



System Provisioning and Configuration Module Lab

Assignment 1

Under the Guidance of: Dr. Hitesh Kumar Sharma

Submitted by - Jayvardhan Singh Negi

SAP ID - 500108365 Roll No - R2142220921

Batch - DevOps B2

1. Create two T2 Micro EC2 Instances. This instance.tf file contains the Iac code to create two instances of type t2.micro and ami of ubuntu.

```
instance.tf
1  # Public Subnet for VPN Endpoint (ins1)
2  resource "aws_subnet" "public" {
3      vpc_id            = aws_vpc.main.id
4      cidr_block        = "10.0.1.0/24"
5      availability_zone  = "ap-south-1a"
6      map_public_ip_on_launch = true
7      tags = {
8          Name = "Sid_Public_Subnet"
9      }
10 }
11
12 # Security Group for VPN Endpoint
13 resource "aws_security_group" "vpn_sg" {
14     name            = "vpn_endpoint_sg"
15     description     = "Allow IPSec VPN traffic"
16     vpc_id          = aws_vpc.main.id
17
18     ingress {
19         description = "IKE (UDP 500)"
20         from_port   = 500
21         to_port     = 500
22         protocol    = "udp"
23         cidr_blocks = ["0.0.0.0/0"]
24     }
25
26     ingress {
27         description = "NAT-T (UDP 4500)"
28         from_port   = 4500
29         to_port     = 4500
30         protocol    = "udp"
31         cidr_blocks = ["0.0.0.0/0"]
32     }
33 }
```

instance.tf

```
13 resource "aws_security_group" "vpn_sg" {
33
34   ingress {
35     description = "SSH"
36     from_port   = 22
37     to_port     = 22
38     protocol    = "tcp"
39     cidr_blocks = ["0.0.0.0/0"]
40   }
41
42   egress {
43     from_port   = 0
44     to_port     = 0
45     protocol    = "-1"
46     cidr_blocks = ["0.0.0.0/0"]
47   }
48
49   tags = {
50     Name = "Sid_VPN_SecurityGroup"
51   }
52 }
53
54 # VPN Endpoint Instance
55 resource "aws_instance" "ins1" {
56   ami           = "ami-0e35ddab05955cf57" # Ubuntu 24.04
57   instance_type = "t2.micro"
58   subnet_id     = aws_subnet.public.id
59   vpc_security_group_ids = [aws_security_group.vpn_sg.id]
60   tags = {
61     Name = "Sid_VPN_Endpoint"
62   }
```

```
65 # Regular Instance (Optional)
66 resource "aws_instance" "ins2" {
67   ami           = "ami-0e35ddab05955cf57"
68   instance_type = "t2.micro"
69   subnet_id     = aws_subnet.public.id # Can change to private subnet if needed
70   tags = {
71     Name = "Sid_Instance2"
72   }
73 }
74
75 # Elastic IP for VPN Endpoint
76 resource "aws_eip" "vpn_eip" {
77   instance = aws_instance.ins1.id
78   tags = {
79     Name = "Sid_VPN_EIP"
80   }
81 }
```

