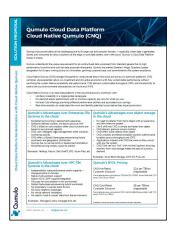# Qumulo Cloud Data Platform Cloud Native Qumulo (CNQ)

Thank you for downloading this Qumulo solution brief. Carahsoft is the distributor for Qumulo data management and storage solutions available via ITES-SW2, NASA SEWP V, GSA MAS and other contract vehicles.

To learn how to take the next step toward acquiring Qumulo's solutions, please check out the following resources and information:

For additional resources:
carah.io/QumuloResources

For upcoming events:
carah.io/QumuloEvents

For additional Qumulo solutions:
carah.io/QumuloSolutions

For additional compliance initiatives solutions:
carah.io/QumuloSolutions

To set up a meeting:
Qumulo@carahsoft.com
888-662-2724

To purchase, check out the contract vehicles available for procurement:
carah.io/QumuloContracts

Qumulo Cloud Data Platform
Cloud Native Qumulo (CNQ)

Storing unstructured data can be challenging due to its large size and complex formats — especially when data is generated, stored, and consumed at various locations at the edge, in core data centers, and in the cloud. Qumulo's Cloud Data Platform makes it simple.

Qumulo understands the unique requirements for all unstructured data workloads from standard general file, to high performance, to archive and cold tier data accessed infrequently. Qumulo has earned Gartner's Magic Quadrant Leader designation for 6 years running due to our innovation, growing customer base, and commitment to file system excellence.

Cloud Native Qumulo (CNQ) changes the game for unstructured data in the cloud and across on-premises platforms. CNQ combines unprecedented return-on-investment and disruptive economics with fully customizable performance without sacrificing file system feature availability and performance. CNQ delivers customizable throughput, IOPS, and the elasticity to control the cloud environment characteristics on Azure and AWS.

Cloud Native Qumulo is an ideal data platform in the cloud that powers workflows with:
- Limitless scalability in a single global namespace.
- On-demand elastic performance with no min/max capacity; pay only for what you use.
- Hot and Cold offerings providing different performance profiles and associated cost-savings.
- Real-time analytics to understand the work and identify potential issues before they impact production.

Qumulo's Advantages over Enterprise File Systems in the cloud

- Simplified provisioning / deployment experience
- Software defined solution, not tied to physical HW
- CNQ is billed on consumption; other cloud solutions are based on provisioned capacity
- CNQ uses intelligent data management; other solutions use tiering policies
- CNQ offers a Global Namespace empowering hybrid workloads and geographic distribution
- Qumulo has no service limits or deployment limitations
- Simplified pricing models, easier to predict

Examples: NetApp, Nasuni, Dell OneFS, EFS, Azure Files, etc.

Qumulo's Advantages over object storage in the cloud

- No need to refactor from file to object with an expensive and time intensive project
- Lift & shift into CNQ is simple and faster than object
- CNQ delivers granular access controls
- CNQ offers lower latency than object
- CNQ is elastic architecture enables dynamic performance tunables across throughput and IOPS
- Applications interact with CNQ the same as they would with any file system
- CNQ Cold can turn "hot" with minimal lag time, ensuring recovery from cold storage meets the pace of business demand

Examples: Azure Blob Storage, AWS S3, Pure, etc.

Qumulo's Advantages over HPC File Systems in the cloud

- Independently scale performance and/or capacity – change anytime in minutes
- Native multi-protocol support
- Native AD & LDAP support/integration
- Only pay for consumption vs for provisioned
- Global Namespace empowering hybrid workloads
- No proprietary in-kernel client drivers
- No noisy neighbor challenges
- No virtual network limitations
- No need to 'load & unload' data from the environment

Examples: Managed Lustre, managed disk, etc.

Qumulo's BYOL Pricing

CNQ Hot Retail	$24 per TB/mo
Customer Discount	*(negotiable)*

Cloud infrastructure not included. CNQ Hot (S3 STD/INT, Azure Blob Hot) TCO range $20-$35 per TB/mo*

CNQ Cold Retail	$8 per TB/mo
Customer Discount	*(negotiable)*

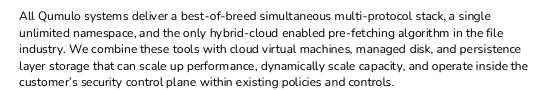Cloud infrastructure not included. CNQ Cold (S3 IA/GIR, Azure Blob Cold) TCO range $6-$12 per TB/mo*

Depending on cloud provider discounts, capacity, performance and region configurations.

Cloud Native Qumulo | A modern cloud file system

Full simultaneous multi-protocol access

Single global namespace

SMB NFS REST API FTP S3

CNQ Deployment in Customer Tenant

4 (ea) NVMe enabled VMs Plus 256 GiB Boot Disk (scalable to 100s of VMs)

Managed Disk/EBS

Included in the VM deployments

4K Read Cache Write Cache 4K

ZRS Blob / S3

S3 STD/INT/IA/GIR or Azure Blob Hot/Cold

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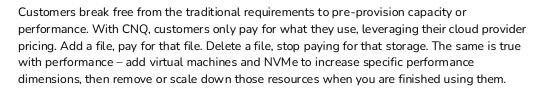1010 1010 1010 1010 1010

CNQ is software only. Cloud infrastructure is provided by the hyperscaler – infrastructure costs will decrement your commitments.

Delivering Return on Investment with Cloud Architecture Innovation

Microsoft Azure

aws

Cloud Native Qumulo delivers the performance of flash file systems near the cost of object and often with competitive total-cost-of-ownership better than legacy on-premises file systems. Delivering this value required re-imaging file system architecture from the ground up and collaborating with the hyperscale cloud providers to deliver a fully customizable unstructured data acceleration environment.

All Qumulo systems deliver a best-of-breed simultaneous multi-protocol stack, a single unlimited namespace, and the only hybrid-cloud enabled pre-fetching algorithm in the file industry. We combine these tools with cloud virtual machines, managed disk, and persistence layer storage that can scale up performance, dynamically scale capacity, and operate inside the customer's security control plane within existing policies and controls.

Customers break free from the traditional requirements to pre-provision capacity or performance. With CNQ, customers only pay for what they use, leveraging their cloud provider pricing. Add a file, pay for that file. Delete a file, stop paying for that storage. The same is true with performance – add virtual machines and NVMe to increase specific performance dimensions, then remove or scale down those resources when you are finished using them.

About Qumulo

Qumulo is the leading file data platform for multi-cloud environments, providing unrivaled freedom, control, and real-time visibility for file data at massive scale. Fortune 500 companies, major film studios, and the largest research facilities in the world trust Qumulo to help them innovate with their mission-critical digital files. The Qumulo experience makes file data management simple with continuous new features, a single solution for all workloads, and access to customer success experts on your schedule.
www.qumulo.com