CUSTOMER SUCCESS STORY

AspenTech is a leading software supplier for optimizing asset performance. Its products thrive in complex, industrial environments where it is critical to optimize the asset design, operation, and maintenance lifecycle. AspenTech uniquely combines decades of process modeling expertise with big data machine-learning. Its purpose-built software platform automates knowledge work and builds sustainable competitive advantage by delivering high returns over the entire asset lifecycle.

Worldwide Backup Required

Upgrade from Tape

AspenTech had been using Quantum Scalar i80 tape libraries with Dell EMC NetWorker to back up its data, but the technology company sought a solution that would bring greater speed to backups at a lower cost and add deduplication to its environment to maximize storage capacity. AspenTech ultimately chose ExaGrid and Veeam to replace its previous solution and back up data in its mostly virtualized environment.

AspenTech installed ExaGrid systems at five locations worldwide. Richard Copithorne, principal systems administrator, finds it surprisingly easy to manage the multiple systems. “ExaGrid provides a simple one-stop web console to see everything at a glance. We use that in conjunction with Veeam, and both offer the information on a single pane of glass.”

Copithorne backs up AspenTech’s data in weekly synthetic fulls and nightly incrementals. “Our backup window is usually close to 24 hours, because our systems across the globe are running at different times. We also back up multiple snaps from VMs across the globe. Our vital VMs are backed up using Veeam and sent to the multiple locations and to the ExaGrid system at our DR site, which we set up recently with the help of our ExaGrid support engineer.”

While backups run throughout the day, AspenTech’s individual backup jobs have a much shorter window. “We are able to back up our entire environment at headquarters in just four hours. In some of our international locations, the entire environment is backed up in just one hour! Using tape, a full backup of a VM would sometimes take 24 hours, but we are able to leverage Veeam and ExaGrid to back up the same amount of data in an hour, and it’s already deduped as it goes,” said Copithorne.

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.

VM Boots and Data Restores ‘Amazingly Easy’

Copithorne is impressed with the ease and speed with which he can restore data now. “One of the major selling points of using ExaGrid with Veeam is the ability to stand up a VM almost immediately with just a couple of clicks. When I need to do an instant VM restore or create a clone copy, it’s amazing how easy it is.”

Key Benefits:

- Short backup windows keep worldwide backups on schedule
- ExaGrid-Veeam combined dedupe saves ‘significant money’ on disk
- VM boots are ‘amazingly easy’
- Unmatched customer support – Dell EMC and HP aren’t ‘nearly as streamlined’
- Entire environment viewable at a glance with one-stop web console

AspenTech-Veeam Provide High Efficiency, Lower Cost Global Backup Strategy for AspenTech

Richard Copithorne
Principal Systems Administrator

“One of the major selling points of using ExaGrid with Veeam is the ability to stand up a VM almost immediately with just a couple of clicks. When I need to do an instant VM restore or create a clone copy, it’s amazing how easy it is.”
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.

“In some cases, when someone accidentally deletes a file, I am able to go to a console, drill into a VMDK file, and pick the file they need restored. That’s huge! With tape, we would have needed to physically go to the data center, unload tapes from the library, find the right tape, put the tape in the library, catalog the file, and then restore the file. Speaking from experience, restoring just a single file from tape could take up to an hour, and now, it takes a mere ten minutes,” said Copithorne.

**ExaGrid Delivers ‘Fantastic’ Support Compared to HP and Dell EMC**

Copithorne’s experience with ExaGrid’s customer support has been ‘fantastic.’ “Having worked with the likes of HP and Dell EMC, I can speak from experience – their support isn’t nearly as streamlined as ExaGrid’s. When I send an email to my ExaGrid support engineer, I typically receive a response within half an hour. If there is ever an issue, I receive an automated alert, and my support engineer will get in touch with me; he usually knows what’s going on before I do! This allows me to take a ‘set it and forget it’ approach and focus on my other priorities because I don’t have to worry,” said Copithorne.

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.

Copithorne finds that ExaGrid’s reliability allows him to focus on other aspects of his position. “As an administrator, using a system that doesn’t require constant upkeep and alleviates the need for me to be hands-on is a major plus for day-to-day operations.

There is so much happening on any given day that the last thing I want to do is worry about backup. Using ExaGrid gives me peace of mind because it’s a solid product.”

**Savings with ExaGrid-Veeam Combined Dedupe**

“Deduplication has saved us from what used to cause a lot of headaches,” Copithorne said. “When I look at the environment—just at our headquarters alone—we are getting a 7.5:1 deduplication ratio. That saves us significant money on disk, and we don’t have to worry about running out of storage anytime soon.”

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.

**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.

**About ExaGrid**

ExaGrid provides hyper-converged secondary storage (HCSS) for backup with a unique landing zone and scale-out architecture. The landing zone enables the fastest backups, restores, and instant VM recoveries. The scale-out architecture includes full appliances in a scalable system and ensures a fixed-length backup window as data grows, eliminating expensive and disruptive forkift upgrades. Learn more at [www.exagrid.com](http://www.exagrid.com).