



# STORAGE SYSTEM ARCHITECTURE

Explore the transformative journey of digital business operations with Titan Cloud Storage's comprehensive guide. This paper delves into the essential steps for digital transformation, highlighting key features of SD-WAN, its implementation strategies, and the long-term benefits. Learn how SD-WAN optimizes cloud connectivity, improves performance, and enhances security, ensuring seamless disaster recovery and robust network infrastructure for the digital age. Discover how Titan Cloud Storage's expertise can streamline your path to efficient and secure cloud integration.



# Executive Overview



Titan Cloud Storage is redefining the cloud storage market by offering the most economical and high-performing service available today. Designed for a wide range of applications, Titan can serve as primary storage for both on-premises and cloud-based systems, a secondary option for backup and recovery, and as a secure solution for long-term archival needs.

Our platform guarantees exceptional data integrity and reliability, promising 99.999999999% durability and 99.99% availability of services, making Titan the go-to choice for businesses looking for dependable cloud storage solutions.

## Storage Features

### Extreme Data Protection and System Resilience:

Titan Cloud Storage is built to protect against both physical and cyber threats, ensuring the safety and availability of data even in adverse conditions. Our system is structured to prevent data loss from disk failures, power outages, and network disruptions.



## Service Level Agreements (SLAs):

Our SLAs guarantee:

- Eleven 9's (99.999999999%) of object durability.
- 99.9% service availability within single data center deployments.
- 99.99% service availability with dual data center configurations.

# System Architecture

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## **Infrastructure:**

Titan's cloud architecture employs a purpose-built file system that integrates state-of-the-art disk drive technology, resulting in significant cost reductions and performance enhancements over traditional cloud services.

## **Scalability and Redundancy:**

Our architecture is highly scalable and distributed, with no single points of failure. All system components are safeguarded through 1:1, 1+1, or N:M redundancy configurations to maintain continuous service availability.

## **Cross-Region Replication:**

Titan supports advanced replication features that allow customer data to be automatically replicated to additional Titan data centers, ensuring maximal service availability and data durability across geographic regions.



# Additional Security Measures

## **Erasur Coding:**

We employ sophisticated erasure coding techniques to protect data. This method distributes data across multiple disks, ensuring that even if up to four disks fail simultaneously, the data can still be recovered without loss.

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## **Data Privacy and Network Security:**

We implement strict access controls and encryption protocols to protect data at rest and in transit. Our comprehensive data privacy strategies ensure that sensitive information remains secure from unauthorized access and data breaches.

## **Data Immutability and Integrity Checking:**

Titan offers optional data immutability to protect against accidental or malicious alterations and deletions. Our system also performs regular integrity checks to ensure data accuracy and reliability.

## **Contact Titan Cloud Storage:**

Discover how Titan can simplify your storage solutions by reducing costs and complexity. Try Titan Cloud Storage for free and get up to 1 TB for 30 days. [About Titan Cloud Storage](#)

Founded by veterans in the cloud storage industry, Titan Cloud Storage aims to commoditize storage services, making high-quality storage available to all at reduced costs. Titan is at the forefront of storage technology, continually innovating to exceed market demands.