

CLOUD COMMAND LINE INTERFACE

OBJECTIVE:

Install the CLI for your cloud provider (e.g., AWS CLI). Use it to list resources, upload files to storage, and manage VMs.

WHAT IS CLI?

AWS CLI is a powerful command-line tool that allows users to interact with AWS services directly from a terminal. It simplifies automation, resource management, and scripting for cloud operations.

VARIOUS AWS CLI COMMANDS:

The common AWS CLI Commands:

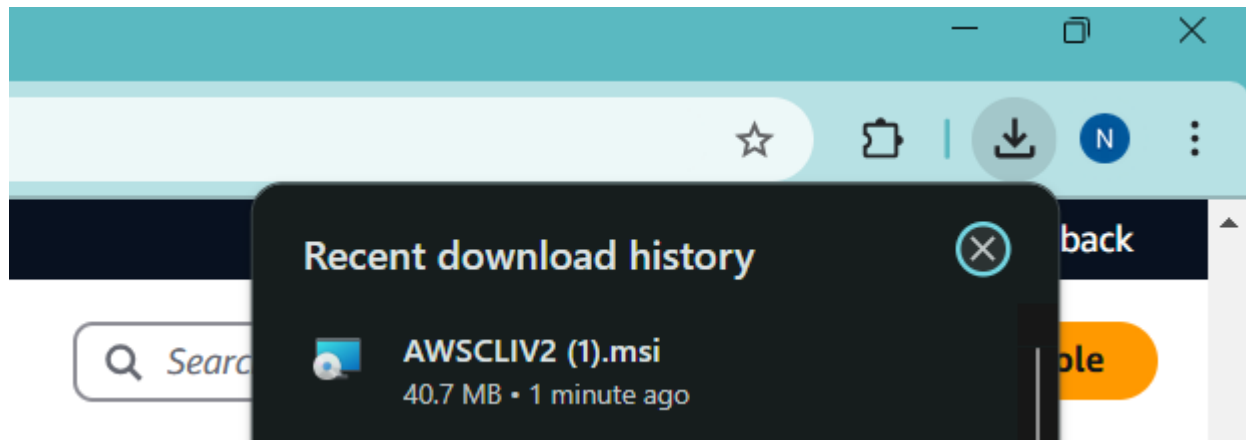
- **Configure CLI** → `aws configure`
- **List S3 Buckets** → `aws s3 ls`
- **Upload File to S3** → `aws s3 cp file.txt s3://my-bucket/`
- **Launch EC2 Instance** → `aws ec2 run-instances --image-id ami-xyz --count 1 --instance-type t2.micro`
- **View IAM Users** → `aws iam list-users`

STEP BY STEP OVERVIEW:

Step 1: Download command line interface for windows.

- Open your browser and search for ‘AWS CLI Installer for Windows’.
- Click on install/update option on the Apache Lounge website.
- Select the link based on your OS and install by using the link provided.

The screenshot shows the AWS Command Line Interface User Guide for Version 2. The main content area is titled 'Install or update the AWS CLI' and provides instructions for updating the CLI on Windows. It includes a list of steps: 1. Download and run the AWS CLI MSI installer for Windows (64-bit): `https://awscli.amazonaws.com/AWSCLIV2.msi`. Alternatively, you can run the `msiexec` command to run the MSI installer. A code block shows the command: `C:\> msiexec.exe /i https://awscli.amazonaws.com/AWSCLIV2.msi`. 2. To confirm the installation, open the Start menu, search for `cmd` to open a command prompt window, and at the command prompt use the `aws --version` command. A code block shows the output: `C:\> aws --version` `aws-cli/2.19.1 Python/3.11.6 Windows/10 exe/AMD64 prompt/off`. The right sidebar contains a section 'On this page' with links to 'AWS CLI install and update instructions', 'Troubleshooting AWS CLI install and uninstall errors', and 'Next steps'. Below that is a section 'Recently added to this guide' and a 'Did this page help you?' section with 'Yes' and 'No' buttons and a 'Provide feedback' link.



