

Qumulo File Data Platform on AWS

Enterprise and Public Sector organizations are moving data workloads to AWS for agility, flexibility, and global reach. With a diverse mix of applications, users, and clients to service, these migrations are not simple. The ability to move with speed to the cloud without having to rewrite critical applications has become imperative.

For this reason, AWS options and services should be free from proprietary formats, licensing, and legacy hardware to help you avoid weeks or months of migration time and years of tech debt.

How Qumulo Can Help

Qumulo's file data software helps you move enterprise file data workloads to AWS with low latency and high throughput and capacity. You can spin up Qumulo on AWS in multiple regions easily, supporting application proximity while aligning with your compliance and governance guidelines. Your workloads run on one file system with a standard set of tools, analytics, and a cloud-native REST API, no matter where or when they are deployed, and you can connect them all together in a single namespace.

Shell, Cinesite, Momentum Metropolitan, FuseFX, and Deluxe Entertainment have moved their workloads to the cloud quickly and efficiently leveraging Qumulo's file data platform. For example, Qumulo:

Supports multiple file protocols so the data can be accessed on AWS by Windows and Linux users from the same file data system.

Provides the same experience regardless of your environment: AWS, hybrid, AWS Outposts, or on-premise.



Delivers massive scalability from petabytes to exabytes of data and billions of files, as well as these enterprise-ready features of a cloud file data system:

- Cloud native experience on AWS, with a simple architecture atop Amazon EC2 & EBS
- Multi-cloud by default — the same capabilities, one-consistent experience
- Native replication from any version-compatible Qumulo system, on-prem, on AWS or multi-cloud
- Native replication to AWS S3 via Qumulo Shift
- Real-time analytics to view capacity usage and performance at the directory/file level and integration with Amazon CloudWatch
- Fully-programmable via REST API
- Fully customizable on AWS instance type and storage class
- Automated deployment via AWS CloudFormation or Terraform

Providing a Clear Path to the Cloud

CTOs and business application owners can advance their timelines for digital transformation with Qumulo by running existing applications and data sets on AWS seamlessly. With Qumulo's file data platform, enterprise applications and workflows are ready for migration to AWS—without special services, rewriting or refactoring.

Enterprises can migrate workloads to AWS with the same applications and user experience that they have on prem. You have the flexibility to choose the infrastructure—AWS, AWS Outposts, hybrid, or both. Many of the features that make Qumulo the best choice for use in the data center also matter to customers in the cloud:

- Snapshots
- AD/LDAP
- Quotas
- Multi-protocol
- Native replication
- World-class support



Industry Use Cases

Financial Services: A mortgage processor leverages its unstructured data on AWS with Qumulo to streamline the digital mortgage application and approval process in minutes versus months.

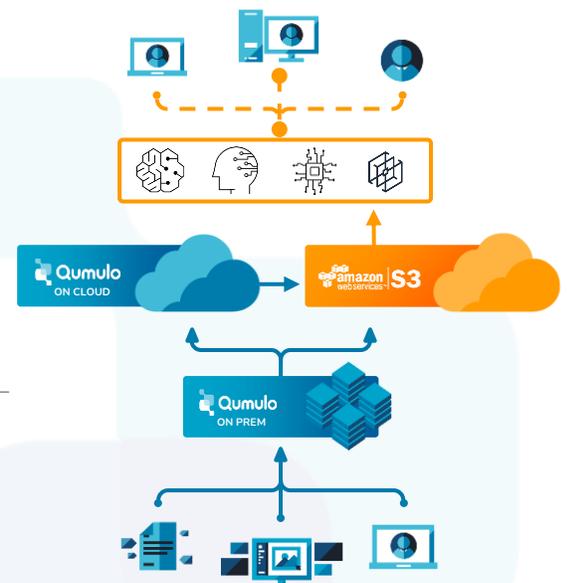
Life Sciences: A large medical testing company migrates genomic sequencing workflows from on-premise NAS to AWS leveraging Qumulo's performant, scale-out, multi-protocol file data platform.

