

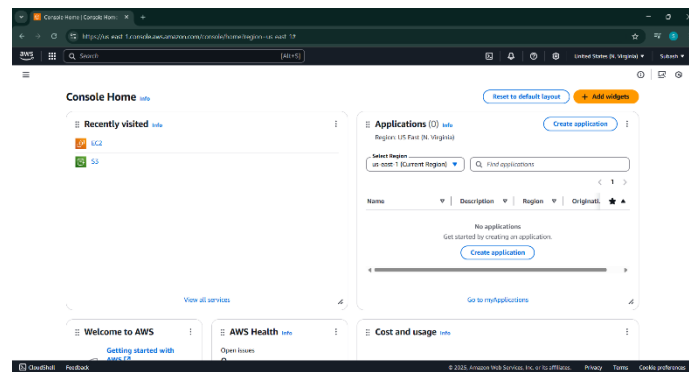
# AWS Task-2

## TASKS

1. Set up a VPC with an Internet gateway, create a public subnet with 256 IP addresses, a private subnet with 256 IP addresses, make a route table connecting the Internet gateway and the subnets, and launch a Linux EC2 instance by using the above VPC and public subnet.

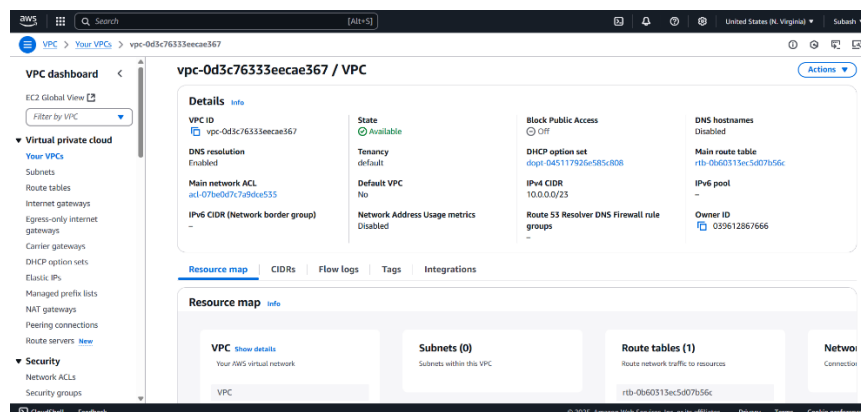
### Pre-Requirements:

- ✓ Go to [AWS Console] (<https://aws.amazon.com/console/>), and log in with your credentials.



### Step 1: Create a VPC (Virtual Private Cloud)

- ✓ Go to the AWS VPC Dashboard.
- ✓ Click on Your VPCs > “Create VPC”.
- ✓ Choose “VPC and more”.
- ✓ Provide the following:
  - Name tag: VPC
  - IPv4 CIDR block: 10.0.0.0/23
  - Leave IPv6 and tenancy as default.
- ✓ Click Create VPC.



*This creates the foundational network environment for your cloud resources.*

## Step 2: Create a Subnets

### Create a Public Subnet

- ✓ Go to Subnets > Create subnet.
- ✓ Select VPC: VPC
- ✓ Add:
  - Subnet name: Public-subnet
  - Availability Zone: Choose any (e.g., us-east-1f)
  - CIDR block: 10.0.0.0/24
- ✓ Click Add new subnet to create a second one.

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

**IPv4 subnet CIDR block**  
 256 IPs  
< > ^ v

### Create a Private Subnet

- ✓ Subnet name: Private-subnet
- ✓ Availability Zone: (same or different, e.g., us-east-1f)
- ✓ CIDR block: 10.0.1.0/24
- ✓ Click Create subnet.

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

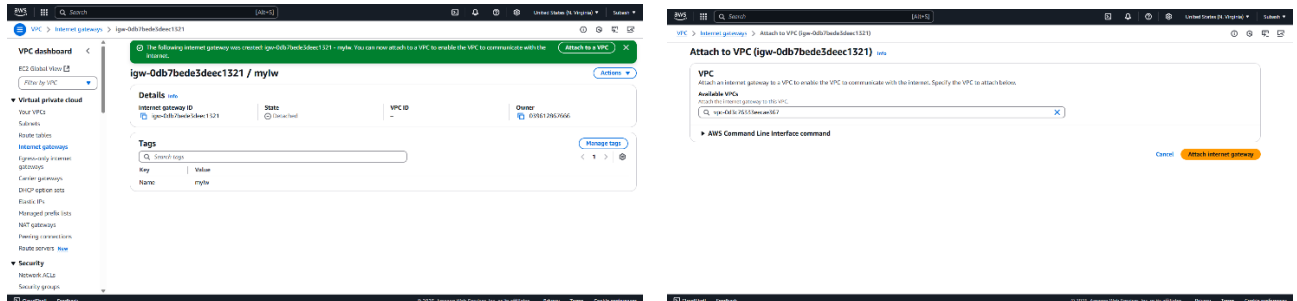
**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

**IPv4 subnet CIDR block**  
 256 IPs  
< > ^ v

***Subnets divide your VPC into public and private zones.***

### Step 3: Create and Attach an Internet Gateway

- ✓ Go to Internet Gateways > Create internet gateway.
- ✓ Name it myIw
- ✓ Click Create, then Attach to VPC.
- ✓ Select VPC and attach.

