Bethune-Cookman University Eliminates Tape, Gains Faster Backups with ExaGrid

USA

Key Benefits:

- Data deduplication ratio of 57:1
- Enterprise level customer support
- Scalable to meet increased demands
- Flexibility to add second system for data replication

"We looked at several different approaches and decided on ExaGrid. We were impressed with its data deduplication technology and we liked the fact that it was a simple, straightforward solution. It was also far more cost-effective than the other systems we looked at."

Hussam Reziqa
Network Administrator

Customer Overview

Bethune-Cookman University is an institution filled with rich history and beloved traditions, and a strong commitment to academic excellence and community service. From its beginnings as a school for young African-American girls to its status as a University, with seven academic schools offering 35 undergraduate degree programs and a master's degree in transformative leadership, B-CU has educated generations of lifelong learners and community leaders. Located in Daytona Beach, B-CU is one of three private historically black colleges in the state of Florida. The institution boasts a diverse and international faculty and student body of more than 3,600.

Failing Tape Library, High Tape Costs

According to Network Administrators John Dinardo and Hussam Reziqa, Bethune-Cookman University had been using a robotic tape library with LTO2 tapes to back up and protect its data but as its data set grew, backups had become slow and unreliable and annual tape costs were high.

"We keep two years of retention and had to dedicate several full-sized racks just to hold all the tapes. We kept buying and buying tapes and the cost was astronomical," said Dinardo. Finally, the tape library started to fail and our backup jobs weren't finishing, so we decided to look for a new solution."

ExaGrid Speeds Backups and Restores

After briefly considering another robotic tape library, B-CU's IT staff narrowed down the search to disk-based backup solutions from ExaGrid and Dell EMC Data Domain.

"We looked at several different approaches and decided on ExaGrid. We were impressed with its data deduplication technology and we liked the fact that it was a simple, straightforward solution," said Reziqa. "It was also far more cost-effective than the other systems we looked at."

The ExaGrid system works along with B-CU's existing backup application, Veritas Backup Exec, to protect a wide range of data including Exchange and SQL databases, file data and its Laserfiche document imaging system.

Dinardo said that since installing the ExaGrid system, B-CU's backup times have been reduced by about a third and restores are significantly faster and easier.

"Our backup jobs now run without fail each and every night and they're approximately three times

as fast as they were with tape," he said. "Restores are also extremely fast because we're accessing the data directly from disk and we don't have to hunt down tapes and feed them into the tape library."

Nearly 57:1 Data Deduplication

B-CU is receiving data deduplication ratios of 56.82:1, which maximizes disk space and retention.

"The ExaGrid's data deduplication technology is simply amazing. We perform full backups every night and it's been no problem with ExaGrid. We've put 200,000 GB of data on the system and it's taking up only 3.5 GB of space," Reziqa said. "It's wonderful to have the ability to throw as much data at the system and have it digest it without a problem."

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).

Fast Setup, Responsive Customer Support

Dinardo and Reziqa installed the system themselves and then called in to their support engineer to finish the setup.

"Installation was really easy. I just racked the unit and contacted our ExaGrid support engineer. He setup a Webex session and finished configuring the system and we were up and running in no time at all," said Dinardo.

Reziqa added, "We've been extremely pleased with the high level of support we receive from our ExaGrid engineer. He really knows his way around the system and he is very, very responsive when we call in. It's enterprise-level customer support."

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.

Scalable to Meet Increased Demands, Flexibility to Add Second System for Data Replication

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 undeduplicated 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.

"The ExaGrid gives us a lot of flexibility. We can easily add additional capacity to handle more data and we can also choose to add a second system for data replication at any time," said Dinardo.

Dinardo noted that the university's IT staff has been able to reduce the amount of time spent on backups each day now that tape has been eliminated.

"Implementing the ExaGrid system has freed up a lot of staff time because we don't have to worry about changing out tapes, labeling them, and fighting with the tape library to get it working. Our backups now run much, much faster thanks to the ExaGrid system and it runs flawlessly every night," he said. "The ExaGrid system is one of the few products we've worked with that exceeds expectations."

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.

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).

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**.

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