



# CAPSTONE AWS Project- 2: Website Orchestration

SUBMITTED BY

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## **Industry:**

Internet related

## **Problem Statement:**

How to orchestrate a website with lesser time and higher availability along with Auto Scaling.

## **Topics:**

In this AWS project, you have to deploy a high-availability PHP application with an external Amazon RDS database to Elastic Beanstalk. Running a DB instance external to Elastic Beanstalk decouples the database from the lifecycle of your environment. This lets you connect to the same database from multiple environments, swap one database for another, or perform a blue/green deployment without affecting your database.

## **Highlights:**

- Launch a DB instance in Amazon RDS
- Create an Elastic Beanstalk Environment
- Configure Security Groups and Scaling

# 1. Launch a DB instance in Amazon RDS

## Step 1: Login to AWS console

**Sign in**

**Root user**  
Account owner that performs tasks requiring unrestricted access. [Learn more](#)

**IAM user**  
User within an account that performs daily tasks. [Learn more](#)

**Root user email address**

**Next**

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New to AWS? [Create a new AWS account](#)

**aws**

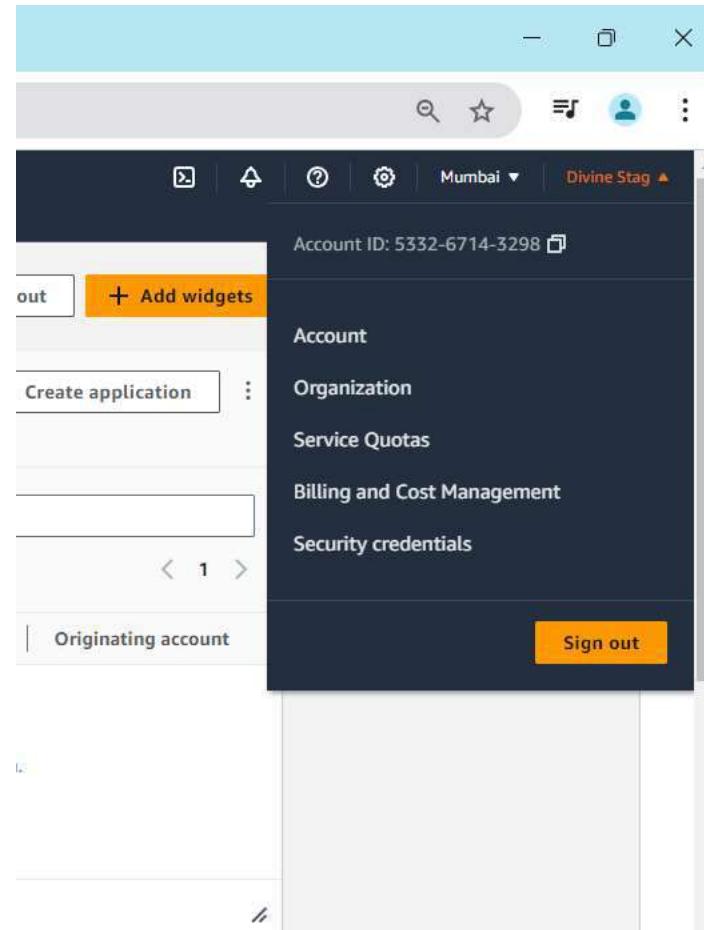
**Root user sign in**

Email: ilamparidhianbu@gmail.com

Password [Forgot password?](#)

.....

**Sign in**



## Step 2: Create a VPC

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

VPC dashboard X

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
- Peering connections

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Services

Search [Alt+S]

Create VPC Launch EC2 Instances

Note: Your instances will launch in the Asia Pacific region.

Introducing the new VPC console experience

We've made updates to the VPC console. This new experience won't change how you work in the console. If you experience a problem with your access, see the troubleshooting documentation to get information about how to resolve it. You can opt out of the new experience until 31 August 2024. Before that date, you must resolve the access issues to continue using the console. You can also report issue details.

Refresh Resources

Resources by Region

You are using the following Amazon VPC resources

Category	Region	Count
VPCs	Asia Pacific	1
Subnets	Asia Pacific	3
Route Tables	Asia Pacific	1
Internet Gateways	Asia Pacific	1
Egress-only Internet Gateways	Asia Pacific	0
DHCP option sets	Asia Pacific	1

NAT Gateways

VPC Peering Connections

Network ACLs

Security Groups

Customer Gateways

Virtual Private Gateways

Service Health

View complete service health details

Settings

Zones

Console Experiments

Additional Information

VPC Documentation

All VPC Resources

Forums

Report an Issue

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.

Get started with Network Manager

javascipt:void(0) feedback

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← → C ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcWithResources

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

VPC > Your VPCs > Create VPC

## Create VPC Info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances. Mouse over a resource to highlight the related resources.

**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 auto-generation** Info  
Enter a value for the Name tag. This value will be used to auto-generate Name tags for all resources in the VPC.  
 Auto-generate

**IPv4 CIDR block** Info  
Determine the starting IP and the size of your VPC using CIDR notation.  
10.0.0.0/16 65,536 IPs  
CIDR block size must be between /16 and /28.

**IPv6 CIDR block** Info  
 No IPv6 CIDR block  Amazon-provided IPv6 CIDR block

**Tenancy** Info  
Default

**Number of Availability Zones (AZs)** Info  
Choose the number of AZs in which to provision subnets. We recommend at least:

**Preview**

**VPC** Show details  
Your AWS virtual network  
MyVPC

**Subnets (6)**  
Subnets within this VPC

- ap-south-1a
  - A Public Subnet-1a
  - A Private Subnet-1a
- ap-south-1b
  - B Public Subnet-1b
  - B Private Subnet-1b
- ap-south-1c
  - C Public Subnet-1c
  - C Private Subnet-1c

**Route tables (4)**  
Route network traffic to resources

- Public route table without
- Private route table without
- Private route table without
- Private route table without

**Network connection**  
Connections to other networks

- Internet gateway without

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IPv4 CIDR block [Info](#)

Determine the starting IP and the size of your VPC using CIDR notation.

10.0.0.0/16

65,536 IPs

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

IPv6 CIDR block [Info](#)

- No IPv6 CIDR block
- Amazon-provided IPv6 CIDR block

Tenancy [Info](#)

Default

Number of Availability Zones (AZs) [Info](#)

Choose the number of AZs in which to provision subnets. We recommend at least two AZs for high availability.

1 2 3[▶ Customize AZs](#)Number of public subnets [Info](#)

The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

0 3 6Number of private subnets [Info](#)

The number of private subnets to add to your VPC. Use private subnets to secure backend resources that don't need public access.

0 3 6[▶ Customize subnets CIDR blocks](#)NAT gateways (\$) [Info](#)

← → C ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcWithResources

aws Services Search [Alt+5] Mumbai Divine Stag

VPC EC2

▶ Customize AZs

Number of public subnets [Info](#)  
The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

0 3

Number of private subnets [Info](#)  
The number of private subnets to add to your VPC. Use private subnets to secure backend resources that don't need public access.

0 3 6

▶ Customize subnets CIDR blocks

NAT gateways (\$) [Info](#)  
Choose the number of Availability Zones (AZs) in which to create NAT gateways.  
Note that there is a charge for each NAT gateway.

None In 1 AZ 1 per AZ

VPC endpoints [Info](#)  
Endpoints can help reduce NAT gateway charges and improve security by accessing S3 directly from the VPC. By default, full access policy is used. You can customize this policy at any time.

None S3 Gateway

DNS options [Info](#)  
 Enable DNS hostnames  
 Enable DNS resolution

▶ Additional tags

Create VPC

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# VPC created successfully

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

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VPC EC2

VPC dashboard X

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
- Peering connections

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Your VPCs (2) Info

Last updated less than a minute ago

Actions Create VPC

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table	Main
MyVPC	vpc-0cacebc7400be2222	Available	10.0.0.0/16	-	dopt-09d17a67b90e2f5...	rtb-0d032658c91a7d4f9	acl-0
-	vpc-0ca136a0d5df4e645	Available	172.31.0.0/16	-	dopt-09d17a67b90e2f5...	rtb-0abd0dca3b0e4bfc7	acl-0

Select a VPC above

# Subnets

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#subnets:vpcId=vpc-0cacebc7400be2222;sort=tag:Name

aws Services Search [Alt+S] Mumbai Divine Stag

VPC dashboard EC2

Subnets (6) Info Last updated less than a minute ago Actions Create subnet

Find resources by attribute or tag

VPC : vpc-0cacebc7400be2222 X Clear filters

Filter by VPC

vpc-0cacebc7400be2222 MyVPC Owner: 533267143298

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

Select a subnet

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	IPv6 CIDR association ID
Private Subnet-1a	subnet-0de0d332d84cf8e67	Available	vpc-0cacebc7400be2222   MyVPC	10.0.128.0/20	-	-
Private Subnet-1b	subnet-0a5f98956d9894d66	Available	vpc-0cacebc7400be2222   MyVPC	10.0.144.0/20	-	-
Private Subnet-1c	subnet-019c1b3561675d338	Available	vpc-0cacebc7400be2222   MyVPC	10.0.160.0/20	-	-
Public Subnet-1a	subnet-09fd41e3abf46d7a7	Available	vpc-0cacebc7400be2222   MyVPC	10.0.0.0/20	-	-
Public Subnet-1b	subnet-03bcff9abbdc1daee	Available	vpc-0cacebc7400be2222   MyVPC	10.0.16.0/20	-	-
Public Subnet-1c	subnet-0bdbbd5633126a676	Available	vpc-0cacebc7400be2222   MyVPC	10.0.32.0/20	-	-

# Public Route Table

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#RouteTables:vpcId=vpc-0cacebc7400be2222

aws Services Search [Alt+S] Mumbai Divine Stag

VPC dashboard EC2

Route tables (1/5) Info Find resources by attribute or tag VPC : vpc-0cacebc7400be2222 Clear filters Last updated less than a minute ago Actions Create route table

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
-	<a href="#">rtb-0d032658c91a7d4f9</a>	-	-	Yes	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-08a486013bd63637c</a>	<a href="#">subnet-0a5f98956d9894d66 / Private Subnet-1b</a>	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-0d7955112bd39be44</a>	<a href="#">subnet-0de0d332d84cf8e67 / Private Subnet-1a</a>	-	No	vpc-0cacebc7400be2222   MyVPC
<input checked="" type="checkbox"/> Public RT	<a href="#">rtb-051c71d84f617bfda</a>	<a href="#">3 subnets</a>	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-09e88cc0a8e2e1d48</a>	<a href="#">subnet-019c1b3561675d338 / Private Subnet-1c</a>	-	No	vpc-0cacebc7400be2222   MyVPC

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 Security Network ACLs Security groups

rtb-051c71d84f617bfda / Public RT Details Routes Subnet associations Edge associations Route propagation Tags

Details			
Route table ID <a href="#">rtb-051c71d84f617bfda</a>	Main <input type="checkbox"/> No	Explicit subnet associations <a href="#">3 subnets</a>	Edge associations -
VPC <a href="#">vpc-0cacebc7400be2222   MyVPC</a>	Owner ID <a href="#">533267143298</a>		

# Internet Gateway

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#igws:VpcId=vpc-0cacebc7400be2222

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

VPC dashboard X

EC2 Global View X

Filter by VPC v

vpc-0cacebc7400be2222 X MyVPC Owner: 533267143298

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

Security

Network ACLs

Security groups

Internet gateways (1/1) Info

Search

VPC ID : vpc-0cacebc7400be2222 X Clear filters

Actions Create internet gateway

MyIGW igw-01a4b0c8afad1bd5b Attached vpc-0cacebc7400be2222 | MyVPC 533267143298

igw-01a4b0c8afad1bd5b / MyIGW

Details Tags

Details

Internet gateway ID igw-01a4b0c8afad1bd5b	State Attached	VPC ID vpc-0cacebc7400be2222   MyVPC	Owner 533267143298
--	-------------------	---	-----------------------

# Step 3: Create Database Subnet Group

ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

## Amazon RDS

**Resources**

You are using the following Amazon RDS resources in the Asia Pacific (Mumbai) region (used/quota)

DB Instances (0/20)	Parameter groups (4)
Allocated storage (0 TB/100 TB)	Default (4)
Instances and storage include Neptune and DocumentDB. Increase DB instances limit	Custom (0/40)
DB Clusters (0/40)	Option groups (3)
Reserved instances (0/20)	Default (3)
Snapshots (0)	Custom (0/20)
Manual	Subnet groups (9/20)
DB Cluster (0/100)	Supported platforms  VPC
DB Instance (0/100)	Default network vpc-0ca136a0d5df4e645

**Subnet groups**

Parameter groups  
Option groups  
Custom engine versions  
Zero-ETL integrations

Events  
Event subscriptions

Recommendations   
Certificate update

**Create database**

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale a relational database in the cloud.

**Create database**

Note: your DB instances will launch in the Asia Pacific (Mumbai) region

**Recommended services**

CloudShell  
A browser-based shell with AWS CLI access from the AWS Management Console

Amazon Comprehend  
Analyze Unstructured Text

Detective  
Investigate and Analyze potential security issues

**Recommended for you**

Amazon RDS Backup and Restore using AWS Backup  
Learn how to backup and restore Amazon RDS databases using AWS Backup in just 10 minutes. [Learn more](#)

Time-Series Tables in PostgreSQL  
Step-by-step guide to design high-performance time series data tables on Amazon RDS for PostgreSQL. [Learn more](#)

Build RDS Operational Tasks  
Watch how to enable users to perform common tasks such as snapshots or restart DB instances in Amazon RDS. [Learn more](#)

Implementing Cross-Region DR  
Learn how to set up Cross-Region disaster recovery (DR) for Aurora PostgreSQL using an Aurora global database spanning multiple Regions. [Learn more](#)

https://ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#db-subnet-grou... © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

## Subnet groups (9)

Filter by subnet group

C Edit Delete Create DB subnet group

&lt; 1 &gt;

<input type="checkbox"/>	Name	Description	Status	VPC
<input type="checkbox"/>	<a href="#">default-vpc-02865e702a27462ba</a>	Created from the RDS Management Console	Complete	vpc-02865e702a27462ba
<input type="checkbox"/>	<a href="#">default-vpc-02882ca5aca37ea90</a>	Created from the RDS Management Console	Complete	vpc-02882ca5aca37ea90
<input type="checkbox"/>	<a href="#">default-vpc-04fbf950a7263c4f6</a>	Created from the RDS Management Console	Complete	vpc-04fbf950a7263c4f6
<input type="checkbox"/>	<a href="#">default-vpc-067a66a0c604ae700</a>	Created from the RDS Management Console	Complete	vpc-067a66a0c604ae700
<input type="checkbox"/>	<a href="#">default-vpc-0ca136a0d5df4e645</a>	Created from the RDS Management Console	Complete	vpc-0ca136a0d5df4e645
<input type="checkbox"/>	<a href="#">default-vpc-0d844b03120f39d27</a>	Created from the RDS Management Console	Complete	vpc-0d844b03120f39d27
<input type="checkbox"/>	<a href="#">default-vpc-0e13c6f1a2cc30a1f</a>	Created from the RDS Management Console	Complete	vpc-0e13c6f1a2cc30a1f
<input type="checkbox"/>	<a href="#">default-vpc-0e6d7b7478c349ab2</a>	Created from the RDS Management Console	Complete	vpc-0e6d7b7478c349ab2
<input type="checkbox"/>	<a href="#">default-vpc-0ef2a2f6f70a1c179</a>	Created from the RDS Management Console	Complete	vpc-0ef2a2f6f70a1c179

Dashboard

Databases

Query Editor

Performance insights

Snapshots

Exports in Amazon S3

Automated backups

Reserved instances

Proxies

## Subnet groups

Parameter groups

Option groups

Custom engine versions

Zero-ETL integrations New

Events

Event subscriptions

Recommendations 0

Certificate update

aws

Services

Search

[Alt+S]

Mumbai

VPC

EC2

[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.

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

← → C ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#create-db-subnet-group:

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2 For Database

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.

