BI Incorporated Monitors Faster Backups and Restores with ExaGrid

BI
a GEO Group Company

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> **UNIX Systems Administrator**
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Customer Overview

BI Incorporated works with more than 1,000 governmental agencies nationwide to provide offender monitoring technology, supervision services from a national monitoring center, community-based treatment services, and reentry programs to adult and juvenile offenders released on parole, probation or pretrial release. Based in Boulder, Colorado, BI works closely with local public corrections officials to reduce recidivism, enhance public safety, and strengthen the communities the organization serves.

High Costs, Slow Backups Strain IT Resources

Backing up its corporate information, the production environments for its monitoring programs, databases and other information to tape was a continuous process for the IT staff at BI Incorporated. Various backup jobs ran most of the day and night, but with a slow, failing tape library, the backups were difficult to complete and were taxing the firm's IT resources.

BI had a legacy tape backup system with 15-tape cartridges that were rotated on a two week basis and sent offsite to a secure facility. However, the cost of the media was high as were the monthly fees for offsite tape storage.

"The costs associated with our backups were high, including the cost of the tape itself, tape storage and transportation, and the cost of tape retrieval when we needed to restore files," said Jeff Voss, UNIX systems administrator for BI International. "When our tape library began to fail, we took a close look at the whole situation and decided that there had to be a faster, more cost-effective way to protect our data than with tape."

ExaGrid's Post-Process Approach to Data D-Duplication Provides Higher Performance

After considering several different approaches to backup, including a SAN-based solution and a competing disk-based backup solution, BI chose ExaGrid. The ExaGrid system works with BI's existing backup application, EMC NetWorker running on Solaris.

"The SAN-based approach was costly because it would have required us to purchase a SAN on top of the cost of the software. Also, it didn't compare in terms of functionality to the other two solutions," said Voss.

BI chose ExaGrid after evaluating both the ExaGrid system and a competing solution in its datacenter.

"We evaluated both ExaGrid and a competing solution and we were impressed with ExaGrid's approach to data de-duplication, scalability and its overall cost. In our testing, we saw a huge performance advantage over tape with the ExaGrid system. ExaGrid's approach to backup is very efficient and it decreased the load on our backup server. This wasn't the case with the other solution whose de-duplication on-the-fly based approach, though efficient, it caused our backup times to increase."

ExaGrid's byte-level data de-duplication technology stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by 10 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 de-duplication is performed post-process after the data is stored to reduce data.

EXAGRID™

Faster Backups and Restores

Currently, BI backs up data from 75 servers to the ExaGrid system, and has experienced significantly faster backups and restores.

"With ExaGrid, our backups are much faster, and I no longer dread performing restores. To restore a file with our old tape backup system, we would often have to call the tape out of storage, have it delivered, load it into the tape library and hope the file would be there. We would spend anywhere from four to five hours a week doing restores, but now it just takes minutes to restore files from the ExaGrid," said Voss.

Off -Site ExaGrid System Provides Enhanced Disaster Recovery

BI purchased a second ExaGrid system to replicate data between its corporate site in Boulder and its industry leading call center in Anderson, Indiana for disaster recovery. When used to replicate data between two or more sites, ExaGrid systems are extremely efficient because only the byte-level changes are moved across the WAN, so only about 1/50th of the data needs to traverse the WAN.

 "The fact that the ExaGrid system can work so efficiently as a disaster recovery site was important to us," said Voss. "Using ExaGrid will enable us to nearly eliminate our offsite storage costs because most of our data will be backed up to disk."

ExaGrid's Virtualized GRID Architecture Provides Linear Scalability

For BI, scalability was also an important factor in choosing ExaGrid. "The ExaGrid system is extremely scalable and can accommodate our needs now and into the future," said Voss. "When it's time for us to upgrade, we can expand the ExaGrid system by adding capacity instead of having to buy a whole new system."

ExaGrid's virtualized GRID architecture enables organizations to "right size" the system up front and add capacity over time in 1TB to 5TB increments with no loss of performance.

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.

Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines high quality SATA drives with byte-level data de-duplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid's byte-level data de-duplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk space needed by 10 to 50:1, or more, resulting in a solution that is 25 to 30% the cost of standard SATA drives.

ExaGrid is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications.

ExaGrid can be used at a primary site and at a second site to supplement or eliminate offsite tapes with a live data repository or for disaster recovery. When a second site is used, the cost savings are even greater because ExaGrid's byte-level data de-duplication technology moves only changes, requiring minimal WAN bandwidth.

For more information about ExaGrid, please visit us at www.exagrid.com or call us at 1-800-868-6985.

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**.