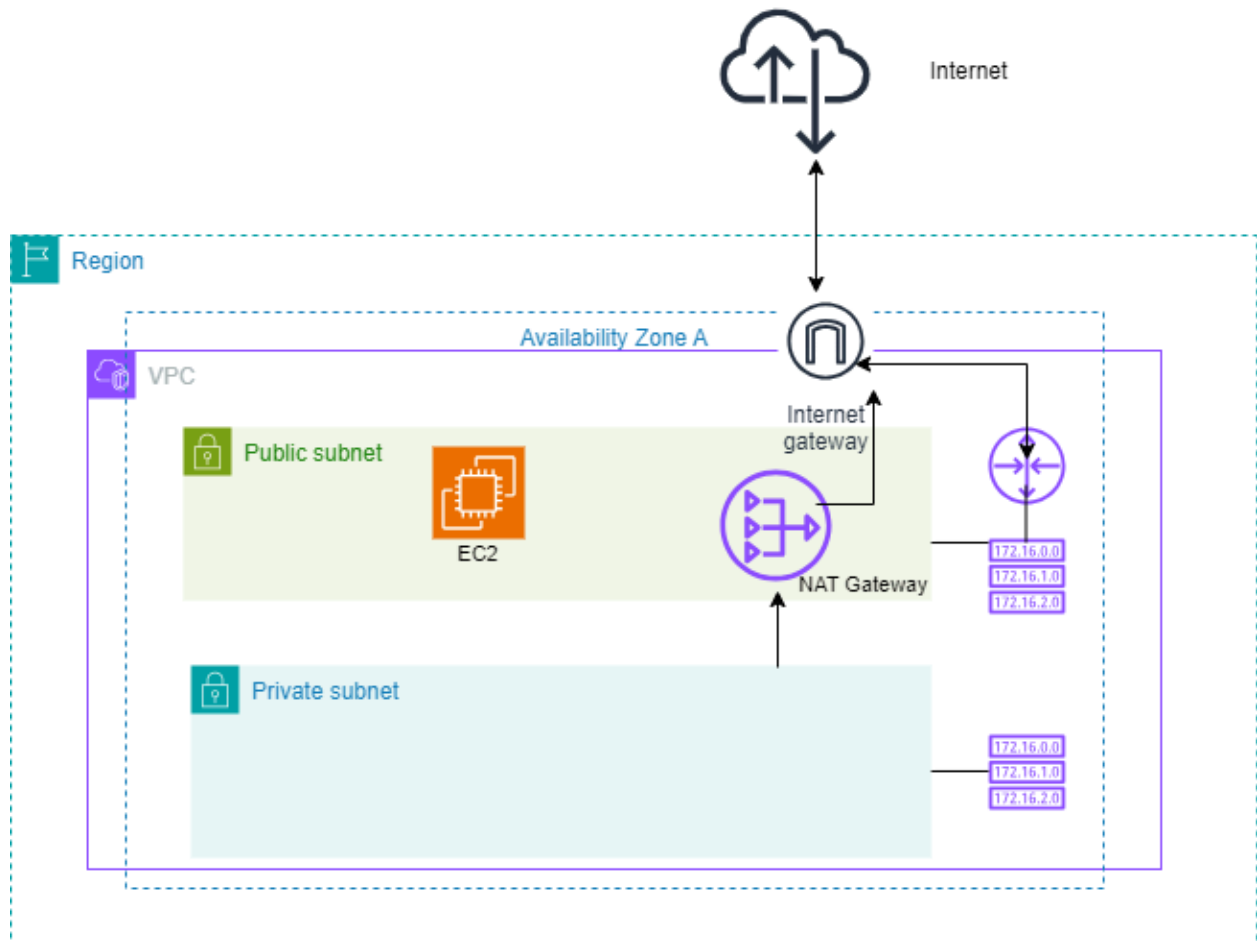
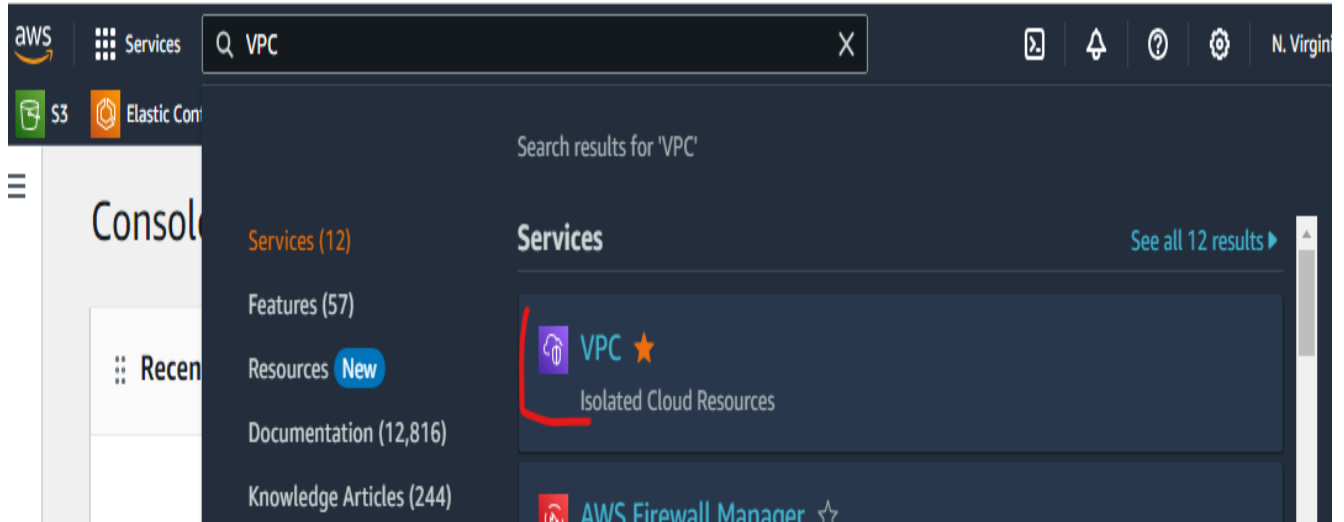