MyVPC (vpc-0cacebc7400be2222)

Add subnets

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

Choose an availability zone: ▾

ap-south-1a X ap-south-1b X ap-south-1c X

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

Select subnets ▾

subnet-019c1b3561675d338 (10.0.160.0/20) X

subnet-0a5f98956d9894d66 (10.0.144.0/20) X

subnet-0de0d332d84cf8e67 (10.0.128.0/20) X

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

Subnets selected (3)

Availability zone	Subnet ID	CIDR block
ap-south-1c	subnet-019c1b3561675d338	10.0.160.0/20

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ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#create-db-subnet-group:

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

### Add subnets

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

Choose an availability zone: ▾

ap-south-1a X ap-south-1b X ap-south-1c X

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

Select subnets: ▾

subnet-019c1b3561675d338 (10.0.160.0/20) X

subnet-0a5f98956d9894d66 (10.0.144.0/20) X

subnet-0de0d332d84cf8e67 (10.0.128.0/20) X

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

**Subnets selected (3)**

Availability zone	Subnet ID	CIDR block
ap-south-1c	subnet-019c1b3561675d338	10.0.160.0/20
ap-south-1b	subnet-0a5f98956d9894d66	10.0.144.0/20
ap-south-1a	subnet-0de0d332d84cf8e67	10.0.128.0/20

Cancel Create

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# Subnet group created successfully

← → C ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#db-subnet-groups-list: Search [Alt+S] Services Mumbai Divine Stag

aws VPC EC2

Amazon RDS

Successfully created Database-subnet group. [View subnet group](#)

RDS > Subnet groups

Subnet groups (10)

Filter by subnet group

Create DB subnet group

<input type="checkbox"/>	Name	Description	Status	VPC
<input type="checkbox"/>	<a href="#">database-subnet group</a>	For Database	✓ Complete	vpc-0cacebc7400be2222
<input type="checkbox"/>	<a href="#">default-vpc-02865e702a27462ba</a>	Created from the RDS Management Console	✓ Complete	vpc-02865e702a27462ba
<input type="checkbox"/>	<a href="#">default-vpc-02882ca5aca37ea90</a>	Created from the RDS Management Console	✓ Complete	vpc-02882ca5aca37ea90
<input type="checkbox"/>	<a href="#">default-vpc-04fbf950a7263c4f6</a>	Created from the RDS Management Console	✓ Complete	vpc-04fbf950a7263c4f6
<input type="checkbox"/>	<a href="#">default-vpc-067a66a0c604ae700</a>	Created from the RDS Management Console	✓ Complete	vpc-067a66a0c604ae700
<input type="checkbox"/>	<a href="#">default-vpc-0ca136a0d5df4e645</a>	Created from the RDS Management Console	✓ Complete	vpc-0ca136a0d5df4e645
<input type="checkbox"/>	<a href="#">default-vpc-0d844b03120f39d27</a>	Created from the RDS Management Console	✓ Complete	vpc-0d844b03120f39d27
<input type="checkbox"/>	<a href="#">default-vpc-0e13c6f1a2cc30a1f</a>	Created from the RDS Management Console	✓ Complete	vpc-0e13c6f1a2cc30a1f
<input type="checkbox"/>	<a href="#">default-vpc-0e6d7b7478c349ab2</a>	Created from the RDS Management Console	✓ Complete	vpc-0e6d7b7478c349ab2
<input type="checkbox"/>	<a href="#">default-vpc-0ef2a2f6f70a1c179</a>	Created from the RDS Management Console	✓ Complete	vpc-0ef2a2f6f70a1c179

Subnet groups

Parameter groups

Option groups

Custom engine versions

Zero-ETL integrations [New](#)

Events

Event subscriptions

Recommendations [0](#)

Certificate update

# Step 4: Create security group for RDS

The screenshot shows the AWS EC2 Home page for the Asia Pacific (Mumbai) Region. The left sidebar is collapsed, and the main content area displays various EC2 resources and service health information.

**Resources**

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

Instances (running)	0	Auto Scaling Groups	0	Capacity Reservations	0
Dedicated Hosts	0	Elastic IPs	0	Instances	0
Key pairs	4	Load balancers	0	Placement groups	0
Security groups	5	Snapshots	0	Volumes	0

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

**Service health**

Region: Asia Pacific (Mumbai) Status: This service is operating normally.

**Zones**

Zone name	Zone ID
ap-south-1a	aps1-az1
ap-south-1b	aps1-az3
ap-south-1c	aps1-az2

**Account attributes**

**Default VPC**: [vpc-0ca136a0d5df4e645](#)

**Settings**

Data protection and security  
Zones

**EC2 Free Tier** [Info](#)  
Offers for all AWS Regions.

2 EC2 free tier offers in use

End of month forecast

⚠️ 0 offers forecasted to exceed free tier limit.

Exceeds free tier

⚠️ 0 offers exceeded and is now pay-as-you-go pricing.

[View Global EC2 resources](#)

**Offer usage (monthly)**

Linux EC2 Instances: 722.490832 hours remaining (4%)

Storage space on EBS: 29.7 GB remaining (1%)

[View all AWS Free Tier offers](#)

← → G ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#SecurityGroups:

aws Services Search [Alt+S] □ Actions Export security groups to CSV Create security group

Mumbai Divine Stag

VPC EC2 Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

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

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**Security Groups (5) Info**

Find resources by attribute or tag

Name	Security group ID	Security group name	VPC ID	Description	Owner
-	sg-0d68f090d9927c01a	launch-wizard-1	vpc-0ca136a0d5df4e645	launch-wizard-1 created 2024-03-16T...	533267143298
-	sg-0377cd7b138e05f47	launch-wizard-3	vpc-0ca136a0d5df4e645	launch-wizard-3 created 2024-08-09T...	533267143298
-	sg-08fd40326c532816d	launch-wizard-2	vpc-0ca136a0d5df4e645	launch-wizard-2 created 2024-05-04T...	533267143298
-	sg-0565e3c2db5c03418	default	vpc-0ca136a0d5df4e645	default VPC security group	533267143298
-	sg-018ad36d34d6db369	default	vpc-0cacebc7400be2222	default VPC security group	533267143298



[EC2](#) > [Security Groups](#) > Create security group

## Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

## Basic details

### Security group name info

Database-SG

Name cannot be edited after creation

### Description Info

## Allow Database

VPC info

vpc-0cacebc7400be2222 (MyVPC)

## Inbound rules Info

Type	Info	Protocol	Info	Port range	Info	Source	Info	Description - optional	Info
MYSQL/Aurora	▼	TCP		3306		Custom	▼	10.0.0.0/16	X

Add rule

MySQL/Aurora ▾ TCP 3306 Custom 10.0.0.0/16 Delete

10.0.0.0/16

Add rule

### Outbound rules Info

Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Destination <small>Info</small>	Description - optional <small>Info</small>
All traffic ▾	All	All	Custom ▾	0.0.0.0/0  Delete

0.0.0.0/0

Add rule

Rules with destination of 0.0.0.0/0 or ::/0 allow your instances to send traffic to any IPv4 or IPv6 address. We recommend setting security group rules to be more restrictive and to only allow traffic to specific known IP addresses.

### Tags - optional

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

No tags associated with the resource.

Add new tag

You can add up to 50 more tags

Cancel

Create security group

# Security group created

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

Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

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 Snapshots Lifecycle Manager

Network & Security Security Groups Elastic IPs Placement Groups Key Pairs

CloudShell Feedback

Security group (sg-0f7afeb73e4e7f2f2 | Database-SG) was created successfully

Details

Security Groups (1/6) Info

Find resources by attribute or tag

C Actions Export security groups to CSV Create security group

Name	Security group ID	Security group name	VPC ID	Description	Owner
-	sg-0d68f090d9927c01a	launch-wizard-1	vpc-0ca136a0d5df4e645	launch-wizard-1 created 2024-03-16T...	533267143298
-	sg-0377cd7b138e05f47	launch-wizard-3	vpc-0ca136a0d5df4e645	launch-wizard-3 created 2024-08-09T...	533267143298
-	sg-08fd40326c532816d	launch-wizard-2	vpc-0ca136a0d5df4e645	launch-wizard-2 created 2024-05-04T...	533267143298
-	sg-0565e3c2db5c03418	default	vpc-0ca136a0d5df4e645	default VPC security group	533267143298
<input checked="" type="checkbox"/> db-sg	sg-0f7afeb73e4e7f2f2	Database-SG	vpc-0cacebc7400be2222	Allow Database	533267143298
-	sg-018ad36d34d6db369	default	vpc-0cacebc7400be2222	default VPC security group	533267143298

sg-0f7afeb73e4e7f2f2 - Database-SG

Details Inbound rules Outbound rules Tags

Details

Security group name	Security group ID	Description	VPC ID
Database-SG	sg-0f7afeb73e4e7f2f2	Allow Database	vpc-0cacebc7400be2222

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# Step 5: Create Database

ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#launch-dbinstance:

aws Services Search [Alt+S] Mumbai Divine Stage

RDS > Create database

## Create database

**Choose a database creation method** Info

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 

MariaDB 

PostgreSQL 

Oracle 

**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-region.

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ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#launch-dbinstance:

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VPC EC2 PostgreSQL Oracle MySQL

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-region.

MySQL Community Edition

Engine version: MySQL 8.0.35

Show versions that support the Multi-AZ DB cluster

Show versions that support the Amazon RDS Optimized Writes

Enable RDS Extended Support

Templates

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 Enable RDS Extended Support [Info](#)

Amazon RDS Extended Support is a [paid offering](#). By selecting this option, you consent to being charged for this offering if you are running your database major version past the RDS end of standard support date for that version. Check the end of standard support date for your major version in the [RDS for MySQL documentation](#).

## Templates

Choose a sample template to meet your use case:

 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.

 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.

 Multi-AZ DB instance (not supported for Multi-AZ DB cluster snapshot)

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.

 Single DB instance (not supported for Multi-AZ DB cluster snapshot)

Creates a single DB instance with no standby DB instances.

## Settings

DB instance identifier [Info](#)

## 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-region.



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EC2



## Settings

### DB instance identifier

Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 60 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

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

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

Password strength

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

#### Confirm master password

## 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-region.

ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#launch-dbinstance:

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

### MySQL

**Instance configuration**

The DB instance configuration options below are limited to those supported by the engine that you selected above.

DB instance class [Info](#)

▼ 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.t3.micro  
2 vCPUs 1 GiB RAM Network: 2,085 Mbps

**Storage**

Storage type [Info](#)  
Provisioned IOPS SSD (io2) storage volumes are now available.

General Purpose SSD (gp2)  
Baseline performance determined by volume size.

Allocated storage [Info](#)  
20 GiB

The minimum value is 20 GiB and the maximum value is 6,144 GiB

After you modify the storage for a DB instance, the status of the DB instance will be in storage-optimization.

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-region.

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ⓘ After you modify the storage for a DB instance, the status of the DB instance will be in storage-optimization. Your instance will remain available as the storage-optimization operation completes. [Learn more](#)

#### ▼ Storage autoscaling

##### Storage autoscaling [Info](#)

Provides dynamic scaling support for your database's storage based on your application's needs.

[Enable storage autoscaling](#)

Enabling this feature will allow the storage to increase after the specified threshold is exceeded.

##### 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.

###### 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.

MyVPC (vpc-0cacebc7400be2222)

6 Subnets, 3 Availability Zones

Only VPCs with a corresponding DB subnet group are listed.

## 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-region.



ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#launch-dbinstance:

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2 Database-SG X MySQL X

Availability Zone [Info](#)  
No preference ▾

RDS Proxy  
RDS Proxy is a fully managed, highly available database proxy that improves application scalability, resiliency, and security.  
 Create an RDS Proxy [Info](#)  
RDS automatically creates an IAM role and a Secrets Manager secret for the proxy. RDS Proxy has additional costs. For more information, see [Amazon RDS Proxy pricing](#)

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 20, 2061

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

▶ Additional configuration

Tags - *optional*  
A tag consists of a case-sensitive key-value pair.  
No tags associated with the resource.  
[Add new tag](#)  
You can add up to 50 more tags.

Database authentication

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-region.

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## Database authentication

Database authentication options: [Info](#) **Password authentication**

Authenticates using database passwords.

 **Password and IAM database authentication**

Authenticates using the database password and user credentials through AWS IAM users and roles.

 **Password and Kerberos authentication**

Choose a directory in which you want to allow authorized users to authenticate with this DB instance using Kerberos Authentication.

## Monitoring

 **Enable Enhanced Monitoring**

Enabling Enhanced Monitoring metrics are useful when you want to see how different processes or threads use the CPU.

## ► Additional configuration

Database options, encryption turned on, backup turned on, backtrack turned off, maintenance, CloudWatch Logs, delete protection turned off.

## Estimated Monthly costs

DB instance	18.25 USD
Storage	2.62 USD
<b>Total</b>	<b>20.87 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.

For more information about costs for this DB instance, see the [Amazon CloudWatch Metrics Data Collector](#).

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-region.

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Option group

default:mysql-8-0

**Backup** Enable automated backups

Creates a point-in-time snapshot of your database

Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to details [here](#).

## Backup retention period

The number of days (1-35) for which automatic backups are kept.

1 day

## Backup window

The daily time range (in UTC) during which RDS takes automated backups.

- 
- Choose a window
- 
- 
- No preference

 Copy tags to snapshots

## Backup replication

 Enable replication in another AWS Region

Enabling replication automatically creates backups of your DB instance in the selected Region, for disaster recovery, in addition to the current Region.

**Encryption** Enable encryption

Choose to encrypt the given instance. Master key IDs and aliases appear in the list after they have been created using the AWS Key Management Service console.

## AWS KMS key

**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-region.



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disaster recovery, in addition to the current Region.

## Encryption

### Enable encryption

Choose to encrypt the given instance. Master key IDs and aliases appear in the list after they have been created using the AWS Key Management Service console. [Info](#)

### AWS KMS key [Info](#)

(default) aws/rds

## Account

533267143298

## KMS key ID

15da970c-380b-4032-ae99-2ed80a023eda

## Log exports

Select the log types to publish to Amazon CloudWatch Logs:

- Audit log
- Error log
- General log
- Slow query log

## IAM role

The following service-linked role is used for publishing logs to CloudWatch Logs:

RDS service-linked role

## Maintenance

### Auto minor version upgrade [Info](#)

### Enable auto minor version upgrade

Enabling auto minor version upgrade will automatically upgrade to new minor versions as they are released. The automatic upgrades occur during the maintenance window for the database.

### Maintenance window [Info](#)

Select the period you want pending modifications or maintenance applied to the database by Amazon RDS.

## 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-region.



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## Maintenance

Auto minor version upgrade [Info](#)

**Enable auto minor version upgrade**

Enabling auto minor version upgrade will automatically upgrade to new minor versions as they are released. The automatic upgrades occur during the maintenance window for the database.

Maintenance window [Info](#)

Select the period you want pending modifications or maintenance applied to the database by Amazon RDS.

Choose a window

No preference

## Deletion protection

**Enable deletion protection**

Protects the database from being deleted accidentally. While this option is enabled, you can't delete the database.

## Estimated Monthly costs

DB instance	18.25 USD
Storage	2.62 USD
<b>Total</b>	<b>20.87 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](#).

## Estimated monthly costs

The Amazon RDS Free Tier is available to you for 12 months. Each calendar month, the free tier will allow you to use the Amazon RDS resources listed below for free:

## 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-region.



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### Estimated Monthly costs

DB instance	18.25 USD
Storage	2.62 USD
<b>Total</b>	<b>20.87 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](#).

### Estimated monthly costs

The Amazon RDS Free Tier is available to you for 12 months. Each calendar month, the free tier will allow you to use the Amazon RDS resources listed below for free:

- 750 hrs of Amazon RDS in a Single-AZ db.t2.micro, db.t3.micro or db.t4g.micro Instance.
- 20 GB of General Purpose Storage (SSD).
- 20 GB for automated backup storage and any user-initiated DB Snapshots.

[Learn more about AWS Free Tier.](#)

When your free usage expires or if your application use exceeds the free usage tiers, you simply pay standard, pay-as-you-go service rates as described in the [Amazon RDS Pricing page](#).

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

### 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-region.

# Database created successfully

ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#databases:

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VPC EC2

Amazon RDS

Databases (1)

Filter by databases

DB identifier Status Role Engine Region & AZ Size Recommendations CPU Current activity Maintenance

DB identifier	Status	Role	Engine	Region & AZ	Size	Recommendations	CPU	Current activity	Maintenance
mysql-database-server	Backing-up	Instance	MySQL Community	ap-south-1c	db.t3.micro	-	-	-	none

Group resources Modify Actions Restore from S3 Create database

< 1 >

Dashboard Databases Query Editor Performance insights Snapshots Exports in Amazon S3 Automated backups Reserved instances Proxies Subnet groups Parameter groups Option groups Custom engine versions Zero-ETL integrations

Events Event subscriptions

Recommendations Certificate update

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# Step 6: Create Blue/Green Deployment

The screenshot shows the AWS RDS (Amazon Relational Database Service) console interface. The left sidebar lists various services like Dashboard, Databases, and Subnet groups. The main area displays a table of databases, with one entry for 'mysql-database-server' listed as 'Available'. On the right, a vertical menu provides quick actions such as 'Convert to Multi-AZ deployment', 'Stop temporarily', and 'Reboot'. A prominent feature is the 'Actions' dropdown menu, which includes options like 'Create database', 'Create read replica', and 'Create Aurora read replica'. The specific option 'Create Blue/Green Deployment - new' is highlighted with a red box.

Amazon RDS

RDS > Databases

Databases (1)

DB identifier Status Role Engine Region & AZ Size Recommendations

mysql-database-server	Available	Instance	MySQL Community	ap-south-1c	db.t3.micro
-----------------------	-----------	----------	-----------------	-------------	-------------

Filter by databases

Actions ▾

Restore from S3

Create database

Quick Actions - New

Convert to Multi-AZ deployment

Stop temporarily

Reboot

Delete

Set up EC2 connection

Set up Lambda connection

Create read replica

Create Aurora read replica

Create Blue/Green Deployment - new

Promote

Take snapshot

Restore to point in time

Migrate snapshot

Create RDS Proxy

Create ElastiCache cluster - new

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Create Blue/Green Deployment: mysql-database-server [Info](#)

Create a Blue/Green Deployment that clones the resources of your current production environment (blue) to a staging environment (green). You can modify the green environment without affecting the blue environment. When you're ready, switch to the green environment to make it the current production environment.

## Settings

Identifiers [Info](#)

Blue database identifier

Selected database identifiers in the current production environment. The databases in the green environment are generated automatically when the Blue/Green Deployment is created.

## mysql-database-server

### Blue/Green Deployment identifier

Type a name for your Blue/Green Deployment. The name must be unique across all Blue/Green Deployments owned by your AWS account in the current AWS Region.

Mysql-db-blue-green-deploy

The Blue/Green Deployment identifier is case-insensitive, but is stored as all lowercase (as in "mybgdeployment"). Constraints: 1 to 60 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

## Blue/Green Deployment settings

Choose the engine version for green databases.

MySQL 8.0.39 - recommended

Choose the DB parameter group for green databases.

default mysql8.0

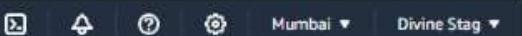
**i** You can modify additional settings after the Blue/Green Deployment is created.



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EC2

MySQL 8.0.39 - recommended



Choose the DB parameter group for green databases.

default.mysql8.0



You can modify additional settings after the Blue/Green Deployment is created.

### RDS Optimized Writes Info

Amazon RDS Optimized Writes provide up to 2x improvement in write transaction throughput.

