

AWS S3

Amazon Simple Storage Service



AWS S3

- What is S3
- Storage Classes (Standard, Glacier)
- Lifecycle Policies
- S3 Events Notifications
- S3 Object Lock
- Version
- Encryption
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 - AWS Management Console
 - CLI
 - AWS SDK
 - Rest API
- Pre-Signed URL
- S3 Gateway Endpoint



AWS S3

- DEMO



What is S3

- Object based storage system
- Bucket
- Objects:
 - Key
 - Value
 - Version
 - Manifest
 - Access information (Permission etc)

S3 Storage Classes - Data Retrieval Time

Storage Class	Retrieval Time
Amazon S3 Glacier Instant Retrieval	Milliseconds
Amazon S3 Glacier Flexible Retrieval (Formerly S3 Glacier)	Configurable retrieval times, from minutes to hours, with free bulk retrieval
Amazon S3 Glacier Deep Archive	Retrieval time within 12 hours

S3 LifeCycle Policy

- Transition actions
 - These actions define when objects transition to another storage class
- Expiration actions
 - These actions define when objects expire.
- Demo



S3 Events Notifications

- Notification can be triggered when a object in the S3 bucket is changed
 - Added
 - Updated
 - Deleted
 - Many more...
- Can be triggered SNS, SQS, Lambda
- Demo

S3 Object Lock

- Prevent deleting object
 - Retention period
 - Legal hold
- Demo

Versions, Encryptions

- Demo



S3 Replications

- Replication enables automatic, asynchronous copying of objects across Amazon S3 buckets
- Can be replicated to single bucket or multiple buckets
- The destination bucket could be in same AWS account or different AWS account
- Could be same region or different region
- Live replication (Cross Region Replication - CRR)
- S3 Batch Replication



Accessing S3

- Via HTTPS URL
- Pre-Signed URL
- S3 Gateway Endpoint
 - <https://docs.aws.amazon.com/vpc/latest/privatelink/vpc-endpoints-s3.html>
- Demo