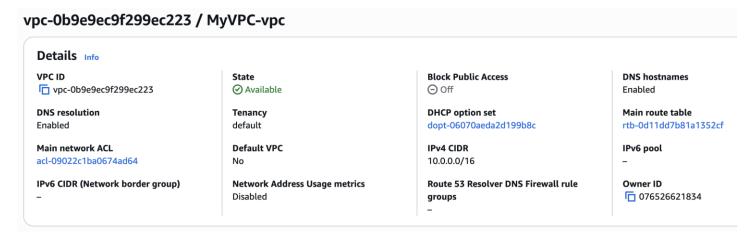
AWS VPC Assignment Practical

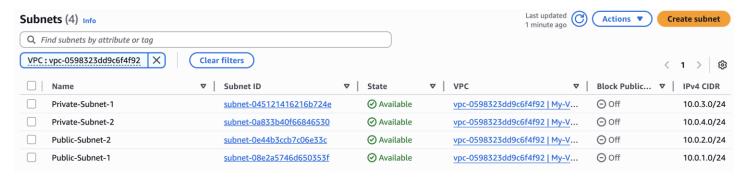
Step-1: Create SSH Key pair and download the .pem file.



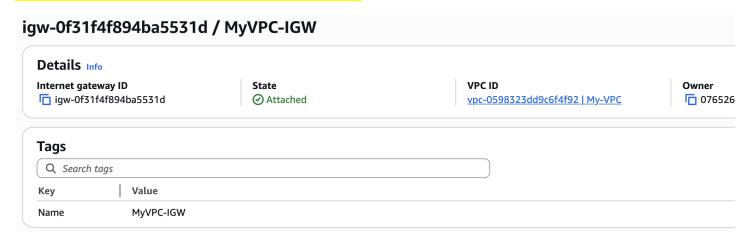
Step-2: Create a VPC



Step-3: Create Public & Private Subnets



Step-4: Create Internet Gateway and attach it to VPC



Step-5: Create NAT Gateway and ensure to allocate an elastic IP address

nat-051b2bda4b6a36698 / MyVPC-NAT

Details

NAT gateway ID

nat-051b2bda4b6a36698

NAT gateway ARN

arn:aws:ec2:us-east-1:076526621834: natgateway/nat-051b2bda4b6a36698

VPC

vpc-0598323dd9c6f4f92 / My-VPC

Connectivity type

Public

Primary public IPv4 address

13.223.128.124

Subnet

subnet-08e2a5746d650353f / Public-Subnet-1

State

Available

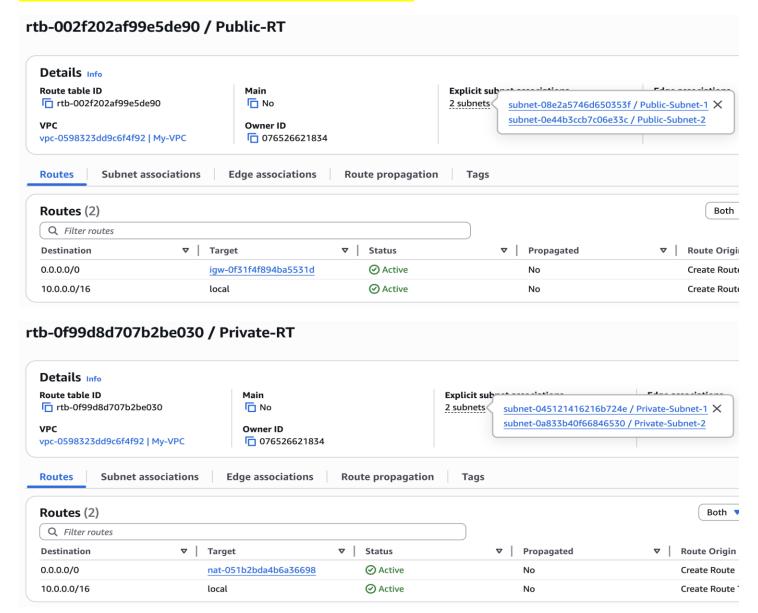
Primary priva

10.0.1.13

Created

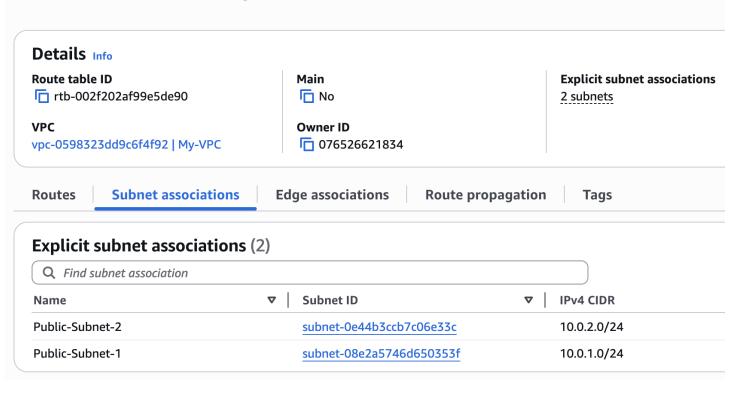
Saturday GMT+5:30

Step-6: Create Public & Private Route Tables and add routes

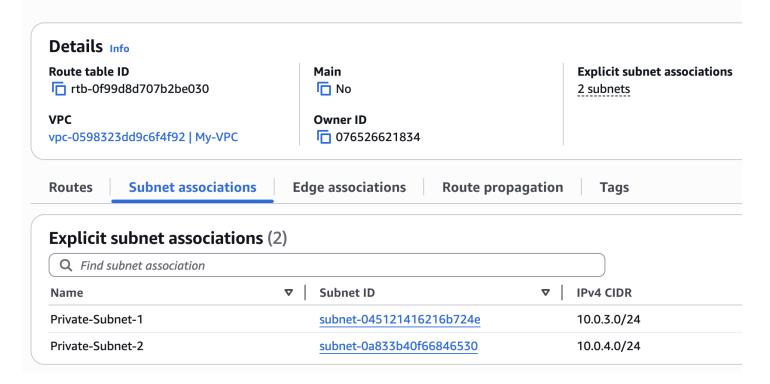


Step-7: Associate Subnets with Route Tables

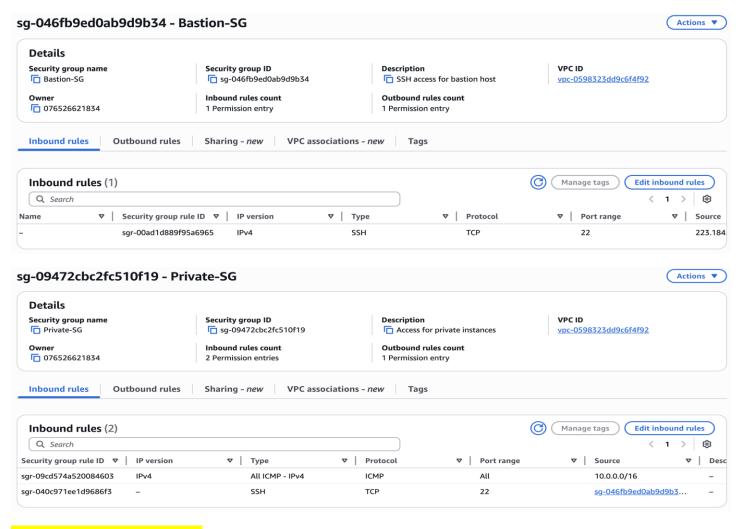
rtb-002f202af99e5de90 / Public-RT



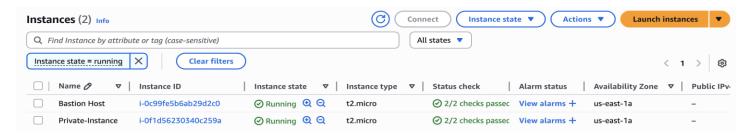
rtb-0f99d8d707b2be030 / Private-RT



Step-8: Create Security Groups



Step-9: Launch EC2 Instances



Step-10: Connect to Instance

Step-10.1: Copy the SSH key-pair from your local host to Bastion EC2 instance

Step:10.2: Connect to Private Instance from Bastion host

```
[ec2-user@ip-10-0-1-166 ~]$ ls
[dipak-main-ssh.pem
[ec2-user@ip-10-0-1-166 ~]$ chmod 400 dipak-main-ssh.pem
[ec2-user@ip-10-0-1-166 ~]$ ssh -i dipak-main-ssh.pem ec2-user@10.0.3.132
The authenticity of host '10.0.3.132 (10.0.3.132)' can't be established.
ED25519 key fingerprint is SHA256:02ojQV9Px9W5t9alog2YWXuedPJ9jK+401x+8fNpIdo.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
[Warning: Permanently added '10.0.3.132' (ED25519) to the list of known hosts.
        ####_
