



## PROJECT -1

COURSE : DEVOPS

Trainer : Mr . MADHUKAR

A large, semi-transparent watermark of the VCUBE logo is positioned in the center of the page. The 'V' part of the logo is on the left, showing grey and yellow wings. To its right, the word 'CUBE' is written in large, semi-transparent grey letters. Below 'CUBE', the words 'Software Solutions Pvt. Ltd.' are written in a semi-transparent yellow font.

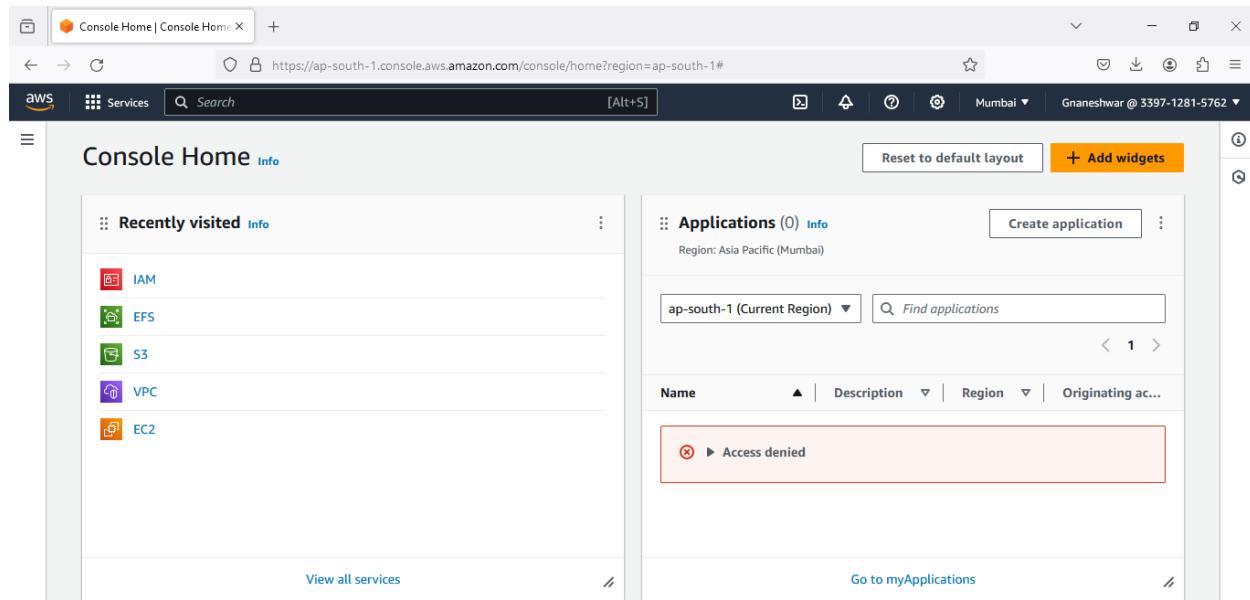
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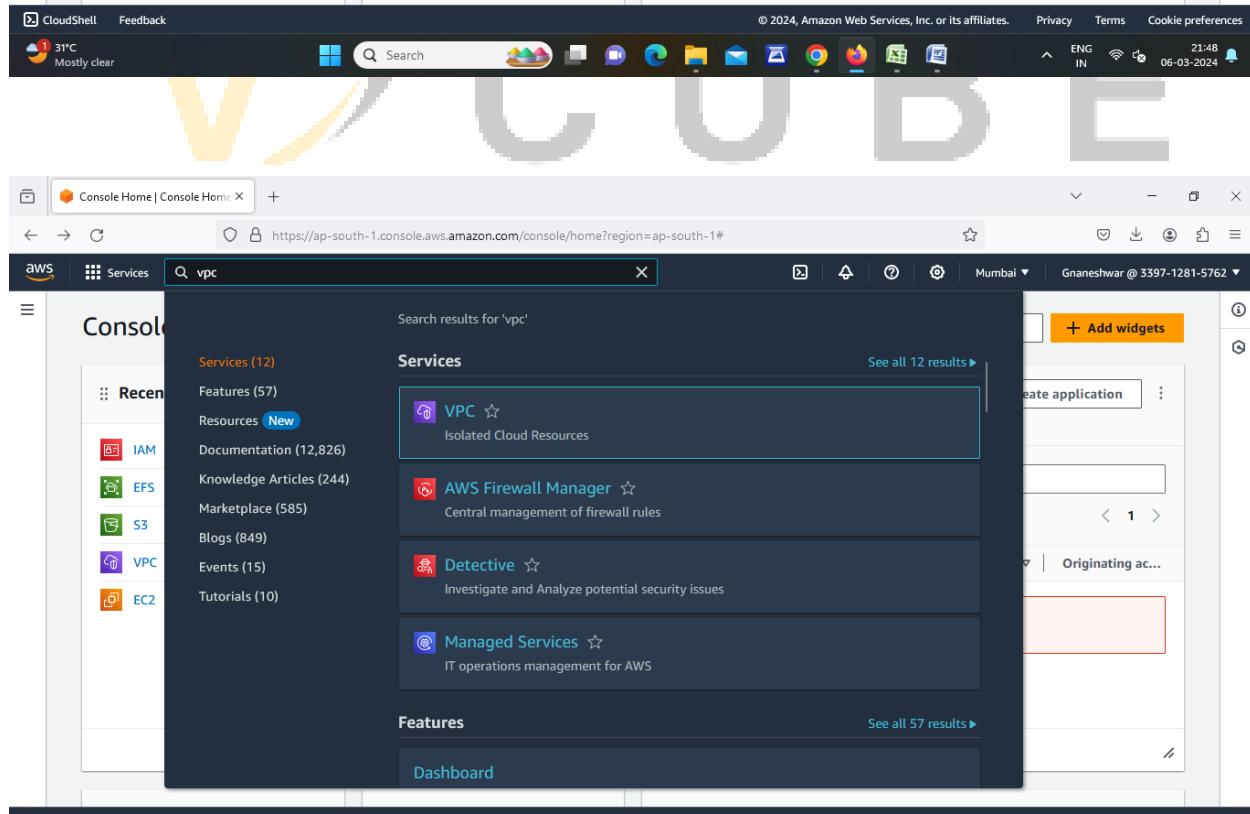


## ➤ Create VPC and connect subnets through Auto scaling and connect RDS

- First Go to Amazon Console Home and search VPC.

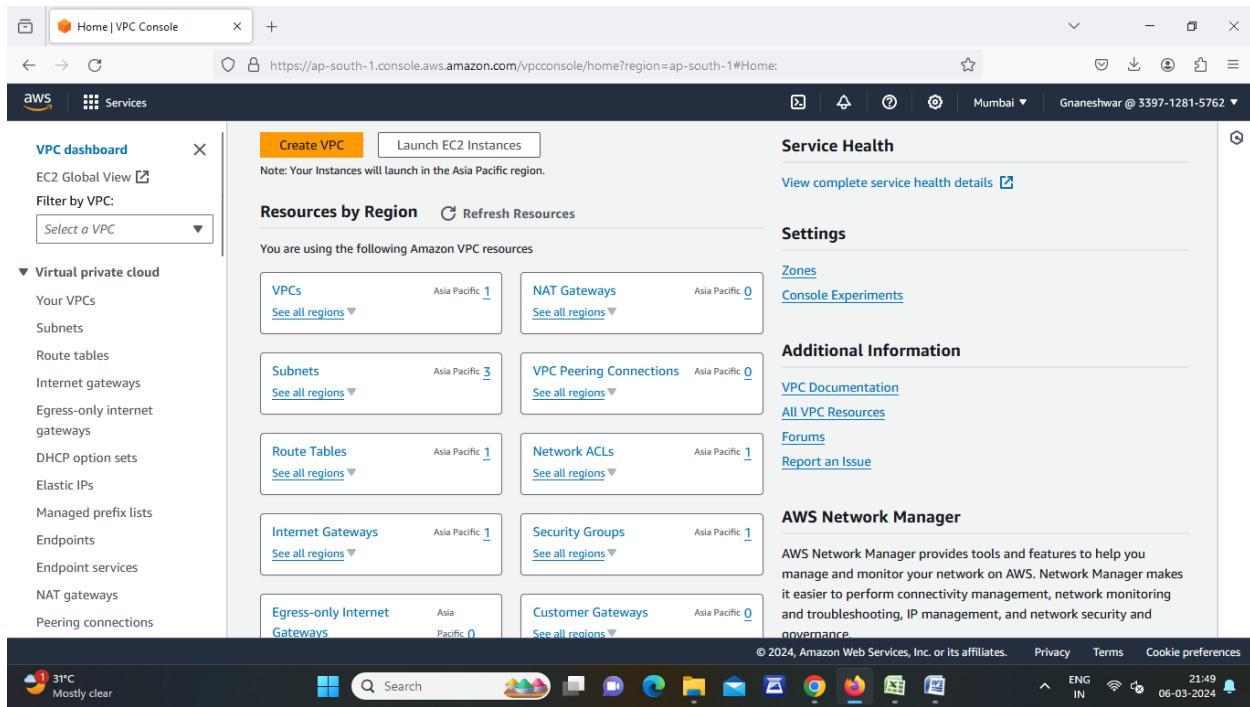


The screenshot shows the AWS Console Home page. At the top, there's a navigation bar with tabs for 'Services' and a search bar. Below the navigation is a sidebar with 'Recently visited' services: IAM, EFS, S3, VPC, and EC2. The main content area has two sections: 'Applications (0)' and 'View all services'. The 'View all services' section contains a search bar and a list of services. A red box highlights an 'Access denied' message in the applications section.

This screenshot is similar to the one above, but the search bar in the navigation bar is now set to 'vpc'. The results for 'vpc' are displayed in the main content area under the 'Services' heading. The 'VPC' service is listed first, followed by AWS Firewall Manager, Detective, and Managed Services. Below this, there are sections for 'Features' and 'Dashboard'.

- Click on Create VPC
- Enter VPC Name and enter CIDR Number then Click on create VPC



The screenshot shows the AWS VPC Console Home page. At the top, there are two buttons: "Create VPC" (orange) and "Launch EC2 Instances". A note below says, "Note: Your Instances will launch in the Asia Pacific region." On the left, a sidebar titled "VPC dashboard" lists various VPC-related services. The main area is titled "Resources by Region" and shows counts for VPCs, Subnets, Route Tables, Internet Gateways, Egress-only Internet Gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, Peering connections, NAT Gateways, VPC Peering Connections, Network ACLs, Security Groups, and Customer Gateways. The "VPCs" section shows 1 in Asia Pacific. The "Subnets" section shows 3 in Asia Pacific. The "Route Tables" section shows 1 in Asia Pacific. The "Internet Gateways" section shows 1 in Asia Pacific. The "Egress-only Internet Gateways" section shows 0 in Asia Pacific.

**AWS Network Manager**

AWS Network Manager provides tools and features to help you manage and monitor your network on AWS. Network Manager makes it easier to perform connectivity management, network monitoring and troubleshooting, IP management, and network security and governance.

**CreateVpc | VPC Console**

The screenshot shows the "Create VPC" page. The title bar says "CreateVpc | VPC Console". The URL is https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly". The page has a breadcrumb navigation: "VPC > Your VPCs > Create VPC". The main content is titled "Create VPC" with a "Info" link. It explains that a VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances. The "VPC settings" section includes:

- Resources to create:** A radio button group with "VPC only" selected (blue outline).
- Name tag - optional:** An input field containing "my-vpc".
- IPv4 CIDR block:** A radio button group with "IPv4 CIDR manual input" selected (blue outline). Other options include "IPAM-allocated IPv4 CIDR block".
- IPv4 CIDR:** An input field containing "100.0.0.0/16". A note below says "CIDR block size must be between /16 and /28."

The bottom of the page includes standard AWS footer links: CloudShell, Feedback, Privacy, Terms, Cookie preferences, and a status bar showing the date and time (06-03-2024, 21:51).

CreateVpc | VPC Console

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

aws Services Search [Alt+S]

100.0.0.0/16 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

**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 my-vpc Remove tag

Add tag

You can add 49 more tags

Cancel Create VPC

CloudShell Feedback

31°C Mostly clear

Search

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ENG IN 21:50 06-03-2024

VpcDetails | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#VpcDetails:VpcId=vpc-00f52c5dcb72e276a

VPC dashboard EC2 Global View Filter by VPC: Select a VPC

Virtual private cloud Your VPCs Subnets Route tables Internet gateways Egress-only internet gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections

You successfully created vpc-00f52c5dcb72e276a / my-vpc

VPC > Your VPCs > vpc-00f52c5dcb72e276a

vpc-00f52c5dcb72e276a / my-vpc

**Details** **Info**

VPC ID	State	DNS hostnames	DNS resolution
vpc-00f52c5dcb72e276a	Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-0f4bd8af4e50e8fc	rtb-067784de33cc06688	acl-048626119ad592d9b
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
No	100.0.0.0/16	-	-
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	
Disabled	-	339712815762	

Resource map **Info**

Resource map

Resource map **Info**

CloudShell Feedback

31°C Mostly clear

Search

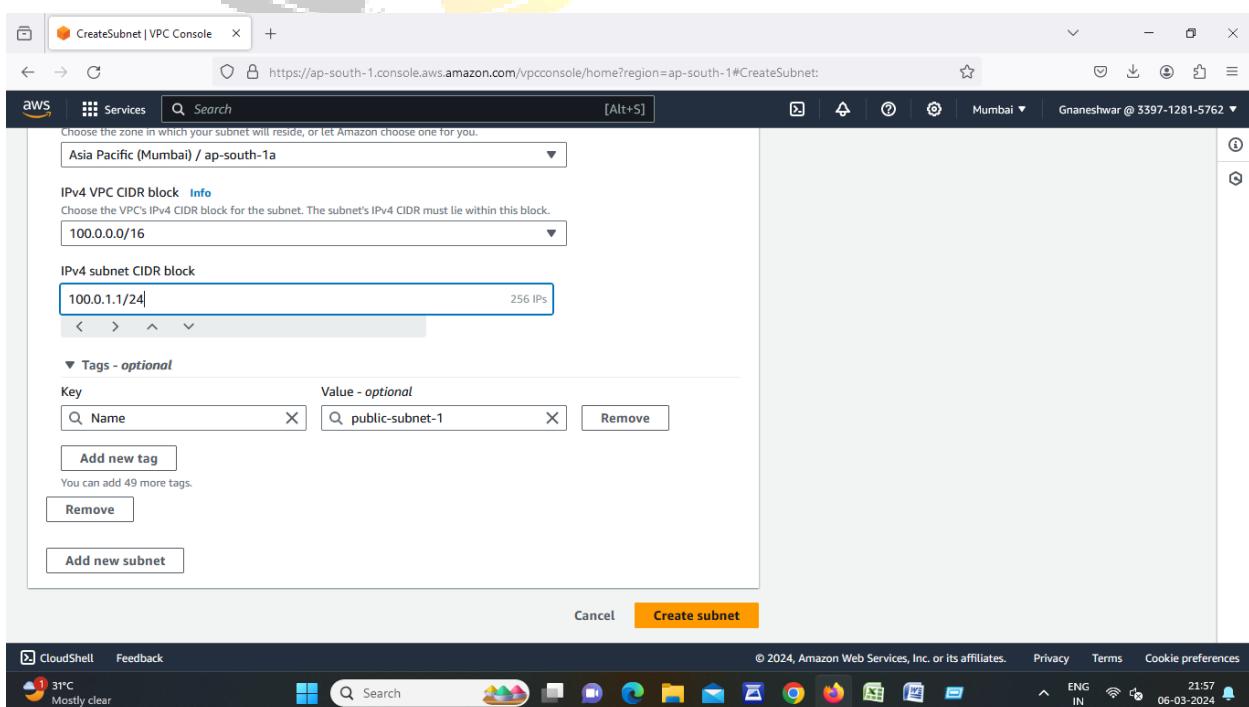
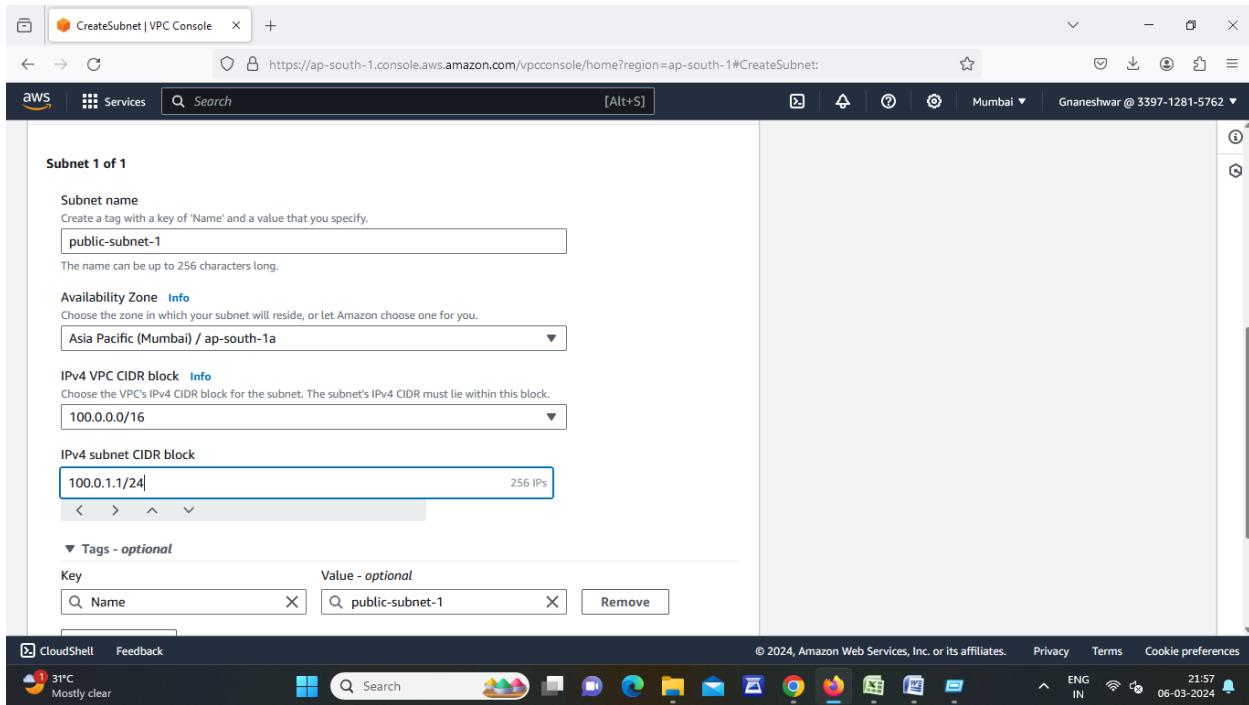
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ENG IN 21:51 06-03-2024

