ExaGrid Tiered Backup Storage

Fastest Backups.

Fastest Recoveries.

Unparalleled, Cost-effective Scale-out.

ExaGrid and Veeam Solution

Integrated Backup Application to Backup Storage

ExaGrid's unique disk-cache Landing Zone and scale-out approach to backup storage with data deduplication is a natural fit with Veeam's backup approach. In addition, ExaGrid has done specific integration work around two unique technologies from Veeam – the Veeam Data Mover and Veeam's Scale-Out Backup Repository (SOBR).

Fastest Backups Provide the Shortest Backup Window

ExaGrid provides advanced and aggressive data deduplication that equals (or is better than the high deduplication ratios in the industry for Veeam when organizations require long-term retention of four copies or more. For retention requirements of less than four copies, straight disk will be less expensive; however, as the number of retention copies increases, more aggressive data deduplication is required with Veeam to reduce the amount of overall backup storage. ExaGrid understands that data deduplication is highly compute intensive and should not be performed "inline" during the backup window. Performing data deduplication inline will reduce ingest performance and result in a longer backup window ExaGrid writes backups directly to a unique disk landing zone, which avoids the inline compute-intensive data deduplication process and provides the fastest ingest rate, resulting in the shortest backup window over any other deduplication solution.

Additionally, ExaGrid has integrated the Veeam Data Mover so that backups are written Veeam- to-Veeam versus Veeam-to-CIFS, which provides a 30% increase in backup performance. ExaGrid is the only product on the market that offers this performance enhancement.

Fastest VM Boots

Typically, 95% or more of the total data volume of VM boots is requested from the most recent backup. However, keeping the most recent backup in a deduplicated form requires a lengthy, compute-intensive "rehydration" process that slows down all requests. With other solutions, VM boots can take hours as they have to be rehydrated from deduplicated data.

Since ExaGrid writes directly to the disk landing zone, the most recent backups are kept in their full, undeduplicated, Veeam-native form, which means that all VM boots are fast because the compute overhead inherent in the data rehydration process is avoided. As an example, ExaGrid provides the data for a VM boot in seconds to single-digit minutes versus hours for backup storage appliances that perform data deduplication inline and therefore only store deduplicated data. Veeam recommends that straight disk be placed in front of inline deduplication appliances to keep several restore points in an undeduplicated format. However, with ExaGrid, the need for straight disk is eliminated since ExaGrid has integrated its unique landing zone and deduplication repository all-in-one. ExaGrid is the only backup storage with data deduplication that efficiently stores data for long-term retention while also preserving the Veeam value proposition of VM boots in seconds to minutes.

Fastest Synthetic Fulls

Because ExaGrid has integrated the Veeam Data Mover, Veeam synthetic fulls can be created at a rate that is six times faster than any other solution. ExaGrid stores the most recent Veeam backups in undeduplicated form in its Landing Zone, has the Veeam Data Mover running on each ExaGrid appliance, and has processor in each appliance in a scale-out architecture. This combination of landing zone, Veeam Data Mover, and scale- out compute provides the fastest Veeam synthetic fulls versus any other solution or configuration on the market.

Fixed-Length Backup Window

As data volumes grow, so does the amount of data to be deduplicated. The differences in how "scale-up" versus "scale- out" architectures handle this compute-intensive work has a direct impact on backup window.

The first generation of deduplication storage appliances utilizes a scale-up storage approach with a fixed resource front-end controller and disk shelves, and as data grows, only storage capacity is added. Because the compute, processor, and memory are all fixed, as data grows, the time it takes to deduplicate the increasing amount of data takes longer and longer, resulting in an ever-expanding backup window. Finally, the length of the backup window will force a "forklift upgrade" – replacement of the front-end controller with a larger/faster one, which is disruptive and costly.

Alternatively, ExaGrid's scale-out approach provides full appliances in a scale-out system. Each appliance has Landing Zone storage, deduplicated repository storage, processor, memory, and network ports. As the amount of data doubles, triples, etc., ExaGrid doubles, triples, etc. not just capacity, but all of the required resources, which maintains a fixed-length backup window. If the backup window is six hours at 100TB, it will remain six hours at 300TB, 500TB, 800TB, etc. Expensive forklift upgrades are avoided, and the aggravation of chasing a growing backup window is eliminated.

ExaGrid leverages the Veeam Scale-Out Backup Repository (SOBR). Shares on ExaGrid appliances in the scale-out system are grouped into a single target repository for Veeam. Veeam SOBR sends backup jobs to whichever repository target has the most storage. If a job was previously sent, Veeam SOBR attempts to keep jobs together by sending repetitive jobs to the same repository target if the storage available on that repository target is adequate. The combination of Veeam SOBR with ExaGrid's appliances in a scale-out system creates true end-to-end automated scale-out backup and backup storage.

ExaGrid Advanced Features for Veeam

ExaGrid has many advanced features, such as:

- A disk-cache Landing Zone for fast backups and VM boots in seconds to minutes
- Scale-out storage architecture for performance scalability and a fixed-length backup window as data grows
- Support for over 25 backup applications to support heterogeneous environments where Veeam coexists with other backup applications
- Data encryption at rest
- Data encryption for replicating over the WAN
- High reliability with RAID6 with a hot spare, redundant components, check-sum data checking, etc.
- Strong security
- Support of the Veeam Data Mover for faster backups – Veeam-to-Veeam
- Support of the Veeam Data Mover for synthetic fulls that are six times faster
- Support of Veeam SOBR for automated scale-out backups to backup storage
- Private, hybrid, and public cloud disaster recovery support

ExaGrid Support Model

ExaGrid understands that IT organizations are stretched and require highly interactive and proactive support. ExaGrid provides in-theatre support teams in North America, EMEA, and ASIA Pacific. ExaGrid assigns a local, level 2 senior customer support technician to each customer so the customer's IT staff deal with the same senior-level technician all the time with no gatekeepers or level 1 support reps Ninety-five percent of customers report alerts and alarms to ExaGrid's health reporting system, enabling ExaGrid to be highly proactive with its support. All failed hardware components such as drives, power supplies, etc., are shipped via next business day air and are hot swappable while the appliances remain in production, maintaining uptime. ExaGrid prides itself on providing the best and most proactive support in the industry.

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