

## Practice Lab Goals

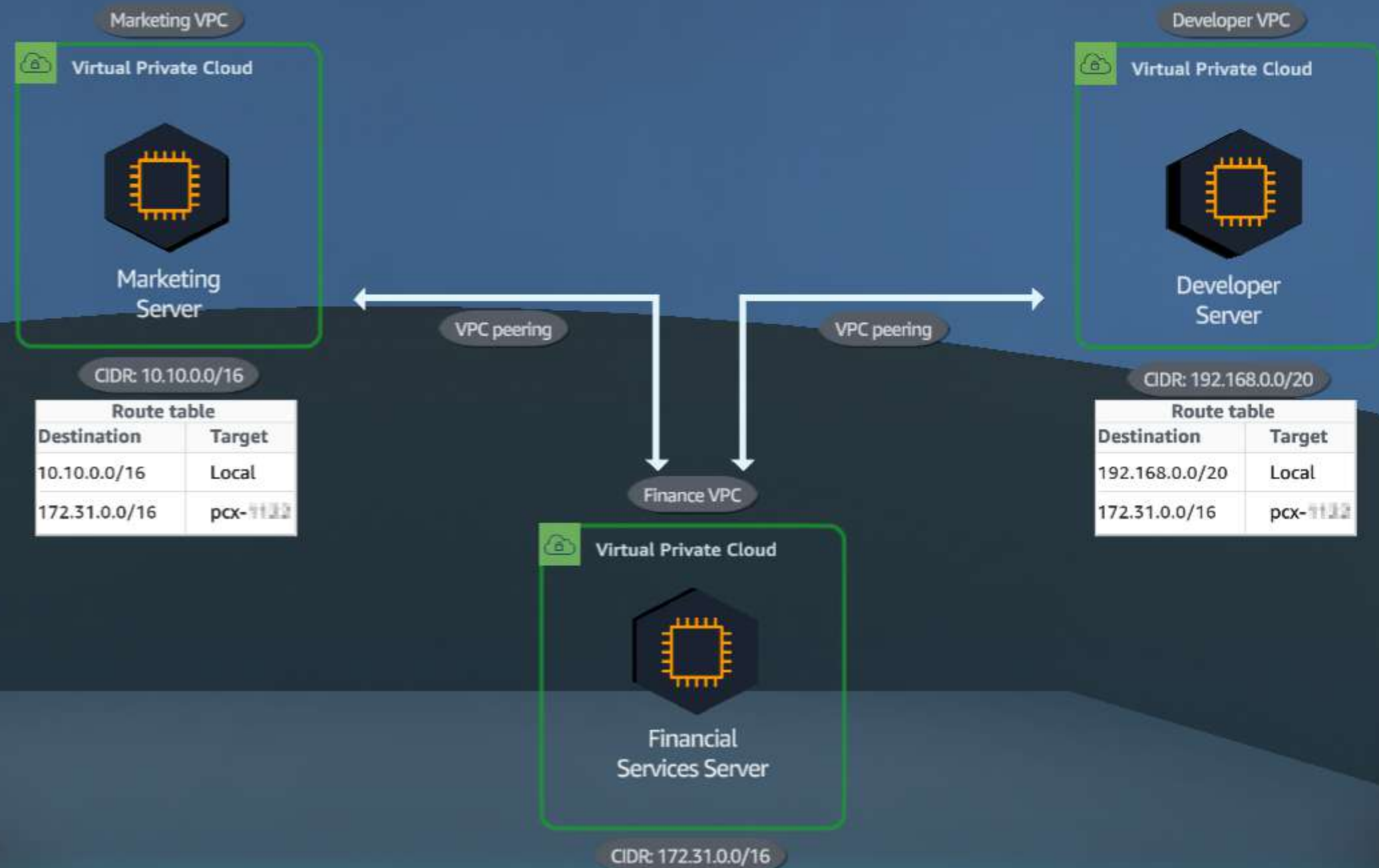
Step-by-step guided learning

- Set up a VPC peering connection.
- Ensure that traffic is internally routed within this connection.

## DIY

Build on what you have learned.

- Configure VPC peering between Developer and Finance department VPCs.



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 2

1. In the top navigation bar search box, type:

vpc

2. In the search results, under Services, click VPC.

3. Go to the next step.

### Concept

Amazon Virtual Private Cloud (Amazon VPC) is a service that helps you launch AWS resources in a logically isolated virtual network that you define. You have complete control over your virtual networking environment.

Search results for 'vpc'

Services (5)

Features (22)

Documentation (36,919)

Marketplace (295)

## Services

[See all 5 results ▶](#)

VPC

Isolated Cloud Resources



AWS Network Firewall

AWS Network Firewall



AWS Firewall Manager

Central management of firewall rules



Detective

Investigate and analyze potential security issues

## Features

[See all 22 results ▶](#)

VPC links



API Gateway feature

VPC Reachability Analyzer



VPC feature

## AWS resources

Now supports four  
Download the AWS  
your iOS or Android  
Store [🔗](#)

47%

One Zone storage

h2 and save money  
ce in EC2.

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Lab Files

Steps

## Connecting VPCs

### Step 3

1. In the left navigation pane, click Your VPCs.
2. In the Your VPCs section, review the Marketing, Finance, and Developer VPCs.
3. Go to the next step.

### Concept

By default, VPCs are isolated from each other. A VPC peering connection is a networking connection between two VPCs that you can use to route traffic between them by using private IP addresses.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', a search bar, and the current region 'N. Virginia'. The left-hand navigation pane lists various AWS services, with 'Your VPCs' highlighted under the 'Virtual private cloud' section. The main content area, titled 'Your VPCs (4)', displays a table of existing VPCs. The table has columns for Name, VPC ID, State, and IPv4 CIDR. Four VPCs are listed: a default VPC, and three VPCs created for 'connecting-vpc' (Developer, Marketing, and Finance). All VPCs are in an 'Available' state. An orange arrow points to the 'Your VPCs' link in the left pane, labeled '1. Click'. Another orange arrow points to the 'Name' column header in the table, labeled '2. Review'.

