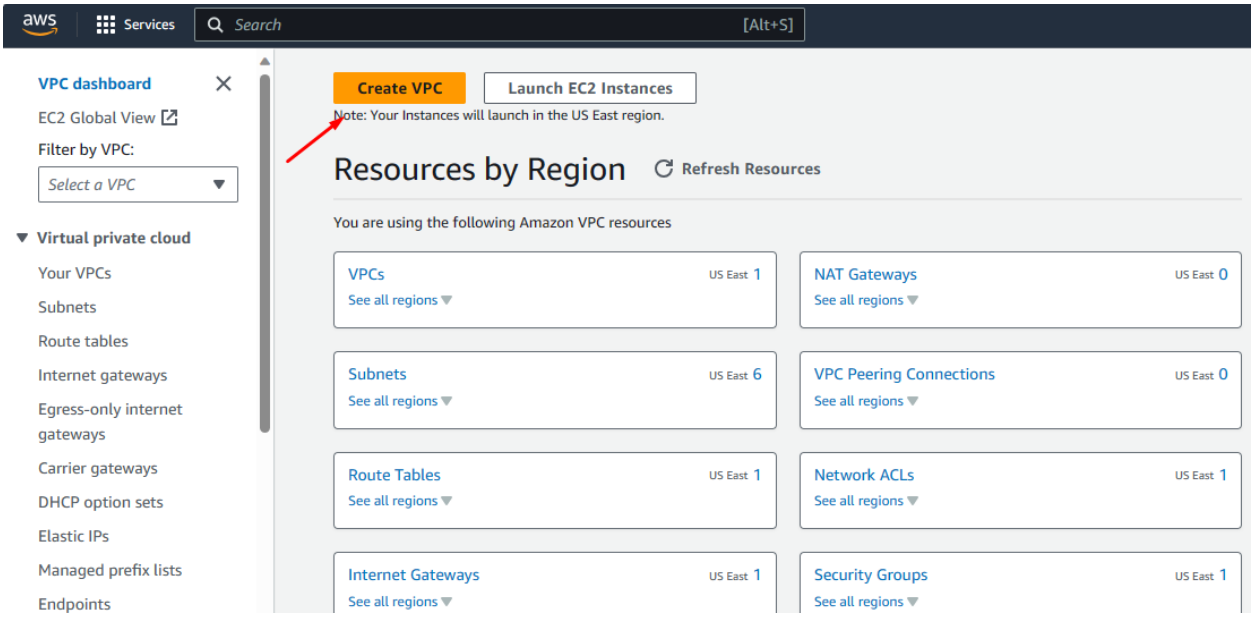
Module 4 - VPC

VPC

AWS VPC stands for Amazon Virtual Private Cloud. It is a service provided by Amazon Web Services (AWS) that allows users to create a virtual network within the AWS cloud infrastructure.

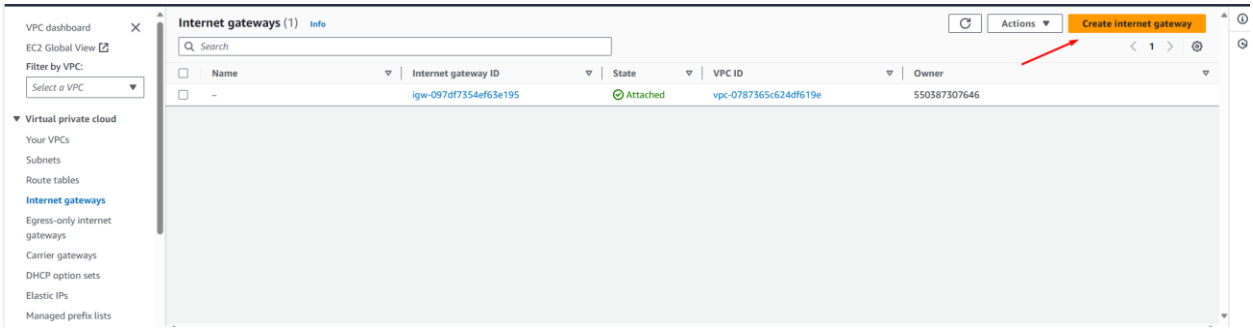
- How to Create VPC.
    1. Search for VPC and then click on Create VPC.

