Simple Storage Service

Object Storage service

Introduction

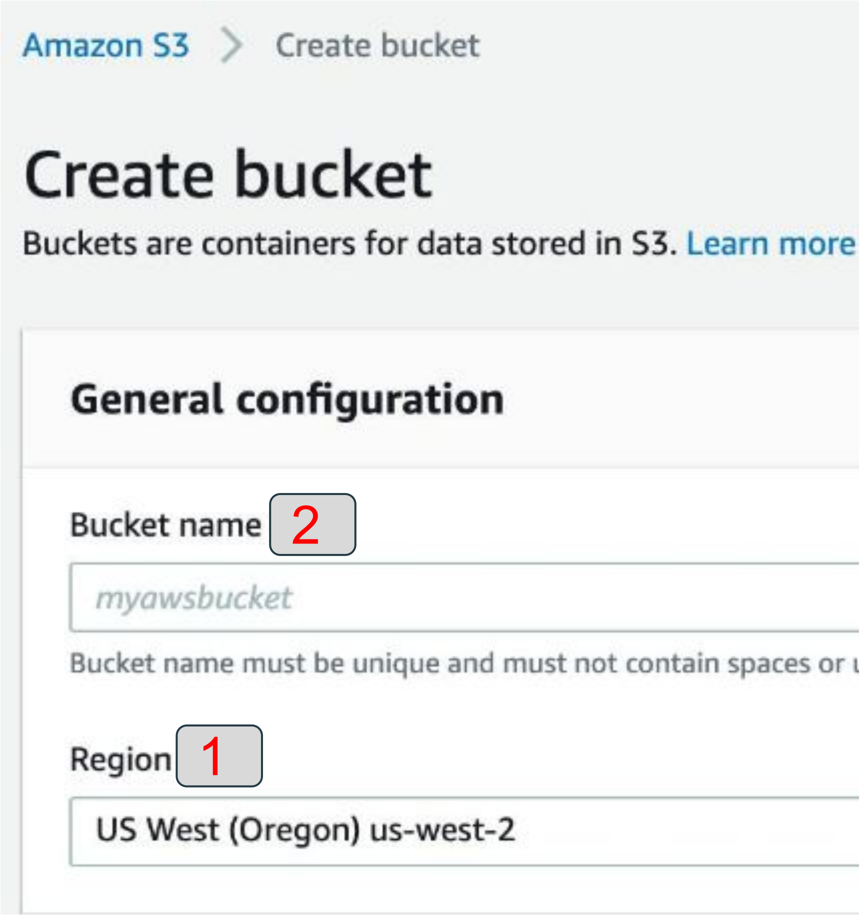
Amazon S3 is a standalone storage solution which isn’t tied to compute.

We have to store our objects in containers called buckets. Without bucket we can’t even upload a single photo.

How to Create a bucket?

1. The first step is choosing the region for the bucket to reside in.

2. The second step is choosing a bucket name.
   Condition for bucket name:
   A. The name must unique across all AWS accounts.



Amazon S3 > Create bucket

Create bucket

Buckets are containers for data stored in S3. Learn more

General configuration

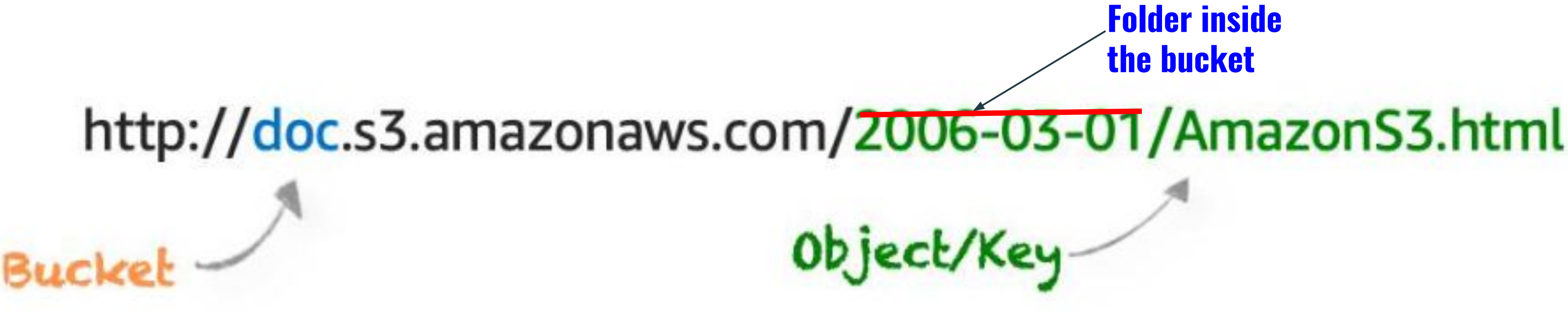
Bucket name 2

myawsbucket

Bucket name must be unique and must not contain spaces or u

Region 1

US West (Oregon) us-west-2



http://doc.s3.amazonaws.com/2006-03-01/AmazonS3.html

In S3, each object is identified using a URL which looks like as shown above.

