



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



USA

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
- Scale-out architecture provides easy, affordable scalability for the library's future data growth

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Heath Young

UNIX Systems Administrator

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 Dell EMC Data Domain.

"Dell 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, Veritas 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 writes backups directly to a disk-cache Landing Zone, avoiding inline processing and ensuring the highest possible backup

performance, which results in the shortest backup window. Adaptive Deduplication performs deduplication and replication in parallel with backups for a strong recovery point (RPO). As data is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

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 engineer 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 operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customer's never have to repeat themselves to various support staff, and issues get resolved quickly.



Scale-out Architecture Delivers Unmatched Scalability

As the library's backup needs increase, ExaGrid's scale-out architecture will ensure that the system can scale out to meet new demands.

The ExaGrid system can easily scale to accommodate data growth. ExaGrid's software makes the system highly scalable – appliances of any size or age can be mixed and matched in a single system. A single scale-out system can take in up to a 2.7PB full backup plus retention at an ingest rate of up to 488TB per hour.

ExaGrid appliances contain not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply added to the existing system. The system scales linearly, maintaining a fixed-length backup window as data grows so customers only pay for what they need, when they need it.

Data is deduplicated into a non-network-facing repository tier with automatic load balancing and global deduplication across all repositories.

"The ExaGrid system was the right choice for the long haul. Its scale-out 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 Veritas NetBackup

Veritas NetBackup delivers high-performance data protection that scales to protect the largest enterprise environments. ExaGrid is integrated with and certified by Veritas in 9 areas, including Accelerator, AIR, single disk pool, analytics, and other areas to ensure full support of NetBackup. ExaGrid Tiered Backup Storage offers the fastest backups, the fastest restores, and the only true scale-out solution as data grows to provide a fixed-length backup window and a non-network-facing tier (tiered air gap) for recovery from a ransomware event.

Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines enterprise drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to disk with deduplication or using backup software deduplication to disk. ExaGrid's patented zone-level deduplication reduces the disk space needed by a range of 10:1 to 50:1, depending on the data types and retention periods, by storing only the unique objects across backups instead of redundant data. Adaptive Deduplication performs deduplication and replication in parallel with backups. As data is being deduplicated to the repository, it is also replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

About ExaGrid

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone that enables fastest backups and restores, a Repository Tier that offers the lowest cost for long-term retention and enables ransomware recovery, and scale-out architecture which includes full appliances with up to 2.7PB full backup in a single system.

Learn more at www.exagrid.com.