ASSIGNMENT-1

System Provisioning & Configuration Management

Terraform scripts to perform following tasks on AWS cloud Platform

1. Creating two T2.micro ec2 instances

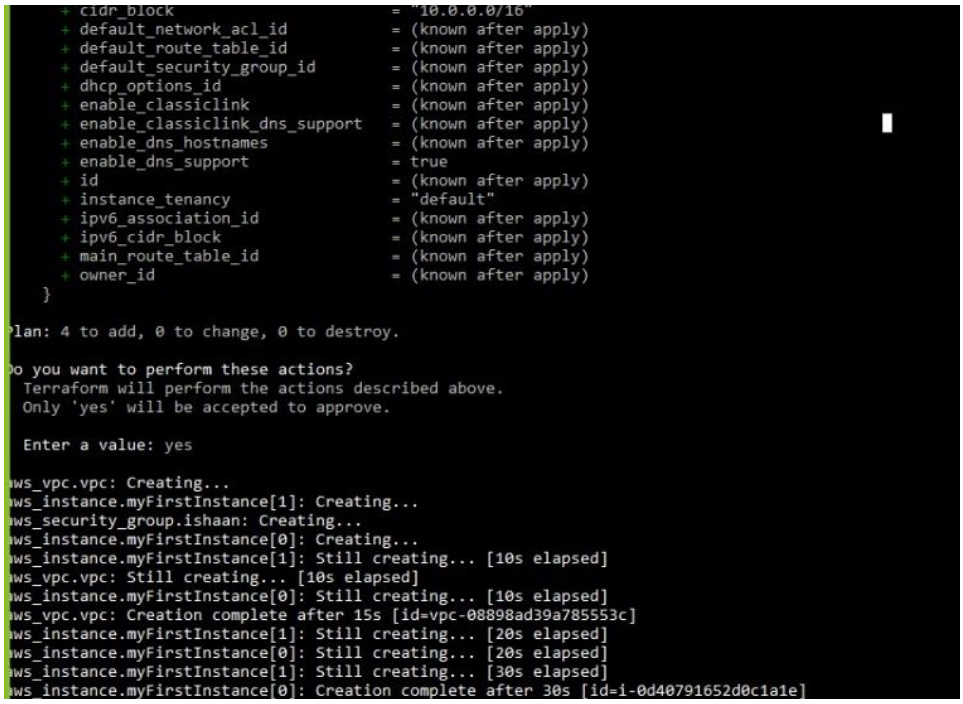
Script :

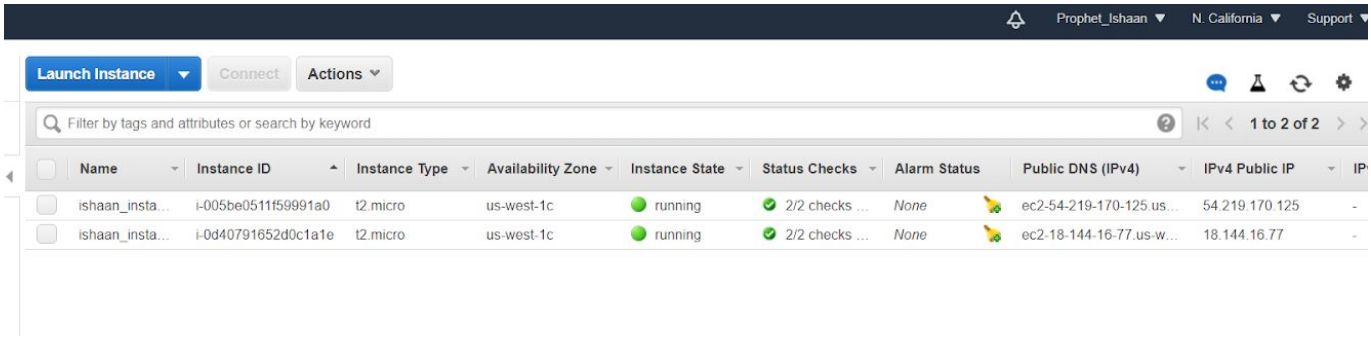
```
provider "aws"  {
 region= "us-west-1"
 access_key= "AKIAIGOKUAPY3EMYUKIQ"
 secret_key= "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"
}
resource "aws_instance" "myFirstInstance" {
  ami           = "ami-07dd19a7900a1f049"
  count=2
  key_name = "keypair"
  instance_type = "t2.micro"
  security_groups= [ "ishaan"]
  tags= {
    Name = "ishaan_instance"
  }
}
```

```
resource "aws_vpc" "vpc" {
  cidr_block = "10.0.0.0/24"
}

resource "aws_security_group" "ishaan" {
  name        = "ishaan"
  description = "security group "

  ingress {
    from_port   = 8080
    to_port     = 8080
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }

 ingress {
    from_port   = 22
    to_port     = 22
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
```

```
 egress {
  from_port   = 0
  to_port     = 65535
  protocol    = "tcp"
  cidr_blocks = ["0.0.0.0/0"]
 }

 tags= {
  Name = "ishaan"
 }
}
```

