Furman University Streamlines Backups and Disaster Recovery with ExaGrid

Customer Overview
Furman University is one of the nation’s premier undergraduate liberal arts colleges. The university offers outstanding academics, a robust visual and performing arts program and NCAA Division I athletics. Furman offers majors and programs in 42 subjects and is one of the select group of colleges that qualify for a chapter of Phi Beta Kappa, the nation’s most prestigious academic honorary society. Located in Greenville, South Carolina, undergraduates come from 46 states and 31 countries to attend Furman.

Search for Better Backup Solution Led to ExaGrid

When the time came to replace its aging tape library, the IT staff at Furman University immediately began looking for a state-of-the-art solution capable of reducing the amount of time spent on managing and administering backups.

“Day-to-day tape management was consuming more and more of our time,” said Russell Ensley, systems administrator at Furman University. “We were spending countless hours generating tapes, swapping them out, and transporting them offsite. We finally decided the time was right to move up to a more modern solution and immediately discounted tape in favor of disk-to-disk technology.”

After looking at several different solutions on the market, Furman chose a dual-site ExaGrid disk-based backup system with data deduplication. Data is backed up each night to one system and is then replicated to the second system, which is located at the university’s disaster recovery site.

“We piloted the ExaGrid in our datacenter and liked what we saw in terms of cost, flexibility, ease of management, and scalability,” Ensley said. “We’re still in the process of moving all our servers to the ExaGrid system, and our goal is to eventually eliminate tape. With the two-site system, we’ll able to recover much more quickly in the event of a disaster because all our data will be offsite and ready to access.”

ExaGrid System Works with Most Backup Applications

The ExaGrid system works along with Furman’s existing backup application, Symantec Backup Exec, to back up and protect data from both physical and virtual servers.

“Backup applications are constantly changing, especially on the virtual side. The ExaGrid system is agnostic, so we have lots of flexibility and can choose the right solution to meet our needs at any point in the future,” Ensley said.

Powerful Deduplication Technology Speeds Backups, Delivers 22:1 Dedupe Ratio

ExaGrid combines last backup compression along with 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 postprocess 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 changes, requiring minimal WAN bandwidth.

“We’ve been extremely pleased with ExaGrid’s data deduplication technology. We’re getting a 22:1 overall dedupe ratio, which maximizes the amount of data we can store on the system. Our backup speeds have also improved. Because the ExaGrid system dedupes the data after it hits the landing zone, backups run as quickly as possible,” said Ensley. “For example, our nightly incremental backups have been reduced by several hours. Backups that used to take five to six hours are now completed in about 90 minutes.”

Fast Setup, Responsive Customer Support, Simplified Management

Ensley said that setting up the solution was simple and straightforward.

“We got the ExaGrid system racked, networked and powered up, and then I worked with our customer support engineer to configure it. We had the system fully installed, up and running in a matter of hours,” he said.

“Backup jobs that used to take five to six hours are now completed in about 90 minutes.”

Russell Ensley
Systems Administrator
Furman University
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 dedicated to individual accounts. The system is fully supported and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

“Having a dedicated engineer is so nice. We had a disk go bad when I was out of town, and I immediately received an alert message from the ExaGrid system and then our engineer called me a short time later to let me know that a replacement was on its way. The disk arrived the next day, and a colleague was able to easily replace it. It was all taken care of by the time I got back,” he said.

Managing the ExaGrid system is simple and straightforward, Ensley said.

“The ExaGrid system is extremely intuitive to use, and the reporting is easy. Also, management is almost nonexistent as far as the storage array is concerned. You don’t really have to manage the solution once it’s in place.”

Easy to Scale to Accommodate Future Growth

Ensley said that one of the main advantages of the ExaGrid system is the ability to scale the system up easily to handle increased backup demands.

“One of the big reasons we chose the ExaGrid system was its scalability. When our backup demands increase, we can easily add additional capacity and increase performance. Unlike a lot of other solutions, we won’t have to buy a whole new head to scale the system up. We can simply add additional ExaGrid appliances to the GRID.”

ExaGrid’s GRID computing software makes the system highly scalable, and when plugged into a switch, different sized configurations can be mixed and matched into a single GRID system with capacities of up to a 130TB full backup plus retention. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

“Implementing the ExaGrid system has significantly reduced the amount of time we spend on backups. I used to spend at least an hour and a half per week managing tapes, another hour or so transporting them and even more time on manual intervention when we had issues,” said Ensley. “Having the ExaGrid system in place has streamlined our backup processes, and it enables me to focus on other parts of my job.”

ExaGrid and Symantec Backup Exec

Symantec Backup Exec provides 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. High-performance agents and options provide fast, flexible, granular protection 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 SATA drives with zone-level data deduplication, delivering a disk-based solution that is more cost effective than standard SATA drives. 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 standard SATA drives. 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.

ABOUT EXAGRID

ExaGrid is the leader in cost-effective disk-based backup solutions. A highly scalable system that works with existing backup applications, the ExaGrid system is ideal for companies looking to quickly eliminate the hassles of tape backup while reducing their existing backup windows. ExaGrid’s innovative approach minimizes the amount of data to be stored by providing standard data compression for the most recent backups along with zone-level data deduplication technology for all previous backups. Customers can deploy ExaGrid at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories or for disaster recovery.