

Adding ExaGrid Improves Performance, Storage Savings, and Security for IT Firm's Customer Data

ADVANCE2000



Key Benefits:

- Adding ExaGrid's deduplication allowed IT firm to meet customers' retention needs
- Switch to ExaGrid improved backup performance
- ExaGrid's two-tier architecture creates a virtual air gap, improving data protection
- ExaGrid system easy to manage, with 'watchful eye' from ExaGrid support engineer

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Eric Gutt

Virtualization Engineer

Customer Overview

Advance 2000, Inc. is a full-service information technology firm dedicated to providing organizations with the endless technology solutions required to continue to grow to the fullest potential. The firm's unique process of Technology Teaming joins together an organization's existing qualified team with skilled professionals to assist with every aspect of the organization's technologies.

ExaGrid Offers Better Performance than Custom-Built Disk Storage

Advance 2000 provides many IT services to customers, including hosting data in a cloud environment, with some of that cloud data backed up to ExaGrid Tiered Backup Storage. The staff at the IT firm feel confident in the data protection and data availability they provide to customers, especially since adding ExaGrid.

In the past, the IT firm backed up data to custom-built disk-based storage using Veeam but found it difficult to keep up with customers' growing retention needs with that solution. "Several customers needed multiple years' worth of retention on the backups in the cloud environment we are hosting. In order to keep the amount of data the customers needed, it was going to require a very large storage unit, so we decided to look into a dedicated storage appliance," said Eric Gutt, a virtualization engineer at Advance 2000.

"We started looking at deduplication appliances, but I wasn't impressed with many of those solutions. We also asked Veeam about their partners, and they mentioned that ExaGrid integrates well with their technology," he said. "The ExaGrid team met with us, took a thorough look at our storage requirements, and sized ExaGrid appliances that would fit our needs. We bought one appliance for our primary site and one for replication to our disaster recovery site."

Since installation, Gutt has noticed improvement in the backup performance. "Once we installed our ExaGrid system, we saw significant differences in terms of the speed of the backups; the ingest speed was much faster than the custom-built disk storage we had used before," he said.



'Fantastic' Deduplication Saves on Storage

Switching to ExaGrid relieved any concerns about handling the retention that customers need. "Whenever I check the deduplication we're getting, I'm floored" said Gutt. "There's almost 200TB backed up to our ExaGrid system but it's been shrunk down to about 16TB with the deduplication. Our dedupe ratio is 14:1, which is fantastic! Some of our customers require a few years' worth of retention and I don't see any issue with our ExaGrid system being able to handle that."

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.

Secure and Scalable Architecture Offers Better Data Protection

Gutt appreciates ExaGrid's unique architecture, which was a factor in the tech firm's choice of backup storage. "ExaGrid's scale-out architecture is highly important to us because while we sized our ExaGrid system for our customers' current retention needs, we wanted to be able to expand the system if their retention increased further and so that we could accommodate new customers in the future. The ExaGrid team showed us that we can simply grow horizontally by adding more ExaGrid appliances to the existing system without having to forklift or replace anything," he said.



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 2.7PB full backup plus retention and an ingest rate of up to 488TB 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's tiered architecture with a non-network-facing tier is more secure than other solutions. "Some of our customers worry about ransomware attacks. The way that ExaGrid is architected provides better data protection, because even if an attacker were able to get in, they wouldn't be able to touch the repository on our ExaGrid system," said Gutt. ExaGrid appliances have a network-facing disk-cache Landing Zone Tier where the most recent backups are stored in an undeduplicated format, for fast backup and restore performance. Data is deduplicated into a non-network-facing tier called the repository where deduplicated data is stored for longer-term retention. The combination of a non-network-facing tier (virtual air gap) plus delayed deletes with ExaGrid's Retention Time-Lock feature, and immutable data objects, guards against the backup data being deleted or encrypted.

ExaGrid Support 'Keeps a Watchful Eye' on System

Gutt is impressed with ExaGrid's ease of use and ExaGrid's customer support model. "ExaGrid is easy to manage and maintain, so I don't have to watch it like a hawk, like I do with other storage that we use. Our assigned ExaGrid support engineer was helpful with installation and getting our Veeam jobs set up, and he made sure we were using the best settings for our environment. I ran into a small issue once, and when I reached out to him, he got back to me immediately and fixed the issue. I didn't have to open a ticket or wait in queue for a support rep, and I've been quite happy with the customer service response," he said.

"I can sleep at night knowing that I'll be able to keep our customer data well-maintained. I know that our ExaGrid support engineer keeps a watchful eye on our system, so I don't have to worry about it," added Gutt. 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.

ExaGrid and Veeam

The combination of ExaGrid 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 Tiered Backup Storage. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery. 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.

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.