**Lesson 7 Lesson-End Project**

**Provision EC2 using Terraform**



**Steps to be followed:**

1. Prepare your machine
2. Prepare Terraform scripts
3. Apply your Terraform scripts

**Step 1: Prepare your machine**

1.1. Have your security credentials handy to authenticate to your AWS Account.

1.2 Execute the following command to set up your AWS credentials as environment variables. The playbook will need these at runtime.

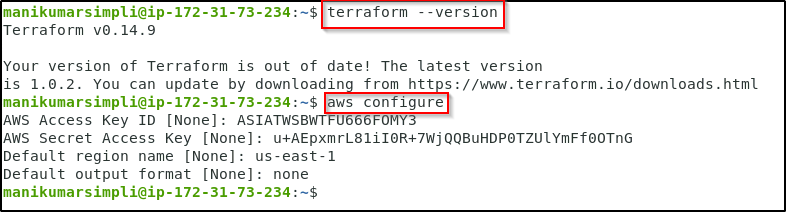
***aws configure***

Enter your AWS access key

Enter your AWS secret access key

Region: us-east-1

Default output format: none



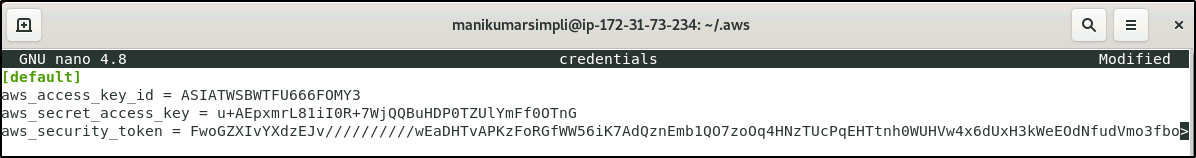
**Note**: The configuration process stores your credentials in a file at ~/.aws/credentials on MacOS and Linux, or %UserProfile%\.aws\credentials on Windows.

1.3 Verify the entered details and then add security token manually(You can skip adding security token in case you are using your own AWS root account)

***cd .aws***

***nano credentials***

***To save:*** *ctrl+x and then press y and enter*



1.4 Run the below commands in the given sequence to set up your AWS CLI:

***pip install awscli***

***sudo apt-get update***

**Step 2: Prepare Terraform scripts**

2.1 Run a **cd** command to move to the home directory

Create a new folder:

***mkdir ec2demo***

Move to the folder:

***cd ec2demo***

Create creds.tf file:

***nano creds.tf***

Enter the following code:

**provider "aws" {**

**access\_key = "AWS\_LAB\_ACCESS\_KEY"**

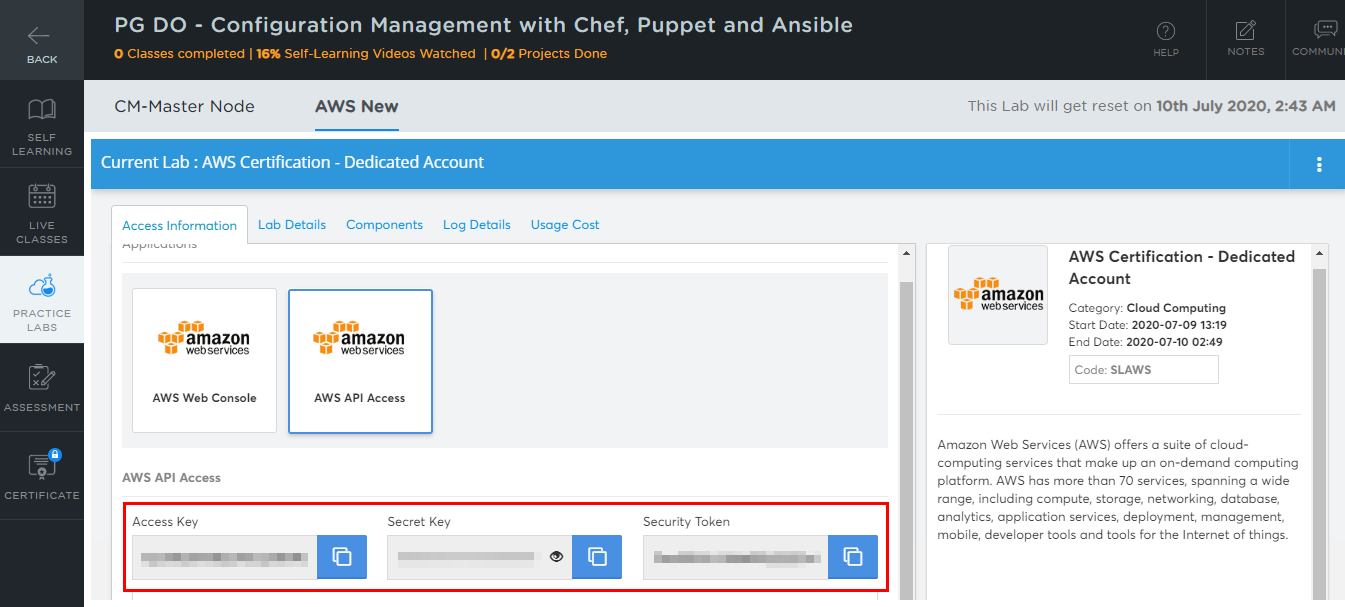
**secret\_key = "AWS\_LAB\_SECRET\_KEY"**

