Toledo-Lucas County Public Library Is Tape-Free with ExaGrid System

"Before I even leave for work in the morning, I check my smartphone to make sure that the backup jobs ran correctly overnight. When I arrive at work, I don't have to change tapes or troubleshoot backup jobs. Installing the ExaGrid has given me hours back in my workday."

Dave Misko
Network Engineer Supervisor

Key Benefits:

- Efficiently scales to meet increasing data volume needs
- Backup window reduced from 15 hours with tape to 6 with the ExaGrid system
- Easy access to reporting provides status on backup jobs from anywhere at anytime
- Backup efficiencies have freed up time in the workday to dedicate to other priorities
- Monitoring by ExaGrid customer support provides proactive

Customer Overview

Located in Toledo, Ohio, the Toledo-Lucas County Public Library is the area leader of information, education, and inspiration. By providing open and equitable access to its collection, all of Northwest Ohio can enjoy the 'The People's University.' The library is home to the fifth largest collection in the state of Ohio.

Need to Replace Time-Consuming, Costly Tape Library Led to ExaGrid

The Toledo-Lucas County Library had hoped to reduce the costs and the amount of time its IT staff was spending on managing tape and troubleshooting backups by purchasing a new tape library. However, the library's backup jobs continued to fail.

"We had great expectations for the new tape library but were left with the same old problems: the high cost of tape, constant troubleshooting, and lots of time spent managing backup jobs. The final straw was when we had to return the autoloader to the factory to have a jammed tape removed," said Dave Misko, network engineer supervisor for the Toledo-Lucas County Library. "We finally decided that enough was enough and began looking for disk-based backup solutions to eliminate tape completely."

Scalability to Grow, Ability to Replicate Data Offsite

After evaluating the pros and cons of different disk-based approaches on the market, the library purchased a two-site ExaGrid system to work along with its existing backup application, Symantec Backup Exec.

"We looked at a couple of different options, but what we liked best about the ExaGrid system was its ability to easily scale as our backup needs increased," said Misko. "The fact that we could also deploy a system offsite for disaster recovery was a big plus.

The ExaGrid system was the best fit and met all of our requirements."

ExaGrid uses a GRID-based configuration, where each appliance contains not just additional 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. 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.

Unique Data Deduplication Approach Speeds Backups

ExaGrid's post-process data deduplication significantly reduces the amount of data stored to boost retention while ensuring fast backups. The library's total data volume is approximately 24TB, with 8TB of data backed up each night.

ExaGrid combines standard compression along with zone-level data deduplication, which stores changes from backup to backup instead of storing full file copies. 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. 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. When a second site is used, the cost savings are even greater because ExaGrid's zone-level

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data deduplication technology moves only the changes from backup to backup, requiring minimal WAN bandwidth.

"The ExaGrid system backs data up to a landing zone before the deduplication process begins, so backup jobs run very quickly. Also, the transmission time between sites is really fast. We start transmitting between sites at 3:00 a.m., and the replication is completed by the time we arrive in the morning," he said.

Misko said that since installing the ExaGrid system, backup times have been reduced to 6 hours, down from as high as 15 hours.

"Our backups have to be completed during the nine-hour timespan when the library is closed, but we weren't able to meet that goal with our tape library, especially when the secondary drive in the carousel failed and our backups stretched to nearly 15 hours. With the ExaGrid system, our backups are completed consistently each night, and our data is automatically replicated offsite for disaster recovery. We don't have to worry about meeting our backup windows anymore," he said.

Easy Management and Top-Notch Support

"Gone are the days when I arrive in the office and have to spend hours troubleshooting backups or manage tape. One of the nice things about the ExaGrid system is its detailed reporting. Before I even leave for work in the morning, I check my smartphone to make sure that the backup jobs ran correctly overnight. When I arrive at work, I don't have to change tapes or troubleshoot backup jobs. Installing the ExaGrid has given me hours back in my workday," said Misko.

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.

"The ExaGrid system is incredibly easy to manage, but I think one of the best things about the system is that it's monitored by ExaGrid's support team. We had a drive failure at one point, and I received a call from our support engineer to let me know he was shipping a new one out immediately," said Misko. "Our support engineer does a great job at keeping in touch, and he's very easy to reach if I have a question. He really knows his way around the system."

Misko said that he would highly recommend the ExaGrid system to other organizations seeking to streamline backup processes.

"ExaGrid is definitely the solution for any organization looking to completely eliminate the need for tape. We're now tape-free, and our backup jobs run so much faster – it's absolutely the way to go."

ExaGrid and Symantec Backup Exec

Symantec Backup Exec is the gold standard in Windows data recovery, providing cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery—including continuous data protection for Microsoft Exchange, SQL, file servers, and workstations. It also supports single-drive libraries, encryption, and disaster recovery. High-performance agents and options provide fast, flexible, granular protection and recovery, and scalable management of local and remote server backups.

Organizations using Symantec Backup Exec can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Symantec Backup Exec, providing faster and more reliable backups and restores. In a network running Symantec Backup Exec, 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**.

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