

Virtual Private Cloud (VPC)

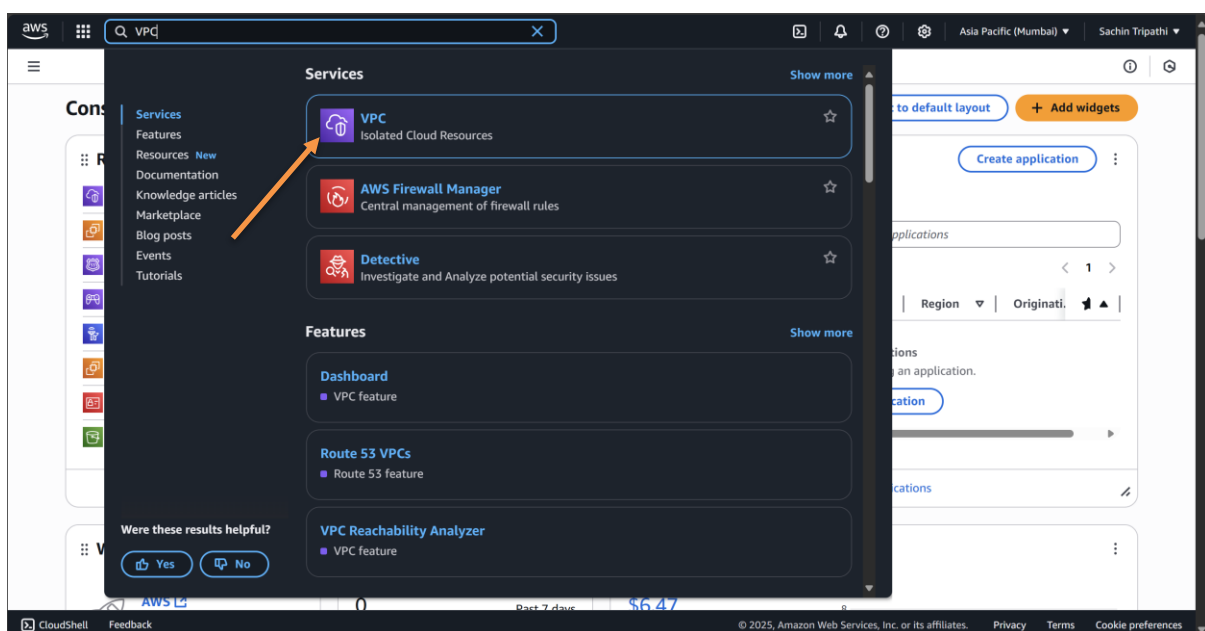
Introduction:

- A **Virtual Private Cloud (VPC)** is an isolated, private segment of the AWS cloud where you can design and manage your own virtual network.
- It enables you to deploy AWS resources like EC2 instances, databases, and load balancers within a secure, fully controlled environment.
- Using a VPC, you can define your own IP address range, create subnets, configure routing tables, and set up network gateways as per your requirements.
- By default, AWS allows the creation of **up to 5 VPCs per region**, and each VPC can contain **up to 200 subnets**.
- One of the biggest advantages of a VPC is **security**. You can leverage **Security Groups** and **Network ACLs** to manage and filter traffic entering or leaving your network, ensuring your cloud applications remain secure, scalable, and high-performing.

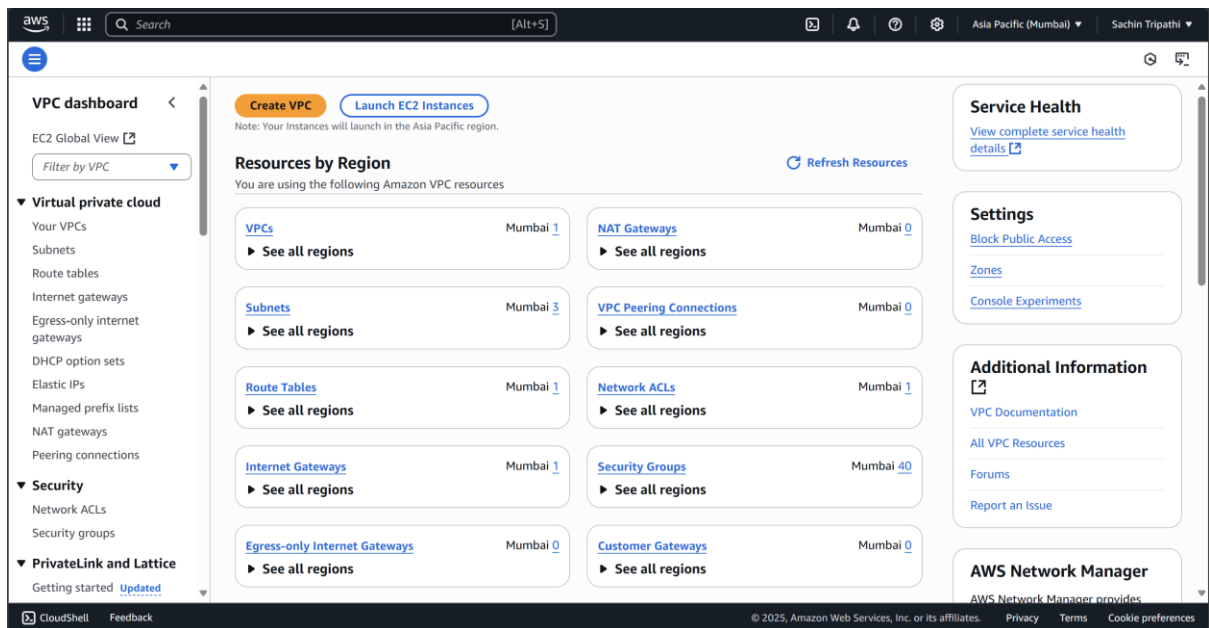
Step by Step Instructions:

Step 1:

- Open “AWS Management Console” on any browser.
- Search “VPC” and open it.



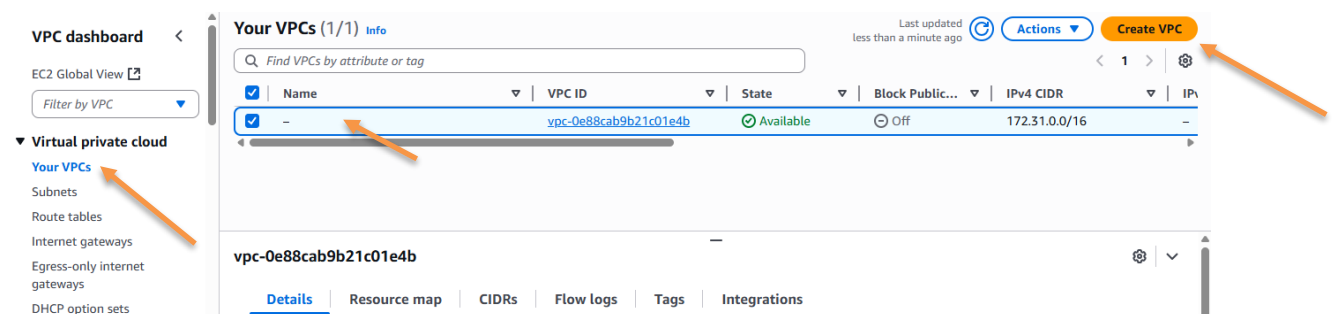
- The VPC Console will open.



Creating a VPC:

Step 2:

- Go to “Your VPCs”.
- Since we are in Mumbai region, we can see that by default, there is already 1 VPC created.
- Click on “Create VPC”.



- In “Resources to create”, select “VPC only”.
- Give a name to your VPC (e.g. “vpc1”).
- In “IPv4 CIDR block”, select the CIDR manual input option and enter the IPv4 CIDR as “192.168.0.0/16”.

