Case study of VPC and Peering

Problem Statement:

You work for XYZ Corporation and based on the expansion requirements of your

corporation you have been asked to create and set up a distinct Amazon VPC for

the production and development team. You are expected to perform the following

tasks for the respective VPCs.

Production Network:

1. Design and build a 4-tier architecture.

2. Create 5 subnets out of which 4 should be private named app1, app2,

dbcache and db and one should be public, named web.

3. Launch instances in all subnets and name them as per the subnet that

they have been launched in.

4. Allow dbcache instance and app1 subnet to send internet requests.

5. Manage security groups and NACLs.

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.

2. 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

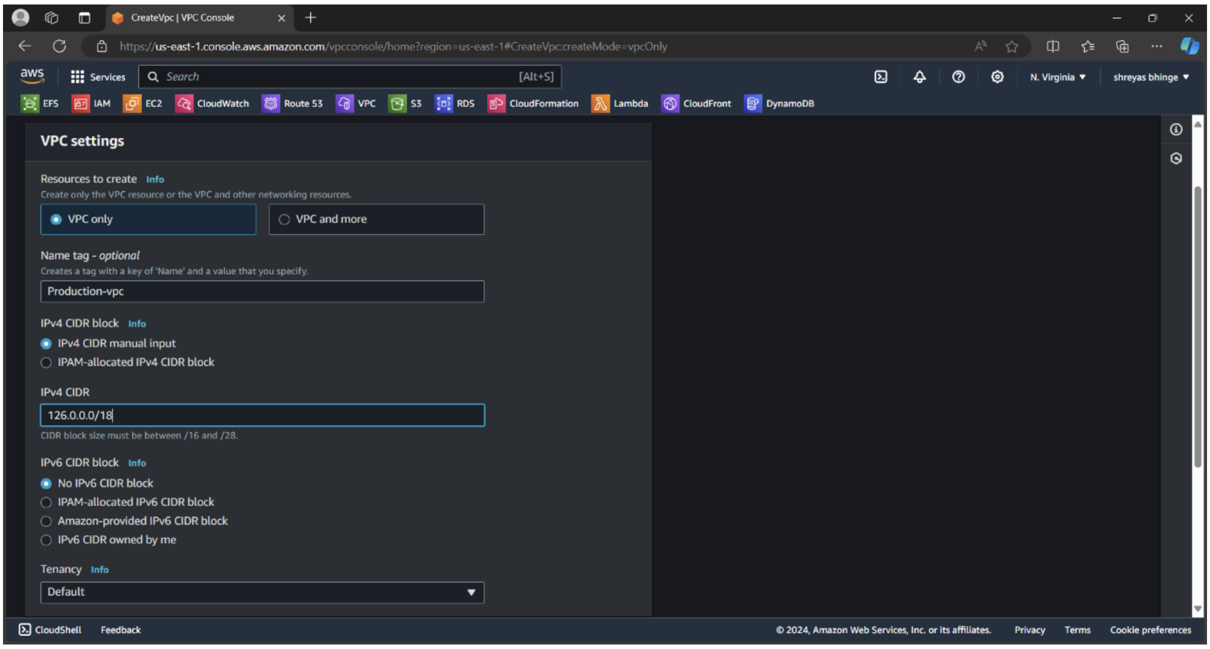
1. Design and build a 4-tier architecture.

2. Create 5 subnets out of which 4 should be private named app1, app2, dbcache and db and one should be public, named web.

3. Launch instances in all subnets and name them as per the subnet that they have been launched in.

4. Allow dbcache instance and app1 subnet to send internet requests.

a. Created the vpc



https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateVpc:createMode=vpcOnly

VPC settings

Resources to create Info

Create only the VPC resource or the VPC and other networking resources.

● VPC only ○ VPC and more

Name tag - *optional*

Creates a tag with a key of 'Name' and a value that you specify.

Production-vpc

IPv4 CIDR block Info

● IPv4 CIDR manual input

○ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

126.0.0.0/18

CIDR block size must be between /16 and /28.

IPv6 CIDR block Info

● No IPv6 CIDR block

○ IPAM-allocated IPv6 CIDR block

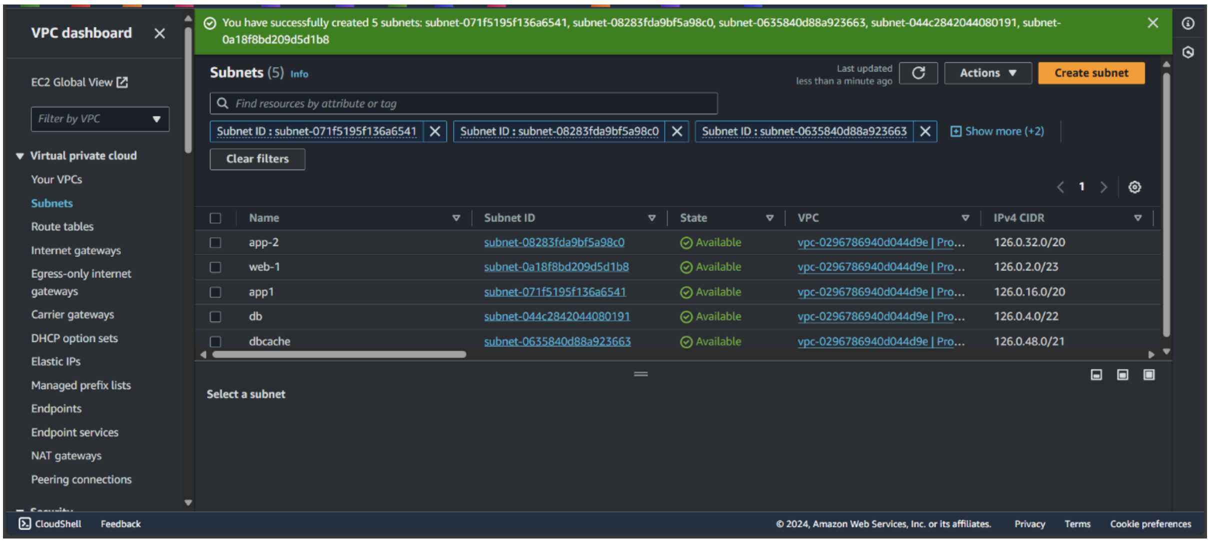
○ Amazon-provided IPv6 CIDR block

○ IPv6 CIDR owned by me

Tenancy Info

Default

b. Created the five subnet



You have successfully created 5 subnets: subnet-071f5195f136a6541, subnet-08283fda9bf5a98c0, subnet-0635840d88a923663, subnet-044c2842044080191, subnet-0a18f8bd209d5d1b8

Subnets (5) Info

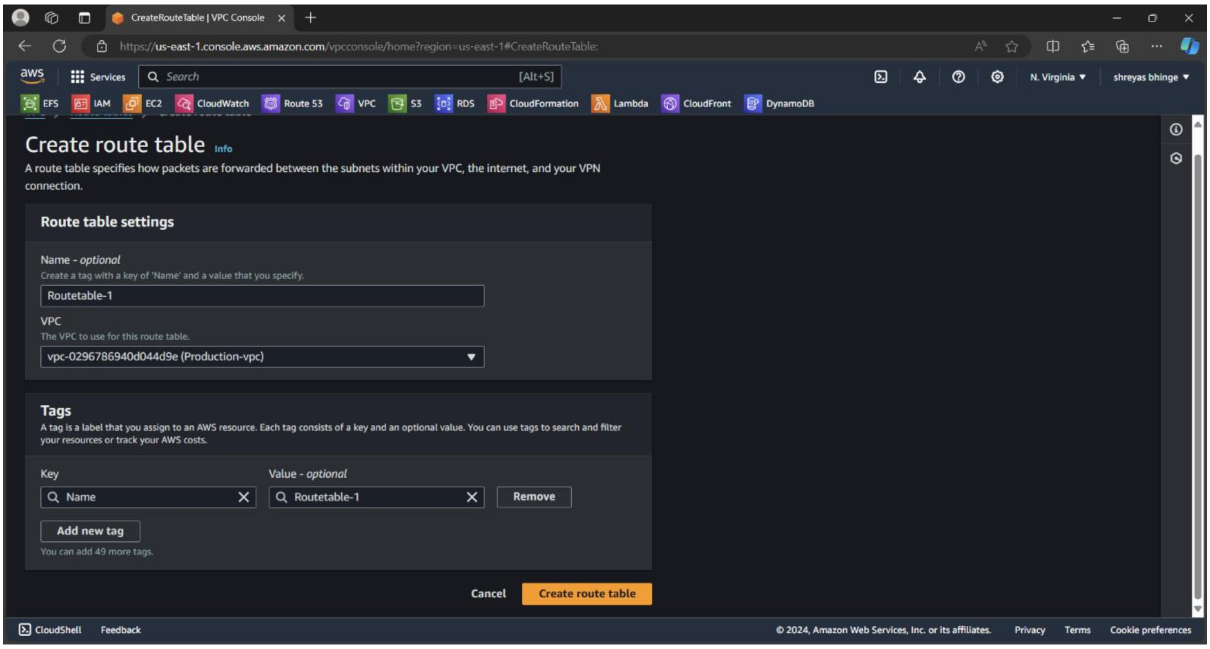
Last updated less than a minute ago

Subnet ID : subnet-071f5195f136a6541 ✕ Subnet ID : subnet-08283fda9bf5a98c0 ✕ Subnet ID : subnet-0635840d88a923663 ✕ Show more (+2)

□	Name	Subnet ID	State	VPC	IPv4 CIDR
□	app-2	subnet-08283fda9bf5a98c0	✓ Available	vpc-0296786940d044d9e | Pro...	126.0.32.0/20
□	web-1	subnet-0a18f8bd209d5d1b8	✓ Available	vpc-0296786940d044d9e | Pro...	126.0.2.0/23
□	app1	subnet-071f5195f136a6541	✓ Available	vpc-0296786940d044d9e | Pro...	126.0.16.0/20
□	db	subnet-044c2842044080191	✓ Available	vpc-0296786940d044d9e | Pro...	126.0.4.0/22
□	dbcache	subnet-0635840d88a923663	✓ Available	vpc-0296786940d044d9e | Pro...	126.0.48.0/21

Select a subnet

c. Web subnet should have internet connection created route table and internet gateway



https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateRouteTable:

Create route table

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

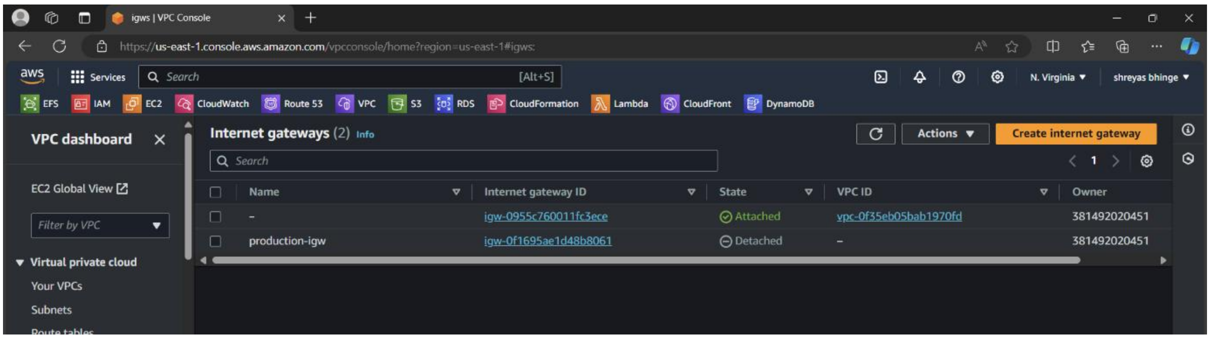
Name - *optional*
Create a tag with a key of 'Name' and a value that you specify.
Routetable-1