Step 2: VERIFY INSTALLATION

- Once installed, verify it by typing `aws--version` in the command prompt.
- If installed, you will get the outcome as below:

```
Command Prompt
Microsoft Windows [Version 10.0.22631.4751]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Aruldas>aws --version
aws-cli/2.23.1 Python/3.12.6 Windows/11 exe/AMD64

C:\Users\Aruldas>
```

Step 3: CONFIGURE AWS CLI

- Before using AWS CLI, we must configure it with our AWS credentials.
- For this, open command prompt and give `aws configure`.

```
Command Prompt - aws conf
Microsoft Windows [Version 10.0.22631.4751]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Aruldas>aws configure
AWS Access Key ID [*****QBFP]: |
```

Step 4: CREATE ACCESS KEY

- Go to IAM and click on 'create access key' as shown below:

Access keys (0)

Use access keys to send programmatic calls to AWS from the AWS CLI, AWS Tools for PowerShell, AWS SDKs, or direct AWS API calls. You can have a maximum of two access keys (active or inactive) at a time. [Learn more](#)

Access key ID	Created on	Access key last used	Region last used	Service last used	Status
No access keys					

As a best practice, avoid using long-term credentials like access keys. Instead, use tools which provide short term credentials. [Learn more](#)

Access key created
This is the only time that the secret access key can be viewed or downloaded. You cannot recover it later. However, you can create a new access key any time.

Retrieve access key

Access key
If you lose or forget your secret access key, you cannot retrieve it. Instead, create a new access key and make the old key inactive.

Access key	Secret access key
AKIA5WLTTCYPJIK6PEY	***** Show

Access key best practices

- Never store your access key in plain text, in a code repository, or in code.
- Disable or delete access key when no longer needed.
- Enable least-privilege permissions.
- Rotate access keys regularly.

For more details about managing access keys, see the [best practices for managing AWS access keys](#).

- Once after creatin your access key, copy the aws access key-id and secret access key in the command prompt.
- Also give the region name and output format as shown below.

```

Microsoft Windows [Version 10.0.22631.4751]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Arulldhas>aws configure
AWS Access Key ID [*****QBFP]: AKIA5WLTTCYPJIK6PEY
AWS Secret Access Key [*****RyBr]: QjXhPLNVUMxLNfw3Qi9tPHnFg7RS8vwLbz5VLEp4
Default region name [ap-south-1]: ap-south-1
Default output format [json]: json

C:\Users\Arulldhas>

```

Step 5: VIEW STORAGE BUCKETS

- To view all the storage buckets, type 'aws s3 ls' in the command prompt

```
C:\Users\Aruldas>aws s3 ls
2025-01-31 10:57:48 sample-101-04

C:\Users\Aruldas>
```

Step 6: CREATE A S3 BUCKET USING COMMAND

- Create an S3 bucket using the command 'aws s3 mb s3://your-unique-bucket-name' in the command prompt.

```
C:\Users\Aruldas>aws s3 mb s3://test-bucket-0218
make_bucket: test-bucket-0218

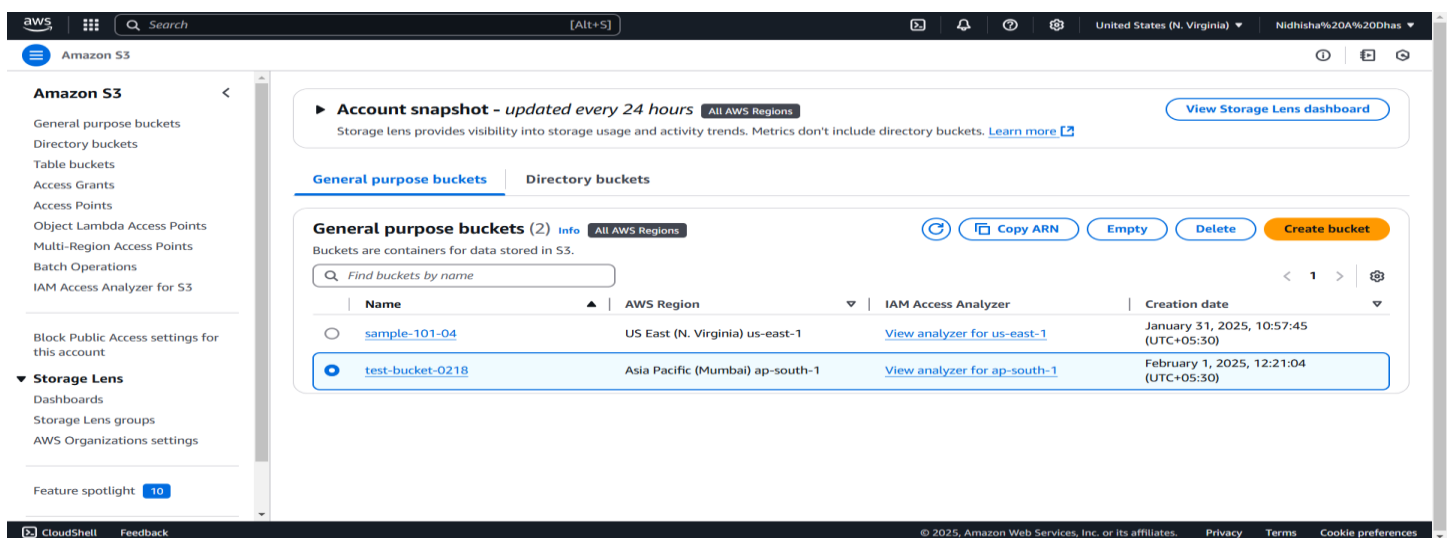
C:\Users\Aruldas>
```