Create VPC [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

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.

vpc1

IPv4 CIDR block [Info](#)

☒ IPv4 CIDR manual input

☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

192.168.0.0/16

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

- In “IPv6 CIDR block”, select “No IPv6 CIDR block”.
- Leave the “Tenancy” at “Default”.
- Click on “Create VPC”.

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

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

Q Name

Value - optional

Q vpc1

Remove tag

Add tag

You can add 49 more tags

Cancel

Preview code

Create VPC

Step 3:

- Your VPC is now created.

☰ [VPC](#) > [Your VPCs](#)

VPC dashboard < EC2 Global View [Filter by VPC](#)

▼ **Virtual private cloud**

- Your VPCs**
- Subnets
- Route tables
- Internet gateways

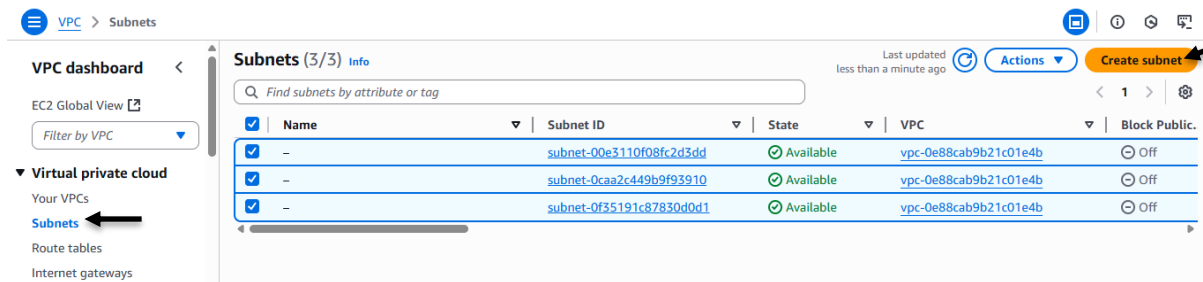
Your VPCs (1/2) [Info](#) Last updated 5 minutes ago [Actions](#) [Create VPC](#)

Find VPCs by attribute or tag

	Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	-	vpc-0e88cab9b21c01e4b	Available	Off	172.31.0.0/16	-
<input checked="" type="checkbox"/>	vpc1	vpc-00f842ed3f6e1a36c	Available	Off	192.168.0.0/16	-

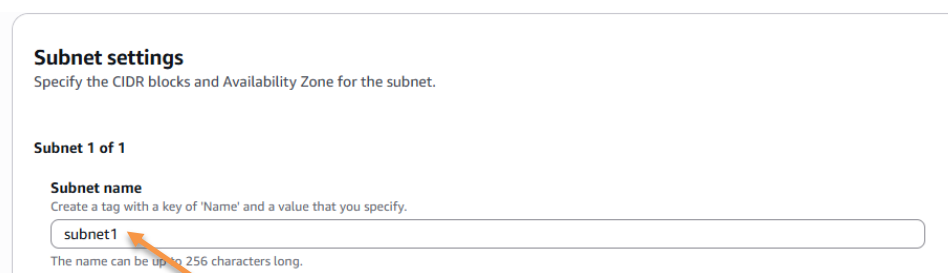
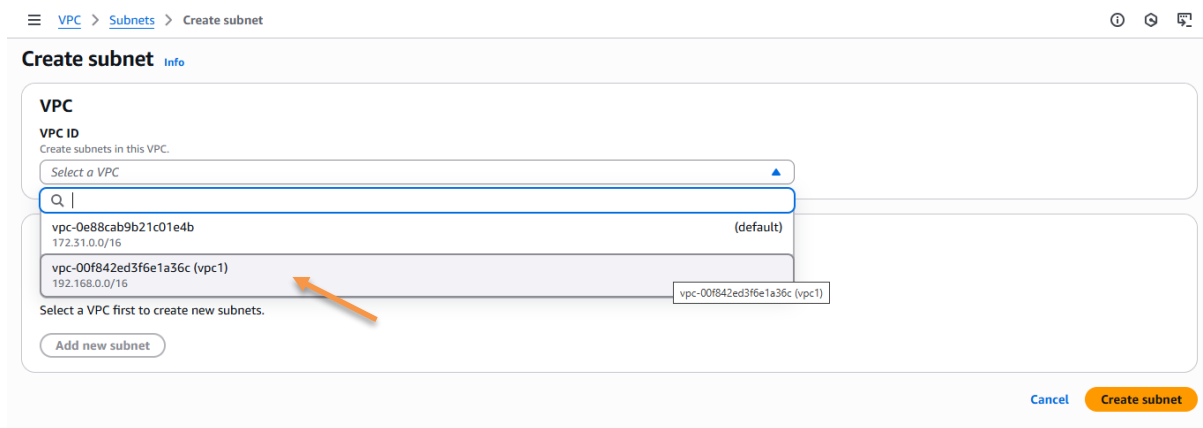
Creating a Subnet:

- Now go to “Subnets” under “Virtual private cloud” and there you can see 3 subnets are already created (for Mumbai region only).
- Click on “Create subnet”.



Step 4:

- In “VPC ID”, select the VPC that you just created i.e. “vpc1”.
- Under “Subnet settings”, give a name to your subnet (e.g. “subnet1”).



- In “Availability Zone”, select any zone as per your preference.
- I have selected “ap-south-1a”.

Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

Asia Pacific (Mumbai) / ap-south-1a

Q |

No preference

Asia Pacific (Mumbai) / ap-south-1a ap-south-1-zg-1 ✓
ID: aps1-az1 Type: availability-zone Network border group: ap-south-1

Asia Pacific (Mumbai) / ap-south-1b Asia Pacific (Mumbai) / ap-south-1a -zg-1
ID: aps1-az3 Type: availability-zone Network border group: ap-south-1

Asia Pacific (Mumbai) / ap-south-1c ap-south-1-zg-1
ID: aps1-az2 Type: availability-zone Network border group: ap-south-1

- Leave “IPv4 VPC CIDR block” as it is.
- In “IPv4 subnet CIDR block”, type “192.168.0.0/24”.
- Click on “Create subnet”.

IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

192.168.0.0/16

IPv4 subnet CIDR block

192.168.0.0/24 256 IPs

▼ Tags - optional

Key	Value - optional
Q Name	Q subnet1

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel **Create subnet**

Step 5:

- Your subnet is now created.

Subnets (1/4) [Info](#)

Last updated
3 minutes ago

Actions

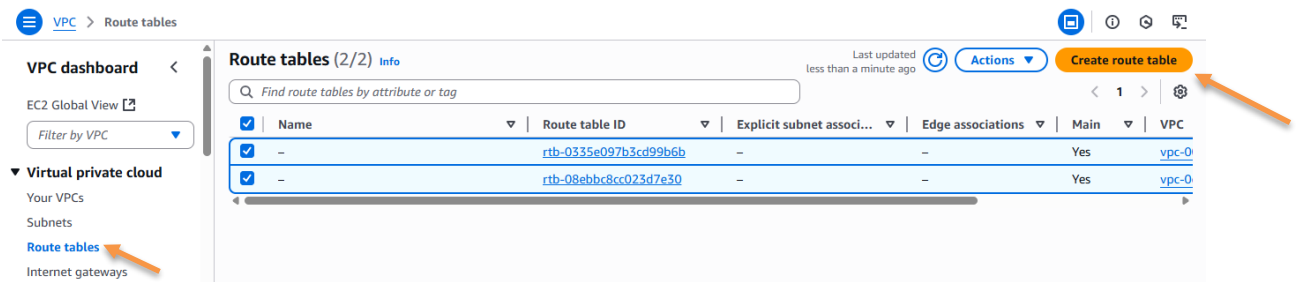
Create subnet

Q Find subnets by attribute or tag

	Name	Subnet ID	State	VPC	Block Public.
<input type="checkbox"/>	-	subnet-00e3110f08fc2d3dd	Available	vpc-0e88cab9b21c01e4b	Off
<input type="checkbox"/>	-	subnet-0caa2c449b9f93910	Available	vpc-0e88cab9b21c01e4b	Off
<input checked="" type="checkbox"/>	subnet1	subnet-0224c7ec397a43f3d	Available	vpc-00f842ed3f6e1a36c vpc1	Off
<input type="checkbox"/>	-	subnet-0f35191c87830d0d1	Available	vpc-0e88cab9b21c01e4b	Off

Creating a Route Table:

- Under “Virtual private cloud”, go to “Route tables”.
- There you can see 2 route tables are already created (for Mumbai region only).
- Click on “Create route table”.



