

# 1. Creación de 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** [Info](#)  
Creates a tag with a key of 'Name' and a value that you specify.

demo-vpc-AlejandroMV

**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. [Additional charges apply](#)

☒ None ☐ Monitor mode ☐ Enforce mode

Tocó crearla en Oregon, dado que el límite es de 5 por región

**VPC dashboard** [Filter by VPC](#)

**Virtual private cloud**

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- NAT gateways
- Peering connections
- Route servers

**Security**

- Network ACLs
- Security groups

**PrivateLink and Lattice**

- Getting started
- Endpoints
- Endpoint services
- Service networks
- Lattice services
- Resource configurations

**VPC-038344d3d66866f1b / demo-vpc-AlejandroMV** [Actions](#)

**Details** [Info](#)

**VPC ID**  
vpc-038344d3d66866f1b

**DNS resolution**  
Enabled

**Main network ACL**  
acl-075b779311285816d2

**IPv6 CIDR (Network border group)**  
-

**Encryption control ID**  
-

**State**  
Available

**Tenancy**  
default

**Default VPC**  
No

**Network Address Usage metrics**  
Disabled

**Encryption control mode**  
-

**Block Public Access**  
Off

**DHCP option set**  
dopt-012b5e64013d9e4f4

**IPv4 CIDR**  
10.0.0.0/16

**Route 53 Resolver DNS Firewall rule groups**  
Failed to load rule groups

**DNS hostnames**  
Disabled

**Main route table**  
rtb-0416f29dbd200229f

**IPv6 pool**  
-

**Owner ID**  
654654478122

**Resource map** [Info](#)

**VPC**  
Your AWS virtual network  
demo-vpc-AlejandroMV

**Subnets (0)**  
Subnets within this VPC

**Route tables (1)**  
Route network traffic to resources  
rtb-0416f29dbd200229f

**Network Connections (0)**  
Connections to other networks

# 2. Creación de la subnet pública

AWS Management Console screenshot showing the details of a subnet (subnet-019dc4a8891de5bc9) in the VPC dashboard. The subnet is associated with the VPC vpc-038344d3d66866f1b (demo-ypc-AlejandroMV). The subnet is in the 'Available' state and has a CIDR of 10.0.1.0/24. The subnet is associated with the route table rtb-0416f29bd200229f. The subnet is associated with the network ACL usw2-acl1 (us-west-2a).

Subnet details:

- Subnet ID: subnet-019dc4a8891de5bc9
- Subnet ARN: arn:aws:ec2:us-west-2:654654478122:subnet/subnet-019dc4a8891de5bc9
- IPV4 CIDR: 10.0.1.0/24
- Availability Zone: usw2-acl1 (us-west-2a)
- Network ACL: usw2-acl1 (us-west-2a)
- Auto-assign customer-owned IPv4 address: No
- IPV6 CIDR reservations: No
- Resource name DNS AAAA record: Disabled

Flow logs:

No flow logs found

### 3. Creación internet gateway

AWS Management Console screenshot showing the 'Create internet gateway' wizard. The 'Internet gateway settings' section shows the name tag 'demo-igw-AlejandroMV'. The 'Tags - optional' section shows a key 'Name' with a value 'demo-igw-AlejandroMV'.

Create internet gateway settings

Name tag

demo-igw-AlejandroMV

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: Name, Value: demo-igw-AlejandroMV

Buttons: Cancel, Create internet gateway

La integramos a la VPC

AWS Management Console screenshot showing the 'Attach to VPC' wizard. The 'VPC' section shows the VPC ID vpc-038344d3d66866f1b (demo-ypc-AlejandroMV) selected from the 'Available VPCs' list.

