Customer Overview
Gifford Medical Center, a Critical Access Hospital in Randolph, Vermont, is the heart of the Gifford Health Care system. Nationally recognized for its importance in serving its rural community, it has remained a central hub of high-quality medical care in Vermont for over 110 years.

ExaGrid and Veeam: ‘Set It and Forget It’
Gifford Medical Center uses Veeam to back up its data to an ExaGrid system. Sheila Hopkins, the hospital’s server administrator, finds that this solution works very well in the backup environment. “The ExaGrid-Veeam solution is reliable and very low-maintenance. The most that I need to do is quickly check the backup report each day; it’s very much a set-it-and-forget-it backup solution.”

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 (DR).

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.

Reliable Backups in Short Windows
Gifford Medical Center has an ExaGrid system at its primary site which replicates backups to its DR site. Hopkins backs up Gifford Medical Center’s data in daily incrementals and weekly fulls. The data consists of a variety of applications, as well as SQL databases, and file servers. “Our environment is mostly virtualized, though we do have some physical servers,” said Hopkins. “It’s great that we can use Veeam to back up our 70 virtual machines (VMs) as well as our physical servers to the ExaGrid system.”

Hopkins is impressed by the short backup windows achieved with ExaGrid-Veeam solution. “Our incrementals range from 40-50 minutes for VMs and only five minutes for our physical servers,” she said. She has also found that restoring data is a very straightforward and easy process.

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 DR 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 DR.
**Easily Scalable Solution**

As Gifford Medical Center's data has grown, the hospital has installed a larger ExaGrid appliance model to its primary site, and then added the smaller appliance to the DR site system. Hopkins has found that making the transition and scaling out the DR site has been easy, with the help of her ExaGrid support engineer. “Adding the appliances was very straightforward. My support engineer sent instructions on the setup, so I was up and running within 15 minutes, and then she took care of the configuration. It was so simple.”

The ExaGrid system can easily scale to accommodate data growth. ExaGrid’s computing software makes the system highly scalable, and when plugged into a switch, appliances of any size or age can be mixed and matched in a single system with capacities of up to a 2PB full backup plus retention and an ingest rate of up to 432TB per hour. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

**ExaGrid Support Provides Guidance on System**

Hopkins appreciates the guidance she receives from her assigned ExaGrid support engineer. “I’m somewhat new to using an ExaGrid system and my support engineer took time to introduce me to the solution in a training session to help me get comfortable using the system. She’s very knowledgeable and supportive and has been helpful with both ExaGrid and Veeam.”

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-Veeam Combined 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 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.

**About ExaGrid**

ExaGrid provides intelligent hyperconverged storage 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 forklift upgrades. Learn more at [www.exagrid.com](http://www.exagrid.com).