

Cloud Computing Project

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Step 1. Setting Up VPC

The image shows two screenshots of the AWS console interface. The top screenshot is the 'Console Home' page, displaying sections for 'Recently visited' (EC2, Support), 'Applications' (empty), 'Welcome to AWS' (Getting started with AWS, Training and certification), and 'Cost and usage' (No cost and usage data). The bottom screenshot is the 'Your VPCs' page under the 'VPC' service, showing a table with one VPC entry: 'vpc-0efdb8de1e109183' (Available, 172.31.0.0/16 CIDR, dsoot-0ef97f1106fffd5bd as the main route table). A sidebar on the left lists various network-related services like Subnets, Route tables, Internet gateways, and Security groups.

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table
vpc-0efdb8de1e109183	Available		172.31.0.0/16	-	dsoot-0ef97f1106fffd5bd	rtb-04fc1016sf4b400e

Activities Brave Web Browser + CreateVpc | VPC Console Mon Jan 1 6:18 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#CreateVpccreateMode=vpcOnly

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

Resources to create Info
Create only the VPC resource or the VPC and other networking resources.

VPC only VPC and more

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

IPv4 CIDR block Info
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block

IPv4 CIDR
172.20.0.0/20
CIDR block size must be between /16 and /20.

IPv6 CIDR block Info
 No IPv6 CIDR block IPAM-allocated IPv6 CIDR block Amazon-provided IPv6 CIDR block IPv6 CIDR owned by me

Tenancy Info
Default

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

Key Value - optional
Name my-project-vpc Remove tag Add tag You can add 49 more tags

Create VPC

CloudShell Feedback Activities Brave Web Browser + VpcDetails | VPC Consl Mon Jan 1 6:19 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#VpcDetailsVpcId=vpc-08d8e8c64db441550

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

You successfully created vpc-08d8e8c64db441550 / my-project-vpc

VPC > Your VPCs > vpc-08d8e8c64db441550 / my-project-vpc Actions

Details Info

VPC ID	State	DNS hostnames	DNS resolution
vpc-08d8e8c64db441550	Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-0c97f1106ffbd58d	rtb-082c055a40d6720bc	ad-0490aa4c342cd73bd
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
No	172.20.0.0/20	-	-
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	856140264327
Disabled	-	-	-

Resource map New CIDRs Flow logs Tags Integrations

Resource map Info

- VPC Show details Your AWS virtual network my-project-vpc
- Subnets (0) Subnets within this VPC
- Route tables (1) Route network traffic to resources rtb-082c055a40d6720bc
- Network connections (0) Connections to other networks

Was the resource map helpful today?
Give us feedback as often as possible. We are improving continually.

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Activities Brave Web Browser vpcs | VPC Console

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#vpcs

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aws Services Search [Alt+S]

Your VPCs (2) Info

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table
vpc-0efdb8de17e109185	vpc-0efdb8de17e109185	Available	172.31.0.0/16	-	doct-0ff7f110effhd5ad	rtb-04ff0c10163f4ff400e
my-project-vpc	vpc-0fd8e8c64db441550	Available	172.20.0.0/20	-	doct-0ff7f110effhd5ad	-

Select a VPC above

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Step 2. Adding Subnets to the VPC

Activities Brave Web Browser subnets | VPC Console

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#subnets

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

Subnets (3) Info

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4 addresses
-	subnet-045cae697f3e2412c	Available	vpc-0efdb8de17e109185	172.31.32.0/20	-	4091
-	subnet-091f544b5401c04a	Available	vpc-0efdb8de17e109185	172.31.0.0/20	-	4091
-	subnet-0e4b7fc1f91a9f9fd	Available	vpc-0efdb8de17e109185	172.31.16.0/20	-	4091

Select a subnet

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Activities Brave Web Browser + CreateSubnet | VPC Co + Mon Jan 1 6:32 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#CreateSubnet:

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

Created Subnets (9) vpc-08d8e0x4db441550 (my-project-vpc)

Associated VPC CIDRs

IPv4 CIDRs
172.20.0.0/20

Subnet settings
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 9

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 VPC CIDR block [Info](#)
Choose the IPv4 VPC CIDR block to create a subnet in.

IPv4 subnet CIDR block
 256 IPs

Tags - optional
Key Value - optional
 Remove

Add new tag You can add 49 more tags.

CloudShell Feedback

Activities Brave Web Browser + Subnets | VPC Manager + Mon Jan 1 6:30 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#subnetsSubnetId=subnet-05f81d1518aadacea... Error

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

You have successfully created 9 subnets: subnet-05f81d1518aadacea, subnet-08b9aa648d54eb0f, subnet-09de3ab518ef59809, subnet-09338137c50cb454, subnet-031ce72f4e174bc52, subnet-094a5be9fa0de6f69, subnet-0d115a4459b1d5a, subnet-05af0f0994a54fb2c, subnet-057ff262ab315156

Subnets (9) Info

Find resources by attribute or tag

Subnet ID	Subnet ID	Subnet ID	Show more (+6)	Clear filters
subnet-05f81d1518aadacea	subnet-08b9aa648d54eb0f	subnet-09de3ab518ef59809		
subnet-057ff262ab315156	subnet-09338137c50cb454	subnet-031ce72f4e174bc52		
subnet-0d115a4459b1d5a	subnet-08b9aa648d54eb0f	subnet-094a5be9fa0de6f69		
subnet-05af0f0994a54fb2c	subnet-09de3ab518ef59809	subnet-057ff262ab315156		
subnet-05f81d1518aadacea	subnet-08b9aa648d54eb0f	subnet-09de3ab518ef59809		
subnet-057ff262ab315156	subnet-09338137c50cb454	subnet-031ce72f4e174bc52		
subnet-0d115a4459b1d5a	subnet-08b9aa648d54eb0f	subnet-094a5be9fa0de6f69		
subnet-05af0f0994a54fb2c	subnet-09de3ab518ef59809	subnet-057ff262ab315156		
subnet-05f81d1518aadacea	subnet-08b9aa648d54eb0f	subnet-09de3ab518ef59809		

Select a subnet

CloudShell Feedback

Step 3. Modifying the Route Tables

The screenshot shows the AWS VPC Route Tables page. On the left, there is a navigation sidebar with various VPC-related options like EC2 Global View, Virtual private cloud, Security, DNS Firewall, Network Firewall, and CloudShell. The main area displays a table titled "Route tables (2) Info". The table has columns for Name, Route table ID, Explicit subnet associations, Edge associations, Main, VPC, and Owner ID. Two entries are listed:

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
-	rtb-04f0c10163f48400e	-	-	Yes	vpc-0def88bde17e109183	836140264327
-	rtb-082c055a40d6720bc	-	-	Yes	vpc-0bd8e8c64db4415501 my... my-project-vpc	836140264327

Below the table, there is a section titled "Select a route table" with a dropdown menu.

The screenshot shows the "Create route table" wizard. The first step, "Route table settings", is displayed. It includes fields for "Name - optional" (containing "my-public-web-route-table") and "VPC" (containing "vpc-0bd8e8c64db441550 (my-project-vpc)"). Below these, there is a "Tags" section where a single tag "Name: my-public-web-route-table" is added. At the bottom, there are "Cancel" and "Create route table" buttons.

Activities | Brave Web Browser | +

RouteTableDetails | VPC | +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetails?routeTableId=rtb-09c7d31dac8d112be...

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aws Services Search [Alt+S]

Mon Jan 1 6:35 PM

Route table rtb-09c7d31dac8d112be | my-public-web-route-table was created successfully.

VPC > Route tables > rtb-09c7d31dac8d112be / my-public-web-route-table

Actions ▾

Details Info

Route table ID rtb-09c7d31dac8d112be	Main No	Explicit subnet associations -	Edge associations -
VPC vpc-08d8e8c64db441550 my-project-vpc	Owner ID 836140264327		

Routes Subnet associations Edge associations Route propagation Tags

Both Edit routes < 1 > ⌂

Routes (1)

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No

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Activities | Brave Web Browser | +

CreateRouteTable | VPC | +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#CreateRouteTable:

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

Mon Jan 1 6:36 PM

VPC > Route tables > Create route table

Create route table [Info](#)

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

Route table settings

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

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 <input type="text" value="Name"/>	Value - optional <input type="text" value="my-private-app-route-table"/>	Remove
--	---	--------

Add new tag
You can add 49 more tags.

Cancel **Create route table**

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Activities Brave Web Browser +

RouteTableDetails | VPC

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetails?routeTableId=rtb-0f6bc7c4137c3fc...

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

Mon Jan 1 6:36 PM

Route table rtb-0f6bc7c4137c3fc0 | my-private-app-route-table was created successfully.

VPC > Route tables > rtb-0f6bc7c4137c3fc0

rtb-0f6bc7c4137c3fc0 / my-private-app-route-table

Actions

Details **Info**

Route table ID rtb-0f6bc7c4137c3fc0	Main <input checked="" type="checkbox"/> No	Explicit subnet associations -	Edge associations -
VPC vpc-08d8e8c64db441550 my-project-vpc	Owner ID 836140264327		

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

Routes (1)

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No

Both Edit routes < 1 > ⚙

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Activities Brave Web Browser +

CreateRouteTable | VPC

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#CreateRouteTable:

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

Mon Jan 1 6:37 PM

VPC > Route tables > Create route table

Create route table Info

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

Route table settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.
my-private-db-route-table

VPC
The VPC to use for this route table.
vpc-08d8e8c64db441550 (my-project-vpc)

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

Key <input type="text"/> Name	Value - optional <input type="text"/> my-private-db-route-table	<input type="button"/> Remove
----------------------------------	--	-------------------------------

Add new tag You can add 49 more tags.

Create route table

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Activities Brave Web Browser RouteTableDetails | VPC + RouteTableDetails | VPC

Mon Jan 1 6:36 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetailsRouteTableId:rtb-0576bad55190eb2a6

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Receive SM... How to crea...

aws Services Search [Alt+Space]

Route table rtb-0576bad55190eb2a6 | my-private-db-route-table was created successfully.

VPC > Route tables > rtb-0576bad55190eb2a6 / my-private-db-route-table

Actions

Details Info

Route table ID: rtb-0576bad55190eb2a6 Main Explicit subnet associations Edge associations

VPC: vpc-08d0e8c64db441550 | my-project-vpc Owner ID: 836140264327

Routes Subnet associations Edge associations Route propagation Tags

Both Edit routes < 1 > ⌂

Routes (1)

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No

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Step 4. Modifying Subnets associations with Route Tables

The screenshot shows two screenshots of the AWS VPC console interface, illustrating the process of modifying subnet associations for a route table.

Screenshot 1: Route Tables List

This screenshot shows the 'Route tables' list page. The table displays five route tables:

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
-	rtb-04fbc10163f48400e	-	-	Yes	vpc-0efdb8de17e109183	836140264327
-	rtb-08c2055a40d87208c	-	-	Yes	vpc-08d8fe8ec4db4415501 my...	836140264327
my-public-web-route-table	rtb-09c7d31dac8d112be	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327
my-private-app-route-table	rtb-0f6bc7c4137cfcb0	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327
my-private-db-route-table	rtb-0576bad55190eb2a6	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327

Screenshot 2: Route Table Details - my-public-web-route-table

This screenshot shows the details for the 'my-public-web-route-table'. The table lists four route entries:

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
-	rtb-04fbc10163f48400e	-	-	Yes	vpc-0efdb8de17e109183	836140264327
-	rtb-08c2055a40d87208c	-	-	Yes	vpc-08d8fe8ec4db4415501 my...	836140264327
my-public-web-route-table	rtb-09c7d31dac8d112be	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327
my-private-app-route-table	rtb-0f6bc7c4137cfcb0	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327
my-private-db-route-table	rtb-0576bad55190eb2a6	-	-	No	vpc-08d8fe8ec4db4415501 my...	836140264327

The 'my-public-web-route-table' row is selected. The 'Subnet associations' tab is active, showing the following configuration:

Explicit subnet associations (0)

No subnet associations.

Subnets without explicit associations (9)

Activities Brave Web Browser

EditRouteTableSubnet +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-09c7d31dac0d112be

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aws Services Search [Alt+S]

VPC > Route tables > rtb-09c7d31dac0d112be > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (3/9)					
<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	my-public-web-subnet-1	subnet-05f81d1518aadacea	172.20.1.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-public-web-subnet-2	subnet-08b9aa648d54eab0f	172.20.2.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-public-web-subnet-5	subnet-09de5ab518ef59809	172.20.3.0/24	-	Main (rtb-082c055a40d6720bc)

Selected subnets

subnet-05f81d1518aadacea / my-public-web-subnet-1	subnet-08b9aa648d54eab0f / my-public-web-subnet-2	subnet-09de5ab518ef59809 / my-public-web-subnet-3
---	---	---

Cancel Save associations

CloudShell Feedback

Activities Brave Web Browser

Route tables | VPC Main +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTables

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

VPC dashboard X

EC2 Global View Filter by VPC

Select a VPC

Virtual private cloud

Your VPCs Subnets Route tables Internet gateways Egress-only Internet gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections Security Network ACLs Security groups DNS firewall Rule groups Domain lists Network Firewall Firewalls Firewall policies

You have successfully updated subnet associations for rtb-09c7d31dac0d112be / my-public-web-route-table.

