Customer Overview

Pareto Securities is an independent, full-service investment bank with a leading position in the Nordic capital markets and a strong international presence within the oil, offshore, shipping, and natural resources sectors. Headquartered in Oslo, Norway, the company has more than 500 employees across the Nordic countries, United Kingdom, France, Germany, USA, Singapore, and Australia.

HPE StoreOnce Couldn’t Keep Up

Pareto Securities had been using HPE StoreOnce, with Veeam as its backup application. Truls Klausen, system administrator at Pareto Securities, was frustrated with the long backup windows experienced and with the limitations of that solution to keep up with data growth. Klausen started looking into other options. “We needed something that could scale the way we scaled Veeam. We tried to add more disks to the old storage system but that only slowed things down, because the controllers had to push more data, and there was always another bottleneck to fight. We needed something that could expand compute and networking along with disk.”

Klausen considered a few options, including Commvault and purchasing backup as a service. An IT services company that Pareto works with recommended using ExaGrid with Veeam, which is the solution that was ultimately chosen.

Switching to ExaGrid Maximizes Veeam Features

Klausen has found that switching to ExaGrid has optimized his use of Veeam. “We have used Veeam for several years, and we had tried to use the functions in Veeam that make the software great like Instant Restore and SureBackup. It’s not really possible to use those with a traditional dedupe appliance, but with ExaGrid’s landing zone, we can really make use of those great features in Veeam. Now, we can use Veeam to its full potential. We couldn’t do that before,” said Klausen.

Backups and Restores Take Minutes vs. Days

Klausen has noticed a significant reduction of the backup window since installing ExaGrid. “Now backups are as short as they should be. An incremental backup only takes minutes, which is great! Before we had ExaGrid, backups would run all day!”

Key Benefits:

- Using ExaGrid and Veeam, restores are as quick as rebooting a VM
- Backup window for daily incrementals has been reduced from days to minutes
- Pareto can keep up with data growth with ExaGrid scalability

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.
Klausen is impressed with how quickly data can be restored using ExaGrid. “Restores are like night and day. Before using ExaGrid, restores could take several hours. As part of the proof of concept with ExaGrid, I tried the same restore that had taken hours to complete some weeks earlier, and it was down to minutes. We can now use Veeam Instant Restore and Instant VM Recovery, which makes the restore process even shorter. In the time it takes to reboot the VM, we can be back in production,” he said.

ExaGrid and Veeam 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.

High Retention Calls for Adaptive Deduplication

Deduplication is important to Pareto, as they have a ten-year retention of data that includes monthly and yearly backups. “We are backing up a virtual environment using VMware with all kinds of data: file servers, Exchange and SQL servers, application servers — there’s a lot of data,” said Klausen.

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 ExaGrid-Veeam combined deduplication rate greatly reduces the amount of disk storage required.

Scalability Key to Long-Term Planning

Pareto hasn’t needed to scale out its ExaGrid system yet but plans to do so in the future. Klausen appreciates the scalable architecture of the system. “Now, I am actually looking forward to scaling out. It’s as easy as adding a new appliance.”

Each ExaGrid appliance contains not just disk but also processing power, memory, and bandwidth. When expansion is needed, additional appliances are simply attached to a scale-out system. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, with customers paying for what they need when they need it. In addition, as new ExaGrid appliances are added, the system automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the system.

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.