OMNI Orthopaedics, based in Ohio, treats a full range of orthopaedic problems, and its board-certified orthopaedic surgeons keep current on the newest advances in orthopaedic care, including computer-assisted surgery and minimally invasive procedures.

ExaGrid Chosen over Cloud Solution to Replace Tape
OMNI Orthopaedics had been backing its data up to tape, using Veritas Backup Exec. The practice was adding a PACS server to its network, which would greatly increase the amount of data storage needed. It was clear that not only would tape no longer meet the storage needs of the practice, but managing tape backups in general and taking them offsite had become too time-intensive a process.

Karen Haley, OMNI’s IT manager, looked into alternatives to tape, and IT contractor she worked with recommended ExaGrid. “We were in the process of making changes to our infrastructure and needed to come up with a better way of backing up our data moving forward. We did look at a cloud environment, but we weren’t entirely comfortable with that. We like having control of our data and knowing what protections are in place, and a cloud environment would limit that control. “We evaluated ExaGrid and thought it was a great solution. What really struck me about ExaGrid was the flexibility it would give us; if we ever need to expand the system, we can just add another appliance without having to rip out the whole system and start over again. Data deduplication was another consideration during our search, and we found that ExaGrid was a viable solution that met our needs in that regard,” said Haley.

ExaGrid’s architecture provides lifetime value and investment protection that no other architecture can match. ExaGrid’s multiple appliance models can be combined into a single system configuration, allowing full backups of up to 2PB with a combined ingest rate of 432TB/hr. The appliances virtualize into one another when plugged into a switch so that multiple appliance models can be mixed and matched into a single configuration. Each appliance includes the appropriate amount of processor, memory, disk, and bandwidth for the data size, so as each appliance is virtualized into the system, performance is maintained and backup times do not increase as data is added.

Backup Windows 2.5x Shorter, Eliminating Spillover into Workday
OMNI installed ExaGrid systems at its primary and secondary sites that cross-replicate to further protect the practice’s data. Haley backs up in daily incrementals and weekly fulls, and is relieved that backup windows no longer affect workday production, as they had done with tape.

“Our backup windows with tape were brutal, sometimes up to 15 hours for a full backup. There were times that I'd get to work in the morning and backup jobs were still going, which affected our ability to get the day started. Now with our ExaGrid system,
backups are all done automatically and take just six hours; we set the schedule for our backup jobs and they’re always done before we walk in the building. ExaGrid does what it’s supposed to do and it’s a solid system,” said Haley.

Haley is impressed that ExaGrid’s data deduplication has maximized storage capacity, accommodating a long period of retention. “Even after adding the PACS server, which is a bit of a space hog, we still are able to store all of our data going back the last ten years without having to archive it. Most of what we back up is information on the active directory and the day-to-day data that we might generate through our business applications. We’re a medical practice, so the doctors haven’t wanted to archive because they want the data readily available, and thankfully our ExaGrid system has been able to manage all of that data.”

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 and VM Instant Recoveries.

IT Staff Appreciates Expertise of ExaGrid Support

Haley is impressed with the level of support that ExaGrid provides. “The support staff at ExaGrid are backup experts so that I don’t have to be. Our support engineer has been incredibly helpful and responsive. Any time we have had questions about our system, she has been a phone call or email away. While we were working to virtualize our network, I needed to access backup reports and found that somehow these had been turned off, and she helped adjust the settings to turn the reporting on.

“Our support engineer often knows if something is going before we do. She’ll give me a call and then logs in and takes care of anything that comes up. She knows exactly what to do and is very efficient and capable making modifications to our system. I have a great deal of respect for her and confidence in her abilities. She is a rock star!” said Haley.

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.

Virtualizing System Leads to Change in Backup Apps

When OMNI first installed ExaGrid, it used Veritas Backup Exec for its physical servers. Recently, the company virtualized its network and replaced Backup Exec with Veeam. “Veeam offers more functionality and flexibility than Backup Exec, and it was time to move in a different direction,” said Haley. “We are working to virtualize our PACS server as well, but now everything else in our environment is on virtual servers.”

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.