

NAME: KSHITIJ GUPTA
Enrolment Number: 21162101007
Sub: CCE

Practical – 6[Batch-71]

Zara and her Team Members are associated with a start-up company as a solution architects which provides consultancy solutions on AWS Cloud Platform. They got their project and details as follows:

They have users who are going to work on their project. Task is to create an isolated network for their project using VPC. In three tier architecture there is one web server and one database server given to their team. As per the requirement of Project, they need 2 networks in a single VPC as per below where they want to have 4 different subnets. [2 Public + 2 Private Subnets].

Web Server – 10.0.0.0/24 : Public

Database – 10. 0.1.0/24 : Private

Additional Subnets must be created for VPC that spans multiple Availability Zones as per below:

Web Server Backup – 10.0.2.0/24 : Public

Database Backup – 10. 0.3.0/24 : Private

Tasks to be done:

- 1. Create a VPC & Subnets as per attachments.**
- 2. Create and configure security group for a) Web Server & b) DB Server.**
- 3. Manage inbound traffic for security.**

Open aws console and search for VPC service and Click on create VPC

The screenshot shows the AWS VPC Dashboard. A prominent blue banner at the top left reads "Introducing the new VPC console experience". It states: "We've made updates to the VPC console. This new experience won't change how you work in the console. If you experience a problem with your access, see the troubleshooting documentation to get information about how to resolve it. You can opt out of the new experience until August 31, 2024. Before that date, you must resolve the access issues to continue using the console. You can also report issue details." Below the banner, there are two buttons: "Create VPC" (yellow) and "Launch EC2 Instances" (white). A note below says: "Note: Your Instances will launch in the Asia Pacific region." On the left sidebar, under "Virtual private cloud", there are several options: EC2 Global View, Filter by VPC, 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, and Feedback. On the right side, there are sections for Service Health, Settings (Zones, Console Experiments), Additional Information (VPC Documentation, All VPC Resources, Forums, Report an Issue), and AWS Network Manager. The bottom status bar shows the date as 29-08-2024.

The screenshot shows the "Create VPC" wizard. The left panel, titled "VPC settings", has a section for "Resources to create" with a radio button for "VPC only" (selected) and "VPC and more". Below this, there's a "Name tag auto-generation" section with a checked "Auto-generate" checkbox and a "project" name input field. There are also sections for "IPv4 CIDR block" (set to 10.0.0.16) and "IPv6 CIDR block" (set to "No IPv6 CIDR block"). The right panel, titled "Preview", shows a diagram of the VPC structure. It starts with a "VPC" node labeled "project-vpc". This VPC contains four "Subnets" under the "ap-south-1a" and "ap-south-1b" route tables. The subnets are: "project-subnet-public1-ap-south-1a", "project-subnet-private1-ap-south-1a", "project-subnet-public2-ap-south-1b", and "project-subnet-private2-ap-south-1b". The bottom status bar shows the date as 29-08-2024.

Select VPC only and provide name

The screenshot shows the 'CreateVpc | VPC Console' page. Under 'Resources to create', 'VPC only' is selected. A name tag 'my-vpc-kshitij' is entered. The IPv4 CIDR block is set to '10.0.0.0/24'. The IPv6 CIDR block is set to 'No IPv6 CIDR block'. Tenancy is set to 'Default'. At the bottom, there is a 'Tags' section where a tag 'Name' is added with value 'my-vpc-kshitij'. The status bar at the bottom right shows '28°C Light rain' and the date '29-08-2024'.

IPv4 CIDR - 10.0.0.0/16 and click on create VPC

The screenshot shows the 'CreateVpc | VPC Console' page. Under 'Resources to create', 'IPv4 CIDR manual input' is selected. The IPv4 CIDR block is set to '10.0.0.0/16'. The IPv6 CIDR block is set to 'No IPv6 CIDR block'. Tenancy is set to 'Default'. In the 'Tags' section, a tag 'Name' is added with value 'my-vpc-kshitij'. At the bottom, the 'Create VPC' button is visible. The status bar at the bottom right shows '28°C Light rain' and the date '29-08-2024'.

