Lesson 05 Demo 05

Configuring Subnets, Route Table, and NAT

Objective: To create a Virtual Private Cloud (VPC) on AWS, set up subnets, configure route tables, and create a Network Address Translation (NAT) gateway for secure and efficient network management

Tools required: Amazon workspaces

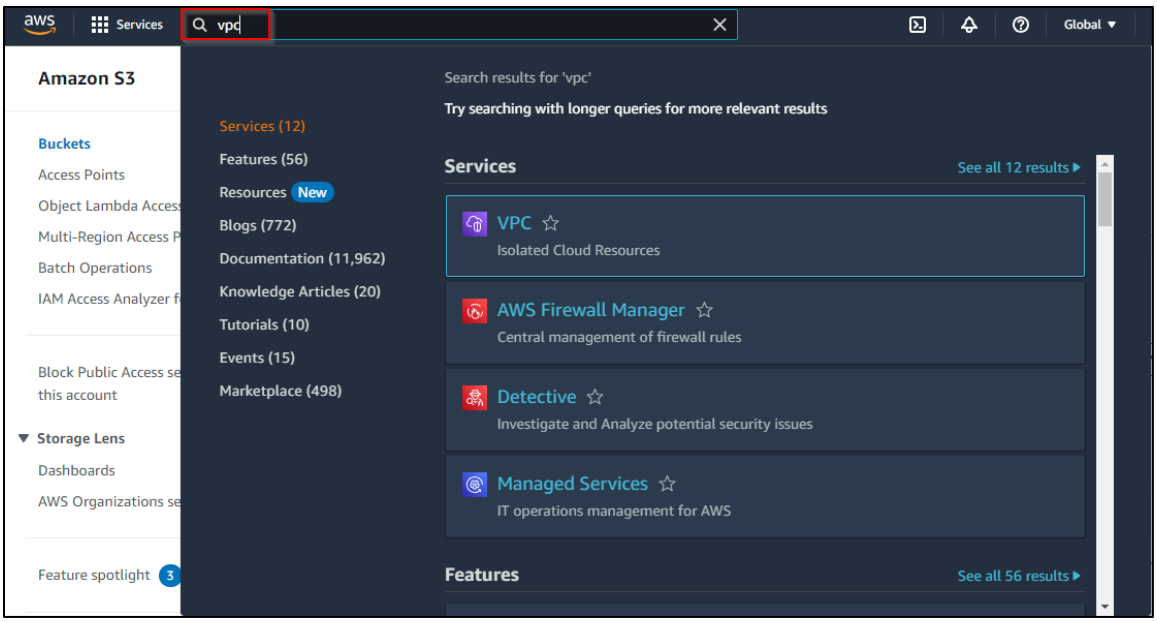
Prerequisites: Amazon account

Steps to be followed:

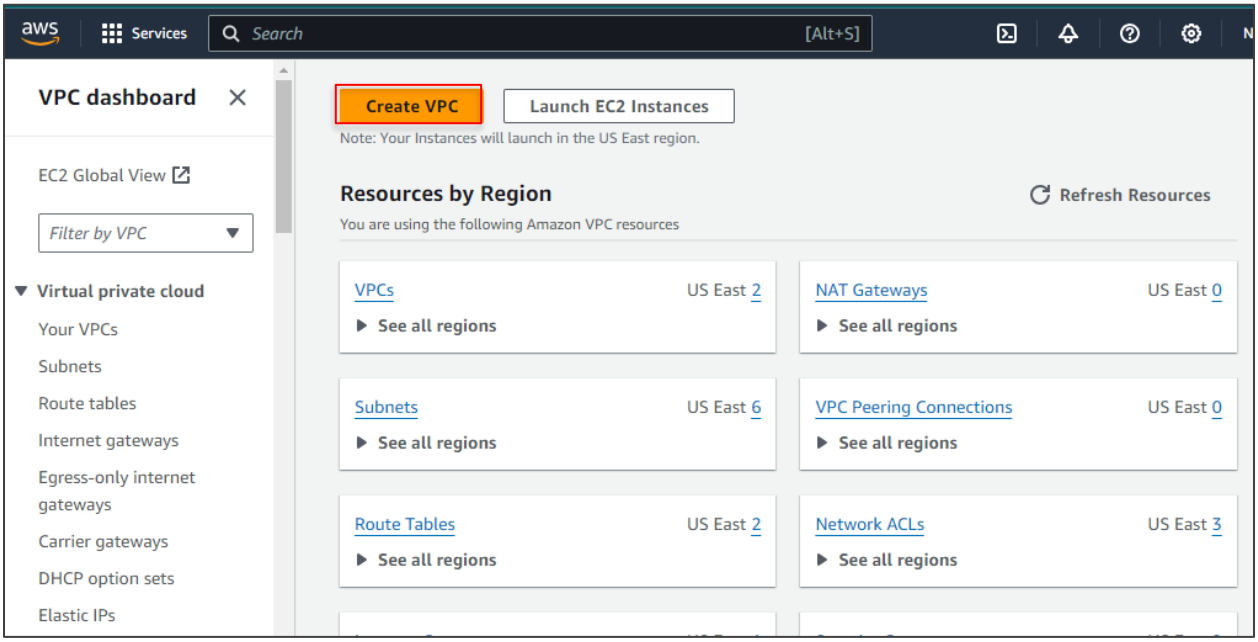
1. Create a VPC
2. Create Internet gateways
3. Create Subnets
4. Create a route table and NAT

Step 1: Create a VPC

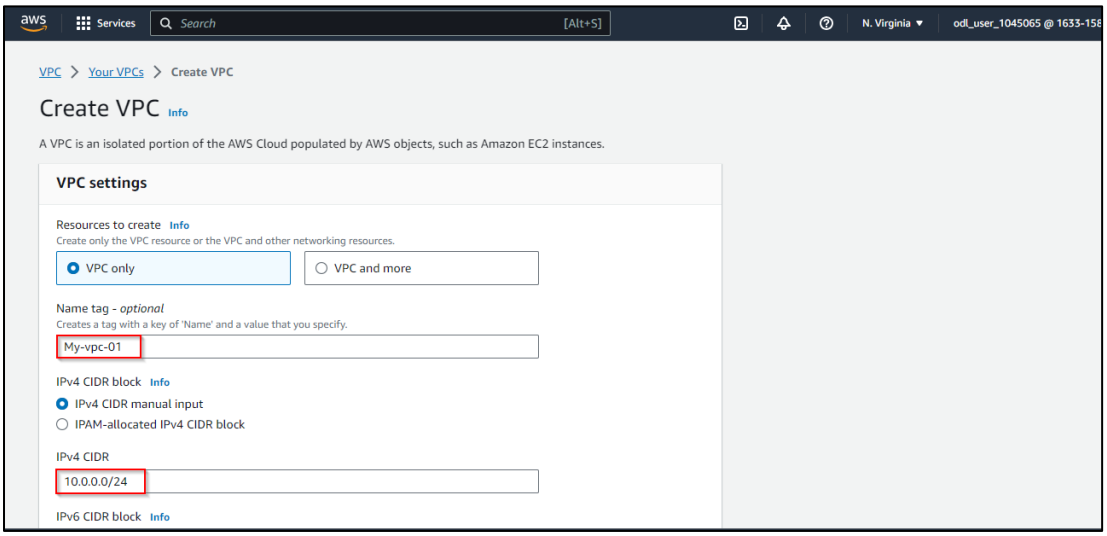
1.1 Navigate to the AWS Console home, search for and select **VPC**



