ExaGrid and Veeam Streamline Penfield Central School District's Backup and Recovery Operations

PENFIELD
CENTRAL SCHOOL DISTRICT

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Michael DiLalla
Sr. Network Technician
Penfield Central School District

Key Benefits:

- Backup window reduced from 34 to 12 hours
- Seamless integration between ExaGrid and Veeam
- Source-side dedupe minimizes network traffic; storage-side dedupe minimizes data storage footprint
- Just a few clicks required to restore a VM with no data rehydration required

Customer Overview

Penfield Central School District (CSD) is located in suburban Rochester, New York and covers nearly 50 square miles, including sections of six towns. The district serves approximately 4,500 students in grades K-12 at its six schools.

Critical Decision Criteria: Speed, Reliability and Cost

Penfield CSD moved from tape to backing up to straight disk (NAS) about three years ago.

"Our backup-to-disk solution worked, but it was painfully slow and consumed a lot of disk space which made it very expensive," said Michael DiLalla, Senior Network Technician at Penfield CSD.

"Our vendor, SMP, knew our problem and suggested that we take a look at deduplication solutions, specifically the ExaGrid system."

The ExaGrid system's use of deduplication removed the high cost of backing up to straight disk as well as enabling Penfield CSD to retain more data for longer periods of time.

DiLalla said, "Since installing the ExaGrid system, our backup window has gone from 34 hours to just 12 hours. In addition, our Veeam-to-ExaGrid backup jobs have never failed, and the ExaGrid system has never had a problem even though it runs 24 hours a day, 365 days a year. The reliability of the ExaGrid System is top notch."

ExaGrid's Compatibility with Veeam

Penfield's environment is 100% virtualized, and their solution had to work seamlessly with Veeam.

The combination of an ExaGrid system and Veeam's industry-leading virtual server data protection allows customers to backup VMs in VMware, vSphere, and Microsoft Hyper-V virtual environments. This provides fast backups and restores as well as efficient data storage.

"We take advantage of Veeam's source-side deduplication as well as deduplication on the ExaGrid," said DiLalla. "Veeam first deduplicates its backups to minimize the amount of data written across the network to the ExaGrid. Once the deduplicated Veeam data lands on the ExaGrid system, the ExaGrid deduplicates it further."

Restores are Quick, Easy, and Reliable

Backing up data in a reasonable amount of time is important. Being able to restore that data in the least amount of time possible is critical.

The ExaGrid's architecture takes full advantage of Veeam's restoration capabilities, including its Instant VM Recovery options. With the most recent backups residing in their entirety on the ExaGrid landing zone, the ExaGrid is the only deduplication solution that can take full advantage of Veeam's Instant VM Recovery options without having to first rehydrate the data.

DiLalla is impressed with the speed and ease of restorations. "If I have a bad virtual machine, it only takes a few clicks to restore from my Exagrid/Veeam solution. In the past, to restore a server, I had to first install the OS and then restore the data. Now I can quickly restore an entire VM in a single operation directly from the ExaGrid's landing zone."

EXAGRID™

"Because I know the ExaGrid system is always up and running and all my backups succeed, I know my data is secure and restorable. ExaGrid and Veeam have taken the worry out of my backups," he said.

Installation was a Breeze

According to DiLalla, "The installation process was fantastic. Our dedicated support representative did a great job installing the ExaGrid system and setting up the initial backups. Since then, the only time I've had to contact him was to schedule a firmware upgrade, which he did without having to get me involved."

GRID Architecture Ensures Flexible Upgrade Path

ExaGrid uses a GRID-based configuration, where each appliance contains processing power, memory, bandwidth, and disk. When the system needs to expand, additional appliance nodes are attached to the GRID, bringing with them additional processing power, memory, bandwidth, and disk. This type of configuration allows the system to maintain all the aspects of performance as the amount of data grows, paying for the amount of processing power, memory, and bandwidth only as it's needed. In addition, as new ExaGrid appliance nodes are added to the GRID, the ExaGrid automatically load balances available capacity, maintaining a virtual pool of storage that is shared across the GRID.

Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines high quality disk drives with zone-level data deduplication, delivering a disk-based solution that is far more cost effective than simply backing up to straight disk. ExaGrid's zone-level data deduplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk needed by a range of 10:1 to 50:1 or more, resulting in a solution that is 25 to 30% the cost of backing up to straight disk. The ExaGrid system is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications and processes. ExaGrid servers can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

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 the built-in backup to disk capabilities of Veeam® Backup & Replication™ 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 backups.

About Veeam Software

Veeam® Software develops innovative solutions for VMware backup, Hyper-V backup, and virtualization management. Veeam Backup & Replication™ is the #1 VM backup solution. Veeam ONE™ is a single solution for real-time monitoring, resource optimization and management reporting for VMware and Hyper-V. The Veeam Management Pack™ (MP) and Smart Plug-in™ (SPI) extend enterprise monitoring to VMware through Microsoft System Center and HP Operations Manager. Veeam also provides free virtualization tools. Learn more by visiting http://www.veeam.com/.

For more information about ExaGrid, please visit us at www.exagrid.com or call us at 1-800-868-6985.