Step 6:

- Give a name to your route table (e.g. "routetable1").
- In "VPC", select the VPC that you have created i.e. "vpc1".

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.

VPC
The VPC to use for this route table.

☒

Key
 [Remove](#)

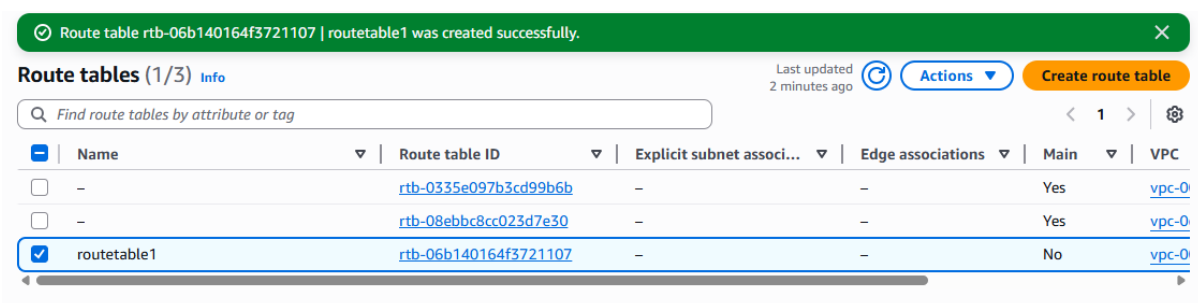
[Add new tag](#)

You can add 49 more tags.

- Click on "Create route table".



- Your route table is created.

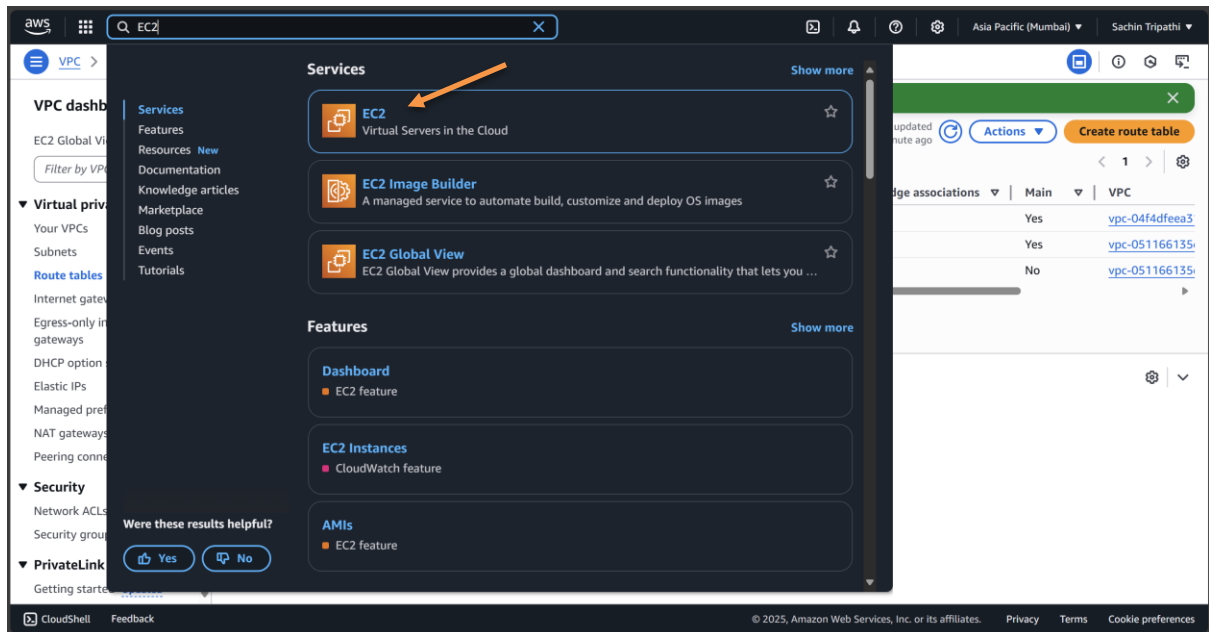


Now Launch an Instance:

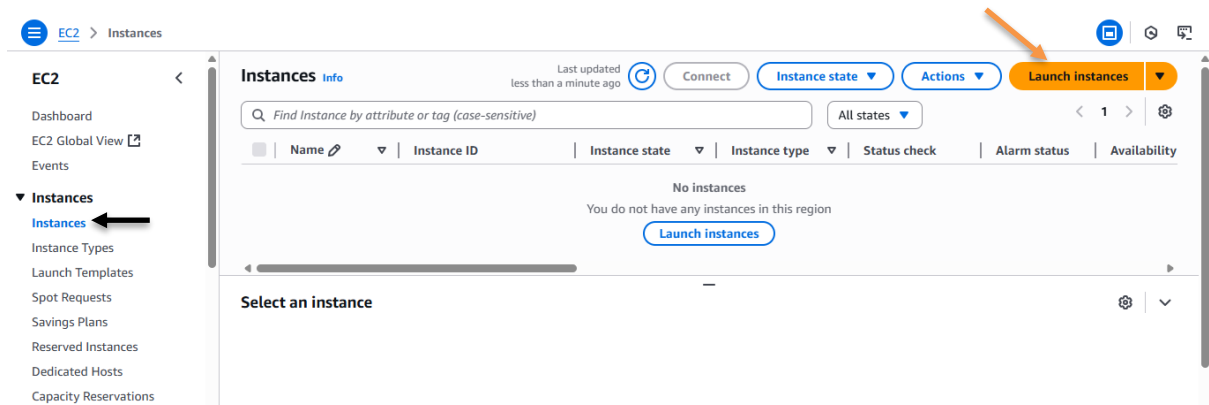
Step 7:

- Now duplicate the tab.

- Search and open “EC2”.

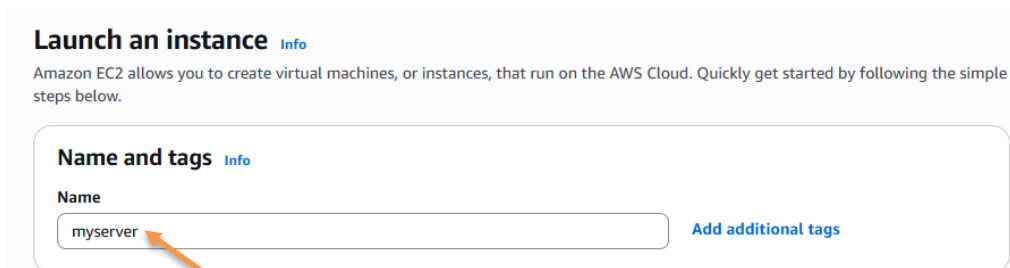


- Under “Instances”, click on “Launch instances”.

