

QuantaStor SDS High-Performance Computing Storage Solutions

For computationally intensive applications such as Monte Carlo simulations, CAE, Seismic Data Processing, computational fluid dynamics, optical design and 3D simulations, the QuantaStor SDS platform provides High-Performance Computing (HPC) storage capabilities that scale with its unique storage grid architecture. QuantaStor SDS provides IT architects with the latest in storage software and hardware capabilities so that any HPC solution can be designed specifically to meet extreme workload and storage traffic needs.

Unified Storage Platform

QuantaStor provides support for all major file, block, and object protocols (NFS, CIFS, SMB, iSCSI, FC, and S3/SWIFT) and the latest in high-performance storage media (NV-DIMM, NVMe) which enables one to design high-performance solutions which are customized to meet the needs of the workload.

Next-generation Networking

With support for the latest generation of 10/25/40/50 and 100GbE network interface cards and switches, QuantaStor SDS appliances support the fast interconnects required for HPC workloads by providing high throughput for storage traffic across HPC clusters.

Scalable All-Flash and Hybrid Storage

Divide up and move storage between network shares and pools of storage that are all-flash or a hybrid mix of SSD and HDD for high-performance and high-capacity storage. All-flash configurations are designed to deliver maximum IOPS and throughput numbers for mission critical HPC workloads and applications. Using a combination of HDD with SSD for read and write performance acceleration, QuantaStor hybrid SAN/NAS configurations are ideal for HPC workloads.

Global Namespaces

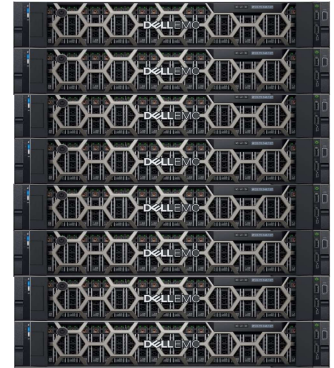
With overall grid scalability to 64 appliances, QuantaStor SDS for HPC can combine any number of network shares into any number of unique Global Namespaces so that storage grids can deliver consistent performance, accessibility, and reliability as HPC environments scale. Different network shares can also be placed on storage tiers to make it easy for end users to find their storage resources across HPC clusters.

S3/SWIFT Object Storage

QuantaStor SDS object storage configurations enable organizations to deploy cost-effective, hyper-scale storage for HPC workloads using the S3 and/or SWIFT REST based protocols. Object storage provides data intensive HPC applications with the ability to scale to 64 petabytes and appliances across HPC clusters.

Summary

QuantaStor SDS provides High-Performance Computing (HPC) storage capabilities to scale-up and out with its grid architecture for increased I/O and capacity requirements. For questions or to learn more about how QuantaStor can help solve HPC challenges for your workloads, contact us at sdr@osnexus.com to speak with one of our solution design architects.



DellEMC based S3 Object Storage solution



Intel/HGST based Hybrid SAN/NAS configuration



HPE based All-Flash SAN/NAS configuration

QuantaStor Storage Grid

About OSNEXUS

OSNEXUS is a leading manufacturer of hyper-scale SDS solutions with the QuantaStor™ Software Defined Storage (SDS) platform. QuantaStor SDS provides NAS, SAN, and Object storage in a single platform with unique storage grid technology. QuantaStor's grid technology simplifies the process of managing multisite and multi-PB storage environments. QuantaStor SDS is sold worldwide through, OEMs, VARs, MSPs, and System Integrators to provide customers with packaged turn-key solutions.