

Case Study

QUICK FACTS

Industry/Solution:

- Construction

Platform/File System:

- Predominantly Microsoft Windows 2003, with some Windows 2008

Applications:

- Microsoft Exchange
- Microsoft Windows Server 2003 and 2008
- Microsoft SQL Server 2005 and 2008
- Microsoft SharePoint 2007
- Prolog construction project management software
- Primavera project portfolio management

Partner Hardware:

- Two Compellent SANs to support 30 TBs of production data and provide disaster recovery support
- Dell servers, desktops, laptops and tablets PCs

Challenges:

- Server and storage sprawl spurred decision to centralize backup and recovery on an enterprise-class data protection platform.
- Legal department mandated that all e-mails be archived for up to 10 years to comply with FRCP regulations.
- Migration to digital records system accelerated demand for efficient and economical eDiscovery search capabilities.
- Escalating data growth drove need to reduce storage costs by reducing duplicate data.

Solution:

- CommVault® Simpana® software with Backup & Recovery, Archive, Search, Replication and Resource Management modules.

Benefits:

- CommVault software's singular architecture elevated data protection for nearly 1,000 employees while also lowering the risk and costs associated with eDiscovery and FRCP compliance.
- The Simpana Search module enables Sundt to accelerate searches, reducing the time it takes to produce results from three days to less than an hour.
- Sundt's pilot deduplication project exceed all expectations, cutting the number of vaulted tapes in half while reducing the company's long-term vaulting footprint by 90 percent.

Sundt Builds a Solid Data Protection and eDiscovery Foundation with Simpana® Software Archive, Search & Deduplication

Customer Profile

Sundt Construction Inc. is one of the largest construction companies in the United States. Headquartered in Tempe, Ariz., the employee-owned organization serves both public and private clients nationwide, including commercial and institutional structures; building highways, dams, pipelines and airport facilities; as well as facilities for the Department of Defense and other federal agencies.

Sundt takes great pride in its steadfast focus on cutting-edge systems that set new standards for efficiency, productivity, collaboration and innovation in the construction industry. For example, the company embraces environmentally friendly, "green" building techniques and sustainable practices along with a series of high-tech tools to streamline workflow and communication.

According to Zach Croxford, corporate IT manager for Sundt Construction, the use of tablet PCs in the field is a prime example of how the company takes extra steps to make all pertinent project documents readily available and easily accessible. "We've consistently embraced new technologies that enable unparalleled collaboration while helping us keep jobs on track, on schedule and on budget," he explains.

In addition to tablet PCs, Sundt has made a big push to keep all project records in digital form. "The Sundt Digital Records System (SDRS) is another example of how we strive to stay ahead of the curve in terms of providing efficient, expedited information access to

ensure the highest levels of communication, quality control and compliance," Croxford adds. "With CommVault Simpana 8 software, we've been able to fortify our digital records strategy with solid data management and eDiscovery support structures for improving productivity and reducing risk."

Data Management Environment

Sundt's IT staff of ten oversees a technology infrastructure that includes corporate local- and wide-area networks, file servers, storage as well as desktops and laptops for approximately 1,000 employees. Tablet PCs are used at project sites as part of the company's innovative Remote Office Construction Kits (ROCKs).

Sundt's predominantly Microsoft environment encompasses 120 Windows 2003 and 2008 servers, SharePoint 2007, along with SQL 2005 and 2008. The team also manages industry-specific software, including Prolog construction project management and Primavera project portfolio management. Dell is the overwhelming choice for Sundt's file servers and computing hardware needs. Two Compellent enterprise-class storage area networks (SANs) store about 30 TBs of production data at the Tempe-based data center, which then is mirrored at the company's disaster recovery site for an extra layer of data protection.

Data storage continues to grow at a rapid pace, increasing by about 20 gigabytes daily, thanks to an ever-increasing influx of project data. "We generate large AutoCAD files and data-intensive project data that eat up a lot of storage," explains Croxford. "Additionally, our

internal legal department follows very strict guidelines for retaining all corporate data and e-mails for up to 10 years as part of our compliance with Federal Rules of Civil Procedure (FRCP). As a result, we have taken a close look at controlling the growth and costs of storing data while taking necessary precautions to safeguard our information.”

Constructing New Pillars of Data Protection

Sundt’s introduction to CommVault was during a backup and recovery migration project. In mid-2006, the IT team decided the company had outgrown its Symantec Backup Exec environment, which was being used in decentralized fashion at Sundt’s dispersed offices. “We had server sprawl at every location and everyone was doing their own backups,” recalls Croxford. “When we decided to centralize data protection, it became clear we also needed to step up to an enterprise-class solution.”

In evaluating more robust offerings, Sundt examined CommVault® technology, Symantec’s NetBackup and SyncSort. What differentiated the solutions was how each contender handled e-mail archiving. “Sundt’s legal department dictated that all e-mails be retained for 10 years to support evolving eDiscovery needs, so archiving emerged as a top requirement,” Croxford explains. “We also wanted to control Exchange e-mail growth, reduce costs as well as manage risks associated with legal discovery and compliance.”

