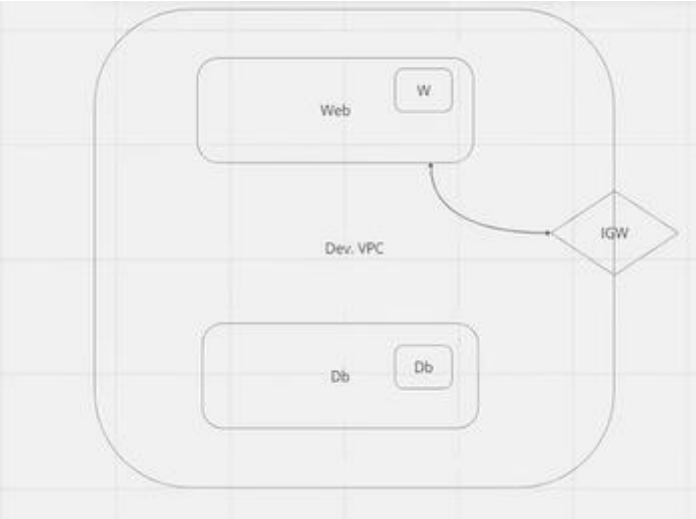
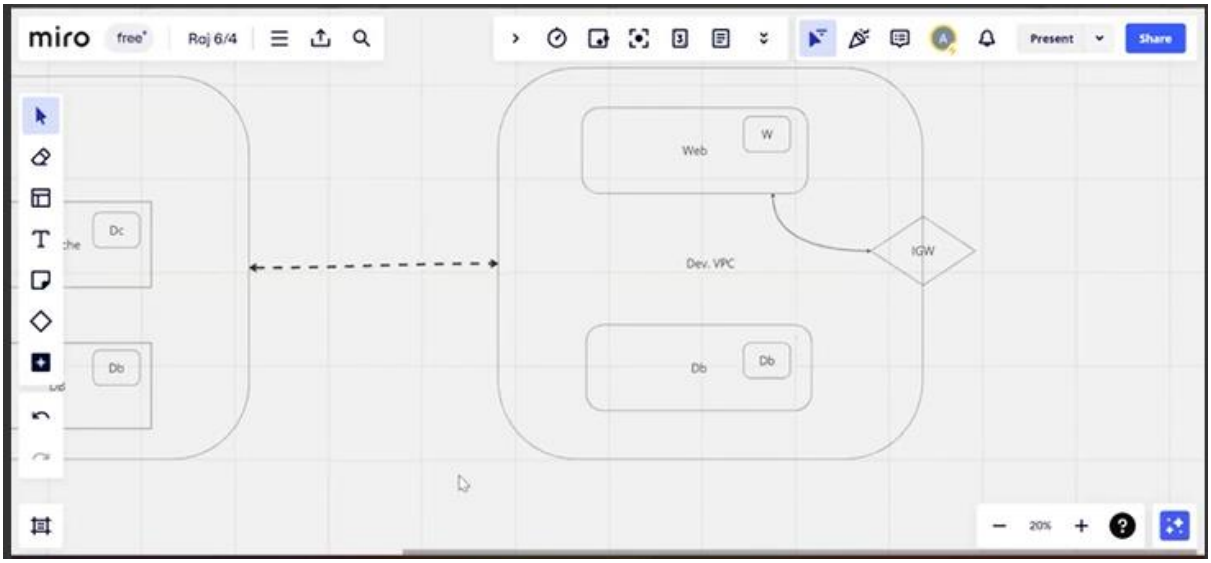
Development Network:

1. Design and build 2-tier architecture with two subnets named web and db and launch instances in both subnets and name them as per the subnet names.

1. Make sure only the web subnet can send internet requests.



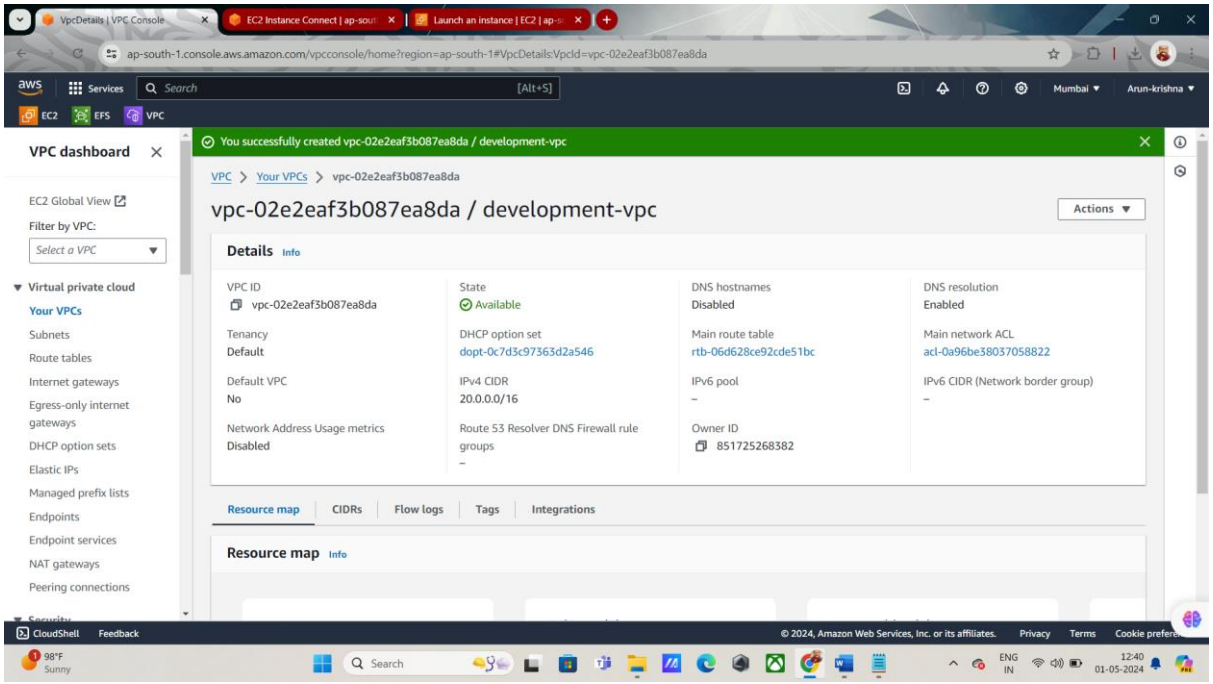
3. Create peering connection between production network and development network.

