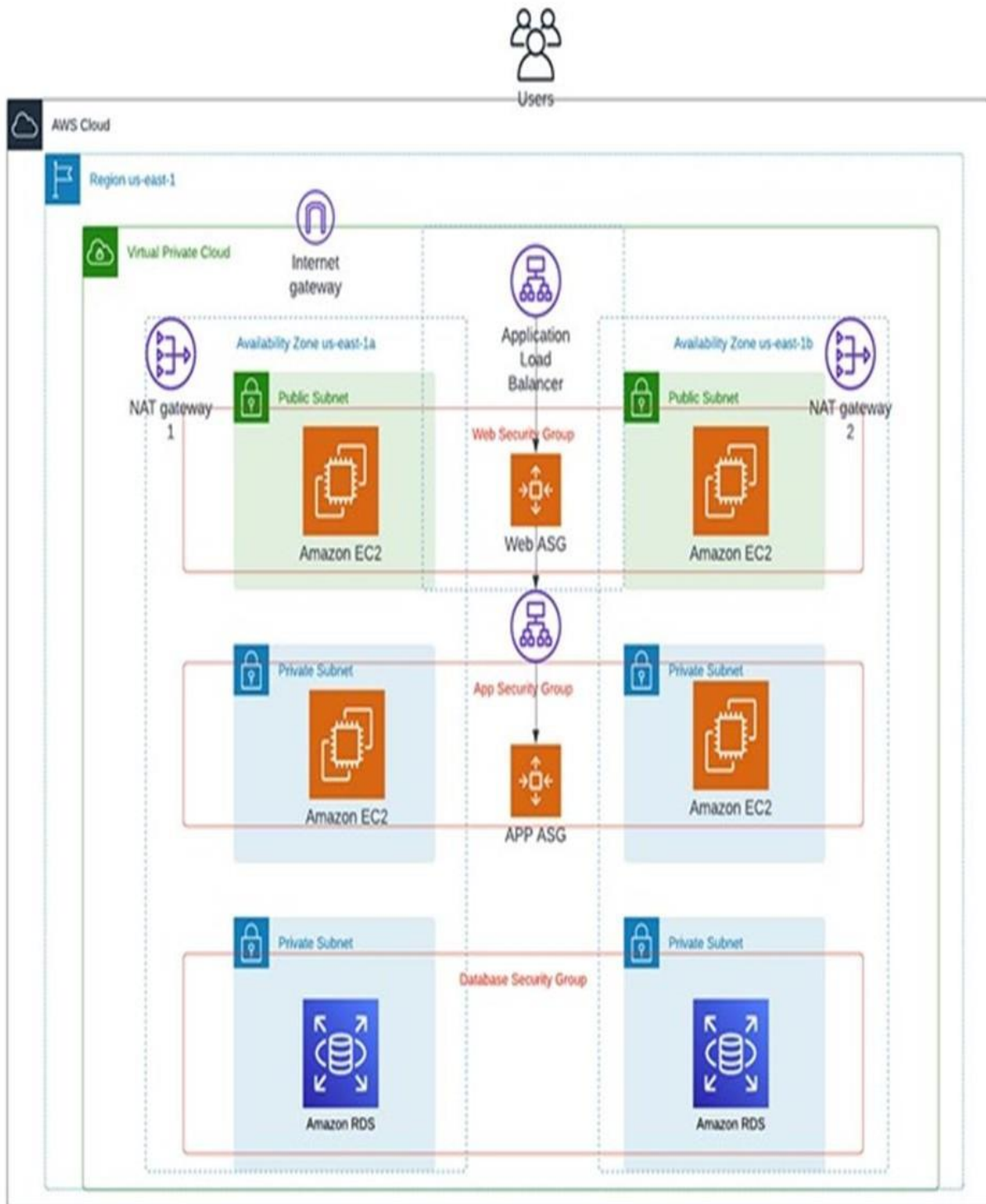


PROJECT-1

3 TIER ARCHITECTURE OF AWS

Name :- Veeramreddy Venkata Naveen

EMAIL:-naveenveeramreddy181668@gmail.com



There are three layers in 3 tier architecture:-

1. **WEB TIER** :- The Web tier is the user interface and communication layer of the application, where the end user interacts with the application.
2. **APPLICATION TIER** :- The application tier, also known as the logic tier or middle tier, is the heart of the application.
3. **DATABASE TIER** :- The data tier, sometimes called database tier, data access tier or back- end, is where the information processed by the application is stored and managed

TO IMPLEMENT THE ABOVE ARCHITECTURE WE HAVE TO FOLLOW THESE STEPS

1. Create VPC ,Subnets-6 ,internet gateway – 1,Route tables- 3,Nat gateway-2
2. Launch an EC2 instance.
3. Create Target group.
4. Create Load Balancer.
5. Create an AMI (image).
6. Create launch template.
7. Create Autoscaling Group.
8. Create Subnet Group.
9. Create Database (RDS).
10. Establish connection.

1. creating VPC and its components :-

- Click on VPC service .
- Click on Create VPC, give name to the VPC as my-project -vpc .
- Give ipv4 CIDR address as: 192.0.0.0./18
- Click on create vpc.

