

An S3-compliant, high-performance file storage platform. It offers a scalable storage infrastructure for modern applications, data analytics, backup, and cloud-based systems.

Challenges of Modern Data Centers

Large data volumes and modern applications generate high-performance object storage requirements. Traditional storage systems can fall short in cloud-based architectures in terms of scalability and access performance. Distributed data structures and increasing access demands complicate management processes. The lack of centralized management creates difficulties in data access and operational processes. Backup, data protection, and multi-access management can complicate operational sustainability. Data loss risks and the need for high availability can create critical problems in modern data centers.

⚠️ What Problems Does It Solve?

· S3-compliant storage need

· Big data management

· High-performance requirement

· Data access continuity

Core Principles

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Compatibility

Provides an object storage infrastructure fully compliant with S3 standards.

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Performance

Offers high access and low latency thanks to its distributed architecture.

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Security

Ensures data security through access policies.

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Scalability

Adapts to capacity requirements via horizontal growth.

How Does MinIO Work?

MinIO stores data in a distributed structure using an object-based storage architecture and delivers high availability and performance by providing S3-compliant access.

📁 Technical Specifications

📁 Object Storage

- ✔️ S3 API support
- ✔️ Object Storage infrastructure
- ✔️ Metadata Management
- ✔️ Bucket Management

📁 Data Protection

- ✔️ Replication
- ✔️ Encryption
- ✔️ Erasure Coding
- ✔️ Access Management

📁 Integration

- ✔️ Kubernetes
- ✔️ Docker
- ✔️ Artificial Intelligence Systems
- ✔️ Data Analytics

📁 Management

- ✔️ Monitoring
- ✔️ API Management
- ✔️ Log Management
- ✔️ User Management

📁 Data Processing Features

- ✔️ Big Data Applications
- ✔️ Artificial Intelligence Systems
- ✔️ Data Analytics
- ✔️ High Transaction Volume

Workflow

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1. Data Management

- Objects are classified.
- Metadata is created.
- Bucket structures are defined.
- Access policies are applied.

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2. Data Ingestion

- Data is uploaded.
- Metadata is created.
- S3 access is provided.
- Distributed structure is managed.

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3. Data Protection

- Coding is applied.
- Redundancy is provided.
- Replication is executed.
- Data integrity is preserved.

📈 Continuous Improvement

The MinIO infrastructure is optimized according to usage needs; performance, accessibility, and data management processes are continuously enhanced.

Advantages

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Erasure Coding

Increases storage efficiency while providing protection against data loss.

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High Performance

Offers low latency and high access performance thanks to its distributed architecture.

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Cloud-Native Architecture

Works compatibly with Kubernetes and container platforms.

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S3 Compatibility

Simplifies application and service integrations through S3 API support.

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AA Teknoloji is an AI-powered media technologies platform developed for modern newsrooms. Our integrated solutions, ranging from news workflow systems to digital archive solutions, real-time broadcasting infrastructure to multi-channel content management, accelerate the digital transformation processes of media organizations and offer scalable broadcasting operations.

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