Lab 2: création d'un réseau privé virtuel cloud VPC et 2 sous réseaux public, privé, IGW et NAT Gateway

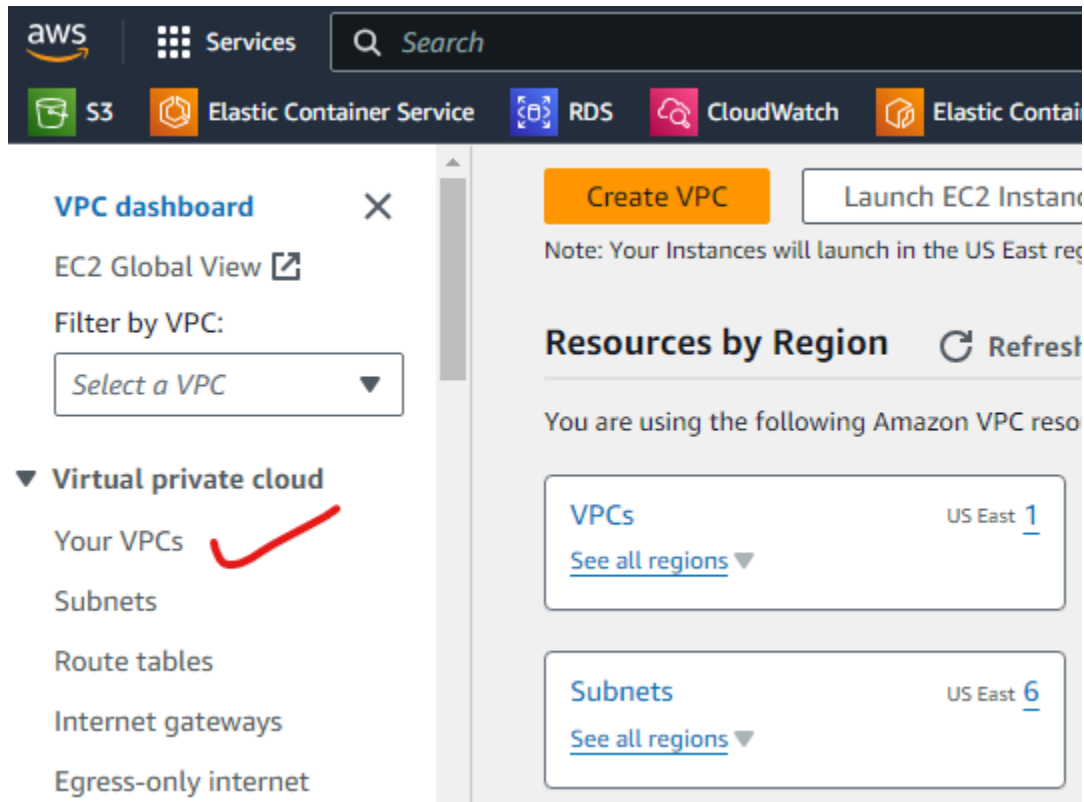
Architecture du lab



- Connectez vous à votre console de gestion AWS, au niveau de la barre de recherche, tapez VPC



- Une fois sur le tableau de bord de VPC, choisir l'option “vos VPC ou your VPC”



Cliquer le bouton “create VPC ou Créer VPC”

aws

Services

Search

[Alt+S]

S3

Elastic Container Service

RDS

CloudWatch

Elastic Container Registry

VPC

VPC dashboard

EC2 Global View

Filter by VPC:

Select a VPC

Your VPCs (1)

Info

Search

	Name	VPC ID
<input type="checkbox"/>	-	vpc-0005a379417

aws

Services

Search

[Alt+S]

S3

Elastic Container Service

RDS

CloudWatch

Elastic Container Registry

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.

VPC1

IPv4 CIDR block

Info

☒ IPv4 CIDR manual input

☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR

