Randolph Township Schools Opt for ExaGrid over Data Domain for Scalability

Customer Overview
The Randolph Township Schools serve more than 5,100 K-12 students spanning six schools in Randolph, New Jersey.

Effort to Streamline Backups Leads to Scalable ExaGrid System
The Randolph Township Schools had been backing up data from each of its ten buildings to multiple different local devices, but the district’s IT staff was concerned about its ability to get consistent backups because equipment and processes varied at each building.

“We had a whole host of different backup devices, servers, and procedures for each building and really needed a centralized approach to ensure that we were consistently and efficiently backing up all our data,” said Peter Emmel, network administrator for the Randolph Township Schools. “The other issue we had was redundant data. Because we have multiple copies of the same information, our data was mushrooming out of control, and we were running out of storage to do certain backups.”

Scalability to Accommodate Future Growth
The school district decided to look for a new backup solution and narrowed down the field to disk-based backup solutions from ExaGrid and EMC Data Domain.

The Randolph Township Schools installed an ExaGrid disk-based backup system with data deduplication in its main data center and is planning to deploy another unit offsite for disaster recovery later this year. The ExaGrid system works along with the district’s existing backup application, Symantec Backup Exec.

“When it came down to it, the ExaGrid solution was far more expandable than the EMC Data Domain system. With the EMC Data Domain unit, we worried that if we had to expand the amount of available storage, we’d need to replace the whole system,” Emmel said. “ExaGrid’s GRID architecture will enable us to add capacity or performance by simply plugging in another unit.”

ExaGrid uses a GRID-based configuration, where each appliance contains processing power, memory, bandwidth, and disk. When the system needs to expand, additional appliance nodes are attached to the GRID, bringing with them additional processing power, memory, bandwidth, and disk. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you are only paying for the amount of processing power, memory and bandwidth as you need it. 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.

“Installing the ExaGrid system has taken all the headaches out of our backups. We’re able to get a far greater breadth of backups than we ever could before,” said Emmel.

20:1 Data Deduplication Maximizes Retention
Emmel said that retention was an issue prior to installing the ExaGrid system. The school district was able to keep only two full backups of its mail system at any given time but now can keep four weekly backups and

Key Benefits:
- Data deduplication eliminates redundant data and mushrooming storage needs
- No future forklift upgrade - GRID architecture provides simple scalability with no performance degradation
- ‘Set it and forget it’ system requires much less daily oversight
- Overall deduplication of 20:1 increases retention

Peter Emmel
Network Administrator
Randolph Township Schools
six monthly backups on the ExaGrid.

“We’re seeing overall data deduplication ratios of 20:1, so we’re able to store more information for a longer period of time. It’s made a huge difference for us,” he said. “We back up all of our data to the ExaGrid, from student data to business data, and I now have the freedom to perform full backups any time I want. Our dedupe ratio of 20:1 is amazing. We’re able to back up 11.4 TB of data in only 5.8TB of space.”

ExaGrid combines standard compression along with zone-level 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 zone-level data deduplication technology moves only the changes from backup to backup, requiring minimal WAN bandwidth.

Management Time Reduced from 15 Hours per Week to Almost Zero

Emmel said that since installing the ExaGrid system, the IT staff spends far less time managing backups than before.

“We were spending about three hours a day checking backups, but that time has been reduced to almost nothing since we began using the ExaGrid system. We have no retention issues, our daily, weekly, and monthly backups are scheduled and go off without a hitch, and I receive emails confirming the status of our backups automatically every day,” he said. “We also like that we can restore files with a few keystrokes.”

Seamless Integration with Backup Exec, Proactive Customer Support

“One of the key factors in choosing the ExaGrid system was its tight integration with Backup Exec. We already had Backup Exec and we were very familiar with it. Because of that, we were able to plug in the ExaGrid system and get it up and running in less than three minutes,” Emmel 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.

“The ExaGrid system is very easy to use, and I can manage it through Backup Exec. It really is a ‘set it and forget it’ type of system,” he said. “I’ve also had a very good experience with ExaGrid support. I’ve reached out to our support engineer to ask a couple of Backup Exec-related questions, and there was never any finger pointing. Our ExaGrid engineer was able to guide me through the issue even though it wasn’t an ExaGrid problem.”

Emmel continued, “We’ve been very happy with the ExaGrid product and with ExaGrid as a whole. It’s a very thorough company and everyone, from the sales organization to the support staff, is knowledgeable and up front about the product’s capabilities, and the product absolutely works as advertised. That’s not always the case with technology companies, but it’s been our experience with ExaGrid,” Emmel said.

ExaGrid and Symantec Backup Exec

Symantec Backup Exec is the gold standard in Windows data recovery, providing cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery—including continuous data protection for Microsoft Exchange, SQL, file servers, and workstations. It also supports single-drive libraries, encryption, and disaster recovery. High-performance agents and options provide fast, flexible, granular protection and recovery, and scalable management of local and remote server backups.

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

For more information about ExaGrid, please visit us at www.exagrid.com or call us at 1-800-868-6985.