

AWS Task-2

1. Set up a VPC with an Internet gateway,
2. create a public subnet with 256 IP addresses, a private subnet with 256 IP addresses,
3. make a route table connecting the Internet gateway and the subnets, and
4. launch a Linux EC2 instance by using the above VPC and public subnet.

1. i created vpc

The screenshot shows the 'Create VPC' page in the AWS Management Console. The page title is 'Create VPC' with an 'Info' link. Below the title, a note states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.' The 'VPC settings' section contains the following fields:

- Resources to create:** Two radio buttons are present. 'VPC only' is selected, and 'VPC and more' is unselected.
- Name tag - optional:** A text input field contains the value 'demo-custom-vpc'. A note below it says: 'Creates a tag with a key of 'Name' and a value that you specify.'
- IPv4 CIDR block:** Two radio buttons are present. 'IPv4 CIDR manual input' is selected, and 'IPAM-allocated IPv4 CIDR block' is unselected.
- IPv4 CIDR:** A text input field contains the value '10.0.0.0/16'. A note below it says: 'CIDR block size must be between /16 and /28.'

The screenshot shows the 'VPC dashboard' page in the AWS Management Console. A green notification banner at the top states: 'You successfully created vpc-08bce7874704a78b2 / demo-custom-vpc'. The page title is 'vpc-08bce7874704a78b2 / demo-custom-vpc' with an 'Actions' dropdown menu. The 'Details' section displays the following information:

Details			
VPC ID vpc-08bce7874704a78b2	State Available	Block Public Access Off	DNS hostnames Disabled
DNS resolution Enabled	Tenancy default	DHCP option set dopt-05f6913aed7d30ec8	Main route table rtb-0e56055e49aa4ffb3
Main network ACL acl-0adccbd346ee1a664	Default VPC No	IPv4 CIDR 10.0.0.0/16	IPv6 pool -
IPv6 CIDR (Network border group) -	Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID 736296213120

Below the details section, there are tabs for 'Resource map', 'CIDRs', 'Flow logs', 'Tags', and 'Integrations'. The 'Resource map' tab is currently selected.

1.i created internet gateway

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 7362-9621-3120 PRABU S R

VPC > Internet gateways > igw-0ca2260558c1e1d4b

VPC dashboard < AWS 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
NAT gateways
Peering connections

The following internet gateway was created: igw-0ca2260558c1e1d4b - my-demo-custom-igw. You can now attach to a VPC to enable the VPC to communicate with the internet. **Attach to a VPC**

igw-0ca2260558c1e1d4b / my-demo-custom-igw Actions

Details Info

Internet gateway ID igw-0ca2260558c1e1d4b	State Detached	VPC ID -	Owner 736296213120
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Tags Manage tags

Search tags

Key	Value
Name	my-demo-custom-igw

i attached igw to my vpc

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VPC > Internet gateways > Attach to VPC (igw-0ca2260558c1e1d4b)

The following internet gateway was created: igw-0ca2260558c1e1d4b - my-demo-custom-igw. You can now attach to a VPC to enable the VPC to communicate with the internet. **Attach to a VPC**

Attach to VPC (igw-0ca2260558c1e1d4b) 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.

Search vpc-08bce7874704a78b2

Use: "vpc-08bce7874704a78b2"

vpc-08bce7874704a78b2 - demo-custom-vpc

Cancel **Attach internet gateway**

i created two subnets(public & private) with 256 IPs each. A /24 CIDR block gives 256 IP addresses

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VPC > Subnets > Create subnet

Create subnet Info

VPC
VPC ID
Create subnets in this VPC.
vpc-08bce7874704a78b2 (demo-custom-vpc)

Associated VPC CIDRs

IPv4 CIDRs 10.0.0.0/16

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

aws

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Account ID: 7362-9621-3120

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VPC > Subnets > Create subnet

Subnet 1 of 1

Subnet name

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

subnet-public

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-1 (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

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Account ID: 7362-9621-3120

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VPC > Subnets

You have successfully created 1 subnet: subnet-035f9dbfaa43ed9f4

VPC dashboard

AWS Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Subnets (1)

Info

Last updated less than a minute ago

Actions

Create subnet

Find subnets by attribute or tag

Subnet ID : subnet-035f9dbfaa43ed9f4

Clear filters

<input type="checkbox"/>	Name	Subnet ID	State	VPC	Block Public
<input type="checkbox"/>	subnet-public	subnet-035f9dbfaa43ed9f4	Available	vpc-08bce7874704a78b2 dem...	Off

Select a subnet

private subnet

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Asia Pacific (Mumbai)

Account ID: 7362-9621-3120

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VPC > Subnets > Create subnet

Create subnet

Info

VPC

VPC ID

Create subnets in this VPC.

vpc-08bce7874704a78b2 (demo-custom-vpc)

Associated VPC CIDRs

IPv4 CIDRs

10.0.0.0/16

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

aws [Search] [Alt+S] Asia Pacific (Mumbai) Account ID: 7362-9621-3120 PRABU S R

VPC > Subnets > Create subnet

Subnet 1 of 1

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

Availability Zone [Info](#)
Choose the zone in which your subnet will reside, or let Amazon choose one for you.
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
10.0.2.0/24 256 IPs

