Customer Overview

The Civil Service Employees Association (CSEA) is one of the largest employee unions in the United States, representing nearly 220,000 members state-wide. CSEA members perform a wide range of essential work throughout the state and local government agencies as well as private sector. CSEA is a member-run union, democratically controlled by member volunteers in more than 750 local chapters throughout the state.

Infrastructure Upgrade Led to Decision to Replace Tape with ExaGrid

CSEA's datacenter was largely run on OpenVMS systems backed up to tape, but when the organization began moving towards virtualization, the union's IT staff decided it was time to look for a more robust solution capable of reducing backup windows and the amount of time spent managing tape.

“Tape was always challenging because it required a lot of monitoring and maintenance on a daily basis, and it took up a lot of space,” said Patricia Neal, production support specialist at CSEA. “When we upgraded our environment, we decided to look for a disk-based solution that could reduce our reliance on tape and efficiently back up both physical and virtual servers.”

CSEA purchased the ExaGrid system after also looking at a unit from EMC Data Domain.

“The ExaGrid system fit easily into our infrastructure, and it works seamlessly with our backup applications, EMC NetWorker and Veeam,” said Neal. “One of the other things we looked closely at was scalability. We knew that our data was likely to grow over time, so we wanted to ensure that our backup solution would be able to scale to handle increasing amounts of data.”

GRID Architecture Provides Required Scalability

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, and bandwidth as well as 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 system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

CSEA originally purchased its first ExaGrid system approximately four years ago and has expanded the system twice since then by adding units to its GRID. Neal said that the organization is considering expanding the system again in the coming fiscal year to handle expected data growth.

“Expanding the ExaGrid system really couldn’t be easier. After racking the system up, I call into our ExaGrid support engineer, and he guides me through the configuration steps. It takes only about an hour to add another unit to the GRID. It’s that simple,” she said.

Key Benefits:

- Works seamlessly with Veeam and EMC NetWorker
- System has been scaled twice to grow with CSEA’s data volume and ‘couldn’t be easier’
- Restores that used to take hours from tape now take just minutes
- Easy-to-manage appliance with intuitive interface saves time
Fast Backups, Powerful Data Deduplication Reduces Amount of Data Stored

The ExaGrid system ensures fast backup times by sending data directly to a landing zone before deduplicating it. At CSEA, data is deduplicated at an average of 12:1, and backups are completed in less than 13 hours each night.

“Our data has grown tremendously in the past four years. Our backup jobs are all completed by the time we come in each morning,” Neal said. “It’s great to have so much data on hand and easily accessible when I need to do a restore. I can restore a file in minutes from the ExaGrid; with tape it would take hours. Now without too much strain on our network, I can move data off the ExaGrid to tape for offsite storage but without the pressure because all the backups have already completed.”

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.

Streamlined Management, ‘Fantastic’ Customer Support

“The ExaGrid system’s interface is intuitive, and the unit is extremely easy to manage, especially compared to the nightmare of managing tape,” said Neal. “Also, support has been fantastic, and we have a very good relationship with our engineer. He’s experienced and is readily available to answer any question that comes up.”

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.

“The ExaGrid system works as advertised, and that’s not always the case with technology products,” said Neal. “It’s easy to manage, and it saves us a tremendous amount of time and aggravation each day because we’re confident in the quality of our backups and in our ability to restore data. Its easy scalability positions us well for the future.”

ExaGrid and Veeam

The combination of ExaGrid’s and Veeam’s industry-leading virtual server data protection solutions allows customers to utilize Veeam Backup & Replication in VMware, vSphere, and Microsoft Hyper-V virtual environments on ExaGrid’s disk-based backup system. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery.

The ExaGrid system fully leverages Veeam Backup & Replication’s built-in backup to disk capabilities and ExaGrid’s zone-level data deduplication for additional data reduction (and cost reduction) over standard disk solutions. Customers can use Veeam Backup & Replication’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with zone-level deduplication to further shrink backups.

ExaGrid and EMC Networker

The EMC NetWorker family provides fast and flexible backup and recovery, with an intuitive user interface and policy-based backup engine that helps automate and simplify the entire backup and recovery process. NetWorker’s powerful snapshot management provides instant data protection and rapid recovery by giving you complete control of third-party snapshot tools.

Organizations using NetWorker can look to ExaGrid as an alternative to tape 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 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.