Canadian City Increases Data Protection with Reliable ExaGrid-Veeam Backup Solution

Customer Overview

Kingston’s vision of being a smart, livable 21st century city is fast becoming reality. History and innovation thrive in the dynamic city located along the beautiful shores of Lake Ontario, in the heart of eastern Ontario, Canada. With a stable and diversified economy that includes global corporations, innovative startups, and all levels of government, Kingston's high quality of life offers access to world-class education and research institutions, advanced healthcare facilities, affordable living and vibrant entertainment and tourism activities.

ExaGrid-Veeam Solution Chosen for Superior Backup Performance

The City of Kingston in Ontario, Canada had been backing up its data using Micro Focus Data Protector to both an HPE StoreOnce and a tape library. The city’s IT staff struggled with sluggish backups that were running over 24 hours. Additionally, restoring data was a difficult process. “Our HPE StoreOnce wasn't dependable and there were several occasions where we had to rebuild it from scratch which caused us to lose our backups. We had no reliable way to recover quickly from a server disappearing,” said Doug Gray, a System Administrator of Networks in the Technical Infrastructure Services Department, for the Information Technology Services Department of the City of Kingston.

“We did a request for proposal (RFP) for a backup solution and our IT vendor recommended a combined solution of Veeam and ExaGrid. I had been impressed with Veeam after learning about them at a tradeshow years ago. We set up a month-long evaluation of the new solution and were impressed with the backup performance it provided,” said Gray.

Easy Installation and Configuration with Both Backup Applications

The City of Kingston installed an ExaGrid system at two of its sites. “Installation was very simple; we had both sites up and running in half a day,” said Gray. As the city adds more appliances and increases the storage capacity of its ExaGrid systems, the IT team plans to eventually implement replication for disaster recovery.

ExaGrid’s appliances contain not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply attached to the existing system. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, with customers paying for what they need when they need it.

Gray backs up the city’s data in daily incremenitals and weekly synthetic fulls. A large amount of data is backed up at each of the sites, about 100TB at one site, and 60TB at the other, mostly consisting of Microsoft Exchange data, as well as file servers and application data. Most of the backup environment has been virtualized and is backed up to ExaGrid using Veeam, with the remaining physical servers, mostly Oracle databases, backed up to ExaGrid using Micro Focus Data Protector. 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 retain its investment in existing applications and processes.

Key Benefits:

- ExaGrid-Veeam solution ‘drastically’ reduces backup windows from days to hours
- IT staff no longer need to rebuild servers; can easily restore them from ExaGrid’s landing zone using Veeam
- ExaGrid’s reliability gives IT staff confidence in data protection
- ExaGrid supports a variety of backup applications, including both of the city’s preferred apps

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ExaGrid-Veeam Solution Takes Worry Out of Backups and Restores

Gray has been impressed with the impact that using ExaGrid has had on daily and weekly backup windows. “Despite the fact that we back up more data, our backup windows have been drastically reduced, especially compared with the full backups of file servers that had gone directly to tape; those would take almost two days to back up and now they take just a few hours to complete. Our incremental backups are also very quick; usually under half an hour.”

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. Once complete, the onsite data is protected and immediately available in its full undeduplicated form for fast restores, VM Instant Recoveries, and tape copies while the offsite data is ready for disaster recovery.

The city’s data is more secure now that it can easily be restored in the event of a server going down. “We had tried testing restores with our previous solution but we could never get them to work properly. If we lost a server, we just had to rebuild it. Now, we can restore a server in under half an hour. Veeam and ExaGrid have made me much more confident in our data protection, now that I know we can restore our data if we ever have a large-scale outage,” said Gray. “In the past, I would worry about the uptime and the dependability of the old products, or if a tape would break, or about issues with older equipment. Now that our backups are so reliable and our data is easily recoverable, that worry has been taken off of my mind.”

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.

‘Fantastic’ ExaGrid Customer Support Leads to Calm Confidence in System

Gray appreciates the customer service that his assigned ExaGrid support engineer provides. “Our ExaGrid support engineer is easy to work with and he really knows his stuff. I have more confidence in our backup environment because I know that if something goes wrong, he will help me work though the issue without hesitation. He’s fantastic! He was helpful with installing and configuring our ExaGrid systems in the beginning, and even worked directly with our Oracle DBA to configure the backups of our databases with Data Protector. Whenever I’ve had a question about the system, he always responds quickly and with a very thorough and helpful explanation. It’s very calming.”

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 level 2 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.

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 adaptive 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 adaptive deduplication to further shrink backups.

ExaGrid and Micro Focus Data Protector

Efficient disk-based backup requires close integration between the backup software and the disk device. That is the advantage delivered by the partnership between Micro Focus Data Protector and ExaGrid. Together, Micro Focus Data Protector and ExaGrid provide a cost-effective disk-based backup solution that scales to meet the needs of demanding enterprise environments.

About ExaGrid

ExaGrid provides tiered backup storage with a unique disk-cache Landing Zone, long-term retention repository and scale-out architecture. ExaGrid’s Landing Zone enables the fastest backups, restores, and instant VM recoveries. The retention repository offers the lowest cost for long-term retention. ExaGrid’s scale-out architecture includes full appliances in a scalable system. Learn more at www.exagrid.com.