Blue DB instance class

db.t3.micro

 Enable Optimized Writes for green database

### Storage

#### ▼ Storage configuration upgrade Info

Storage file system configuration upgrade

RDS recommends a storage file system configuration upgrade for your selected database instance.

#### ► Estimated monthly costs for green database

20.87 USD

A Blue/Green Deployment creates new databases in the green environment. The costs for the databases on the green environment are similar to the costs for the databases in the blue environment. These costs include the current standard pricing for the DB instances, storage, I/Os, in addition to enabled features such as a Multi-AZ deployment, backups, and Amazon RDS Performance Insights. This estimate shows the costs for the green databases only.

← → C ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#create-staging-environment-databaseid=mysql-database-server;

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

RDS Optimized Writes [Info](#)  
Amazon RDS Optimized Writes provide up to 2x improvement in write transaction throughput.

Blue DB instance class Blue  
db.t3.micro

Enable Optimized Writes for green database

**Storage**

Storage configuration upgrade [Info](#)  
 Storage file system configuration upgrade  
RDS recommends a storage file system configuration upgrade for your selected database instance.

Estimated monthly costs for green database **20.87 USD**  
A Blue/Green Deployment creates new databases in the green environment. The costs for the databases on the green environment are similar to the costs for the databases in the blue environment. These costs include the current standard pricing for the DB instances, storage, I/Os, in addition to enabled features such as a Multi-AZ deployment, backups, and Amazon RDS Performance Insights. This estimate shows the costs for the green databases only.

Ensure that IAM policies are applied before switchover  
IAM roles aren't copied over from the blue environment to the green environment. Make sure that your IAM policies are appropriately applied to the green environment before you switch over the blue/green deployment.  
[Learn more](#)

Cancel **Create staging environment**

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← → C ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#databases:

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

Amazon RDS X

RDS is creating Blue/Green Deployment mysql-db-blue-green-deploy and green database  
Preparing to create Blue/Green Deployment

View details X

Dashboard

Databases

Query Editor

Performance insights

Snapshots

Exports in Amazon S3

Automated backups

Reserved instances

Proxies

Subnet groups

Parameter groups

Option groups

Custom engine versions

Zero-ETL integrations New

Events

Event subscriptions

Recommendations 0

Certificate update

RDS > Databases

Databases (2)

Filter by databases

Group resources C Modify Actions ▾ Restore from S3 Create database

DB identifier	Status	Role	Engine	Region & AZ	Size	Recommendations	CPU	Current
mysql-database-server	Blue Available	Primary	MySQL Community	ap-south-1c	db.t3.micro	-	-	5.77%
mysql-db-blue-green-deploy	Provisioning	Blue/Green Deployment	-	-	-	-	-	-

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# Prerequisites for creating Elastic Beanstalk Environment

## Step 1: Create NAT gateway to access internet

The screenshot shows the AWS VPC dashboard with the 'NAT gateways' section selected. The top navigation bar includes links for Services, Search, and Mumbai. The left sidebar lists various VPC-related options like Your VPCs, Subnets, Route tables, Internet gateways, Egress-only Internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, and Peering connections. The 'NAT gateways' link under Security is also highlighted in blue. The main content area displays a table titled 'NAT gateways' with columns for Name, NAT gateway ID, Connectivity..., State, State message, Primary public IP..., Primary private IP..., Primary network..., and VPC. A search bar at the top of the table allows filtering by attribute or tag. Below the table, a message says 'No NAT gateways found'. At the bottom of the page, there is a section titled 'Select a NAT gateway' with three small icons.

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

NAT gateways Info

Find resources by attribute or tag

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

Select a NAT gateway

Create NAT gateway

Services

Search [Alt+S]

Mumbai

Divine Stag

VPC EC2

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**
- Peering connections

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

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

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← → C ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateNatGateway:

aws Services Search [Alt+S] VPC EC2 Mumbai Divine Stag

Elastic IP address 13.126.176.104 (eipalloc-04ecc2bb519f40902) allocated.

VPC > NAT gateways > Create NAT gateway

## Create NAT gateway Info

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

### NAT gateway settings

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

### 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 - <i>optional</i>

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← → C ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateNatGateway:

aws Services Search [Alt+5] Mumbai Divine Stag

VPC EC2

Elastic IP address 13.126.176.104 (eipalloc-04ecc2bb519f40902) allocated.

### NAT gateway settings

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

Subnet  
Select a subnet in which to create the NAT gateway.  
subnet-09fd41e3abf46d7a7 (Public Subnet-1a)

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

Elastic IP allocation ID [Info](#)  
Assign an Elastic IP address to the NAT gateway.  
eipalloc-04ecc2bb519f40902 [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
Q Name X	Q MyNATGateway X Remove

Add new tag  
You can add 49 more tags.

Create NAT gateway

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## Step 2: Associate NAT gateway with Private Route Table

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

VPC dashboard X

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

Peering connections

Network ACLs

Security groups

Rule groups

Domain lists

Last updated less than a minute ago

Actions ▾

Create route table

Route tables (1/6) Info

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
-	rtb-0d032658c91a7d4f9	-	-	Yes	vpc-0acebc7400be2222   MyVPC
<input checked="" type="checkbox"/> -	rtb-08a486013bd63637c	subnet-0a5f98956d9894d66 / Private Subnet-1b	-	No	vpc-0acebc7400be2222   MyVPC
<input type="checkbox"/> -	rtb-0d7955112bd39be44	subnet-0de0d332d84cf8e67 / Private Subnet-1a	-	No	vpc-0acebc7400be2222   MyVPC
<input type="checkbox"/> -	rtb-0ahd0dca3b0e4bf7	-	-	Yes	vpc-0ca136a0d5df4e645
<input type="checkbox"/> Public RT	rtb-051c71d84f617bfda	3 subnets	-	No	vpc-0acebc7400be2222   MyVPC
<input type="checkbox"/> -	rtb-09e88cc0a8e2e1d48	subnet-019c1b3561675d338 / Private Subnet-1c	-	No	vpc-0acebc7400be2222   MyVPC

rtb-08a486013bd63637c

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

Both ▾ **Edit routes**

Routes (1)

Filter routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRoutes:RouteTableId=rtb-08a486013bd63637c

Services Search [Alt+S]

VPC EC2

VPC > Route tables > rtb-08a486013bd63637c > Edit routes

## Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	NAT Gateway	-	No

Add route Remove

Cancel Preview Save changes

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

VPC dashboard X

Services Search [Alt+S]

aws VPC EC2

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

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Route tables (1/6) Info

Last updated less than a minute ago

Actions Create route table

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
-	<a href="#">rtb-0d032658c91a7d4f9</a>	-	-	Yes	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-08a486013bd63637c</a>	<a href="#">subnet-0a5f98956d9894d66 / Private Subnet-1b</a>	-	No	vpc-0cacebc7400be2222   MyVPC
<input checked="" type="checkbox"/> -	<a href="#">rtb-0d7955112bd39be44</a>	<a href="#">subnet-0de0d332d84cf8e67 / Private Subnet-1a</a>	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-0abd0dca3b0e4bf7</a>	-	-	Yes	vpc-0ca136a0d5df4e645
Public RT	<a href="#">rtb-051c71d84f617bfda</a>	3 subnets	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-09e88cc0a8e2e1d48</a>	<a href="#">subnet-019c1b3561675d338 / Private Subnet-1c</a>	-	No	vpc-0cacebc7400be2222   MyVPC

rtb-0d7955112bd39be44

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (1)

Both Edit routes

Filter routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

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← → ⌂ ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRoutes:RouteTableId=rtb-0d7955112bd39be44

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

VPC > Route tables > rtb-0d7955112bd39be44 > Edit routes

## Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	NAT Gateway	-	No
	nat-0286663b768b576b1		<button>Remove</button>

Add route

Cancel Preview Save changes

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

aws Services Search [Alt+5] Mumbai Divine Stag

VPC EC2

VPC dashboard X

EC2 Global View

Filter by VPC ▾

Virtual private cloud

Your VPCs

Subnets

**Route tables**

Internet gateways

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DHCP option sets

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NAT gateways

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Security

Network ACLs

Security groups

DNS firewall

Rule groups

Domain lists

Updated routes for rtb-0d7955112bd39be44 successfully

Details

Route tables (1/6) Info

Last updated less than a minute ago

Actions Create route table

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
-	<a href="#">rtb-0d032658c91a7d4f9</a>	-	-	Yes	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-08a486013bd63637c</a>	<a href="#">subnet-0a5f98956d9894d66 / Private Subnet-1b</a>	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-0d7955112bd39be44</a>	<a href="#">subnet-0de0d332d84cf8e67 / Private Subnet-1a</a>	-	No	vpc-0cacebc7400be2222   MyVPC
-	<a href="#">rtb-0abd0dc3b0e4bfcc7</a>	-	-	Yes	vpc-0ca136a0d5df4e645
Public RT	<a href="#">rtb-051c71d84f617bfda</a>	3 subnets	-	No	vpc-0cacebc7400be2222   MyVPC
<input checked="" type="checkbox"/> -	<a href="#">rtb-09e88cc0a8e2e1d48</a>	<a href="#">subnet-019c1b3561675d338 / Private Subnet-1c</a>	-	No	vpc-0cacebc7400be2222   MyVPC

rtb-09e88cc0a8e2e1d48

Details Routes Subnet associations Edge associations Route propagation Tags

Both Edit routes

Filter routes:

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

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## Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	<input checked="" type="checkbox"/> Active	No
<input type="text" value="Q_ 0.0.0.0/0"/> X	<input type="text" value="Q_ local"/> X	-	<input type="checkbox"/> No
<input type="text" value="Q_ nat-0286663b768b576b1"/> X	<input type="text" value="Q_ NAT Gateway"/> X	-	<input type="button" value="Remove"/>

Add route

**Cancel**

Preview

**Save changes**

# Step 2: Creating IAM role for Elatic Beanstalk

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/home

IAM Services Search [Alt+S] Global Divine Stag

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management

User groups

Users

**Roles** (highlighted with a red box)

Policies

Identity providers

Account settings

Access reports

Access Analyzer

External access

Unused access

Analyzer settings

Credential report

Organization activity

Service control policies

Related consoles

IAM Identity Center

AWS Organizations

IAM Dashboard

Security recommendations

- Add MFA for root user
- Root user has no active access keys

Add MFA

AWS Account

Account ID: 533267143298

Account Alias: Create

Sign-in URL for IAM users in this account: https://533267143298.signin.aws.amazon.com/console

IAM resources

User groups	Users	Roles	Policies	Identity providers
0	0	23	7	0

What's new

- AWS IAM Access Analyzer now offers policy checks for public and critical resource access. 2 months ago
- AWS IAM Access Analyzer now offers recommendations to refine unused access. 2 months ago
- AWS Launches Console-based Bulk Policy Migration for Billing and Cost Management. Console Access. 3 months ago
- IAM Roles Anywhere now supports modifying the mapping of certificate attributes. 4 months ago

View all

more

Quick Links

My security credentials

Manage your access keys, multi-factor authentication (MFA) and other credentials.

Tools

Policy simulator

The simulator evaluates the policies that you choose and determines the effective permissions for each of the actions that you specify.

Additional information

Security best practices in IAM

IAM documentation

Videos, blog posts, and additional resources

https://us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles

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us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles

Identity and Access Management (IAM)

IAM > Roles

Roles (23) Info

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Search

Create role

<input type="checkbox"/>	Role name	Trusted entities	Last activity
<input type="checkbox"/>	<a href="#">Accessforelasticbeanstalk</a>	AWS Service: ec2	50 days ago
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240716T133010</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	-
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240718T203137</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	-
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240718T221118</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	-
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240718T222852</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	32 days ago
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240720T091046</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	22 days ago
<input type="checkbox"/>	<a href="#">AmazonRedshift-CommandsAccessRole-20240730T192931</a>	AWS Service: redshift, and 2 more. <small>[edit]</small>	22 days ago
<input type="checkbox"/>	<a href="#">AWSBackupDefaultServiceRole</a>	AWS Service: backup	36 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAmazonElasticFileSystem</a>	AWS Service: elasticfilesystem (Service-Linked Role)	96 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAmazonFSx</a>	AWS Service: fsx (Service-Linked Role)	116 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForApplicationAutoScaling_DynamoDBTable</a>	AWS Service: dynamodb.application	36 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAutoScaling</a>	AWS Service: autoscaling (Service-Linked Role)	20 hours ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForBackup</a>	AWS Service: backup (Service-Linked Role)	10 hours ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForElasticBeanstalk</a>	AWS Service: elasticbeanstalk (Service-Linked Role)	50 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForElasticLoadBalancing</a>	AWS Service: elasticloadbalancing (Service-Linked Role)	20 hours ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForGlobalAccelerator</a>	AWS Service: globalaccelerator (Service-Linked Role)	-
<input type="checkbox"/>	<a href="#">AWSServiceRoleForRDS</a>	AWS Service: rds (Service-Linked Role)	8 minutes ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForRedshift</a>	AWS Service: redshift (Service-Linked Role)	22 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForSupport</a>	AWS Service: support (Service-Linked Role)	3 hours ago

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us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create

aws Services Search [Alt+S]

VPC EC2

IAM > Roles > Create role

Step 1 Select trusted entity

Step 2 Add permissions

Step 3 Name, review, and create

## Select trusted entity Info

### Trusted entity type

AWS service  
Allow AWS services like EC2, Lambda, or others to perform actions in this account.

AWS account  
Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

Web identity  
Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

SAML 2.0 federation  
Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

Custom trust policy  
Create a custom trust policy to enable others to perform actions in this account.

### Use case

Allow an AWS service like EC2, Lambda, or others to perform actions in this account.

Service or use case:

Choose a use case for the specified service.

Use case

Elastic Beanstalk - Customizable  
Allows Elastic Beanstalk to create and manage AWS resources on your behalf.

Elastic Beanstalk  
Allows Elastic Beanstalk to create and manage AWS resources on your behalf.

Cancel

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us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create?trustedEntityType=AWS\_SERVICE&selectedService=ElasticBeanstalk&selectedUseCase=ElasticBeanstalk

aws Services Search [Alt+S] Global ▾ Divine Stag ▾

VPC EC2

IAM > Roles > Create role

Step 1 Select trusted entity

Step 2 Add permissions

Step 3 Name, review, and create

## Add permissions Info

Permissions policies (2) Info  
The type of role that you selected requires the following policy.

Policy name	Type
<input checked="" type="checkbox"/> AWSElasticBeanstalkEnhancedHealth	AWS managed
<input checked="" type="checkbox"/> AWSElasticBeanstalkService	AWS managed

▶ Set permissions boundary - optional

Cancel Previous Next

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## Name, review, and create

## Role details

## Role name

Enter a meaningful name to identify this role.

Elasticbeanstalk-role

Maximum 64 characters. Use alphanumeric and '+'-, '@-' characters.

## Description

Add a short explanation for this role.

Allows Elastic Beanstalk to create and manage AWS resources on your behalf.

Maximum 1000 characters. Use letters (A-Z and a-z), numbers (0-9), tabs, new lines, or any of the following characters: \_+=..@-/\[]!%\$%^()~`

## Step 1: Select trusted entities

Edit

## Trust policy

```
1 - [c] "Version": "2012-10-17",
2 -   "Statement": [
3 -     {
4 -       "Sid": "",
5 -       "Effect": "Allow",
6 -       "Principal": [
7 -         {
8 -           "Service": [
9 -             "elasticbeanstalk.amazonaws.com"
10 -           ]
11 -         },
12 -         "Action": [
13 -           "sts:AssumeRole"
14 -         ],
15 -         "Condition": [
16 -           "StringEquals": [
17 -             "sts:ExternalId": "elasticbeanstalk"
18 -           ]
19 -         }
20 -       ]
21 -     }
22 -   ]
```

## Step 2: Add permissions

Edit

aws  
VPC EC2

Search [Alt+5]

## Trust policy

```
3 - "Statement": [
4 -   {
5 -     "Sid": "",
6 -     "Effect": "Allow",
7 -     "Principal": [
8 -       "service-role/AWSLambdaBasicExecutionRole"
9 -     ]
10 -   },
11 -   {
12 -     "Action": [
13 -       "sts:AssumeRole"
14 -     ],
15 -     "Condition": [
16 -       "StringEquals": [
17 -         "sts:ExternalId": "elasticbeanstalk"
18 -       ]
19 -     }
20 -   }
21 - ],
22 - ]
```

## Step 2: Add permissions

[Edit](#)

## Permissions policy summary

Policy name [Edit](#)[AWSElasticBeanstalkEnhancedHealth](#)[AWSElasticBeanstalkService](#)

## Type

AWS managed

## Attached as

Permissions policy

AWS managed

Permissions policy

## Step 3: Add tags

Add tags - optional [Info](#)

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

[Add new tag](#)

You can add up to 50 more tags.

[Cancel](#)[Previous](#)[Create role](#)

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles

Identity and Access Management (IAM)

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Related consoles

IAM Identity Center

AWS Organizations

CloudShell Feedback

Search [Alt+5]

Global Divine Stage

Search

Star

Feedback

Help

Global

Create role

Elb

1 match

Role name

Elbeanstalk-role

Trusted entities

Last activity

AWS Service: elasticbeanstalk

Roles Anywhere

Info

Manage

Access AWS from your non AWS workloads

Operate your non AWS workloads using the same authentication and authorization strategy that you use within AWS.

X.509 Standard

Use your own existing PKI infrastructure or use AWS Certificate Manager Private Certificate Authority to authenticate identities.

Temporary credentials

Use temporary credentials with ease and benefit from the enhanced security they provide.

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us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/details/Elbeanstalk-role?section=permissions

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Related consoles

IAM Identity Center

AWS Organizations

Saved filters

Global

Divine Stag

Search IAM

IAM > Roles > Elbeanstalk-role

Elbeanstalk-role Info

Allows Elastic Beanstalk to create and manage AWS resources on your behalf.