VPC created successfully

The screenshot shows the AWS VPC console with a success message: "You successfully created vpc-0fb6181d5a6ca56df / my-vpc-kshitij". The main details pane shows the VPC ID as "vpc-0fb6181d5a6ca56df", State as "Available", and other configuration details like DHCP option set, IPv4 CIDR, and Route tables.

Now Go to subnet and click on create subnet and Provide name, select AZ and CIDR block - 10.0.0.0/24

The screenshot shows the "Subnet 1 of 1" configuration screen. It includes fields for Subnet name ("webserver-public"), Availability Zone ("Asia Pacific (Mumbai) / ap-south-1a"), IPv4 VPC CIDR block ("10.0.0.0/16"), IPv4 subnet CIDR block ("10.0.0.0/24"), and optional tags ("Name: webserver-public").

Provide subnet 2 name, select AZ and CIDR block - 10.0.1.0/24

Subnet 1 of 1

Subnet name

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

database-private

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.

Asia Pacific (Mumbai) / ap-south-1a ▾

IPv4 VPC CIDR block [Info](#)

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

10.0.0.0/16 ▾

IPv4 subnet CIDR block

10.0.1.0/24

256 IPs

◀ ▶ ⌂ ⌃

▼ Tags - optional

Key

Value - optional

Q Name X

Q database-private X

Remove

Add new tag

You can add 49 more tags.

Provide subnet 3 name, select AZ and CIDR block - 10.0.2.0/24

Subnet 1 of 1

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



IPv4 subnet CIDR block

256 IPs



▼ Tags - optional

Key

Value - optional



You can add 49 more tags.

Provide subnet 4 name, select AZ and CIDR block - 10.0.3.0/24

Subnet 1 of 1

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

database-private-backup

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.

Asia Pacific (Mumbai) / ap-south-1a

IPv4 VPC CIDR block [Info](#)
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/16

IPv4 subnet CIDR block

10.0.3.0/24 256 IPs

< > ^ < > ^ < > ^

▼ Tags - optional

Key	Value - optional
<input type="text" value="Name"/> X	<input type="text" value="database-private-backup"/> X
Remove	
Add new tag	

You can add 49 more tags.

[Remove](#)

[Add new subnet](#)

[CloudShell](#)
[Feedback](#)

Here you can see all 4 subnets

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

VPC dashboard X

EC2 Global View X

Virtual private cloud

- Your VPCs
- Subnets**
- Route tables
- Internet gateways
- Egress-only internet gateways
- DHCP option sets

Services Search [Alt+S]

Subnets (7) [Info](#)

Actions Create subnet

Last updated less than a minute ago

Find resources by attribute or tag

Name	Subnet ID	State	VPC	IPv4 CIDR
-	subnet-04c2922b3cf0b87b1	Available	vpc-075f109655381d042	172.31.16.0/20
-	subnet-06cccd433091dceb9b	Available	vpc-075f109655381d042	172.31.0.0/20
webserver-public	subnet-039538ce25caa1e21	Available	vpc-0fb6181d5a6ca56df my-v...	10.0.0.0/24
-	subnet-019b7b8a818e13ef9	Available	vpc-075f109655381d042	172.31.32.0/20
database-private	subnet-0afc5038a14802b61	Available	vpc-0fb6181d5a6ca56df my-v...	10.0.1.0/24
webserver-public-backup	subnet-079249152a261cf07	Available	vpc-0fb6181d5a6ca56df my-v...	10.0.2.0/24
database-private-backup	subnet-0dc3c677a23d164fd	Available	vpc-0fb6181d5a6ca56df my-v...	10.0.3.0/24

Now go to Internet gateway and click on Create internet gateway

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

VPC > Internet gateways > Create internet gateway

Create internet gateway Info

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

Internet gateway settings

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

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

Key	Value - optional
<input type="text" value="Name"/>	<input type="text" value="internet-gateway"/> X

Add new tag
You can add 49 more tags.