Name	VPC ID	State	IPv4 CIDR
-	vpc-2d508f50	Available	172.31.0.0/16
connecting-vpc/Developer VPC	vpc-0a8833eb4dd2bd556	Available	192.168.0.0/20
connecting-vpc/Marketing VPC	vpc-07e209844ba50ae63	Available	10.10.0.0/16
connecting-vpc/Finance VPC	vpc-0d907062e29d94098	Available	172.31.0.0/16



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## Practice

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Lab Files

Steps

## Connecting VPCs

## Step 4

1. In the top navigation bar search box, type:

ec2

2. In the search results, under Services, click EC2.

3. Go to the next step.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface. At the top, the search bar contains 'EC2' and an orange arrow points to it with the label '1. Type'. Below the search bar, the 'Services' section is highlighted, and an orange arrow points to the 'EC2' service card with the label '2. Click'. The 'EC2' card is the first result under 'Services' and is titled 'Virtual Servers in the Cloud'. To the right, a 'Create VPC' dialog box is open, showing a table with IPv4 and IPv6 CIDR blocks. The table has two columns: 'IPv4 CIDR' and 'IPv6 CIDR (Network)'. The rows show the following values:

IPv4 CIDR	IPv6 CIDR (Network)
172.31.0.0/16	-
192.168.0.0/20	-
10.10.0.0/16	-
172.31.0.0/16	-

At the bottom of the console, there is a footer with 'Feedback', 'English (US)', and copyright information: '© 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved.' There are also links for 'Privacy Policy', 'Terms of Use', and 'Cookie preferences'.



Step 4/38



2 Plan

4 DIY

Exit

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Lab Files





Steps

## Connecting VPCs

### Step 5

1. In the Resources section, click Instances (running).
2. Go to the next step.

Navigate steps:  
(click or use arrow keys)

 Services  [Option+S]    N. Virginia AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience  
Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances


Capacity Reservations

▼ Images

AMIs


AMI Catalog

Resources

EC2 Global view 

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:


Instances (running)	3	Auto Scaling Groups	3	Dedicated Hosts	0
Elastic IPs	2	Instances	3	Key pairs	0
Load balancers	0	Placement groups	0	Security groups	7
Snapshots	0	Volumes	3		

 Easily size, configure, and deploy Microsoft SQL Server Always On availability groups on AWS using the AWS Launch Wizard for SQL Server. [Learn more](#)



Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance ▼

Migrate a server 

Service health

 [AWS Health Dashboard](#) 

Region

US East (N. Virginia)

Status

Feedback

Language

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Lab Files

Steps

## Connecting VPCs

### Step 6

1. In the Instances section, choose the check box to select the FinanceServer instance.

2. On the Details tab, review to see that no Public IPv4 address or DNS is populated for FinanceServer.

- This is because the server was created in a private subnet.

3. Under Private IPv4 addresses, click the copy icon to copy the provided IP address for FinanceServer, and then paste it in the text editor of your choice on your local device.

- You will use this value in later steps.

Navigate steps:  
(click or use arrow keys)



Step 6/38



aws Services Search [Option+S] N. Virgini AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

1. Choose

Instances (1/3) Info

Connect Instance state Actions Launch Instances

Find instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state	Instance type
<input type="checkbox"/>	connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
<input checked="" type="checkbox"/>	connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance: i-0775ea6d5ab4eb050 (connecting-vpc/FinanceServer)

Details Security Networking Storage Status checks Monitoring Tags

▼ Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0775ea6d5ab4eb050 (connecting-vpc/FinanceServer)	-	172.31.1.83
IPv6 address	Instance state	Public IPv4 DNS
-	Running	-
Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-172-31-1-83.ec2.internal	ip-172-31-1-83.ec2.internal	

2. Review

3. Click

4. Scroll

Feedback Language

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Lab Files

Steps

## Connecting VPCs

### Step 7

1. Under Subnet ID, review the provided ID.

- Note that the subnet is private (FinancePrivateSubnet).

2. Go to the next step.

Navigate steps:  
(click or use arrow keys)



Step 7/38



Services

Search [Option+S]

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Instances (1/3) Info

Refresh

Connect

Instance state

Actions

Launch Instances

Find instance by attribute or tag (case-sensitive)

Instance state = running

Clear filters

	Name	Instance ID	Instance state	Instance type
<input type="checkbox"/>	connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
<input checked="" type="checkbox"/>	connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance: i-0775ea6d5ab4eb050 (connecting-vpc/FinanceServer)

Auto-assigned IP address

-

IAM Role

ec2\_app\_role

VPC ID

vpc-0d907062e29d94098  
(connecting-vpc/Finance VPC)

Subnet ID

subnet-0444713472f35d8ce  
(connecting-vpc/Finance VPC/FinancePrivateSubnet2)

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer f  
or recommendations.  
[Learn more](#)

Auto Scaling Group name

LabStack-  
6pZWqCsCC89ak7Y2fB5SwK-1-  
FinanceServerASG820901C4-  
WJ2WWMGEYGAU

Instance details

Info







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Lab Files

Steps

## Connecting VPCs

### Step 9

1. Click the Session Manager tab.
2. Click Connect.

- The Session Manager terminal for the MarketingServer instance opens in a new browser tab (or window).

3. Go to the next step.

### Concept

Session Manager is a fully managed AWS Systems Manager capability. With Session Manager, you can manage your Amazon EC2 instances, edge devices, and on-premises servers and virtual machines (VMs). You can use either an interactive one-click

Navigate steps:  
(click or use arrow keys)

Feedback

Language

Privacy

Terms

Cookie preferences



EC2 > Instances > i-03f3ea049eaeaf3d8 > Connect to instance

### Connect to instance [Info](#)

Connect to your instance i-03f3ea049eaeaf3d8 (Marketing-vpc/MarketingServer) using any of these options

1. Click



EC2 Instance Connect

**Session Manager**

SSH client

EC2 serial console

### Session Manager usage:

- Connect to your instance without SSH keys or a bastion host.
- Sessions are secured using an AWS Key Management Service key.
- You can log session commands and details in an Amazon S3 bucket or CloudWatch Logs log group.
- Configure sessions on the Session Manager [Preferences](#) page.

2. Click



Cancel

**Connect**

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Lab Files

Steps

## Connecting VPCs

### Step 10

1. In the terminal window, replacing the current IP address with the IP address that you copied in an earlier step, run (type the command and press Enter):

```
ping <172.31.x.xx>
```

- This private IPv4 address is for the FinanceServer instance. This command checks the connection to the FinanceServer instance.