2. Create a VPN on AWS This resource.tf file contains the complete code to make a VPN. It consists of resources like vpc, customer gateway and vpn connection.

```
resource.tf
1  # Main VPC
2  resource "aws_vpc" "main" {
3      cidr_block      = "10.0.0.0/16"
4      enable_dns_support = true
5      enable_dns_hostnames = true
6      tags = {
7          Name = "Sid_VPC"
8      }
9  }
10
11 # Internet Gateway
12 resource "aws_internet_gateway" "igw" {
13     vpc_id = aws_vpc.main.id
14     tags = {
15         Name = "Sid_IGW"
16     }
17 }
18
19 # Route Table for Public Subnet
20 resource "aws_route_table" "public" {
21     vpc_id = aws_vpc.main.id
22
23     route {
24         cidr_block = "0.0.0.0/0"
25         gateway_id = aws_internet_gateway.igw.id
26     }
27
28     tags = {
29         Name = "Sid_Public_RT"
30     }
31 }
```

```
resource.tf
33 # Route Table Association
34 resource "aws_route_table_association" "public" {
35     subnet_id      = aws_subnet.public.id
36     route_table_id = aws_route_table.public.id
37 }
38
39 # VPN Gateway
40 resource "aws_vpn_gateway" "vpn_gw" {
41     vpc_id = aws_vpc.main.id
42     tags = {
43         Name = "Sid_VPN_Gateway"
44     }
45 }
46
47 # Customer Gateway (Using EC2's EIP)
48 resource "aws_customer_gateway" "cgw" {
49     bgp_asn      = 65000
50     ip_address    = aws_eip.vpn_eip.public_ip
51     type          = "ipsec.1"
52     tags = {
53         Name = "Sid_Customer_Gateway"
54     }
55 }
```

```

57 # VPN Connection
58 resource "aws_vpn_connection" "main" {
59     vpn_gateway_id      = aws_vpn_gateway.vpn_gw.id
60     customer_gateway_id = aws_customer_gateway.cgw.id
61     type                 = "ipsec.1"
62     static_routes_only  = true
63     tags = {
64         Name = "Sid_VPN_Connection"
65     }
66 }

```

3. Create a S3 Bucket Code to create a s3 bucket.

```

s3.tf
1 resource "aws_s3_bucket" "assignment_bucket" {
2     bucket = "r2142220666"
3     tags = {
4         Name          = "Sid_Assignment_Bucket"
5         Environment   = "Assignment"
6     }
7 }

```

4. Main.tf file to perform the above-mentioned tasks

```

main.tf
1 terraform {
2     required_providers {
3         aws = {
4             source = "hashicorp/aws"
5             version = "5.68.0"
6         }
7     }
8 }
9
10 provider "aws" {
11     access_key = "AKIA6GSNHCFAR2SWI2NN"
12     secret_key = "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"
13     region = "ap-south-1"
14 }
15

```

5. Terraform init to initialize the terraform folder which will have the aws provider.

```
PS G:\New Volume E\6th sem\System Provisioning Lab\Assignment-1> terraform init
Initializing the backend...
Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.68.0"...
- Installing hashicorp/aws v5.68.0...
- Installed hashicorp/aws v5.68.0 (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.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```

6. Terraform plan to see the resources that will be created.

```
PS G:\New Volume E\6th sem\System Provisioning Lab\Assignment-1> terraform plan
aws_vpc.main: Refreshing state... [id=vpc-04ff9b57c16aadbf]
aws_s3_bucket.assignment_bucket: Refreshing state... [id=r2142220666]
aws_internet_gateway.igw: Refreshing state... [id=igw-0e2e8738c0ed9ca43]
aws_vpn_gateway.vpn_gw: Refreshing state... [id=vgw-04e7657a0495cd1b1]
aws_subnet.public: Refreshing state... [id=subnet-0e26a936205a4d00d]
aws_security_group.vpn_sg: Refreshing state... [id=sg-039725890fd2770ce]
aws_route_table.public: Refreshing state... [id=rtb-0d67b64b84661baff]
aws_instance.ins2: Refreshing state... [id=i-0436d3c5e1c951f53]
aws_instance.ins1: Refreshing state... [id=i-0c7ffb55b094abc44]
aws_route_table_association.public: Refreshing state... [id=rtbassoc-0d7c070f171a7bf8f]
aws_eip.vpn_eip: Refreshing state... [id=eipalloc-0b7533407a3bdfed]
aws_customer_gateway.cgw: Refreshing state... [id=cgw-0c9a8b7812ecf9660]
aws_vpn_connection.main: Refreshing state... [id=vpn-08f2ede948ccd26ac]

No changes. Your infrastructure matches the configuration.
```

P.s. - I performed terraform plan after terraform apply so the resources were actually created. In practice, it is advised to perform terraform plan before terraform apply to see what resources will be created.

7. Terraform apply to create the mentioned resources.