Attach to VPC (igw-02bd7b41d239864ce)

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.

vpc-038344d3d66866f1b

Buttons: Cancel, Attach internet gateway

AWS Management Console screenshot showing the 'Internet gateways' list. The list shows three internet gateways: igw-0c10e8ad2cabb2694 (Attached to vpc-0152831d80ee97aa5), igw-02bd7b41d239864ce (Attached to vpc-038344d3d66866f1b | demo-ypc-AlejandroMV), and igw-09058524e85ba5efb (Detached from vpc-038344d3d66866f1b | demo-ypc-AlejandroMV).

Internet gateways (3)

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-0c10e8ad2cabb2694	Attached	vpc-0152831d80ee97aa5	654654478122
demo-igw-AlejandroMV	igw-02bd7b41d239864ce	Attached	vpc-038344d3d66866f1b   demo-ypc-AlejandroMV	654654478122
demo-igw-duvan983	igw-09058524e85ba5efb	Detached	-	654654478122

## 4. Creamos y configuramos route table

The screenshot displays the AWS Management Console interface for creating and configuring a route table. The top navigation bar shows the AWS logo, a search bar, and the current region (United States (Oregon)). The breadcrumb trail indicates the path: VPC > Route tables > Create route table.

**Create route table**

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-AlejandroMV

**VPC**  
The VPC to use for this route table.  
vpc-038344d3d66866f1b (demo-vpc-AlejandroMV)

**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-AlejandroMV 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**  
Q 0.0.0.0/0 X

**Target**  
Internet Gateway

**Status**  
-

**Propagated**  
No

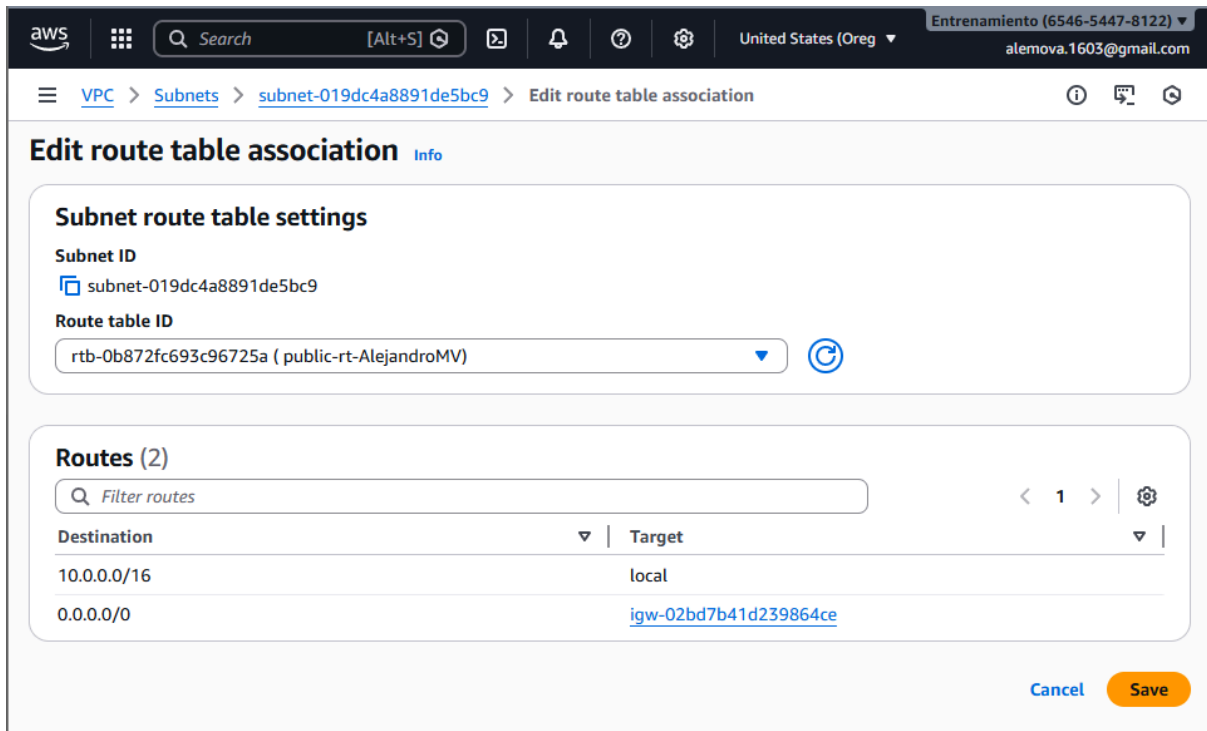
**Route Origin**  
CreateRoute

[Remove](#)