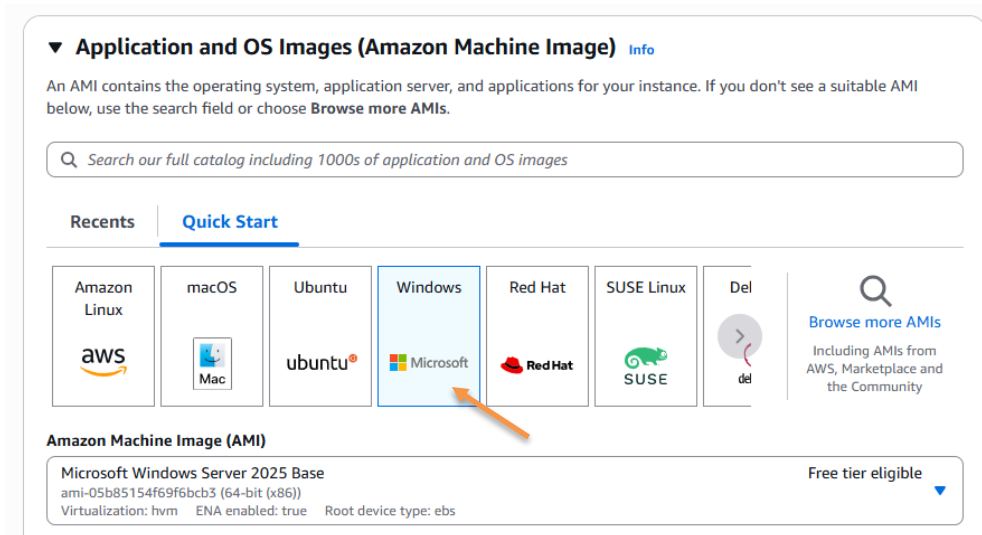


Step 8:

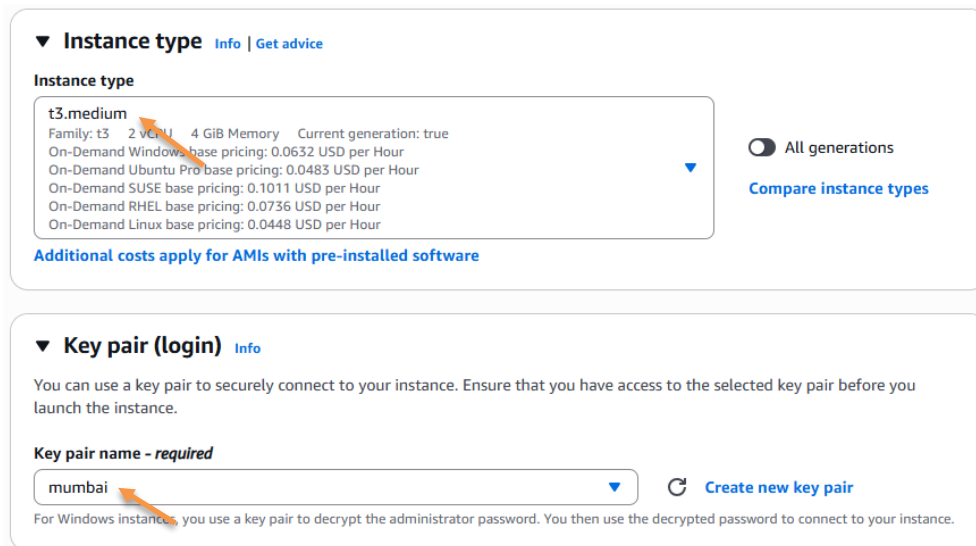
- Give a name to your server.



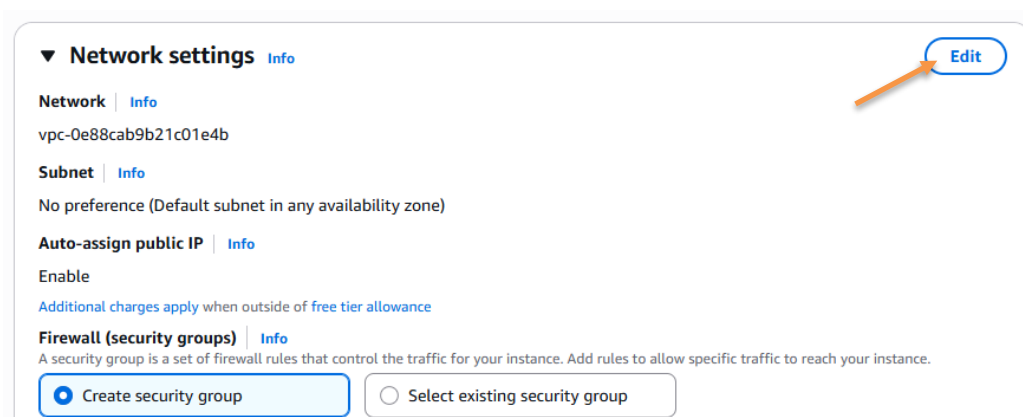
- Select “Windows” under “Application and OS Images (AMI)”.



- Select any instance type as per your preference (e.g. “t3.medium”).
- Select any key pair of Mumbai region (e.g. “mumbai”).

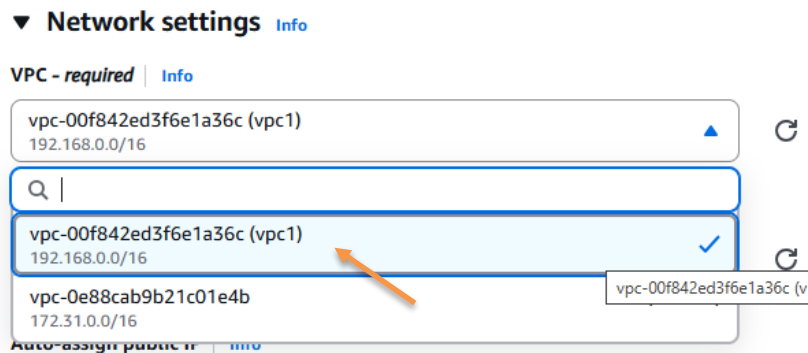


- In “Network settings”, click on “Edit” button.

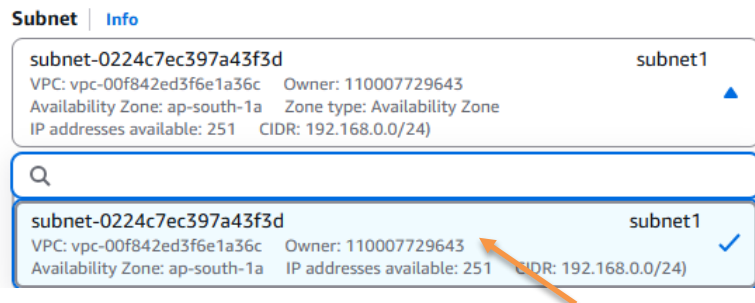


Step 9:

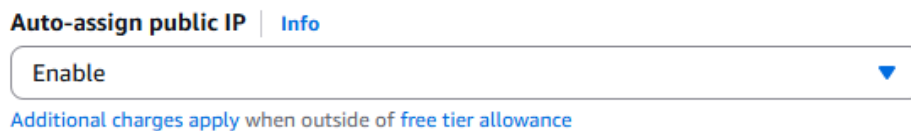
- In “VPC - required”, select “vpc1” that you have created.



- In “Subnet”, select “subnet1” that you have created.



- Select “Enable” option in “Auto-assign public IP”.



- Give a name to the security group (e.g. “SG1”).



- Under “Inbound Security Group Rules”, leave the first rule as it is i.e. “RDP – Anywhere”.
- Click on “Add security group rule”.

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 3389, 0.0.0.0/0)

Remove

Type | Info

rdp

Protocol | Info

TCP

Port range | Info

3389

Source type | Info

Anywhere

Source | Info

Q Add CIDR, prefix list or security gr

Description - optional | Info

e.g. SSH for admin desktop

0.0.0.0/0 X

Add security group rule

- Add second rule as “All traffic - Anywhere”.

▼ Security group rule 2 (All, All, 0.0.0.0/0)

Remove

Type | Info

All traffic

Protocol | Info

All

Port range | Info

All

Source type | Info

Anywhere

Source | Info

Q Add CIDR, prefix list or security gr

Description - optional | Info

e.g. SSH for admin desktop

0.0.0.0/0 X

- Leave the other settings as it is and click on “Launch instance”.

