# Century Arms Optimizes Backups and Maximizes Storage with ExaGrid-Veeam Solution

**CENTURY ARMS**

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**Keith Simpson**
**IT Systems Administrator**

## Key Benefits:

- Century Arms maximizes backup storage space with combined ExaGrid-Veeam deduplication
- ExaGrid support assisted Century Arms in scaling and re-configuring its systems to establish cross-replication
- Internal customers 'very happy' with data restores that now take just minutes
- ExaGrid system sends email alerts and daily reports for easy maintenance

## Customer Overview

For over 50 years, Century Arms has provided unique and affordable products to the American collector, hunter, and target shooter. That tradition is carried on today, with a state-of-the-art manufacturing facility located in Vermont, as the company continues to offer unique, innovative, and quality products to the United States consumer as well as the United States Government.

## Leveraging Backup Solution to Its Full Potential

When Keith Simpson first started as the IT systems administrator at Century Arms, he realized that the company's backup environment was not being used to its fullest potential. The company had been backing up its virtual machines (VMs) on ESXi servers using Veeam to a two-site ExaGrid system; however, Simpson found that during the transition of IT staff, the ExaGrid systems were no longer being utilized, so he made it a priority to evaluate the backup environment and reestablish backups to ExaGrid.

"We had an ExaGrid system in our main facility and another at our executive office, halfway across the nation," said Simpson. "I decided to establish cross-replication between the sites. Neither of the ExaGrid systems were being utilized when I started, so I quickly learned as much as possible about ExaGrid and Veeam, and contacted an ExaGrid support tech, who was helpful in assessing our next steps. We determined that we needed to add a new appliance to our system in order to have enough storage to establish cross-replication. Now, we have a hub-and-spoke configuration and not only a viable backup schedule here at our main site, but also offsite replication happening at the same time. That provides us with peace of mind, knowing that we have multiple backups on- and off-site, should the worst-case scenario happen."

All of ExaGrid's appliances contain not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply attached to the existing system. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, with customers paying for what they need when they need it. In addition, as new ExaGrid appliances are added to the existing system, ExaGrid automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the system.

## Data Deduplication Maximizes Storage

Simpson looked to his ExaGrid support engineer to help him with data deduplication issues when he first initialized the ExaGrid-Veeam solution. "We're able to maximize our storage space with the deduplication we get from ExaGrid and Veeam. Initially, our settings were incorrect in Veeam, but with our support engineer's help, we adjusted the settings, and our ratios have since been steadily climbing."

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

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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.

## Short Backup Windows and Quick Restores

Simpson backs up Century Arms' data in daily incrementals and a weekly full, and is impressed with the short backup windows. "The daily incrementals take between 30 and 90 minutes, depending on the amount of new data stored since the last backup. The full weekly backup takes a few hours. The backup windows work well with our schedule, and I set everything to run when no one is in the office, so the jobs usually start around 9:00 p.m.  I like that the system emails me a report every morning about the success of the backups."

Simpson has been impressed with how quickly data is restored from ExaGrid's landing zone. "Our Accounting office had accidentally deleted a folder and was very happy that I was able to restore it in just ten minutes!"

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 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.

## Easy System Maintenance with Proactive Customer Support

"Using ExaGrid eases my worries about backup so I can focus my attention on other projects.  The system periodically 'phones home' and sends an alert if there's an error, which triggers my ExaGrid support engineer to reach out to me and see if she can help," said Simpson.

"This has been my first experience using ExaGrid, and my support engineer has bent over backward to make sure everything is running smoothly while I've been learning my way around the system. I'm really sold on the ExaGrid system—I can't imagine using anything else! Beyond the product itself, the customer service is amazing!"

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.

## 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. ExaGrid fully leverages Veeam's built-in backup-to-disk capabilities, and ExaGrid's zone-level 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 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 forklift upgrades. Learn more at **www.exagrid.com**.