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

HOSPITAL SERVICE & CATERING

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>
> **David James**
> **Team Director,**
> **Infrastructure and Systems**

GERMANY

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

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."

STIFTUNG HOSPITAL ZUM HEILIGEN GEIST

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

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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."

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.

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!"

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. ExaGrid fully leverages Veeam's built-in backup-to-disk capabilities, and ExaGrid's zone-level data deduplication provides additional data 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 backups.

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**.