Lacking e-mail archiving capabilities, SyncSort fell off the radar quickly. While Symantec NetBackup provided e-mail archiving through its Enterprise Vault product, the team was concerned that adding another point product would require more storage and additional servers. “With Symantec’s approach, we would have needed a separate

e-mail archiving server, which would double our capital expenditures,” says Croxford. “There also were concerns about performance optimization and the fact that Enterprise Vault would require a lot of our SAN storage.”

Sundt preferred the CommVault approach, which employs a single platform for all Simpana® software modules. To that end, the Simpana Archive module leverages the same repository used by the backup and recovery software. Moreover, all functionality is managed by a centralized console, which eases deployment and simplifies ongoing operation. “We liked how CommVault software enabled us to run everything as one system, instead of disparate solutions,” says Croxford. “Also, management overhead is an issue as we don’t have dedicated resources for overseeing both backup and archiving operations. With Simpana software, we could easily set policies for handling our daily backups as well as managing e-mail retention and retrieval.”

Sundt also determined that CommVault provided all the required functionality at a better price than the alternative solutions. “We certainly felt we could do more with less if we chose CommVault Simpana software,” notes Croxford. “Simpana software’s modular platform made the most sense for our current and future needs.”

Centralized Archiving & Smart Search Streamline eDiscovery

With the Simpana Archive module, Sundt transparently archives e-mail from end-user mailboxes. Up to eight months of e-mails are archived on disk before migration to WORM media for longer-term retention. Additionally, the company archives its data-intensive AutoCAD files directly to tape, where it’s retained for up to 10 years in keeping with corporate policies. With Simpana software, Sundt meets its e-mail archiving requirements

as mandated by the company’s legal team while also bolstering overall data protection since daily incremental and weekend full backups to tape are automated.

Moreover, the team relies on the Simpana Search module to quickly and easily find e-mails using attributes and content that can be located anywhere in the message, including e-mail attachments. In particular, Croxford is impressed by the Search interface, which dramatically simplifies the process of responding to legal discovery actions and compliance audits. “CommVault’s web-based interface is so easy, my kids could use it,” he explains. “The back-end of the Search module is incredibly fast, so it literally takes seconds to perform an initial search.”

Sundt also leverages CommVault software’s support of Microsoft FAST search and indexing technology to accelerate the retrieval of e-mails to aid in eDiscovery of electronically stored information (ESI). “It used to take up to three days to respond to a legal discovery request,” notes Croxford. “Now, we can search, find and classify relevant e-mails in less than an hour.” Additionally, Sundt takes advantage of CommVault software’s advanced search capabilities, including Boolean phrases and patterns, Wildcards, proximity searches as well as search-within-a-search functionality to refine the process and improve result accuracy.

“Initially, searches could entail nearly 20,000 items, but we can get very granular with Simpana 8, so searches now might involve hundreds, not thousands, of items,” Croxford explains. “Simpana software provides a layer of search intelligence that yields better results and speeds the process, which makes a big difference in accommodating eDiscovery and corporate governance best practices.”

Croxford is so impressed with Simpana software's straightforward searches that he's considering extending its reach throughout Sundt. "Since every eDiscovery involves the retrieval of ESI, we're considering enabling our legal team to perform their own searches," he adds. "Having proven the underlying business value of the Simpana Archive and Search modules, we're now in an excellent position to extend the functionality to files and SharePoint data since all we have to do is turn on additional licenses."

Reducing Data Storage Costs with Deduplication

Sundt also created a strong business case for incorporating CommVault software's embedded deduplication as part of an overarching goal to reduce data management and related storage expenses. "Dedupe is our next big initiative and so far CommVault's deduplication software is exceeding our expectations," says Croxford.

Faced with escalating data storage requirements, Sundt decided to test the Simpana deduplication feature after sizing up the differences between hardware-based dedupe appliances and the CommVault software-based approach. The company first met with Data Domain and Quantum to address concerns about scalability and cost. "We didn't want to buy

a ton of dedicated storage when we already have a SAN," says Croxford. "We were also skeptical about scalability with the hardware-based approach as we certainly didn't want to be in the position of buying additional, costly appliances if we ran out of room."

After surveying the competitive landscape, Sundt determined that CommVault software's embedded dedupe feature provided more cost-effective scaling and greater flexibility in being able to reduce duplicate data across both backups and archived data. The results of its pilot test have been overwhelmingly positive. To date, Sundt has achieved 85-percent compression on its deduped data while also cutting the number of file-server vaulted tapes in half. "Based on the success of the pilot project, we're extending CommVault's innovative deduplication functionality to all file servers at our corporate data center," says Croxford.

In doing so, Sundt expects to reduce the footprint of its long-term vaulting by 90 percent, which translates into fewer tapes and tape drivers as well as less time required to manage the system. Croxford adds, "At the end of the day, Simpana software provides all the information I need to show my executive team that dedupe isn't just a trend—it's a key player in our overall data management strategy."

For Croxford, CommVault software's focus on innovative data management solutions mirrors his company's dedication to bringing leading-edge solutions into the construction industry. "When it comes to FRCP compliance and eDiscovery, we're ahead of the curve as far as the construction industry is concerned, thanks to sound corporate practices and CommVault Simpana software," he concludes. "As we move toward a fully digital environment, we're counting on CommVault to take on an increasingly critical role in both our eDiscovery and overall data management efforts."



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