- After successfully creating an S3 bucket, upload any file by typing the command 'aws s3 cp yourfile.txt s3://your-unique-bucket-name' in the command prompt.

```
C:\Users\Aruldas>aws s3 cp "C:\Users\Aruldas\Documents\textfile.txt" s3://test-bucket-0218
upload: Documents\textfile.txt to s3://test-bucket-0218/textfile.txt

C:\Users\Aruldas>
```

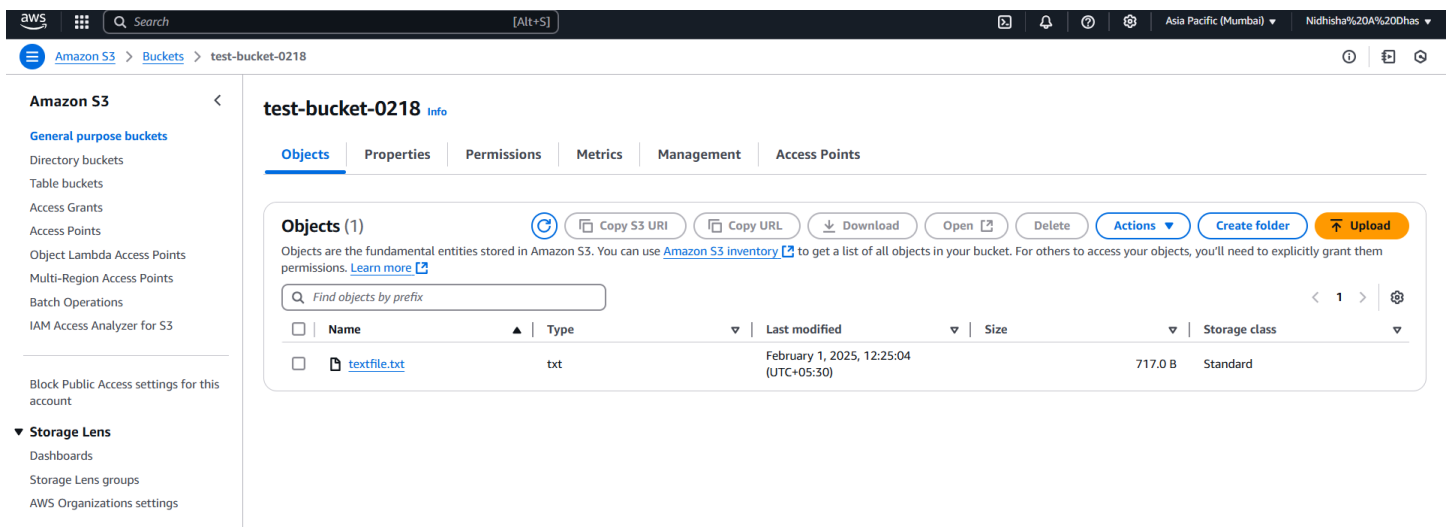
- Now, we have also uploaded the file in our bucket.
- To check this, open your AWS console and go to S3 service.



The screenshot shows the AWS Management Console for the Amazon S3 service. The left sidebar contains navigation links for Amazon S3, including General purpose buckets, Directory buckets, Table buckets, Access Grants, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Block Public Access settings, Storage Lens, Dashboards, Storage Lens groups, AWS Organizations settings, and Feature spotlight. The main content area displays an 'Account snapshot' and a 'General purpose buckets' section. The 'General purpose buckets' section shows a list of buckets with columns for Name, AWS Region, IAM Access Analyzer, and Creation date. The bucket 'test-bucket-0218' is selected, and its details are shown below the list.

Name	AWS Region	IAM Access Analyzer	Creation date
sample-101-04	US East (N. Virginia) us-east-1	View analyzer for us-east-1	January 31, 2025, 10:57:45 (UTC+05:30)
test-bucket-0218	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	February 1, 2025, 12:21:04 (UTC+05:30)

- Thus, the bucket has been created successfully.
- Now, to view the uploaded file click on the created S3 bucket.



- Thus, the file also has been uploaded successfully.

CONCLUSION:

Hence from this POC, we have understood:

1. How to install AWS CLI and verify it in command prompt.
2. Configure aws by creating access key in IAM.
3. View the S3 buckets present already.
4. Create new S3 bucket using commands.
5. Upload files in the created bucket using command prompt.

Thus, this one among the available ways to interact with AWS.