- Go to Subnets and Click on create 2 public Subnets
- Select our VPC then enter Public subnet name and select One region then ipv4 subnet CIDR Number
- Click on add new subnet

The screenshot shows the AWS VPC Subnets console. On the left, there's a navigation sidebar with options like VPC dashboard, EC2 Global View, Filter by VPC, Virtual private cloud, Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, and Peering connections. The main area displays a table titled "Subnets (3) Info" with columns: Name, Subnet ID, State, VPC, and IPv4 CIDR. The table lists three subnets: subnet-0159d1df909729c40, subnet-0101cebfb860a3f5f, and subnet-06de7bf03642714e4, all in the "Available" state. Below the table, a section titled "Select a subnet" is visible.

The screenshot shows the "Create subnet" wizard. The first step, "VPC", is displayed. It asks to "Select a VPC" and lists two options: "my-vpc" (VPC ID: vpc-00f52c5dcb72e276a, CIDR: 100.0.0.0/16) and "vpc-05c6e37ded27aa6ea" (VPC ID: vpc-05c6e37ded27aa6ea, CIDR: 172.31.0.0/16). A note below says "Select a VPC first to create new subnets." At the bottom, there are "Cancel" and "Create subnet" buttons.



- Enter public subnet name and select another region then ipv4 subnet CIDR Number then Click on Create Subnet

**CreateSubnet | VPC Console**

Subnet name: public-subnet-2

Availability Zone: Asia Pacific (Mumbai) / ap-south-1b

IPv4 VPC CIDR block: 100.0.0.0/16

IPv4 subnet CIDR block: 100.0.2.2/24

Tags - optional: Name: public-subnet-2

**Create subnet**

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**CreateSubnet | VPC Console**

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

Availability Zone: Asia Pacific (Mumbai) / ap-south-1b

IPv4 VPC CIDR block: 100.0.0.0/16

IPv4 subnet CIDR block: 100.0.2.2/24

Tags - optional: Name: public-subnet-2

You can add 49 more tags.

**Add new subnet**

**Create subnet**

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- Go to Subnets and Click on create 2 Private Subnets
- Select our VPC then enter Private subnet name and select One region then ipv4 subnet CIDR Number
- Click on add new subnet

**Screenshot 1: AWS Subnets | VPC Management Console**

You have successfully created 2 subnets: subnet-08b4c86c131317765, subnet-046ad2c4f1c268d05

**Subnets (2) Info**

Name	Subnet ID	State	VPC	IPv4 CIDR
public-subnet-2	subnet-046ad2c4f1c268d05	Available	vpc-00f52c5dc72e276a   my-vpc	100.0.2.0/24
public-subnet-1	subnet-08b4c86c131317765	Available	vpc-00f52c5dc72e276a   my-vpc	100.0.1.0/24

**Screenshot 2: CreateSubnet | VPC Console**

**Create subnet**

**VPC**

VPC ID: Create subnets in this VPC.

- vpc-00f52c5dc72e276a (my-vpc)
- vpc-00f52c5dc72e276a (my-vpc) 100.0.0.0/16
- vpc-05c6e37ded27aa6ea 172.31.0.0/16 (default)

**Subnet settings**

Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

CreateSubnet | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateSubnet:

Mumbai Gnaneshwar @ 3397-1281-5762

Subnet 1 of 1

Subnet name: private-subnet-1

Availability Zone: Asia Pacific (Mumbai) / ap-south-1a

IPv4 VPC CIDR block: 100.0.0.0/16

IPv4 subnet CIDR block: 100.0.4.1/24

Tags - optional: Name: private-subnet-1

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CreateSubnet | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateSubnet:

Mumbai Gnaneshwar @ 3397-1281-5762

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

Availability Zone: Asia Pacific (Mumbai) / ap-south-1a

IPv4 VPC CIDR block: 100.0.0.0/16

IPv4 subnet CIDR block: 100.0.4.1/24

Tags - optional: Name: private-subnet-1

Add new tag

You can add 49 more tags.

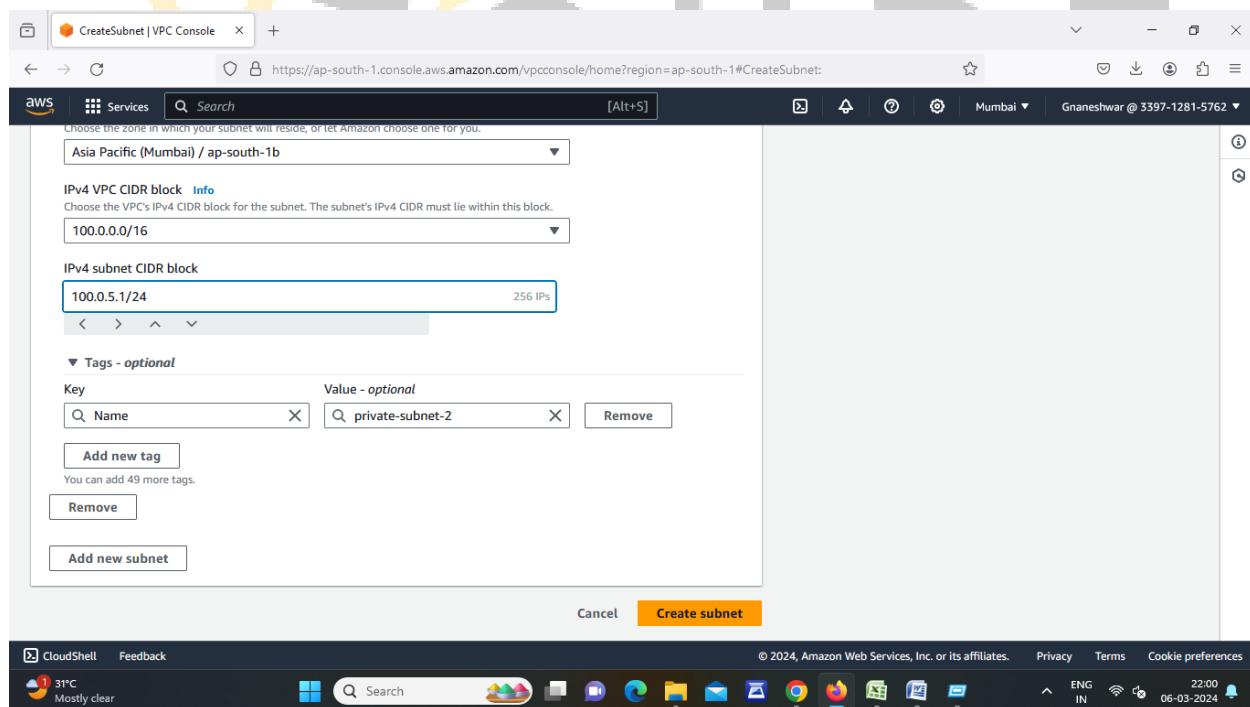
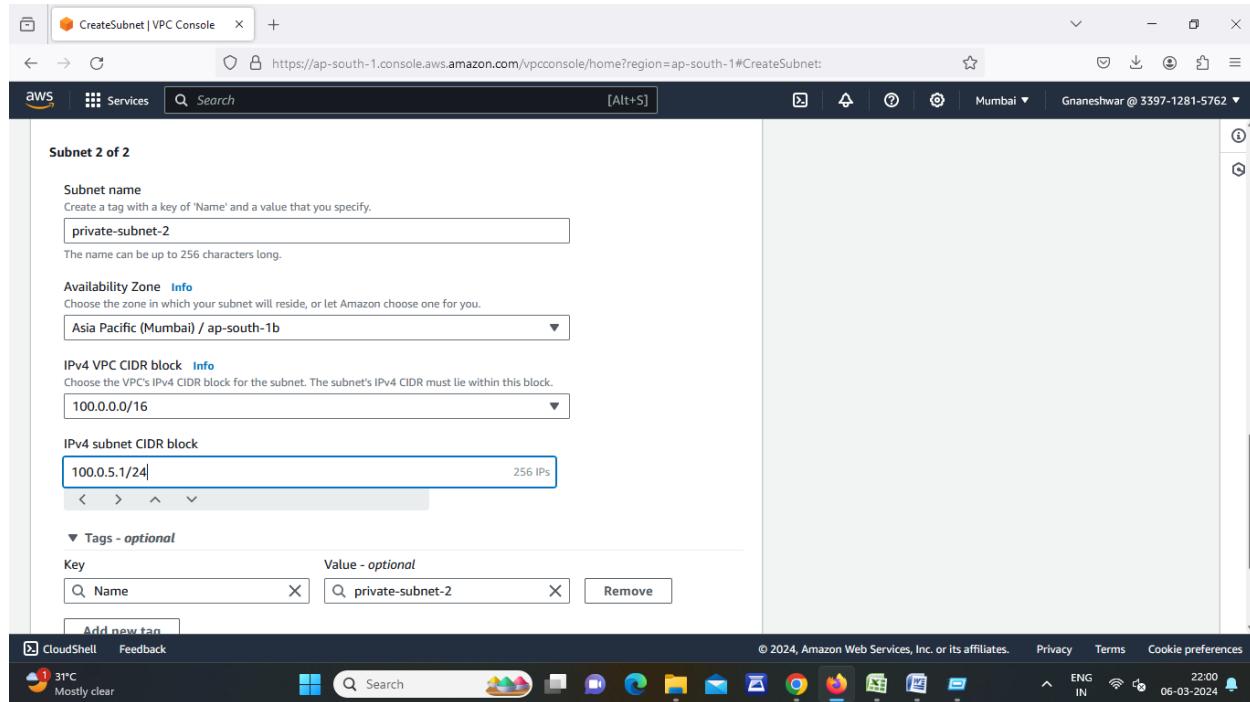
Remove

Add new subnet

Cancel Create subnet

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- Enter public subnet name and select another region then ipv4 subnet CIDR Number then Click on Create Subnet



- After Successfully created public and private go to route tables

You have successfully created 2 subnets: subnet-0b150443d9679a474, subnet-0eda13542ed1d90a5

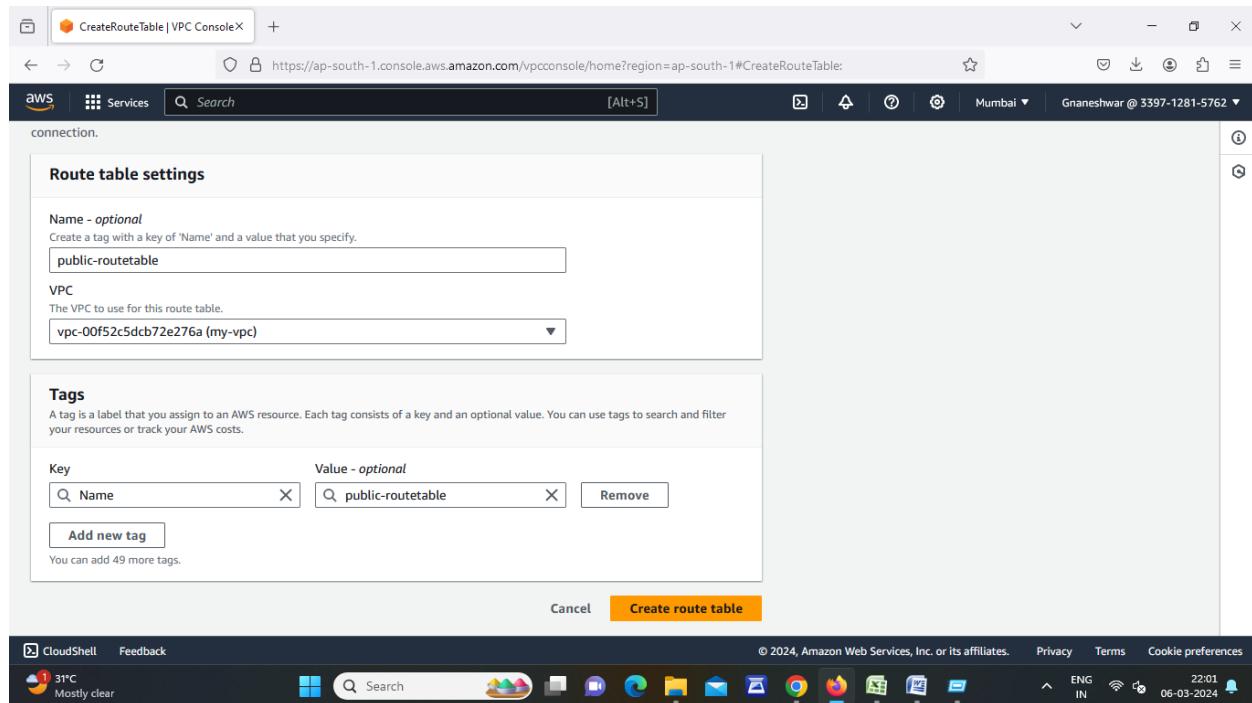
Name	Subnet ID	State	VPC	IPv4 CIDR
-	subnet-0b150443d9679a474	Available	vpc-00f52c5dcb72e276a   my-vpc	172.31.1.0/24
-	subnet-0eda13542ed1d90a5	Available	vpc-00f52c5dcb72e276a   my-vpc	100.0.5.0/24
public-subnet-2	subnet-046ad2c4f1c268d05	Available	vpc-00f52c5dcb72e276a   my-vpc	100.0.2.0/24
public-subnet-1	subnet-08b4c86c131317765	Available	vpc-00f52c5dcb72e276a   my-vpc	100.0.1.0/24
private-subnet-2	subnet-0eda13542ed1d90a5	Available	vpc-00f52c5dcb72e276a   my-vpc	100.0.5.0/24
private-subnet-1	subnet-0b150443d9679a474	Available	vpc-00f52c5dcb72e276a   my-vpc	100.0.4.0/24

- Create 2 route tables (public and private)
- Click on create route table

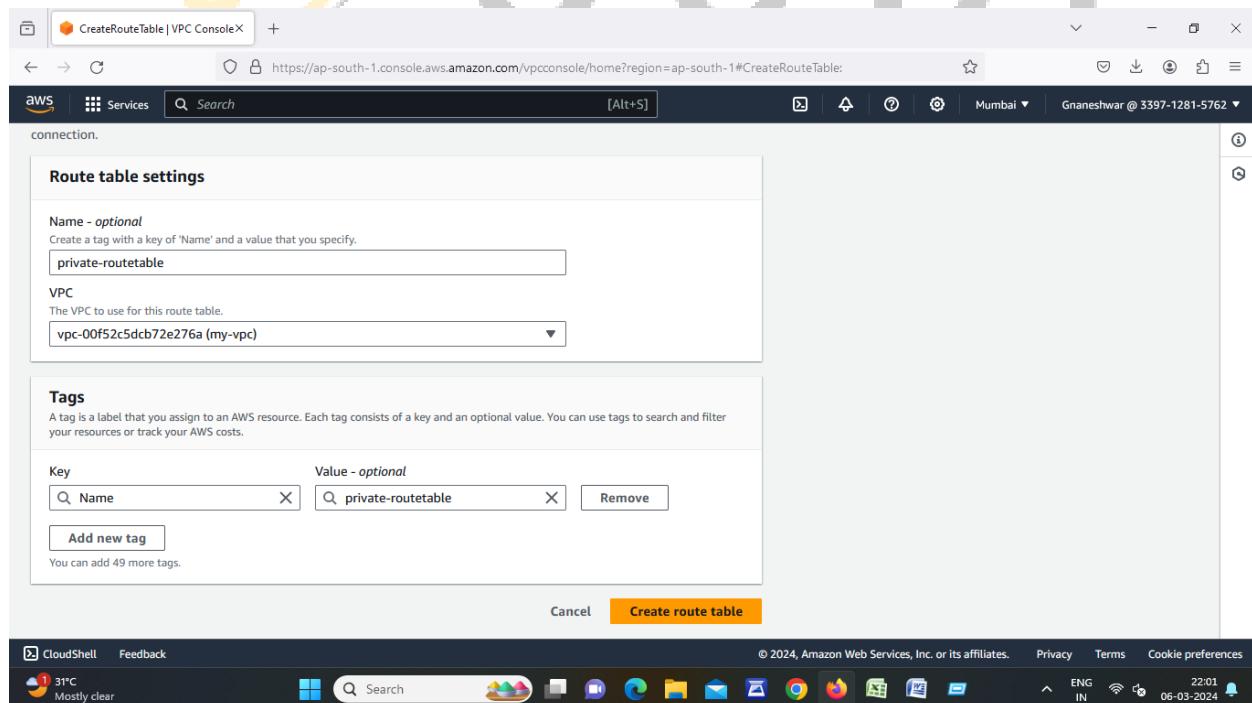
Route tables (1) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
-	rtb-07cb6587559c3e409	-	-	Yes	vpc-00f52c5dcb72e276a

- Enter route table name for public then select our VPC then click on create route table



- Enter route table name for private then select our VPC then click on create route table



- Click on Public route table id then go to subnet association
- Go to edit subnet association select public subnets then save changes.