Summary Edit

Creation date: August 22, 2024, 08:47 (UTC+05:30)

Last activity: -

ARN: arn:aws:iam::533267143298:role/Elbeanstalk-role

Maximum session duration: 1 hour

Permissions Trust relationships Tags Access Advisor Revoke sessions

Permissions policies (2) Info

You can attach up to 10 managed policies.

Filter by Type: All types

Search:  Attached entities:

Policy name	Type	Attached entities
<a href="#">AWS:ElasticBeanstalkEnhancedHealth</a>	AWS managed	2
<a href="#">AWS:ElasticBeanstalkService</a>	AWS managed	2

Permissions boundary (not set)

Generate policy based on CloudTrail events

You can generate a new policy based on the access activity for this role, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. Learn more Info

Generate policy

https://us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/details/Elbeanstalk-role?section=permissions

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us-east-1.console.aws.amazon.com/iam/home#region=ap-south-1#/roles/details/Elbeanstalk-role/attach-policies

Services Search [Alt+S]

VPC EC2

Filter by Type: All types

Policy name Type Description

Policy name	Type	Description
<input checked="" type="checkbox"/> AdministratorAccess	AWS managed - job function	Provides full access to AWS services an...
<input type="checkbox"/> AdministratorAccess-Amplify	AWS managed	Grants account administrative permis...
<input type="checkbox"/> AdministratorAccess-AWSElasticBeanstalk	AWS managed	Grants account administrative permis...
<input type="checkbox"/> AlexaForBusinessDeviceSetup	AWS managed	Provide device setup access to AlexaFo...
<input type="checkbox"/> AlexaForBusinessFullAccess	AWS managed	Grants full access to AlexaForBusiness ...
<input type="checkbox"/> AlexaForBusinessGatewayExecution	AWS managed	Provide gateway execution access to A...
<input type="checkbox"/> AlexaForBusinessLifesizeDelegatedAccessPolicy	AWS managed	Provide access to Lifesize AVS devices
<input type="checkbox"/> AlexaForBusinessPolyDelegatedAccessPolicy	AWS managed	Provide access to Poly AVS devices
<input type="checkbox"/> AlexaForBusinessReadOnlyAccess	AWS managed	Provide read only access to AlexaForB...
<input type="checkbox"/> AmazonAPIGatewayAdministrator	AWS managed	Provides full access to create/edit/dele...
<input type="checkbox"/> AmazonAPIGatewayInvokeFullAccess	AWS managed	Provides full access to invoke APIs in A...
<input type="checkbox"/> AmazonAPIGatewayPushToCloudWatchLogs	AWS managed	Allows API Gateway to push logs to us...
<input type="checkbox"/> AmazonAppFlowFullAccess	AWS managed	Provides full access to Amazon AppFlo...
<input type="checkbox"/> AmazonAppFlowReadOnlyAccess	AWS managed	Provides read only access to Amazon A...
<input type="checkbox"/> AmazonAppStreamFullAccess	AWS managed	Provides full access to Amazon AppStr...
<input type="checkbox"/> AmazonAppStreamPCAAccess	AWS managed	Amazon AppStream 2.0 access to AWS...
<input type="checkbox"/> AmazonAppStreamReadOnlyAccess	AWS managed	Provides read only access to Amazon A...
<input type="checkbox"/> AmazonAppStreamServiceAccess	AWS managed	Default policy for Amazon AppStream ...
<input type="checkbox"/> AmazonAthenaFullAccess	AWS managed	Provide full access to Amazon Athena ...
<input type="checkbox"/> AmazonAugmentedAIFullAccess	AWS managed	Provides access to perform all operati...

Add permissions

Cancel

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# Elastic Beanstalk Role created

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/details/Elbeanstalk-role?section=permissions

Identity and Access Management (IAM)

Creation date: August 22, 2024, 08:47 (UTC+05:30)

Last activity: -

ARN: arn:aws:iam:533267143298:role/Elbeanstalk-role

Maximum session duration: 1 hour

Permissions | Trust relationships | Tags | Access Advisor | Revoke sessions

Permissions policies (3) Info

You can attach up to 10 managed policies.

Policy name	Type	Attached entities
AdministratorAccess	AWS managed - job function	1
AWSElasticBeanstalkEnhancedHealth	AWS managed	2
AWSElasticBeanstalkService	AWS managed	2

Filter by Type: All types

Permissions boundary (not set)

Generate policy based on CloudTrail events

You can generate a new policy based on the access activity for this role, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. [Learn more](#)

Generate policy

No requests to generate a policy in the past 7 days.

# Step 3: Create IAM Role for instance profile

The screenshot shows the AWS Identity and Access Management (IAM) service interface. The left sidebar is titled 'Identity and Access Management (IAM)' and includes sections for Dashboard, Access management, Access reports, and Related consoles. Under 'Access management', the 'Roles' section is selected. The main content area is titled 'Roles (25) Info' and contains a table listing 25 IAM roles. The columns in the table are 'Role name', 'Trusted entities', and 'Last activity'. A search bar is at the top of the table. At the bottom right of the table, there are buttons for 'Create role' (highlighted with a red box), 'Delete', and navigation arrows. The URL in the browser bar is 'us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles'.

Role name	Trusted entities	Last activity
<a href="#">Accessforelasticbeanstalk</a>	AWS Service: ec2	50 days ago
<a href="#">AmazonRedshift-CommandsAccessRole-20240716T133010</a>	AWS Service: sagemaker, and 2 mon	-
<a href="#">AmazonRedshift-CommandsAccessRole-20240718T203137</a>	AWS Service: sagemaker, and 2 mon	-
<a href="#">AmazonRedshift-CommandsAccessRole-20240718T221118</a>	AWS Service: sagemaker, and 2 mon	-
<a href="#">AmazonRedshift-CommandsAccessRole-20240718T222852</a>	AWS Service: sagemaker, and 2 mon	32 days ago
<a href="#">AmazonRedshift-CommandsAccessRole-20240720T091046</a>	AWS Service: sagemaker, and 2 mon	22 days ago
<a href="#">AmazonRedshift-CommandsAccessRole-20240730T192951</a>	AWS Service: sagemaker, and 2 mon	22 days ago
<a href="#">AWSBackupDefaultServiceRole</a>	AWS Service: backup	36 days ago
<a href="#">AWSServiceRoleForAmazonElasticFileSystem</a>	AWS Service: elasticfilesystem (Serv	96 days ago
<a href="#">AWSServiceRoleForAmazonFSx</a>	AWS Service: fsx (Service-Linked Rol	116 days ago
<a href="#">AWSServiceRoleForApplicationAutoScaling_DynamoDBTable</a>	AWS Service: dynamodb.application	36 days ago
<a href="#">AWSServiceRoleForAutoScaling</a>	AWS Service: autoscaling (Service-Li	20 hours ago
<a href="#">AWSServiceRoleForBackup</a>	AWS Service: backup (Service-Linker	10 hours ago
<a href="#">AWSServiceRoleForElasticBeanstalk</a>	AWS Service: elasticbeanstalk (Serv	50 days ago
<a href="#">AWSServiceRoleForElasticLoadBalancing</a>	AWS Service: elasticloadbalancing (S	20 hours ago
<a href="#">AWSServiceRoleForGlobalAccelerator</a>	AWS Service: globalaccelerator (Serv	-
<a href="#">AWSServiceRoleForRDS</a>	AWS Service: rds (Service-Linked Rol	11 minutes ago
<a href="#">AWSServiceRoleForRedshift</a>	AWS Service: redshift (Service-Linker	22 days ago
<a href="#">AWSServiceRoleForSupport</a>	AWS Service: support (Service-Linker	3 hours ago
<a href="#">AWSServiceRoleForTrustedAdvisor</a>	AWS Service: trustedadvisor (Service	24 minutes ago

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create

Services Search [Alt+S]

Step 2 Add permissions

Step 3 Name, review, and create

### Trusted entity type

AWS service Allow AWS services like EC2, Lambda, or others to perform actions in this account.

AWS account Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

Web identity Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

SAML 2.0 federation Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

Custom trust policy Create a custom trust policy to enable others to perform actions in this account.

### Use case

Allow an AWS service like EC2, Lambda, or others to perform actions in this account.

Service or use case

Choose a use case for the specified service.

Use case

EC2 Allows EC2 instances to call AWS services on your behalf.

EC2 Role for AWS Systems Manager Allows EC2 instances to call AWS services like CloudWatch and Systems Manager on your behalf.

EC2 Spot Fleet Role Allows EC2 Spot Fleet to request and terminate Spot instances on your behalf.

EC2 - Spot Fleet Auto Scaling Allows Auto Scaling to access and update EC2 spot fleets on your behalf.

EC2 - Spot Fleet Tagging Allows EC2 to launch spot instances and attach tags to the launched instances on your behalf.

EC2 - Spot Instances Allows EC2 Spot instances to launch and manage spot instances on your behalf.

EC2 - Spot Fleet Allows EC2 Spot Fleet to launch and manage spot fleet instances on your behalf.

EC2 - Scheduled Instances Allows EC2 Scheduled Instances to manage instances on your behalf.

Cancel

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Services

Search

(Alt+S)



IAM &gt; Roles &gt; Create role

Step 1

Select trusted entity

Step 2

Add permissions

Step 3

Name, review, and create

Add permissions InfoPermissions policies (1/954) Info

Choose one or more policies to attach to your new role.

Filter by Type

Q Search

All types

&lt; 1 2 3 4 5 6 7 ... 48 &gt; ⌂

Policy name	Type	Description
<input checked="" type="checkbox"/> AdministratorAccess	AWS managed - job function	Provides full access to AWS services an...
<input type="checkbox"/> AdministratorAccess-Amplify	AWS managed	Grants account administrative permis...
<input type="checkbox"/> AdministratorAccess-AWSElasticBeanstalk	AWS managed	Grants account administrative permis...
<input type="checkbox"/> AlexaForBusinessDeviceSetup	AWS managed	Provide device setup access to AlexaFo...
<input type="checkbox"/> AlexaForBusinessFullAccess	AWS managed	Grants full access to AlexaForBusiness ...
<input type="checkbox"/> AlexaForBusinessGatewayExecution	AWS managed	Provide gateway execution access to A...
<input type="checkbox"/> AlexaForBusinessLifesizeDelegatedAccessPolicy	AWS managed	Provide access to Lifesize AVS devices
<input type="checkbox"/> AlexaForBusinessPolyDelegatedAccessPolicy	AWS managed	Provide access to Poly AVS devices
<input type="checkbox"/> AlexaForBusinessReadOnlyAccess	AWS managed	Provide read only access to AlexaForB...
<input type="checkbox"/> AmazonAPIGatewayAdministrator	AWS managed	Provides full access to create/edit/delete...
<input type="checkbox"/> AmazonAPIGatewayInvokeFullAccess	AWS managed	Provides full access to invoke APIs in A...
<input type="checkbox"/> AmazonAPIGatewayPushToCloudWatchLogs	AWS managed	Allows API Gateway to push logs to us...
<input type="checkbox"/> AmazonAppFlowFullAccess	AWS managed	Provides full access to Amazon AppFlo...
<input type="checkbox"/> AmazonAppFlowReadOnlyAccess	AWS managed	Provides read only access to Amazon A...
<input type="checkbox"/> AmazonAppStreamFullAccess	AWS managed	Provides full access to Amazon AppStr...
<input type="checkbox"/> AmazonAppStreamPCAAccess	AWS managed	Amazon AppStream 2.0 access to AWS...
<input type="checkbox"/> AmazonAppStreamReadOnlyAccess	AWS managed	Provides read only access to Amazon A...

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create?trustedEntityType=AWS\_SERVICE&selectedService=EC2&selectedUseCase=EC2&policies=arn%3Aaws%3Aia...

Services Search [Alt+S] Global ▾ Divine Stag ▾

IAM > Roles > Create role

Step 1 Select trusted entity

Step 2 Add permissions

Step 3 Name, review, and create

## Name, review, and create

### Role details

Role name  
Enter a meaningful name to identify this role.  
**EC2-Instance-role**

Description  
Add a short explanation for this role.  
Allows EC2 instances to call AWS services on your behalf.

Maximum 64 characters. Use alphanumeric and '+-,.,@,\_' characters.

Maximum 1000 characters. Use letters (A-Z and a-z), numbers (0-9), tabs, new lines, or any of the following characters: ... , @-/()#%^():;"`

### Step 1: Select trusted entities

#### Trust policy

```
1 - [
2 -     "Version": "2012-10-17",
3 -     "Statement": [
4 -         {
5 -             "Effect": "Allow",
6 -             "Action": [
7 -                 "sts:AssumeRole"
8 -             ],
9 -             "Principal": [
10 -                 "Service": [
11 -                     "ec2.amazonaws.com"
12 -                 ]
13 -             }
14 -         }
15 -     ]
16 - ]
```

### Step 2: Add permissions

#### Permissions policy summary

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us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create?trustedEntityType=AWS\_SERVICE&selectedService=EC2&selectedUseCase=EC2&policies=arn%3Aaws%3Aia...

Services

VPC EC2

Step 1: Select trusted entities

Trust policy

```
1- {
2-     "Version": "2012-10-17",
3-     "Statement": [
4-         {
5-             "Effect": "Allow",
6-             "Action": [
7-                 "sts:AssumeRole"
8-             ],
9-             "Principal": [
10-                 "Service": [
11-                     "ec2.amazonaws.com"
12-                 ]
13-             }
14-         }
15-     ]
16- }
```

Step 2: Add permissions

Permissions policy summary

Policy name	Type	Attached as
<a href="#">AdministratorAccess</a>	AWS managed - job function	Permissions policy

Step 3: Add tags

Add tags - optional Info

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Create role

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# Instance Profile role created

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/details/EC2-Instance-role?section=permissions

aws Services Search [Alt+S] Global ▾ Divine Stag ▾

VPC EC2

Identity and Access Management (IAM) X View role

Role EC2-Instance-role created.

IAM > Roles > EC2-Instance-role

## EC2-Instance-role Info

Allows EC2 instances to call AWS services on your behalf.

**Summary** Edit

Creation date: August 22, 2024, 08:49 (UTC+05:30)

ARN: arn:aws:iam::533267143298:role/EC2-Instance-role

Last activity:

Maximum session duration: 1 hour

Instance profile ARN: arn:aws:iam::533267143298:instance-profile/EC2-Instance-role

**Permissions** Trust relationships Tags Access Advisor Revoke sessions

**Permissions policies (1) Info**

You can attach up to 10 managed policies.

Filter by Type: All types

Policy name: AdministratorAccess

Type: AWS managed - job function

Attached entities: 2

**Permissions boundary (not set)**

**Generate policy based on CloudTrail events**

You can generate a new policy based on the access activity for this role, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. Learn more

Generate policy

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## 2. Create an Elastic Beanstalk Environment

### Step 1: Create Elastic Beanstalk Application Environment

The screenshot shows the AWS IAM console interface. On the left, a sidebar lists various services and features under 'Identity and Access Management (IAM)'. The main area displays search results for 'Elast' (Elastic Beanstalk), with the 'Elastic Beanstalk' service card highlighted by a red box. The right side shows the 'Permissions' tab for the 'EC2-Instance-role' role, which has been created and assigned the 'AmazonEC2InstanceRole' instance profile. The policy editor interface includes tabs for 'Simulate', 'Remove', and 'Add permissions'.

us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#roles/details/EC2-Instance-role?section=permissions

Elastic Beanstalk

Search results for Elast'

Services (12)

Features (29)

Resources New

Documentation (28,215)

Knowledge Articles (905)

Marketplace (1,600)

Blogs (3,344)

Events (27)

Tutorials (14)

Elastic Beanstalk

Elastic Container Service

Top features

Applications Environments

Elastic IPs

Elastic IP addresses

ElastiCache Cluster Client

Volumes

Resources / for a focused search

View role

Delete

Edit

Instance profile ARN

arn:aws:iam::533267145298:instance-profile/EC2-Instance-role

Filter by Type

All types

Attached entities

job function

Simulate

Remove

Add permissions

Generate policy

Introducing resource search

AWS uses your CloudTrail events to identify the services and actions used and generate a policy. Learn more

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

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← → ⌂ ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/welcome

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Compute

# Amazon Elastic Beanstalk

## End-to-end web application management.

Amazon Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS.

### Get started

You simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, and automatic scaling to web application health monitoring, with ongoing fully managed patch and security updates. [Learn more](#)

### Benefits and features

**Easy to get started**  
Elastic Beanstalk is the simplest way to deploy and run your web application on Amazon Web Services. Elastic Beanstalk automatically handles the deployment details of capacity provisioning, load

**Complete resource control**  
You have the freedom to select the Amazon Web Services resources, such as Amazon EC2 instance types, that are optimal for your web application. Additionally, Elastic Beanstalk lets you manage and

### Get started

Easily deploy your web application in minutes.

**Create application**

### Pricing

There's no additional charge for Elastic Beanstalk. You pay for Amazon Web Services resources that we create to store and run your web application, like Amazon S3 buckets and Amazon EC2 instances.

### Getting started

[Launch a web application](#)

### More resources

<https://ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/cre...>

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## Configure environment info

## Environment tier Info

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications.

- Web server environment  
Run a website, web application, or web API that serves HTTP requests. Learn more
  - Worker environment  
Run code in the browser's runtime environment. Learn more

## **Application information**

### Application name

Maximum length of 100 characters

#### ► Application tags (optional)

Environment information [Info](#)

Choose the name, subdomain and description for your environment. These cannot be changed later.

### Environment name

Myapplication-en

Must be from 4 to 40 characters in length. The name can contain only letters, numbers, and hyphens. It can't start or end with a hyphen. This name must be unique within a region in your account.

Domain

Leave blank for automated values

### *Check availability*

**Platform** Info

## Platform type

 Managed platform

Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)

 Custom platform

Platforms created and owned by you. This option is unavailable if you have no platforms.