EC2 > Instances > Launch an instance

▼ Configure storage | Info

1x 30 GiB gp3 Root volume, 3000 IOPS, Not encrypted

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

The selected AMI contains instance store volumes, however the instance does not allow any instance store volumes. None of the instance store volumes from the AMI will be accessible from the instance

Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems

Advanced details | Info

▼ Summary

Number of instances | Info

1

Software Image (AMI)

Microsoft Windows Server 2025 ...read more

ami-05b85154f69f6bcb3

Virtual server type (instance type)

t3.medium

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 30 GiB

Cancel

Launch instance

Preview code

- Your instance is launched and is running.

EC2 > Instances

Dashboard
EC2 Global View
Events

▼ Instances
Instances
Instance Types

Instances (1/1) | Info

Last updated less than a minute ago

Connect Instance state Actions Launch instances

Find Instance by attribute or tag (case-sensitive)

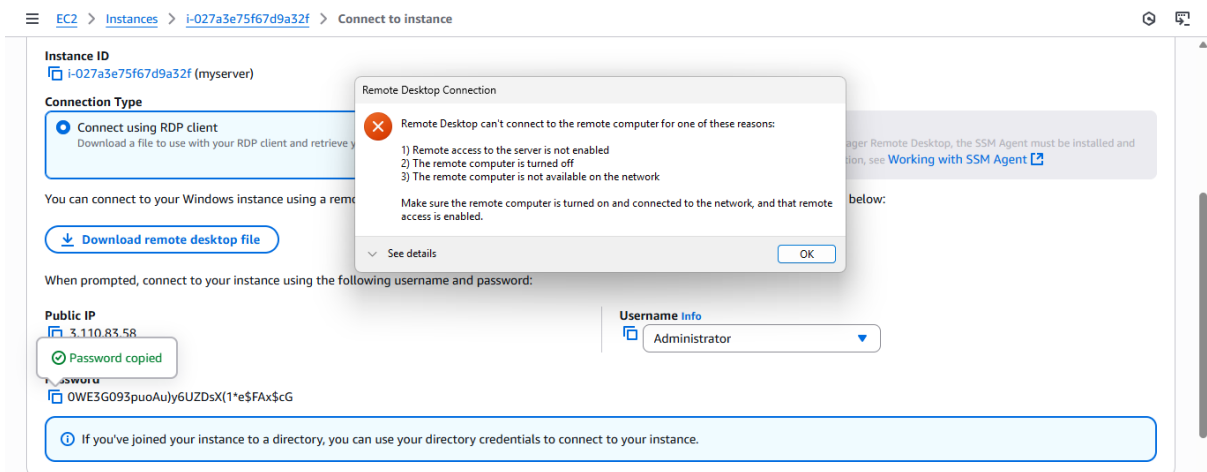
All states

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input checked="" type="checkbox"/>	myserver	i-027a3e75f67d9a32f	Running	t3.medium	Initializing	View alarms +	ap-south-1a

Step 10:

- Now if you try to connect your instance, it will not be connected.

- To connect an instance, we need to create an internet gateway.



Creating an Internet Gateway:

Step 11:

- Go back to “VPC” tab and click on “Internet gateways”.
- There you can see that 1 internet gateway is already created (for Mumbai region only).
- Click on “Create internet gateway”.



Step 12:

- In “Internet gateway settings”, name your internet gateway (e.g. “ig1”).
- Click on “Create internet gateway”.

Create internet gateway [Info](#)

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

Internet gateway settings

Name tag

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

ig1

Tags - optional

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

Q Name

Value - optional

Q ig1

Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

- Your internet gateway is now created.
- Click on “Attach to a VPC” option.

✓ The following internet gateway was created: igw-0fbec86a5ad0f8789 - ig1. You can now attach to a VPC to enable the VPC to communicate with the internet.

Attach to a VPC

×

igw-0fbec86a5ad0f8789 / ig1

Actions

Details [Info](#)

Internet gateway ID

igw-0fbec86a5ad0f8789

State

Detached

VPC ID

-

Owner

110007729643

Tags

Search tags

Manage tags

< 1 > ⚙

Key

Value

Name

ig1

Step 13:

- Under “Available VPCs”, select your VPC i.e. “vpc1”.
- Click on “Attach internet gateway”.

VPC > Internet gateways > Attach to VPC (igw-0fbec86a5ad0f8789)

ⓘ ⚙ 🖨

Attach to VPC (igw-0fbec86a5ad0f8789) [Info](#)

VPC

Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.

Available VPCs

Attach the internet gateway to this VPC.

Q Select a VPC

vpc-00f842ed3f6e1a36c - vpc1

AWS Command Line Interface

Cancel

Attach internet gateway

- The internet gateway “ig1” is successfully attached to your VPC “vpc1”.

✓ Internet gateway igw-0fbec86a5ad0f8789 successfully attached to vpc-00f842ed3f6e1a36c

×

igw-0fbec86a5ad0f8789 / ig1

Actions

Details [Info](#)

Internet gateway ID

igw-0fbec86a5ad0f8789

State

Attached

VPC ID

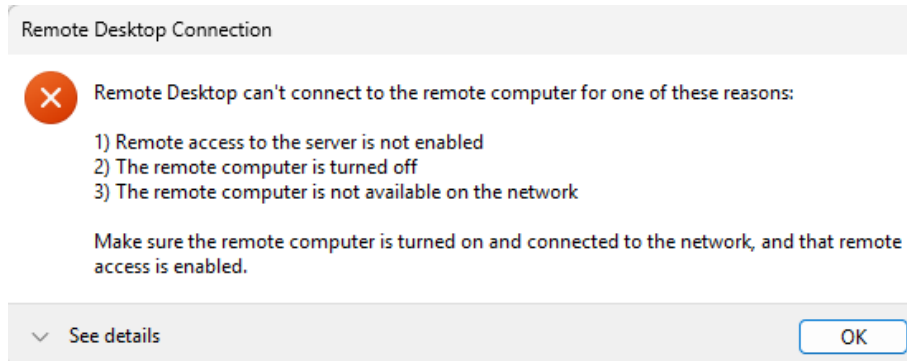
vpc-00f842ed3f6e1a36c | vpc1

Owner

110007729643

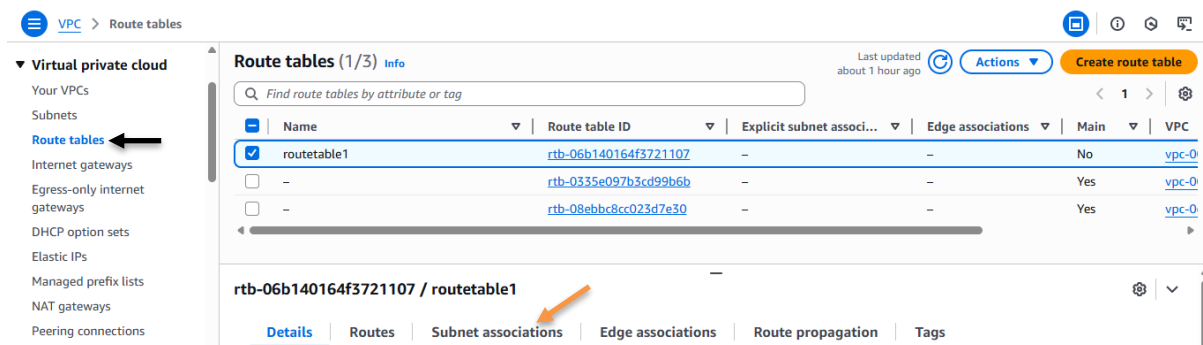
Step 14:

- Go to “EC2” tab and once again, try to connect your instance.
- It still won’t get connected because we have not added rules to the route table yet.



