

VPC PEERING

How to communicate ec2 instance two different VPC .

How to create 2 VPC .

1step

how to create 1st vpc .

[VPCs](#) > Create VPC

Create VPC

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address range for your VPC. Specify the IPv4 address range as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. You cannot specify an IPv4 CIDR block larger than /16. You can optionally associate an IPv6 CIDR block with the VPC.

Name tag ⓘ

IPv4 CIDR block* ⓘ

IPv6 CIDR block ☒ No IPv6 CIDR Block ⓘ
☐ Amazon provided IPv6 CIDR block
☐ IPv6 CIDR owned by me

Tenancy ⓘ

* Required

[Cancel](#) [Create](#)

how to create 1st subnet .

[Subnets](#) > Create subnet

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag ⓘ

VPC* ⓘ

Availability Zone ⓘ

| VPC CIDRs | CIDR | Status | Status Reason |
|-----------|-------------|------------|---------------|
| | 10.0.0.0/16 | associated | |

IPv4 CIDR block* ⓘ

* Required

[Cancel](#) [Create](#)

How to create 1st internet gateway .

[Internet gateways](#) > Create internet gateway

Create internet gateway

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.

Name tag ⓘ

* Required

[Cancel](#)

[Create](#)

How to attach internet gateway .

[Internet gateways](#) > Attach to VPC

Attach to VPC

Attach an internet gateway to a VPC to enable communication with the internet. Specify the VPC you would like to attach below.

VPC* ⓘ

▶ AWS Command Line Interface command

* Required

[Cancel](#)

[Attach](#)

How to create 1st route table .

[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.

Name tag ⓘ
VPC* ⓘ ⓘ

* Required

[Cancel](#)

[Create](#)

How to add route .

| <input type="checkbox"/> | Name | Route Table ID | Explicit subnet association | Edge associations | Main | VPC ID | Owner |
|-------------------------------------|------------|-----------------------|-----------------------------|-------------------|------|----------------------------|--------------|
| <input checked="" type="checkbox"/> | vpc1-route | rtb-033c43b63d4ab0f4e | - | - | No | vpc-036dbba772d533fbd ... | 288900961078 |
| <input type="checkbox"/> | | rtb-045eed7a | - | - | Yes | vpc-f3c7f389 | 288900961078 |
| <input type="checkbox"/> | | rtb-0e2bfa91ac8ac5f0c | - | - | Yes | vpc-036dbba772d533fbd ... | 288900961078 |

Route Table: rtb-033c43b63d4ab0f4e

Summary

Routes

Subnet Associations

Edge Associations

Route Propagation

Tags

Edit routes

View

All routes

| Destination | Target | Status | Propagated |
|-------------|--------|--------|------------|
| 10.0.0.0/16 | local | active | No |

[Route Tables](#) > Edit routes

Edit routes

| Destination | Target | Status | Propagated |
|----------------------|----------------------------------|--------|------------|
| 10.0.0.0/16 | <div>local</div> | active | No |
| <div>0.0.0.0/0</div> | <div>igw-07e2d9119db45520d</div> | | No |

Add route

* Required

CancelSave routes

How to add subnet associations .

[Route Tables](#) > Edit subnet associations

Edit subnet associations

Route table rtb-033c43b63d4ab0f4e (vpc1-route)

Associated subnets

subnet-0bab4b94ee2fae1da

Filter by attributes or search by keyword

☐

Subnet ID

IPv4 CIDR

IPv6 CIDR

Current Route Table

☒

subnet-0bab4b94ee2fae1da | vpc1-subnet

10.0.0.0/24

-

Main

* Required

CancelSave

2step

how to create 2nd vpc .

[VPCs](#) > Create VPC

Create VPC

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address range for your VPC. Specify the IPv4 address range as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. You cannot specify an IPv4 CIDR block larger than /16. You can optionally associate an IPv6 CIDR block with the VPC.

Name tag ⓘ

IPv4 CIDR block* ⓘ

IPv6 CIDR block ☒ No IPv6 CIDR Block ⓘ
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Tenancy ⓘ

* Required

[Cancel](#) [Create](#)

how to create 2nd subnet .

[Subnets](#) > Create subnet

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag ⓘ

VPC* ⓘ

Availability Zone ⓘ

| VPC CIDRs | CIDR | Status | Status Reason |
|-----------|----------------|------------|---------------|
| | 192.168.0.0/16 | associated | |

IPv4 CIDR block* ⓘ

* Required

[Cancel](#) [Create](#)

How to create 2nd internet gateway .

[Internet gateways](#) > Create internet gateway

Create internet gateway

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.

Name tag ⓘ

* Required

[Cancel](#) [Create](#)

How to attach internet gateway .

[Internet gateways](#) > Attach to VPC

Attach to VPC

Attach an internet gateway to a VPC to enable communication with the internet. Specify the VPC you would like to attach below.

