EdgeVault™

Web3-Ready Distributed Storage Platform

> "Decentralized storage with enterprise-grade intelligence"

Product Overview

EdgeVault redefines enterprise storage for the Web3 era, combining distributed ledger technology with intelligent data routing to create a resilient, secure, and compliant storage ecosystem. This next-generation platform leverages edge computing principles to store data closer to where it's needed while ensuring regulatory compliance through automated data governance across global jurisdictions.

Key Features

🌐 Web3-Ready Architecture

- Decentralized storage with blockchain verification
- Tokenized access control with smart contract integration
- Self-sovereign identity support for granular permissions
- Multi-chain compatibility with major blockchain networks

🧠 Smart Data Routing

- AI-driven data placement based on access patterns
- Predictive caching at the network edge
- Latency-optimized content delivery
- Geographic-aware storage for regulatory compliance

🔒 End-to-End Security

- Zero-knowledge encryption with client-side key management
- Quantum-resistant cryptographic algorithms
- Tamper-evident storage with blockchain verification
- Homomorphic encryption support for secure processing

📋 Automated Data Governance

- Policy-driven data lifecycle management
- Jurisdictional compliance automation
- AI-powered data classification and tagging
- Automated PII detection and protection

Technical Specifications

Feature	Specification
Architecture	Distributed storage with edge caching
Blockchain Support	Ethereum, Polkadot, Solana, Hyperledger, Custom
Data Redundancy	N+3 with geographic distribution
Global Footprint	37 regions, 148 edge locations
Throughput	Up to 20 GB/s per storage cluster
Latency	<10ms edge access (region dependent)
APIs	S3-compatible, REST, GraphQL, Web3
Smart Contracts	Solidity, Ink!, CosmWasm

Deployment Scenarios

Enterprise Web3 Infrastructure

Build the foundation for decentralized applications and services with enterprise-grade reliability, performance, and compliance.

Global Content Distribution

Distribute content globally with intelligent edge caching, regional compliance, and optimized delivery based on access patterns and user location.

Secure Multi-Party Collaboration

Enable secure collaboration across organizational boundaries with cryptographically enforced access controls and complete audit trails.

Digital Asset Management

Securely store, manage, and distribute digital assets with tokenized access, verifiable provenance, and intelligent rights management.

ROI Impact

- **73%** reduction in data access latency through edge caching
- **64%** decrease in cross-border compliance incidents
- **42%** lower storage costs through intelligent tiering
- **91%** faster deployment of blockchain-based applications

Advanced Capabilities

Data Sovereignty Engine

Automatically enforce data residency requirements through intelligent routing and storage policies that adapt to changing regulations across jurisdictions.

Token-Based Access Economy

Implement fine-grained access control through non-fungible tokens (NFTs) that represent access rights, enabling novel business models and secure sharing economies.

Verifiable Compute

Perform computations on sensitive data while maintaining privacy and verifying the integrity of results through zero-knowledge proofs and secure multi-party computation.

EdgeVault Control Center

Our comprehensive management dashboard provides:

- **Global Data Visualization** - Real-time view of data distribution and access patterns
- **Compliance Mapping** - Visual representation of regulatory compliance across regions
- **Smart Contract Registry** - Management of access control and data governance contracts
- **Tokenomics Dashboard** - Monitoring of storage utilization and token-based transactions

Compliance & Certification

- GDPR Compliant with Automated Data Sovereignty
- SOC2 Type II Certified
- ISO 27001 Certified
- EU AI Act Compliant
- Cryptocurrency Security Standard (CCSS) Level 3
- eIDAS Qualified Trust Service Provider