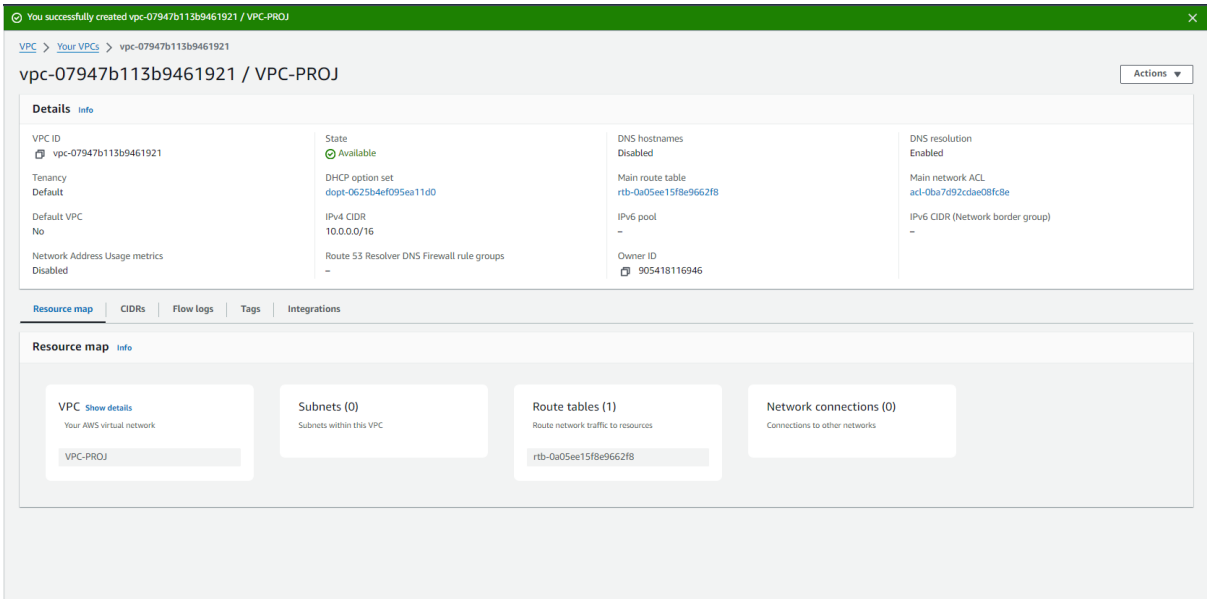
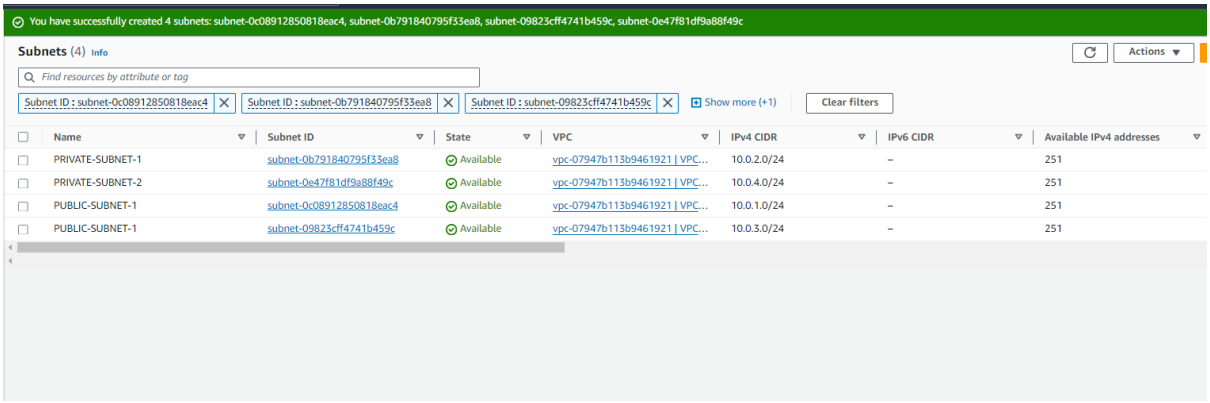
VPC PROJECT