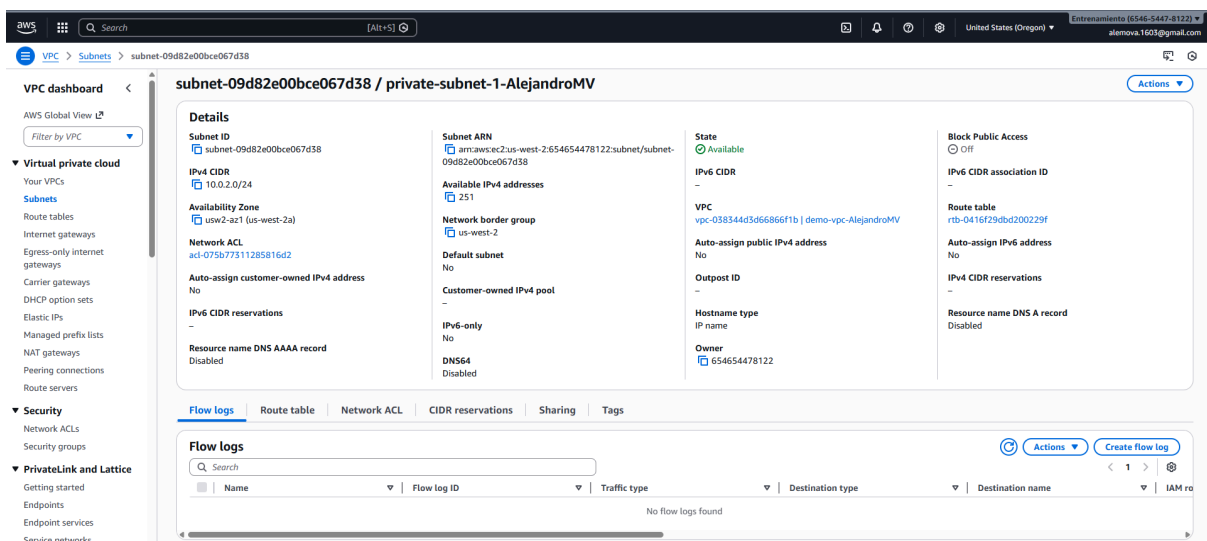
[Add route](#)

[Cancel](#) [Preview](#) [Save changes](#)

Agregamos la tabla de enrutamiento a la subred pública



## 5. Creamos la subred privada



## 6. Creamos la route table para la red privada

Esta no tiene acceso a internet a través de la Internet Gateway

Route tables (1/11) Info

Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID
public-rt-saja	rtb-0a4828d7a01799840	subnet-015d9e517cc110...	-	No	vpc-0c964ff5c0601d4ad	654654478122
-	rtb-08d2e524f94c95a02	-	-	Yes	vpc-00d44984c89389e7d   vpc...	654654478122
public-rt-AlejandroMV	rtb-0b872fc693c96725a	subnet-019dc4a8891de5...	-	No	vpc-038344d3d66866f1b   dem...	654654478122
-	rtb-0f609cb1d384e33bd	-	-	Yes	vpc-0152831d80ee97aa5	654654478122
-	rtb-0c3b2b737946af98e	-	-	Yes	vpc-0c964ff5c0601d4ad	654654478122
-	rtb-0416f29dbd200229f	-	-	Yes	vpc-038344d3d66866f1b   dem...	654654478122
public-rt-duvan983	rtb-0ea940ffef196fce8	subnet-0c93da1bcee2a3...	-	No	vpc-05896b690f8da72b2   dem...	654654478122
public-rt-santiago-jaramillo	rtb-033e7659e05d7611c	-	-	No	vpc-00d44984c89389e7d   vpc...	654654478122
-	rtb-08dee3ca126ab790	-	-	Yes	vpc-05896b690f8da72b2   dem...	654654478122
private-rt-Alejandro MV	rtb-0ca2f591e46cf6d16	-	-	No	vpc-038344d3d66866f1b   dem...	654654478122
private-rt-duvan983	rtb-0489ba3a346ebc273	subnet-00638574e97502...	-	No	vpc-05896b690f8da72b2   dem...	654654478122