Cancel **Create internet gateway**

Go to actions and click on Attach to VPC

igws | VPC Console

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

Internet gateways (1/2) Info

Name	Internet gateway ID	State	VPC ID
-	igw-0fb440fe27ce304cc	Attached	vpc-075f10
<input checked="" type="checkbox"/> internet-gateway	igw-0bdd29bff5cf9f8cb	Detached	-

Actions ▾ **Create internet gateway** i

- Attach to VPC**
- View details
- < 1 >
- Owner
- Detach from VPC
- 008971634001
- Manage tags
- 008971634001
- Delete internet gateway

igw-0bdd29bff5cf9f8cb / internet-gateway

Details **Tags**

Details

Internet gateway ID <input type="button" value="Copy"/> igw-0bdd29bff5cf9f8cb	State <input type="button" value="Copy"/> Detached	VPC ID -	Owner <input type="button" value="Copy"/> 008971634001
--	---	-------------	---

The screenshot shows the 'Attach to VPC' dialog box for an internet gateway. The URL in the browser is ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#AttachInternetGateway:internetGatewayId=igw-0bdd29bff5cf9f8cb. The dialog has a search bar with 'vpc-0fb6181d5a6ca56df'. A large orange button at the bottom right says 'Attach internet gateway'.

The screenshot shows the 'Internet gateways' page in the AWS VPC dashboard. The URL is ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#igws. The table lists two internet gateways:

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-0fb440fe27ce304cc	Attached	vpc-075f109655381d042	008971634001
internet-gateway	igw-0bdd29bff5cf9f8cb	Attached	vpc-0fb6181d5a6ca56df my-vpc-kshitij	008971634001

Go to Security Groups and click on create security group

Security Groups (3) Info

Name	Security group ID	Security group name	VPC ID	Description
-	sg-02b938ed9712ff6a9	launch-wizard-1	vpc-075f109655381d042	launch-wizard-1
-	sg-011b202d89b300657	default	vpc-075f109655381d042	default VPC
-	sg-057feb4d57bfdd4b8	default	vpc-0fb6181d5a6ca56df	default VPC

Provide name and select the VPC

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
PR6-kshitij
Name cannot be edited after creation.

Description Info
Allows SSH access to developers

VPC info
vpc-0fb6181d5a6ca56df (my-vpc-kshitij)

Inbound rules as follow

Inbound rules Info

Type	Protocol	Port range	Source	Description - optional
SSH	TCP	22	Anyw... ▾	0.0.0.0/0 X
HTTP	TCP	80	Anyw... ▾	0.0.0.0/0 X
HTTPS	TCP	443	Anyw... ▾	0.0.0.0/0 X

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.

Outbound rule as follows and click on create

Outbound rules Info

Type	Info	Protocol	Info	Port range	Info	Destination	Info	Description - optional	Info
All traffic	▼	All		All		Anyw...	▼	<input type="text"/>	X
0.0.0.0/0 X									

Add rule

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

Created successfully

VPC | ap-south-1 Practical - 6

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#SecurityGroup:groupId=sg-01dcf1d8eb74383ef

AWS Services Search [Alt+S] Mumbai KautikGupta

VPC dashboard X

EC2 Global View Filter by VPC

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

SG Security group (sg-01dcf1d8eb74383ef | PR6-kshitij) was created successfully Details

VPC > Security Groups > sg-01dcf1d8eb74383ef - PR6-kshitij

sg-01dcf1d8eb74383ef - PR6-kshitij Actions

Details

Security group name PR6-kshitij	Security group ID sg-01dcf1d8eb74383ef	Description PR6	VPC ID vpc-0fb6181d5a6ca56df
Owner 008971634001	Inbound rules count 3 Permission entries	Outbound rules count 1 Permission entry	

Inbound rules Outbound rules Tags

Inbound rules (3)