VPC
The VPC to use for this route table.
vpc-0296786940d044d9e (Production-vpc)

Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - *optional*
Name	Routetable-1

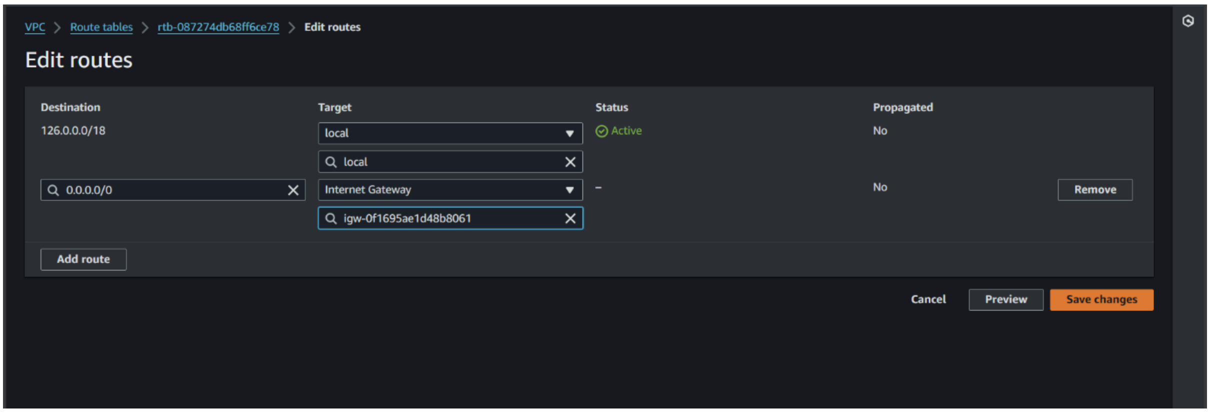
You can add 49 more tags.



https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#igws:

Internet gateways (2)

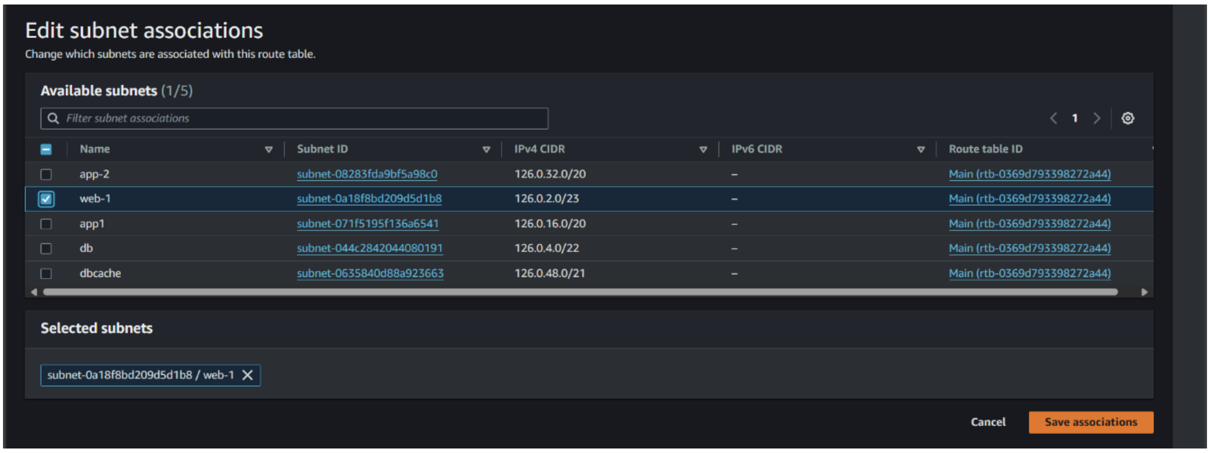
Name	Internet gateway ID	State	VPC ID	Owner
-	igw-0955c760011fc3ece	Attached	vpc-0f35eb05bab1970fd	381492020451
production-igw	igw-0f1695ae1d48b8061	Detached	–	381492020451



VPC > Route tables > rtb-087274db68ff6ce78 > Edit routes

Edit routes

Destination	Target	Status	Propagated
126.0.0.0/18	local local	Active	No
0.0.0.0/0	Internet Gateway igw-0f1695ae1d48b8061	–	No



Edit subnet associations

Change which subnets are associated with this route table.

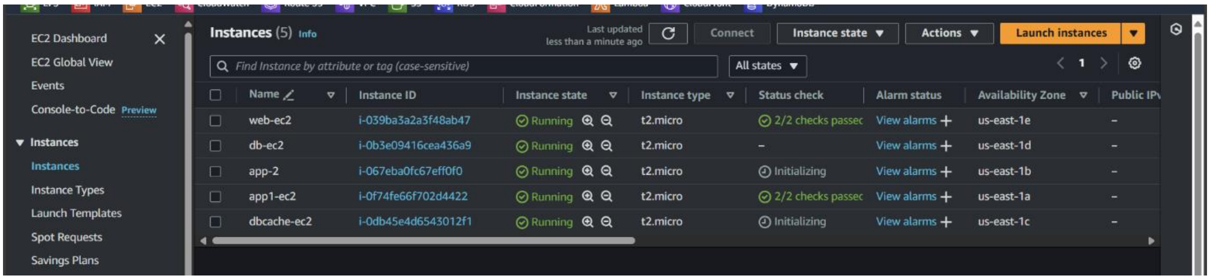
Available subnets (1/5)

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
□	app-2	subnet-08283fda9bf5a98c0	126.0.32.0/20	–	Main (rtb-0369d793398272a44)
☑	web-1	subnet-0a18f8bd209d5d1b8	126.0.2.0/23	–	Main (rtb-0369d793398272a44)
□	app1	subnet-071f5195f136a6541	126.0.16.0/20	–	Main (rtb-0369d793398272a44)
□	db	subnet-044c2842044080191	126.0.4.0/22	–	Main (rtb-0369d793398272a44)
□	dbcache	subnet-0635840d88a923663	126.0.48.0/21	–	Main (rtb-0369d793398272a44)

Selected subnets

subnet-0a18f8bd209d5d1b8 / web-1

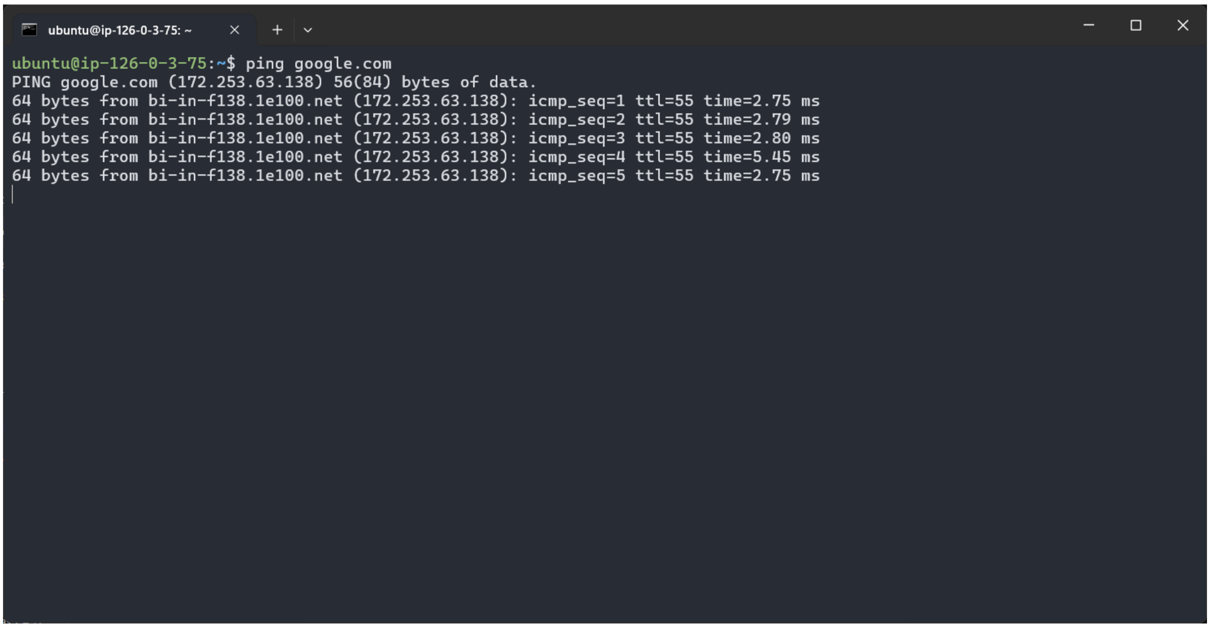
d. Created 5 instance in each subnet



Instances (5)

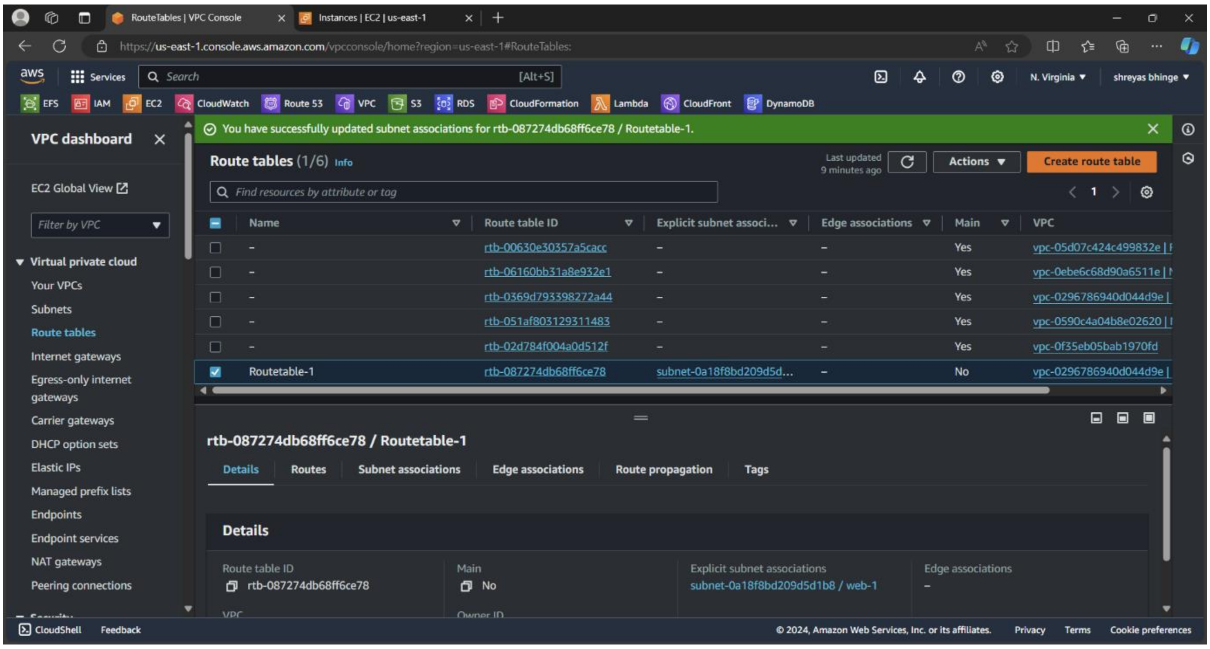
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv
□	web-ec2	i-039ba3a2a3f48ab47	Running	t2.micro	2/2 checks passec	View alarms +	us-east-1e	–
□	db-ec2	i-0b3e09416cea436a9	Running	t2.micro	–	View alarms +	us-east-1d	–
□	app-2	i-067eba0fc67eff0f0	Running	t2.micro	Initializing	View alarms +	us-east-1b	–
□	app1-ec2	i-0f74fe66f702d4422	Running	t2.micro	2/2 checks passec	View alarms +	us-east-1a	–
□	dbcache-ec2	i-0db45e4d6543012f1	Running	t2.micro	Initializing	View alarms +	us-east-1c	–

e. Connected web instance and checked internet connection



```
ubuntu@ip-126-0-3-75:~$ ping google.com
PING google.com (172.253.63.138) 56(84) bytes of data.
64 bytes from bi-in-f138.1e100.net (172.253.63.138): icmp_seq=1 ttl=55 time=2.75 ms
64 bytes from bi-in-f138.1e100.net (172.253.63.138): icmp_seq=2 ttl=55 time=2.79 ms
64 bytes from bi-in-f138.1e100.net (172.253.63.138): icmp_seq=3 ttl=55 time=2.80 ms
64 bytes from bi-in-f138.1e100.net (172.253.63.138): icmp_seq=4 ttl=55 time=5.45 ms
64 bytes from bi-in-f138.1e100.net (172.253.63.138): icmp_seq=5 ttl=55 time=2.75 ms
```

f. Created Routetable-2 for connecting dbcache and app1 instances by NAT gateway



You have successfully updated subnet associations for rtb-087274db68ff6ce78 / Routetable-1.