VPC settings

Resources to create [Info](#)

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

☒ VPC only

☐ VPC and more

Name tag - optional

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

my-project-vpc

IPv4 CIDR block [Info](#)

☒ IPv4 CIDR manual input

☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

192.0.0.0/18

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

IPv6 CIDR block [Info](#)

☒ No IPv6 CIDR block

☐ IPAM-allocated IPv6 CIDR block

☐ Amazon-provided IPv6 CIDR block

☐ IPv6 CIDR owned by me

Tenancy [Info](#)

Default

IPv6 CIDR block [Info](#)

☒ No IPv6 CIDR block

☐ IPAM-allocated IPv6 CIDR block

☐ Amazon-provided IPv6 CIDR block

☐ IPv6 CIDR owned by me

Tenancy [Info](#)

Default

Tags

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

Key

Q Name

X

Value - optional

Q my-project-vpc

X

Remove tag

Add tag

You can add 49 more tags

Cancel

[Preview code](#)

Create VPC

Creating subnets:-

- 2 -public & 4 private subnets.
- Select (my-project-vpc).
- Give name tag as availability zone .

VPC**VPC ID**

Create subnets in this VPC.

vpc-0497c72466548f4fb (my-project-vpc-vpc) ▼

Associated VPC CIDRs**IPv4 CIDRs**

192.0.0.0/18

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1**Subnet name**

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

public1

The name can be up to 256 characters long.

Availability Zone [Info](#)

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

Europe (London) / eu-west-2a ▼

IPv4 VPC CIDR block [Info](#)

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

192.0.0.0/18 ▼

IPv4 subnet CIDR block

192.0.0.0/22

1,024 IPs

< > ^ v

Tags - optional

Key

Q Name X

Value - optional

Q public1 X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

[Cancel](#)[Create subnet](#)

In a similar way create public 2subnet.

Creating private subnet:

Create Subnet [Info](#)

VPC

VPC ID

Create subnets in this VPC.

vpc-0497c72466548f4fb (my-project-vpc-vpc)

Associated VPC CIDRs

IPv4 CIDRs

192.0.0.0/18

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

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

private1-subnet

The name can be up to 256 characters long.

Availability Zone [Info](#)

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

Europe (London) / eu-west-2b

IPv4 VPC CIDR block [Info](#)

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

192.0.0.0/18

IPv4 subnet CIDR block

192.0.0.0/24

256 IPs

▼ Tags - optional

Key

Q Name

X

Value - optional

Q private1-subnet

X

Remove

▼ Tags - optional

Key

Q Name

X

Value - optional

Q private1-subnet

X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

Create subnet [Info](#)

VPC

VPC ID

Create subnets in this VPC.

vpc-0497c72466548f4fb (my-project-vpc-vpc) ▼

Associated VPC CIDRs

IPv4 CIDRs

192.0.0.0/18

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

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

private2-subnet

The name can be up to 256 characters long.

Availability Zone [Info](#)

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

Europe (London) / eu-west-2c ▼

IPv4 VPC CIDR block [Info](#)

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

192.0.0.0/18 ▼

IPv4 subnet CIDR block

192.2.0.0/20 4,096 IPs

< > ^ v

▼ Tags - optional

Key

Q Name X

Value - optional

Q private2-subnet X

Remove

< > ^ v

▼ Tags - optional

Key

Q Name X

Value - optional

Q private2-subnet X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

Create subnet [Info](#)

VPC

VPC ID

Create subnets in this VPC.

vpc-0497c72466548f4fb (my-project-vpc-vpc) ▼

Associated VPC CIDRs

IPv4 CIDRs

192.0.0.0/18

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

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

private3-subnet

The name can be up to 256 characters long.

Availability Zone

Info

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

Europe (London) / eu-west-2b

IPv4 VPC CIDR block

Info

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

192.0.0.0/18

IPv4 subnet CIDR block

192.2.0.4/26

64 IPs

Tags - optional

Key

Value - optional

Q Name

X

Q private3-subnet

X

Remove

Tags - optional

Key

Value - optional

Q Name

X

Q private3-subnet

X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

Create subnet

VPC

VPC ID

Create subnets in this VPC.

vpc-0497c72466548f4fb (my-project-vpc-vpc)

Associated VPC CIDRs

IPv4 CIDRs

192.0.0.0/18

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

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

private4-subnet

The name can be up to 256 characters long.

Availability Zone

Info

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

Europe (London) / eu-west-2c

IPv4 VPC CIDR block

Info

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

192.0.0.0/18

IPv4 subnet CIDR block

192.2.0.8/17

32,768 IPs

▼ Tags - optional

Key	Value - optional	
Q Name	Q private4-subnet	Remove

[Add new tag](#)

You can add 49 more tags.

[Remove](#)

[Add new subnet](#)

[Cancel](#) [Create subnet](#)

Creating Route Table:-

- Click on route tables
- Give a name as Public, (select my -project-vpc)create route table.
- Open route table click on edit subnet associations and then select two public subnets and save associations.
- Click on add routes give all traffic (0.0.0.0/0)and select our internet gateway.