Route tables (1/5) Info

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	-	rtb-04f8c10163f48400e	-	-	Yes	vpc-0efdb88de17e109183	B56140264527
<input type="checkbox"/>	-	rtb-082c055a40d6720bc	-	-	Yes	vpc-08d8e8c64db4415501 my...	B56140264527
<input type="checkbox"/>	my-public-web-route-table	rtb-09c7d31dac0d112be	3 subnets	-	No	vpc-08d8e8c64db4415501 my...	B56140264527
<input checked="" type="checkbox"/>	my-private-app-route-table	rtb-0f6bc7c4137c3fc0	-	-	No	vpc-08d8e8c64db4415501 my...	B56140264527
<input type="checkbox"/>	my-private-db-route-table	rtb-0576bad55190eb2a6	-	-	No	vpc-08d8e8c64db4415501 my...	B56140264527

rtb-0f6bc7c4137c3fc0 / my-private-app-route-table

Details Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (0)

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
No subnet associations				
You do not have any subnet associations.				

Edit subnet associations

CloudShell Feedback

Activities Brave Web Browser

EditRouteTableSubnet + 1 tab

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#EditRouteTableSubnetAssociations:RouteTable/edit... Mon Jan 1 6:39 PM

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aws Services Search [Alt+S]

VPC > Route tables > rtb-0f6bc7c4137c3fc0 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (3/9)

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	my-private-app-subnet-2	subnet-031ce72f4e174bc52	172.20.5.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-private-app-subnet-1	subnet-09338837c530cb434	172.20.4.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-private-app-subnet-3	subnet-09045be96a0de6f69	172.20.6.0/24	-	Main (rtb-082c055a40d6720bc)

Selected subnets

subnet-031ce72f4e174bc52 / my-private-app-subnet-2	subnet-09338837c530cb434 / my-private-app-subnet-1	subnet-09045be96a0de6f69 / my-private-app-subnet-3
--	--	--

Cancel Save associations

CloudShell Feedback

Activities Brave Web Browser

Route tables | VPC Main + 1 tab

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTables Mon Jan 1 6:39 PM

4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

You have successfully updated subnet associations for rtb-0f6bc7c4137c3fc0 / my-private-app-route-table.

Route tables (1/5) Info

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	-	rtb-04f8c10163f48400e	-	-	Yes	vpc-0efdb88de17e109183	B56140264527
<input type="checkbox"/>	-	rtb-082c055a40d6720bc	-	-	Yes	vpc-08d8e8rc64db4415501 my-...	B56140264527
<input type="checkbox"/>	my-public-web-route-table	rtb-09c7d31dacbd112be	3 subnets	-	No	vpc-08d8e8rc64db4415501 my-...	B56140264527
<input checked="" type="checkbox"/>	my-private-app-route-table	rtb-0f6bc7c4137c3fc0	3 subnets	-	No	vpc-08d8e8rc64db4415501 my-...	B56140264527
<input checked="" type="checkbox"/>	my-private-db-route-table	rtb-0576bad55190eb2a6	-	-	No	vpc-08d8e8rc64db4415501 my-...	B56140264527

rtb-0576bad55190eb2a6 / my-private-db-route-table

Details	Routes	Subnet associations	Edge associations	Route propagation	Tags
---------	--------	----------------------------	-------------------	-------------------	------

Explicit subnet associations

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
Loading subnet associations...				

Subnets without explicit associations

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

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
Loading subnets...				

CloudShell Feedback

Activities Brave Web Browser

EditRouteTableSubnet x

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#EditRouteTableSubnetAssociations:RouteTable/edit... Mon Jan 1 6:39 PM

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aws Services Search [Alt+S]

VPC > Route tables > rtb-0576bad55190eb2a6 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (3/9)					
<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	my-private-db-subnet-3	subnet-057ffc262ab21515e	172.20.9.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-private-db-subnet-2	subnet-05af0f0994a5f82c	172.20.8.0/24	-	Main (rtb-082c055a40d6720bc)
<input checked="" type="checkbox"/>	my-private-db-subnet-1	subnet-0adb1f5a445d81d3a	172.20.7.0/24	-	Main (rtb-082c055a40d6720bc)

Selected subnets

subnet-057ffc262ab21515e / my-private-db-subnet-3	subnet-05af0f0994a5f82c / my-private-db-subnet-2	subnet-0adb1f5a445d81d3a / my-private-db-subnet-1
---	--	---

Cancel Save associations

CloudShell Feedback

Activities Brave Web Browser

Route tables | VPC Main x

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTables Mon Jan 1 6:40 PM

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aws Services Search [Alt+S]

You have successfully updated subnet associations for rtb-0576bad55190eb2a6 / my-private-db-route-table.

Route tables (5) Info

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	-	rtb-04f8c10163f48400e	-	-	Yes	vpc-0efdb8de17e109183	B56140264527
<input type="checkbox"/>	-	rtb-082c055a40d6720bc	-	-	Yes	vpc-08d8e8c64db4415501 my-...	B56140264527
<input type="checkbox"/>	my-public-web-route-table	rtb-09c7d31dacbd112be	3 subnets	-	No	vpc-08d8e8c64db4415501 my-...	B56140264527
<input type="checkbox"/>	my-private-app-route-table	rtb-0f6bc7c4157c3fc0	3 subnets	-	No	vpc-08d8e8c64db4415501 my-...	B56140264527
<input type="checkbox"/>	my-private-db-route-table	rtb-0576bad55190eb2a6	3 subnets	-	No	vpc-08d8e8c64db4415501 my-...	B56140264527

Select a route table

CloudShell Feedback

Step 5. Creating Internet Gateway

The screenshot shows two consecutive steps in the AWS VPC console.

Step 1: Internet gateways (1) - Info

This screen displays a single internet gateway named "igw-097cfaf471c355780". It is attached to a VPC with ID "vpc-0efdb8de17e109183". The "Actions" menu shows an option to "Create internet gateway".

Step 2: Create internet gateway - Info

This screen is part of the "Create internet gateway" wizard. It starts with the "Internet gateway settings" step. A "Name tag" is specified as "my-internet-gateway". Under "Tags - optional", a single tag "Name" is added with the value "my-internet-gateway". The "Create internet gateway" button is highlighted in orange at the bottom right.

Activities Brave Web Browser InternetGateway | VPC +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#InternetGateway/internetGatewayId:igw-099a6044191fb671d

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aws Services Search [Alt+S]

The following internet gateway was created: igw-099a6044191fb671d - my-internet-gateway. You can now attach to a VPC to enable the VPC to communicate with the internet.

Attach to a VPC

VPC > Internet gateways > igw-099a6044191fb671d / my-internet-gateway

Details Info Actions

Internet gateway ID: igw-099a6044191fb671d State: Detached VPC ID: - Owner: 836140264327

Tags

Search tags

Key	Value
Name	my-internet-gateway

Manage tags

< 1 >

Virtual private cloud

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

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Network Firewall

- Firewalls
- Firewall policies

CloudShell Feedback

Activities Brave Web Browser Attach internet gateway +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#AttachInternetGateway/internetGatewayId:igw-099a6044191fb671d

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aws Services Search [Alt+S]

Attach to VPC (igw-099a6044191fb671d) Info

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

Available VPCs
Attach the internet gateway to this VPC.
Select a VPC

AWS Command Line Interface command

Cancel Attach internet gateway

CloudShell Feedback

Activities Brave Web Browser +

Attach internet gateway x

eu-north-1.console.aws.amazon.com/vpcconsole/home/region=eu-north-1#AttachInternetGatewayToVPC;igw-099a6044191fb671d

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aws Services Search [Alt+S]

VPC > Internet gateways > Attach to VPC (igw-099a6044191fb671d) info

Attach to VPC (igw-099a6044191fb671d)

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

Available VPCs
Attach the Internet gateway to this VPC.

Q vpc-08d8e8c64db441550 X

▶ AWS Command Line Interface command

Cancel Attach internet gateway

CloudShell Feedback

Activities Brave Web Browser +

InternetGateway | VPC x

eu-north-1.console.aws.amazon.com/vpcconsole/home/region=eu-north-1#InternetGateway;igw-099a6044191fb671d

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aws Services Search [Alt+S]

Internet gateway igw-099a6044191fb671d successfully attached to vpc-08d8e8c64db441550 info

VPC > Internet gateways > igw-099a6044191fb671d

igw-099a6044191fb671d / my-internet-gateway

Actions ▼

Details Info

Internet gateway ID	State	VPC ID
igw-099a6044191fb671d	Attached	vpc-08d8e8c64db441550 my-project-vpc
Owner		
836140264527		

Tags

Search tags

Key	Value
Name	my-internet-gateway

Manage tags

CloudShell Feedback

Step 6. Creating NAT Gateways

The screenshot shows two browser windows side-by-side. The left window displays the 'NAT gateways' list page, which is currently empty. The right window shows the 'Create NAT gateway' configuration page.

NAT gateways (Info)

No NAT gateways found

Create NAT gateway

Elastic IP address 16.16.228.90 (epalloc-0d064d18a287a4b15) allocated.

Create NAT gateway (Info)

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

NAT gateway settings

Name - optional
my-nat-gateway-1

Subnet
Select a subnet in which to create the NAT gateway.
subnet-05f01d1518aaadacea (my-public-web-subnet-1)

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

Elastic IP allocation ID - Info
Assign an Elastic IP address to the NAT gateway.
epalloc-0d064d18a287a4b15

Additional settings (Info)

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

Key	Value - optional

Activities Brave Web Browser NatGatewayDetails | V +

Mon Jan 1 6:45 PM

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#NatGatewayDetailsnatGatewayId=nat-08ac7687dc973a71c...

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aws Services Search [Alt+5]

NAT gateway nat-08ac7687dc973a71c | my-nat-gateway-1 was created successfully.

VPC > NAT_gateways > nat-08ac7687dc973a71c

nat-08ac7687dc973a71c / my-nat-gateway-1

Actions ▾

Details Info

NAT gateway ID nat-08ac7687dc973a71c	Connectivity type Public	State Pending	State message Info
NAT gateway ARN arnaws:e2:eu-north-1:836140264327:natgateway/nat-08ac7687dc973a71c	Primary public IPv4 address -	Primary private IPv4 address -	Primary network interface ID -
VPC vpc-08d1e0c64db441550 / my-project-vpc	Subnet subnet-05f81d1518aadacea / my-public-web-subnet-1	Created Monday, January 1, 2024 at 10:45:07 GMT+5	Deleted -

Secondary IPv4 addresses Monitoring Tags

Secondary IPv4 addresses

Filter by secondary IPv4 address

Private IPv4 address Network Interface ID Status Failure message

Secondary IPv4 addresses are not available for this nat gateway.

CloudShell Feedback

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Step 7. Adding Internet Gateway and NAT Gateway in Route Tables

The screenshot shows two screenshots of the AWS VPC console interface.

Screenshot 1: Route Tables Overview

This screenshot shows the 'Route tables' page with a list of existing route tables:

Name	Route table ID	Explicit subnet associat...	Main	VPC	Owner ID
-	rtb-04f0c10163f48400e	-	Yes	vpc-0ef88bde17e09185	836140264327
-	rtb-082c055a40d67208c	-	Yes	vpc-08d0feefc4db4415501my...	836140264327
my-public-web-route-table	rtb-09c7d31dac8d112be	3 subnets	No	vpc-08d0feefc4db4415501my...	836140264327
my-private-app-route-table	rtb-0f6bc74a137cf5fb0	3 subnets	No	vpc-08d0feefc4db4415501my...	836140264327
my-private-db-route-table	rtb-0576bad55190eb2a6	3 subnets	No	vpc-08d0feefc4db4415501my...	836140264327

Screenshot 2: Edit Routes for my-public-web-route-table

This screenshot shows the 'Edit routes' page for the selected route table (rtb-09c7d31dac8d112be). It displays one existing route:

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No

Below this, there is a form to add a new route:

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No
0.0.0.0/0	Internet Gateway	-	No
	lgw-099a6044191fb671d	-	

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

Activities Brave Web Browser +

RouteTableDetails | VPC

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetailsRouteTableId:rtb-09c7d31dac8d112be...