The screenshot shows two browser windows open in a desktop environment. Both windows are from the AWS VPC Console.

**Top Window (RouteTables | VPC Console):**

- Left Sidebar:** Shows navigation links for VPC dashboard, EC2 Global View, Filter by VPC, Virtual private cloud (Your VPCs, Subnets), and Route tables (Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, Peering connections).
- Main Content:** A table titled "Route tables (4) Info" listing four route tables:
 

Name	Route table ID	Explicit subnet associations	Edge associations
-	rtb-07c6587559c3e409	-	Yes
public-routetable	rtb-0234080d0befa3a5a	-	No
-	rtb-067784de33cc06688	-	Yes
private-routetable	rtb-09a93b1ffa099abb0	-	No
- Action Bar:** Includes "Actions" dropdown, "Create route table" button, and other standard UI elements.

**Bottom Window (RouteTableDetails | VPC Console):**

- Left Sidebar:** Same as the top window.
- Main Content:** Details for the selected route table (rtb-0234080d0befa3a5a):
 

Route table ID: rtb-0234080d0befa3a5a	Main: No	Explicit subnet associations: -	Edge associations: -
VPC: vpc-00f52c5dc72e276a   my-vpc	Owner ID: 339712815762		
- Subnet Associations Tab:** Shows "Explicit subnet associations (0)" and "Subnets without explicit associations (4)".
- Action Bar:** Includes "Edit subnet associations" buttons and other standard UI elements.

**Available subnets (2/4)**

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
public-subnet-2	subnet-046ad2c4f1c268d05	100.0.2.0/24	-	Main (rtb-067784de33cc06688)
public-subnet-1	subnet-08b4c86c131317765	100.0.1.0/24	-	Main (rtb-067784de33cc06688)
private-subnet-2	subnet-0eda13542ed1d90a5	100.0.5.0/24	-	Main (rtb-067784de33cc06688)
private-subnet-1	subnet-0b150443d9679a474	100.0.4.0/24	-	Main (rtb-067784de33cc06688)

**Selected subnets**

- subnet-046ad2c4f1c268d05 / public-subnet-2
- subnet-08b4c86c131317765 / public-subnet-1

**Actions:** Cancel, Save associations

- Click on Private route table id then go to subnet association
- Go to edit subnet association select private subnets then save changes.

**Route tables (1/4) Info**

Name	Route table ID	Explicit subnet assoc...	Edge associations	Main	VPC
-	rtb-07cb6587559c3e409	-	-	Yes	VPC
public-routetable	rtb-0234080d0befa3a5a	2 subnets	-	No	VPC
-	rtb-067784de33cc06688	-	-	Yes	VPC
<b>private-routetable</b>	<b>rtb-09a93b1ffa099abb0</b>	-	-	No	VPC

**rtb-09a93b1ffa099abb0 / private-routetable**

**Details**

Route table ID rtb-09a93b1ffa099abb0	Main <input type="checkbox"/>	Explicit subnet associations -	Edge associations -
---	----------------------------------	-----------------------------------	------------------------

**Actions:** Create route table, Details, Routes, Subnet associations, Edge associations, Route propagation, Tags

**CloudShell Feedback**

RouteTableDetails | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#RouteTableDetails:RouteTableId=rtb-09a93b1ffa099abb0

VPC dashboard    X

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

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Details Info

Route table ID: rtb-09a93b1ffa099abb0

Main: No

Explicit subnet associations: -

Edge associations: -

VPC: vpc-00f52c5dcb72e276a | my-vpc

Owner ID: 339712815762

Routes    Subnet associations    Edge associations    Route propagation    Tags

Explicit subnet associations (0)

No subnet associations

You do not have any subnet associations.

Edit subnet associations

Subnets without explicit associations (2)

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Find subnet association

Edit subnet associations

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ENG IN 22:03 06-03-2024

EditRouteTableSubnetAssociations | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-09a93b1ffa099abb0

VPC > Route tables > rtb-09a93b1ffa099abb0 > Edit subnet associations

## Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
public-subnet-2	subnet-046ad2c4f1c268d05	100.0.2.0/24	-	rtb-0234080d0befa3a5a / public-rtb-09a93b1ffa099abb0
public-subnet-1	subnet-08b4c86c131317765	100.0.1.0/24	-	rtb-0234080d0befa3a5a / public-rtb-09a93b1ffa099abb0
<input checked="" type="checkbox"/> private-subnet-2	subnet-0eda13542ed1d90a5	100.0.5.0/24	-	Main (rtb-067784de33cc06688)
<input checked="" type="checkbox"/> private-subnet-1	subnet-0b150443d9679a474	100.0.4.0/24	-	Main (rtb-067784de33cc06688)

Selected subnets

subnet-0eda13542ed1d90a5 / private-subnet-2    X

subnet-0b150443d9679a474 / private-subnet-1    X

Cancel    Save associations

CloudShell    Feedback

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Search [Alt+S]

Mumbai    Gnaneshwar @ 3397-1281-5762

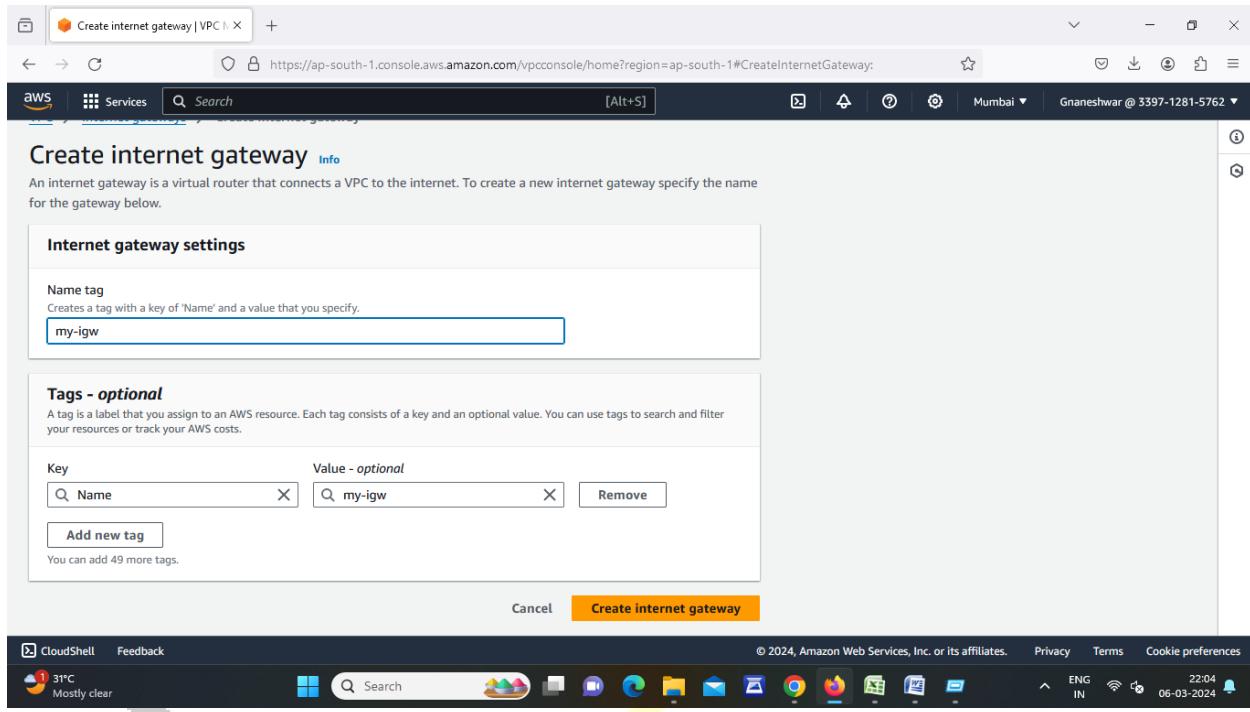
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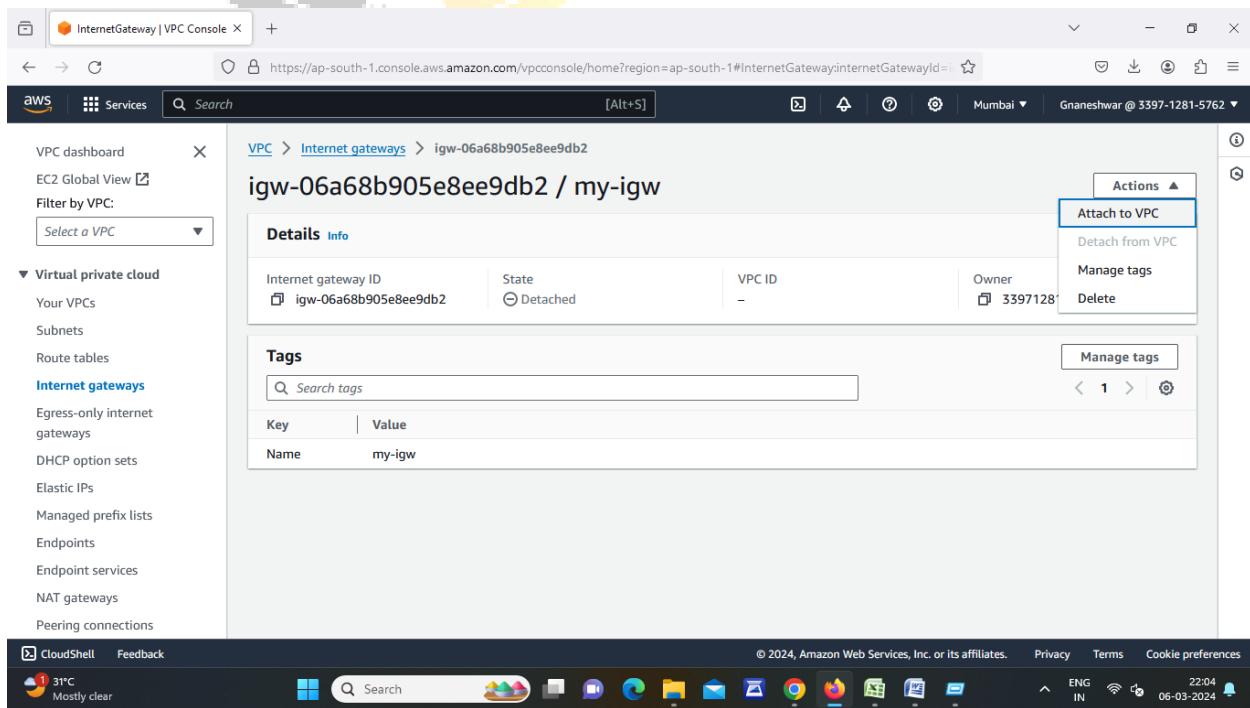
The screenshot shows the AWS VPC Console with the URL <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#RouteTableDetails:RouteTableId=rtb-09a93b1ffa099abb0>. A green success message at the top states: "You have successfully updated subnet associations for rtb-09a93b1ffa099abb0 / private-routetable." The main page displays the details of the route table "rtb-09a93b1ffa099abb0 / private-routetable". The "Routes" tab is selected, showing one route entry: Destination 100.0.0.0/16, Target local, Status Active, and Propagated No. The sidebar on the left shows the "Route tables" section under "Virtual private cloud". The bottom status bar shows the date and time as 06-03-2024.

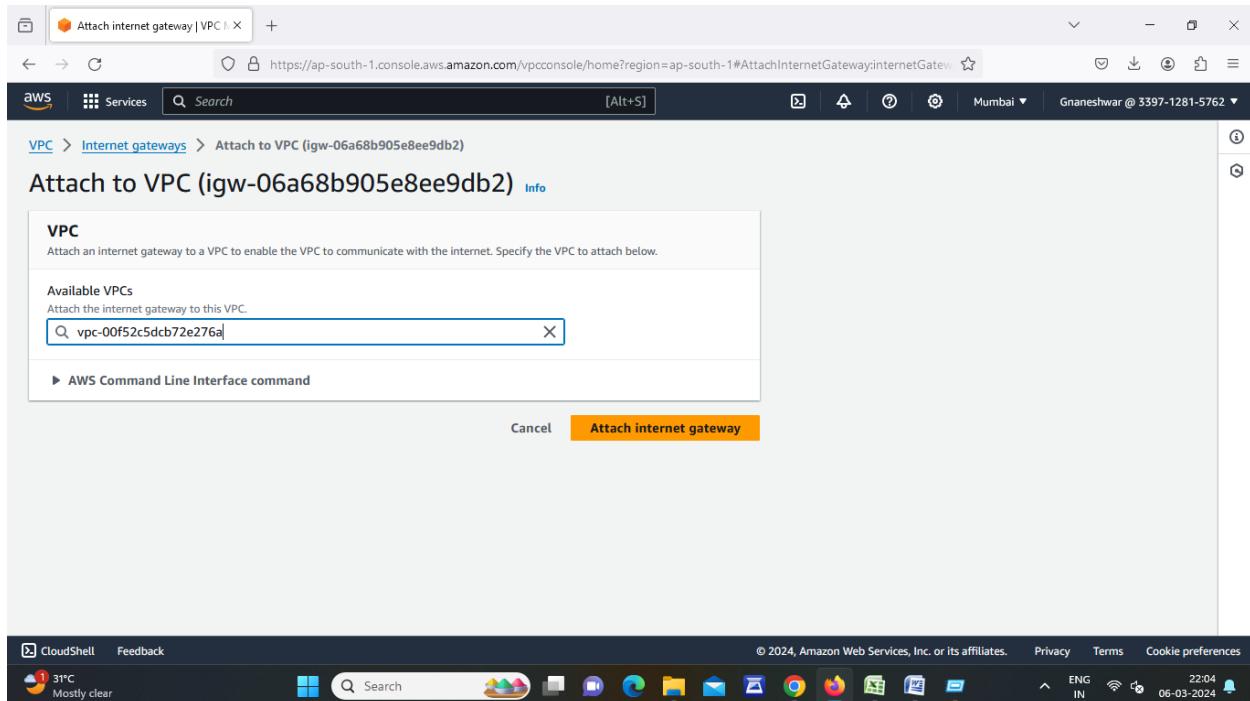
- Now go to Internet gateway then click on create internet gateway
- Enter internet gateway name then click on create internet gateway

The screenshot shows the AWS VPC Console with the URL <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#igws>. The "Internet gateways (1)" section is displayed, showing one gateway named "igw-018fa2a68541b128e" which is attached to the VPC "vpc-05c6e37ded27aa6ea". The "Create internet gateway" button is visible. The sidebar on the left shows the "Internet gateways" section under "Virtual private cloud". The bottom status bar shows the date and time as 06-03-2024.



