



Vermont Electric Power Company Plugs in ExaGrid, Improves Backups and Restores



USA

Key Benefits:

- Seamless integration with Veritas Backup Exec
- Expert level support
- Never have to worry about tape and the integrity of backup data
- Secure disaster recovery solution

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Kevin Fredette
Network Administrator

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.

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 Dell EMC 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 appliances 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, Veritas 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 writes backups directly to a disk-cache Landing Zone, avoiding inline processing and ensuring the highest possible backup performance, which results in the shortest backup window. Adaptive Deduplication performs deduplication and replication in parallel with backups for a strong recovery point (RPO). As data

is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

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 appliance models can be mixed and matched into a single scale-out system allowing a full backup of up to 2.7PB with a combined ingest rate of 488TB/hr, in a single system. The appliances automatically join the scale-out system. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size. By adding compute with capacity, the backup window remains fixed in length as the data grows. Automatic load balancing across all repositories allows for full utilization of all appliances. Data is deduplicated into an offline repository, and additionally, data is globally deduplicated across all repositories.

The ExaGrid system was designed to be easy to set up and operate. ExaGrid’s industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customers never have to repeat themselves to various support staff, and issues get resolved quickly.

“We found it very easy to install 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.”



ExaGrid and Veritas Backup Exec

Veritas Backup Exec provides cost-effective, high-performance backup and recovery – including continuous data protection for Microsoft Exchange servers, Microsoft SQL servers, file servers, and workstations. High-performance agents and options provide fast, flexible, granular protection and scalable management of local and remote server backups.

Organizations using Veritas Backup Exec can look to ExaGrid Tiered Backup Storage for nightly backups. ExaGrid sits behind existing backup applications, such as Veritas Backup Exec, providing faster and more reliable backups and restores. In a network running Veritas Backup Exec, using ExaGrid is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to ExaGrid for backup to disk.

Intelligent Data Protection

ExaGrid’s turnkey disk-based backup system combines enterprise drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to disk with deduplication or using backup software deduplication to disk. ExaGrid’s patented zone-level deduplication reduces the disk space needed by a range of 10:1 to 50:1, depending on the data types and retention periods, by storing only the unique objects across backups instead of redundant data. Adaptive Deduplication performs deduplication and replication in parallel with backups. As data is being deduplicated to the repository, it is also replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

About ExaGrid

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone that enables fastest backups and restores, a Repository Tier that offers the lowest cost for long-term retention and enables ransomware recovery, and scale-out architecture which includes full appliances with up to 2.7PB full backup in a single system.

Learn more at www.exagrid.com.