

# Furman University Streamlines Backups and Disaster Recovery with ExaGrid





# **Key Benefits:**

- Accomplished goal of automatic offsite disaster recovery plan
- 22:1 overall dedupe ratio
- Backups that used to take five to six hours are now completed in about
  90 minutes
- ExaGrid system is easy to manage & maintain, savings time and resources

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

**Russell Ensley** 

Systems Administrator

#### **Customer Overview**

Furman University ranks as one of the nation's finest liberal arts colleges, providing students with a well-rounded, rigorous academic setting that prepares them for postgraduate lives in higher education and a diverse spectrum of professions. Their campus offers numerous opportunities for undergraduate research, internships, leadership development, and global experiences. Even with a student body of over 2,500 undergraduate students, the university maintains a student-to-faculty ratio of 9:1. Furman rests at the base of the Blue Ridge Mountains and boasts acclaimed natural beauty, with over 750 acres of woodland and a large lake overlooked by the famous Bell Tower.

# 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 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 from 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, Veritas 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'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).

"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 appliance 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.

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. Customer's never have to repeat themselves to various support staff, and issues get resolved quickly.

"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.

"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."

The ExaGrid system can easily scale to accommodate data growth. ExaGrid's software makes the system highly scalable - appliances of any size or age can be mixed and matched in a single system. A single scale-out system can take in up to a 2.7PB full backup plus retention at an ingest rate of up to 488TB per hour.

ExaGrid appliances contain not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply added to the existing system. The system scales linearly, maintaining a fixed-length backup window as data grows so customers only pay for what they need, when they need it.

Data is deduplicated into a non-network-facing Repository Tier with automatic load balancing and global deduplication across all repositories.

"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 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.

