Customer Overview

John Knox Village is widely recognized as one of the most comprehensive not-for-profit retirement communities in the country. It provides independent living, numerous services and amenities, and a full continuum of long-term health care services on its 400+ acre campus in Lee's Summit, Missouri.

ExaGrid-Veeam Solution for Virtualized Environment

John Knox Village had historically backed up its data to disk using Veritas Backup Exec. When the Village virtualized its environment, it switched its backup application to Veeam, installing an ExaGrid system as its new backup target. The Village also installed an ExaGrid system at its disaster recovery (DR) site to establish replication between the sites, further protecting its data.

The ExaGrid system is easy to install and use and works seamlessly with all of the most frequently used backup applications, so an organization can seamlessly retain its investment in existing applications and processes. In addition, ExaGrid appliances can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

Solution Backs Up Incremental Critical Data in Minutes and Restores Data in Seconds

Garon Ashby, system administrator II at the Village, backs up critical servers in daily incrementals and weekly fulls, adding the non-critical servers to the weekly backup schedule. The data mostly consists of file servers, Microsoft Exchange servers, SQL servers, and domain controllers. “The daily incrementals are fast, taking just 15 minutes at most,” said Ashby. “The full backups are pretty quick too, between two to three hours depending on the server. Ever since we established a 10GbE connection to our ExaGrid system, backup jobs are much faster now.”

Ashby has also noticed that restoring data from ExaGrid’s landing zone is faster as well. “Restoring a file from ExaGrid takes a matter of seconds; it wasn’t a very long process when we restored a file from disk—it took five minutes—but using Veeam to restore from ExaGrid offers much better speed and reliability.”

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.
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.

Reliable Backups with Expert Support

Ashby appreciates that ExaGrid support offers expertise on his entire environment. “The ExaGrid team has been very knowledgeable and easy to work with. My support engineer helped me work through a bug in Veeam that was deleting our backups. We were able to save the deleted data by restoring it from our DR site.

“ExaGrid provides reliable, speedy backups and that has made my job much easier. I don’t need to spend as much time managing backup, especially compared with solutions I’ve used in the past,” said Ashby. 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.