**Customer Overview**

ISCorp is a trusted leader in private, secure cloud management services, serving a wide variety of industries and customers with tailored solutions to meet their business needs while managing complex compliance and security requirements. Headquartered in Wisconsin, ISCorp has been leading the industry in data management, systems integration, and security since 1987, developing its first private cloud environment in 1995 – long before private cloud services were widely available.

**SAN Replaced with a Storage System that Saves Staff Time**

ISCorp had been backing up its data to a Dell EMC CLARiiON SAN disk array, using Commvault as a backup app. Adam Schlosser, ISCorp’s infrastructure architect, found that the solution was limiting in terms of managing the company’s data growth and had noticed performance issues as the system aged. Schlosser was frustrated that the CLARiiON solution was not easily expandable, so he looked into other solutions.

During the search, a colleague recommended ExaGrid, so Schlosser looked into the system and arranged for a 90-day proof of concept (POC). “We put together a plan and mapped out what needed to meet or exceed expectations. We worked on our primary site first, and then we synced the appliances that were going to our secondary site, making a trip down to the secondary site to install that system and get the replication caught up. Once a week, we had a tech meeting with ExaGrid’s sales team and support engineers, which kept the process moving.

“What impressed me, from an administrative standpoint, was the ‘set and forget it’ nature of the ExaGrid system. When we were replicating from our primary site to our DR site using Commvault, a lot of administration needed to be done, such as making sure that the DASH copies and the replicated copies were finishing on time. With ExaGrid, when the backup job is done, one look at the interface confirms whether the deduplication completed and allows me to check on the replication queues. We realized during the POC that we’d save a huge amount of time administering backups using ExaGrid, so we decided to move forward,” said Schlosser.

**More Backup Jobs in the Same Window**

ISCorp installed ExaGrid systems at both its primary and DR sites, keeping Commvault as its backup application. “We’re using ExaGrid to back up a large subset of the environment, which is 75-80% virtualized. This environment is made up of over 1,300 VMs and 400+ physical servers, with a total of 2,000+ devices between the two sites,” said Schlosser. As a cloud service provider, ISCorp backs up a broad spectrum of data, from databases and file systems to VMs.

Schlosser backs up data in daily incrementals and weekly fulls, and has found that he can run a higher volume of backup jobs using ExaGrid than he could using Commvault to disk – and still stay within his backup window. “I can run more backup jobs than ever, and everything gets done on time.
I don’t have to spread the jobs out as much or be as conscious of the scheduling. Our backup jobs are definitely staying within the backup window."

Overall, Schlosser has found that using ExaGrid has simplified his backup process, saving on staff time and worry. "I’ve noticed that there is much less stress around backups since we installed ExaGrid, and now I enjoy nights and weekends a little bit more. It’s so simple to use and I don’t have to babysit it."

Protection from Potential Disaster

Schlosser has found that using ExaGrid has had a major impact on ISCorp’s preparations for disaster recovery. "When we were replicating data using Commvault, we were forced to choose a subset of our most critical data for replication to our DR site. With ExaGrid, we don’t have to pick and choose anything. We can replicate our entire primary site to our DR site, ensuring that all of the data that we store is protected. Some of our customers have certain RPOs and RTOs, and ExaGrid’s deduplication and replication helps us to meet those objectives," said Schlosser.

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.

ExaGrid and Commvault can instantly recover a VMware virtual machine by running it directly from the ExaGrid appliance in the event that the primary storage VM becomes unavailable. This is possible because of ExaGrid’s “landing zone” – a high-speed cache on the ExaGrid appliance that retains the most recent backups in complete form. Once the primary storage environment has been brought back to a working state, the VM running on the ExaGrid appliance can then be migrated to primary storage for continued operation.

Simple Scalability – Just ‘Rinse and Repeat’

“It only takes an hour or so to scale out an ExaGrid system. It’s such a simple process: we rack up the new appliance, power it on, hook it up to the network and configure it, add it to Commvault, and we can start our backups. During the initial installation of our first system, our ExaGrid support engineer helped to tweak everything so that we can fully utilize all of the system’s capabilities. Now when we purchase a new appliance, we have already ‘figured out the formula,’ so we can just ‘rinse and repeat,’” said Schlosser.

The ExaGrid system can easily scale to accommodate data growth. ExaGrid’s computing software makes the system highly scalable, and when plugged into a switch, appliances of any size or age can be mixed and matched in a single system with capacities of up to a 2PB full backup plus retention and an ingest rate of up to 432TB per hour. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

ExaGrid and Commvault

Commvault Backup and Recovery software contains extensive capabilities to simplify the management of backup media resources. Commvault software writes backup data to a broad collection of storage devices, including disk as a media target. This ability to write to magnetic disk as a functional equal of all other media types while exploiting the random access nature of the disk media sets Commvault software apart. Organizations using Commvault can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as Commvault, providing faster and more reliable backups and restores. In a network running Commvault, 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 onsite backup to disk.

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.