- Go to actions then attach to VPC
- Select our VPC then click on attach internet gateway





- Go to NAT Gateway

The screenshot shows the AWS VPC console with the URL <https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#InternetGateway:internetGatewayId=igw-06a68b905e8ee9db2>. The page title is "igw-06a68b905e8ee9db2 / my-igw". The left sidebar shows "Virtual private cloud" with "Internet gateways" selected. The main content area displays "Details" for the Internet gateway, including its ID (igw-06a68b905e8ee9db2), state (Attached), VPC ID (vpc-00f52c5dcb72e276a | my-vpc), and owner (339712815762). It also shows a "Tags" section with one tag: Name = my-igw. At the bottom are "Actions" and "Manage tags" buttons. The status bar at the bottom indicates "CloudShell" and "Feedback".

- Click on create NAT gateway
- Enter Name and select public subnet then click on allocate elastic ip then click on create NAT gateway

NAT gateways Info

Name	NAT gateway ID	Connectivity...	State	State message	Primary public I...
No NAT gateways found					

Select a NAT gateway

Elastic IP address 65.1.77.246 (eipalloc-0ebb832009ca46633) allocated.

**NAT gateway settings**

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

The name can be up to 256 characters long.

**Subnet**  
Select a subnet in which to create the NAT gateway.

**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.

**Additional settings** Info

Elastic IP address 65.1.77.246 (eipalloc-0ebb832009ca46633) allocated.

Connectivity type: Public

Elastic IP allocation ID: eipalloc-0ebb832009ca46633

Tags: Name: my-nat

Create NAT gateway

- Go to Route Tables and add routes to the tables

NAT gateway nat-07d6d5ed54a36af76 | my-nat was created successfully.

nat-07d6d5ed54a36af76 / my-nat

Details

NAT gateway ID nat-07d6d5ed54a36af76	Connectivity type Public	State Pending	State message -
NAT gateway ARN arn:aws:ec2:ap-south-1:339712815762:natgateway/nat-07d6d5ed54a36af76	Primary public IPv4 address -	Primary private IPv4 address -	Primary network interface ID -
VPC vpc-00f52c5dc72e276a / my-vpc	Subnet subnet-08b4c86c131317765 / public-subnet-1	Created Wednesday, March 6, 2024 at 22:06:08 GMT+5:30	Deleted -

Secondary IPv4 addresses

Secondary IPv4 addresses

- Click on Public route table id then go to actions
- Click on edit routes
- Click on add route select Destination 0.0.0.0/0
- Select target group is Internet gateway and NAT gateway then click on save changes

The screenshot shows the AWS VPC Route Tables console. On the left, there's a navigation sidebar with options like VPC dashboard, EC2 Global View, Filter by VPC (Select a VPC), Virtual private cloud (Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, Peering connections), CloudShell, Feedback, and a weather widget (31°C, Mostly clear). The main area has a header 'Route tables (1/4) Info' with a search bar and a 'Create route table' button. Below is a table with columns: Name, Route table ID, Explicit subnet associa..., Edge associations, Main, and VPC. There are four rows: one unselected row with a dash, and three selected rows: 'public-routetable' (selected with a checked checkbox), 'rtb-0234080d0befa3a5a' (selected with a checked checkbox), and 'private-routetable'. The 'public-routetable' row details show it has 2 subnets and is not the main route table. The 'rtb-0234080d0befa3a5a / public-routetable' details page is open, showing tabs for Details, Routes, Subnet associations, Edge associations, Route propagation, and Tags. Under 'Details', it shows Route table ID: rtb-0234080d0befa3a5a, Main: No, Explicit subnet associations: 2 subnets, and Edge associations: -. At the bottom, there's a footer with links to Privacy, Terms, Cookie preferences, and a date/time stamp (© 2024, Amazon Web Services, Inc. or its affiliates. 22:06 06-03-2024).

Name	Route table ID	Explicit subnet associa...	Edge associations	Main	VPC
-	<a href="#">rtb-07cb6587559c3e409</a>	-	-	Yes	VPC
<input checked="" type="checkbox"/> public-routetable	<a href="#">rtb-0234080d0befa3a5a</a>	2 subnets	-	No	VPC
-	<a href="#">rtb-067784de33cc06688</a>	-	-	Yes	VPC
-	<a href="#">rtb-09a93b1ffa099abb0</a>	2 subnets	-	No	VPC

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RouteTableDetails | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#RouteTableDetails:RouteTableId=rtb-0234080d0befa3a5a

VPC > Route tables > rtb-0234080d0befa3a5a / public-routetable

Actions ▾

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

Details Info

Route table ID rtb-0234080d0befa3a5a	Main No	Explicit subnet associations 2 subnets	Edge as
VPC vpc-00f52c5dc72e276a   my-vpc	Owner ID 339712815762		

Routes Subnet associations Edge associations Route propagation Tags

Routes (1)

Destination	Target	Status	Propagated
100.0.0.0/16	local	Active	No

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EditRoutes | VPC Console

https://ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRoutes:RouteTableId=rtb-0234080d0befa3a5a

VPC > Route tables > rtb-0234080d0befa3a5a > Edit routes

### Edit routes

Destination	Target	Status	Propagated
100.0.0.0/16	local	Active	No

Add route Cancel Preview Save changes

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The screenshot shows the 'Edit routes' page in the AWS VPC console. A table lists three routes:

Destination	Target	Status	Propagated
100.0.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	-	No
0.0.0.0/24	NAT Gateway	-	No

Buttons at the bottom include 'Add route', 'Cancel', 'Preview', and 'Save changes'.

The screenshot shows the 'RouteTableDetails' page for route table ID rtb-0234080d0befa3a5a. A green banner indicates 'Updated routes for rtb-0234080d0befa3a5a / public-routetable successfully'. The 'Details' tab is selected, showing:

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-0234080d0befa3a5a	No	2 subnets	-
VPC	Owner ID		
vpc-00f52c5dc72e276a   my-vpc	339712815762		

The 'Routes' tab is selected, displaying three routes:

Destination	Target	Status	Propagated
0.0.0.0/24	nat-07d6d5ed54a36af76	Active	No

Buttons at the bottom include 'Actions', 'Both', 'Edit routes', and navigation controls.

- Click on Private route table id then go to actions
- Click on edit routes
- Click on add route select Destination 0.0.0.0/0

- Select target group is NAT gateway then click on save changes

Screenshot of the AWS VPC Console showing the Route Tables page. A route table named "private-routetable" is selected.

Name	Route table ID	Explicit subnet associations	Main
-	<a href="#">rtb-07cb6587559c3e409</a>	-	Yes
public-routetable	<a href="#">rtb-0234080d0befa3a5a</a>	2 subnets	No
-	<a href="#">rtb-067784de33cc06688</a>	-	Yes
<b>private-routetable</b>	<a href="#">rtb-09a93b1ffa099abb0</a>	2 subnets	No

Details for route table rtb-09a93b1ffa099abb0 / private-routetable:

Route table ID	Main	Explicit subnet associations	Edge associations
<a href="#">rtb-09a93b1ffa099abb0</a>	No	2 subnets	-

Actions menu for the selected route table:

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

Route table details:

Route table ID	Main	Explicit subnet associations	Edge associations
<a href="#">rtb-09a93b1ffa099abb0</a>	No	2 subnets	-

Routes (1):

Destination	Target	Status	Propagated
100.0.0.0/16	local	Active	No

The screenshot shows the 'Edit routes' page for a specific route table. The table has two entries:

Destination	Target	Status	Propagated
100.0.0.0/16	local	Active	No
0.0.0.0/0	NAT Gateway	-	No

Buttons at the bottom include 'Add route', 'Cancel', 'Preview', and 'Save changes'.

The screenshot shows the 'RouteTableDetails' page for the same route table. A green banner at the top indicates that the routes have been updated successfully.

The details section shows:

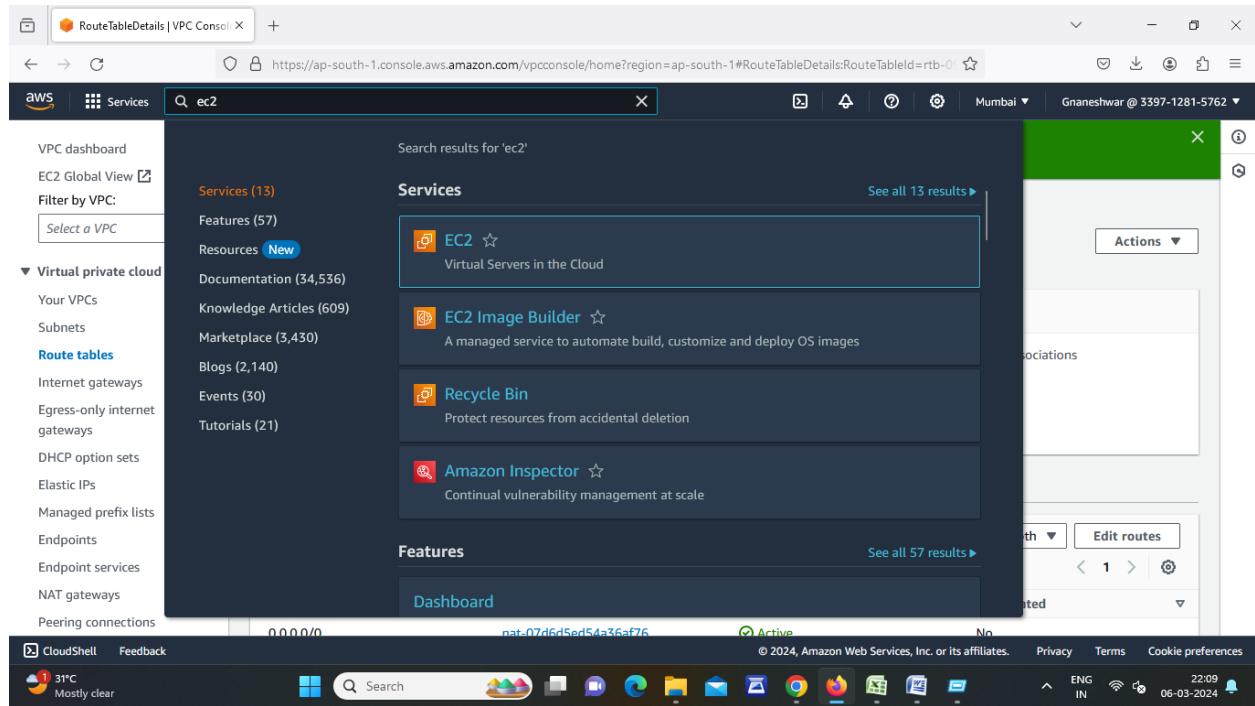
Route table ID	Main	Explicit subnet associations	Edge associations
rtb-09a93b1ffa099abb0	No	2 subnets	-
VPC	Owner ID		
vpc-00f52c5dc72e276a   my-vpc	339712815762		

The 'Routes' tab is selected, showing the following route entry:

Destination	Target	Status	Propagated
0.0.0.0/0	nat-07d6d5ed54a36af76	Active	No

Buttons at the bottom include 'Actions', 'Edit routes', and navigation controls.

- Click on EC2 instance



- Click on Instances and click on launch instance
  - Instance name then select AMI, instance type
  - Click on create key pair then enter key name then click on create key pair
  - Edit network settings select our VPC and select public subnet and enable auto assign ip
  - Click on launch instance

RouteTableDetails | VPC Console X Home | EC2 | ap-south-1 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Home:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

**EC2 Dashboard**

- EC2 Global View
- Events
- Instances**
  - Instances
  - Instance Types
  - Launch Templates
  - Spot Requests
  - Savings Plans
  - Reserved Instances
  - Dedicated Hosts
  - Capacity Reservations New
- Images**
  - AMIs
  - AMI Catalog
- Elastic Block Store**
  - Volumes

**Resources**

You are using the following Amazon EC2 resources in the Asia Pacific (Mumbai) Region:

Instances (running)	0	Auto Scaling Groups	0
Dedicated Hosts	0	Elastic IPs	2
Instances	0	Key pairs	1
Load balancers	0	Placement groups	0
Security groups	2	Snapshots	0
Volumes	0		

**Launch instance**  
To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

**Service health**

AWS Health Dashboard

**EC2 Free Tier Info**  
Offers for all AWS Regions.

**0 EC2 free tier offers in use**

End of month forecast

User: arn:aws:iam::339712815762:user/Gnaneshwar is not authorized to perform: freetier:GetFreeTierUsage on resource: arn:aws:freetier:us-east-1:339712815762:/GetFreeTierUsage because no identity-based policy allows the freetier:GetFreeTierUsage action

Exceeds free tier

User: arn:aws:iam::339712815762:user/Gnaneshwar is not authorized to perform: freetier:GetFreeTierUsage on resource: arn:aws:freetier:us-east-1:339712815762:/GetFreeTierUsage because no identity-based policy allows the freetier:GetFreeTierUsage action

[View Global EC2 resources](#)

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Schemas:

31°C Mostly clear

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RouteTableDetails | VPC Console X Instances | EC2 | ap-south-1 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

**EC2 Dashboard**

- EC2 Global View
- Events
- Instances**
  - Instances**
    - Instance Types
    - Launch Templates
    - Spot Requests
    - Savings Plans
    - Reserved Instances
    - Dedicated Hosts
    - Capacity Reservations New
  - Images**
    - AMIs
    - AMI Catalog
  - Elastic Block Store**
    - Volumes

**Instances Info**

Find Instance by attribute or tag (case-sensitive)

Any state

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
No instances You do not have any instances in this region						

**Select an instance**

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RouteTableDetails | VPC Console X Launch an instance | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

## 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  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

**Quick Start**

**Summary**

Number of instances Info

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.3.2...read more  
ami-0ba259e664698cbfc

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

Cancel **Launch instance** Review commands

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RouteTableDetails | VPC Console X Launch an instance | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

## Launch an instance Info

Instance type

**t2.micro** Free tier eligible  
Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Linux base pricing: 0.0124 USD per Hour  
On-Demand Windows base pricing: 0.017 USD per Hour  
On-Demand RHEL base pricing: 0.0724 USD per Hour  
On-Demand SUSE base pricing: 0.0124 USD per Hour

All generations Compare instance types

Additional costs apply for AMIs with pre-installed software

**Key pair (login) Info**

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - **required**  Create new key pair

**Network settings Info**

Network Info Edit  
vpc-05c6e37ded27aa6ea

**Summary**

Number of instances Info

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.3.2...read more  
ami-0ba259e664698cbfc

