

# Data Without Limits: Software-Defined Storage for Federal Missions

## Qumulo for Federal Agencies

In today's data-driven landscape, government agencies face critical scale, security, and governance challenges. To modernize IT and effectively tackle evolving threats, agencies seek solutions that enhance capabilities while reducing costs and improving data security. Although artificial intelligence is often highlighted as a frontier, the real battleground is data, where every bit is an asset and a vulnerability.

Qumulo's unified platform addresses these challenges, providing a seamless data ecosystem across edge, on-premises, and cloud environments. It scales to exabytes and meets federal compliance standards, allowing agencies to innovate with secure, agile data management.

Qumulo empowers federal agencies—across sectors like defense and intelligence—to store and share data securely, tackling physical and cyber threats while improving citizen services. Our high-performance, distributed file system meets the demands of managing sensitive data in varied environments.

The Qumulo Cloud Data Platform streams data securely and in encrypted form, with temporary storage that ensures data is deleted once it is no longer needed, mitigating risks of data exfiltration. By ensuring data availability at the edge, in the data center, or the cloud, federal agencies can generate insights for faster decision-making.

Our platform simplifies integration, allowing agencies to develop solutions using familiar languages and frameworks. It efficiently scales to meet federal demands, turning vast amounts of data into actionable intelligence.

Qumulo's platform offers built-in efficiencies that ease scaling, enable cloud migration, reduce costs, and allow proactive capacity planning. We support federal organizations across various use cases, ensuring their mission success in an increasingly data-centric world.

- Video Surveillance
- Cloud Migration
- Data Protection
- Research and High - High-performance computing
- Telemetry
- Geospatial
- AI Workloads

Qumulo easily integrates into existing environments and supports multiple protocols, including SMB, NFS, FTP, and REST. The file data software is designed for maximum flexibility to enable federal agencies to run one file system that can scale across on-prem, hybrid, and multi-cloud environments at a petabyte scale.

## Massive Scalability

Qumulo's distributed file system efficiently scales to billions of files while supporting all file sizes. It offers excellent scalability, performance, and data protection, managing petabytes of data and millions of operations for thousands of users.

The cloud-based file data lake accommodates various workflows without compromising manageability or performance, allowing users to adjust capacity as needed.

Agencies can scale across data centers and the cloud without performance loss. Qumulo supports up to 200 nodes and petabytes of data, automatically rebalancing when new nodes are added.



### A Modern File Data Experience

#### Simple Management

Qumulo is an intuitive and user-friendly file data management and storage system featuring a modern interface that offers real-time visibility through integrated analytics.

#### Efficiency

All user-provisioned capacity is available for file storage, unlike legacy NAS systems that offer only 70% to 80% usable capacity. Qumulo software also supports mixed I/O performance.

#### Extreme Application Response

All NVMe or hybrid SSD (flash-first) platforms that are tuned to optimize performance and capacity.

#### Improve Business Efficiencies

Real-time analytics provides a comprehensive overview of the entire file system's performance, capacity, and usage. It offers a real-time view at the directory and file level to streamline resource management and reduce costs.

#### Qumulo on AWS GovCloud (US)

Run sensitive workloads on AWS GovCloud to ensure compliance with FedRAMP, ITAR, and CJS regulations using Qumulo.

#### Qumulo Run Anywhere

Qumulo, available on Industry Standard x86 platforms, delivers the same features at the Edge, Data Center and Cloud.

#### Automate Workflows

With Qumulo's REST API, users can build and manage a modern application stack and easily integrate existing applications to run in the cloud.

#### Customer Success

Qumulo's zero-latency support ensures rapid problem resolution by providing direct access to Qumulo Customer Success Managers, who are experienced enterprise storage professionals or Qumulo file system engineers, without the need to raise troubleshooting tickets.



## Scales Across On-Prem, Hybrid, and Multi-Cloud Environments

Qumulo's file data platform provides a unified solution for data management, whether it is in the cloud or on-premises. Users can easily run workloads in AWS or Google Cloud without rewriting applications.

Continuous replication allows organizations to move data between on-premises and cloud clusters for processing and return results seamlessly. The Qumulo Shift for Amazon S3 feature converts data to the S3 native format for easy access to AWS services.

Additionally, Qumulo integrates with AWS Outposts for a fully managed private cloud solution, enabling federal entities to use their existing applications while connecting AWS services to on-premises unstructured data and managing large workloads securely.

## Real-Time Analytics for Visibility and Control

Qumulo's file data platform enhances data intelligence, helping users predict trends and manage capacity. With real-time analytics, storage administrators can monitor performance metrics like throughput, IOPS, and latency, allowing them to proactively address issues, optimize workflows, and make informed decisions for service delivery.

## Data Security and Protection

Data plays a crucial role in the operations of government services, including national security, public safety, healthcare, citizen services, and critical infrastructure. Disruptions to data security and accessibility can lead to complex and sometimes dangerous outcomes.

Qumulo's file data platform ensures data security through encryption during transmission, utilizing SMBv3 and TCP secured by TLS. It also offers software-based encryption for data at rest, using a AES-256-bit implementation. Additionally, Qumulo meets FIPS 140-2 Level 1 standards for data at rest encryption.

The platform includes integrated data protection through snapshot replication, allowing for simple and cost-effective backups. Notably, Qumulo provides the same file system and individual namespaces for both active and backed-up data, eliminating the need for additional applications.

## Qumulo on AWS GovCloud (US)

Organizations that handle sensitive workloads in the cloud can utilize Qumulo's file data platform in AWS GovCloud (US) to meet compliance requirements such as FedRAMP, ITAR, and CJIS. Qumulo's unified file data platform not only satisfies these compliance mandates but also accelerates digital transformation for various data-driven workloads. It enables the integration of file data with both legacy applications in private clouds and cloud-native applications in AWS GovCloud (US).



## About Qumulo

Qumulo is the leading provider of cloud file data services, providing real-time visibility, massive scale and API control of data across the data center, private, and public clouds. Federal agencies across the U.S. trust Qumulo to solve their most complex and mission-critical data challenges quickly, efficiently and securely. For more information, visit [www.qumulo.com](http://www.qumulo.com)