Name	Security group rule...	IP version	Type	Protocol	Port range

CloudShell Feedback Type here to search Live 17:08 29-08-2024

Go to Route Tables and select the table and Edit routes

The screenshot shows the AWS VPC Route Tables page. On the left, there's a navigation sidebar with sections like VPC dashboard, EC2 Global View, Virtual private cloud (Your VPCs, Subnets, Route tables selected), Internet gateways, Egress-only internet gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, and Peering connections. Below that is a Security section with Network ACLs. The main content area has a search bar and a table titled "Route tables (2) Info". The table columns are Name, Route table ID, Explicit subnet assoc..., Edge associations, Main, and VPC. It lists two entries: "rtb-01c5add8376930d3e" associated with "vpc-075f109655381d042" and "rtb-0c02c1791d52f7c32" associated with "vpc-0fb6181d5a6ca56df". A "Create route table" button is at the top right. Below the table is a "Select a route table" dropdown.

The screenshot shows the "Edit routes" page for route table "rtb-0c02c1791d52f7c32". The URL in the address bar is "ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1>EditRoutes:RouteTableId=rtb-0c02c1791d52f7c32". The page title is "Edit routes". There's a table with columns Destination, Target, Status, and Propagated. One row is shown: "10.0.0.0/16" with Target set to "local" (selected from a dropdown menu) and Status "Active". Below the table is an "Add route" button. At the bottom are "Cancel", "Preview", and "Save changes" buttons. The status bar at the bottom shows "CloudShell Feedback" and system icons.

Select Internet Gateway

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

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
Q 0.0.0.0/0	Internet Gateway	-	No
	Q igw-0bdd29bff5cf9f8cb	-	

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

The screenshot shows the 'Details' page for the route table 'rtb-0c02c1791d52f7c32'. The 'Routes' tab is selected, showing the following routes:

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0bdd29bff5cf9f8cb	Active	No
10.0.0.0/16	local	Active	No

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

Go to EC2 service to launch instance. Provide name

The screenshot shows the AWS EC2 'Launch an instance' wizard. In the 'Name and tags' section, the name 'PR6- webserver' is specified. Under 'Application and OS Images (Amazon Machine Image)', an AMI is selected: 'Amazon Linux 2023 AMI 2023.5.2...'. The summary panel indicates 1 instance, the software image is 'Amazon Linux 2023 AMI 2023.5.2...', the virtual server type is 't2.micro', and there is 1 volume(s) - 8 GiB. A tooltip for the 'Free tier' is visible, stating: '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 10000 on free tier AMIs per month'.

Select the created VPC in network settings

The screenshot shows the 'Network settings' section of the EC2 launch wizard. It includes fields for 'VPC - required' (set to 'vpc-0fb6181d5a6ca56df (my-vpc-kshitij)'), 'Subnet' (set to 'subnet-079249152a261cf07'), 'Auto-assign public IP' (set to 'Disable'), and 'Firewall (security groups)' (set to 'Create security group'). The security group is named 'launch-wizard-2'. The summary panel shows 1 instance, the software image is 'Amazon Linux 2023 AMI 2023.5.2...', the virtual server type is 't2.micro', and there is 1 volume(s) - 8 GiB. A tooltip for the 'Free tier' is visible, stating: '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 10000 on free tier AMIs per month'.

Select the subnet as Webserver-Public and Auto assign IP enable and Select the existing security group

VPC - required | [Info](#)

vpc-0fb6181d5a6ca56df (my-vpc-kshitij)
10.0.0.0/16

Subnet | [Info](#)

subnet-039538ce25caa1e21 webserver-public
VPC: vpc-0fb6181d5a6ca56df Owner: 008971634001
Availability Zone: ap-south-1a Zone type: Availability Zone
IP addresses available: 251 CIDR: 10.0.0.0/24

Create new subnet

Auto-assign public IP | [Info](#)

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) | [Info](#)

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

Create security group Select existing security group

Common security groups [Info](#)

Select security groups

PR6-kshitij sg-01dcf1d8eb74383ef VPC: vpc-0fb6181d5a6ca56df

Compare security group rules

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

► Advanced network configuration

Launch an instance | EC2 | ap-south-1 | Practical - 6

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

aws Services Search [Alt+S]