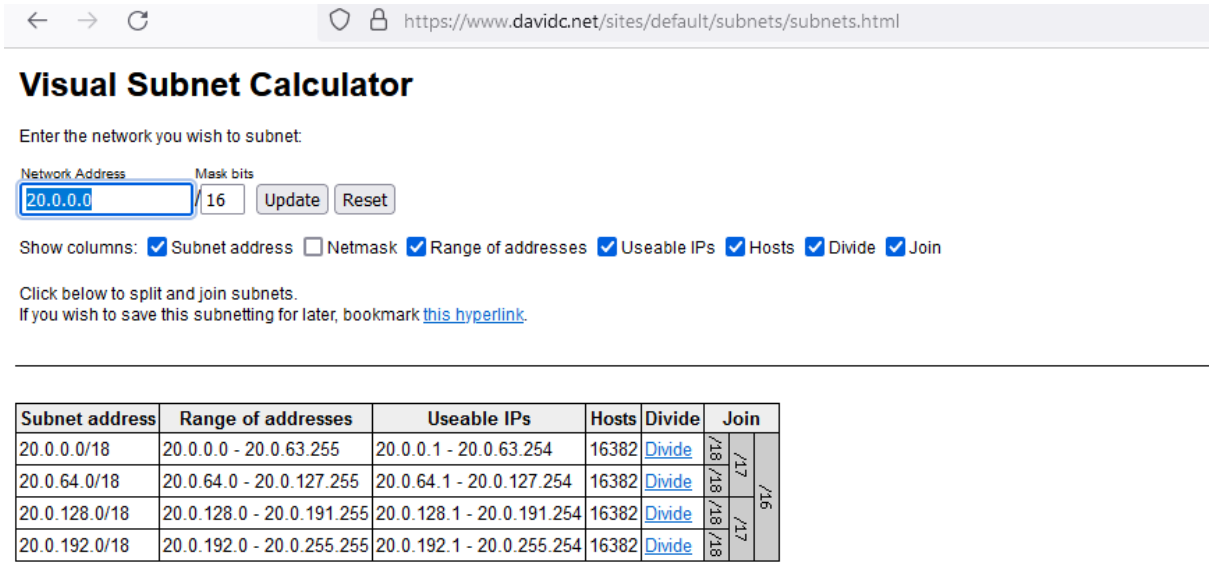


4. Setup connection between db subnets of both production network and development network respectively.

Pls add the ICMP protocol in both db subnets to get the db connectivity.

