

Block Storage



Overview

JioCloud Block Storage gives your businesses the performance, reliability, and scalability they need. Built for databases, analytics platforms, and business-critical apps, it offers persistent volumes that stay available through reboots and updates, along with flexible capacity that lets you scale from 1 GB to 2 TB per volume instantly. With tiered performance options to match your workload - from everyday use to I/O-intensive operations - your applications stay fast and responsive. Snapshot backups and built-in redundancy keep your data protected at all times. And you can manage everything through a clean, intuitive console - no special tools, no manual workarounds.

Key Features

- **Optimised I/O performance**
Accelerate data access with low-latency, high-throughput block volumes.
- **Persistent storage volumes**
Data remains intact across system restarts, failures, and updates.
- **Instant snapshots**
Capture point-in-time data for fast backup and recovery.
- **Multiple performance tiers**
Choose from Standard, Premium, or Ultra based on IOPS and budget.

Benefits

- **Boost app performance**
Speed up databases, analytics, and transactional systems with high IOPS and low latency.
- **Adapt on the fly**
Adapt on the Fly - Scale up instantly - no wasteful overprovisioning or downtime.
- **Recover faster**
Restore from point-in-time snapshots to minimise disruption and data loss.
- **Reduce storage waste**
Find the right performance tier to match your workload needs - and nothing else.
- **Operate with confidence**
Rely on persistent volumes, built-in redundancy, and centralised control.

Technical Specifications

Provisioning Range	1 GB – 2 TB per volume
Scalability	Expandable in increments or predefined packs
Volume Attachment	VM instances (Linux & Windows), Containers
Snapshot Support	Yes, with instant recovery
Backup and DR	Integration with disaster recovery workflows
Access Methods	Block-level access

Operating / Environmental Requirements

Compatible Workloads	Databases (SQL/NoSQL)
	VMs (Boot and Data disks)
	ERP, CRM, and transactional applications
	Container persistent volumes (Kubernetes)
Infrastructure Requirements	Jio Cloud Compute environment
	OS support for block device mounting (Linux, Windows)

Integration Details

Supported Integrations	Kubernetes persistent volumes
	VM orchestration platforms
	Cloud-native backup and snapshot tools
	Automation (Terraform, CLI, APIs)
Security and Access	Role-based access for volume provisioning
	Encrypted volume support (future roadmap)
	Integration with monitoring and logging systems

Scalability / Sizing / Performance Benchmarks

Volume Size	Increments of Scales based on growing data or application needs.
Performanc	IOPS-based provisioning Latency optimised for <1 ms in SSD tiers
Snapshots	Instant snapshot creation and restore
Resilience	High-availability infrastructure with built-in redundancy

Use Cases

- **High-speed databases**
A financial services team hosts a mission-critical OLTP database on Premium tier block storage, backed by hourly snapshots for point-in-time recovery.
- **DevOps workflows**
Developers spin up volumes in seconds for CI/CD pipelines - scaling storage dynamically as builds grow.
- **Disaster recovery**
Healthcare teams use snapshot and redundancy features to keep patient data safe, available, and compliant.