2. Review to see that your command hangs, and there is no connection.

3. To exit the running process, on your keyboard, press Ctrl+C.

Navigate steps:  
(click or use arrow keys)

Session ID: exntools-session-

Instance ID: i-03f3ea049eaeaf3d8

Terminate

sh-4.2\$

sh-4.2\$

sh-4.2\$

sh-4.2\$ ping 172.31.1.83

PING 172.31.1.83 (172.31.1.83) 56(84) bytes of data.

^C

--- 172.31.1.83 ping statistics ---

8 packets transmitted, 0 received, 100% packet loss, time 7172ms

sh-4.2\$



Step 10/38



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Exit



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Lab Files





Steps


## Connecting VPCs

### Step 11

1. In the previous browser, in the Amazon EC2 Instances section, under Instance ID, click the MarketingServer instance ID.
2. Go to the next step.

Navigate steps:  
(click or use arrow keys)

 Services  [Option+S]    N. Virgini AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience 

EC2 Dashboard

EC2 Global View

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Instances (3) [Info](#)  [Connect](#) [Instance state](#) [Actions](#) [Launch Instances](#)

<input type="checkbox"/>	Name ▾	Instance ID	Instance state ▾	Instance type ▾
<input type="checkbox"/>	connecting-vpc/MarketingServer	<a href="#">i-03f3ea049eaeaf3d8</a>	 	t2.micro
<input type="checkbox"/>	connecting-vpc/FinanceServer	<a href="#">i-0775ea6d5ab4eb050</a>	 Running  	t2.micro
<input type="checkbox"/>	connecting-vpc/DeveloperServer	<a href="#">i-0c8b2a01d16f2e9bf</a>	 Running  	t2.micro

Select an instance 

1. Click



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Lab Files

Steps

## Connecting VPCs

### Step 12

1. Under Subnet ID, click the provided ID.
2. Go to the next step.

### Concept

EC2 instances reside within a subnet. A subnet is a range of IP addresses in your VPC.



Step 12/38



Services

Search [Option+S]

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AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience

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AMI Catalog

EC2 > Instances > i-03f3ea049eaeaf3d8

Instance summary for i-03f3ea049eaeaf3d8 (connecting-vpc/MarketingServer)

Updated less than a minute ago

Refresh

Connect

Instance state

Actions

Instance ID	Public IPv4 address	Private IPv4 addresses
i-03f3ea049eaeaf3d8 (connecting-vpc/MarketingServer)	100.24.123.161   <a href="#">open address</a>	10.10.1.109
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-100-24-123-161.compute-1.amazonaws.com   <a href="#">open address</a>
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-10-10-1-109.ec2.internal	ip-10-10-1-109.ec2.internal	-
Answer private resource DNS name	Instance type	AWS Compute Optimizer finding
-	t2.micro	Opt-in to AWS Compute Optimizer for recommendations.   <a href="#">Learn more</a>
Auto-assigned IP address	VPC ID	Auto Scaling Group name
100.24.123.161 [Public IP]	vpc-07e209844ba50ae63 (connecting-vpc/Marketing VPC)   <a href="#">open address</a>	LabStack- 6pZWqCsCC89ak7Y2fB5SwK-1-MarketingServerASG48324A3D-
IAM Role	Subnet ID	
ec2_app_role   <a href="#">open address</a>	subnet-0d8bead67e206b62b (connecting-vpc/Marketing VPC/MarketingPublicSubnet2)   <a href="#">open address</a>	

Feedback

Language

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1. Click





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Steps

## Connecting VPCs

### Step 13

1. In the Subnets section, choose the check box to select the subnet name.
2. On the Details tab, under Route table, click the provided route ID.
3. Go to the next step.

### Concept

An important property of a subnet is its route table. A route table contains a set of rules, called routes. Routes are used to determine where network traffic, from your subnet or gateway, is directed.

Navigate steps:  
(click or use arrow keys)



Step 13/38



Services

Search

N. Virgini

AWSLabsUser-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard

EC2 Global View

Filter by VPC:

Select a 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

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Endpoint services

NAT gateways

Peering connections

Subnets (1/1)

Filter subnets

Subnet ID: subnet-0d8bead67e206b62b

Clear filters

<input checked="" type="checkbox"/>	Name	Subnet ID	State	VPC
<input checked="" type="checkbox"/>	connecting-vpc/Ma...	subnet-0d8bead67e206b62b	Available	vpc-07e209844ba50ae63

Details

Flow logs

Route table

Network ACL

CIDR reservations

Sharing

Tags

Details

Subnet ID

subnet-0d8bead67e206b62b

Subnet ARN

arn:aws:ec2:us-east-1:860008896607:subnet/subnet-0d8bead67e206b62b

Available IPv4 addresses

250

Network border group

us-east-1

State

Available

Availability Zone

us-east-1

Route table

rtb-0eeb61128bfb05253 | connecting-vpc/Marketing

VPC

IPv4 CIDR

10.10.1.0/24

Availability Zone ID

use1-az1

Network ACL

acl-067a66f205bd522ca

Auto-assign customer-

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Lab Files

Steps

## Connecting VPCs

### Step 14

1. Under Route tables, choose the Marketing route table.
2. Click the Routes tab.
3. In the Routes section, review the routing rules.

- You should see two routes: one route for the local traffic and one route for the internet traffic through the internet gateway.

4. Go to the next step.

### Concept

Route tables will have rules for local traffic and public IP ranges if a gateway

Navigate steps:  
(click or use arrow keys)



Step 14/38



Services

Search [Option+S]

N. Virginia

AWSLabsUser-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard

EC2 Global View

Filter by VPC:  
Select a VPC

Virtual private cloud

Your VPCs

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Egress-only Internet gateways

Carrier gateways

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Route tables (1/1)

Filter route tables

Route table ID: rtb-0eeb61128bfb05253

Clear filters

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associat...	Edge associations
<input checked="" type="checkbox"/>	connecting-vpc/Ma...	rtb-0eeb61128bfb05253	subnet-0d8bead67e206...	-

rtb-0eeb61128bfb05253 / connecting-vpc/Marketing VPC/MarketingPublicSubnet2

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Filter routes

Both

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0e4044fa8aad7e5a2	Active	No
10.10.0.0/16	local	Active	No

1. Choose

2. Click

3. Review

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2 Plan

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Exit



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Lab Files

Steps

## Connecting VPCs

### Step 15

1. In the left navigation pane, click Peering connections.
2. In the Peering connections section, click Create peering connection.
3. Go to the next step.

