

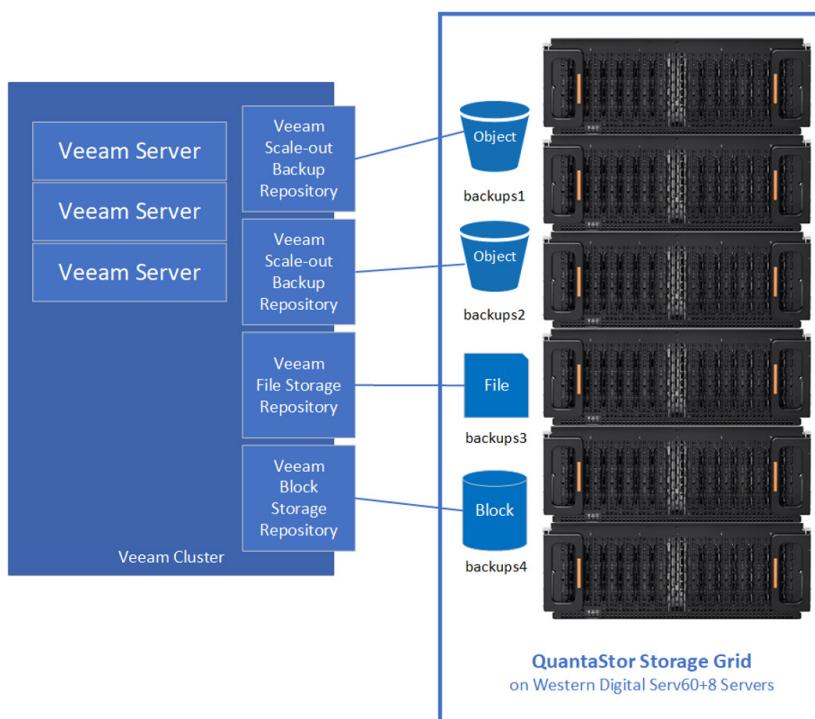
OSNEXUS and Veeam: Simplifying Data Backup With Storage Grids

Business challenge

Modern data growth is straining legacy backup platforms, and as IT budgets are forced to grow, companies are requiring a more simplified and economical approach to backing up data. Planning for business continuity has become a critical aspect of the modern digital enterprise and that involves extensive data backup, recovery strategies and scalability across private and public clouds. Another key challenge is managing and maintaining multiple different storage environments, adding complexities with different hardware, storage protocols and compatibility.

Solution overview "Better Together"

The combination of Veeam® and QuantaStor software-defined storage enables IT organizations to reach new levels of performance, flexibility and operational efficiency. QuantaStor runs on your choice of commodity hardware and is certified for use on a broad range of server systems from Western Digital, Dell, Hewlett Packard Enterprise (HPE), Intel, Supermicro, Cisco and Lenovo. QuantaStor turns these standard x86 servers into storage appliances that combine together to form a QuantaStor Storage Grid. Storage grids can span sites and data centers, scale to over 100 PB and make it easy to keep track of all your Veeam backups. Rather than having to manage silos of storage, QuantaStor makes it easy to track available capacity and expand with ease with zero downtime.



Environment configurations

QuantaStor is one of the most flexible software-defined storage platforms on the market and has been internally tested and integrated with servers and disk enclosures from all the major manufacturers. This deep integration with the hardware includes monitoring, management and alerting for key system metrics, such as thermals, power supplies and drive health, so that maintenance is made easy.

QuantaStor delivers file, block and object storage in a unified platform that can scale out across sites to deliver highly available private cloud storage for your organization. With Veeam's support for all three protocol options as a backup target, you're able to choose the protocol that best fits the backup workflow for your organization.

To begin designing your own QuantaStor storage configuration for your Veeam backups, visit osnexus.com/design or contact info@osnexus.com for more information on hardware compatibility with additional platforms.



OSNEXUS

QuantaStor 5 - Object & Block Storage Solution Designer

QuantaStor scale-out solutions provide both block (RBD/SCSI/FC) and object storage (S3/SWIFT). Storage is made highly-available using 3 or more servers and a storage layout using erasure-coding or replicas. QuantaStor is available as a bare-metal operating system installer and as an upgrade for RedHat/CentOS 7. QuantaStor integrates with and leverages Ceph open storage technology.

