Customer Overview

Vermont Electric Power Company (VELCO) was formed in 1956 when local utilities joined together to create the nation’s first statewide, “transmission only” company in order to share access to clean hydro power and maintain the state’s transmission grid. With the completion of the Northwest Vermont Reliability Transmission Project, the first major project constructed in the state in over 20 years, VELCO is the country’s fastest growing transmission company. VELCO is committed to utilizing energy efficiency, power generation and system infrastructure to serve as Vermont’s transmission reliability resource.

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Kevin Fredette
Network Administrator
Vermont Electric Power Company

Lots of Data, Lots of Retention Led to Nightmare Restores

The IT department at VELCO backs up a total of 56TB of data and had been keeping nearly eight years of retention on tape. The organization was frustrated with difficult and unreliable restores, long backup times, and the sheer number of tapes in storage and decided to evaluate different approaches to backup in an effort to streamline processes and provide better access to stored data.

“Restoring data from tape is simply unreliable. We have to restore data quite often and we need to be sure that the stored data is accessible,” said Kevin Fredette, network administrator for Vermont Electric Power Company. “As a company, we need to keep lots of retention. After testing some of our stored tapes, we realized that our tape system was sorely lacking in meeting our needs.”

ExaGrid Reduces Reliance on Tape, Boosts Restores and Disaster Recovery

VELCO’s IT department decided to look towards disk-based backup systems to speed up backup times and improve the reliability of its stored data. The staff considered systems from both ExaGrid and Data Domain and chose ExaGrid.

“We compared both systems and chose the ExaGrid based on its price/performance and scalability. Also, ExaGrid’s post-process data deduplication technology seemed like a good fit for us and we liked the fact that we could retain our investment in Backup Exec,” said Fredette.

VELCO currently uses four ExaGrid systems in its datacenter to perform primary backup. Data is replicated each night to two ExaGrid systems located in a separate facility for disaster recovery. The systems work in conjunction with VELCO’s existing backup application, Symantec’s Backup Exec.

“In deploying the ExaGrid systems, we were able to reduce our reliance on tape and dramatically improve our ability to recover from a disaster,” said Fredette. “It’s awesome to have all that data on hand and ready to restore. We don’t have to search through boxes of tapes anymore.”

Data Deduplication Reduces Footprint and Costs

Fredette said that ExaGrid’s data deduplication technology enables VELCO to reduce costs by storing more data in less space.

“ExaGrid’s data deduplication technology enables us to store a lot of data in a small footprint. Without deduplication, the costs would be astronomical,” he said. “We’ve been very pleased with our dedupe rate. For example, we’re currently getting a 15:1 ratio on our Oracle data, which is impressive because it doesn’t change much. Some of our other dedupe rates are even higher.”
ExaGrid combines last backup compression along with data deduplication, which stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by a range of 10:1 to 50:1 or more, delivering unparalleled cost savings and performance. ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data deduplication is performed post-process after the data is stored to reduce data. When a second site is used, the cost savings are even greater because ExaGrid’s byte-level data deduplication technology moves only changes, requiring minimal WAN bandwidth.

ExaGrid System Scales to Meet Increased Demands

Fredette said that since installing the ExaGrid system, nightly backups are still taking approximately 12 hours, but the system is backing up more than three times as much data, including 130 virtual images.

“We’re backing up a tremendous amount of data and we’ve been able to scale the ExaGrid system to meet our demands. Scalability is very important to us and it was one of the reasons we chose the system. We recently added a fourth ExaGrid to our primary system and it was fairly straightforward to do,” he said.

ExaGrid’s GRID computing software makes the system highly scalable, and when plugged into a switch, different sized configurations can be mixed and matched into a single GRID system with capacities of up to a 100TB full backup plus retention. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

The ExaGrid system was designed to be easy to set up and maintain, and ExaGrid’s industry-leading customer support team is staffed by trained, in-house engineers who are dedicated to individual accounts. The system is fully supported and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

“We found it very easy to install the ExaGrid and the support has been phenomenal. I’m amazed with the level of support we receive from our support engineer. We’ve been working with him for over a year and we have a great relationship. He’s responsive and he knows what he’s doing. We couldn’t ask for more,” said Fredette. “The ExaGrid is a very solid, reliable system. It’s a wonderful feeling to not have to worry about tape and the integrity of our backup data anymore.”

Intelligent Data Protection

ExaGrid’s turnkey disk-based backup system combines high quality SATA drives with byte-level data deduplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid’s byte-level data deduplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk needed by a range of 10:1 to 50:1 or more, resulting in a solution that is 25 to 30% the cost of standard SATA drives. The ExaGrid system is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications and processes. ExaGrid servers can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

ExaGrid is the leader in cost-effective disk-based backup solutions. A highly scalable system that works with existing backup applications, the ExaGrid system is ideal for companies looking to quickly eliminate the hassles of tape backup while reducing their existing backup windows. ExaGrid’s innovative approach minimizes the amount of data to be stored by providing standard data compression for the most recent backups along with byte-level data deduplication technology for all previous backups. Customers can deploy ExaGrid at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories or for disaster recovery.

For more information about ExaGrid, please visit us at www.exagrid.com or call us at 1-800-868-6985.

About ExaGrid Systems, Inc.

Customers worldwide depend on ExaGrid Systems to solve their backup problems—effectively and permanently. ExaGrid’s disk-based, scale-out GRID architecture adjusts to increasing backup demands due to constantly growing data volumes. It is the only solution that combines compute with capacity as well as a unique landing zone to permanently shorten backup windows and eliminate expensive forklift upgrades. Learn more at www.exagrid.com.