

SPCM LAB

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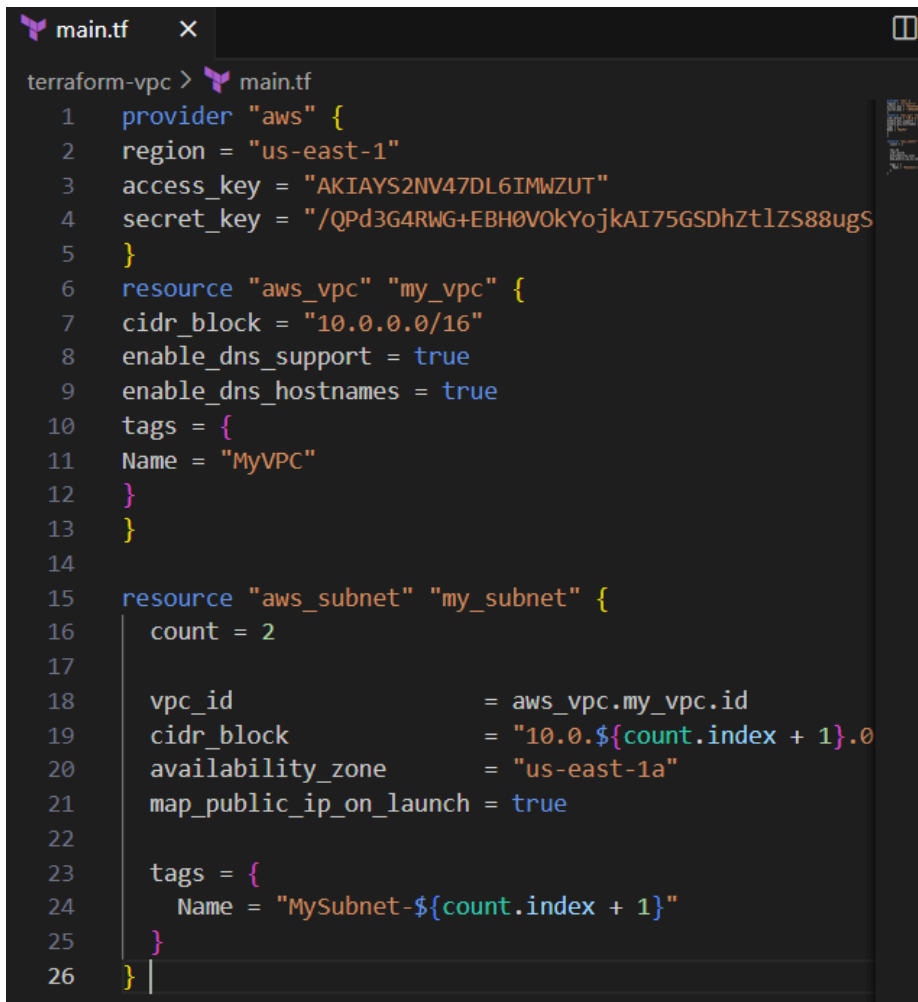
Btech cse devops B2

Lab Exercise 8– Creating a VPC in Terraform

Objective:

1. Create a Terraform Directory:

- Create a file named main.tf



```
main.tf x
terraform-vpc > main.tf
1 provider "aws" {
2   region = "us-east-1"
3   access_key = "AKIAYS2NV47DL6IMWZUT"
4   secret_key = "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"
5 }
6 resource "aws_vpc" "my_vpc" {
7   cidr_block = "10.0.0.0/16"
8   enable_dns_support = true
9   enable_dns_hostnames = true
10  tags = {
11    Name = "MyVPC"
12  }
13 }
14
15 resource "aws_subnet" "my_subnet" {
16   count = 2
17
18   vpc_id = aws_vpc.my_vpc.id
19   cidr_block = "10.0.${count.index + 1}.0/24"
20   availability_zone = "us-east-1a"
21   map_public_ip_on_launch = true
22
23   tags = {
24     Name = "MySubnet-${count.index + 1}"
25   }
26 }
```

2. Initialize and Apply:

Terraform init

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

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-0dc0b514c5bd453f7]
aws_subnet.my_subnet[0]: Creation complete after 13s [id=subnet-0151c2b694f3f395a]

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:

Your VPCs (2) Info

1

<input type="checkbox"/>	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP
<input type="checkbox"/>	MyVPC	vpc-0f6b7b6b4f85b0e85	Available	10.0.0.0/16	-	dopt-0
<input type="checkbox"/>	-	vpc-09c372bb92a70d013	Available	172.31.0.0/16	-	dopt-0

Subnets (8) Info

1

4. Clean Up: terraform destroy

```
- owner_id              = "590184048582" -> null
- tags                  = {
  - "Name" = "MyVPC"
} -> null
- tags_all              = {
  - "Name" = "MyVPC"
} -> null
}

plan: 0 to add, 0 to change, 3 to destroy.

Do you really want to destroy all resources?
Terraform will destroy all your managed infrastructure, as shown above.
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

aws_subnet.my_subnet[0]: Destroying... [id=subnet-0151c2b694f3f395a]
aws_subnet.my_subnet[1]: Destroying... [id=subnet-0dc0b514c5bd453f7]
aws_subnet.my_subnet[0]: Destruction complete after 2s
aws_subnet.my_subnet[1]: Destruction complete after 2s
aws_vpc.my_vpc: Destroying... [id=vpc-0f6b7b6b4f85b0e85]
aws_vpc.my_vpc: Destruction complete after 1s

Destroy complete! Resources: 3 destroyed.
```

Your VPCs (1) Info

1

<input type="checkbox"/>	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP
<input type="checkbox"/>	-	vpc-09c372bb92a70d013	Available	172.31.0.0/16	-	dopt-04

Subnets (6) Info

1

