California Dept of Ed Faces Forklift Upgrade, Replaces EMC Data Domain with ExaGrid System

> "The ExaGrid system was extremely cost effective, and we liked the idea that we could quickly and easily add appliances to the GRID to increase capacity and performance."
>
> **John jackson**
> **Backup and LAN Administrator**

Key Benefits:

- GRID architecture allows for future scalability with no forklift upgrade
- Easy-to-use ExaGrid system works seamlessly with Symantec NetBackup
- Backing up *more* data now takes *less* time with ExaGrid
- Restores are faster, done from most recent undeduplicated full backup kept on landing zone

Customer Overview

The California Department of Education oversees public education for the State of California. The department oversees funding and testing, and holds local educational agencies accountable for student achievement. Its stated mission is to provide leadership, assistance, oversight, and resources (via teaching and teaching material) so that every Californian has access to a good education. Its headquarters are located in Sacramento.

EMC Data Domain System Required Forklift Upgrade

The State of California Department of Education has approximately 1,900 users at its headquarters along with additional users sprinkled throughout the state in district offices and in schools. The agency began shopping for a new backup solution because its EMC Data Domain system had reached capacity.

"Our old Data Domain unit required a forklift upgrade to accommodate our growing backup demands, so we decided to look for a more scalable solution that could handle our needs well into the future," said John Jackson, backup and LAN administrator for the State of California Department of Education. "The ExaGrid system was extremely cost effective, and we liked the idea that we could quickly and easily add appliances to the GRID to increase capacity and performance."

Big Savings Due to Lower Acquisition Cost and Ongoing Maintenance Fees

Jackson said that the ExaGrid system was considerably less expensive to acquire and maintenance was nearly 25% less than the EMC Data Domain system. The department decided to implement the ExaGrid system after consulting with another state agency that was also using the system.

"Once we saw for ourselves how simple it was to use and to scale, it really was an easy decision," said Jackson. "We also liked the fact that it worked with our existing backup application, Symantec NetBackup, so we were able to just drop it into our existing infrastructure."

GRID Architecture Delivers Easy Scalability

The department chose two ExaGrid EX21000E systems and installed one appliance in its main datacenter and a second in its offsite location. The EX21000E systems can be mixed and matched with other ExaGrid appliances in a single GRID. Each EX21000E has 42TB usable storage and can take in a 21TB full backup. Up to ten EX21000E appliances can be configured in a single GRID to handle up to a 210TB full backup.

The department recently took advantage of ExaGrid's GRID architecture and increased capacity by adding two more appliances. 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.

EXAGRID™

Improved Backup and Restore Times

Jackson said that restores from the ExaGrid are faster than the EMC Data Domain unit, and backups run faster and more efficiently, too.

"Our backup times have been significantly reduced with the ExaGrid system, and that's taking into account the fact that we're backing up more data – nearly 11TB now," he said. "Backups to our EMC Data Domain used to take from Friday night to late night Sunday. Now, they still kick off on Friday nights but they're completed by Sunday morning.

Restores are faster, too, Jackson said. "With the ExaGrid, our backups are sent directly to a landing zone on the system and we have access to our last full backup in its complete form. We're able to access our data far faster and more efficiently than we could with our EMC Data Domain system," he said.

Post-process Data Deduplication Delivers 14:1 Reduction in Data

Deduplication was another factor in the decision to purchase ExaGrid, Jackson said.

"ExaGrid's post-process data deduplication produces 14:1 data reduction, which enabled us to purchase a system with a lot less disk space and yet still keep three months of retention," he said.

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.

Easy Installation and Superior Customer Support

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 dedicated to individual accounts. The system is fully supported and was designed and manufactured for maximum uptime with redundant, hot-swappable components. Jackson said that he finds the ExaGrid system easy to use and the customer support engineer assigned to the account is responsive and knowledgeable.

"The ExaGrid system is simple to use and to manage on a day-to-day basis. Our support engineer really knows his way around the system, and it increases the level of confidence we have in our backups because we know that we'll be able to resolve any issue quickly," said Jackson. "We've been very pleased with our transition to the ExaGrid system, and looking to the future, we're happy that we're in a situation that we have a solid backup solution that will be able to quickly and easily scale to handle increased demands."

ExaGrid and Symantec NetBackup

Symantec NetBackup delivers high performance data protection that scales to protect the largest UNIX, Windows, Linux and NetWare environments. With complete protection from remote office to center to vault, NetBackup offers a single console for all backup and recovery operations. Organizations using NetBackup can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as NetBackup, providing faster and more reliable backups and restores. In a network running NetBackup, 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.

About ExaGrid Systems, Inc.

Customers worldwide depend on ExaGrid Systems to solve their backup problems–effectively and permanently. ExaGrid's disk-based, scale-out GRID architecture adjusts to increasing backup demands due to constantly growing data volumes. It is the only solution that combines compute with capacity as well as a unique landing zone to permanently shorten backup windows and eliminate expensive forklift upgrades. Learn more at **www.exagrid.com**.