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CREATE VPC , 2 SUBNET , 1 PRIVATE AND 1 PUBLIC , 2 ROUTE TABLE AND 1 INTERNET GATEWAY

- VPC CODE

```
vpc.tf        ×

vpc >  vpc.tf >  resource "aws_internet_gateway" "igw"
1    resource "aws_vpc" "myvpc" {
2        cidr_block = "10.0.0.0/16"
3        tags = {
4            Name = "my terraformvpc"
5        }
6    }
7
8    resource "aws_subnet" "PublicSubnet" {
9        vpc_id = aws_vpc.myvpc.id
10       cidr_block = "10.0.1.0/24"
11   }
12
13   resource "aws_subnet" "PrivateSubnet" {
14       vpc_id = aws_vpc.myvpc.id
15       cidr_block = "10.0.2.0/24"
16   }
17
18   resource "aws_internet_gateway" "igw" {
19       vpc_id = aws_vpc.myvpc.id
20   }
21
22   resource "aws_route_table" "PublicRT" {
23       vpc_id = aws_vpc.myvpc.id
24       route {
25           cidr_block = "0.0.0.0/0"
26           gateway_id = aws_internet_gateway.igw.id
27       }
28   }
29
30   resource "aws_route_table_association" "PublicRTassociation" {
31       subnet_id = aws_subnet.PublicSubnet.id
32       route_table_id = aws_route_table.PublicRT.id
```

- ## TERRAFORM PLAN

```
commands will detect it and remind you to do so if necessary.
vaibhav@DESKTOP-P3NSBEM:/mnt/c/terra/vpc$ terraform plan
aws_vpc.myvpc: Refreshing state... [id=vpc-0e04fb68b30506c0d]
aws_internet_gateway.igw: Refreshing state... [id=igw-0eca6009cddea108f]
aws_subnet.PrivateSubnet: Refreshing state... [id=subnet-0e4104d1715f1ca26]
aws_subnet.PublicSubnet: Refreshing state... [id=subnet-0d4dd5b7b602fa679]
aws_route_table.PublicRT: Refreshing state... [id=rtb-0d6defe131b24023d]
aws_route_table_association.PublicRTassociation: Refreshing state... [id=rtbassoc-04405e425cefa0e98]

Note: Objects have changed outside of Terraform

Terraform detected the following changes made outside of Terraform since the last "terraform apply" which may have affected this plan:

  # aws_internet_gateway.igw has been deleted
  - resource "aws_internet_gateway" "igw" {
      - id       = "igw-0eca6009cddea108f" -> null
        # (4 unchanged attributes hidden)
    }

  # aws_route_table.PublicRT has been deleted
  - resource "aws_route_table" "PublicRT" {
      - id          = "rtb-0d6defe131b24023d" -> null
        # (6 unchanged attributes hidden)
    }

  # aws_subnet.PublicSubnet has been deleted
  - resource "aws_subnet" "PublicSubnet" {
      - id                                  = "subnet-0d4dd5b7b602fa679" -> null
        # (16 unchanged attributes hidden)
    }
```

```
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_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_all = (known after apply)
      + vpc_id   = (known after apply)
    }

  # aws_route_table.PublicRT will be created
  + resource "aws_route_table" "PublicRT" {
      + arn              = (known after apply)
      + id               = (known after apply)
      + owner_id         = (known after apply)
      + propagating_vgws = (known after apply)
      + route            = [
          + {
              + carrier_gateway_id         = ""
              + cidr_block                 = "0.0.0.0/0"
              + core_network_arn           = ""
              + destination_prefix_list_id = ""
              + egress_only_gateway_id     = ""
              + gateway_id                 = (known after apply)
              + ipv6_cidr_block            = ""
              + local_gateway_id           = ""
              + nat_gateway_id             = ""
              + network_interface_id       = ""
              + transit_gateway_id         = ""
              + vpc_endpoint_id            = ""
```

Snipping Tool
Screenshot copied to clipboard and saved
Select here to mark up and share.

```
+ resource "aws_subnet" "PrivateSubnet" {
    + arn                                            = (known after apply)
    + assign_ipv6_address_on_creation                = false
    + availability_zone                              = (known after apply)
    + availability_zone_id                           = (known after apply)
    + cidr_block                                     = "10.0.2.0/24"
    + 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                        = false
    + owner_id                                       = (known after apply)
    + private_dns_hostname_type_on_launch            = (known after apply)
    + tags_all                                       = (known after apply)
    + vpc_id                                         = (known after apply)
  }

# aws_subnet.PublicSubnet will be created
+ resource "aws_subnet" "PublicSubnet" {
    + arn                                            = (known after apply)
    + assign_ipv6_address_on_creation                = false
    + availability_zone                              = (known after apply)
    + 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                        = false
    + owner_id                                       = (known after apply)
    + private_dns_hostname_type_on_launch            = (known after apply)
    + vpc_id                                         = (known after apply)
  }

# aws_vpc.myvpc will be created
+ resource "aws_vpc" "myvpc" {
    + 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                 = (known after apply)
    + 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)
    + ipv6_cidr_block                      = (known after apply)
    + ipv6_cidr_block_network_border_group = (known after apply)
    + main_route_table_id                  = (known after apply)
    + owner_id                             = (known after apply)
    + tags                                 = {
        + "Name" = "my terraformvpc"
      }
    + tags_all                             = {
        + "Name" = "my terraformvpc"
      }
  }
```

- **TERRAFORM APPLY**

```
vaibhav@DESKTOP-P3NSBEM:/mnt/c/terra/vpc$ terraform apply -auto-approve
aws_vpc.myvpc: Refreshing state... [id=vpc-0e04fb68b30506c0d]
aws_subnet.PrivateSubnet: Refreshing state... [id=subnet-0e4104d1715f1ca26]
aws_subnet.PublicSubnet: Refreshing state... [id=subnet-0d4dd5b7b602fa679]
aws_internet_gateway.igw: Refreshing state... [id=igw-0eca6009cddea108f]
aws_route_table.PublicRT: Refreshing state... [id=rtb-0d6defe131b24023d]
aws_route_table_association.PublicRTassociation: Refreshing state... [id=rtbassoc-04405e425cefa0e98]
```

```
        }
    }

Plan: 6 to add, 0 to change, 0 to destroy.
aws_vpc.myvpc: Creating...
aws_vpc.myvpc: Creation complete after 5s [id=vpc-0ae9d69aa21de6c14]
aws_internet_gateway.igw: Creating...
aws_subnet.PrivateSubnet: Creating...
aws_subnet.PublicSubnet: Creating...
aws_subnet.PrivateSubnet: Creation complete after 3s [id=subnet-012ab716cb36df7bc]
aws_subnet.PublicSubnet: Creation complete after 3s [id=subnet-065b8f8d7c57e6732]
aws_internet_gateway.igw: Creation complete after 3s [id=igw-00805721ff2467f86]
aws_route_table.PublicRT: Creating...
aws_route_table.PublicRT: Creation complete after 3s [id=rtb-028719c88626132ad]
aws_route_table_association.PublicRTassociation: Creating...
aws_route_table_association.PublicRTassociation: Creation complete after 1s [id=rtbassoc-0a611bd91947b4aa5]

Apply complete! Resources: 6 added, 0 changed, 0 destroyed.
vaibhav@DESKTOP-P3NSBEM:/mnt/c/terra/vpc$
```

COMPLETE THE CREATE VPC , 2 SUBNET , 1 PRIVATE AND 1 PUBLIC , 2 ROUTE TABLE AND 1 INTERNET GATEWAY.