

Qumulo File Fabric On All-Flash

The Leader in Universal-Scale File Storage

Qumulo File Fabric (QF2) is a modern, highly scalable file storage system that runs in the data center and the public cloud. QF2 on-premises all-flash instances serve high-performance workloads such as genomic sequencing and analysis, high-resolution video editing, scientific computing and the ingestion of large-scale datasets for machine learning applications.

QF2 all-flash clusters deliver the best price performance of any all-flash file storage system. Throughput of a single node is 4GB per second, an entry-level 4-node cluster is a blisteringly fast 16GB per second and a 400-node system scales up to 1.6TB per second, all with the lowest cost in the industry.

QF2 on all-flash is the first modern, scalable, all-flash file storage system built entirely from standard hardware components. QF2's all-flash instances, known as the Qumulo P-series, use state-of-the-art NVMe, Intel Xeon Gold (Skylake-SP) CPUs and dual 100GbE or 40GbE QSFP+ NICs. QF2 on all-flash uses the very latest commercial, off-the-shelf components, instead of expensive, proprietary hardware. Rapid delivery of advanced software features, combined with the competitively priced, commercially available standard hardware, delivers unmatched economic benefits and continuous innovation.

QF2 runs in the data center and in the public cloud. Continuous replication moves the data where and when it's needed, which means high-value all-flash workloads won't be confined to a silo in the data center. QF2 powered by all-flash is the world's only cloud-integrated all-flash file storage.

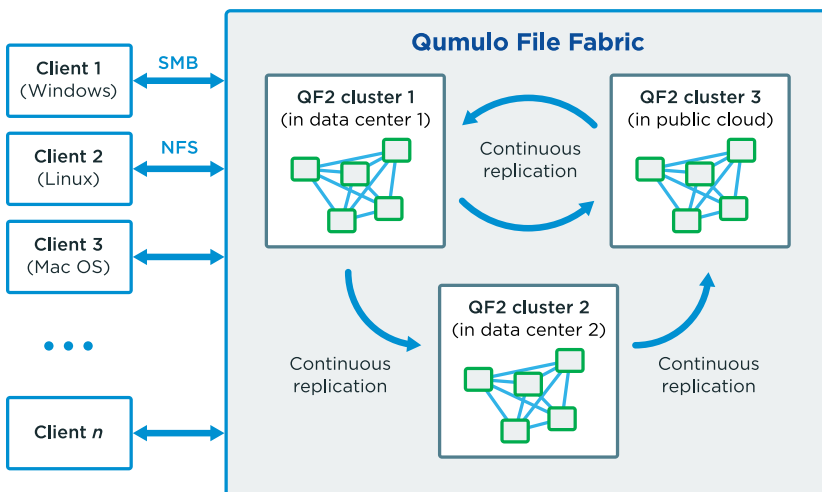
The Qumulo P-series is available in 23 and 92 terabyte node configurations, the Qumulo P-series 23T (12 x 1.92 NVMe SSDs) and the Qumulo P-series 92T (24 x 3.84 NVMe SSDs).



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.

QF2 Architecture



“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>

