

Module 8 – Terraform

Assignment-1

1. Create an EC2 service in the default subnet in the Ohio region
 - Navigated to terraform installed instance
 - Created a directory naming assignment1 and created a main.tf inside the directory created with the script to create EC2 instance in ohio regio

```
ubuntu@ip-172-31-35-160:~$ mkdir assignment1
ubuntu@ip-172-31-35-160:~$ cd assignment1
ubuntu@ip-172-31-35-160:~/assignment1$ ls
ubuntu@ip-172-31-35-160:~/assignment1$ vi main.tf
```

- The script writtenb in main.tf

```
provider "aws" {
  secret_key = "Pr7tQthXHgkb3dgT+S1010wfwkQPaDrusDdD8Rf8"
  access_key = "AKIAYJ5MROACCA2BOW5E"
  region = "us-east-2"
}
resource "aws_instance" "this" {
  ami = "ami-05fb0b8c1424f266b"
  instance_type = "t2.micro"
  key_name = "venkatohio"
  tags = {
    Name = "Assignment1"
  }
}
```

```
provider "aws" {
  secret_key = "Pr7tQthXHgkb3dgT+S1010wfwkQPaDrusDdD8Rf8"
  access_key = "AKIAYJ5MROACCA2BOW5E"
  region = "us-east-2"
}
resource "aws_instance" "this" {
  ami = "ami-05fb0b8c1424f266b"
  instance_type = "t2.micro"
  key_name = "venkatohio"
  tags = {
    Name = "Assignment1"
  }
}

"main.tf" 13L, 361B
```

- Then initialised terraform

```
ubuntu@ip-172-31-35-160:~/assignment1$ terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.31.0...
- Installed hashicorp/aws v5.31.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.
```

- Validated the syntax of script with terraform validate

```
ubuntu@ip-172-31-35-160:~/assignment1$ terraform validate
Success! The configuration is valid.
```

- Performed terraform plan

```
ubuntu@ip-172-31-35-160:~/assignment1$ terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.this will be created
+ resource "aws_instance" "this" {
  + ami              = "ami-05fb0b8c1424f266b"
  + arn              = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone = (known after apply)
  + cpu_core_count   = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop  = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized     = (known after apply)
  + get_password_data = false
  + host_id           = (known after apply)
  + host_resource_group_arn = (known after apply)
```

- Then applied the changes with terraform apply

```
ubuntu@ip-172-31-35-160:~/assignment1$ terraform apply
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_instance.this will be created
+ resource "aws_instance" "this" {
  + ami              = "ami-05fb0b8c1424f266b"
  + arn              = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone = (known after apply)
  + cpu_core_count   = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop  = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized     = (known after apply)
  + get_password_data = false
  + host_id           = (known after apply)
}

Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

Enter a value: yes

aws_instance.this: Creating...
aws_instance.this: Still creating... [10s elapsed]
aws_instance.this: Still creating... [20s elapsed]
aws_instance.this: Creation complete after 21s [id=i-0def6e8048b000bdc]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
ubuntu@ip-172-31-35-160:~/assignment1$
```