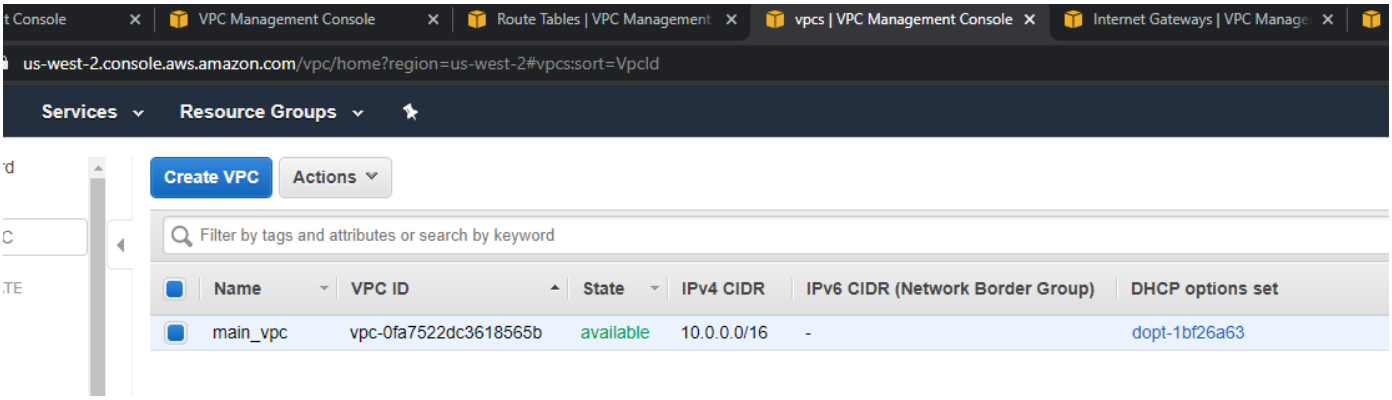
VPC Creation:

```
resource "aws_vpc" "main_vpc" {
  cidr_block       = "10.0.0.0/16"
  tags = {
    Name = "main_vpc"
  }
}
```

AWS /VPC:



Subnetting:

2 Public and 2 private subnets were created with each being in a different AZ

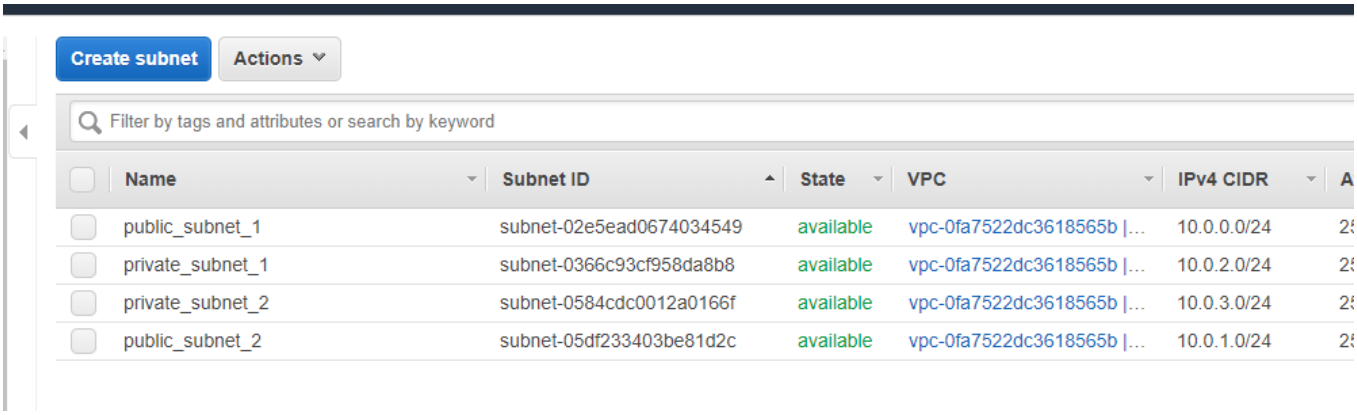
```
resource "aws_subnet" "public_subnet_1" {
  vpc_id     = "${aws_vpc.main_vpc.id}"
  cidr_block = "10.0.0.0/24"
  map_public_ip_on_launch = "true"
  availability_zone = "us-west-2a"

  tags = {
    Name = "public_subnet_1"
  }
}
```

```
resource "aws_subnet" "public_subnet_2" {
  vpc_id     = "${aws_vpc.main_vpc.id}"
  cidr_block = "10.0.1.0/24"
  availability_zone = "us-west-2b"
  map_public_ip_on_launch = "true"

  tags = {
    Name = "public_subnet_2"
  }
}
```

```
1 references
resource "aws_subnet" "private_subnet_1" {
  vpc_id     = "${aws_vpc.main_vpc.id}"
  cidr_block = "10.0.2.0/24"
  availability_zone = "us-west-2c"

  tags = {
    Name = "private_subnet_1"
  }
}
```

```
1 references
resource "aws_subnet" "private_subnet_2" {
  vpc_id     = "${aws_vpc.main_vpc.id}"
  cidr_block = "10.0.3.0/24"
  availability_zone = "us-west-2d"

  tags = {
    Name = "private_subnet_2"
  }
}
```