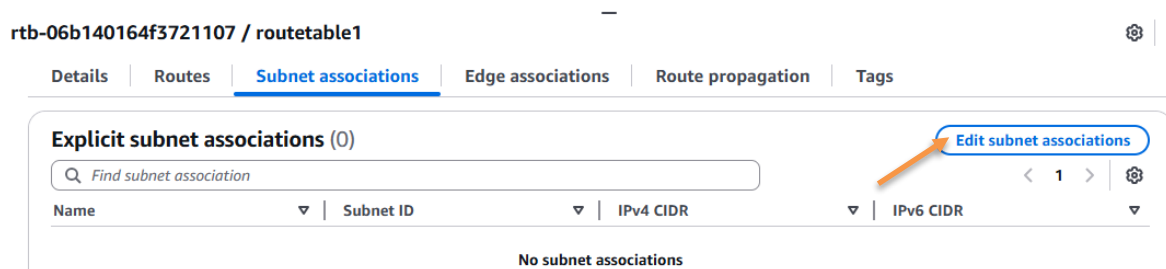
Adding Rules to the Route Table:

- Again, go back to the “VPC” tab.
- Under “Route tables”, select the route table that you have created.
- From the options below, click on “Subnet associations”.



Step 15:

- Now click on “Edit subnet associations” button.



- Under “Available subnets”, select the subnet that you have created i.e. “subnet1”.
- Now click on “Save associations”.

☰ VPC > Route tables > rtb-06b140164f3721107 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/1)

<input checked="" type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	subnet1	subnet-0224c7ec397a43f3d	192.168.0.0/24	-	Main (rtb-0335e097b3cd99b6b)

Selected subnets
subnet-0224c7ec397a43f3d / subnet1 ✕

[Cancel](#) [Save associations](#)

- Subnet association is successfully updated.

✓ You have successfully updated subnet associations for rtb-06b140164f3721107 / routetable1.

Route tables (1/3) Info

Find route tables by attribute or tag

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
<input checked="" type="checkbox"/>	routetable1	rtb-06b140164f3721107	subnet-0224c7ec397a43f...	-	No	vpc-0
<input type="checkbox"/>	-	rtb-0335e097b3cd99b6b	-	-	Yes	vpc-0
<input type="checkbox"/>	-	rtb-08ebbc8cc023d7e30	-	-	Yes	vpc-0

Step 16:

- Again, select the route table that you have created.
- From the options below, click on “Routes”.

Route tables (1/3) Info

Find route tables by attribute or tag

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
<input checked="" type="checkbox"/>	routetable1	rtb-06b140164f3721107	subnet-0224c7ec397a43f...	-	No	vpc-0
<input type="checkbox"/>	-	rtb-0335e097b3cd99b6b	-	-	Yes	vpc-0
<input type="checkbox"/>	-	rtb-08ebbc8cc023d7e30	-	-	Yes	vpc-0

rtb-06b140164f3721107 / routetable1

[Details](#) [Routes](#) [Subnet associations](#) [Edge associations](#) [Route propagation](#) [Tags](#)

- You can see that one route is already added.
- Now click on “Edit routes”.

rtb-06b140164f3721107 / routetable1

[Details](#) [Routes](#) [Subnet associations](#) [Edge associations](#) [Route propagation](#) [Tags](#)

Routes (1)

Destination	Target	Status	Propagated
192.168.0.0/16	local	Active	No

[Both](#) [Edit routes](#)

- Click on “Add route” button.

☰ VPC > Route tables > rtb-06b140164f3721107 > Edit routes

Edit routes

Destination	Target	Status	Propagated
192.168.0.0/16	local	Active	No

[Add route](#) [Cancel](#) [Preview](#) [Save changes](#)

Step 17:

- Add route “0.0.0.0/0” in destination from the options.

Search: 0.0.0.0/0

- 0.0.0.0/0
- 0.0.0.0/8
- 0.0.0.0/16
- 0.0.0.0/24
- 0.0.0.0/32
- ::/0
- ::/16
- ::/32
- ::/48

- In “Target”, add “Internet Gateway”.
- Select the internet gateway that you have created.

Core Network

Egress Only Internet Gateway

Gateway Load Balancer Endpoint

Instance

Internet Gateway

local

NAT Gateway

Network Interface

Outpost Local Gateway

Internet Gateway

igw-0fbec86a5ad0f8789

Use: "igw-0fbec86a5ad0f8789"

igw-0fbec86a5ad0f8789 (ig1)

- Click on “Save changes”.

[Cancel](#) [Preview](#) [Save changes](#)

- The routes are now updated for the route table.

✓ Updated routes for rtb-06b140164f3721107 / routetable1 successfully
✕

Details Info

Route table ID
 rtb-06b140164f3721107

VPC
vpc-00f842ed3f6e1a36c | vpc1

Main
 No

Owner ID
 110007729643

Explicit subnet associations
[subnet-0224c7ec397a43f3d / subnet1](#)

Edge associations
–

Routes
Subnet associations
Edge associations
Route propagation
Tags

Routes (2)

Both ▼
[Edit routes](#)

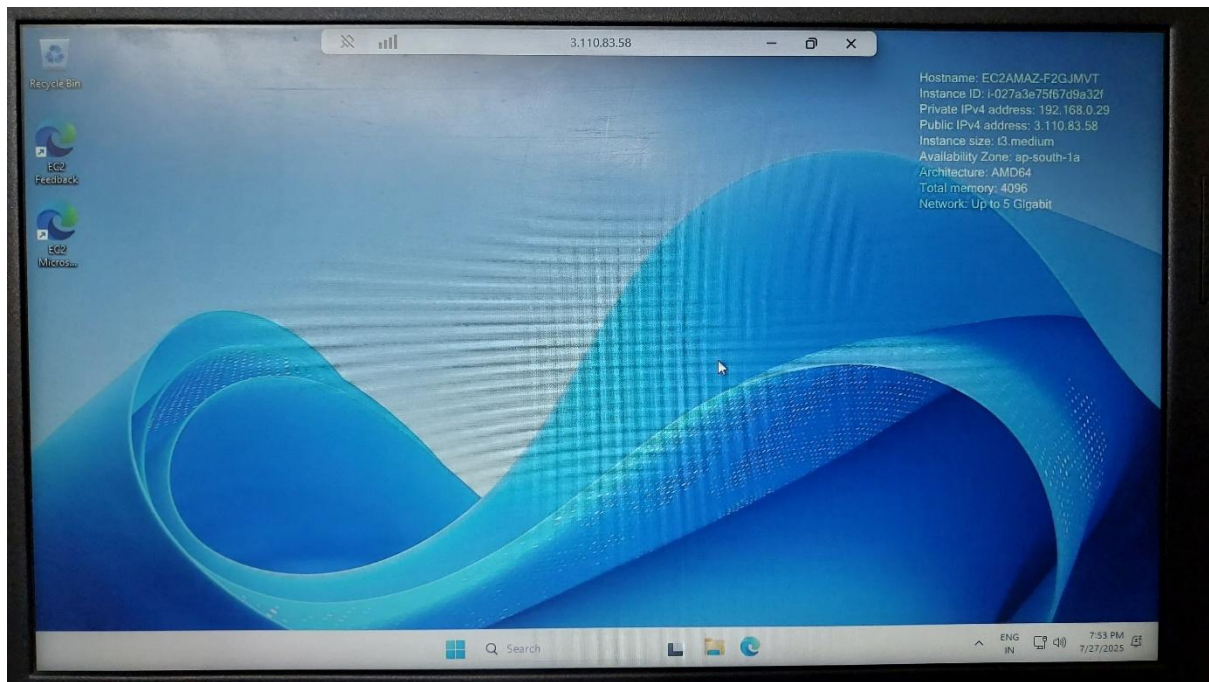
Destination ▼	Target ▼	Status ▼	Propagated ▼
0.0.0.0/0	igw-0fbec86a5ad0f8789	✓ Active	No
192.168.0.0/16	local	✓ Active	No

Step 18:

- Go back to “EC2” tab and try to connect your instance again.
- Generate the password as usual, decrypt it and paste there.