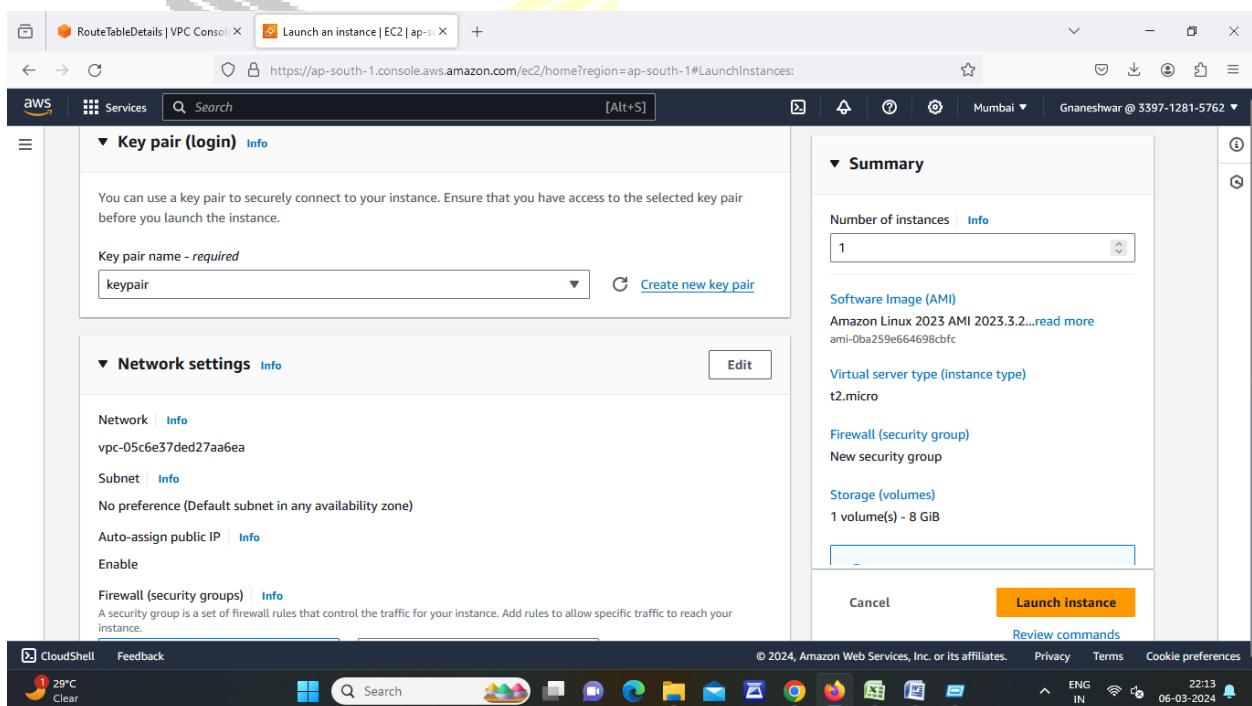
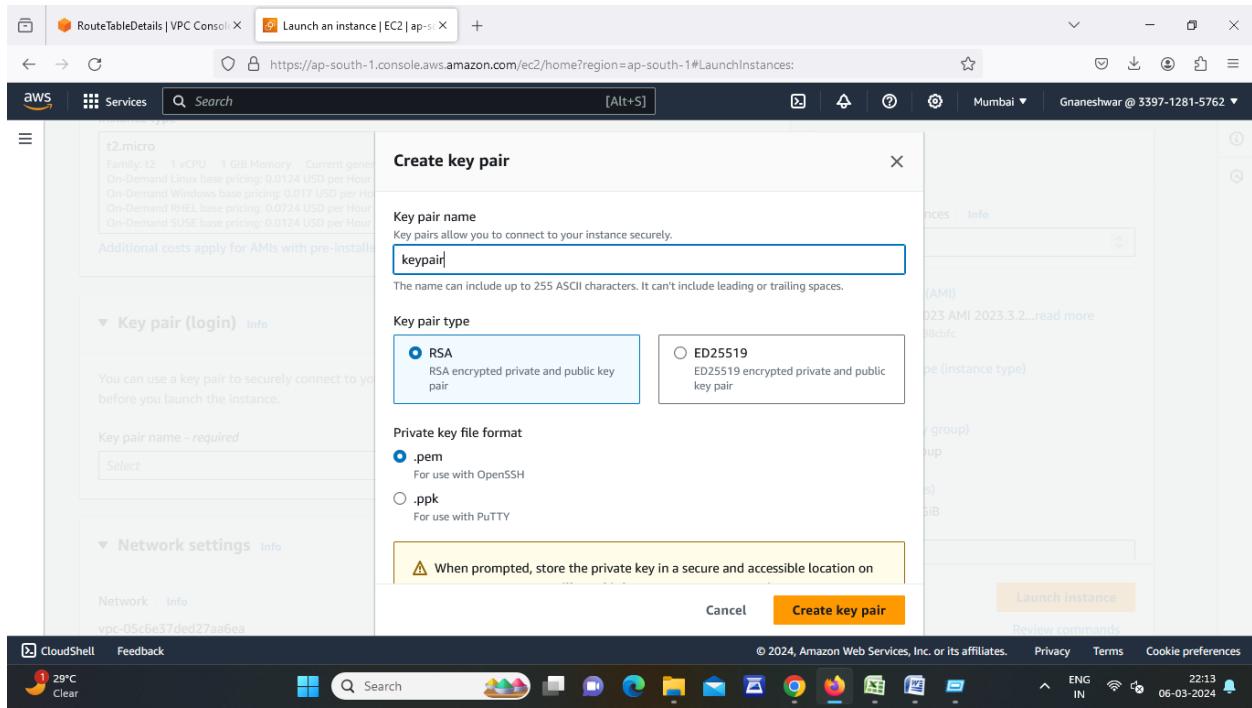
Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

Cancel **Launch instance** Review commands

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RouteTableDetails | VPC Console X Launch an instance | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

**Network settings**

VPC - required Info  
vpc-00f52c5dc72e276a (my-vpc)  
100.0.0.0/16

Subnet Info  
subnet-08b4c86c1317765 public-subnet-1  
VPC: vpc-00f52c5dc72e276a Owner: 339712815762 Availability Zone: ap-south-1a IP addresses available: 250 CIDR: 100.0.1.0/24

Create new subnet

Auto-assign public IP Info  
Disable

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-1

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.

**Summary**

Number of instances Info  
1

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.3.2...read more  
ami-0ba259e664698cbfc

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

Cancel Launch instance Review commands

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RouteTableDetails | VPC Console X Launch an instance | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

**Configure storage**

Advanced

1x 8 GiB gp3 Root volume (Not encrypted)

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

Add new volume

Click refresh to view backup information C  
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems Edit

Advanced details Info

**Summary**

Number of instances Info  
1

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.3.2...read more  
ami-0ba259e664698cbfc

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

Cancel Launch instance Review commands

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RouteTableDetails | VPC Console Launch an instance | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 Instances Launch an instance

**Success**  
Successfully initiated launch of instance (i-0e59ffe7c0c45b1d0)

▶ Launch log

**Next Steps**

What would you like to do next with this instance, for example "create alarm" or "create backup"

1 2 3 4 5 6 >

Create billing and free tier usage alerts  
To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.  
Create billing alerts

Connect to your instance  
Once your instance is running, log into it from your local computer.  
Connect to instance Learn more

Connect an RDS database  
Configure the connection between an EC2 instance and a database to allow traffic flow between them.  
Connect an RDS database Create a new RDS database

Create EBS snapshot policy  
Create a policy that automates the creation, retention, and deletion of EBS snapshots.  
Create EBS snapshot policy

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RouteTableDetails | VPC Console Instances | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 Dashboard EC2 Global View Events

Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes

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**Instances (1) Info**

Find Instance by attribute or tag (case-sensitive)

Any state

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
ec2-1	i-0e59ffe7c0c45b1d0	Pending	t2.micro	-	View alarms	ap-south-1

Select an instance

The screenshot shows the AWS EC2 Instances page. On the left, there's a navigation sidebar with options like EC2 Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes). The main content area is titled 'Instances (1) Info'. It shows a table with one row for 'ec2-1'. The columns are Name (ec2-1), Instance ID (i-0e59ffe7c0c45b1d0), Instance state (Running), Instance type (t2.micro), Status check (-), and Availability Zone (ap-south-1a). There are buttons for Connect, Actions (with a dropdown menu), and Launch instances. A search bar at the top says 'Find Instance by attribute or tag (case-sensitive)' with the placeholder 'Any state'. Below the table is a section titled 'Select an instance'.

- Click on Check box Created EC2 instance go to actions then image and templates and create image.
- Enter name then click on create image.

RouteTableDetails | VPC Console Instances | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#instances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 Dashboard EC2 Global View Events Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog Elastic Block Store Volumes

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### Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

Any state

Name	Instance ID	Instance state	Instance type	Status check
ec2-1	i-0e59ffe7c0c45b1d0	Running	t2.micro	-

Create image Create template from instance Launch more like this

#### Instance: i-0e59ffe7c0c45b1d0 (ec2-1)

Details Status and alarms New Monitoring Security Networking Storage Tags

Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0e59ffe7c0c45b1d0 (ec2-1)	-	100.0.1.163

IPv6 address Instance state Public IPv4 DNS

Private IPv4 address (Primary)

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Actions ▲ Launch instances Connect View details Manage instance state Instance settings Networking Security Image and templates Monitor and troubleshoot

ability Zone ap-south-1a

RouteTableDetails | VPC Console Create Image | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateImage:instanceId=i-0e59ffe7c0c45b1d0

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

Instance ID i-0e59ffe7c0c45b1d0 (ec2-1)

Image name myimage Maximum 127 characters. Can't be modified after creation.

Image description - optional Image description Maximum 255 characters

No reboot  Enable

Instance volumes

Storage type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination	Encrypted
EBS	/dev/...	Create new snapshot fr...	8	EBS General Purpose S...	3000	-	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable

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The screenshot shows the 'Create Image' step in the AWS EC2 console. It's a wizard with several steps completed. The current step is 'Configure volumes'. A table lists two volumes: one EBS General Purpose S360 volume of size 8 GiB and throughput of 3000 MiB/s, and another ephemeral device (/dev/xvda) of size 8 GiB. Both have 'Delete on termination' checked and 'Enable' checked. Below the table, a note says: 'During the image creation process, Amazon EC2 creates a snapshot of each of the above volumes.' There are two options for tagging: 'Tag image and snapshots together' (selected) and 'Tag image and snapshots separately'. A note states: '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.' At the bottom, there are 'Add new tag' and 'Cancel' buttons, and a large orange 'Create image' button.

- Go to Auto scaling group
- Click on create auto scaling group

The screenshot shows the 'Auto Scaling groups' page in the AWS EC2 console. On the left, a sidebar lists services: Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling (with 'Auto Scaling Groups' selected). The main content area has a dark background with yellow and grey decorative swooshes. It features a large heading 'Amazon EC2 Auto Scaling' and a sub-headline 'helps maintain the availability of your applications'. Below this is a paragraph about Auto Scaling groups: 'Auto Scaling groups are collections of Amazon EC2 instances that enable automatic scaling and fleet management features. These features help you maintain the health and availability of your applications.' To the right, a white box contains the heading 'Create Auto Scaling group' and a sub-instruction 'Get started with EC2 Auto Scaling by creating an Auto Scaling group.', followed by a large orange 'Create Auto Scaling group' button. At the bottom, there are sections for 'How it works' and 'Pricing'. The footer includes standard AWS navigation links like CloudShell, Feedback, Search, and various icons.

- Click on launch template
- Enter launch template name then select our created AMI, instance type, key pair and select security group then click launch template.

Auto Scaling group name  
Enter a name to identify the group.  
**Autoscale**  
Must be unique to this account in the current Region and no more than 255 characters.

**Launch template Info**

For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

**Launch template**  
Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

Select a launch template

Cancel **Next**

Creating a launch template allows you to create a saved instance configuration that can be reused, shared and launched at a later time. Templates can have multiple versions.

**Launch template name and description**

**Launch template name - required**  
**my-temp**  
Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '\*', '@'.

**Template version description**  
A prod webserver for MyApp  
Max 255 chars

**Auto Scaling guidance** [Info](#)  
Select this if you intend to use this template with EC2 Auto Scaling  
 Provide guidance to help me set up a template that I can use with EC2 Auto Scaling

**Summary**

**Software Image (AMI)**  
-

**Virtual server type (instance type)**  
-

**Firewall (security group)**  
-

**Storage (volumes)**  
-

**Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS

Cancel **Create launch template**

RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true

Mumbai | Gnaneshwar @ 3397-1281-5762

Application and OS Images (Amazon Machine Image) - required

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

Currently in use

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Summary

Software Image (AMI)

-

Virtual server type (instance type)

-

Firewall (security group)

-

Storage (volumes)

-

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS

Create launch template

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RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true

Mumbai | Gnaneshwar @ 3397-1281-5762

Services | Search | [Alt+S]

Application and OS Images (Amazon Machine Image) - required

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

Owned by me

Shared with me

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

myimage  
ami-08f288f70530bc6f5  
2024-03-06T16:46:32.000Z Virtualization: hvm ENA enabled: true Root device type: ebs

Description

-

Architecture x86\_64 AMI ID ami-08f288f70530bc6f5

Summary

Software Image (AMI)

myimage  
ami-08f288f70530bc6f5

Virtual server type (instance type)

-

Firewall (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 t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS

Create launch template

RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | + https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true Mumbai Gnaneshwar @ 3397-1281-5762

Architecture x86\_64 AMI ID ami-08f288f70530bc6f5

Instance type t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Linux base pricing: 0.0124 USD per Hour  
On-Demand Windows base pricing: 0.017 USD per Hour  
On-Demand RHEL base pricing: 0.0724 USD per Hour  
On-Demand SUSE base pricing: 0.0124 USD per Hour

Additional costs apply for AMIs with pre-installed software

Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Software Image (AMI) myimage ami-08f288f70530bc6f5

Virtual server type (instance type) t2.micro

Firewall (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 t2.micro is unavailable) instance usage on free

Create launch template

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RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | + https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true Mumbai Gnaneshwar @ 3397-1281-5762

Services Search [Alt+S]

Compare instance types

Additional costs apply for AMIs with pre-installed software

Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name keypair

Create new key pair

Network settings Info

Subnet Info

Don't include in launch template

Create new subnet

When you specify a subnet, a network interface is automatically added to your template.

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instances. Add rules to allow specific traffic to each instance.

Software Image (AMI) myimage ami-08f288f70530bc6f5

Virtual server type (instance type) t2.micro

Firewall (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 t2.micro is unavailable) instance usage on free

Create launch template

RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true

Mumbai | Gnaneshwar @ 3397-1281-5762

Subnet | Info

Don't include in launch template

When you specify a subnet, a network interface is automatically added to your template.

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.

Select existing security group | Create security group

Security groups Info

Select security groups

Compare security group rules

Advanced network configuration

Storage (volumes) | Info

EBS Volumes

Hide details

Cancel | Create launch template

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RouteTableDetails | VPC Console | Create Auto Scaling group | EC2 | Create launch template | EC2 | +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true

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Volume 1 (AMI Root) (8 GiB, EBS, General purpose SSD (gp3))

AMI Volumes are not included in the template unless modified

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

Add new volume

Resource tags | Info

No resource tags are currently included in this template. Add a resource tag to include it in the launch template.

Add new tag

You can add up to 50 more tags.

Advanced details | Info

Software Image (AMI)

myimage  
ami-08f288f70530bc6f5

Virtual server type (instance type)

t2.micro

Firewall (security group)

launch-wizard-1

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 t2.micro is unavailable) instance usage on free

Cancel | Create launch template

CloudShell Feedback | 29°C Clear | Search | © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences | ENG IN 22:19 06-03-2024

The screenshot shows a browser window with the URL <https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateTemplate:autoScalingGuidance=true>. The page is titled "Create launch template | EC2". The main content area displays a green success message: "Successfully created my-temp(lt-02e1fbf5bf0a24b6)." Below this, there's a link to "Actions log". A sidebar on the left shows navigation steps: EC2 > Launch templates > Create launch template. The bottom of the screen shows a Windows taskbar with various icons and system status.

- Go auto scaling group and enter name
- Select our launch template then click on next
- Select our VPC and select public available zones then click on next
- Set time 60 sec then click on next

W C U B E  
Software Solutions Pvt. Ltd.

RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

Mumbai Gnaneshwar @ 3397-1281-5762

aws Services Search [Alt+S]

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

**Auto Scaling group name**  
Enter a name to identify the group.  
  
Must be unique to this account in the current Region and no more than 255 characters.

**Launch template Info**

For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

**Launch template**  
Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

Select a launch template  
Search launch templates  
my-temp

Cancel Next



RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

Mumbai Gnaneshwar @ 3397-1281-5762

aws Services Search [Alt+S]

Create a launch template

**Version**  
Default (1) C

**Create a launch template version**

Description	Launch template	Instance type
-	my-temp	t2.micro
AMI ID	lt-02e1fbf5b8f0a24b6	Request Spot Instances
AMI ID	ami-08f288f70530bc6f5	No
Key pair name	Security groups	Security group IDs
keypair	-	sg-070bc1db7f8e1fa4b
<b>Additional details</b>		
Storage (volumes)	Date created	
-	Wed Mar 06 2024 22:19:34	GMT+0530 (India Standard Time)

Cancel Next



RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S]

Mumbai Gnaneshwar @ 3397-1281-5762

Step 5 - optional  
[Add notifications](#)

Instance type  
t2.micro

Step 6 - optional  
[Add tags](#)

Step 7  
[Review](#)

**Network Info**

For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances across the zones. The default VPC and default subnets are suitable for getting started quickly.

**VPC**  
Choose the VPC that defines the virtual network for your Auto Scaling group.  
vpc-00f52c5dcb72e276a (my-vpc)  
100.0.0.0/16 Cancel Next

[Create a VPC](#)

**Availability Zones and subnets**  
Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.  
Select Availability Zones and subnets Cancel Next

[Create a subnet](#)

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29°C Clear ENG IN 22:20 06-03-2024

RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S]

Mumbai Gnaneshwar @ 3397-1281-5762

Step 7  
[Review](#)

For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances across the zones. The default VPC and default subnets are suitable for getting started quickly.