**token = “AWS\_LAB\_SECURITY\_TOKEN”**

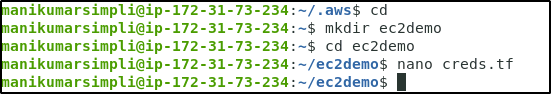
**region = "us-east-1"**

**}**

**Note:** Use the credentials given in your AWS lab and replace the placeholders of Access key, Security key, and Security Token with the corresponding values.



**2.2 *To save:*** *ctrl+x and then press y and enter*





2.2 Create a file to define your infrastructure i.e **ec2.tf** and enter the below code:

Create a file using the below command:

***nano ec2.tf***

Enter the below code:

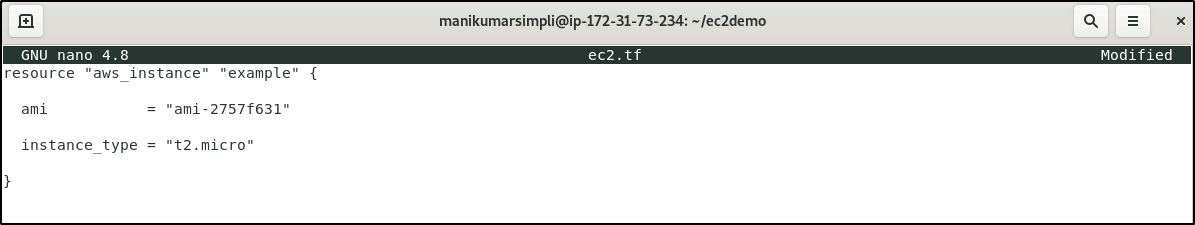
***resource "aws\_instance" "example" {***

