Placement Empowerment Program

Cloud Computing and DevOps Centre

Use Cloud CLI Tools Install the CLI for your cloud provider

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Introduction and Overview

To effectively manage and interact with your cloud resources, cloud providers offer Command Line Interface (CLI) tools. These tools are designed to provide a seamless way to control and automate your cloud services directly from your command line. By installing the CLI for your cloud provider, you can perform a wide range of tasks such as creating and managing virtual machines, configuring network settings, and deploying applications, all with simple command-line instructions. Each cloud provider has its own CLI tool, for example, AWS CLI for Amazon Web Services, gcloud CLI for Google Cloud Platform, and Azure CLI for Microsoft Azure. This introduction will guide you through installing the CLI for your chosen cloud provider, enabling you to efficiently manage your cloud infrastructure from your terminal.

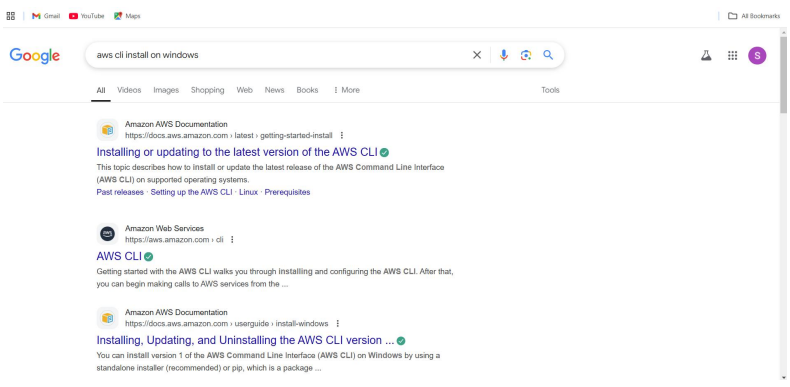
Objective

The objective of using Cloud CLI tools is to provide a streamlined and efficient way to manage and automate cloud resources directly from the command line. By installing the CLI for your chosen cloud provider, you can perform a variety of tasks, such as creating and managing virtual machines, configuring network settings, deploying applications, and monitoring services. This enables you to interact with your cloud infrastructure programmatically, allowing for greater control, flexibility, and automation of your cloud operations. Whether you're managing a single VM or orchestrating complex deployments, Cloud CLI tools are essential for efficient and effective cloud management.

Step-by-Step Overview

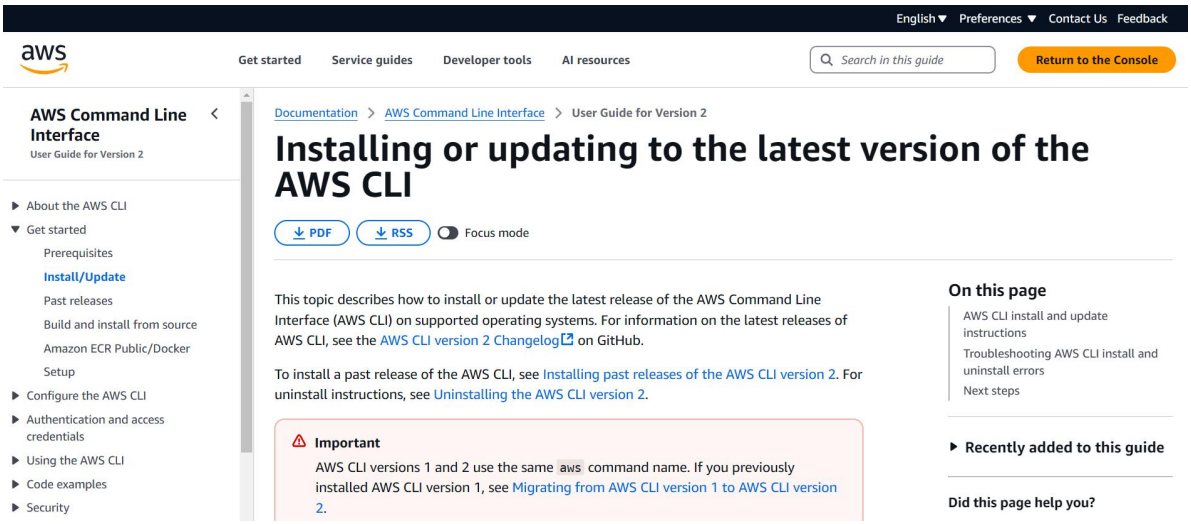
Step1:

