HealthEquity Replaces Straight Disk with ExaGrid for a ‘Perfect Fit’

Customer Overview

Founded in 2002, HealthEquity is the nation’s largest health savings account non-bank custodian. The company’s innovative technology platform and tax-advantaged accounts help members build health savings, while controlling health care costs. HealthEquity, located in Salt Lake City, Utah, services more than 2.8 million health savings accounts for 87 health plan partners and employees at more than 34,000 companies across the United States.

A ‘Perfect Fit’ for Increased Retention

HealthEquity had been backing up straight to disk, which limited the capacity for retention. Mark Petersen, systems engineer at HealthEquity, looked for a better backup storage solution that would allow the company to keep more than seven years of retention. HealthEquity was using Veeam as its backup application and Petersen hoped to find a solution that would work with the incumbent software.

HealthEquity sought out several potential solutions including Cohesity, Dell EMC Data Domain, HPE StoreOnce, and ExaGrid. “We did the POC of the different solutions and ExaGrid came out on top as the other solutions didn’t fit as well with Veeam. We had already invested in Veeam, and ExaGrid’s integration with Veeam made it a perfect fit,” said Petersen. “What impacted our choice the most was the amount of throughput we could get with ExaGrid.”

Since installing ExaGrid, HealthEquity has been able to increase all backup retention to more than seven years. Petersen noted, “Our company is a combination of financial and healthcare services. This requires that we keep some data indefinitely and other data for a seven-year period.”

Key Benefits:

- ExaGrid was the ‘only appliance that could keep up’ during POC with other solutions
- Scale-out system ideal for HealthEquity’s yearly growth plan
- ‘Amazing’ deduplication with combination of ExaGrid and Veeam
- ExaGrid support provides expertise on entire environment

Expertise on Entire Environment

Petersen found the ExaGrid system easy to install and was impressed by the expertise of his assigned support engineer of both the ExaGrid hardware and the Veeam software. “Installation was amazingly simple, especially with the support model that ExaGrid has. We work with a single person that knows our solution. He knows Veeam and makes sure that integration between the two products is extremely simple. The fact that he is very knowledgeable about our backup application along with ExaGrid is awesome. The best feature of ExaGrid is the support model; it provides the best support of any product I’ve used. I would highly recommend ExaGrid to anybody that ever asks me, and a major reason would be the 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 system is fully supported, and was designed and manufactured for maximum uptime with redundant, hot-swappable components.
‘Amazing’ ExaGrid-Veeam Combined Dedupe

Petersen is pleased with the combination of ExaGrid and Veeam. “Right now, we have 470TB of data on our ExaGrid, and the space consumed on the ExaGrid is 94TB, so we are seeing a ratio of 5:1. We weren't getting the dedupe before, so that's a significant savings. The fact that we can get 5:1 on data that's already deduped is pretty amazing.”

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.

Short Backup Windows and Quick Restores

Data is backed up often at HealthEquity. The company keeps six weekly fulls and runs a monthly full on the first Sunday of every month, keeping 13 monthlies total in addition to seven yearlies. Petersen is pleased that the backup windows are as short as five hours and don't leak into production time.

Petersen finds that restoring data is a quick and simple process using ExaGrid in combination with Veeam. “With Veeam, I just go in and select a restore job which it pulls from the ExaGrid. Our restore times have always been great with ExaGrid. Our database users write directly to the ExaGrid as though it is a file share and can pull data back out, like a file share. They have reported that the speeds are great and have had no problem restoring database data.”

Scalable System Ideal for Replication Between Sites

HealthEquity uses ExaGrid at both its primary site and DR site, and Petersen finds managing the backup process simple. “We have two identical ExaGrid systems and we replicate everything on our primary site for backups to our DR site. So, we are using ExaGrid to replicate those backups, too. I like using the GUI; I can log into one spot to see all of the information and check to see that everything is being replicated. The data replication is pretty quick—I’m amazed at how fast you can replicate given how much data is being backed up.”

HealthEquity plans to scale out the system at both sites as its data grows. Petersen said, “We are using EX40000E models. We plan to purchase additional models in a year or so, depending on our growth. Our plan is to keep growing the ExaGrid system year over year.”

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 1PB full backup plus retention and an ingest rate of up to 200TB 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 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 backup.

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.