

Greenchoice Gains 20 Hours Back to Workweek After Switching to ExaGrid

CUSTOMER SUCCESS STORY



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> Carlo Kleinloog System Administrator



Key Benefits:

- Staff regains 20 hours each week that used to be spent on resolving backup issues
- Backup jobs finish 6x faster
- ExaGrid-Veeam deduplication doubles the amount of time until additional storage will be needed

Customer Overview

Greenchoice is a Netherlands-based renewable energy company. Its mission is to provide 100% green energy for a cleaner world by sourcing energy generated from the sun, wind, water, and biomass. In addition to proving customers with renewable energy, Greenchoice offers its customers the opportunity to generate their own energy by investing in ownership of solar panels and windmills, as well as helping customers to create energy cooperatives.

20 Hours Spent Weekly to Resolve Backup Issues Takes a Toll

Prior to switching to ExaGrid, Greenchoice was backing up to server-attached storage. The backups were not going smoothly, leading Carlo Kleinloog, Greenchoice's system administrator, to look for a better solution.

Kleinloog described some of the issues he experienced, "[The prior system] didn't really offer us what we needed. I had to spend up to 20 hours a week resolving issues with backup. The backups were running, but sometimes the server had issues, then replication went wrong, and to check on the backups we had to reboot the server. When the server was rebooted, it took four hours just to scan the store that I was putting the backup on. One job wouldn't finish, and then another one was running again. Performance issues were really, really bad." Not only were backups causing a strain on the workweek, but restores were also proving difficult. "We did one full server restore that actually crashed. When I had to restore individual files, it took me half an hour just to set up the server and mount the data that I was supposed to restore, and sometimes it worked, sometimes it didn't," said Kleinloog.

ExaGrid-Veeam Combo Chosen as New Solution

Greenchoice looked into other options, such as local storage using Microsoft for deduplication, but Kleinloog was not comfortable with heading in that direction while needing to back up large terabytesized files.



A local company specializing in storage solutions recommended ExaGrid to Kleinloog, who had already been looking into using Veeam as a backup application. Kleinloog was impressed by the demo of Veeam he had downloaded, and looked into ExaGrid's seamless integration with Veeam. After reading ExaGrid's customer success stories on its website and conducting other online research, he decided to install both Veeam and ExaGrid together as Greenchoice's new storage solution. Kleinloog set up two ExaGrid appliances at separate sites that cross-replicate, allowing for redundancy.

Scalability Offers Flexibility to Only Buy What Is Needed

While initially looking at the different ExaGrid models to purchase, Kleinloog was concerned about running out of storage as Greenchoice has been experiencing growth at a dynamic rate. He figured that he would need to purchase additional appliances just a few years down the line but was impressed to learn that the combined ExaGrid-Veeam deduplication ratios maximized storage and



doubled the amount of time it would take before additional storage is needed.

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.

Better Performance in a Shorter Time

It used to take Kleinloog half an hour just to set up the server for a restore, and now the entire restore process has been reduced to minutes. "We can actually start restores right from the ExaGrid. After a virus attack, we've had to restore files, and it took just ten minutes, at most," Kleinloog noted.

Kleinloog is impressed with how quick the backup process is, now that he uses the combination of ExaGrid and Veeam. He commented, "Our largest backup takes three and a half hours; that's nothing compared to what it was before. Backup is easily five to six times faster."

With shorter backup windows and quicker restores, as well as not needing to spend 20 hours a week resolving backup issues, Kleinloog has more time to accomplish other projects. Kleinloog commented, "If you look at dedupe ratios and the performance of the backup, it's unbelievable. The performance is so good that I don't need to check on it every day. We don't have outages anymore; it's just running -- it's up on arrival. We have a really dynamic environment, we're growing and doing new things, so we actually needed this extra time."

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.

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 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-Veeam Combined Dedupe

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.

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