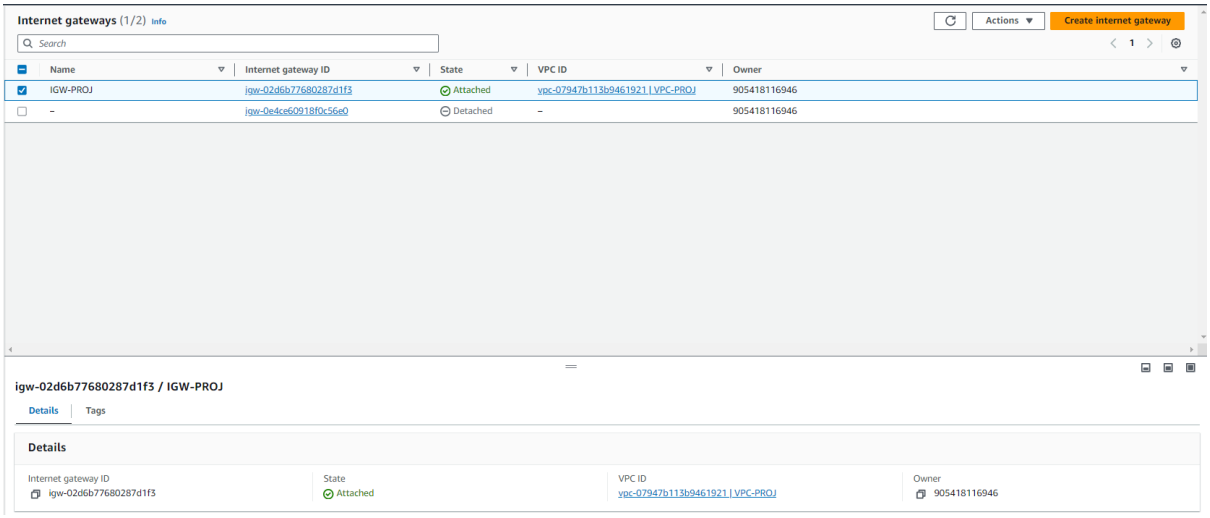
- Create a VPC with IPV4 CIDR 10.0.0.0/16



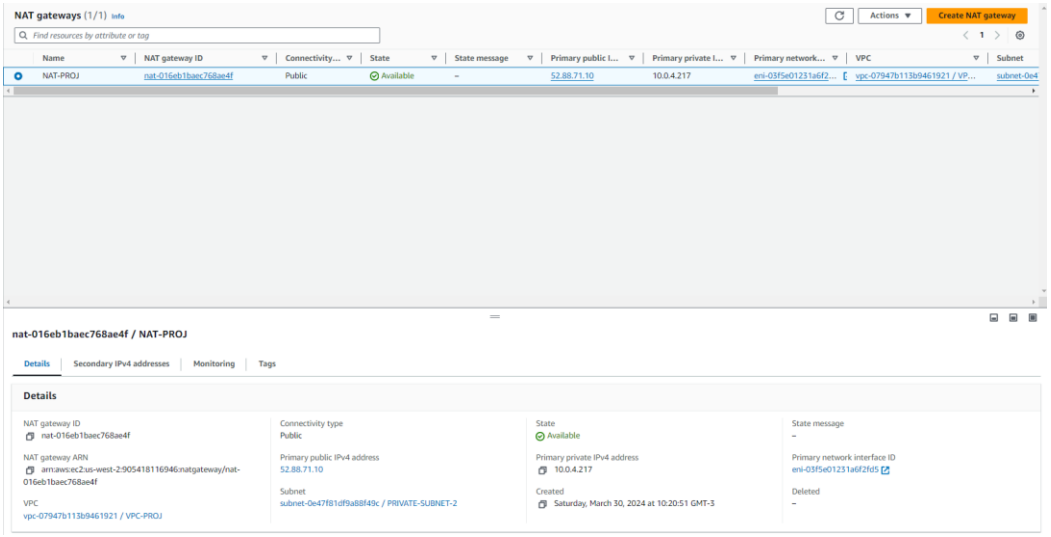
- Create 4 subnets (2 public 2 private) at each availability zone there is 1 private subnet and 1 public subnet, 2 availability zones can fulfill high availability.