```
PS G:\New Volume E\6th sem\System Provisioning Lab\Assignment-1> 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_customer_gateway.cgw will be created

```
+ resource "aws_customer_gateway" "cgw" {
+   arn           = (known after apply)
+   bgp_asn       = "65000"
+   id            = (known after apply)
+   ip_address     = (known after apply)
+   tags          = {
+     + "Name" = "Sid_Customer_Gateway"
+   }
+   tags_all       = {
+     + "Name" = "Sid_Customer_Gateway"
+   }
+   type          = "ipsec.1"
}
```

aws_eip.vpn_eip will be created

```
+ resource "aws_eip" "vpn_eip" {
+   allocation_id = (known after apply)
+   arn           = (known after apply)
+   association_id = (known after apply)
+   carrier_ip    = (known after apply)
+   customer_owned_ip = (known after apply)
+   domain        = (known after apply)
+   id            = (known after apply)
+   instance      = (known after apply)
+   network_border_group = (known after apply)
```

```
+   network_interface = (known after apply)
+   private_dns       = (known after apply)
+   private_ip        = (known after apply)
+   ptr_record        = (known after apply)
+   public_dns        = (known after apply)
+   public_ip         = (known after apply)
+   public_ipv4_pool  = (known after apply)
+   tags              = {
+     + "Name" = "Sid_VPN_EIP"
+   }
+   tags_all          = {
+     + "Name" = "Sid_VPN_EIP"
+   }
+   vpc                = (known after apply)
}
```

aws_instance.ins1 will be created

```
+ resource "aws_instance" "ins1" {
+   ami                     = "ami-0e35ddb05955cf57"
+   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)
+   iam_instance_profile    = (known after apply)
+   id                      = (known after apply)
+   instance_initiated_shutdown_behavior = (known after apply)
+   instance_lifecycle      = (known after apply)
```

```

+ instance_type = (known after apply)
+ instance_state = (known after apply)
+ instance_type = "t2.micro"
+ ipv6_address_count = (known after apply)
+ ipv6_addresses = (known after apply)
+ key_name = (known after apply)
+ monitoring = (known after apply)
+ outpost_arn = (known after apply)
+ password_data = (known after apply)
+ placement_group = (known after apply)
+ placement_partition_number = (known after apply)
+ primary_network_interface_id = (known after apply)
+ private_dns = (known after apply)
+ private_ip = (known after apply)
+ public_dns = (known after apply)
+ public_ip = (known after apply)
+ secondary_private_ips = (known after apply)
+ security_groups = (known after apply)
+ source_dest_check = true
+ spot_instance_request_id = (known after apply)
+ subnet_id = (known after apply)
+ tags = {
+   + "Name" = "Sid_VPN_Endpoint"
+ }
+ tags_all = {
+   + "Name" = "Sid_VPN_Endpoint"
+ }
+ tenancy = (known after apply)
+ user_data = (known after apply)
+ user_data_base64 = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids = (known after apply)

+ capacity_reservation_specification (known after apply)

```

```

+ cpu_options (known after apply)
+ ebs_block_device (known after apply)
+ enclave_options (known after apply)
+ ephemeral_block_device (known after apply)
+ instance_market_options (known after apply)
+ maintenance_options (known after apply)
+ metadata_options (known after apply)
+ network_interface (known after apply)
+ private_dns_name_options (known after apply)
+ root_block_device (known after apply)
}

# aws_instance.ins2 will be created
+ resource "aws_instance" "ins2" {
+   ami = "ami-0e35ddab05955cf57"
+   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)
+ iam_instance_profile        = (known after apply)
+ id                          = (known after apply)
+ instance_initiated_shutdown_behavior = (known after apply)
+ instance_lifecycle          = (known after apply)
+ instance_state              = (known after apply)
+ instance_type               = "t2.micro"
+ ipv6_address_count          = (known after apply)
+ ipv6_addresses              = (known after apply)
+ key_name                    = (known after apply)
+ monitoring                  = (known after apply)
+ outpost_arn                 = (known after apply)
+ password_data               = (known after apply)
+ placement_group             = (known after apply)
+ placement_partition_number  = (known after apply)
+ primary_network_interface_id = (known after apply)
+ private_dns                 = (known after apply)
+ private_ip                  = (known after apply)
+ public_dns                  = (known after apply)
+ public_ip                   = (known after apply)
+ secondary_private_ips       = (known after apply)
+ security_groups             = (known after apply)
+ source_dest_check           = true
+ spot_instance_request_id    = (known after apply)
+ subnet_id                   = (known after apply)
+ tags                        = {
+   + "Name" = "Sid_Instance2"
+ }
+ tags_all                    = {
+   + "Name" = "Sid_Instance2"
+ }
+ tenancy                     = (known after apply)
+ user_data                   = (known after apply)
+ user_data_base64           = (known after apply)

