

Denver Public Library Cuts Backup Window by 84% with ExaGrid System

CUSTOMER SUCCESS STORY



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Heath Young
UNIX Systems Administrator

Key Benefits:

- Budget-friendly system works with existing backup application
- Backup window cut by 84%, management time reduced by approximately 90%
- Retention increased six-fold
- 'Awesome' customer support
- GRID architecture provides easy, affordable scalability for the library's future data growth

Customer Overview

The Denver Public Library connects people with information, ideas, and experiences to provide enjoyment, enrich lives, and strengthen their community. The library provides services to over 250,000 patrons in the Denver metro area through 27 branches.

Library Needs to Reduce Time Spent on Backup

The Denver Public Library had been backing up to tape and was outside its backup window. Full backups were taking nearly 24 hours, and the library needed to split the weekend backup over two nights in order to get everything in.

"We were spending four to six hours per week just managing tape for restores and general administration," said Heath Young, UNIX systems administrator for the Denver Public Library. "We needed a solution that could reduce our backup times as well as the time and effort we were putting into backups each week."

Two-Site ExaGrid Replicates for Disaster Recovery

Young got the go-ahead to look for a new backup solution when a ballot measure passed that increased the library's budget. He was intrigued about the potential of disk-based backup solutions and looked at systems from both ExaGrid and EMC Data Domain.

"EMC Data Domain came back with a quote that was just crazy – well into six figures – and way more than we could afford," he said. "ExaGrid worked with us and got us to a point where we could get something in at a reasonable price. We also liked how tightly integrated the ExaGrid system was with our existing backup solution, Symantec NetBackup. The two work extremely well together, and we were able to retain our existing investment in NetBackup."

The Denver Public Library initially installed one ExaGrid system for primary backup and then purchased a second one for disaster recovery. The library backs up and protects all the data from its main datacenter – including user data, production databases, product web servers, and network infrastructures – locally and then replicates it to the second ExaGrid located in a library branch each night for safekeeping.

Backup Window, Management Reduced with ExaGrid System

Young said that since installing the ExaGrid system, the library's backup times have been significantly reduced as has the amount of time spent on management. Full backup times have been reduced from 48 hours to eight hours, and he estimates that he spends only 30 minutes per week managing backup processes and restores, down from the four to six hours with tape.

"The ExaGrid system simplifies the process. I don't have to think about what backup jobs have run or what else needs to get done, and I can get everything completed on a Saturday night," he said. "It also makes a tremendous difference in terms of my weekly workload. I'm able to squeeze all my management and administration into 30 minutes instead of four to six hours."

Deduplication Ratios as High as 28:1, Retention Increased

Young said that the library is experiencing data deduplication ratios of up to 28:1, and the library is now able to keep six months of retention on the ExaGrid system versus the one month it had with tape.



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. The 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 to Manage, 'Awesome' Technical Support

"I found it easy to get up to speed on the ExaGrid system, and technical support has been simply awesome," Young said. "We've had the same support person throughout the whole process. He gets back to us almost immediately and has a high degree of technical knowledge about the product."

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.

GRID Architecture Delivers Unmatched Scalability

As the library's backup needs increase, ExaGrid's GRID architecture will ensure that the system can scale out to meet new demands. ExaGrid uses a GRID-based configuration where each appliance contains not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliance nodes are simply attached to the GRID. 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 what you need when 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.

"The ExaGrid system was the right choice for the long haul. Its GRID architecture will enable us to grow the system as our backup needs increase so we're not worried about the future," said Young. "ExaGrid really streamlined and simplified our entire backup process. We're not concerned with backup windows anymore, and we don't have to deal with tape. It's been a great solution for us."

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.

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.

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.