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aws Services Search [Alt+S]

Mon Jan 1 6:50 PM

Updated routes for rtb-09c7d31dac8d112be / my-public-web-route-table successfully

VPC > Route tables > rtb-09c7d31dac8d112be

rtb-09c7d31dac8d112be / my-public-web-route-table

Actions

Details **Info**

Route table ID	rtb-09c7d31dac8d112be	Main	No	Explicit subnet associations	3 subnets	Edge associations	-
VPC	vpc-00db8e8c64db441550 my-project-vpc	Owner ID	836140264327				

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	jgw-329a6044191fb671d	Active	No
172.20.0.0/20	local	Active	No

Subnet associations

Edge associations

Security

Network ACLs

Security groups

DNS firewall

Rule groups

Domain lists

Network Firewall

Firewalls

Firewall policies

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RouteTables | VPC Con

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTables

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aws Services Search [Alt+S]

Mon Jan 1 6:50 PM

Route tables (1/5) **Info**

Name	Route table ID	Explicit subnet associat...	Edge associations	Main	VPC	Owner ID
rtb-04fbc10165f49400e	-	-	-	Yes	vpc-0efdb88de17e1091b3	836140264327
rtb-082c055a40d6720bc	-	-	-	Yes	vpc-08d8fecc64db441550 my...	836140264327
my-public-web-route-table	rtb-09c7d31dac8d112be	3 subnets	-	No	vpc-08d8fecc64db441550 my...	836140264327
my-private-app-route-table	rtb-0f6bc7c4137c3fc0	3 subnets	-	No	vpc-08d8fecc64db441550 my...	836140264327
my-private-db-route-table	rtb-0576hd55190eb2a6	3 subnets	-	No	vpc-08d8fecc64db441550 my...	836140264327

Create route table

rtb-0f6bc7c4137c3fc0 / my-private-app-route-table

Routes (1)

Destination	Target	Status	Propagated
172.20.0.0/20	local	Active	No

Activities Brave Web Browser Mon Jan 1 6:51 PM

EditRoutes | VPC Cons... + eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#EditRoutesRouteTableId:rtb-0f6bc7c4137c3fc0

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aws Services Search [Alt+S]

VPC > Route tables > rtb-0f6bc7c4137c3fc0 > Edit routes

Edit routes

Destination	Target	Status	Propagated
172.20.0.0/20	local Q local	Active	No
Q 0.0.0.0/0	NAT Gateway Q nat-08ac7687dc973a71c	-	No

Add route

Cancel Preview Save changes

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Activities Brave Web Browser Mon Jan 1 6:51 PM

RouteTableDetails | VPC + eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetailsRouteTableId:rtb-0f6bc7c4137c3fc0

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aws Services Search [Alt+S]

Updated routes for rtb-0f6bc7c4137c3fc0 / my-private-app-route-table successfully

Details

VPC > Route tables > rtb-0f6bc7c4137c3fc0

rtb-0f6bc7c4137c3fc0 / my-private-app-route-table

Actions

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-0f6bc7c4137c3fc0	No	3 subnets	-
VPC	Owner ID		
vpc-0bd9e8c64db44150 my-project-vpc	836140264327		

Details Info

Routes (2)

Destination	Target	Status	Propagated
0.0.0.0/0	nat-08ac7687dc973a71c	Active	No
172.20.0.0/20	local	Active	No

Both Edit routes

Filter routes

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Activities □ Brave Web Browser □

RouteTableDetails | VPC □

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetails?routeTableId=rtb-0f6bc7c4137c3fcbo

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aws Services Search [Alt+S]

Updated routes for rtb-0f6bc7c4137c3fcbo / my-private-app-route-table successfully

Details

VPC > Route tables > rtb-0f6bc7c4137c3fcbo

rtb-0f6bc7c4137c3fcbo / my-private-app-route-table

Actions ▾

Details **Info**

Route table ID	rtb-0f6bc7c4137c3fcbo	Main	No	Explicit subnet associations	3 subnets	Edge associations	-
VPC	vpc-00d8e8c64db441550 my-project-vpc	Owner ID	836140264327				

Routes (2) Both ▾ Edit routes

Destination	Target	Status	Propagated
0.0.0.0/0	nat-08a27687dc973a71c	Active	No
172.20.0.20	local	Active	No

Subnet associations Edge associations Route propagation Tags

CloudShell Feedback

Activities □ Brave Web Browser □

RouteTables | VPC Con □

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTables

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aws Services Search [Alt+S]

Route tables (1/5) Info

Create route table

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associat...	Edge associations	Main	VPC	Owner ID
rtb-04fb10165f40400e	rtb-04fb10165f40400e	-	-	Yes	vpc-0efdb88de17e109183	836140264327
rtb-082c055a40d6720bc	rtb-082c055a40d6720bc	-	-	Yes	vpc-08d8e8c64db441550 my...	836140264327
my-public-web-route-table	rtb-09c7d31dadcd112be	3 subnets	-	No	vpc-08d8e8c64db441550 my...	836140264327
my-private-app-route-table	rtb-0f6bc7c4137c3fcbo	3 subnets	-	No	vpc-08d8e8c64db441550 my...	836140264327
my-private-db-route-table	rtb-0576bad55190eb2a6	3 subnets	-	No	vpc-08d8e8c64db441550 my...	836140264327

CloudShell Feedback

Activities Brave Web Browser RouteTableDetails | VPC +

eu-north-1.console.aws.amazon.com/vpcconsole/home?region=eu-north-1#RouteTableDetailsRouteTableId:rtb-0576bad55190eb2a6

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aws Services Search [Alt+5]

Updated routes for rtb-0576bad55190eb2a6 / my-private-db-route-table successfully

Details Info

Route table ID: rtb-0576bad55190eb2a6 Main: No Explicit subnet associations: 3 subnets Edge associations: -

VPC: vpc-00d8e8c64db441550 | my-project-vpc Owner ID: 836140264327

Actions

Details Subnet associations Edge associations Route propagation Tags

Routes (2) Both Edit routes < 1 > @

Destination	Target	Status	Propagated
0.0.0.0/0	nat-08a7687dc973a71c	Active	No
172.20.0.0/20	local	Active	No

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Step 8. Setting Up Presentation Tier: EC2 Web Server (Configuration)

The screenshot shows the AWS EC2 Launch Instance wizard. The first step, 'Launch an instance', is displayed. It includes fields for 'Name and tags' (Name: my-jump-server), 'Application and OS Images (Amazon Machine Image)', and a 'Quick Start' section with various AMI options. A callout box highlights the 'Free tier' information: 'Free tier: In your first year includes 750 hours of t2.micro (or t3.micro) in the Regions in which t2.micro is unavailable'.

The second step, 'Create key pair', is shown in a modal window. It asks for a 'Key pair name' (mykeypair) and 'Key pair type' (RSA). A warning message states: '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.' The 'Create key pair' button is highlighted.

The third step, 'Network settings', is partially visible at the bottom of the screen. It includes sections for VPC, Subnet, Auto-assign public IP, and Firewall security groups.

Mon Jan 1 7:47 PM

Activities Brave Web Browser

EC2 | eu-north-1

eu-north-1.console.aws.amazon.com/eec2/home?region=eu-north-1#LaunchInstances

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aws Services Search [Alt+S]

Key pair (login) Info

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

Key pair name - required Create new key pair

Network settings Info

VPC - required Info Create new subnet

Subnet Info Create new subnet

Auto-assign public IP Info

Firewall (security groups) Info
A security group is a set of Network 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
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 _./@[:!-`~]{1}^*

Description - required Info

Summary

Number of instances Info

Software Image (AMI)
Amazon Linux 2023 AMI 2023.5.2... read more
ami-03645cf14269b40b

Virtual server type (instance type)
t3.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 IOPS, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance Review commands

CloudShell Feedback

Activities Brave Web Browser

EC2 | eu-north-1

eu-north-1.console.aws.amazon.com/eec2/home?region=eu-north-1#LaunchInstances

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aws Services Search [Alt+S]

Security group name - required
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 _./@[:!-`~]{1}^*

Description - required Info

Inbound Security Group Rules

Security group rule 1 (TCP: 443, 0.0.0.0/0)

Type Info	Protocol Info	Port range Info
HTTPS	TCP	443

Source type Info Add CIDR, prefix list or security group Remove

Security group rule 2 (TCP: 22, 206.84.142.31/32)

Type Info	Protocol Info	Port range Info
ssh	TCP	22

Source type Info Name Info Add CIDR, prefix list or security group Remove

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Add security group rule

Summary

Number of instances Info

Software Image (AMI)
Amazon Linux 2023 AMI 2023.5.2... read more
ami-03645cf14269b40b

Virtual server type (instance type)
t3.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 IOPS, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance Review commands

CloudShell Feedback

Step 9. EC2 Instances for Application Tier (Configuration)

The screenshot shows the AWS EC2 'Launch an instance' configuration page. In the 'Summary' section, 'Number of Instances' is set to 1. The 'Software Image (AMI)' is set to 'Amazon Linux 2023 AMI 2023.5.2...'. The 'Virtual server type (instance type)' is 't3.micro'. Under 'Storage volumes', it shows 1 volume(s) - 8 GiB. A callout box highlights the 'Free tier' information: '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 IOPS, 1 GB of snapshots, and 100 GB of bandwidth to the internet.' The 'Launch instance' button is prominently displayed.

Name and tags

Name: my-php-app-server-1

Application and OS Images (Amazon Machine Image)

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

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

Recent AMIs: Amazon Linux, macOS, Ubuntu, Windows, Red Hat, SUSE Linux Enterprise Server

Browse more AMIs

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI (ami-03645cf1426c9b40b (64-bit (x86), us-east-1) / ami-dabbef1255676ef1 (64-bit (Arm), us-east-1))

VPC - required

vpc-08d8e8c64db441550 (my-project-vpc) 172.30.0.0/20

Subnet

subnet-09358837c530cb434 VPC: vpc-08d8e8c64db441550 Owner: 836140264527 Availability Zone: eu-north-1a IP addresses available: 251 CIDR: 172.30.4.0/24

Auto-assign public IP

Enable

Firewall (security groups)

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

my-php-app-server-1-sg

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

my-php-app-server-1-sg

Inbound Security Group Rules

Security group rule 1 (TCP: 22, sg-01e4d8a7f7b7ad89b)

Type: ssh Protocol: TCP Port range: 22

Source type: Custom Source: sg-01e4d8a7f7b7ad89b Description: SSH for admin desktop

Summary

Number of Instances: 1

Software Image (AMI): Amazon Linux 2023 AMI 2023.5.2... (ami-03645cf1426c9b40b)

Virtual server type (instance type): t3.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 IOPS, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Launch instance

Activities Brave Web Browser

EC2 | eu-north-1 eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#LaunchInstances

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

Mon Jan 1 7:55 PM

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: my-php-app-server-2 Add additional tags

Application and OS Images (Amazon Machine Image) Info

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

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

Recents Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE Linux Browse more AMIs

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI ami-03643cf1426cb940b (64-bit (x86), usf-preferred) / ami-0abb0fe8255676ef1 (64-bit (Arm), usf) Virtualization type: ENA enabled: true Root device type: ebs

Free tier eligible

CloudShell Feedback

Activities Brave Web Browser

EC2 | eu-north-1 eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#LaunchInstances

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

Mon Jan 1 7:55 PM

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 mykeypair Create new key pair

Network settings Info

VPC - required Info my-project-vpc 172.20.0.0/20

Subnet Info my-private-app-subnet-2 subnet-031ce72f4e174bc52 VPC: vpc-08d8e8c64db441550 Owner: 836140264327 Availability Zone: eu-north-1b IP addresses available: 251 CIDR: 172.20.5.0/24 Create new subnet

Auto-assign public IP Info Disable

Firewall (security groups) Info Create security group Select existing security group

Common security groups Info my-php-app-server-1-sg sg-0d30cce1fd33da846 X

my-ec2-08d8e8c64db441550 Security groups that you add or remove here will be added to or removed from all your network interfaces.

Advanced network configuration

Summary

Number of instances: 1

Software Image (AMI): Amazon Linux 2023 AMI 2023.5.2... read more ami-03643cf1426cb940b

Virtual server type (instance type): t3.micro

Firewall (security group): my-php-app-server-1-sg

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 IOPS, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch Instance Review commands

https://eu-north-1.console.aws.amazon.com/vpc/home?region=eu-north-1#...

Step 10. Connecting Web Server with PHP EC2 (app tier) instances

EC2 > Instances > i-0878905460072e914 (my-jump-server) [Info](#)

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0878905460072e914 (my-jump-server)	16.170.227.151 Open address	172.0.1.143
IPv6 address	Instance state	Public IPv4 DNS
-	Running	-
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-172-20-1-143.eu-north-1.compute.internal	ip-172-20-1-143.eu-north-1.compute.internal	-
Answer private resource DNS name	Instance type	AWS Compute Optimizer finding
-	t3.micro	Opt-in to AWS Compute Optimizer for recommendations Learn more
Auto-assigned IP address	VPC ID	Auto Scaling Group name
16.170.227.151 [Public IP]	vpc-08d8e8c64db441550 (my-project-vpc)	-
IAM Role	Subnet ID	
-	subnet-05fb1d1518aadacea (my-public-web-subnet-1)	

Details Security Networking Storage Status checks Monitoring Tags

Instance details [Info](#)

Platform	AMI ID	Monitoring
Amazon Linux (Inferred)	ami-03643cf1426c9b40b	disabled
Platform details	AMI name	Termination protection
Linux/UNIX	al2023-ami-2023.3.20231218.0-kernel-6.1-x86_64	Disabled
Stop protection	Launch time	AMI location
Disabled	Mon Jan 01 2024 19:47:17 GMT+0500 (Pakistan Standard Time) (10 minutes)	amazon/al2023-ami-2023.3.20231218.0-kernel-6.1-x86_64
Instance auto-recovery	Lifecycle	Stop-hibernate behavior
Disabled	recreate	disabled

CloudShell Feedback

EC2 > Instances > i-0878905460072e914 > Connect to instance

Connect to instance [Info](#)

Connect to your instance i-0878905460072e914 (my-jump-server) using any of these options

EC2 Instance Connect Session Manager **SSH client** EC2 serial console

Instance ID: i-0878905460072e914 (my-jump-server)