1.Creating public route table:

Create route table [Info](#)

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

Route table settings

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

my-project-vpc-rtb-public

VPC
The VPC to use for this route table.

vpc-0497c72466548f4fb (my-project-vpc-vpc)

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

Key	Value - optional	
Q Name	Q my-project-vpc-rtb-public	Remove

[Add new tag](#)

You can add 49 more tags.

[Cancel](#) [Create route table](#)

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/6)

Q Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	private2- subnet	subnet-0242e9e7df7b82b51	192.0.52.0/22	-	Main (rtb-000907bab26d1ced1)
<input type="checkbox"/>	private3- subnet	subnet-04fd32f0c3372bc2f	192.0.40.0/22	-	Main (rtb-000907bab26d1ced1)
<input type="checkbox"/>	private1- subnet	subnet-02e69b64cd057da49	192.0.32.0/22	-	Main (rtb-000907bab26d1ced1)
<input checked="" type="checkbox"/>	public2	subnet-0dac5927db5d9b695	192.0.4.0/22	-	rtb-0350399105579ee58 / my-proje...
<input checked="" type="checkbox"/>	public1	subnet-084da5ebd9d6311b1	192.0.0.0/22	-	rtb-0350399105579ee58 / my-proje...
<input type="checkbox"/>	private4- subnet	subnet-02afbce612fdb504d	192.0.44.0/22	-	Main (rtb-000907bab26d1ced1)

Selected subnets

subnet-084da5ebd9d6311b1 / public1 X subnet-0dac5927db5d9b695 / public2 X

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

Edit routes

Destination	Target	Status	Propagated
192.0.0.0/18	local	Active	No
0.0.0.0/0	Internet Gateway	Active	No

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

2. creating private route table:

Create a private route table and select(my-project-vpc) create route table.

Open route table click on edit subnet associations and then select all private subnets and save associations.

Create NAT gateway and give name as ngw-1

Create route table

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

Route table settings

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

my-project-vpc-rtb-private

VPC
The VPC to use for this route table.

vpc-0497c72466548f4fb (my-project-vpc-vpc)

Tags

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

Key

Q Name X

Value - optional

Q my-project-vpc-rtb-private X Remove

[Add new tag](#)

You can add 49 more tags.

[Cancel](#) [Create route table](#)

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (4/6)

Q Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	private2- subnet	subnet-0242e9e7df7b82b51	192.0.52.0/22	-	Main (rtb-000907bab26d1ced1)
<input checked="" type="checkbox"/>	private3- subnet	subnet-04fd32f0c3372bc2f	192.0.40.0/22	-	Main (rtb-000907bab26d1ced1)
<input checked="" type="checkbox"/>	private1- subnet	subnet-02e69b64cd057da49	192.0.32.0/22	-	Main (rtb-000907bab26d1ced1)
<input type="checkbox"/>	public2	subnet-0dac5927db5d9b695	192.0.4.0/22	-	rtb-0350399105579ee58 / my-proje...
<input type="checkbox"/>	public1	subnet-084da5ebd9d6311b1	192.0.0.0/22	-	rtb-0350399105579ee58 / my-proje...
<input checked="" type="checkbox"/>	private4- subnet	subnet-02afbce612fdb504d	192.0.44.0/22	-	Main (rtb-000907bab26d1ced1)

Selected subnets

subnet-02e69b64cd057da49 / private1- subnet X

subnet-0242e9e7df7b82b51 / private2- subnet X

subnet-04fd32f0c3372bc2f / private3- subnet X

subnet-02afbce612fdb504d / private4- subnet X

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

Create NAT gateway [Info](#)

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

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.

[Allocate Elastic IP](#)

► Additional settings [Info](#)

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*

[Remove](#)[Add new tag](#)

You can add 49 more tags.

[Cancel](#)[Create NAT gateway](#)

Edit routes

Destination	Target	Status	Propagated
192.0.0.0/18	local	Active	No
<input type="text" value="Q 0.0.0.0/0"/>	<input type="text" value="Q local"/>		
	NAT Gateway	-	No
	<input type="text" value="Q nat-083dc4e910cbdd981"/>		Remove

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

Step :2 Launch instance:-

Goto ec2 service click on launch instance, give name as public ec2-1.

And then select AMI as -ubuntu, select instance type t2 micro, and then create key pair or else use existing once.

Click on edit network settings, select vpc and public subnet , enable auto ip assign and create a security group as project-stg ,and click on launch instance.

Creating Public instances :-

EC2 > Instances > Launch an instance

Launch an instance

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

Name

public ec2-1

Add additional tags

Application and OS Images (Amazon Machine Image)

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

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUSE

Debian

debian

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

ami-01c0ed0b087735750 (64-bit (x86)) / ami-01a9982aa16548da3 (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).

