Customer Overview

Berrien County’s location in the heart of “Michigan’s Great Southwest” makes it a prime market for business, industry, and tourism. Its substantial and wide variety of agriculture has established locally grown crops as major attractions for tourists and food processors. 585 square miles of scenic natural beauty with 42 miles of shoreline on Lake Michigan make Berrien County a choice destination for tourists, artists, and naturalists. Berrien County contains 22 townships, 8 cities, and 9 villages.

Before ExaGrid, Backups Ran ‘Forever’

The municipality of Berrien County serves all courthouses, 911 responses, and administrative functions. The County transitioned its backup from tape libraries to a disk-based solution because tapes were expensive, storage space became problematic, and the entire process was too complex to maintain and manage. They began looking for a disk-based backup storage solution to take them into the future, while balancing tape outs off the ExaGrid for long-term retention requirements.

“I worked more than a part-time job doing nothing but managing backup storage,” said Paul Olmstead, LAN Specialist at Berrien County. “Our backups would seemingly run forever, over 72 hours at times. We'd back up to tape and archive our government data for at least seven years of record.”

Multiple Backup Apps in the Same Environment Supported

Berrien County is 90% virtualized, using Veeam as its primary backup application and Veritas Backup Exec for a small amount of physical servers. Because ExaGrid supports a wide variety of backup applications, multiple approaches can be used within the same environment.

“With ExaGrid, we now have the correct product and sizing, which makes a world of difference. We keep about six months’ worth of retention on ExaGrid, and it’s relatively maintenance-free. I really like ExaGrid’s management interface because it allows me to pick and choose what time of day the DR data is available as well as easily manage backups among our three ExaGrid sites.

“When I need to add an ExaGrid appliance, it’s very smooth. We have a very good support engineer assigned to our account, so we get the support we need to rearrange things to fit our unique needs. We have a great design now, and I don’t have to worry anymore about scaling for the future – it’s pretty simple,” said Olmstead.

Berrien County values how well ExaGrid data deduplication works with Backup Exec. They see deduplication of, on average, 16:1, so disk utilization is optimized.

Customer Support and System Flexibility Inspire Confidence

Olmstead is pleased with ExaGrid’s customer support and has found his assigned support engineer to be responsive and knowledgeable. “I get help from our support engineer as needed to ensure things are running optimally. I only spend about 20% of my day administering backup storage now, so I have more time to work on other key projects. Restores are much easier now. I don’t have to run and grab tapes with the hope that we can deliver. Our backup is easier to manage, and there’s much less stress. I know that if I need to restore a VM, it’s there for me. There’s ROI on our time and on our operations.”

Berrien’s data volume consistently increases at an average rate of 25% per year, and now they have a solution that easily scales to keep up with data growth. “I like ExaGrid’s data
deduplication, scalability, and performance. That’s what matters most to us,” said Olmstead.

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.

**Veeam-ExaGrid Deduplication**

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 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.

**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. The ExaGrid system fully leverages Veeam Backup & Replication’s built-in backup-to-disk capabilities and ExaGrid’s zone-level data deduplication for additional data reduction (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.

**ExaGrid and Veritas Backup Exec**

Veritas Backup Exec provides cost-effective, high-performance, and certified disk-to-disk-to-tape backup and recovery – including continuous data protection for Microsoft Exchange servers, Microsoft SQL servers, file servers, and workstations. High-performance agents and options provide fast, flexible, granular protection and scalable management of local and remote server backups.

Organizations using Veritas Backup Exec can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Veritas Backup Exec, providing faster and more reliable backups and restores. In a network running Veritas Backup Exec, using ExaGrid in place of a tape backup system is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to the ExaGrid for backup to disk.

**GRID Architecture Provides Superior Scalability**

ExaGrid uses a GRID-based configuration, where each appliance contains not just disk but also processing power, memory, and bandwidth. When the system needs to expand, additional appliances are simply attached to the GRID. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, and you only pay for what you need when you need it. In addition, as new ExaGrid appliances are added to the GRID, the system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

**About ExaGrid**

ExaGrid provides backup storage with a unique landing zone and scale-out architecture. The landing zone provides for the fastest backups, restores and instant VM recoveries. The scale-out architecture includes full appliances in a scalable GRID and provides for a fixed-length backup window as data grows, eliminating expensive forklift upgrades. Learn more at www.exagrid.com.