## 1. Create a VPC

- Step 1: Log in to the AWS Management Console and go to the VPC Dashboard.
- Step 2: Click on Create VPC.



- Step 3: Choose VPC only.
- **Step 4**: Enter the following details:

o Name tag: (e.g., MyVPC)

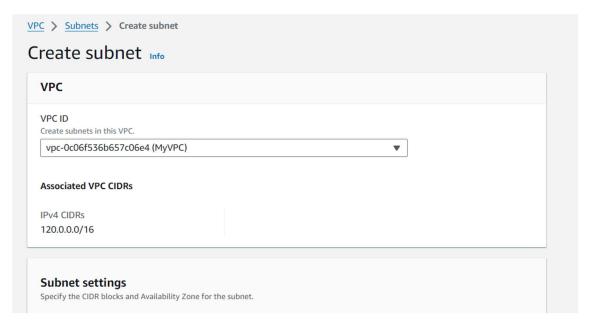
o IPv4 CIDR block: 120.0.0.0/16

Create only the VPC resource or the VPC and other networking resources.	
• VPC only	○ VPC and more
Name tag - optional	
Creates a tag with a key of 'Name' and a value that you specify.	
MyVPC	
IPv4 CIDR block Info	
<ul> <li>IPv4 CIDR manual input</li> </ul>	
○ IPAM-allocated IPv4 CIDR block	
IPv4 CIDR	
120.0.0.0/16	
CIDR block size must be between /16 and /28.	
IPv6 CIDR block Info	
No IPv6 CIDR block	
○ IPAM-allocated IPv6 CIDR block	
<ul> <li>Amazon-provided IPv6 CIDR block</li> </ul>	
○ IPv6 CIDR owned by me	
Tenancy Info	
Default	▼

• Step 5: Click Create VPC.

## 2. Create Subnets

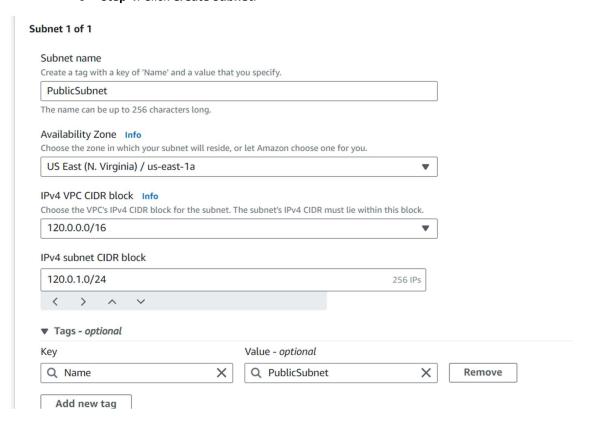
- Step 1: In the VPC Dashboard, click on Subnets in the left navigation pane, then click Create
   Subnet.
- **Step 2**: Select the VPC you just created.



• **Step 3**: Create the public and private subnets:

## **Public Subnet**

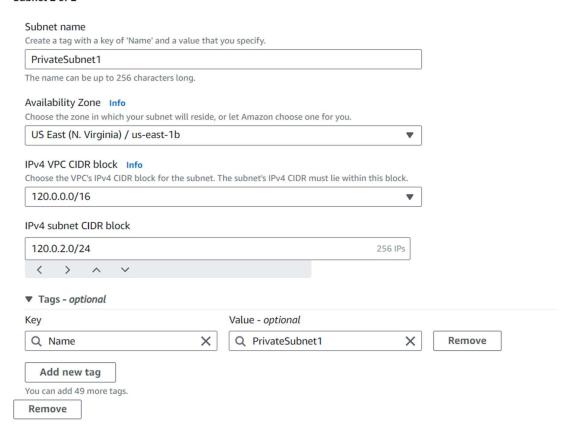
- o Name tag: (e.g., PublicSubnet)
- o **Availability Zone**: Choose one (e.g., us-east-1a).
- o **IPv4 CIDR block**: (e.g., 120.0.1.0/24)
- o Step 4: Click Create Subnet.



### **Private Subnet 1**

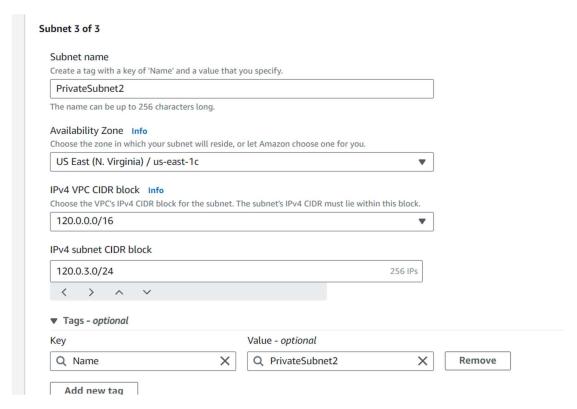
- Name tag: (e.g., PrivateSubnet1)
- Availability Zone: Choose another one (e.g., us-east-1b).
- o **IPv4 CIDR block**: (e.g., 120.0.2.0/24)
- Step 4: Click Create Subnet.

