1.2. Student Handout

AWS CLI Student Handout

Introduction to AWS CLI

What is AWS CLI?

The AWS Command Line Interface (CLI) is a tool that allows you to manage AWS services from your terminal or command prompt. It is useful for automation, scripting, and efficient management of AWS resources.

Benefits and Use Cases of AWS CLI

- **Automation**: Automate repetitive tasks with scripts.
- **Efficiency**: Perform tasks faster than using the AWS Management Console.
- **Scripting**: Ideal for creating scripts to manage resources and deploy applications.
- **Cross-Platform**: Works on Windows, macOS, and Linux.

Overview of Supported Platforms

AWS CLI is supported on:

- **Windows**
- **macOS**
- **Linux**

Commands are consistent across all platforms.

Installing AWS CLI on Windows

Step 1: Downloading and Installing AWS CLI v2 for Windows

1. **Download the Installer**: Visit the AWS CLI download page and download the `.msi` installer.
2. **Run the Installer**: Double-click the `.msi` file and follow the instructions.
3. **Verify Installation**: Open Command Prompt and type:

```
aws --version
```

Step 2: Configuring AWS CLI with AWS Credentials

1. **Obtain AWS Credentials**: Log in to AWS Management Console, navigate to IAM, and generate an Access Key and Secret Key.
2. **Configure AWS CLI**: In Command Prompt, type:

```
aws configure
```

Enter your Access Key, Secret Key, Region, and Output Format.

3. **Testing the Installation**: Run:

```
aws s3 ls
```

Installing AWS CLI on macOS and Linux

Step 1: Installing AWS CLI on macOS Using Homebrew

1. **Install Homebrew**:

```
/bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

2. **Install AWS CLI**:

```
brew install awscli
```

3. **Verify Installation**:

```
aws --version
```

Step 2: Installing AWS CLI on Linux Using Package Managers

1. **For Ubuntu/Debian**:

```
sudo apt update

sudo apt install awscli
```

2. **For CentOS/RedHat**:

```
sudo yum install awscli
```

3. **Verify Installation**:

```
aws --version
```

Configuring AWS CLI on macOS/Linux with IAM Credentials

1. **Run the Configuration Command**:

```
aws configure
```

2. **Enter AWS Credentials**: Provide Access Key, Secret Key, Region, and Output Format.
3. **Testing the Installation**:

```
aws s3 ls
```

Managing Multiple AWS Profiles with the CLI

Step 1: Setting Up Named Profiles

1. **Create a Profile**:

```
aws configure --profile dev
```

2. **Switch Between Profiles**:

```
aws s3 ls --profile dev
```

Step 2: Listing All Profiles

Check the `~/.aws/credentials` file (macOS/Linux) or `C:\Users\<YourUsername>\.aws\credentials` (Windows).

Hands-On: Installing, Configuring, and Testing AWS CLI on Your Platform

Follow the steps for your platform to install, configure, and test AWS CLI.

Potential Gaps or Unclear Points

1. **Understanding AWS Credentials**: Access Key and Secret Key are like your username and password for AWS services.
2. **Region Confusion**: Regions represent AWS data centers in specific geographic locations.

Diagrams to Help Understand

Diagram 1: AWS CLI Workflow

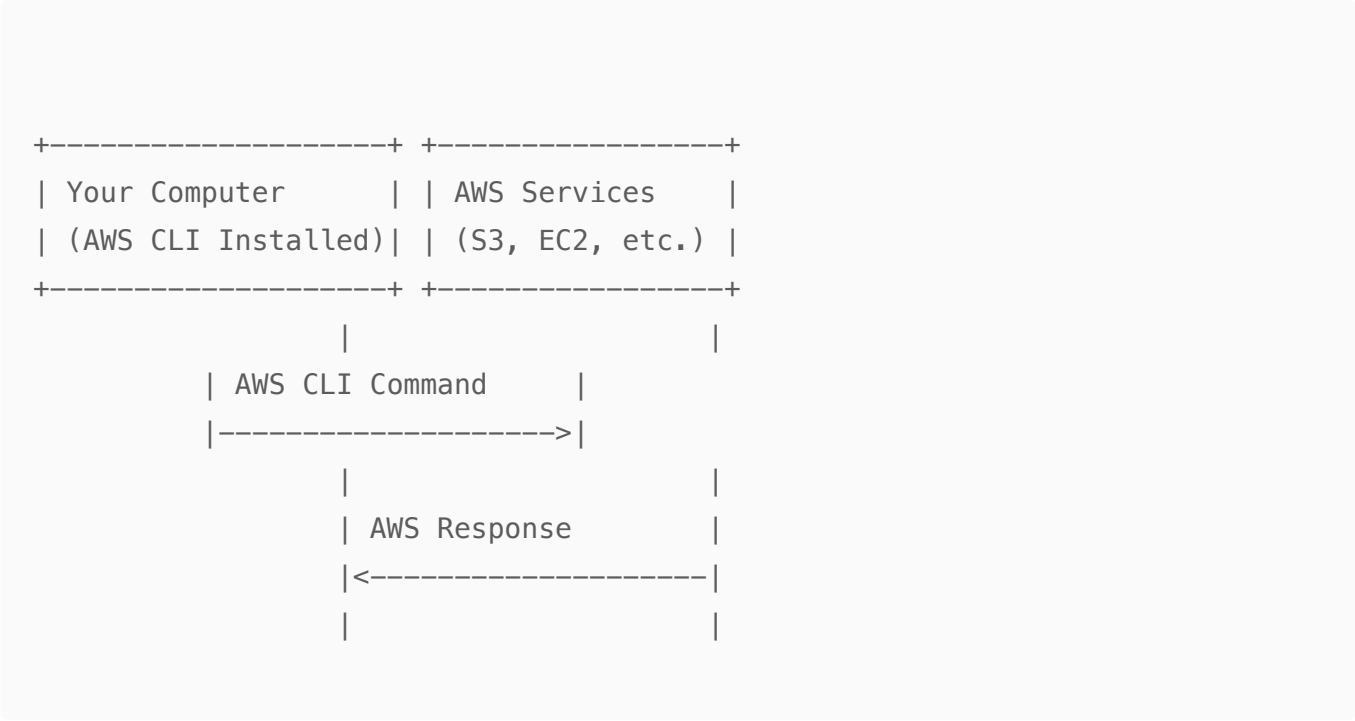

Diagram 2: AWS CLI Configuration

```
+----------------+
```

Conclusion

You should now understand what AWS CLI is, how to install it on different platforms, and how to configure it with your AWS credentials. AWS CLI is a powerful tool for managing AWS services efficiently. Try it out on your platform and run some basic commands to get familiar with it.