Canonical, Ubuntu, 24.04, amd64 noble image

Architecture

AMI ID

Publish Date

Username

Verified provider

64-bit (x86)

ami-01c0ed0b087735750

2025-05-30

ubuntu

Instance type

Free tier eligible

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Windows base pricing: 0.0178 USD per Hour

On-Demand RHEL base pricing: 0.0276 USD per Hour On-Demand SUSE base pricing: 0.0132 USD per Hour

On-Demand Linux base pricing: 0.0132 USD per Hour

On-Demand Ubuntu Pro base pricing: 0.015 USD per Hour

All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

Key pair (login)

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

nem1

Create new key pair

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0497c72466548f4fb (my-project-vpc-vpc)
192.0.0.0/18



Subnet [Info](#)

subnet-084da5ebd9d6311b1 public1
VPC: vpc-0497c72466548f4fb Owner: 552401576144 Availability Zone: eu-west-2a
Zone type: Availability Zone IP addresses available: 1017 CIDR: 192.0.0.0/22



[Create new subnet](#)

Auto-assign public IP [Info](#)

Enable

[Additional charges apply](#) when outside of free tier allowance

Firewall (security groups) [Info](#)

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

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups

project-sgt sg-00db7cfc349651295 X
VPC: vpc-0497c72466548f4fb



[Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

► **Advanced network configuration**

▼ Summary

Number of instances [Info](#)

1

Software image (AMI)

Canonical, Ubuntu, 24.04, amd64...[read more](#)
ami-01c0ed0b087735750

Virtual server type (instance type)

t2.micro

Firewall (security group)

project-sgt

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free

[Cancel](#)

[Launch instance](#)

[Preview code](#)

☰ [EC2](#) > [Instances](#) > [Launch an instance](#)

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name

public-ec2-2

[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

[Recents](#)

[Quick Start](#)



[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type
ami-01c0ed0b087735750 (64-bit (x86)) / ami-01a9982aa16548da3 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Canonical, Ubuntu, 24.04, amd64 noble image

Architecture	AMI ID	Publish Date	Username	
64-bit (x86)	ami-01c0ed0b087735750	2025-05-30	ubuntu	Verified provider

▼ Instance type

Info | Get advice

Instance type

t2.micro
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0178 USD per Hour
On-Demand RHEL base pricing: 0.0276 USD per Hour On-Demand SUSE base pricing: 0.0132 USD per Hour
On-Demand Linux base pricing: 0.0132 USD per Hour
On-Demand Ubuntu Pro base pricing: 0.015 USD per Hour

Free tier eligible

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

nem1

Create new key pair

▼ Network settings

Info

VPC - required

Info

vpc-0497c72466548f4fb (my-project-vpc-vpc)

192.0.0.0/18

Subnet

Info

subnet-0dac5927db5d9b695

public2

VPC: vpc-0497c72466548f4fb Owner: 552401576144 Availability Zone: eu-west-2b
Zone type: Availability Zone IP addresses available: 1019 CIDR: 192.0.4.0/22

Auto-assign public IP

Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)

Info

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

Create security group

Select existing security group

Common security groups

Info

Select security groups

project-sgt sg-00db7cfc349651295

VPC: vpc-0497c72466548f4fb

Security groups that you add or remove here will be added to or removed from all your network interfaces.

► Advanced network configuration

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...read more

ami-01c0ed0b087735750

Virtual server type (instance type)

t2.micro

Firewall (security group)

project-sgt

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free

Cancel

Launch instance

Preview code

Creating private ec2 instances:

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

private1

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

Q Search our full catalog including 1000s of application and OS images

Recents

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUSE

Debian

debian

>

Q

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

ami-01c0ed0b087735750 (64-bit {x86}) / ami-01a9982aa16548da3 (64-bit {Arm})

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Canonical, Ubuntu, 24.04, amd64 noble image

Architecture

AMI ID

Publish Date

Username

64-bit {x86}

ami-01c0ed0b087735750

2025-05-30

ubuntu

Verified provider

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Windows base pricing: 0.0178 USD per Hour

On-Demand RHEL base pricing: 0.0276 USD per Hour On-Demand SUSE base pricing: 0.0132 USD per Hour

On-Demand Linux base pricing: 0.0132 USD per Hour

On-Demand Ubuntu Pro base pricing: 0.015 USD per Hour

Free tier eligible

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

nem1

Create new key pair

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0497c72466548f4fb (my-project-vpc-vpc)
192.0.0.0/18

Subnet [Info](#)

subnet-02e69b64cd057da9
private1 - subnet
VPC: vpc-0497c72466548f4fb Owner: 552401576144 Availability Zone: eu-west-2a
Zone type: Availability Zone IP addresses available: 1019 CIDR: 192.0.32.0/22

Auto-assign public IP [Info](#)

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) [Info](#)

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

☐ Create security group
☒ Select existing security group

Common security groups [Info](#)

Select security groups

project-sgt sg-00db7cfc349651295 X
VPC: vpc-0497c72466548f4fb

Compare security group rules

Cancel

Launch instance

Preview code

In Similar way create another private instance .

Step 3: create Target group:-

1 for public instance and 1 for private and then create target groups as 2 public and private.

EC2 > Target groups > Create target group

Target group name

public-tg

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Protocol

HTTP

Protocol for load balancer-to-target communication. Can't be modified after creation.

Port

80

Port number where targets receive traffic. Can be overridden for individual targets during registration.