**VPC**  
Choose the VPC that defines the virtual network for your Auto Scaling group.  
vpc-00f52c5dcb72e276a (my-vpc)  
100.0.0.0/16 Cancel Next

[Create a VPC](#)

**Availability Zones and subnets**  
Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.  
Select Availability Zones and subnets Cancel Next

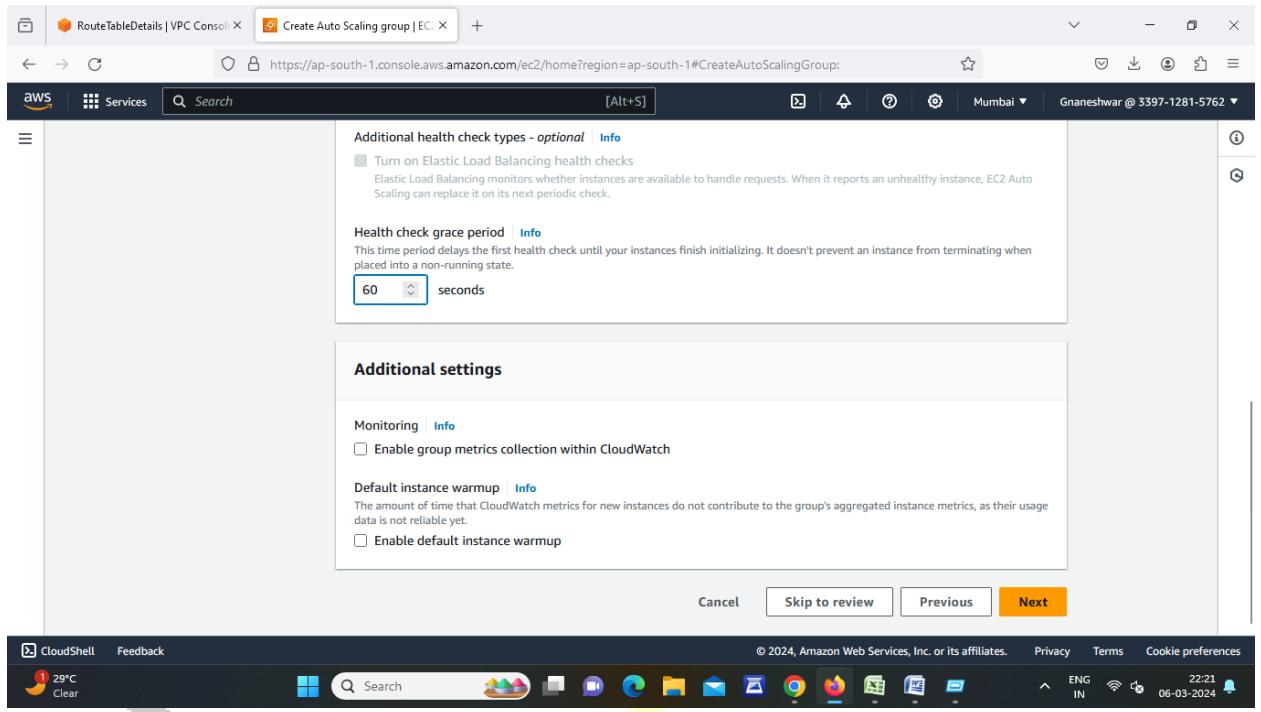
ap-south-1a | subnet-08b4c86c131317765 (public- X  
subnet-1)  
100.0.1.0/24

ap-south-1b | subnet-046ad2c4f1c268d05 (public- X  
subnet-2)  
100.0.2.0/24

[Create a subnet](#)

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- Enter Desired Capacity then enter min and max desired capacity then click on next

**V C U B E**  
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The screenshot shows the AWS EC2 Auto Scaling group creation wizard at Step 5: Configure group size and scaling. The 'Desired capacity' is set to 2. The 'Scaling Info' section indicates that the group can be resized manually or automatically. Under 'Automatic scaling - optional', the 'No scaling policies' option is selected, stating that the group will remain at its initial size. The bottom navigation bar includes 'Review' and 'Next Step' buttons.

The screenshot shows the AWS EC2 Auto Scaling group creation wizard at Step 6: Choose replacement behavior. It lists four options: 'Mixed behavior' (selected), 'Prioritize availability', 'Control costs', and 'Flexible'. The 'Mixed behavior' option describes rebalancing events where new instances launch before terminating others. The 'Prioritize availability' option describes launching new instances before terminating others. The 'Control costs' option describes terminating and launching instances at the same time. The 'Flexible' option describes setting custom values for minimum and maximum capacity. The 'Instance scale-in protection' section contains a checkbox for enabling scale-in protection. The bottom navigation bar includes 'Cancel', 'Skip to review', 'Previous', and 'Next' buttons.

- Click on Add notification and create topic
- Enter topic name and enter email id then next

- Click on create auto scaling group.

The screenshots show the 'Add notifications - optional' step of the AWS Create Auto Scaling Group wizard. The first screenshot shows the overall step navigation on the left. The second and third screenshots provide a detailed view of the notification configuration interface, including recipient selection, event types, and a 'Next' button at the bottom right.

**Screenshot 1: Step Navigation**

- Step 1: Choose launch template
- Step 2: Choose instance launch options
- Step 3 - optional: Configure advanced options
- Step 4 - optional: Configure group size and scaling
- Step 5 - optional: Add notifications
- Step 6 - optional: Add tags
- Step 7: Review

**Screenshot 2: Notification Configuration**

**Notification 1:**

- Send a notification to: autoscale
- With these recipients: gnaneshwarvicky@gmail.com
- Event types:
  - Notify subscribers whenever instances
  - Launch
  - Terminate
  - Fail to launch
  - Fail to terminate

**Screenshot 3: Final Step**

Final step of the wizard with the 'Next' button highlighted.

RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S]

Mumbai Gnaneshwar @ 3397-1281-5762

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

### Add tags - optional Info

Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.

ⓘ You can optionally choose to add tags to instances (and their attached EBS volumes) by specifying tags in your launch template. We recommend caution, however, because the tag values for instances from your launch template will be overridden if there are any duplicate keys specified for the Auto Scaling group.

**Tags (0)**

Add tag 50 remaining

Cancel Previous Next

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RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S]

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### Step 5: Add notifications

**Notifications**

Notification 1  
SNS Topic  
autoscale (gnaneshwarky@gmail.com)

Event types

Launch  
 Terminate  
 Fail to launch  
 Fail to terminate

### Step 6: Add tags

**Tags (0)**

Key	Value	Tag new instances
No tags		

Cancel Previous **Create Auto Scaling group**

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The screenshot shows the AWS EC2 Auto Scaling groups page. At the top, there are tabs for 'RouteTableDetails | VPC Console' and 'Auto Scaling groups | EC2'. The URL is https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#AutoScalingGroups:. The page title is 'Auto Scaling groups (1) Info'. There is a search bar with placeholder text 'Search your Auto Scaling groups'. Below the search bar is a table with columns: Name, Launch template/configuration, Instances, Status, Desired capacity, Min, and Max. One row is visible for 'Autoscale' with a status of 'Updating capacity'.

This screenshot shows the AWS CloudShell interface. It includes a header with 'CloudShell' and 'Feedback', a weather widget (29°C Clear), and a toolbar with various icons. The main content area displays the same Auto Scaling groups page as the first screenshot, showing the 'Autoscale' group with an 'Updating capacity' status.

This screenshot shows the AWS CloudShell interface. It includes a header with 'CloudShell' and 'Feedback', a weather widget (29°C Clear), and a toolbar with various icons. The main content area displays the same Auto Scaling groups page as the first two screenshots, showing the 'Autoscale' group with an 'Updating capacity' status.

This screenshot shows the AWS CloudShell interface. It includes a header with 'CloudShell' and 'Feedback', a weather widget (29°C Clear), and a toolbar with various icons. The main content area displays the same Auto Scaling groups page as the previous screenshots, showing the 'Autoscale' group with an 'Updating capacity' status.

- Click on create auto scaling group
- Go auto scaling group and enter name
- Select our launch template then click on next
- Select our VPC and select public available zones then click on next
- Set time 60 sec then click on next

The screenshot shows the AWS EC2 Auto Scaling groups page. The left sidebar has sections for EC2 Dashboard, EC2 Global View, Events, Instances (with sub-options like Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations), Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes). The main content area is titled 'Auto Scaling groups (1) Info'. It features a search bar and a table with one row. The table columns are Name, Launch template/configuration, Instances, Status, and Desired capacity. The single entry is 'Autoscale' with 'my-temp | Version Default' under Launch template/configuration, '2' under Instances, '-' under Status, and '2' under Desired capacity.

Name	Launch template/configuration	Instances	Status	Desired capacity
Autoscale	my-temp   Version Default	2	-	2

**0 Auto Scaling groups selected**

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RouteTableDetails | VPC Console Instances | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

Elastic Block Store  
Volumes  
Snapshots  
Lifecycle Manager

Network & Security  
Security Groups  
Elastic IPs  
Placement Groups  
Key Pairs  
Network Interfaces

Load Balancing  
Load Balancers  
Target Groups  
Trust Stores New

Auto Scaling  
Auto Scaling Groups

Currently creating AMI ami-08f288f70530bc6f5 from instance i-0e59ffe7c0c45b1d0. Check that the AMI status is 'Available' before deleting the instance or carrying out other actions related to this AMI.

Instances (3) Info Connect Instance state Actions Launch instances

Find Instance by attribute or tag (case-sensitive)

Any state

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Z
ec2-1	i-0e59ffe7c0c45b1d0	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a
	i-048111d30f3abd7ea	Running	t2.micro	Initializing	View alarms +	ap-south-1a
	i-0005aee7a67c0601f	Running	t2.micro	Initializing	View alarms +	ap-south-1b

Select an instance

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RouteTableDetails | VPC Console Auto Scaling groups | EC2 | ap-south-1

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#AutoScalingGroups:

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Elastic Block Store  
Volumes  
Snapshots  
Lifecycle Manager

Network & Security  
Security Groups  
Elastic IPs  
Placement Groups  
Key Pairs  
Network Interfaces

Load Balancing  
Load Balancers  
Target Groups  
Trust Stores New

Auto Scaling  
Auto Scaling Groups

EC2 > Auto Scaling groups

Auto Scaling groups (1) Info

Launch configurations Launch templates Actions Create Auto Scaling group

Search your Auto Scaling groups

Name	Launch template/configuration	Instances	Status	Desired capacity
Autoscale	my-temp   Version Default	2	-	2

0 Auto Scaling groups selected

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

**Choose launch template Info**

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group.

**Name**

**Auto Scaling group name**  
Enter a name to identify the group.  
 Must be unique to this account in the current Region and no more than 255 characters.

**Launch template Info**

ⓘ For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

Launch template

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

**Auto Scaling group name**  
Enter a name to identify the group.  
 Must be unique to this account in the current Region and no more than 255 characters.

**Launch template Info**

ⓘ For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

**Launch template**  
Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

Select a launch template  
Q Search launch templates  
my-temp

Cancel Next

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CloudShell Feedback 29°C Clear Search

RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S]

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**Version**  
Default (1) Create a launcher template

**Create a launch template version**

Description	Launch template <a href="#">my-temp</a> lt-02e1fbf5b8f0a24b6	Instance type t2.micro
AMI ID	ami-08f288f70530bc6f5	Security groups
Key pair name	keypair	Security group IDs <a href="#">sg-070bc1db7f8e1fa4b</a>

**Additional details**

Storage (volumes)	Date created Wed Mar 06 2024 22:19:34 GMT+0530 (India Standard Time)
-------------------	--

Cancel Next

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RouteTableDetails | VPC Console Create Auto Scaling group | EC2

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S]

Mumbai Gnaneshwar @ 3397-1281-5762

**Step 7 Review**

For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances across the zones. The default VPC and default subnets are suitable for getting started quickly.

**VPC**  
Choose the VPC that defines the virtual network for your Auto Scaling group.  
[vpc-00f52c5dcb72e276a \(my-vpc\)](#) 100.0.0.0/16 Create a VPC

**Availability Zones and subnets**  
Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.  
Select Availability Zones and subnets Create a subnet

ap-south-1a | subnet-0b150443d9679a474 (private-subnet-1) 100.0.4.0/24

ap-south-1b | subnet-0eda13542ed1d90a5 (private-subnet-2) 100.0.5.0/24

Cancel Skip to review Previous Next

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29°C Clear ENG IN 22:26 06-03-2024

RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

## Configure advanced options - optional Info

Choose a load balancer to distribute incoming traffic for your application across instances to make it more reliable and easily scalable. You can also set options that give you more control over health check replacements and monitoring.

### Load balancing Info

Use the options below to attach your Auto Scaling group to an existing load balancer, or to a new load balancer that you define.

No load balancer  
Traffic to your Auto Scaling group will not be fronted by a load balancer.

Attach to an existing load balancer  
Choose from your existing load balancers.

Attach to a new load balancer  
Quickly create a basic load balancer to attach to your Auto Scaling group.

### Health checks

Health checks increase availability by replacing unhealthy instances. When you use multiple health checks, all are evaluated, and if at least one fails, instance replacement occurs.

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

### Additional health check types - optional Info

Turn on Elastic Load Balancing health checks  
Elastic Load Balancing monitors whether instances are available to handle requests. When it reports an unhealthy instance, EC2 Auto Scaling can replace it on its next periodic check.

### Health check grace period Info

This time period delays the first health check until your instances finish initializing. It doesn't prevent an instance from terminating when placed into a non-running state.

6d  seconds

### Additional settings

#### Monitoring Info

Enable group metrics collection within CloudWatch

#### Default instance warmup Info

The amount of time that CloudWatch metrics for new instances do not contribute to the group's aggregated instance metrics, as their usage data is not reliable yet.

Enable default instance warmup

Cancel Skip to review Previous Next

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- Enter Desired Capacity then enter min and max desired capacity then click on next

RouteTableDetails | VPC Console X Create Auto Scaling group | EC X + https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup: Mumbai Gnaneshwar @ 3397-1281-5762 [Alt+S] Services Search [Alt+S]

**Step 3 - optional**  
[Configure advanced options](#)

**Step 4 - optional**  
**Configure group size and scaling**

**Step 5 - optional**  
[Add notifications](#)

**Step 6 - optional**  
[Add tags](#)

**Step 7**  
[Review](#)

**Scaling Info**  
You can resize your Auto Scaling group manually or automatically to meet changes in demand.

**Scaling limits**  
Set limits on how much your desired capacity can be increased or decreased.

Min desired capacity	Max desired capacity
2	5
Equal or less than desired capacity	Equal or greater than desired capacity

**Automatic scaling - optional**

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC X + https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup: Mumbai Gnaneshwar @ 3397-1281-5762 [Alt+S] Services Search [Alt+S]

**Choose a replacement behavior depending on your availability requirements**

**Mixed behavior**

**No policy**  
For rebalancing events, new instances will launch before terminating others. For all other events, instances terminate and launch at the same time.

**Prioritize availability**

**Launch before terminating**  
Launch new instances and wait for them to be ready before terminating others. This allows you to go above your desired capacity by a given percentage and may temporarily increase costs.

**Control costs**

**Terminate and launch**  
Terminate and launch instances at the same time. This allows you to go below your desired capacity by a given percentage and may temporarily reduce availability.

**Flexible**

**Custom behavior**  
Set custom values for the minimum and maximum amount of available capacity. This gives you greater flexibility in setting how far below and over your desired capacity EC2 Auto Scaling goes when replacing instances.

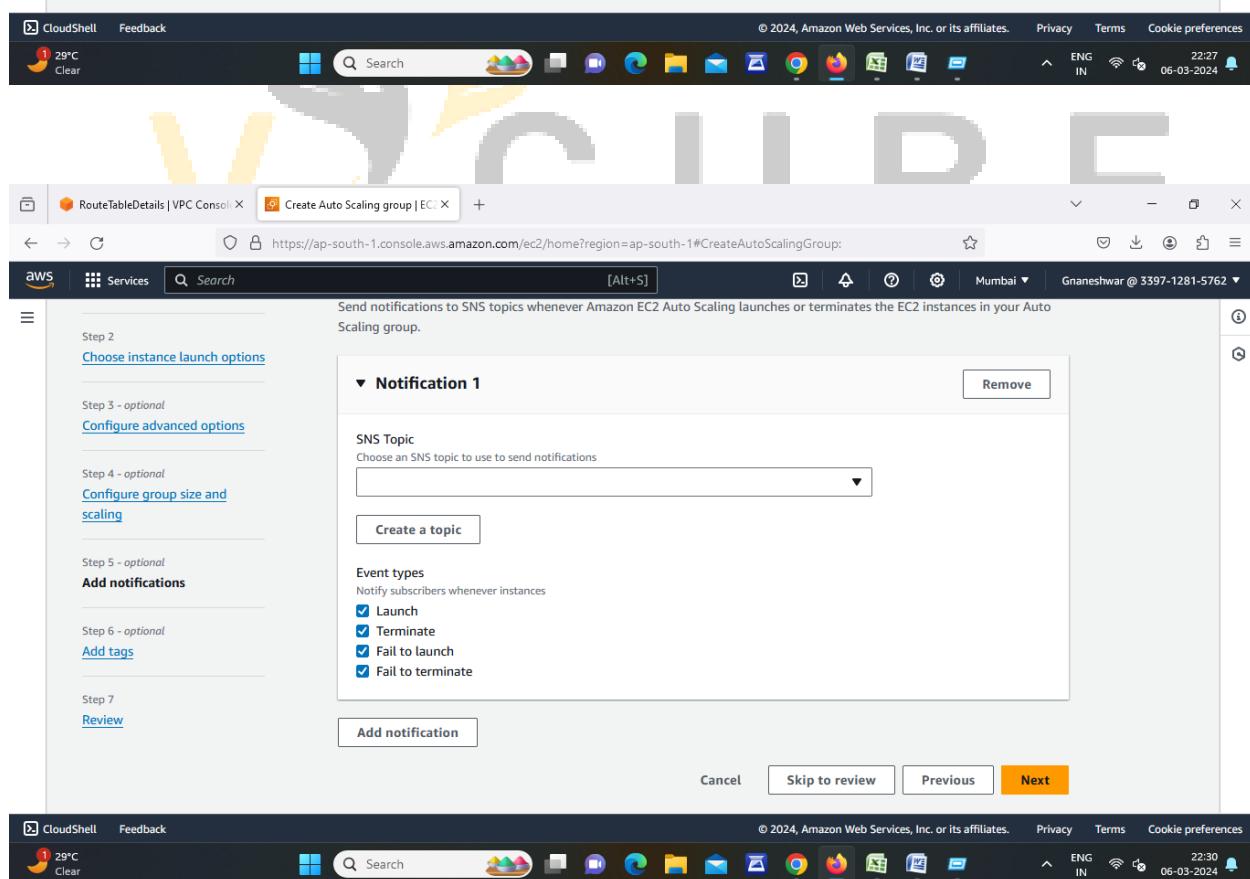
**Instance scale-in protection**  
Scale-in protection prevents newly launched instances from being terminated by scaling activities. Make sure to remove scale-in protection for the group or individual instances when instances are ready to be terminated.