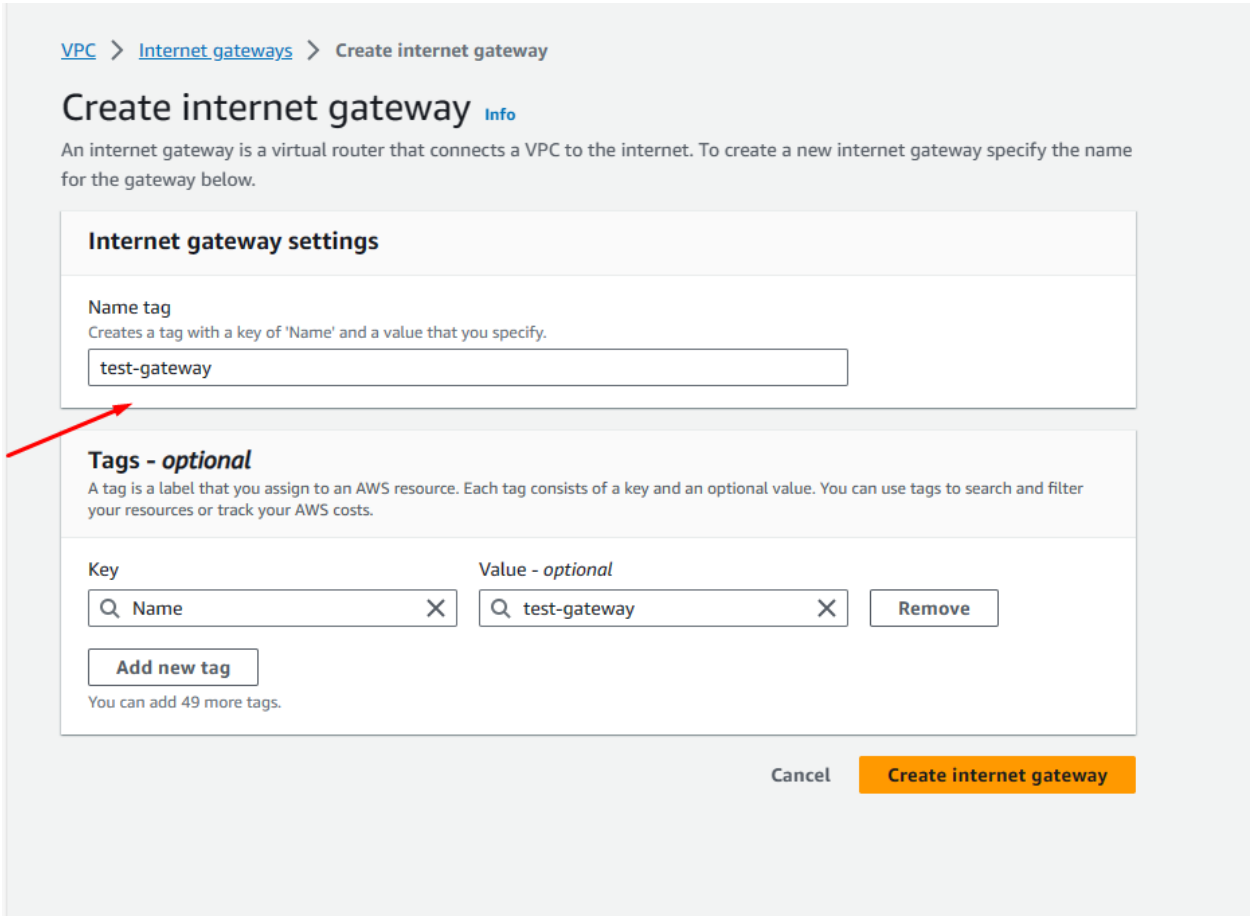


    2. Configure VPC Settings:
        i. Name tag: Give your VPC a name to identify it.
        ii. IPv4 CIDR Block: Specify the IPv4 address range for your VPC. This range should be in CIDR notation (e.g., 10.0.0.0/16).
        iii. IPv6 CIDR Block: Optionally, you can specify an IPv6 address range for your VPC.
        iv. Tenancy: Choose whether your instances should run on shared hardware (default) or dedicated hardware (Dedicated tenancy).
- How to Create Subnet.
    1. Specify a name for the subnet.
    2. Choose the VPC you created earlier.
    3. Specify the IPv4 CIDR block for the subnet.
    4. Optionally, specify an IPv6 CIDR block for the subnet.
    5. Choose the availability zone for the subnet.

    Note – Best Practice – If we are going to create the subnet for public interface then enabled the auto assign Public IP by default.

- Internet Gateway – AWS resources can talk with outside of the world.
    - Go to the Internet Gateway and click on Create Internet Gateway.





- Attach this Gateway to the VPC.
- Select go to action and click on attach to VPC, select the VPC where you want to attach and save it.

- VPC Flow Logs - Send to S3 bucket.
  So now if we want to see the traffic or we want to debug how the traffic is flowing, we have a service called VPC flow logs, and we can redirect all the logs to S3 bucket which will be easy for us to identify the issues.
  - Select the VPC and click on Create Flow log.

- Provide the name and in the Destination specify the S3 bucket ARN value where we must store the logs.
- Keep other setting as default.