

Creating VPC :-

The screenshot shows the 'Create VPC' configuration page in the AWS Management Console. The top navigation bar includes the AWS logo, 'Services' dropdown, a search bar, and account information for 'N. California' and 'mihir.popat@growexxaws.com'. The main title is 'Create VPC' with an 'Info' link. Below it, a sub-header states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.' The configuration is divided into two tabs: 'VPC settings' (selected) and 'Tags'.

VPC settings

Resources to create [Info](#)
Create only the VPC resource or the VPC and other networking resources.

VPC only VPC and more

Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
my-vpc-mihir

IPv4 CIDR block [Info](#)
 IPv4 CIDR manual input
 IPAM-allocated IPv4 CIDR block

IPv4 CIDR
10.0.0.0/16

IPv6 CIDR block [Info](#)
 No IPv6 CIDR block
 IPAM-allocated IPv6 CIDR block
 Amazon-provided IPv6 CIDR block
 IPv6 CIDR owned by me

Tenancy [Info](#)
Default

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

Key	Value - optional

aws Services Search [Alt+S] N California mihir.popat@gowexaws

Resources to create [Info](#)
Create only the VPC resource or the VPC and other networking resources.

VPC only VPC and more

Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
my-vpc-mihir

IPv4 CIDR block [Info](#)
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block

IPv4 CIDR
10.0.0.0/16

IPv6 CIDR block [Info](#)
 No IPv6 CIDR block IPAM-allocated IPv6 CIDR block Amazon-provided IPv6 CIDR block IPv6 CIDR owned by me

Tenancy [Info](#)
Default

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

Key	Value - optional
<input type="text"/> Name X	<input type="text"/> my-vpc-mihir X Remove

Add new tag
You can add 49 more tags.

Cancel **Create VPC**

The screenshot shows the AWS VPC Details page for a newly created VPC named "my-vpc-mihir". The top navigation bar includes the AWS logo, Services, a search bar, and account information (mihir.popat@growexaws.com @ growexaws). A green banner at the top indicates success: "You successfully created vpc-011bd70770918b91b / my-vpc-mihir".

VPC Details:

VPC ID	State	DNS hostnames	DNS resolution
vpc-011bd70770918b91b	Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-3c47845a	rtb-0dfab4a4a4b61d7fe	acl-069a90d3d00e43be6
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR
No	10.0.0.0/16	-	-
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	
Disabled	-	719056139938	

Resource map:

- VPC: Show details (Your AWS virtual network)
- Subnets (0): Subnets within this VPC
- Route tables (1): Route network traffic to resources (rtb-0dfab4a4a4b61d7fe)
- Network connections (0): Connections to other networks

A modal window titled "Introducing the VPC resource map" explains the legend for the resource map:

- Solid lines represent relationships between resources in your VPC.
- Dotted lines represent network traffic to network functions.

- Search VPC In the search box and click on create VPC .
- Give name to VPC and set IPV4 CIDR block so that we can set ip address range . The number after "/" denotes fixed bits . It ranges form 0 to 32 bits . So if 16 then first 2 digits are fixed . The reason to defined this range is because when we create any instance private ip address is used to connect we can not change public ip address . Tendency is

selected as default because not required dedicated hardware right now . And create VPC . In every AWS account there is default VPC and Default Subnet . In here region US-WEST-1 is choose complete the assignment.

Create Public and Private Subnet :-

The screenshot shows the AWS VPC Create Subnet wizard. At the top, the navigation bar includes the AWS logo, Services, a search bar, and account information for N. California and mihir.popat@gowexx.com @ growexxaws. The main page title is "Create subnet".

VPC ID: A dropdown menu is open, showing "vpc-011bd70770918b91b (my-vpc-mihir)".

Associated VPC CIDRs: IPv4 CIDRs listed as "10.0.0.0/16".

Subnet settings: Subnet 1 of 4.

Subnet name: "public-subnet-1".

Availability Zone: "US West (N. California) / us-west-1".

IPv4 CIDR block: "10.0.0.0/24".

Tags - optional: A table with one entry: Key "Name" and Value "public-subnet-1".

Subnet 2 of 4

Subnet name

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

The name can be up to 256 characters long.

Availability Zone [Info](#)

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



IPv4 CIDR block [Info](#)



▼ Tags - optional

Key



Value - optional



You can add 49 more tags.

Subnet 3 of 4

Subnet name

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

The name can be up to 256 characters long.

Availability Zone [Info](#)

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



IPv4 CIDR block [Info](#)



▼ Tags - optional

Key

Value - optional



You can add 49 more tags.

Subnet 4 of 4

Subnet name

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

The name can be up to 256 characters long.

Availability Zone [Info](#)

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



IPv4 CIDR block [Info](#)



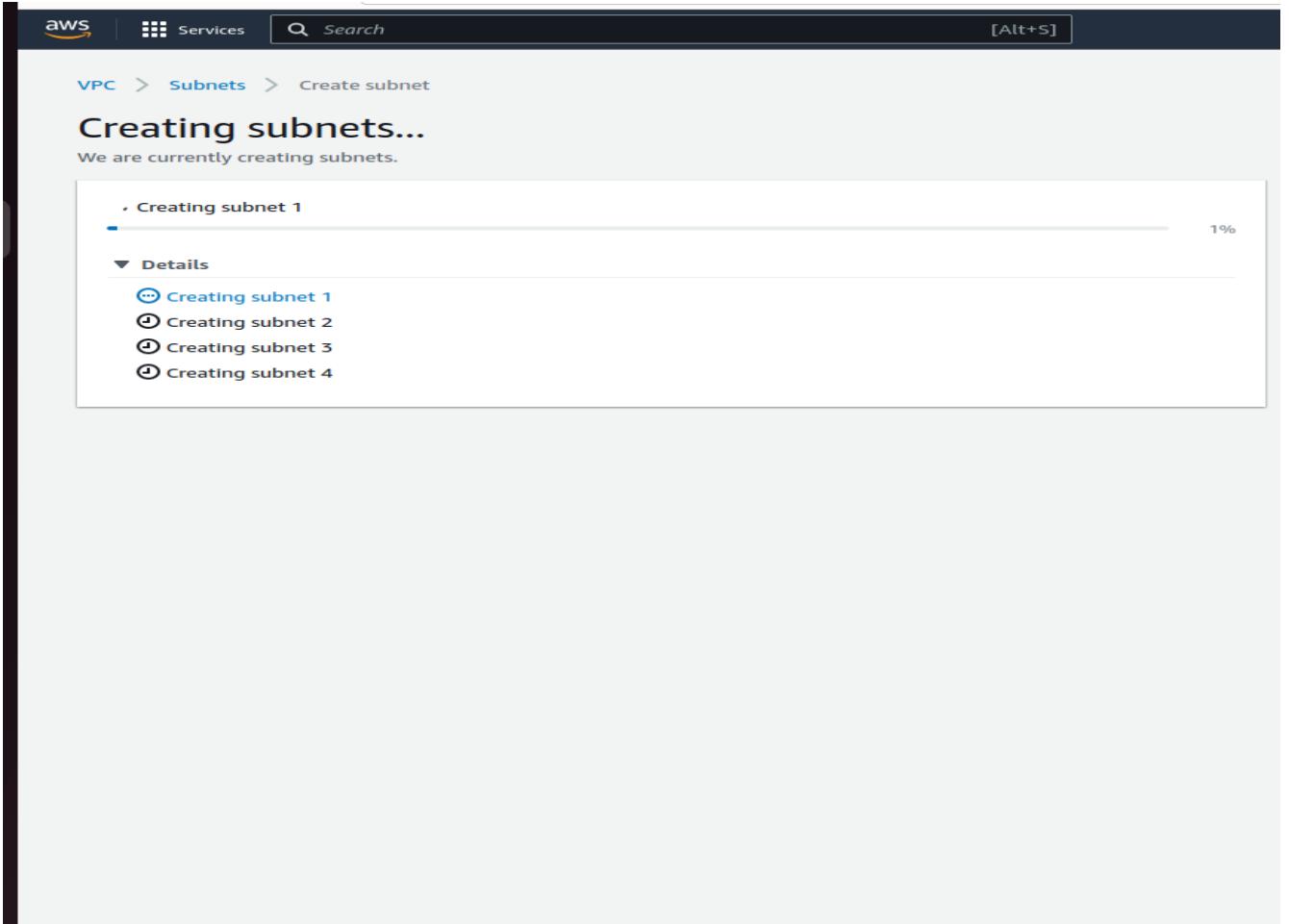
▼ Tags - optional

Key

Value - optional



You can add 49 more tags.



The screenshot shows the AWS VPC Subnets page. At the top, a green banner indicates: "You have successfully created 4 subnets: subnet-026c5281869687bbe, subnet-0e51a900752662900, subnet-07ef563799dcf4cb9, subnet-00b2143e34289d9a2". The main table lists four subnets:

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4 addresses
private-subnet-1	subnet-07ef563799dcf4cb9	Available	vpc-011bd70770918b91b m...	10.0.2.0/24	-	251
private-subnet-2	subnet-00b2143e34289d9a2	Available	vpc-011bd70770918b91b m...	10.0.3.0/24	-	251
public-subnet-1	subnet-026c5281869687bbe	Available	vpc-011bd70770918b91b m...	10.0.0.0/24	-	251
public-subnet-2	subnet-0e51a900752662900	Available	vpc-011bd70770918b91b m...	10.0.1.0/24	-	251

Below the table, a section titled "Select a subnet" is shown, with three small icons for copy, cut, and paste.

Now create internet gateway :- by default all the subnets are private so make it public we need internet gateway and routing table

AWS Services Search [Alt+S]

VPC > Internet gateways > Create internet gateway

Create internet gateway Info

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

Internet gateway settings

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

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

Key	Value - optional	Remove
<input type="text" value="Name"/> <input type="button" value="X"/>	<input type="text" value="mihir-igw"/> <input type="button" value="X"/>	<input type="button" value="Remove"/>

You can add 49 more tags.

The screenshot shows the AWS VPC dashboard with the 'Internet gateways' section selected. A success message at the top states: 'The following Internet gateway was created: igw-05670b6b5122eb6c2 - mihir-igw. You can now attach to a VPC to enable the VPC to communicate with the Internet.' Below this, the breadcrumb navigation shows 'VPC > Internet gateways > igw-05670b6b5122eb6c2'. The main content area displays the details of the internet gateway 'igw-05670b6b5122eb6c2 / mihir-igw'. The 'Details' tab is selected, showing the following information:

Internet gateway ID	State	VPC ID	Owner
igw-05670b6b5122eb6c2	Detached	-	719056139938

Below the details, there is a 'Tags' section with a search bar and a table showing one tag: Name: mihir-igw.

Now attach internet gateway with vpc.

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N. California mihir.popat@gowexaws

VPC > Internet gateways > Attach to VPC (igw-05670b6b5122eb6c2) ⓘ

Attach to VPC (igw-05670b6b5122eb6c2) ⓘ

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

Available VPCs
Attach the internet gateway to this VPC.

vpc-011bd70770918b91b X

▶ AWS Command Line Interface command

Cancel **Attach internet gateway**

This screenshot shows the 'Attach to VPC' configuration page for an internet gateway in the AWS VPC service. The top navigation bar includes the AWS logo, services menu, search bar, and account information for 'mihir.popat@gowexaws'. The breadcrumb path indicates the current step: 'VPC > Internet gateways > Attach to VPC (igw-05670b6b5122eb6c2)'. The main title is 'Attach to VPC (igw-05670b6b5122eb6c2)' with an 'Info' link. A 'VPC' section explains the purpose of attaching an internet gateway to enable communication with the internet. Below it, an 'Available VPCs' section lists 'vpc-011bd70770918b91b' with a delete 'X' button. A link to 'AWS Command Line Interface command' is also present. At the bottom are 'Cancel' and a prominent orange 'Attach internet gateway' button.

The screenshot shows the AWS VPC dashboard with the 'Internet gateways' section selected. A success message at the top states: 'Internet gateway igw-05670b6b5122eb6c2 successfully attached to vpc-011bd70770918b91b'. The main content area displays the details of the internet gateway 'igw-05670b6b5122eb6c2 / mihir-igw'. The 'Details' tab is active, showing the following information:

Internet gateway ID	igw-05670b6b5122eb6c2	State	Attached
VPC ID	vpc-011bd70770918b91b my-vpc-mihir	Owner	719056139938

The 'Tags' section shows one tag: Name = mihir-igw. There is a 'Manage tags' button and navigation arrows for the tag list.

On the left sidebar, under 'Virtual private cloud', 'Internet gateways' is also selected. Other options like 'Your VPCs', 'Subnets', and 'Route tables' are visible but not selected.

Now create route table for public subnet to separate them for private subnet .

The screenshot shows the AWS VPC Route Tables creation interface. At the top, there's a navigation bar with the AWS logo, a search bar, and account information for 'mihir.popat@gowexx.com @ growexaws'. Below the navigation, the path 'VPC > Route tables > Create route table' is shown. The main title is 'Create route table' with an 'Info' link. A descriptive text explains that a route table specifies packet forwarding between subnets, the internet, and VPN connections.

Route table settings

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

VPC
The VPC to use for this route table.

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
<input type="text" value="Name"/> X	<input type="text" value="public-subnet-rt"/> X

Add new tag
You can add 49 more tags.

Cancel **Create route table**

AWS Services Search [Alt+S] N. California mihir.popat@growexx.com @ growexaws

VPC dashboard X Route table rtb-07525e230da182d66 | public-subnet-rt was created successfully. X

EC2 Global View New Filter by VPC: Select a VPC ▾

Virtual private cloud Your VPCs Subnets Route tables Internet gateways Egress-only Internet gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections Security Network ACLs Security groups Network Analysis Reachability Analyzer Network Access Analyzer DNS firewall Rule groups Domain lists

VPC > Route tables rtb-07525e230da182d66 / public-subnet-rt Actions ▾

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer X

Details Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-07525e230da182d66	No	-	-
VPC	Owner ID		
vpc-011bd70770918b91b my-vpc-mihir	719056139938		

Routes Subnet associations Edge associations Route propagation Tags

Routes (1) Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

The screenshot shows the AWS VPC Route Tables 'Edit routes' page. The table has columns for Destination, Target, Status, and Propagated. There are two existing routes: one to 'local' (Status: Active, Propagated: No) and another to an Internet Gateway (Status: -, Propagated: No). A new route for '0.0.0.0/0' is being added, indicated by the 'Add route' button and the input fields for destination and target.

Destination	Target	Status	Propagated
10.0.0.0/16	Q local X	Active	No
Q 0.0.0.0/0 X	Q igw-05670b6b5122eb6c2 X -	-	No Remove

Add route Cancel Preview Save changes

Due to adding 0.0.0.0 we can add internet gate way for public subnet.

VPC dashboard X

Services Search [Alt+S]

EC2 Global View New N. California | mihir.popat@growexaws.com @ growexaws

Filter by VPC: Select a VPC

Virtual private cloud X

Your VPCs Subnets

Route tables Actions

Internet gateways Run Reachability Analyzer X

Egress-only Internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Security Edit routes

Network ACLs

Security groups

Network Analysis Both

Reachability Analyzer

Network Access Analyzer

DNS firewall Edit

Rule groups

Domain lists

Updated routes for rtb-07525e230da182d66 / public-subnet-rt successfully
► Details

VPC > Route tables > rtb-07525e230da182d66

rtb-07525e230da182d66 / public-subnet-rt

You can now check network connectivity with Reachability Analyzer

Details Info

Route table ID rtb-07525e230da182d66	Main No	Explicit subnet associations -	Edge associations -
VPC vpc-011bd70770918b91b my-vpc-mihir	Owner ID 719056139938		

Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	igw-05670b6b5122eb6c	Active	No
10.0.0.0/16	local	Active	No

Now edit public subnet explicitly .