Now Go to VPC and Create VPC for the Development Network

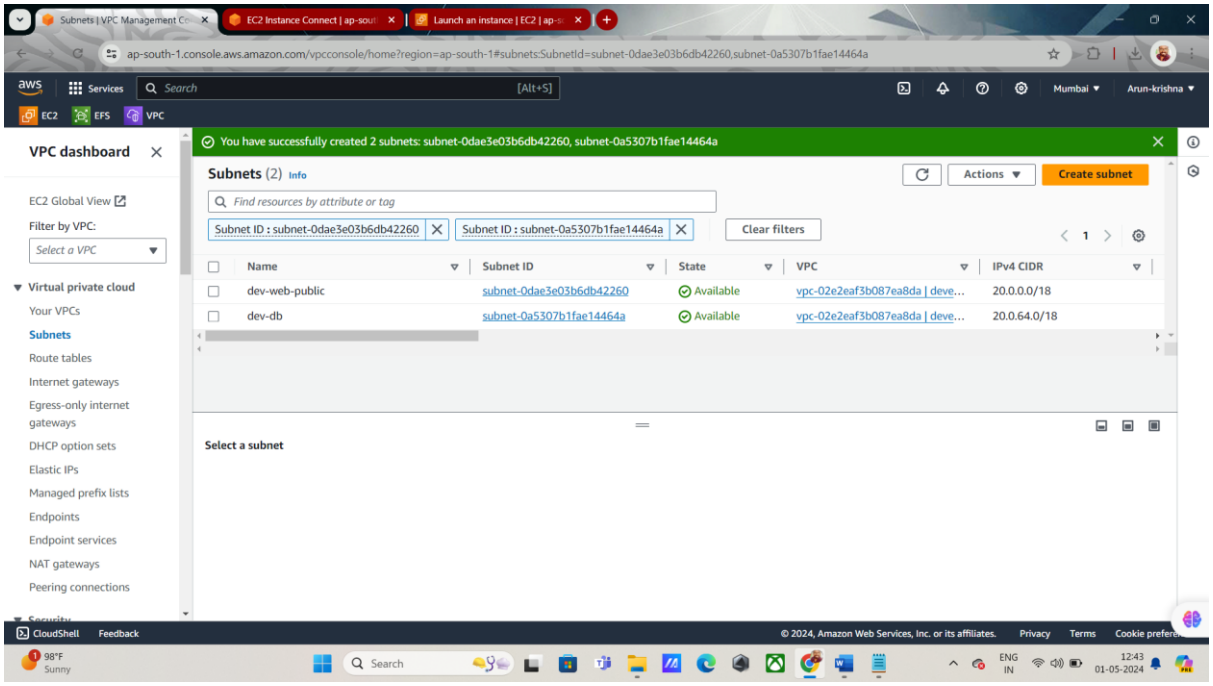




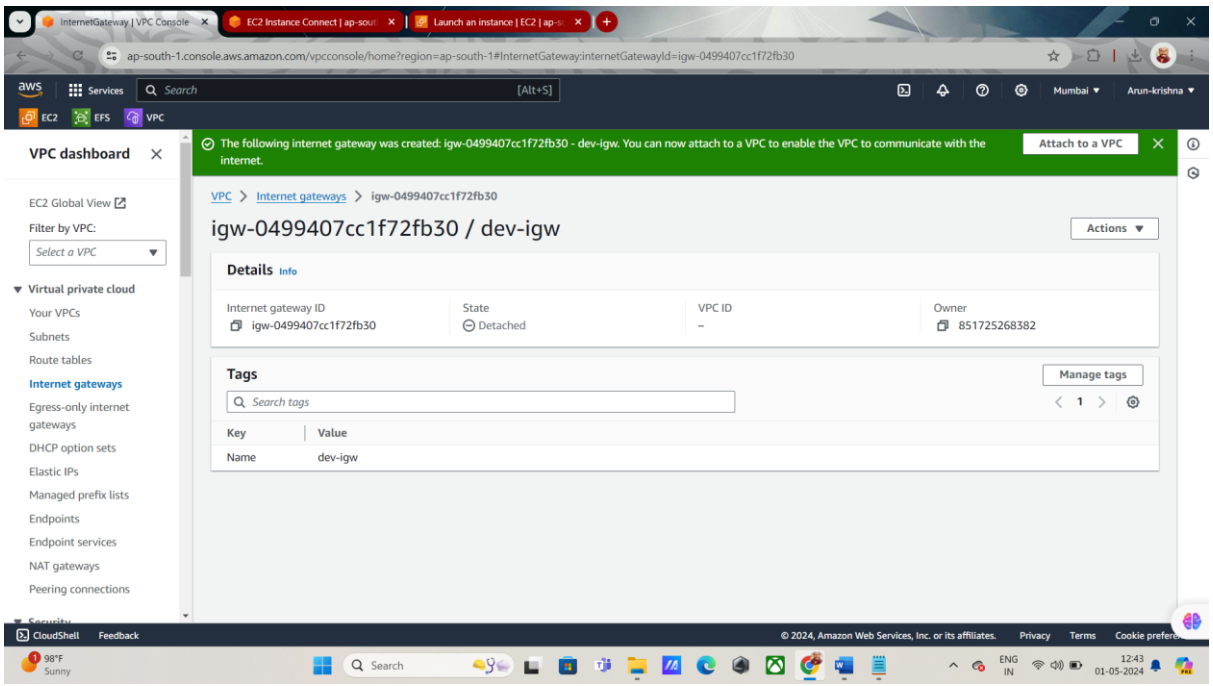
Subnet address	Range of addresses	Useable IPs	Hosts	Divide	Join		
20.0.0.0/18	20.0.0.0 - 20.0.63.255	20.0.0.1 - 20.0.63.254	16382	Divide	/18	/17	/16
20.0.64.0/18	20.0.64.0 - 20.0.127.255	20.0.64.1 - 20.0.127.254	16382	Divide	/18		
20.0.128.0/18	20.0.128.0 - 20.0.191.255	20.0.128.1 - 20.0.191.254	16382	Divide	/18	/17	
20.0.192.0/18	20.0.192.0 - 20.0.255.255	20.0.192.1 - 20.0.255.254	16382	Divide	/18		

User different CIDR for the peering connection to to avoid overlapping

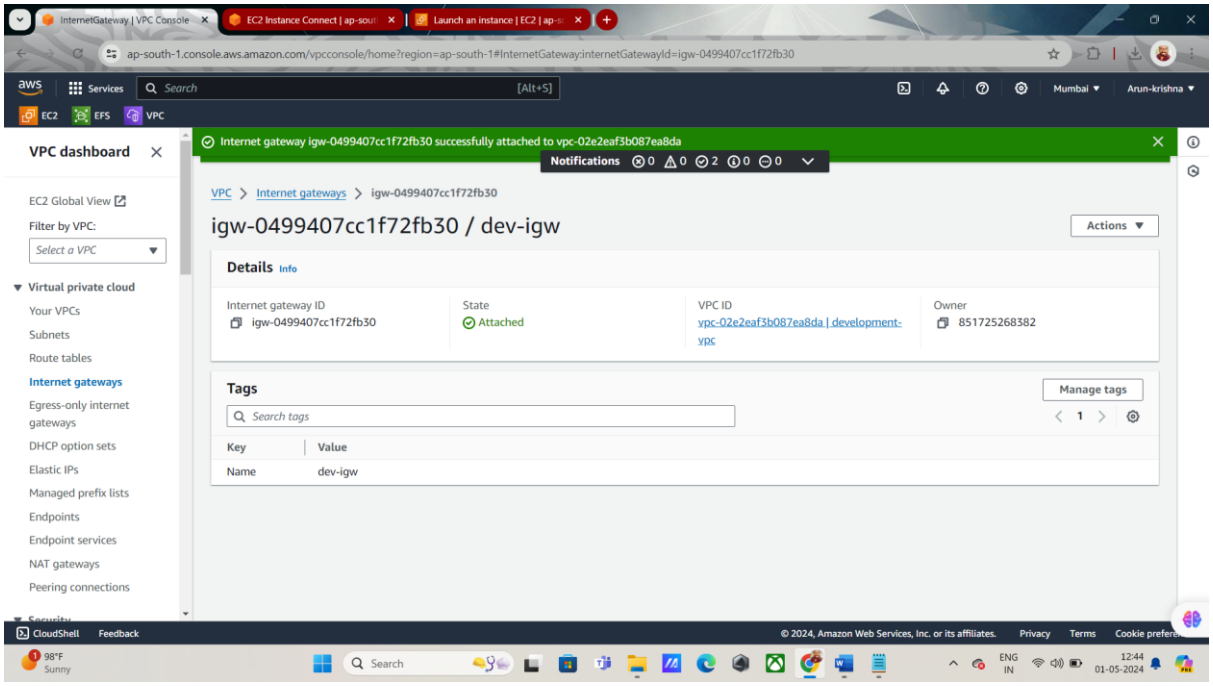
Now go to subnet and create web public subnet and db private subnet