```

```

+ user_data_base64            = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids      = (known after apply)

+ capacity_reservation_specification (known after apply)

+ cpu_options (known after apply)

+ ebs_block_device (known after apply)

+ enclave_options (known after apply)

+ ephemeral_block_device (known after apply)

+ instance_market_options (known after apply)

+ maintenance_options (known after apply)

+ metadata_options (known after apply)

+ network_interface (known after apply)

+ private_dns_name_options (known after apply)

+ root_block_device (known after apply)
}

# aws_internet_gateway.igw will be created
+ resource "aws_internet_gateway" "igw" {
+   arn      = (known after apply)
+   id       = (known after apply)
+   owner_id = (known after apply)
+   tags     = {
+     + "Name" = "Sid_IGW"
+   }
+ }

```

```

+ tags_all = {
+   + "Name" = "Sid_IGW"
+ }
+ vpc_id = (known after apply)
}

# aws_route_table.public will be created
+ resource "aws_route_table" "public" {
+   arn = (known after apply)
+   id = (known after apply)
+   owner_id = (known after apply)
+   propagating_vgws = (known after apply)
+   route = [
+     + {
+       + cidr_block = "0.0.0.0/0"
+       + gateway_id = (known after apply)
+       # (11 unchanged attributes hidden)
+     },
+   ]
+   tags = {
+     + "Name" = "Sid_Public_RT"
+   }
+   tags_all = {
+     + "Name" = "Sid_Public_RT"
+   }
+   vpc_id = (known after apply)
}

# aws_route_table_association.public will be created
+ resource "aws_route_table_association" "public" {
+   id = (known after apply)
+   route_table_id = (known after apply)
+   subnet_id = (known after apply)
}

```

```

# aws_s3_bucket.assignment_bucket will be created
+ resource "aws_s3_bucket" "assignment_bucket" {
+   acceleration_status = (known after apply)
+   acl = (known after apply)
+   arn = (known after apply)
+   bucket = "R2142220666"
+   bucket_domain_name = (known after apply)
+   bucket_prefix = (known after apply)
+   bucket_regional_domain_name = (known after apply)
+   force_destroy = false
+   hosted_zone_id = (known after apply)
+   id = (known after apply)
+   object_lock_enabled = (known after apply)
+   policy = (known after apply)
+   region = (known after apply)
+   request_payer = (known after apply)
+   tags = {
+     + "Environment" = "Assignment"
+     + "Name" = "Sid_Assignment_Bucket"
+   }
+   tags_all = {
+     + "Environment" = "Assignment"
+     + "Name" = "Sid_Assignment_Bucket"
+   }
+   website_domain = (known after apply)
+   website_endpoint = (known after apply)

+ cors_rule (known after apply)

+ grant (known after apply)

+ lifecycle_rule (known after apply)

+ logging (known after apply)

