

Learning AWS S3 with Basic Commands

A beginner's guide by Prikshit Marrhia

What is AWS S3?

Amazon S3 (Simple Storage Service) is a cloud storage service that lets you store and retrieve files easily. You can think of it as a giant online folder accessible from anywhere.

What I Learned

- How to configure AWS CLI with credentials.
- How to list buckets and files inside buckets.
- How to upload and download files using AWS CLI.
- How to create buckets and handle bucket naming errors.

Step-by-Step Work Done

1. Configuring AWS CLI

Before using AWS CLI commands, you must configure it with your AWS account credentials.

```
bash
aws configure
```

You will be prompted to enter:

- AWS Access Key ID
- AWS Secret Access Key
- Default region (for example, ap-south-1)
- Default output format (e.g., JSON)

This setup allows the CLI to communicate with your AWS account securely.

2. Checking AWS CLI Version

To verify the AWS CLI is installed correctly:

```
bash
- aws --version
```

It shows the version of AWS CLI and Python installed on your system.

3. Listing S3 Buckets

To see all the buckets you have created:

```
- aws s3 ls
```

This lists all buckets with their creation date.

4. Uploading Files to an S3 Bucket

To upload a file from your local machine to a bucket:

```
- aws s3 cp Workflow.png s3://prikshit-demo-bucket
```

- cp means copy.
- The first argument is the local file name.
- The second argument is the destination bucket URL.

If the file path is incorrect, you get an error saying the file does not exist.

5. Downloading Files from an S3 Bucket

To download a file from S3 to your local system:

```
- aws s3 cp s3://prikshit-demo-bucket/Workflow.png C:\Users\Prikshit\Downloads\
```

- The first path is the file location in S3.
- The second path is the local folder where you want to save it.

6. Creating a New S3 Bucket

To create a new bucket where you can store files:

```
- aws s3 mb s3://demo-bucket-prikshit-02
```

- mb means make bucket.
- Bucket names must be globally unique across AWS, so if the name is already taken, you get an error.

Try different bucket names until you find one available.

7. Listing Files Inside a Bucket

To see what files or folders are inside a bucket:

- aws s3 ls s3://prikshit-demo-bucket

- Shows all files with their size and last modified date.
- Prefix PRE indicates folders.

Common Errors and Tips

- **BucketAlreadyExists**: Bucket names must be unique globally.
- **NoSuchBucket**: Check spelling or if the bucket really exists.
- Always double-check file paths when uploading or downloading.
- Use proper permissions if access is denied.

Summary of Commands

Purpose	Command
Check AWS CLI version	aws --version
Configure AWS CLI	aws configure
List all S3 buckets	aws s3 ls
Upload a file to the bucket	aws s3 cp local_file s3://bucket-name
Download a file from the bucket	aws s3 cp s3://bucket-name/file local_folder
Create a new S3 bucket	aws s3 mb s3://bucket-name
List files inside the bucket	aws s3 ls s3://bucket-name