SPCM LAB

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Lab Exercise 8– Creating a VPC in Terraform

Objective:

1. Create a Terraform Directory:

- Create a file named main.tf

main.tf

terraform-vpc > main.tf

```
provider "aws" {
region = "us-east-1"
access_key = "AKIAYS2NV47DL6IMWZUT"
secret_key = "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
}
resource "aws_vpc" "my_vpc" {
cidr_block = "10.0.0.0/16"
enable_dns_support = true
enable_dns_hostnames = true
tags = {
Name = "MyVPC"
}
}

resource "aws_subnet" "my_subnet" {
  count = 2

  vpc_id                  = aws_vpc.my_vpc.id
  cidr_block              = "10.0.${count.index + 1}.0
  availability_zone       = "us-east-1a"
  map_public_ip_on_launch = true

  tags = {
    Name = "MySubnet-${count.index + 1}"
  }
}
```

2. Initialize and Apply:

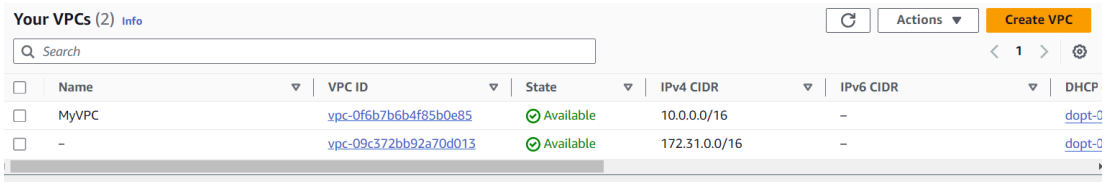
Terraform init

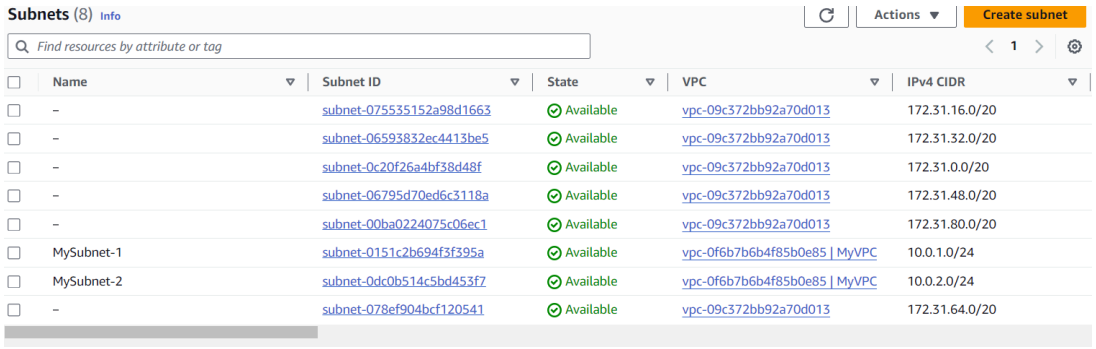
```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-vpc> terrafo
rm init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.38.0...
- Installed hashicorp/aws v5.38.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the pr
ovider
selections it made above. Include this file in your version control re
pository
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!
```

Terraform apply

```
    }

Plan: 3 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_vpc.my_vpc: Creating...
aws_vpc.my_vpc: Still creating... [10s elapsed]
aws_vpc.my_vpc: Creation complete after 15s [id=vpc-0f6b7b6b4f85b0e85]
aws_subnet.my_subnet[0]: Creating...
aws_subnet.my_subnet[1]: Creating...
aws_subnet.my_subnet[1]: Still creating... [10s elapsed]
aws_subnet.my_subnet[0]: Still creating... [10s elapsed]
aws_subnet.my_subnet[1]: Creation complete after 13s [id=subnet-0dc0b5
14c5bd453f7]
aws_subnet.my_subnet[0]: Creation complete after 13s [id=subnet-0151c2
b694f3f395a]

Apply complete! Resources: 3 added, 0 changed, 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-vpc>
```

3. Verify Resources in AWS Console:





4. Clean Up:
terraform destroy