VPC > Route tables > rtb-07525e230da182d66 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
private-subnet-1	subnet-07ef563799dcf4cb9	10.0.2.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)
private-subnet-2	subnet-00b2145e54289d9e2	10.0.3.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)
public-subnet-1	subnet-026c5281869687bbe	10.0.0.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)
public-subnet-2	subnet-0e51a900752662900	10.0.1.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)

Selected subnets

subnet-026c5281869687bbe / public-subnet-1 X subnet-0e51a900752662900 / public-subnet-2 X

Cancel Save associations

You have successfully updated subnet associations for rtb-07525e230da182d66 / public-subnet-rt.

VPC > Route tables > rtb-07525e230da182d66

rtb-07525e230da182d66 / public-subnet-rt

Actions ▾

Run Reachability Analyzer X

Details Info

Route table ID rtb-07525e230da182d66	Main No	Explicit subnet associations 2 subnets	Edge associations =
VPC vpc-011bd7077091bb91b my-vpc-mihir	Owner ID 719056139938		

Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	igw-05670b6b512eb6c2	Active	No
10.0.0.0/16	local	Active	No

Edit routes < 1 > ⌂

VPC > Route tables > rtb-0dfab4a4a4b61d7fe > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
private-subnet-1	subnet-07ef563799dcf4cb9	10.0.2.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)
private-subnet-2	subnet-00b2143e34289d9a2	10.0.3.0/24	-	Main (rtb-0dfab4a4a4b61d7fe)
public-subnet-1	subnet-026c5281869687bbe	10.0.0.0/24	-	rtb-07525e230da182d66 / public-subnet-rt
public-subnet-2	subnet-0e51a900752662900	10.0.1.0/24	-	rtb-07525e230da182d66 / public-subnet-rt

Selected subnets

subnet-00b2143e34289d9a2 / private-subnet-2 X subnet-07ef563799dcf4cb9 / private-subnet-1 X

Cancel Save associations

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You have successfully updated subnet associations for rtb-0dfab4a4a4b61d7fe.

Route tables (6) Info

Filter route tables

	Name	Route table ID	Explicit subnet associat...	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	-	rtb-fc9ad59a	-	-	Yes	vpc-3c2df5a	719056139938
<input type="checkbox"/>	-	rtb-0020ed77945b06e28	-	-	Yes	vpc-018151355044cb82e	719056139938
<input type="checkbox"/>	RDS-Pvt-rt	rtb-0be9f90e4ddca373	2 subnets	-	No	vpc-3c2df5a	719056139938
<input type="checkbox"/>	-	rtb-0dfab4a4a4b61d7fe	2 subnets	-	Yes	vpc-011bd70770918b91b m...	719056139938
<input type="checkbox"/>	public-subnet-rt	rtb-0752e230da182d66	2 subnets	-	No	vpc-011bd70770918b91b m...	719056139938
<input type="checkbox"/>	-	rtb-0777ec06a1aab046	-	-	Yes	vpc-001905b7c3c852fcb my...	719056139938

Select a route table

The screenshot shows the AWS Management Console interface for managing VPC subnets. The top navigation bar includes the AWS logo, Services, a search bar, and account information for 'mihir.popat@growexaws.com' in the 'N. California' region.

The main page title is 'Edit subnet settings' for a subnet named 'public-subnet-1'. The subnet ID is 'subnet-026c5281869687bbe'.

Auto-assign IP settings

Enable the auto-assign IP settings to automatically request a public IPv4 or IPv6 address for a new network interface in this subnet.

- Enable auto-assign public IPv4 address
- Enable auto-assign customer-owned IPv4 address

Option disabled because no customer owned pools found.

Resource-based name (RBN) settings

Specify the hostname type for EC2 instances in this subnet and optional RBN DNS query settings.

- Enable resource name DNS A record on launch
- Enable resource name DNS AAAA record on launch

Hostname type:

- Resource name
- IP name

DNS64 settings

Enable DNS64 to allow IPv6-only services in Amazon VPC to communicate with IPv4-only services and networks.

Auto Assign ip address that help when we create ec2 instance in same subnet for public ip address.

Now creating EC2 instance

- To create EC2 instance click on launch instance . Then give name to the EC2 instance and select amazon machine image as ubuntu and instance type t2.micro .

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New EC2 Experience Tell us what you think X

EC2 Dashboard

- EC2 Global View
- Events
- Tags
- Limits

Instances

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

Images

- AMIs
- AMI Catalog

Elastic Block Store

- Volumes
- Snapshots
- Lifecycle Manager

Network & Security

- Security Groups
- Elastic IPs
- Placement Groups
- Key Pairs

Resources

You are using the following Amazon EC2 resources in the US West (N. California) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts	0
Elastic IPs	0	Instances	0	Key pairs	0
Load balancers	0	Placement groups	0	Security groups	20
Snapshots	0	Volumes	0		

(ⓘ Easily size, configure, and deploy Microsoft SQL Server Always On availability groups on AWS using the AWS Launch Wizard for SQL Server. Learn more X)

Launch instance

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

Service health C AWS Health Dashboard

Region	Status
US West (N. California)	ⓘ This service is operating normally

Zones

Zone name	Zone ID
us-west-1a	usw1-az1
us-west-1c	usw1-az3

Scheduled events C

US West (N. California)
No scheduled events

Migrate a server

Account attributes

Supported platforms ⓘ

- VPC

Default VPC ⓘ vpc-3c2dfdf5a

Settings

- EBS encryption
- Zones
- EC2 Serial Console
- Default credit specification
- Console experiments

Additional information ⓘ

Getting started guide
Documentation
All EC2 resources
Forums
Pricing
Contact us

Help topics ⓘ X

Why can't I connect to my Amazon S3 bucket from my Amazon EC2 instance?
Using Elastic IP Addresses in Amazon EC2

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EC2 > Instances > Launch an instance

Launch an instance Info

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

Name and tags Info

Name Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Quick Start

Amazon Linux	Ubuntu	Windows	Red Hat	SUSE Linux	Browse more AMIs

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type ami-060d3509162bcc386 (64-bit (x86)) / ami-0001e277752486de5 (64-bit (Arm)) Virtualization: hvm ENA enabled: true Root device type: ebs	Free tier eligible
---	--------------------

Description

Summary

Number of Instances Info

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI... [read more](#)
ami-060d3509162bcc386

Virtual server type (Instance type)
t2.micro

Firewall (security group)
New security group

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

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GiB of bandwidth to the internet.

Cancel Launch instance

Resource tags X

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value, both of which you define.

Key
Up to 128 Unicode characters in UTF-8

Value
Optional tag value up to 256 characters in UTF-8

Resource types
The resource type on which the tag will be created when an instance is launched from the launch template.

Instances
Use this tag for instances created with this launch template

Volumes
Use this tag for volumes created with this launch template

Elastic graphics
Use this tag for elastic graphics created with this launch template

Spot instance requests
Use this tag for spot instance requests created with this launch template

Network interfaces
Use this tag for network interfaces created with this launch template

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Summary

Number of instances [Info](#)
1

Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ... [read more](#)
ami-0d50e5e845c552faf

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

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

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro) in the Regions in which t2.micro is unavailable instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GiB of bandwidth to the internet.

Cancel [Launch instance](#)

Resource tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value, both of which you define.

Key
Up to 128 Unicode characters in UTF-8

Value
Optional tag value up to 256 characters in UTF-8

Resource types
The resource type on which the tag will be created when an instance is launched from the launch template.

Instances
Use this tag for instances created with this launch template

Volumes
Use this tag for volumes created with this launch template

Elastic graphics
Use this tag for elastic graphics created with this launch template

Spot instance requests
Use this tag for spot instance requests created with this launch template

Network interfaces
Use this tag for network interfaces created with this launch template

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On-Demand Windows pricing: 0.0184 USD per Hour
On-Demand Linux pricing: 0.0138 USD per Hour

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

Key pair name - required
mihir-first

Network settings Info
Edit

Network Info
vpc-3c2dfdf5a

Subnet Info
No preference (Default subnet in any availability zone)

Auto-assign public IP Info
Enable

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

Create security group Select existing security group

We'll create a new security group called 'launch-wizard-6' with the following rules:

Allow SSH traffic from Anywhere
Helps you connect to your instance 0.0.0.0/0

Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

⚠ Rule with source 0.0.0.0/0 allows all IP addresses to access your instance. We recommend setting a more specific rule.

Summary

Number of instances Info
1

Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, ..read more
ami-0d50e5e0845c552faf

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

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

ⓘ Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GB of bandwidth to the internet.

Resource tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value, both of which you define.

Key
Up to 128 Unicode characters in UTF-8

Value
Optional tag value up to 256 characters in UTF-8

Resource types
The resource type on which the tag will be created when an instance is launched from the launch template.

Instances
Use this tag for instances created with this launch template

Volumes
Use this tag for volumes created with this launch template

Elastic graphics
Use this tag for elastic graphics created with this launch template

Spot instance requests
Use this tag for spot instance requests created with this launch template

Network interfaces
Use this tag for network interfaces created with this launch template

Now if key pair not created create it and save it .

Create key pair

X

Key pairs allow you to connect to your instance securely.

Enter the name of the key pair below. When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** [Learn more](#)

Key pair name

Enter key pair name

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

RSA

RSA encrypted private and public key pair

ED25519

ED25519 encrypted private and public key pair (Not supported for Windows instances)

Private key file format

.pem

For use with OpenSSH

.ppk

For use with PuTTY

Cancel

Create key pair

In the network setting select the VPC already created and select the public subnet already created and create security group if not create and assign rule to it and write detail description to it

.

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-011bd70770918b91b (my-vpc-mihir)
10.0.0.0/16

Subnet [Info](#)

subnet-026c5281869687bbe	public-subnet-1
	▼
	Create new subnet

Auto-assign public IP [Info](#)

Enable

Firewall (security groups) [Info](#)

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

Create security group Select existing security group

Security group name - required

sg-mihir-wp

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#@[]+=;&;!\$*

Description - required [Info](#)

security group for wordpress

Inbound security groups rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

[Remove](#)

Type Info	Protocol Info	Port range Info
ssh	TCP	22
Source type Info	Source Info	Description - optional Info
Anywhere	Add CIDR, prefix list or security	e.g. SSH for admin desktop
	0.0.0.0/0 X	

Also Add security group rules

security group for wordpress

Inbound security groups rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

[Remove](#)

Type [Info](#)

ssh

Protocol [Info](#)

TCP

Port range [Info](#)

22

Source type [Info](#)

Anywhere

Source [Info](#)

Add CIDR, prefix list or security

Description - optional [Info](#)

e.g. SSH for admin desktop

0.0.0.0/0 [X](#)

▼ Security group rule 2 (TCP, 80, Multiple sources)

[Remove](#)

Type [Info](#)

HTTP

Protocol [Info](#)

TCP

Port range [Info](#)

80

Source type [Info](#)

Custom

Source [Info](#)

Add CIDR, prefix list or security

Description - optional [Info](#)

e.g. SSH for admin desktop

0.0.0.0/0 [X](#) ::/0 [X](#)

▼ Security group rule 3 (TCP, 443, Multiple sources)

[Remove](#)

Type [Info](#)

HTTPS

Protocol [Info](#)

TCP

Port range [Info](#)

443

Source type [Info](#)

Custom

Source [Info](#)

Add CIDR, prefix list or security

Description - optional [Info](#)

e.g. SSH for admin desktop

0.0.0.0/0 [X](#) ::/0 [X](#)

 Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting [X](#)

S Services Search [Alt+S] N. California ▾ mihir.popat@growexx.com @ growexxaws ▾

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance (i-06cd9cf82de153484)

▼ Launch log

Initializing requests	Succeeded
Creating security groups	Succeeded
Creating security group rules	Succeeded
Launch initiation	Succeeded

Next Steps

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

Connect to your instance
Once your instance is running, log into it from your local computer.
[Connect to instance](#)
[Learn more](#)

Connect an RDS database
Configure the connection between an EC2 instance and a database to allow traffic flow between them.
[Connect an RDS database](#)
[Create a new RDS database](#)
[Learn more](#)

[View all instances](#)

Security groups X

A security group is a set of firewall rules that controls the traffic to and from your instance. Inbound rules control the incoming traffic to your instance, and outbound rules control the outgoing traffic from your instance. You can assign one or more security groups to your instance. If you assign multiple security groups, all the rules are evaluated to control inbound and outbound traffic. If no value is specified the value of the source template will still be used. If the template value is not specified then the default API value will be used.

[Learn more](#)

[Create a VPC security group for a public web server](#)
[Create a VPC security group for a private DB instance](#)

S | Services | Search [Alt+S] | N. California | mihir.popat@gowexx.com @ growexaws

New EC2 Experience [Tell us what you think](#)

Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
mihir-first	i-06cd9cf82de153484	Running	t2.micro	2/2 checks passed	No alarms	us-west-1a	-	54.176.228.23	-

Instances

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

Images

- AMIs
- AMI Catalog

Elastic Block Store

- Volumes
- Snapshots
- Lifecycle Manager

Network & Security

- Security Groups
- Elastic IPs
- Placement Groups
- Key Pairs

Instance: i-06cd9cf82de153484 (mihir-first)

54.176.228.23 [Public IP]	vpc-011bd70770918b91b (my-vpc-mihir)	No recommendations available for this instance.
IAM Role	Subnet ID	Auto Scaling Group name
-	subnet-026c5281869607bbe (public-subnet-1)	-
Instance details Info		
Platform	AMI ID	Monitoring
Ubuntu (Inferred)	ami-0d50e5e045c552faf	disabled
Platform details	AMI name	Termination protection
Linux/UNIX	ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20230208	Disabled
Stop protection	Launch time	AMI location
Disabled	Fri Mar 03 2023 16:15:24 GMT+0530 (India Standard Time) (8 minutes)	amazon/ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20230208
Instance auto-recovery	Lifecycle	Stop-hibernate behavior
Default	normal	disabled
AMI launch index		

Now connect to instance

aws Services Search [Alt+S]

EC2 > Instances > i-06cd9cf82de153484 > Connect to instance

Connect to instance Info

Connect to your instance i-06cd9cf82de153484 (mihir-first) using any of these options

EC2 Instance Connect Session Manager SSH client EC2 serial console

Instance ID [i-06cd9cf82de153484 \(mihir-first\)](#)

Public IP address [54.176.228.23](#)

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

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

Cancel **Connect**

This screenshot shows the 'Connect to instance' dialog box from the AWS Management Console. At the top, it displays the instance ID (i-06cd9cf82de153484) and its public IP address (54.176.228.23). Below this, there's a field for the user name, which is set to 'ubuntu'. A note at the bottom of the dialog box states: 'ⓘ Note: In most cases, the default user name, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.' At the bottom right of the dialog are two buttons: 'Cancel' and a prominent orange 'Connect' button.

```
aws Services Search [Alt+S] N. California ▾ mihir.popat@growexaws.com @ growexaws ▾
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Fri Mar  3 10:50:14 UTC 2023

System load: 0.0107421875    Processes:          102
Usage of /: 19.8% of 7.57GB  Users logged in:      0
Memory usage: 19k           IPv4 address for eth0: 10.0.0.245
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

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

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

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

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

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

ubuntu@ip-10-0-0-245:~$
```

i-06cd9cf82de153484 (mihir-first) X
PublicIPs: 54.176.228.23 PrivateIPs: 10.0.0.245

```
growlt216@growlt216:~$ cd Downloads  
growlt216@growlt216:~/Downloads$ sudo chmod 400 mthir-first.pem  
[sudo] password for growlt216:  
growlt216@growlt216:~/Downloads$ ssh -i "mthir-first.pem" ubuntu@54.176.228.23  
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)
```

```
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/advantage
```

System information as of Fri Mar 3 12:16:32 UTC 2023

```
System load: 0.0 Processes: 185  
Usage of /: 23.7% of 7.57GB Users logged in: 1  
Memory usage: 26% IPv4 address for eth0: 10.0.0.245  
Swap usage: 0%
```

* Ubuntu Pro delivers the most comprehensive open source security and compliance features.

