ITS Fiber is a premier provider of fiber-optic communications services to homes and businesses on the eastern coast of Florida, and beyond. ITS Fiber started out as one of the thirteen original phone companies in Florida and today it provides not only fiber-optic based voice and broadband, but data center, virtual, and other managed IT services, including ITS Fiber Cloud Backup, a solution for businesses to virtually archive files and data from both individual workstations and company server backups.

ExaGrid Chosen for Integration with Veeam
ITS 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 ITS Fiber staff began to look into other solutions. ITS 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 ITS 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.”

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.

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

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

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.

### ExaGrid Provides Enhanced Data Security

ITS 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 the EX7000 models and above. 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 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 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).