

Object Storage



Overview

JioCloud Object Storage allows organizations to manage exploding data volumes leveraging durable, S3-compatible and policy-driven storage optimized for scale. However, if you are archiving financial documents, serving streamed videos, or running analytics on petabytes of data, JioCloud supports cost-effective and secure storage, with no trade-offs. You get encryption, versioning, object lock, replication, and automated lifecycle rules - all from one interface. Because we are S3-compatible, moving your data and already built integrations can happen with little to no impact to your existing applications or workflow. Data stays resilient, compliant, and accessible - no matter how fast your business grows.

Key Features

- **S3-compatible interface**
Use existing tools and SDKs - no need to refactor code or switch ecosystems.
- **Object versioning**
Automatically preserve, track, and restore previous versions of your data.
- **Object lock**
Make data tamper-proof with write-once-read-many (WORM) protections.
- **Cross-region replication**
Keep data available and resilient with automatic replication across geographies.
- **Built-in encryption**
Protect data at rest and in transit with enterprise-grade encryption.
- **Policy-based lifecycle management**
Automate data retention, or deletion with customizable rules.

Benefits

- **Scale without limits**
Store anything - from gigabytes to petabytes
- without infrastructure bottlenecks.
- **Cut storage costs**
Expire unused data with lifecycle policies that optimize spend.
- **Durable by design**
Automatically replicated across regions for high availability - no manual backups needed.
- **Stronger compliance and governance**
Keep audit trails, enforce retention, and lock critical data to meet regulatory mandates.
- **Simple integration, instant access**
REST APIs, SDKs, and S3 compatibility make it easy for developers and admins to connect.

Technical Specifications

Provisioning Range	No defined size Elastic growth from terabytes to petabytes with no predefined size limits
Access Method	S3-Compatible REST APIs for application and tool integration
Data Model Flat object	Based model (no hierarchy)
Metadata Support	Support for system and custom metadata per object
Redundancy Built-in	Replication and erasure coding
Security Encryption	At-rest and in-transit, object immutability
Tools Compatible	With AWS CLI/sdks, s3cmd, rclone, and more

Operating / Environmental Requirements

Compatible With	Cloud-native apps (microservices, containers)
	AI/ML pipelines
	Analytics workloads
	Backup/Archiving solutions
Access	Requires internet or VPC connectivity
	Uses HTTP/S3 API access (CLI, SDKs, GUI)
Deployment	No on-premises infrastructure required
	Multi-region availability zones

Integration Details

API Access	S3-compatible endpoints (RESTful)
Tooling	Integration with tools like s3cmd, AWS CLI, Terraform
	SDKs for Python, Java, Node.js, etc.
Applications	Backup software (e.g., Veeam, Commvault)
	Data lakes and analytics platforms
	AI/ML model training environments
Security and IAM	Bucket policies
	Role-based access

Scalability / Sizing / Performance Benchmarks

Scalability	Designed to scale linearly from 100 GB to petabyte-scale
Performance	High-throughput upload/download via S3-compatible tools
	Parallel access from multiple applications
Durability	11 nines (99.999999999%) object durability
Availability	Designed for 99.99% uptime SLAs
Latency	Optimized for hot data workloads

Use Cases

- **Data backup and long-term archival**
Store years of business-critical data with durability and minimal cost - no tapes or manual processes.
- **Media storage and delivery**
Serve videos, images, and documents to millions of users with low latency and high reliability.
- **Healthcare and regulated industries**
Store medical records and logs securely with retention enforcement and object lock.
- **Big data analytics**
Keep massive datasets ready for batch jobs, machine learning, and real-time insights.