Usable Capacity (TB): 963 TB

Use Cases: General Backup & Archive (S3/SWIFT, Erasure Coding, 4k+2m)

Server/Cluster Specification

- Server Model: Western Digital Serv60+8 Hybrid Storage Server (4U60) | 60 Drives
- Data Device: 12TB HDD
- Journal Devices: 375GB Intel Optane

Storage Configuration

- Storage Layout: Erasure Coding (4k+2m)
- Usable/Raw Capacity Ratio: 0.667
- Data Compression: 20%
- Reserved Free-Space: 10%
- Reserved Drive Slots: 0%

Rack Summary

Servers	6
Data Devices (per server)	108 (18)
Journal Devices (per server)	6 (1)
Rack Space	24U
Usable Capacity	864TB
Usable w/ Compression	1081TB
Raw Capacity	1256TB
Estimated Power Req	2596W
Estimated HW Cost	N/A
HW Price/TB	N/A
HW Price/Gb/mo (5yr basis)	N/A

Solution Summary

Server Specification

- Western Digital Serv60 4U 60 bay LFF + 8 SFF Storage Server
- 2x Intel Xeon E5380 Gold (20 core) processors
- 384GB DDR4 ECC RAM
- 2x 240GB SSD (local)
- 2x Dual-port 40GbE/10GbE NICs
- Dual redundant power supplies
- 18x 12TB HDD (data)
- 1x 375GB Intel Optane (Journal)

License Summary

- Quantastor Enterprise Edition / Storage Grid License
- License Duration: 3 Years
- Support Level: Enterprise Edition - Gold Support (24/7 with max 4 hour response time)
- License Capacity: 1296TB

Request Quote

Benefits

- Integrated hardware monitoring and management for all major server platforms
- Storage grid technology is built-in and enables storage management across racks, sites and clouds.
- Unified storage platform enables deployment as file, block and object storage simultaneously in the same cluster.
- S3 Object Locking with both Governance and Compliance modes to meet the needs of organizations with compliance requirements
- End-to-end encryption with compliance to major security standards, including HIPAA, NIST 800-171, CJIS, FINRA and more
- 24.7.365 global support, training and configuration assistance included

Use cases



VM backup for managed service providers:

MSPs require a cost-effective way to build out large-scale backup systems for their multi-tenant environments. QuantaStor storage grids delivering S3 object storage are ideal for these environments.



Healthcare compliant backups: QuantaStor systems are HIPAA compliant and are used by some of the world's largest healthcare companies as backup systems.



S3 bucket object locking: QuantaStor enables S3 bucket object locking to satisfy compliance requirements for Veeam backups in regulated industries, including finance and healthcare.



Direct repository to Microsoft Office 365: Veeam's Office 365 backups can go directly into QuantaStor as an object repository.

Conclusion

QuantaStor and Veeam provide a flexible, scalable backup solution that combines Veeam's powerful data protection and recovery with QuantaStor's multi-protocol, feature-rich platform to enable organizations to manage all their storage as one, while ensuring availability, securing data and saving costs compared to public cloud storage. QuantaStor is Veeam Ready qualified, ensuring that IT professionals are able to leverage Veeam within the QuantaStor storage platform, supporting seamless backup and disaster recovery as well as an array of file, block and object capabilities that QuantaStor provides.

About Veeam Software

Veeam® is the leader in Backup solutions that deliver Cloud Data Management™. Veeam provides a single platform for modernizing backup, accelerating hybrid cloud, and securing data. With 375,000+ customers worldwide, including 82% of the Fortune 500 and 67% of the Global 2,000, Veeam customer-satisfaction scores are the highest in the industry at 3.5x the average. Veeam's 100-percent channel ecosystem includes global partners, as well as HPE, NetApp, Cisco and Lenovo as exclusive resellers. Veeam has offices in more than 30 countries. To learn more, visit www.veeam.com or follow Veeam on Twitter [@veeam](https://twitter.com/veeam).



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About Alliance Partner

Founded in 2010, OSNEXUS enables organizations to manage their storage as composable infrastructure with its QuantaStor industry-leading Software Defined Storage (SDS) platform. The QuantaStor platform provides scale-out file, block and object storage on commodity hardware as an easy-to-manage storage grid solution. QuantaStor, deployed by Fortune 500 companies and major research institutions, addresses a broad set of storage use cases ranging from backup & archive, HPC, big data, cloud computing, virtualization and high-performance applications through its scale-out grid architecture.