### Concept

Instances in either VPC can communicate with each other as if they are in the same network.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface. At the top, the navigation bar includes the AWS logo, 'Services', a search bar, and user information. The left-hand navigation pane lists various AWS services, with 'Peering connections' under the 'Virtual private cloud' section highlighted in blue. A black callout box with an orange arrow points to this link, labeled '1. Click'. The main content area is titled 'Peering connections' and features a 'Create peering connection' button in orange. A black callout box with an orange arrow points to this button, labeled '2. Click'. Below the button is a table with columns: Name, Peering connection ID, Status, and Requester VPC. The table is currently empty, displaying 'No' results. At the bottom of the console, there are links for 'Privacy', 'Terms', and 'Cookie preferences', and a copyright notice for Amazon Web Services, Inc. or its affiliates.

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Lab Files

Steps

## Connecting VPCs

### Step 16

1. In the Peering connection settings section, for Name, type:

Marketing <> Finance

2. For VPC ID (Requester), on the dropdown menu, choose the Marketing VPC.

3. For VPC CIDRs, review to ensure that the Marketing VPC has 10.10.0.0/16 as its CIDR range.

4. Scroll down to the bottom of the page.

5. Go to the next step.

### Concept

Your VPC will request that another VPC allow access to its resources. The

Navigate steps:  
(click or use arrow keys)



Step 16/38



VPC > Peering connections > Create peering connection

## 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.

Marketing <> Finance

1. Type

Select a local VPC to peer with

2. Choose

VPC ID (Requester)

vpc-07e209844ba50ae63 (connecting-vpc/Marketing VPC)

VPC CIDRs for vpc-07e209844ba50ae63 (connecting-vpc/Marketing VPC)

CIDR	Status	Status reason
10.10.0.0/16	Associated	-

3. Review

Select another VPC to peer with

Account

My account

4. Scroll

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Lab Files

Steps

## Connecting VPCs

### Step 17

1. For VPC ID (Acceptor), choose the Finance VPC.
2. For VPC CIDRs, review to ensure that the Finance VPC has 172.31.0.0/16 as its CIDR range.
3. Click Create peering connection.
4. Go to the next step.

Navigate steps:  
(click or use arrow keys)

Feedback

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Services

Search

[Option+S]



N. Virginia

AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

#### Region

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

1. Choose

#### VPC ID (Acceptor)

vpc-0d907062e29d94098 (connecting-vpc/Finance VPC)

#### VPC CIDRs for vpc-0d907062e29d94098 (connecting-vpc/Finance VPC)

CIDR	Status	Status reason
172.31.0.0/16	Associated	-

2. Review

#### 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

Name



##### Value - optional

Marketing &lt;&gt; Finance



Remove

Add new tag

You can add 49 more tags.

3. Click

Cancel

Create peering connection



Step 17/38



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Exit

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Lab Files

Steps

## Connecting VPCs

### Step 18

1. In the success alert, review the message.
2. Under Status, review to ensure that the status is Pending Acceptance by xxxxxx.
3. Click Actions to expand the dropdown menu.
4. Choose Accept request.
5. Go to the next step.

### Concept

To request a VPC peering connection with a VPC in your account, ensure that you have the IDs of the VPCs with which you are creating the VPC peering connection. You must both create and accept the VPC peering connection request yourself to activate it. If the peering connection

Navigate steps:  
(click or use arrow keys)

aws Services Search [Option+S] N. Virginia AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard X

EC2 Global View [New](#)

Filter by VPC:

Select a VPC

Virtual private cloud

Your VPCs [New](#)

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[Peering connections](#)

Security

Feedback Language

A VPC peering connection pcx-08a0d6b27ba01821a / Marketing <> Finance has been requested. X

VPC > [Peering connections](#) > pcx-08a0d6b27ba01821a / Marketing <> Finance

1. Review

3. Click

4. Choose

Actions

- Accept request
- Reject request
- Edit DNS settings
- Edit ClassicLink settings
- Manage tags
- Delete peering connection

Review this peering connection request using the 'Actions' menu. You have until 11:34:54 EDT to accept or reject the request, otherwise it expires. X

Requester owner ID	860008896607	Acceptor owner ID	860008896607	VPC Peering connection ARN	arn:aws:ec2:us-east-1:860008896607:vpc-peering-connection/pcx-08a0d6b27ba01821a
Peering connection ID	pcx-08a0d6b27ba01821a	Requester VPC	vpc-07e209844ba50ae63 / connecting-vpc/Marketing VPC	Acceptor VPC	vpc-0d907062e29d94098 / connecting-vpc/Finance VPC
Status	Pending Acceptance by 860008896607	Requester CIDRs	10.10.0.0/16	Acceptor CIDRs	
Expiration time		Requester Region			



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 19

1. In the pop-up box, click Accept request.
2. Go to the next step.

Navigate steps:  
(click or use arrow keys)

VPC dashboard



EC2 Global View New

Filter by VPC:

Select a VPC

## Virtual private cloud

Your VPCs New

Subnets

Route tables

Internet gateways

Egress-only Internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

## Security

Feedback

Language

A VPC peering connection pcx-08a0d6b27ba01821a / Marketing &lt;-&gt; Finance has been requested.

VPC &gt; Peering connections &gt; pcx-08a0d6b27ba01821a

## Accept VPC peering connection request

Are you sure you want to accept this VPC peering connection request? (pcx-08a0d6b27ba01821a / Marketing &lt;-&gt; Finance)

Requester VPC

vpc-07e209844ba50ae63 /  
connecting-vpc/Marketing VPC

Acceptor VPC

vpc-0d907062e29d94098 /  
connecting-vpc/Finance VPC

Requester CIDRs

10.10.0.0/16

Acceptor Region

N. Virginia (us-east-1)

Acceptor CIDRs

-

Requester Region

N. Virginia (us-east-1)

Requester owner ID

 860008896607  
(This account)

Acceptor owner ID

 860008896607  
(This account)

Cancel

1. Click



Accept request

Status

Pending Acceptance by 860008896607

Expiration time

connecting-vpc/Marketing VPC

Requester CIDRs

10.10.0.0/16

Requester Region

Acceptor VPC

vpc-0d907062e29d94098 /  
connecting-vpc/Finance VPC

Acceptor CIDRs

Privacy

Terms

Cookie preferences

In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 20

1. In the success alert, review the message.
2. Under Status, review to see that the status is Active.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)



Services

Search

[Option+S]



N. Virgini

AWS Labs User-6pZWqCsCC89ak7Y2f85SwK/exptools\_session @ 8600-

VPC dashboard



EC2 Global View



Filter by VPC:

Select a VPC

### Virtual private cloud

Your VPCs

New

Subnets

Route tables

Internet gateways

Egress-only Internet  
gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

✔ Your VPC peering connection (pcx-08a0d6b27ba01821a | Marketing <> Finance) has been established.

