QUOBYTE – THE DATA CENTER FILE SYSTEM

Quobyte

Features and Capabilities

High Performance

Get the most out of your hardware: Ultra-low latency and fast metadata operations keep up with tough workloads like EDA, Life Sciences, Financial Services, and Media & Entertainment.

Linear Scalability

Scale out from four nodes to entire data centers and beyond. Add nodes to increase performance *without* downtime.

Manage with Automation

Quobyte's low-touch solution frees administrators from worrying about system internals. Our JSON-RPC API supports integration with existing automation tools. Reconfigure your entire storage with one click; bring agile best practices to your storage.

The software is self-managing, shielding you against hardware failures, operator errors, network partitions and disk corruption. End-to-end checksums protect all file data, metadata, and communications.

Freedom of Choice

Customers are free to deploy on any hardware, even cluster nodes don't have to be identical. Supports all modern Linux distributions and has no kernel dependencies.
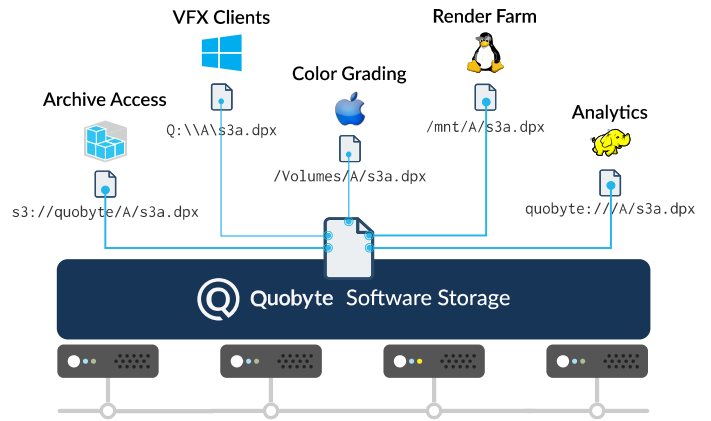
Native Linux, Windows, and Mac drivers deliver high performance parallel IO. Connect your NFS or S3 workloads with our stateless proxies. Storage is accessible through all interfaces simultaneously. Automatically erasure code files/folders for long-term storage.

Unified Storage Access

Easy-to-use Web Console
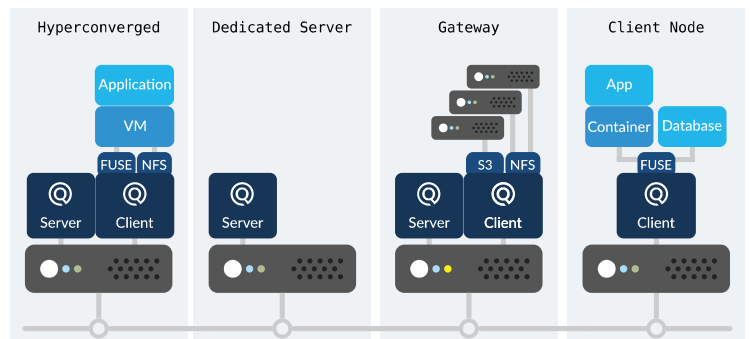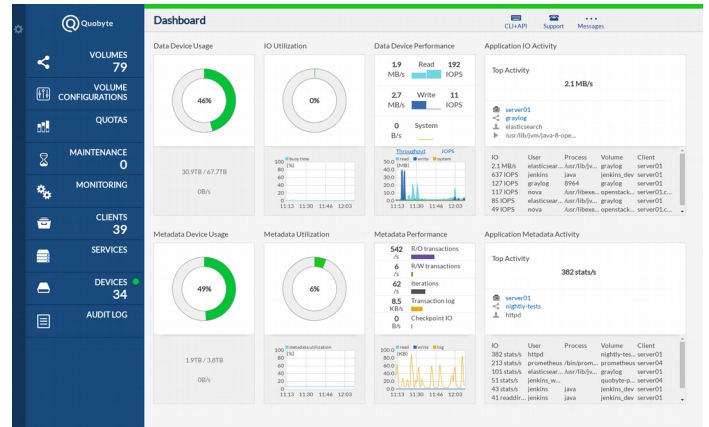

Smarter Software-Defined Storage

Built for the Future

Inflexible data center design has given way to a highly responsive containerized world and with Quobyte your storage will be ready. We provide persistent storage for containers, you can even run your storage inside containers. Along with support for Kubernetes, Mesos, and Rancher you get a solution for rapidly fluctuating workloads. Quobyte is compatible with OpenStack Cinder, Glance, Manila, and S3 interfaces, and supports Hadoop.

Quobyte Datasheet

Interfaces	Native Client: Proxies: Object:	Linux, Mac, Windows, HDFS NFSv3, NFSv4, SMB S3
OpenStack	Drivers: Integration:	Manila, Cinder, S3 Keystone, OpenStack domains
Container Infrastructures	Shared file storage for stateful containers; deployable in containers	
Multitenancy	Built-in (also integrates with OpenStack domains) Unified ACLs across all interfaces and operating systems	
Data Placement	Dynamic and policy-defined down to the file level; enables performance isolation, system partitioning, tiering, and intelligent placement by locality	
High Availability	Built-in, with transparent failover	
Data Protection	Split-brain safe replication or erasure coding, configurable at the file level	
Checksums	End-to-end CRC32 at the block level	
Geo-Replication	Asynchronous, per-volume mirroring	
Small-File Performance	High throughput for uncompressed media streams (DPX) and many other small-file workloads	
Block Size	512 bytes to 2MB, configurable for each file	
Quotas	Based on capacity/files/file systems; per user, group, file system or tenant	
Live Updates	No service interruption with rolling updates	
Parallel IO	Striping, direct communication from client to many storage servers	
Network	Any IP network, multiple networks and storage backbone support	
Thin Provisioning	Yes, all volumes thinly provisioned	
Limits (per installation)	Servers: Capacity: File Systems: Files:	Min. 4, up to 10,000s Unlimited, max. 32PB per file Unlimited Up to 100,000,000 per file system
Management	WebUI, JSON-RPC API, and command line tools	
Health Manager	Continuous supervision of cluster health and performance. Runs proactive maintenance tasks	
Platforms	OS: Frameworks:	Ubuntu, Debian, CentOS/RHEL, Fedora, openSUSE/SLES Kubernetes, Docker, Mesos, Rancher

Key Benefits

- POSIX file system for seamless integration
- High IOPS, consistent sub-millisecond latency
- "Lights-out" data center resiliency; self-healing
- Near-perfect linear scaling
- 100% hardware and kernel independent
- Hadoop, Docker, and OpenStack support
- Erasure coding option, perfect for analytics and sequential workloads
- Policy-driven data placement and tiering
- Integrates with Kubernetes, Rancher, and Mesos

Quobyte Inc.
4633 Old Ironsides Drive
Suite 150
Santa Clara, CA 95054
650-564-3111

info@quobyte.com

German Office
Hardenbergplatz 2
10623 Berlin
Germany
+ 49-30-814 591 800

Quobyte®
Data Center File System.™ Fast and Reliable Software Storage.

linkedin.com/company/quobyte

twitter.com/quobyte

facebook.com/quobyte