EC2 > Instances > Launch an instance

Success Successfully initiated launch of instance (i-0ecb44056187c19ac)

Launch log

Next Steps

Q What would you like to do next with this instance, for example "create alarm" or "create backup" < 1 2 3 4 5 6 >

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

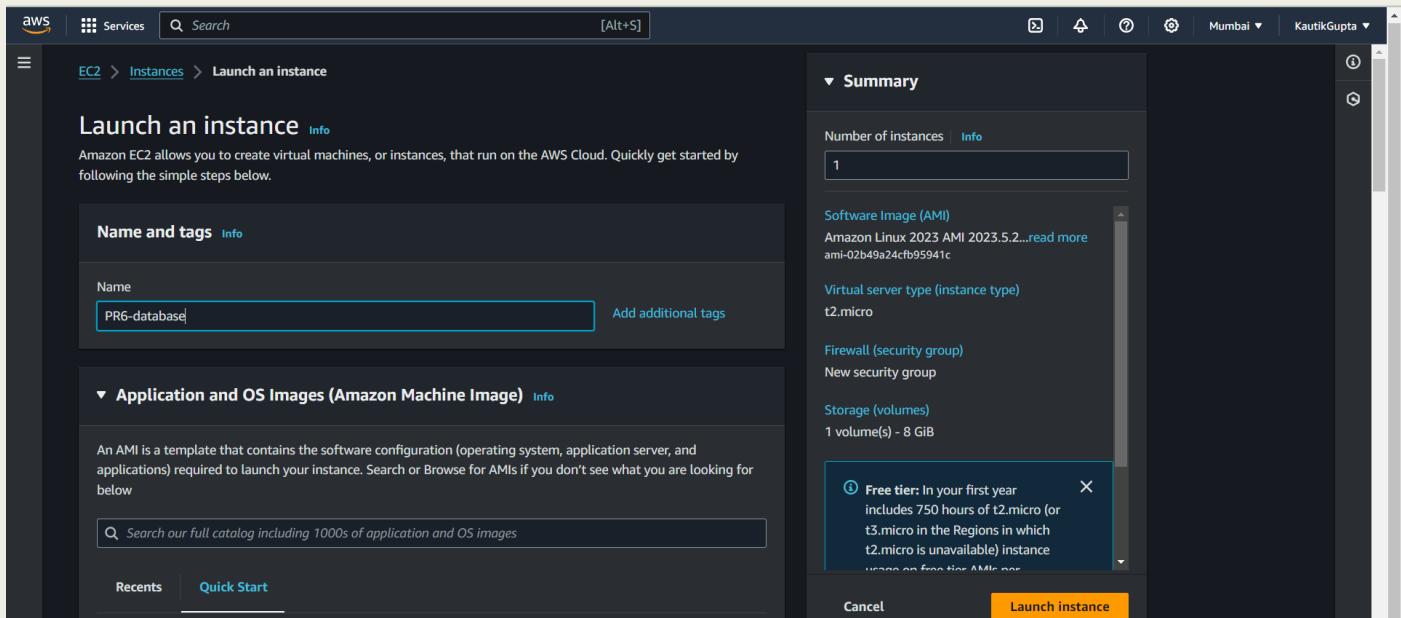
Connect to your instance
Once your instance is running, log into it from your local computer.
[Connect to instance](#) [Learn more](#)

