Top 5 Reasons to Use
ExaGrid and Veeam in the Enterprise

1 + 1 = 3
ExaGrid + Veeam
Better Together

Solving the Challenges of Enterprise Environments

Business requirements continue to change and put stress on legacy IT systems and approaches. Backup and recovery remain critical in protecting data against loss and corruption; whether it be natural or human disasters, or maintaining long-term retention copies for legal, financial and regulatory reasons. New backup requirements are emerging for restores and VM recovery for the "just in time" data center and the increased cost associated with downtime has put pressure on legacy backup solutions. Legacy backup solutions were built for data backup in physical environments with restores measured in hours. New backup solutions are built to back up virtual machines that boot in seconds and support a complex environment of private, managed and public clouds.

ExaGrid and Veeam® Software were brought together to meet the challenges of data growth and offer uninterrupted operations to support the virtual data center and hybrid cloud, while reducing cost. ExaGrid and Veeam enables customers to boot VMs in seconds to minutes, and leverages the private, managed and public clouds, as well as reduces IT staff maintenance time and overall cost of ownership. The combined solution enables customers to increase the performance of their backup infrastructure while reducing data storage and complexity to meet their data backup goals via a high performance, flexible and scalable architecture. The amount of data an organization manages continues to grow, impacting uptime goals and budget. The ability to access the right data at the right time and restore it quickly can greatly impact an organization's productivity. The 2019 Veeam Cloud Data Management Report found that nearly three quarters (73%) of businesses recognize that they still are unable to meet users' demands for uninterrupted access to applications and data. ExaGrid and Veeam solve this challenge for enterprises.

Enterprises today require the following capabilities from their backup and restore solutions, including:
- Fast and reliable backups, including restores and VM boots in second to minutes
- Unlimited scalability
- Low cost up front and over time

Top Five Enterprise Value Propositions for ExaGrid and Veeam

Existing legacy backup infrastructures do not easily enable customers to economically manage data and satisfy long-term retention requirements. ExaGrid, together with Veeam, enables businesses to understand the strategic and competitive importance of gaining more control and reliability over their IT systems, protecting and managing their data, and taking proactive steps to improve backup and disaster recovery. There are five key benefits where ExaGrid and Veeam help customers more effectively manage their data.

1) Cost avoidance

Legacy backup solutions can be costly. While business and IT decision makers are aware of the importance of data management to their business' success, managing the costs associated with or migrating from legacy solutions isn't as straightforward.

ExaGrid, together with Veeam, offers customers a cost-effective solution that results in significant savings over traditional backup technologies. ExaGrid analyzed traditional approaches to data deduplication and saw that most vendors used inline deduplication. The inline deduplication process greatly impacts backup and restore performance, and only stores deduplicated data. First generation solutions also used a scale-up approach, adding storage as data grows, creating an ever-expanding backup window and disruptive controller forklift upgrades. Slower backups, restores and ever-expanding backup windows impact IT staff maintenance time and operational costs. In addition, high up-front costs, forklift upgrades and product obsolescence impact the bottom line.

Through a more innovative approach, ExaGrid created an architecture with a front-end disk Landing Zone to avoid inline deduplication. This approach allows for faster backups and the ability to store the most recent backups in an undeduplicated form. The lengthy data rehydration process can be avoided, which impacts restore and VM boot performance. A scale-out architecture can add compute with capacity, keep the backup window fixed in length as data grows and eliminate both forklift upgrades and planned product obsolescence. ExaGrid offers simple deployment and ease of use. These factors combined with a low up-front cost, elimination of forklift upgrades and product obsolescence allows for a lower overall cost of ownership.

William Santana, Systems Engineer at Dycom, stated, "Veeam told us about the great partnership that they have with ExaGrid and once we saw the deduplication numbers, we were just blown away. When we looked at ExaGrid's pricing as compared to the other solutions, it was an easy decision."

2) Simplicity

The ExaGrid and Veeam joint solution is designed to be easy to use and does not require any specialized training or professional services. Most of the processes are simple "point and click" and run automatically once configured. The goal is to make backup simple and allow a general IT person to perform such tasks.

The simplicity of installing ExaGrid and Veeam, in addition to superior customer technical support, has helped both solutions achieve outstanding customer satisfaction scores in the industry. In 2019, Veeam achieved an NPS score of +75, a value three and a half times the industry average. ExaGrid also achieved an NPS score of +73 and has taken a unique approach by assigning a senior Level 2 support engineer to each organization. By assigning a support engineer to each customer, ExaGrid ensures customers will receive help from someone familiar with their environment and who can quickly provide a resolution.

Jamie Orth, Vice President of Information Technology at CenterState Bank of Florida, noted, "We've had a great experience with ExaGrid's support; our engineer is easy to reach and is always prepared to answer any question we have."

