

Qumulo on All-Flash

As businesses struggle with the unrelenting growth in unstructured data and how to use this data to unlock business value, they look to IT to provide a smart, flexible and cost-efficient storage infrastructure. IT leaders recognize that, all too often, storage can be the bottleneck in their business. Many of today's legacy storage systems are limited in their ability to scale performance and bridge workloads to the public cloud.

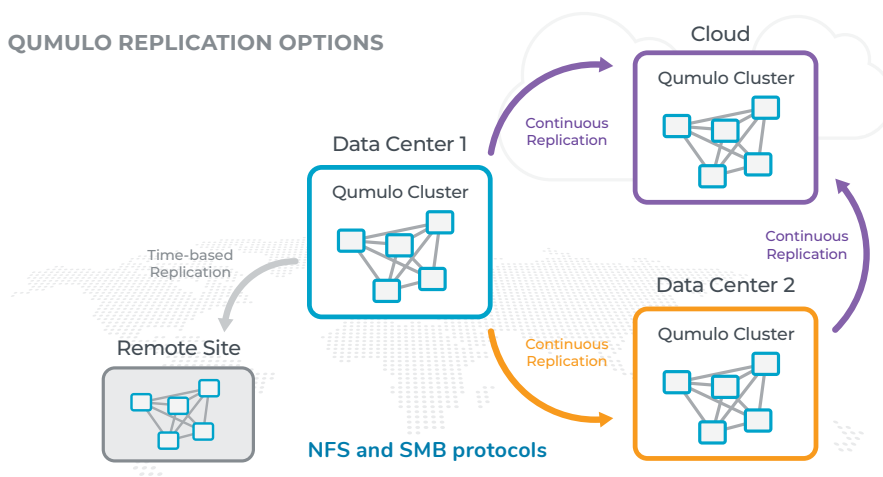
Very High-Performance

Qumulo's competitively priced P-Series uses NVMe and the very latest commercial, off-the-shelf components, instead of expensive, proprietary hardware. The P-Series enables extremely consistent, high performance, and scalable file storage. The P-Series platforms have been tuned for performance and provide a starting capacity of 50TB that linearly scales to over 10PB.

Each P-Series node is a dense, self-contained modular building block comprising compute, cache, networking, and NVMe drives. Each node runs Qumulo's hybrid distributed file system 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. There are no architectural limits to the number of nodes that can form a cluster.

Qumulo's hybrid cloud file storage clusters work together to form a globally distributed and highly connected storage fabric tied together with continuous replication. Customers interact with the storage clusters using industry-standard file protocols, Qumulo's REST API, and a web-based graphical user interface for storage.

QUMULO REPLICATION OPTIONS



P-23T | P-92T | P-184T

FEATURES & BENEFITS

- Highest performance**
 The Qumulo P-series, based on NVMe, delivers the best price-performance of any All-Flash file storage system. Throughput and IOPS enable unparalleled read and write performance.
- Lowest cost**
 Riding the cost curve of commercial, off-the-shelf hardware and NVMe drives, the P-Series is less expensive than proprietary All-Flash systems today, and will continue to take advantage of commodity economics. And, customers can actually use 100 percent of its provisioned capacity.
- Enterprise-level data services**
 The P-Series is not only incredibly fast, but it has all of the data services that enterprise organizations have come to expect. Continuous replication, snapshots, auditing, and quotas are provided so users can protect their data and optimally manage their storage. These services go across both on-prem and public cloud platforms.
- Scales to billions of files**
 Use any mix of large and small files and store as many files as needed. There is no practical limit with Qumulo's hybrid cloud file storage advanced file system technology. There is also no penalty for small files.

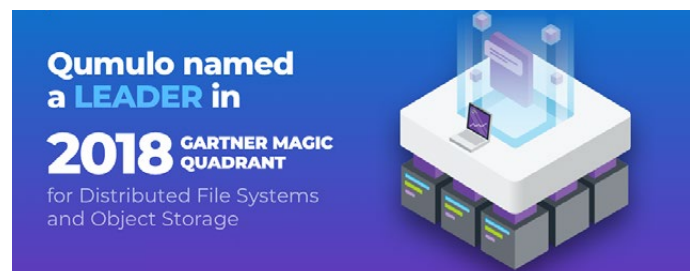
“We are a digital manufacturer and digital media files are the core asset of our business. During the production of a major animated motion picture, we often create in excess of 500 million media files. If storage fails to perform, the creativity stalls. Qumulo gives us the speed to meet our demanding production schedules while continuing to raise the bar on creating the world’s most compelling movie experiences.”

— Technology Fellow for Engineering and Infrastructure at Major Movie Studio

Technical Specifications

Per Node	P-23T	P-92T	P-184T
Raw storage capacity	23TB	92TB	184TB
SSD Drives (hot swappable)	12 x 1.92TB NVMe	24 x 3.84TB NVMe	24 X 7.68TB NVMe
Connectivity Ports	4 x 100GbE (QSFP+)		
Management Ports	1GbE Base-T (RJ45)		
CPU	2 x Intel Gold 6126, 12 cores, 2.6Ghz		
Memory	192GB		
Power Supply	2 x 1100W (fully redundant, hot-swappable)		
Dimensions (HxWxD)	3.5" (8.9cm) x 17.2" (43.7cm) x 29" (73.7cm)		
Power Requirements	100 – 240V, 50/60hz		
Typical Power Consumption	~300W		
Typical Thermal Rating	650W (VA), 2,218 BTU/hr		
Maximum Power Consumption	3.55A @ 240V, 7.73A @ 110V		
Maximum Thermal Rating	2,218W (VA), 2,900 BTU/hr		
Operating Temperature	50° F – 95° F (10° C – 35°C)		
Non-operating Temperature	-40° F – 158° F (-40° C – 70°C)		
Operating Relative Humidity	8% to 90% (non-condensing)		
Non-operating Relative Humidity	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