## Platform:

PHP

## Platform branch

PHP 8.1 running on 64bit Amazon Linux 2023

## Platform version

4.3.2 (Recommended)

**Application code** Info Sample application Existing version

Application versions that you have uploaded.

 Upload your code

Upload a source bundle from your computer or copy one from Amazon S3.

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

PHP

Platform branch  
PHP 8.1 running on 64bit Amazon Linux 2023

Platform version  
4.3.2 (Recommended)

**Application code** Info

Sample application

Existing version  
Application versions that you have uploaded.

Upload your code  
Upload a source bundle from your computer or copy one from Amazon S3.

**Presets** Info

Start from a preset that matches your use case or choose custom configuration to unset recommended values and use the service's default values.

Configuration presets

Single instance (free tier eligible)

Single instance (using spot instance)

High availability

High availability (using spot and on-demand instances)

Custom configuration

Cancel **Next**

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ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

Step 1 Configure environment

Step 2 Configure service access

Step 3 - optional Set up networking, database, and tags

Step 4 - optional Configure instance traffic and scaling

Step 5 - optional Configure updates, monitoring, and logging

Step 6 Review

## Configure service access Info

**Service access**

IAM roles, assumed by Elastic Beanstalk as a service role, and EC2 instance profiles allow Elastic Beanstalk to create and manage your environment. Both the IAM role and instance profile must be attached to IAM managed policies that contain the required permissions. Learn more [Learn more](#)

**Service role**

Create and use new service role  
 Use an existing service role

**Existing service roles**

Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.

Elbeanstalk-role  

**EC2 key pair**

Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)

Mine  

**EC2 instance profile**

Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.

EC2-Instance-role  

[View permission details](#)

[Cancel](#) [Skip to review](#) [Previous](#) [Next](#)

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ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Step 4 - optional  
Configure instance traffic and scaling

Step 5 - optional  
Configure updates, monitoring, and logging

Step 6  
Review

Create custom VPC

**Instance settings**  
Choose a subnet in each AZ for the instances that run your application. To avoid exposing your instances to the Internet, run your instances in private subnets and load balancer in public subnets. To run your load balancer and instances in the same public subnets, assign public IP addresses to the instances. [Learn more](#)

**Public IP address**  
Assign a public IP address to the Amazon EC2 instances in your environment.  
 Activated

**Instance subnets**

Availability Zone	Subnet	CIDR	Name
<input checked="" type="checkbox"/> ap-south-1c	subnet-019c1b356...	10.0.160.0/20	Private Subnet-1c
<input type="checkbox"/> ap-south-1b	subnet-03bcff9abb...	10.0.16.0/20	Public Subnet-1b
<input type="checkbox"/> ap-south-1a	subnet-09fd41e3a...	10.0.0.0/20	Public Subnet-1a
<input checked="" type="checkbox"/> ap-south-1b	subnet-0a5f98956...	10.0.144.0/20	Private Subnet-1b
<input type="checkbox"/> ap-south-1c	subnet-0bdbbd56...	10.0.32.0/20	Public Subnet-1c
<input checked="" type="checkbox"/> ap-south-1a	subnet-0de0d332d...	10.0.128.0/20	Private Subnet-1a

**Database** [Info](#)  
Integrate an RDS SQL database with your environment. [Learn more](#)

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<input checked="" type="checkbox"/>	ap-south-1a	subnet-0de0d332d...	10.0.128.0/20	Private Subnet-1a
-------------------------------------	-------------	---------------------	---------------	-------------------

**Database** [Info](#)Integrate an RDS SQL database with your environment. [Learn more](#)**Database subnets**If your Elastic Beanstalk environment is attached to an Amazon RDS, choose subnets for your database instances. [Learn more](#)**Choose database subnets (6)** Filter database subnets

<input type="checkbox"/>	Availability Zone	Subnet	CIDR	Name
<input type="checkbox"/>	ap-south-1c	subnet-019c1b356...	10.0.160.0/20	Private Subnet-1c
<input type="checkbox"/>	ap-south-1b	subnet-03bcff9abb...	10.0.16.0/20	Public Subnet-1b
<input type="checkbox"/>	ap-south-1a	subnet-09fd41e3a...	10.0.0.0/20	Public Subnet-1a
<input type="checkbox"/>	ap-south-1b	subnet-0a5f98956...	10.0.144.0/20	Private Subnet-1b
<input type="checkbox"/>	ap-south-1c	subnet-0bdbbd56...	10.0.32.0/20	Public Subnet-1c
<input type="checkbox"/>	ap-south-1a	subnet-0de0d332d...	10.0.128.0/20	Private Subnet-1a

 Enable database**Restore a snapshot - optional**

Restore an existing snapshot from a previously used database.

**Snapshot**

None

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stag

Enable database

Restore a snapshot - *optional*  
Restore an existing snapshot from a previously used database.

Snapshot

None

Database settings  
Choose an engine and instance type for your environment's database.

Engine

Engine version

Instance class

Storage  
Choose a number between 5 GB and 1024 GB.  
5 GB

Username

Password

Availability

Low (one AZ)

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Username

Password

Availability

Low (one AZ)

**Database deletion policy**

This policy applies when you decouple a database or terminate the environment coupled to it.

 Create snapshot

Elastic Beanstalk saves a snapshot of the database and then deletes it. You can restore a database from a snapshot when you add a DB to an Elastic Beanstalk environment or when you create a standalone database. You might incur charges for storing database snapshots.

 Retain

The decoupled database will remain available and operational external to Elastic Beanstalk.

 Delete

Elastic Beanstalk terminates the database. The database will no longer be available.

**Tags**

Apply up to 50 tags. You can use tags to group and filter your resources. A tag is a key-value pair. The key must be unique within the resource and is case-sensitive. [Learn more](#)

No tags associated with the resource.

[Add new tag](#)

You can add 50 more tags.

[Cancel](#)[Skip to review](#)[Previous](#)[Next](#)

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S]

VPC EC2

Step 1 Configure environment

Step 2 Configure service access

Step 3 - optional Set up networking, database, and tags

Step 4 - optional Configure instance traffic and scaling

Step 5 - optional Configure updates, monitoring, and logging

Step 6 Review

## Configure instance traffic and scaling - *optional* Info

**Instances** Info

Configure the Amazon EC2 instances that run your application.

**Root volume (boot device)**

**Root volume type**

(Container default) ▾

**Size**  
The number of gigabytes of the root volume attached to each instance.  
8 GB

**IOPS**  
Input/output operations per second for a provisioned IOPS (SSD) volume.  
100 IOPS

**Throughput**  
The desired throughput to provision for the Amazon EBS root volume attached to your environment's EC2 instance  
125 MiB/s

**Amazon CloudWatch monitoring**  
The time interval between when metrics are reported from the EC2 instances

**Monitoring interval**

5 minute ▾

**Instance metadata service (IMDS)**

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← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stag

The time interval between when metrics are reported from the EC2 instances

Monitoring interval: 5 minute

Instance metadata service (IMDS)

Your environment's platform supports both IMDSv1 and IMDSv2. To enforce IMDSv2, deactivate IMDSv1. [Learn more](#)

IMDSv1  
With the current setting, the environment enables only IMDSv2.  
 Deactivated

EC2 security groups

Select security groups to control traffic.

EC2 security groups (2)

Filter security groups

<input type="checkbox"/>	Group name	▲	Group ID	▼	Name	▼
<input type="checkbox"/>	Database-SG		sg-0f7afeb73e4e7f2f2			
<input type="checkbox"/>	default		sg-01bad36d34d6db369			

▼ Capacity [Info](#)  
Configure the compute capacity of your environment and auto scaling settings to optimize the number of instances used.

Auto scaling group

Environment type

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**Capacity** Info

Configure the compute capacity of your environment and auto scaling settings to optimize the number of instances used.

**Auto scaling group****Environment type**

Select a single-instance or load-balanced environment. You can develop and test an application in a single-instance environment to save costs and then upgrade to a load-balanced environment when the application is ready for production. [Learn more](#)

 Load balanced**Instances** 1

Min

 4

Max

**Fleet composition**

Spot instances are launched at the lowest available price. [Learn more](#)

 On-Demand instances Combine purchase options and instances**Maximum spot price**

The maximum price per instance-hour, in USD, that you're willing to pay for a Spot Instance. Setting a custom price limits your chances to fulfill your target capacity using Spot instances.

 Default Set your maximum price**On-Demand base**

The minimum number of On-Demand Instances that your Auto Scaling group provisions before considering Spot Instances as your environment scales out.

 0**On-Demand above base**

The percentage of On-Demand Instances as part of any additional capacity that your Auto Scaling group provisions beyond the On-Demand base instances.

70

0%

**On-Demand above base**

The percentage of On-Demand Instances as part of any additional capacity that your Auto Scaling group provisions beyond the On-Demand base instances.

70 %

**Capacity rebalancing**

Specifies whether to enable the capacity rebalancing feature for Spot Instances in your Auto Scaling Group. This option is only relevant when EnableSpot is true in the aws:ec2:instances namespace, and there is at least one Spot Instance in your Auto Scaling group.

 Turn on capacity rebalancing**Architecture**

The processor architecture determines the instance types that are made available. You can't change this selection after you create the environment. [Learn more](#)

 x86\_64

This architecture uses x86 processors and is compatible with most third-party tools and libraries.

 arm64 - new

This architecture uses AWS Graviton2 processors. You might have to recompile some third-party tools and libraries.

**Instance types**

Add instance types for your fleet. Change the order that the instances are in to set the preferred launch order. This only affects On-Demand instances. We recommend you include at least two instance types. [Learn more](#)

Choose x86 instance types ▾

t3.micro X

t3.small X

**AMI ID**

Elastic Beanstalk selects a default Amazon Machine Image (AMI) for your environment based on the Region, platform version, and processor architecture that you choose. [Learn more](#)

ami-0df323923d3d9293a

**Availability Zones**

Number of Availability Zones (AZs) to use:

Any ▾

**Placement**

Specify Availability Zones (AZs) to use:

Choose Availability Zones (AZs) ▾

**On-Demand above base**

The percentage of On-Demand Instances as part of any additional capacity that your Auto Scaling group provisions beyond the On-Demand base instances.

70 %

**Capacity rebalancing**

Specifies whether to enable the capacity rebalancing feature for Spot instances in your Auto Scaling Group. This option is only relevant when EnableSpot is true in the aws:ec2:instances namespace, and there is at least one Spot Instance in your Auto Scaling group.

 Turn on capacity rebalancing**Architecture**

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Choose x86 instance types ▾

t3.micro X

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ami-0df323923d3d9293a

**Availability Zones**

Number of Availability Zones (AZs) to use:

Any ▾

**Placement**

Specify Availability Zones (AZs) to use:

Choose Availability Zones (AZs) ▾

aws

Services

Search [Alt+S]

VPC

EC2

Mumbai

Divine Stag

**Availability Zones**

Number of Availability Zones (AZs) to use.

Any

**Placement**

Specify Availability Zones (AZs) to use.

Choose Availability Zones (AZs)

**Scaling cooldown**

360

seconds

**Scaling triggers****Metric**

Change the metric that is monitored to determine if the environment's capacity is too low or too high.

NetworkOut

**Statistic**

Choose how the metric is interpreted.

Average

**Unit**

Bytes

**Period**

The period between metric evaluations.

5

Min

**Breach duration**

The amount of time a metric can exceed a threshold before triggering a scaling operation.

5

Min

**Upper threshold**

The period between metric evaluations.

 Min**Breach duration**

The amount of time a metric can exceed a threshold before triggering a scaling operation.

 Min**Upper threshold****Scale up increment** EC2 instances**Lower threshold** capacity**Scale down increment** EC2 instances**Load balancer network settings****Visibility**

Make your load balancer internal if your application serves requests only from connected VPCs. Public load balancers serve requests from the Internet.

**Load balancer subnets**

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Scale down increment  
-1 EC2 instances

Load balancer network settings

Visibility  
Make your load balancer internal if your application serves requests only from connected VPCs. Public load balancers serve requests from the Internet.  
Public

Load balancer subnets

	Availability Zone	Subnet	CIDR	Name
<input type="checkbox"/>	ap-south-1c	subnet-019c1b3...	10.0.160.0/20	Private Subnet-1c
<input checked="" type="checkbox"/>	ap-south-1b	subnet-03bcff9a...	10.0.16.0/20	Public Subnet-1b
<input checked="" type="checkbox"/>	ap-south-1a	subnet-09fd41e3...	10.0.0.0/20	Public Subnet-1a
<input type="checkbox"/>	ap-south-1b	subnet-0a5f9895...	10.0.144.0/20	Private Subnet-1b
<input checked="" type="checkbox"/>	ap-south-1c	subnet-0bdbbd5...	10.0.32.0/20	Public Subnet-1c
<input type="checkbox"/>	ap-south-1a	subnet-0de0d33...	10.0.128.0/20	Private Subnet-1a

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<input type="checkbox"/>	ap-south-1b	subnet-0a5f9895...	10.0.144.0/20	Private Subnet-1b
<input checked="" type="checkbox"/>	ap-south-1c	subnet-0bdbbd5...	10.0.32.0/20	Public Subnet-1c
<input type="checkbox"/>	ap-south-1a	subnet-0de0d33...	10.0.128.0/20	Private Subnet-1a

### Load Balancer Type

#### Application load balancer

Application layer load balancer—routing HTTP and HTTPS traffic based on protocol, port, and route to environment processes.

#### Classic load balancer

Previous generation — HTTP, HTTPS, and TCP

#### Network load balancer

Ultra-high performance and static IP addresses for your application.

#### Dedicated

Use a load balancer that Elastic Beanstalk creates exclusively for this environment.

#### Shared

Use a load balancer that someone in your account created. It can be shared among multiple Elastic Beanstalk environments.

### Listeners

You can specify listeners for your load balancer. Each listener routes incoming client traffic on a specified port using a specified protocol to your environment processes. By default, we've configured your load balancer with a standard web server on port 80.

Actions ▾

Add listener

Listener Port ▲	Listener Protocol ▼	SSL certificate ▼	Default process ▼	Enabled ▼
<input type="radio"/> 80	HTTP	—	default	<input checked="" type="checkbox"/>

Select environment

### Listeners

You can specify listeners for your load balancer. Each listener routes incoming client traffic on a specified port using a specified protocol to your environment processes. By default, we've configured your load balancer with a standard web server on port 80.

Actions ▾ Add listener

Listener Port	Listener Protocol	SSL certificate	Default process	Enabled
80	HTTP	—	default	

### Processes

For each environment process, you can specify the protocol and port that the load balancer uses to route requests to the process. You can also specify how the load balancer performs process health checks.

Actions ▾ Add process

Name	Port	Protocol	HTTP code	Health check path	Stickiness
default	80	HTTP	/		Disabled

### Rules

Your load balancer routes requests to environment processes based on rules. Rules are evaluated by priority in ascending numerical order. Elastic Beanstalk configures a default rule for each listener. Each default rule routes all traffic to the default process associated with each listener, and has the last priority among all rules of that listener. If a request doesn't match the conditions for any other rule, a default rule routes the request to the listener's default process.

## Rules

Your load balancer routes requests to environment processes based on rules. Rules are evaluated by priority in ascending numerical order. Elastic Beanstalk configures a default rule for each listener. Each default rule routes all traffic to the default process associated with each listener, and has the last priority among all rules of that listener. If a request doesn't match the conditions for any other rule, a default rule routes the request to the listener's default process.

Actions

Add rule

Name	Listener ports	Priority	Host headers	Path patterns	Processes
------	----------------	----------	--------------	---------------	-----------

No additional listener rules are currently configured.

Click Add rule to add a listener rule.

## Log files access

Configure Elastic Load Balancing to capture logs with detailed information about requests sent to your Load Balancer. Logs are stored in Amazon S3.

### Store logs

Standard Amazon S3 charges apply.

Enabled

### S3 Bucket

S3 Bucket:



### Prefix

Standard Amazon S3 charges apply.

## Rules

Your load balancer routes requests to environment processes based on rules. Rules are evaluated by priority in ascending numerical order. Elastic Beanstalk configures a default rule for each listener. Each default rule routes all traffic to the default process associated with each listener, and has the last priority among all rules of that listener. If a request doesn't match the conditions for any other rule, a default rule routes the request to the listener's default process.

[Actions](#) [Add rule](#)

Name	Listener ports	Priority	Host headers	Path patterns	Processes
No additional listener rules are currently configured.					

Click [Add rule](#) to add a listener rule.

## Log files access

Configure Elastic Load Balancing to capture logs with detailed information about requests sent to your Load Balancer. Logs are stored in Amazon S3.

### Store logs

Standard Amazon S3 charges apply.

Enabled

### S3 Bucket

S3 Bucket:



### Prefix

Standard Amazon S3 charges apply.

[Cancel](#)

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Services

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VPC



EC2

Step 1

[Configure environment](#)

Step 2

[Configure service access](#)

Step 3 - optional

[Set up networking, database, and tags](#)

Step 4 - optional

[Configure instance traffic and scaling](#)

Step 5 - optional

[Configure updates, monitoring, and logging](#)

Step 6

Review

## Configure updates, monitoring, and logging - *optional* Info

### ▼ Monitoring Info

#### Health reporting

Enhanced health reporting provides free real-time application and operating system monitoring of the instances and other resources in your environment. The **EnvironmentHealth** custom metric is provided free with enhanced health reporting. Additional charges apply for each custom metric. For more information, see [Amazon CloudWatch Pricing](#).

#### System

- Basic  
 Enhanced

#### CloudWatch Custom Metrics - Instance

[Choose metrics](#)

#### CloudWatch Custom Metrics - Environment

[Choose metrics](#)

#### Health monitoring rule customization

Configure the HTTP application and load balancer status codes included in determining your environment's health. [Learn more](#)

##### Ignore application 4xx

- Activated

##### Ignore load balancer 4xx

- Activated

#### Health event streaming to CloudWatch Logs

Configure Elastic Beanstalk to stream environment health events to CloudWatch Logs. You can set the retention up to a maximum of ten years and configure Elastic Beanstalk to delete the logs when you terminate your environment.