***ami = "ami-2757f631"***

***instance\_type = "t2.micro"***

***}***

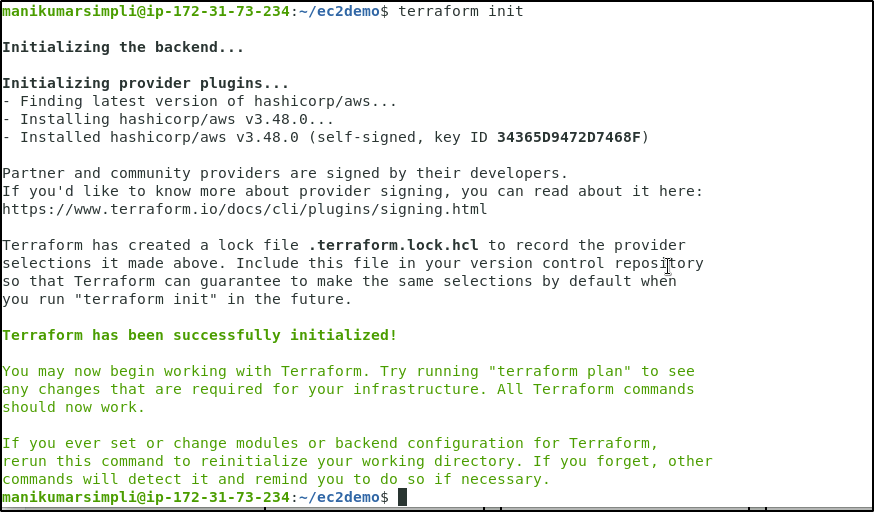




**Step 3: Apply your Terraform scripts**

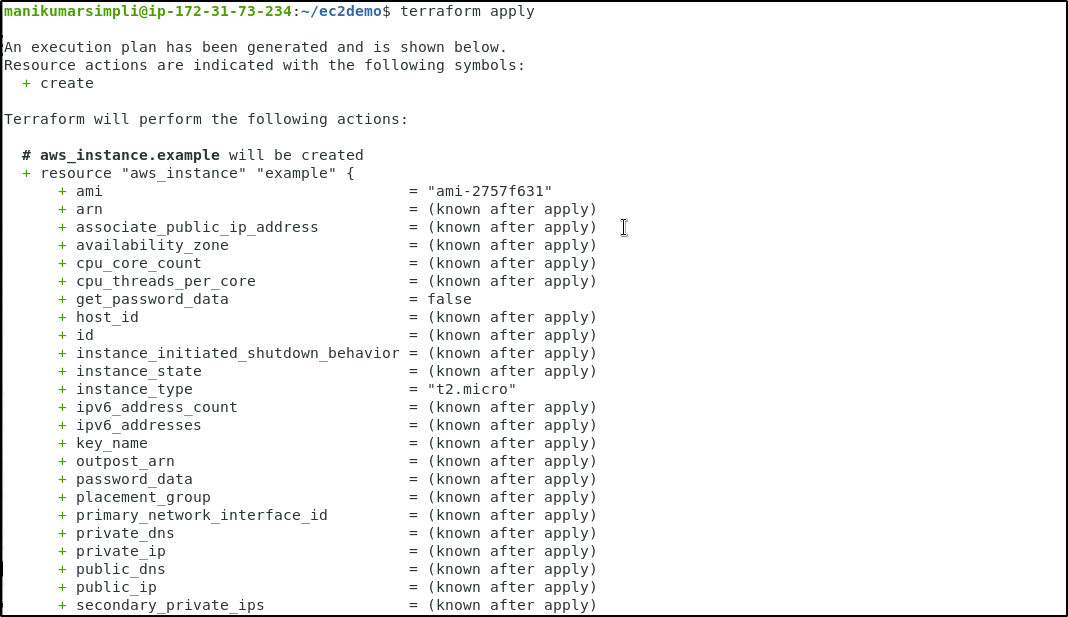
3.1 When you create a new configuration — or check out an existing configuration from version control — you need to initialize the directory with *terraform init*

***terraform init***



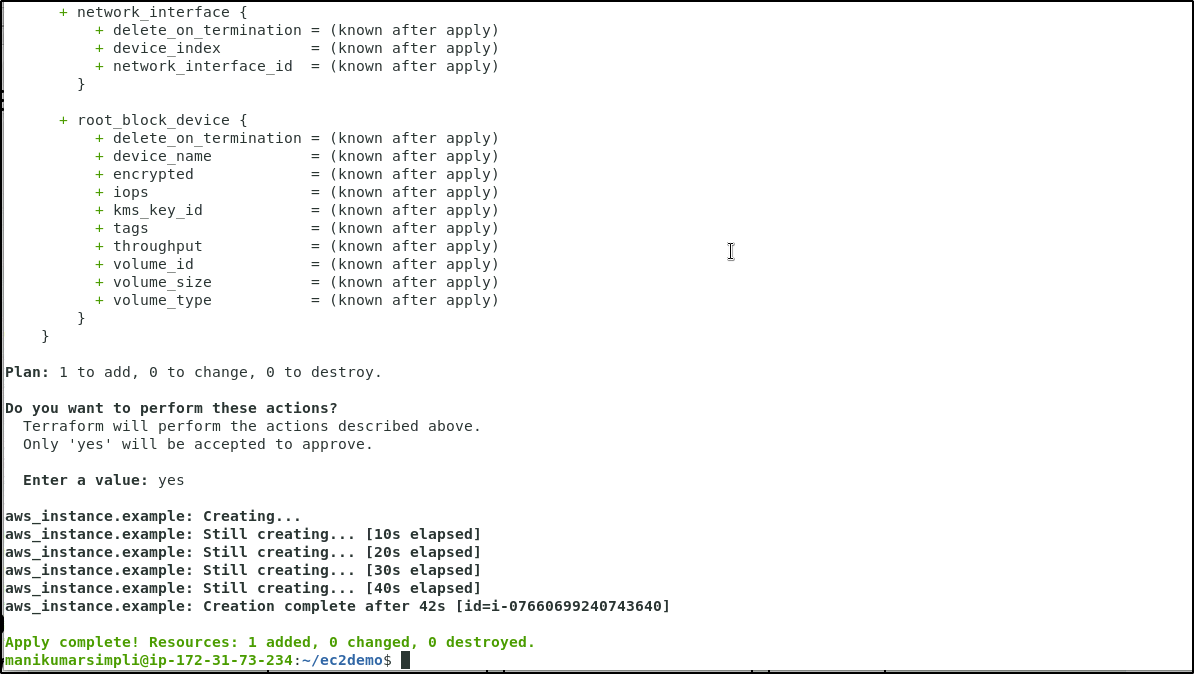
3.2 Apply the configuration now with the *terraform apply* command

***terraform apply***



Terraform will pause and wait for your approval before proceeding

**Enter a value:** Yes



3.3 Verify the creation of EC2 instance in your AWS management console