10.0.0.0/16



Services

Search

[Alt+S]



S3



Elastic Container Service



RDS



CloudWatch



Elastic Container Registry



VPC

Name tag - *optional*

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

IPv4 CIDR block [Info](#)

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

IPv4 CIDR

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](#)

Tenancy [Info](#)

Default

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 your resources or track your AWS costs.

Key

Q Name



Value - optional

Q VPC1



Remove tag

Add tag

You can add 49 more tags

Cancel



Services

Q Search

[Alt+S]



S3



Elastic Container Service



RDS



CloudWatch



Elastic Container Registry



VPC

VPC dashboard



EC2 Global View

Filter by VPC:

Select a VPC

▼ Virtual private cloud

Your VPCs

Your VPCs (2) [Info](#)

Q Search



Name



VPC ID



-

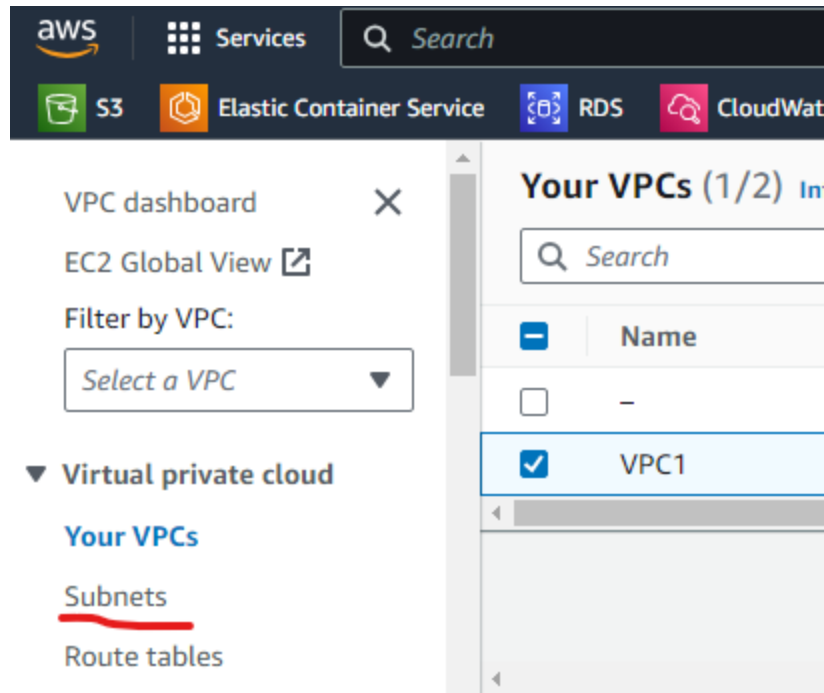
[vpc-0005a379417](#)