Now create the Internet gateway

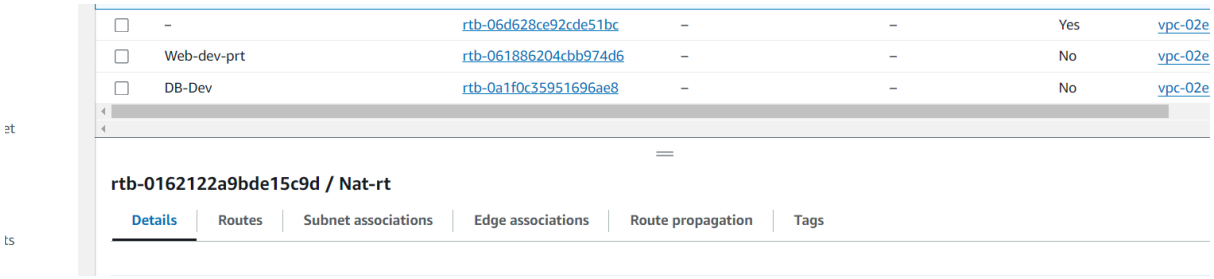


Now attach it to DEV VPC



Now we need to create the two Route table one for web and one for db private subnet

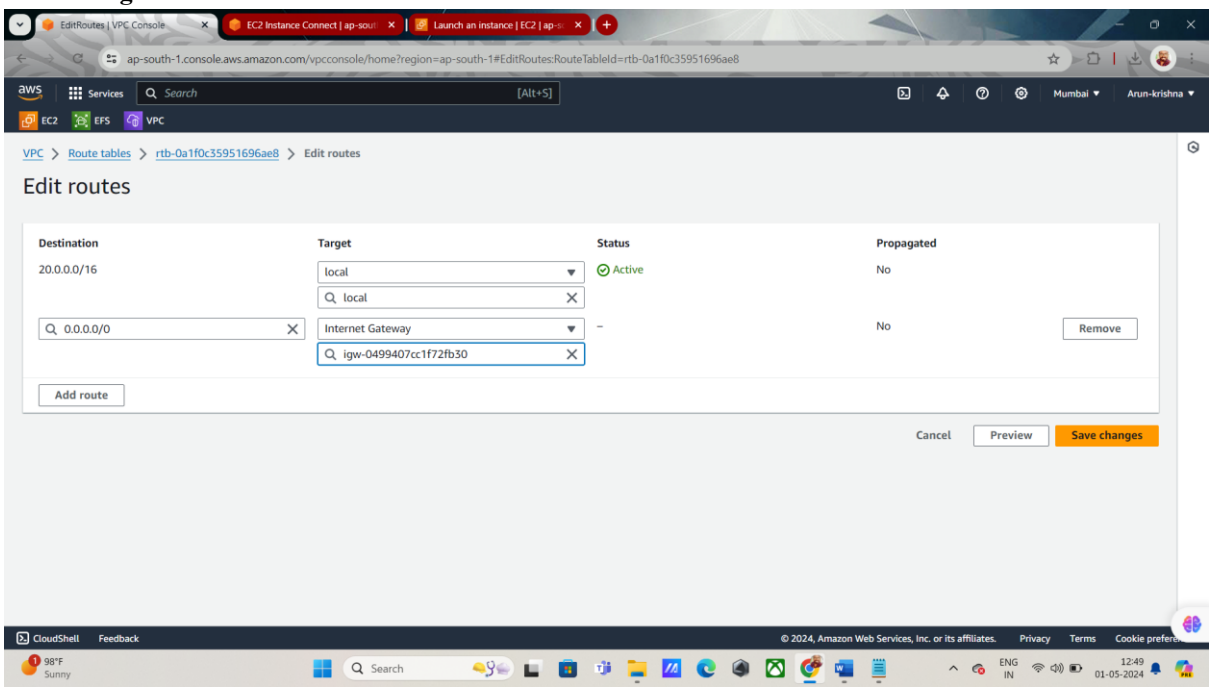
