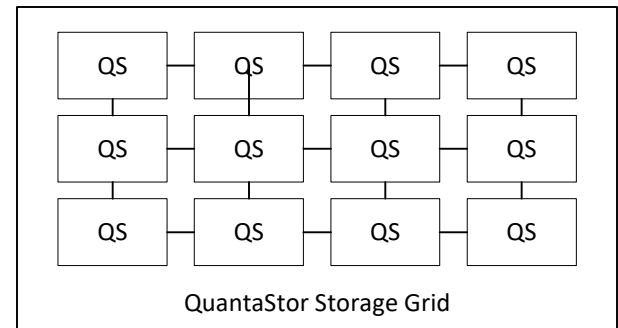# QuantaStor 6 Storage Platform Overview

QuantaStor is a unified software-defined-storage (SDS) platform providing file, block and object storage that addresses a broad spectrum of application workloads. Designed with unique storage grid technology, QuantaStor's federated storage management across all systems so that multiple storage clusters spanning multiple sites may be managed within a single grid. This empowers IT organizations with the flexibility they need to reduce costs while increasing security, performance, and uptime.

Grid Technology

QuantaStor's storage grid technology provides unified management of QuantaStor servers and clusters. The grid management system is built into every system so that administrators can log in and manage their storage grid from any system without having to install and maintain additional software. Each grid can scale to over 100PB and may contain multiple scale-out and scale-up storage clusters. Storage grids can also span sites and datacenters. QuantaStor has powerful access control, encryption, and security compliance features.

QuantaStor Storage Grid

End-to-End Encryption and Security

QuantaStor delivers end-to-end security coverage, enabling multi-layer data protection on-the-wire and for data-at-rest. With NIST 800-53, 800-171, HIPAA, and CJIS compliance and FIPS 140-2 certification, QuantaStor provides advanced security features required by government and regulated industries. In addition, QuantaStor has advanced RBAC capabilities as well as immutability / WORM support.
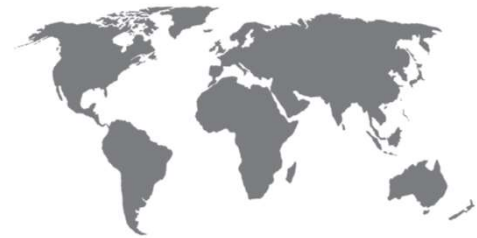

Unified File, Block & Object Storage

QuantaStor delivers both scale-up and scale-out configurations with file, block, and object storage types. Scale-out configurations provide high-performance NAS and S3-compatible object storage with scalability to over 50PB per cluster. Scale-up configurations provide SAN and NAS storage with less hardware making it more cost effective but are generally limited to 6PB or less per cluster.

Open Storage Foundation

OSNexus is dedicated to advancing open source storage technologies and is a member of the Ceph Foundation and Linux Foundation. QuantaStor integrates with mature enterprise open source storage technologies (Ceph and OpenZFS) to deliver rapid innovations at a lower cost and without the vendor lock-in that comes with the use of proprietary filesystems. QuantaStor delivers a turn-key enterprise storage platform that requires little to no Ceph or ZFS knowledge.

Deep Hardware Integration

QuantaStor's hardware integration spans a broad selection of servers and JBODs, including Seagate, Supermicro, Dell, HPE, Western Digital, and Lenovo. Grid technology makes it easy to manage all your storage systems within and across sites. New with QuantaStor 6 is a Seagate CORVAULT external system management module enabling management, monitoring, and auto-configuration of Seagate CORVAULT systems used within a QuantaStor storage grid.

Watch video here

Solution Design Tools

QuantaStor enables the deployment of up to 100x systems that can be grouped into any number of scale-up or scale-out storage clusters. Hardware designs differ for each cluster type, so we provide tools to help design optimal QuantaStor storage solutions. To begin designing your next scale-out or scale-up solution using our web based design utilities, visit osnexus.com/design.

osnexus.com/design

QuantaStor Feature Analysis

QuantaStor has an extensive feature set and adds new capabilities in every product release. To access an updated spreadsheet with a list of all current features, visit link.osnexus.com/key-features.

link.osnexus.com/key-features