

ExaGrid Provides Murraysmith Significant Savings on Storage with 'Incredible' Deduplication

CUSTOMER SUCCESS STORY



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Steve Blair Network Administrator

Key Benefits:

- Murraysmith replaced 'oldergeneration 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

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.

ExaGrid-Veeam Solution Replaces Aging Data Domain

The IT staff at Murraysmith felt that their Dell EMC Data Domain system was "oldergeneration 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."

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 (DR).

ExaGrid fully leverages Veeam's built-in backup-to-disk capabilities, and ExaGrid's adaptive data deduplication provides additional data 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 adaptive deduplication to further shrink backups.



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 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. Available system cycles are utilized to perform deduplication and offsite replication for an optimal recovery point at the disaster recovery site. 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.

'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 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 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of upwards to 10:1, which greatly reduces the amount of disk storage required.

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."

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 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 maintain, and ExaGrid's industry-leading customer support team is staffed by trained, in-house level 2 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.

About ExaGrid

ExaGrid provides intelligent hyperconverged storage 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.

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