High-Speed File Storage

Overview

AI workloads slow down when storage can't keep pace. JioCloud High-Speed File Storage solves this by combining an all-flash architecture with the simplicity of NFS. The result: ultra-fast reads and writes, consistently low latency, and GPUs that run at full speed. The reason: it's fully integrated with the JioCloud AI platform, clusters stay productive. Data flows smoothly from pre-processing to training to inference—while enterprise-grade safeguards protect it at every step.

Key Features

- **NFS protocol made simple**
  Works seamlessly with leading AI frameworks and pipelines. No tweaks, no lock-ins—just standard file access.

- **High-speed data delivery for parallel training**
  Sustained multi-GB/s performance keeps accelerators busy and eliminates data starvation.

- **Elastic scalability**
  Expand capacity from terabytes to petabytes without disruption.

- **Built-in data protection and security**
  Snapshots, encryption, redundancy, and role-based access controls safeguard datasets.

- **Multi-protocol access**
  Use both high-speed file and S3 object protocols on the same dataset without duplication.

- **Low-latency access**
  Optimised data paths reduce wait times for data-intensive jobs.

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Benefits

- **Maximise GPU utilization**
  Keep your accelerators busy instead of waiting on data.

- **Accelerate time-to-insights**
  Reduce training and inference times by feeding data at line rate.

- **Simplify AI data management**
  Centralise datasets, checkpoints, and results in one high-performance.

- **Future-ready scalability**
  Expand capacity and performance seamlessly for growing AI workloads.

- **Enterprise-grade reliability**
  Count on built-in safeguards—from snapshots to redundancy—to keep your datasets safe and always available.

Technologies Supported

Operating Systems	Windows, Linux, Unix
APIs and Protocols	PKCS#11, CSP/CNG, JCE, REST APIs
Cloud Integrations	Jio Azure and On-Prem environments

Technical Specifications

Specification	Details
API Support	PKCS#11, CSP/CNG, JCE
Key Algorithms	RSA 2048, 3072,4096, AES, DES
Compliance	FIPS 140-2 Level 3

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- **AI/ML research labs**
  Run faster experiments with immediate access to training data and saved checkpoints.

- **Autonomous systems**
  Stream large datasets smoothly for real-time simulation and ongoing model refinement.

- **Media and entertainment**
  Speed up creative work, from rendering to tagging, with storage that keeps up with AI pipeline.

- **Healthcare and life sciences**
  Provide instant access to imaging datasets to support accurate, AI-driven diagnostics.