[illegible]

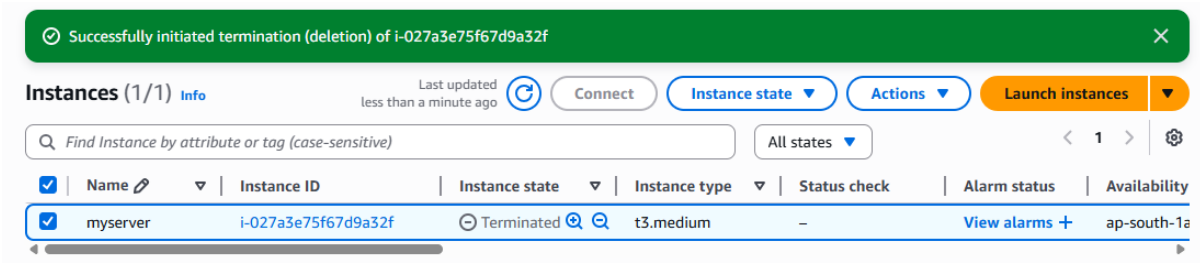
- Click on “OK”.
- Your instance is now connected.
- This shows that if we are creating our own VPC, subnet and route table, then it is necessary to attach them to an internet gateway.
- Only then the server will get connected.



Now terminate your instance:

Step 19:

- On the “EC2” tab, go to “Instances” and terminate your instance.

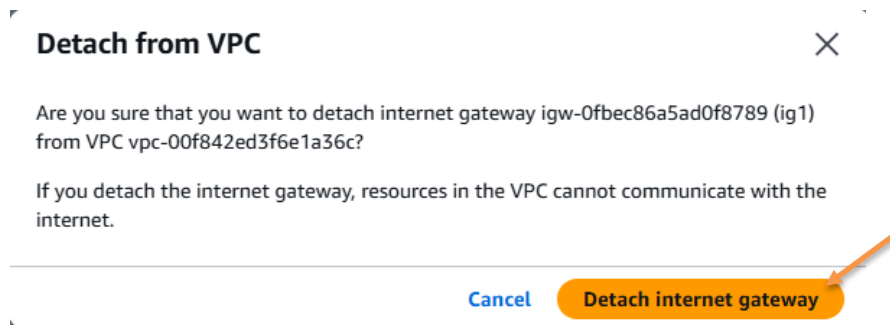


Deleting Internet Gateway:

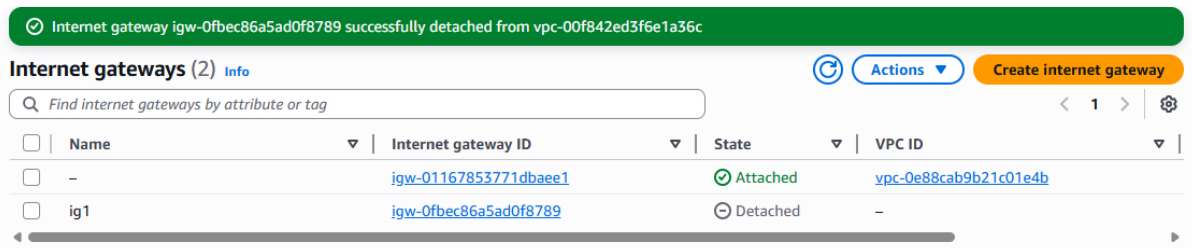
- Go back to “VPC” tab and under “Internet gateways”, select the internet gateway that you have created.
- Click on “Actions” and then click on “Detach from VPC”.



- Click on “Detach internet gateway”.

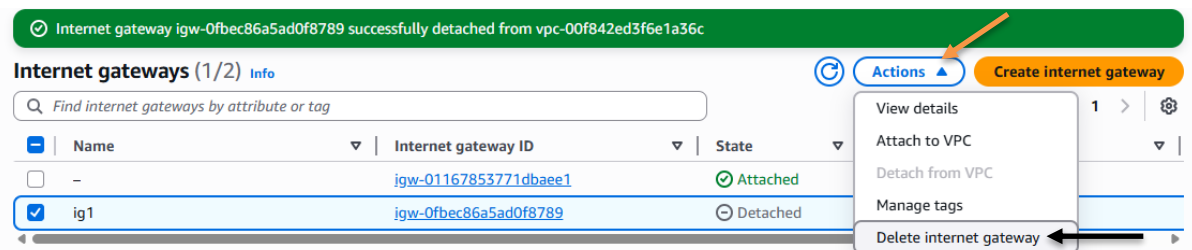


- Your internet gateway is successfully detached.

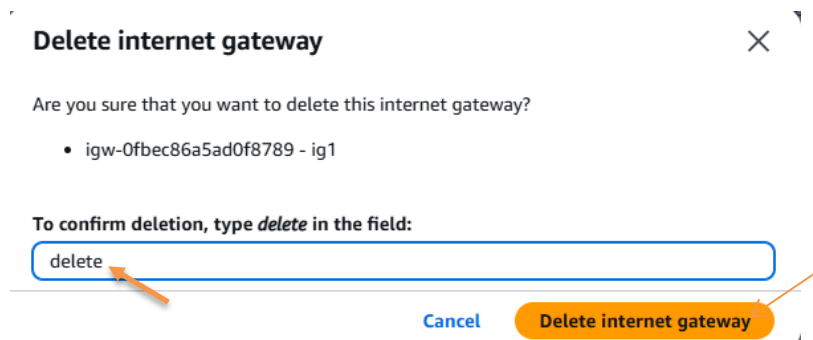


Step 20:

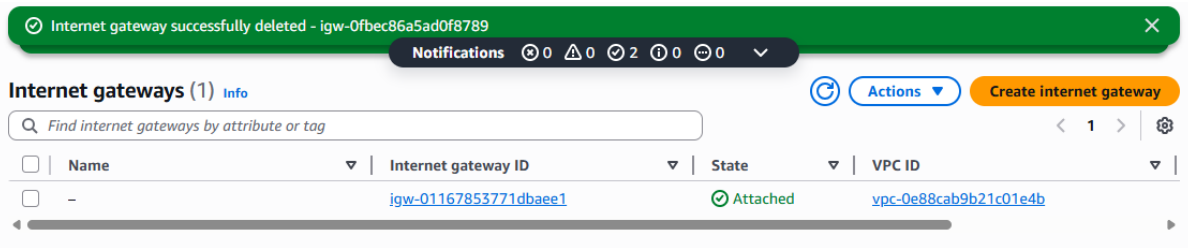
- Now select your internet gateway again and go to “Actions”.
- Click on “Delete internet gateway”.



- Type “delete” and click on “Delete internet gateway”.



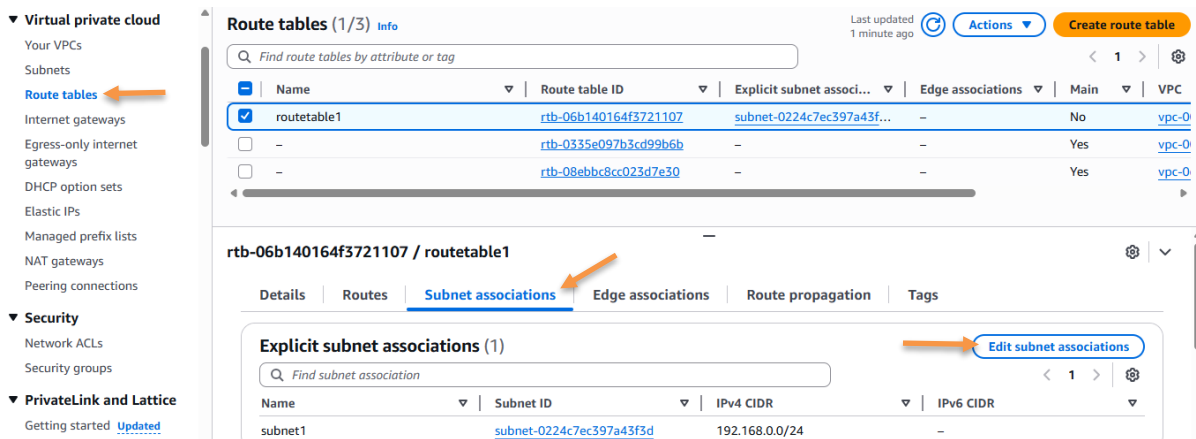
- Your internet gateway is deleted successfully.