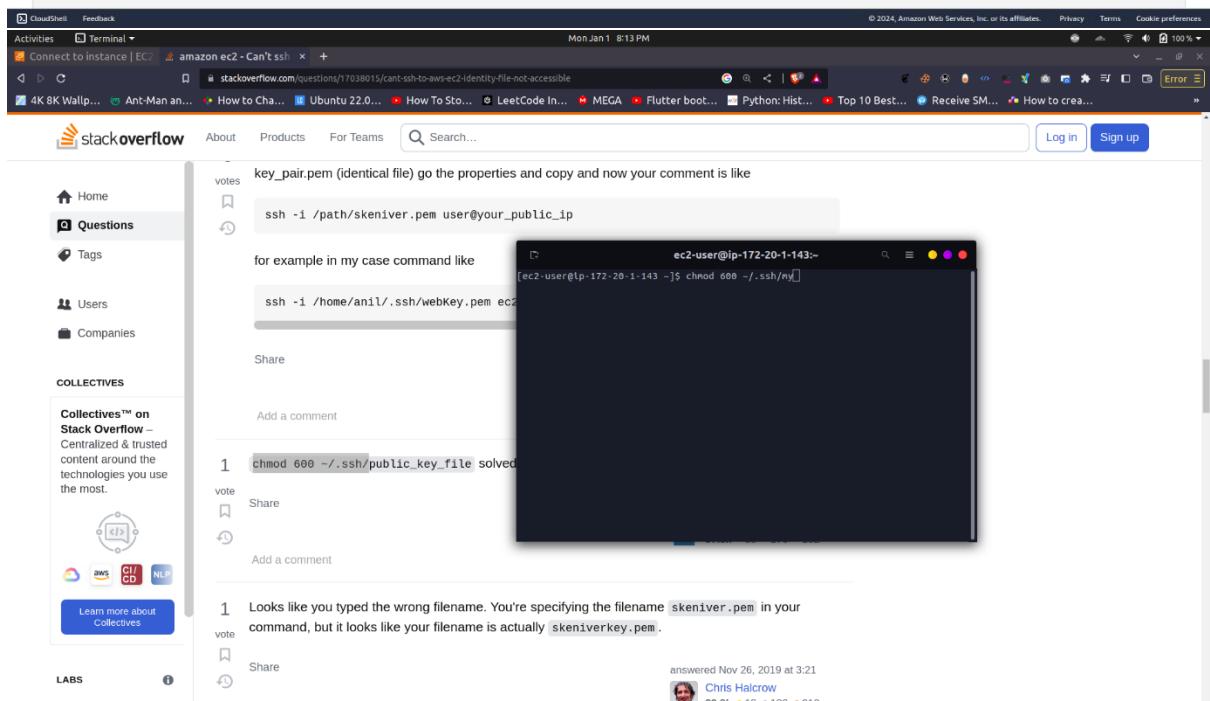
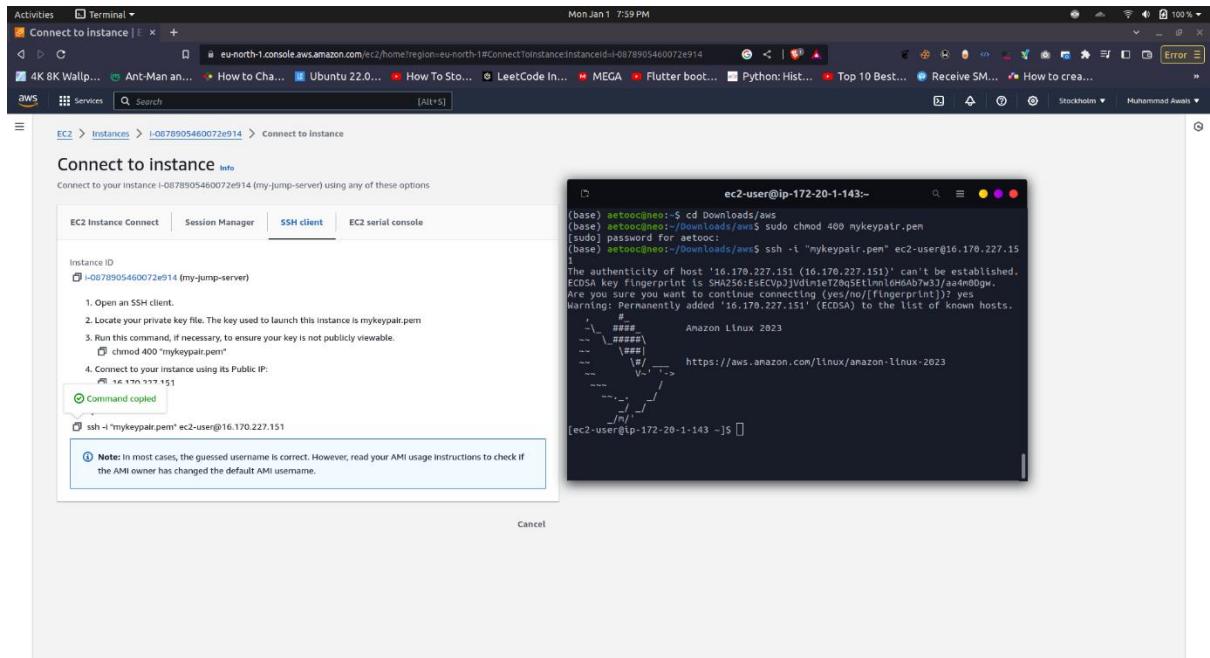
1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is mykeypair.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 ↳ chmod 400 "mykeypair.pem"
4. Connect to your instance using its Public IP:
 ↳ 16.170.227.151

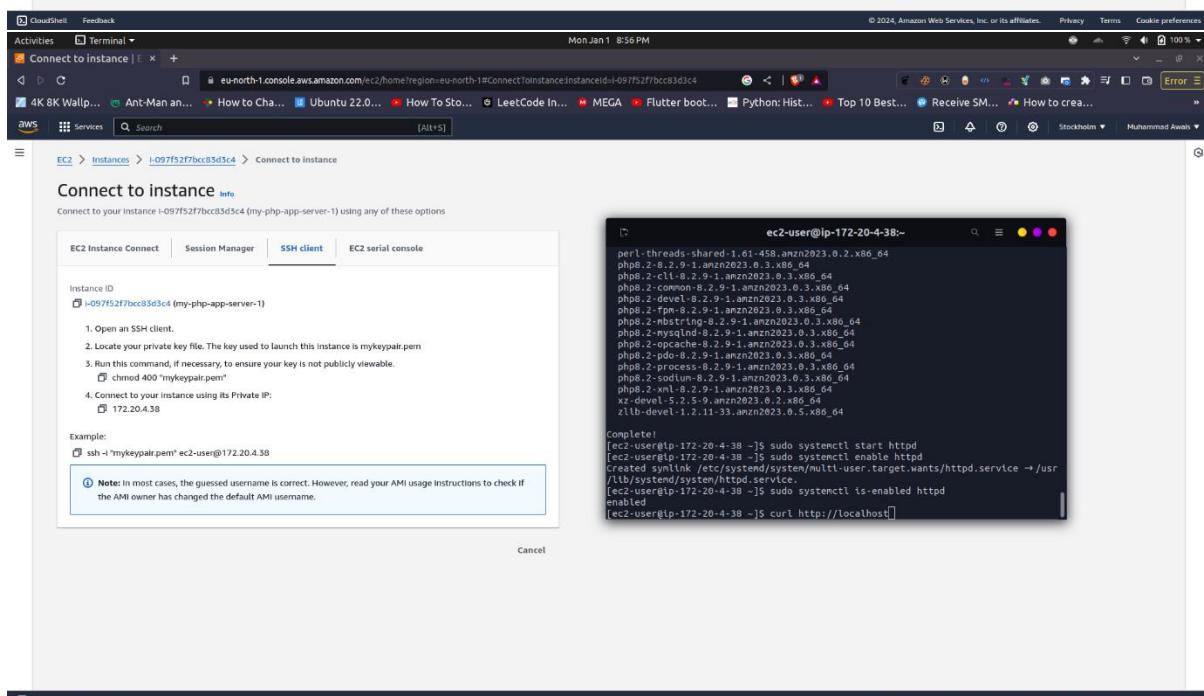
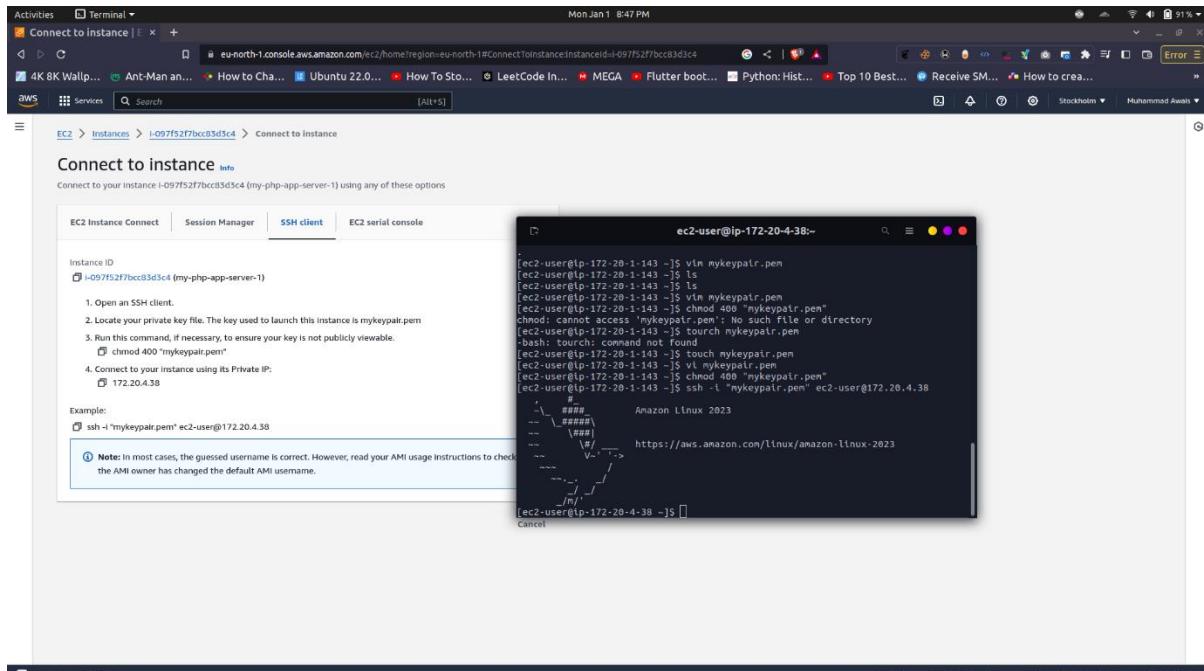
Example:
 ↳ ssh -i "mykeypair.pem" ec2-user@16.170.227.151

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

CloudShell Feedback





Activities Terminal ▾

Mon Jan 1 8:56 PM

eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#ConnectToInstanceInstanceId=i-097f52f7bcc83d5c4

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+5]

EC2 Instances i-097f52f7bcc83d5c4 Connect to instance

Connect to instance

Connect to your instance i-097f52f7bcc83d5c4 (my-php-app-server-1) using any of these options

EC2 Instance Connect Session Manager **SSH client** EC2 serial console

Instance ID i-097f52f7bcc83d5c4 (my-php-app-server-1)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is mykeypair.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 'mykeypair.pem'
4. Connect to your instance using its Private IP:
172.20.4.38

Example:
ssh -i 'mykeypair.pem' ec2-user@172.20.4.38

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

ec2-user@ip-172-20-4-38:~

```
php8.2-cli-8.2.9-1.anzn2023.0.3.x86_64
php8.2-common-8.2.9-1.anzn2023.0.3.x86_64
php8.2-devel-8.2.9-1.anzn2023.0.3.x86_64
php8.2-fpm-8.2.9-1.anzn2023.0.3.x86_64
php8.2-mbstring-8.2.9-1.anzn2023.0.3.x86_64
php8.2-mysqli-8.2.9-1.anzn2023.0.3.x86_64
php8.2-opcache-8.2.9-1.anzn2023.0.3.x86_64
php8.2-pdo-8.2.9-1.anzn2023.0.3.x86_64
php8.2-process-8.2.9-1.anzn2023.0.3.x86_64
php8.2-sodium-8.2.9-1.anzn2023.0.3.x86_64
php8.2-xnl-8.2.9-1.anzn2023.0.3.x86_64
xz-devel-5.2.5-9.anzn2023.0.2.x86_64
zlib-devel-1.2.11-33.anzn2023.0.5.x86_64
```

Complete!

```
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl is-enabled httpd
enabled
[ec2-user@ip-172-20-4-38 ~]$ curl http://localhost
<html><body><h1>It works!</h1></body></html>
[ec2-user@ip-172-20-4-38 ~]$
```

Activities Terminal ▾

Mon Jan 1 8:56 PM

eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#ConnectToInstanceInstanceId=i-097f52f7bcc83d5c4

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+5]

EC2 Instances i-097f52f7bcc83d5c4 Connect to instance

Connect to instance

Connect to your instance i-097f52f7bcc83d5c4 (my-php-app-server-1) using any of these options

EC2 Instance Connect Session Manager **SSH client** EC2 serial console

Instance ID i-097f52f7bcc83d5c4 (my-php-app-server-1)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is mykeypair.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 'mykeypair.pem'
4. Connect to your instance using its Private IP:
172.20.4.38