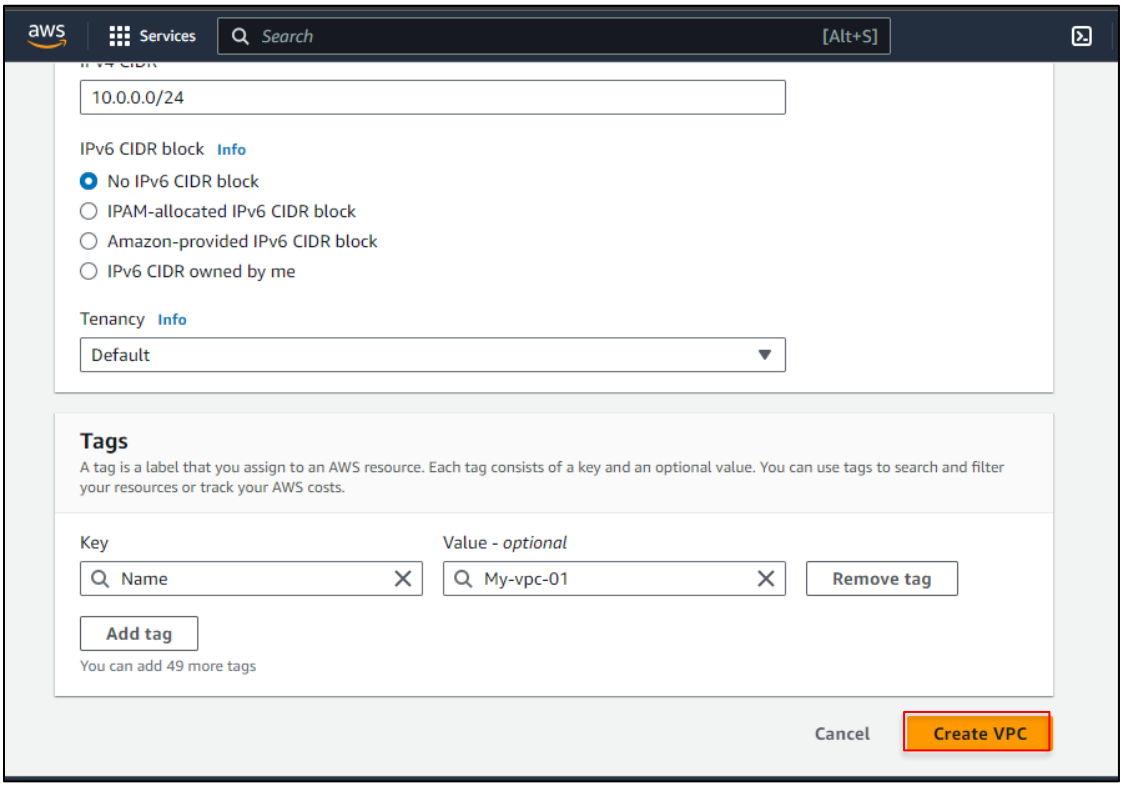
1.2 Click on **Create VPC**

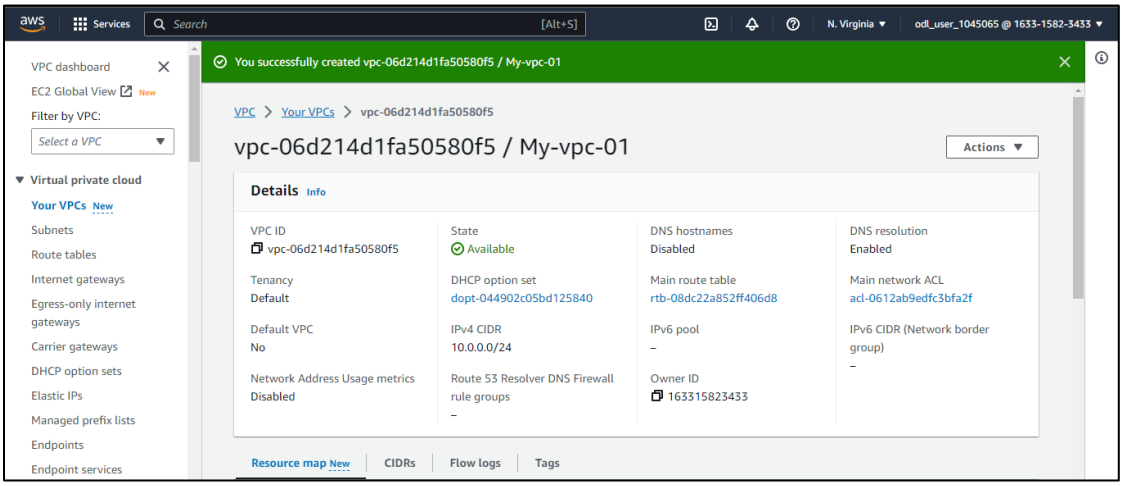


1.3 Enter the VPC Name as **My-vpc-01** and IPv4 CIDR as **10.0.0.0/24**



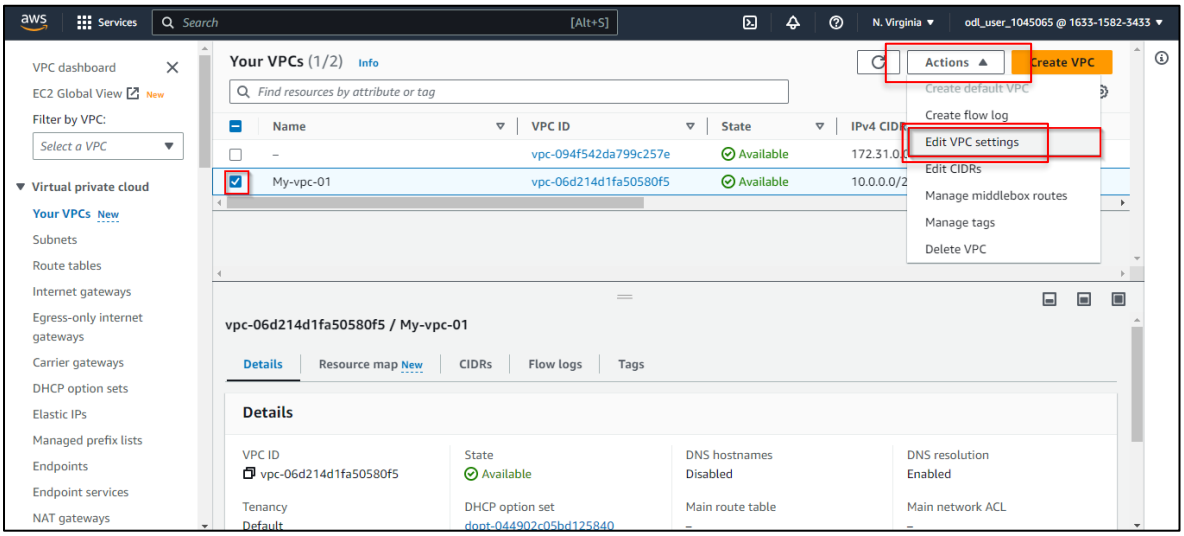
1.4 Click on **Create VPC**



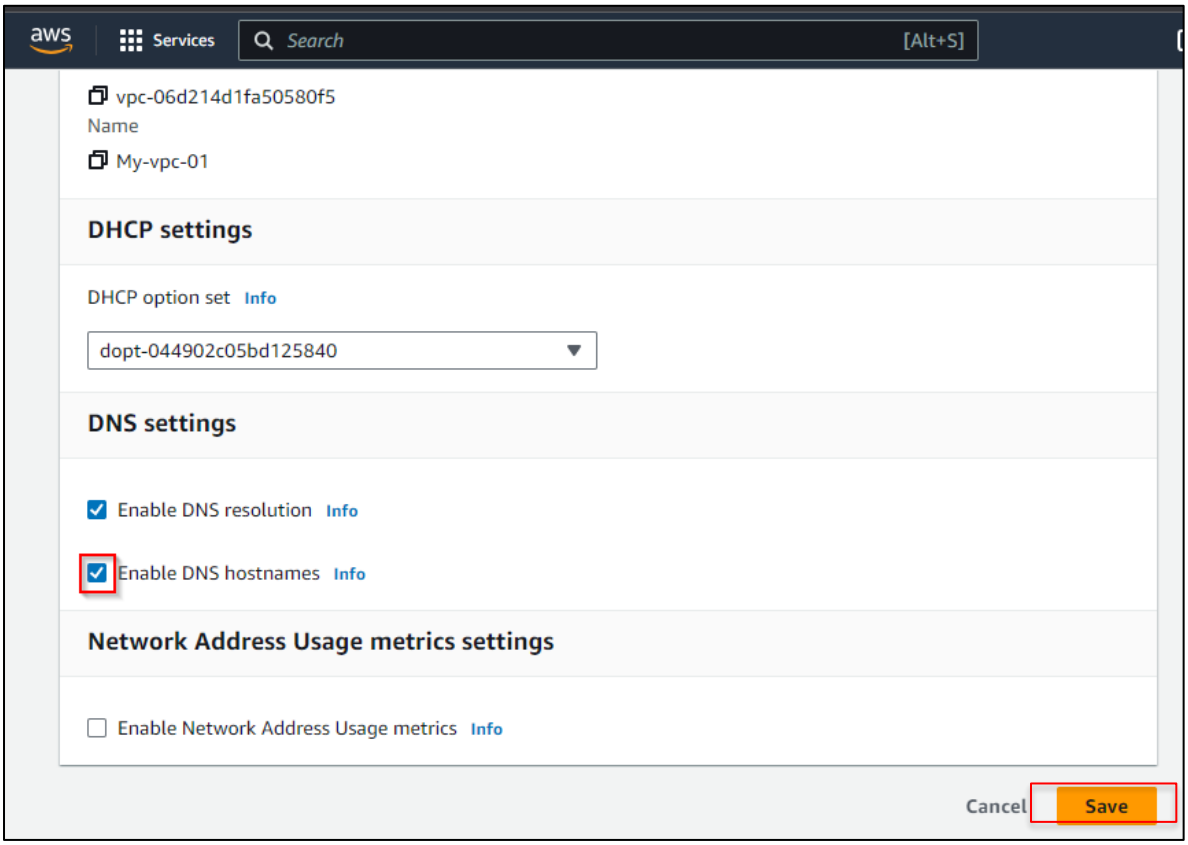


The VPC is successfully created.

