

ExaGrid Disk-based Backup Gets High Marks from Greece Central School District





Key Benefits:

- Restores of large directory takes 90 seconds
- Time savings on managing backups and restores
- Seamless integration with existing backup applications
- Easily expandable for future data growth

"Restoring a fairly large directory from the ExaGrid system takes about 90 seconds. Restoring the same directory from tape would have taken a day and a half. We've been extremely impressed with ExaGrid's restore speeds. It has made a tremendous difference in our day-to- day IT operations because we can spend more time on other duties instead of on managing backups and restores."

Rob Spencer Network Engineer

Customer Overview

Serving a student population of 10,775 students in 17 schools in grades PreK-12, Greece Central is the largest suburban school district in Monroe County and the tenth-largest district in New York State. The Greece Central School District serves most of the Town of Greece. The Greece Central School District was created in July 1928, but schools existed in the area before the Town was established in 1822.

Time Consuming Restores, Reliability Issues with Tape

The process of backing data up to tape was a challenge for the IT department at Greece Central School District, but restores were even more difficult. The District's tape library was unreliable and restoring data from tapes was time consuming, especially considering that its IT staff performs restores for students and faculty members on a daily basis.

"Tape was unreliable and it didn't meet our daily backup and restore needs. Our tape library often malfunctioned and the media itself wasn't easy to restore data from," said Rob Spencer, Network Engineer for Greece Central School District. "To restore a file, we had to find the correct tape, load it, inventory it and then merge it into our database. A restore could take up to a day and a half to complete. We often perform two or three restores a day and the restore process was incredibly time consuming."

ExaGrid's Data Deduplication Increases Retention, Provides Faster Restores

The Greece Central School District initially considered purchasing a larger tape library but decided that a disk-based system would better suit its backup and restore needs and chose ExaGrid.

"No other vendor offered advanced byte- level data deduplication technology like ExaGrid," said Spencer. "ExaGrid's data deduplication is very effective at reducing our data and we are currently able to keep six months of information on our system, which makes restoring older files easier."

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).

Because the District's IT staff had been overburdened with long restore processes, improving restore speed was the most important goal in selecting a new backup approach. Since installing the ExaGrid system, restore speeds have been reduced from days to minutes.

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Integration with Existing Backup Applications

The ExaGrid system is located in the District's datacenter in Greece NY and works alongside its existing backup applications, Arcserve and Dell NetWorker. The District's IT staff also uses its ExaGrid system to make tape copies each week and then archive the tapes offsite for disaster recovery purposes.

"One of the main problems we had with tape was its reliability. The ExaGrid system is extremely reliable and we're confident that our backups are performed correctly each and every time," said Spencer. "Also, the ExaGrid system integrated nicely with our existing backup applications. That was a big plus."

Easy Scalability to Support Future Growth

As the District's employees increase their use of technology and create more data, the ExaGrid system can easily scale to meet backup needs.



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.

"As we begin new technology initiatives it's critical that we have a backup solution that can scale to meet our needs. The ExaGrid is easily expandable so that we can meet our needs now and into the future," said Spencer. "The ExaGrid system is a quantum leap above tape technology and its cost per megabyte was in line with the tape systems we looked at. The ExaGrid really has made our backup processes more reliable and efficient."

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 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.

ExaGrid and Arcserve Backup

Efficient backup requires close integration between the backup software and backup storage. That is the advantage delivered by the partnership between Arcserve and ExaGrid Tiered Backup Storage. Together, Arcserve and ExaGrid provide a cost-effective backup solution that scales to meet the needs of demanding enterprise environments.

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.

