Municipality Restructures Backup Environment with ExaGrid-Veeam, Cuts Backup Window by 40%

CUSTOMER SUCCESS STORY



"It had been difficult to keep our backups organized when they were all over the place. Now that they have all been moved to our ExaGrid system, we can clearly see how much space each share is taking up and how much deduplication is achieved. Using ExaGrid has provided huge value in understanding what we have and has simplified how we manage our data."

> Ethan Hussong IT Systems Engineer

Key Benefits:

- Using ExaGrid and Veeam as a single solution simplifies data management
- 40% reduction of daily backup window
- Interface is easy to navigate, so restoring lost files can be done by interns
- 'Phenomenal' ExaGrid customer support guides IT staff to organize and optimize environment

Customer Overview

The Village of Northbrook is a vibrant suburban community of 35,000 residents, located about 25 miles north of Chicago, in northern Cook County, Illinois.

Leveraging ExaGrid to Organize Environment

When Ethan Hussong started as the Village of Northbrook's IT systems engineer, the backup environment was comprised of a variety of solutions which made backups difficult to manage. "When I started, the Village used a myriad of storage solutions that were randomly distributed across the Village in various locations. Backups were all over the place, and we had multiple repositories – there was no real rhyme or reason to it."

The Village's environment had been split evenly between physical servers backed up using Veritas Backup Exec and virtual servers backed up using Veeam, and Hussong found this environment difficult to work with. "There was constant confusion around finding and accessing backups, and it was hard to understand how things were connected. I found that each storage solution used its own methods, and if the solution was connected directly through a server, I would have to proxy the information through the server."

In order to organize its environment and streamline backups, the Village decided to switch all backups to a single storage solution. Its ExaGrid system was expanded by adding a third, larger appliance and Hussong worked to virtualize the environment, transitioning 45 combined virtual and physical servers into 65 virtual servers. Once the entire environment was virtualized, Hussong was able to use Veeam exclusively.

Hussong has been very pleased with the transition. "It had been difficult to keep our backups organized when they were all



over the place. Now that they have all been moved to our ExaGrid system, we can clearly see how much space each share is taking up and how much deduplication is achieved. Using ExaGrid has provided huge value in understanding what we have and has simplified how we manage our data."

Daily Backup Window Reduced by 40%

The Village has a wide variety of data to back up. Its two data centers run a nightly replication of critical VMs between the sites, and also has its ExaGrid system at a third offsite location to which backups are run.

Hussong runs full VM backups on a daily, weekly, and monthly basis. Daily backups take up to eight hours, which is a significant improvement. "We had some challenges with our daily backups in the past, as they would often run 20 hours or more, and the backup would often finish right before it was about to kick off again or even continue past the next scheduled backup job start time. We have really improved the backup window by restructuring the way that we are backing up our data now."



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.

Straightforward Data Restores

In addition to more efficient backups, Hussong has found that ExaGrid has improved the process of restoring data. "Now that we have virtualized and organized our environment and are able to use a single interface, we can retrieve exactly what we need, and that has really saved our bacon a couple of times! We once had an email catastrophe where one of our critical users actually lost a number of their email folders in a migration. We were able to use the Veeam backups from ExaGrid and restore the entire folders of emails dating back for years just by being able to navigate at an application level and specifically pull out this user's email. What was really great was that restoring data is so straightforward, we were able to have one of our interns do it. It didn't even require engineer-level support!

"On another occasion, when a VM had a break in connectivity with vMotion in one cluster, we were able to shut it off, run a backup, and then restore it at the other cluster. We were able to bypass VMware connectivity issues by using the backup," said Hussong. 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.

'Phenomenal' Customer Support

Hussong considers ExaGrid's support model one of the best benefits of working with the system. ExaGrid's industry-leading customer support team is staffed by trained, in-house engineers who are assigned to individual accounts. "I've worked with my ExaGrid support engineer, Glenn, on many things – he has helped guide us through reconfiguration and expansion of our system, and how to best manage things when the rest of our environment was a mess so that we could maximize our ExaGrid system. He is the reason that our environment is in such great shape today.

"I came into this job not being a storage or IT expert. I'm an IT generalist and was unfamiliar with the world of storage and backup administration previously. Our ExaGrid support engineer has been patient and insightful. He is also very honest and straightforward, which is something that I really appreciate. He has helped us isolate problems and find solutions for them, whether they are with ExaGrid or Veeam. Glenn is fantastic – our trust in the ExaGrid solution comes in large measure directly from him, and he is a major reason that we will continue to use ExaGrid. He has always been there when we've needed him."

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.

United States:	2000 West Park Drive Westborough, MA 01581 (800) 868-6985	EXAGRID °
United Kingdom:	200 Brook Drive Green Park, Reading, Berkshire RG2 6UB +44 (0) 1189 497 051	CANGINE
Singapore :	1 Raffles Place, #20-61 One Raffles Place Tower 2 048616 +65 6808 5574	www.exagrid.com

ExaGrid reserves the right to change specifications or other product information without notice. ExaGrid and the ExaGrid logo are trademarks of ExaGrid Systems, Inc. All other trademarks are the property of their respective holders. ©2018 ExaGrid Systems, Inc. All rights reserved.