Customer Overview

With roots extending back to 1898, Page provides architecture, interiors, planning, consulting and engineering services throughout the United States and around the world. The firm’s diverse, international portfolio encompasses the healthcare, academic, aviation and science and technology sectors, as well as civic, corporate and urban housing projects. Page Southerland Page, Inc. has 600-plus employees across offices in Austin, Dallas, Denver, Dubai, Houston, Mexico City, Phoenix, San Francisco and Washington, D.C. Learn more about the firm at pagethink.com.

Impressive POC Highlights

ExaGrid’s Backup Performance

Over the years, Page has tried different backup solutions as technology has advanced. “Many years ago, we were using tape backups. Eventually, we switched to Veeam, with inexpensive storage as a backup target,” said Zoltan Karl, IT Director at Page. “We have a large amount of unstructured data and our virtual servers tend to be very large. The storage system we were using was struggling to meet our needs. It filled up quickly and wasn’t providing consistent backup performance; it wasn’t able to consistently assemble the incremental backups to synthesize a full backup. It just wasn’t powerful enough to manage what we expected of it, so we decided to look into other options.”

At first, Karl tried using a higher-end system, but experienced similar results. Page’s reseller recommended trying ExaGrid, so Karl asked for a proof of concept (POC). “We’d had a presentation with the ExaGrid sales team, but it was in that first hour of implementation when it really clicked and we realized the incredible performance that the ExaGrid provides, and how efficient the system is at storage and deduplication. We were amazed at how much data we could store on the system, and with the ease of use. We especially liked how well ExaGrid integrates with Veeam, especially with the Data Mover feature,” he said.

ExaGrid has integrated the Veeam Data Mover so that backups are written Veeam-to-Veeam versus Veeam-to-CIFS, which provides a 30% increase in backup performance. ExaGrid is the only product on the market that offers this performance enhancement, which allows Veeam synthetic fulls to be created at a rate that is six times faster than any other solution.

ExaGrid Simplifies Multi-Site Replication

Page has over 300TB of data to back up, and much of it is large files and unstructured data. “We’re an architecture and engineering firm, so we have a lot of architectural files, drawings, design concepts, animations, and 3D rendered images of our designs. These files tend to be quite large, and we find ourselves in an environment where each office needs to be very close to their data. We’re backing up many VMs across multiple sites, and that had been the crux of the problem as it added a level of complexity,” explained Karl.

Karl had tried different storage options for Page’s smaller offices, including cloud storage, but found that ExaGrid is more efficient and cost-effective. “In our smaller offices, we had initially tried using a cloud-based repository for Veeam. It was very easy to set up and use but we quickly filled up 30TB of storage, which was more costly when
we compared it to ExaGrid storage. We were able to move away from the cloud-based repository because of ExaGrid's ability to take that data across our WAN, ingest it and synthesize full backups pretty easily for us,” he said.

Page installed an ExaGrid system at its primary site which receives replicated data from its smaller offices and also replicates data to an offsite ExaGrid system for disaster recovery. Karl was impressed with ExaGrid’s replication during the POC as that had been a struggle using the previous solution. “We tried to implement replication with various backup solutions, but it wasn’t able to keep up with the replica data. When we did get it working, it was on expensive enterprise tier storage, so that was a very costly setup. One of the reasons we were drawn to ExaGrid was its ability to replicate our large VMs across our sites on storage that’s not nearly as expensive as our production tier,” he said. “It’s much easier to replicate data using ExaGrid. We’re able to replicate backup data from our smaller sites to one of the existing ExaGrid systems at our larger offices.”

ExaGrid Resolves Backup Issues and Restores Data Twice as Fast

One of the major issues that Karl struggled with using Page’s previous backup solution was synthesizing daily incrementals into a full backup. “The previous system had an issue when it came to assembling synthetic fulls. It would take the system a long time to finish, and sometimes the jobs wouldn’t complete. If they don’t complete, the system keeps going with incrementals, and then there are more incrementals that can’t synthesize, which creates a snowball effect. One of the great things about ExaGrid is that it synthesizes the fulls with Veeam seamlessly, so we no longer have any issues and our backups are consistent and reliable” said Karl. “Restoring data is also significantly faster, as least twice as fast compared to what we were seeing,” he added.

ExaGrid writes backups directly to a disk-cache 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 offline 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 offline data is ready for DR.

Dedupe ‘Squeezes More Out of Every Terabyte’

Karl has been very impressed with the data deduplication that his ExaGrid system has provided. “We’re seeing solid dedupe rates, and it’s given us the ability to store more data using less storage than with other products. Compared to our previous solution, we’re able to squeeze more out of every gig, every terabyte that we have on the ExaGrid system,” he said.

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. ExaGrid is architected from the ground up to protect virtualized environments and provide deduplication as backups are taken. The result is a combined Veeam and ExaGrid deduplication rate of upwards to 10:1, which greatly reduces the amount of disk storage required.

ExaGrid Customer Support

Karl has been pleased with the level of customer support provided by ExaGrid. “Our assigned customer support engineer is responsive and very knowledgeable. He is able to help with system maintenance and upgrades remotely, and without any involvement on my end, which is very convenient. He also takes the time to explain why any changes are made and what will be impacted, which I appreciate. Backup is critical, but it isn’t something we can dedicate a lot of time and resources to manage. Having such great customer support and such a reliable, easy-to-manage system is valuable to us. I’m able to worry less about backups, and I’m confident that we can restore our data if we need to.”

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. Customers can use Veeam Backup & Replication’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with Adaptive Deduplication to further shrink backups.

About ExaGrid

ExaGrid provides tiered backup storage with a unique disk-cache Landing Zone, long-term retention repository and scale-out architecture. ExaGrid’s Landing Zone enables the fastest backups, restores, and instant VM recoveries. The retention repository offers the lowest cost for long-term retention. ExaGrid’s scale-out architecture includes full appliances in a scalable system. Learn more at www.exagrid.com.