- Create an internet gateway AND attach it to VPC

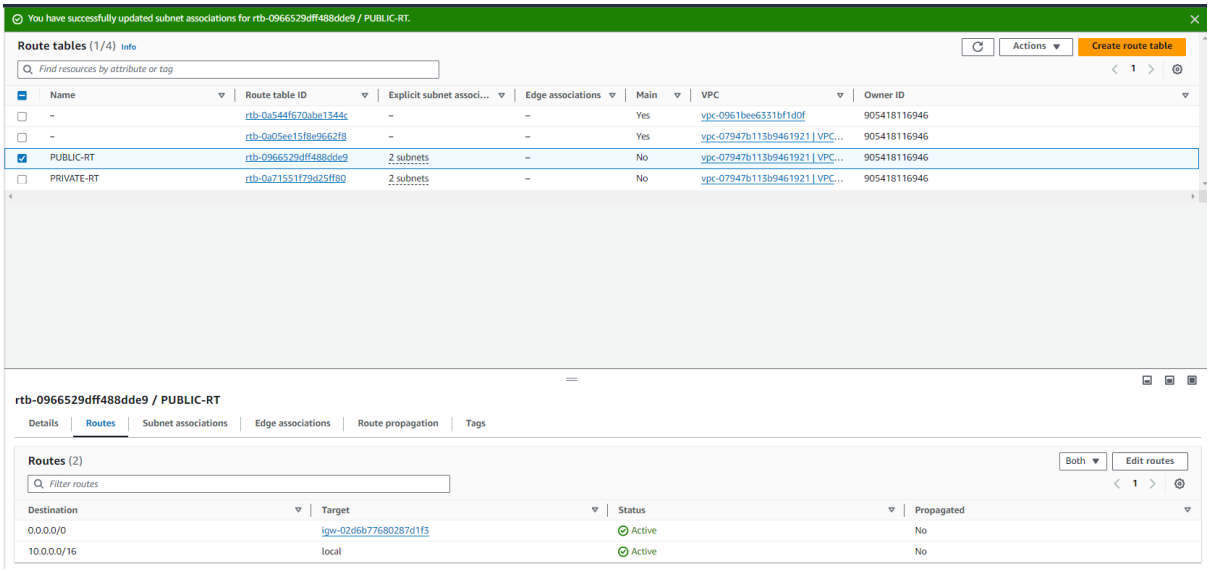


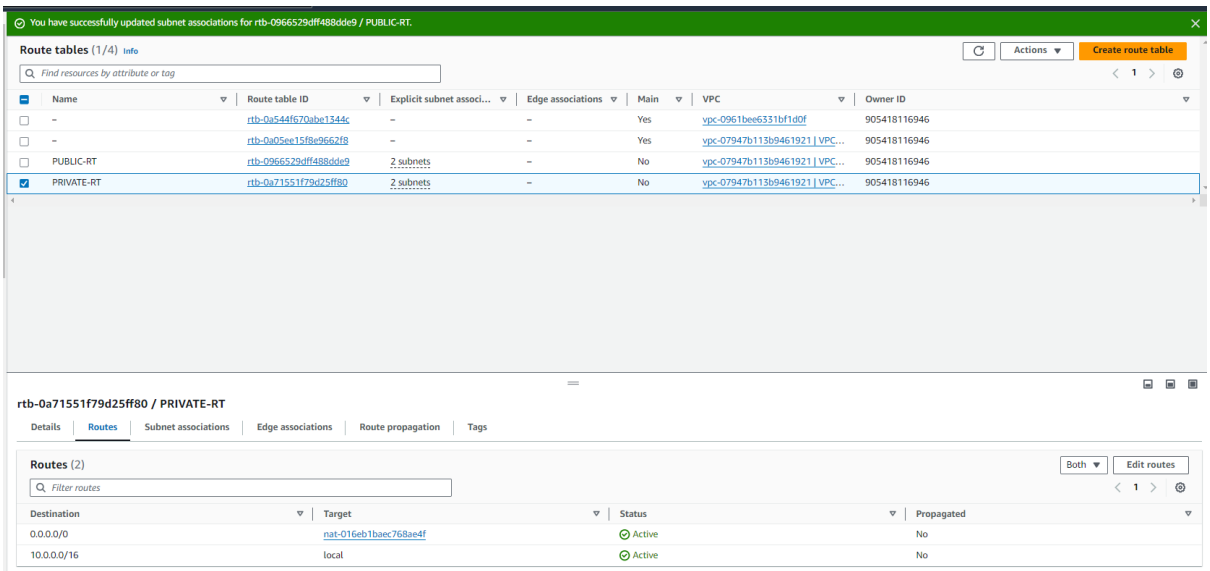
- Create a NAT gateway