S3

Simple Storage Service

Simple Storage Service/S3

Amazon S3 (Simple Storage Service) provides object storage, which is built for storing and recovering any amount of information or data from anywhere over the Internet .
S3 is Universal i.e not bound to any region.

Simple Storage Service/S3

S3 allows you to do the following:

- ✓ Storing and recovering any amount of information or data from anywhere over the internet. It provides this storage through a web services interface.
- ✓ S3 allow to the object in resources known as **Buckets**. In single bucket, you can store numerous objects, and at the same time add or delete an object in a bucket.
- ✓ Files are stored in Bucket. A bucket is like a folder available in S3 that stores the files.
- ✓ S3 allow to store data 0 byte to 5 Tb.
- ✓ S3 is object storage (Static). We can not store OS or Databases
- ✓ We can store images, audios, videos, any type of documents, logs.
- ✓ S3 easily integrate with other AWS services like cloudfront.
- ✓ Static Web Hosting is one of the most powerful features of the AWS S3.

Simple Storage Service/S3

✓ Unlimited Storage

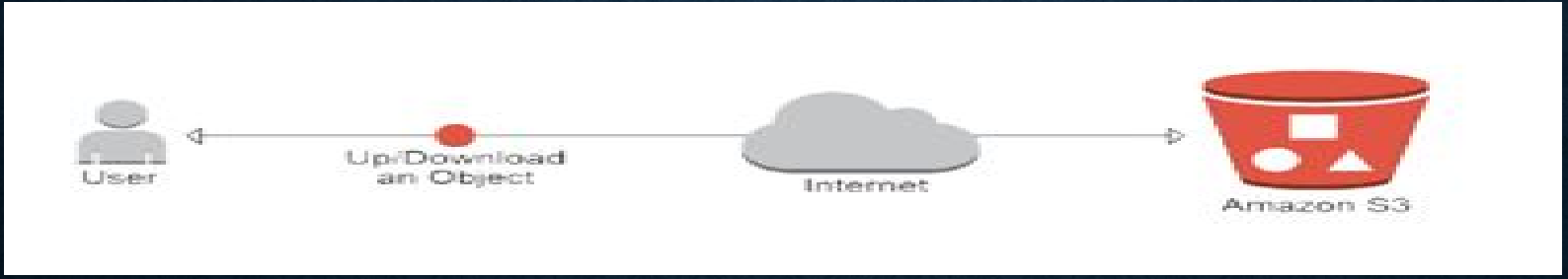
✓ S3 is a universal namespace, i.e., the names must be unique globally. Bucket contains a DNS address. Therefore, the bucket must contain a unique name to generate a unique DNS address.

✓ If you upload a file to S3 bucket, then you will receive an HTTP 200 code means that the uploading of a file is successful.

✓ No bucket can exist inside of other buckets.

✓ S3 performance remains the same regardless of how many buckets have been created.

✓ The AWS account that creates a bucket can delete a bucket, but no other AWS user can delete the bucket.



Simple Storage Service/S3

- ✓ An object is a file and any metadata that describes that file.
- ✓ To store an object in Amazon S3, you create a bucket and then upload the object to the bucket.
- ✓ When the object is in the bucket, you can open it, download it, and move it.
- ✓ When you no longer need an object or a bucket, you can clean up your resources.

S3 Configure Options (Optional)

In “Configure options,” you can select features you want to enable on a particular bucket, such as:

Versioning: Keeps track of all versions of a file, making it easy to recover the file in case of accidental deletion.

Server access logging: Logs all requests/activities on your bucket to another bucket.

Tags: You can tag the bucket with key and name, which will make it easier to search resources with tags.

Default encryption: By default, AWS encrypts files with AES 256, but you can use your own managed key to encrypt objects.

Amazon S3 Storage Types

Standard: Used to store performance-sensitive data that should have a retrieval time of milliseconds.

Standard Infrequent Access: Used to store infrequently accessed data.

One Zone-Infrequent Access: Used for infrequently used objects that need lower durability. Saves cost compared to other storage types.

Amazon Glacier: Used to store archived data.

Amazon S3 Use Cases

Amazon S3 has many use cases, including:

Storage for Internet
Amazon S3 is ideal when you want to store application images and videos, and render with faster performance. All AWS services (including Amazon Prime and Amazon.com), as well as Netflix and Airbnb, use Amazon S3 for this purpose.

Backup and Disaster Recovery
Amazon S3 is suitable for storing and archiving highly critical data or backup because it is automatically replicated cross-region.

Static Website Hosting
Amazon S3 stores various static objects. One interesting use case is its ability to host static websites. More and more web apps are becoming single page and static (Angular, ReactJS, etc.), and it’s costly to keep running a web server for their hosting.

AWS S3 Benefits

Some of the benefits of AWS S3 are:

- ✓ Low cost
- ✓ Availability
- ✓ Security
- ✓ Flexibility
- ✓ Simple data transfer

DEMO

Lets Start !