RPC Cuts Backup Window by 50% with ExaGrid Disk-Based Backup Solution

Customer Overview
RPC Inc. is an oil and gas services company with numerous service lines well positioned to take advantage of high levels of exploration and production activities. In addition, RPC provides ongoing maintenance and emergency services to the oil and gas services industry.

Backup Window Took Days, Forcing Upgrade to Veeam and ExaGrid
RPC had been backing up its virtual infrastructure data using an EMC Avamar system, but ongoing capacity issues and the need for better disaster recovery led the company to look for a new solution designed specifically for virtualized environments. Backup storage management became a monumental task.

“We were always limited by how much data we could back up and what drives were priority. We spent so much time managing this balancing act. Regardless, we could never go back as far as we wanted to. The worst thing was when a server went down that didn’t have an image restore – it’s a nightmare to try and bring back the server. EMC Avamar was only good for file backup – there was far too much maintenance and too many failures. It could run for days at a time if you didn’t stop it,” said Michael Anderson, systems administrator IV at RPC.

RPC installed a two-site ExaGrid system along with Veeam to handle its 25TB+ full backup.

Fast Backups and 10:1 Deduplication Drive Efficiency
RPC decided to go with Veeam early on in its virtualization process. They tested it out with local image-based backups, and restores were quick and easy. ExaGrid was a natural fit to ensure optimal data deduplication and instant recovery. On average, RPC gets a 10:1 data dedupe ratio.

“A big plus in choosing ExaGrid is the replication of the backup. In the past, we would have to replicate full data sets without deduplication. It was the whole thing or nothing. Now with the ExaGrid system, we replicate our entire data center nightly to our second-site ExaGrid. Things are so much easier now,” said Anderson.

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 ratio. The net result is a combined Veeam and ExaGrid deduplication ratio of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

ExaGrid Cuts Backup Window in Half and Drives 70% Time Savings
“A full backup within 24 hours was almost impossible with EMC Avamar, and we had constant failures. With ExaGrid, I know all of my backups are completed each night, in half the time! It’s such a relief! I save at least 70% of my time on backup maintenance.”

Michael Anderson
Systems Administrator IV

Key Benefits:
- 70% time savings since eliminating EMC Avamar
- Backup window cut by over 50%
- Virtualization leads to powerful Veeam and ExaGrid combination
- 10:1 dedupe ratio maximizes disk capacity
- Seamless replication between data centers
**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 performance of Veeam and ExaGrid together is impressive. Prior to our buying decision, I did my research and everybody said ExaGrid and Veeam were the ‘bomb’ and now, I agree,” said Anderson.

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’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with zone-level deduplication to further shrink backups.

**Straightforward Installation and Personal Support**

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 installation was very straightforward. We basically plugged it in, and we were up and running in an hour. We have a great relationship with our assigned engineer. He usually picks up the phone directly when we call – and if he’s busy, he gets back to us within the hour. I could not ask for more. I love the ExaGrid system because it just works;” said Anderson.

**Intelligent Data Protection**

ExaGrid’s turnkey disk-based backup system combines high quality disk 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 storing only the unique bytes across backups instead of redundant data.

“When it comes to replication and restores, it’s all about peace of mind. I’ve lost a couple of systems due to Windows updates, and I restored them within a couple of minutes. Often people want copies of their servers that are in production, so we just bring them up on the ExaGrid. I don’t have to clone it and copy the clone offsite and bring the clone up. It’s a dramatic time savings,” said Anderson.

Adaptive deduplication performs deduplication and replication in parallel with backups while providing full system resources to the backups for the shortest backup window. Adaptive deduplication delivers the fastest backups, and 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, instant VM recovery, “Instant DR,” and fast tape copy. And, as data grows, ExaGrid saves up to 50% in total system costs over time compared to competitive solutions by avoiding costly “forklift” upgrades.

**GRID Architecture Provides Superior Scalability**

ExaGrid’s scalable GRID architecture will enable RPC to continue to expand the system as its data and backup requirements grow.

ExaGrid uses a GRID-based configuration, so when the system needs to expand, additional appliances are attached to the GRID, bringing with them not only additional disk but also processing power, memory, and bandwidth. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows. 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.

**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).