

High performance, scalable storage solution for PACS from Qumulo and HPE

Data is at the heart of every healthcare system. In an effort to improve diagnoses, find cures, and speed patient services, medical technologies are continuously evolving. The quantities, types, and sizes of the resulting data is continuously growing, and it is produced across various systems both on-prem and across various geographic regions. Electronic Medical Records (EMR) and Electronic Health Records (EHR) systems produce countless patient medical records, while massive amounts of imaging content is created by many different modalities such as MRI, CAT, CT, and X-rays and managed by Picture Archiving and Communication Systems (PACS).

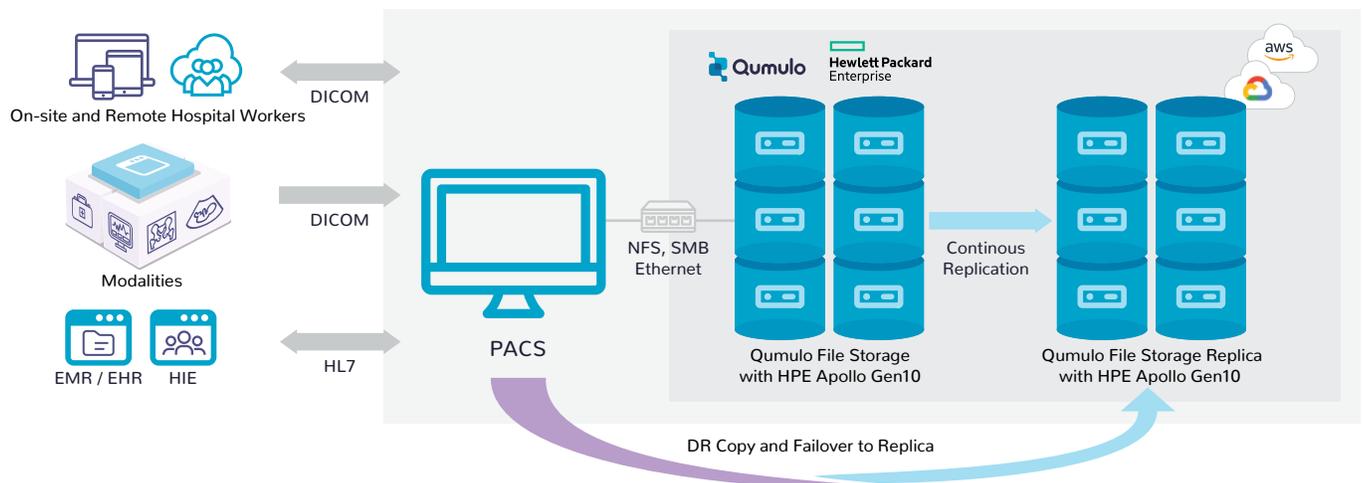
Qumulo and HPE deliver a proven single-tier storage solution for PACS

Healthcare organizations today require cost effective, secure storage to support data volumes ranging from 10TB up to hundreds of petabytes data generated by medical modalities and medical records systems today. Qumulo’s innovative hybrid cloud file storage, running on HPE Apollo 4200 Gen10 servers, provides a unified, cost-effective, and scalable storage architecture that meets the accessibility, security, and efficiencies requirements for healthcare organizations. Together, Qumulo and HPE provide a single-tier file storage solution that can scale across on-prem data centers, while also seamlessly transitioning to cloud environments. With the use of flash-first technology, this solution provides an extremely fast, patient-centric architecture that accelerates patient services and minimizes administrative costs.

SOLUTION BENEFITS

- Single-tier hybrid cloud file storage solution for PACS
- Fast flash-first data access
- Easy to deploy and manage
- Simple scalability to manage rapid growth
- Maximum file storage efficiencies
- Continuous replication on-prem or to the cloud
- Data protection and security for all data
- Speed overall patient experience
- Real-time analytics to manage entire file system
- World-class customer success

QUMULO WITH HPE SINGLE-TIER FILE STORAGE FOR PACS



Unified fast access to all imaging data

The Qumulo and HPE PACS storage solution is simple to deploy, manage, and scale. With Qumulo's single namespace, healthcare organizations can unify access to all data, while simplifying and reducing the cost of data management. Accessible through NFS and SMB protocols, Qumulo's file storage fits perfectly into healthcare environments and integrates with existing network clients.

Flash-first hybrid architecture and intelligent predictive caching optimizes performance and cost for healthcare organizations. Viewing stations, either on-prem or at remote sites, can count on extremely fast access to all imaging data with the speed solid state drives (SSD), while the data that is not actively accessed is stored on more economical hard disk drives (HDD).

Maximum efficiencies, protection, and simple, cost-effective scalability

The Qumulo with HPE storage solution is more economical than legacy storage offerings with regard to capacity utilization. The solution efficiently manages both large and small files generated by today's imaging technologies, and enables healthcare studies and other patient data to occupy 100 percent of provisioned capacity, unlike 70-80 percent as seen with many other file storage systems. Efficient, long-term archive data protection is provided through the use of erasure coding, which delivers superior data protection with minimal storage overhead. No separate hardware or software is needed for tiering; Qumulo's intelligent predictive caching moves static data from SSD to more cost-effective HDD storage.

Finally, HPE Apollo 4200 Gen10 servers offer advanced storage density in a 2U form factor, and support Qumulo's modular architecture. Adding capacity is as simple as adding a single node (or multiple nodes) to the cluster, with no disruption or downtime.

Data reliability through continuous replication on-prem or in the cloud

Qumulo's file storage provides continuous replication across storage clusters, whether on-prem or in the public cloud. This feature leverages snapshot capabilities to ensure consistent data replicas. Qumulo's file system then takes it a step further, applying smart algorithms to make sure data replicates as often as practical without negatively impacting overall cluster performance. In the event that the primary data center is unavailable, data can be accessed from the replica cluster.

Data protection and security for all medical imaging and clinical data

This solution provides built-in data protection through local and remote snapshots and continuous replication, to ensure data is preserved and always available. Together, Qumulo and HPE provide over-the-wire and at-rest encryption to ensure confidential records are secure. The companies work closely with key healthcare industry partners and PACS providers to deliver solutions that assure compliance with government and institutional data privacy and security regulations, and meet HIPAA regulations for compliance, including encryption and off-site copies.

Real-time analytics for data visibility and growth predictability

Qumulo provides built-in real-time analytics to provide insight across the entire file system regarding storage usage and performance trends. With this superior visibility, organizations can proactively manage current and future capacity requirements.

ABOUT QUMULO

Qumulo's enterprise-proven hybrid cloud file storage delivers real-time visibility, scale and control of data across on-prem and cloud. Qumulo customers can 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