Output:





2. Creating a VPN on AWS

Script:

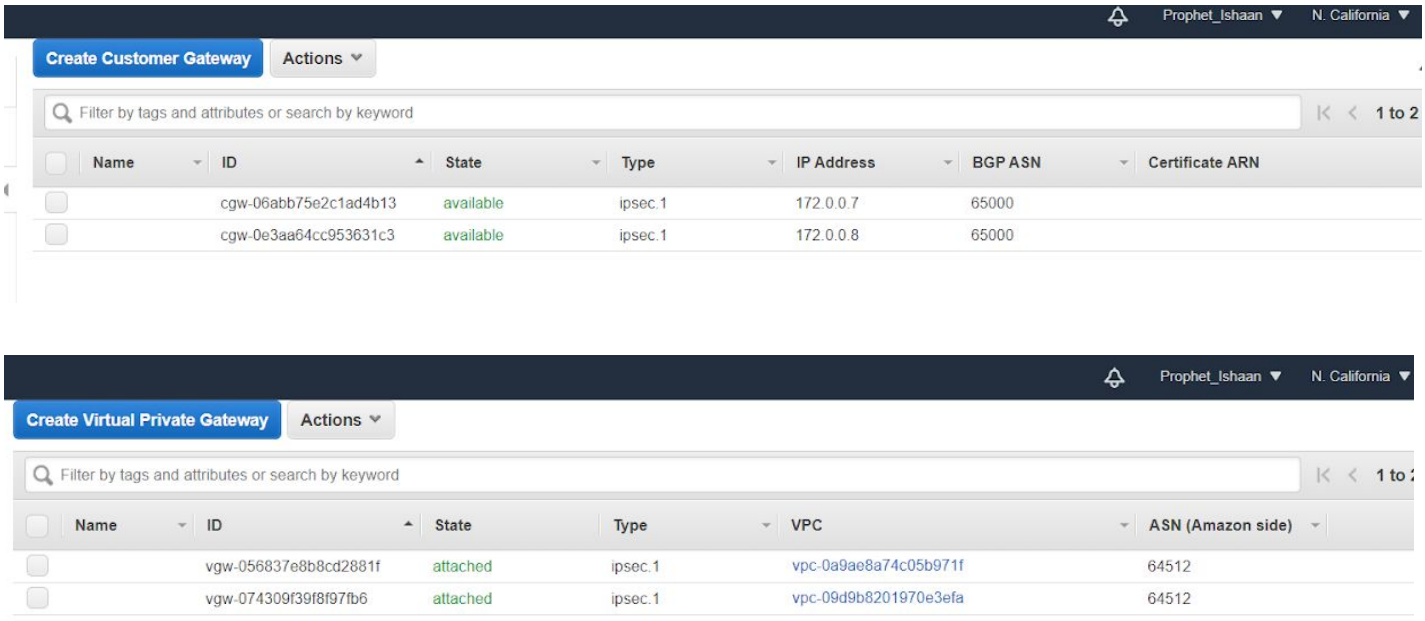
```
provider "aws"  {

 region= "us-west-1"

 access_key= "AKIAIGOKUAPY3EMYUKIQ"

 secret_key= "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"

}


resource "aws_vpc" "vpc" {

  cidr_block = "10.0.0.0/24"

}


resource "aws_vpn_gateway" "vpn_gateway" {

  vpc_id = aws_vpc.vpc.id

}


resource "aws_customer_gateway" "customer_gateway" {
```

```
  bgp_asn    = 65000
  ip_address = "172.0.0.8"
  type       = "ipsec.1"
}

resource "aws_vpn_connection" "main" {
  vpn_gateway_id      = aws_vpn_gateway.vpn_gateway.id
  customer_gateway_id = aws_customer_gateway.customer_gateway.id
  type                = "ipsec.1"
  static_routes_only  = true
}

resource "aws_security_group" "ishaan" {
  name        = "ishaan"
  description = "security group "

  ingress {
    from_port   = 8080
    to_port     = 8080
    protocol    = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
```

```
 ingress {
   from_port   = 22
   to_port     = 22
   protocol    = "tcp"
   cidr_blocks = ["0.0.0.0/0"]
 }

 egress {
   from_port   = 0
   to_port     = 65535
   protocol    = "tcp"
   cidr_blocks = ["0.0.0.0/0"]
 }
 tags= {
   Name = "ishaan"
 }
}
```