##### Log streaming

### Health monitoring rule customization

Configure the HTTP application and load balancer status codes included in determining your environment's health. [Learn more](#)

Ignore application 4xx

Activated

Ignore load balancer 4xx

Activated

### Health event streaming to CloudWatch Logs

Configure Elastic Beanstalk to stream environment health events to CloudWatch Logs. You can set the retention up to a maximum of ten years and configure Elastic Beanstalk to delete the logs when you terminate your environment.

Log streaming

Activated (standard CloudWatch charges apply.)

Retention

7

Lifecycle

Keep logs after terminating environment

### ▼ Managed platform updates [Info](#)

Activate managed platform updates to apply platform updates automatically during a weekly maintenance window that you choose. Your application stays available during the update process.

Managed updates

Activated

Weekly update window

Tuesday at 00 : 03 UTC

Update level

**▼ Managed platform updates** Info

Activate managed platform updates to apply platform updates automatically during a weekly maintenance window that you choose. Your application stays available during the update process.

**Managed updates** Activated**Weekly update window** at  :  UTC**Update level****Instance replacement**

If enabled, an instance replacement will be scheduled if no other updates are available.

 Activated**▼ Email notifications** Info

Enter an email address to receive email notifications for important events from your environment. [Learn more](#)

**Email****▼ Rolling updates and deployments** Info**Application deployments**

Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#)

**▼ Rolling updates and deployments** Info**Application deployments**

Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#)

**Deployment policy**

Rolling

**Batch size type** Percentage Fixed**Deployment batch size**

30

% instances at a time

**Traffic Split**

% to new application versions

**Traffic splitting evaluation time**

minutes

**Configuration updates**

Changes to virtual machine settings and VPC configuration trigger rolling updates to replace the instances in your environment without downtime. [Learn more](#)

**Rolling update type**

Deactivated

**Batch Size**

Deactivated

## Batch Size

The maximum number of instances to replace in each phase of the update.

instances

## Minimum capacity

The minimum number of instances to keep in service at all times.

instances

## Pause Time

Pause the update for up to an hour between each batch.

00:00:00

## Deployment preferences

Customize health check requirements and deployment timeouts.

## Ignore health check

Don't fail deployments due to health check failures.

False

## Health threshold

Lower the threshold for an instance in a batch to pass health checks during an update or deployment.

Ok

## Command timeout

Change the amount of time in seconds that Amazon Elastic Beanstalk allows an instance to complete deployment commands.

600

seconds

## ▼ Platform software

Configure the options available to your specific platform. These include the proxy server and OS environment properties. Learn more



## Container options

**▼ Platform software** Info

Configure the options available to your specific platform. These include the proxy server and OS environment properties. [Learn more](#)

**Container options****Proxy server**

Nginx

**Document root**

The child directory of your project that acts as the public facing web root. If your root document is stored in your project directory, leave this set to /. If your root document is in a child directory (e.g., /public), set this value to match the child directory. Values should begin with a / character, and may NOT begin with a . (period).

**Memory limit**

The amount of memory allocated to the PHP environment. This value is written to a .ini configuration file located in the /etc/php.d/ directory.

256M

**Zlib output compression**

Whether PHP should use compression for output. This value is written to a .ini configuration file located in the /etc/php.d/ directory.

Off

**Allow URL fopen**

Whether the PHP's file functions are allowed to retrieve data from remote locations, such as websites or FTP servers. This value is written to a .ini configuration file located in the /etc/php.d/ directory.

On

**Display errors**

Whether error messages should be part of the output. This value is written to a .ini configuration file located in the /etc/php.d/ directory.

Off



Whether error messages should be part of the output. This value is written to a .ini configuration file located in the /etc/php.d/ directory.

#### Max execution time

The maximum time a script is allowed to run before the environment terminates it. This helps prevent poorly written scripts from tying up the server.

seconds

#### Amazon X-Ray

Amazon X-Ray is a service that collects data about the requests and responses that your application serves and receives. You can use the tools that X-Ray offers to view and filter the data that it provides to identify potential issues and optimization opportunities.

##### X-Ray daemon

(service charges may apply.)

 Activated

#### S3 log storage

Configure the instances in your environment to upload rotated logs to Amazon S3. [Learn more](#)

##### Rotate logs

(standard S3 charges apply.)

 Activated

#### Instance log streaming to CloudWatch logs

Configure the instances in your environment to stream logs to CloudWatch logs. You can set the retention to up to 10 years and configure Elastic Beanstalk to delete the logs when you terminate your environment. [Learn more](#)

##### Log streaming

(standard CloudWatch charges apply.)

 Activated

##### Retention

#### Lifecycle

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stage

X-Ray daemon  
(service charges may apply.)  
 Activated

S3 log storage  
Configure the instances in your environment to upload rotated logs to Amazon S3. [Learn more](#)

Rotate logs  
(standard S3 charges apply.)  
 Activated

Instance log streaming to CloudWatch logs  
Configure the instances in your environment to stream logs to CloudWatch logs. You can set the retention to up to 10 years and configure Elastic Beanstalk to delete the logs when you terminate your environment. [Learn more](#)

Log streaming  
(standard CloudWatch charges apply.)  
 Activated

Retention  
7

Lifecycle  
Keep logs after terminating envir...

Environment properties  
The following properties are passed in the application as environment properties. [Learn more](#)

No environment properties have been configured.

Add environment property

Cancel Previous Next

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Step 1  
[Configure environment](#)Step 2  
[Configure service access](#)Step 3 - optional  
[Set up networking, database, and tags](#)Step 4 - optional  
[Configure instance traffic and scaling](#)Step 5 - optional  
[Configure updates, monitoring, and logging](#)Step 6  
Review

## Review Info

### Step 1: Configure environment

[Edit](#)

#### Environment information

Environment tier	Application name
Web server environment	Myapplication
Environment name	Application code
Myapplication-env	Sample application
Platform	arn:aws:elasticbeanstalk:ap-south-1::platform/PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

### Step 2: Configure service access

[Edit](#)

#### Service access Info

Configure the service role and EC2 instance profile that Elastic Beanstalk uses to manage your environment. Choose an EC2 key pair to securely log in to your EC2 instances.

Service role	EC2 key pair	EC2 instance profile
arn:aws:iam::533267143298:role/ElasticBeanstalk-role	Mine	EC2-Instance-role

### Step 3: Set up networking, database, and tags

[Edit](#)

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

Services Search [Alt+S]

Mumbai Divine Stage

VPC EC2

Configure updates, monitoring, and logging

Step 6 Review Step 2: Configure service access Edit

Service access [Info](#)  
Configure the service role and EC2 instance profile that Elastic Beanstalk uses to manage your environment. Choose an EC2 key pair to securely log in to your EC2 instances.

Service role: arn:aws:iam::533267143298:role/ElasticBeanstalk-Role  
EC2 key pair: Mine  
EC2 instance profile: EC2-Instance-Role

Step 3: Set up networking, database, and tags Edit

Networking, database, and tags [Info](#)  
Configure VPC settings, and subnets for your environment's EC2 instances and load balancer. Set up an Amazon RDS database that's integrated with your environment.

Network

VPC	Public IP address	Instance subnets
vpc-0cacebc7400be2222	false	subnet-019c1b3561675d338, subnet-0a5f98956d9894d66, subnet-0de0d332d84cf8e67

Tags

Key	Value
-----	-------

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Service role	EC2 key pair	EC2 instance profile
arn:aws:iam::533267143298:role/ElbElasticBeanstalk-role	Mine	EC2-Instance-role

## Step 3: Set up networking, database, and tags

[Edit](#)Networking, database, and tags [Info](#)

Configure VPC settings, and subnets for your environment's EC2 instances and load balancer. Set up an Amazon RDS database that's integrated with your environment.

## Network

VPC	Public IP address	Instance subnets
vpc-0cacebc7400be2222	false	subnet-019c1b3561675d338, subnet-0a5f98956d9894d66, subnet-0de0d332d84cf8e67

## Tags

Key	▲	Value	▼
No tags			
There are no tags defined			

## Step 4: Configure instance traffic and scaling

[Edit](#)Instance traffic and scaling [Info](#)

Customize the capacity and scaling for your environment's instances. Select security groups to control instance traffic. Configure the

## Step 4: Configure instance traffic and scaling

Edit

## Instance traffic and scaling

Customize the capacity and scaling for your environment's instances. Select security groups to control instance traffic. Configure the software that runs on your environment's instances by setting platform-specific options.

## Instances

IMDSv1

Deactivated

## Capacity

Environment type	Min instances	Max instances
Load balanced	1	4
Fleet composition	On-demand base	On-demand above base
On-Demand instances	0	70
Capacity rebalancing	Scaling cooldown	Processor type
Deactivated	360	x86_64
Instance types	AMI ID	Availability Zones
t3.micro,t3.small	ami-0df323923d3d9293a	Any
Metric	Statistic	Unit
NetworkOut	Average	Bytes
Period	Breach duration	Upper threshold
5	5	6000000



## Step 5: Configure updates, monitoring, and logging

Edit

Updates, monitoring, and logging Info

Define when and how Elastic Beanstalk deploys changes to your environment. Manage your application's monitoring and logging settings, instances, and other environment resources.

## Monitoring

System	Cloudwatch custom metrics - instance	Cloudwatch custom metrics - environment
enhanced	—	—
Log streaming	Retention	Lifecycle
Deactivated	7	false

## Updates

Managed updates	Deployment batch size	Deployment batch size type
Activated	30	Percentage
Command timeout	Deployment policy	Health threshold
600	Rolling	Ok
Ignore health check	Instance replacement	
false	false	

## Platform software

Lifecycle	Log streaming	Allow URL fopen
false	Deactivated	On
Display errors	Document root	Max execution time

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Command timeout	Deployment policy	Health threshold
600	Rolling	Ok
Ignore health check	Instance replacement	
false	false	
<b>Platform software</b>		
Lifecycle	Log streaming	Allow URL fopen
false	Deactivated	On
Display errors	Document root	Max execution time
Off	-	60
Memory limit	Zlib output compression	Proxy server
256M	Off	nginx
Logs retention	Rotate logs	Update level
7	Deactivated	minor
X-Ray enabled		
Deactivated		
<b>Environment properties</b>		
Key	Value	
No environment properties		
There are no environment properties defined		

Cancel Previous Submit

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# Elastic Beanstalk Environment Created

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/dashboard?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Elastic Beanstalk

Elastic Beanstalk Environments Myapplication-env

Myapplication-env Info

Actions Upload and deploy

Environment overview

Health: Pending

Environment ID: e-wq8qpjdxfg

Domain: Myapplication-env.eba-pfihagg.ap-south-1.elasticbeanstalk.com

Application name: Myapplication

Platform: PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

Running version: -

Platform state: Supported

Events Health Logs Monitoring Alarms Managed updates Tags

Events (14) Info

Filter events by text, property or value

Time Type Details

August 22, 2024 08:58:31 (UTC+5:30)	INFO	Added instance [i-03f02672e7694ec09] to your environment.
August 22, 2024 08:56:46 (UTC+5:30)	INFO	Waiting for EC2 instances to launch. This may take a few minutes.
August 22, 2024 08:56:46 (UTC+5:30)	INFO	Created Auto Scaling group named: awseb-e-wq8qpjdxfg-stack-AWSEBAutoScalingGroup-s2xR8h3M9jwz
August 22, 2024 08:56:31 (UTC+5:30)	INFO	Environment health has transitioned to Pending. Initialization in progress (running for 8 seconds). There are no instances.

myapplication-env.eba-pfihagg.ap-south-1.elasticbeanstalk.com

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# Application Environment working well

# Congratulations!

Your AWS Elastic Beanstalk *PHP* application is now running on your own dedicated environment in the AWS Cloud

You are running PHP version 8.1.29

This environment is launched with Elastic Beanstalk PHP Platform

## What's Next?

- [AWS Elastic Beanstalk overview](#)
- [Deploying AWS Elastic Beanstalk Applications in PHP Using Eb and Git](#)
- [Using Amazon RDS with PHP](#)
- [Customizing the Software on EC2 Instances](#)
- [Customizing Environment Resources](#)

## AWS SDK for PHP

- [AWS SDK for PHP home](#)
- [PHP developer center](#)
- [AWS SDK for PHP on GitHub](#)

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environments

aws Services Search [Alt+S] VPC EC2

Elastic Beanstalk X Elastic Beanstalk Environments

Applications Environments Change history

Recent environments Myapplication-env

Environments (1) Info Actions Create environment

Filter environments

Environment name	Health	Application name	Platform	Domain	Running versions	Tier name	Date created
Myapplication-env	Ok	Myapplication	PHP 8.1 running on...	Myapplication-env.eba-ptihaa...	-	WebServer	August 22, 2024 08:22:27

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Mumbai Divine Stag

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# Step 2: Deploy PHP Application file

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#environment/dashboard?environmentId=e-wq8qpjdxfg

Elastic Beanstalk Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Elastic Beanstalk Myapplication-env

Myapplication-env Info Actions Upload and deploy

Environment overview

Health: Ok Environment ID: e-wq8qpjdxfg

Domain: Myapplication-env.eba-pfihhaagc.ap-south-1.elasticbeanstalk.com

Application name: Myapplication

Platform

Platform: PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

Running version: - Platform state: Supported

Events Health Logs Monitoring Alarms Managed updates Tags

Events (21) Info Filter events by text, property or value

Time Type Details

Time	Type	Details
August 22, 2024 08:59:30 (UTC+5:30)	INFO	Environment health has transitioned from Pending to Ok. Initialization completed 19 seconds ago and took 3 minutes.
August 22, 2024 08:59:00 (UTC+5:30)	INFO	Successfully launched environment: Myapplication-env
August 22, 2024 08:58:58 (UTC+5:30)	INFO	Application available at Myapplication-env.eba-pfihhaagc.ap-south-1.elasticbeanstalk.com.
August 22, 2024 08:58:44 (UTC+5:30)	INFO	Instance deployment completed successfully.
August 22, 2024 08:58:40 (UTC+5:30)	INFO	Instance deployment: You didn't include a 'composer.json' file in your source bundle. The deployment didn't install Composer dependencies.

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ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/dashboard?environmentId=e-wq8qpjdxfg

Elastic Beanstalk

Environment overview

Upload application

Choose file

To deploy a previous version, go to the [Application versions page](#)

Version label

Deployment preferences

Cancel Deploy

Events (21) 1m ago

Time

August 22, 2024 06:59:30 (UTC+5:30)

August 22, 2024 06:59:00 (UTC+5:30)

August 22, 2024 06:58:50 (UTC+5:30)

August 22, 2024 06:58:44 (UTC+5:30)

August 22, 2024 06:58:40 (UTC+5:30)