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

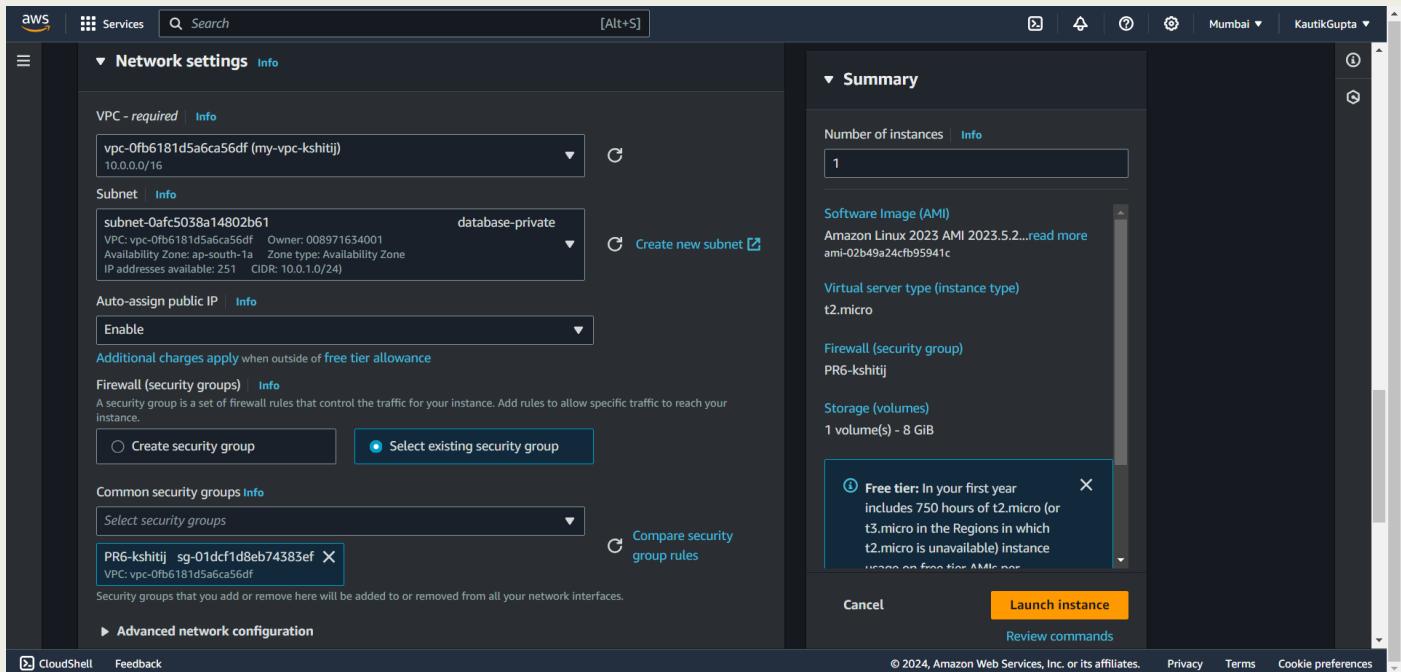
Create EBS snapshot policy
Create a policy that automates the creation, retention, and deletion of EBS snapshots.
[Create EBS snapshot policy](#)

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences Type here to search 28°C Cloudy ENG 17:23 29-08-2024

Another instance, provide name



Select the created VPC, subnet as Database-Private and Auto assign IP enable



Here 2 instances launch successfully

The screenshot shows the AWS EC2 Instances page. On the left, a sidebar lists various EC2-related services like EC2 Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity, and Reservations. Below that are Images (AMIs, AMI Catalog) and Elastic Block Store (Volumes, Snapshots, Lifecycle Manager). The main content area displays a table titled "Instances (2) Info" with columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, and Public IP. Two instances are listed: "PR6-database" (Pending, t2.micro, 0/2 checks passed) and "PR6-webserver" (Running, t2.micro, 2/2 checks passed). A modal window titled "Select an instance" is open over the table. At the bottom, there's a CloudShell tab and a system tray with icons for search, file, browser, email, and others.

Select webserver instance and click on connect

The screenshot shows the "Connect to instance" dialog for the instance "i-0ecb44056187c19ac (PR6- webserver)". A warning message at the top states: "Port 22 (SSH) is open to all IPv4 addresses. Port 22 (SSH) is currently open to all IPv4 addresses, indicated by 0.0.0.0/0 in the inbound rule in your security group. For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 13.233.177.0/29. [Learn more](#)". Below this, the "Instance ID" is listed as "i-0ecb44056187c19ac (PR6- webserver)". The "Connection Type" section contains two options: "Connect using EC2 Instance Connect" (selected) and "Connect using EC2 Instance Connect Endpoint". Under "Public IP address", the value is "65.2.172.139". The "Username" field contains "ec2-user". A note below says: "Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username." At the bottom are "Cancel" and "Connect" buttons. The footer includes CloudShell, Feedback, and standard system icons.