Route tables (1/6) Info

Last updated 9 minutes ago

Actions ▼ | Create route table

Find resources by attribute or tag

	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
□	-	rtb-00630e30357a5cacc	–	–	Yes	vpc-05d07c424c499832e |
□	-	rtb-06160bb31a8e932e1	–	–	Yes	vpc-0ebe6c68d90a6511e |
□	-	rtb-0369d793398272a44	–	–	Yes	vpc-0296786940d044d9e |
□	-	rtb-051af803129311483	–	–	Yes	vpc-0590c4a04b8e02620 |
□	-	rtb-02d784f004a0d512f	–	–	Yes	vpc-0f35eb05bab1970fd
☑	Routetable-1	rtb-087274db68ff6ce78	subnet-0a18f8bd209d5d...	–	No	vpc-0296786940d044d9e |

rtb-087274db68ff6ce78 / Routetable-1

Details | Routes | Subnet associations | Edge associations | Route propagation | Tags

Details

Route table ID: rtb-087274db68ff6ce78

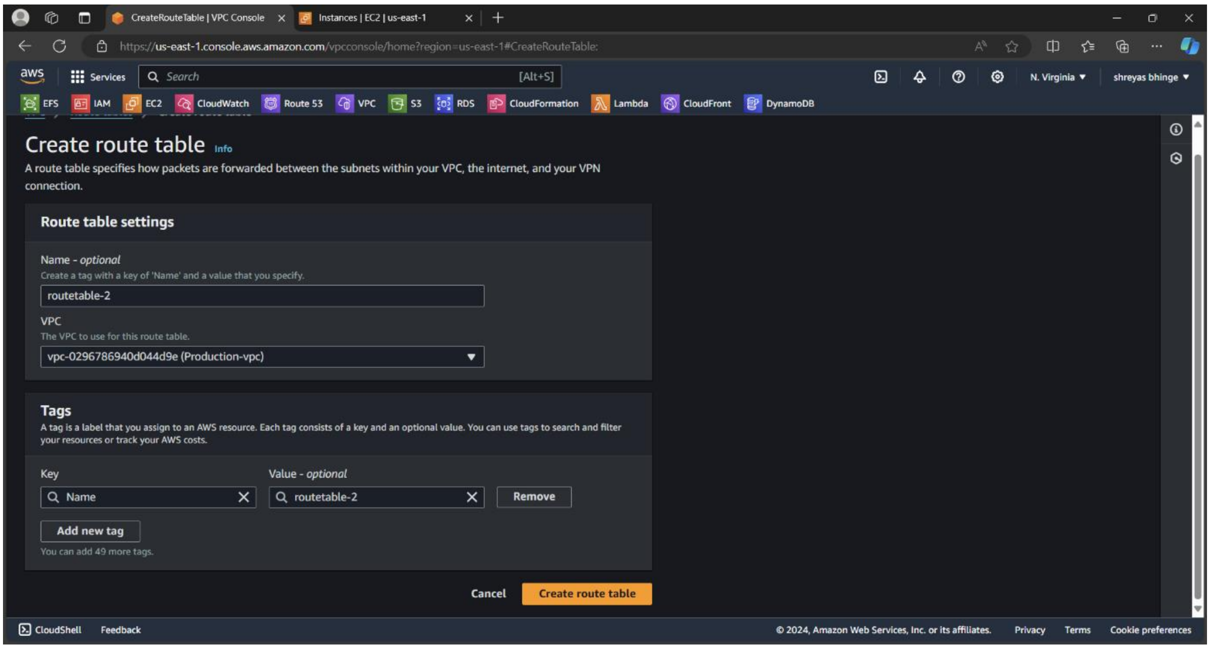
Main: No

Explicit subnet associations: subnet-0a18f8bd209d5d1b8 / web-1

Edge associations: –

VPC

Owner ID



CreateRouteTable | VPC Console
Instances | EC2 | us-east-1
https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateRouteTable:
Services
Search
[Alt+S]
N. Virginia ▼
shreyas bhinge ▼
EFS
IAM
EC2
CloudWatch
Route 53
VPC
S3
RDS
CloudFormation
Lambda
CloudFront
DynamoDB
CloudShell
Feedback
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Privacy
Terms
Cookie preferences

Create route table Info

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

Name - *optional*

Create a tag with a key of 'Name' and a value that you specify.

routetable-2

VPC

The VPC to use for this route table.

vpc-0296786940d044d9e (Production-vpc) ▼

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key: Name

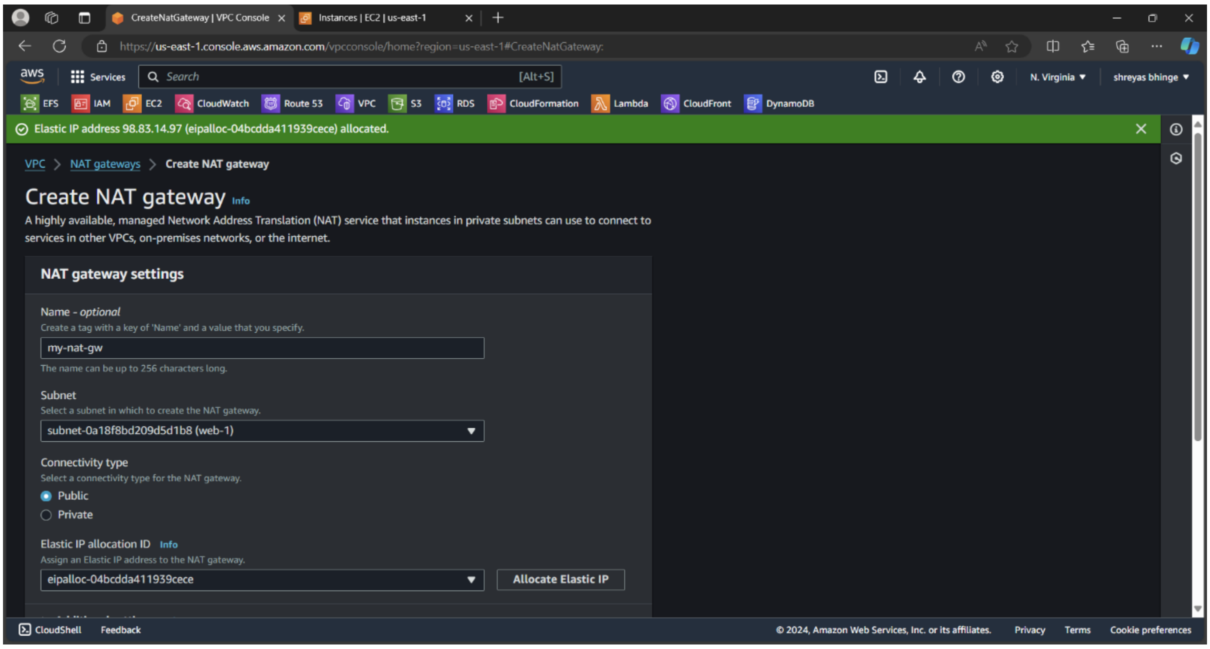
Value - *optional*: routetable-2

Remove

Add new tag

You can add 49 more tags.

Cancel | Create route table


CreateNatGateway | VPC Console
Instances | EC2 | us-east-1
https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateNatGateway:
Services
Search [Alt+S]
N. Virginia
shreyas bhinge
EFS IAM EC2 CloudWatch Route 53 VPC S3 RDS CloudFormation Lambda CloudFront DynamoDB
CloudShell
Feedback
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Privacy
Terms
Cookie preferences

Elastic IP address 98.83.14.97 (eipalloc-04bcdda411939cece) allocated.

VPC > NAT gateways > Create NAT gateway

Create NAT gateway Info

A highly available, managed Network Address Translation (NAT) service that instances in private subnets can use to connect to services in other VPCs, on-premises networks, or the internet.

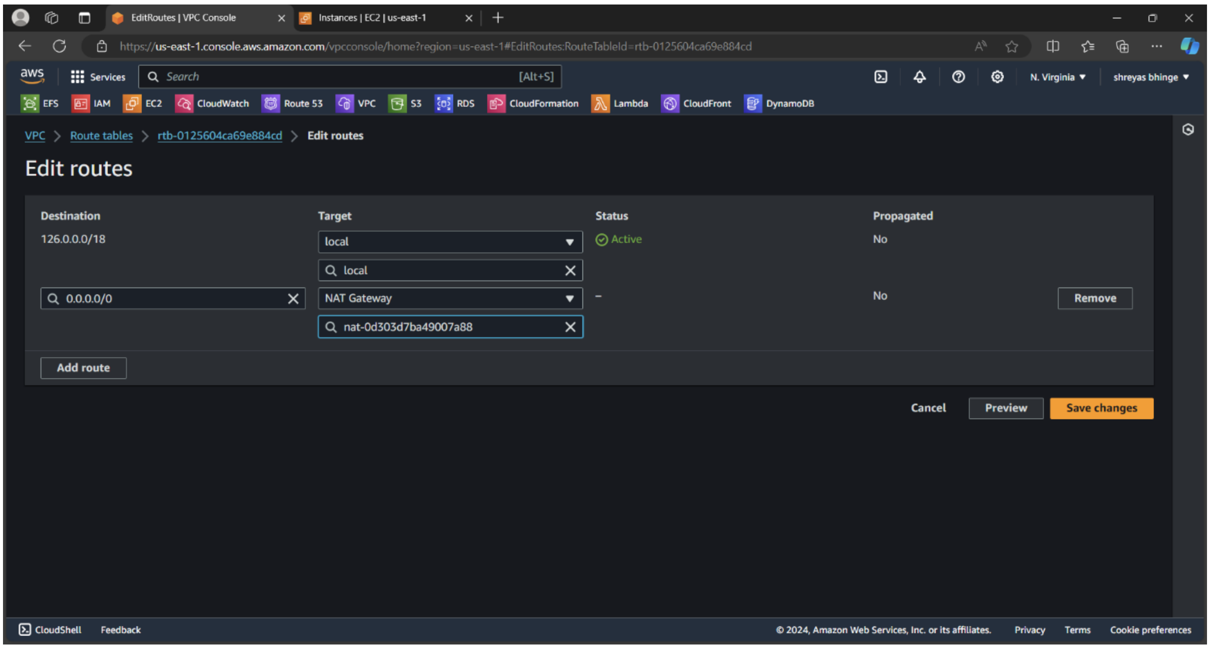
NAT gateway settings

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

Subnet
Select a subnet in which to create the NAT gateway.
subnet-0a18f8bd209d5d1b8 (web-1)