Enable instance scale-in protection

Cancel Skip to review Previous Next

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- Click on Add notification and create topic
- Enter topic name and enter email id then next
- Click on create auto scaling group.



The screenshot shows the AWS CloudShell interface with the AWS Lambda function configuration page open. The Lambda function name is 'HelloWorld'. The configuration tabs shown are General, Handler, Runtime, and Environment. The Handler is set to 'index.handler' and the Runtime is 'Node.js 18.x'. The Environment section shows the variable 'AWS\_LAMBDA\_FUNCTION\_NAME' with the value 'HelloWorld'. The Lambda function status is listed as 'Running' with 1 execution and 29° C. The CloudWatch Metrics tab is also visible.

**Add notifications - optional**

Send notifications to SNS topics whenever Amazon EC2 Auto Scaling launches or terminates the EC2 instances in your Auto Scaling group.

**Add notification**

Cancel Skip to review Previous Next

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

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**Notification 1**

SNS Topic Choose an SNS topic to use to send notifications

Create a topic

Event types Notify subscribers whenever instances

Launch  
 Terminate  
 Fail to launch  
 Fail to terminate

Add notification

Cancel Skip to review Previous Next

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

▼ Notification 1 Remove

Send a notification to autoscale

With these recipients gnaneshwarvicky@gmail.com

Use existing topic

Event types Notify subscribers whenever instances

Launch

Terminate

Fail to launch

Fail to terminate

Add notification

Cancel Skip to review Previous Next

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

AWS Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

Add tags - optional Info

Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.

ⓘ You can optionally choose to add tags to instances (and their attached EBS volumes) by specifying tags in your launch template. We recommend caution, however, because the tag values for instances from your launch template will be overridden if there are any duplicate keys specified for the Auto Scaling group. X

Tags (0)

Add tag 50 remaining

Cancel Previous Next

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RouteTableDetails | VPC Console X Create Auto Scaling group | EC2 X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#CreateAutoScalingGroup:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

Step 5: Add notifications

**Notifications**

Notification 1  
SNS Topic  
autoscale (gnaneshwarvicky@gmail.com)

Event types  
 Launch  
 Terminate  
 Fail to launch  
 Fail to terminate

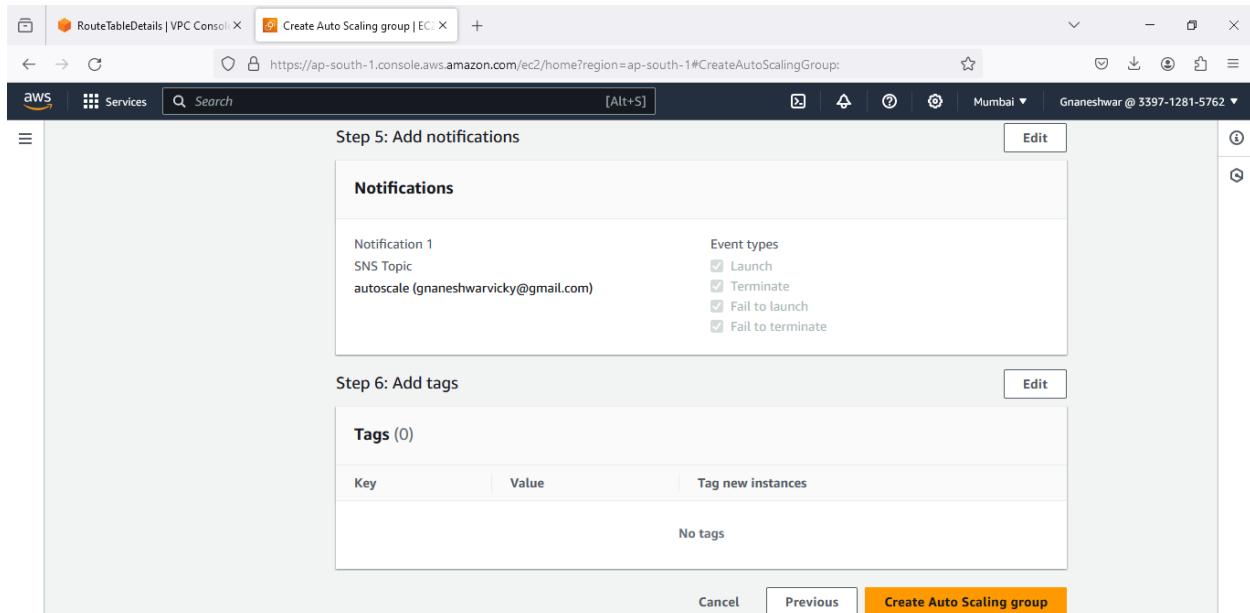
Step 6: Add tags

**Tags (0)**

Key Value Tag new instances

No tags

Cancel Previous Create Auto Scaling group



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RouteTableDetails | VPC Console X Auto Scaling groups | EC2 ap- X +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#AutoScalingGroups:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 > Auto Scaling groups

**Auto Scaling groups (2) Info**

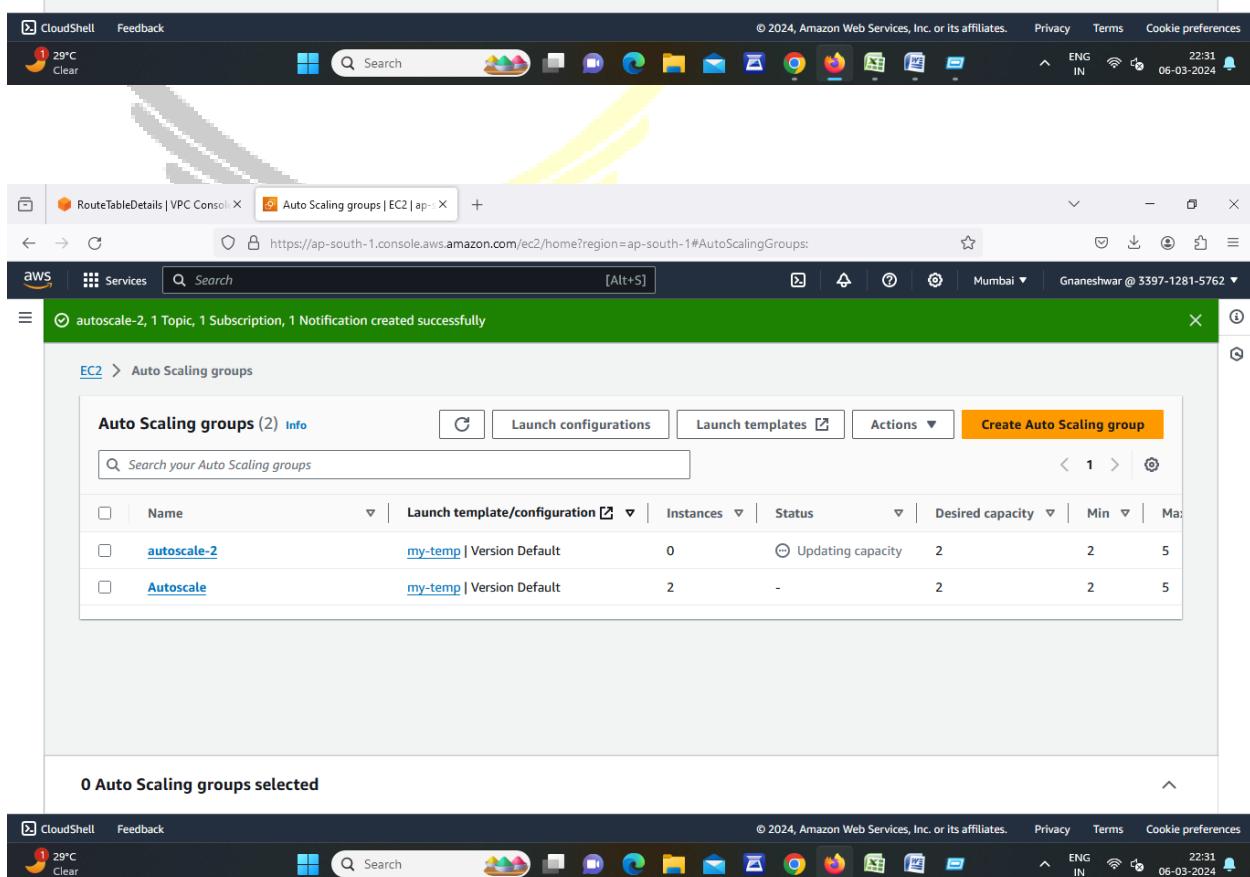
Search your Auto Scaling groups

Actions Create Auto Scaling group

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max
<a href="#">autoscale-2</a>	my-temp   Version Default	0	Updating capacity	2	2	5
<a href="#">Autoscale</a>	my-temp   Version Default	2	-	2	2	5

0 Auto Scaling groups selected

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RouteTableDetails | VPC Console X Auto Scaling groups | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#AutoScalingGroups:

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 > Auto Scaling groups

Auto Scaling groups (2) Info

Search your Auto Scaling groups

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max
autoscale-2	my-temp   Version Default	2	-	2	2	5
Autoscale	my-temp   Version Default	2	-	2	2	5

0 Auto Scaling groups selected

- After Creating Auto scaling group we can see the servers automatically created.

RouteTableDetails | VPC Console X Instances | EC2 | ap-south-1 +

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#instances:v=3;\$case=tags:true\client:false\$region=ap-south-1

aws Services Search [Alt+S] Mumbai Gnaneshwar @ 3397-1281-5762

EC2 Dashboard

EC2 Global View

Events

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations New

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

CloudShell Feedback

Find Instance by attribute or tag (case-sensitive)

Any state

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Z
ec2-1	i-0e59ffe7c0c45b1d0	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a
	i-048111d30f3abd7ea	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a
	i-0b66977c1e60e6ea7	Running	t2.micro	Initializing	View alarms +	ap-south-1a
	i-0005aae7a67c0601f	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1b
	i-01af60235f74187c4	Pending	t2.micro	Initializing	View alarms +	ap-south-1b

Select an instance

- Now go to VPC and create private subnets for RDS

**Subnets (10) Info**

Name	Subnet ID	State	VPC
pub-sub-2	subnet-05a420a77747690e3	Available	vpc-092f02a1c72735777   my...
pub-sub-1	subnet-03339eb49b1959053	Available	vpc-092f02a1c72735777   my...
priv-sub-4	subnet-03d1abdd4be31457e	Available	vpc-092f02a1c72735777   my...
priv-sub-3	subnet-0312df880c3905169	Available	vpc-092f02a1c72735777   my...
priv-sub-2	subnet-084f2332934469e22	Available	vpc-092f02a1c72735777   my...
priv-sub-1	subnet-0672c0350eaf70fde	Available	vpc-092f02a1c72735777   my...
-	subnet-0050bee67a7342411	Available	vpc-0a851b25047d251f9
-	subnet-07561bfe8738a9ad2	Available	vpc-0a851b25047d251f9

Select a subnet

- Now go to RDS

**Recently visited**

- RDS
- Console Home
- IAM
- EC2
- S3
- DynamoDB

- Go to subnet groups then click on Create Subnet group
- Enter subnet group name and select VPC
- Select AZ's then Select subnet's RDS and public subnet of while launching ec2 instance of subnet.

The screenshot shows the AWS RDS console in the US West (Oregon) region. A blue banner at the top left reads "Introducing Aurora I/O-Optimized" with a subtext about predictable pricing and improved performance. Below the banner, there's a callout box with an info icon: "Try the new Amazon RDS Multi-AZ deployment option for MySQL and PostgreSQL". It describes the option for MySQL and PostgreSQL workloads, mentioning faster failover, improved transactional commit latencies, and read scalability with two readable standby DB instances. It includes a "Create database" button and a link to "Restore Multi-AZ DB Cluster from Snapshot".

The main content area is titled "Resources" and displays usage information: "You are using the following Amazon RDS resources in the US West (Oregon) region (used/quota)". It lists DB Instances (0/40), Parameter groups (0), Option groups (0), and DB Clusters (0/10). There are also links to "Increase DB instances limit" and "Option groups (0)".

**Screenshot 2:**

This screenshot shows the "Subnet groups" list page. The left sidebar has a "Subnet groups" section under "Amazon RDS". The main area is titled "Subnet groups (0)" and contains a table with columns: Name, Description, Status, and VPC. A message at the bottom says "No db subnet groups" and "You don't have any db subnet groups." A prominent orange "Create DB subnet group" button is located at the bottom right of the table area.

**Subnet group details**

**Name**  
You won't be able to modify the name after your subnet group has been created.  
 Must contain from 1 to 255 characters. Alphanumeric characters, spaces, hyphens, underscores, and periods are allowed.

**Description**

**VPC**  
Choose a VPC identifier that corresponds to the subnets you want to use for your DB subnet group. You won't be able to choose a different VPC identifier after your subnet group has been created.

**Add subnets**

**Availability Zones**  
Choose the Availability Zones that include the subnets you want to add.

**Subnets**  
Choose the subnets that you want to add. The list includes the subnets in the selected Availability Zones.

**For Multi-AZ DB clusters, you must select 3 subnets in 3 different Availability Zones.**

The screenshot shows the AWS RDS console in the 'Create DB subnet group' wizard. The user has selected three subnets from a VPC:

Availability zone	Subnet ID	CIDR block
us-east-1b	subnet-0ef42d11bbe46221	120.0.17.0/24
us-east-1a	subnet-0458927dfcd3e8abe	120.0.11.0/24
us-east-1a	subnet-05ebfac3b9c833a96	120.0.16.0/24

A note at the bottom states: "For Multi-AZ DB clusters, you must select 3 subnets in 3 different Availability Zones." The 'Create' button is highlighted.

The screenshot shows the AWS RDS console in the 'Subnet groups' section. A success message indicates that 'mydbsubnet' was successfully created. The subnet group details are listed:

Name	Description	Status	VPC
mydbsubnet	allow	Complete	vpc-092f02a1c72735777

- Now go to Database
- Click on Create database through VPC and subnet group

The screenshot shows the AWS RDS Databases page. The left sidebar includes options like Dashboard, Databases (which is selected), Query Editor, Performance insights, Snapshots, Exports in Amazon S3, Automated backups, Reserved instances, Proxies, Subnet groups, Parameter groups, Option groups, and Custom engine versions. The main content area displays a table header for 'Databases (0)' with columns for DB identifier, Status, Role, Engine, Region & AZ, Size, and Recommendations. A message at the bottom states 'No instances found'.

The screenshot shows the 'Create database' page. The top section, 'Choose a database creation method', has two options: 'Standard create' (selected) and 'Easy create'. The 'Standard create' option is described as setting all configuration options, including availability, security, backups, and maintenance. The 'Easy create' option is described as using recommended best-practice configurations where some options can be changed after creation. Below this, the 'Engine options' section shows 'Engine type' with 'Aurora (MySQL Compatible)' selected (indicated by a blue circle) and 'Aurora (PostgreSQL Compatible)' as an alternative. The status bar at the bottom indicates the session is in English (ENG IN) and shows the date as 19-03-2024.

Screenshot of the AWS RDS console showing the engine selection step. The user has selected MySQL as the engine type.

**Engine type** [Info](#)

- Aurora (MySQL Compatible)
- Aurora (PostgreSQL Compatible)
- MySQL
- MariaDB
- PostgreSQL
- Oracle
- Microsoft SQL Server
- IBM Db2

**MySQL**

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 64 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 15 Read Replicas per instance, within a single Region or 5 read replicas cross-

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Screenshot of the AWS RDS console showing the deployment options step. The user has selected "Multi-AZ DB instance".