1.5 Select the VPC, click on **Edit VPC settings** under **Actions**

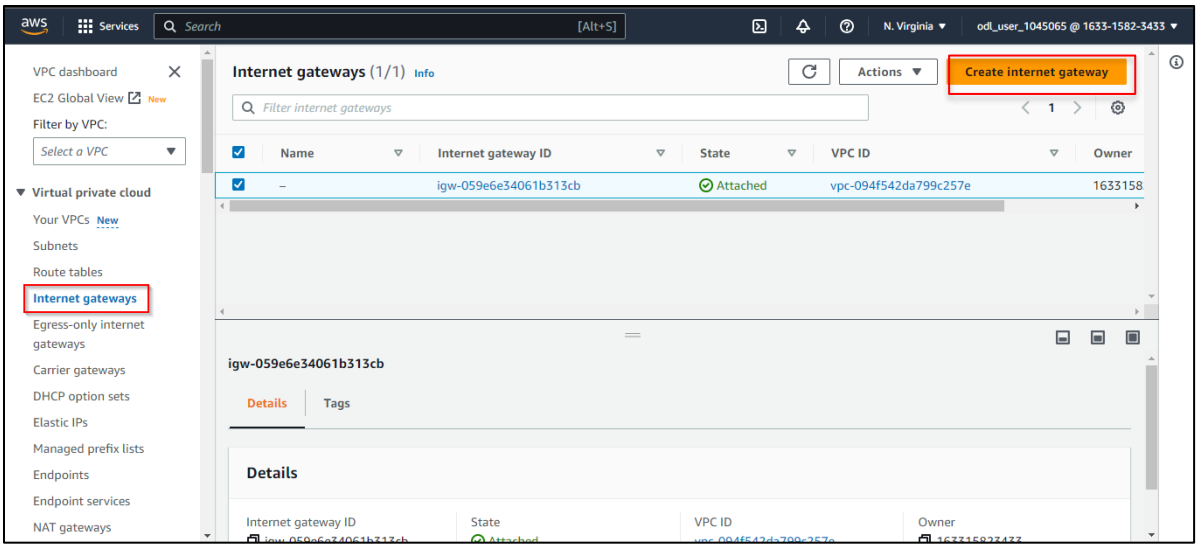


1.6 Select **Enable DNS hostnames** and then click on **Save**

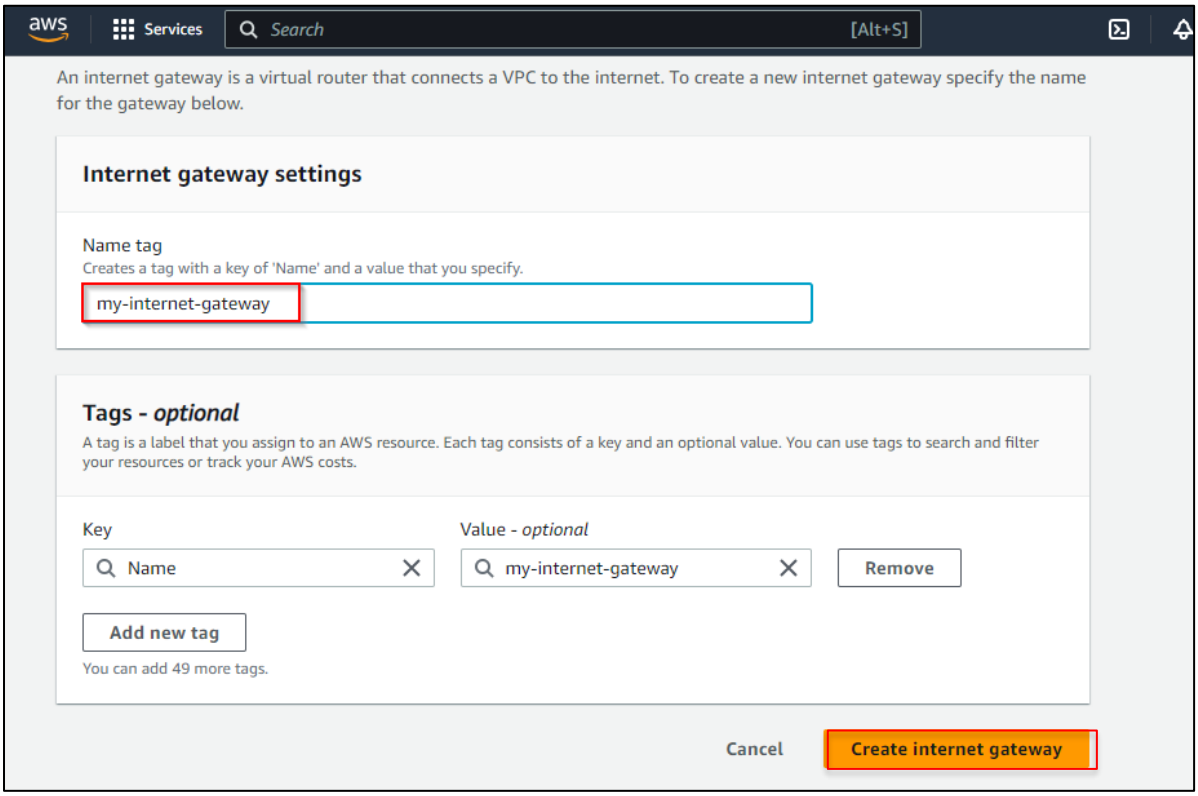


Step 2: Create Internet gateways

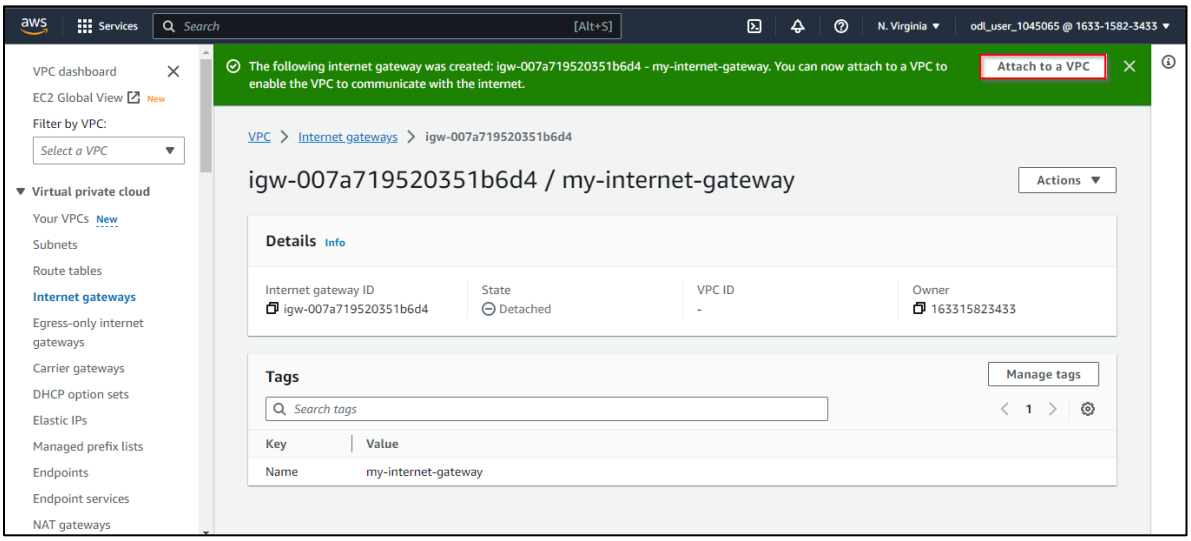
2.1 Navigate to **Internet gateways** under Virtual private cloud in the VPC dashboard, then click on **Create internet gateway**