Tags - optional

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AWS Console Home Subnets

VPC dashboard < AWS Global View Filter by VPC

Subnets (5) [Info](#) Last updated less than a minute ago [Actions](#) [Create subnet](#)

Find subnets by attribute or tag

<input type="checkbox"/>	Name	Subnet ID	State	VPC	Block Publi
<input type="checkbox"/>	-	subnet-096e32d7d129d4f26	Available	vpc-0811954bf33a0cb2f Defa...	Off
<input type="checkbox"/>	private-subnet	subnet-0d6c94f6f5ad36ff7	Available	vpc-08bce7874704a78b2 dem...	Off
<input type="checkbox"/>	subnet-public	subnet-035f9dbfaa43ed9f4	Available	vpc-08bce7874704a78b2 dem...	Off

3. i created Route table

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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-route-table

VPC
The VPC to use for this route table.
vpc-08bce7874704a78b2 (demo-custom-vpc)

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

Key **Value - optional**

Q Name X Q my-route-table X [Remove](#)

[Add new tag](#)

aws

Search

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Asia Pacific (Mumbai)

Account ID: 7362-9621-3120

PRABU S R

VPC > Route tables > rtb-06a5253952125f1de

VPC dashboard

AWS Global View

Filter by VPC

Virtual private cloud

Your VPCs

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Egress-only internet gateways

DHCP option sets

Elastic IPs

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Peering connections

Route table rtb-06a5253952125f1de | my-route-table was created successfully.

rtb-06a5253952125f1de / my-route-table

Details

Route table ID
rtb-06a5253952125f1de

VPC
vpc-08bce7874704a78b2 | demo-custom-vpc

Main
No

Owner ID
736296213120

Explicit subnet associations
-

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Filter routes

Both

Edit routes

Destination	Target	Status	Propagated	Route Origin
10.0.0.0/16	local	Active	No	CreateRouteTable

edit routes

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AWS Console Home > Route tables > rtb-06a5253952125f1de > Edit routes

Edit routes

Destination

10.0.0.0/16

Q 0.0.0.0/0

Add route

Target

local

Q local

Internet Gateway

Q igw-0ca2260558c1e1d4b

Status

Active

-

Propagated

No

No

Route Origin

CreateRouteTable

CreateRoute

Remove

Cancel

Preview

Save changes

aws

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Asia Pacific (Mumbai)

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VPC > Route tables > rtb-06a5253952125f1de > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

1

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	private-subnet	subnet-0d6c94f6f5ad36ff7	10.0.2.0/24	-	Main (rtb-0e56055e49aa4ffb3)
<input checked="" type="checkbox"/>	subnet-public	subnet-035f9dbfaa43ed9f4	10.0.1.0/24	-	Main (rtb-0e56055e49aa4ffb3)

Selected subnets

subnet-035f9dbfaa43ed9f4 / subnet-public

Cancel

Save associations

i created EC2 instance-MyLinuxInstance

aws

Account ID: 7362-9621-3120 PRABU S R

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EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance `i-0777d6e73cf7d7b00`

► **Launch log**

Next Steps

What would you like to do next with this instance, for example "create alarm" or "create backup"

The screenshot displays the AWS Management Console interface. At the top, there's a navigation bar with the AWS logo, account ID (7362-9621-3120), and region (Asia Pacific (Mumbai)). Below this is a breadcrumb trail: EC2 > Instances > i-0777d6e73cf7d7b00. The left-hand navigation pane shows categories like Dashboard, AWS Global View, Events, Instances (expanded), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, and AMIs. The main content area is titled "Instance summary for i-0777d6e73cf7d7b00 (MyLinuxInstance)". It includes action buttons: Connect, Instance state (dropdown), and Actions (dropdown). A status message indicates it was updated less than a minute ago. The instance details are organized into three columns:

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0777d6e73cf7d7b00	15.206.158.109 open address	10.0.1.184
IPv6 address	Instance state	Public DNS
-	✔ Running	-
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-10-0-1-184.ap-south-1.compute.internal	ip-10-0-1-184.ap-south-1.compute.internal	-
Answer private resource DNS name	Instance type	AWS Compute Optimizer finding
-	t3.micro	Opt-in to AWS Compute Optimizer for recommendations.
Auto-assigned IP address	VPC ID	Learn more
15.206.158.109 [Public IP]	vpc-08bce7874704a78b2	

At the bottom of the console, there's a CloudShell prompt.

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EC2 > Instances > i-0777d6e73cf7d7b00 > Connect to instance

Connect to instance

Connect Info

Connect to an instance using the browser-based client.

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

Instance ID

i-0777d6e73cf7d7b00 (MyLinuxInstance)

Connection type

☒ Connect using a Public IP
Connect using a public IPv4 or IPv6 address

☐ Connect using a Private IP
Connect using a private IP address and a VPC endpoint

☒ Public IPv4 address
15.206.158.109

☐ IPv6 address
-

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

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.

[illegible]