Medical School Chooses ExaGrid Over Other Backup-to-Disk Options

University at Buffalo
The State University of New York

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"I've used ExaGrid for one year now - this company can be differentiated by its customer support alone. When you put the technology and the support together, you get an unbeatable combination."

Eric Warner
Assistant Director of
Medical Computing

Key Benefits:

- Backup window reduced by 60% from 56 hours down to just 22
- Deduplication ratio of 35:1 maximizes disk storage
- File restores are done in minutes
- Offsite system provides reliable disaster recovery
- Proactive customer support provides notification of problems - like the power loss at the school's remote site

Customer Overview

The University at Buffalo School of Medicine and Biomedical Sciences was founded in 1846 and is one of the oldest medical schools in the United States. It offers undergraduate and graduate degrees in the biomedical and biotechnical sciences as well as an MD program and residencies.

Long, Error-Prone Backups, Complex Restores Led School to Seek a New Solution

The University at Buffalo School of Medicine and Biomedical Sciences began looking for a backup solution to replace tape in an effort to alleviate long backup times, the constant annoyance of tape drive errors, and complex restore procedures.

"Our tape drive would often just quit in the middle of a restore, and then we'd have to shut it off and queue everything back up again. Because of the way our backup software worked with tape, it often meant going through 12 tapes if the data set was beyond our browse policy just to perform a single restore," said Eric Warner, Assistant Director for the University at Buffalo School of Medicine and Biomedical Sciences.

Scalable, Cost-Effective ExaGrid System Selected Over the Competition

The school decided to purchase the ExaGrid system to back up data from its School of Medicine after also evaluating other backup-to-disk options.

"We chose to go with the ExaGrid system for the School of Medicine because it provided all the functionality we needed at a better price point then other system," said Warner. "It was also the best choice for the long haul because the ExaGrid's GRID architecture will enable us to easily scale the system to handle more data without doing a forklift upgrade."

ExaGrid uses a GRID-based configuration, so when the system needs to expand, additional appliance nodes are attached to the GRID, bringing with them not only additional disk but also processing power, memory, and bandwidth. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows. 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.

Two-Site System Provides Disaster Recovery, 35:1 Data Deduplication Ratio Reduces Data

The School of Medicine purchased a two-site ExaGrid system and installed one unit in its main datacenter for primary backup and a second offsite for disaster recovery. The ExaGrid system works along with the school's existing backup application, EMC NetWorker.

Since installing the ExaGrid system, full backup times have been reduced from 56 hours to 22 hours, and most jobs finish within an eight-hour period. The University has been getting an overall data deduplication ratio of 35:1.

"ExaGrid's post-process data deduplication does a great job at reducing our data, and restoring data from the system is fast and easy. We can restore any file in minutes with just a few keystrokes. It simply can't compare to tape," said Warner.

EXAGRID™

ExaGrid combines standard compression along with zone-level data deduplication, which stores changes from backup to backup instead of storing full file copies. 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. 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. 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.

Fast Installation, Easy Management, Outstanding Customer Support

Warner said that the ExaGrid system was set up by an ExaGrid technician over a WebEx and that he was using it within hours for backups.

"It's a very elegant solution. It's simple and straightforward to understand and to manage with a nice interface that presents all the information needed for easy administration. I get email messages every day outlining the status of our backup jobs, so I really don't have to drill down much to find the information I need," he said.

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 assigned to individual accounts. The system is fully supported and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

"We were immediately impressed with the ExaGrid during the installation process. The ExaGrid support engineer assigned to our account dove right in and really knew his way around NetWorker. In fact, I think he probably knows more about NetWorker than anyone we've worked with, anywhere," said Warner.

Warner said that ExaGrid's high level of support was evident when the power went out at the University's remote site, and he received an email notifying him of the outage and then a phone call from the ExaGrid support engineer assigned to the account.

"Our ExaGrid engineer called to check in and make sure that everything was running properly; however, he didn't stop there. He took the initiative to WebEx into the system and double-checked the logs to confirm that things were working

as they were supposed to," he said. "That level of support is extremely rare. To me, support is critical, and ExaGrid delivers some of the best support in the business."

He continued, "I would highly recommend the ExaGrid system because it's easy to use, rock-solid, and it's backed by world-class customer support."

ExaGrid and EMC NetWorker

EMC NetWorker provides a complete, flexible and integrated backup and recovery solution for Windows, NetWare, Linux and UNIX environments. For large datacenters or individual departments, EMC NetWorker protects and helps ensure the availability of all critical applications and data. It features the highest levels of hardware support for even the largest devices, innovative support for disk technologies, storage area network (SAN) and network attached storage (NAS) environments and reliable protection of enterprise class databases and messaging systems.

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