

Placement Empowerment Program
Cloud Computing and DevOps Centre

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

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Introduction

Cloud CLI tools, such as AWS CLI, allow users to interact with cloud services directly from the terminal, enabling automation and efficient resource management. This task involves installing the AWS CLI, configuring it with AWS credentials, and using it to perform basic operations like listing resources, uploading files to S3, and managing EC2 instances. CLI tools offer a faster and scriptable alternative to the AWS Management Console, improving productivity. By completing this task, you'll gain hands-on experience in cloud automation and resource control using command-line commands.

Objectives

- **Learn Cloud CLI Basics** – Install and configure AWS CLI to interact with cloud resources using command-line commands.
- **Manage Cloud Resources** – Use AWS CLI to list cloud resources, upload files to S3, and manage EC2 instances efficiently.
- **Enhance Automation Skills** – Gain hands-on experience in automating cloud tasks, improving efficiency over manual AWS Management Console operations.

Step by Step Overview

1. Search CLI installer for windows

The screenshot shows a Microsoft Bing search results page for the query "aws cli installer for windows". The search bar at the top shows the query and a "Deep search" button. Below the search bar, there are tabs for "ALL", "COPILOT", "VIDEOS", "IMAGES", "MAPS", "NEWS", "SHOPPING", "MORE", and "TOOLS". The search results are displayed below the tabs, showing "About 5,090,000 results".

The main search result is titled "To install the AWS CLI version 1 on Windows, you can use the MSI installer". It lists four steps: 1. Download the appropriate MSI installer from the AWS CLI page on the Amazon website. 2. Run the downloaded MSI installer or the setup file. 3. Follow the on-screen instructions. 4. To confirm the installation, use the `aws --version` command at a command prompt (open the Start menu and search for cmd to start a command prompt).

Below the steps, there is a "Learn more:" section with two links: "1. Install, Update, and Uninstall the AWS CLI version 1 on Windows" and "2. How To Use and Install AWS CLI On Windows (The Perfect Way!)".

On the right side of the search results, there is a "Related searches" section with the following links: "download AWS CLI for window", "AWS CLI exe download", "AWS CLI commands cheat sheet", "AWS CLI zip download", "AWS download cli", "install AWS in windows", "AWS download for windows", and "AWS configure download".

At the bottom of the search results, there is a link to "AWS Documentation" with the URL <https://docs.aws.amazon.com/cli/latest/userguide/getting-started...> and a link to "Installing or updating to the latest version of the AWS CLI".

The screenshot shows the AWS Command Line Interface (CLI) documentation page for Windows. The page is titled "AWS Command Line Interface" and "User Guide for Version 2". The left sidebar contains a navigation menu with the following items: "About the AWS CLI", "Get started", "Prerequisites", "Install/Update", "Past releases", "Build and install from source", "Amazon ECR Public/Docker", "Setup", "Configure the AWS CLI", "Authentication and access credentials", "Using the AWS CLI", "Code examples", "Security", "Troubleshoot errors", "Migration guide", "Uninstall", and "Document History".

The main content area is titled "Windows" and contains the following sections:

- Install and update requirements**
 - We support the AWS CLI on Microsoft-supported versions of 64-bit Windows.
 - Admin rights to install software
- Install or update the AWS CLI**

To update your current installation of AWS CLI on Windows, download a new installer each time you update to overwrite previous versions. AWS CLI is updated regularly. To see when the latest version was released, see the [AWS CLI version 2 Changelog](#) on [GitHub](#).

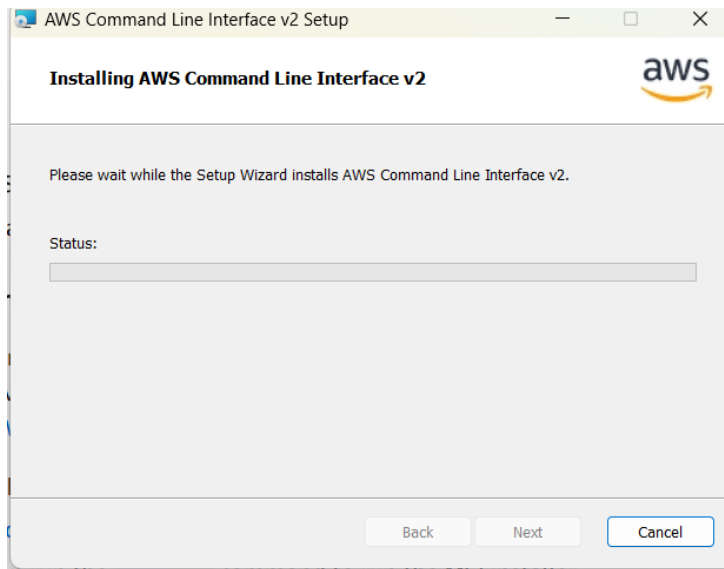
 - Download and run the AWS CLI MSI installer for Windows (64-bit):
<https://awscli.amazonaws.com/AWSCLIV2.msi>
Alternatively, you can run the `msiexec` command to run the MSI installer.

```
C:\> msiexec.exe /i https://awscli.amazonaws.com/AWSCLIV2.msi
```

For various parameters that can be used with `msiexec`, see [msiexec](#) on the [Microsoft Docs](#) website. For example, you can use the `/qn` flag for a silent installation.

```
C:\> msiexec.exe /i https://awscli.amazonaws.com/AWSCLIV2.msi /qn
```

On the right side of the page, there is a "On this page" section with a link to "AWS CLI install and update instructions" and a "Recently added to this guide" section. At the bottom, there is a "Did this page help you?" section with "Yes" and "No" buttons and a "Provide feedback" link.



