

ExaGrid-Veeam Solution Provides CMMC with 'Huge' Storage Savings and Enhanced Backup Performance





Key Benefits:

- ExaGrid supports all of CMMC's backup applications throughout evolution of environment
- Backup window of CMMC's largest server reduced by 60% with ExaGrid-Veeam solution
- Combined ExaGrid-Veeam deduplication provides 'huge' savings on storage space

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Paul Leclair

Senior Systems Engineer

Customer Overview

Central Maine Medical Center (CMMC), located in Lewiston, Maine, is a resource hospital for healthcare providers in Androscoggin, Franklin, Oxford counties and the surrounding region. Supported by the latest technologies, CMMC's skilled professionals provide outstanding care delivered with compassion, kindness, and understanding.

An Evolving Backup Environment

Central Maine Medical Center (CMMC) has been backing up its data to an ExaGrid system for many years, throughout the evolution of its backup environment. Prior to using ExaGrid, CMMC backed its data up to a FalconStor VTL system, using Veritas NetBackup. "We had outgrown our current backup system, and were open to trying a different approach. After looking at a few options such as Dell EMC Data Domain and a newer FalconStor VTL solution, we compared cost and functionality and chose ExaGrid especially for its data deduplication process," said Paul Leclair, senior systems engineer at Cerner Corporation, which is the company that manages the hospital's IT environment.

As CMMC's environment moved toward virtualization, Quest vRanger was added to back up the VMware, while Veritas NetBackup continued to back up the physical servers. Leclair found that both backup applications worked well with the ExaGrid system, and that the improvements in the backup environment led to "better backup performance and better deduplication ratios." The ExaGrid system works seamlessly with all of the most frequently used backup applications, so an organization can retain its investment in existing applications and processes.

After several years, it was time to look at improving the backup environment again, so new backup applications were considered. "Over the years, as our data grew, we found that we outgrew vRanger. We recently switched to Veeam, and ExaGrid has been incredibly helpful, and even loaned us an ExaGrid appliance for the migration of our data from both vRanger and NetBackup to Veeam. Since the migration, nearly 99% of our data is now backed up by Veeam with the remaining 1% backed up by NetBackup," said Leclair.



ExaGrid-Veeam Solution Enhances Backup Performance

CMMC's data consists of SQL and Oracle databases, a large Microsoft Exchange server, as well as other application and file servers. Leclair backs up critical data in incrementals on a daily basis, and with a full backup of the environment on a weekly basis. In addition, full backups are copied to tape each month, for archiving.

Switching to the ExaGrid-Veeam solution has greatly reduced the backup windows, especially for one of CMMC's largest servers. "When we used NetBackup, it took up to five days to back up one of our larger servers that runs Microsoft Windows. We've enabled the Microsoft deduplication and it is great, because storing the server took up 6TB, but we found after rehydrating that server, that there is actually 11TB of data stored on that server, which we didn't realize until we used Veeam. Using the ExaGrid-Veeam solution, the backup window for that server has been reduced from five days to two days," said Leclair. "A benefit to the ExaGrid-Veeam solution is how much better the backup performance is because of the synthetic backups and because data is backed up right to ExaGrid's Landing Zone. It takes all the load off our VMs, and our users don't feel anything," he added.

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).

Combined Deduplication Saves on Storage Space

Leclair has been impressed with the combined data deduplication that Veeam and ExaGrid provide. "The combined deduplication has saved a significant amount of storage space. My ExaGrid support engineer recently upgraded my firmware, and the combined deduplication is even better! I showed others on my team, and they couldn't believe how much space has been saved. It's huge!"



Veeam uses changed block tracking to perform a level of data deduplication. ExaGrid allows Veeam deduplication and Veeam dedupe-friendly compression to stay on. ExaGrid will increase Veeam's deduplication by a factor of about 7:1 to a total combined deduplication ratio of 14:1, reducing the storage required and saving on storage costs up front and over time.

Well-Supported System Reduces Backup Administration

Over the years, Leclair has found that one of the most valuable benefits of using an ExaGrid system is working with an assigned ExaGrid support engineer. "The product has been rock solid, and my support engineer has been responsive to any questions I've had. I didn't expect him to be so knowledgeable about our backup applications or so attentive to our environment. My support engineer monitors our system and has let us know if we need any patches; I have never worked with a product that provides such proactive support!"

Leclair has found that ExaGrid provides reliable backups that are easy to manage, leaving time to focus on other projects. "Since using our ExaGrid system, I've hardly had to spend any time managing backups. I used to have to dedicate two hours per day for backup administration, and now it just takes a few minutes to look at the reports. One of my goals has been to transition from engineering and backup administration and to shift toward an architect role. Now that backups are so straightforward and reliable, I can worry less about backup and focus on systems architecting."

ExaGrid and Veeam

Leclair appreciates the integration between ExaGrid and Veeam and uses the solution's unique features, such as the ExaGrid-Veeam Accelerated Data Mover to enhance backup performance. "The marriage between the ExaGrid and Veeam is wonderful. It provides great features and the ability to optimize the backup environment."

ExaGrid has integrated the Veeam Data Mover so that backups are written Veeam-to-Veeam versus Veeam-to-CIFS, which provides a 30% increase in backup performance. Since the Veeam Data Mover is not an open standard, it is far more secure than using CIFS and other open market protocols. In addition, because ExaGrid has integrated the Veeam Data Mover, Veeam synthetic fulls can be created six times faster than any other solution. ExaGrid stores the most recent Veeam backups in an undeduplicated form in its Landing Zone and has the Veeam Data Mover running on each ExaGrid appliance and has a processor in each appliance in a scale-out architecture. This combination of Landing Zone, Veeam Data Mover, and scale-out compute provides the fastest Veeam synthetic fulls versus any other solution on the market.

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.