<https://ubuntu.com/aws/pro>

* Introducing Expanded Security Maintenance for Applications.
Receive updates to over 25,000 software packages with your Ubuntu Pro subscription. Free for personal use.

<https://ubuntu.com/aws/pro>

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

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

```
Last login: Fri Mar 3 11:58:15 2023 from 13.52.6.116  
ubuntu@ip-10-0-0-245:~$ 
```

```
ubuntu@ip-10-0-0-245: $ exit
logout
Connection to 54.176.228.23 closed.
growlt216@growlt216:~/Downloads$ sudo chmod 600 mihir-first.pem
growlt216@growlt216:~/Downloads$ ssh -i "mihir-first.pem" ubuntu@54.176.228.23
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Fri Mar 3 12:20:28 UTC 2023

System load: 0.0 Processes: 103
Usage of /: 23.7% of 7.57GB Users logged in: 1
Memory usage: 26% IPv4 address for eth0: 10.0.0.245
Swap usage: 0%

* Ubuntu Pro delivers the most comprehensive open source security and
compliance features.

https://ubuntu.com/aws/pro

* Introducing Expanded Security Maintenance for Applications.
Receive updates to over 25,000 software packages with your
Ubuntu Pro subscription. Free for personal use.

https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

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

Last login: Fri Mar 3 12:16:33 2023 from 122.169.119.120
ubuntu@ip-10-0-0-245: $ 
```

```
Last login: Fri Mar 3 12:16:33 2023 from 122.169.119.120
ubuntu@ip-10-0-0-245: $ sudo apt update
Hit:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [107 kB]
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Fetched 226 kB in 1s (366 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-10-0-0-245: $ 
```

```
ubuntu@ip-10-0-0-245:~$ sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcgi-fast-perl libcgi-pm-perl libclone-perl libcode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0dbi libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libdata-dump-perl libipc-sharedcache-perl libbusiness-isbn-perl libwww-perl mailx tinyca
The following NEW packages will be installed:
  libcgi-fast-perl libcgi-pm-perl libclone-perl libcode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0dbi libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
0 upgraded, 28 newly installed, 0 to remove and 42 not upgraded.
Need to get 29.5 MB of archives.
After this operation, 242 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

```
ubuntu@ip-10-0-0-245:~$ sudo apt install mysql-client
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  mysql-client
0 upgraded, 1 newly installed, 0 to remove and 42 not upgraded.
Need to get 9358 B of archives.
After this operation, 35.8 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu/jammy-updates/main amd64 mysql-client all 8.0.32-0ubuntu0.22.04.2 [9358 B]
Fetched 9358 B in 0s (1536 B/s)
Selecting previously unselected package mysql-client.
(Reading database ... 1000 packages listed)
Preparing to unpack .../mysql-client_8.0.32-0ubuntu0.22.04.2_all.deb ...
Unpacking mysql-client (8.0.32-0ubuntu0.22.04.2) ...
Setting up mysql-client (8.0.32-0ubuntu0.22.04.2) ...
Scanning for hardware changes...
Scanning for Linux images...
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-0-245:~$ [ ]
```

```
ubuntu@ip-10-0-0-245:~$ sudo service apache2 start
ubuntu@ip-10-0-0-245:~$ sudo mysql -u root
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.32-0ubuntu0.22.04.2 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.
```

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

```
mysql> [ ]
```

```
mysql> CREATE USER 'mihir'@'localhost' IDENTIFIED BY 'Password';
```

```
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> [REDACTED]
```

```
mysql> GRANT ALL PRIVILEGES ON *.* TO 'mihir'@'localhost';
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> [REDACTED]
```

```
mysql> FLUSH PRIVILEGES;
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> [REDACTED]
```

```
mysql> CREATE DATABASE wpdb;
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> [REDACTED]
```

```
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
| wpdb |
+-----+
5 rows in set (0.01 sec)

mysql> 
```

```
| Database      |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
| wpdb |
+-----+
5 rows in set (0.01 sec)

mysql> EXIT;
Bye
ubuntu@lp-10-0-0-245: $ 
```

```
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
| wpdb |
+-----+
5 rows in set (0.01 sec)

mysql> EXIT;
Bye
ubuntu@lp-10-0-0-245: $ sudo service mysql start
ubuntu@lp-10-0-0-245: $ 
```

```
| information_schema |
| mysql |
| performance_schema |
| sys |
| wpdb |
+-----+
5 rows in set (0.01 sec)

mysql> EXIT;
Bye
ubuntu@lp-10-0-0-245: $ sudo service mysql start
ubuntu@lp-10-0-0-245: $ sudo cp -r wordpress/* /var/www/html
ubuntu@lp-10-0-0-245: $ 
```

```
ubuntu@lp-10-0-0-245: $ sudo apt install php8.1-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  php8.1-mysql
0 upgraded, 1 newly installed, 0 to remove and 42 not upgraded.
Need to get 138 kB of archives.
After this operation, 456 kB of additional disk space will be used.
Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-mysql amd64 8.1.2-1ubuntu2.11 [138 kB]
Fetched 130 kB in 0s (6564 kB/s)
Selecting previously unselected package php8.1-mysql.
(Reading database ... 65089 files and directories currently installed.)
Preparing to unpack .../php8.1-mysql_8.1.2-1ubuntu2.11_amd64.deb ...
Unpacking php8.1-mysql (8.1.2-1ubuntu2.11) ...
Setting up php8.1-mysql (8.1.2-1ubuntu2.11) ...

Creating config file /etc/php/8.1/mods-available/mysqli.ini with new version
Creating config file /etc/php/8.1/mods-available/mysqlnd.ini with new version

Creating config file /etc/php/8.1/mods-available/pdo_mysql.ini with new version
Processing triggers for php8.1-cll (8.1.2-1ubuntu2.11) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@lp-10-0-0-245: $ 
```

```

Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
php8.1-mysql
0 upgraded, 1 newly installed, 0 to remove and 42 not upgraded.
Need to get 130 kB of archives.
After this operation, 462 kB of additional disk space will be used.
Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-mysql amd64 8.1.2-1ubuntu2.11 [130 kB]
Fetched 130 kB in 0s (6564 kB/s)
Selecting previously unselected package php8.1-mysql.
(Reading database ... 65089 files and directories currently installed.)
Preparing to unpack .../php8.1-mysql_8.1.2-1ubuntu2.11_amd64.deb ...
Unpacking php8.1-mysql (8.1.2-1ubuntu2.11) ...
Setting up php8.1-mysql (8.1.2-1ubuntu2.11) ...

Creating config file /etc/php/8.1/mods-available/mysqlnd.ini with new version
Creating config file /etc/php/8.1/mods-available/mysqli.ini with new version
Creating config file /etc/php/8.1/mods-available/pdo_mysql.ini with new version
Processing triggers for php8.1-cli (8.1.2-1ubuntu2.11) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-0-245:~$ sudo chown -R www-data:www-data /var/www/html
ubuntu@ip-10-0-0-245:~$ 

```

The screenshot shows a Linux desktop environment with a terminal window and a web browser window.

Terminal Window (Left):

```

Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
php8.1-mysql
0 upgraded, 1 newly installed, 0 to remove and 42 not upgraded.
Need to get 130 kB of archives.
After this operation, 462 kB of additional disk space will be used.
Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-mysql amd64 8.1.2-1ubuntu2.11 [130 kB]
Fetched 130 kB in 0s (6564 kB/s)
Selecting previously unselected package php8.1-mysql.
(Reading database ... 65089 files and directories currently installed.)
Preparing to unpack .../php8.1-mysql_8.1.2-1ubuntu2.11_amd64.deb ...
Unpacking php8.1-mysql (8.1.2-1ubuntu2.11) ...
Setting up php8.1-mysql (8.1.2-1ubuntu2.11) ...