Connectivity type
Select a connectivity type for the NAT gateway.
● Public
○ Private

Elastic IP allocation ID Info
Assign an Elastic IP address to the NAT gateway.
eipalloc-04bcdda411939cece


EditRoutes | VPC Console
Instances | EC2 | us-east-1
https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#EditRoutes:RouteTableId=rtb-0125604ca69e884cd
Services
Search [Alt+S]
N. Virginia
shreyas bhinge
EFS IAM EC2 CloudWatch Route 53 VPC S3 RDS CloudFormation Lambda CloudFront DynamoDB
CloudShell
Feedback
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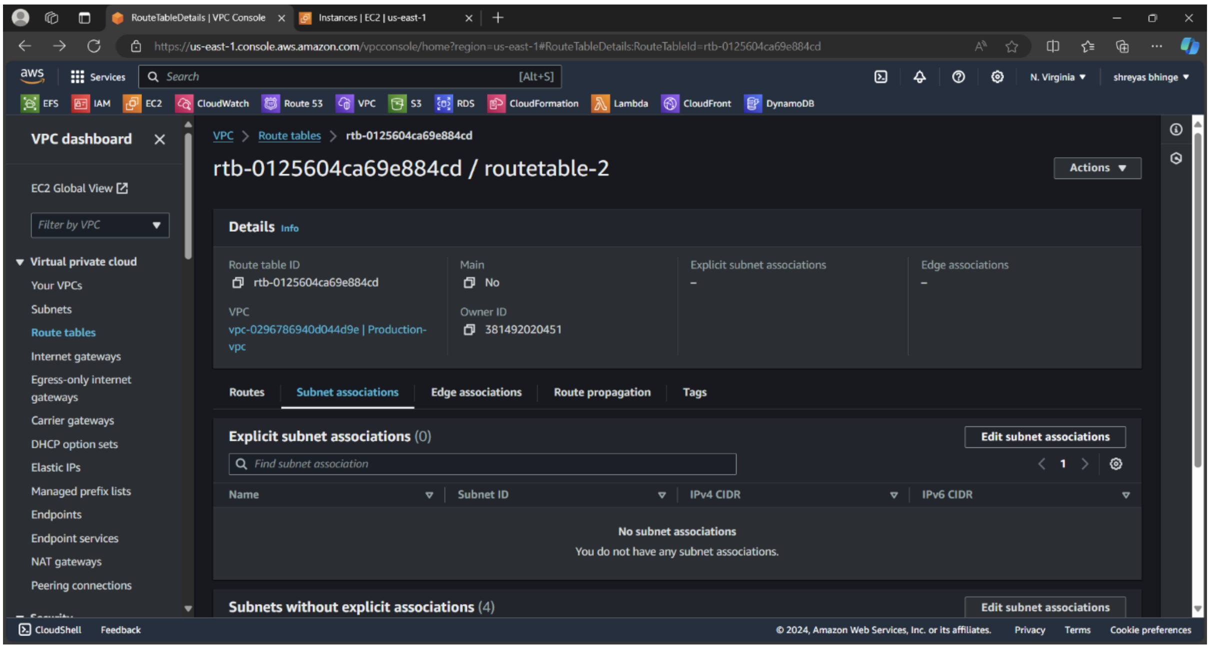
Privacy
Terms
Cookie preferences

VPC > Route tables > rtb-0125604ca69e884cd > Edit routes

Edit routes

Destination	Target	Status	Propagated	
126.0.0.0/18	local local	✓ Active	No	
0.0.0.0/0	NAT Gateway nat-0d303d7ba49007a88	-	No	Remove

Add route
Cancel
Preview
Save changes



VPC > Route tables > rtb-0125604ca69e884cd

rtb-0125604ca69e884cd / routetable-2

Details

Route table ID: rtb-0125604ca69e884cd

Main: No

Explicit subnet associations: –

Edge associations: –

VPC: vpc-0296786940d044d9e | Production-vpc

Owner ID: 381492020451

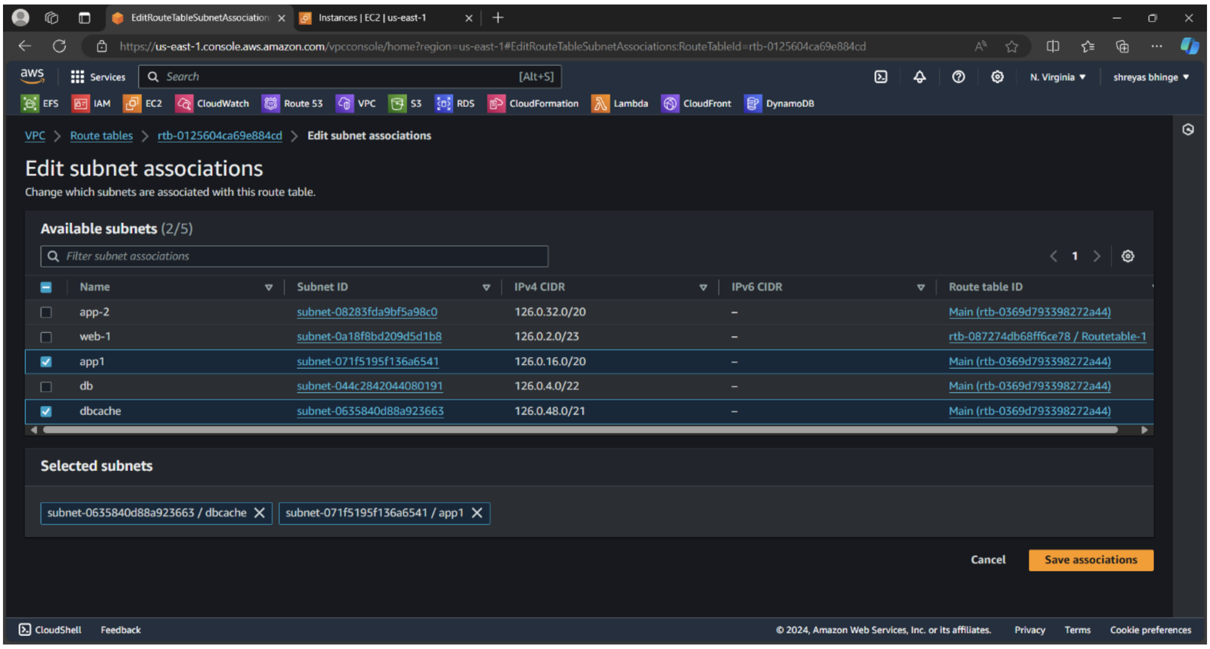
Explicit subnet associations (0)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR

No subnet associations

You do not have any subnet associations.

Subnets without explicit associations (4)



VPC > Route tables > rtb-0125604ca69e884cd > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/5)

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
☐	app-2	subnet-08283fda9bf5a98c0	126.0.32.0/20	–	Main (rtb-0369d793398272a44)
☐	web-1	subnet-0a18f8bd209d5d1b8	126.0.2.0/23	–	rtb-087274db68ff6ce78 / Routetable-1
☑	app1	subnet-071f5195f136a6541	126.0.16.0/20	–	Main (rtb-0369d793398272a44)
☐	db	subnet-044c2842044080191	126.0.4.0/22	–	Main (rtb-0369d793398272a44)
☑	dbcache	subnet-0635840d88a923663	126.0.48.0/21	–	Main (rtb-0369d793398272a44)

Selected subnets

subnet-0635840d88a923663 / dbcache

subnet-071f5195f136a6541 / app1

EditRouteTableSubnetAssociation
Instances | EC2 | us-east-1
https://us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-0125604ca69e884cd
Services
Search
[Alt+S]
N. Virginia
shreyas bhinge
EFS
IAM
EC2
CloudWatch
Route 53
VPC
S3
RDS
CloudFormation
Lambda
CloudFront
DynamoDB
Filter subnet associations
Cancel
Save associations
CloudShell
Feedback
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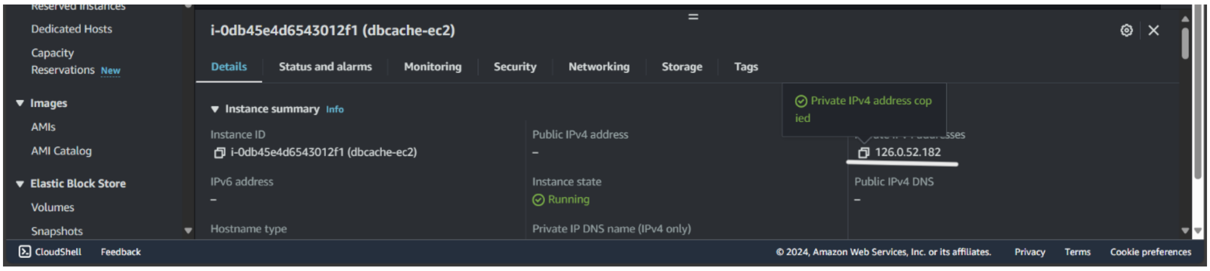
Privacy
Terms
Cookie preferences

g. Connect the web instance which has internet access

use commands:

1. Nano Demo-1.pem
2. Add private key and save
3. Chmod 400 Demo-1.pem
4. Ssh -i Demo-1.pem ubuntu@Private ip of dbcahe



i-0db45e4d6543012f1 (dbcache-ec2)

Instance summary Info

Private IPv4 address copied

Instance ID: i-0db45e4d6543012f1 (dbcache-ec2)

Public IPv4 address: –

Private IPv4 addresses: 126.0.52.182

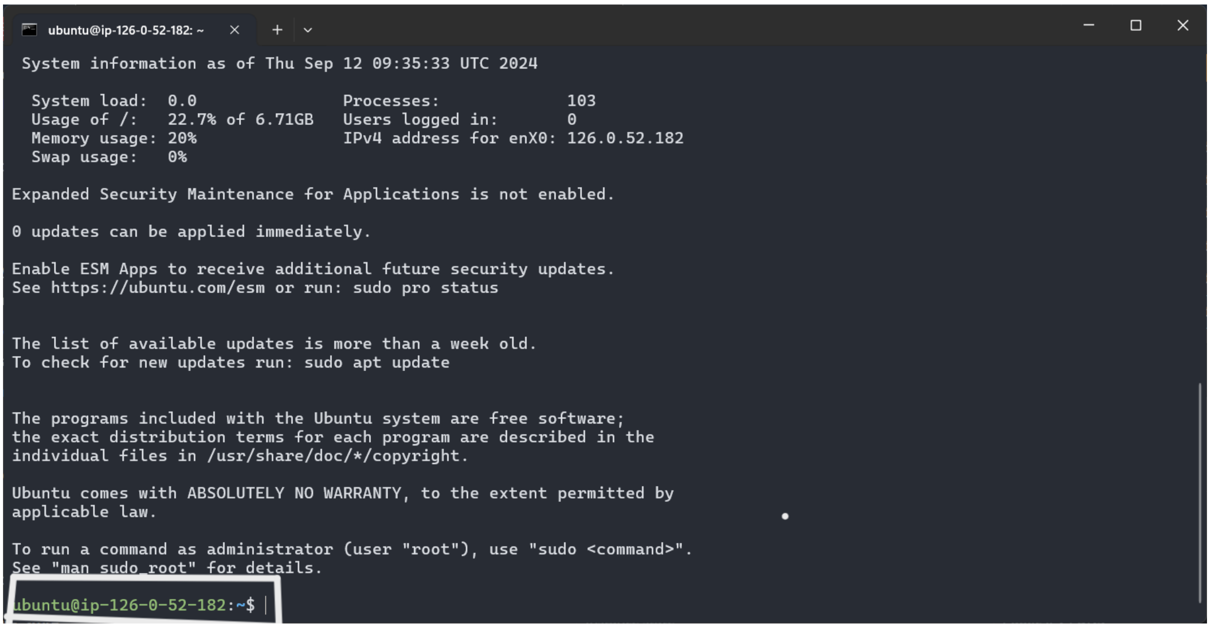
IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

