Customer Overview
The Weber County Library System (WCLS) is a public library system located in northern Utah. The WCLS serves a population of approximately 213,000 Weber County residents, with interlocal agreements, extending access to 330,000 residents in surrounding counties.

Near Disaster Led to Decision to Purchase a New Backup Solution
The WCLS had been using SAN snapshots to back up its virtual machines and tape for backups at the file level, but when a drive on a primary server failed, it brought down a major system, and the drive had to be sent out to a recovery service for data retrieval.

After this brush with disaster, the WCLS began looking closely at its backup infrastructure and decided a major improvement was needed to properly back up its virtual environment.

“We quickly realized that in a virtual environment, a file-level restoration wouldn’t be enough if we ended up losing a whole machine,” said Scott Jones, Technology Director for the Weber County Library System.

The library began its quest for a best-in-class backup solution by choosing Veeam Backup & Recovery and then set out to select a target.

“We began looking for a solution that would enable us to restore an entire machine quickly, and we also wanted offsite disaster recovery. We looked at a lot of backup applications but nothing shined as brightly as Veeam Backup & Recovery. When we learned from our VAR, Trusted Network Solutions, how tightly integrated Veeam was with the ExaGrid system, it became the only choice for a backup target,” 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.

Post-Process Data Deduplication Speeds Backup Times Over Data Domain
The library installed an ExaGrid system in its main datacenter and a second system for disaster recovery at a branch location. Data is automatically replicated between the two systems each night for disaster recovery.

Jones said that the WCLS looked closely at the ExaGrid system and liked its post-process data deduplication approach because it reduces the amount of data stored while ensuring fast backup times. Since installing the ExaGrid system, backup jobs have been reduced from six to eight hours to 90 minutes.

“We have a fairly large backup window, but some of the other systems we looked at would have deduplicated the data while the backup was happening and stretched the backup times out too far,” he said. “Now, we have enough time to perform our backups every night and still have plenty of time to perform maintenance and other tasks that come up. Restores are easier too because we can easily access data on the ExaGrid’s landing zone, and with just a few keystrokes, we can recover data quickly.”

Key Benefits:
- ExaGrid’s tight integration with Veeam provides worry-free backup, restore, and recovery
- Automated cross-replication between sites provides offsite disaster recovery
- Backup window reduced by over 75% from 6 to 8 hours to just 1-1/2
- Automated reporting and intuitive interface provide hands-off operation
- ‘Proactive support is really impressive’
Easy-to-Manage Solution, Superior Customer Support

The ExaGrid system is ‘overly simplistic’ to manage, said Jones, and its automated reporting features help him keep tabs on the status of daily backup jobs and system capacity. “We really like ExaGrid’s automated reporting features. Every day at 9 a.m., we get a report on our nightly backups with detailed information about the health and capacity of the ExaGrid. I don’t have to look at the interface often, but when I do, it’s intuitive and easy to understand and use,” he 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.

“ExaGrid’s customer support is among the best in the business. If we have a question or concern, we contact our support engineer and he’ll remote into the system to help diagnose it. Our engineer is also proactive and has been known to call us to alert us to a potential issue. For example, he recently called us out of the blue to tell us that we were behind on our software updates and promptly scheduled the upgrade. That kind of proactive support is really impressive,” he said.

GRID Architecture Ensures Flexible Upgrade Path

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.

“Scalability wasn’t an initial requirement of ours but as we’ve seen our data grow, we’re happy that we’ll be able to expand the ExaGrid system to handle more data in the future without doing a forklift upgrade,” said Jones.

Jones said that the powerful combination of Veeam and ExaGrid delivers solid, consistent backups day in and day out, and he no longer worries about disaster recovery.

“We’ve been very happy with our choice of the Veeam/ExaGrid combination,” he said. “We learned the hard way exactly how critical it is to properly back up our virtual environment, and we’re extremely confident in our ability to restore data now, thanks to the combination of Veeam and ExaGrid. The two products work seamlessly together and the result has been fast, reliable backups and efficient storage.”

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.

Intelligent Data Protection

ExaGrid’s turnkey disk-based backup system combines high quality disk drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to straight disk. ExaGrid’s zone-level data deduplication 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 backing up to straight disk. 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.