Creating config file /etc/php/8.1/mods-available/mysqlnd.ini with new version
Creating config file /etc/php/8.1/mods-available/mysqli.ini with new version
Creating config file /etc/php/8.1/mods-available/pdo_mysql.ini with new version
Processing triggers for php8.1-cli (8.1.2-1ubuntu2.11) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-0-245:~$ sudo chown -R www-data:www-data /var/www/html
ubuntu@ip-10-0-0-245:~$ 

```

Firefox Web Browser (Right):

The browser is displaying the AWS VPC Management Console. The URL is <https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-0188a61d42126e761>. The page shows the "Edit inbound rules" section for a security group with ID sg-0188a61d42126e761. A single rule is listed:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-0314570bcff523a6c	MySQL/Aurora	TCP	3306	Custom	sg-0b9683bb248026241

Buttons at the bottom right include "Cancel", "Preview changes", and "Save rules".

Activities Firefox Web Browser Mar 5 11:25

VPC Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#SecurityGroup;groupId=sg-0188a61d42126e761

N. California mihir.popat@growexaws.com

aws Services Search [Alt+S]

VPC > Security Groups sg-0188a61d42126e761 - sgmihirdb

sg-0188a61d42126e761 - sgmihirdb

Details

Security group name	sgmihirdb	Security group ID	sg-0188a61d42126e761	Description	Created by RDS management console	VPC ID	vpc-011bd70770918b91b
Owner	719056139938	Inbound rules count	1 Permission entry	Outbound rules count	1 Permission entry		

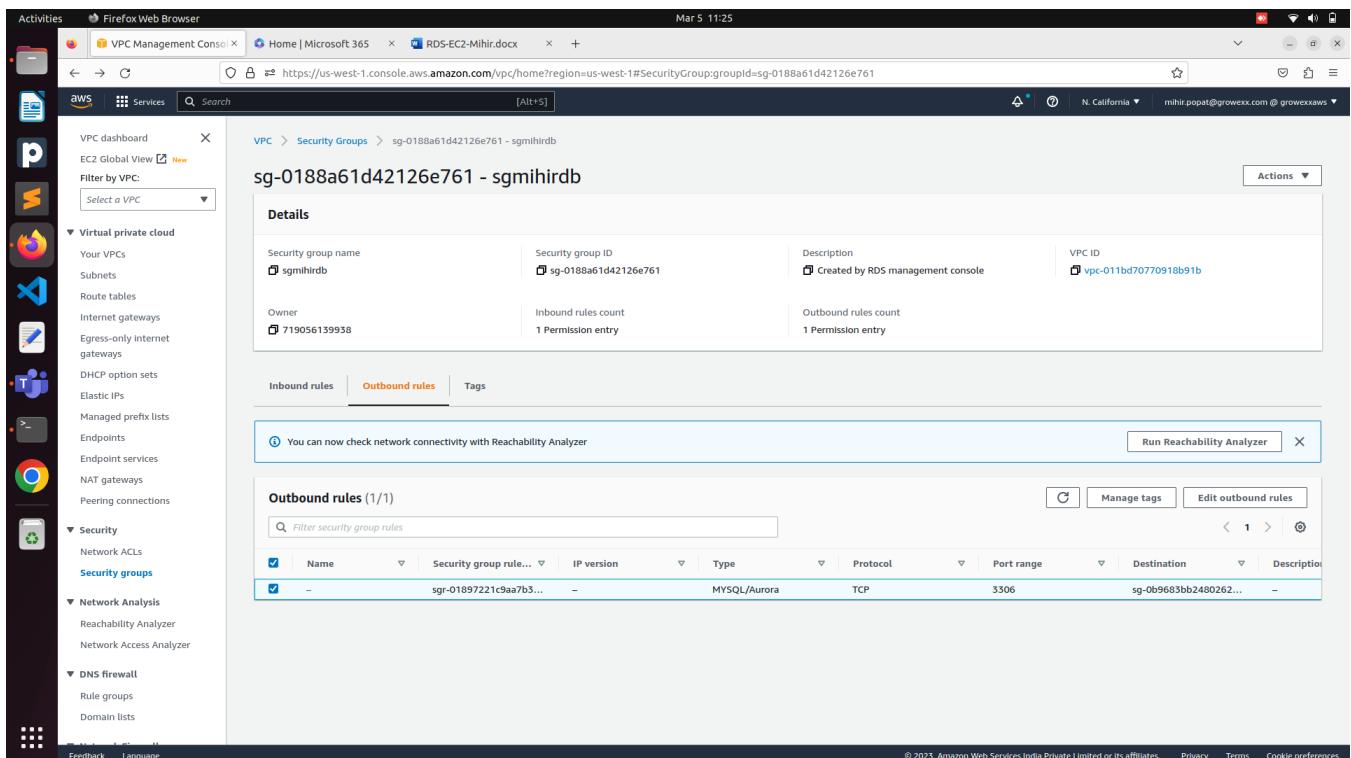
Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Outbound rules (1/1)

Name	Security group rule...	IP version	Type	Protocol	Port range	Destination	Description
-	sgr-01897221c9aa7b5...	-	MySQL/Aurora	TCP	3306	sg-0b9683bb2480262...	-

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Activities Firefox Web Browser Mar 5 11:25

VPC Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyOutboundSecurityGroupRules;securityGroupId=sg-0188a61d42126e761

N. California mihir.popat@growexaws.com

aws Services Search [Alt+S]

VPC > Security Groups sg-0188a61d42126e761 - sgmihirdb Edit outbound rules

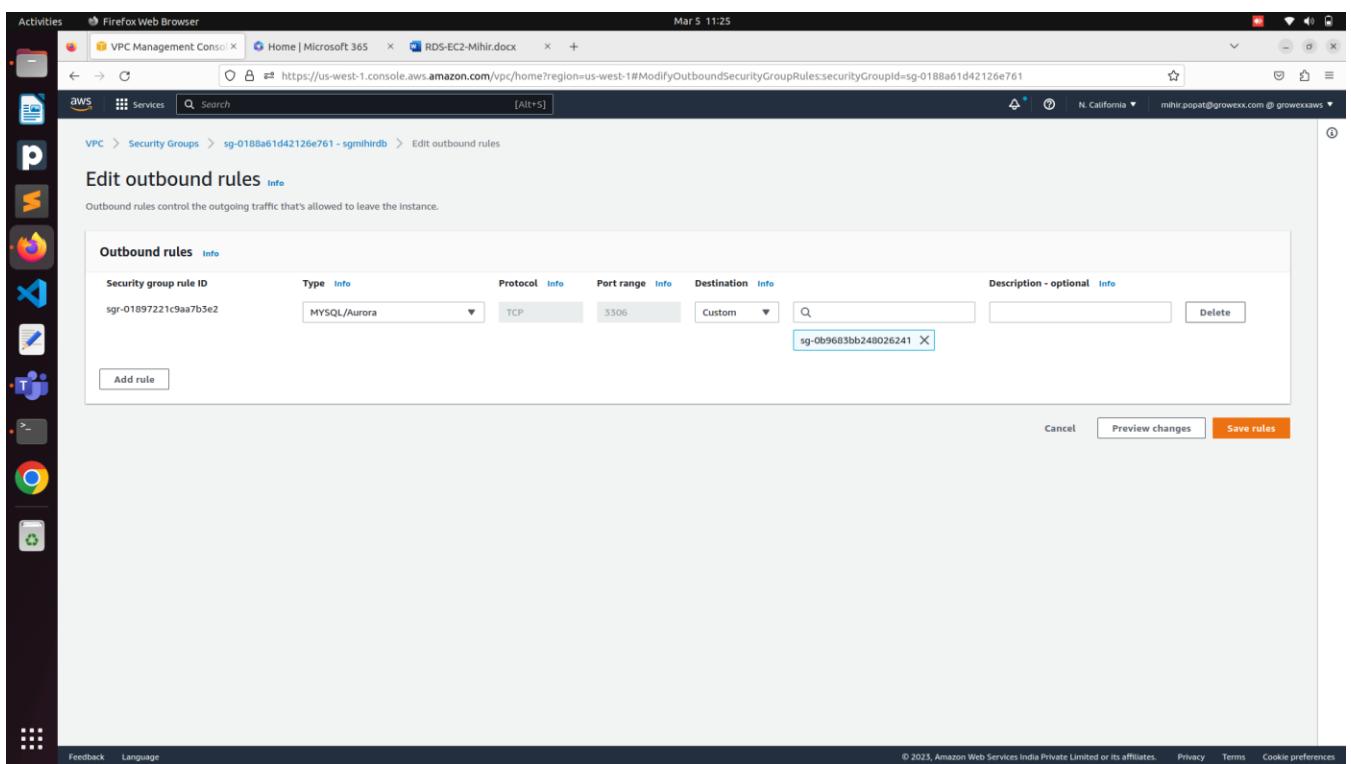
Edit outbound rules

Outbound rules Info

Security group rule ID	Type Info	Protocol Info	Port range Info	Destination Info	Description - optional Info
sgr-01897221c9aa7b5e2	MySQL/Aurora	TCP	3306	Custom	<input type="text" value="sg-0b9683bb248026241"/> Delete

Add rule Cancel Preview changes Save rules

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Activities Firefox Web Browser Mar 5 11:26

VPC Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-0b9683bb248026241

N. California mihir.popat@growexaws.com @ growexaws

VPC > Security Groups > sg-0b9683bb248026241 - SgMihirWp > Edit inbound rules

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Security group rule ID	Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>	Delete
sgr-0c439dc6b23727e4e	MySQL/Aurora	TCP	3306	Custom	sg-0188a61d42126e761	<input type="button" value="Delete"/>
sgr-0875276b2454a29d7	HTTP	TCP	80	Custom	/0	<input type="button" value="Delete"/>
sgr-0146510bcf7ea010f	SSH	TCP	22	Custom	122.169.119.120/32	<input type="button" value="Delete"/>
sgr-06bce5bb0510eff8	HTTP	TCP	80	Custom	0.0.0.0/0	<input type="button" value="Delete"/>
sgr-0d1939e41322aae17	HTTPS	TCP	443	Custom	0.0.0.0/0	<input type="button" value="Delete"/>
sgr-0d8ee2ba44502a214	HTTPS	TCP	443	Custom	/0	<input type="button" value="Delete"/>

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Activities Firefox Web Browser Mar 5 11:26

VPC Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyOutboundSecurityGroupRules:securityGroupId=sg-0b9683bb248026241

N. California mihir.popat@growexaws.com @ growexaws

VPC > Security Groups > sg-0b9683bb248026241 - SgMihirWp > Edit outbound rules

Edit outbound rules Info

Outbound rules control the outgoing traffic that's allowed to leave the instance.

Security group rule ID	Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Destination <small>Info</small>	Description - optional <small>Info</small>	Delete
sgr-008cd70117ba5bcfc	MySQL/Aurora	TCP	3306	Custom	sg-0188a61d42126e761	<input type="button" value="Delete"/>
sgr-0614e330fe1ff6e39	All traffic	All	All	Custom	0.0.0.0/0	<input type="button" value="Delete"/>

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Activities Firefox Web Browser Mar 5 11:27

RDS Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#databases:

aws Services Search [Alt+S] N, California mihir.popat@growexaws

Amazon RDS Databases

Consider creating a Blue/Green Deployment to minimize downtime during upgrades You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases.

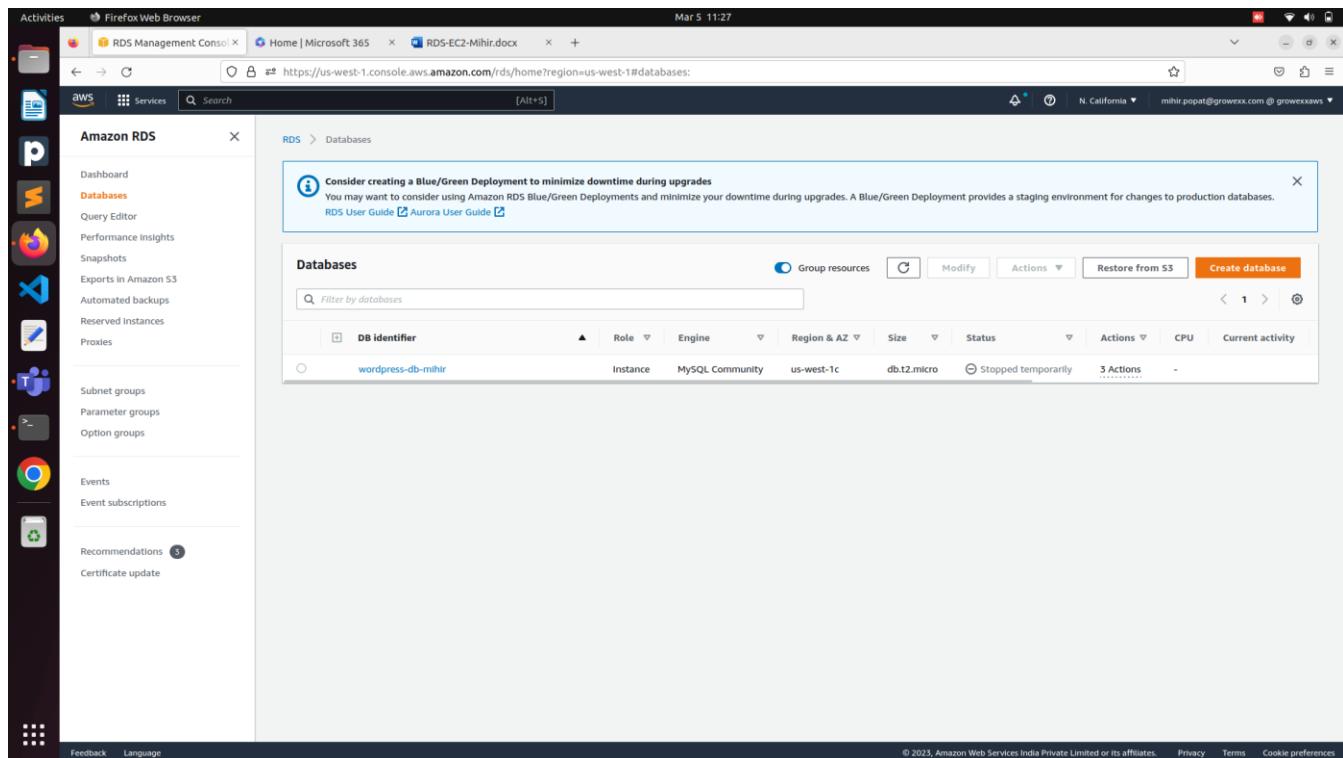
RDS User Guide Aurora User Guide

Databases

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

wordpress-db-mihir Instance MySQL Community us-west-1c db.t2.micro Stopped temporarily 3 Actions -

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Activities Firefox Web Browser Mar 5 11:27

RDS Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#database:id=wordpress-db-mihir&is-cluster=false

aws Services Search [Alt+S] N, California mihir.popat@growexaws

Amazon RDS Databases

Summary

DB identifier wordpress-db-mihir	CPU -	Status Stopped temporarily	Class db.t2.micro
Role Instance	Current activity	Engine MySQL Community	Region & AZ us-west-1c

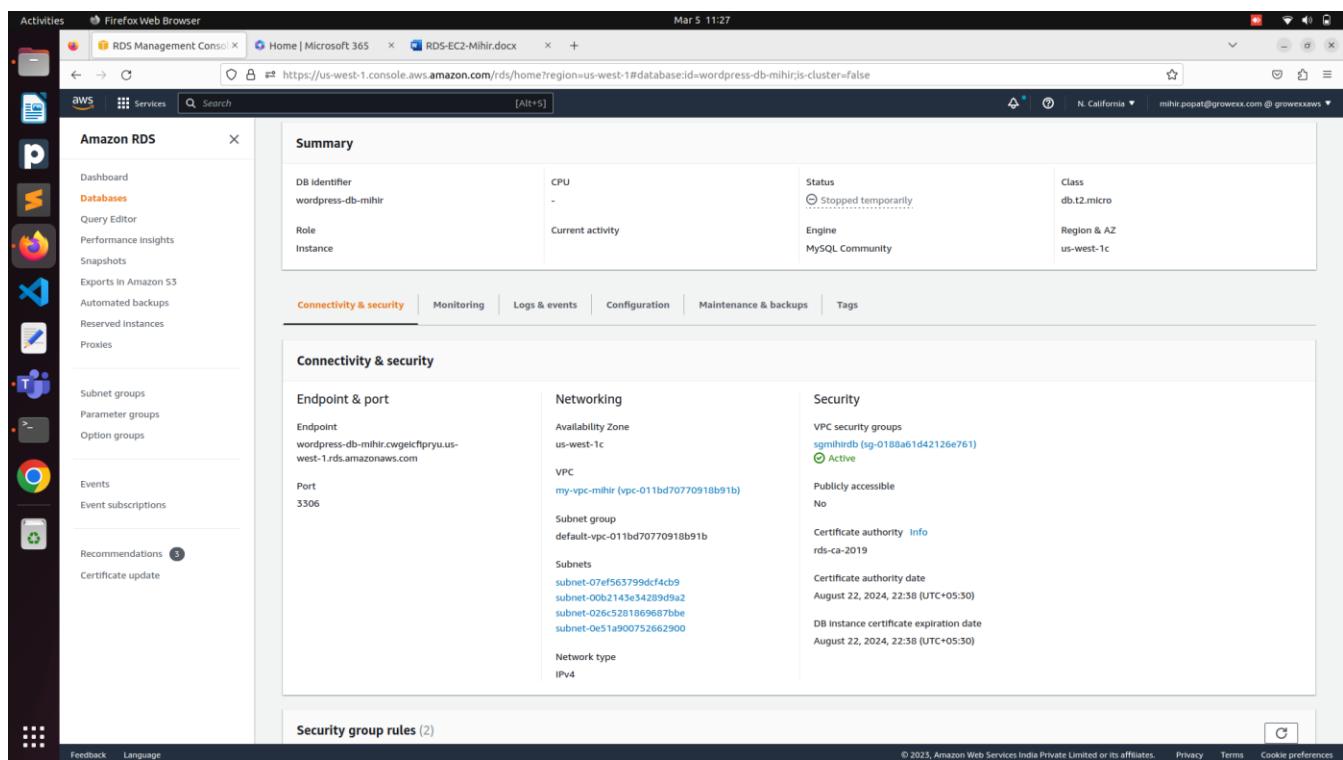
Connectivity & security Monitoring Logs & events Configuration Maintenance & backups Tags

Connectivity & security

Endpoint wordpress-db-mihir.cgwclcfpru.us-west-1.rds.amazonaws.com	Networking Availability Zone us-west-1c	Security VPC security groups sgmihirdb (sg-0188a61d42126e761) Active
Port 3306	VPC my-vpc-mihir (vpc-011bd70770918b91b)	Publicly accessible No
	Subnets subnet-07ef563799dcf4cb9 subnet-0092143e54289d9a2 subnet-026c5201869607bbe subnet-0e51a900752662900	Certificate authority Info rds-ca-2019
	Network type IPv4	Certificate authority date August 22, 2024, 22:38 (UTC+05:30)
		DB instance certificate expiration date August 22, 2024, 22:38 (UTC+05:30)

Security group rules (2)

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Activities Firefox Web Browser Mar 5 11:27

RDS Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#database:id=wordpress-db-mihir;is-cluster=false

N. California mihir.popat@growexx.com @ growexxaws

Amazon RDS Services Search [Alt+S] IP-VIS

Security group rules (2)

Security group	Type	Rule
sgmihirdb (sg-0188a61d42126e761)	EC2 Security Group - Inbound	sg-0b9683bb248026241
sgmihirdb (sg-0188a61d42126e761)	EC2 Security Group - Outbound	sg-0b9683bb248026241

Replication (1)

DB identifier	Role	Region & AZ	Replication source	Replication state	Lag
wordpress-db-mihir	Instance	us-west-1c	-	-	-

Proxies (0)

Proxy identifier	Status	Engine family
No proxies You don't have any proxies.		

Create proxy

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Activities Firefox Web Browser Mar 5 11:28

RDS Management Console Home | Microsoft 365 RDS-EC2-Mihir.docx +

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#database:id=wordpress-db-mihir;is-cluster=false;tab=configuration

N. California mihir.popat@growexx.com @ growexxaws

Amazon RDS Services Search [Alt+S]

DB name - RAM 1 GB Storage 20 GB

License model General Public License Availability Provisioned IOPS

Option groups default.mysql-8.0 ⓘ In sync Master username admin Storage throughput -

Amazon Resource Name (ARN) arn:aws:rds:us-west-1:719056139938:db:wordpress-db-mihir Master password ***** Storage autoscaling Disabled

Resource ID db-IUYYTpaG3JMPDMGM1BAPTRZCA IAM DB authentication Not enabled

Created time March 03, 2023, 19:47 (UTC+05:30) Multi-AZ No

DB instance parameter group default.mysql@.0 ⓘ In sync Secondary Zone -

Deletion protection Disabled

Recommendations

Recommendation type	Recommendation	Recommendation time
Enhanced monitoring off	Enhanced Monitoring is not enabled on your DB instance. We recommend enabling Enhanced Monitoring.	March 03, 2023, 19:49 (UTC+05:30)
Multi az Instance	We recommend that you use Multi-AZ deployment. The Multi-AZ deployments enhance the availability and durability of the DB instance. Click Info for more details about Multi-AZ deployment and pricing.	March 03, 2023, 19:49 (UTC+05:30)
Storage autoscaling off	We recommend that you turn on the storage autoscaling with a maximum allocated storage of 40 GB for your DB instance.	March 03, 2023, 19:49 (UTC+05:30)

Dismiss Schedule Apply now

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The screenshot shows the AWS RDS Management Console interface. On the left, there's a sidebar with various services like Dashboard, Databases, Query Editor, and Subnet groups (which is currently selected). The main content area is titled "Subnet groups (3)". It lists three entries:

Name	Description	Status	VPC
default-vpc-011bd70770918b91b	Created from the RDS Management Console	Complete	vpc-011bd70770918b91b
default-vpc-3c2df5a	Created from the RDS Management Console	Complete	vpc-3c2df5a
rds-ec2-db-subnet-group-1	Created from the RDS Management Console	Complete	vpc-3c2df5a

At the bottom right of the main content area, there are buttons for "Edit", "Delete", and "Create DB subnet group". The top right corner shows the user's name (mahir.popat@growexx.com) and location (N. California).

The screenshot shows a terminal session on an Ubuntu EC2 instance. The user has run several commands:

```
growltz@growltz16: ~$ cd Downloads
growltz@growltz16: ~$ ssh -L "mahir-first.pem" ubuntu@54.177.237.134
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

System information as of Sun Mar  5 06:35:52 UTC 2023

System load: 0.03271484375  Processes:          101
Usage of /: 37.8% of 7.57GB   Users logged in: 0
Memory usage: 58%            IPv4 address for eth0: 10.0.0.245
Swap usage: 0%
* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.
https://ubuntu.com/ubuntu/pro

* Introducing Expanded Security Maintenance for Applications.
  Receive updates to over 25,000 software packages with your
  Ubuntu Pro subscription. Free for personal use.
https://ubuntu.com/ubuntu/pro

Expanded Security Maintenance for Applications is not enabled.