### Subnet 2 of 2

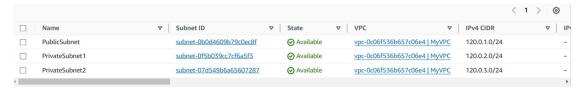


# **Private Subnet 2**

- Name tag: (e.g., PrivateSubnet2)
- o **Availability Zone**: Choose the third (e.g., us-east-1c).
- o IPv4 CIDR block: (e.g., 120.0.3.0/24)

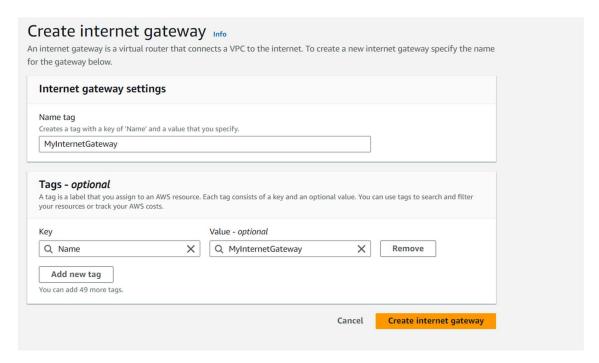


Step 4: Click Create Subnet.



# 3. Create an Internet Gateway and Attach it to the VPC

- **Step 1**: In the VPC Dashboard, click on **Internet Gateways** in the left navigation pane, then click **Create internet gateway**.
- Step 2: Enter a name tag (e.g., MyInternetGateway), then click Create internet gateway.



Step 3: Click Attach to VPC, select the VPC you created, and click Attach internet gateway.

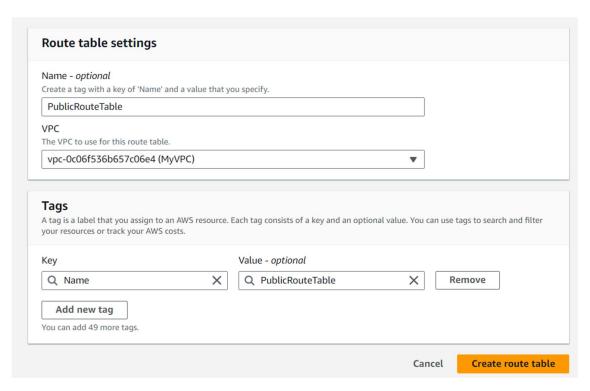


## 4. Create a Route Table for the Public Subnet

• Step 1: In the VPC Dashboard, click on Route Tables in the left navigation pane, then click Create route table.



Step 2: Select the VPC you created, and enter a name tag (e.g., PublicRouteTable).



- Step 3: Click Create route table.
- Step 4: Select the newly created route table, and under the Routes tab, click Edit routes.
- Step 5: Click Add route:
  - o **Destination**: 0.0.0.0/0
  - Target: Select your Internet Gateway.
- Step 6: Click Save changes.



• Step 7: Under the Subnets associations tab, click Edit subnet associations

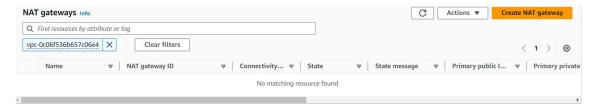


• and select your public subnet.

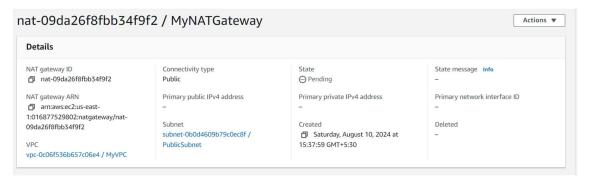


## 5. Create a NAT Gateway

• **Step 1**: In the VPC Dashboard, click on **NAT Gateways** in the left navigation pane, then click **Create NAT gateway**.



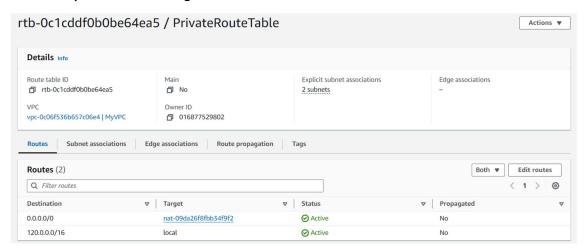
- **Step 2**: Enter the following details:
  - Name tag: (e.g., MyNATGateway)
  - o **Subnet**: Select your public subnet.
  - o **Elastic IP allocation ID**: Allocate a new Elastic IP or select an existing one.
- Step 3: Click Create NAT gateway.



### 6. Create a Route Table for the Private Subnets

- Step 1: In the VPC Dashboard, click on Route Tables in the left navigation pane, then click Create route table.
- **Step 2**: Select the VPC you created, and enter a name tag (e.g., PrivateRouteTable).
- Step 3: Click Create route table.
- Step 4: Select the newly created route table, and under the Routes tab, click Edit routes.
- Step 5: Click Add route:
  - o **Destination**: 0.0.0.0/0
  - Target: Select your NAT Gateway.

Step 6: Click Save changes.



 Step 7: Under the Subnets associations tab, click Edit subnet associations and select your private subnets.