Asociamos la tabla a la subred privada

Edit route table association Info

Subnet route table settings

Subnet ID  
subnet-09d82e00bce067d38

Route table ID  
rtb-0ca2f591e46cf6d16 (private-rt-Alejandro MV)

Routes (1)

Destination	Target
10.0.0/16	local

## 7. Creamos un grupo de seguridad

sg-0e583c9588bc04ba6 - demo-sg-AlejandroMV

Details

Security group name  
demo-sg-AlejandroMV

Security group ID  
sg-0e583c9588bc04ba6

Description  
Grupo de seguridad laboratorio VPC

VPC ID  
vpc-038344d3d66866f1b

Owner  
654654478122

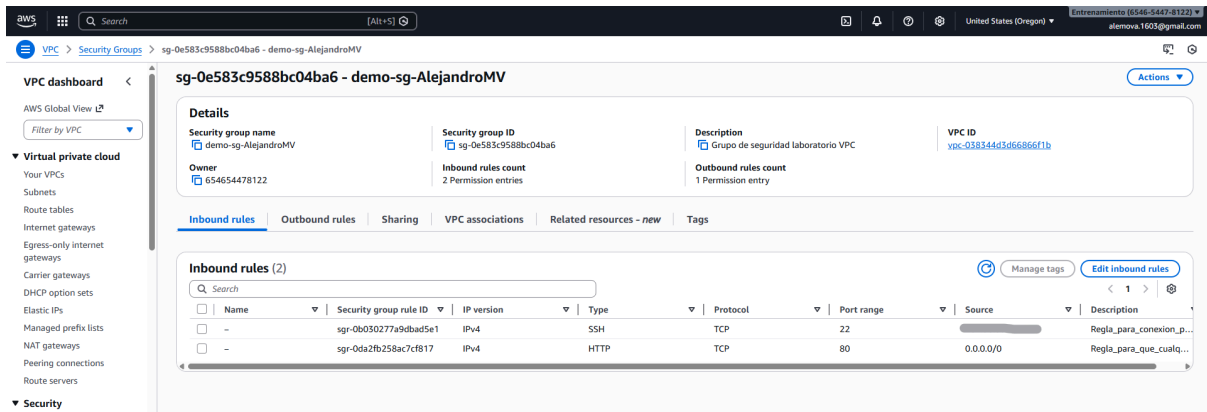
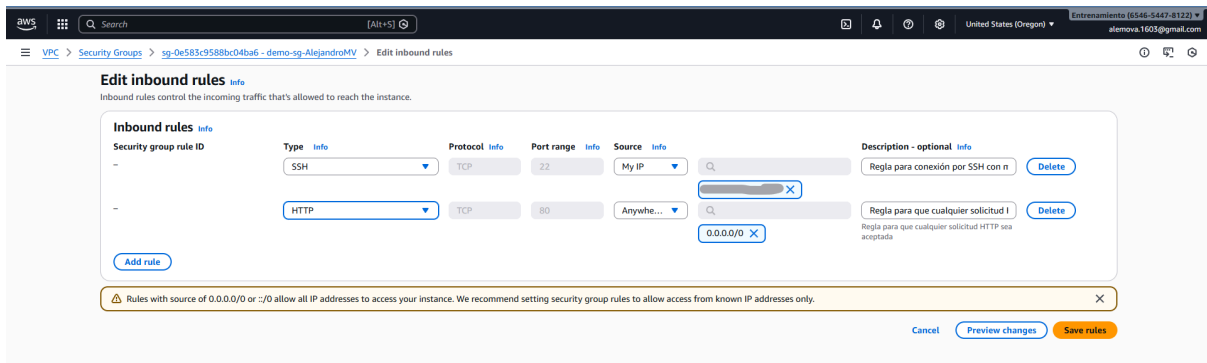
Inbound rules count  
0 Permission entries

