

11/3/2022

S3 (Simple Storage Service)

- It is an object storage service over the internet.
- we cannot install O.S
- It is not a bootable vol.
- No m/c can be attached to S3.
- PUT, POST, GET

* Data & object

- Object ID is unique.
- Metadata \rightarrow Addⁿ info^r - data - image/png / size

data = object ID + Metadata

- whole data is achieved

* Diff^y:

Block storage

- 1) Divide into blocks.

- 2) Bootable

- 3) Can be attached to EC2

- 4) SAN

- 5) O.S

- 6) Costly

- 7) Region Specific

Object storage (S3)

- As a whole object ID + Metadata

- NOT

- Cannot

- Attach^(correct) http/https (over the internet)

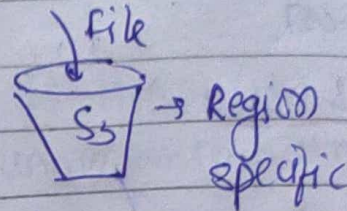
- OS not install

- Cheaper

- Global service

* Arch. of S3

- It is a distributed data storage architecture
- i.e. It stores backup in 3 zones
- S3 → global service
- S3 → bucket - folders



* Bucket:

- flat container (object (data) → stores as a whole object)

- 1 Bucket = Max. 5 TB capacity.
↳ It can be diff^{nt} file or single file.

- There is no bucket inside bucket i.e. nested buckets cannot be made.

- In one acc. we can have 100 Bucket (by default) & if we want more bucket we have to raise ticket to AWS.

→ Naming of Bucket:

- Name should be globally unique across all AWS regions/Accounts.

- If 1st bucket = xyz name is deleted & then we can name bucket xyz

- 3-63 characters : Name should be betⁿ these

- No Alphabets / No IP - can be used while naming bucket.

- Impl^m: 1) Block storage $\xrightarrow{\text{use}}$ bootable vol.
2) EFS $\xrightarrow{\text{use}}$ If I want common storage
3) S3 (object storage) $\xrightarrow{\text{use}}$ 1) Backup over the internet. (log files etc.)
2) Website hosting (static) @ logs

* What is S3 in AWS?

- S3 is service offered by AWS that provides object storage thr. web service interface.
- It cannot mount anywhere.
- It is only drive we do not need to create any file syst.
- Similar to google drive

* Advtg:

- 1) Reliable security
- 2) All-time availability
- 3) Very low cost.
- 4) Easy of Migration
- 5) Simplicity of Management.

* Distributed Arch.

- It works min^m of three Availability Zones.

* S3 Concepts

1)

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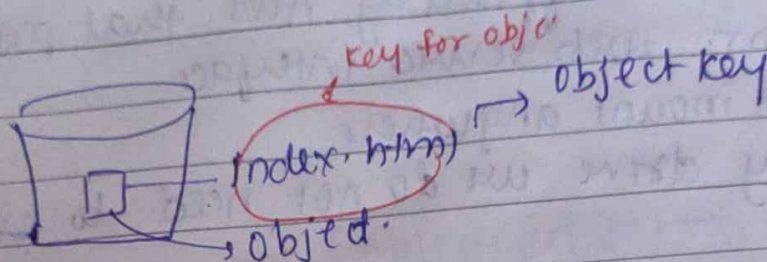
* S3 Concepts

1)

1) Bucket

- By default buckets & its obj. are priv. they by default only owners can access it.
- Naming must be globally unique.
End should be: Letter or no.

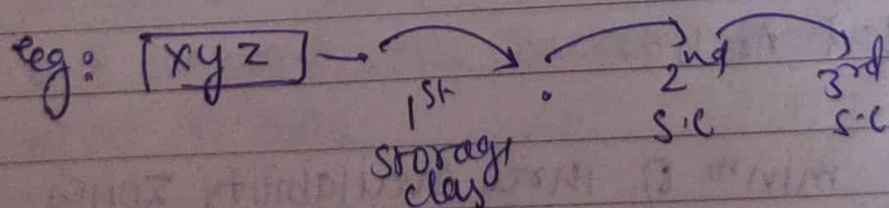
2) Object



- Bucket owner can change permission
- url = service end point.

3) S3 Object Lifecycle:

S3 Lifecycle → It move data to diff^{nt} storage class
∵ data is getting old (automatic moves)

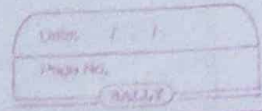


- We can set expiry date.

4) Website:

- can be use to host static website
- Static website - Business logic is not there & no 'cal' req.

★ Versioning works.
★ In region there can be multiple buckets



- That is fixed contains.
- It has individual pg.
- Enable static website hosting : by → S3 console, SESAP, AWS SDK, AWS CLI, AWS CloudFormation.