**Production** Use defaults for high availability and fast, consistent performance.

**Dev/Test** This instance is intended for development use outside of a production environment.

**Free tier** Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. [Info](#)

**Availability and durability**

**Deployment options** [Info](#)

The deployment options below are limited to those supported by the engine you selected above.

- Single DB instance Creates a single DB instance with no standby DB instances.
- Multi-AZ DB instance Creates a primary DB instance and a standby DB instance in a different AZ. Provides high availability and data redundancy, but the standby DB instance doesn't support connections for read workloads.
- Multi-AZ DB Cluster Creates a DB cluster with a primary DB instance and two readable standby DB instances, with each DB instance in a different Availability Zone (AZ). Provides high availability, data redundancy and increases capacity to serve read workloads.

**Settings**

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Screenshot of the AWS RDS console showing the 'Credentials Settings' section for launching a MySQL DB instance.

**Credentials Settings**

**Master username:** admin

Type a login ID for the master user of your DB instance.

**Credential management:**

- Managed in AWS Secrets Manager - most secure**  
RDS generates a password for you and manages it throughout its lifecycle using AWS Secrets Manager.
- Self managed**  
Create your own password or have RDS create a password that you manage.

**Auto generate password:**   
Amazon RDS can generate a password for you, or you can specify your own password.

**Master password:**

Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / ` " @

**Confirm master password:**

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Screenshot of the AWS RDS console showing the 'Storage' configuration section for launching a MySQL DB instance.

**Hide filters**

**Show instance classes that support Amazon RDS Optimized Writes** Info  
Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.

**Include previous generation classes**

**Standard classes (includes m classes)**

**Memory optimized classes (includes r and x classes)**

**Burstable classes (includes t classes)**

**db.m6gd.large (supports Amazon RDS Optimized Writes)**  
2 vCPUs 8 GiB RAM Network: 4,750 Mbps

**Storage**

**Storage type:** Info  
Provisioned IOPS SSD (io2) storage volumes are now available.

**Provisioned IOPS SSD (io1)**  
Flexibility in provisioning I/O

MySQL

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 64 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 15 Read Replicas per instance, within a single Region or 5 read replicas cross-

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CloudShell Feedback ENG IN 23:33 19-03-2024

[subnets | VPC Console](#) [Instance details | EC2 | us-east-1](#) [EC2 Instance Connect | us-east-1](#) [RDS | us-east-1](#)

https://us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#launch-dbinstance:

**Compute resource**  
Choose whether to set up a connection to a compute resource for this database. Setting up a connection will automatically change connectivity settings so that the compute resource can connect to this database.

**Don't connect to an EC2 compute resource**  
Don't set up a connection to a compute resource for this database. You can manually set up a connection to a compute resource later.

**Connect to an EC2 compute resource**  
Set up a connection to an EC2 compute resource for this database.

**Network type** [Info](#)  
To use dual-stack mode, make sure that you associate an IPv6 CIDR block with a subnet in the VPC you specify.

**IPv4**  
Your resources can communicate only over the IPv4 addressing protocol.

**Dual-stack mode**  
Your resources can communicate over IPv4, IPv6, or both.

**Virtual private cloud (VPC)** [Info](#)  
Choose the VPC. The VPC defines the virtual networking environment for this DB instance.

my-vpc (vpc-0ac0454bcd659e7e)  
6 Subnets, 2 Availability Zones

Only VPCs with a corresponding DB subnet group are listed.

**After a database is created, you can't change its VPC.**

**MySQL**

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 64 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 15 Read Replicas per instance, within a single Region or 5 read replicas cross-

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[subnets | VPC Console](#) [Instance details | EC2 | us-east-1](#) [EC2 Instance Connect | us-east-1](#) [RDS | us-east-1](#)

https://us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#launch-dbinstance:

**DB subnet group** [Info](#)  
Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB instance can use in the VPC that you selected.

mydbsubnet  
3 Subnets, 2 Availability Zones

**Public access** [Info](#)  
 **Yes**  
RDS assigns a public IP address to the database. Amazon EC2 instances and other resources outside of the VPC can connect to your database. Resources inside the VPC can also connect to the database. Choose one or more VPC security groups that specify which resources can connect to the database.

**No**  
RDS doesn't assign a public IP address to the database. Only Amazon EC2 instances and other resources inside the VPC can connect to your database. Choose one or more VPC security groups that specify which resources can connect to the database.

**VPC security group (firewall)** [Info](#)  
Choose one or more VPC security groups to allow access to your database. Make sure that the security group rules allow the appropriate incoming traffic.

**Choose existing**  
Choose existing VPC security groups

**Create new**  
Create new VPC security group

**Existing VPC security groups**  
Choose one or more options

**MySQL**

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 64 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 15 Read Replicas per instance, within a single Region or 5 read replicas cross-

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RDS doesn't assign a public IP address to the database. Only Amazon EC2 instances and other resources inside the VPC can connect to your database. Choose one or more VPC security groups that specify which resources can connect to the database.

**VPC security group (firewall) Info**  
Choose one or more VPC security groups to allow access to your database. Make sure that the security group rules allow the appropriate incoming traffic.

**Choose existing**  
Choose existing VPC security groups

**Create new**  
Create new VPC security group

**Existing VPC security groups**  
Choose one or more options

**Certificate authority - optional Info**  
Using a server certificate provides an extra layer of security by validating that the connection is being made to an Amazon database. It does so by checking the server certificate that is automatically installed on all databases that you provision.

rds-ca-rsa2048-g1 (default)  
Expiry: May 26, 2061

If you don't select a certificate authority, RDS chooses one for you.

**Additional configuration**

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Estimated Monthly costs

DB instance	272.29 USD
Storage	100.00 USD
Provisioned IOPS	600.00 USD
<b>Total</b>	<b>972.29 USD</b>

This billing estimate is based on on-demand usage as described in [Amazon RDS Pricing](#). Estimate does not include costs for backup storage, IOs (if applicable), or data transfer.

Estimate your monthly costs for the DB Instance using the [AWS Simple Monthly Calculator](#).

**Important** You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.

Cancel **Create database**

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- Now click on database then set up ec2 connection
- Click on set up ec2 connection and select ec2 instance click on next
- Then click on set up

The screenshot shows the Amazon RDS service in the AWS Management Console. The left sidebar navigation bar includes options like Dashboard, Databases (which is selected), Query Editor, Performance insights, Snapshots, Exports in Amazon S3, Automated backups, Reserved instances, Proxies, Subnet groups, Parameter groups, Option groups, and Custom engine versions. The main content area displays a table titled 'Databases (1)'. The table has columns for DB identifier, Status, Role, Engine, Region & AZ, and Size. One row is listed: 'database-1' (Status: Available, Instance: MySQL Community, Region & AZ: us-east-1a, Size: db.m6gd.large). Below the table is a 'Create database' button.

The screenshot shows the 'Connected compute resources (0)' section of the RDS service. It indicates that no connected compute resources were created automatically by RDS. There are two buttons at the bottom: 'Set up EC2 connection' and 'Set up Lambda connection'.

The screenshot shows the 'Proxies (0)' section of the RDS service. It indicates that no proxies have been created. There is a 'Create proxy' button at the top right.

Screenshot of the AWS RDS console showing the "Set up EC2 connection" step. The user is selecting an EC2 instance to connect to the RDS database.

Step 1: Set up EC2 connection

Step 2: Review and confirm

Select EC2 instance

Database: database-1

EC2 instance:

Choose the EC2 instance to connect to this database. Only EC2 instances in the same VPC as the database are shown. If no EC2 instances in the same VPC are available, you can create a new EC2 instance.

i-03af6cc11b3cdf587  
ec2-rds us-east-1a

Create EC2 instance

Cancel Continue

Screenshot of the AWS RDS console showing the "Review and confirm" step. The user is reviewing the connection setup between the RDS database and the selected EC2 instance.

You are setting up a connection between RDS database database-1 and EC2 instance i-03af6cc11b3cdf587.

To set up a connection between the database and the EC2 instance, VPC security group rds-ec2-2 is added to the database, and VPC security group ec2-rds-2 is added to the EC2 instance.

VPC: vpc-0ac0454bcd659e7e (my-vpc)

Security group: rds-ec2-2 (connection rule)

RDS database-1 Port: 3306

Security group: ec2-rds-2 (connection rule)

EC2 instance i-03af6cc11b3cdf587

**Bold indicates an addition being made to set up a connection.**

Changes to RDS database: database-1

The screenshot shows the AWS RDS setup dialog for connecting an EC2 instance to an RDS database. It displays two tables of attribute changes:

Attribute	Current value	New value
Security group	launch-wizard-9	bold launch-wizard-9, rds-ec2-2

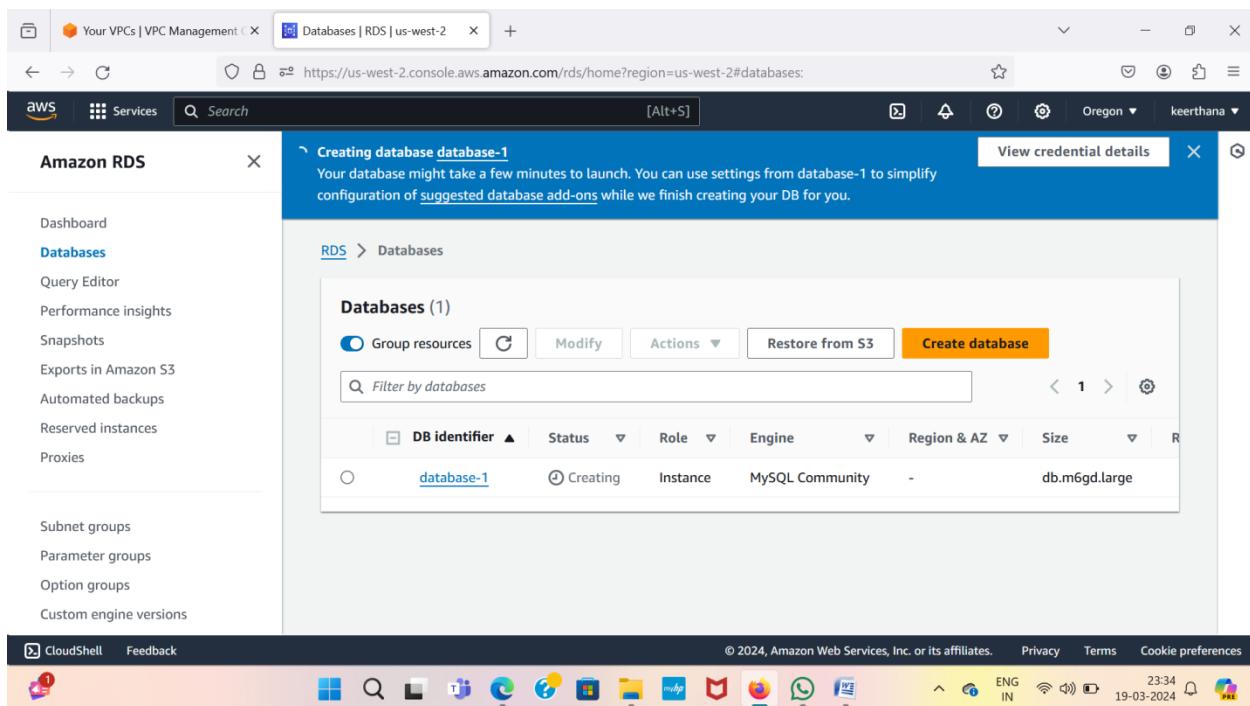
Attribute	Current value	New value
Security group	ec2-rds-1, launch-wizard-9	bold ec2-rds-1, launch-wizard-9, ec2-rds-2

Buttons at the bottom include 'Cancel', 'Previous', and a prominent orange 'Set up' button.

The screenshot shows the AWS RDS Databases page. A green success message at the top states: "Connection setup successfully for RDS database database-1 and EC2 instance i-03af6cc11b3cdf587". The main table lists the database details:

DB identifier	Status	Role	Engine	Region & AZ	Size
database-1	Available	Instance	MySQL Community	us-east-1a	db.m6gd.large

The left sidebar shows navigation links for Amazon RDS, including Databases, Query Editor, and Performance insights.



After Creating database go to ec2 instance then connect

Install mysql-server command is

```
sudo apt update -y
```

```
sudo apt install mysql-server
```

```
mysql -h <endpoint> -u <username> -p
```

Your VPCs | VPC Management

Databases | RDS | us-west-2

https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#databases:

AWS Services Search [Alt+S]

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Your VPCs | VPC Management

Instance details | EC2 | us-west-2

https://us-west-2.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-05c8f08b4912f5915

AWS Services Search [Alt+S]

```
root@ip-120-0-12-81:~# sudo apt update -y
[...]
et:1 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy InRelease
et:2 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
et:3 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
et:4 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
et:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
et:6 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
et:7 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
et:8 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
et:9 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
et:10 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
et:11 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1498 kB]
et:12 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [288 kB]
et:13 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1607 kB]
et:14 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [270 kB]
et:15 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1058 kB]
et:16 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [239 kB]
et:17 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.1 kB]
et:18 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [42.1 kB]
et:19 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [10.1 kB]
```

i-05c8f08b4912f5915 (my-ec2-rds)

PublicIPs: 54.186.194.205 PrivateIPs: 120.0.12.81

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```
root@ip-120-0-12-81:~# sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcgifast-perl libcgipm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgioldbl
  libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl
  libmecab2 libprotobuf-lite23 libtimsdate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0
  mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libdata-dump-perl libipc-sharedcache-perl libbusiness-isbn-perl libwww-perl mailx tinyca
The following NEW packages will be installed:
  libcgifast-perl libcgipm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgioldbl
  libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl
  libmecab2 libprotobuf-lite23 libtimsdate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0
  mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
Upgraded: 28 newly installed, 0 to remove and 19 not upgraded.
Need to get 29.5 MB of archives.
After this operation, 243 MB of additional disk space will be used.
Do you want to continue? [Y/n] 
```

i-05c8f08b4912f5915 (my-ec2-rds)

PublicIPs: 54.186.194.205 PrivateIPs: 120.0.12.81

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Your VPCs | VPC Management | Instance details | EC2 | us-west-2 | EC2 Instance Connect | us-west-2 +

Databases | RDS | us-west-2 | Instance details | EC2 | us-west-2 | EC2 Instance Connect | us-west-2 +

https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#databases:

AWS Services Search [Alt+S]

Amazon RDS

Databases (1)

Group resources  Modify Actions ▾ Restore from S3 Create database

Filter by databases

DB identifier	Status	Role	Engine	Region & AZ	Size
database-1	Modifying	Instance	MySQL Community	us-west-2d	db.m6gd.large

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The screenshot shows the Amazon RDS Connectivity & security page for a database instance. The instance details are as follows:

Endpoint & port	Networking	Security
Endpoint database-1.cr084m6k43cx.us-west-2.rds.amazonaws.com	Availability Zone us-west-2d VPC my-vpc-1 (vpc-092f02a1c72735777) Subnet group mydbsubnet Subnets	VPC security groups default (sg-0473aa174f54591b9) Active Publicly accessible Yes Certificate authority Info rds-ca-rsa2048-g1

Below the main page, there are two CloudShell windows. The top CloudShell window shows the AWS CLI command to install MySQL on an EC2 instance:

```
root@ip-120-0-11-198:~# sudo apt install mysql-server
```

The output of the command indicates that MySQL is already at the newest version (8.0.36-Ubuntu0.22.04.1). There were 0 upgraded, 0 newly installed, 0 to remove and 19 not upgraded.

The bottom CloudShell window shows the MySQL prompt for the database 'keerthana' on the EC2 instance:

```
i-03af6cc11b3cdf587 (ec2-rds)
PublicIPs: 184.72.83.57 PrivateIPs: 120.0.11.198
```

- Now we can see database connected to mysql server

A screenshot of an AWS CloudShell terminal window. The terminal is running a MySQL session on an RDS instance. The output shows the MySQL prompt, copyright information, and a note about Oracle trademarks. The session ends with a 'mysql>' prompt.

```
root@ip-120-0-11-198:~# mysql -h database-1.cz8kiiys2m6k.us-east-1.rds.amazonaws.com -u admin -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 31
Server version: 8.0.35 Source distribution

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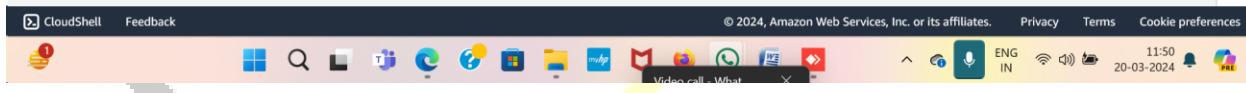
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> 
```

i-03af6cc11b3cdf587 (ec2-rds)

PublicIPs: 184.72.83.57 PrivateIPs: 120.0.11.198



\*\*\*\*\* END \*\*\*\*\*