Outbound rules count  
1 Permission entry

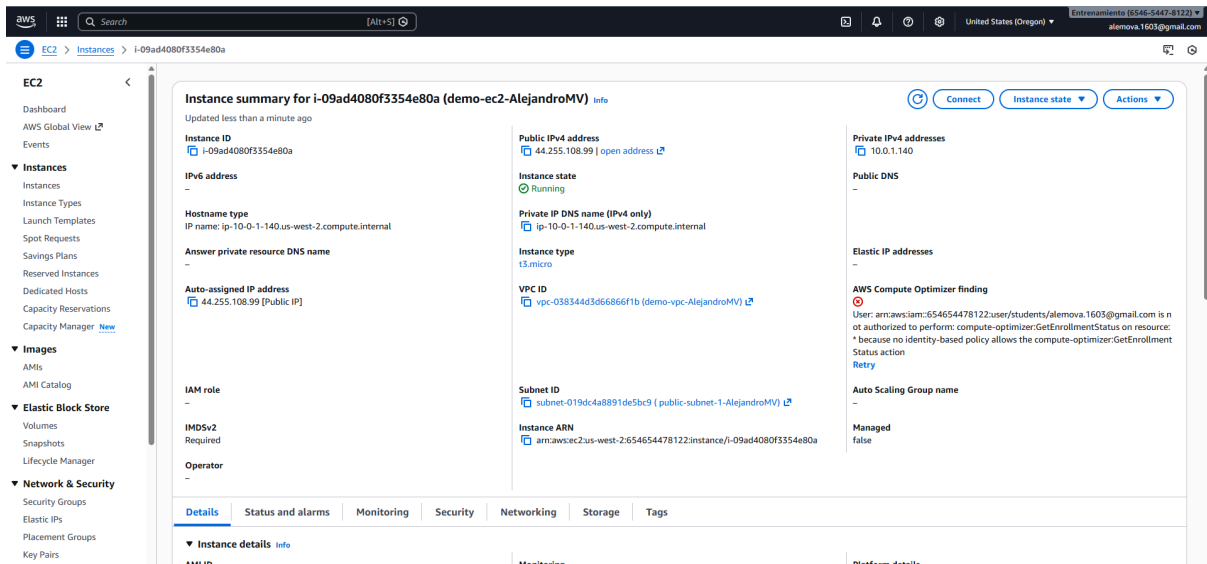
Inbound rules

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source	Description
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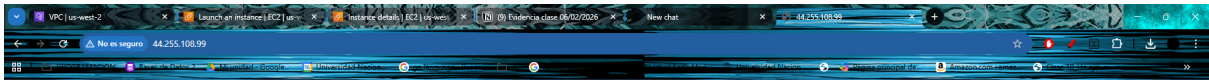
Le añadimos las reglas de entrada y salida al grupo de seguridad



## 8. Lanzamos una EC2 con user data (script)



Vemos que funciona correctamente



## Demo AWS Networking - AlejandroMV

VPC, Subnet, SG, Route 53 y CloudFront

Servidor: ip-10-0-1-140.us-west-2.compute.internal

## 9. Crear servidor DNS (route 53)

No se pudo hacer

## 10. Crear CloudFront

No se pudo hacer

## 11.

Borramos todos los recursos

