



ExaGrid Backs Up Triple the Data in a Third of the Time and Optimizes Oracle Backups



HOSPITAL SERVICE
& CATERING



GERMANY

Customer Overview

Hospital-Service & Catering GmbH provides IT, building, and catering services for the Foundation Hospital of the Holy Spirit. First mentioned in documents dating back to 1267, the foundation celebrated its 750th anniversary in 2017. Once a medieval hospice for travelers, maids, and servants, it has become a modern health services organization with 2,700 employees – of regional importance in Germany's Rhine-Main area. Today, the foundation runs two hospitals, two senior living facilities, and a hotel/conference center at its Nordwest Hospital.

Simplifying the Backup Environment

The IT staff at Hospital-Service & Catering GmbH had been backing up data to tape with difficulty using Veritas NetBackup and Veeam, so they switched their backup target to straight disk but still found it hard to manage and struggled with storage capacity.

"We needed to upgrade our backup applications often to maintain their stability, but to keep them compatible with older methods of backup, we had to forgo using many features, such as data deduplication," said David James, the foundation's team director of infrastructure and systems. "The deduplication and compression offered through the backup applications was minimal anyway."

The foundation began to research new backup solutions, and when asked for advice, its partners recommended ExaGrid. "We were impressed with the simplicity of ExaGrid's scalability by just adding a new appliance to an existing system. We also liked that we would be able to back up our Oracle RMAN data to ExaGrid directly, without using another application. One of the most important factors in choosing ExaGrid was its deduplication, which we hadn't been able to utilize with past solutions," said James. "Now we have simplified our backup environment to ExaGrid and Veeam, and use NetBackup for just one NAS server."

Triple the Amount of Data in a Third of the Time

James backs up the foundation's data in daily incrementals and weekly fulls. He has seen a significant increase in the speed of backups since switching to ExaGrid. "We've been able to up our speed by a factor of four, partially because of ExaGrid's integration with Veeam and a more efficient setup, and partially because we had been using a 4GB Ethernet connection before, and have upgraded to a 20GB connection, so it's just flying! We've tripled the amount of data we back up per



day and are doing it in a window of at least a third of the time than before," said James.

Prior to switching to ExaGrid, James found that backup jobs often exceeded the scheduled window. "We had allotted a 12-hour window to our backups, but the jobs ended up taking 16 hours to complete. Now that we are using ExaGrid, our backups run in an 8-hour window, even though I am backing up about twice as many VMs as I used to. On top of that, we used to back up our Oracle databases using NetBackup which would take 11 hours to finish, and now that we can use Oracle RMAN to back up directly to ExaGrid, that job finishes within an hour and a half!"

Deduplication Ratios to 'Dream Of'

James has been impressed with the impact that data deduplication has had on storage capacity. "Our total backup data from the Oracle database is over 81TB and it's been deduplicated by a factor of nearly 53:1, so we are consuming just 1.5TB of disk space. Those are factors that you dream of!" In addition to the notable dedupe ratios with Oracle backups, James has been pleased with deduplication of the ExaGrid-Veeam backups as well. "We are backing up our 178TB of data on a space consuming 35TB, so our deduplication ratio is about 5:1; a very high deduplication rate which I'm very happy with."

Key Benefits:

- Backups no longer exceed scheduled window – ExaGrid actually reduces backup window
- ExaGrid provides 'deduplication ratios to dream of', such as 53:1 for an Oracle database
- Backup management simplified; IT staff spend 25% less time on backups after switch to ExaGrid

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David James

Team Director, Infrastructure and Systems

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 for a strong recovery point (RPO). As data is being deduplicated to the repository, it can also be replicated to a second ExaGrid site or the public cloud for disaster recovery (DR).

ExaGrid and Veeam can instantly recover a file or VMware virtual machine by running it directly from the ExaGrid appliance in the event that the file is lost, corrupted or encrypted or the primary storage VM becomes unavailable. This instant recovery is possible because of ExaGrid's Landing Zone – a high-speed disk cache on the ExaGrid appliance that retains the most recent backups in their complete form. Once the primary storage environment has been brought back to a working state, the VM backed up on the ExaGrid appliance can then be migrated to primary storage for continued operation.



System Scales to Accommodate More Data

The foundation is in the process of buying a second ExaGrid appliance so that it can back up more data to its ExaGrid system. "We've been backing up 180 of our 254 virtual servers to ExaGrid, but we'd like to back up all of them to the system. Not all of our file systems are compatible with ExaGrid at the moment, so we are in the process of converting them. ExaGrid has been so productive and worked so well for us that we're willing to change our infrastructure to fit ExaGrid instead of the other way around," said James.

Staff Time Saved on Easily Managed System

James appreciates how simple it is to manage the ExaGrid system, and the time it has saved in his workweek. "ExaGrid has reduced the time it takes to manage our backups; I now spend 25% less time on everything from configuring to implementing and checking on backups jobs compared to the time I spent on them before. I'm very impressed by the ExaGrid system, from concept to implementation, so I recommend that if you have a chance to use it, do it – you're going to love it!"

The ExaGrid system was designed to be easy to set up and operate. ExaGrid's industry-leading level 2 senior support engineers are assigned to individual customers, ensuring they always work with the same engineer. Customer's never have to repeat themselves to various support staff, and issues get resolved quickly.

ExaGrid and Veeam

Veeam's backup solutions and ExaGrid's Tiered Backup Storage combine for the industry's fastest backups, fastest restores, a scale-out storage system as data grows, and a strong ransomware recovery story – all at the lowest cost.

ExaGrid-Veeam Combined Dedupe

Veeam uses changed block tracking to perform a level of data deduplication. ExaGrid allows Veeam deduplication and Veeam dedupe-friendly compression to stay on. ExaGrid will increase Veeam's deduplication by a factor of about 7:1 to a total combined deduplication ratio of 14:1, reducing the storage required and saving on storage costs up front and over time.

About ExaGrid

ExaGrid provides Tiered Backup Storage with a unique disk-cache Landing Zone that enables fastest backups and restores, a Repository Tier that offers the lowest cost for long-term retention and enables ransomware recovery, and scale-out architecture which includes full appliances with up to 2.7PB full backup in a single system.

Learn more at www.exagrid.com.