Example:
ssh -i 'mykeypair.pem' ec2-user@172.20.4.38

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

ec2-user@ip-172-20-4-38:~

```
php8.2-cli-8.2.9-1.anzn2023.0.3.x86_64
php8.2-common-8.2.9-1.anzn2023.0.3.x86_64
php8.2-devel-8.2.9-1.anzn2023.0.3.x86_64
php8.2-fpm-8.2.9-1.anzn2023.0.3.x86_64
php8.2-mbstring-8.2.9-1.anzn2023.0.3.x86_64
php8.2-mysqli-8.2.9-1.anzn2023.0.3.x86_64
php8.2-opcache-8.2.9-1.anzn2023.0.3.x86_64
php8.2-pdo-8.2.9-1.anzn2023.0.3.x86_64
php8.2-process-8.2.9-1.anzn2023.0.3.x86_64
php8.2-sodium-8.2.9-1.anzn2023.0.3.x86_64
php8.2-xnl-8.2.9-1.anzn2023.0.3.x86_64
xz-devel-5.2.5-9.anzn2023.0.2.x86_64
zlib-devel-1.2.11-33.anzn2023.0.5.x86_64
```

Complete!

```
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-20-4-38 ~]$ sudo systemctl is-enabled httpd
enabled
[ec2-user@ip-172-20-4-38 ~]$ curl http://localhost
<html><body><h1>It works!</h1></body></html>
[ec2-user@ip-172-20-4-38 ~]$
```

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```
Activities Terminal Mon Jan 1 9:37PM ec2-user@ip-172-20-5-78:var/www/html

phpMyAdmin-5.2.1-all-languages/config.sample.inc.php
phpMyAdmin-5.2.1-all-languages/doc
phpMyAdmin-5.2.1-all-languages/doc/html/
phpMyAdmin-5.2.1-all-languages/doc/html/_images/
phpMyAdmin-5.2.1-all-languages/doc/html/_images/chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/column_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/line_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pie_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-links.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-relation-link.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-relation-name.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-relation-view-link.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-view-link.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relation-viewer_charts.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relation-viewer_charts.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/spline_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/timeline_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/usergroups.png
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/bookmarks.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/charts.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/config.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/copyright.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/credits.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/debian.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/debian_rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/glossary.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/import_export.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/index.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/intro.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/install.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/privileges.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/relations.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/require.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/security.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/setup.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/themes.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/transformations.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/two_factor.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/user.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_sources/vendors.rst.txt
phpMyAdmin-5.2.1-all-languages/doc/html/_static/
phpMyAdmin-5.2.1-all-languages/doc/html/_static/basic.css
phpMyAdmin-5.2.1-all-languages/doc/html/_static/classic.css
phpMyAdmin-5.2.1-all-languages/doc/html/_static/doc.css
phpMyAdmin-5.2.1-all-languages/doc/html/_static/doctools.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/documentation_options.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/file.png
phpMyAdmin-5.2.1-all-languages/doc/html/_static/jquery.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/language_data.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/logo.png
phpMyAdmin-5.2.1-all-languages/doc/html/_static/pics.png
phpMyAdmin-5.2.1-all-languages/doc/html/_static/payments.css
phpMyAdmin-5.2.1-all-languages/doc/html/_static/searchtools.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/sidebar.js
phpMyAdmin-5.2.1-all-languages/doc/html/_static/underscore.js

Activities Terminal Mon Jan 1 9:37PM ec2-user@ip-172-20-5-78:var/www/html

-- 
Last Login: Mon Jan 1 16:32:57 2024 from 172.26.1.143
[ec2-user@ip-172-20-5-78 ~]$ sudo chown -R ec2-user:apache /var/www
[ec2-user@ip-172-20-5-78 ~]$ sudo chmod 2775 /var/www/ www -type d -exec sudo chmod 2775 {} \;
[ec2-user@ip-172-20-5-78 ~]$ sudo chmod 664 /var/www/ www -type f -exec sudo chmod 664 {} \;
[ec2-user@ip-172-20-5-78 ~]$ sudo dnf install httpd-modproxy-pixi -y
Last metadata expiration check: 1:39:16 ago on Mon Jan 1 14:56:23 2024.
Package httpd-2.4.46-2.2.9-1.1.mzn2023.0.3.x86_64 is already installed.
Nothing to do.
Everything resolved.

Nothing to do.
Complete!
[ec2-user@ip-172-20-5-78 ~]$ sudo systemctl restart httpd
[ec2-user@ip-172-20-5-78 ~]$ sudo systemctl restart http-fpm
[ec2-user@ip-172-20-5-78 ~]$ curl -I http://127.0.0.1:80
[ec2-user@ip-172-20-5-78 ~]$ wget https://www.phpmyadmin.net/downloads/phpMyAdmin-latest-all-languages.tar.gz
Resolving www.phpmyadmin.net (www.phpmyadmin.net)... 185.76.9.23, 185.76.9.15, 2a02:6ea0:c500::3, ...
Connecting to www.phpmyadmin.net (www.phpmyadmin.net)|185.76.9.23|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 13041998 (12M) [application/gzip]
Saving to: 'phpMyAdmin-latest-all-languages.tar.gz'

phpMyAdmin-latest-all-languages.tar.gz: 100%[=====] 12.44M 29.5MB/s in 0.4s

2024-01-01 16:36:06 [29.5 MB/s] - 'phpMyAdmin-latest-all-languages.tar.gz' saved [13041998/13041998]

[ec2-user@ip-172-20-5-78 ~]$ mkdir phpMyAdmin && tar -xvf phpMyAdmin-latest-all-languages.tar.gz -C phpMyAdmin --strip-components 1
phpMyAdmin-5.2.1-all-languages/.rtlcsrc.json
phpMyAdmin-5.2.1-all-languages/CONTRIBUTING.md
phpMyAdmin-5.2.1-all-languages/CONTRIBUTING.org
phpMyAdmin-5.2.1-all-languages/LICENSE
phpMyAdmin-5.2.1-all-languages/README
phpMyAdmin-5.2.1-all-languages/RELEASE-DATE-5.2.1
phpMyAdmin-5.2.1-all-languages/babel.config.json
phpMyAdmin-5.2.1-all-languages/composer.json
phpMyAdmin-5.2.1-all-languages/composer.lock
phpMyAdmin-5.2.1-all-languages/config.sample.inc.php
phpMyAdmin-5.2.1-all-languages/doc/
phpMyAdmin-5.2.1-all-languages/doc/html/
phpMyAdmin-5.2.1-all-languages/doc/html/_images/
phpMyAdmin-5.2.1-all-languages/doc/html/_images/chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/column_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/line_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pie_chart.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-links.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-relation-link.png
phpMyAdmin-5.2.1-all-languages/doc/html/_images/pma-relations-relation-name.png
```

```
Activities Terminal Mon Jan 1 9:39 PM ec2-user@ip-172-20-5-78:/var/www/html
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialParameters.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialRequestOptions.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialResponse.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialSource.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialSourceRepository.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/PublicKeyCredentialUserEntity.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/Server.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/StringParam.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/IgnoreTokenBindingHandler.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/SectokenBindingHandler.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/TokenBinding.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/TokenBindingHandler.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TokenBinding/TokenBindingNotSupportedHandler.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TrustPath/
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TrustPath/EcdsaKeyIdTrustPath.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TrustPath/PgpTrustPath.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TrustPath/TrustPath.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/TrustPath/TrustPathLoader.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/Util/Publickey.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/Util/CoseSignatureFixer.php
phpMyAdmin-5.2.1-all-languages/vendor/web-auth/webauthn-lib/src/Util/JsonSignatureVerifier.php
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/CHANGELOG.md
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/LICENSE
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/README.md
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/Assert/Assert.php
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/Assert/Json
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/Assert/Json
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/Assert.php
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/InvalidArgumentException.php
phpMyAdmin-5.2.1-all-languages/vendor/webmzoart/assert/src/Mixin.php
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/CHANGELOG.md
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/LICENSE
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/README.md
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/merged-ultraslim.json
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/dist/
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/dist/merged-ultraslim.json
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/KBDocumentation.php
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/KBEntry.php
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/KBException.php
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/Search.php
phpMyAdmin-5.2.1-all-languages/vendor/willnames/maradb-mysql-kbs/src/SlmData.php
phpMyAdmin-5.2.1-all-languages/yarn.lock
[ec2-user@ip-172-20-5-78 html]$ tar -xvf phpMyAdmin-latest-all-languages.tar.gz
[ec2-user@ip-172-20-5-78 html]$ pwd
/var/www/html
[ec2-user@ip-172-20-5-78 html]$ echo "PHP Server 2" >index.html
[ec2-user@ip-172-20-5-78 html]$ cat index.html
PHP Server 2
[ec2-user@ip-172-20-5-78 html]$
```

Step 11. Application Code for the instances

The image shows two terminal windows side-by-side, both titled "Terminal".

The top terminal window displays the contents of "index.php". It includes CSS styles for form elements, a header section with a "User Management System" title and a form for adding users, and a "Users" section with a list of users. The file ends with a closing tag for "index.php".

```
form {
    margin-bottom: 20px;
}
label {
    display: block;
    margin-bottom: 5px;
}
input {
    width: 100%;
    padding: 8px;
    margin-bottom: 10px;
}
button {
    background-color: #4CAF50;
    color: white;
    padding: 10px;
    border: none;
    cursor: pointer;
}
button:hover {
    background-color: #45a049;
}
ul {
    list-style-type: none;
    padding: 0;
}
li {
    margin-bottom: 10px;
}
</style>
</head>
<body>
<div class="container">
<h2>User Management System</h2>
<form action="add_user.php" method="post">
    <label for="username">Username:</label>
    <input type="text" id="username" name="username" required>
    <button type="submit">Add User</button>
</form>
<h3>Users:</h3>
<ul>
    <li><?php include 'show_users.php'; ?>
</ul>
</div>
</body>
</html>

```

The bottom terminal window displays the contents of "add_user.php". It is a PHP script that connects to a MySQL database using mysqli. It checks if the request method is POST, then inserts a new user record into the "users" table. If successful, it redirects to "index.php"; if not, it outputs an error message.

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // Assuming you have a MySQL database connection
    $servername = "my-db.cts8e6dqkqm1.eu-north-1.rds.amazonaws.com";
    $username = "admin";
    $password = "HelloWorld1";
    $dbname = "users";

    $conn = new mysqli($servername, $username, $password, $dbname);

    if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
    }

    $username = mysqli_real_escape_string($conn, $_POST['username']);

    $sql = "INSERT INTO users (username) VALUES ('$username')";

    if ($conn->query($sql) === TRUE) {
        echo "User added successfully";
        header("Location: index.php");
        exit();
    } else {
        echo "Error: " . $sql . "<br>" . $conn->error;
    }
}

$conn->close();
?>
```


Step 12. Creating Load Balancer (ALB)

Screenshot of the AWS EC2 Load Balancers console showing an empty list of load balancers.

EC2 > Load balancers

No load balancers
You don't have any load balancers in eu-north-1

Create load balancer

0 load balancers selected

Select a load balancer above.

Load balancer types

Application Load Balancer Info Create

Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic. Operating at the request level, Application Load Balancers provide advanced routing and visibility features targeted at application architectures, including microservices and containers.

Create Application Load Balancer Create

Network Load Balancer Info Create

Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, support for UDP, and static IP addresses for your applications. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.

Gateway Load Balancer Info Create

Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE. These appliances enable you to improve security, compliance, and policy controls.

Classic Load Balancer - previous generation

Activities Brave Web Browser ▾

Create application load balancer

eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#CreateALBWizard:

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

EC2 > Load balancers > Create Application Load Balancer

Create Application Load Balancer Info

The Application Load Balancer distributes incoming HTTP and HTTPS traffic across multiple targets such as Amazon EC2 Instances, microservices, and containers, based on request attributes. When the load balancer receives a connection request, it evaluates the listener rules in priority order to determine which rule to apply, and if applicable, it selects a target from the target group for the rule action.

▶ How Elastic Load Balancing works

Basic configuration

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

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

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

Internet-facing An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. Learn more

Internal An internal load balancer routes requests from clients to targets using private IP addresses.

IP address type Info Select the type of IP addresses that your subnets use.

IPv4 Recommended for internal load balancers.

Dualstack Includes IPv4 and IPv6 addresses.

Network mapping Info

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

VPC Info Select the virtual private cloud (VPC) for your targets or you can create a new VPC. Only VPCs with an internet gateway are enabled for selection. The selected VPC can't be changed after the load balancer is created. To confirm the VPC for your targets, view your target groups.

my-project-vpc
vpc-08858c0d4b441550
IPv4: 172.20.0.0/20

Mappings Info Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

eu-north-1a (eu-n1-az1)
Subnet: subnet-05f81d1510aadacea my-public-web-subnet-1

IPv4 address Assigned by AWS

eu-north-1b (eu-n1-az2)
Subnet: subnet-08b9aa648d54eab0f my-public-web-subnet-2

IPv4 address Assigned by AWS

eu-north-1c (eu-n1-az3)
Subnet: subnet-09d03ab518ef59809 my-public-web-subnet-3

IPv4 address Assigned by AWS

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Activities Brave Web Browser ▾

Create application load balancer

eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#CreateALBWizard:

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aws Services Search [Alt+S]

EC2 > Load balancers > Create Application Load Balancer

Create Application Load Balancer Info

The Application Load Balancer distributes incoming HTTP and HTTPS traffic across multiple targets such as Amazon EC2 Instances, microservices, and containers, based on request attributes. When the load balancer receives a connection request, it evaluates the listener rules in priority order to determine which rule to apply, and if applicable, it selects a target from the target group for the rule action.