2. Once installed, verify the installation

By opening Command Prompt type **aws --version**.

```
C:\Users\nandh>aws --version
aws-cli/2.23.13 Python/3.12.6 Windows/11 exe/AMD64
```

3. Configure your account

Before using AWS CLI, you need to configure it with your AWS credentials. Open Command Prompt and type **aws configure**.

```
C:\Users\nandh>aws configure
```

It will ask for the following : (get these from your IAM access credentials)

```
AWS Access Key ID [None]: nan
AWS Secret Access Key [None]:
Default region name [None]: ap
Default output format [None]:
```

4. Check your EC2 instances available

Type “ **aws ec2 describe-instances**” to check the instances.

Similarly you can get the list about list of s3 buckets you have by typing “**aws s3 ls**”.

```
C:\Users\nandh>aws ec2 describe-instances
{
  "Reservations": []
}
```

5. Create Bucket

Create a new bucket using “ **aws s3 mb s3://your-bucket-name** ” command.

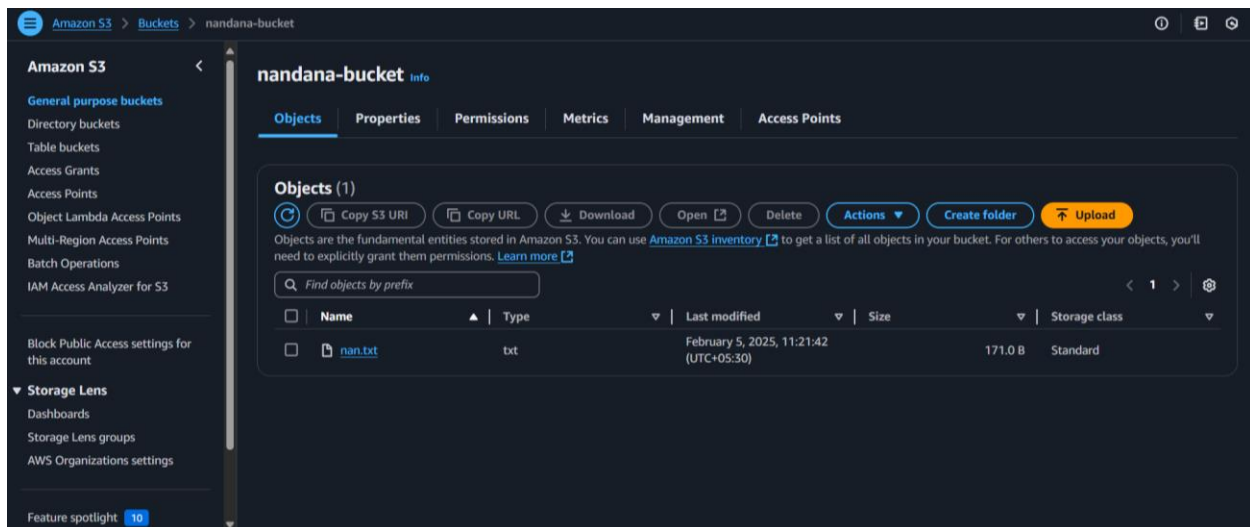
```
C:\Users\nandh> aws s3 mb s3://nandana-bucket
make_bucket: nandana-bucket
```

Upload into the s3 bucket using the below command.

```
C:\Users\nandh>aws s3 cp C:\Users\nandh\Downloads\nan.txt s3://nandana-bucket
upload: Downloads\nan.txt to s3://nandana-bucket/nan.txt
```

6. Check the console

Log in to your console and check the s3 service. You can find the bucket and file you uploaded through CLI in it.



7. Deleting the bucket

First, empty the bucket using “**aws s3 rm s3://your-bucket-name --recursive**”

```
C:\Users\nandh>aws s3 rm s3://nandana-bucket --recursive
delete: s3://nandana-bucket/nan.txt
```

Now, delete the bucket using “**aws s3 rb s3://your-bucket-name**”

```
C:\Users\nandh>aws s3 rb s3://nandana-bucket  
remove_bucket: nandana-bucket
```

8. Starting an EC2 instance

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

Replace with your actual instance ID.

```
C:\Users\nandh>aws ec2 start-instances --instance-ids i-05d19b11007763186  
{  
  "StartingInstances": [  
    {  
      "InstanceId": "i-05d19b11007763186",  
      "CurrentState": {  
        "Code": 0,  
        "Name": "pending"  
      },  
      "PreviousState": {  
        "Code": 80,  
        "Name": "stopped"  
      }  
    }  
  ]  
}
```

Outcome:

- **Successful Installation & Configuration** – AWS CLI will be installed and configured with the correct credentials, allowing seamless interaction with AWS services.
- **Ability to List Cloud Resources** – You will be able to list AWS resources such as S3 buckets, EC2 instances, and IAM users using CLI commands.
- **File Management in S3** – You will gain hands-on experience in uploading, downloading, and managing files in Amazon S3 using the CLI.
- **EC2 Instance Control** – You will learn how to start, stop, and reboot EC2 instances from the command line, improving your cloud management skills.