

CommVault Delivers a Consolidated, Disk-to-Disk Backup Solution for Law Firm

QUICK FACTS

Industry/Solution:

- Legal

Platform/File System:

- Windows 2000, 2003

Applications:

- Microsoft Exchange
- Microsoft SQL Server 2000
- Hummingbird Docs Open
- Thompson Publishing Elite

Partner Hardware:

- HP and Dell servers
- EMC Storage Area Network
- StorageTek tape library
- Brocade switch fabric

Challenges:

- Too many servers running independent backups
- Slow restores from off-site tape
- Need for a consolidated, simplified enterprise backup solution

Solution:

- CommVault Galaxy Backup & Recovery
- AUX Copy
- Synthetic Full Backup

Benefits:

- Faster backups disk-to-disk reduced backup time
- More frequent backups of critical applications
- Ease of management of a complex network
- Informative reports
- Full weekend backups completed in available time
- Fast easy restores

Customer Profile

Founded in Philadelphia in 1968, Cozen O'Connor is a full-service law firm serving business, insurance and private clients throughout the United States and internationally. Ranked among the 100 largest law firms in the United States, Cozen O'Connor is comprised of more than 550 attorneys practicing in 24 offices. The firm has 22 national offices and international offices in London, England and Toronto, Canada.

Data Management Environment

Cozen O'Connor's IS data center and Help Desk are located at the firm's Philadelphia headquarters, where there are 600 employees, including 230 attorneys and all of the firm's administrative and executive management staffs. Approximately 700 other staff members work out of the firm's regional offices.

The data center infrastructure in Philadelphia includes 55 Windows servers, a mix of HP and Dell hardware. Primary storage is an EMC Storage Area Network (SAN) with 15 terabytes of disk capacity, Brocade switch fabric, and a StorageTek tape library with three LTO2 drives and 60 slots. CommVault Galaxy is installed on all 55 servers in the data center, and eight servers have CommVault media agents that talk directly to the SAN library. All of the regional offices have their own servers, which are backed over the network to the Philadelphia data center using CommVault's Synthetic Full Backup capability.

The mission of the Information Systems (IS) department at Cozen O'Connor is to provide technology support for the firm's legal production staff of attorneys and other professionals, including accountants and in-house business consultants. IS is also responsible for technology support for the general business operations of the firm, including client billing, time tracking, and general accounting.

Moving to an Enterprise Solution

Cozen O'Connor installed CommVault Galaxy backup and recovery software in September 2004. Before that, they used Veritas BackupExec software, backing up individual servers to directly attached tape drives. This was a straightforward backup solution, but proved inadequate as the firm grew. With dozens of servers running independent backups, managing the process became a burden. It required too much tape handling and too much administrative time just to do routine backups. The firm determined that they needed a much more automated, enterprise-wide backup solution.

Terry Kufen is Senior Manager of Technical Operations in the Cozen O'Connor IS department. Researching a new backup solution, he first identified the two most likely enterprise backup solutions — Veritas NetBackup and CommVault Galaxy. Then he and his team did an extensive, feature-by-feature comparison of the two products. They concluded that CommVault had better features and more closely matched the firm's needs. Cozen O'Connor wanted to move toward disk-to-disk backup, and Kufen concluded that CommVault was better able to handle disk-to-disk-to-tape backups in multiple steps. He also liked the Synthetic Full Backup capability in Galaxy, which the firm planned to use to back up servers in the regional offices, significantly reducing the backup window requirement. "We needed to move to an enterprise backup solution," says Kufen, "and CommVault was the right choice."

Transition was "a Learning Experience"

The transition to an enterprise backup solution was a learning experience for the IS team. Says Kufen, "We were making a switch from backing up individual servers to individual local attached tape drives, doing one full tape

every night — a very simple process — to a complex process including Synthetic Full Backups and disk-to-disk-to-tape. We wanted to jump in with a complex set of rules right from the start. It might have been better to start slowly and grow into it — crawl, walk, run. But after a few stumbles we took a step back and worked out the issues, with CommVault's help. Within a few months we got to where we wanted to be from the start, with a highly automated process. And the whole transition process was invisible to our users."

Backup is Mission Critical

Backup and recovery are critical for Cozen O'Connor, says Kufen, because, "the data we back up is relevant to active cases. What we are protecting is the active work product of 1,300 people. Without the data that we back up, we don't have a product." One of the most critical applications is the firm's Hummingbird Docs Open document management system. The firm has millions of documents on 25 SQL databases in the system, primarily legal documents authored by attorneys.

Disk-to-Disk Backup Slashes Backup Time

All 55 servers in Philadelphia get full backups each night, amounting to about two terabytes backed up each night. Backups are done disk-to-disk, and then copied to tape, using the AUX Copy capability of Galaxy. Tapes are sent off-site each day for disaster recovery purposes. Says Kufen, "Disk-to-disk backup is much faster than disk-to-tape, and significantly reduces our backup window

requirement." Cozen O'Connor has a strict data retention schedule. They keep three full backups on line on disk, and they keep seven days worth of tapes off-line. After seven days they overwrite the tapes. Regional offices are backed up nightly over the network to the data center using CommVault's Synthetic Full Backup capability, which reduces network traffic and the window of time required for backups.

The Proof is in the Restores

Kufen reports that routine restores are much easier to do with Galaxy than with the previous backup solution. Most requests for restores are for data created within the last few days, which is usually on disk. Says Kufen, "With CommVault, we can restore the lost file with a few clicks, rather than what we used to do, which involved calling off-site tape storage people and then waiting hours to get a tape."

Galaxy has also proven itself in more dramatic circumstances. "We had a worst case scenario," recalls Kufen. "We lost a Microsoft Exchange server, and we had to restore it all from tape. From a CommVault perspective it was a 100% success; it went flawlessly. I was very pleased."

The firm's disaster recovery process is based on doing disk-to-disk-to-tape backups every night, and then sending the tapes off-site every morning. Because most restores are done from disk, the function of the tapes is primarily for disaster recovery.

Automated Solution Allows More Frequent Backups

Disk-to-disk backup using CommVault software has allowed Cozen O'Connor to pursue a much more ambitious backup strategy. Previously they did backups five nights a week. Because there is no IS staff on duty on weekends to load tapes, they did not do weekend backups. Now they do backups seven days a week, with no user intervention required. Says Kufen, "We load tapes into the library at the start of the week, and the library automatically handles loading the tapes as needed. We had people loading tapes every night. Now we just check at the start of the week to make sure we have enough tapes and go. We pop out the full tapes each day and send them off-site. The process is now automated." In the past, the firm's storage strategy was limited sometimes by tape capacity. They wanted to be able to back up any server on a single tape, so they would not need to swap tapes in the middle of the backup, which usually happens in the middle of the night. Therefore, they could not put more than 100 gigabytes on a server, the limit of the size of the backup they could put on one tape. "Now, we can have terabytes on a server, no problem," says Kufen.

The smaller window of time required with disk-to-disk backup also allows Cozen O'Connor to protect its most critical applications with even more frequent backups. Explains Kufen, "Instead of one backup at 10:00 p.m. each night, now we back up Exchange four times each day." Before they installed Galaxy, they backed up their SQL servers once a night. "Now I can do live database backups once an hour, using the CommVault SQL agent," says Kufen.

www.commvault.com | 888.746.3849 | E-mail: info@commvault.com

CommVault Worldwide Headquarters • 2 Crescent Place • Oceanport, NJ 07757 • 732-870-4000 • Fax: 732-870-4525
Regional Offices: United States • Europe • Middle East & Africa • Asia-Pacific • Mexico & Latin America • Canada • India • Oceania