that we going to use it in public subnet



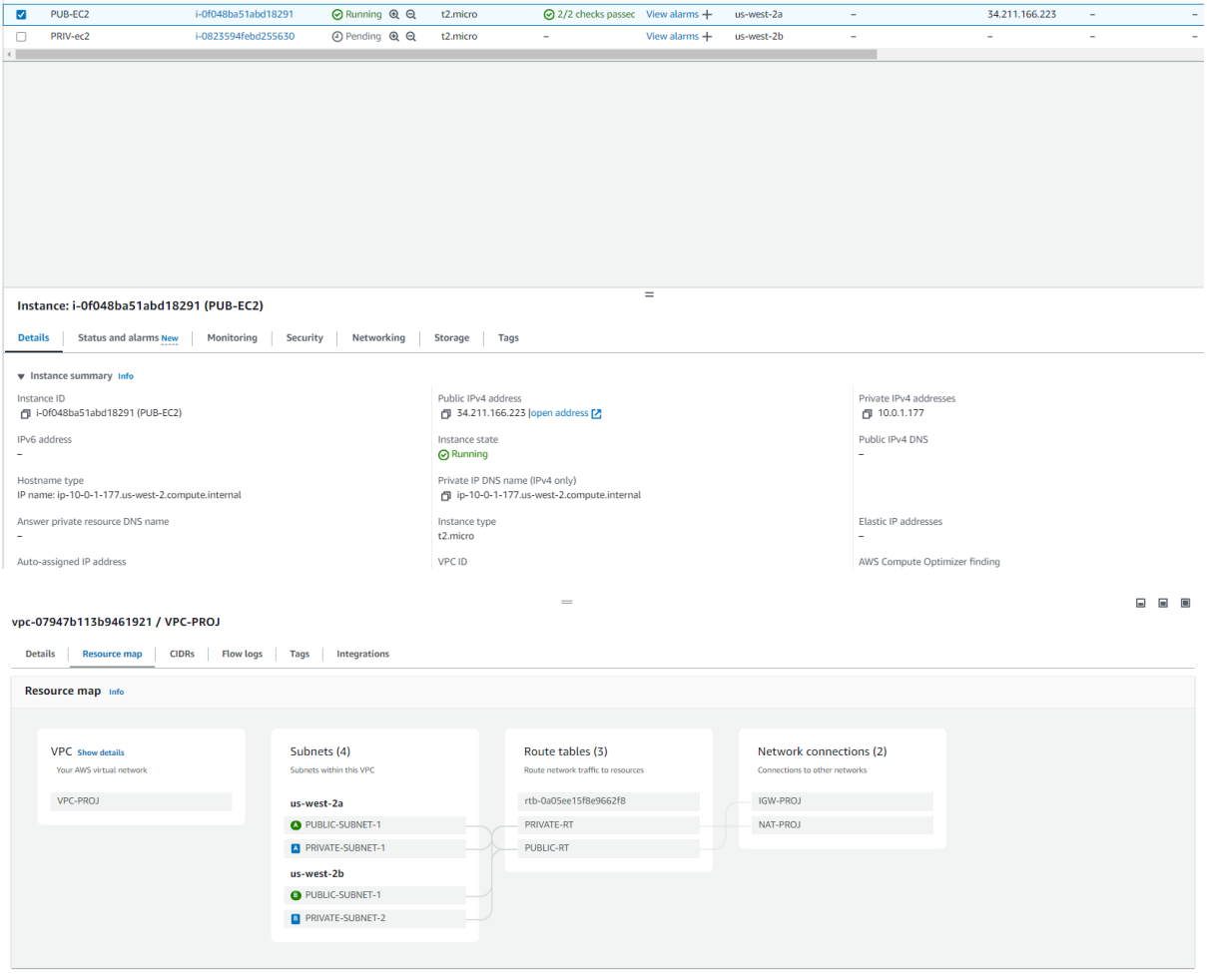
- After creating NAT and IGW (internet gateway) we must define route tables