                     Amazon Linux 2023
      \_####\
         \###I
           \#/
                     https://aws.amazon.com/linux/amazon-linux-2023
            ۱ ~۷
```

Step-11: Test your VPC setup

```
[[ec2-user@ip-10-0-1-166 ~]$ ping google.com
PING google.com (142.251.179.113) 56(84) bytes of data.
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=1 ttl=109 time=1.72 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=2 ttl=109 time=1.71 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=3 ttl=109 time=1.71 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=4 ttl=109 time=1.72 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=5 ttl=109 time=1.69 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=6 ttl=109 time=1.72 ms
64 bytes from pd-in-f113.1e100.net (142.251.179.113): icmp_seq=7 ttl=109 time=1.73 ms
^C
 --- google.com ping statistics ---
7 packets transmitted, 7 received, 0% packet loss, time 6010ms
rtt min/avg/max/mdev = 1.689/1.713/1.728/0.012 ms
[[ec2-user@ip-10-0-1-166 ~]$ ls
dipak-main-ssh.pem
[ec2-user@ip-10-0-1-166 \sim]$ ssh -i dipak-main-ssh.pem ec2-user@10.0.3.132
        ####
                     Amazon Linux 2023
        #####\
         \###I
                     https://aws.amazon.com/linux/amazon-linux-2023
           \#/
            V~' '->
        /m/'
Last login: Sat Oct 4 06:08:14 2025 from 10.0.1.166
[[ec2-user@ip-10-0-3-132 \sim]$ ping google.com
PING google.com (142.251.179.101) 56(84) bytes of data.
64 bytes from pd-in-f101.1e100.net (142.251.179.101): icmp_seq=1 ttl=104 time=3.36 ms
64 bytes from pd-in-f101.1e100.net (142.251.179.101): icmp_seq=2 ttl=104 time=2.86 ms
64 bytes from pd-in-f101.1e100.net (142.251.179.101): icmp_seq=3 ttl=104 time=2.80 ms
64 bytes from pd-in-f101.1e100.net (142.251.179.101): icmp_seq=4 ttl=104 time=2.81 ms
64 bytes from pd-in-f101.1e100.net (142.251.179.101): icmp_seq=5 ttl=104 time=2.81 ms
```