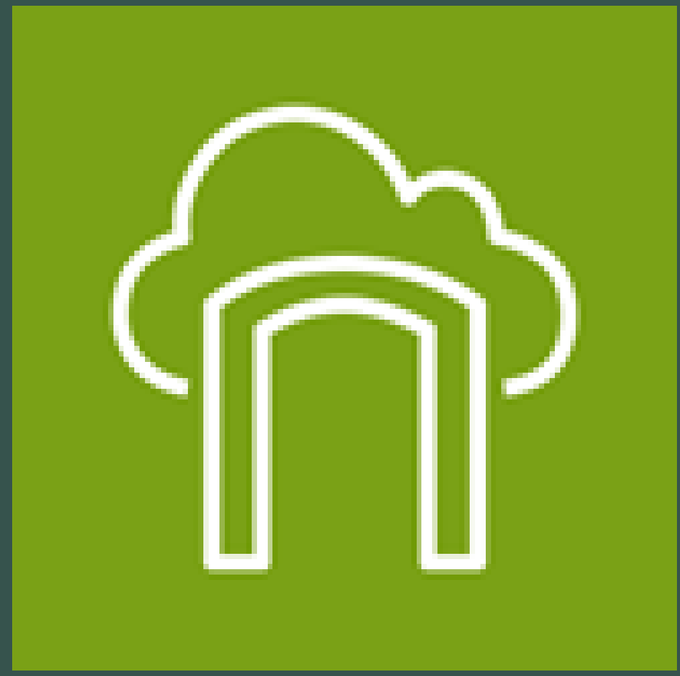
AWS STORAGE

GATEWAY

The Tech Stuff



Content

01

Introduction

A hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. It seamlessly integrates on-premises environments with the AWS cloud, allowing businesses to leverage the scalability and cost benefits of cloud storage while maintaining local access to their data. Here's a comprehensive guide to AWS Storage Gateway, covering its features, types, use cases, and more.

Key Features

02

Hybrid Cloud Storage

Connects on-premises environments to AWS storage services like S3, Glacier, and EBS.

Provides a seamless integration between local storage and the AWS cloud.

Multiple Gateway Types

File, Tape & Volume Gateway

Data Security

Encryption: Data is encrypted in transit using SSL and at rest using AWS Key Management Service (KMS).

Access Control: Integrates with AWS Identity and Access Management (IAM) for granular access control.

Data Management

Caching: Local cache improves performance by storing frequently accessed data on-premises.

Data Compression: Reduces the amount of data transferred to and stored in AWS.

Automatic Data Tiering: Automatically moves data to lower-cost storage tiers based on access patterns.

Key Features

02

Scalability and Reliability

Scalable Storage: Virtually unlimited storage capacity by leveraging AWS cloud storage.

Durability: Utilizes S3's durability of 99.999999999% (11 nines) for data stored in the cloud.

High Availability: Supports multi-site deployments and high-availability configurations.

Integration with AWS Services

AWS Backup: Centralized backup management for AWS services, including Storage Gateway.

Amazon S3 Glacier: Cost-effective long-term archiving for tape data.

Amazon EBS: Restoring Volume Gateway snapshots to EBS volumes.

03

Gateway Types

Three types of Gateway: File, Tape and Volume

File GW

Use Case: Ideal for file-based workloads, such as user home directories, content repositories, and file shares.

Access Protocols: Supports NFS and SMB protocols for file access.

Tape GW

Use Case: Designed for backup and archiving, enabling existing tape-based workflows to use cloud storage.

Virtual Tapes: Presents cloud storage as virtual tapes compatible with leading backup applications.

Volume GW

Use Case: Suitable for block storage use cases, such as databases, virtual machine (VM) storage, and business applications.

iSCSI Volumes: Provides iSCSI block storage volumes to on-premises applications.

03

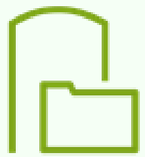
Gateway Types

Three types of Gateway: File, Tape and Volume

File GW

Data Storage: Files are stored as objects in Amazon S3, maintaining file metadata.

Caching: Frequently accessed data is cached locally for low-latency access.



Tape GW

Data Storage: Virtual tapes are stored in Amazon S3 and can be archived in Amazon S3 Glacier for long-term storage.

Volume GW

Snapshot Backups: Snapshots of volumes are stored in Amazon S3 and can be restored to Amazon EBS volumes.

Use Cases

04

01

Hybrid Cloud Storage

Extend on-premises storage to the cloud, providing a seamless and scalable storage solution.

Maintain local access to frequently accessed data while leveraging cloud storage for infrequently accessed data.

02

Data Migration

Migrate data to the cloud with minimal disruption to existing workflows.

Use Storage Gateway to transfer large datasets to AWS efficiently.

03

Disaster Recovery

Implement a robust disaster recovery strategy by replicating on-premises data to AWS.

Use snapshots and backups to quickly recover from data loss or site failures.

Use Cases

04

04

File Sharing and Collaboration

Deploy File Gateway for easy file sharing and collaboration across multiple locations.

Access files stored in Amazon S3 using standard file protocols.

05

Backup and Archiving

Use Tape Gateway to replace physical tape infrastructure with virtual tapes stored in AWS.

Utilize Volume Gateway for block-level backups and snapshot management.

Archive data to Amazon S3 Glacier for cost-effective, long-term storage.

Best Practices

05

01

Optimize Cache Size

02

Monitor Performance

03

Data Security

Best Practices

05

04

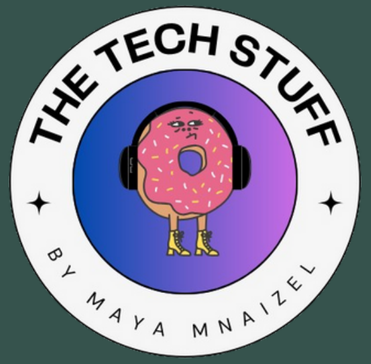
Cost Management

05

Regular Backups

THANK YOU!

Any Questions?



mayamnaizel2013@gmail.com

The Tech Stuff