Uncompressed 4K Playback with Qumulo

Uncompressed 4K playback is a demanding workload that requires instant and consistent access to content with minimal latency. Gone are the days when this workflow necessitated dedicated block storage; with the Qumulo P-series all flash NVMe scale-out NAS, a better solution exists.

Instead of dedicated playback machines, each with its own isolated storage silo that must be managed and maintained separately, a Qumulo P-series cluster can serve multiple streams of uncompressed 4K imagery to several clients.

Centralized storage means a single name-space, easier maintenance, simpler management, scale-out growth, and greater convenience, and avoids the time lost having to copy sequences between dedicated playback systems. The result is increased productivity for storage administrators, editors and reviewers.

The Qumulo High Performance, P-series has the best performance of any all-flash file storage system. A minimum four-node cluster delivers 18GB/s today and with Qumulo's rapid pace of innovation this means that you can expect constant performance gains at no additional cost.

The P-series is built entirely from the finest industry standard hardware components. It uses state-of-the-art NVMe, Intel Xeon Gold (Skylake-SP) CPUs and dual 100GbE or 40GbE QSFP+ NICs. Rapid delivery of advanced software features, combined with the competitively priced, commercially available standard hardware, delivers unmatched economic benefits and continuous innovation.

The Qumulo P-series is available in 23 and 92 terabyte node configurations: the Qumulo P-series 23T and the Qumulo P-series 92T.

Features & Benefits

- **Highest performance**
  The Qumulo P-series delivers the best price performance of any all-flash file storage system. QF2 on all-flash initiates a software-enabled future for flash storage, where performance gains come about through continuous software innovation.

- **Lowest cost**
  Riding the cost curve of commercial, off-the-shelf hardware, QF2 is less expensive than proprietary all-flash systems today and will continue to take advantage of commodity economics over time. Qumulo's straightforward subscription pricing covers everything, including new features, updates, and support.
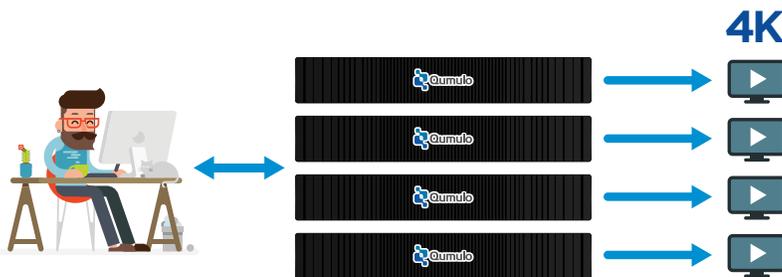
- **The only cloud-integrated all-flash**
  QF2 runs in the data center and in the public cloud. Continuous replication moves the data where and when it's needed, which means that high-value all-flash workloads can be easily moved to the public cloud and won't be confined to a silo in the data center.

- **Real-time control**
  QF2's advanced, real-time visibility and control let you tune your high-performance, all-flash workloads for optimal use of performance and capacity.

- **Highest rated support**
  Qumulo has an industry-leading NPS score. Customers get help fast from our team of storage experts with your own Slack channel.

Qumulo Core: Gold Winner
2015 Products of the Year
Storage Systems: Disk and Hybrid Systems

"At DreamWorks, 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. QF2 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."

— **Skottie Miller**, Technology Fellow for Engineering and Infrastructure at DreamWorks Animation

Technical Specifications

Per Node	Qumulo P-series 23T	Qumulo P-series 92T
Connectivity ports	2 x dual 100GbE or 40GbE QSFP+ NICs	2 x dual 100GbE or 40GbE QSFP+ NICs
Management ports	1 x IPMI 1GbE Base-T (RJ45)	1 x IPMI 1GbE Base-T (RJ45)
Storage media	12 x 1.92 SSDs	24 x 3.84 SSDs
CPU	Intel Xeon Scalable 6126	Intel Xeon Scalable 6126
Memory	192GB	192GB
Raw storage capacity	23TB	92TB
Power supply	2 x 1100W (fully redundant, hot-swappable)	2 x 1100W (fully redundant, hot-swappable)
Dimensions (H x W x D)	3.5" (8.9cm) x 17.2" (43.7cm) x 29" (73.7cm)	3.5" (8.9cm) x 17.2" (43.7cm) x 29" (73.7cm)
Power requirements	100 – 240V, 50/60hz	100 – 240V, 50/60hz
Typical power consumption	~300W	~300W
Typical thermal rating	650W (VA), 2,218 BTU/hr	650W (VA), 2,218 BTU/hr
Maximum power consumption	3.55A @ 240V, 7.73A @ 110V	3.55A @ 240V, 7.73A @ 110V
Maximum thermal rating		
Operating temperature	50° F - 95° F(10° C– 35°C)	50° F - 95° F(10° C– 35°C)
Non-operating temperature	-40° F - 158° F(-40° C– 70°C)	40° F - 158° F(-40° C– 70°C)

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 is the leader in universal-scale file storage. Qumulo File Fabric (QF2) gives data-intensive businesses the freedom to store, manage and access file-based data in the data center and on the cloud, at petabyte and global scale. Founded in 2012 by the inventors of scale-out NAS, Qumulo serves the modern file storage and management needs of Global 2000 customers. For more information, visit http://qumulo.com

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