IP address type

☒ IPv4
☐ IPv6

Only targets with the indicated IP address type can be registered to this target group.
Each instance has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.
Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). [Learn more](#)

VPC

my-project-vpc-vpc

Select the VPC with the instances that you want to include in the target group. Only VPCs that support the IP address type selected above are available in this list.

Protocol version

HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

Register targets

This is an optional step to create a target group. However, to ensure that your load balancer routes traffic to this target group you must register your targets.

Available instances (2/4)

Filter instances

1

⚙

<input checked="" type="checkbox"/>	Instance ID	Name	State	Security groups	Zone
<input type="checkbox"/>	i-068b8ebdb26896707	private 2	Running	project-sgt	eu-west-2c
<input type="checkbox"/>	i-0f6f16617b82f4e4b	private1	Running	project-sgt	eu-west-2a
<input checked="" type="checkbox"/>	i-020276f2b711473fd	public ec2-2	Running	project-sgt	eu-west-2b
<input checked="" type="checkbox"/>	i-081a1b0319a421e43	public ec2-1	Running	project-sgt	eu-west-2a

Review targets

Targets (2)

[Remove all pending](#)☐ Show only pending

< 1 > ⚙

Instance ID	Name	Port	State	Security groups	Zone	Private IPv4 address	Subnet ID
i-020276f2b711473fd	public ec2-2	80	Running	project-sgt	eu-west-2b	192.0.4.176	subnet-0dac5927db5d9b695
i-081a1b0319a421e43	public ec2-1	80	Running	project-sgt	eu-west-2a	192.0.2.116	subnet-084da5ebd9d6311b1

2 pending

[Cancel](#)[Previous](#)[Create target group](#)

Step 4:-Create load balancer for public ec2

Basic configuration

Load balancer name

Name must be unique within your AWS account and can't be changed after the load balancer is created.

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Scheme [Info](#)

Scheme can't be changed after the load balancer is created.

☒ Internet-facing

- Serves Internet-facing traffic.
- Has public IP addresses.
- DNS name resolves to public IPs.
- Requires a public subnet.

☐ Internal

- Serves internal traffic.
- Has private IP addresses.
- DNS name resolves to private IPs.
- Compatible with the IPv4 and Dualstack IP address types.

Load balancer IP address type [Info](#)

Select the front-end IP address type to assign to the load balancer. The VPC and subnets mapped to this load balancer must include the selected IP address types. Public IPv4 addresses have an additional cost.

☒ IPv4

Includes only IPv4 addresses.

☐ Dualstack

Includes IPv4 and IPv6 addresses.

☐ Dualstack without public IPv4

Includes a public IPv6 address, and private IPv4 and IPv6 addresses. Compatible with Internet-facing load balancers only.

[EC2](#) > [Load balancers](#) > Create Application Load Balancer[?](#) [🔍](#)

Network mapping [Info](#)

The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings.

VPC [Info](#)

The load balancer will exist and scale within the selected VPC. The selected VPC is also where the load balancer targets must be hosted unless routing to Lambda or on-premises targets, or if using VPC peering. To confirm the VPC for your targets, view [target groups](#). For a new VPC, [create a VPC](#).

my-project-vpc-vpc
vpc-0497c72a56548f4fb
IPv4 VPC CIDR: 192.0.0.0/18



IP pools - new [Info](#)

You can optionally choose to configure an IPAM pool as the preferred source for your load balancers IP addresses. Create or view Pools in [Amazon VPC IP Address Manager console](#).

☐ Use IPAM pool for public IPv4 addresses

The IPAM pool you choose will be the preferred source of public IPv4 addresses. If the pool is depleted IPv4 addresses will be assigned by AWS.

Availability Zones and subnets [Info](#)

Select at least two Availability Zones and a subnet for each zone. A load balancer node will be placed in each selected zone and will automatically scale in response to traffic. The load balancer routes traffic to targets in the selected Availability Zones only.

☒ eu-west-2a (euw2-az2)

Subnet

Only CIDR blocks corresponding to the load balancer IP address type are used. At least 6 available IP addresses are required for your load balancer to scale efficiently.

subnet-084da5ebd9d6311b1
IPv4 subnet CIDR: 192.0.0.0/22

public1

☒ eu-west-2b (euw2-az3)

Subnet

Only CIDR blocks corresponding to the load balancer IP address type are used. At least 6 available IP addresses are required for your load balancer to scale efficiently.

subnet-0dac5927db5d9b695
IPv4 subnet CIDR: 192.0.4.0/22

public2

Security groups [Info](#)

A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can [create a new security group](#).

Security groups

Select up to 5 security groups

project-sgt

sg-00db7cfc349651295 VPC: vpc-0497c72466548f4fb

Listeners and routing [Info](#)

A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer

▼ Listener HTTP:80

Protocol

HTTP

Port

80

1-65535

Default action [Info](#)

Forward to

public-tg

Target type: Instance, IPv4

HTTP

[Create target group](#)

Creation workflow and status

► Server-side tasks and status

After completing and submitting the above steps, all server-side tasks and their statuses become available for monitoring.

