KeyMark Chooses ExaGrid for Optimal Data Protection, Restores VMs in Minutes

Customer Overview

Headquartered in Liberty, South Carolina, KeyMark partners with clients that need document management solutions customized to their own unique operations, challenges, and goals. KeyMark makes it a point to know and understand the business of its clients, providing deep expertise in financial services, government, insurance, healthcare and other industries coupled with a keen ability to leverage the latest technologies helps us help clients attain greater efficiencies, and ultimately, reach new heights.

Fluctuating Data Center Infrastructure Requires Purpose-Built Backup Storage

Like many of today’s data center environments these days, KeyMark’s is mostly virtualized. However, due to the nature of its business and the types of services it provides to its customers, its infrastructure changes dynamically, according to KeyMark’s IT infrastructure manager, Larry Booty.

“We do a lot of testing of virtual servers for our development and testing group, and have different scenarios based on what our customers want to try out. We do all the testing and configuration for them, and once we get those running, we start to back it all up, but all these VMs can come on and go off at a moment’s notice. It fluctuates, and all of that fluctuation in our infrastructure makes it a challenge to set up backups for every device and server.”

When IT was evaluating replacement disk-based backup systems, KeyMark looked at a few solutions alongside ExaGrid, but one of the things that stood out was ExaGrid’s high deduplication ratios that keep the data size down. KeyMark purchased two ExaGrid systems – one for its primary data center and another for an offsite location. The two systems synchronize and cross-replicate the deduplicated data.

“We're getting between 12:1 and 14:1 deduplication on average, and that definitely keeps the synchronization time required with our colocation low,” said Booty. KeyMark uses vRanger as its backup application and backs up approximately 9TB of data in a weekly full.

Hitting Capacity and Failed Components Handled with Ease

Due to KeyMark’s growth and the number of VMs it’s adding, the company is beginning to hit the upper limits of its retention. “Because the ExaGrid devices do a nightly health check, my customer support engineer gets alerts and has been in touch with me about adding capacity,” said Booty. “Or if a hard drive fails or something isn’t right, he knows about it before I do sometimes. Right now, we're in the middle of a major data center consolidation project, so I want to get my arms around that so that I know how much more data we'll need to start backing up so that I can include that in the capacity upgrade.”

When checking the system one day, Booty noticed that he had a failed hard drive. He knew he had a hot spare and wasn’t concerned, but called his ExaGrid support engineer to report it.

“He already knew about the failed drive and told...
me that he had already sent out a replacement. That’s much more proactive than waiting on me to react to something. If customer support was always like that, it would make things a lot easier for the IT world.”

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.

**Plug-and-Play Scalability Is a ‘Simple Addition’**

When KeyMark is ready to add capacity, Booty feels prepared to expand his system. "I haven’t had to do it yet, but from what I know and have seen, it’s just a simple addition. You just seat another appliance in the rack and plug it into the existing system, which sees the new device as more capacity to back up to. There’s not a lot of configuration required."

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 ExaGrid system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

**Reporting Provides Peace of Mind**

With KeyMark’s prior Linux environment, Booty didn’t know when backups failed or completed; that kind of notification wasn’t available and the Bacula product they used at the time wasn’t intuitive. “There was no GUI that I could use to check the status of the prior night’s backups, and the system wasn’t straightforward if you weren’t a Linux expert.”

The nightly emails that Booty now receives with the current status of what his ExaGrid system is doing helps his team sleep better at night, he said. “Before ExaGrid, I had no idea what was getting backed up – or even if the system was getting backed up at all. Now, I have the knowledge of what’s taken place in our backup environment.”

**Fast Restores Mean Satisfied Users**

“The few restores that I’ve had to do have just been a few clicks. I’ve done one full VM restore and it took just minutes to complete. Being able to respond quickly to a user who deleted something definitely makes my life much easier,” said Booty.

**ExaGrid’s ‘Intelligent’ Data Protection**

ExaGrid’s turnkey disk-based backup system combines enterprise SATA/SAS drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to straight disk. ExaGrid’s patented zone-level deduplication reduces the disk space needed by a range of 10:1 to 50:1 by storing only the unique bytes across backups instead of redundant data. Adaptive deduplication performs deduplication and replication in parallel with backups while providing full system resources to the backups for the fastest backups and, therefore, the shortest backup window. As data grows, only ExaGrid avoids expanding backup windows by adding full appliances in a GRID. ExaGrid’s unique landing zone keeps a full copy of the most recent backup on disk, delivering the fastest restores, VM boots in seconds to minutes, “Instant DR,” and fast tape copy. Over time, ExaGrid saves up to 50% in total system costs compared to competitive solutions by avoiding costly “forklift” upgrades.

**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](http://www.exagrid.com).