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

STATE COLLEGE OF FLORIDA
MANATEE-SARASOTA

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>
> **Jackie Hemmerich**
> **Network Administrator**
> **State College of Florida**

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

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 Dell vRanger for its virtual machines and Symantec 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 combines standard compression along with zone-level data deduplication, which stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by a range of 10:1 to 50:1 or more, delivering unparalleled cost savings and performance.

ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data deduplication is performed post process after the data is stored to reduce data. When a second site is used, the cost savings are even greater because ExaGrid's zone-level data deduplication technology moves only the changes from backup to backup, requiring minimal WAN bandwidth.

Assigned Support Engineer Helps to Fine Tune System for Maximum Performance

The ExaGrid system was designed to be easy to set up and maintain, and ExaGrid's

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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.

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 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," 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 uses a GRID-based configuration, where each appliance contains processing power, memory, bandwidth, and disk. When the system needs to expand, additional appliance nodes are attached to the GRID, bringing with them additional processing power, memory, bandwidth, and disk. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you are only paying for the amount of processing power, memory and bandwidth as you need it. In addition, as new ExaGrid appliance nodes are added to the GRID, the ExaGrid automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

ExaGrid and Dell vRanger

Dell's vRanger solution offers full image-level and differential backups of virtual machines to enable faster, more efficient storage and recovery of virtual machines. ExaGrid's disk-based backup systems serve as the backup target for these virtual machine images, using high-performance, post-process data deduplication to dramatically reduce the disk storage capacity required for backups versus standard disk storage.

ExaGrid and Symantec Backup Exec

Symantec Backup Exec is the gold standard in Windows data recovery, providing cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery—including continuous data protection for Microsoft Exchange, SQL, file servers, and workstations. It also supports single-drive libraries, encryption, and disaster recovery. High-performance agents and options provide fast, flexible, granular protection and recovery, and scalable management of local and remote server backups.

Organizations using Symantec Backup Exec can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Symantec Backup Exec, providing faster and more reliable backups and restores. In a network running Symantec 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 onsite backup to disk.

Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines high quality disk drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to straight disk. ExaGrid's zone-level data deduplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk needed by a range of 10:1 to 50:1 or more, resulting in a solution that is 25 to 30% the cost of backing up to straight disk. The ExaGrid system is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications and processes. ExaGrid servers can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

For more information about ExaGrid, please visit us at www.exagrid.com or call us at 1-800-868-6985.