

Sesión 8 - Conectividad

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Paso 1. Crear la 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.

demo-vpc

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

IPv4 CIDR
10.0.0.0/16
CIDR block size must be between /16 and /28.

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

VPC encryption control (\$) [Info](#)
Monitor mode provides visibility into encryption status without blocking traffic. Enforce mode prevents unencrypted traffic. [Additional charges apply](#)

☒ None ☐ Monitor mode
See which resources in your VPC are unencrypted but allow the creation of unencrypted resources.

Paso 2. Crear subnet pública

VPC

VPC ID
Create subnets in this VPC.

vpc-0f96c6d6771b20358 (demo-vpc)

Associated VPC CIDRs

IPv4 CIDRs
10.0.0.0/16

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.

public-subnet-AngelGonzalez

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.

10.0.0.0/16

IPv4 subnet CIDR block

10.0.1.0/24

256 IPs

▼ Tags - optional

Key

Q Name



Value - optional

Q public-subnet-AngelGonzalez



Remove

Add new tag

You can add 49 more tags.

Remove

Paso 3. Crear un internet Gateway y hacerle attach a la VPC

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.

demo-igw-angelgonzalez

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

Q Name



Value - optional

Q demo-igw-angelgonzalez



Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

Attach to VPC (igw-096039f9b77e4279a) [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.

Q vpc-0f96c6d6771b20358 X

► AWS Command Line Interface command

[Cancel](#)

[Attach internet gateway](#)

✓ Internet gateway igw-096039f9b77e4279a successfully attached to vpc-0f96c6d6771b20358 X

igw-096039f9b77e4279a / demo-igw-angelgonzalez

[Actions](#) ▼

Details [Info](#)

Internet gateway ID

igw-096039f9b77e4279a

State

✓ Attached

VPC ID

[vpc-0f96c6d6771b20358](#) | [demo-vpc](#)

Owner

654654478122

Tags (1)

[Manage tags](#)

Q Search tags

< 1 > ⚙

Key

Value

Name demo-igw-angelgonzalez

Actividad 4. Configurar 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.

public-rt-angelgonzalez

VPC

The VPC to use for this route table.

vpc-0f96c6d6771b20358 (demo-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

Q Name X

Value - optional

Q public-rt-angelgonzalez X

[Remove](#)

[Add new tag](#)

You can add 49 more tags.

[Cancel](#)

[Create route table](#)

Edit routes

Route 1
Destination
10.0.0.0/16

Target
local

Status
Active

Propagated
No

Route Origin
CreateRouteTable

Route 2
Destination
0.0.0.0/0

Target
Internet Gateway

Status
-

Propagated
No

Route Origin
CreateRoute

Remove

Add route

Cancel Preview Save changes

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/1)

Filter subnet associations

<input checked="" type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Ro
<input checked="" type="checkbox"/>	public-subnet-AngelGonzalez	subnet-053c8fd04b17f...	10.0.1.0/24	-	Ma

Selected subnets

subnet-053c8fd04b17fa601 / public-subnet-AngelGonzalez

Cancel Save associations

Paso 5. Subnets privadas

You have successfully created 1 subnet: subnet-0616cd0257921e157

Subnets (1)

Info

Last updated less than a minute ago

Actions

Create subnet

Find subnets by attribute or tag

Subnet ID : subnet-0616cd0257921e157

X

Clear filters

<

1

>

Name

Subnet ID

State

pvs-AngelGonzalez-DBS

[subnet-0616cd0257921e157](#)

Available

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.

private-rt-dbs

VPC

The VPC to use for this route table.

vpc-0f96c6d6771b20358 (demo-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 private-rt-dbs

X

Remove

Add new tag

You can add 49 more tags.