Platform state

Supported

Change version

Actions

Upload and deploy

Environment details > Environments > Myapplication-env

Environment

Health

Logs

Events

Configuration

Events

Health

Logs

Monitoring

Alarms

Managed updates

Tags

Recent environments

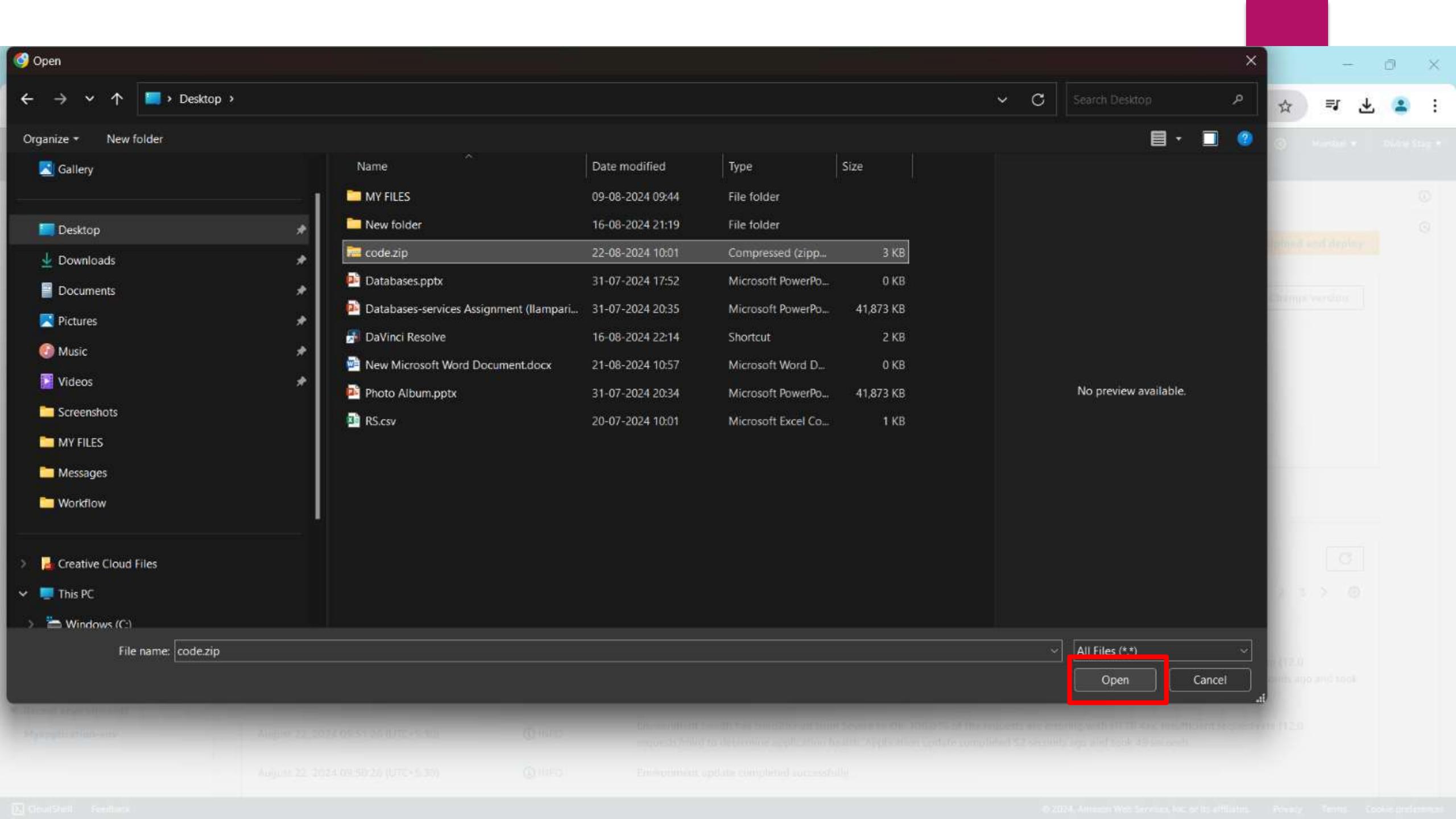
Myapplication-env

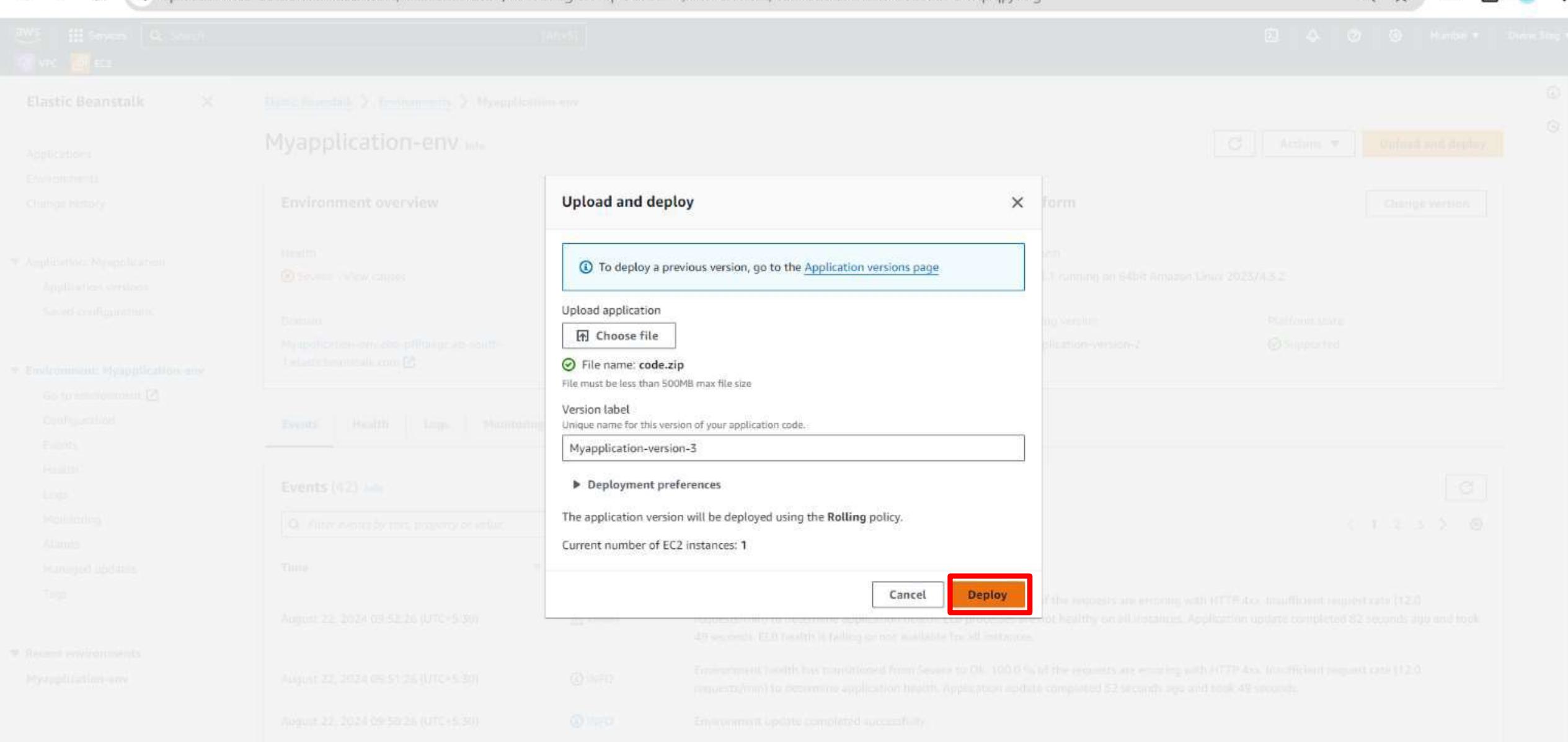
CloudWatch Feedback

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Privacy Terms

Cookie preferences





ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/dashboard?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stag

Elastic Beanstalk Applications Environments Change history Application: Myapplication Application versions Saved configurations Environment: Myapplication-env Go to environment Configuration Events Health Logs Monitoring Alarms Managed updates Tags Recent environments Myapplication-env

Successfully uploaded file code.zip to S3, created application version and started deployment with new application version

Environment update successfully completed.

Elastic Beanstalk > Environments > Myapplication-env

## Myapplication-env Info

Actions Upload and deploy

Environment overview

Health: Ok - View causes

Domain: Myapplication-env.eba-pfhaagc.ap-south-1.elasticbeanstalk.com

Environment ID: e-wq8qpjdxfg

Application name: Myapplication

Platform

Platform: PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

Running version: Myapplication-version-3

Platform state: Supported

Events Health Logs Monitoring Alarms Managed updates Tags

Events (50) Info

Filter events by text, property or value

Time	Type	Details
August 22, 2024 10:03:17 (UTC+5:30)	INFO	Environment update completed successfully.
August 22, 2024 10:03:17 (UTC+5:30)	INFO	Successfully deployed new configuration to environment.
August 22, 2024 10:03:17 (UTC+5:30)	INFO	New application version was deployed to running EC2 instances.

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PHP application file deployed successfully

← → ⌂ ⚠ Not secure myapplication-env.eba-pfihaagc.ap-south-1.elasticbeanstalk.com



## Upload Employee Data

Employee ID:

Name: \_\_\_\_\_

DOB: dd-mm-yyyy

Department:

**Submit**

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/dashboard?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stage

Elastic Beanstalk X

Applications Environments Change history

Application: Myapplication Application versions Saved configurations

Environment: Myapplication-env Go to environment Configuration Events Health Logs Monitoring Alarms Managed updates Tags

Recent environments Myapplication-env

Elastic Beanstalk > Environments > Myapplication-env

## Myapplication-env Info

C Actions ▾ Upload and deploy

Change version

### Environment overview

Health Ok - View causes Environment ID e-wq8qpjdxfg

Domain Myapplication-env.eba-pfihagg.ap-south-1.elasticbeanstalk.com Application name Myapplication

### Platform

Platform PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

Running version Myapplication-version-3 Platform state Supported

Events Health Logs Monitoring Alarms Managed updates Tags

### Events (51) Info

C Filter events by text, property or value

< 1 2 3 > ⌂

Time	Type	Details
August 22, 2024 10:04:25 (UTC+5:30)	INFO	Environment health has transitioned from Severe to Ok. Application update completed 15 seconds ago and took 48 seconds.
August 22, 2024 10:03:17 (UTC+5:30)	INFO	Environment update completed successfully.
August 22, 2024 10:03:17 (UTC+5:30)	INFO	Successfully deployed new configuration to environment.
August 22, 2024 10:03:17 (UTC+5:30)	INFO	New application version was deployed to running EC2 instances.
August 22, 2024 10:02:57 (UTC+5:30)	INFO	Instance deployment completed successfully.

https://ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/configuration?environmentId=e-wq8qpjdxfg © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

It cannot store data because the environment is not defined so it needs to be defined

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/configuration?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S]

VPC EC2

Elastic Beanstalk X

CloudWatch logs is shared false Deactivated

Updates, monitoring, and logging [Info](#) Edit

Define when and how Elastic Beanstalk deploys changes to your environment. Manage your application's monitoring and logging settings, instances, and other environment resources.

Monitoring

System	Cloudwatch custom metrics - instance	Cloudwatch custom metrics - environment
enhanced	—	—
Log streaming	Retention	Lifecycle
Deactivated	7	false

Updates

Managed updates	Deployment batch size	Deployment batch size type
Activated	30	Percentage
Command timeout	Deployment policy	Health threshold
600	Rolling	Ok
Ignore health check	Instance replacement	
false	false	

Platform software

Lifecycle	Log streaming	Allow URL fopen
false	Deactivated	On
Display errors	Document root	Max execution time
Off	—	60

Applications Environments Change history

Application: Myapplication

- Application versions
- Saved configurations

Environment: Myapplication-env

- Go to environment
- Configuration

  - Events
  - Health
  - Logs
  - Monitoring
  - Alarms
  - Managed updates
  - Tags

Recent environments

- Myapplication-env

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← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/configuration/updates-monitoring-logging?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stage

X-Ray daemon  
(service charges may apply.)  
 Activated

S3 log storage  
Configure the instances in your environment to upload rotated logs to Amazon S3. [Learn more](#)

Rotate logs  
(standard S3 charges apply.)  
 Activated

Instance log streaming to CloudWatch logs  
Configure the instances in your environment to stream logs to CloudWatch logs. You can set the retention to up to 10 years and configure Elastic Beanstalk to delete the logs when you terminate your environment. [Learn more](#)

Log streaming  
(standard CloudWatch charges apply.)  
 Activated

Retention  
7

Lifecycle  
Keep logs after terminating envir...

Environment properties  
The following properties are passed in the application as environment properties. [Learn more](#)

No environment properties have been configured.

Add environment property

Cancel Continue Apply

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File Edit Selection View Go Run Terminal Help ⏪ ⏩ Search

Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

upload\_data.php X Python Basics Hands-On - 02-03-2024.ipynb ●

C: > Users > Deepika > AppData > Local > Temp > e4d36e8b-230d-4cbe-a2e2-51776dd133d9\_code.zip.3d9 > upload\_data.php

```
1 <?php
2 // Read database details from environment variables
3 $db_host = getenv('RDS_HOSTNAME');
4 $db_username = getenv('RDS_USERNAME');
5 $db_password = getenv('RDS_PASSWORD');
6 $db_name = getenv('RDS_DB_NAME');

7 // Check if all required environment variables are set
8 if (!$db_host || !$db_username || !$db_password || !$db_name) {
9     die("Error: Please set all required environment variables.");
10 }

11 // Establish a connection to the MySQL server
12 $connection = mysqli_connect($db_host, $db_username, $db_password);

13 // Check connection
14 if (mysqli_connect_errno()) {
15     die("Connection failed: " . mysqli_connect_error());
16 }

17 // Create the database if it does not exist
18 $create_database_query = "CREATE DATABASE IF NOT EXISTS $db_name";
19 if (!mysqli_query($connection, $create_database_query)) {
20     die("Error creating database: " . mysqli_error($connection));
21 }

22 // Select the database
23 mysqli_select_db($connection, $db_name);

24 // Create the table if it does not exist
25 $create_table_query = "
26 CREATE TABLE IF NOT EXISTS employees (
27     id INT(6) UNSIGNED AUTO_INCREMENT PRIMARY KEY,
28     emp_id VARCHAR(30) NOT NULL,
29     name VARCHAR(100) NOT NULL,
30     dob DATE NOT NULL
31 )";

32 
```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF PHP

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/configuration/updates-monitoring-logging?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Activated

Instance log streaming to CloudWatch logs

Configure the instances in your environment to stream logs to CloudWatch logs. You can set the retention to up to 10 years and configure Elastic Beanstalk to delete the logs when you terminate your environment. [Learn more](#)

Log streaming  
(standard CloudWatch charges apply.)

Activated

Retention

7

Lifecycle

Keep logs after terminating envir...

Environment properties

The following properties are passed in the application as environment properties. [Learn more](#)

Name	Value	Remove
RDS_HOSTNAME	mysql-database-server.c5cms2kien8s.ap	Remove
RDS_USERNAME	admin	Remove
RDS_PASSWORD	Laurax23	Remove
RDS_DB_NAME	Project23	Remove

Add environment property

Cancel Continue Apply

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A screenshot of the AWS Elastic Beanstalk configuration page for environment "e-wq8qpjdxfg". The 'Updates & Monitoring' section is selected. The 'Environment properties' table is highlighted with a red box, showing four entries: RDS\_HOSTNAME (mysql-database-server.c5cms2kien8s.ap), RDS\_USERNAME (admin), RDS\_PASSWORD (Laurax23), and RDS\_DB\_NAME (Project23). The 'Apply' button at the bottom right of the properties table is also highlighted with a red box.

← → C ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/environment/dashboard?environmentId=e-wq8qpjdxfg

aws Services Search [Alt+S] Mumbai Divine Stage

VPC EC2

Elastic Beanstalk X

Environment update successfully completed.

Elastic Beanstalk > Environments > Myapplication-env

## Myapplication-env Info

Actions Upload and deploy

Environment overview

Health: Ok

Domain: Myapplication-env.eba-pfhaagc.ap-south-1.elasticbeanstalk.com

Environment ID: e-wq8qpjdxfg

Application name: Myapplication

Platform: PHP 8.1 running on 64bit Amazon Linux 2023/4.3.2

Running version: Myapplication-version-3

Platform state: Supported

Events Health Logs Monitoring Alarms Managed updates Tags

Events (58) Info

Filter events by text, property or value

Time Type Details

August 22, 2024 10:15:24 (UTC+5:30)	INFO	Environment health has transitioned from Ok to Info. Configuration update in progress (running for 11 seconds).
August 22, 2024 10:15:23 (UTC+5:30)	INFO	Environment update completed successfully.
August 22, 2024 10:15:23 (UTC+5:30)	INFO	Successfully deployed new configuration to environment.
August 22, 2024 10:15:02 (UTC+5:30)	INFO	Instance deployment completed successfully.

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# Now the Data will be recorded

← → ⌂ Not secure myapplication-env.eba-pfihaagc.ap-south-1.elasticbeanstalk.com



## Upload Employee Data

Employee ID:

Name:

DOB:

Department:

## Upload Employee Data

Employee ID:

Name: \_\_\_\_\_

DOB: dd-mm-yyyy

Department: \_\_\_\_\_

**Submit**

Data uploaded successfully.

# Step 3: Verification

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

aws Services Search [Alt+S] Mumbai Divine Stag

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 Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs Placement Groups Key Pairs

Instances (1/1) [Info](#) Last updated Less than a minute ago [C](#) Connect Instance state Actions Launch instances

Find Instance by attribute or tag (case-sensitive) All states

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
Myapplication...	i-03f02672e7694ec09	Running	t3.micro	2/2 checks passed	<a href="#">View alarms</a>	ap-south-1a	-	-	-

i-03f02672e7694ec09 (Myapplication-env)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary [Info](#)

Instance ID <a href="#">i-03f02672e7694ec09 (Myapplication-env)</a>	Public IPv4 address -	Private IPv4 addresses <a href="#">10.0.142.82</a>
IPv6 address -	Instance state <a href="#">Running</a>	Public IPv4 DNS -
Hostname type IP name: ip-10-0-142-82.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) <a href="#">ip-10-0-142-82.ap-south-1.compute.internal</a>	Elastic IP addresses -
Answer private resource DNS name -	Instance type t3.micro	AWS Compute Optimizer finding -
Auto-assigned IP address -	VPC ID -	

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

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# Connecting RDS to instance

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#ConnectToInstance:instanceId=i-03f02672e7694ec09

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

EC2 Instances i-03f02672e7694ec09 Connect to instance

## Connect to instance Info

Connect to your instance i-03f02672e7694ec09 (Myapplication-env) using any of these options

EC2 Instance Connect Session Manager SSH client EC2 serial console

Session Manager usage:

- Connect to your instance without SSH keys, a bastion host, or opening any inbound ports.
- Sessions are secured using an AWS Key Management Service key.
- You can log session commands and details in an Amazon S3 bucket or CloudWatch Logs log group.
- Configure sessions on the Session Manager [Preferences](#) page.

Cancel **Connect**

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← → G ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlm3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -p
sh: mysql: command not found
sh-5.2$ sudo apt install mysql-client -y
sudo: apt: command not found
sh-5.2$ sudo yum install mariadb -y
```

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml

Instance ID: i-03f02672e7694ec09

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -p
sh: mysql: command not found
sh-5.2$ sudo apt install mysql-client -y
sudo: apt: command not found
sh-5.2$ sudo yum install mariadb -y
Amazon Linux 2023 repository
Amazon Linux 2023 Kernel Livepatch repository
No match for argument: mariadb
Error: Unable to find a match: mariadb
sh-5.2$ sudo dnf update -y
```

35 kB/s   3.6 kB	00:00
27 kB/s   2.9 kB	00:00

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -p
sh: mysql: command not found
sh-5.2$ sudo apt install mysql-client -y
sudo: apt: command not found
sh-5.2$ sudo yum install mariadb -y
Amazon Linux 2023 repository                                         35 kB/s | 3.6 kB    00:00
Amazon Linux 2023 Kernel Livepatch repository                      27 kB/s | 2.9 kB    00:00
No match for argument: mariadb
Error: Unable to find a match: mariadb
sh-5.2$ sudo dnf update -y
Last metadata expiration check: 0:00:36 ago on Thu 22 Aug 2024 04:52:34 AM UTC.

WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:
  Version 2023.5.20240819:
    Run the following command to upgrade to 2023.5.20240819:
      dnf upgrade --releasever=2023.5.20240819

  Release notes:
    https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.5.20240819.html

Dependencies resolved.
Nothing to do.
Complete!
sh-5.2$
```

Terminate

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn

Instance ID: i-03f02672e7694ec09

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -p
sh: mysql: command not found
sh-5.2$ sudo apt install mysql-client -y
sudo: apt: command not found
sh-5.2$ sudo yum install mariadb -y
Amazon Linux 2023 repository
Amazon Linux 2023 Kernel Livepatch repository
No match for argument: mariadb
Error: Unable to find a match: mariadb
sh-5.2$ sudo dnf update -y
Last metadata expiration check: 0:00:36 ago on Thu 22 Aug 2024 04:52:34 AM UTC.
=====
WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.5.20240819:
  Run the following command to upgrade to 2023.5.20240819:
    dnf upgrade --releasever=2023.5.20240819

Release notes:
  https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.5.20240819.html

=====
Dependencies resolved.
Nothing to do.
Complete!
sh-5.2$ sudo dnf install mariadb105
```

← → C

ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:



Session ID: root-ejw4vrt2xyitcwlm3wu2wlfcnm

Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -p
sh: mysql: command not found
sh-5.2$ sudo apt install mysql-client -y
sudo: apt: command not found
sh-5.2$ sudo yum install mariadb -y
Amazon Linux 2023 repository
Amazon Linux 2023 Kernel Livepatch repository
No match for argument: mariadb
Error: Unable to find a match: mariadb
sh-5.2$ sudo dnf update -y
Last metadata expiration check: 0:00:36 ago on Thu 22 Aug 2024 04:52:34 AM UTC.
```

35 kB/s | 3.6 kB 00:00  
27 kB/s | 2.9 kB 00:00

**WARNING:**  
A newer release of "Amazon Linux" is available.

**Available Versions:**

**Version 2023.5.20240819:**  
Run the following command to upgrade to 2023.5.20240819:

```
dnf upgrade --releasever=2023.5.20240819
```

**Release notes:**  
<https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.5.20240819.html>

Dependencies resolved.  
Nothing to do.  
Complete!  
sh-5.2\$ sudo dnf install mariadb105  
Last metadata expiration check: 0:01:06 ago on Thu 22 Aug 2024 04:52:34 AM UTC.  
Dependencies resolved.

Package	Architecture	Version	Repository	Size
Installing: <b>mariadb105</b>	x86_64	3:10.5.25-1.amzn2023.0.1	amazonlinux	1.6 M
Installing dependencies: <b>mariadb105-common</b>	x86_64	3:10.5.25-1.amzn2023.0.1	amazonlinux	29 k

**Transaction Summary**

Install 2 Packages

Total download size: 1.6 M  
Installed size: 18 M  
Is this ok [y/N]: y

Session ID: root-ejw4vrt2xyitcwlm3wu2wlfcn  
Instance ID: i-03f02672e7694ec09

Terminate

```
mariadb105           x86_64          3:10.5.25-1.amzn2023.0.1      amazonlinux          1.6 M
Installing dependencies:
mariadb105-common    x86_64          3:10.5.25-1.amzn2023.0.1      amazonlinux          29 kB

Transaction Summary

Install 2 Packages

Total download size: 1.6 M
Installed size: 18 M
Is this ok [y/N]: y
Downloading Packages:
(1/2): mariadb105-common-10.5.25-1.amzn2023.0.1.x86_64.rpm   472 kB/s | 29 kB     00:00
(2/2): mariadb105-10.5.25-1.amzn2023.0.1.x86_64.rpm          14 MB/s | 1.6 MB    00:00
Total                                         9.1 MB/s | 1.6 MB    00:00

Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing : mariadb105-common-3:10.5.25-1.amzn2023.0.1.x86_64 1/2
Installing : mariadb105-3:10.5.25-1.amzn2023.0.1.x86_64        2/2
Running scriptlet: mariadb105-3:10.5.25-1.amzn2023.0.1.x86_64 2/2
Verifying  : mariadb105-3:10.5.25-1.amzn2023.0.1.x86_64        1/2
Verifying  : mariadb105-common-3:10.5.25-1.amzn2023.0.1.x86_64 2/2

WARNING:
A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.5.20240819:
Run the following command to upgrade to 2023.5.20240819:

dnf upgrade --releasever=2023.5.20240819

Release notes:
https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.5.20240819.html

Installed:
mariadb105-3:10.5.25-1.amzn2023.0.1.x86_64                  mariadb105-common-3:10.5.25-1.amzn2023.0.1.x86_64

Complete!
sh-5.2$
```

# Verifying the Blue deploy

The screenshot shows the AWS RDS console interface for managing databases. The left sidebar navigation bar includes links for Dashboard, Databases (selected), Query Editor, Performance insights, Snapshots, Exports in Amazon S3, Automated backups, Reserved instances, Proxies, Subnet groups, Parameter groups, Option groups, Custom engine versions, Zero-ETL integrations, Events, Event subscriptions, Recommendations (0), and Certificate update.

The main content area displays a list of database identifiers under the heading "DB Identifier". Three entries are listed:

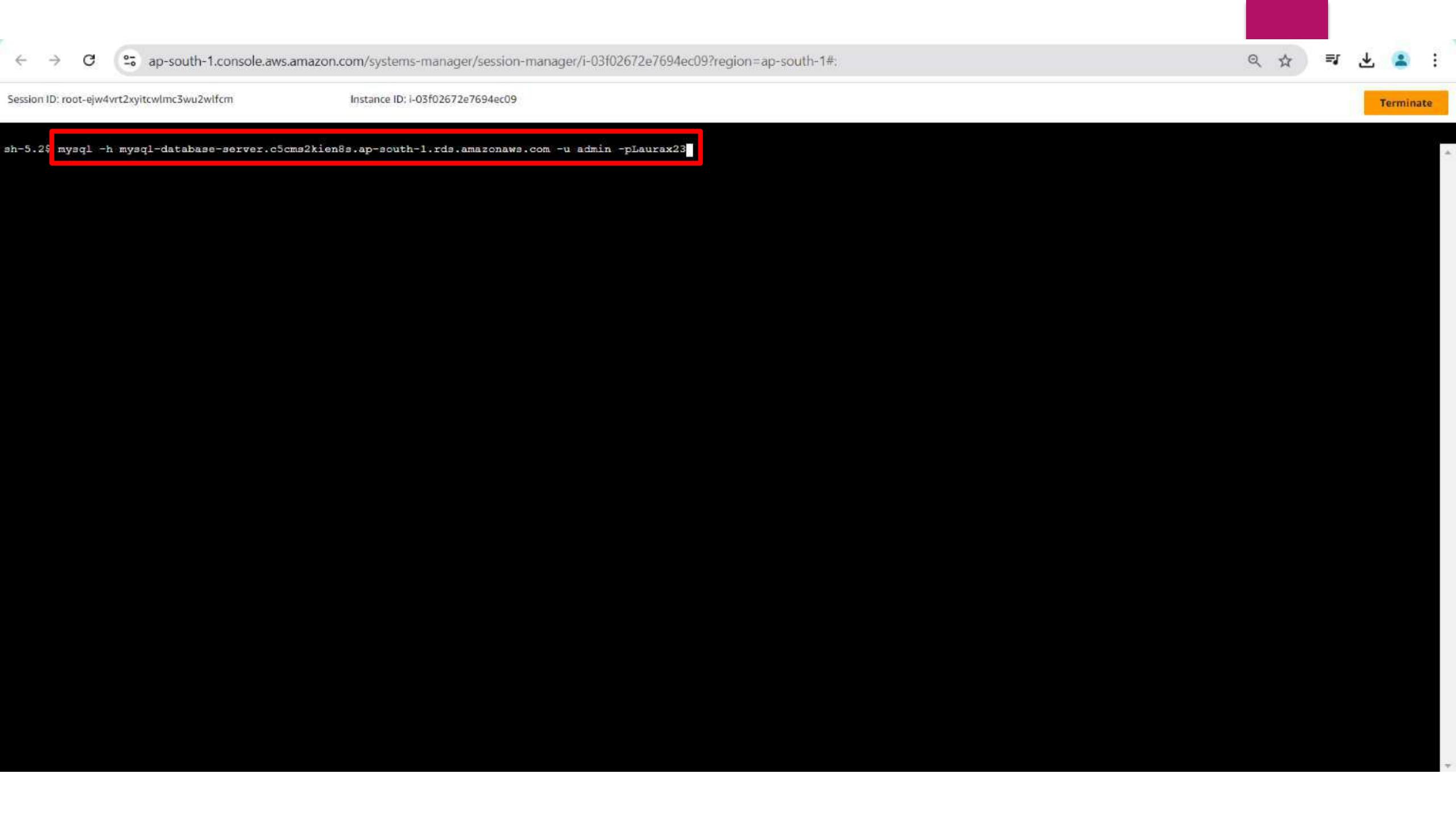
- mysql-database-server** (Blue) - Available
- mysql-db-blue-green-deploy** (Blue) - Available
- mysql-database-server-green-gvawxx** (Green) - Available

A tooltip message indicates: "Some green environment settings are different from blue environment settings" with the note: "The blue instance engine version is 8.0.35 and the green instance engine version is".

The "Connectivity & security" tab is selected, showing the "Blue connectivity and security" section. Under "Endpoint & port", the endpoint URL is listed as **mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com**, which is highlighted with a red box.

Other connectivity details include Port (3306) and Networking (Availability Zone: ap-south-1c, VPC: MyVPC (vpc-0cacebc7400be2222), Subnet group).

At the bottom, CloudShell and Feedback links are available.



← → G ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

sh-5.2\$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23

# RDS connected successfully

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]>
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vt2xyitcwlm3wu2wlfcn Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pIaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
```

# Database was created

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| Project23 |
| ema      |
| mysql    |
| performance_schema |
| sys      |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> 
```

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml

Instance ID: i-03f02672e7694ec09

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> █
```

Session ID: root-ejw4vrt2xyitcwlm3wu2wlfcn

Instance ID: i-03f02672e7694ec09

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pIaurax23  
Welcome to the MariaDB monitor. Commands end with ; or \q.
```

```
Your MySQL connection id is 59
```

```
Server version: 8.0.35 Source distribution
```

```
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
```

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

```
MySQL [(none)]> SHOW DATABASES;
```

Database
Project23
information_schema
mysql
performance_schema
sys

```
5 rows in set (0.005 sec)
```

```
MySQL [(none)]> use Project23
```

```
Reading table information for completion of table and column names.  
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
```

```
MySQL [Project23]> show tables;
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]>
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| Project23 |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]> select * from employees;
```

# Data was stored

← → G ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn Instance ID: i-03f02672e7694ec09

sh-5.29 mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23  
Welcome to the MariaDB monitor. Commands end with ; or \g.  
Your MySQL connection id is 59  
Server version: 8.0.35 Source distribution  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]> select * from employees;
+----+----+----+----+----+
| id | emp_id | name | dob       | department |
+----+----+----+----+----+
| 1  | 1      | ABC  | 2024-07-30 | AWS        |
+----+----+----+----+----+
1 row in set (0.001 sec)

MySQL [Project23]> 
```

← → G ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql          |
| performance_schema |
| sys            |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees           |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]> select * from employees;
+----+----+----+----+----+
| id | emp_id | name | dob      | department |
+----+----+----+----+----+
| 1  | 1      | ABC  | 2024-07-30 | AWS        |
+----+----+----+----+----+
1 row in set (0.001 sec)

MySQL [Project23]> clear
MySQL [Project23]> EXIT
```

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]> select * from employees;
+----+----+----+----+----+
| id | emp_id | name | dob   | department |
+----+----+----+----+----+
| 1  | 1      | ABC  | 2024-07-30 | AWS       |
+----+----+----+----+----+
1 row in set (0.001 sec)

MySQL [Project23]> clear
MySQL [Project23]> EXIT
Bye
sh-5.2$
```

```
← → G ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1# Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09 Terminate
```

```
sh-5.2$ mysql -h mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 59
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> SHOW DATABASES;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.005 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.001 sec)

MySQL [Project23]> select * from employees;
+----+----+----+----+
| id | emp_id | name | dob      | department |
+----+----+----+----+
| 1  | 1      | ABC  | 2024-07-30 | AWS       |
+----+----+----+----+
1 row in set (0.001 sec)

MySQL [Project23]> clear
MySQL [Project23]> EXIT
Bye
sh-5.2$ CLEAR
sh: CLEAR: command not found
sh-5.2$ clear
```

# Verifying Green Deployment to check whether the stored data was replicated

ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#database:id=bgd-twmigmlaqhbprpb4;is-maintenance=true;tab=connectivity

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

Amazon RDS X

Dashboard Databases Query Editor Performance insights Snapshots Exports in Amazon S3 Automated backups Reserved instances Proxies Subnet groups Parameter groups Option groups Custom engine versions Zero-ETL integrations New Events Event subscriptions Recommendations 0 Certificate update

DB Identifier Status Role Engine Region & AZ Size Recommendations CPU

DB Identifier	Status	Role	Engine	Region & AZ	Size	Recommendations	CPU
mysql-database-server Blue	Available	Primary	MySQL Community	ap-south-1c	db.t3.micro		3.28
mysql-db-blue-green-deploy	Available	Blue/Green Deployment		-	-	-	-
mysql-database-server-green-gvawxx Green	Available	Primary	MySQL Community	ap-south-1c	db.t3.micro		3.06

Some green environment settings are different from blue environment settings

- The blue instance engine version is 8.0.35 and the green instance engine version is 8.0.39.

Connectivity & security Monitoring Logs & events Configuration Status Tags Recommendations

Blue connectivity and security Blue

Endpoint & port

Endpoint: mysql-database-server.c5cms2kien8s.ap-south-1.rds.amazonaws.com

Port: 3306

Networking

Availability Zone: ap-south-1c

VPC: MyVPC (vpc-0cacebc7400be2222)

Subnet group:

Green connectivity and security Green

Endpoint & port

Endpoint: mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com

Port: 3306

Networking

Availability Zone: ap-south-1c

VPC: MyVPC (vpc-0cacebc7400be2222)

Subnet group:

← → G 55 ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlm3wu2wlfcn Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> █
```

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn

Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.25 mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database |
+-----+
| Project23 |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> use Project23
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql          |
| performance_schema |
| sys            |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names.
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcml Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names.
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.002 sec)

MySQL [Project23]>
```

← → C ap-south-1.console.aws.amazon.com/systems-manager/session-manager/i-03f02672e7694ec09?region=ap-south-1#:

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn Instance ID: i-03f02672e7694ec09

Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database      |
+-----+
| Project23     |
| information_schema |
| mysql          |
| performance_schema |
| sys            |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees           |
+-----+
1 row in set (0.002 sec)

MySQL [Project23]> select * from employees;
```

# Data also replicated in Green deploy

Session ID: root-ejw4vrt2xyitcwlmc3wu2wlfcn  
Instance ID: i-03f02672e7694ec09  
Terminate

```
sh-5.2$ mysql -h mysql-database-server-green-gvawxx.c5cms2kien8s.ap-south-1.rds.amazonaws.com -u admin -pLaurax23
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 8.0.39 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> show databases;
+-----+
| Database      |
+-----+
| Project23    |
| information_schema |
| mysql         |
| performance_schema |
| sys           |
+-----+
5 rows in set (0.003 sec)

MySQL [(none)]> use Project23
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MySQL [Project23]> show tables;
+-----+
| Tables_in_Project23 |
+-----+
| employees          |
+-----+
1 row in set (0.002 sec)

MySQL [Project23]> select * from employees;
+----+----+----+----+
| id | emp_id | name | dob      | department |
+----+----+----+----+
| 1  | 1      | ABC  | 2024-07-30 | AWS       |
+----+----+----+----+
1 row in set (0.001 sec)

MySQL [Project23]>
```

### 3. Configure Security Groups and Scaling

#### Security Group

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

aws Services Search [Alt+S] VPC EC2 Mumbai Divine Stag

EC2 > Security Groups > Create security group

### Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

#### Basic details

Security group name Info  
Database-SG  
Name cannot be edited after creation.

Description Info  
Allow Database

VPC Info  
vpc-0cacebc7400be2222 (MyVPC)

#### Inbound rules Info

Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>	Delete
MySQL/Aurora	TCP	3306	Custom	10.0.0.0/16	X
10.0.0.0/16 X					
<a href="#">Add rule</a>					

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# Scaling Groups

ap-south-1.console.aws.amazon.com/elasticbeanstalk/home?region=ap-south-1#/create-environment

aws Services Search [Alt+S] Mumbai Divine Stag

VPC EC2

**Capacity Info**  
Configure the compute capacity of your environment and auto scaling settings to optimize the number of instances used.

**Auto scaling group**

**Environment type**  
Select a single-instance or load-balanced environment. You can develop and test an application in a single-instance environment to save costs and then upgrade to a load-balanced environment when the application is ready for production. [Learn more](#)

Load balanced

**Instances**

1	Min
4	Max

**Fleet composition**  
Spot instances are launched at the lowest available price. [Learn more](#)

On-Demand instances  
 Combine purchase options and instances

**Maximum spot price**  
The maximum price per instance-hour, in USD, that you're willing to pay for a Spot Instance. Setting a custom price limits your chances to fulfill your target capacity using Spot Instances.

Default  
 Set your maximum price

**On-Demand base**  
The minimum number of On-Demand instances that your Auto Scaling group provisions before considering Spot Instances as your environment scales out.

0

**On-Demand above base**  
The percentage of On-Demand Instances as part of any additional capacity that your Auto Scaling group provisions beyond the On-Demand base instances.

70 94

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Security Groups and Scaling groups are configured accordingly for the requirement in the process

## Topics:

In this AWS project, you have to deploy a high-availability PHP application with an external Amazon RDS database to Elastic Beanstalk. Running a DB instance external to Elastic Beanstalk decouples the database from the lifecycle of your environment. This lets you connect to the same database from multiple environments, swap one database for another, or perform a blue/green deployment without affecting your database.

- High availability PHP application was deployed and tested with an external Amazon RDS database to Elastic Beanstalk.
- Performed blue/green deployment and tested.