Successfully connected and working

Instances | EC2 | ap-south-1 | EC2 Instance Connect | ap-south-1 | Practical - 6

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0ecb44056187c19ac&osUser=ec2-user®ion=ap-south-1&sshPort=22#

aws Services Search [Alt+S]

```

Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-10-0-0-200 ~]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=113 time=1.86 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=113 time=1.87 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=113 time=1.89 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=113 time=1.79 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=113 time=1.79 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=113 time=1.79 ms
64 bytes from 8.8.8.8: icmp_seq=7 ttl=113 time=1.80 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=113 time=1.91 ms
64 bytes from 8.8.8.8: icmp_seq=9 ttl=113 time=1.82 ms
64 bytes from 8.8.8.8: icmp_seq=10 ttl=113 time=1.95 ms
64 bytes from 8.8.8.8: icmp_seq=11 ttl=113 time=1.85 ms
64 bytes from 8.8.8.8: icmp_seq=12 ttl=113 time=1.82 ms

```

i-0ecb44056187c19ac (PR6- webserver)

Public IPs: 65.2.172.139 Private IPs: 10.0.0.200

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 28°C Cloudy 17:28 29-08-2024

Select another database instance and click on connect

Instances | EC2 | ap-south-1 | Practical - 6 | hello - Google Search

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

aws Services Search [Alt+S]

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
PR6-database	i-0e630f5dc87e4c853	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a	-
PR6- webserver	i-0ecb44056187c19ac	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a	-

i-0e630f5dc87e4c853 (PR6-database)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID	i-0e630f5dc87e4c853 (PR6-database)	Public IPv4 address	65.2.167.13 open address
IPv6 address	-	Instance state	Running
Hostname type	IP name: ip-10-0-1-56.ap-south-1.compute.internal	Private IP DNS name (IPv4 only)	ip-10-0-1-56.ap-south-1.compute.internal

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 28°C Cloudy 17:31 29-08-2024

The screenshot shows the AWS EC2 Instance Connect dialog. At the top, there is a warning message: "Port 22 (SSH) is open to all IPv4 addresses. Port 22 (SSH) is currently open to all IPv4 addresses, indicated by 0.0.0.0/0 in the inbound rule in your security group. For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 13.233.177.0/29. [Learn more.](#)" Below this, the "Instance ID" is listed as "i-0e630f5dc87e4c853 (PR6-database)". The "Connection Type" section contains two options: "Connect using EC2 Instance Connect" (selected) and "Connect using EC2 Instance Connect Endpoint". The "Public IP address" is "65.2.167.13". The "Username" field contains "ec2-user". A note below the username says: "Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username." At the bottom are "Cancel" and "Connect" buttons.

successfully connected and working

The screenshot shows the AWS CloudShell terminal. The user has run the command "ping google.com" from the terminal. The output shows four ICMP packets being sent to the IP 142.250.183.110. The terminal also displays the instance ID "i-0e630f5dc87e4c853 (PR6-database)" and its public IP "65.2.167.13". The CloudShell interface includes a search bar, a toolbar with various icons, and a status bar at the bottom indicating the date and time.

```
[ec2-user@ip-10-0-1-56 ~]$ ping google.com
PING google.com (142.250.183.110) 56(84) bytes of data.
64 bytes from bom12s13-in-f14.1e100.net (142.250.183.110): icmp_seq=1 ttl=113 time=1.82 ms
64 bytes from bom12s13-in-f14.1e100.net (142.250.183.110): icmp_seq=2 ttl=113 time=1.84 ms
64 bytes from bom12s13-in-f14.1e100.net (142.250.183.110): icmp_seq=3 ttl=113 time=1.90 ms
64 bytes from bom12s13-in-f14.1e100.net (142.250.183.110): icmp_seq=4 ttl=113 time=1.85 ms
```