10 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

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

*** System restart required ***
Last login: Sun Mar  5 06:18:55 2023 from 122.169.119.120
ubuntu@ip-10-0-0-245: ~$ dpkg -l | grep -i mysql
ii  mysql-client                           8.0.32-0ubuntu0.22.04.2      all        MySQL database client (metapackage depending on the latest version)
ii  mysql-client-8.0                         8.0.32-0ubuntu0.22.04.2      amd64     MySQL database client binaries
ii  mysql-client-core-8.0                    8.0.32-0ubuntu0.22.04.2      amd64     MySQL database core client binaries
ii  mysql-common                            5.8+1.0.8                   all        MySQL database common files, e.g. /etc/mysql/my.cnf
ii  mysql-server                            8.0.32-0ubuntu0.22.04.2      all        MySQL database server (metapackage depending on the latest version)
ii  mysql-server-8.0                         8.0.32-0ubuntu0.22.04.2      amd64     MySQL database server binaries and system database setup
ii  mysql-server-core-8.0                   8.0.32-0ubuntu0.22.04.2      amd64     MySQL database server binaries
ii  php8.1-mysql                           8.1.2-1ubuntu2.11           amd64     MySQL module for PHP
```

```
Activities Terminal Mar 5 12:07 ubuntu@ip-10-0-0-245:~  
ubuntutlp-10-0-0-245:~$ sudo apt-get remove --purge mysql*  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
Note, selecting 'mysql-common' for glob 'mysql*'  
Note, selecting 'mysql-server-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server-5.7' for glob 'mysql*'  
Note, selecting 'mysql-server-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client-5.5' for glob 'mysql*'  
Note, selecting 'mysql-client-5.6' for glob 'mysql*'  
Note, selecting 'mysql-client-5.7' for glob 'mysql*'  
Note, selecting 'mysql-client-8.0' for glob 'mysql*'  
Note, selecting 'mysql-common' for glob 'mysql*'  
Note, selecting 'mysqlctl' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.5' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.6' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.7' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client' for glob 'mysql*'  
Note, selecting 'mysql-router' for glob 'mysql*'  
Note, selecting 'mysql-sandbox' for glob 'mysql*'  
Note, selecting 'mysqltuner' for glob 'mysql*'  
Note, selecting 'mysql-common-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.7' for glob 'mysql*'  
Note, selecting 'mysql-server-core-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.5' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.6' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.7' for glob 'mysql*'  
Note, selecting 'mysql-client-core-8.0' for glob 'mysql*'  
Note, selecting 'mysql-source-8.0' for glob 'mysql*'  
Package 'mysql-client-5.7' is not installed, so not removed  
Package 'mysql-client-core-5.5' is not installed, so not removed  
Note, selecting 'mysql-common' instead of 'mysql-common-5.6'  
Package 'mysql-server-5.5' is not installed, so not removed  
Package 'mysql-server-5.7' is not installed, so not removed  
Package 'mysql-server-core-5.7' is not installed, so not removed  
Package 'mysql-client-core-5.5' is not installed, so not removed  
Package 'mysql-client-core-5.6' is not installed, so not removed  
Package 'mysql-client-core-5.7' is not installed, so not removed  
Package 'mysql-client-core-8.0' is not installed, so not removed  
Package 'mysql-testsuite-5.5' is not installed, so not removed  
Package 'mysql-testsuite-5.6' is not installed, so not removed  
Package 'mysql-testsuite-5.7' is not installed, so not removed  
Package 'mysql-sandbox' is not installed, so not removed
```

```
Activities Terminal Mar 5 12:08 ubuntu@ip-10-0-0-245:~  
ubuntutlp-10-0-0-245:~$ sudo apt-get remove --purge mysql*  
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.  
After this operation, 184 MB disk space will be freed.  
Do you want to continue? [Y/n] y  
(Reading database ... 93919 files and directories currently installed.)  
Removing mysql-client (8.0.32-0ubuntu0.22.04.2) ...  
Removing mysql-server (8.0.32-0ubuntu0.22.04.2) ...  
update-alternatives: using /etc/mysql/my.cnf.fallback to provide /etc/mysql/my.cnf (my.cnf) in auto mode  
Removing mysql-client-8.0 (8.0.32-0ubuntu0.22.04.2) ...  
Removing mysql-server-8.0 (8.0.32-0ubuntu0.22.04.2) ...  
Removing mysql-client-8.0 (8.0.32-0ubuntu0.22.04.2) ...  
Removing mysql-common (5.8+1.0.8) ...  
Removing mysql-server-core-8.0 (8.0.32-0ubuntu0.22.04.2) ...  
Processing triggers for man-db (2.10.2-1) ...  
(Reading database ... 93708 files and directories currently installed.)  
Purging configuration files for mysql-server-8.0 (8.0.32-0ubuntu0.22.04.2) ...  
Purging configuration files for mysql-common (5.8+1.0.8) ...  
dpkg: warning: while removing mysql-common, directory '/etc/mysql' not empty so not removed  
ubuntu@ip-10-0-0-245:~$ sudo apt-get purge mysql*  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
Note, selecting 'mysql-testsuite' for glob 'mysql*'  
Note, selecting 'mysql-server-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server-5.7' for glob 'mysql*'  
Note, selecting 'mysql-server-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client-5.5' for glob 'mysql*'  
Note, selecting 'mysql-client-5.6' for glob 'mysql*'  
Note, selecting 'mysql-client-5.7' for glob 'mysql*'  
Note, selecting 'mysql-client-8.0' for glob 'mysql*'  
Note, selecting 'mysql-common' for glob 'mysql*'  
Note, selecting 'mysqlctl' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.5' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.6' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.7' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client' for glob 'mysql*'  
Note, selecting 'mysql-router' for glob 'mysql*'  
Note, selecting 'mysql-sandbox' for glob 'mysql*'  
Note, selecting 'mysqltuner' for glob 'mysql*'  
Note, selecting 'mysql-common-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.7' for glob 'mysql*'  
Note, selecting 'mysql-server-core-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.5' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.6' for glob 'mysql*'  
Note, selecting 'mysql-client-core-5.7' for glob 'mysql*'  
Note, selecting 'mysql-client-core-8.0' for glob 'mysql*'  
Note, selecting 'mysql-source-8.0' for glob 'mysql*'  
Package 'mysql-client-5.7' is not installed, so not removed  
Package 'mysql-client-core-5.7' is not installed, so not removed  
Note, selecting 'mysql-common' instead of 'mysql-common-5.6'  
Package 'mysql-server-5.5' is not installed, so not removed  
Package 'mysql-server-5.7' is not installed, so not removed
```

```
Activities Terminal Mar 5 12:08 ubuntu@lp-10-0-0-245: ~
Package 'mysql-sandbox' is not installed, so not removed
Package 'mysqlclient' is not installed, so not removed
Package 'mysqldumper' is not installed, so not removed
Package 'mysql-client-8.0' is not installed, so not removed
Package 'mysql-client-core-8.0' is not installed, so not removed
Package 'mysql-server' is not installed, so not removed
Package 'mysql-server-8.0' is not installed, so not removed
Package 'mysql-server-core-8.0' is not installed, so not removed
Package 'mysql-router' is not installed, so not removed
Package 'mysql-source-8.0' is not installed, so not removed
Package 'mysql-test-engine' is not installed, so not removed
Package 'mysql-testsuite-8.0' is not installed, so not removed
The following packages were automatically installed and are no longer required:
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgioldbl libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.
After this operation, 58.0 MB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 93683 files and directories currently installed.)
Removing libfcgi-fast-perl (1:2.15-1) ...
Removing libhtml-template-perl (2.97-1.1) ...
Removing libfcgi-pm-perl (4.54-1) ...
Removing libclone-perl (0.45-1build3) ...
Removing libhttp-message-perl (0.38-1) ...
Removing libfcgi-bin (2.1.12-stable-1build3) ...
Removing libfcgioldbl (2.4.2-2build2) ...
Removing libfcgi-perl:amd64 (0.82+ds-1build1) ...
Removing libfcgioldbl:amd64 (2.4.2-2build2) ...
Removing libhttp-date-perl:amd64 (3.76-1build2) ...
Removing libhttp-message-perl:amd64 (3.12-4) ...
Removing libfcgi-bin:amd64 (2.1.12-stable-1) ...
Removing libfcgi-perl (6.05-1) ...
Removing libio-html-perl (1.004-2) ...
Removing liblwp-mediatypes-perl (6.04-1) ...
Removing mecab-ipadic-utf8 (2.7.0-20070801+main-3) ...
update-alternatives: using /var/lib/mecab/dic/ipadic to provide /var/lib/mecab/dic/debian (mecab-dictionary) in auto mode
Removing mecab-ipadic (2.7.0-20070801+main-3) ...
Removing libmecab2:amd64 (0.996-14build9) ...
Removing libmecab2oldbl:amd64 (0.996-14build9) ...
Removing libprotobuf-lite23:amd64 (3.12.4-1ubuntu7) ...
Removing libtimedate-perl (2.3300-2) ...
Removing liburi-perl (5.10-1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
ubuntu@lp-10-0-0-245: ~
```

```
Activities Terminal Mar 5 12:09 ubuntu@lp-10-0-0-245: ~
Package 'mysql-client-8.0' is not installed, so not removed
Package 'mysql-client-core-8.0' is not installed, so not removed
Package 'mysql-server' is not installed, so not removed
Package 'mysql-server-8.0' is not installed, so not removed
Package 'mysql-test-engine' is not installed, so not removed
Package 'mysql-router' is not installed, so not removed
Package 'mysql-source-8.0' is not installed, so not removed
Package 'mysql-testsuite' is not installed, so not removed
Package 'mysql-testsuite-8.0' is not installed, so not removed
The following packages were automatically installed and are no longer required:
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgioldbl libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 22 to remove and 24 not upgraded.
After this operation, 58.0 MB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 93683 files and directories currently installed.)
Removing libfcgi-fast-perl (1:2.15-1) ...
Removing libhtml-template-perl (2.97-1.1) ...
Removing libfcgi-pm-perl (4.54-1) ...
Removing libclone-perl (0.45-1build3) ...
Removing libhttp-message-perl (0.38-1) ...
Removing libfcgi-bin (2.1.12-stable-1build3) ...
Removing libfcgioldbl (2.4.2-2build2) ...
Removing libfcgi-perl:amd64 (0.82+ds-1build1) ...
Removing libfcgioldbl:amd64 (2.4.2-2build2) ...
Removing libhttp-date-perl:amd64 (3.76-1build2) ...
Removing libfcgi-bin:amd64 (2.1.12-stable-1) ...
Removing libfcgi-perl (6.05-1) ...
Removing libio-html-perl (1.004-2) ...
Removing liblwp-mediatypes-perl (6.04-1) ...
Removing mecab-ipadic-utf8 (2.7.0-20070801+main-3) ...
update-alternatives: using /var/lib/mecab/dic/ipadic to provide /var/lib/mecab/dic/debian (mecab-dictionary) in auto mode
Removing mecab-ipadic (2.7.0-20070801+main-3) ...
Removing libmecab2:amd64 (0.996-14build9) ...
Removing libmecab2oldbl:amd64 (0.996-14build9) ...
Removing libprotobuf-lite23:amd64 (3.12.4-1ubuntu7) ...
Removing libtimedate-perl (2.3300-2) ...
Removing liburi-perl (5.10-1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
ubuntu@lp-10-0-0-245: $ sudo apt-get autoclean
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ubuntu@lp-10-0-0-245: ~
```

```
Activities Terminal Mar 5 12:09 ubuntu@ip-10-0-0-245:~  
Package 'mysql-source-8.0' is not installed, so not removed  
Package 'mysql-testsuite' is not installed, so not removed  
Package 'mysql-testsuite-8.0' is not installed, so not removed  
The following packages were automatically installed and are no longer required:  
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl  
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmcab2 libprotobuf-lite23 libtitemate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils  
0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.  
# sudo apt autoremove  
#  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages will be REMOVED:  
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl  
  libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmcab2 libprotobuf-lite23 libtitemate-perl liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils  
0 upgraded, 0 newly installed, 22 to remove and 24 not upgraded.  
After this operation, 58.0 MB disk space will be freed.  
Do you want to continue? [Y/n] y  
(Reading database ... 93083 files and directories currently installed.)  
Removing libfcgi-fast-perl (1:12.15-1) ...  
Removing libhtml-template-perl (2.97-1.1) ...  
Removing libfcgi-pm-perl (4.54-1)  
Removing libclone-perl (0.45-1buid1) ...  
Removing libevent-pthreads (2.1-7) ...  
Removing libencode-locale-perl (1.05-1.1) ...  
Removing libfcgi-pm-perl (2.1.12-stable-1buid3) ...  
Removing libfcgi-bin (2.4.2-2buid2) ...  
Removing libfcgi-perl:amd64 (0.82-2ds-1buid1) ...  
Removing libfcgi0ldbl:amd64 (2.4.2-2buid2) ...  
Removing libhtml-parser-perl:amd64 (3.76-1buid2) ...  
Removing libhtml-tagset-perl (3.20-4) ...  
Removing libio-html-perl (0.99-2) ...  
Removing liblwp-mediatypes-perl (6.04-1) ...  
Removing mecab-ipadic-utf8 (2.7.0-20070801+main-3) ...  
update-alternatives: using /var/lib/mecab/dic/ipadic to provide /var/lib/mecab/dic.debian (mecab-dictionary) in auto mode  
Removing mecab-ipadic (2.7.0-20070801+main-3) ...  
Removing mecab-utils (0.99c-1buid9) ...  
Removing libmecab2:amd64 (0.99c-1buid9) ...  
Removing libprotobuf-lite23:amd64 (3.12.4-1ubuntu7) ...  
Removing libtitemate23:amd64 (3.300.2) ...  
Removing liburi-perl (5.10-1)  
Processing triggers for man-db (2.10.2-1) ...  
Processing triggers for libfcgi-bin (2.35-0ubuntu3.1) ...  
# sudo apt-get autoclean  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
# sudo apt-get remove dbconfig-mysql  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
Package 'dbconfig-mysql' is not installed, so not removed  
0 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.  
#  
ubuntu@ip-10-0-0-245:~
```

