



State College of Florida Virtualizes Infrastructure, Turns to ExaGrid to Shorten Backup Window



USA

Key Benefits:

- Exchange server backups reduced from 15 hours to just 7 using ExaGrid
- Dedupe ratios as high as 18:1, maximizing retention
- Restores 'much faster' than tape
- 'Proactive' customer support
- System scalability allows the college to easily expand the system as data grows

"The previous network administrator said that he spent 75% of his time doing backups. Now, thanks to the ExaGrid, I spend just a few minutes a day. Having the ExaGrid system in place enables me to focus on other important parts of my job."

Jackie Hemmerich
Network Administrator

Customer Overview

Established in 1957, the State College of Florida, Manatee-Sarasota (SCF) is the region's first and largest public college, serving 27,000 students annually at three campuses and online via eLearning. Another 14,000 participants annually attend professional development and personal enrichment classes. SCF has graduated 40,000 students since 1960.

Data Growth Due to Virtualization Expands Backup Window

After undergoing a virtualization initiative, the State College of Florida experienced a rapid increase in data and associated backup window expansion.

"Our data exploded after we virtualized much of our infrastructure, and our tape library couldn't handle the increased load," said Jackie Hemmerich, network administrator for the State College of Florida. "We were constantly swapping out tapes and managing backup jobs just to get everything done. Eventually, it became almost a full-time job. The college ultimately decided to install the ExaGrid system in an effort to speed backups and reduce reliance on tape."

The college uses the ExaGrid system along with Quest vRanger for its virtual machines and Veritas Backup Exec for physical servers, and backs up a wide range of data –including its student database, and Exchange and file servers.

Backup Times Cut in Half, Data Deduplication Maximizes Storage

Hemmerich said that backups run faster since installing the ExaGrid system and take far less effort than before.

"Our backup jobs run very efficiently. For example, our Exchange server backups used to take about 15 hours to tape, but they only take seven hours with ExaGrid, and backups from a lot of our smaller servers have gone from about eight hours to one hour. It's made a big difference," said Hemmerich.

ExaGrid's post-process data deduplication helps to reduce the amount of data stored on the system by about half, Hemmerich said.

"Our data deduplication ratios are running as high as 18:1, so we're able to maximize retention on the ExaGrid," she said. "It's nice to have so much data at our fingertips and ready to restore. With the ExaGrid, we can do file-level restores very easily, much faster than tape."



ExaGrid writes backups directly to a disk-cache 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 for a strong recovery point (RPO). As data is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

Assigned Support Engineer Helps to Fine Tune System for Maximum Performance

The ExaGrid system was designed to be easy to set up and operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customers never have to repeat themselves to various support staff, and issues get resolved quickly.

Hemmerich said that ExaGrid's assigned support engineer helped her come up to speed quickly on the system and still works closely with her to fine tune backup jobs to achieve maximum performance.

"Our ExaGrid support engineer is extremely proactive and easy to work with. For example, we were close to the point where we really should

have upgraded our system but it wasn't in our budget. Our engineer has gone out of his way to work with me to streamline our backup jobs to ensure we are getting the most out of the system," she said. "I really can't say enough good things about ExaGrid support."

Hemmerich said that installing the ExaGrid system saves the college's IT department hours each week.

"The previous network administrator said that he spent 75% of his time doing backups. Now, thanks to ExaGrid, I spend just a few minutes a day. Having the ExaGrid system in place enables me to focus on other important parts of my job," she said.

As the college's data increases, the ExaGrid system can easily be expanded to meet increased backup requirements.

"We're confident that the ExaGrid system will be able to easily scale as our data increases," said Hemmerich.

"It's been a very good solution for us. It reduces the amount of time it takes to perform backups and minimizes the hassle associated with managing backups and restores."

ExaGrid's award-winning scale-out architecture provides customers with a fixed-length backup window regardless of data growth. Its unique disk-cache Landing Zone allows for the fastest backups and retains the most recent backup in its full unduplicated form, enabling the fastest restores.

ExaGrid's appliance models can be mixed and matched into a single scale-out system allowing a full backup of up to 2.7PB with a combined ingest rate of 488TB/hr, in a single system. The appliances automatically join the scale-out system. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size. By adding compute with capacity, the backup window remains fixed in length as the data grows. Automatic load balancing across all repositories allows for full utilization of all appliances. Data is deduplicated into an offline repository, and additionally, data is globally deduplicated across all repositories.

This combination of capabilities in a turnkey appliance makes the ExaGrid system easy to install, manage, and scale. ExaGrid's architecture provides lifetime value and investment protection that no other architecture can match.

Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines enterprise drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to disk with deduplication or using backup software deduplication to disk. ExaGrid's patented zone-level deduplication reduces the disk space needed by a range of 10:1 to 50:1, depending on the data types and retention periods, by storing only the unique objects across backups instead of redundant data. Adaptive Deduplication performs deduplication and replication in parallel with backups. As data is being deduplicated to the repository, it is also replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

ExaGrid and Quest vRanger

Quest vRanger offers full image-level and differential backups of virtual machines to enable faster, more efficient storage and recovery of virtual machines. ExaGrid Tiered Backup Storage serves as the backup target for these virtual machine images, using high-performance data deduplication to dramatically reduce the disk storage capacity required for backups versus standard disk storage.

ExaGrid and Veritas Backup Exec

Veritas Backup Exec provides cost-effective, high-performance 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 Tiered Backup Storage 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 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 ExaGrid for backup to disk.

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.

