Customer Overview

The Montachusett Regional Transit Authority (MRTA) is one of the Commonwealth of Massachusetts’ 15 regional transit authorities. MRTA is located in North Central Massachusetts and encompasses parts of Northern Worcester and Western Middlesex Counties. MRTA was created in 1978 to provide public transportation to 22 area cities and towns and works with those local communities to offer attractive travel options.

Virtualization Leads to ExaGrid and Veeam

Prior to ExaGrid, MRTA was using Dell EMC Data Domain. As they started virtualizing their environments, backing up virtual machines required a little more work, including installing modules.

“We didn’t want to go that route, so we looked into alternatives in order to optimize our environment, and we came up with ExaGrid and Veeam,” said David Gallant, IT administrator for MRTA. “My director had experience with ExaGrid in the past, so we did a full analysis of a few different offerings. I did my due diligence, and ExaGrid won hands down due to its tight integration with Veeam.

“Our old backups took quite some time to complete and, in addition, we were constantly having performance issues. I’d say with the ExaGrid-Veeam solution, we have a much shorter backup window – I would estimate a 40% improvement at least. I monitor ExaGrid once a day, and that’s all. There’s not much to it. It just works,” Gallant said.

Retention and Replication Covered

Replication was an issue for MRTA in the past, and Gallant reports having to go down to three days’ retention because they were running out of disk space. Now, he says they’re back to two weeks and it’s very fast.

“We back up from two sites, and we also run cross-replicated backup copies from site to site. Every night, data from site A gets replicated to site B, and data from site B gets replicated to site A, and we continue to maintain a good percentage of data availability. Post Veeam, we are seeing an average of 4:1, which is phenomenal. We get 50TB of data down to under 12TB – that’s very manageable for us.

“I like the ability to rebuild a virtual machine from another site. I can go right from site B and make the VM from site A and do a full restore from site B, which could really help us – this is very good. With Dell EMC Data Domain, I was spending more time doing the daily monitoring and trying to figure out where I could save on disk space here and there. Now, I just do a quick view to make sure everything is ‘in the green,’ and that’s it – I’m done for the day. I save half my day NOT managing our backup storage!”

David Gallant
IT Administrator

Key Benefits:

- 40% improvement in backup window
- 50% less IT staff time spent managing backups
- Tight integration with Veeam maximizes system optimization
- ExaGrid engineer ‘knows what we need’ and is ‘very knowledgeable’ about Veeam
Seamless Integration and Support
That ‘Knows What We Need’

“The ExaGrid relationship has been very good. I like having an assigned ExaGrid engineer because he keeps in touch with me and consistently checks on how things are going. He’s very knowledgeable about products, especially Veeam! I haven’t had to reach out to Veeam at all because our ExaGrid engineer knows what we need.”

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 assigned to individual accounts. The system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.

GRID-based Scalability
ExaGrid uses a GRID-based configuration, where each appliance contains not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply attached to the GRID. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you only pay for what you need when you need it. In addition, as new ExaGrid appliances are added to the GRID, the system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

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.

The ExaGrid system fully leverages Veeam Backup & Replication’s built-in backup-to-disk capabilities and ExaGrid’s zone-level data deduplication for additional data reduction (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.

Veeam-ExaGrid Deduplication

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 a 3:1 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

About ExaGrid

ExaGrid provides backup storage with a unique landing zone and scale-out architecture. The landing zone provides for the fastest backups, restores and instant VM recoveries. The scale-out architecture includes full appliances in a scalable GRID and provides for a fixed-length backup window as data grows, eliminating expensive forklift upgrades. Learn more at www.exagrid.com.