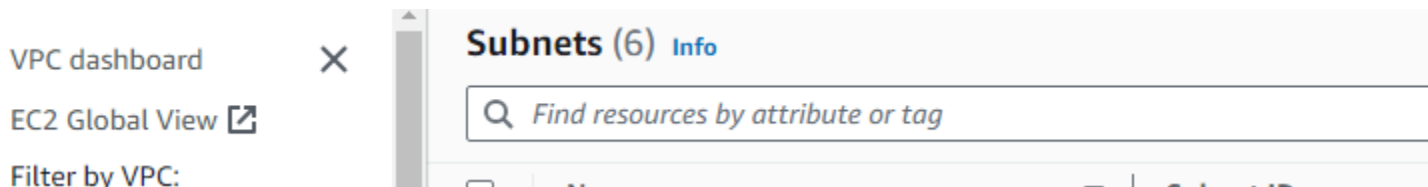
VPC1

[vpc-003495e248](#)


- Création des sous réseaux: public et privé









- Ensuite, cliquer sur “create subnet ou créer un sous réseau”



Sélectionnez le VPC que vous venez de créer

 Services [Alt+S]

 S3  Elastic Container Service  RDS  CloudWatch  Elastic Container Registry  VPC

VPC > Subnets > Create subnet

Create subnet [Info](#)

VPC

VPC ID
Create subnets in this VPC.

vpc-003495e2481913e22 (VPC1) ▼

Associated VPC CIDRs

IPv4 CIDRs
10.0.0.0/16

- Configuration des paramètres de sous réseau

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.

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

IPv4 subnet CIDR block

10.0.0.0/24  256 IPs

< > ^ v

▼ Tags - *optional*

Key

Value - *optional*

🔍 Name ✕

🔍 sous réseau public ✕

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Creat

- Création du sous réseau privé

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.

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

aws

Services

Search [Alt+S]

S3

Elastic Container Service

RDS

CloudWatch

Elastic Container Registry

VPC

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

< > ^ v

Tags - optional

Key

Value - optional

Q Name X

Q sous réseau privé X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Cr

Vous venez de créer un VPC et ses sous réseaux public et privé

Subnets (8) [Info](#)

Find resources by attribute or tag

<input type="checkbox"/>	Name	Subnet ID	State
<input type="checkbox"/>	-	subnet-01b9f0cc72d999971	Available
<input type="checkbox"/>	-	subnet-0b6f96c4092a9e93c	Available
<input checked="" type="checkbox"/>	sous réseau public	subnet-0b15704736088728a	Available
<input checked="" type="checkbox"/>	sous réseau privé	subnet-09bb1e88fc0f40f77	Available

- **Création des tables de routage public et privé**
 - **Table de routage public**

Route table settings

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

VPC
The VPC to use for this route table.

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*

You can add 49 more tags.

- **Création de la table de routage privé**

Route table settings

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

VPC
The VPC to use for this route table.

vpc-0f0327681412e8b74 (MyVPC)

▼

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*

X

X

Remove

Add new tag

You can add 49 more tags.

Cancel

Create route table

- **Association des routes aux sous réseaux respectifs**

<input checked="" type="checkbox"/>	my_public_rt	rtb-0c6d2830c70fc31d4	-	-	No
<input type="checkbox"/>	-	rtb-0d7751d6d5477e7a7	-	-	Yes
<input type="checkbox"/>	my_private_rt	rtb-00d9147e18df01aff	-	-	No

rtb-0c6d2830c70fc31d4 / my_public_rt

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

Explicit subnet associations (0)