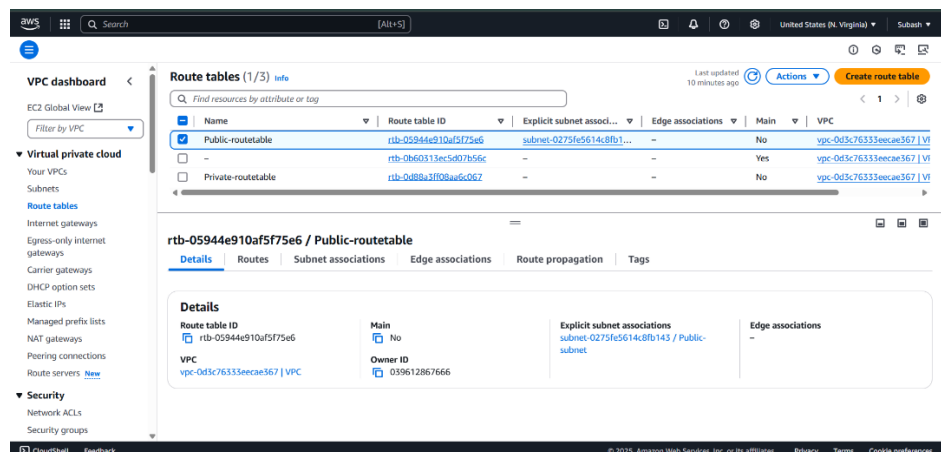


*This enables resources in the public subnet to access the internet.*

### Step 4: Configure Route Tables

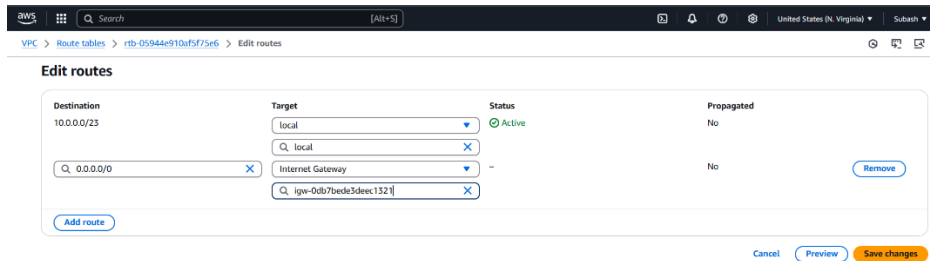
#### Create a Route Table

- ✓ Go to Route Tables > Create route table.
- ✓ Name it Public-routetable, select VPC.
- ✓ Click Create.



#### Add a Route to the Internet

- ✓ Select Public-routetable.
- ✓ Go to Routes > Edit routes > Add route.
  - Destination: 0.0.0.0/0
  - Target: Select the Internet Gateway (myIw)
- ✓ Save the route.



## Associate Route Table with Public Subnet

- ✓ Go to Subnet associations > Edit subnet associations.
- ✓ Select PublicSubnet.
- ✓ Click Save associations.



*This allows public subnet traffic to be routed to the internet.*

## Step 7: Launch a Linux EC2 Instance

- ✓ Go to EC2 Dashboard > Instances > Launch instances.
- ✓ Choose Amazon Linux 2 AMI.
- ✓ Choose Instance type: t2.micro (Free Tier eligible).
- ✓ Click Next: Configure instance details.

- Network: VPC
- Subnet: Public-subnet
- Auto-assign Public IP: Enable

### ▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0d3c76333eeca367 (VPC)  
10.0.0.0/23

Subnet [Info](#)