Output:

```
aws_customer_gateway.customer_gateway: Creating...
aws_customer_gateway.customer_gateway: Still creating... [10s elapsed]
aws_customer_gateway.customer_gateway: Creation complete after 15s [id=cgw-06abb75e2c1ad4b13]
aws_vpn_connection.main: Creating...
aws_vpn_connection.main: Still creating... [10s elapsed]
aws_vpn_connection.main: Still creating... [20s elapsed]
aws_vpn_connection.main: Still creating... [30s elapsed]
aws_vpn_connection.main: Still creating... [40s elapsed]
aws_vpn_connection.main: Still creating... [50s elapsed]
aws_vpn_connection.main: Still creating... [1m0s elapsed]
aws_vpn_connection.main: Still creating... [1m10s elapsed]
aws_vpn_connection.main: Still creating... [1m20s elapsed]
aws_vpn_connection.main: Still creating... [1m30s elapsed]
aws_vpn_connection.main: Still creating... [1m40s elapsed]
aws_vpn_connection.main: Still creating... [1m50s elapsed]
aws_vpn_connection.main: Still creating... [2m0s elapsed]



aws_vpn_connection.main: Still creating... [2m10s elapsed]
aws_vpn_connection.main: Still creating... [2m20s elapsed]
aws_vpn_connection.main: Still creating... [2m30s elapsed]
aws_vpn_connection.main: Still creating... [2m40s elapsed]
aws_vpn_connection.main: Still creating... [2m50s elapsed]
aws_vpn_connection.main: Still creating... [3m0s elapsed]
aws_vpn_connection.main: Still creating... [3m10s elapsed]
aws_vpn_connection.main: Still creating... [3m20s elapsed]
aws_vpn_connection.main: Still creating... [3m30s elapsed]
aws_vpn_connection.main: Creation complete after 3m38s [id=vpn-0b3c0ce564ceed0af]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
```

