Customer Overview

Evanston Township High School (ETHS) District 202 is a four-year comprehensive high school occupying a 62-acre campus in Evanston, Illinois, a suburb of Chicago along the Lake Michigan shore. ETHS was established in 1883 and serves the city of Evanston and a small portion of the neighboring village of Skokie for a total district population of approximately 78,000.

ExaGrid-Veeam Ideal Solution for VM Backups

Evanston Township High School (ETHS) is a one-school district, accommodating over 3,500 students and 500 staff members. The on-premises IT department supports students and staff, and hosts the school’s website.

ETHS’ IT environment is comprised of 85 virtual machines (VMs) running on VMware ESXi with an HPE Nimble SAN. ETHS uses Veeam to back up its VMs to an ExaGrid system at its primary site, which replicates to an offsite ExaGrid system for disaster recovery.

Vincent Stewart, ETHS’ systems administrator, appreciates the reliability and simple manageability of the ExaGrid-Veeam solution. “I spend next to no time managing the ExaGrid system; it almost runs itself, which is a beautiful thing [...] Using ExaGrid is like using electricity – we just expect it to work, and it does!”

Nightly Backups Run on Schedule

Stewart backs up ETHS’ data on a nightly basis, staggering backup jobs across a 12-hour window. “Because we're working with a well-configured solution, each backup job takes about an hour, and our nightly backup completes within the window that we've established.

“We receive automated e-mails every morning that report on backup jobs that ran the previous night. Our ExaGrid support engineer did a great job configuring our system, and he regularly keeps an eye on what's happening. Thanks to that, we haven't had any issues,” said Stewart.

ExaGrid’s award-winning scale-out architecture provides customers with a consistent backup window regardless of data growth. Its unique landing zone retains the most recent backup in its full undeduplicated form, enabling the fastest restores, offsite tape copies, and instant recoveries.

Easy Restores from ExaGrid’s Landing Zone

Stewart has found that restoring data is a quick and simple process using ExaGrid and Veeam. “Restoring files works seamlessly by using Veeam on the front end and retrieving the data from ExaGrid’s landing zone. It’s like opening an Explorer window; I can browse to select the proper file, direct it to where I want it to land, and I’m done. The integration just works!”

ExaGrid writes backups directly to a disk “landing zone” – a high-speed cache on the ExaGrid appliance that retains the most

Key Benefits:
- Nightly backups complete within established backup window
- Automated email reporting provides quick and easy backup management
- Offsite replication ensures disaster recovery protection
- Restoring files ‘works seamlessly’ using Veeam and ExaGrid
recent backups in complete form—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.

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, possible because of ExaGrid’s landing zone. 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.

Customer Support Keeps System Running Smoothly

Stewart appreciates ExaGrid’s customer support model of consistently working with the same support engineer who knows ETHS’ IT environment and is proactive about the health of the system. “Having an assigned support engineer has been a huge relief. Our engineer is easy to work with, and he takes the time to teach us about the technology. He has worked with me via live WebEx sessions to make adjustments to our configurations, and then he watches over the system afterwards to make sure those adjustments work.

“He’s the type of person that makes sure the job is done right, and he’s a great problem solver—it takes him little to no time to get to the bottom of why something is not as it should be. It’s been helpful to know that the system is so well supported because I have other tasks that really need managing. Using ExaGrid is like using electricity—we just expect it to work, and it does!”

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 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’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.

ExaGrid-Veeam Combined Dedupe

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 a 3:1 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

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.