  One for public subnets and the other for private subnets.

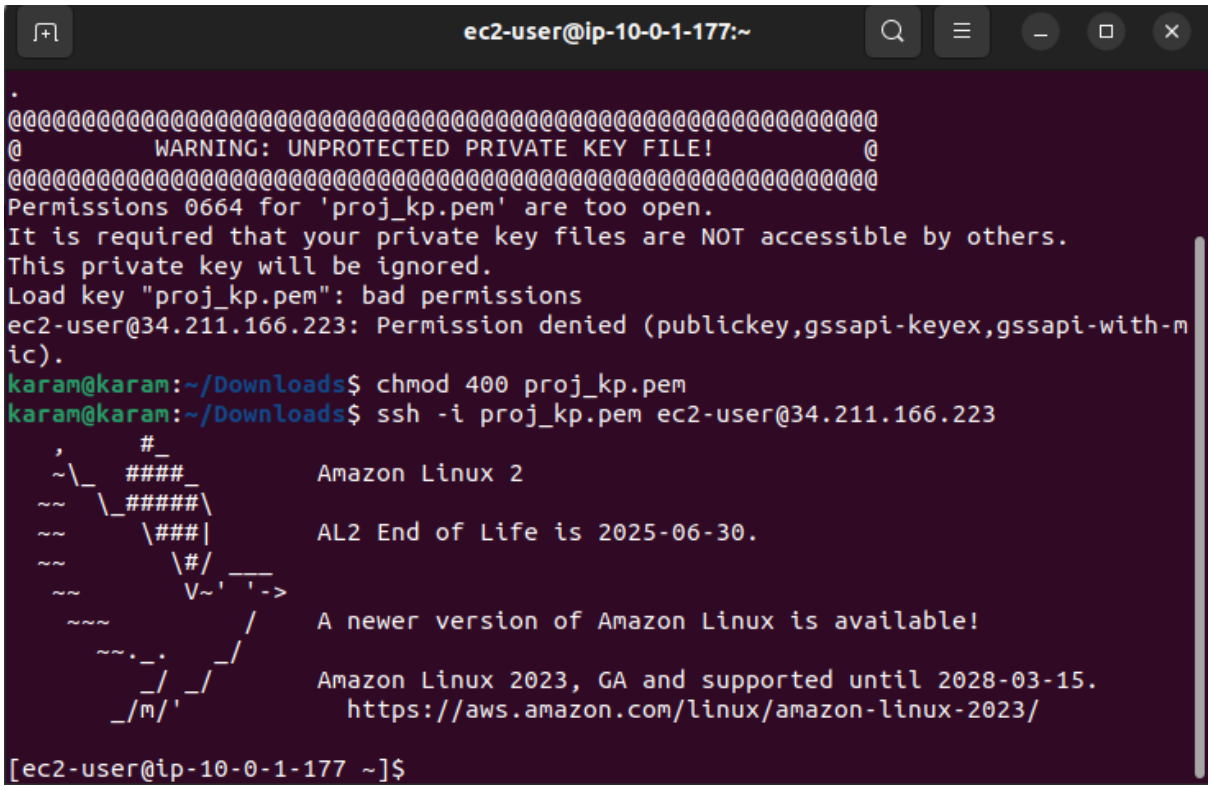

You have successfully updated subnet associations for rtb-0966529dff488dde9 / PUBLIC-RT.
Route tables (1/4) Info
Find resources by attribute or tag
Actions
Create route table
Name
Route table ID
Explicit subnet associ...
Edge associations
Main
VPC
Owner ID
– rtb-0a544f670abe1344c – – Yes vpc-0961bee6331bf1d0f 905418116946
– rtb-0a05ee15f8e9662f8 – – Yes vpc-07947b113b9461921 | VPC... 905418116946
PUBLIC-RT rtb-0966529dff488dde9 2 subnets – No vpc-07947b113b9461921 | VPC... 905418116946
PRIVATE-RT rtb-0a71551f79d25ff80 2 subnets – No vpc-07947b113b9461921 | VPC... 905418116946
rtb-0966529dff488dde9 / PUBLIC-RT
Details
Routes
Subnet associations
Edge associations
Route propagation
Tags
Routes (2)
Filter routes
Both
Edit routes
Destination
Target
Status
Propagated
0.0.0.0/0 igw-02d6b77680287d1f3 Active No
10.0.0.0/16 local Active No

