

VPC-Assignment

Step-1

- Creat VPC: Go to VPC→creat VPC

VPC > Your VPCs > Create VPC

Create VPC [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

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

☒ VPC only ☐ VPC and more

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

test_VPC

IPv4 CIDR block [Info](#)

☒ IPv4 CIDR manual input ☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

10.180.0.0/16

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

IPv6 CIDR block [Info](#)

☒ No IPv6 CIDR block

- Created VPC (test_VPC)

aws Services Search [Alt+S]

EC2 S3 IAM

VPC dashboard X

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs

Subnets

You successfully created vpc-07b262dbc631a0510 / test_VPC

Your VPCs (2) [Info](#)

Search

Actions Create VPC

	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	-	vpc-0b83f6ee2675e959f	Available	172.31.0.0/16	-
<input type="checkbox"/>	test_VPC	vpc-07b262dbc631a0510	Available	10.180.0.0/16	-

Step2:

Internet Gateway: IGW → Creat IGW (test_IGW)

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.

test_IGW

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="test_IGW"/>	<input type="button" value="Remove"/>

You can add 49 more tags.

➤ Then attached to VPC

IGW → action → attach to VPC

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EC2 S3 IAM

VPC dashboard ×

EC2 Global View

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs

Subnets

VPC > Internet gateways > igw-045b475e9b3e5886a

igw-045b475e9b3e5886a / test_IGW

Details [Info](#)

Internet gateway ID	State	VPC ID	Owner
igw-045b475e9b3e5886a	Detached	-	1780788747

Actions

- Attach to VPC**
- Detach from VPC
- Manage tags
- Delete

VPC > Internet gateways > Attach to VPC (igw-045b475e9b3e5886a)

Attach to VPC (igw-045b475e9b3e5886a) [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.

► AWS Command Line Interface command

Cancel **Attach internet gateway**

Internet gateway igw-045b475e9b3e5886a successfully attached to vpc-07b262dbc631a0510

VPC > Internet gateways > igw-045b475e9b3e5886a

igw-045b475e9b3e5886a / test_IGW [Actions](#)

Details [Info](#)

Internet gateway ID	State	VPC ID	Owner
igw-045b475e9b3e5886a	Attached	vpc-07b262dbc631a0510 test_VPC	178078874758

Step3:

Creat Subnet:

VPC→Subnet→creat subnet for the particular VPC

VPC > Subnets > Create subnet

Create subnet [Info](#)

VPC

VPC ID
Create subnets in this VPC.

Associated VPC CIDRs

IPv4 CIDRs
10.180.0.0/16

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

Subnet 1 of 1

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

Creat four subnets→Two public subnets and Two privet subnets

Subnet 1 of 1

Subnet name

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

Public_Sub_1

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.

No preference

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.

10.180.0.0/16

IPv4 subnet CIDR block

10.180.0.0/24

256 IPs

< > ^ v

▼ Tags - optional

Subnet 2 of 2

Subnet name

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

Public_Sub_2

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.

No preference

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.

10.180.0.0/16

IPv4 subnet CIDR block

10.180.1.0/24

256 IPs

< > ^ v

▼ Tags - optional

Subnet 3 of 4

Subnet name

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

Privet_Sub_1

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.

No preference

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.

10.180.0.0/16

IPv4 subnet CIDR block

10.180.2.0/24

256 IPs

< > ^ v

▼ Tags - optional

Subnet 4 of 4

Subnet name

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

Privet_Sub_2

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.

No preference

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.