Connectivity Options for Resources

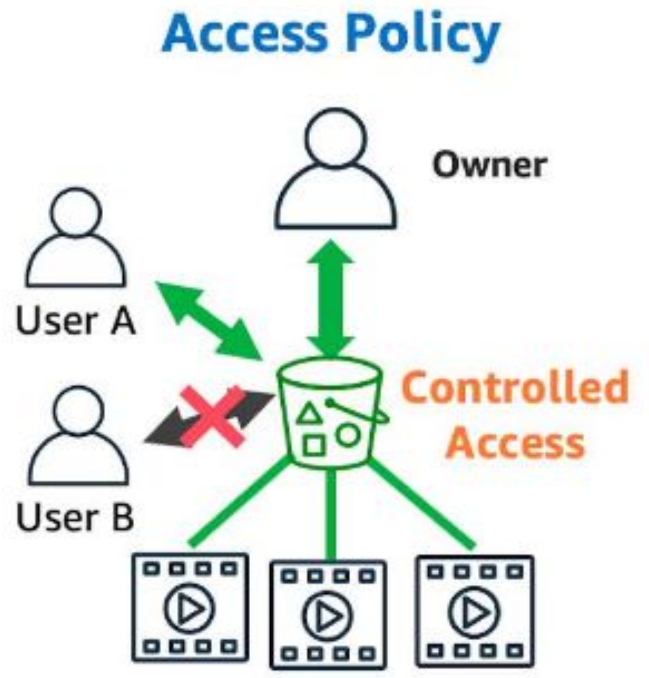
Everything in S3 is private by default. It means that all resources can only be viewed by the user or AWS account that created the resource.

If we want those resources to make visible to everyone then we can make them public. This option makes the resource permission all or nothing.

Typically, we want access to be more granular.

To be more specific about who can do what with our resources AWS provides two access management features:

1. IAM policies
2. S3 bucket policies



Versioning in S3

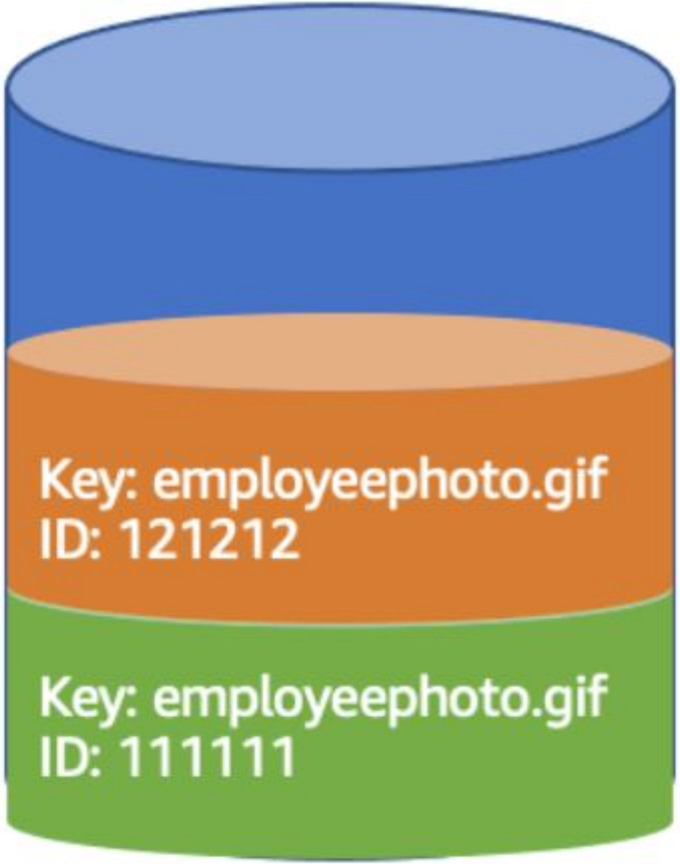
S3 identifies objects using the object name.

Concequences of not using versioning:

1. If we upload an object with name that already exists then the old object may get overwritten.

Reason to use versioning:

1. If we need to upload two or more objects with same name.



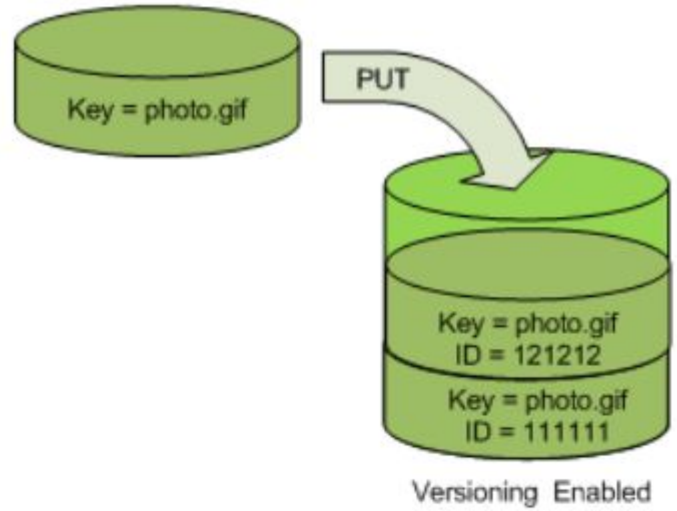
How does versioning work?

When we enable versioning, Amazon S3 automatically generates a unique version ID for every object.

In one bucket we can have two objects with same key but different version IDs.

Advantages of versioning:

1. We can recover objects from accidental deletion or overwrite.


Key = photo.gif
PUT
Key = photo.gif
ID = 121212
Key = photo.gif
ID = 111111
Versioning Enabled