To send and receive traffic across this VPC peering connection, you must add a route to the peered VPC in one or more of your VPC route tables. [Info](#)

Modify my route tables now



VPC &gt; Peering connections &gt; pcx-08a0d6b27

1. Review

## pcx-08a0d6b27ba01821a / Marketing <> Finance

Actions

### Details

Info

Requester owner ID

860008896607

Peering connection ID

pcx-08a0d6b27ba01821a

Status

✔ Active

2. Review

Expiration time

-

Acceptor owner ID

860008896607

Requester VPC

vpc-07e209844ba50ae63 /  
connecting-vpc/Marketing VPC

Requester CIDRs

10.10.0.0/16

Requester Region

N. Virginia (us-east-1)

VPC Peering connection ARN

arn:aws:ec2:us-east-1:  
860008896607:vpc-peering-  
connection/pcx-  
08a0d6b27ba01821a

Acceptor VPC

vpc-0d907062e29d94098 /  
connecting-vpc/Finance VPC

Acceptor CIDRs

172.31.0.0/16

Security

Feedback

Language

Privacy

Terms

Cookie preferences





In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 21

1. Return to the Instances section on the Amazon EC2 console, and then choose the check box to select the MarketingServer instance.
2. On the Details tab, under Subnet ID, click the provided ID.
3. Go to the next step.

### Concept

After you establish a peering connection, you must modify the route table associated with each VPC. You must add a route into each route table to allow traffic to be routed to the peered VPC.

Navigate steps:  
(click or use arrow keys)



Step 21/38



Services

Search

N. Virgini

AWSLabsUser-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience

Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

AMIs

AMI Catalog

Instances (1/3) Info

Connect

Instance state

Actions

Launch Instances

Find instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state	Instance type
<input checked="" type="checkbox"/>	connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance: i-03f3ea049eaeaf3d8 (connecting-vpc/MarketingServer)

Auto-assigned IP address

100.24.123.161 [Public IP]

IAM Role

ec2\_app\_role

VPC ID

vpc-07e209844ba50ae63  
(connecting-vpc/Marketing VPC)

Subnet ID

subnet-0d8bead67e206b62b  
(connecting-vpc/Marketing VPC/MarketingPublicSubnet2)

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer f  
or recommendations.  
[Learn more](#)

Auto Scaling Group name

LabStack-srikola-  
6pZWqCsCC89ak7Y2fB5SwK-1-  
MarketingServerASG48324A3D-  
1Y1Y3ZXFQF954

Instance details Info

Platform

AMI ID

Monitoring

Feedback

Language

Privacy

Terms

Cookie preferences

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2 Plan

4 DIY

Exit

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Lab Files

Steps

## Connecting VPCs

## Step 22

1. In the Subnets section, choose the check box to select the available subnet.
2. Under Route table, click the provided route ID.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)

aws Services Search [Option+S] N. Virginia AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard X

EC2 Global View New

Filter by VPC:

Select a VPC

Virtual private cloud

Your VPCs 1. Choose

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Security

Feedback Language

Subnets (1/1) Info

Filter subnets

Subnet ID: subnet-0d8bead67e206b62b X Clear filters

<input checked="" type="checkbox"/>	Name	Subnet ID	State	VPC
<input checked="" type="checkbox"/>	connecting-vpc/Ma...	subnet-0d8bead67e206b62b	Available	vpc-07e209844ba50ae63

0d8bead67e206b62b

Available IPv4 addresses 250

Network border group us-east-1

Default subnet No

Customer-owned IPv4 pool -

IPv6-only No

1:860008896607:subnet /subnet-0d8bead67e206b62b

IPv6 CIDR -

VPC vpc-07e209844ba50ae63 | connecting-vpc/Marketing VPC

Auto-assign public IPv4 address Yes

Availability Zone us-east-1

Route table rtb-0eeb61128bfb05253 | connecting-vpc/Marketing VPC/MarketingPublicSubnet2

Auto-assign IPv6 address No

IPv4 CIDR reservations -

Availability Zone ID use1-az1

Network ACL acl-067a66f205bd522ca

Auto-assign customer-owned IPv4 address No

IPv6 CIDR reservations -

Resource name DNS AAAA record Disabled

2. Click



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 23

1. In the Route tables section, choose the Marketing route table.
2. Click the Routes tab.
3. Click Edit routes.
4. Go to the next step.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface for Route Tables. The left sidebar contains a navigation menu with the following items: VPC dashboard, EC2 Global View, Filter by VPC (Select a VPC), Virtual private cloud, Your VPCs, Subnets, Route tables (selected), Internet gateways, Egress-only Internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, and Peering connections. The main content area is titled 'Route tables (1/1)'. It includes a search bar for 'Filter route tables' and a filter for 'Route table ID: rtb-0eeb61128bfb05253'. Below this is a table of route tables with columns: Name, Route table ID, Explicit subnet associations, and Edge associations. The first row is selected and highlighted, showing the name 'connecting-vpc/Marketing VPC/MarketingPublicSubnet2' and the ID 'rtb-0eeb61128bfb05253'. Below the table, the 'Routes' tab is active, showing a list of routes with columns: Destination, Target, Status, and Propagated. There are two routes listed: one for '0.0.0.0/0' pointing to 'igw-0e4044fa8aad7e5a2' and another for '10.10.0.0/16' pointing to 'local'. The 'Edit routes' button is highlighted in the top right corner of the Routes section.

aws Services Search [Option+S] N. Virginia AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard X