Edit subnet associations

< 1 >

⚙

Name

Subnet ID

IDv4 CIDR

IDv6 CIDR

VPC > Route tables > rtb-0c6d2830c70fc31d4 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	my_public_subnet	subnet-0078961e383a24ddc	10.0.0.0/24	-	Main (rtb-0d7751d6d5477e7a7)
<input type="checkbox"/>	my_private_subnet	subnet-03a8bccfde5b25263	10.0.1.0/24	-	Main (rtb-0d7751d6d5477e7a7)

Selected subnets

subnet-0078961e383a24ddc / my_public_subnet X

Cancel Save associations

my_private_rt rtb-00d9147e18df01aff - - No

rtb-00d9147e18df01aff / my_private_rt

Details Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (0)

Find subnet association

Edit subnet associations

VPC > Route tables > rtb-00d9147e18df01aff > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	my_public_subnet	subnet-0078961e383a24ddc	10.0.0.0/24	-	rtb-0c6d2830c70fc31d4 / my_public_subnet
<input checked="" type="checkbox"/>	my_private_subnet	subnet-03a8bccfde5b25263	10.0.1.0/24	-	Main (rtb-0d7751d6d5477e7a7)

Selected subnets

subnet-03a8bccfde5b25263 / my_private_subnet X

Cancel Save associations


- Création de la passerelle internet

▼ Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways 

Egress-only internet

Subn



Internet gateways [Info](#)



Actions ▼

Create internet gateway

Q Search

< 1 > 

<input type="checkbox"/>	Name	Internet gateway ID	State	VPC ID
No internet gateways found in this Region				

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.

MyIGW 

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

Q Name



Q MyIGW




Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway 

Internet gateways (1/1) [Info](#)

Search

<input checked="" type="checkbox"/>	Name	Internet gateway ID	State
<input checked="" type="checkbox"/>	MyIGW	igw-06d6dd548b59e9d8c	Details

Actions

- View details
- Attach to VPC
- Detach from VPC
- Manage tags
- Delete internet gateway

Create internet gateway

- Création de la passerelle NAT

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

▼ Security

NAT gateway settings

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

My_NAT

The name can be up to 256 characters long.

Subnet
Select a subnet in which to create the NAT gateway.

subnet-0078961e383a24ddc (my_public_subnet)

Connectivity type
Select a connectivity type for the NAT gateway.

☒ Public
☐ Private

Elastic IP allocation ID [Info](#)
Assign an Elastic IP address to the NAT gateway.

eipalloc-0820ddfab9a96d883

[Allocate Elastic IP](#)

► Additional settings [Info](#)

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_NAT X Remove

Add new tag

You can add 49 more tags.

Cancel Create NAT gateway

- **Edition des différentes routes**

- **Public**

<input checked="" type="checkbox"/>	my_public_rt	rtb-0c6d2830c70fc31d4	subnet-0078961e383a24...	-	No
<input type="checkbox"/>	-	rtb-0d7751d6d5477e7a7	-	-	Yes
<input type="checkbox"/>	my_private_rt	rtb-00d9147e18df01aff	subnet-03a8bccfde5b252...	-	No

rtb-0c6d2830c70fc31d4 / my_public_rt

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (1) Both Edit routes

Filter routes

< 1 > ⚙

Destination	Target	Status	Propagated
-------------	--------	--------	------------

VPC > Route tables > rtb-0c6d2830c70fc31d4 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
Q 0.0.0.0/0 X	Internet Gateway	-	No
	igw-04b9dee2a08c09a65		

Add route

Remove

Cancel Preview Save changes

- **Privé**

my_private_rt ✓ rtb-00d9147e18df01aff subnet-03a8bccfde5b252... - No

rtb-00d9147e18df01aff / my_private_rt

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

Routes (1) Both Edit routes

Filter routes

VPC > Route tables > rtb-00d9147e18df01aff > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0 ✓	NAT Gateway	-	No
	nat-0246ef3cf2cd865e4 ✓		

Add route

Cancel Preview **Save changes**

Bravo et félicitations!!! Vous venez de mettre en place votre réseau privé virtuel (VPC) avec tous ses composants à savoir les sous réseaux, les différentes routes, les passerelles internet et NAT. 🎉👏👏