Manufacturing: An auto manufacturer scans each component for flaws as it moves along the production line, capturing the high-resolution images for real-time analysis by an AWS AI/ML service and returning the results in milliseconds.

Media and Entertainment: A creative studio on a blockbuster schedule bursts to thousands of high-quality render nodes enabling remote talent in a cloud studio with high availability for heavy work-loads.

Retail: A retailer gathers data from in-store purchases by the second to promote the most sought after products by geography in near real time.

SHIFT



Easily Migrate Workloads to AWS

Qumulo's file data platform opens up enterprise application and workflow portfolios for immediate migration to AWS. You can easily lift and shift file data workloads running in the data center to AWS. Free from hardware constraints, organizations can scale storage in software and move data to secure, reliable cloud storage for long-term archiving. You can move data from Qumulo on prem to Qumulo on AWS, or from Qumulo in your data center to Amazon S3 with Qumulo's native replication technology, enabling data tiering, global replication, and integration to cloud services.

Run Your File System Anywhere

Cloud architects can choose where to manage and store valuable data, simply, with consistent file data management and storage running seamlessly across the data center and multi-cloud environments. Qumulo's single file data system runs anywhere:

- AWS, with multiple listings in the AWS Marketplace
- On AWS Outposts
- In your datacenters on your own hardware

“For Shell, Qumulo is a key component of the migration of subsurface applications and related data from on premises to a cloud-based setup. Using Qumulo, we have been able to accelerate the processing of large file data sets with their highly performant NFS and SMB support.”

Johan Krebbers, GM Digital and Emerging Technologies / VP Innovation, Royal Dutch Shell

Qumulo's Unique Value to System Administrators and Data Owners

To address the diverse needs of enterprise file-based applications and workloads, Qumulo's single file data management system supports multiple protocols to run seamlessly across on-prem and AWS. This means enterprise applications and features function the same way on AWS as they do on-premise.

You can manage an enterprise-grade file data lake on AWS and run all your unstructured file applications on AWS without having to re-architect them. Qumulo's file data platform enables organizations to:

Automate and integrate everywhere with programmatic access to data via the command line, REST API, and web UI:

- Integrate and automate file data with other systems and AWS-native services, like CloudWatch
- Automate workflows and management to create a consistent experience
- Keep data in proximity to services for low-latency and increased throughput via file-data system integration with AWS
- Connect data directly to AWS network-security service via file data system

Scale without limits:

- One file data lake on AWS supports different workflows and applications without compromising manageability, flexibility, or performance

Make atomic updates to file data for consistency.

Move active, data-driven workloads onto AWS to enable high-performance computing at incredible speeds including:

- Compute-intensive CPU / GPU workloads
- Digital content creation and production
- AI modeling

Manage everything with file data analytics that enable you to see and control what's happening in your file system on AWS in real time. Understand your data in terms of usage and capacity in real time at billion-file scale:

- Control access
- Monitor usage
- Prevent issues

Developers Build Applications Faster with Qumulo

Using Qumulo's file data platform, developers can build applications faster in the AWS region with their choice of AWS compute infrastructure. For example, you can:

Integrate applications with AWS-native services with secure access to unstructured data to meet information security requirements.

Attach compute, data, AI, and ML services to get more value from your applications and data using Qumulo's robust APIs to attach

Scale capacity and performance up and down to match workflows by swapping instance types on a running AWS cluster:

- Access from anywhere
- Create new resources in minutes
- Start/stop cluster

“Files are the medium of exchange between applications ... It follows then, that without a high-performance file system in the cloud, our workflow would be impossible. Qumulo is at the foundation of our AWS storage solution. Without it, we wouldn't be able to expand to the capacity that we have.”

Jason Fotter, Co-Founder & CTO, FuseFX

About Qumulo

Qumulo is the breakthrough leader in simplifying enterprise file data management. Qumulo offers a high performance file data platform that helps organizations store, manage and build with petabytes of unstructured data in its native file form across cloud and on-prem environments with radical simplicity.