▶ How Elastic Load Balancing works

Basic configuration

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

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

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

Internet-facing An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. Learn more

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IPv4 Recommended for internal load balancers.

Dualstack Includes IPv4 and IPv6 addresses.

Network mapping Info

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

VPC Info Select the virtual private cloud (VPC) for your targets or you can create a new VPC. Only VPCs with an internet gateway are enabled for selection. The selected VPC can't be changed after the load balancer is created. To confirm the VPC for your targets, view your target groups.

my-project-vpc
vpc-08858c0d4b441550
IPv4: 172.20.0.0/20

Mappings Info Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

eu-north-1a (eu-n1-az1)
Subnet: subnet-05f81d1510aadacea my-public-web-subnet-1

IPv4 address Assigned by AWS

eu-north-1b (eu-n1-az2)
Subnet: subnet-08b9aa648d54eab0f my-public-web-subnet-2

IPv4 address Assigned by AWS

eu-north-1c (eu-n1-az3)
Subnet: subnet-09d03ab518ef59809 my-public-web-subnet-3

IPv4 address Assigned by AWS

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Activities Brave Web Browser Create application load balancer CreateSecurityGroup + Mon Jan 1 9:14 PM eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#CreateSecurityGroup 4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

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EC2 > Security Groups > Create security group

Create security group info

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

Basic details

Security group name Info
my-alb-sg
Name cannot be edited after creation.

Description Info
my-alb-sg

VPC Info
vpc-08d8e8c64db441550 (my-project-vpc)

Inbound rules Info

Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional
Custom TCP	TCP	80	Anywhere... ▾	<input type="text" value="0.0.0.0/0"/> <input type="button" value="Delete"/>
<input type="button" value="Add rule"/>				

⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

CloudShell Feedback Activities Brave Web Browser Step 1 Create target + Mon Jan 1 9:18 PM eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#CreateTargetGroup protocol=HTTP vpc=vpc-08d8e8c64db441550 4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

EC2 > Target groups > Create target group

Step 1 Specify group details

Your load balancer routes requests to the targets in a target group and performs health checks on the targets.

Basic configuration
Settings in this section can't be changed after the target group is created.

Choose a target type

Instances

- Supports load balancing to instances within a specific VPC.
- Facilitates the use of [Amazon EC2 Auto Scaling](#) to manage and scale your EC2 capacity.

IP addresses

- Supports load balancing to VPC and on-premises resources.
- Facilitates routing to multiple IP addresses and network interfaces on the same instance.
- Offers Resiliency with microservice-based architectures, simplifying inter-application communication.
- Supports IPv6 targets, enabling end-to-end IPv6 communication, and IPv4-to-IPv6 NAT.

Lambda function

- Facilitates routing to a single Lambda function.
- Accessible to Application Load Balancers only.

Application Load Balancer

- Offers the flexibility for a Network Load Balancer to accept and route TCP requests within a specific VPC.
- Facilitates using static IP addresses and PrivateLink with an Application Load Balancer.

Target group name
my-alb-php-tg
A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

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Activities Brave Web Browser Step 1 Create target group + Mon Jan 1 9:18 PM eu-north-1.console.aws.amazon.com/eu-north-1/home?region=eu-north-1#CreateTargetGroup;protocol=HTTP;vpc=vpc-08d8e8c64db441550

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Protocol : Port
Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation.

HTTP **80** 1-65535

IP address type
Only targets with the indicated IP address type can be registered to this target group.

IPv4
Amazon has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.

IPv6
Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). [Learn more](#)

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

my-project-vpc
vpc-08d8e8c64db441550
IPv4: 172.20.0.0/20

Protocol version

HTTP1
Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

HTTP2
Send requests to targets using HTTP/2. Supported when the request protocol is HTTP/2 or gRPC, but gRPC-specific features are not available.

gRPC
Send requests to targets using gRPC. Supported when the request protocol is gRPC.

Health checks
The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol
 HTTP

Health check path
Use the default path of "/" to ping the root, or specify a custom path if preferred.

Up to 1024 characters allowed.

Advanced health check settings

Attributes

Info Certain default attributes will be applied to your target group. You can view and edit them after creating the target group.

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4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

Protocol : Port
Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation.

HTTP **80** 1-65535

IP address type
Only targets with the indicated IP address type can be registered to this target group.

IPv4
Amazon has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.

IPv6
Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). [Learn more](#)

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

my-project-vpc
vpc-08d8e8c64db441550
IPv4: 172.20.0.0/20

Protocol version

HTTP1
Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

HTTP2
Send requests to targets using HTTP/2. Supported when the request protocol is HTTP/2 or gRPC, but gRPC-specific features are not available.

gRPC
Send requests to targets using gRPC. Supported when the request protocol is gRPC.

Health checks
The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol
 HTTP

Health check path
Use the default path of "/" to ping the root, or specify a custom path if preferred.

Up to 1024 characters allowed.

Advanced health check settings

Attributes

Info Certain default attributes will be applied to your target group. You can view and edit them after creating the target group.

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences Mon Jan 1 9:18 PM eu-north-1.console.aws.amazon.com/eu-north-1/home?region=eu-north-1#CreateTargetGroup;protocol=HTTP;vpc=vpc-08d8e8c64db441550

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aws Services Search [Alt+S]

Step 12 (i). Adding Targeted Instances to the LB

The screenshot shows two screenshots of the AWS CloudWatch Metrics Insights interface. The top screenshot displays the 'Create target group' step, where two EC2 instances ('my-php-app-server-1' and 'my-php-app-server-2') are selected as targets for an application load balancer. The bottom screenshot shows the successful creation of the target group 'my-alb-phps-tg'.

Screenshot 1: Register targets (Step 2 Create target group)

This screenshot shows the 'Register targets' step of creating a target group. It lists three available instances:

Instance ID	Name	State	Security groups	Zone	Private IPv4 address
i-098a083688b6c079b	my-php-app-server-2	Running	my-php-app-server-1-sg	eu-north-1b	172.20.5.78
i-097f52f7bcc85d3c4	my-php-app-server-1	Running	my-php-app-server-1-sg	eu-north-1a	172.20.4.38
i-0878905460072e914	my-jump-server	Running	my-jump-server-sg	eu-north-1a	172.20.1.143

The 'Ports for the selected Instances' field contains '80, 1-65535'. The 'Review targets' section shows the newly registered targets.

Screenshot 2: Target group details (Step 3 Target group created)

This screenshot shows the successful creation of the target group 'my-alb-phps-tg'. The 'Details' section provides the following information:

- Protocol: HTTP : Port 80
- VPC: vpc-08d8e8c64db441550
- Total targets: 2 (0 Healthy, 0 Unhealthy, 2 Unused, 0 Initial, 0 Draining)

The 'Targets' tab shows the registered targets:

Target type	Protocol	Protocol version
Instance	HTTP : 80	HTTP1
IP address type	Load balancer	
IPv4	(None associated)	

An 'Actions' dropdown is visible in the top right corner.

Activities Brave Web Browser + Create application load ...

eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#CreateALBWizard:

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

Security groups Info

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

Security groups

Select up to 5 security groups

my-alb-sg sg-0c2b7df2fd851247 VPC vpc-0bd8ebc64db441550

Listeners and routing Info

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

▼ Listener HTTP:80

Protocol	Port	Default action	Info
HTTP	:80 1-65535	Forward to	my-alb-phps-tg Target type: Instance, IPv4
Create target group			

Listener tags - optional
Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

[Add listener tag](#)
You can add up to 50 more tags.

[Add listener](#)

▼ Add-on services - optional
Additional AWS services can be integrated with this load balancer at launch. You can also add these and other services after your load balancer is created by reviewing the "Integrated Services" tab for the selected load balancer.

CloudShell Feedback

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eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#LoadBalancersSearch:my-alb

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aws Services Search [Alt+S]

EC2 Dashboard Feedback

EC2 Global View

Events

Instances Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations New

Images AHIs

AHIs Catalog

Elastic Block Store Volumes

Snapshots

Lifecycle Manager

Network & Security Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

Load Balancing Create load balancer

CloudShell Feedback

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EC2 > Load balancers

Load balancers (1)

elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Filter load balancers 1 match

my-alb X Clear filters

Name	DNS name	State	VPC ID	Availability Zones	Type	Date created
my-alb	my-alb-1914593547.eu-n...	Provisioning...	vpc-0bd8ebc64db441...	3 Availability Zones	application	January 1, 2024, 21:21 (UTC+05:00)

0 load balancers selected

Select a load balancer above.

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Activities Brave Web Browser Mon Jan 1 9:25 PM

ModifyInboundSecurityGroup Target group details | EC2

eu-north-1.console.aws.amazon.com/eu-north-1/ModifyInboundSecurityGroup?rules=securityGroupid=sg-0d3... Error

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S]

EC2 > Security Groups > sg-0d30cce1fd353da846 - my-php-app-server-1-sg > Edit inbound rules

Edit inbound rules Info

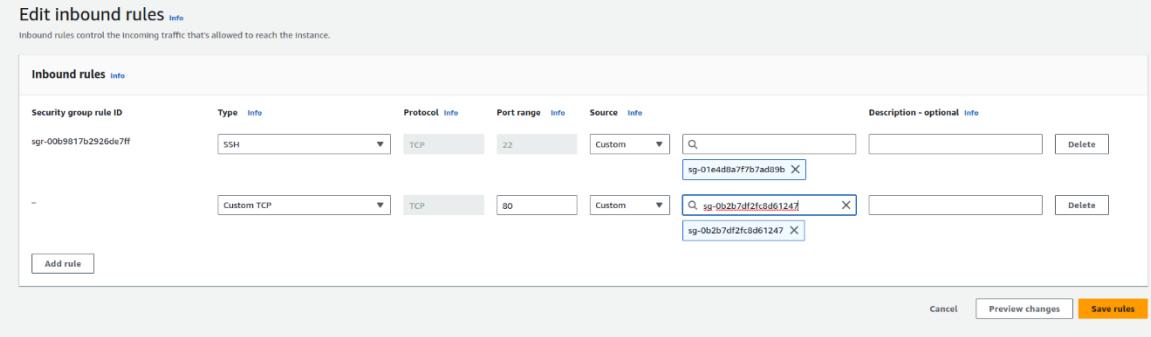
Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-00b9817b2926de7ff	SSH	TCP	22	Custom	<input type="text" value="sg-01e4db8a7f7b7ad89b"/> Delete
-	Custom TCP	TCP	80	Custom	<input type="text" value="sg-0b2b7df2fc8d61247"/> Delete

Add rule

Cancel Preview changes Save rules

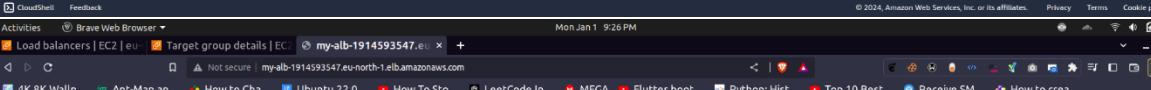


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Activities Brave Web Browser Mon Jan 1 9:26 PM

Load balancers | EC2 | Target group details | EC2 my-alb-1914593547.eu-north-1.elb.amazonaws.com Error

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...



It works!

Activities Terminal ▾ Load balancers | EC2 ▾ Target group details | EC2 my-alb-1914593547.eu-nor... + Mon Jan 1 9:29 PM eu-north-1.console.aws.amazon.com/e2/home?region=eu-north-1#LoadBalancers: 4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... aws Services Search [Alt+5]

EC2 > Load balancers

Load balancers (1 / 1)

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Name	DNS name	Status	VPC
my-alb	my-alb-1914593547.eu-nor...	Active	vpc-ultralinn.json

Create load balancer

Load balancer: my-alb

Load balancer type	Status	Availability Zones	Date created
Application	Active	subnet-05f81d1518aadcaeu-north-1a (eu-n1-az1) subnet-00b9aa640d54eb0feu-north-1b (eu-n1-az2) subnet-09de3ab51bef59809eu-north-1c (eu-n1-az3)	January 1, 2024, 21:21 (UTC+05:00)

Scheme: Internet-facing

Hosted zone: Z23TAZ6LKFNMNIO

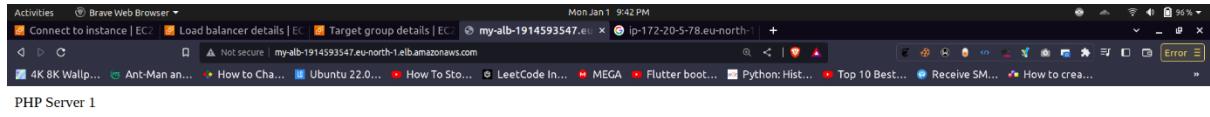
Load balancer ARN: arn:aws:elasticloadbalancing:eu-north-1:1856140264327:loadbalancer/app/my-alb/b12fc7d10b9b09fb

DNS name copied

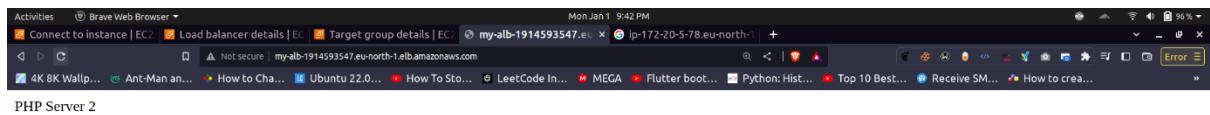
my-alb-1914593547.eu-north-1.elb.amazonaws.com (A Record)

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Step 12 (ii). LB working in Round Robin



PHP Server 1



PHP Server 2

Step 13. Setting Up Data Tier (RD5 Instance)

The screenshot shows the AWS RDS console in the EU North (Stockholm) region. A modal window titled "Introducing Aurora I/O-Optimized" is open, explaining the new Multi-AZ deployment option for MySQL and PostgreSQL. It highlights improved transactional commit latencies by 2x, faster failover (less than 35 seconds), and read scalability with two readable standby DB instances. Buttons for "Create database" and "Or, Restore Multi-AZ DB Cluster from Snapshot" are visible.