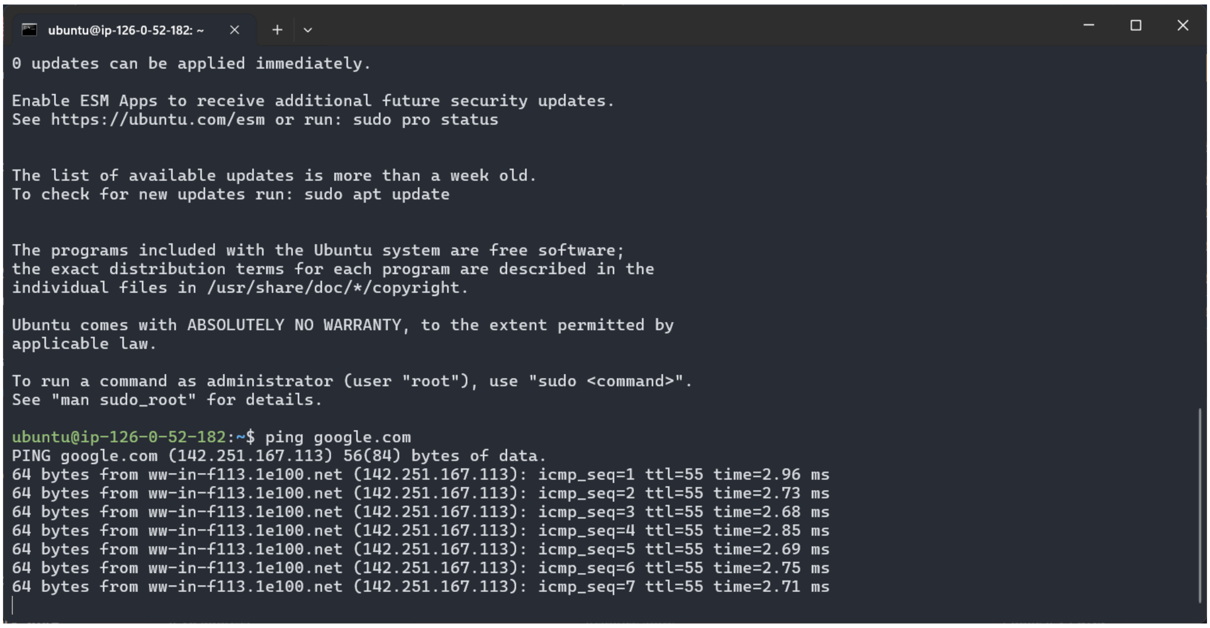
Hostname type

Private IP DNS name (IPv4 only)



```
 System information as of Thu Sep 12 09:35:33 UTC 2024

  System load:  0.0               Processes:             103
  Usage of /:   22.7% of 6.71GB   Users logged in:       0
  Memory usage: 20%               IPv4 address for enX0: 126.0.52.182
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-126-0-52-182:~$
```

Checked internet connection



```
0 updates can be applied immediately.

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See https://ubuntu.com/esm or run: sudo pro status


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the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-126-0-52-182:~$ ping google.com
PING google.com (142.251.167.113) 56(84) bytes of data.
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=1 ttl=55 time=2.96 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=2 ttl=55 time=2.73 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=3 ttl=55 time=2.68 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=4 ttl=55 time=2.85 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=5 ttl=55 time=2.69 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=6 ttl=55 time=2.75 ms
64 bytes from ww-in-f113.1e100.net (142.251.167.113): icmp_seq=7 ttl=55 time=2.71 ms
```
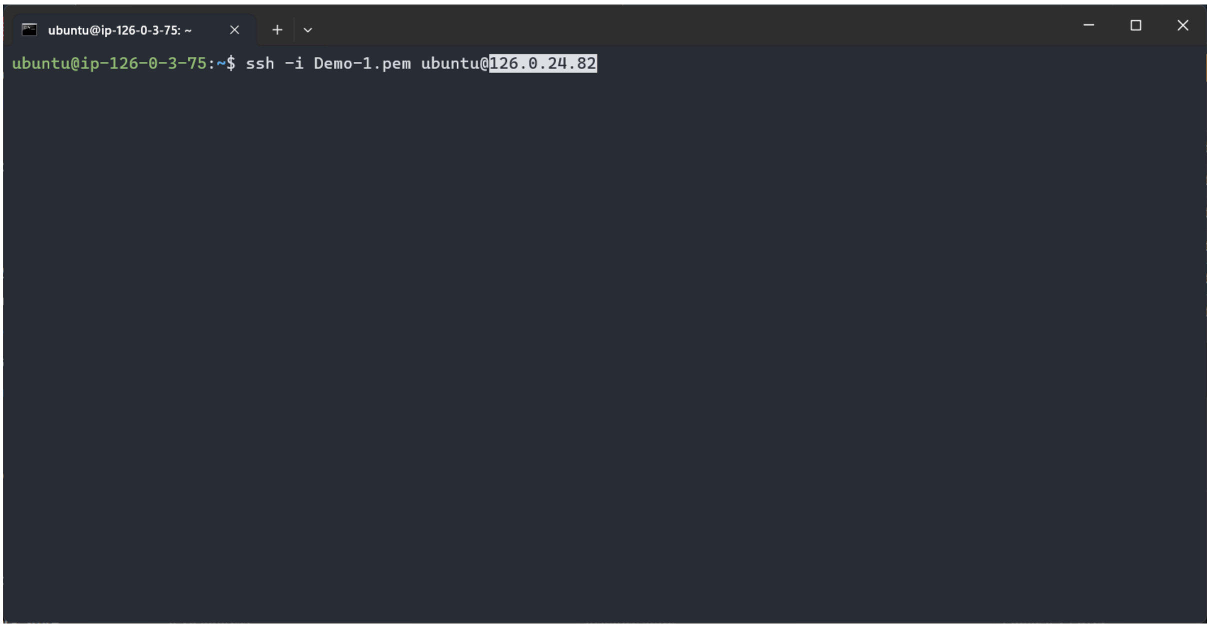
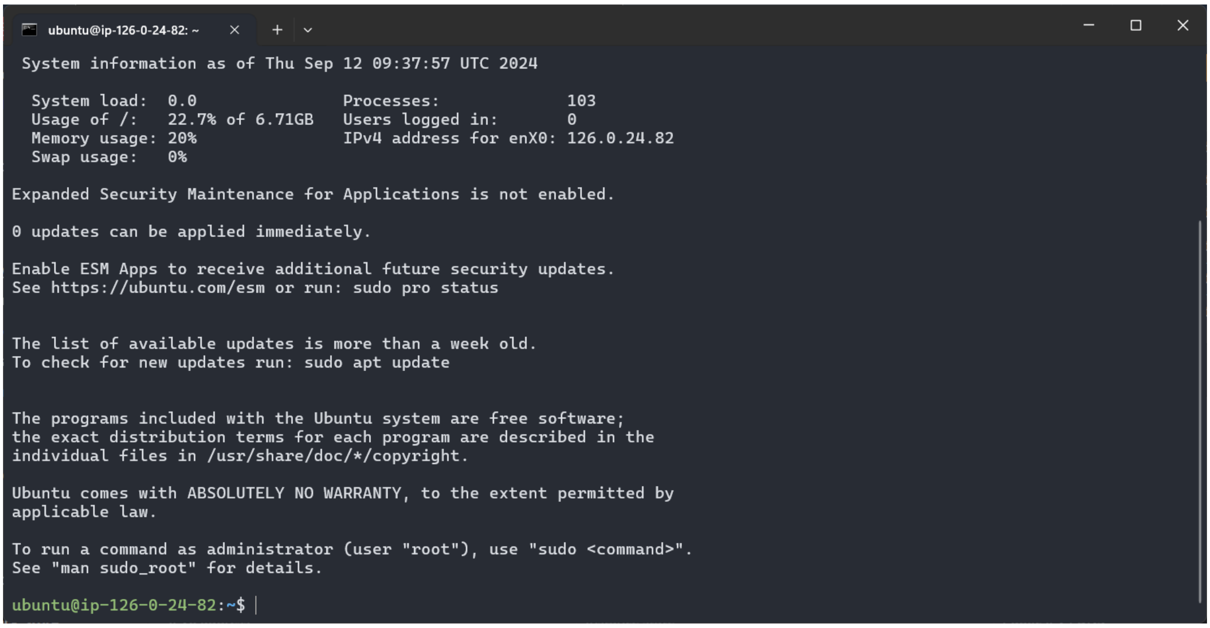

h. Also connected app1 same as above



```
ubuntu@ip-126-0-3-75:~$ ssh -i Demo-1.pem ubuntu@126.0.24.82
```



```
 System information as of Thu Sep 12 09:37:57 UTC 2024

  System load:  0.0               Processes:             103
  Usage of /:   22.7% of 6.71GB   Users logged in:       0
  Memory usage: 20%               IPv4 address for enX0: 126.0.24.82
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


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applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-126-0-24-82:~$
```

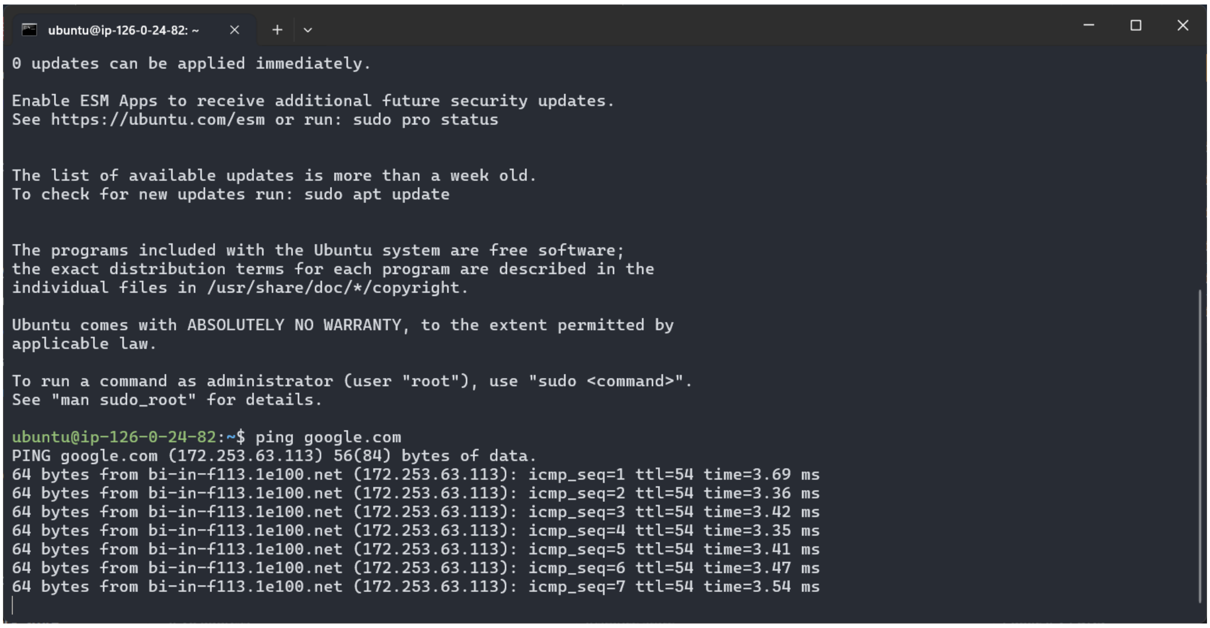

```
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
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Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-126-0-24-82:~$ ping google.com
PING google.com (172.253.63.113) 56(84) bytes of data.
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=1 ttl=54 time=3.69 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=2 ttl=54 time=3.36 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=3 ttl=54 time=3.42 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=4 ttl=54 time=3.35 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=5 ttl=54 time=3.41 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=6 ttl=54 time=3.47 ms
64 bytes from bi-in-f113.1e100.net (172.253.63.113): icmp_seq=7 ttl=54 time=3.54 ms
```

