

Intelligent Edge-to-Core Data Services with CTERA and Cloudian

AI-Ready Enterprise Data Solution

The Challenge

As enterprises accelerate digital transformation, IT faces growing pressure to modernize unstructured data storage, simplify ROBO (Remote Office/Branch Office) management, and meet new demands for AI-driven workloads. Traditional file servers, backup appliances, and legacy NAS create costly silos that limit scalability, expose security gaps, and are a struggle to implement as a reliable data foundation to support AI initiatives.

Solution Overview

The CTERA Intelligent Data Platform integrated with Cloudian Data Platform delivers a modern edge-to-cloud architecture, fundamentally transforming how organizations store, protect, and mobilize unstructured data across all locations. This joint solution delivers the dynamic flexibility and elasticity of cloud environments, complemented by a global file system with local edge caching. The result is an AI-Ready, secure, highly resilient, and adaptable storage infrastructure, fortified with enterprise-grade security and integrated ransomware protection, all delivered cost-effectively.

Solutions Benefits

- **Multi-protocol access:** Solution combines enterprise NAS features and file sharing with the best S3 API compatible object storage for both unstructured and semi-structured data needs, enabling seamless data management across diverse environments.
- **Global Namespace with Intelligent Caching:** Consolidate all unstructured data under a single global file system while optimizing WAN usage and delivering local performance for distributed users.
- **AI-Ready Data Access:** Seamlessly support AI/ML initiatives by making enterprise data readily accessible to analytics and AI platforms while ensuring full governance and data security.
- **Limitless Scalability:** Multi-tenant object storage delivers limitless scale, high security, multi-site replication, cost efficiency with full API ecosystem compatibility.
- **Security, Ransomware and Compliance Protection:** Advanced AI-powered anomaly detection, real-time malware scanning, immutability, and zero-trust access controls safeguard data from cyber threats and insider risk.
- **End-to-End Encryption & Data Sovereignty:** AES-256 encryption at rest and in transit with customer-owned keys ensures security and regulatory compliance.

Benefits

- **Seamless multi-protocol access:** Unified file and object storage simplifies management across environments
- **Global Namespace with Intelligent Caching:** Streamlines global file access with local performance
- **AI-Ready Data Access:** Enables secure, efficient AI/ML data utilization
- **Limitless Scalability:** Grows effortlessly with demand while maintaining security and efficiency
- **Ransomware & Compliance Protection:** Prevents cyber threats and ensures regulatory compliance
- **Encryption & Sovereignty:** Meets strict security and compliance needs with full data control
- **AI/ML Infrastructure Support:** Powers data-intensive AI/ML workflows at scale

Use Cases:

- NAS Modernization
- Multi-Site File Collaboration
- Ransomware-Resilient Data Protection
- Private & Hybrid Cloud Storage
- AI & ML Data Pipeline Enablement

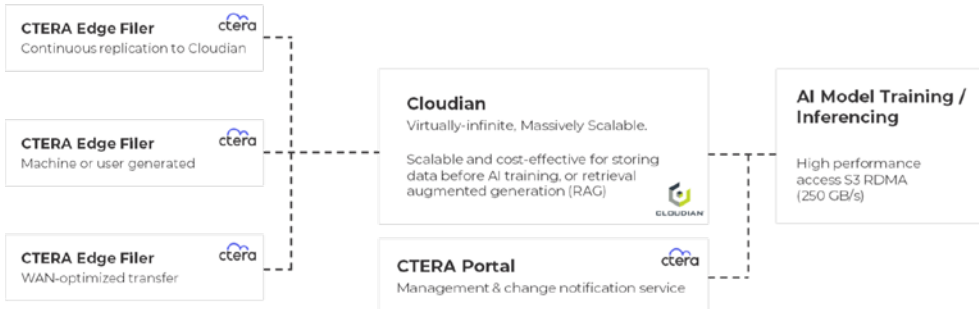
- **AI/ML ready:** For AI/ML workloads, the solution offers robust data management. CTERA facilitates efficient data collection and movement into Cloudian HyperStore, which, integrated with NVIDIA GPUDirect, provides exabyte-scale, high-performance storage. This optimizes the handling of diverse, data-intensive training and processing needs.

Use Cases

- **NAS Modernization:** Eliminate legacy branch file servers with CTERA Edge Filers that combine NAS, backup, and cloud synchronization in a single solution managed centrally, backed by scalable object storage.
- **Multi-Site File Collaboration:** Enable distributed teams to work on shared files across multiple locations with real-time synchronization, version control, and consistent performance regardless of geography.
- **Ransomware-Resilient Data Protection:** Protect critical data with advanced ransomware detection, immutable snapshots, and zero-trust security controls.
- **Private & Hybrid Cloud Storage:** Build flexible storage architectures that seamlessly span on-premises infrastructure and cloud services, while maintaining full control over data locality and sovereignty.
- **AI & ML Data Pipeline Enablement:** Provide secure, real-time access to distributed enterprise data sets for training and feeding AI/ML models without complex data replication.

Data Management Strategy for AI

Support AI workflows with reliable, real-time data collection across distributed environments



CTERA is the global data management leader in the delivery of Enterprise Data Services, enabling organizations of all sizes to efficiently and effectively manage, protect, and leverage their data across highly distributed environments. With a foundation built on security, scale, and seamless integration, the CTERA Intelligent Data Platform empowers organizations to align their data management strategies to continuously deliver against today’s business needs and tomorrow’s vision.

Learn more at www.ctera.com



Cloudian provides an exabyte-scalable data platform optimized for AI workloads, data protection, and advanced analytics. The company’s HyperStore solution delivers native S3 API compatibility, government-verified security, and industry-leading performance, enabling organizations to efficiently manage massive datasets across distributed environments. This combination makes Cloudian the ideal foundation for data-intensive applications that drive business innovation and competitive advantage.

Learn more at cloudian.com