Web RT and Db Rt

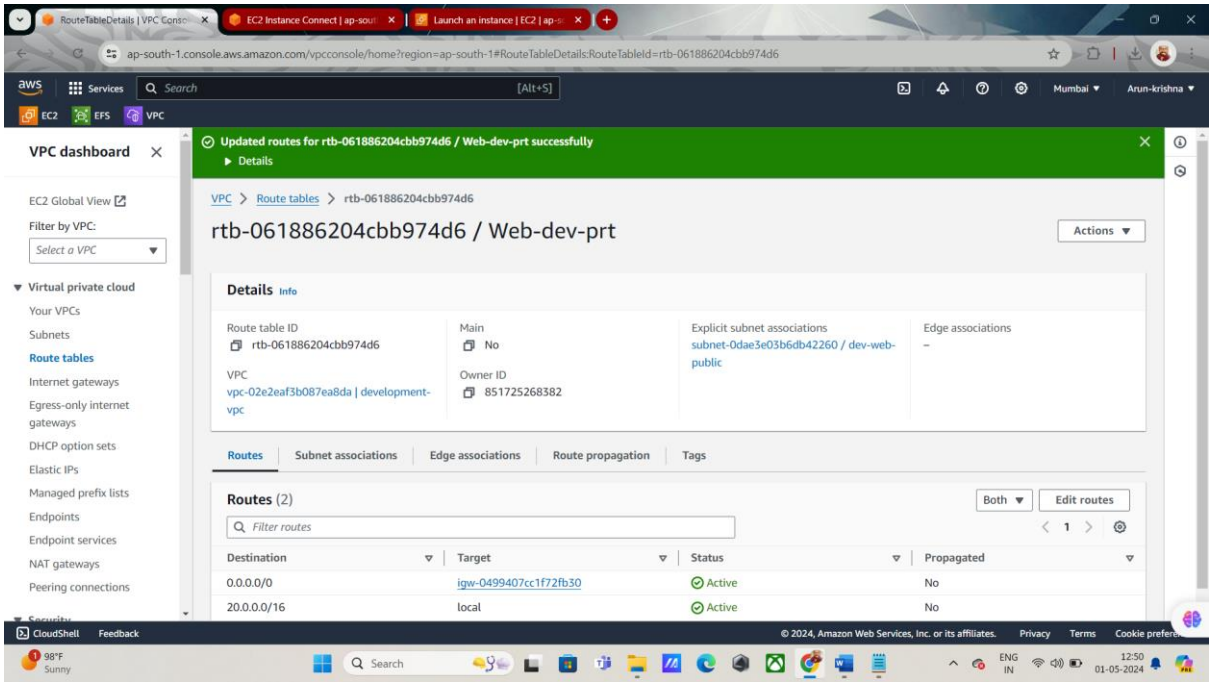


Now go to web RT and Db Rt add the assciaotion

Now go to edit route

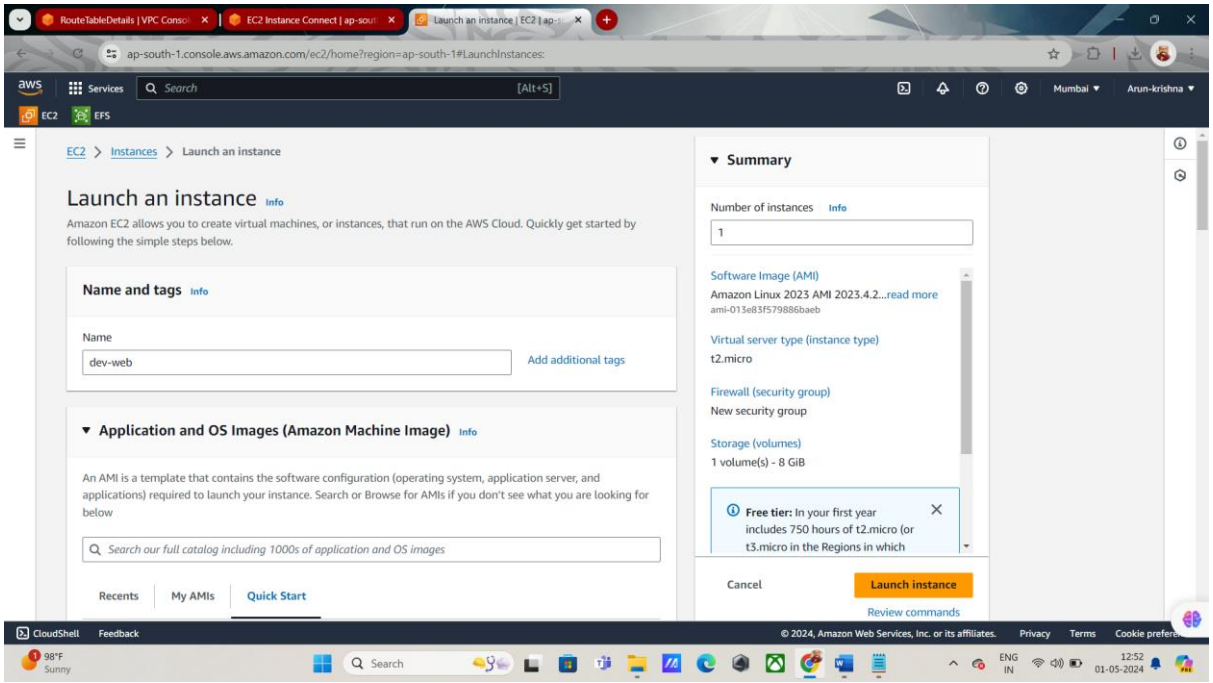
Save changes for the internet connection