Development Network:

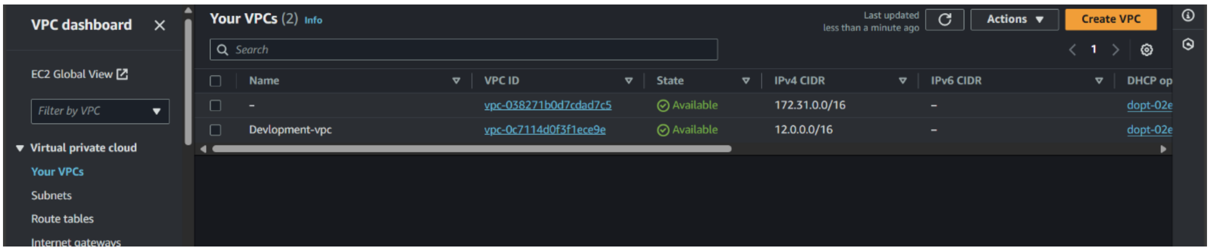
1. Design and build 2-tier architecture with two subnets named web and db and launch instances in both subnets and name them as per the subnet names.

2. 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

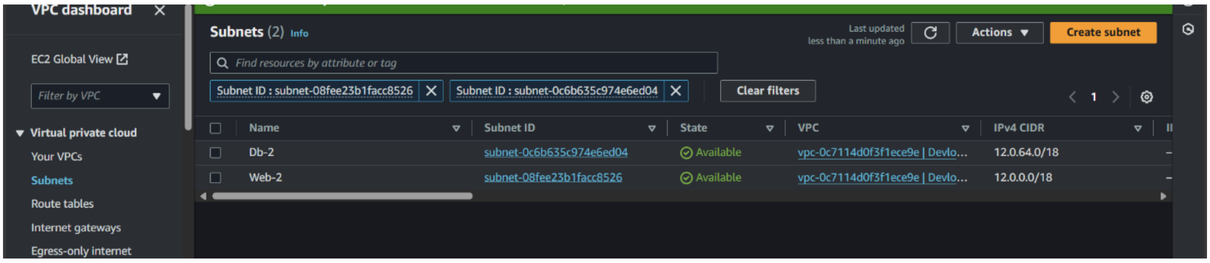
a. Created VPC



Your VPCs (2) Info

□	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP op
□	-	vpc-038271b0d7cdad7c5	Available	172.31.0.0/16	–	dopt-02e
□	Devlopment-vpc	vpc-0c7114d0f3f1ece9e	Available	12.0.0.0/16	–	dopt-02e

b. Two subnet web-2 and db2



Subnets (2) Info

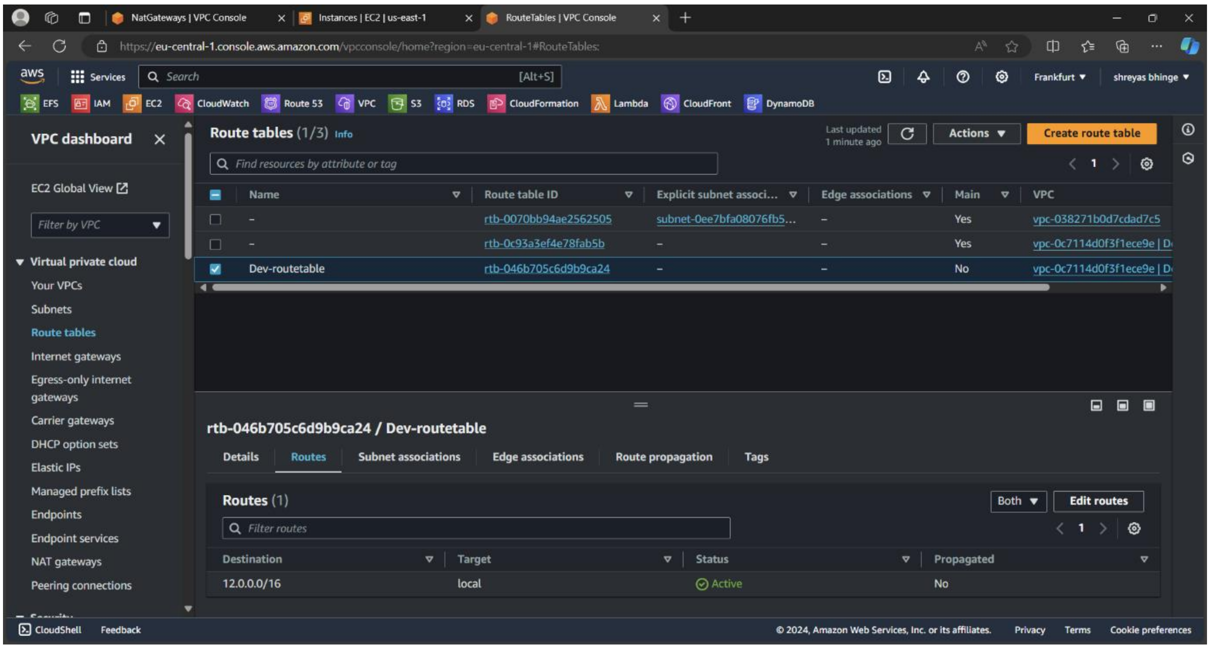
Last updated less than a minute ago

Find resources by attribute or tag

Subnet ID : subnet-08fee23b1facc8526 | Subnet ID : subnet-0c6b635c974e6ed04

Name	Subnet ID	State	VPC	IPv4 CIDR
Db-2	subnet-0c6b635c974e6ed04	Available	vpc-0c7114d0f3f1ece9e | Devlo...	12.0.64.0/18
Web-2	subnet-08fee23b1facc8526	Available	vpc-0c7114d0f3f1ece9e | Devlo...	12.0.0.0/18

c. Created routetable and internet gateway



https://eu-central-1.console.aws.amazon.com/vpcconsole/home?region=eu-central-1#RouteTables:

Route tables (1/3) Info

Last updated 1 minute ago

Find resources by attribute or tag

	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
□	–	rtb-0070bb94ae2562505	subnet-0ee7bfa08076fb5...	–	Yes	vpc-038271b0d7cdad7c5
□	–	rtb-0c93a3ef4e78fab5b	–	–	Yes	vpc-0c7114d0f3f1ece9e | D
☑	Dev-routetable	rtb-046b705c6d9b9ca24	–	–	No	vpc-0c7114d0f3f1ece9e | D

rtb-046b705c6d9b9ca24 / Dev-routetable

Details | Routes | Subnet associations | Edge associations | Route propagation | Tags

Routes (1)

Filter routes

Destination	Target	Status	Propagated
12.0.0.0/16	local	Active	No

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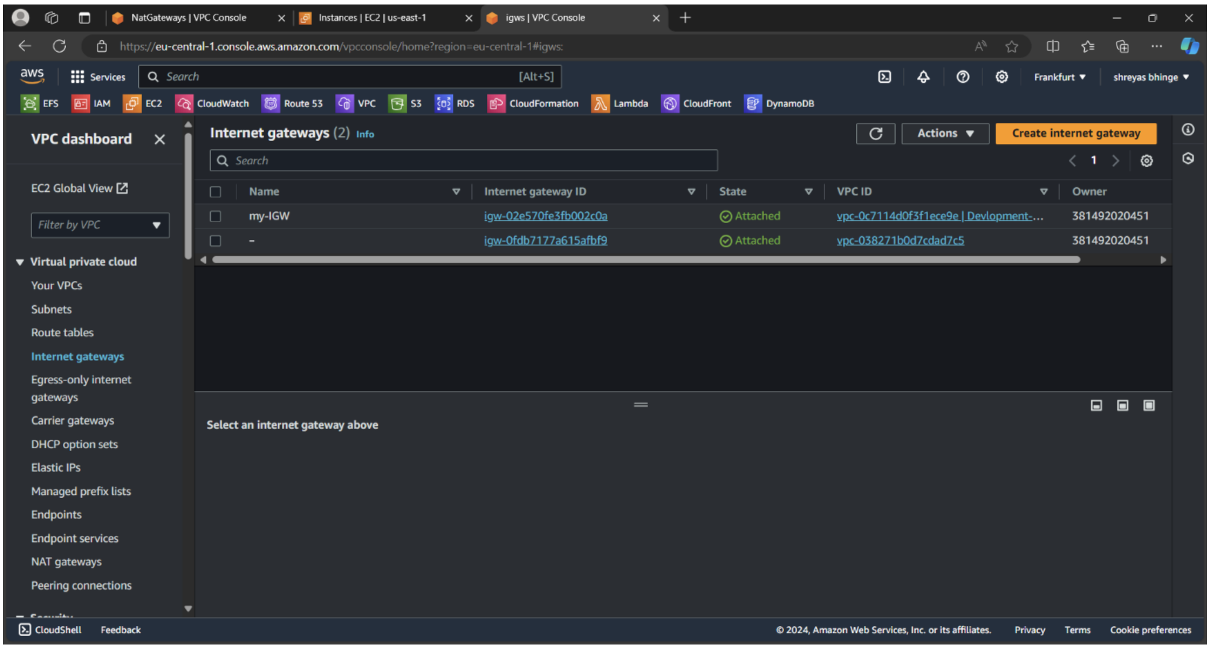

https://eu-central-1.console.aws.amazon.com/vpcconsole/home?region=eu-central-1#igws:

Internet gateways (2) Info

Search

Name	Internet gateway ID	State	VPC ID	Owner
my-IGW	igw-02e570fe3fb002c0a	Attached	vpc-0c7114d0f3f1ece9e | Devlopment-...	381492020451
–	igw-0fdb7177a615afbf9	Attached	vpc-038271b0d7cdad7c5	381492020451