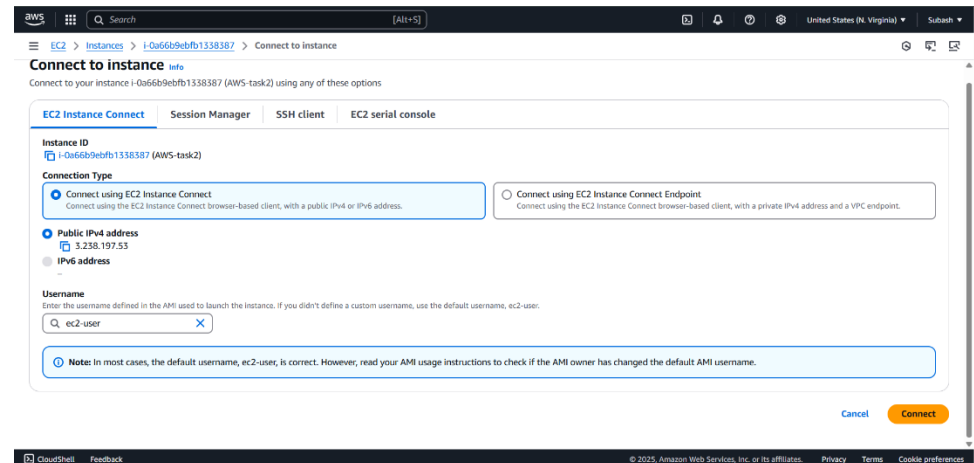
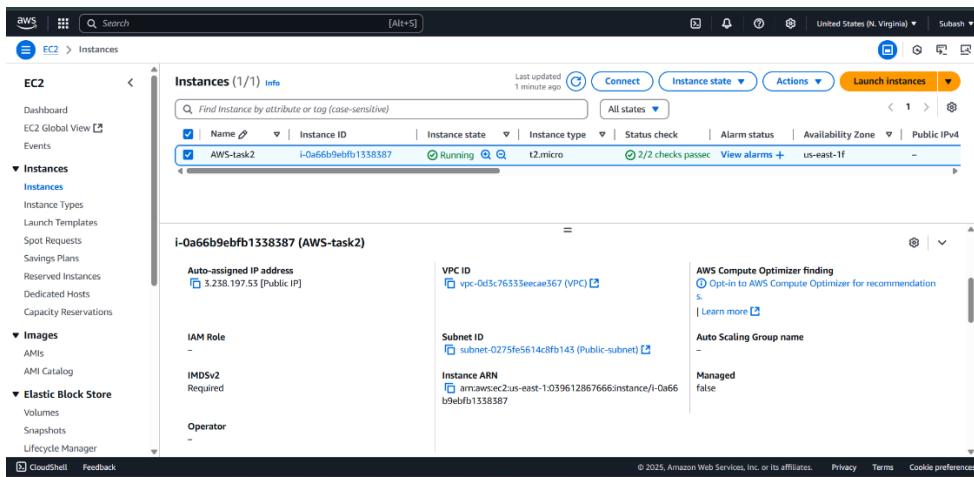
subnet-0275fe5614c8fb143 Public-subnet  
VPC: vpc-0d3c76333eeca367 Owner: 039612867666 Availability Zone: us-east-1f  
Zone type: Availability Zone IP addresses available: 251 CIDR: 10.0.0.0/24

Auto-assign public IP [Info](#)

Enable

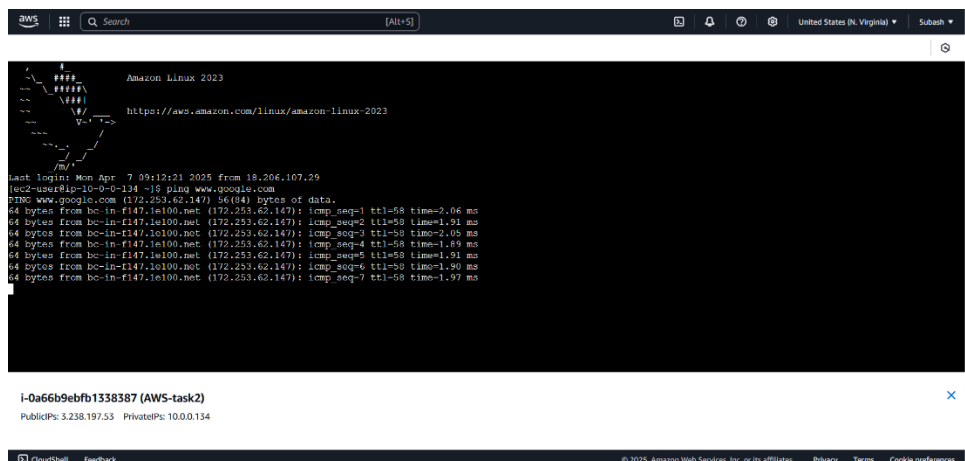
Additional charges apply when outside of free tier allowance

- ✓ Add storage (default is fine).
- ✓ Add tags (optional).
- ✓ Configure security group:
  - Select existing: Public-sg
- ✓ Review and Launch.
  - Choose an existing key pair or create a new one.



- ✓ To check Whether we can able to connect an instance to internet or not , just use ping command to get information from internet about particular domain.

- ping www.google.com



*You now have a Linux instance publicly accessible an Internet.*

\*\*\*\*\* TASK COMPLETED \*\*\*\*\*