[Cancel](#)

[Create load balancer](#)

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-10-0-3-175:~# sudo systemctl start nginx
root@ip-10-0-3-175:~# cd /var/www/html
root@ip-10-0-3-175:/var/www/html# sudo rm index.nginx-debian.html
root@ip-10-0-3-175:/var/www/html# sudo nano index.html
root@ip-10-0-3-175:/var/www/html# vi index.html
root@ip-10-0-3-175:/var/www/html# systemctl restart nginx
root@ip-10-0-3-175:/var/www/html# cd
root@ip-10-0-3-175:~#
```

← → ↻ ⚠ Not secure 18.171.54.156

This is my web server 1

← → ↻ ⚠ Not secure 13.40.83.173

This is my web server 2

Step 5:- create an AMI (image):-

Goto ec2 instances select public ec2-1 and click on actions and select image and give a name as project-img click to create im

Create image [Info](#)

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

Instance ID

 i-081a1b0319a421e43 (public ec2-1)

Image name

project-img

Maximum 127 characters. Can't be modified after creation.

Image description - optional

image description

Maximum 255 characters

☒ Reboot instance

When selected, Amazon EC2 reboots the instance so that data is at rest when snapshots of the attached volumes are taken. This ensures data consistency.

Instance volumes

Step 6: Launch template:-

After image is available ,click on launch template.

Give a template name as temp public, Select AMI's as share with me, select my-image.

Instance type as t2.micro and key pair as nem1,

Select existing security group (project sgt) which is used to launch an EC2 instance.

Click on launch template.

Launch template name and description

Launch template name - required

temp-public

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

Template tags

Source template

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)

project-img

ami-0410d52df6f794650

2025-06-11T20:42:37.000Z

Virtualization: hvm

ENA enabled: true

Root device type: ebs

Boot mode: uefi-preferred

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 instance. Add rules to allow specific traffic to reach your instance.

Select existing security group

Create security group

Security groups

Info

Select security groups

project-sgt sg-00db7cfc349651295

VPC: vpc-0497c72466548f4fb

Compare security group rules

Advanced network configuration

Storage (volumes)

Info

No volume details are currently included in this template. Add a new volume to include it in the launch template

Add new volume

Summary

Software image (AMI)

-

Virtual server type (instance type)

t2.micro

Firewall (security group)

project-sgt

Storage (volumes)

-

Free tier

In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GiB of bandwidth to the internet.

Cancel

Create launch template

Step 7: Auto scaling group :-

We need to create 2 auto scaling groups 1 for public and another for private.

EC2 > Auto Scaling groups > Create Auto Scaling group

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-0497c72466548f4fb (my-project-vpc-vpc) 192.0.0.0/18

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

eu-west-2b | subnet-0dac5927db5d9b695 (public2) 192.0.4.0/22

eu-west-2a | subnet-084da5ebd9d6311b1 (public1) 192.0.0.0/22

Create a subnet

Availability Zone distribution - new

Auto Scaling automatically balances instances across Availability Zones. If launch failures occur in a zone, select a strategy.

☒ **Balanced best effort**
If launches fail in one Availability Zone, Auto Scaling will attempt to launch in another healthy Availability Zone.

☐ **Balanced only**
If launches fail in one Availability Zone, Auto Scaling will continue to attempt to launch in the unhealthy Availability Zone to preserve balanced distribution.

Integrate with other services - optional Info

Use a load balancer to distribute network traffic across multiple servers. Enable service-to-service communications with VPC Lattice. Shift resources away from impaired Availability Zones with zonal shift. You can also customize 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.

Attach to an existing load balancer

Select the load balancers that you want to attach to your Auto Scaling group.

☒ **Choose from your load balancer target groups**

This option allows you to attach Application, Network, or Gateway Load Balancers.

☐ Choose from Classic Load Balancers

Existing load balancer target groups

Only instance target groups that belong to the same VPC as your Auto Scaling group are available for selection.

Select target groups

public-tg | HTTP

Application Load Balancer: public-lb

Configure group size and scaling - optional [Info](#)

Define your group's desired capacity and scaling limits. You can optionally add automatic scaling to adjust the

Group size [Info](#)

Set the initial size of the Auto Scaling group. After creating the group, you can change its size to meet demand.

Desired capacity type

Choose the unit of measurement for the desired capacity value. vCPUs and Memory(GiB) are only supported for mixed instance groups.

Units (number of instances) ▼

Desired capacity

Specify your group size.

2

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

2

Equal or less than desired capacity

Max desired capacity

5

Equal or greater than desired capacity

Automatic scaling - optional

Choose whether to use a target tracking policy [Info](#)

You can set up other metric-based scaling policies and scheduled scaling after creating your Auto Scaling group.

☐

No scaling policies

Your Auto Scaling group will remain at its initial size and will not dynamically resize to meet demand.

☒

Target tracking scaling policy

Choose a CloudWatch metric and target value and let the scaling policy adjust the desired capacity in proportion to the metric's value.

Scaling policy name

Target Tracking Policy

Metric type [Info](#)

Monitored metric that determines if resource utilization is too low or high. If using EC2 metrics, consider enabling detailed monitoring for better scaling performance.

Average CPU utilization ▼

Target value

50

Instance warmup [Info](#)

100

seconds

☐

Disable scale in to create only a scale-out policy

Instances (2/8) Info

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

Instance state = running

Clear filters

< 1 >

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input type="checkbox"/>	private 2	i-068b8ebdb26896707	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2c	ec2-13-4
<input checked="" type="checkbox"/>		i-0bc001e243aed39c7	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2c	-
<input checked="" type="checkbox"/>		i-012b96d244ae586fb	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	-
<input type="checkbox"/>	public ec2-1	i-081a1b0319a421e43	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-2a	ec2-18-1

In a similar way create private autoscaling group.

Step 8: Create subnet group:-

Aurora and RDS > Subnet groups > Create DB subnet group

Create DB subnet group

To create a new subnet group, give it a name and a description, and choose an existing VPC. You will then be able to add subnets related to that VPC.

Subnet group details