```
Activities Terminal Mar 5 12:10 ubuntu@ip-10-0-0-245:~  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following package has been kept back:  
  grub-efi-amd64-bin grub-efi-amd64-signed libibmbm-glib4 libibmbm-proxy libbcmi-glib5 libbcmi-proxy libbsas12-2 libbsas12-modules-db python3-software-properties shim-signed  
  software-properties-common tcpcdump ubuntu-advantage-tools  
The following packages will be upgraded:  
  base-files fwupd-signed isc-dhcp-client libbcmi-glib6 motd-news-config python-apt-common python3-apt python3-distupgrade ubuntu-release-upgrader-core  
10 upgraded, 0 newly installed, 0 to remove and 24 not upgraded.  
Need to get 952 kB of additional archives.  
After this operation, 136 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 motd-news-config all 1@ubuntu4.3 [4484 B]  
Get:2 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 base-files amd64 1@ubuntu4.3 [62.6 kB]  
Get:3 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 isc-dhcp-client amd64 4.4.1-2.3ubuntu2.4 [235 kB]  
Get:4 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 isc-dhcp-common amd64 4.4.1-2.3ubuntu2.4 [45.0 kB]  
Get:5 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libbcmi-glib6 amd64 1@ubuntu4.3 [63 kB]  
Get:6 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-apt amd64 2.4.0ubuntu1 [164 kB]  
Get:7 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ubuntu-release-upgrader-core all 1:22.04.16 [26.2 kB]  
Get:8 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-distupgrade all 1:22.04.16 [107 kB]  
Get:9 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 fwupd-signed amd64 1.51-22.04.1+1.2-3ubuntu0.2 [30.4 kB]  
Get:10 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libbcmi-glib6 amd64 1.20.0-1-ubuntu22.04.1 [263 kB]  
Fetched 952 kB in 0s (5148 kB/s)  
Reading package lists... Done  
Preparing to unpack .../motd-news-config_1@ubuntu4.3_all.deb ...  
Unpacking motd-news-config (1@ubuntu4.3) over (1@ubuntu4.2) ...  
Preparing to unpack .../base-files_1@ubuntu4.3_amd64.deb ...  
Unpacking base-files (1@ubuntu4.3) over (1@ubuntu4.2) ...  
Setting up base-files (1@ubuntu4.3) ...  
Installing new version of config file '/etc/issue'  
Installing new version of config file '/etc/lsb-release' ...  
motd-news.service is a disabled or a static unit not running, not starting it.  
(Reading database ... 93317 files and directories currently installed.)  
Preparing to unpack .../0-isc-dhcp-client_4.4.1-2.3ubuntu2.4_amd64.deb ...  
Unpacking isc-dhcp-client (4.4.1-2.3ubuntu2.4) over (4.4.1-2.3ubuntu2.3) ...  
Preparing to unpack .../1-isc-dhcp-common_4.4.1-2.3ubuntu2.4_amd64.deb ...  
Unpacking isc-dhcp-common (4.4.1-2.3ubuntu2.4) over (4.4.1-2.3ubuntu2.3) ...  
Preparing to unpack .../2-py3-apt-common_2.4.0ubuntu1_all.deb ...  
Unpacking python-apt-common (2.4.0ubuntu1) over (2.4.0) ...  
Preparing to unpack .../3/python3-apt_2.4.0ubuntu1_amd64.deb ...  
Unpacking python3-apt (2.4.0ubuntu1) over (2.4.0) ...  
Preparing to unpack .../4-ubuntu-release-upgrader-core_1@22.04.16_all.deb ...  
Unpacking ubuntu-release-upgrader-core (1:22.04.16) over (1:22.04.15) ...  
Preparing to unpack .../5/python3-distupgrade_1@22.04.16_all.deb ...  
Unpacking python3-distupgrade (1:22.04.16) over (1:22.04.15) ...  
Preparing to unpack .../6-fwupd-signed_1.51-22.04.1+1.2-3ubuntu0.2_amd64.deb ...  
Unpacking fwupd-signed (1.51-22.04.1+1.2-3ubuntu0.2) over (1.44+1.2-3) ...
```

Activities Terminal Mar 5 12:10

```
Installing new version of config file /etc/issue ...
Installing new version of config file /etc/issue.net ...
Installing new version of config file /etc/lsb-release ...
motd-news.service is a disabled or a static unit not running, not starting it.
(Reading database ... 93317 files and directories currently installed.)
Preparing to unpack .../0ubuntu1_amd64.deb ...
Unpacking isc-dhcp-client (4.4.1-2.3ubuntu0.2) over (4.4.1-2.3ubuntu0.3) ...
Preparing to unpack .../1-isc-dhcp-common_4.4.1-2.3ubuntu0.4 over (4.4.1-2.3ubuntu0.3) ...
Preparing isc-dhcp-common (4.4.1-2.3ubuntu0.4) over (4.4.1-2.3ubuntu0.3) ...
Preparing to unpack .../2-python-apt-common_2.4.0ubuntu1_all.deb ...
Unpacking python-apt-common (2.4.0ubuntu1) over (2.4.0) ...
Preparing to unpack .../3-python3-apt_2.4.0ubuntu1_amd64.deb ...
Unpacking python3-apt (2.4.0ubuntu1) over (2.4.0) ...
Preparing to unpack .../4-ubuntu-release-upgrader-core_18.04.16_all.deb ...
Unpacking ubuntu-release-upgrader-core (1:22.04.16) over (1:22.04.15) ...
Preparing to unpack .../5-python3-distupgrade_18.04.16_all.deb ...
Unpacking python3-distupgrade (1:22.04.16) over (1:22.04.15) ...
Preparing to unpack .../6-fwupd-signed_1.51-22.04.1+1.2-3ubuntu0.2_amd64.deb ...
Unpacking fwupd-signed (1.51-22.04.1+1.2-3ubuntu0.2) over (1.44+1.2.3) ...
Preparing to unpack .../7-libmm-glib0_1.20.0-1-ubuntu22.04.1_amd64.deb ...
Unpacking libmm-glib0 (1.20.0-1-ubuntu22.04.1) over (1.18.0-1) ...
Setting up fwupd-signed (1.51-22.04.1+1.2-3ubuntu0.2) ...
Setting up libmm-glib0:amd64 (1.20.0-1-ubuntu22.04.1) ...
Setting up libmm-glib0 (1.20.0-1-ubuntu22.04.1) ...
Setting up python3-setuptools (2.4.0ubuntu1) ...
Setting up python3-set (2.4.0ubuntu1) ...
Setting up python3-distupgrade (1:22.04.16) ...
Setting up ubuntu-release-upgrader-core (1:22.04.16) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for plymouth-theme-ubuntu-text (0.9.5+git20210108-1ubuntu3) ...
update-initramfs: deferring update (trigger activated)
Processing triggers for install-info (6.8.1build1) ...
Processing triggers for initramfs-tools (0.140ubuntu3.1) ...
update-initramfs: Generating /boot/initrd.lz-2.11.0-1031-aws
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
systemctl restart apache2.service chrony.service packagekit.service systemd-resolved.service
Service restarts being deferred:
systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
```

ubuntu@ip-10-0-0-245: \$ dpkg -l | grep -i mysql
ii php8.1-mysql 8.1.2-1ubuntu2.11 amd64 MySQL module for PHP

ubuntu@ip-10-0-0-245: \$

Activities Terminal Mar 5 12:11

```
ubuntu@ip-10-0-0-245:~$ dpkg -l | grep -l mysql
ii  mysql-client                           8.0.32-0ubuntu0.22.04.2      amd64      MySQL database client (metapackage depending on the latest version)
ii  mysql-client-8.0                         8.0.32-0ubuntu0.22.04.2      amd64      MySQL database client binaries
ii  mysql-client-core-8.0                    8.0.32-0ubuntu0.22.04.2      amd64      MySQL database core client binaries
ii  mysql-common                            5.8+1.0.8                  all        MySQL database common files, e.g. /etc/mysql/my.cnf
ii  php8.1-mysql                           8.0.32-1ubuntu2.11          amd64      MySQL module for PHP

No user sessions are running outdated binaries.
```

The following additional packages will be installed:

- mysql-client-8.0 mysql-client-core-8.0 mysql-common

The following NEW packages will be installed:

- mysql-client mysql-client-core-8.0 mysql-client-core-8.0 mysql-common

0 upgraded, 4 newly installed, 0 to remove and 14 not upgraded.

Need to get 2716 kB of archives.

After this operation, 62.1 MB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-core-8.0 amd64 8.0.32-0ubuntu0.22.04.2 [2677 kB]

Get:2 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mysql-common all 5.8+1.0.8 [7212 B]

Get:3 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-8.0 amd64 8.0.32-0ubuntu0.22.04.2 [22.7 kB]

Get:4 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client all 8.0.32-0ubuntu0.22.04.2 [9350 B]

Fetched 2716 kB in 0s (29.5 MB/s)

Selecting previously unselected package mysql-client-core-8.0.

(Reading database ... 9331 files and directories currently installed.)

Preparing to unpack .../mysql-client-core-8.0_8.0.32-0ubuntu0.22.04.2_amd64.deb ...

Unpacking mysql-client-core-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Selecting previously unselected package mysql-common.

Preparing to unpack .../mysql-common_5.8+1.0.8_all.deb ...

Unpacking mysql-common (5.8+1.0.8) ...

Selecting previously unselected package mysql-client-8.0.

Preparing to unpack .../mysql-client-8.0_8.0.32-0ubuntu0.22.04.2_amd64.deb ...

Unpacking mysql-client-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Selecting previously unselected package mysql-client.

Preparing to unpack .../mysql-client_8.0.32-0ubuntu0.22.04.2_all.deb ...

Unpacking mysql-client (8.0.32-0ubuntu0.22.04.2) ...

Selecting previously unselected package mysql-common (5.8+1.0.8).

Processing triggers for man-db (2.10.2-1) ...

Scanning processes...

Scanning candidates...

Scanning linux images...

Restarting services...

Service restarts being deferred:

systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.

```
ubuntu@ip-10-0-0-245:~$ 
```

Activities Terminal Mar 5 12:11

```
ubuntu@ip-10-0-0-245:~$ dpkg -l | grep -l mysql
ii  mysql-client                           8.0.32-0ubuntu0.22.04.2      amd64      MySQL database client (metapackage depending on the latest version)
ii  mysql-client-8.0                         8.0.32-0ubuntu0.22.04.2      amd64      MySQL database client binaries
ii  mysql-client-core-8.0                    8.0.32-0ubuntu0.22.04.2      amd64      MySQL database core client binaries
ii  mysql-common                            5.8+1.0.8                  all        MySQL database common files, e.g. /etc/mysql/my.cnf
ii  php8.1-mysql                           8.0.32-1ubuntu2.11          amd64      MySQL module for PHP

No user sessions are running outdated binaries.
```

The following additional packages will be installed:

- mysql-client-8.0 mysql-client-core-8.0 mysql-common

The following NEW packages will be installed:

- mysql-client mysql-client-core-8.0 mysql-client-core-8.0 mysql-common

0 upgraded, 4 newly installed, 0 to remove and 14 not upgraded.

Need to get 2716 kB of archives.

After this operation, 62.1 MB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-core-8.0 amd64 8.0.32-0ubuntu0.22.04.2 [2677 kB]

Get:2 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mysql-common all 5.8+1.0.8 [7212 B]

Get:3 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-8.0 amd64 8.0.32-0ubuntu0.22.04.2 [22.7 kB]

Get:4 http://us-west-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client all 8.0.32-0ubuntu0.22.04.2 [9350 B]

Fetched 2716 kB in 0s (29.5 MB/s)

Selecting previously unselected package mysql-client-core-8.0.

(Reading database ... 9331 files and directories currently installed.)

Preparing to unpack .../mysql-client-core-8.0_8.0.32-0ubuntu0.22.04.2_amd64.deb ...

Unpacking mysql-client-core-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Selecting previously unselected package mysql-common.

Preparing to unpack .../mysql-common_5.8+1.0.8_all.deb ...

Unpacking mysql-common (5.8+1.0.8) ...

Selecting previously unselected package mysql-client-8.0.

Preparing to unpack .../mysql-client-8.0_8.0.32-0ubuntu0.22.04.2_amd64.deb ...

Unpacking mysql-client-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Selecting previously unselected package mysql-client.

Preparing to unpack .../mysql-client_8.0.32-0ubuntu0.22.04.2_all.deb ...

Unpacking mysql-client (8.0.32-0ubuntu0.22.04.2) ...

Setting up mysql-common (5.8+1.0.8) ...

update-alternatives: using /etc/mysql/my.cnf fallback to provide /etc/mysql/my.cnf (my.cnf) in auto mode

Setting up mysql-client-core-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Setting up mysql-client-8.0 (8.0.32-0ubuntu0.22.04.2) ...

Setting up mysql-client (8.0.32-0ubuntu0.22.04.2) ...

Processing triggers for man-db (2.10.2-1) ...

Scanning processes...

Scanning candidates...

Scanning linux images...

Restarting services...

Service restarts being deferred:

systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

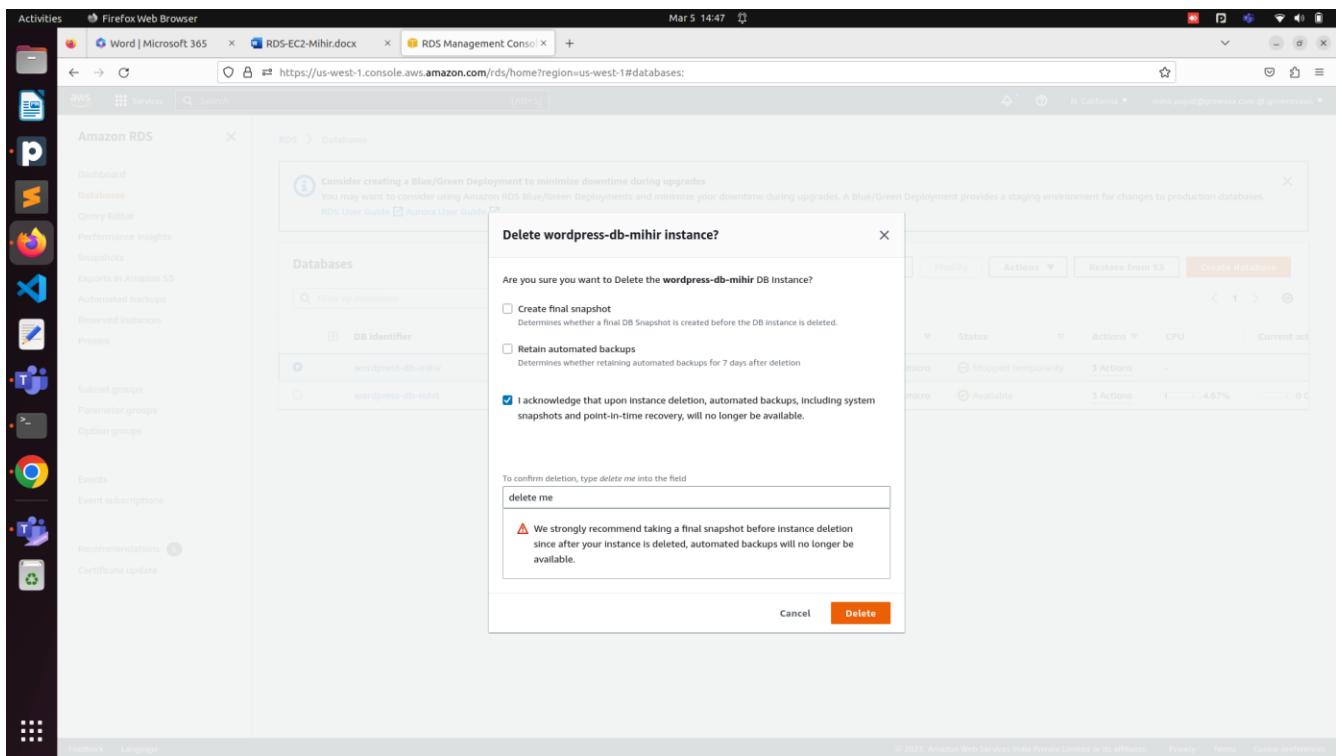
No VM guests are running outdated hypervisor (qemu) binaries on this host.

