

Amazon Glacier Cheat Sheet

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General Characteristics

Data archiving and long-term backup. Cold data

Data is copied to multiple devices within a facility and to multiple facilities.

Data is stored in Archives which are then stored in Vaults.

Durability 99.999999999%

Synchronous for upload, asynchronous for download

Only actions possible with Management Console are:

- Create Vault

- Delete Vault

- *The rest with AWS CLI, REST API, SDKs

Archives

Can be a single file or an aggregation of many in a TAR or ZIP file.

Maximum size is 40TB.

Immutable, once an Archive is created, it cannot be modified.

Multipart Upload API starting at file size of 4GB.

Unlimited number of Archives in a Vault

Archive Operations

- Upload, delete & set description

Can perform Ranged Archive Retrievals; downloading only part of the archive.

Vaults

Vaults are containers that store Archives.

Maximum 1000 Vaults per account

Vault Operations

- Create, delete, lock, list metadata, retrieve inventory, tag, configure notifications & set a description.

Unique name within a region and per account

Can only delete an empty Vault.

Can retrieve Inventory, list & metadata.

Can set tags to Vaults, maximum 50 per Vault.

Access Policies from AWS resources and the internet.

Retrieval Options

Expedited

- 1 to 5 minutes before download can start.

- (1) On-demand: available most of the time

- (2) Provisioned: guaranteed

Standard

- 3 to 5 hours before download can start.

Bulk

- 5 to 12 hours before download can start.

Encryption

Data at rest

Automatically encrypted using AES 256 bit symmetric keys.

Data in transit

Using SSL.

Vault Inventory

Inventory of all Archives in each Vault for DR or reconciliation purposes.

Updated once a day.

JSON or CSV file

Mandatory Request Signing

All requests made to Glacier must be signed for authentication protection.

Jobs

To retrieve an Archive or Inventory, a job must be initiated.

Retrievals are queued.

When the job terminates, download of output is ready.

Can configure SNS notifications to be informed when a job is finished and output is ready for download.

Vault Locks

Can lock a vault policy and it becomes immutable.

Data Retrieval Policies

For Standard Retrieval option only

Set retrieval limits to:

- Free Tier only

- Max retrieval rate (bytes per hour)

- No retrieval limit

Pricing

Storage

Data Retrievals

- Expedited (most expensive)

- Standard

- Bulk (cheapest)

Upload Request

Data transfer OUT to other regions

Data transfer OUT to the internet

Amazon Glacier Select

Allows queries to Archives stored in Glacier to use for analytics.