Name

You won't be able to modify the name after your subnet group has been created.

mydb-sub

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.

my-project-vpc-vpc (vpc-0497c72466548f4fb)
6 Subnets, 3 Availability Zones

Add subnets

Availability Zones

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

Choose an availability zone

eu-west-2a eu-west-2b eu-west-2c

Subnets

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

Select subnets

private2- subnet
Subnet ID: subnet-0242e9e7df7b82b51 CIDR: 192.0.52.0/22

private3- subnet
Subnet ID: subnet-04fd32f0c3372bc2f CIDR: 192.0.40.0/22

private1- subnet
Subnet ID: subnet-02e69b64cd057da49 CIDR: 192.0.32.0/22

public1
Subnet ID: subnet-084da5ebd9d6311b1 CIDR: 192.0.0.0/22

private4- subnet
Subnet ID: subnet-02afbce612fdb504d CIDR: 192.0.44.0/22

public2
Subnet ID: subnet-0dac5927db5d9b695 CIDR: 192.0.4.0/22

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

Subnets selected (6)

Subnets selected (6)			
Availability zone	Subnet name	Subnet ID	CIDR block
eu-west-2c	private2- subnet	subnet-0242e9e7df7b82b51	192.0.52.0/22
eu-west-2c	private3- subnet	subnet-04fd32f0c3372bc2f	192.0.40.0/22
eu-west-2a	private1- subnet	subnet-02e69b64cd057da49	192.0.32.0/22
eu-west-2a	public1	subnet-084da5ebd9d6311b1	192.0.0.0/22
eu-west-2a	private4- subnet	subnet-02afbce612fdb504d	192.0.44.0/22
eu-west-2b	public2	subnet-0dac5927db5d9b695	192.0.4.0/22

Cancel

Create

Step 9: Create database instance:-

- Click on create database and select standard create, and choose database engine.
- Give a database cluster as db1.
- Select multi Az availability zone cluster, select self managed ,set user name and password.
- Select VPC(my-project- vpc), select subnet group (db-sub) and give public access
- Select security group(project sgt) and click on create database.

aws Search [Alt+S]


Aurora and RDS > Create database


☒ **Standard create**
You set all of the configuration options, including ones for availability, security, backups, and maintenance.


☐ **Easy create**
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.


Engine options


Engine type [Info](#)


☐ Aurora (MySQL Compatible) 


☐ Aurora (PostgreSQL Compatible) 


☒ **MySQL** 

☐ PostgreSQL 

☐ MariaDB 

☐ Oracle 

☐ Microsoft SQL Server 

☐ IBM Db2 

IBM Db2

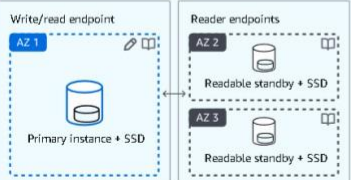
Availability and durability

Deployment options [Info](#)

Choose the deployment option that provides the availability and durability needed for your use case. AWS is committed to a certain level of uptime depending on the deployment option you choose. Learn more in the [Amazon RDS service level agreement \(SLA\)](#).

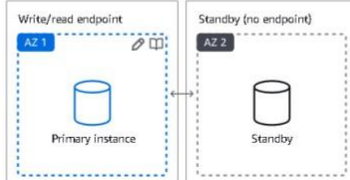
☒ **Multi-AZ DB cluster deployment (3 instances)**
Creates a primary DB instance with two readable standbys in separate Availability Zones. This setup provides:

- 99.95% uptime
- Redundancy across Availability Zones
- Increased read capacity
- Reduced write latency



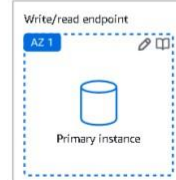
☐ **Multi-AZ DB instance deployment (2 instances)**
Creates a primary DB instance with a non-readable standby instance in a separate Availability Zone. This setup provides:

- 99.95% uptime
- Redundancy across Availability Zones



☐ **Single-AZ DB instance deployment (1 instance)**
Creates a single DB instance without standby instances. This setup provides:

- 99.5% uptime
- No data redundancy



Settings

DB cluster identifier [Info](#)

Enter a name for your DB cluster. The name must be unique across all DB clusters owned by your AWS account in the current AWS Region.

Mydb-1

The DB cluster identifier is case-insensitive, but is stored as all lowercase (as in "mydbcluster"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

▼ Credentials Settings

Master username [Info](#)

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

admin

1 to 16 alphanumeric characters. The first character must be a letter.

Credentials management

You can use AWS Secrets Manager or manage your master user credentials.

☐ **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 [Info](#)

••••••••

Password strength **Strong**

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

Confirm master password [Info](#)

••••••••

Connectivity [Info](#)



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.

Virtual private cloud (VPC) [Info](#)

Choose the VPC. The VPC defines the virtual networking environment for this DB cluster.

my-project-vpc-vpc (vpc-0497c72466548f4fb)
6 Subnets, 3 Availability Zones

Only VPCs with a corresponding DB subnet group are listed.

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

DB subnet group [Info](#)

Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB cluster can use in the VPC that you selected.

mydb-sub
6 Subnets, 3 Availability Zones

Public access [Info](#)

☒ **Yes**
RDS assigns a public IP address to the cluster. Amazon EC2 instances and other resources outside of the VPC can connect to your cluster. Resources inside the VPC can also connect to the cluster. Choose one or more VPC security groups that specify which resources can connect to the cluster.

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

Connectivity [Info](#)



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.

Virtual private cloud (VPC) [Info](#)

Choose the VPC. The VPC defines the virtual networking environment for this DB cluster.

my-project-vpc-vpc (vpc-0497c72466548f4fb)
6 Subnets, 3 Availability Zones

Only VPCs with a corresponding DB subnet group are listed.

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

DB subnet group [Info](#)

Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB cluster can use in the VPC that you selected.

mydb-sub
6 Subnets, 3 Availability Zones

Public access [Info](#)

☒ **Yes**

RDS assigns a public IP address to the cluster. Amazon EC2 instances and other resources outside of the VPC can connect to your cluster. Resources inside the VPC can also connect to the cluster. Choose one or more VPC security groups that specify which resources can connect to the cluster.

☐ **No**

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

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

project-sgt ✕

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 installed on all databases that you provision.

rds-ca-rsa2048-g1 (default)
Expiry: May 22, 2061

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

► Additional configuration

Aurora and RDS > Databases

Databases (4)

Filter by databases

DB identifier	Status	Role	Engine	Region...	Size
mydb-1	Available	Multi-AZ DB cluster	MySQL C...	eu-west-2	3 instances
mydb-1-instance-1	Available	Writer instance	MySQL C...	eu-west-2c	db.m5d.large
mydb-1-instance-2	Available	Reader instance	MySQL C...	eu-west-2a	db.m5d.large
mydb-1-instance-3	Available	Reader instance	MySQL C...	eu-west-2b	db.m5d.large

step 10 : Establish connection:-

Goto ec2 service , click on public ec2-1 instance and connect to the server.

Type commands:

- Sudo -i
- apt update -y
- Sudo apt install mysql - server .

