Qumulo C-Series File Storage Platforms

As businesses struggle with the unrelenting growth of data and how to best use that data to unlock incremental business value, they look to IT to provide a smart, flexible, and cost-efficient storage infrastructure. IT leaders recognize that, all too often, storage is a bottleneck in truly realizing this value. Many of today's storage systems are either All-Flash, which are fast but can also be very expensive; or lack robust data management, effective data protection and do not scale seamlessly in the hybrid cloud.

Seamless Scalability

Qumulo's C-Series contains a mix of solid state drives (SSDs) and hard disk drives (HDDs). The C-Series provides a starting capacity of 96TB raw and scales linearly to multi-petabyte scale. Built on enterprise-class standard hardware, the C-Series leverages the SSDs to enable the high performance characteristics of flash hardware but at the pricing of spinning disk. There are no architectural limitations to the number of nodes that can form a cluster.

Each C-Series node is a dense, self-contained modular building block comprising compute, cache, networking, SSDs, and HDDs. Each node runs Qumulo's distributed filesystem and participates in the cluster as a fully-symmetric peer, managing write and read requests, and coordinating transactions with other nodes within the cluster. Additional nodes can be added to the cluster easily and non-disruptively, linearly scaling both storage capacity and performance at the same time.

When multiple clusters are deployed, the clusters can work together to form a globally-distributed but highly connected storage fabric tied together with continuous replication. Clients interact with the storage clusters using industry-standard file protocols (SMB, NFS, FTP or the REST API), and administrators can manage the cluster via a web-based graphical user interface or command-line interface.
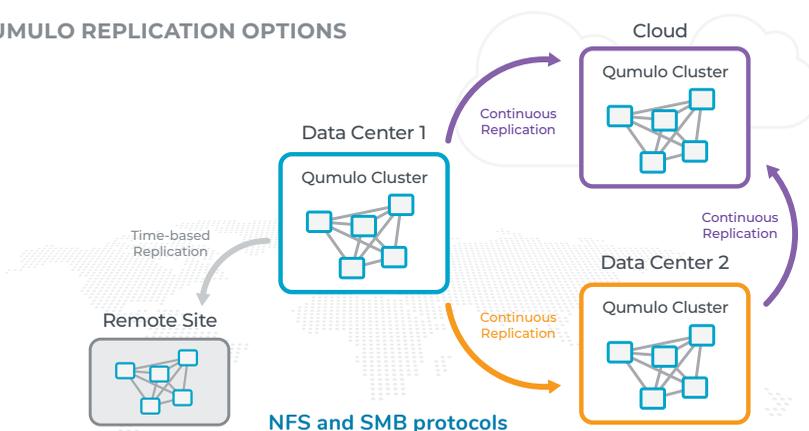
QC24 | QC40 | C-72T | C-168T

QC104 | QC208 | QC260 | QC360

FEATURES & BENEFITS

- **Scales to billions of files**
  Use any mix of large and small files and store as many files as you need. There is no practical limit with Qumulo's hybrid cloud file storage advanced file-system technology. There is no penalty for small files.

- **Real-time control at scale**
  Get answers and solve administration problems in real time, no matter how many files and directories you manage.

- **Highest performance**
  Qumulo's hybrid cloud file storage is the highest performance file storage system in the data center and in the cloud. Get multi-GB/s throughput for your toughest on-prem and cloud workloads.

- **Lowest cost**
  Qumulo's hybrid cloud file storage is one third the cost of legacy storage appliances on a capacity basis. And, you actually can use 100% of provisioned capacity.

QUMULO REPLICATION OPTIONS

Cloud — Qumulo Cluster

Data Center 1 — Qumulo Cluster

Continuous Replication

Time-based Replication

Remote Site

Data Center 2 — Qumulo Cluster

Continuous Replication

Continuous Replication

NFS and SMB protocols

Best Customer Value

The Qumulo C-Series newest members, the C-72T and the C-168T, provide massive gains in economics, density and power efficiencies. The Qumulo C-Series hybrid storage platforms features eight options so you can get exactly what you need. The C-Series 1U appliances (QC24, QC40, C-72T and C-168T models) give users a choice between lower-cost entry requirements and higher performance/higher capacity needs. The Qumulo C-Series 4U appliances (QC104, QC208, QC260 and QC360 models) give users a choice between cost-optimized requirements and the highest density, lowest cost per GB solution.