10.180.0.0/16

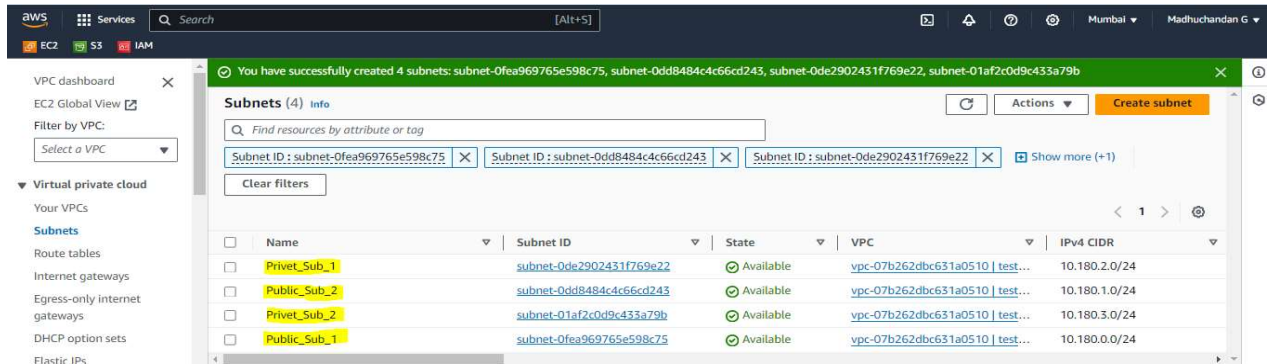
IPv4 subnet CIDR block

10.180.3.0/24

256 IPs

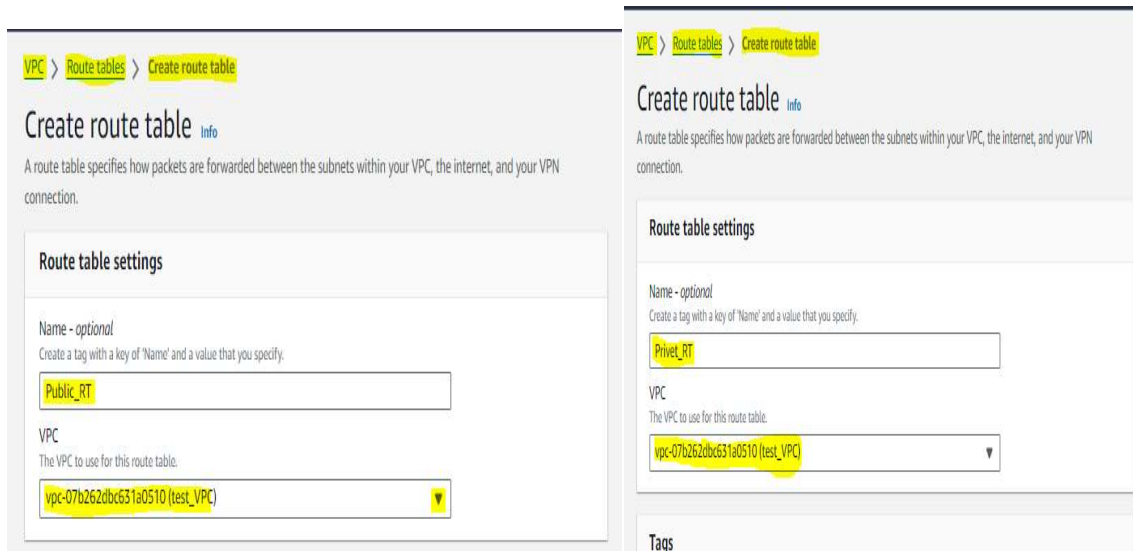
< > ^ v

▼ Tags - optional



Step 4: Rout Table VPC→RT→Creat RT

Creat two rout tables one for public and another for privet to access.



- Then in RT→Subnet association→Edit Association→select public subnet and privet subnet individually

[Alt+S]

VPC > Route tables > rtb-0afb9a67ac48a81bc

rtb-0afb9a67ac48a81bc / Public_RT

Actions

Details info

Route table ID rtb-0afb9a67ac48a81bc	Main No	Explicit subnet associations -	Edge associations -
VPC vpc-07b262dbc631a0510 test_VPC	Owner ID 178078874758		

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

Explicit subnet associations (0) [Edit subnet associations](#)

Find subnet association

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
No subnet associations You do not have any subnet associations.			

- Select only Public subnets and save it.

aws Services Search [Alt+S]

EC2 S3 IAM

VPC > Route tables > rtb-0afb9a67ac48a81bc > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	Privet_Sub_1	subnet-0de2902431f769e22	10.180.2.0/24	-	Main (rtb-0febedf415d1e31cb)
<input checked="" type="checkbox"/>	Public_Sub_2	subnet-0dd8484c4c66cd243	10.180.1.0/24	-	Main (rtb-0febedf415d1e31cb)
<input type="checkbox"/>	Privet_Sub_2	subnet-01af2c0d9c433a79b	10.180.3.0/24	-	Main (rtb-0febedf415d1e31cb)
<input checked="" type="checkbox"/>	Public_Sub_1	subnet-0fea969765e598c75	10.180.0.0/24	-	Main (rtb-0febedf415d1e31cb)

Selected subnets

subnet-0dd8484c4c66cd243 / Public_Sub_2 X subnet-0fea969765e598c75 / Public_Sub_1 X

Cancel [Save associations](#)

- Similarly Select only Privet subnets and save it.

aws Services Search [Alt+S]

EC2 S3 IAM

VPC > Route tables > rtb-0b35b330cca123a16 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/4)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	Privet_Sub_1	subnet-0de2902431f769e22	10.180.2.0/24	-	rtb-0b35b330cca123a16 / Privet_RT
<input type="checkbox"/>	Public_Sub_2	subnet-0dd8484c4c66cd243	10.180.1.0/24	-	rtb-0afb9a67ac48a81bc / Public_RT
<input checked="" type="checkbox"/>	Privet_Sub_2	subnet-01af2c0d9c433a79b	10.180.3.0/24	-	rtb-0b35b330cca123a16 / Privet_RT
<input type="checkbox"/>	Public_Sub_1	subnet-0fea969765e598c75	10.180.0.0/24	-	rtb-0afb9a67ac48a81bc / Public_RT

Selected subnets

subnet-01af2c0d9c433a79b / Privet_Sub_2 X subnet-0de2902431f769e22 / Privet_Sub_1 X

Cancel [Save associations](#)

- To access the internet select the public RT→Routes→Edit Routes→select IGW with respect VPC and save.

VPC > Route tables > rtb-0afb9a67ac48a81bc

rtb-0afb9a67ac48a81bc / Public_RT

Actions

Details

Info

Route table ID
rtb-0afb9a67ac48a81bc

Main
No

Explicit subnet associations
2 subnets

Edge associations
-

VPC
vpc-07b262dbc631a0510 | test_VPC

Owner ID
178078874758

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Both

Edit routes

Filter routes

< 1 >

⚙

Destination	Target	Status	Propagated
10.180.0.0/16	local	Active	No

VPC > Route tables > rtb-0afb9a67ac48a81bc > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.180.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	-	No
	igw-045b475e9b3e5886a		

Add route

Remove

Cancel

Preview

Save changes

- Then we can launch Instance with respect to VPC, subnet

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-07b262dbc631a0510 (test_VPC)
10.180.0.0/16

▼

↻

Subnet [Info](#)

subnet-0fea969765e598c75
VPC: vpc-07b262dbc631a0510 Owner: 178078874758
Availability Zone: ap-south-1b IP addresses available: 251 CIDR: 10.180.0.0/24

Public_Sub_1

▼

↻ [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