Amazon RDS

Dashboard

- Databases
- Performance insights
- Snapshots
- Exports in Amazon S3
- Automated backups
- Reserved Instances
- Proxies

Subnet groups

Parameter groups

Option groups

Custom engine versions

Zero-ETL Integrations New

Events

Event subscriptions

Recommendations 0

Certificate update

Create database

<https://eu-north-1.console.aws.amazon.com/rds/home?region=eu-north-1#snapshots-list>

Mon Jan 1 10:13 PM

eu-north-1 | Target group details | EC2 | my-alb-1914593547.eu-north-1 | ip-172-20-5-78.eu-north-1 | +

aws services Search [Alt+Space]

67% ▾

Introducing Aurora I/O-Optimized

Aurora's I/O-Optimized is a new cluster storage configuration that offers predictable pricing for all applications and improved price-performance, with up to 40% costs savings for I/O-intensive applications.

Try the new Amazon RDS Multi-AZ deployment option for MySQL and PostgreSQL. For your Amazon RDS for MySQL and PostgreSQL workloads, improve transactional commit latencies by 2x, experience faster failover typically less than 35 seconds and, get read scalability with two readable standby DB instances by deploying the Multi-AZ DB cluster. [Learn more](#)

Create database

Or, Restore Multi-AZ DB Cluster from Snapshot

Resources

You are using the following Amazon RDS resources in the EU North (Stockholm) region (used/quota)

DB Instances (0/40)	Parameter groups (0)
Allocated storage (0 TB/100 TB)	Default (0)
Increase DB instances limit	Custom (0/100)
DB Clusters (0/40)	Option groups (0)
Reserved instances (0/40)	Default (0)
Snapshots (0)	Custom (0/20)
Manual	Subnet groups (0/50)
DB Cluster (0/100)	Supported platforms VPC
DB Instance (0/100)	Default network vpc-0efd80de17e109183
Automated	
DB Cluster (0)	
DB Instance (0)	
Recent events (0)	
Event subscriptions (0/20)	

Recommended services

No recommendations yet

Additional information

Getting started with RDS

Overview and features

Documentation

Articles and tutorials

Data import guide for MySQL

Data import guide for Oracle

Data import guide for SQL Server

New RDS feature announcements

Pricing

Forums

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Step 14. Adding RD5 Subnet group details

The screenshot shows the 'Create DB subnet group' wizard on the AWS RDS console. The current step is 'Subnet group details'. The form fields are as follows:

- Name:** my-db-subnet-group
- Description:** my-db-subnet-group
- VPC:** my-project-vpc (vpc-08d3e8c64db441550)

Below this, the 'Add subnets' section shows:

- Availability Zones:** eu-north-1a, eu-north-1b
- Subnets:** subnet-0adb1f3a445d81d3a (172.20.7.0/24), subnet-05af0f0994a54ff02c (172.20.8.0/24)

A note at the bottom of the 'Add subnets' section states: "For Multi-AZ DB clusters, you must select 3 subnets in 3 different Availability Zones."

The left sidebar shows the navigation path: RDS > Subnet groups > Create DB subnet group.

The top status bar indicates the date and time: Mon Jan 1 10:15 PM.

Mon Jan 1 10:16 PM

RDS | eu-north-1 | Target group details | EC2 | my-alb-1914593547.eu-north-1 | ip-172-20-5-78.eu-north-1 | +

eu-north-1.console.aws.amazon.com/rds/home?region=eu-north-1#create-db-subnet-group

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aws Services Search [Alt+S]

Amazon RDS

Add subnets

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

eu-north-1a X eu-north-1b X eu-north-1c X

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

subnet-0adb1f5aa45d815a (172.20.7.0/24) X
subnet-05af0f0994a54f82c (172.20.8.0/24) X
subnet-057fc262ab21515e (172.20.9.0/24) X

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

Subnets selected (3)

Availability zone	Subnet ID	CIDR block
eu-north-1a	subnet-0adb1f5aa45d815a	172.20.7.0/24
eu-north-1b	subnet-05af0f0994a54f82c	172.20.8.0/24
eu-north-1c	subnet-057fc262ab21515e	172.20.9.0/24

Create

CloudShell Feedback

Activities | Brave Web Browser | RDS | eu-north-1 | Target group details | EC2 | my-alb-1914593547.eu-north-1 | ip-172-20-5-78.eu-north-1 | +

eu-north-1.console.aws.amazon.com/rds/home?region=eu-north-1#create-db-subnet-groups-list

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aws Services Search [Alt+S]

Amazon RDS

Subnet groups

Subnet groups (1)

Filter by subnet group

Name	Description	Status	VPC
my-db-subnet-group	my-db-subnet-group	Complete	vpc-08d8e8c64db441550

Create DB subnet group

CloudShell Feedback

Activities Connect to instance | EC2 RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 Mon Jan 1 10:21 PM

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

rds-ca-2019 (default) Expiry: Aug 22, 2024

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

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

▶ Additional configuration

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

Estimated Monthly costs

DB Instance 12.41 USD

CloudShell Feedback

Activities Connect to instance | EC2 RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 Mon Jan 1 10:21 PM

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

MySQL

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

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

CloudShell Feedback

Activities Connect to instance | EC2 RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 Mon Jan 1 10:21 PM

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S]

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CloudShell Feedback

Mon Jan 1 10:21 PM

Activities Connect to instance | EC2 RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 + eu-north-1.console.aws.amazon.com/rls/home?region=eu-north-1&launchDbInstance;isHermesCreate=true 4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S] Stockholm Muhammad Awas

Storage autoscaling

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

Connectivity Info

Compute resource

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

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

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

Virtual private cloud (VPC) Info

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

my-project-vpc (vpc-0d8dbec8c64db41550)
9 Subnets, 5 Availability Zones

Only VPCs with a corresponding DB subnet group are listed.

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

DB subnet group Info

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

my-db-subnet-group
3 Subnets, 5 Availability Zones

Public access Info

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

No

MySQL

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

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

CloudShell Feedback Mon Jan 1 10:21 PM eu-north-1.console.aws.amazon.com/rls/home?region=eu-north-1&launchDbInstance;isHermesCreate=true 4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S] Stockholm Muhammad Awas

Amazon RDS

Succesfully created my-db-subnet-group. View subnet group

Creating database my-db

Your database might take a few minutes to launch.
You can use settings from my-db to simplify configuration of suggested database add-ons while we finish creating your DB for you.

View credential details

Introducing Aurora I/O-Optimized

Aurora I/O-Optimized is a new cluster storage configuration that offers predictable pricing for all applications and improved price-performance, with up to 40% costs savings for I/O-intensive applications.

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 (1)

DB identifier	Status	Role	Engine	Region & AZ	Size	Recommendations	CPU	Current activity	Maintenance	VPC
my-db	Creating	Instance	MySQL Community	eu-north-1a	db.t3.micro	-	-	none	vpc-08db	

Group resources Modify Actions Restore from S3 Create database

CloudShell Feedback Mon Jan 1 10:21 PM eu-north-1.console.aws.amazon.com/rls/home?region=eu-north-1&launchDbInstance;isHermesCreate=true 4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... Error

aws Services Search [Alt+S] Stockholm Muhammad Awas

Activities Connect to instance | EC2 ModifyInboundSecurityGroup Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 +

eu-north-1.console.aws.amazon.com/ec2/v2/home?region=eu-north-1#ModifyInboundSecurityGroupRulesSecurityGroupId:sg-0555e... < | 🔍 Error ⓘ

4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... »

aws Services Search [Alt+S]

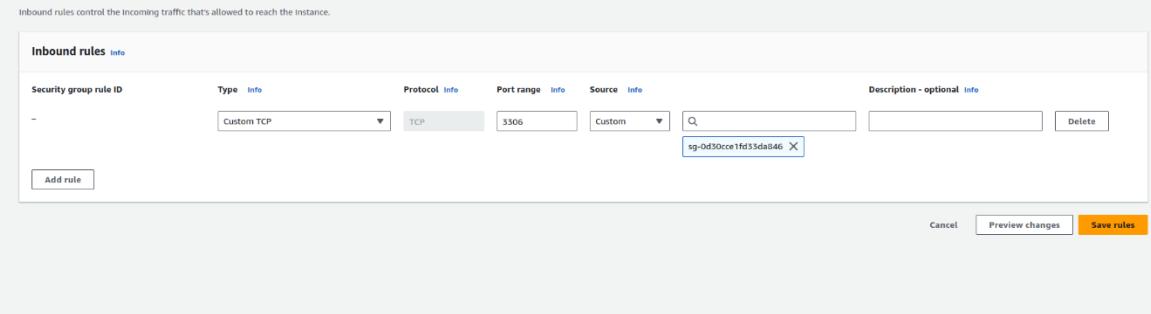
Edit inbound rules Info

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

Inbound rules Info

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>
-	Custom TCP	TCP	3306	Custom	Q sg-0d30cce1fd53da846 X

Add rule Cancel Preview changes Save rules



CloudShell Feedback

Activities Connect to instance | EC2 SecurityGroup | EC2 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 +

eu-north-1.console.aws.amazon.com/ec2/v2/home?region=eu-north-1#SecurityGroupgroup-id:sg-0555e0815790767bc < | 🔍 Error ⓘ

4K 8K Wallp... Ant-Man an... How To Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea... »

aws Services Search [Alt+S]

EC2 Dashboard EC2 Global View Events

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

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

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

Load Balancing

CloudShell Feedback

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Inbound security group rules successfully modified on security group sg-0555e0815790767bc - my-db-sg

▶ Details

EC2 > Security Groups > sg-0555e0815790767bc - my-db-sg Actions ▾

Details

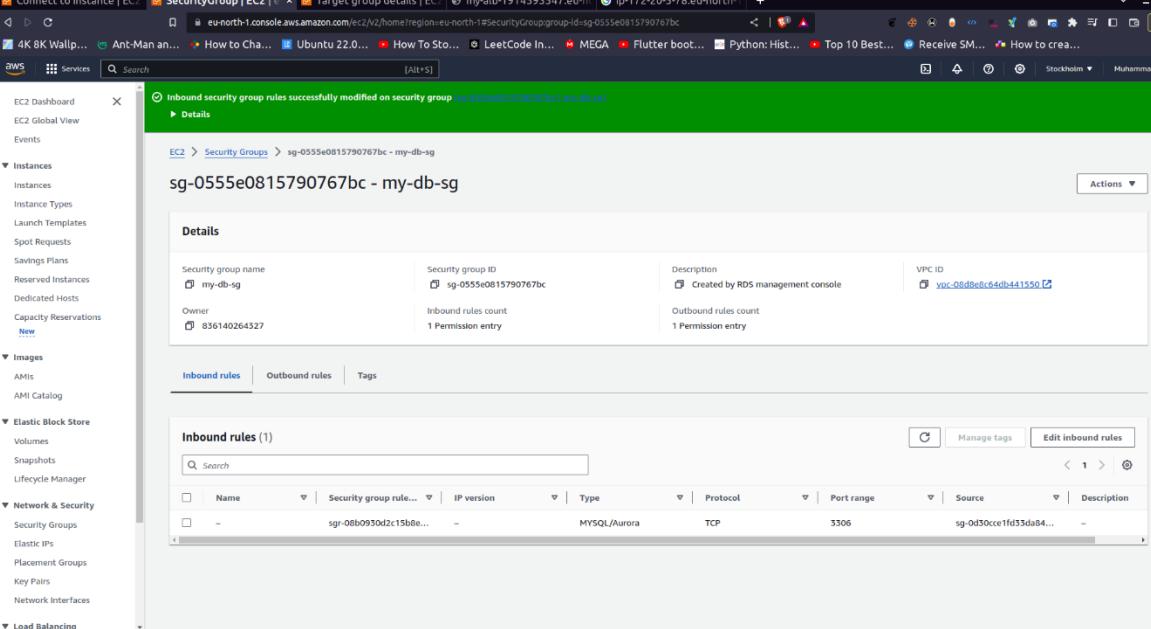
Security group name	my-db-sg	Security group ID	sg-0555e0815790767bc	Description	Created by RDS management console
Owner	836140264327	Inbound rules count	1	Outbound rules count	1 Permission entry

Inbound rules Outbound rules Tags

Inbound rules (1)

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source	Description
sgr-08b0950d2c15b8e...	-	-	MySQL/Aurora	TCP	3306	sg-0d30cce1fd53da84...	-

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Activities Brave Web Browser Mon Jan 1 10:40 PM

Connect to instance | EC2 RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu-north-1 ip-172-20-5-78.eu-north-1 +

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

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

aws Services Search [Alt+S] Stockholm Muhammad Awas

Templates
Choose a sample template to meet your use case.