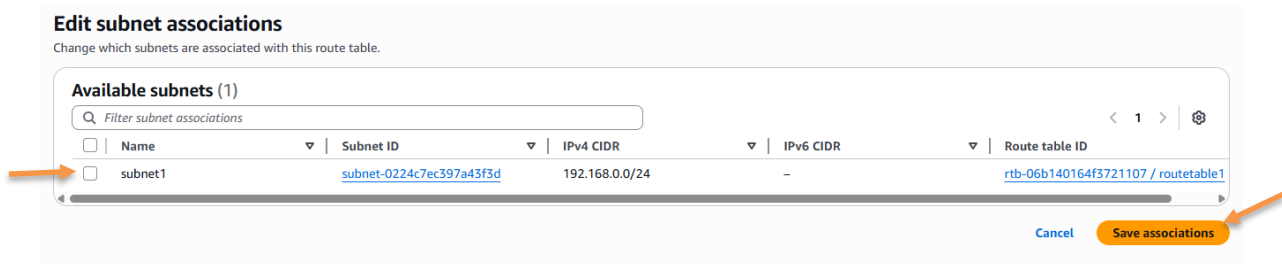
Deleting Route Table:

Step 21:

- Now go to “Route tables” under “Virtual private cloud” and select the route table that you have created.
- Go to “Subnet associations” and then click on “Edit subnet associations”.



- Remove “subnet1” from “Available subnets”.
- Click on “Save associations”.



- Now select the route table and go to “Actions”.
- Click on “Delete route table”.

Route tables (1/3) Info

Last updated less than a minute ago

Find route tables by attribute or tag

Name	Route table ID	Explicit subnet associ...	Edge
<input checked="" type="checkbox"/> routetable1	rtb-06b140164f3721107	-	-
<input type="checkbox"/> -	rtb-0335e097b3cd99b6b	-	-
<input type="checkbox"/> -	rtb-08ebbc8cc023d7e30	-	-

rtb-06b140164f3721107 / routetable1

Actions

- View details
- Set main route table
- Edit subnet associations
- Edit edge associations
- Edit route propagation
- Edit routes
- Manage tags
- Delete route table

- Type "delete" and click on "Delete" button.

Delete route tables

The following route tables will be deleted permanently and can't be recovered later.

Name	Route table ID	VPC ID
routetable1	rtb-06b140164f3721107	vpc-00f84

To confirm deletion, type *delete* in the field:

delete

Cancel Delete

- Your route table is successfully deleted.

You have successfully deleted rtb-06b140164f3721107 / routetable1

Route tables (2) Info

Last updated less than a minute ago

Find route tables by attribute or tag

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
<input type="checkbox"/> -	rtb-0335e097b3cd99b6b	-	-	Yes	vpc-
<input type="checkbox"/> -	rtb-08ebbc8cc023d7e30	-	-	Yes	vpc-

Deleting Subnet:

Step 22:

- Go to "Subnets" under "Virtual private cloud" and select the subnet that you have created.
- Click on "Actions" and then click on "Delete subnet".

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Subnets (1/4) Info

Last updated 1 minute ago

Find subnets by attribute or tag

Name	Subnet ID	State
<input type="checkbox"/> -	subnet-00e3110f08fc2d3dd	Available
<input type="checkbox"/> -	subnet-0caa2c449b9f93910	Available
<input checked="" type="checkbox"/> subnet1	subnet-0224c7ec397a43f3d	Available
<input type="checkbox"/> -	subnet-0f35191c87830d0d1	Available

subnet-0224c7ec397a43f3d / subnet1

Details Flow logs Route table Network ACL CIDR reservations

Actions

- View details
- Create flow log
- Edit subnet settings
- Edit IPv6 CIDRs
- Edit network ACL association
- Edit route table association
- Edit CIDR reservations
- Share subnet
- Manage tags
- Delete subnet

- Type “delete” and click on “Delete” button.

Delete subnets

The following subnets will be deleted permanently and cannot be recovered later.

Name	Subnet ID	State	VPC ID
subnet1	subnet-0224c7ec397...	Available	vpc-00f842ed3f6e1a...

To confirm deletion, type *delete* in the field

delete

Cancel

Delete

- Your subnet is successfully deleted.

✓ You have successfully deleted subnet-0224c7ec397a43f3d

Subnets (3) Info

Find subnets by attribute or tag

	Name	Subnet ID	State	VPC	Block Public.
<input type="checkbox"/>	-	subnet-00e3110f08fc2d3dd	Available	vpc-0e88cab9b21c01e4b	Off
<input type="checkbox"/>	-	subnet-0caa2c449b9f93910	Available	vpc-0e88cab9b21c01e4b	Off
<input type="checkbox"/>	-	subnet-0f35191c87830d0d1	Available	vpc-0e88cab9b21c01e4b	Off

Deleting VPC:

Step 23:

- Go to “Your VPCs” under “Virtual private cloud” and select the VPC that you have created.
- Click on “Actions” and then click on “Delete VPC”.

VPC > Your VPCs

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

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DHCP option sets

Elastic IPs

Managed prefix lists

Your VPCs (1/2) Info

Find VPCs by attribute or tag

	Name	VPC ID	State	Block Public
<input checked="" type="checkbox"/>	vpc1	vpc-00f842ed3f6e1a36c	Available	Off
<input type="checkbox"/>	-	vpc-0e88cab9b21c01e4b	Available	Off

Actions

- Create default VPC
- Create flow log
- Edit VPC settings
- Edit CIDRs
- Manage middlebox routes
- Manage tags
- Delete VPC

- Type “delete” and click on “Delete” button.

Delete VPC

✓ Will be deleted
This VPC will be deleted permanently and cannot be recovered later:

Name	VPC ID	State
vpc1	vpc-00f842ed3f6e1a36c	✓ Available

To confirm deletion, type *delete* in the field:

delete

Cancel Delete

- Your VPC is also deleted successfully.

✓ You successfully deleted vpc-00f842ed3f6e1a36c / vpc1

Your VPCs (1) Info

Last updated 1 minute ago Actions Create VPC

Find VPCs by attribute or tag

Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
-	vpc-0e88cab9b21c01e4b	✓ Available	Off	172.31.0.0/16	-

Some Important Terms:

“Subnet”

- A “Subnet” is a smaller part of a VPC that divides the network into sections.
- It helps organize and isolate resources within the VPC.
- You can have public and private subnets based on internet access.

“CIDR” (Classless Inter-Domain Routing)

- “CIDR” defines the IP address range for your VPC and subnets.
- It uses a format like “192.168.0.0/16” to show how many IPs are available.
- It helps in managing IP allocation and network size.

“Internet Gateway”

- An “Internet Gateway” allows communication between resources in a VPC and the internet.
- It is attached to the VPC and linked with public subnets.

- Without it, instances cannot send or receive data from the internet.
-

“Route Table”

- A “Route Table” contains rules (routes) that decide where network traffic goes.
 - Each subnet in a VPC must be linked to a route table.
 - It helps control traffic flow between subnets and to the internet.
-

“Security Groups”

- “Security Groups” act like virtual firewalls for your instances.
- They control incoming and outgoing traffic based on rules you define.
- They are stateful, meaning allowed return traffic is automatically permitted.