City of Miami Beach Shores Up Backups with ExaGrid

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> **Senior Systems Administrator**
> **City of Miami Beach**

Customer Overview

The City of Miami Beach is an island city of just 7.1 square miles located on a barrier island between Biscayne Bay and the Atlantic Ocean accessible from the mainland by a series of bridges. The City was incorporated in 1915. With over seven miles of beaches, Miami Beach has been one of America's pre-eminent beach resorts for almost a century. In addition to being a popular beach destination, its identity is strongly linked to the arts and entertainment. Its rich history includes diversity in entertainment and culture, from architecture to nightclubs to fashion. The City has a population of approximately 90,000 residents.

Growing Amounts of Data Put Pressure on Nightly Backups

The City of Miami Beach's IT department is responsible for maintaining all IT-related resources and programs for the entire city, including hardware, software and telecommunications equipment. The IT staff had been backing up nearly 3TB of data each night using a combination of disk and tape but decided to look for a new backup approach because the staff was finding it difficult to keep up with the constant pressure of protecting its rapidly growing data set.

"We were always adding disk in order to keep up with our backup demands. We began looking at data deduplication technologies in hopes of reducing our disk usage when we learned about ExaGrid," said Chris Hipskind, senior systems administrator for the City of Miami Beach. "We were immediately impressed with ExaGrid's post-process approach to data deduplication, and we liked the fact that the ExaGrid is fully integrated with NetBackup, including Open Storage Option (OST) support. NetBackup is an integral part of our backup strategy, and we needed to be sure that we could retain our investment in it."

The City chose a two-site ExaGrid disk backup system with data deduplication. One ExaGrid system was installed in its primary datacenter in downtown Miami Beach, and the second system is located offsite in another area of the City. Data is replicated between the two systems for disaster recovery.

Post-Process Data Deduplication Delivers High Performance

"We spent some time comparing ExaGrid's post-process approach to data deduplication with the inline technology offered by other vendors," said Hipskind. "In the end, we chose ExaGrid because we liked the fact that the data is processed after it lands on the ExaGrid system. We suspected that we'd get better performance, and we haven't been disappointed. The system works extremely well at reducing our SAN disk storage needs."

ExaGrid combines last backup compression along with 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 byte-level data deduplication technology moves only changes, requiring minimal WAN bandwidth.

Hipskind said that the IT department has differentiated retention policies for the wide array of data it protects. Since installing the ExaGrid system, he said that he has been able to better fine tune the policies and move much of the data the City had been backing up to SAN disk to the ExaGrid.

"The ExaGrid system has given us the ability to recover and redeploy disk that we had been using for backups, and it has enabled us to get more data off SAN disk and tape and onto other types of disk. That's just better for us all around," said Hipskind. "We're now able to more comfortably back up our data within our backup windows because we're going to the ExaGrid instead of a combination of disk and tape. We have fewer failures and we no longer exceed our backup window. Also, restores are much easier with the ExaGrid system. It saves us a lot of time, and it's much more efficient."

Scalability, Simplicity, Outstanding Customer Support

The ExaGrid system was designed with scalability in mind, so as the City's backup demands increase, the system can be easily expanded to accommodate more data. ExaGrid's GRID computing software makes the system highly scalable, and when plugged into a switch, different sized configurations can be mixed and matched into a single GRID system with capacities of up to a 100TB full backup plus retention. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across appliances is automatic.

"We were surprised at how easy it was to set up the ExaGrid system. ExaGrid's customer support team was really terrific when it came to the install. We were thinking it would be a painful installation, but the support team was with us step by step, and it worked out really well," said Hipskind. "We've continued to be thrilled with ExaGrid's customer support. It's very personalized and proactive. We have a dedicated support engineer who knows our environment and monitors our systems to let us know if there are any issues. The support has been wonderful."

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.

"The ExaGrid has made a big impact in our daily backups. With the ExaGrid, we've been able to reduce our reliance on SAN disk and tape, refine our backup policies, perform faster restores and more efficiently restore our data," said Hipskind. "It works quietly in the background, but it has made a big difference in our backups."

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 SATA drives with byte-level data deduplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid's byte-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 standard SATA drives. 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.

ExaGrid is the leader in cost-effective disk-based backup solutions. A highly scalable system that works with existing backup applications, the ExaGrid system is ideal for companies looking to quickly eliminate the hassles of tape backup while reducing their existing backup windows. ExaGrid's innovative approach minimizes the amount of data to be stored by providing standard data compression for the most recent backups along with byte-level data deduplication technology for all previous backups. Customers can deploy ExaGrid at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories or for disaster recovery.

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