

Storage

Block

Elastic Block Store- Data is split into evenly split block directly accessed by OS. Only supports single write volume

Files

AWS Elastic File Storage (EFS):

File is stored with data and metadata. Multiple connection via a network share supports read, write locks the file. When you need a file-share when multiple user or VMs need to access the same drive

Object

AWS S3- Object is stored with data, metadata and unique id scale with limited no file limit or storage limit. When you just want to upload files, and not to worry about underlying infra, Not intended for high IOPs(input and output per seconds)

S3 Storage Classes

AWS offers a range of s3 storage classes that trade retrieval time, accessibility and durability of cheaper storage

S3 Standard (default)

Fast 99.99% availability. Replicated across at least three AZs

S3 intelligent Tiering

Uses ML to analyze object usage and determine the appropriate storage class. Data is moved to most cost effective access tier, without any performance impact or added overload.

S3 Standard-IA (Infrequent Access)

Still fast cheaper if you access files less than once a month.
Additional retrieval fee is applied

S3 One zone- IA

Still fast objects exist only in one AZ. Availability (99.5%) but cheaper than Standard-IA by 20% less durability.

S3 Glacier

For long term cold storage. Retrieval of data can take minutes to hour but the cost is very cheap storage

S3- Glacier Deep Archive

The lowest cost storage. Data retrieval time is 12 hours

AWS Snow family- storage and compute devices used to physically move data in or out the cloud when moving data over the internet or private connection it is slow, difficult or costly.

Snowcone- Two sizes- 8 TB HDD and 14 TB SSD

Snowball Edge- Two types- Storage optimized 80TB, compute optimized- 39.5 TB

Snowmobile- 100PB of storage