EC2 Global View New

Filter by VPC: Select a VPC

Virtual private cloud

Your VPCs 1. Choose

Subnets

Route tables

Internet gateways

Egress-only Internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Route tables (1/1) Info

Filter route tables

Route table ID: rtb-0eeb61128bfb05253 X Clear filters

Actions Create route table

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associations	Edge associations
<input checked="" type="checkbox"/>	connecting-vpc/Marketing VPC/MarketingPublicSubnet2	rtb-0eeb61128bfb05253	subnet-0d8bead67e206...	-

rtb-0eeb61128bfb05253 / connecting-vpc/Marketing VPC/MarketingPublicSubnet2

Details Routes Subnet associations Edge associations Route propagation 3. Click

Edit routes

Routes (2)

Filter routes Both

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0e4044fa8aad7e5a2	Active	No
10.10.0.0/16	local	Active	No

Security

Feedback Language

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Lab Files

Steps

## Connecting VPCs

### Step 24

1. Click Add route.
2. To configure the route, for Destination, in the new search box, type:

172.31.0.0/16

3. For Target, in the dropdown box, choose Peering Connection.

4. Choose the peering connection target that contains Marketing <> Finance.
5. Click Save changes.
6. Go to the next step.

Navigate steps:  
(click or use arrow keys)

aws

Services

Search

[Option+S]

N. Virginia

AWSLabsUser-fewXFMBcRtC84BvicxsQar/exptools\_session @ 7254-72...

VPC

Route tables

rtb-06a5ae4ef63134ce3

Edit routes

## Edit routes

Destination	Target	Status	Propagated
10.10.0.0/16	local	Active	No
0.0.0.0/0	Internet Gateway	Active	No
172.31.0.0/16	Peering Connection		No

Add route

1. Click

2. Type

3. Choose

4. Choose

5. Click

Cancel

Preview

Save changes



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Lab Files

Steps

## Connecting VPCs

## Step 25

1. In the success alert, review the message.
2. Go to the next step.

Navigate steps:  
(click or use arrow keys)

VPC dashboard



EC2 Global View New

Filter by VPC:

Select a VPC

## Virtual private cloud

Your VPCs New

Subnets

Route tables

Internet gateways

Egress-only Internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Peering connections

Security

Feedback

Language

Updated routes for rtb-0eeb61128bfb05253 / connecting-vpc/Marketing VPC/MarketingPublicSubnet2 successfully

[Details](#)

1. Review

VPC &gt; Route tables &gt; rtb-0eeb61128bfb05253

## rtb-0eeb61128bfb05253 / connecting-vpc/Marketing VPC/MarketingPublicSubnet2

Actions

You can now check network connectivity with Reachability Analyzer

[Run Reachability Analyzer](#)

## Details

Route table ID  
 rtb-0eeb61128bfb05253

VPC  
 vpc-07e209844ba50ae63 | connecting-vpc/Marketing VPC

Main  
 No

Owner ID  
 860008896607

Explicit subnet associations  
 subnet-0d8bead67e206b62b / connecting-vpc/Marketing VPC/MarketingPublicSubnet2

Edge associations  
-

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Lab Files

Steps

## Connecting VPCs

### Step 26

1. Return to the Instances section on the Amazon EC2 console, and then choose the check box to select the FinanceServer instance.
2. On the Details tab, under Subnet ID, click the provided ID.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the Amazon EC2 console interface. On the left, the 'Instances' section is expanded, and the 'connecting-vpc/FinanceServer' instance is selected. A callout '1. Choose' points to this instance. The main panel displays the details for the selected instance, 'i-0775ea6d5ab4eb050'. A callout '2. Click' points to the Subnet ID, 'subnet-0444713472f35d8ce (connecting-vpc/Finance VPC/FinancePrivateSubnet2)'. The instance is in a 'Running' state and is a 't2.micro' type. The details section shows the IAM Role as 'ec2\_app\_role', the Platform as 'Amazon Linux (Inferred)', the AMI ID as 'ami-06d3b5e1ed9e1d982', and the AMI name as 'amzn2-ami-hvm-2.0.20230320.0-'. The Auto Scaling Group name is 'LabStack-srikola-6pZWqCsCC89ak7Y2fB5SwK-1-FinanceServerASG820901C4-WJ2WWMGEYGau'.

aws Services Search [Option+S] N. Virgini AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience Tell us what you think

EC2 Dashboard  
EC2 Global View  
Events  
Tags  
Limits

1. Choose

Instances (1/3) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type
connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance: i-0775ea6d5ab4eb050 (connecting-vpc/FinanceServer)

2. Click

IAM Role: ec2\_app\_role

Subnet ID: subnet-0444713472f35d8ce (connecting-vpc/Finance VPC/FinancePrivateSubnet2)

Auto Scaling Group name: LabStack-srikola-6pZWqCsCC89ak7Y2fB5SwK-1-FinanceServerASG820901C4-WJ2WWMGEYGau

Learn more

Instance details Info

Platform	AMI ID	Monitoring
Amazon Linux (Inferred)	ami-06d3b5e1ed9e1d982	detailed

Platform details	AMI name	Termination protection
Linux/UNIX	amzn2-ami-hvm-2.0.20230320.0-	Disabled

Feedback Language

Privacy Terms Cookie preferences



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Lab Files

Steps

## Connecting VPCs

## Step 27

1. In the Subnets section, choose the check box to select the available subnet.
2. On the Details tab, under Route table, click the provided route ID.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface. On the left, the 'Virtual private cloud' section is expanded, showing 'Your VPCs' and 'Subnets'. A black box with '1. Choose' and an orange arrow points to the 'connecting-vpc/Fin...' subnet. The 'Subnets' table lists the following details:

Name	Subnet ID	State	VPC
connecting-vpc/Fin...	subnet-0444713472f35d8ce	Available	vpc-0d907062e29d94098

The 'Details' tab for the selected subnet shows the following information:

Subnet ID	Subnet ARN	State	IPv4 CIDR
subnet-0444713472f35d8ce	arn:aws:ec2:us-east-1:860008896607:subnet/subnet-0444713472f35d8ce	Available	172.31.1.0/24

The 'Route table' field is highlighted with an orange arrow, and a black box with '2. Click' points to the route table ID 'rtb-0428de1aceee882df | connecting-vpc/Finance VPC/FinancePrivateSubnet2'.