Cancel

Create route table

✓ You have successfully updated subnet associations for rtb-076a294da08ca8512 / private-rt-dbs.

rtb-076a294da08ca8512 / private-rt-dbs

Actions

Details

Info

Route table ID

rtb-076a294da08ca8512

VPC

vpc-0f96c6d6771b20358 | demo-vpc

Main

No

Owner ID

654654478122

Explicit subnet associations

subnet-0616cd0257921e157 / pvs-AngelGonzalez-DBS

Edge associations

–

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (1)

Edit subnet associations

Find subnet association

< 1 >

Find subnet association

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
pvs-AngelGonzalez-DBS	subnet-0616cd0257...	10.0.2.0/24	–

Subnets without explicit associations (0)

Edit subnet associations

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

Find subnet association

< 1 >

Find subnet association

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
------	-----------	-----------	-----------

No subnets without explicit associations

All your subnets are associated with a route table.

Paso 6. Crear 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](#)

Name cannot be edited after creation.

Description [Info](#)

VPC [Info](#)

Inbound rules [Info](#)

This security group has no inbound rules.

[Add rule](#)

Outbound rules [Info](#)

Outbound rule 1

[Delete](#)

Type [Info](#)

Protocol [Info](#)

Port range [Info](#)

Destination type [Info](#)

Destination [Info](#)

Description - optional [Info](#)

Outbound rule 2

[Delete](#)

Type [Info](#)

Protocol [Info](#)

Port range [Info](#)

Destination type [Info](#)

Destination [Info](#)

Description - optional [Info](#)

[Add rule](#)

Paso 7. lanzar EC2

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0f96c6d6771b20358 (demo-vpc)
10.0.0.0/16



Subnet [Info](#)

subnet-053c8fd04b17fa601 public-subnet-AngelGonzalez
VPC: vpc-0f96c6d6771b20358 Owner: 654654478122
Availability Zone: us-east-1c (use1-az4) Zone type: Availability Zone
IP addresses available: 251 CIDR: 10.0.1.0/24



[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



[Compare security group rules](#)

ebs-SG-test-angelgonzalez sg-023deef5d4788232e ✕
VPC: vpc-00f479057476a2db8

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

▼ Advanced network configuration

Instance summary for i-011cf67f2039ef1bf (demo-ec2-angelGonzalez) [Info](#)

[Connect](#)[Instance state](#) ▼[Actions](#) ▼

Updated less than a minute ago

Instance ID

i-011cf67f2039ef1bf

IPv6 address

–

Hostname type

IP name: ip-10-0-1-38.ec2.internal

Answer private resource DNS name

–

Auto-assigned IP address

54.172.238.185 [Public IP]

IAM role

–

IMDSv2

Required

Public IPv4 address



54.172.238.185 | [open address](#)

Instance state

Running

Private IP DNS name (IPv4 only)



ip-10-0-1-38.ec2.internal

Instance type

t3.micro

VPC ID



vpc-0f96c6d6771b20358
(demo-vpc)

Subnet ID



subnet-053c8fd04b17fa601
(public-subnet-AngelGonzalez)

Instance ARN



arn:aws:ec2:us-east-1:654654478122:instance/i-011cf67f2039ef1bf

Private IPv4 addresses



10.0.1.38

Public DNS

–

Elastic IP addresses

–

AWS Compute Optimizer finding



User: arn:aws:iam::65465447812:user/students/anggonpad@gmail.com is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action

[Retry](#)

Auto Scaling Group name

–

Managed

false

```
[ec2-user@ip-10-0-1-38 html]$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Mon 2026-02-09 00:20:23 UTC; 2min 1s ago
     Docs: man:httpd.service(8)
   Main PID: 25881 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
     Tasks: 177 (limit: 1067)
    Memory: 13.4M
       CPU: 160ms
    CGroup: /system.slice/httpd.service
            └─25881 /usr/sbin/httpd -DFOREGROUND
              └─25882 /usr/sbin/httpd -DFOREGROUND
                └─25883 /usr/sbin/httpd -DFOREGROUND
                  └─25884 /usr/sbin/httpd -DFOREGROUND
                    └─25936 /usr/sbin/httpd -DFOREGROUND

Feb 09 00:20:23 ip-10-0-1-38.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Feb 09 00:20:23 ip-10-0-1-38.ec2.internal httpd[25881]: Server configured, listening on: port 80
Feb 09 00:20:23 ip-10-0-1-38.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
[ec2-user@ip-10-0-1-38 html]$ 
[0] 0:sudo*
```

