ExaGrid Makes the Grade at Victor Central School District

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>
> **Dave Henderson**
> **Dir. of Computer Services**
> **Victor Central School District**

Customer Overview

Victor Central School District educates over 4,000 students in grades K-12 each year in the town of Victor, New York.

Unreliable, Time Consuming Backups and Restores with Tape

The Victor Central School District's IT department is responsible for backing up and protecting data from the 26 servers in its datacenter that run everything from VMware to Windows to Apple Mac OS X. The district's IT department had been using a tape library to protect its data but found that managing and administering tape on a daily basis was time consuming and stressful. In addition, the department often experienced reliability issues with tape, which lengthened backup times and made the process of restoring data difficult.

"We had several issues with tape, but reliability was a key concern," said Dave Henderson, director of computer services for the Victor Central School District. "There were several instances when we tried to restore a file and found that the data simply wasn't on the tape. And even if the data was on the tape, restoring even small files could take hours of valuable staff time."

Henderson was also concerned that the district's long weekend backups could become a problem in the future. The district has Network Appliance storage-area networks (SANs) at both its primary datacenter and at its disaster recovery site, and had been backing up its data onto a tape library from the SAN located at the disaster recovery site. However, with full weekend backups already stretching into Sunday, any glitch with tape meant that backups spilled over into Monday resulting in a slow down in the district's production network.

Purpose-built ExaGrid System Integrates Seamlessly into Environment to Solve Backup and Restore Issues

After considering several different approaches, the district chose ExaGrid's disk-based backup system.

"We initially considered using our existing Netapp SAN for backup by adding data de-duplication and additional software, but we realized it would be an expensive proposition since we would need to add another disk shelf. It also would have been complex to run and to manage," said Henderson. "We chose the ExaGrid system because it is a device built for backup and we were able to keep our investment in CommVault. We also talked at length with a nearby school district who has been an ExaGrid customer for several years and they recommended the system highly."

The ExaGrid system works alongside the district's existing backup application, CommVault Galaxy™. Most of the district's data is first backed up to its disaster recovery SAN and then sent to the ExaGrid system.

"The ExaGrid system works seamlessly with CommVault Galaxy. The system was easy to install and was up and running quickly," said Henderson. "Our backups are now running much faster and we no longer run the risk of pushing our backups into the workweek. We have a high degree of confidence in the ExaGrid system and we know that our data is properly protected and ready to restore at any time. Restores are fast and take virtually no time at all."

EXAGRID™

After installing the ExaGrid system, the district has seen its backup times reduced significantly. Weekly full backups to tape used to kick off at 9:00 p.m. on Friday nights and finish at noon on Sunday. With the ExaGrid system, backups still start at 9:00 p.m. but finish early Saturday morning. Nightly incremental backup times have been reduced as well.

Data Deduplication Technology Reduces Amount of Data Stored, Easy Scalability to Accommodate Future Growth

ExaGrid's built-in byte-level data deduplication technology significantly reduced the amount of data stored on the system and enables the district to maximize the amount of disk space used. According to Henderson, the district is currently experiencing data deduplication rates of 11.5:1.

ExaGrid combines last backup compression along with data deduplication, which stores changes from backup to backup instead of storing full file copies. 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. 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. When a second site is used, the cost savings are even greater because ExaGrid's byte-level data deduplication technology moves only changes, requiring minimal WAN bandwidth. Henderson noted that the system's scalable architecture will make it easy to handle more data in the future if the need arises.

"ExaGrid's architecture will enable us to easily scale the system to accommodate our data growth into the future. A few years down the line we can easily add onto our ExaGrid system to give us more capacity and throughput," said Henderson.

ExaGrid's GRID computing software makes the system highly scalable, and when plugged into a switch, different sized configurations can be mixed and matched into a single GRID system with capacities of up to a 60TB full back up plus retention. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

Superior Customer Support

"We've been extremely pleased with ExaGrid's customer support. A few months after installing the system we began experiencing problems with our backups. It turned out that there was a simple configuration issue, but the ExaGrid engineer was able to WebEx in and resolve the issue in minutes. We were very impressed," said Henderson.

ExaGrid's industry-leading customer support center is staffed by trained, in-house engineers who are dedicated to individual accounts. The ExaGrid system is fully supported and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

"Installing the ExaGrid system has significantly reduced the amount of time we spend on backups each day," said Henderson. "Now, we're confident in our ability to properly protect and restore our data and we're able to spend our staff time on other projects. We're very happy with the ExaGrid system and highly recommend it."

ExaGrid and CommVault Galaxy

CommVault Galaxy Backup and Recovery software contains extensive capabilities to simplify the management of backup media resources.

Galaxy software writes backup data to a broad collection of storage devices, including disk as a media target. This ability to write to magnetic disk as a functional equal of all other media types while exploiting the random access nature of the disk media sets Galaxy software apart.

Organizations using Galaxy can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Galaxy, providing faster and more reliable backups and restores. In a network running Galaxy, 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 SATA drives with byte-level data de-duplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid's byte-level data de-duplication 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 standard SATA drives. 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 servers 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.

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