



Blue Stream Fiber Uses ExaGrid-Veeam Solution for Longer Backup Retention with Enhanced Data Security



USA

Key Benefits:

- Blue Stream Fiber uses ExaGrid to store internal data as well as house customer cloud data
- ExaGrid-Veeam deduplication enables Blue Stream Fiber to offer longer retention to its customers
- ExaGrid SEC appliance model which encrypts data at rest for extra security

"As a service provider, it is critical to ensure security of our customers' data. Using ExaGrid's SEC appliances reduces the risk of ransomware."

James Stanley
Senior Systems Engineer

Customer Overview

ITS Fiber was acquired by Blue Stream Fiber in December, 2020. Blue Stream Fiber provides customers with the most advanced broadband and television products all over 100% gigabit capable networks. With a 40-year history of providing customers with local and high-touch customer service, Blue Stream is a welcome alternative to the incumbent providers in Florida.

ExaGrid Chosen for Integration with Veeam

Blue Stream Fiber provides not only communication services, but managed IT services to its customers, such as backing up data to the cloud. The provider had been housing the cloud data on Supermicro storage, using FreeNAS software, and using Veeam as its backup application. As the storage began to run low and retention demands increased, the Blue Stream Fiber staff began to look into other solutions. Blue Stream Fiber is a VMware cloud provider and a Veeam partner, so integration with the backup application was a key factor in the search for a new storage solution.

"We were looking for a product that would reduce our data footprint and work well with our internal environment as well as our customers' IT environments," said James Stanley, senior systems engineer at Blue Stream Fiber. "We use Veeam to back up our internal data and customer data to the cloud. Our customers' requirements range from needing offsite storage to backup a single server with Veeam Agents, to needing cloud storage to replicate their local Veeam backup data to an offsite repository utilizing Veeam Cloud Connect.

"ExaGrid was recommended as a great option to use with Veeam by some of the members in the local VMware User Group (VMUG)," said Stanley. "We liked that ExaGrid can scale easily. As a service provider, we need to respond quickly to customer requests and new projects, which makes scalability important to us."

Veeam's backup solutions and ExaGrid's Tiered Backup Storage combine for the industry's fastest backups, fastest restores, a scale-out storage system as data grows, and a strong ransomware recovery story – all at the lowest cost.

ExaGrid and Veeam can instantly recover a file or VMware virtual machine by running it directly from the ExaGrid appliance in the event that the file is lost, corrupted or encrypted or the primary



storage VM becomes unavailable. This instant recovery is possible because of ExaGrid's Landing Zone – a high-speed disk cache on the ExaGrid appliance that retains the most recent backups in their complete form. Once the primary storage environment has been brought back to a working state, the VM backed up on the ExaGrid appliance can then be migrated to primary storage for continued operation.

Data Deduplication Enables Longer Retention

Stanley has found that data deduplication has had a major impact on storage capacity. "Since switching to ExaGrid, we've been able to offer longer periods of retention to our customers, as deduplication has reduced the amount of storage needed for backups. We're also pleased with how well ExaGrid and Veeam integrate, and that has made the backup performance faster and more predictable. Our previous backup solution kept up with our backup windows, but we did end up running out of space, so adding deduplication has resolved that," said Stanley.

"We're also able determine how much storage is being used and saved for each customer, which makes it easier to predict their data storage needs going forward," he added.

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 for a strong recovery point (RPO). As data is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

ExaGrid-Veeam Combined Dedupe

Veeam uses changed block tracking to perform a level of data deduplication. ExaGrid allows Veeam deduplication and Veeam dedupe-friendly compression to stay on. ExaGrid will increase Veeam's deduplication by a factor of about 7:1 to a total combined deduplication ratio of 14:1, reducing the storage required and saving on storage costs up front and over time.

ExaGrid Provides Enhanced Data Security

Blue Stream Fiber uses one of ExaGrid's SEC appliance models, which offer data encryption at rest for additional security. "As a service provider, it is critical to ensure security of our customers' data.

Using ExaGrid's SEC appliances reduces the risk of ransomware. In addition, the way that Veeam and ExaGrid work together also offers a better layer of security than using a drive that is mounted directly to a backup server, where viruses can infect the backup data and spread to production data," said Stanley.

The data security capabilities in the ExaGrid product line, including optional enterprise-class Self-Encrypting Drive (SED) technology, provide a high level of security for data at rest and can help reduce IT drive retirement costs in the data center. All data on the disk drive is encrypted automatically without any action required by users. Encryption and authentication keys are never accessible to outside systems where they can be stolen. Unlike software-based encryption methods, SEDs typically have a better throughput rate, particularly during extensive read operations. Optional data encryption at rest is available for all product models. Data can be encrypted during replication between ExaGrid systems. Encryption occurs on the sending ExaGrid system, is encrypted as it traverses the WAN, and is decrypted at the target ExaGrid system. This eliminates the need for a VPN to perform encryption across the WAN.

ExaGrid Support Lets IT Staff 'Sleep Easier'

From the start, Stanley has been impressed with his assigned customer support engineer. "Installation was super easy! Our ExaGrid support engineer was very helpful in setting up our system and also suggesting adjustments to make integration with Veeam even better.

"We haven't had any major issues and whenever we've had a tech question, our support engineer is quick to respond. She contacts me whenever there are patches or upgrades, and then schedules them on a date that works for us," said Stanley. "I can sleep easier at night knowing that if there is a major issue that I have a good support team I can call."

The ExaGrid system was designed to be easy to set up and operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customers never have to repeat themselves to various support staff, and issues get resolved quickly.



About ExaGrid

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone that enables fastest backups and restores, a Repository Tier that offers the lowest cost for long-term retention and enables ransomware recovery, and scale-out architecture which includes full appliances with up to 2.7PB full backup in a single system.

Learn more at www.exagrid.com.