



ExaGrid Provides Murraysmith Significant Savings on Storage with ‘Incredible’ Deduplication



USA

Key Benefits:

- Murraysmith replaced ‘older-generation technology’ with ExaGrid-Veeam solution
- Data is restored easily and quickly ExaGrid-Veeam solution
- ‘Incredible’ deduplication saves Murraysmith terabytes of storage
- Proactive ExaGrid support helps keep system maintained and fully upgraded

“We are always tied up with a variety of projects, and using the ExaGrid-Veeam solution has taken the stress out of dealing with backup. I know I won’t need to spend all day monitoring it, which has been the case with older systems and technologies I’ve used. This solution just works, and I’m always confident that it will do what I expect it to.”

Steve Blair
Network Administrator

Customer Overview

Founded in 1980, Murraysmith is a public infrastructure engineering firm serving communities in the western U.S. Headquartered in Portland, Oregon, Murraysmith specializes in public infrastructure planning, design, and project delivery in the fields of water, wastewater, stormwater, and transportation. Murraysmith rebranded as Consor in October, 2022.

ExaGrid-Veeam Solution Replaces Aging Data Domain

The IT staff at Murraysmith felt that their Dell EMC Data Domain system was “older-generation technology” and decided to see what newer technology options were available. ExaGrid and Veeam were chosen as the new backup solution for the company’s entirely virtualized backup environment.

Steve Blair, Murraysmith’s network administrator, is pleased with how well ExaGrid and Veeam work together. “ExaGrid and Veeam integrate very well. Whenever I’ve reached out to Veeam, they seem glad to work in our environment since we are also using ExaGrid, which they know to be a good backup system; both Veeam’s and ExaGrid’s support teams know each other’s products very well.”

Veeam’s backup solutions and ExaGrid’s Tiered Backup Storage combine for the industry’s fastest backups, fastest restores, a scale-out storage system as data grows, and a strong ransomware recovery story – all at the lowest cost.

Quick Restores Keep Engineering Projects on Track

Blair backs up Murraysmith’s key servers in incrementals, every two hours, as well as with a weekly synthetic full backup, and a monthly backup. “Our backups run fairly quickly, the incrementals average about 15 minutes and most of our weekly fulls take a few hours; although fulls of our largest servers can take up to 24 hours, due to the fact that much of the data stored on them are AutoCAD files, which are very large and complex. The ExaGrid system is reliable, so we’ve never had a problem with our backup jobs,” said Blair.

Blair finds that restoring data is quick, too. “We need to restore data pretty often. Many of our engineers use AutoCAD, and as they’re working



through a project and tweaking their CAD files and models, they might end up going down a path that doesn’t work. At that point, they reach out to us and ask if we can revert a file to a previous version. We’re able to help them with that quickly and easily thanks to ExaGrid and Veeam. Compared to older file-based backups, using our ExaGrid-Veeam solution is heaven. I would recommend this solution over anything I’ve used in the past.”

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 and Veeam can instantly recover a file or VMware virtual machine by running it directly from the ExaGrid appliance in the event that the file is lost, corrupted or encrypted or the primary storage VM becomes unavailable. This instant recovery is possible because of ExaGrid’s Landing Zone – a high-speed disk cache on the ExaGrid appliance that retains the most recent backups in their complete form. Once the primary storage

environment has been brought back to a working state, the VM backed up on the ExaGrid appliance can then be migrated to primary storage for continued operation.

'Incredible' Deduplication Saves Terabytes of Storage

Blair has been impressed with the impact that data deduplication has had on Murraysmith's backup storage capacity. "Our backup data is 540TB, half of a petabyte, which is stored on just 65TB on our ExaGrid system after deduplication. It's absolutely incredible," he said.

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.



Planning for Data Growth with a Scalable System

Blair appreciates ExaGrid's scale-out architecture as he plans for ongoing data growth. "Our data has grown by 40% the last two years in a row. I'm excited that when we do eventually add another ExaGrid appliance to our system, it will be a simple process, and I'll be able to manage it on a single pane of glass without having to separate our backups according to which appliance they will go to. I like that we can add on to the system modularly, without difficulty."

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.

ExaGrid Support: Proactive, Not Reactive

Blair has found that his ExaGrid system is easy to maintain, especially with the assistance of his assigned ExaGrid support engineer. "ExaGrid support is proactive instead of reactive. Typically, my interaction with ExaGrid support isn't me calling in with a problem, but my support engineer calling me to tell me what more I could be doing with my system. Our ExaGrid support engineer lets me know whenever an upgrade is available and works with me on the best time to schedule it. I also like working with the same engineer each time; he knows our unique backup scenario and has an understanding of our schedules and timeframes. It's also great to know that there's another set of eyes on our system, so I don't have to worry about a problem creeping up that I'm unaware of.

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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.

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.