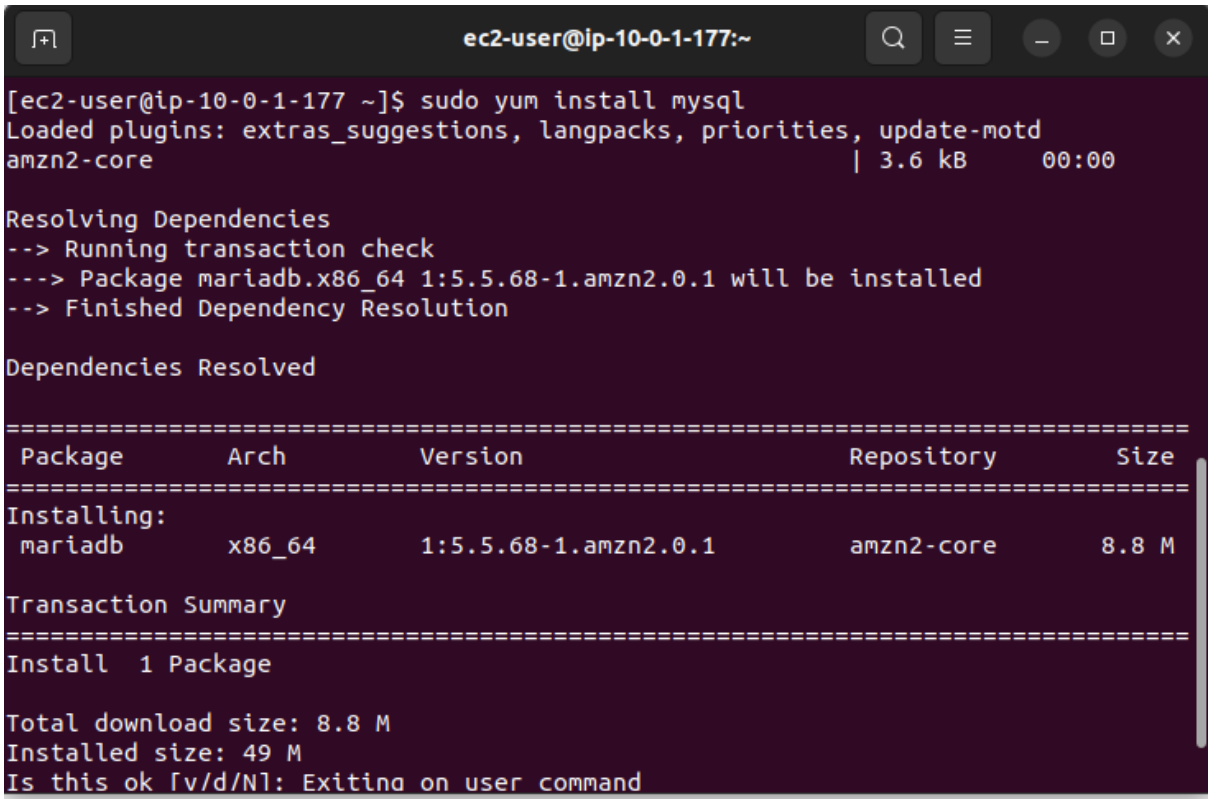

You have successfully updated subnet associations for rtb-0966529dff488dde9 / PUBLIC-RT.
Route tables (1/4) Info
Find resources by attribute or tag
Actions
Create route table
Name
Route table ID
Explicit subnet associ...
Edge associations
Main
VPC
Owner ID
– rtb-0a544f670abe1344c – – Yes vpc-0961bee6331bf1d0f 905418116946
– rtb-0a05ee15f8e9662f8 – – Yes vpc-07947b113b9461921 | VPC... 905418116946
PUBLIC-RT rtb-0966529dff488dde9 2 subnets – No vpc-07947b113b9461921 | VPC... 905418116946
PRIVATE-RT rtb-0a71551f79d25ff80 2 subnets – No vpc-07947b113b9461921 | VPC... 905418116946
rtb-0a71551f79d25ff80 / PRIVATE-RT
Details
Routes
Subnet associations
Edge associations
Route propagation
Tags
Routes (2)
Filter routes
Both
Edit routes
Destination
Target
Status