AWS /VPC/Subnets:



Route Tables:

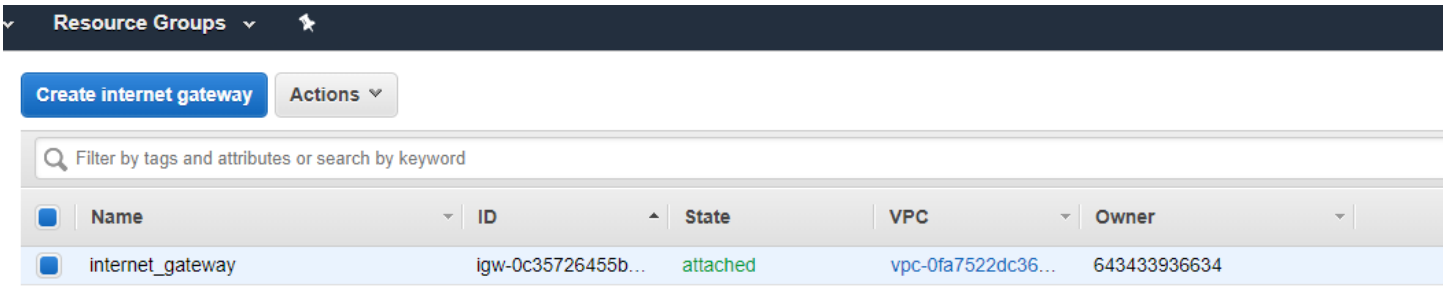
```
2 references
resource "aws_route_table" "public_route_table" {
  vpc_id      ="${aws_vpc.main_vpc.id}"

  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = "${aws_internet_gateway.internet_gateway.id}"
  }

  tags = {
    Name = "public_route_table"
  }
}
```

```
2 references
resource "aws_route_table" "private_route_table" {
  vpc_id      = "${aws_vpc.main_vpc.id}"

  tags = {
    Name = "private_route_table"
  }
}
```

Internet Gateway:

```
resource "aws_internet_gateway" "internet_gateway" {
  vpc_id      = "${aws_vpc.main_vpc.id}"

  tags = {
    Name = "internet_gateway"
  }
}
```

AWS /VPC/Internet Gateways:



Route Tables:

2 Route tables were created, one for public subnets and one for private subnets

```
2 references
resource "aws_route_table" "public_route_table" {
  vpc_id      ="${aws_vpc.main_vpc.id}"

  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = "${aws_internet_gateway.internet_gateway.id}"
  }

  tags = {
    Name = "public_route_table"
  }
}
```

```
resource "aws_route_table" "private_route_table" {
  vpc_id      = "${aws_vpc.main_vpc.id}"

  tags = {
    Name = "private_route_table"
  }
}
```

Associating route tables with subnets:

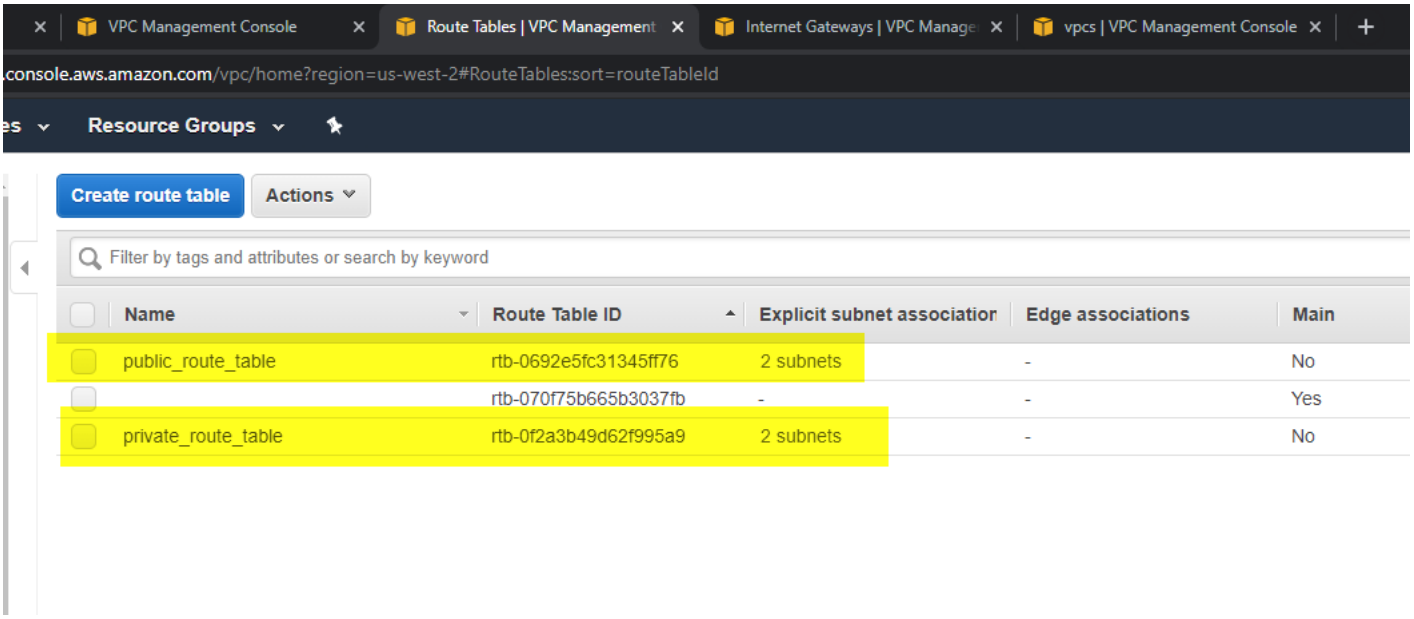
```
0 references
resource "aws_route_table_association" "public_association_1" {
  subnet_id      = "${aws_subnet.public_subnet_1.id}"
  route_table_id = "${aws_route_table.public_route_table.id}"
}
```

```
0 references
resource "aws_route_table_association" "public_association_2" {
  subnet_id      = "${aws_subnet.public_subnet_2.id}"
  route_table_id = "${aws_route_table.public_route_table.id}"
}
```

```
0 references
resource "aws_route_table_association" "private_association_1" {
  subnet_id      = "${aws_subnet.private_subnet_1.id}"
  route_table_id = "${aws_route_table.private_route_table.id}"
}
```

```
0 references
resource "aws_route_table_association" "private_association_2" {
  subnet_id      = "${aws_subnet.private_subnet_2.id}"
  route_table_id = "${aws_route_table.private_route_table.id}"
}
```

Final result on AWS:


VPC Management Console
Route Tables | VPC Management
Internet Gateways | VPC Manage
vpcs | VPC Management Console
console.aws.amazon.com/vpc/home?region=us-west-2#RouteTables:sort=routeTableId
Resource Groups
Create route table
Actions
Filter by tags and attributes or search by keyword
Name
Route Table ID
Explicit subnet association
Edge associations
Main
public_route_table
rtb-0692e5fc31345ff76
2 subnets
-
No
rtb-070f75b665b3037fb
-
-
Yes
private_route_table
rtb-0f2a3b49d62f995a9
2 subnets
-
No