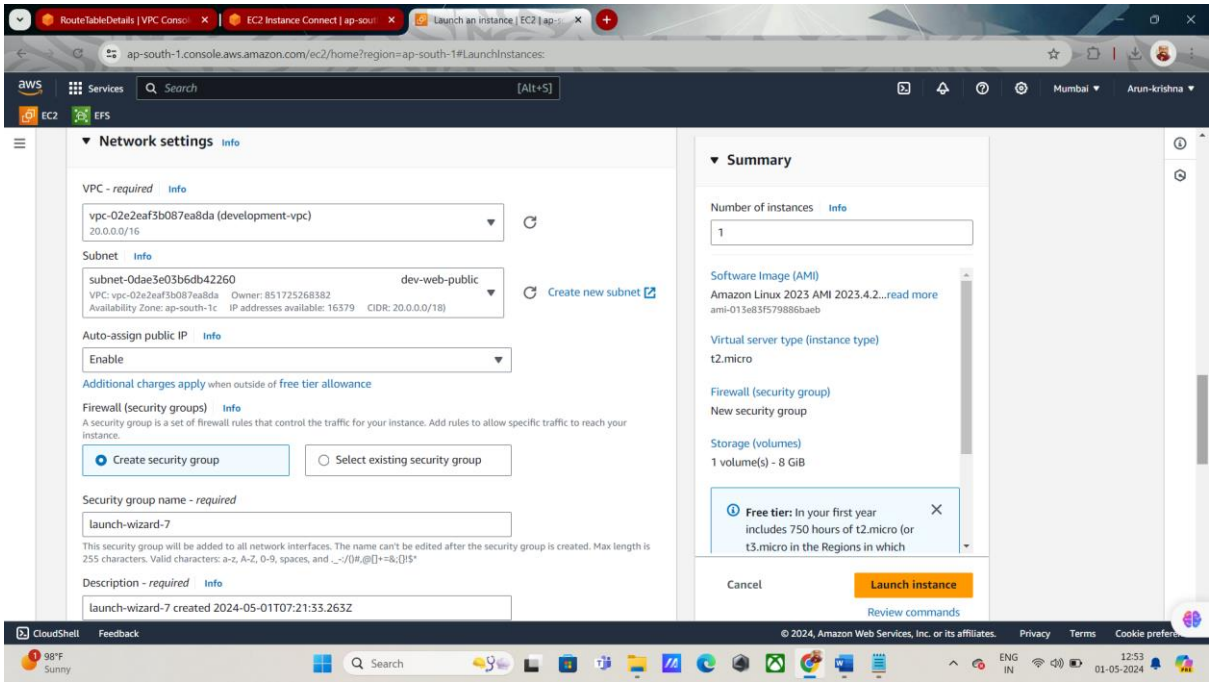


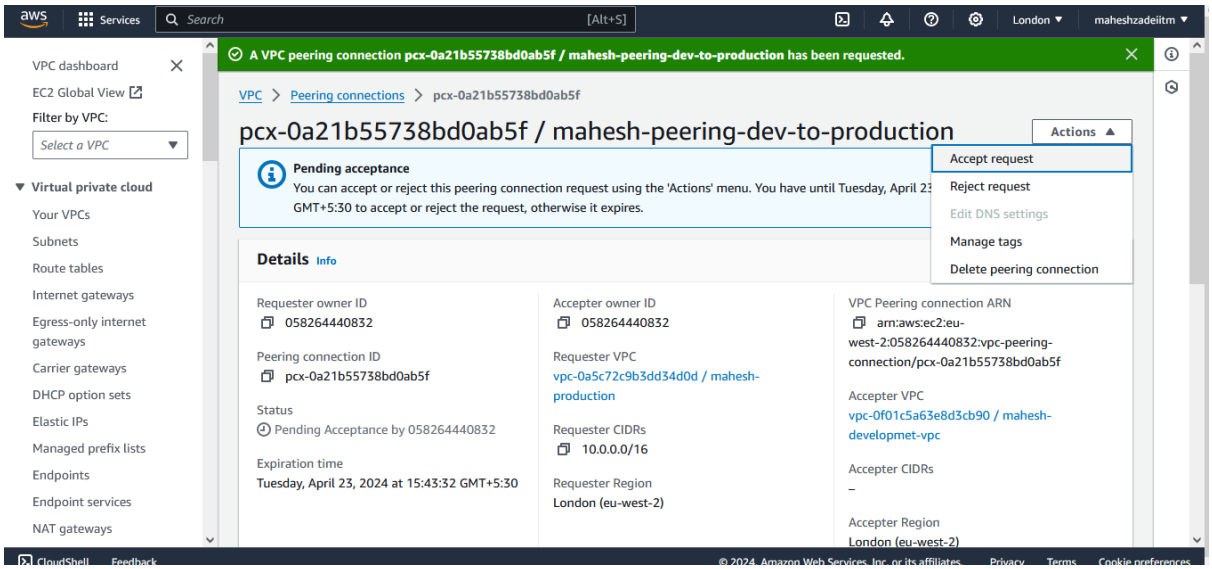


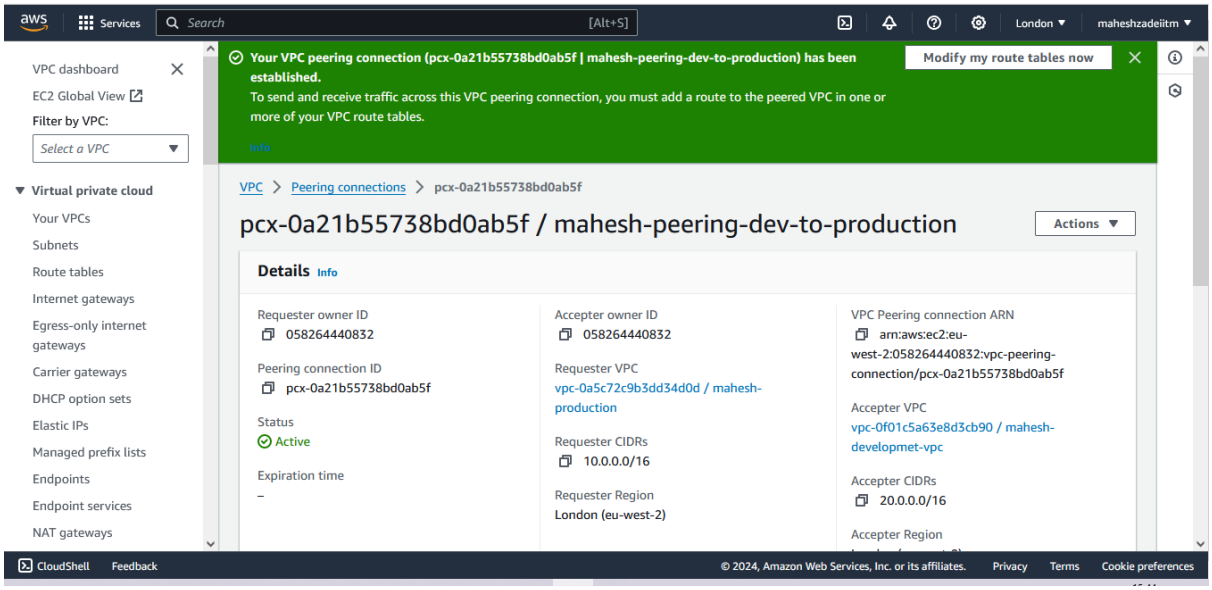
Now Lauch the two EC2 Instacne in web and db subnet of Dev VPC