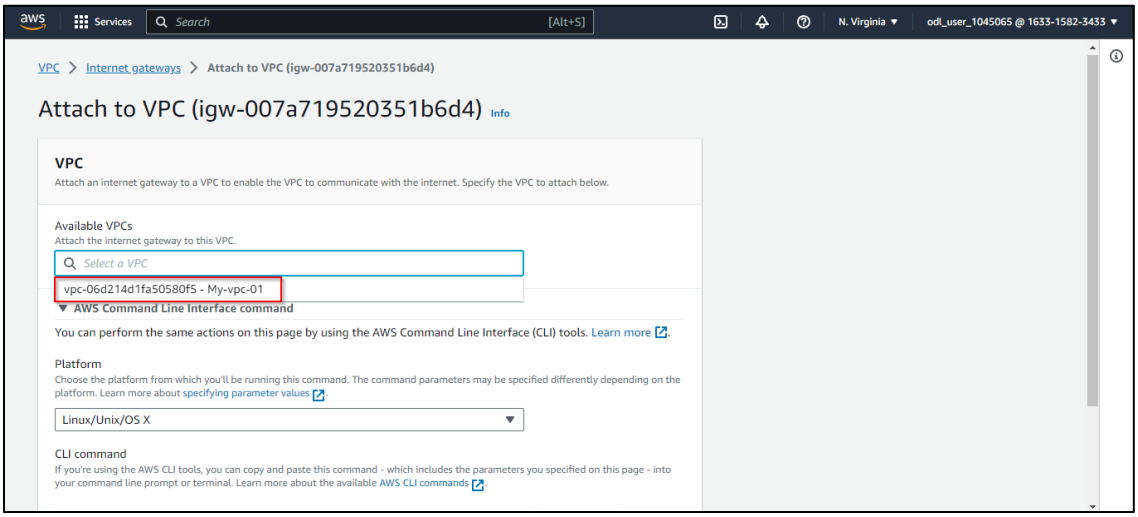
2.2 Name it as **my-internet-gateway,** and click on **Create internet gateway**



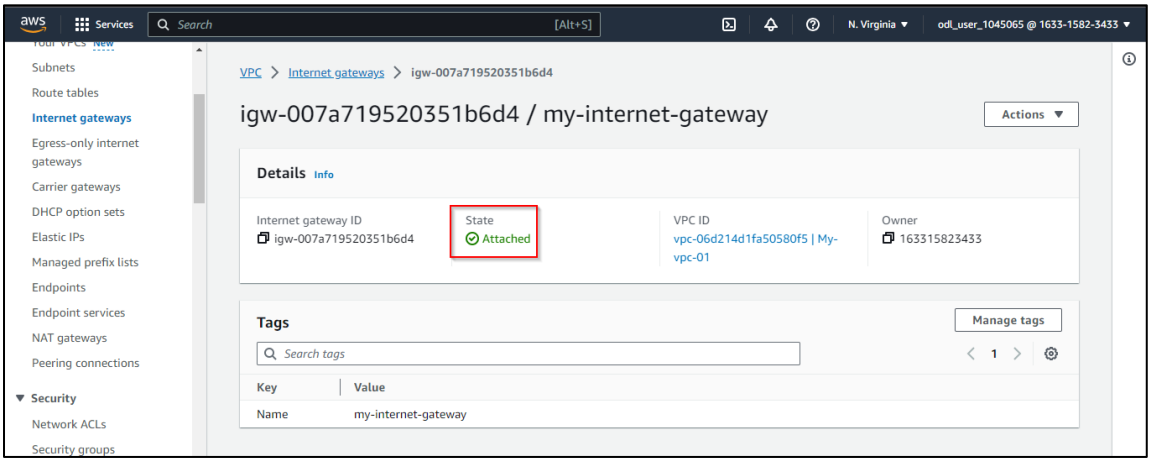
2.3 Click on **Attach to a VPC**



2.4 Select **Available VPCs**



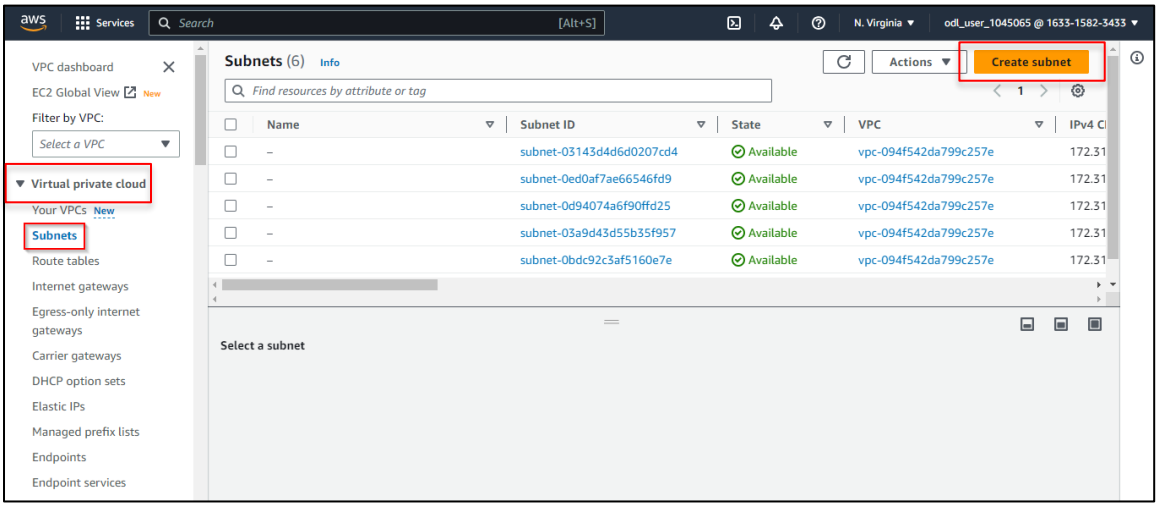
2.5 Click on **Attach internet gateway**



