

Weekly Tasks		
	Description	Deliverable
Week 4	<p>In this task, you'll create two separate VPCs in your AWS environment to simulate a multi-VPC architecture.</p> <p>Configure VPC-A with the CIDR block 10.10.0.0/16 and VPC-B with 10.20.0.0/16. In each VPC, create one public subnet and one private subnet (you don't need to attach Internet or NAT Gateways). Then, establish a VPC peering connection between the two VPCs and update the route tables in each VPC to allow traffic to flow between them via the peering connection.</p>	<p>Provide clear screenshots from the AWS Console showing: the two VPCs and their CIDR blocks, the public and private subnets in each VPC, the VPC peering connection in <b>Active</b> status, and the route tables with routes pointing to the other VPC's CIDR block through the peering connection.</p>

## WEEK 4: Cloud Networking with AWS VPC and Subnets

### \*Deliverable

Provide clear screenshots from the AWS Console showing:

- The two VPCs and their CIDR blocks,
- The public and private subnets in each VPC,
- The VPC peering connection in **Active** status,
- The route tables with routes pointing to the other VPC's CIDR block through the peering connection

- STEP 1: Created two VPCs:
- ✓ VPC-A with CIDR block: [10.10.0.0/16](#) 
  - ✓ VPC-B with CIDR block: [10.20.0.0/16](#) 

- STEP 2: In each VPC, created:
- ✓ 1 Public Subnet (e.g., [10.10.1.0/24](#) in VPC-A)
  - ✓ 1 Private Subnet (e.g., [10.10.2.0/24](#) in VPC-A)

Repeat for VPC-B (e.g., [10.20.1.0/24](#), [10.20.2.0/24](#))

✓ STEP 3: Set up a VPC Peering connection between VPC-A and VPC-B.

✓ Requester: VPC-A

✓ Acceptor: VPC-B

✓ STEP 4: Updated route tables in both VPCs so they can talk to each other via the peering connection.

✓ In VPC-A, add a route to [10.20.0.0/16](#) via Peering Connection

✓ In VPC-B, add a route to [10.10.0.0/16](#) via Peering Connection

The screenshot shows the AWS VPC console interface. On the left, there's a navigation sidebar with options like EC2 Global View, Virtual private cloud (selected), Security, and CloudShell. The main area displays 'Your VPCs (1/3) Info' with two entries: VPC-A and VPC-B. Below this, the details for VPC-A are shown, including its Subnets (us-east-1a with Public and Private Subnets) and Route tables (with routes rtb-0e7e3f0d72d8fbfb and rtb-07af8a9b7b616e0b). A 'resource map' section also shows VPC-A.

This screenshot shows the CIDRs tab for VPC-A. It lists one IPv4 CIDR: 10.10.0.0/16, which is associated with the VPC and has a status of 'Associated'. There are tabs for Details, Resource map, CIDRs (selected), Flow logs, Tags, and Integrations.

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#vpcs:

VPC dashboard | EC2 Global View | 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 New

Security | Network ACLs | Security groups

Your VPCs (1/3) Info

Name	VPC ID	State	Block Public Access	IPv4 CIDR	IPv6 CIDR
-	vpc-0ebb33f37ccbf0485	Available	Off	172.31.0.0/16	-
VPC-A	vpc-0537435e2f61f40cd	Available	Off	10.10.0.0/16	-
<b>VPC-B</b>	<b>vpc-0a012a5bcb41d14b4</b>	<b>Available</b>	<b>Off</b>	<b>10.20.0.0/16</b>	-

vpc-0a012a5bcb41d14b4 / VPC-B

Details | Resource map | **CIDRs** | Flow logs | Tags | Integrations

IPv4 CIDRs Info

Address family	CIDR	Status
IPv4	10.20.0.0/16	Associated

Edit CIDRs

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Your VPCs (1/3) Info

Name	VPC ID	State	Block Public Access	IPv4 CIDR	IPv6 CIDR
-	vpc-0ebb33f37ccbf0485	Available	Off	172.31.0.0/16	-
VPC-A	vpc-0537435e2f61f40cd	Available	Off	10.10.0.0/16	-
<b>VPC-B</b>	<b>vpc-0a012a5bcb41d14b4</b>	<b>Available</b>	<b>Off</b>	<b>10.20.0.0/16</b>	-

vpc-0a012a5bcb41d14b4 / VPC-B

Details | Resource map | CIDRs | Flow logs | Tags | Integrations

Resource map Info

**VPC** Show details

Your AWS virtual network

VPC-B

**Subnets (2)**

Subnets within this VPC

us-east-1a

- Private Subnet
- Public Subnet

**Route tables (2)**

Route network traffic to resources

rtb-03fd6c08abaa2f646

rtb-06447d5b51aa72979

**Network**

Connections

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us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#PeeringConnections:

VPC dashboard < VPC > Peering connections

Peering connections (1/2) Info

Find peering connections by attribute or tag

Name	Peering connection ID	Status	Requester VPC	Acceptor VPC
-	pox-09de0f52b6d1e2a80	Deleted	vpc-0537435e2f61f40cd / VPC-A	vpc-0a012a5bcb41d14b4 / VPC-B
-	pox-0ac4638b84eb51ef9	Active	vpc-0537435e2f61f40cd / VPC-A	vpc-0a012a5bcb41d14b4 / VPC-B

pcx-0ac4638b84eb51ef9

Details DNS Route tables Tags

Details

Requester owner ID	488874248115	Acceptor owner ID	488874248115
Peering connection ID	pox-0ac4638b84eb51ef9	Requester VPC	vpc-0537435e2f61f40cd / VPC-A
Status	Active	Requester CIDRs	10.0.0.0/16
Expiration time	-	Requester Region	N. Virginia (us-east-1)
		VPC Peering connection ARN	arn:aws:ec2:us-east-1:488874248115:vpc-peering-connection/pox-0ac4638b84eb51ef9
		Acceptor VPC	vpc-0a012a5bcb41d14b4 / VPC-B
		Acceptor CIDRs	10.20.0.0/16
		Acceptor Region	N. Virginia (us-east-1)

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Name	Peering connection ID	Status	Requester VPC	Acceptor VPC
-	pox-09de0f52b6d1e2a80	Deleted	vpc-0537435e2f61f40cd / VPC-A	vpc-0a012a5bcb41d14b4 / VPC-B
-	pox-0ac4638b84eb51ef9	Active	vpc-0537435e2f61f40cd / VPC-A	vpc-0a012a5bcb41d14b4 / VPC-B

pcx-0ac4638b84eb51ef9

Details DNS Route tables Tags

Route tables Info

This VPC peering connection is referenced in a route in the following route tables.

Route table ID	VPC ID	Main	Associated with
rtb-07af9a9b7b616e0b1	vpc-0537435e2f61f40cd / VPC-A	No	0 subnets
rtb-06447d5b51aa72979	vpc-0a012a5bcb41d14b4 / VPC-B	No	0 subnets

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us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#RouteTables:

VPC dashboard < EC2 Global View 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 New Security Network ACLs Security groups

Route tables (1/5) Info

Last updated 8 minutes ago Actions Create route table

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
rtb-05a46a43808e63179	-	-	-	Yes	vpc-0eb33f57ccb0485 4E
rtb-07af8a9b7b616e0b1	-	-	-	No	vpc-0537435e2f61f40cd   VPC-A 4E
rtb-06447d3b51aa72979	-	-	-	No	vpc-0a012a5bcb41d14b4   VPC-B 4E

rtb-07af8a9b7b616e0b1

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
10.10.0.0/16	local	Active	No
10.20.0.0/16	pcc-0ac4638b84eb51ef9	Active	No

Both Edit routes

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Route tables (1/5) Info

Last updated 8 minutes ago Actions Create route table

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
rtb-06a4a43808e63179	-	-	-	Yes	vpc-0eb33f57ccb0485 4E
rtb-07af8a9b7b616e0b1	-	-	-	No	vpc-0537435e2f61f40cd   VPC-A 4E
rtb-06447d3b51aa72979	-	-	-	No	vpc-0a012a5bcb41d14b4   VPC-B 4E

rtb-06447d3b51aa72979

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Destination	Target	Status	Propagated
10.10.0.0/16	pcc-0ac4638b84eb51ef9	Active	No
10.20.0.0/16	local	Active	No

Both Edit routes

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