Select an internet gateway above

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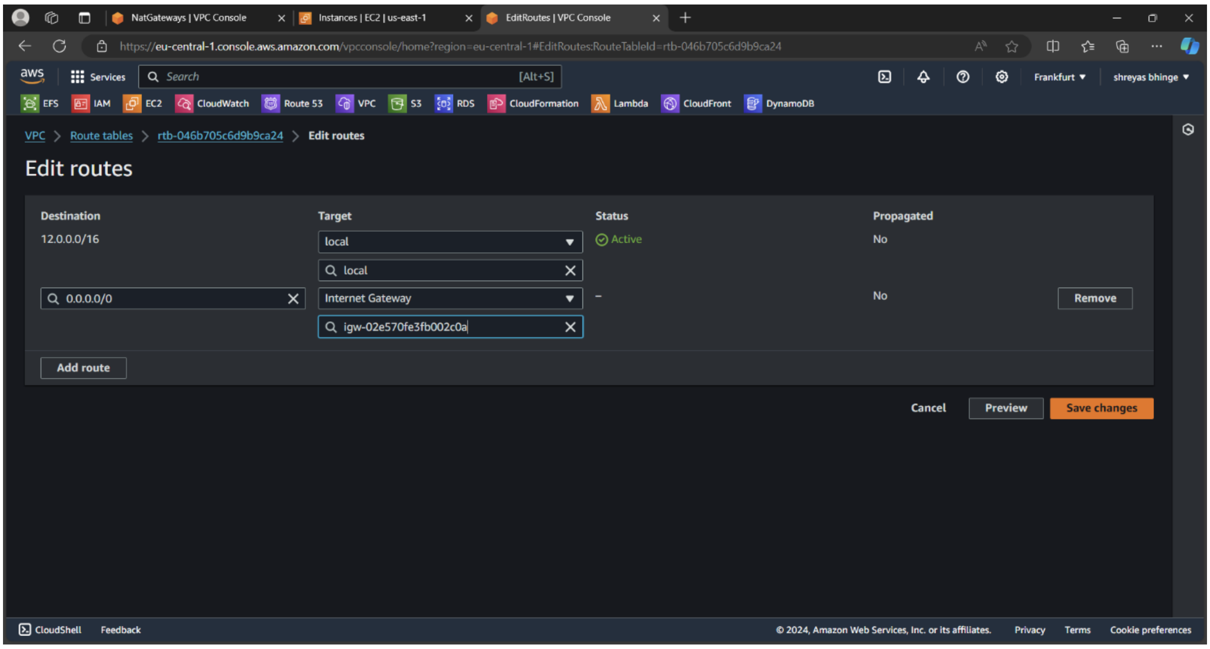
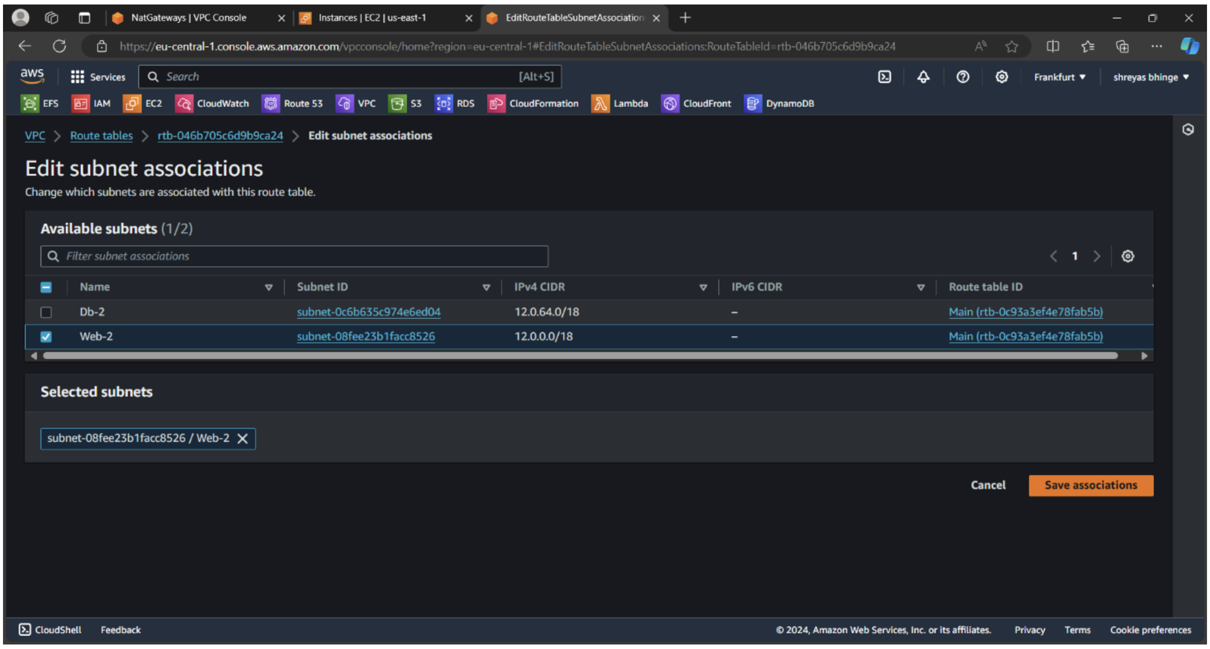


https://eu-central-1.console.aws.amazon.com/vpcconsole/home?region=eu-central-1#EditRoutes:RouteTableId=rtb-046b705c6d9b9ca24

VPC > Route tables > rtb-046b705c6d9b9ca24 > Edit routes

Edit routes

Destination	Target	Status	Propagated
12.0.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway igw-02e570fe3fb002c0a	-	No



https://eu-central-1.console.aws.amazon.com/vpcconsole/home?region=eu-central-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-046b705c6d9b9ca24

VPC > Route tables > rtb-046b705c6d9b9ca24 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

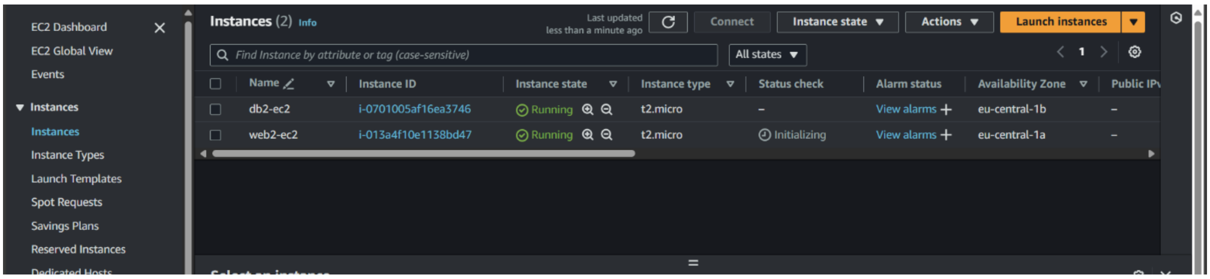
Available subnets (1/2)

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
□	Db-2	subnet-0c6b635c974e6ed04	12.0.64.0/18	–	Main (rtb-0c93a3ef4e78fab5b)
☑	Web-2	subnet-08fee23b1facc8526	12.0.0.0/18	–	Main (rtb-0c93a3ef4e78fab5b)

Selected subnets

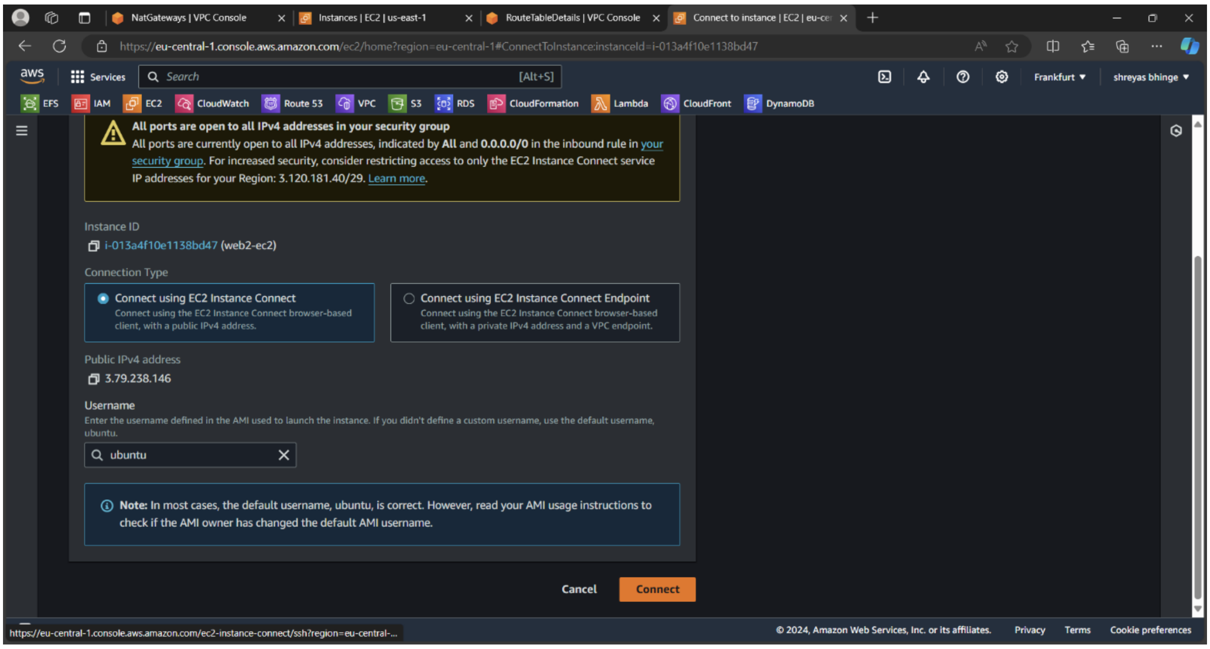
subnet-08fee23b1facc8526 / Web-2

d. Create two instance in each subnet and name after the subnet



Instances (2) Info

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv
□	db2-ec2	i-0701005af16ea3746	Running	t2.micro	–	View alarms +	eu-central-1b	–
□	web2-ec2	i-013a4f10e1138bd47	Running	t2.micro	Initializing	View alarms +	eu-central-1a	–



NatGateways | VPC Console
Instances | EC2 | us-east-1
RouteTableDetails | VPC Console
Connect to instance | EC2 | eu-ce
https://eu-central-1.console.aws.amazon.com/ec2/home?region=eu-central-1#ConnectToInstance:instanceId=i-013a4f10e1138bd47
Services
Search
[Alt+S]
Frankfurt
shreyas bhinge
EFS
IAM
EC2
CloudWatch
Route 53
VPC
S3
RDS
CloudFormation
Lambda
CloudFront
DynamoDB

All ports are open to all IPv4 addresses in your security group

All ports are currently open to all IPv4 addresses, indicated by **All** and **0.0.0.0/0** in the inbound rule in your security group. For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 3.120.181.40/29. Learn more.

Instance ID
i-013a4f10e1138bd47 (web2-ec2)

Connection Type

● Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

○ Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IPv4 address
3.79.238.146

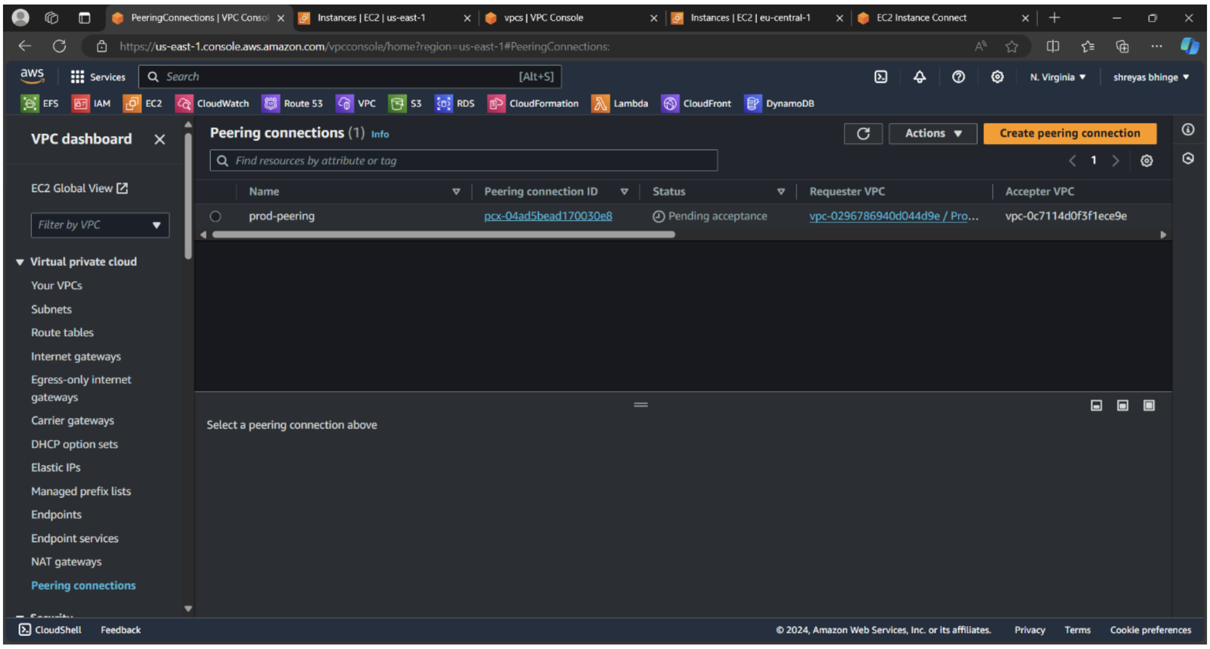
Username
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.

