University of Buffalo Medical School Chooses ExaGrid Over Other Backup-to-Disk Options

University at Buffalo

USA

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

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

"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
Asst. Director of Medical Computing

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 ExaGrid 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 scale-out architecture will enable us to easily scale the system to handle more data without doing a forklift upgrade."

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.

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, Dell 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 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 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 operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customers never have to repeat themselves to various support staff, and issues get resolved quickly.

"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."

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).

ExaGrid and Dell NetWorker

Dell NetWorker provides a complete, flexible, and integrated backup and recovery solution for Windows, NetWare, Linux, and UNIX environments. For large datacenters or individual departments, Dell 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 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 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 appliance for onsite 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**.

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