JioCloud

File Storage

Overview

JioCloud File Storage gives your teams a centralized, secure place to store and share files - no matter where they work. Built on POSIX-compliant file systems with full support for NFS and SMB, it lets your Linux and Windows workloads access files consistently across environments. You get fine-grained user based access control, so the right people get the right access. Snapshots and automated backups protect your data without manual effort, while replication keeps it safe - even during disasters. And with elastic scalability and high throughput built in, you can support everything from everyday file sharing to media-heavy workloads, all on one reliable platform.

Key Features

- **File sharing**
  Access files securely through NFS and SMB - across Linux, Unix, and Windows systems.

- **Enterprise access control**
  Use POSIX permissions and directory integrations to enforce access policies across users and groups.

- **Role-based management**
  Simplify admin tasks with RBAC for provisioning, monitoring, and configuration.

- **Disaster recovery replication**
  Auto replicate data to secondary sites for built-in business continuity.

- **Snapshot support**
  Create instant, space-efficient snapshots for backup, recovery, and versioning.

- **Encrypted at rest**
  Keep data secure with built-in encryption that meets enterprise and regulatory standards.

Benefits

- **Secure collaboration across workloads**
  Enable seamless file sharing across virtual machines, containers, and apps - without compromising security.

- **One interface, zero complexity**
  Manage shares, permissions, backups, and DR - all from a unified console.

- **Scale when you need to**
  Expand storage in increments - without downtime or disruption.

- **Always-on protection**
  Recover from failures, deletions, or ransomware with automated backups, snapshots, and replication.

- **Compliance made simple**
  Enforce tight access policies and meet governance standards with audit-ready visibility.

- **High throughput, low latency**
  Power performance-heavy workloads with consistently reliable access.

Technical Specifications

Access Protocols	NFSv3/NFSv4 and SMB 3.x
Volume Size	Increments of Scales based on growing data or application needs.
Snapshots	Instant, incremental, space-efficient
Encryption	AES-256 (at rest), TLS (in transit)
Access Control	Access Control: POSIX permissions, RBAC, export/share policies

Operating / Environmental Requirements

- Compatible with major operating systems
  - Linux (via NFS)
  - Windows (via SMB)

- Network access via VPC/Subnet configuration

- No client-side agent required

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Integration Details

- Works with cloud-native applications and virtualized environments
- Compatible with directory services for authentication
- Supports Kubernetes via CSI drivers for persistent storage
- API integration for programmatic provisioning and monitoring
- Easily migrates legacy file workloads to cloud

Scalability / Sizing / Performance Benchmarks

- Increments of Scales based on growing data or application needs.
- Supports multiple simultaneous connections per share
- Consistent, low-latency performance for shared access
- Suitable for concurrent file access across dozens of VMs/containers
- Performance tuning based on share-level configuration

Use Cases

- A media team shares high-res videos across VMs and cloud-based editors, accessing files via SMB/NFS. Hourly snapshots and replication ensure no data loss or delays.

- A healthcare provider stores sensitive records with user-level access policies. Data is encrypted and backed up automatically.

- A DevOps team mounts file shares into containers running CI/CD pipelines - scaling storage as workloads grow.