In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 28

1. In the Route tables section, choose the Finance route table.
2. Click the Routes tab.
3. Click Edit routes.
4. Go to the next step.

### Concept

The route tables for each VPC must be modified to allow traffic across the peering connection.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface for Route Tables. The left sidebar contains a navigation menu with the following items: VPC dashboard, EC2 Global View, Filter by VPC (Select a VPC), Virtual private cloud, Your VPCs, Subnets, Route tables (selected), Internet gateways, Egress-only Internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, and Peering connections. The main content area is titled 'Route tables (1/1)'. It includes a search bar for 'Filter route tables' and a 'Clear filters' button. A table lists the route tables, with the first one, 'connecting-vpc/Finance VPC/FinancePrivateSubnet2', selected. Below the table, the 'Routes' tab is active, showing a list of routes. The 'Edit routes' button is highlighted. The routes table has the following data:

Destination	Target	Status	Propagated
0.0.0.0/0	nat-036046ab98cececea	Active	No
172.31.0.0/16	local	Active	No



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 29

1. Click Add route.
2. To configure the route, for Destination, in the new search box, type:

10.10.0.0/16

3. For Target, in the dropbox box, choose Peering Connection.

4. Choose the peering connection target that contains Marketing <> Finance.
5. Click Save changes.
6. Go to next the step.

Navigate steps:  
(click or use arrow keys)

aws

Services

Search

[Option+S]

N. Virginia

AWSLabsUser-fewXFMBcRtC84BvicxsQar/exptools\_session @ 7254-72...

VPC

>

Route tables

>

rtb-02e0f5bbf2ab4f21c

>

Edit routes

## Edit routes

Destination	Target	Status	Propagated
172.31.0.0/16	local	Active	No
0.0.0.0/0	NAT Gateway	Active	No
10.10.0.0/16	Peering Connection		No
	pcx-0d35a44f2dd5032bf (Marketing <> Finance)		

Add route

Cancel

Preview

Save changes

In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

## Step 30

1. In the success alert, review the message.
2. Go to the next step.

Navigate steps:  
(click or use arrow keys)

aws

Services

Search [Option+S]

N. Virginia

AWSLabsUser-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

VPC dashboard

EC2 Global View

Filter by VPC:  
Select a 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

Endpoints

Endpoint services

NAT gateways

Peering connections

Security

Feedback

Language

Updated routes for rtb-0428de1aceee882df / connecting-vpc/Finance VPC/FinancePrivateSubnet2 successfully

Details

1. Review

VPC > Route tables > rtb-0428de1aceee882df

rtb-0428de1aceee882df / connecting-vpc/Finance VPC/FinancePrivateSubnet2

Actions

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Details

Route table ID rtb-0428de1aceee882df	Main No	Explicit subnet associations subnet-0444713472f35d8ce / connecting-vpc/Finance VPC/FinancePrivateSubnet2	Edge associations -
VPC vpc-0d907062e29d94098   connecting-vpc/Finance VPC	Owner ID 860008896607		



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 31

1. Return to the Amazon EC2 Instances section, and then choose the check box to select the MarketingServer instance.
2. Click Connect.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)



Step 31/38



Services  [Option+S] N. Virgini AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience  
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Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

▼ Images

AMIs

AMI Catalog

Instances (1/3) Info

**Connect** Instance state ▾ Actions ▾ **Launch Instances** ▾

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input checked="" type="checkbox"/>	connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
<input type="checkbox"/>	connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance: i-03f3ea049eaeaf3d8 (connecting-vpc/MarketingServer)

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-03f3ea049eaeaf3d8 (connecting-vpc/MarketingServer)	100.24.123.161   <a href="#">open address</a>	10.10.1.109
IPv6 address	Instance state	Public IPv4 DNS
–	Running	ec2-100-24-123-161.compute-1.amazonaws.com   <a href="#">open address</a>
Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-10-10-1-109.ec2.internal	ip-10-10-1-109.ec2.internal	

Feedback Language

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Lab Files

Steps

## Connecting VPCs

### Step 32

1. Click the Session Manager tab.
2. Click Connect.
3. Go to the next step.

Navigate steps:  
(click or use arrow keys)

Feedback

Language



Services

Search

[Option+S]



N. Virginia

AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-



EC2 &gt; Instances &gt; i-03f3ea049eaeaf3d8 &gt; Connect to instance

### Connect to instance [Info](#)

Connect to your instance i-03f3ea049eaeaf3d8 (Ubuntu-22.04-amd64-g2.x86\_64-g2.2xlarge in us-east-1/MarketingServer) using any of these options

1. Click



EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

### Session Manager usage:

- Connect to your instance without SSH keys or a bastion host.
- Sessions are secured using an AWS Key Management Service key.
- You can log session commands and details in an Amazon S3 bucket or CloudWatch Logs log group.
- Configure sessions on the Session Manager [Preferences](#) page.

2. Click



Cancel

Connect



Step 32/38



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Plan

DIY

Exit



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Lab Files

Steps

## Connecting VPCs

### Step 33

- The Session Manager terminal for the MarketingServer instance opens in a new browser tab (or window).

1. In the terminal, replacing the current IP address with the IP address that you copied in an earlier step, run:

```
ping <172.31.x.xx>
```

- This private IPv4 address is for the FinanceServer instance.

2. Review to see that the ping command is still not working,

3. To exit the running process,

Navigate steps:  
(click or use arrow keys)

Session ID: e

Instance ID: i-03f3ea049eaeaf3d8

Terminate

1. Run

sh-4.2\$

sh-4.2\$

sh-4.2\$

sh-4.2\$ ping 172.31.1.83

PING 172.31.1.83 (172.31.1.83) 56(84) bytes of data.

2. Review

^C

3. Press

--- 172.31.1.83 ping statistics ---

6 packets transmitted, 0 received, 100% packet loss, time 5108ms

sh-4.2\$



Step 33/38



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Exit

In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 34

1. In the previous browser, in the Amazon EC2 Instances section, choose the check box to select the FinanceServer instance.
2. Click the Security tab.
3. Under Security groups, click the provided security group name that contains FinanceServerSecurityGroup.
4. Go to the next step.

### Concept

Security groups do not automatically accept data from peered VPCs. You must update security groups to allow a peered VPC as an incoming source.