- Production**
Use defaults for high availability and fast, consistent performance.
- Dev/Test**
This instance is intended for development use outside of a production environment.
- Free tier**
Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. [Info](#)

Availability and durability

Deployment options [Info](#)
The deployment options below are limited to those supported by the engine you selected above.

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

Settings

DB instance identifier [Info](#)
Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

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

Credentials Settings

Master username [Info](#)

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Show versions that support the multi-AZ db cluster [Info](#)
Creates a Multi-AZ DB cluster with one primary DB instance and two readable standby DB instances. Multi-AZ DB clusters provide up to 2x faster transaction commit latency and automatic failover in typically under 35 seconds.

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](#)

Templates
Choose a sample template to meet your use case.

- Production**
Use defaults for high availability and fast, consistent performance.
- Dev/Test**
This instance is intended for development use outside of a production environment.
- Free tier**
Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. [Info](#)

Availability and durability

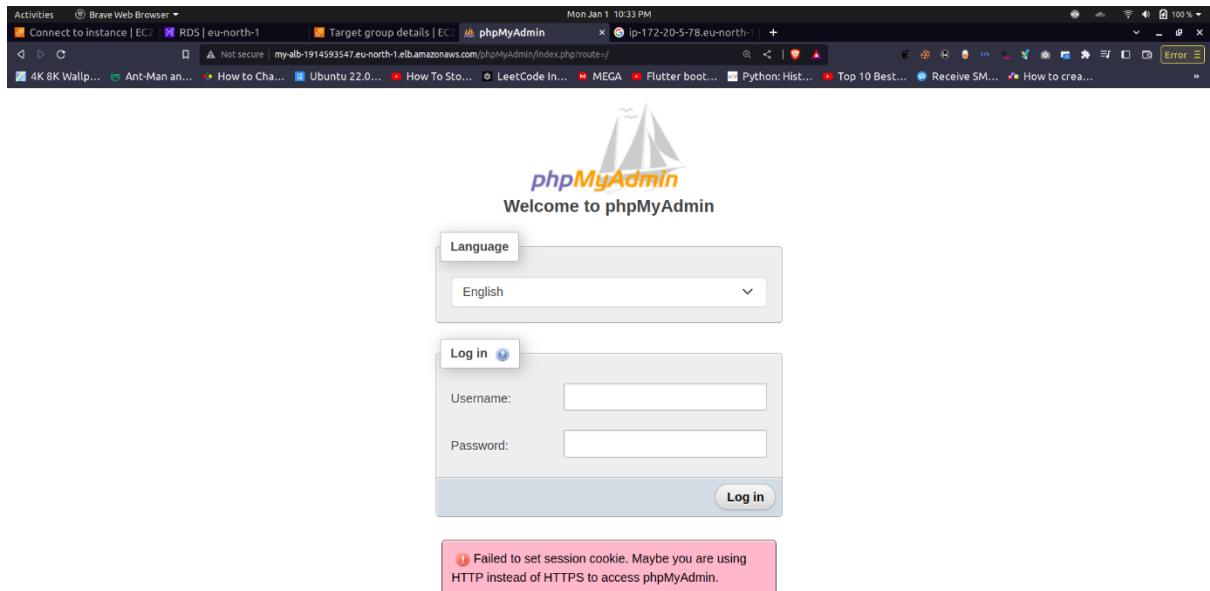
Deployment options [Info](#)
The deployment options below are limited to those supported by the engine you selected above.

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

MySQL

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

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



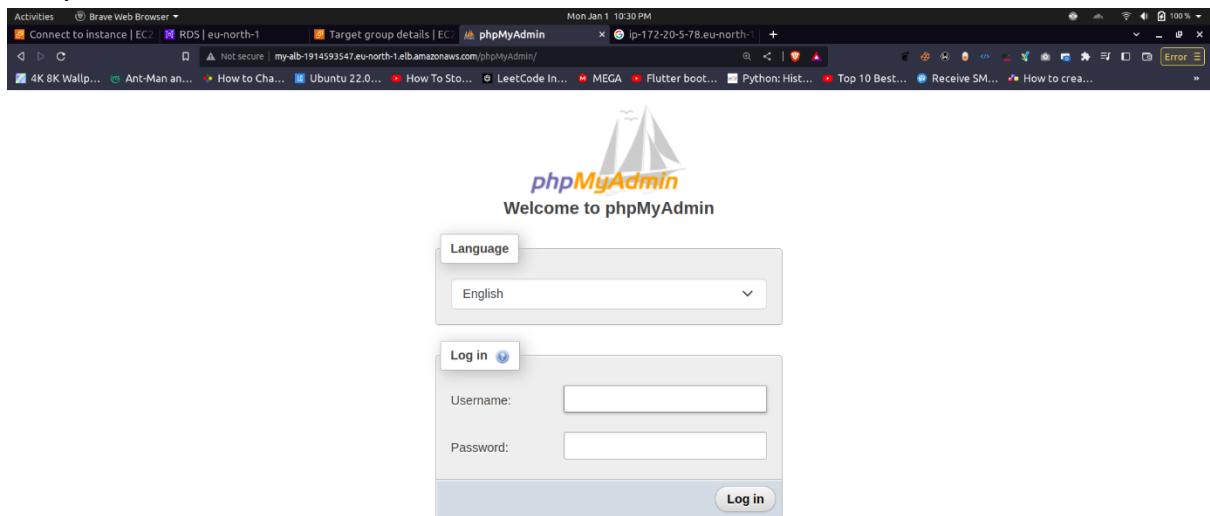
Step 15. Checking Stickiness of LB

The screenshot shows the AWS CloudWatch Metrics console with the following details:

- Target selection configuration:**
 - Turn on stickiness:** Checked.
 - Stickiness duration:** Set to 1 day.
- Cross-zone load balancing:** Info: Cross-zone load balancing can be configured for each target group or inherited from the load balancer. Inherit settings from load balancer attributes: Uses the cross-zone settings from the Application Load Balancer attributes - On by default.
- Target group health requirements:** Info: Specify the target group health requirements and the resulting actions when the minimum is not met.

At the bottom right, there are 'Cancel' and 'Save changes' buttons.

Step 16. DB Schema



The screenshot displays the phpMyAdmin main dashboard. On the left, a sidebar lists databases: 'New', 'information_schema', 'mysql', 'performance_schema', and 'sys'. The main area contains several configuration panels:

- General settings:** Includes options for changing password, setting server connection collation (selected as 'utf8mb4_unicode_ci'), and more settings.
- Database server:** Provides details about the MySQL server, including its name ('my-db.cts8me6qkqm1.eu-north-1.rds.amazonaws.com'), type ('MySQL'), connection status ('SSL is not being used'), version ('8.0.35 - Source distribution'), protocol ('10'), user ('admin@172.20.5.78'), and character set ('UTF-8 Unicode (utf8mb4)').
- Appearance settings:** Allows users to change the language (set to English) and theme (set to 'pmahomme').
- Web server:** Lists the Apache version ('2.4.58 (Amazon Linux)'), database client version ('libmysql - mysqlnd 8.2.9'), PHP extensions ('mysqli', 'curl', 'mbstring', 'sodium'), and PHP version ('8.2.9').
- phpMyAdmin:** Shows the version information ('5.2.1 (up to date)').

Mon Jan 1 11:01 PM

Activities Brave Web Browser ▾

Connect to instance | EC2 Databases | RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu... ip-172-20-5-78.eu-north-1 +

Not secure | my-alb-1914593547.eu-north-1.elb.amazonaws.com | phpMyAdmin/index.php/route=/server/databases

4K 8K Wallp... Ant-Man an... How to Cha... Ubuntu 22.0... How To Sto... LeetCode In... MEGA Flutter boot... Python: Hist... Top 10 Best... Receive SM... How to crea...

phpMyAdmin

Databases SQL Status User accounts Export Import Settings Binary log Replication More

Databases

Create database

users utf8mb4_0900_ai_ci Create

Check all Drop Search

Database	Collation	Primary replication	Action
information_schema	utf8mb3_general_ci	Replicated	<input type="checkbox"/> Check privileges
mysql	utf8mb4_0900_ai_ci	Replicated	<input type="checkbox"/> Check privileges
performance_schema	utf8mb4_0900_ai_ci	Replicated	<input type="checkbox"/> Check privileges
sys	utf8mb4_0900_ai_ci	Replicated	<input type="checkbox"/> Check privileges

Total: 4

Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.

Enable statistics

Console

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Activities Brave Web Browser ▾

Connect to instance | EC2 Databases | RDS | eu-north-1 Target group details | EC2 my-alb-1914593547.eu... ip-172-20-5-78.eu-north-1 +

Not secure | my-alb-1914593547.eu-north-1.elb.amazonaws.com | phpMyAdmin/index.php/route=/database/structure&server=...

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phpMyAdmin

Databases Structure SQL Search Insert Export Import Privileges Operations Triggers

Table: users

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	user_id	int			No	None	AUTO_INCREMENT	<input type="checkbox"/> Change <input type="checkbox"/> Drop <input type="checkbox"/> More	<input type="checkbox"/> Change <input type="checkbox"/> Drop <input type="checkbox"/> More
2	username	text	utf8mb4_0900_ai_ci		No	None		<input type="checkbox"/> Change <input type="checkbox"/> Drop <input type="checkbox"/> Primary <input type="checkbox"/> Unique <input type="checkbox"/> Index <input type="checkbox"/> Spatial <input type="checkbox"/> Fulltext	<input type="checkbox"/> Change <input type="checkbox"/> Drop <input type="checkbox"/> More

Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

Add 1 column(s) after username Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
<input type="checkbox"/> Edit <input type="checkbox"/> Rename <input type="checkbox"/> Drop	PRIMARY	BTREE	Yes	No	user_id	0	A	No	

Create an index on 1 columns Go

Partitions

No partitioning defined!

Console

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1 row inserted.
Inserted row id: 1

```
INSERT INTO `users` (`user_id`, `username`) VALUES (NULL, 'Awais');
```

[Edit inline] [Edit] [Create PHP code]

Run SQL query/queries on table users.users:

```
1 INSERT INTO `users` (`user_id`, `username`) VALUES (NULL, 'Awais');
```

user_id
username

Console SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

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Showing rows 0 - 0 (1 total, Query took 0.0013 seconds.)

```
SELECT * FROM `users`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

Extra options

user_id username

Edit Copy Delete 1 Awais

Check all With selected: Edit Copy Delete Export

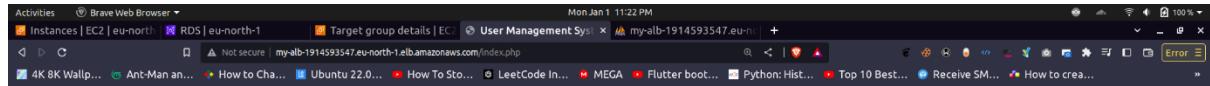
Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Console

Step 17. Trying the 3 Tier Application



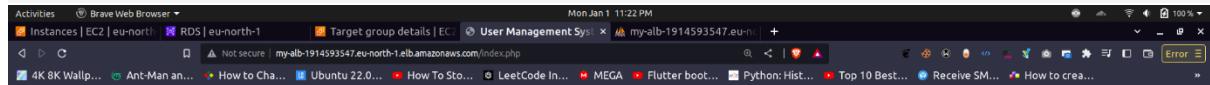
User Management System

Username:

Add User

Users:

No users found



User Management System

Username:

Add User

Users:

Awais

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Instances | EC2 | eu-north-1 RDS | eu-north-1 Target group details | EC User Management System my-alb-1914593547.eu-north-1.elb.amazonaws.com/index.php

Not secure my-alb-1914593547.eu-north-1.elb.amazonaws.com/index.php

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User Management System

Username:

Add User

Users:

Awais
Abbas

Activities Brave Web Browser Mon Jan 1 11:22 PM

Instances | EC2 | eu-north-1 RDS | eu-north-1 Target group details | EC User Management System my-alb-1914593547.eu-north-1.elb.amazonaws.com/index.php/route/sqlalpos-0dc-usersstable...

Not secure my-alb-1914593547.eu-north-1.elb.amazonaws.com/index.php/route/sqlalpos-0dc-usersstable...

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phpMyAdmin

Server: my-db.ct8me6okgm1.eu-north-1.rds.amazonaws.com Database: users Table: users

Browse Structure SQL Search Insert Export Privileges Operations Triggers

Showing rows 0 - 1 (total, Query took 0.0014 seconds.)

SELECT * FROM `users`

Profile [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	user_id	username
<input type="checkbox"/>	10	Awais
<input type="checkbox"/>	11	Abbas

Check all With selected: Edit Copy Delete

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Console