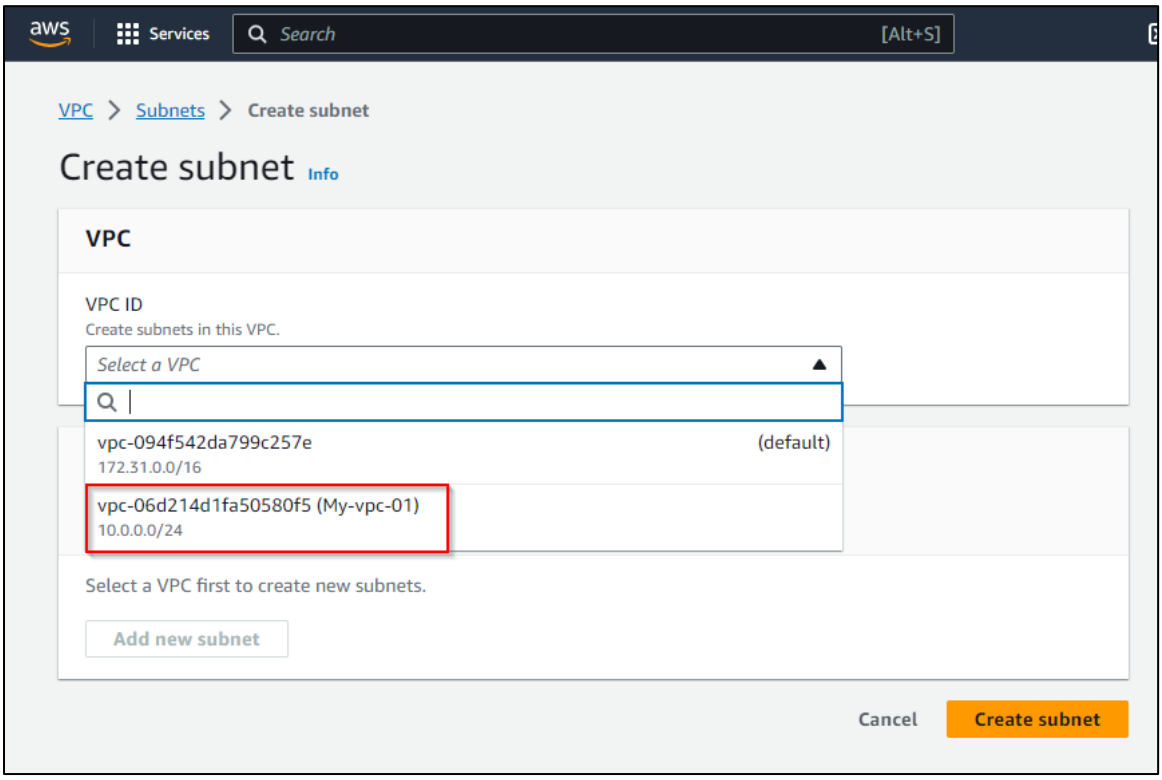
The VPC is successfully attached.

Step 3: Create Subnets

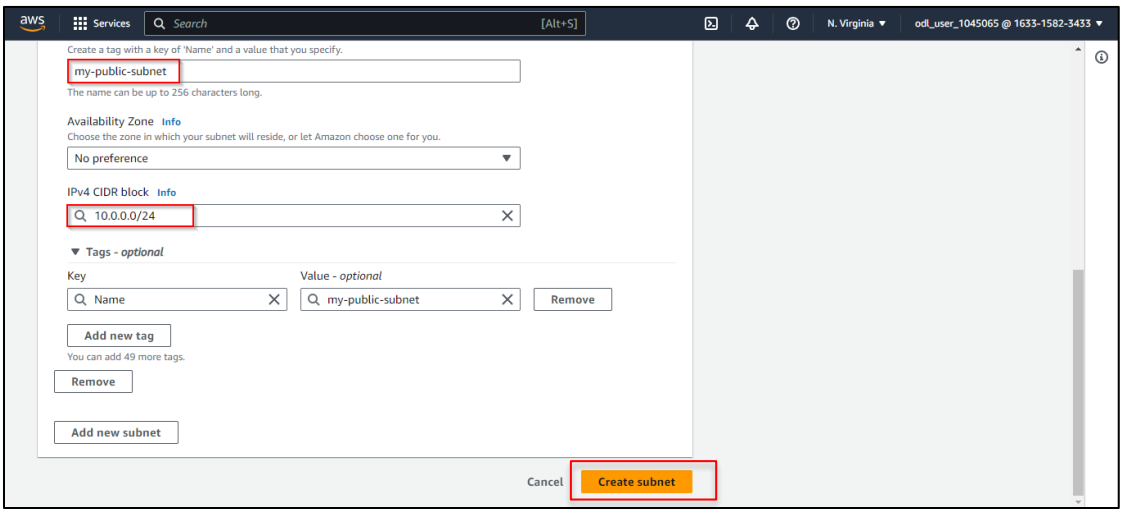
3.1 Navigate to **Subnets** under **Virtual private cloud** in the VPC dashboard, then click on **Create subnet**