Navigate steps:  
(click or use arrow keys)

The screenshot shows the AWS Management Console interface for the EC2 Instances page. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, Images, and AMIs. The main content area displays a list of instances. The 'connecting-vpc/FinanceServer' instance is selected, and the 'Security' tab is active. The 'Security details' section shows the 'IAM Role' as 'ec2\_app\_role', the 'Owner ID' as '860008896607', and the 'Security groups' as 'sg-05e99807bc7772f15 (FinanceServerSecurityGroup)'. The 'Inbound rules' section is also visible.

Name	Instance ID	Instance state	Instance type
connecting-vpc/MarketingServer	i-03f3ea049eaeaf3d8	Running	t2.micro
connecting-vpc/FinanceServer	i-0775ea6d5ab4eb050	Running	t2.micro
connecting-vpc/DeveloperServer	i-0c8b2a01d16f2e9bf	Running	t2.micro

Instance details for **i-0775ea6d5ab4eb050 (connecting-vpc/FinanceServer)**

Details	Security	Networking	Storage	Status checks	Monitoring	Tags
<b>Security details</b>						
IAM Role ec2_app_role		Owner ID 860008896607		Launch time Fri Mar 24 2023 10:09:48 GMT-0400 (Eastern Daylight Time)		
Security groups sg-05e99807bc7772f15 (FinanceServerSecurityGroup)						
<b>Inbound rules</b>						



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 35

1. Click the Inbound rules tab.
2. Click Edit inbound rules.
3. Go to the next step.

### Concept

Security groups are stateful. If you send a request from your instance, the response traffic for that request is allowed to flow in regardless of the inbound rules. This also means that responses to allowed inbound traffic are allowed to flow out, regardless of the outbound rules.

Navigate steps:  
(click or use arrow keys)



Step 35/38



Services

Search

[Option+S]



N. Virginia

AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

New EC2 Experience  
Tell us what you think



EC2 Dashboard

EC2 Global View

Events

Tags

Limits

#### Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

#### Images

AMIs

AMI Catalog

Feedback

Language

## sg-05e99807bc7772f15 - FinanceServerSecurityGroup

Actions

### Details

Security group name

FinanceServerSecurityGroup

Security group ID

sg-05e99807bc7772f15

Description

Security Group for Finance Server

VPC ID

 vpc-0d907062e29d94098  

Owner

860008896607

Inbound rules count

0 Permission entries

Outbound rules count

1 Permission entry

1. Click



Inbound rules

Outbound rules

Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability



2. Click



### Inbound rules



Manage tags

Edit inbound rules

Filter security group rules



1



Privacy

Terms

Cookie preferences

In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 36

1. Click Add rule.
2. To configure the rule, for Type, in the new search box, choose Custom ICMP - IPv4.
3. For Source, in the new search box, type and choose:

10.10.0.0/16

4. Click Save rules.
5. Return to the Amazon EC2 Instance page, and then connect to the MarketingServer instance by using Session Manager (not shown).
6. Go to the next step.

## Concept

Navigate steps:  
(click or use arrow keys)



Step 36/38



Feedback

Language

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Exit



Services

Search

[Option+S]



N. Virginia

AWS Labs User-6pZWqCsCC89ak7Y2fB5SwK/exptools\_session @ 8600-

## Edit inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

### Inbound rules [Info](#)

#### Inbound rule 1

Delete

Security group rule ID

-

Port range [Info](#)

All

Type [Info](#)

Custom ICMP - IPv4

Source type [Info](#)

Custom

Protocol [Info](#)

All

Source

Q

10.10.0.0/16 X

Description - optional [Info](#)

Add rule

1. Click

4. Click

Cancel

Preview changes

Save rules



In the Cloud Practitioner Edition, launching a lab for an assignment that has already been validated is disabled.

Lab Files

Steps

## Connecting VPCs

### Step 37

1. In the terminal, replacing the current IP address with the IP address that you copied in an earlier step, run:

```
ping <172.31.x.xx>
```

- This private IPv4 address is for the FinanceServer instance.

2. Review the data.

- The MarketingServer instance should now be able to communicate with the FinanceServer instance.

3. To exit the running process,

Navigate steps:  
(click or use arrow keys)



Step 37/38



Session ID: exptools\_session-

Instance ID: i-03f3ea049eaeaf3d8

Terminate

```
sh-4.2$
sh-4.2$
sh-4.2$
sh-4.2$
sh-4.2$ ping 172.31.1.83
PING 172.31.1.83 (172.31.1.83) 56(84) bytes of data.
64 bytes from 172.31.1.83: icmp_seq=1 ttl=255 time=0.511 ms
64 bytes from 172.31.1.83: icmp_seq=2 ttl=255 time=0.418 ms
64 bytes from 172.31.1.83: icmp_seq=3 ttl=255 time=0.495 ms
64 bytes from 172.31.1.83: icmp_seq=4 ttl=255 time=0.466 ms
64 bytes from 172.31.1.83: icmp_seq=5 ttl=255 time=0.464 ms
64 bytes from 172.31.1.83: icmp_seq=6 ttl=255 time=0.467 ms
64 bytes from 172.31.1.83: icmp_seq=7 ttl=255 time=0.458 ms
64 bytes from 172.31.1.83: icmp_seq=8 ttl=255 time=0.454 ms
64 bytes from 172.31.1.83: icmp_seq=9 ttl=255 time=0.406 ms
64 bytes from 172.31.1.83: icmp_seq=10 ttl=255 time=0.454 ms
64 bytes from 172.31.1.83: icmp_seq=11 ttl=255 time=0.440 ms
64 bytes from 172.31.1.83: icmp_seq=12 ttl=255 time=0.454 ms
64 bytes from 172.31.1.83: icmp_seq=13 ttl=255 time=0.430 ms
64 bytes from 172.31.1.83: icmp_seq=14 ttl=255 time=0.455 ms
64 bytes from 172.31.1.83: icmp_seq=15 ttl=255 time=0.442 ms
64 bytes from 172.31.1.83: icmp_seq=16 ttl=255 time=0.492 ms
^C
--- 172.31.1.83 ping statistics ---
16 packets transmitted, 16 received, 0% packet loss, time 15346ms
rtt min/avg/max/mdev = 0.406/0.456/0.511/0.035 ms
sh-4.2$
```

1. Run

2. Review

3. Press

2 Plan

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Exit