```
ubuntu@ip-10-0-0-245:~$ dpkg -l | grep -l mysql
ii  mysql-client                           8.0.32-0ubuntu0.22.04.2      all        MySQL database client (metapackage depending on the latest version)
ii  mysql-client-8.0                         8.0.32-0ubuntu0.22.04.2      amd64     MySQL database client binaries
ii  mysql-client-core-8.0                    8.0.32-0ubuntu0.22.04.2      amd64     MySQL database core client binaries
ii  mysql-common                            5.8+1.0.8                  all        MySQL database common files, e.g. /etc/mysql/my.cnf
ii  php8.1-mysql                           8.0.32-1ubuntu2.11          amd64     MySQL module for PHP

No user sessions are running outdated binaries.
```

```
ubuntu@ip-10-0-0-245:~$ 
```

DELETING RDS



First create subnet group

The screenshot shows the AWS RDS Management Console interface. On the left, there's a sidebar with various services like Word, Microsoft 365, RDS-EC2-Mihir.docx, RDS Management Console, Subnets | VPC Manager, and New Tab. The main content area is titled "Subnet groups" and shows a table of existing subnet groups:

Name	Description	Status	VPC
default-vpc-001905b7c3c852fc	Created from the RDS Management Console	Complete	vpc-001905b7c3c852fc
default-vpc-011bd70770918b91b	Created from the RDS Management Console	Complete	vpc-011bd70770918b91b
default-vpc-3c2df5a	Created from the RDS Management Console	Complete	vpc-3c2df5a
privatesubnetsgohit	Custom VPCs private subnet group	Complete	vpc-001905b7c3c852fc
rds-ec2-db-subnet-group-1	Created from the RDS Management Console	Complete	vpc-3c2df5a

At the bottom right of the table, there are buttons for "Edit", "Delete", and "Create DB subnet group".

Now click on subnet group

The screenshot shows the "Create DB subnet group" wizard in the AWS RDS Management Console. The sidebar includes Word, Microsoft 365, RDS-EC2-Mihir.docx, RDS Management Console, Subnets | VPC Manager, and New Tab.

The main steps are:

- 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**: privatesubnetsgohit (Note: You won't be able to modify the name after your subnet group has been created.)
 - Description**: private subnet for database
 - VPC**: my-vpc-mihir (vpc-011bd70770918b91b) (Note: 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.
 - Choose an availability zone: us-west-1a, us-west-1c
 - Subnets**: Choose the subnets that you want to add. The list includes the subnets in the selected Availability Zones.
 - Select subnets: subnet-07ef563799d9cf4cb9 (10.0.2.0/24)

Activities Firefox Web Browser Mar 5 14:56

RDS-EC2-Mihir.docx RDS Management Console Subnets | VPC Manager New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#create-db-subnet-group; N. California mihir.popat@growexaws

Amazon RDS Services Search [Alt+S]

VPC private subnet for database

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

my-vpc-mihir (vpc-011bd70770918b91b)

Add subnets

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

Choose an availability zone us-west-1a us-west-1c

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

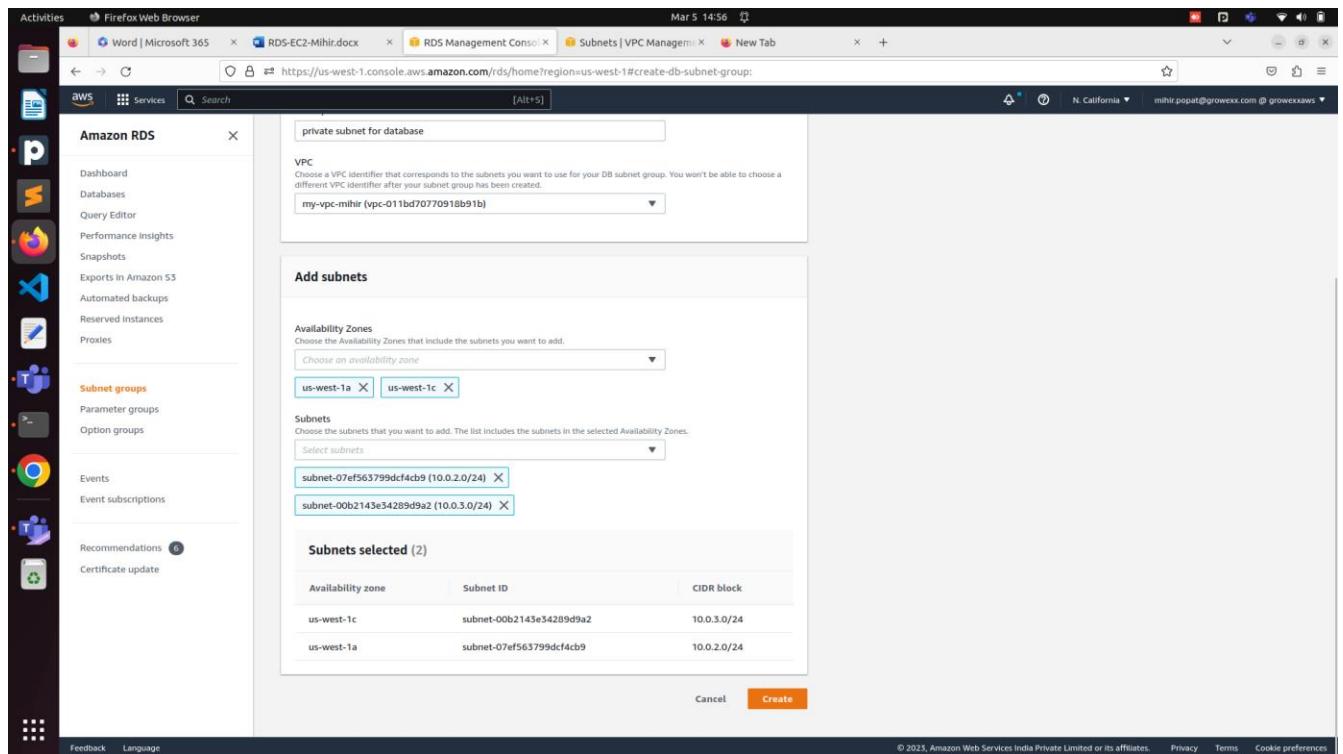
Select subnets subnet-07ef563799dcf4cb9 (10.0.2.0/24) subnet-00b2143e34289d9a2 (10.0.3.0/24)

Subnets selected (2)

Availability zone	Subnet ID	CIDR block
us-west-1c	subnet-00b2143e34289d9a2	10.0.3.0/24
us-west-1a	subnet-07ef563799dcf4cb9	10.0.2.0/24

Create

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Activities Firefox Web Browser Mar 5 14:57

RDS-EC2-Mihir.docx RDS Management Console Subnets | VPC Manager New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#db-subnet-groups-list; N. California mihir.popat@growexaws

Amazon RDS Services Search [Alt+S]

Subnet groups Successfully created privatesubnetsgmihir View subnet group

RDS > Subnet groups

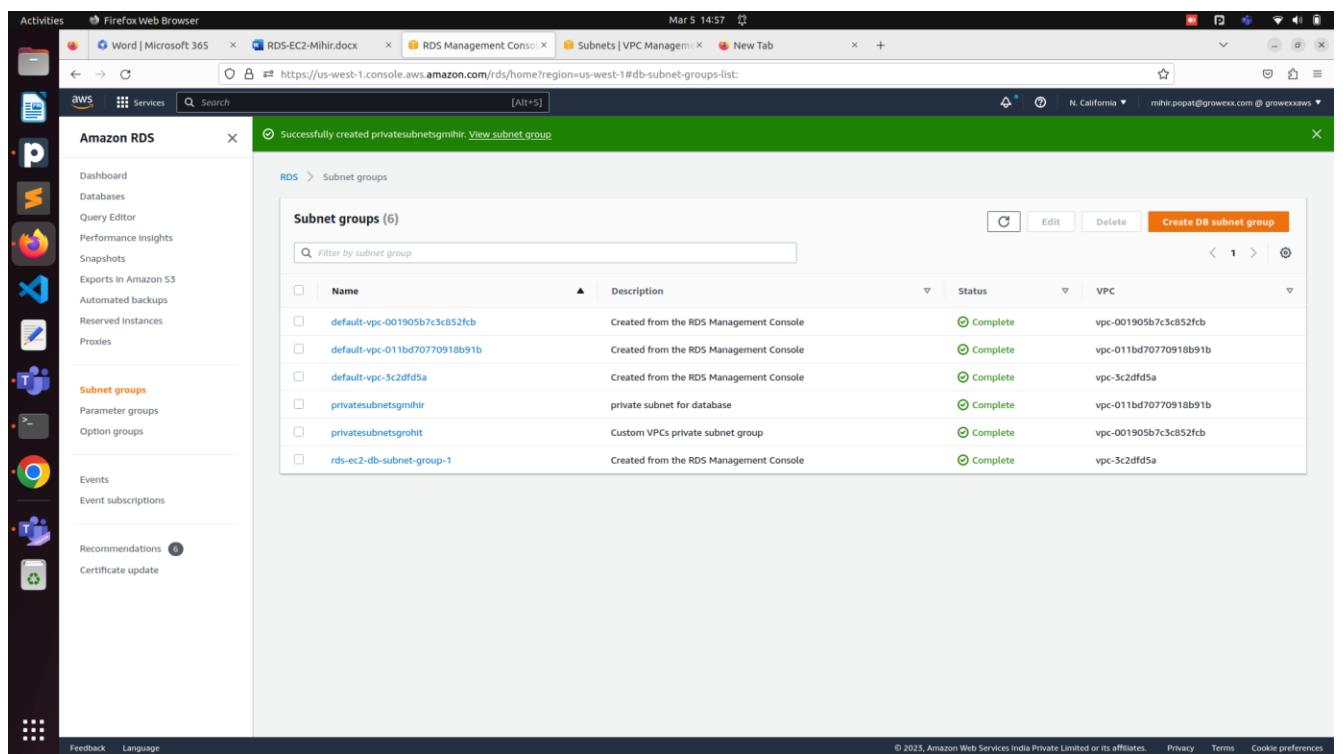
Subnet groups (6)

Name	Description	Status	VPC
default-vpc-001905b7c3c852fcf	Created from the RDS Management Console	Complete	vpc-001905b7c3c852fcf
default-vpc-011bd70770918b91b	Created from the RDS Management Console	Complete	vpc-011bd70770918b91b
default-vpc-5c2df5a	Created from the RDS Management Console	Complete	vpc-3c2df5a
privatesubnetsgmihir	private subnet for database	Complete	vpc-011bd70770918b91b
privatesubnetsgrobhit	Custom VPCs private subnet group	Complete	vpc-001905b7c3c852fcf
rds-ec2-db-subnet-group-1	Created from the RDS Management Console	Complete	vpc-3c2df5a

Filter by subnet group

Create DB subnet group

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Now create rds

Activities Firefox Web Browser Mar 5 15:01

Word | Microsoft 365 RDS-EC2-Mihir.docx RDS Management Console Subnets | VPC Manager New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false N. California mihir.popat@growexxw.com @ growexxw

We listened to your feedback! Now, create a database with a single click using our pre-built configurations! Or choose your own configurations.

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 

Microsoft SQL Server 

Aurora MySQL- Compatible Edition

Aurora MySQL is Amazon's enterprise-class MySQL-compatible database.

Aurora MySQL offers:

- Up to five times the throughput of MySQL Community Edition
- Up to 128 TB of autoscaling SSD storage
- Six-way replication across three Availability Zones
- Up to 15 read replicas with replica lag under 10-ms
- Automatic monitoring with failover

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false N. California mihir.popat@growexxw.com @ growexxw

MySQL Server

Edition MySQL Community

Known issues/limitations [Info](#) Review the Known issues/limitations [Info](#) to learn about potential compatibility issues with specific database versions.

Hide filters

Show versions that support the Amazon RDS Optimized Writes [Info](#) Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.

Engine Version [Info](#) MySQL 8.0.28

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](#)

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false

Services Search [Alt+S]

Experience with Amazon RDS Info

Settings

DB instance identifier [Info](#)
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.
wordpress-db-mihir

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 [Info](#)
Type a login ID for the master user of your DB instance.
admin

1 to 16 alphanumeric characters. First character must be a letter.

Manage master credentials in AWS Secrets Manager
Manage master user credentials in Secrets Manager. RDS can generate a password for you and manage it throughout its lifecycle.

If you manage the master user credentials in Secrets Manager, some RDS features aren't supported. [Learn more](#)

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

Master password [Info](#)

Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), '(single quote)', "(double quote)" and @ (at sign).

Confirm master password [Info](#)

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false

Services Search [Alt+S]

Instance configuration

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

DB instance class [Info](#)
 Burstable classes (Includes t classes)
db.t2.micro
 1 vCPUs 1 GiB RAM Not EBS Optimized

Include previous generation classes

Storage

Storage type [Info](#)