Launch the web instance

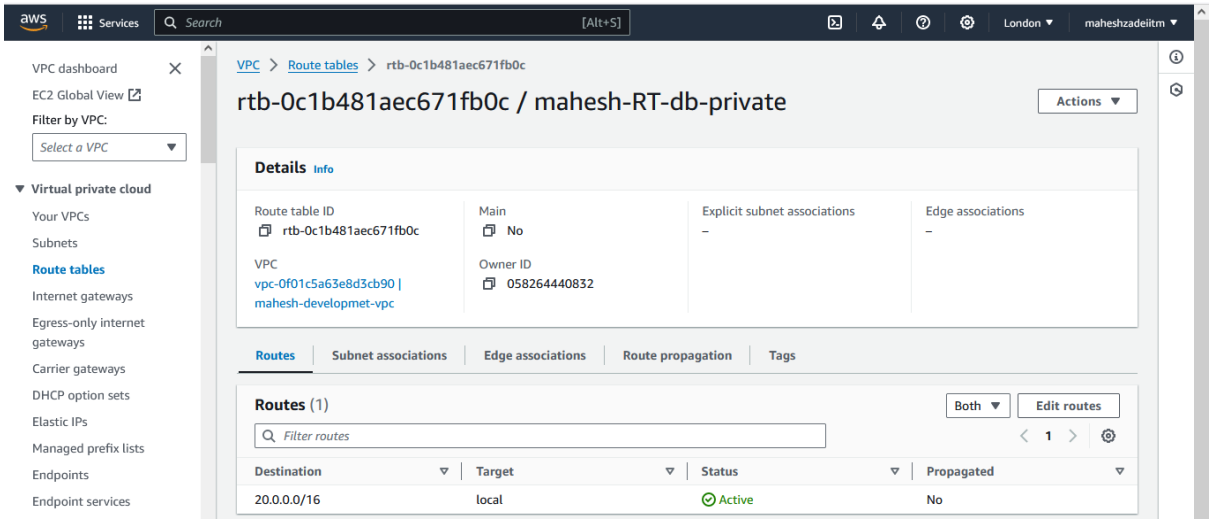

RouteTableDetails | VPC Consc
EC2 Instance Connect | ap-sout
Launch an instance | EC2 | ap-s
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
aws
Services
Search
[Alt+S]
Mumbai
Arun-krishna
EC2
EFS
EC2 > Instances > Launch an instance
Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
dev-web
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Recents
My AMIs
Quick Start
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.4.2...read more
ami-013e83f579886baeb
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which
Cancel
Launch instance
Review commands
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
98°F
Sunny
Search
ENG
IN
12:52
01-05-2024


RouteTableDetails | VPC Consc
EC2 Instance Connect | ap-sout
Launch an instance | EC2 | ap-s
ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:
aws
Services
Search
[Alt+S]
Mumbai
Arun-krishna
EC2
EFS
Network settings Info
VPC - required Info
vpc-02e2eaf3b087ea8da (development-vpc)
20.0.0.0/16
Subnet Info
subnet-0dae3e03b6db42260
dev-web-public
VPC: vpc-02e2eaf3b087ea8da Owner: 851725268382
Availability Zone: ap-south-1c IP addresses available: 16379 CIDR: 20.0.0.0/18)
Create new subnet
Auto-assign public IP Info
Enable
Additional charges apply when outside of free tier allowance
Firewall (security groups) Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.
Create security group
Select existing security group
Security group name - required
launch-wizard-7
This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*
Description - required Info
launch-wizard-7 created 2024-05-01T07:21:33.263Z
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.4.2...read more
ami-013e83f579886baeb
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which
Cancel
Launch instance
Review commands
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
98°F
Sunny
Search
ENG
IN
12:53
01-05-2024

