**Customer Overview**

Microserve, a leading Canadian IT provider, helps organizations across Canada leverage IT to achieve their goals. Its unique approach to client partnerships is different from the average IT provider. Instead of taking a one-size-fits-all approach, Microserve focuses on providing a customizable IT service that is specific to the needs of each client. For over 30 years, companies have trusted in Microserve’s experience, commitment to excellence, and insight to keep all their technologies running and optimized for the future. With the expansion of ExaGrid services available to Microserve customers, it continues its commitment to client partnerships.

**Microserve Expands Its Own ExaGrid Usage to Benefit Clients**

Microserve uses ExaGrid as a replication target at its DR site for its internal data. It also backs up its client data to ExaGrid systems using Veeam. The IT team at Microserve had switched to ExaGrid as a backup target behind Veeam, replacing NAS servers. The team found it to be a superior solution for backing up its own data and decided to offer ExaGrid as an option to its clients for its Backup and Disaster Recovery services.

“We liked the way ExaGrid worked in our internal infrastructure and realized it would be a better backup solution for our clients,” said Cyrus Lim, solutions architect at Microserve.

When using a combination of ExaGrid and Veeam’s industry-leading virtual server data protection solutions, customers utilize the Veeam® Availability Suite™ in VMware, vSphere, and Microsoft Hyper-V virtual environments on ExaGrid’s Tiered Backup Storage. This combination provides fast backups and efficient data storage, as well as replication to an offsite location for disaster recovery. Customers can use Veeam’s built-in source-side deduplication in concert with ExaGrid’s Tiered Backup Storage with Adaptive Deduplication to further shrink backups.

**ExaGrid’s Secure Architecture Provides Peace of Mind**

One of the reasons that Microserve switched to ExaGrid was because of the superior data protection that its two-tier architecture offers.

**Key Benefits:**

- After switching to ExaGrid for its internal backups, Microserve realized it was a better solution to use for client data as well
- ExaGrid’s secure tiered architecture and Retention Time-Lock feature gives the IT provider and clients peace of mind
- Microserve able to offer clients longer retention due to improved deduplication from ExaGrid-Veeam solution
- ExaGrid solution scales easily and works ‘as advertised’

“ExaGrid’s Retention Time-Lock feature with delayed deletes and immutability was key in our decision to offer ExaGrid to our clients as an option. It gives our clients and us peace of mind,” said Lim.

ExaGrid appliances have a network-facing disk-cache Landing Zone Tier where the most recent backups are stored in an undeduplicated format for fast backup and restore performance. Data is deduplicated into a non-network-facing tier called the repository where deduplicated data is stored for longer-term retention. The combination of a non-network facing tier (virtual air gap) plus delayed deletes with ExaGrid’s Retention Time-Lock feature, and immutable data objects, guards against the backup data being deleted or encrypted.

**Better Deduplication Allows for Longer Retention**

Lim backs up Microserve’s data on a daily, monthly, and yearly basis. He appreciates that the deduplication that the ExaGrid-Veeam solution provides storage savings, leaving a greater capacity for long-term retention. “We’re able to extend the amount of data we can keep on our ExaGrid appliances and still keep within budget.”

---

*Cyrus Lim*

Solutions Architect

Microserve Impact:

- Improved backup and recovery performance
- Increased efficiency and capacity
- Enhanced data protection
- Peace of mind for clients and IT provider

---
of retention we offer to clients and increase our own retention as well. The improved dedupe reduces the penalty of keeping of multiple copies,” he said.

Veeam uses the information from VMware and Hyper-V and provides deduplication on a “per-job” basis, finding the matching areas of all the virtual disks within a backup job and using metadata to reduce the overall footprint of the backup data. Veeam also has a “dedupe friendly” compression setting which further reduces the size of the Veeam backups in a way that allows the ExaGrid system to achieve further deduplication. This approach typically achieves a 2:1 deduplication ratio.

ExaGrid is architected from the ground up to protect virtualized environments and provide deduplication as backups are taken. ExaGrid will achieve up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of upwards to 10:1, which greatly reduces the amount of disk storage required.

Instant Restores and Running a VM from ExaGrid Landing Zone

Lim has been impressed with how quickly data can be restored using the ExaGrid-Veeam solution during regular DR testing and, on rare occasions, when a file retrieval is required. In one instance, the capability to boot a VM directly from ExaGrid was key to keeping the production environment going while resolving an unexpected issue.

“When our remote cluster went offline, the ability to instantly restore and run VMs from our internal ExaGrid system gave us time and flexibility as the VMs were added back to the production disks in stages as we completed the fuller restores, based on priority”, said Lim, addressing the solutions’ instant data restore capabilities.

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 disk 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.

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.