



BHB Replaces Tape Backup with ExaGrid; Cuts Backup Windows in Half, Restores Data 10X Faster



Bermuda Hospitals Board



BERMUDA

Key Benefits:

- BHB chose ExaGrid for its scalability as well as its flexibility to support many backup apps
- ExaGrid's integration with Veeam provides access to more Veeam features, further improving backups
- Backup windows were cut in half while backups remained on schedule
- Data is restored 'almost instantly' – 10X faster than tape

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Zico Jones

Senior Infrastructure Specialist

Customer Overview

Bermuda Hospitals Board (BHB) comprises King Edward VII Memorial Hospital (KEMH), Mid-Atlantic Wellness Institute (MWI) and the Lamb Foggo Urgent Care Centre. BHB offers comprehensive diagnostic, treatment, and rehabilitative services in response to Bermuda's full spectrum of medical and mental health needs. BHB serves the resident population of approximately 65,000 people, as well as the many visitors who come to the island each year.

ExaGrid System Chosen as New Backup Solution

Bermuda Hospitals Board (BHB) had been backing up to tape, using Veritas Backup Exec. Conscious of the growing need for more data storage, BHB researched options to replace its tape backup. ExaGrid was chosen as part of a new backup solution.

BHB still uses Veritas Backup Exec for its physical servers but added Veeam to its environment to manage its virtual machines (VMs). "ExaGrid has terrific integration with Veeam, especially the ExaGrid-Veeam Accelerated Data Mover," said Zico Jones, BHB's senior infrastructure specialist. "Our ExaGrid support engineer recently helped us upgrade to the latest version of Veeam, which added a new feature that allows us to back up from multiple ExaGrid appliances. The combined solution of Veeam and ExaGrid works for us, and given that we are the only hospitals on the island, using Veeam and ExaGrid allows us to better manage patient information and data backups."

The ExaGrid system is easy to install and use and works seamlessly with all of the most frequently used backup applications, so an organization can seamlessly retain its investment in existing applications and processes. In addition, ExaGrid appliances can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

Backup Windows Cut in Half

Prior to using ExaGrid, Jones found that backups could often be quite lengthy, and would sometimes exceed the defined windows that were in place. Since switching to ExaGrid, the time that backup jobs take have been cut in half, ensuring that backups no longer exceed their scheduled windows.

ExaGrid writes backups directly to a disk 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 while providing full system resources to the backups for the shortest backup window. Available system cycles are utilized to perform deduplication and offsite replication for an optimal recovery point at the disaster recovery site.

Restores are Ten Times Faster

Jones finds that locating and restoring data is easy and quick, especially in comparison to tape. "Using Veeam and ExaGrid makes it possible to choose certain portions of the data to restore, whereas with tape we sometimes had to restore the entire data subset. ExaGrid restores almost instantly, ten times faster than with tape."

ExaGrid and Veeam can instantly recover a VMware virtual machine by running it directly from the ExaGrid appliance in the event that the primary storage VM becomes unavailable. This is possible because of ExaGrid's "landing zone" – a high-speed cache on the ExaGrid appliance that retains the most recent backups in complete form. Once the primary storage environment has been brought back to a working state, the VM running on the ExaGrid appliance can then be migrated to primary storage for continued operation.

Unique Architecture offers Investment Protection

During BHB's search for its new backup solution, ExaGrid's scalability was a major consideration in the decision to purchase the system. ExaGrid's award-winning scale-out architecture provides customers with a consistent backup window regardless of data growth. Its unique landing zone retains the most recent backup in its full unduplicated form, enabling the fastest restores, offsite tape copies, and instant recoveries. ExaGrid's architecture provides lifetime value and investment protection that no other architecture can match.

ExaGrid's multiple appliance models can be combined into a single system configuration, allowing full backups of up to 2PB with a combined ingest rate of 432TB/hr. The appliances virtualize into one another when plugged into a switch so that multiple appliance models can be mixed and matched into a single configuration. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size, so as each appliance is virtualized into the system, performance is maintained and backup times do not increase as data is added. Once virtualized, they appear as a single pool of long-term capacity. Capacity load balancing of all data across servers is automatic, and multiple systems can be combined for additional capacity. Even though data is load balanced, deduplication occurs across the systems so that data migration does not cause a loss of effectiveness in deduplication.



ExaGrid and Veeam

The combination of ExaGrid's and Veeam's industry-leading virtual server data protection solutions allows customers to utilize Veeam Backup & Replication in VMware, vSphere, and Microsoft Hyper-V virtual environments on ExaGrid's disk-based backup system. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery. ExaGrid fully leverages Veeam's built-in backup-to-disk capabilities, and ExaGrid's zone-level data deduplication provides additional data and cost reduction over standard disk solutions. Customers can use Veeam Backup & Replication's built-in source-side deduplication in concert with ExaGrid's disk-based backup system with zone-level deduplication to further shrink backups.

ExaGrid and Veritas Backup Exec

Veritas Backup Exec provides cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery – including continuous data protection for Microsoft Exchange servers, Microsoft SQL servers, file servers, and workstations. High-performance agents and options provide fast, flexible, granular protection and scalable management of local and remote server backups.

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

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.