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

Storage aut scaling [Info](#)
Provides dynamic scaling support for your database's storage based on your application's needs.
 Enable storage aut scaling
Enabling this feature will allow the storage to increase after the specified threshold is exceeded.

Availability & durability

Multi-AZ deployment [Info](#)
 Do not create a standby instance

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RDS Management Console Subnets | VPC Manager New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false

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Availability & durability

Multi-AZ deployment Info

- Do not create a standby instance
- Create a standby instance (recommended for production usage)

Creates a standby in a different Availability Zone (AZ) to provide data redundancy, eliminate I/O freezes, and minimize latency spikes during system backups.

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
- 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.

Network type Info

To use dual-stack mode, make sure that you associate an IPv6 CIDR block with a subnet in the VPC you specify.

- IPv4 Your resources can communicate only over the IPv4 addressing protocol.
- Dual-stack mode Your resources can communicate over IPv4, IPv6, or both.

Virtual private cloud (VPC) Info

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

my-vpc-mlihir (vpc-011bd70770918b91b)

Only VPCs with a corresponding DB subnet group are listed.

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

DB subnet group Info

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

privatesubnetsmlihir

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RDS Management Console Subnets | VPC Manager New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false

N. California mihir.popat@growexx.com @ growexxaws

Only VPCs with a corresponding DB subnet group are listed.

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

DB subnet group Info

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

privatesubnetsmlihir

Public access Info

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

VPC security group (firewall) Info

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

- Choose existing VPC security groups
- Create new VPC security group

Create new VPC security group

Existing VPC security groups

Choose one or more options

sgmlihirdb 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

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.

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false N. California mihir.popat@growexaws.com

RDS Proxy
RDS Proxy is a fully managed, highly available database proxy that improves application scalability, resilience, and security.

Create an RDS Proxy Info
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rds-ca-2019 (default)

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

Additional configuration

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

Monitoring

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

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Activities Firefox Web Browser Mar 5 15:03

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#launch-dbinstance:gdb=false;s3-import=false N. California mihir.popat@growexaws.com

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

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

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

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#databases; [Alt+5]

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Amazon RDS Services Search [Alt+5]

Creating database **wordpress-db-mihir**
Your database might take a few minutes to launch.
How was your experience creating an Amazon RDS database? [Provide feedback](#)

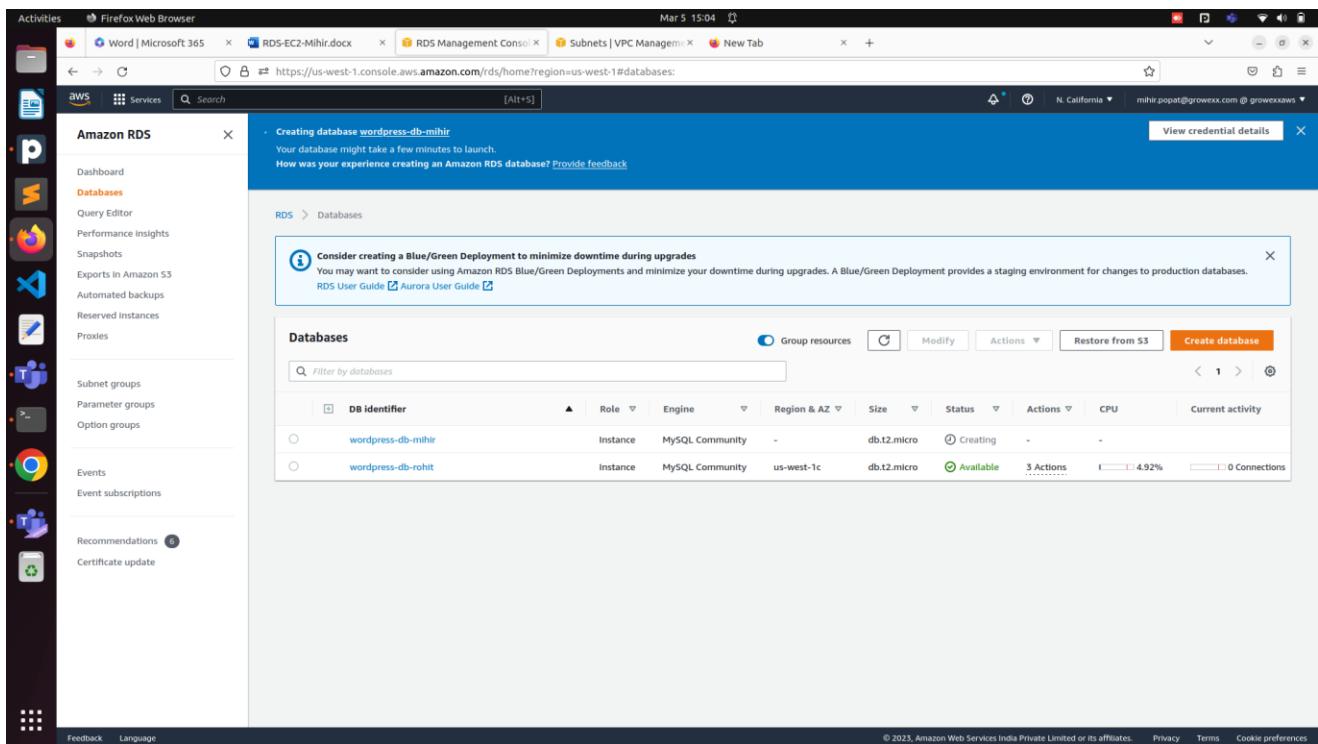
RDS Databases

Consider creating a Blue/Green Deployment to minimize downtime during upgrades
You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases.
[RDS User Guide](#) [Aurora User Guide](#)

Databases Group resources C Modify Actions Restore from S3 Create database

DB identifier	Role	Engine	Region & AZ	Size	Status	Actions	CPU	Current activity
wordpress-db-mihir	Instance	MySQL Community	-	db.t2.micro	Creating	-	-	-
wordpress-db-rohit	Instance	MySQL Community	us-west-1c	db.t2.micro	Available	3 Actions	4.92%	0 Connections

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https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#databases; [Alt+5]

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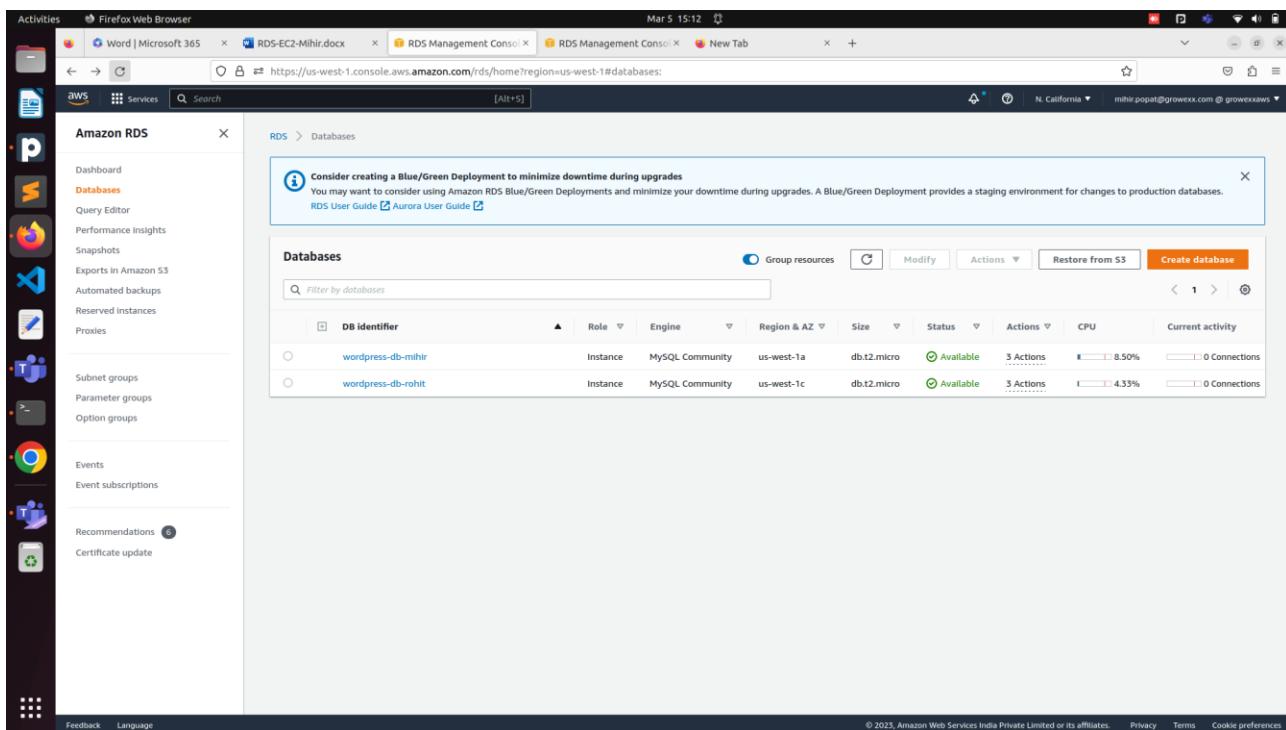
Amazon RDS Services Search [Alt+5]

Consider creating a Blue/Green Deployment to minimize downtime during upgrades
You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases.
[RDS User Guide](#) [Aurora User Guide](#)

Databases Group resources C Modify Actions Restore from S3 Create database

DB identifier	Role	Engine	Region & AZ	Size	Status	Actions	CPU	Current activity
wordpress-db-mihir	Instance	MySQL Community	us-west-1a	db.t2.micro	Available	3 Actions	8.50%	0 Connections
wordpress-db-rohit	Instance	MySQL Community	us-west-1c	db.t2.micro	Available	3 Actions	4.53%	0 Connections

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Activities Firefox Web Browser Mar 5 15:13

Word | Microsoft 365 RDS-EC2-Mihir.docx RDS Management Console VPC Management Console New Tab

https://us-west-1.console.aws.amazon.com/rds/home?region=us-west-1#database:id=wordpress-db-mihir;is-cluster=false;tab=connectivity

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Amazon RDS

Databases

DB identifier: wordpress-db-mihir

Role: Instance

CPU: 7.74%

Status: Available

Class: db.t2.micro

Region & AZ: us-west-1a

Connectivity & security

Endpoint & port

Endpoint: wordpress-db-mihir.cwgelchpny.us-west-1.rds.amazonaws.com

Port: 3306

Networking

Availability Zone: us-west-1a

VPC: my-vpc-mihir (vpc-011bd7077091bb91b)

Subnet group: privatesubnetsgmihiir

Subnets: subnet-07ef563799dcf4cb9, subnet-00b2143e34289d9a2

Network type: IPv4

Security

VPC security groups: sgmihiir (sg-0188a61d42126e761) Active

Publicly accessible: No

Certificate authority: Info rds-ca-2019

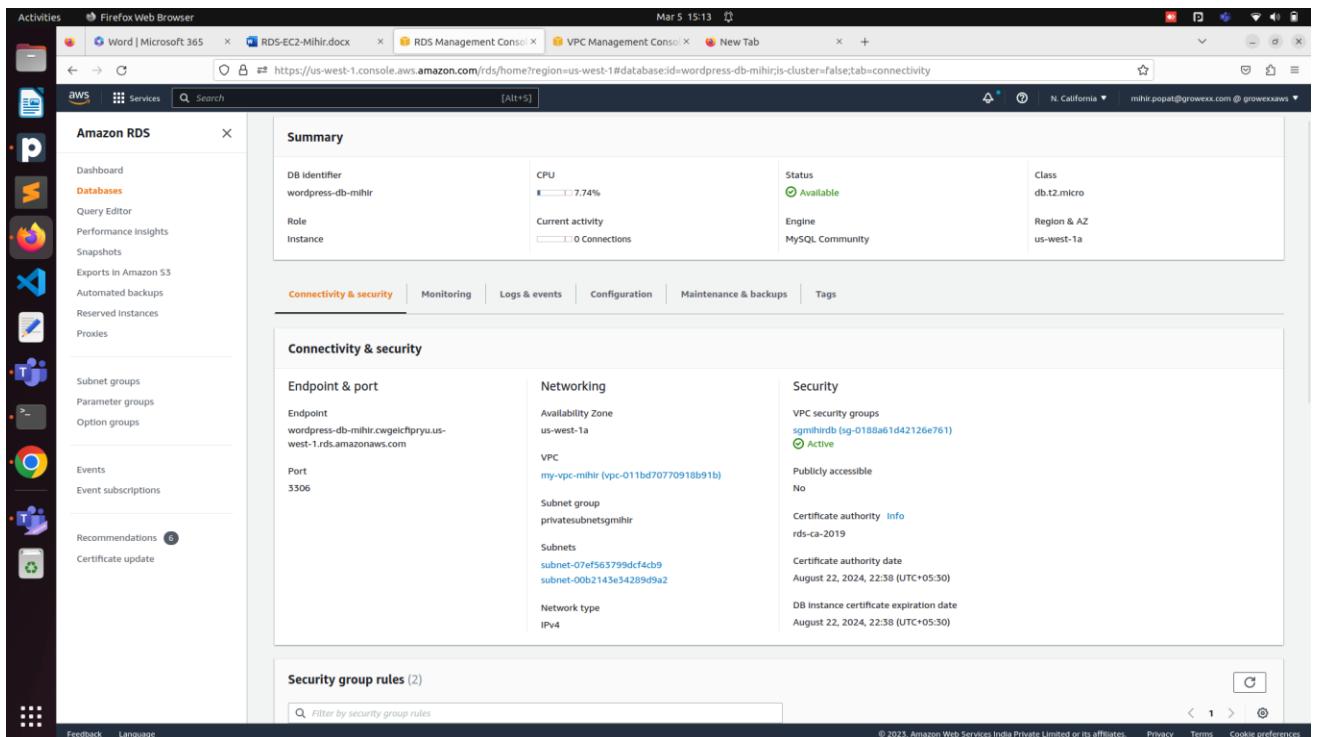
Certificate authority date: August 22, 2024, 22:38 (UTC+05:30)

DB instance certificate expiration date: August 22, 2024, 22:38 (UTC+05:30)

Security group rules (2)

Filter by security group rules

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https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#ModifyInboundSecurityGroupRules;securityGroupId=sg-0188a61d42126e761

N. California mihir.popat@growexx.com @ growexxaws

Edit inbound rules

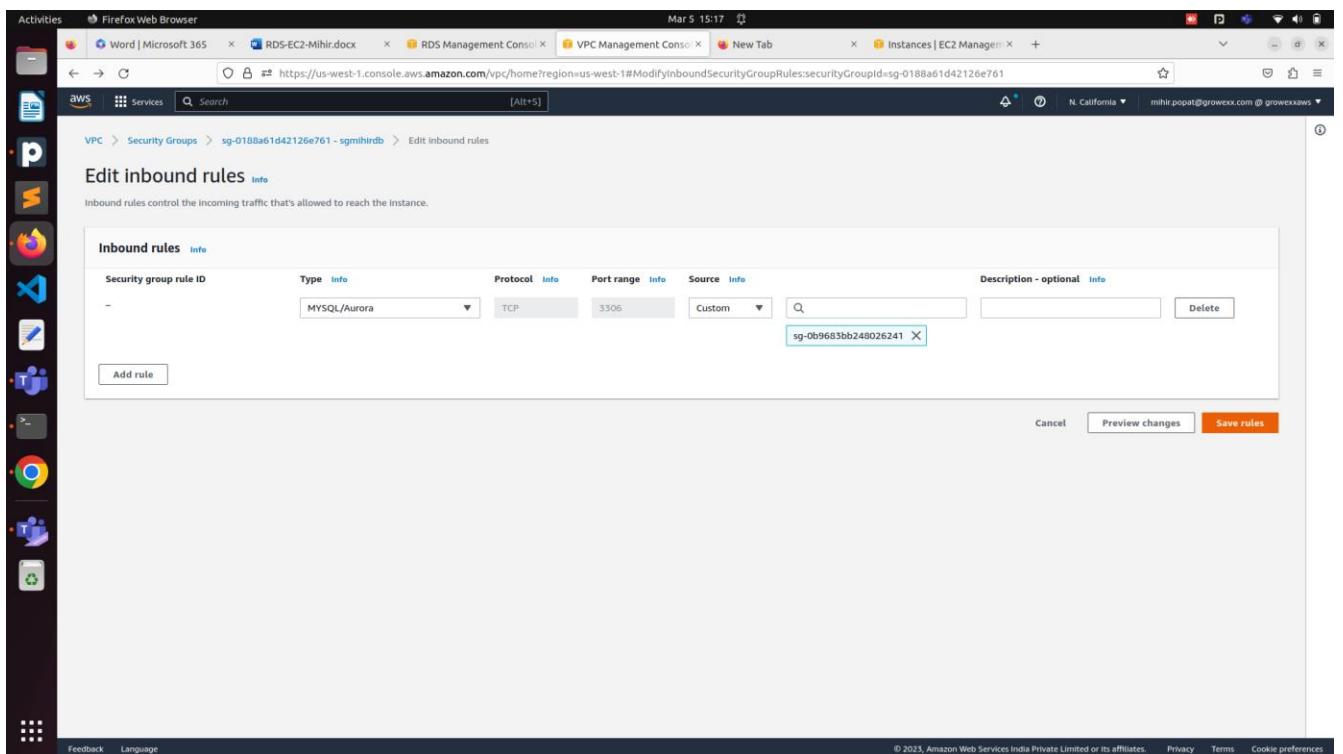
Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
-	MySQL/Aurora	TCP	3306	Custom	sg-0b9683bb248026241

Add rule Cancel Preview changes Save rules

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```
root@ip-10-0-0-245:/home/ubuntu# nc -zv wordpress-db-mihir.cggeicfipryu.us-west-1.rds.amazonaws.com 3306
Connection to wordpress-db-mihir.cggeicfipryu.us-west-1.rds.amazonaws.com (10.0.2.116) 3306 port [tcp/mysql] succeeded!
root@ip-10-0-0-245:/home/ubuntu#
```