Eastern Propane and Oil Reduces Backup Window by Over 80% with ExaGrid and Veeam

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>
> **Dan Doucette**
> **Senior System Administrator**

Key Benefits:

- Nightly backups reduced from up to 12 hours to just 2 hours
- 'Amazing' ExaGrid-Veeam combined deduplication maximizes storage capacity
- Speed of data restores is 'light-years' beyond tape
- Eastern can now increase retention due to tape replacement and maximized storage capacity

Customer Overview

Eastern Propane and Oil is a full-service propane and oil company serving New Hampshire, Maine, Massachusetts, Rhode Island, and Vermont. Family-owned for more than 85 years, Eastern is committed to helping people make energy choices that are safe for families and businesses.

ExaGrid and Veeam Replace Tape

When Eastern Propane and Oil decided to switch ERP systems, it seemed to be the ideal time to also virtualize its IT environment and modernize its backup strategy from LTO tape using Veritas Backup Exec. Following up on a recommendation, Eastern looked into ExaGrid and was impressed by the data deduplication and amount of storage that the system provides. The company also evaluated Veeam and purchased both as a new solution.

Dan Doucette, Eastern's senior system administrator, found that the ExaGrid system was easy to install and was impressed by ExaGrid's integration with Veeam. "Installation went off without a hitch—it was seamless. The ExaGrid system integrated well into our environment. We also installed Veeam, and the two seem to work well together."

Nightly Backups Reduced by as Much as 83%

Eastern's data consists primarily of Oracle databases and also applications from its ERP system, as well as file servers, domain controllers, and Exchange servers from Windows. Doucette backs up Eastern's data in nightly incrementals as well as synthetic weekly fulls.

Doucette has noticed a significant reduction of his nightly backup window. "We run two nightly backup jobs, separated by operating systems, and they each take under an hour. When we were backing up to tape with Backup Exec, nightly backups could take up to 12 hours in total, depending on much the data had changed."

ExaGrid writes backups directly to a disk 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 while providing full system resources to the backups for the shortest backup window. Once complete, the onsite data is protected and immediately available in its full undeduplicated form for fast restores, VM Instant Recoveries, and tape copies while the offsite data is ready for disaster recovery.

'Amazing' Deduplication Ratios

Doucette has been pleased with the combined data deduplication of ExaGrid and Veeam. "The deduplication ratios we're seeing are amazing. Depending on the share, the ratios are anywhere from 3:1 to 5:1."

Deduplication has maximized Eastern's storage capacity, so Doucette plans to increase the two weeks of retention that the company had been keeping, which was limited by tape in the past. "With tape, retention was always an issue, just based on the amount of tapes that we were able to store."

EXAGRID®

Veeam uses the information from VMware and Hyper-V and provides deduplication on a "per-job" basis, finding the matching areas of all the virtual disks within a backup job and using metadata to reduce the overall footprint of the backup data. Veeam also has a "dedupe friendly" compression setting which further reduces the size of the Veeam backups in a way that allows the ExaGrid system to achieve further deduplication. This approach typically achieves a 2:1 deduplication ratio.

ExaGrid is architected from the ground up to protect virtualized environments and provide deduplication as backups are taken. ExaGrid will achieve a 3:1 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

Speed of Restores are 'Light-years Beyond' Previous Solution

Doucette has found that restoring data is a simpler process since replacing tape. "Using ExaGrid and Veeam has made my job so much easier in terms of managing backups and restores – it's definitely streamlined the process for us, and it's very quick and easy to restore data now. The speed with which we restore data, or a virtual machine for that matter, is light-years beyond what we had before."

ExaGrid and Veeam can instantly recover a VMware virtual machine by running it directly from the ExaGrid appliance in the event that the primary storage VM becomes unavailable. This is possible because of ExaGrid's "landing zone" – a high-speed cache on the ExaGrid appliance that retains the most recent backups in complete form. Once the primary storage environment has been brought back to a working state, the VM running on the ExaGrid appliance can then be migrated to primary storage for continued operation.

Responsive Customer Support is Easy to Work With

Doucette finds the ExaGrid system easy to manage, especially with the help of his assigned support engineer. "I spend five minutes or so a day looking through the email updates from ExaGrid about the success of our backup jobs. There's a minimal amount of time that we need to spend on this device aside from upgrades, which our support engineer implements. ExaGrid's customer support team is always easy to work with. We rarely have any issues at all and if we do, our engineer is responsive and makes sure we are taken care of."

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 assigned to individual accounts. The system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

Simple Scalability

When Eastern needed to expand its ExaGrid system, Doucette was able to simply add another appliance. "ExaGrid pretty much handled everything. We brought in the new appliance, connected it to our network, and our ExaGrid support engineer configured it for us."

The ExaGrid system can easily scale to accommodate data growth. ExaGrid's computing software makes the system highly scalable, and when plugged into a switch, appliances of any size or age can be mixed and matched in a single system with capacities of up to a 2PB full backup plus retention and an ingest rate of up to 432TB per hour. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

ExaGrid and Veeam

The combination of ExaGrid's and Veeam's industry-leading virtual server data protection solutions allows customers to utilize Veeam Backup & Replication in VMware, vSphere, and Microsoft Hyper-V virtual environments on ExaGrid's disk-based backup system. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery. The ExaGrid system fully leverages Veeam Backup & Replication's built-in backup-to-disk capabilities and ExaGrid's zone-level data deduplication for additional data reduction (and cost reduction) over standard disk solutions. Customers can use Veeam Backup & Replication's built-in source-side deduplication in concert with ExaGrid's disk-based backup system with zone-level deduplication to further shrink backups.

About ExaGrid

ExaGrid provides hyper-converged secondary storage (HCSS) for backup with a unique landing zone and scale-out architecture. The landing zone enables the fastest backups, restores, and instant VM recoveries. The scale-out architecture includes full appliances in a scalable system and ensures a fixed-length backup window as data grows, eliminating expensive and disruptive forklift upgrades. Learn more at **www.exagrid.com**.