3) Predictable performance

There are several factors to consider when evaluating data backup:

- Backup performance, which impacts the length of the backup window
- Restore/VM performance, which impacts time to recover operations
- Data growth management, which helps keep the backup window fixed in length and within the time allotted

ExaGrid, together with Veeam, have collaborated to focus on providing the best possible performance across all three areas. ExaGrid has integrated the Veeam Data Mover into its appliances. The Veeam protocol is more efficient versus using CIFS or NFS, increasing performance by 30%. Because ExaGrid has integrated the Veeam Data Mover, Veeam synthetic full backup can be created at a rate that is six times faster than legacy storage solutions. In addition, Veeam writes directly to the ExaGrid Landing Zone, a front-end disk cache, avoiding the performance bottleneck of inline deduplication. Furthermore, ExaGrid does not deduplicate the most recent Veeam backups, maintaining them in the Landing Zone, which allows for faster restores and VM boots by avoiding the data deduplication rehydration process.

ExaGrid's scale-out architecture includes not only disk, but also memory, bandwidth and processing power — all the elements needed to maintain high backup performance and to scale as data needs grow. By adding compute with capacity as data grows, the backup window stays fixed in length. The combination of Landing Zone, Veeam Data Mover and scale-out storage architecture provides the fastest backups, restores and VM boots in the industry, while maintaining a fixed-length backup window as data grows.

Hologic, a leading global healthcare and diagnostics company, recently selected the ExaGrid and Veeam solution, as their backups required over 24 hours to complete. Today, everything completes in eight to nine hours, which is a 65% reduction in the company's backup window. "ExaGrid's Landing Zone is a lifesaver. It makes restores easy and straightforward — for example, an instant restore takes around 80 seconds," said Mike Le, Systems Administrator at Hologic. "ExaGrid is amazing and it means the world! It has made all of our lives so much easier."

In a similar example to the backup infrastructure at Hologic, ExaGrid tested a 1PB full backup against the performance of a competing solution. The competing solution achieved an ingest performance of 68 TB/hr. The same 1PB full backup on an ExaGrid system achieved 216 TB/hr., illustrating why Hologic and many other customers have decided to adopt ExaGrid together with Veeam.

ExaGrid's Landing Zone also impacts performance, enabling data to be stored prior to deduplication ingest. This unique feature, coupled with Veeam Instant VM Recovery®, helps customers recover data in seconds to minutes versus hours from solutions that only store deduplicated data. ExaGrid appliances maintain the most recent backups undeduplicated in the Landing Zone and then store both short- and long-term retention data in a deduplicated repository. This approach provides the best of both worlds: fast restores and VM boots, as well as efficient low-cost storage for all backup retention.

Truls Klausen, System Administrator at Pareto Securities, stated, "It's not really possible to use [the great features in Veeam] with a traditional dedupe appliance, but with ExaGrid's Landing Zone we can really make use of them. Now we can use Veeam to its full potential. We couldn't do that before."

4) Scalability

ExaGrid scale-out storage system adds resources such as processor, memory and bandwidth, as well as disk, in a unique, scalable manner. As data grows in size, ExaGrid doubles, triples and quadruples the processor, memory, bandwidth and disk to help customers maintain a fixed-length backup window. In other words, you simply add additional appliances to the system and still maintain the shortest possible backup times. Since all resources are added as data grows, there are no future bottlenecks to impact costs over time. Any previously purchased ExaGrid appliance, regardless of storage capacity, can be mixed and matched in a single system, protecting an organization's investments.

Veeam's Scale-out Backup Repository™, used in conjunction with ExaGrid's scale-out storage architecture, provides automated job management and performance load balancing. Scale-out Backup Repository communicates with ExaGrid appliances and manages the data backups and distribution, ensuring performance load balancing and storage load balancing. This approach provides the only fixed-length backup window as data grows and the lowest total cost of ownership.

"When I first started my career in IT, I had to manually check our backup jobs every morning and sometimes it took half a day to resolve an issue. Now I have so many tasks as a network engineer and backup is not the portion of my work that I worry about, thanks to the reliability of the ExaGrid-Veeam solution," said Richard Ding, Network Engineer at MLSListings.

5) Flexibility

Backup and recovery solutions in today's world must provide the flexibility needed to address customer challenges, including:

- **Data criticality** - Ability to drive innovation, improved consumer experiences, operational efficiency and business opportunity
- **Data growth** - Customers constantly state that data is growing at 30% year over year, which doubles data every two and a half years
- **Data sprawl** - Distributed data, including multiple clouds, databases, devices and apps — requiring more visibility

Each ExaGrid appliance includes the Landing Zone and integration with the Veeam Data Mover, helping customers take full advantage of Veeam's software-defined, hardware agnostic, cloud-ready features.

The joint ExaGrid and Veeam solution offers customers the flexibility to:

- Retain data on site, off site at a second data center, off site in a third-party managed cloud or public cloud
- Leverage physical cross-replication with up to 16 worldwide major data centers in a group
- Backup directly using SQL dumps or Oracle Recovery Manager (RMAN)
- Maintain the ability to have a hybrid cloud approach to data management and backup

Conclusion

Long-term data backup and quick recovery of critical data and applications are now considered essential to every business strategy, but not all solutions are able to deliver these essential IT requirements. Together, ExaGrid and Veeam help customers create a scalable, simple to deploy and manage, and flexible solution. It's no wonder customers rave about the low costs up front and over time, and Ethan Peterson, Network Engineer at Jordan's Furniture (a Berkshire Hathaway company), commented that the combination of Veeam and ExaGrid is "very powerful, it's cost-effective and was designed specifically for the unique challenges of backing up virtualized environments."

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