Technical Specifications

Per Node	1U				4U			
	QC24	QC40	C-72T	C-168T	QC104	QC208	QC260	QC360
Connectivity Ports	2 x 10GbE (SFP+)		2 x 25GbE (SFP28)		4 x 40GbE (QSFP+)			
Management Ports	1GbE Base-T (RJ45)				1GbE Base-T (RJ45)			
Storage Media (all hot-swappable)	4 x 6TB HDD	4 x 10TB HDD	12 x 6TB HDD	12 x 14TB HDD	26 x 4TB HDD	26 x 8TB HDD	26 x 10TB HDD	36 x 10TB HDD
	2 x 800GB SSD		4 x 480GB SSD	4 x 960GB SSD	13 x 480GB SSD			4 x 1.6TB SSD
CPU	Intel® Xeon E3-1230 v6, 4 cores, 3.60GHz		Intel® Xeon-D D-1531 SOC, 6 cores, 2.2GHz		Intel® Xeon E5 2620v3, 6 cores, 2.40GHz			
Memory	64GB				128GB			256GB
Raw Storage Capacity	24TB	40TB	72TB	168TB	104TB	208TB	260TB	360TB
Power Supply	2 x 650W (fully redundant, hot-swappable)		2 x 400W Platinum PSU (fully redundant, hot swappable)		2 x 750W (fully redundant, hot-swappable)			
Dimensions (H x W x D)	1.75" (4.5cm) x 17.2" (43.7cm) x 27.9" (70.8cm)		1.7" (4.3 cm) x 17.2" (43.7cm) x 36.25" (9.21cm)		7" (17.8cm) x 17.2" (43.7cm) x 29" (73.7cm)			
Weight	55lbs (24.9kg)		63 lbs (28.6kg)		155lbs (70.3kg)			166lbs (75.3kg)
Power Requirements	100 – 240V, 50/60hz				100 – 240V, 50/60hz			
Typical Power Consumption	0.65A @ 240V, 1.41A @ 110V		0.59A @ 240V, 1.29A @ 110V		2.71A @ 240V, 5.91A @ 110V			
Typical Thermal Rating	155W (VA), 529 BTU/hr		142W (VA), 484 BTU/hr		650W (VA), 2,218 BTU/hr			
Maximum Power Consumption	1.04A @ 240V, 2.28A @ 110V		1.0A @ 240V, 2.18A @ 110V		3.55A @ 240V, 7.73A @ 110V			
Maximum Thermal Rating	250W (VA), 855 BTU/hr		240W (VA), 818 BTU/hr		850W (VA), 2,900 BTU/hr			
Operating Temperature	50° F – 95° F (10° C – 35° C)		41° F – 95° F (5° C – 35° C)		50° F - 95° F (10° C – 35° C)			
Non-operating Temperature	-40° F – 158° F (-40° C – 70° C)		-40° F – 149° F (-40° C – 65° C)		-40° F - 158° F (-40° C – 70° C)			
Operating Relative Humidity	8% to 90% (non-condensing)				8% to 90% (non-condensing)			
Non-operating Relative Humidity	5% to 95% (non-condensing)				5% to 95% (non-condensing)			

Certifications	
Safety	UL, cUL
Country	FCC (USA), NRTL (USA and Canada)
Emissions	FCC Part 15 Class A, ICES-003 Class A
Immunity	North America

ABOUT QUMULO

Qumulo hybrid cloud file storage delivers real-time visibility, scale and control of data across on-prem and cloud. Qumulo customers understand storage at a granular level; programmatically configure and manage usage, capacity and performance; and are continuously delighted with new capabilities, 100 percent usable capacity and direct access to experts. More: www.qumulo.com