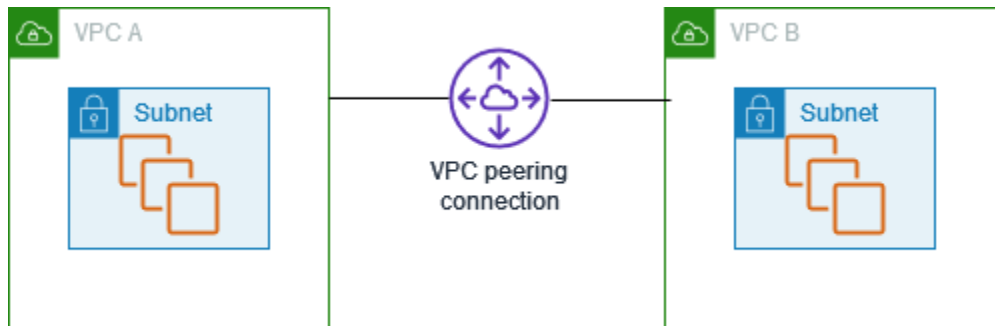


Lab 2: Créer Un VPC Peering connection entre 2 VPC

Architecture



Objectifs:

- Créer des VPC
- Créer les tables de routages
- Créer les sous réseaux
- Créer une passerelle internet
- Créer une peering connection

Réalisation

- Ouvrez votre console de gestion AWS, au niveau de la barre de recherche, tapez VPC et créez 2 VPC, VPCA et VPCB
 - VPCA: 12.0.0.0/16

- VPCB: 13.0.0.0/16
- Créer 2 tables de routages respectivement pour le VPC A et le VPC B
 - Table de routage du VPCA

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.

VPCA-rtb

VPC
The VPC to use for this route table.

vpc-0e6762e9266eb133d (VPCA)

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	
<input type="text" value="Name"/>	<input type="text" value="VPCA-rtb"/>	<input type="button" value="Remove"/>

- Table de routage du VPCB

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.

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

- Créez 2 sous réseaux public respectivement pour le VPCA et VPCB
- Créez la passerelle internet respectivement pour VPCA et VPCB
 - Passerelle internet pour VPC A

▼ Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet

Subnet ID : su



Name



SOUS_re



SOUS_re

Internet gateways [Info](#)



Actions ▼



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.

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

Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

igw-0b24943aa830ea8c6 / VPCA-IGW

Details [Info](#)

Internet gateway ID
igw-0b24943aa830ea8c6

State
Detached

VPC ID
-

Owner
590183

Attach to VPC

Detach from VPC

Manage tags

Delete

Attach to VPC (igw-0b24943aa830ea8c6) [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

- Passerelle internet pour VPC B

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.

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

Remove

Add new tag

You can add 49 more tags.

Cancel

Create internet gateway

igw-0128b7d94bd1819c8 / VPCB-IGW

Details [Info](#)

Internet gateway ID
igw-0128b7d94bd1819c8

State
Detached

VPC ID
-

Owner
59018:

Actions

Attach to VPC

Detach from VPC

Manage tags

Delete

Attach to VPC (igw-0128b7d94bd1819c8) [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

- Créez 2 sous réseaux respectivement pour le VPCa et VPCB

- Sous réseaux VPC A

Create subnets in this VPC.

vpc-0e6762e9266eb133d (VPCA)

Associated VPC CIDRs

IPv4 CIDRs
12.0.0.0/16

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.

VPCA-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.

US East (N. Virginia) / us-east-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.

12.0.0.0/16

IPv4 subnet CIDR block

12.0.0.0/24

256 IPs

< > ^ v

▼ Tags - optional

Key

Q Name

X

Value - optional

Q VPCA-subnet

X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

- Sous réseau VPC B

VPC ID

Create subnets in this VPC.

vpc-07d35e32e307ec71e (VPCB)

Associated VPC CIDRs

IPv4 CIDRs

13.0.0.0/16

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.

Subnet-VPCB

The name can be up to 256 characters long.

US East (N. Virginia) / us-east-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.

13.0.0.0/16

IPv4 subnet CIDR block

13.0.1.0/24 256 IPs

< > ^ v

▼ Tags - optional

Key Value - optional

Q Name X Q Subnet-VPCEB ✓ X Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel Create subnet

- Association des sous réseaux aux routes respectives

- VPCA-rtb

Route tables ←

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

		rtb-0b1ec4f8678b5ef62	-	-	Yes
<input checked="" type="checkbox"/>	VPCA-rtb ✓	rtb-06489ab84acfc71b0	-	-	No
<input type="checkbox"/>	VPCEB-rtb	rtb-02b9e5bec67047e3	-	-	No

↓

Details Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (0)

Edit subnet associations

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	Route table ID
<input checked="" type="checkbox"/>	VPCA-subnet	subnet-0f291db2f65ab85ef	12.0.0.0/24	-	Main (rtb-0b1ec4f8678b5ef62)

Selected subnets

subnet-0f291db2f65ab85ef / VPCA-subnet X

Cancel Save associations

- VPC B: vous faites la même association que le précédent, sauf que c'est pour le VPC B.
- Lancez **2 serveurs EC2 Ubuntu** respectivement dans le **VPCA** et **VPCB** et installez le serveur apache dans chacun d'eux.
 - Server VPC A

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)


Name

ServerVPCA

[Add additional tags](#)


▼ Application and OS Images (Amazon Machine Image) [Info](#)


An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking below

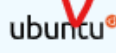
 Search our full catalog including 1000s of application and OS images


My AMIs


Quick Start


Amazon Linux



macOS


Ubuntu


Windows


Red Hat


SUSE Linux



Browse more AMIs
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

Free tier eligible

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

Free tier eligible

☐ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

VPCAKey

 [Create new key pair](#)

▼ Network settings [Info](#)

VPC - *required* [Info](#)

vpc-0e6762e9266eb133d (VPCA)
12.0.0.0/16

Subnet [Info](#)

subnet-0f291db2f65ab85ef
VPC: vpc-0e6762e9266eb133d Owner: 590183799597
Availability Zone: us-east-1a IP addresses available: 251 CIDR: 12.0.0.0/24

VPCA-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 spe instance.