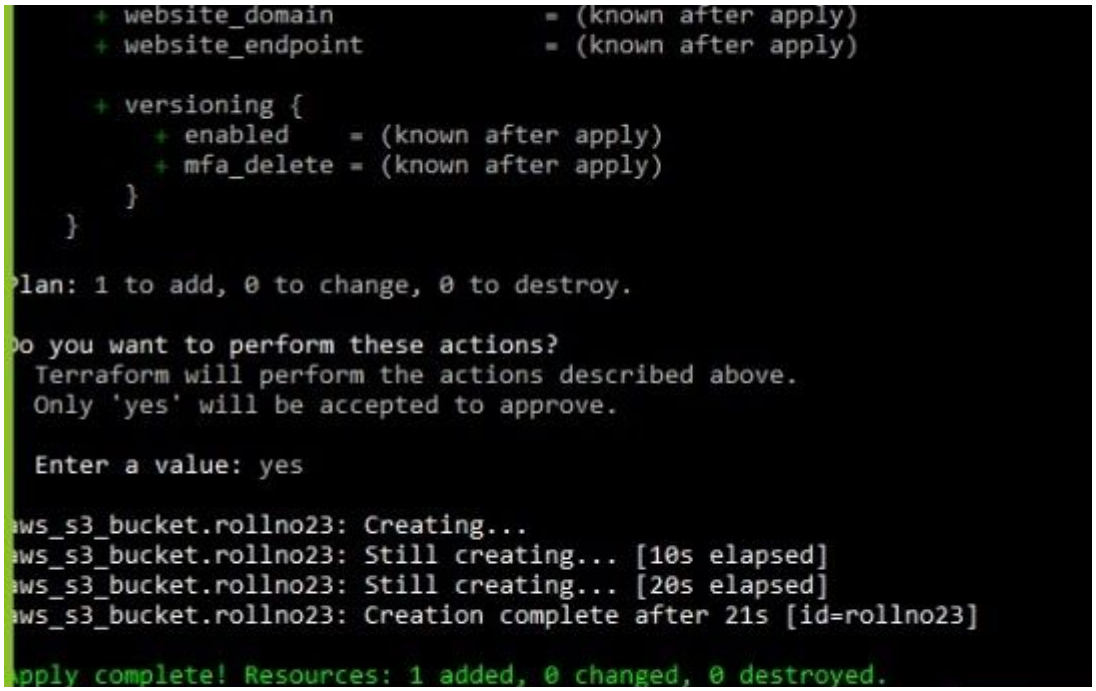


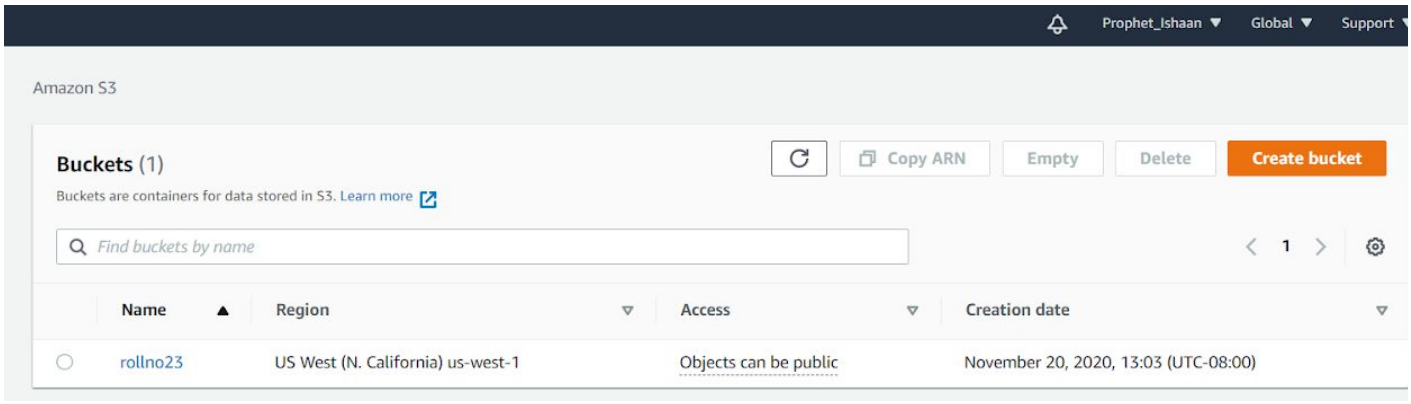
3. Creating a S3 bucket

Script :

```
provider "aws"  {

 region= "us-west-1"

 profile= "Prophet_Ishaan"

 access_key= "AKIAIGOKUAPY3EMYUKIQ"

 secret_key= "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"

}

resource  "aws_s3_bucket" "rollno23" {

  bucket = "rollno23"

}
```

Output :


+ website_domain = (known after apply)
+ website_endpoint = (known after apply)
+ versioning {
+ enabled = (known after apply)
+ mfa_delete = (known after apply)
}
}
lan: 1 to add, 0 to change, 0 to destroy.
o you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.
Enter a value: yes
ws_s3_bucket.rollno23: Creating...
ws_s3_bucket.rollno23: Still creating... [10s elapsed]
ws_s3_bucket.rollno23: Still creating... [20s elapsed]
ws_s3_bucket.rollno23: Creation complete after 21s [id=rollno23]
pply complete! Resources: 1 added, 0 changed, 0 destroyed.


Prophet_Ishaan
Global
Support
Amazon S3
Buckets (1)
Buckets are containers for data stored in S3. Learn more
Copy ARN
Empty
Delete
Create bucket
Find buckets by name
1
Name
Region
Access
Creation date
rollno23
US West (N. California) us-west-1
Objects can be public
November 20, 2020, 13:03 (UTC-08:00)