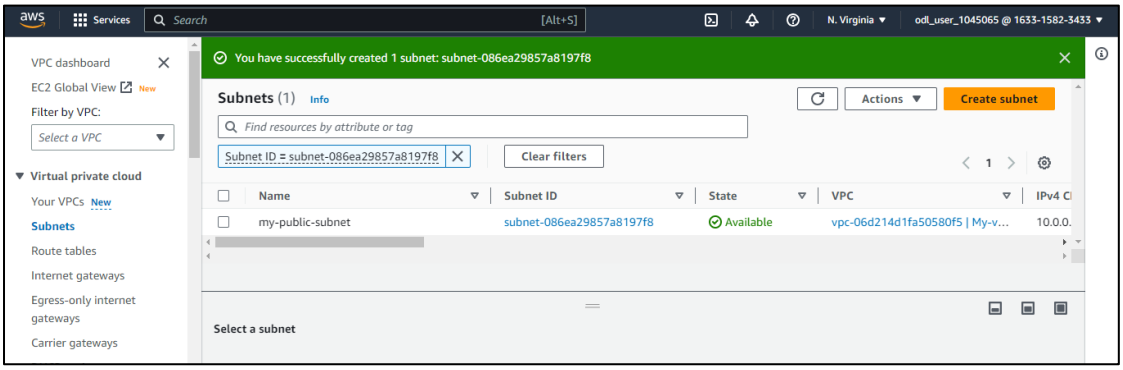


3.2 Select **My-vpc-01** in the **VPC ID**



3.3 Enter the name as **my-public-subnet** and **IPv4 CIDR block** as **10.0.0.0/24,** then click on **Create subnet**

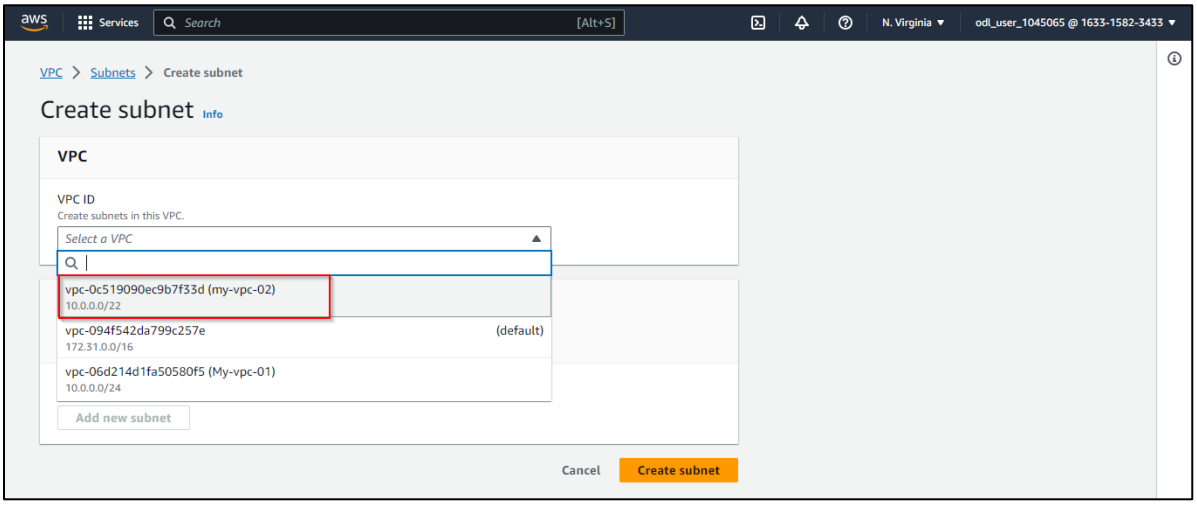




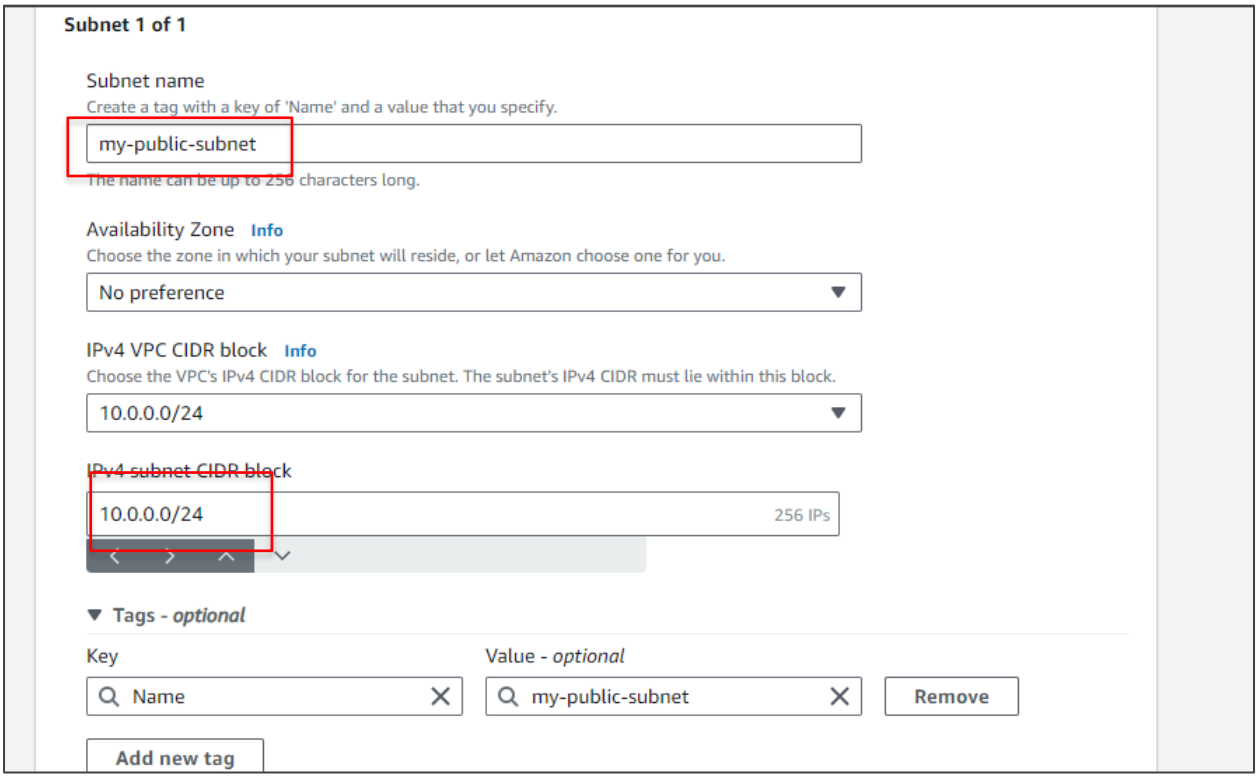
The subnet is created successfully.

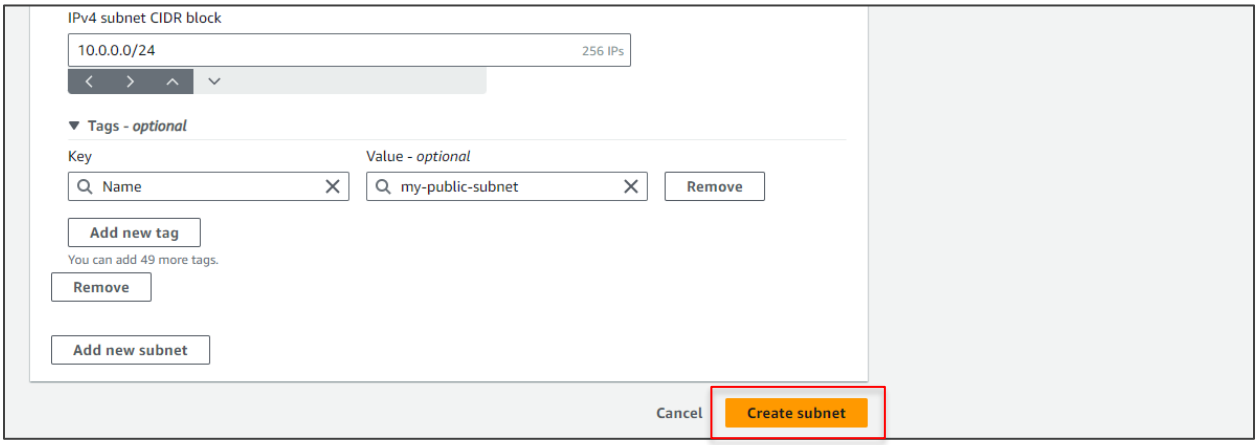
Now, create a **VPC** named **my-vpc-02** for the private subnet by following the previous steps (1.2 to 1.6). Enter the **Ipv4 CIDR** as **10.0.0.0/22** during VPC creation.

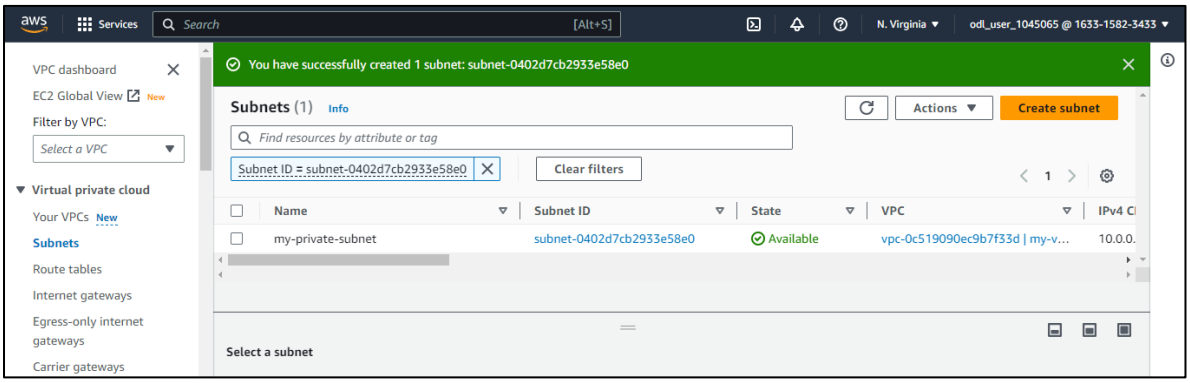
3.4 Click on **my-vpc-02**



3.5 Enter subnet name as **my-private-subnet** and **IPv4 subnet CIDR block** as **10.0.0.0/22**, then click on **Create subnet**