☒ Create security group

☐ Select existing security group

Security group name - *required*

SGVPCA-1

SGVPCA-1 created 2024-04-30T15:25:06.698Z

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

Remove

Type	Info	Protocol	Info	Port range	Info
ssh		TCP		22	
Source type	Info	Source	Info	Description - optional	
Anywhere		<input type="text" value="Add CIDR, prefix list or security"/>		<input type="text" value="e.g. SSH for admin desktop"/>	
		<input type="text" value="0.0.0.0/0"/>			

▼ Security group rule 2 (TCP, 80, 0.0.0.0/0)

Remove

Type	Info	Protocol	Info	Port range	Info
HTTP		TCP		80	
Source type	Info	Source	Info	Description - optional	
Anywhere		<input type="text" value="Add CIDR, prefix list or security"/>		<input type="text" value="e.g. SSH for admin desktop"/>	

Entrez dans les détails avancés, au niveau de **user data ou données utilisateur**, collez **script d'installation d'apache qui accompagne ce lab**. Pour cliquer sur lancer l'instance.

- Server VPC B: faites le même processus de bout en bout.
- **Créez une connexion peering**

Endpoint services

NAT gateways

Peering connections

- **Nom** : si vous le souhaitez, vous pouvez nommer votre connexion d'appairage de VPC.
- **ID de VPC (Demandeur)** : sélectionnez le VPC dans votre compte avec lequel vous souhaitez créer la connexion d'appairage de VPC

Create peering connection

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately.

[Info](#)

Peering connection settings

Name - *optional*

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

My-PC

Select a local VPC to peer with

VPC ID (Requester)

vpc-0e6762e9266eb133d (VPCA)

VPC CIDRs for vpc-0e6762e9266eb133d (VPCA)

CIDR	Status	Status reason
12.0.0.0/16	Associated	-

- **Pour sélectionner un autre VPC auquel s'appairer** : choisissez Mon compte et sélectionnez un autre de vos VPC.
- (Facultatif) Pour ajouter une identification, choisissez Add new tag (Ajouter une identification) et saisissez la clé et la valeur de l'identification.

Select another VPC to peer with

Account

- ☒ My account
☐ Another account

Region

- ☒ This Region (us-east-1)
☐ Another Region

VPC ID (Accepter)

vpc-07d35e32e307ec71e (VPCB) ▼

VPC CIDRs for vpc-07d35e32e307ec71e (VPCB)

CIDR	Status	Status reason
13.0.0.0/16	✓ Associated	-

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 My-PC X

Remove

Add new tag

You can add 49 more tags.

Cancel

Create peering connection

- Lorsque vous êtes invité à confirmer l'opération, choisissez Accepter la demande.

Peering connections (1/1) Info

Find resources by attribute or tag

	Peering connection ID	Status	Requester VPC	Accepter VPC
us-east-1	pcx-0bd48b18440d1fa58	Pending acceptance	vpc-0bd48b18440d1fa58	vpc-0bed7...

Actions ▲

Create peering connection

View details

Accept request ✓

Reject request

Edit DNS settings

Manage tags

Delete peering connection

Accept VPC peering connection request Info

✕

Are you sure you want to accept this VPC peering connection request? (pcx-0bd48b18440d1fa58 / My-PC-1)

Requester VPC vpc-077fb46b78ab1ea25 / project-vpc	Accepter VPC vpc-0bed77a5d4892f01f	Requester CIDRs 10.0.0.0/16
Accepter CIDRs -	Requester Region N. Virginia (us-east-1)	Accepter Region N. Virginia (us-east-1)
Requester owner ID 905418488876 (This account)	Accepter owner ID 905418488876 (This account)	

Cancel
Accept request

3. Choisissez Modifier mes tables de routage maintenant pour ajouter une route à la table de routage de VPC et pouvoir envoyer et recevoir du trafic via la connexion d'appairage.

- Table de routage VPC A, modifier en ajoutant l'adresse IP du VPC B

VPC > Route tables > rtb-06489ab84afc71b0 > Edit routes

Edit routes

Destination	Target	Status	Propagated
12.0.0.0/16	local	Active	No
13.0.0.0/16	Peering Connection	-	No
	pcx-04f90daaa18d5174b		

Add route

Cancel Preview Save changes

- Table de routage VPC B, modifier en ajoutant l'adresse IP du VPC A

VPC > Route tables > rtb-02b9e5bece67047e3 > Edit routes

Edit routes

Destination	Target	Status	Propagated
13.0.0.0/16	local	Active	No
<input type="text" value="12.0.0.0/16"/>	<input type="text" value="local"/>	-	No
	Peering Connection		
	<input type="text" value="pcx-04f90daaa18d5174b"/>		

- Testez la connexion peering que vous venez de configurer en copiant l'adresse IP privée de l'instance dans le VPC B question visualiser les données sur ce serveur.