```

```

# aws_subnet.public will be created
+ resource "aws_subnet" "public" {
  + arn                                = (known after apply)
  + assign_ipv6_address_on_creation    = false
  + availability_zone                  = "ap-south-1a"
  + availability_zone_id                = (known after apply)
  + cidr_block                          = "10.0.1.0/24"
  + enable_dns64                        = false
  + enable_resource_name_dns_a_record_on_launch = false
  + enable_resource_name_dns_aaaa_record_on_launch = false
  + id                                  = (known after apply)
  + ipv6_cidr_block_association_id      = (known after apply)
  + ipv6_native                          = false
  + map_public_ip_on_launch             = true
  + owner_id                            = (known after apply)
  + private_dns_hostname_type_on_launch = (known after apply)
  + tags                                = {
    + "Name" = "Sid_Public_Subnet"
  }
  + tags_all                            = {
    + "Name" = "Sid_Public_Subnet"
  }
  + vpc_id                              = (known after apply)
}

# aws_vpc.main will be created
+ resource "aws_vpc" "main" {
  + arn                                = (known after apply)
  + cidr_block                          = "10.0.0.0/16"
  + default_network_acl_id              = (known after apply)
  + default_route_table_id              = (known after apply)
  + default_security_group_id           = (known after apply)
  + dhcp_options_id                     = (known after apply)
  + enable_dns_hostnames                 = true
  + enable_dns_support                   = true
  + enable_network_address_usage_metrics = (known after apply)
  + id                                  = (known after apply)
  + instance_tenancy                     = "default"
  + ipv6_association_id                  = (known after apply)
}

```

```

# aws_vpn_connection.main will be created
+ resource "aws_vpn_connection" "main" {
  + arn                                = (known after apply)
  + core_network_arn                   = (known after apply)
  + core_network_attachment_arn         = (known after apply)
  + customer_gateway_configuration      = (sensitive value)
  + customer_gateway_id                 = (known after apply)
  + enable_acceleration                 = (known after apply)
  + id                                  = (known after apply)
  + local_ipv4_network_cidr             = (known after apply)
  + local_ipv6_network_cidr             = (known after apply)
  + outside_ip_address_type             = (known after apply)
  + remote_ipv4_network_cidr            = (known after apply)
  + remote_ipv6_network_cidr            = (known after apply)
  + routes                              = (known after apply)
  + static_routes_only                  = true
  + tags                                = {
    + "Name" = "Sid_VPN_Connection"
  }
  + tags_all                            = {
    + "Name" = "Sid_VPN_Connection"
  }
  + transit_gateway_attachment_id        = (known after apply)
  + tunnel1_address                     = (known after apply)
  + tunnel1_bgp_asn                     = (known after apply)
  + tunnel1_bgp_holdtime                = (known after apply)
  + tunnel1_cgw_inside_address          = (known after apply)
  + tunnel1_inside_cidr                 = (known after apply)
  + tunnel1_inside_ipv6_cidr            = (known after apply)
  + tunnel1_preshared_key                = (sensitive value)
  + tunnel1_vgw_inside_address          = (known after apply)
  + tunnel2_address                     = (known after apply)
  + tunnel2_bgp_asn                     = (known after apply)
  + tunnel2_bgp_holdtime                = (known after apply)
  + tunnel2_cgw_inside_address          = (known after apply)
}