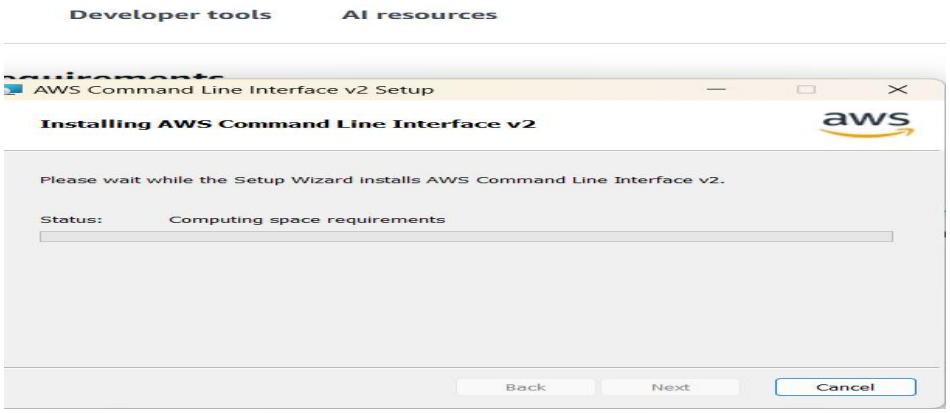
Search for "AWS CLI Installer for Windows" on Google



Step 2:

Click on the "Install/Update" option located on the left-hand side of the Apache Lounge website. Select the link regarding your OS, Install by using the link provided else use the ***msiexec*** command





Step 3:

Once installed, verify the installation by running **aws --version**

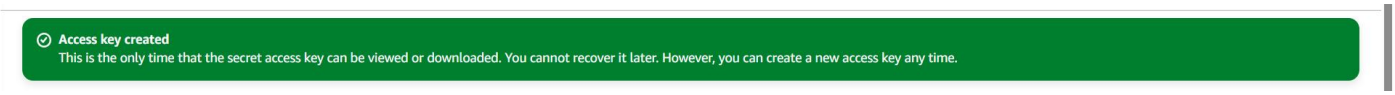
```
aws-cli/2.23.8 Python/3.12.6 Windows/11 exe/AMD64
```

Step 4:

configure it with your AWS credentials.

Open Command Prompt and type **aws configure**

```
AWS Access Key ID [****************WU6K]:
```



Step 5:

To see all storage buckets, Type **aws s3 ls** in cmd

```
2025-01-28 22:49:31 my-storage-bucket-abc
```

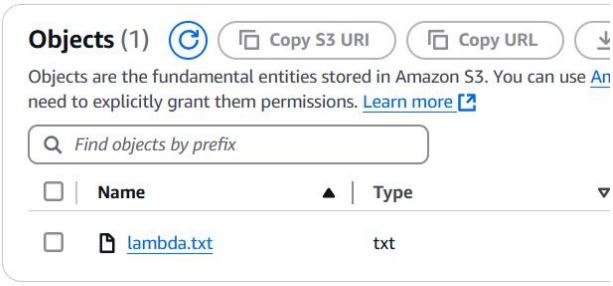
Step 6:

Create an S3 Bucket by typing **aws s3 mb s3://your-unique-bucket-name** in cmd

```
make_bucket: my-storage-bucket-def
```

Upload a file to S3 Bucket by typing **aws s3 cp yourfile.txt s3://your-unique-bucket-name/** in cmd

```
upload: Downloads\lambda.txt to s3://my-storage-bucket-def/lambda.txt
```



Step 7:

To Start an EC2 Instance, Type **aws ec2 start-instances --instance-ids <INSTANCE_ID>** in cmd


```
    "StartingInstances": [
        {
            "InstanceId": "i-0a3c2170890ffb3e1",
            "CurrentState": {
                "Code": 0,
                "Name": "pending"
            },
            "PreviousState": {
                "Code": 80,
                "Name": "stopped"
            }
        }
    ]
}
```


Expected Outcome

By installing and utilizing Cloud CLI tools, you can expect the following outcomes:

1. **Efficient Cloud Management**: Seamlessly manage your cloud resources directly from the command line, streamlining your workflow.

2. **Automation**: Automate repetitive tasks such as creating VMs, configuring networks, and deploying applications, improving productivity.

3. **Flexibility**: Gain the ability to perform a wide range of actions, including resource provisioning, monitoring, and scaling, all from the CLI.

4. **Enhanced Control**: Execute precise commands for specific cloud operations, giving you granular control over your cloud infrastructure.

5. **Programmatic Access**: Integrate CLI commands into scripts and automation tools, enabling sophisticated cloud operations and deployments.

In essence, using Cloud CLI tools will greatly enhance your ability to efficiently and effectively manage your cloud services, making cloud infrastructure management more intuitive and powerful.