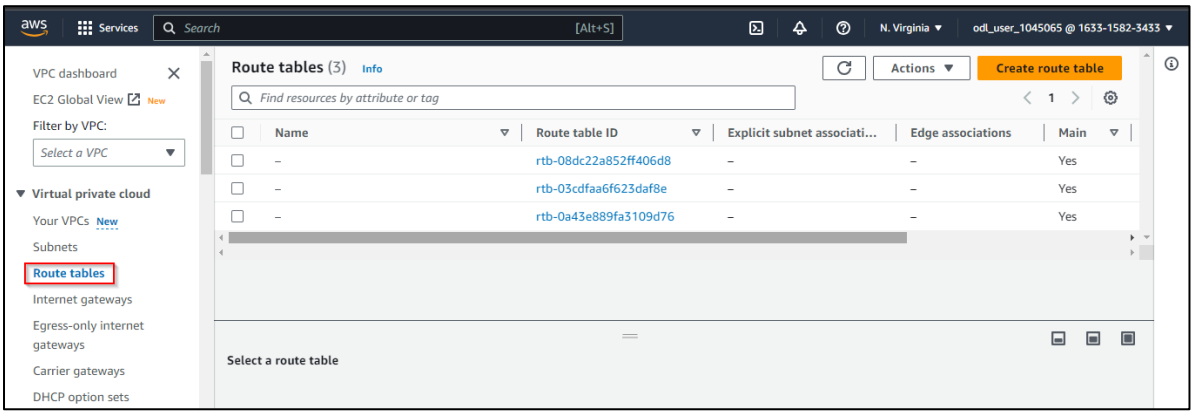




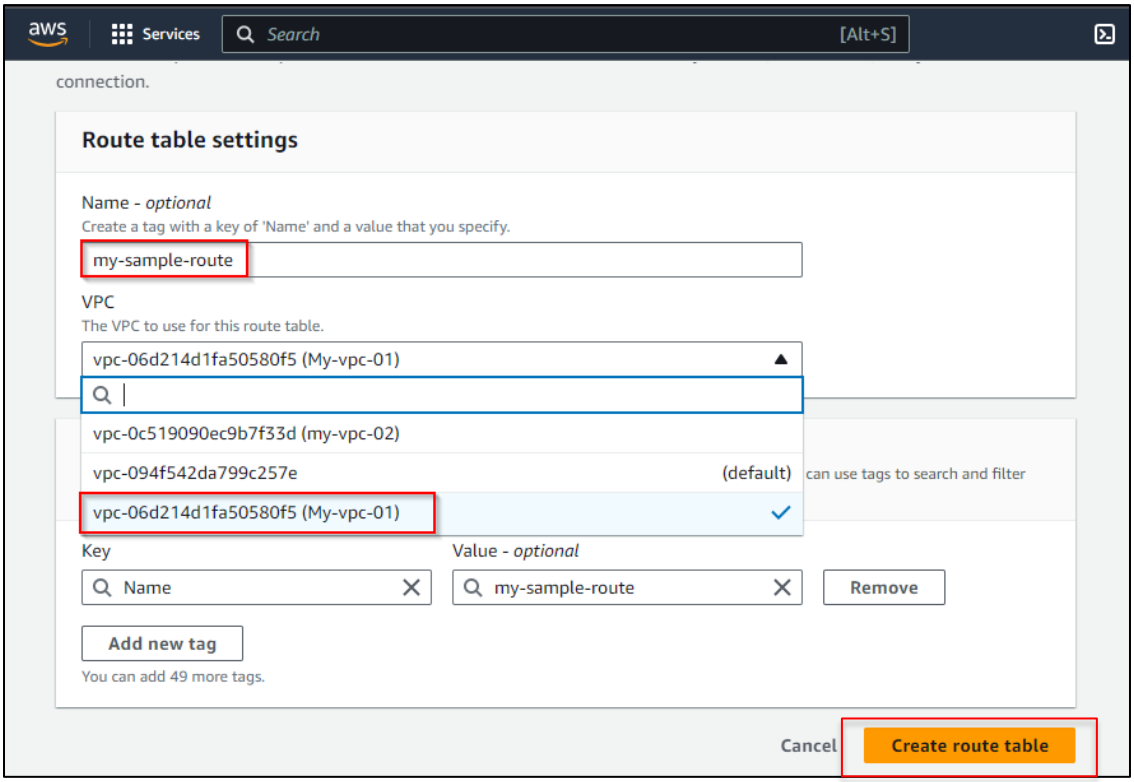
The private subnet is created successfully.

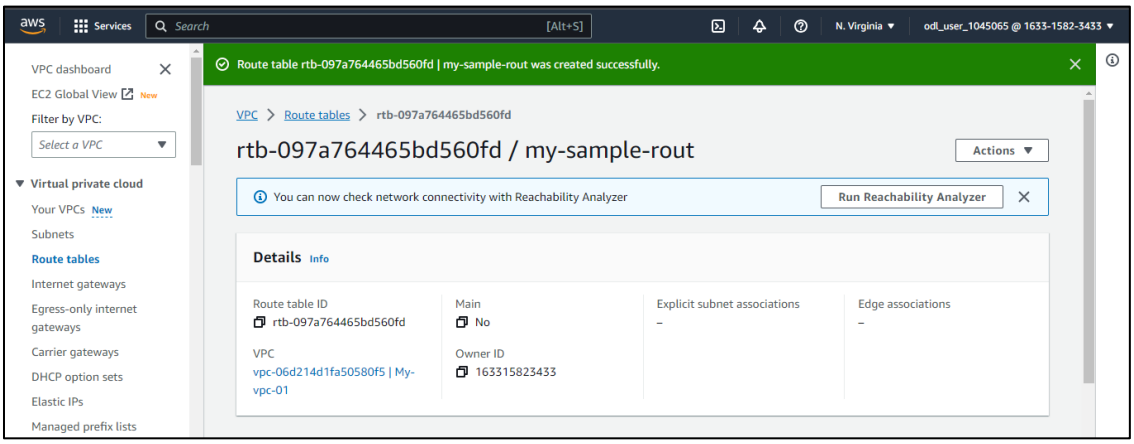
Step 4: Create a Route table and NAT

4.1 Navigate to **Route tables** under **Virtual private cloud** in the VPC dashboard, then click on **Create route table**



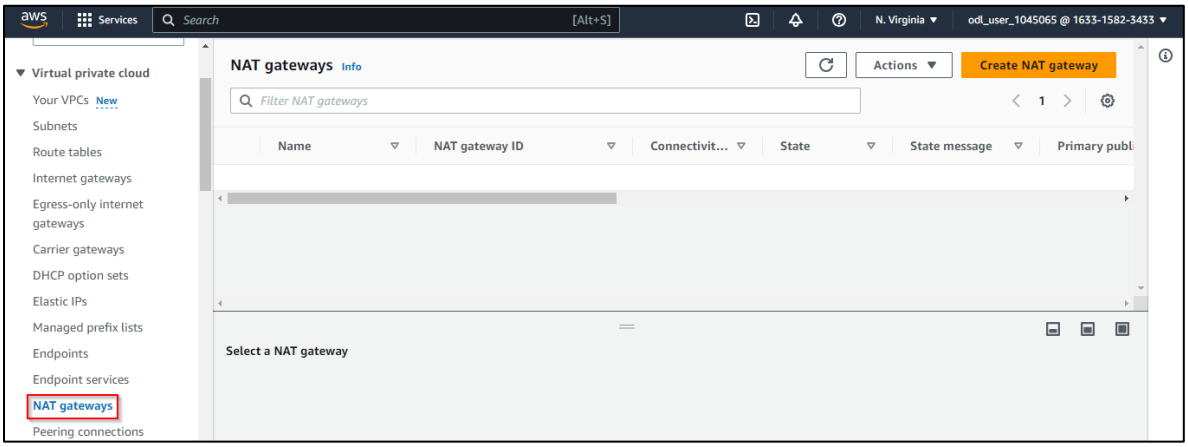
4.2 Enter the **Name** as **my-sample-route** and select **VPC** as **My-vpc-01,** then click on **Create route table**



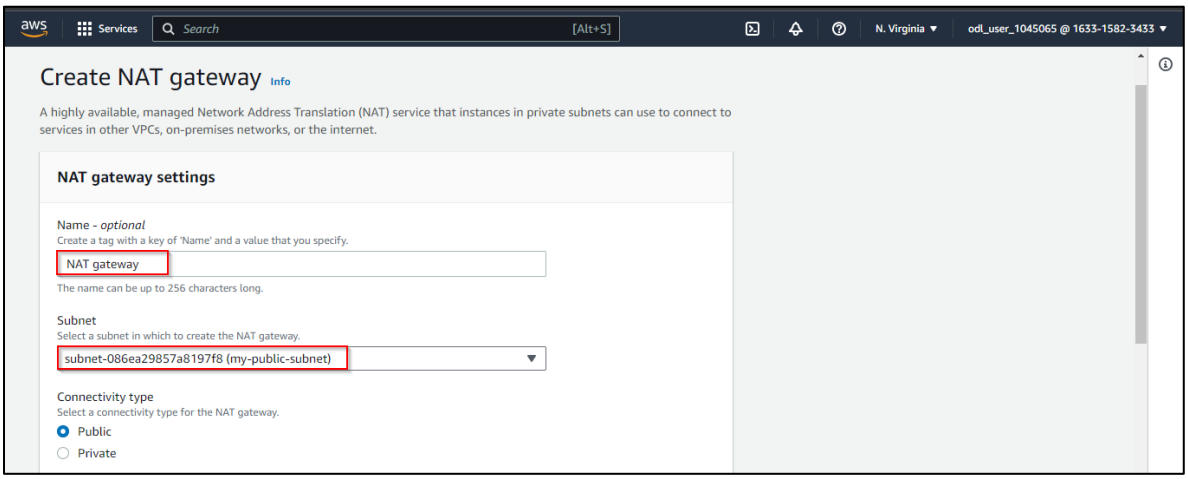


The route table is created successfully.