```
aws | Search [Alt+S]

reading /usr/share/mecab/dic/ipadic/Filler.csv ... 19
emitting double-array: 100% |#####|
reading /usr/share/mecab/dic/ipadic/matrix.def ... 1316x1316
emitting matrix : 100% |#####|

done!
update-alternatives: using /var/lib/mecab/dic/ipadic-utf8 to provide /var/lib/mecab/dic/debian (mecab-dictionary) in auto mode
Setting up libhtml-parser-perl:amd64 (3.81-1build3) ...
Setting up libhttp-message-perl (6.45-1ubuntu1) ...
Setting up mysql-server (8.0.42-0ubuntu0.24.04.1) ...
Setting up libcgi-pm-perl (4.63-1) ...
Setting up libhtml-template-perl (2.97-2) ...
Setting up libcgi-fast-perl (1:2.17-1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-10-0-3-175:~#
```

```
aws | Search [Alt+S] Europe (London) osany%20chaitanya

Last login: Wed Jun 11 21:50:09 2025 from 3.8.37.29
ubuntu@ip-10-0-2-116:~$ sudo mysql
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.42-0ubuntu0.24.04.1 (Ubuntu)

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owners.

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

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| shiva |
| sys |
+-----+
5 rows in set (0.01 sec)
```

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

mysql> create database ravi;
Query OK, 1 row affected (0.01 sec)

mysql> use ravi;
Database changed
mysql> create table ramu(id int primary key, Name varchar(22), Email varchar(30));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into ramu(id, Name, Email) values(1, 'chaitanya', 'ochaitanyacm036@gmail.com');
> insert into ramu(id, Name, Email) values(1, 'chaitanya', 'ochaitanyacm036@gmail.com');
> exit;
> \c
> exit
> ^C

mysql> insert into ramu(id, Name, Email) values(1, 'chaitanya', 'ochaitanyacm036@gmail.com');
Query OK, 1 row affected (0.01 sec)

mysql> select * from ramu;
+----+-----+-----+
| id | Name   | Email                               |
+----+-----+-----+
| 1  | chaitanya | ochaitanyacm036@gmail.com |
+----+-----+-----+
1 row in set (0.00 sec)
```