```

```
# aws_vpn_gateway.vpn_gw will be created
+ resource "aws_vpn_gateway" "vpn_gw" {
  + amazon_side_asn = (known after apply)
  + arn              = (known after apply)
  + id              = (known after apply)
  + tags            = {
    + "Name" = "Sid_VPN_Gateway"
  }
  + tags_all        = {
    + "Name" = "Sid_VPN_Gateway"
  }
  + vpc_id          = (known after apply)
}

Plan: 13 to add, 0 to change, 0 to destroy.

Changes to Outputs:
+ s3_bucket_name      = "R2142220666"
+ vpn_connection_id    = (known after apply)
+ vpn_endpoint_ip      = (known after apply)
+ vpn_tunnel_details   = (known after apply)

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.main: Creating...
aws_s3_bucket.assignment_bucket: Creating...
aws_vpc.main: Still creating... [10s elapsed]
aws_vpc.main: Creation complete after 12s [id=vpc-04ff9b57c16aadbf]
aws_internet_gateway.igw: Creating...
aws_vpn_gateway.vpn_gw: Creating...
aws_subnet.public: Creating...
aws_security_group.vpn_sg: Creating...
aws_internet_gateway.igw: Creation complete after 0s [id=igw-0e2e8738c0ed9ca43]
aws_route_table.public: Creating...
aws_route_table.public: Creation complete after 1s [id=rtb-0d67b64b84661baff]
aws_security_group.vpn_sg: Creation complete after 2s [id=sg-039725890fd2770ce]
aws_vpn_gateway.vpn_gw: Still creating... [10s elapsed]
aws_subnet.public: Still creating... [10s elapsed]
```

```
aws_route_table.public: Creation complete after 1s [id=rtb-0d67b64b84661baff]
aws_security_group.vpn_sg: Creation complete after 2s [id=sg-039725890fd2770ce]
aws_vpn_gateway.vpn_gw: Still creating... [10s elapsed]
aws_subnet.public: Still creating... [10s elapsed]
aws_subnet.public: Creation complete after 11s [id=subnet-0e26a936205a4d00d]
aws_route_table.association.public: Creating...
aws_instance.ins2: Creating...
aws_instance.ins1: Creating...
aws_route_table.association.public: Creation complete after 0s [id=rtbassoc-0d7c070f171a7bf8f]
aws_vpn_gateway.vpn_gw: Still creating... [20s elapsed]
aws_instance.ins2: Still creating... [10s elapsed]
aws_instance.ins1: Still creating... [10s elapsed]
aws_instance.ins1: Creation complete after 13s [id=i-0c7ffb55b094abc44]
aws_eip.vpn_eip: Creating...
aws_instance.ins2: Creation complete after 13s [id=i-0436d3c5e1c951f53]
aws_eip.vpn_eip: Creation complete after 1s [id=eipalloc-0b7533407a3bdfeed]
aws_customer_gateway.cgw: Creating...
aws_vpn_gateway.vpn_gw: Still creating... [30s elapsed]
aws_customer_gateway.cgw: Still creating... [10s elapsed]
aws_customer_gateway.cgw: Creation complete after 11s [id=cgw-0c9a8b7812ecf9660]
aws_vpn_gateway.vpn_gw: Still creating... [40s elapsed]
aws_vpn_gateway.vpn_gw: Creation complete after 44s [id=vgw-04e7657a0495cd1b1]
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... [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: Creation complete after 3m16s [id=vpn-08f2ede948ccd26ac]
```

```
aws_s3_bucket.assignment_bucket: Creating...
aws_s3_bucket.assignment_bucket: Creation complete after 2s [id=r2142220666]
```

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Resources Created -

1. Instances

Instances (2/3) [Info](#) Last updated 17 minutes ago [Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

[All states](#) < 1 > [Settings](#)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	kakfa	i-0d181f74427480e81	Stopped	t2.micro	-	View alarms
<input checked="" type="checkbox"/>	Sid_Instance2	i-0436d3c5e1c951f53	Running	t2.micro	2/2 checks passed	View alarms
<input checked="" type="checkbox"/>	Sid_VPN_Endp...	i-0c7ffb55b094abc44	Running	t2.micro	2/2 checks passed	View alarms

2. S3 Bucket

[General purpose buckets](#) [Directory buckets](#)

General purpose buckets (1) [Info](#) [All AWS Regions](#) [Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Buckets are containers for data stored in S3.

< 1 > [Settings](#)

	Name	AWS Region	IAM Access Analyzer	Creation date
<input type="radio"/>	r2142220666	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	April 25, 2025, 03:40:08 (UTC+05:30)

3. Customer Gateway

Customer gateways (1) [Info](#) [Refresh](#) [Actions](#) [Create customer gateway](#)

< 1 > [Settings](#)

	Name	Customer gateway ID	State	BGP ASN	IP address
<input type="radio"/>	Sid_Customer_Gate...	cgw-0c9a8b7812ecf9660	Available	65000	13.202.87.1

4. VPC

Your VPCs (2) [Info](#) Last updated 1 minute ago [Refresh](#) [Actions](#) [Create VPC](#)

< 1 > [Settings](#)

	Name	VPC ID	State	Block Public...	IPv4 CIDR
<input type="checkbox"/>	-	vpc-077a2fb10879758de	Available	Off	172.31.0.0/16
<input type="checkbox"/>	Sid_VPC	vpc-04ff9b57c16aadb1f	Available	Off	10.0.0.0/16

