

# ExaGrid Provides Storage Savings and Enhances Data Protection for New Hampshire General Court

**CUSTOMER SUCCESS STORY** 



"Using ExaGrid has given me a sense of security, since I know our backups are available and can spin up fast. I can tell the COO with confidence that if anything ever goes down, we have the resources to restore our data and we will be able to get up and running again quickly."

Ray Larose Sr. Information Systems Engineer

#### **Key Benefits:**

- ExaGrid's unique Adaptive Deduplication process eases strain on network
- ExaGrid-Veeam solution provides 'incredible' deduplication
- ExaGrid simplifies backup management which frees up staff time

### **Customer Overview**

The General Court of New Hampshire is the bicameral state legislature of the U.S. state of New Hampshire. The lower house is the New Hampshire House of Representatives with 400 members. The upper house is the New Hampshire Senate with 24 members. The General Court convenes in the New Hampshire State House in downtown Concord.

# Upgrades Result in 'Lightning-Fast' Backup Environment

The General Court of New Hampshire upgraded its IT infrastructure to an improved network that boosted internal bandwidth and to use the combined solution of ExaGrid and Veeam. "They've been working very well together," said Ray Larose, senior information systems engineer at the General Court. "ExaGrid and Veeam seem like they're built to work together as one seamless unit. Now that we've updated our environment, everything's lightning fast."

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's Adaptive Deduplication Process Eases Replication

The General Court installed an ExaGrid system at its primary site that replicates



data to a second ExaGrid system for disaster recovery (DR). Larose has found that the ExaGrid-Veeam solution easily backs up the virtualized environment.

Larose backs up the General Court's data on a daily basis, in addition to a weekly and monthly backup and is pleased with how time-efficient backups are. "Our backups take about 40 minutes," he said. "The ExaGrid system is so reliable. We haven't had any issues, it's very much a set-it-and forget-it solution."

He especially appreciates ExaGrid's Adaptive Deduplication process, which has eased strain on the network. "One of the best features about ExaGrid is that it deduplicates our data before it's replicated to our DR site. Now that there is less data moving over to the second site, we've noticed an improvement from before, when full, undeduplicated data was streaming across the fiber connection," said Larose.



ExaGrid writes backups directly to a disk-cache 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.

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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.

## 'Incredible' Deduplication Saves on Storage

Larose has been impressed with the storage savings that the ExaGrid-Veeam solution provides. "The deduplication and compression are really incredible. There's so much data on our file servers that is duplicated and redundant, so it's a relief that ExaGrid has the intelligence to only pull data once and manage the changed files, which ends up being a huge savings in terms of storage."

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.

## **Strong Relationship with ExaGrid Support**

Larose appreciates ExaGrid's support model of working with an assigned customer support engineer. "ExaGrid's support is personable and hands-on, which creates a much stronger relationship than other vendors provide. My ExaGrid support engineer upgrades our ExaGrid system for us, and discusses how the upgrade will impact our backups, while working with us to figure out the best time to start the process. My support engineer has walked me though so many things, and I like that I can give him remote access and we can work together through a screen share," he said. "Since ExaGrid support takes care of a lot of the system maintenance, the only thing I need to do is monitor the system—it runs behind the scenes, which frees up a ton of my time."

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.

### **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.

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