ubuntu

Note: In most cases, the default username, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel
Connect
https://eu-central-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=eu-central-...
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

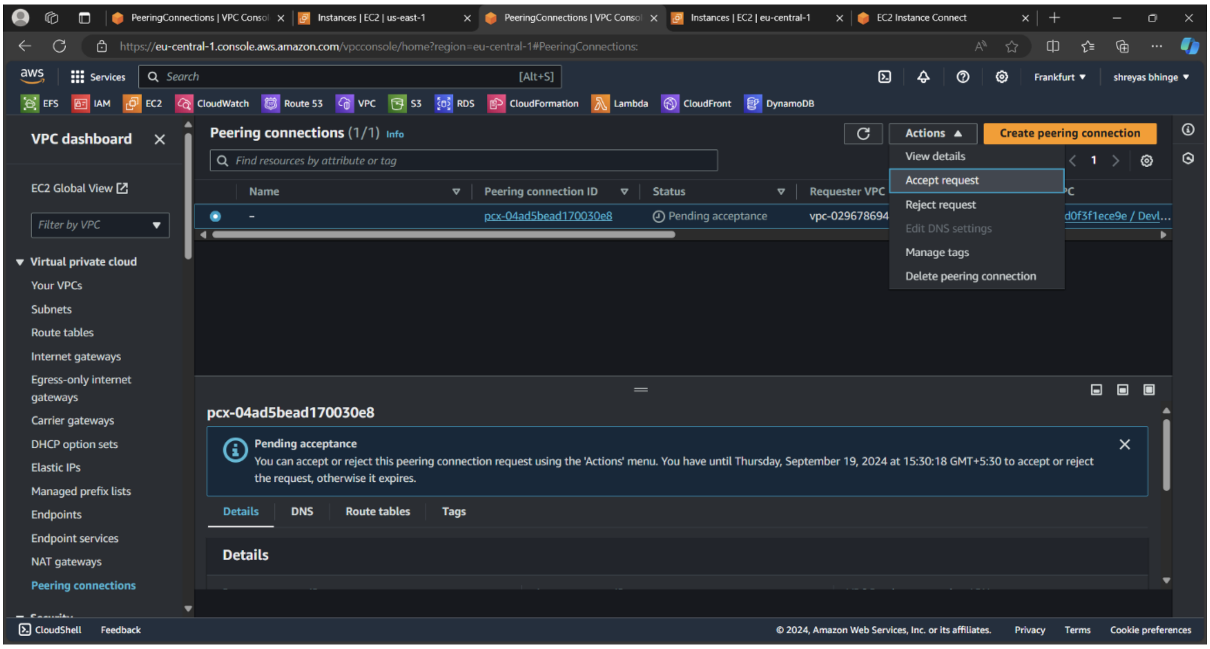
e. Create the peering connection in N.virginia



Peering connections (1) Info

	Name	Peering connection ID	Status	Requester VPC	Accepter VPC
○	prod-peering	pcx-04ad5bead170030e8	Pending acceptance	vpc-0296786940d044d9e / Pro...	vpc-0c7114d0f3f1ece9e

Select a peering connection above



Peering connections (1/1)

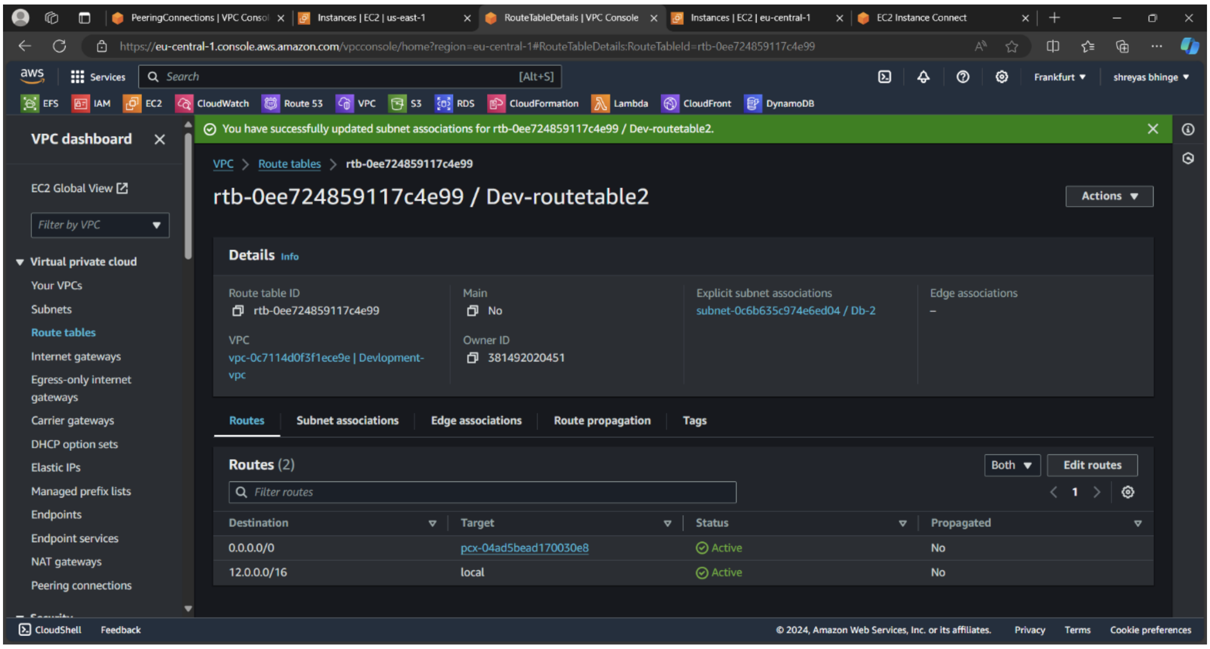
Name	Peering connection ID	Status	Requester VPC	
-	pcx-04ad5bead170030e8	Pending acceptance	vpc-029678694	d0f3f1ece9e / Devl...

pcx-04ad5bead170030e8

Pending acceptance
You can accept or reject this peering connection request using the 'Actions' menu. You have until Thursday, September 19, 2024 at 15:30:18 GMT+5:30 to accept or reject the request, otherwise it expires.

Accept the requeste in Frankfurt region

f. Created route table in Frankfurt and N.virginia and add peering connection



You have successfully updated subnet associations for rtb-0ee724859117c4e99 / Dev-routetable2.

VPC > Route tables > rtb-0ee724859117c4e99

rtb-0ee724859117c4e99 / Dev-routetable2

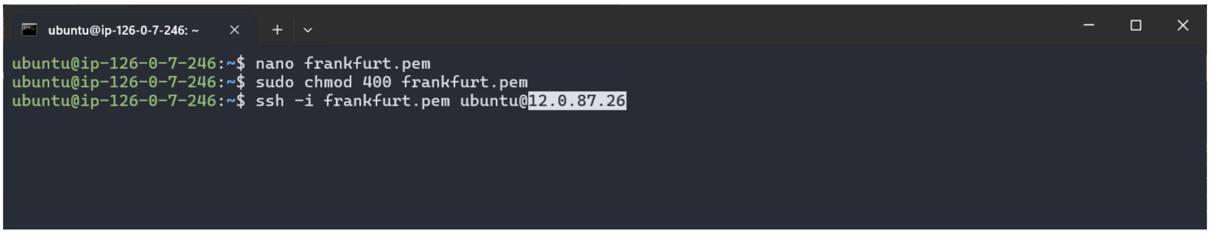
Details

Route table ID: rtb-0ee724859117c4e99
Main: No
Explicit subnet associations: subnet-0c6b635c974e6ed04 / Db-2
Edge associations: –
VPC: vpc-0c7114d0f3f1ece9e | Devlopment-vpc
Owner ID: 381492020451

Routes (2)

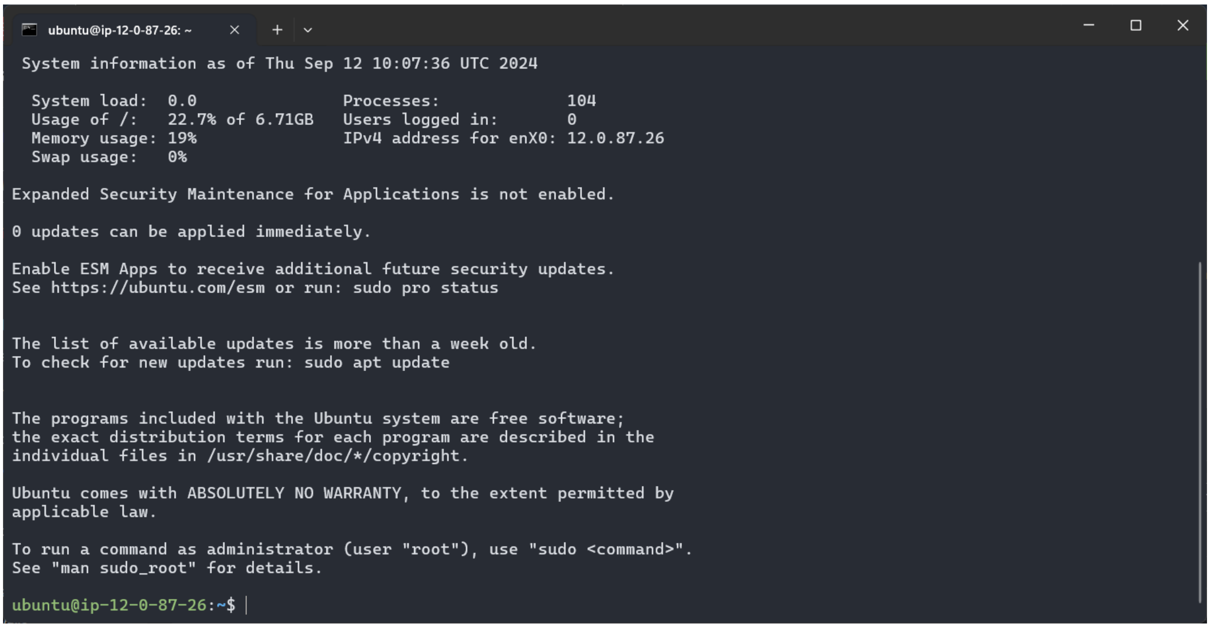
Destination	Target	Status	Propagated
0.0.0.0/0	pcx-04ad5bead170030e8	Active	No
12.0.0.0/16	local	Active	No

g. Add the following command and checked the connection



```
ubuntu@ip-126-0-7-246:~$ nano frankfurt.pem
ubuntu@ip-126-0-7-246:~$ sudo chmod 400 frankfurt.pem
ubuntu@ip-126-0-7-246:~$ ssh -i frankfurt.pem ubuntu@12.0.87.26
```

Connected



```
 System information as of Thu Sep 12 10:07:36 UTC 2024

  System load:  0.0               Processes:             104
  Usage of /:   22.7% of 6.71GB   Users logged in:       0
  Memory usage: 19%               IPv4 address for enX0: 12.0.87.26
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-12-0-87-26:~$
```