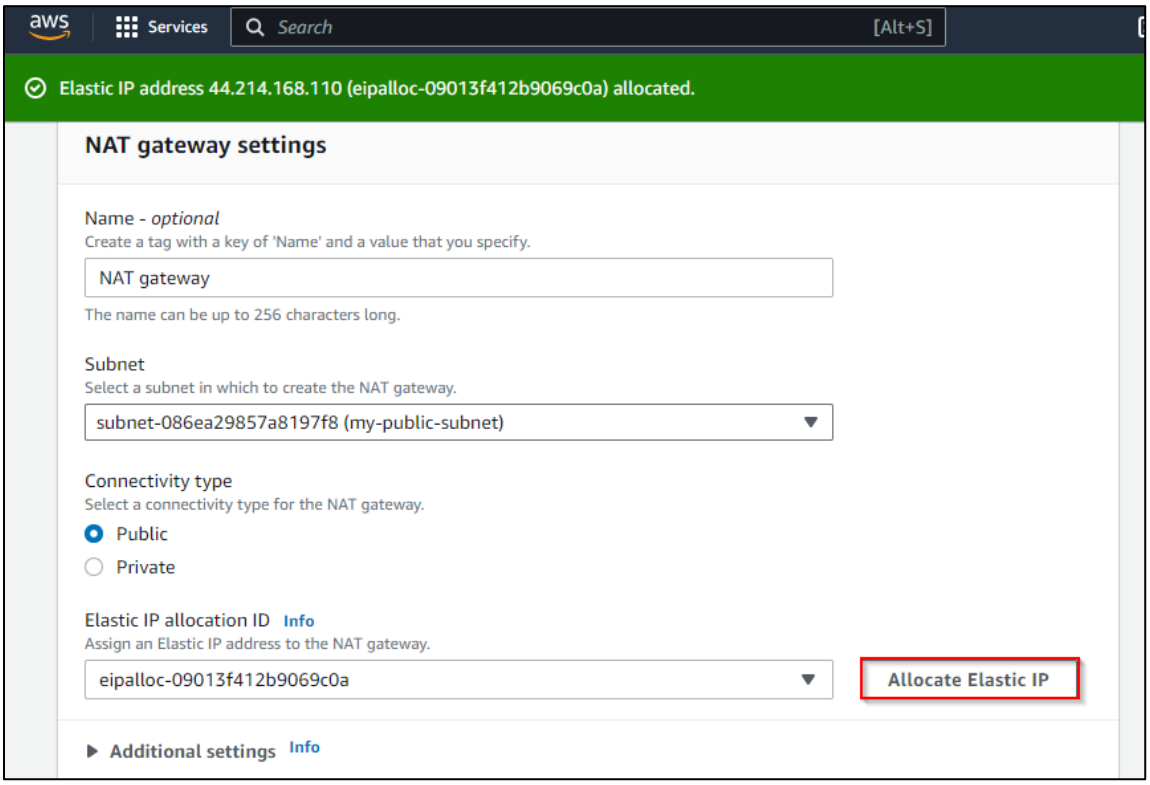
4.3 Navigate to **NAT gateways**, then click on **Create NAT gateway**



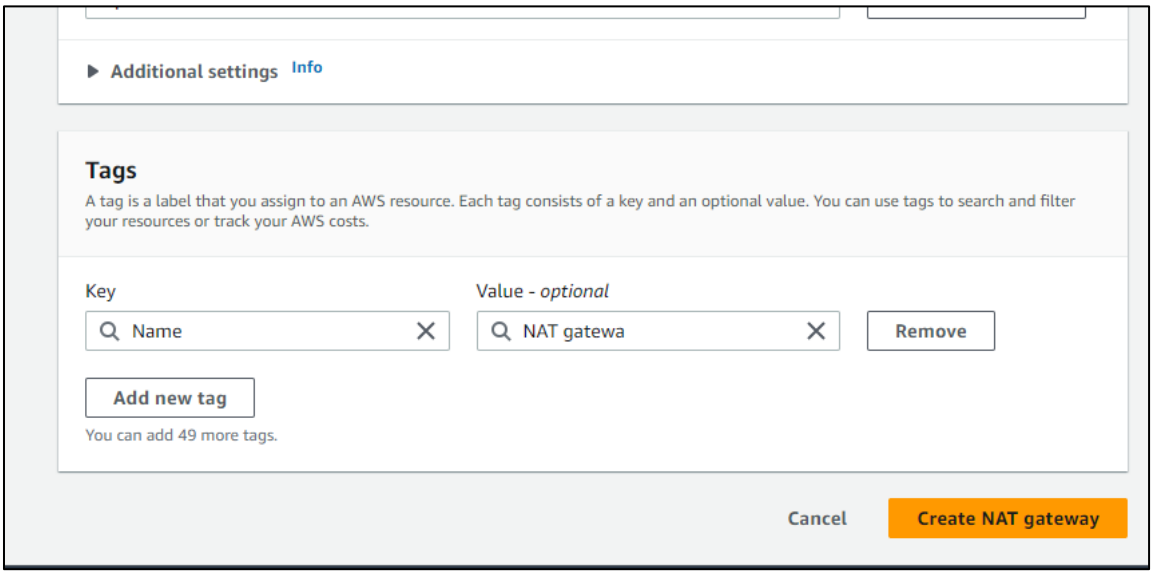
4.4 Enter the NAT name as **NAT gateway**, select the subnet as **my-public-subnet**, and choose **Public** from the Connectivity type

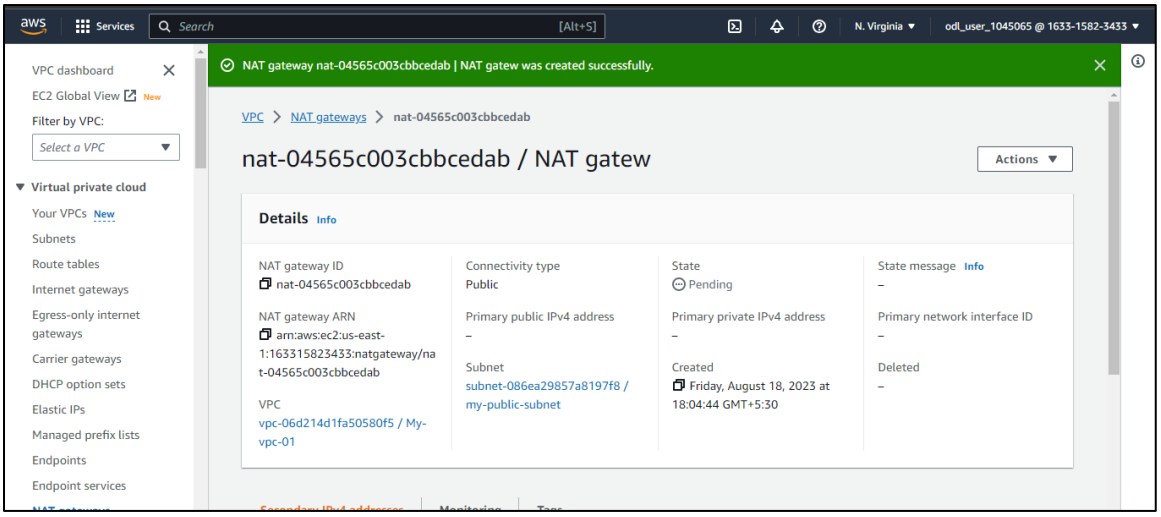


4.5 Click on **Allocate Elastic IP**



4.6 Click on **Create NAT gateway**





NAT gateway is created successfully.

By following these steps, you have successfully demonstrated the process of setting up a robust network infrastructure within your AWS Virtual Private Cloud (VPC). You have established a well-organized and secure network by creating subnets, configuring route tables, and implementing a Network Address Translation (NAT) gateway.