Propagated
0.0.0.0/0 nat-016eb1baec768ae4f Active No
10.0.0.0/16 local Active No

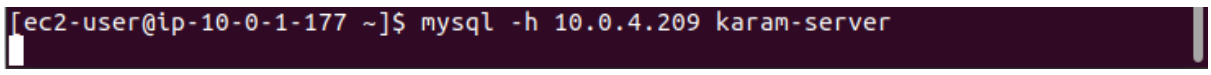
- Create EC2 instances:



- **Connect by ssh:**







```
ec2-user@ip-10-0-1-177:~
           └─3843 /usr/libexec/mysqld --basedir=/usr --datadir=/var/lib/mysql...

Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:20 ip-10-0-1-177.us-west-2.compute.internal mariadb-prepare-db-dir[
3595]: ...
Mar 30 13:58:21 ip-10-0-1-177.us-west-2.compute.internal mysqld_safe[3677]: 2...
Mar 30 13:58:21 ip-10-0-1-177.us-west-2.compute.internal mysqld_safe[3677]: 2...
Mar 30 13:58:23 ip-10-0-1-177.us-west-2.compute.internal systemd[1]: Started ...
Hint: Some lines were ellipsized, use -l to show in full.
[ec2-user@ip-10-0-1-177 ~]$ mysql -h 10.0.4.209  karam-server
SHOW DATABASES;
```