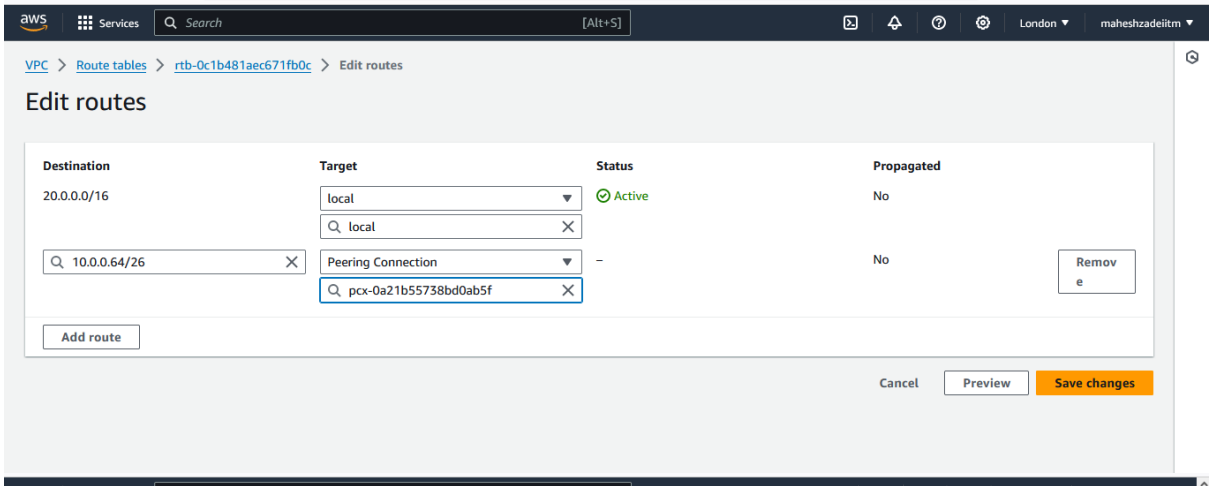


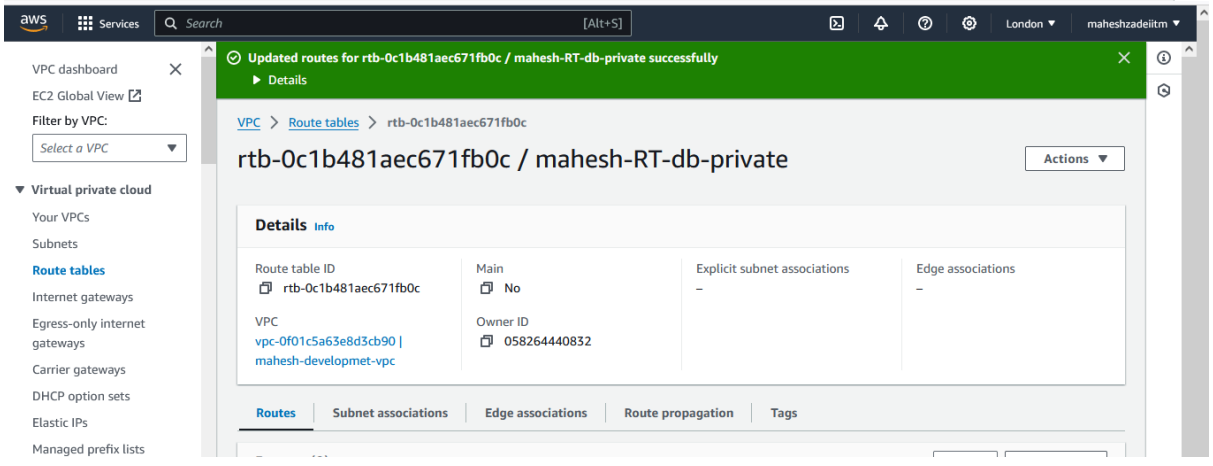


Your VPC peering connection (pcx-0a21b55738bd0ab5f | mahesh-peering-dev-to-production) has been established.
To send and receive traffic across this VPC peering connection, you must add a route to the peered VPC in one or more of your VPC route tables.
Now go to private RT of production VPC

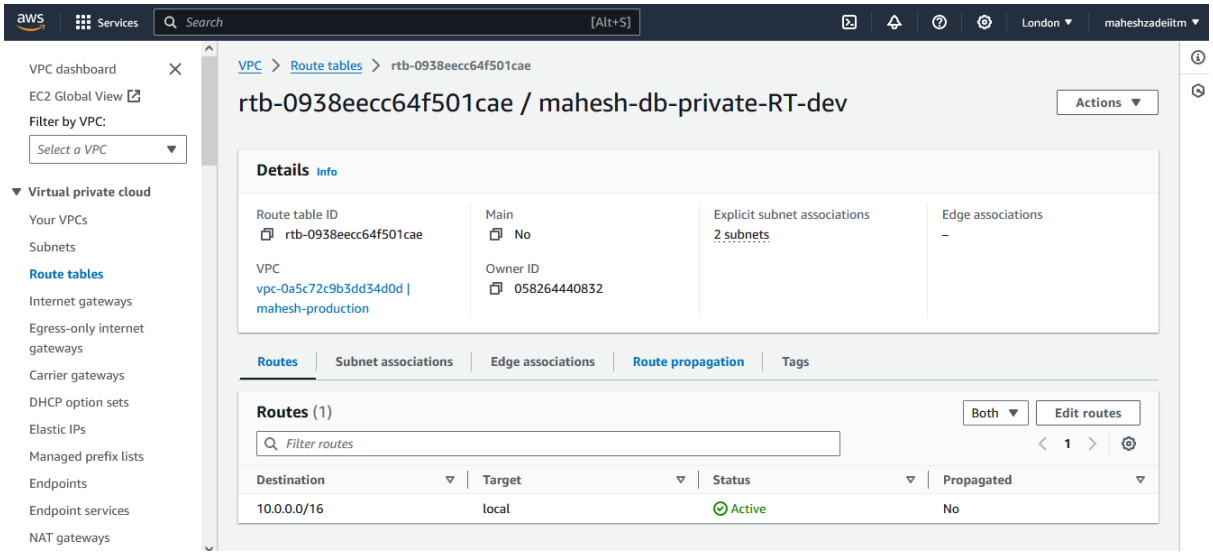


Go to dev priate subnet and take the CIDR and go to Route table and add the CIDR and perring the connection only between the two private subnets



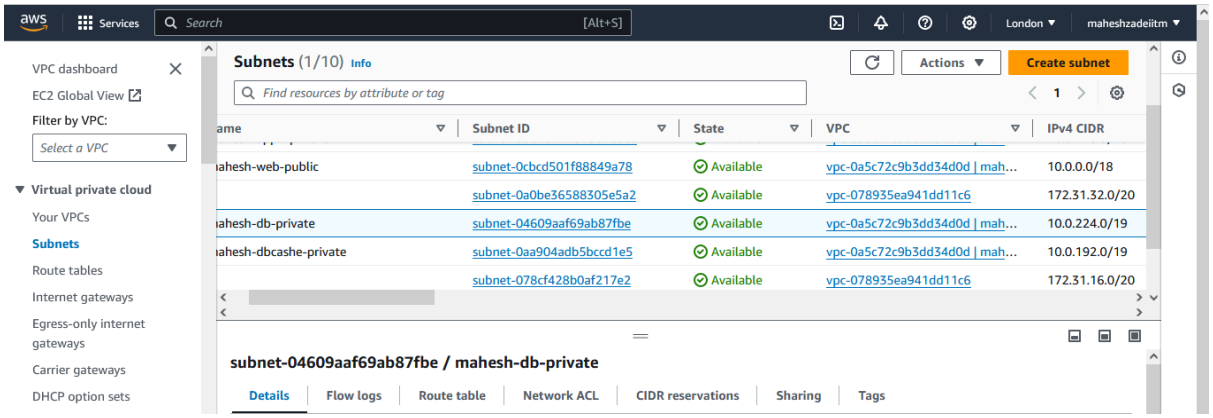


Similarly repeat the process for development private RT



Edit route

Go to production subnet route table and copy the CIDR



Copy the CIDR 10.0.224.0/19

10.0.0.0/16 prod CIDR

20.0.0.0/16 dev CID