ExaGrid System Scales with College's Growing Data, Offsite System Added for DR

SUNY GCC

> "I feel more secure now that we have established a DR site. I'm confident that if we had a disaster, we could recover critical machines. Knowing that Veeam would be able to back up an entire virtual machine and bring it back in a form that we could start up on another host gives me a feeling of security that I didn't have before."
>
> **Jim Cody**
> **Director of User Services**

Key Benefits:

- GCC now able to back up five times more data in the same backup window
- Retention increased from 5 to 12 weeks
- ExaGrid supports both of GCC's preferred backup applications
- Restoring data formerly took days using tape; now takes minutes from the ExaGrid landing zone
- ExaGrid customer support assists with configuration of DR site

Customer Overview

Genesee Community College (GCC) is located just outside the City of Batavia in upstate New York, centered between the greater metropolitan areas of Buffalo and Rochester. In addition to its main campus, it also has six Campus Centers located in Livingston, Orleans, and Wyoming counties. With seven campus locations in four counties and more than 5,000 students, GCC is an important part of the prestigious State University of New York (SUNY) education system.

Cost-Effective Scalable System Chosen to Replace Tape

Genesee Community College (GCC) first installed ExaGrid in 2010 to replace tape-based backup, which had proved costly and difficult to manage, especially when it came to restoring data. "Not only were we paying for offsite tape storage, which is pretty expensive, but recovery took time. We had tape deliveries once a week, so there was lag time to do a restore. If it was a critical restore, we'd request a special delivery at a premium cost," said Jim Cody, GCC's director of user services.

GCC has experienced significant data growth since installing its first ExaGrid system in 2010, and ExaGrid's scalability has helped to keep the growth manageable. "It's easy to add more appliances. We have seven of them now and we started out with two. We've had a great experience," said Cody. "It's a very simple process: we speak with our account manager, they recommend what is needed, and then we purchase it. Our support engineer helps us get each appliance running on the network and shows us the best way to configure it to work in our environment."

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.

Flexibility of Different Backup Apps Supported by One System

One of the deciding factors in choosing a new storage solution was that it worked well with the backup application that Cody had been using, Veritas Backup Exec. "This was really important to me," said Cody. He liked ExaGrid'ws seamless integration with Backup Exec and the fact that it was so easy to set up the shares and point the server to the ExaGrid without changing anything. "The simpler something is to use, the better," added Cody.

GCC has since virtualized its environment and has added Veeam to manage virtual backups. The college now has 150 virtual servers and 20 physical servers. The physical servers are at six of the campus centers, which are spread out across the county, and Cody still uses Backup Exec to manage those servers. ExaGrid works with the most frequently used backup applications, including Veeam and Backup Exec, among others.

EXAGRID®

Backup Window Reduced by 50%, Restores Reduced from Days to Minutes

After moving its backups to ExaGrid, the IT team at GCC saw a 50% reduction of the backup window. Using tape, full backups had needed to be staggered at times, but since installing ExaGrid, the college can now run multiple jobs at the same time, including weekly fulls and nightly differentials. Prior to installing ExaGrid, GCC was keeping approximately five weeks of retention. Using the ExaGrid system, the college was able to increase that to 12 weeks of retention. "Since moving to the ExaGrid system, we are backing up five times as much data as we used to with tape, and in the same backup window," Cody said.

Switching to ExaGrid also improved the process for restoring data. Restore requests used to take significant time, especially if the tapes were offsite, the entire process could take days. Now using ExaGrid, restore requests are handled in minutes and without the associated retrieval costs.

ExaGrid Support Helps GCC Configure DR Site

GCC recently set up a remote site for disaster recovery, using ExaGrid with Veeam. "We're in the process of building a disaster recovery center. We bought a new ExaGrid appliance and took it down to the site, turned it on, and my ExaGrid support engineer took care of the configuration. I'm not an expert in configuring the system, so he made sure it was done right, and then showed me how to get Veeam to work with it," said Cody. "At this point, we're backing up 10 of our extremely critical servers each night to our ExaGrid system at the DR site, which is 42 miles away. So far, we haven't had to restore any data, but I've tried some test restores and it works really well.

"I feel more secure now that we've established a DR site. I'm confident that if we had a disaster, we could recover critical machines. Knowing that Veeam would be able to back up an entire virtual machine and bring it back in a form that we could start up on another host gives me a feeling of security that I didn't have before," said Cody. 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.

"ExaGrid's customer support team is excellent," said Cody. "As an IT person, I have so many systems that I manage, so I place high value on quality support; that's invaluable to me, and ExaGrid's support is the best I've seen." 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 and Veritas Backup Exec

Veritas Backup Exec provides cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery – including continuous data protection for Microsoft Exchange servers, Microsoft SQL servers, file servers, and workstations. High-performance agents and options provide fast, flexible, granular protection and scalable management of local and remote server backups. Organizations using Veritas Backup Exec can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Veritas Backup Exec, providing faster and more reliable backups and restores. In a network running Veritas Backup Exec, using ExaGrid in place of a tape backup system is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to the ExaGrid for backup to disk.

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**.