5. VPN Connections

VPN connections (1) [Info](#)



Actions ▾

Download configuration

Create VPN connection

< 1 > ⚙

	Name ↗	VPN ID	State	Virtual private gateway	Transit gate
<input type="radio"/>	Sid_VPN_Connection	vpn-08f2ede948ccd26ac	Available	vgw-04e7657a0495cd1b1	-

Then use terraform destroy to clean up all the resources.

```
PS G:\New Volume E\6th sem\System Provisioning Lab\Assignment-1> terraform destroy
aws_vpc.main: Refreshing state... [id=vpc-04ff9b57c16aadb1f]
aws_s3_bucket.assignment_bucket: Refreshing state... [id=r2142220666]
aws_vpn_gateway.vpn_gw: Refreshing state... [id=vgw-04e7657a0495cd1b1]
aws_internet_gateway.igw: Refreshing state... [id=igw-0e2e8738c0ed9ca43]
aws_subnet.public: Refreshing state... [id=subnet-0e26a936205a4d00d]
aws_security_group.vpn_sg: Refreshing state... [id=sg-039725890fd2770ce]
aws_route_table.public: Refreshing state... [id=rtb-0d67b64b84661baff]
aws_route_table_association.public: Refreshing state... [id=rtbassoc-0d7c070f171a7bf8f]
aws_instance.ins2: Refreshing state... [id=i-0436d3c5e1c951f53]
aws_instance.ins1: Refreshing state... [id=i-0c7ffb5b094abc44]
aws_eip.vpn_eip: Refreshing state... [id=eipalloc-0b7533407a3bdfed]
aws_customer_gateway.cgw: Refreshing state... [id=cgw-0c9a8b7812ecf9660]
aws_vpn_connection.main: Refreshing state... [id=vpn-08f2ede948ccd26ac]

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

Terraform will perform the following actions:

# aws_customer_gateway.cgw will be destroyed
- resource "aws_customer_gateway" "cgw" {
  - arn          = "arn:aws:ec2:ap-south-1:976193261889:customer-gateway/cgw-0c9a8b7812ecf9660" -> null
  - bgp_asn      = "65000" -> null
  - id           = "cgw-0c9a8b7812ecf9660" -> null
  - ip_address   = "13.202.87.220" -> null
  - tags         = {
    - "Name" = "Sid_Customer_Gateway"
  } -> null
  - tags_all     = {
    - "Name" = "Sid_Customer_Gateway"
  } -> null
}
```

```
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_route_table_association.public: Destroying... [id=rtbassoc-0d7c070f171a7bf8f]
aws_s3_bucket.assignment_bucket: Destroying... [id=r2142220666]
aws_instance.ins2: Destroying... [id=i-0436d3c5e1c951f53]
aws_vpn_connection.main: Destroying... [id=vpn-08f2ede948ccd26ac]
aws_route_table_association.public: Destruction complete after 1s
aws_route_table.public: Destroying... [id=rtb-0d67b64b84661baff]
aws_route_table.public: Destruction complete after 0s
aws_s3_bucket.assignment_bucket: Destruction complete after 1s
aws_internet_gateway.igw: Destroying... [id=igw-0e2e8738c0ed9ca43]
aws_vpn_connection.main: Still destroying... [id=vpn-08f2ede948ccd26ac, 10s elapsed]
aws_instance.ins2: Still destroying... [id=i-0436d3c5e1c951f53, 10s elapsed]
aws_vpn_connection.main: Destruction complete after 11s
```

```
aws_subnet.public: Destroying... [id=subnet-0e26a936205a4d00d]
aws_security_group.vpn_sg: Destroying... [id=sg-039725890fd2770ce]
aws_subnet.public: Destruction complete after 1s
aws_security_group.vpn_sg: Destruction complete after 1s
aws_vpc.main: Destroying... [id=vpc-04ff9b57c16aadb1f]
aws_vpc.main: Destruction complete after 0s
```

```
Destroy complete! Resources: 13 destroyed.
PS G:\New Volume E\6th sem\System Provisioning Lab\Assignment-1> |
```