

## Case Study



### INDUSTRY

Non-profit

### LOCATION

Minneapolis, Minnesota

### SOLUTION

Primary and remote data protection architecture that uses two Data Domain systems with data duplication and provides the ability to retain over a year's worth of backup data on disk

### DATALINK SERVICES

- Analysis
- Design
- Implementation
- Support

### BENEFITS

- Cut nightly backup times by 300-percent
- Saved more than \$35,000 per year on backup tape-related costs
- Reassigned 50-percent of an IT staff resource from basic tape operations to higher-level functions
- Enabled retention of 18 months of backup data on a small disk storage footprint
- Gained a turnkey remote disaster recovery solution

## Datalink helps ELCA Board of Pensions boost its backup and recovery operations.

### THE CUSTOMER: EVANGELICAL LUTHERAN CHURCH IN AMERICA BOARD OF PENSIONS


The Minneapolis-based Evangelical Lutheran Church in America (ELCA) Board of Pensions is a non-profit corporation that provides retirement and health-related benefits to 50,000 pastors, rostered laypersons, employees, and their families in the ELCA and other faith-based organizations. One of its chief goals is to help its members lead healthy lives and achieve financial security through the services it provides and the effective stewardship of the assets it administers.

### THE CHALLENGE: LENGTHY BACKUPS, DATA GROWTH, AND TOO MUCH TAPE

Like many organizations, the ELCA Board of Pensions had come to rely on tape-based data protection technologies to back up its growing slate of Microsoft® Windows®-based servers and more than 130 VMware®-based virtual machines responsible for running everything from Microsoft® Exchange and SQL Server® applications to the organization's financials, CRM, and member enrollment and billing systems.

According to Ken Brown, IS solutions delivery manager for the ELCA Board of Pensions, frustrations with tape and its associated cost and slow data recovery capability had become a challenge. Likewise, employees had begun complaining about system performance slowdowns associated with backups running in the late evening or spilling into the next morning's work hours.

Recognizing disk-based backup might improve the situation, the organization decided to try a small virtual tape library (VTL) solution from its primary storage vendor. While this allowed some of the organization's backup data to be stored for a few weeks on disk, it still required ongoing offload to tape. Performance and integration issues also stemmed from the growing amounts of backup data the VTL needed to process. With the lease for the VTL solution soon up for renewal, Brown decided to look at other disk-based backup solutions.



"I would give both Datalink and Data Domain high marks. Datalink helped us size our environment and configure things. They have a lot of expertise in this area. Datalink developed and earned our trust. They also perform our ongoing support services, which has given us a sense of comfort."

**KEN BROWN**

IS SOLUTIONS DELIVERY MANAGER,  
ELCA BOARD OF PENSIONS

#### THE SOLUTION: PRIMARY AND REMOTE DATA PROTECTION WITH DATA DEDUPLICATION

"When it came time to replace our VTL, it was natural to bring in Datalink as someone who understood our environment," said Brown, noting the Board of Pensions had worked with Datalink for some time to support its earlier tape-based backup environment. "They offered a fresh approach, helped us learn the differences between six to nine different manufacturers, and let us quickly narrow down our options to two or three solutions."

Datalink spent time with Brown and his team comparing and contrasting deduplication and data protection technology options. Relying on its engineers' extensive experience with a full range of best-available technologies, Datalink's recommendation of Data Domain® was influenced by several factors:

- A better deduplication ratio
- Easier offsite replication
- Close integration with NetBackup™
- Better local support
- The ability to use the Data Domain system for more than just data protection (The Board planned to implement archival software the next year.)

In addition, the ELCA Board of Pensions also participated in a proof-of-concept exercise with a Data Domain system in Datalink's interoperability lab. The outcome of the lab experience was enough to convince Brown and his team that they had made the right choice, prior to deploying the solution.

In the end, Datalink implemented two storage appliances from Data Domain, with one residing at the Minneapolis headquarters and the

second at a nearby co-location facility. Both systems came equipped with Data Domain Replicator software for efficient data replication and a Data Domain software module for tight integration with Symantec™ NetBackup OpenStorage interface. The architecture provides both local recovery and remote disaster recovery capabilities.

#### THE BENEFITS: INCREASED SPEED AND MEASURABLE SAVINGS

From speed of backup and recovery to sheer cost savings, Brown couldn't be more pleased with the results of this project.

##### **Eighteen months of backup data retention on a small storage footprint**

Key to Brown's choice of Data Domain was its ability to de-duplicate a large portion of unchanged nightly backup data. Citing an average deduplication ratio of somewhere between 24 to 1 and 26 to 1, Brown notes this functionality has since allowed him to comfortably store the first six to nine months' worth of backup data on the six-terabyte Data Domain solution, with plenty of room for more. "Because our data deduplication ratio exceeded our initial expectations, we think we can retain 18 months of backup data, as opposed to the 12 months we initially expected," he said.

##### **More than \$35,000 saved per year on tape costs**

The ability to store data on disk for longer retention periods has since led Brown to virtually eliminate the use of backup tapes and the yearly costs associated with them. By his estimation, the savings now amount to more than \$35,000 on hardware upgrades and support, new tape purchases, and the annual cost associated with offsite tape transport and storage. Just as important, tape backup management no longer requires 50-percent of a full-time employee who can now be assigned to higher-level tasks.

Instead of backups running from the close of business each day to sometime well into the next morning, backups now start much later at night and complete in four hours – a speed improvement of 300-percent.

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**Nightly backup times reduced by 300-percent**

Instead of backups running from the close of business each day to sometime well into the next morning, Brown reports backups now start much later at night and complete in four hours – a speed improvement of 300-percent. “This has definitely opened up a new window where people can do their work in the evenings or the early mornings,” he said. “Much of the backup data we had went from taking minutes to now just seconds to complete. Larger jobs also went from hours into the minutes category.” Likewise, he’s seen dramatic improvement in both speed of restores and the ease of performing offsite restores.

Brown also noted Datalink’s knowledgeable suggestion – aggregating backups across a second network interface card (NIC) – proved key to the organization’s ability to boost backup speeds after initial implementation.

**THE OVERALL EXPERIENCE:  
SHORT ROI AND A SENSE OF COMFORT**

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Brown is very satisfied with the returns on his organization’s initial investment. “From a budget standpoint, this project’s been a very good thing. Our ROI was fairly short. Typically, if you can break even in two to three years, that’s a good thing. Here, it was considerably less than that,” he noted. “We are going to save a lot of money. It’s already started to show, as I work with next year’s budget and start seeing that the money we’ve saved now can be used on other things.”

Brown has since involved Datalink in other projects, including adding and properly sizing a new primary storage system for its non-production environment. “Datalink did such a good job with us on this project that it was natural to work with them again on designing and implementing our disk array,” he said, noting, “I would give both Datalink and Data Domain high marks. Datalink helped us size our environment and configure things. They have a lot of expertise in this area. Datalink developed and earned our trust. They also perform our ongoing support services, which has given us a sense of comfort.” ■

## Making IT happen

A complete data center solutions and services provider, Datalink helps Fortune 500 and mid-tier enterprises get the most from every IT investment – with storage, server, and network expertise across the infrastructure. We deliver greater business results throughout, designing what we sell, deploying what we design, and supporting what we deliver.

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