

# 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.
- Reduce storage waste**  
 Find the right performance tier to match your workload needs - and nothing else.
- Recover faster**  
 Restore from point-in-time snapshots to minimise disruption and data loss.
- 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

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

## Scalability / Sizing / Performance Benchmarks

<b>Volume Size</b>	Increments of Scales based on growing data or application needs.
<b>Performance</b>	IOPS-based provisioning Latency optimised for <1 ms in SSD tiers
<b>Snapshots</b>	Instant snapshot creation and restore
<b>Resilience</b>	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.