VPC*

vpc-0236d971691b6ff1b

i

▶ AWS Command Line Interface command

* Required

Cancel Attach

How to create 2nd route table.

[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.

Name tag

vpc2-route

i

VPC*

vpc-0236d971691b6ff1b

C

i

* Required

Cancel Create

How to add route .

[Route Tables](#) > Edit routes

Edit routes

| Destination | Target | Status | Propagated | |
|----------------------|----------------------------------|--------|------------|---|
| 192.168.0.0/16 | local | active | No | |
| <div>0.0.0.0/0</div> | <div>igw-00c6d4e67e51ee9ff</div> | | No | ✕ |
| Add route | | | | |

* Required

Cancel Save routes

How to add subnet associations .

[Route Tables](#) > Edit subnet associations

Edit subnet associations

Route table rtb-02c314f7e58e8b2c7 (vpc2-route)

Associated subnets subnet-082dd3e47e958f86b

Filter by attributes or search by keyword

Subnet ID

IPv4 CIDR

IPv6 CIDR

Current Route Table

subnet-082dd3e47e958f86b | vpc2-subnet

192.168.0.0/24

-

Main

* Required

Cancel Save

Create subnet

Actions

Filter by tags and attributes or search by keyword

1 to 3 of 3

| | Name | Subnet ID | State | VPC | IPv4 CIDR | Available IPv4 | IPv6 CIDR | Availability Zone | Availability Zone |
|--|-------------|--------------------------|-----------|-----------------------------|----------------|----------------|-----------|-------------------|-------------------|
| | vpc2-subnet | subnet-082dd3e47e958f86b | available | vpc-0236d971691b6ff1b ... | 192.168.0.0/24 | 250 | - | us-east-1a | use1-az1 |
| | vpc1-subnet | subnet-0bab4b94ee2fae1da | available | vpc-036dbba772d533fbd ... | 10.0.0.0/24 | 250 | - | us-east-1a | use1-az1 |

how to create vpc peering .

Peering Connections > Create Peering Connection

Create Peering Connection

Peering connection name tag

Select a local VPC to peer with

VPC (Requester)*

| CIDRs | CIDR | Status | Status Reason |
|-------|-------------|------------|---------------|
| | 10.0.0.0/16 | associated | |

Select another VPC to peer with

Account ☒ My account ☐ Another account

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

VPC (Accepter)*

| CIDRs | CIDR | Status | Status Reason |
|-------|----------------|------------|---------------|
| | 192.168.0.0/16 | associated | |

* Required

Cancel Create Peering Connection

Note :- how to request VPC1 .

How to accept VPC2 .

Create Peering Connection Actions

Filter by tags and attributes

| | Name | Peering | Requester VPC | Accepter VPC | Requester CIDRs | Accepter CIDRs | Requester Owner | Accepter Owner |
|---|----------------|------------|--------------------|--------------------|-----------------|----------------|-----------------|----------------|
| <div>Accept Request</div> <div>Reject Request</div> <div>Delete VPC Peering Connection</div> <div>Edit ClassicLink Settings</div> <div>Edit DNS Settings</div> <div>Add/Edit Tags</div> | peering-vpc... | pcx-06e... | vpc-036dbba772d... | vpc-0236d971691... | 10.0.0.0/16 | - | 288900961078 | 288900961078 |

Note:- how to accept request

How to create 2 ec2 instance .

How to create 1st ec2-instance .

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances1Launch into Auto Scaling Group

Purchasing option☐ Request Spot instances

Networkvpc-036dbba772d533fbd | VPC-1Create new VPC

Subnetsubnet-0bab4b94ee2fae1da | vpc1-subnet | us-east-251 IP Addresses availableCreate new subnet

Auto-assign Public IPEnable

Placement group☐ Add instance to placement group

Capacity ReservationOpenCreate new Capacity Reservation

IAM roleNoneCreate new IAM role

Shutdown behaviorStop

Stop - Hibernate behavior☐ Enable hibernation as an additional stop behavior

Enable termination protection☐ Protect against accidental termination

Monitoring☐ Enable CloudWatch detailed monitoring

CancelPreviousReview and LaunchNext: Add Storage

How to create 1st security group .

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group:☒ Create a new security group☐ Select an existing security group

Security group name:vpc-sg1

Description:launch-wizard-1 created 2020-06-07T12:32:21.524+05:30

| Type | Protocol | Port Range | Source | Description |
|----------------|----------|------------|--------------------------|----------------------------|
| SSH | TCP | 22 | Anywhere 0.0.0.0/0, :::0 | e.g. SSH for Admin Desktop |
| All ICMP - IPv | ICMP | 0 - 65535 | Anywhere 0.0.0.0/0, :::0 | e.g. SSH for Admin Desktop |

Add Rule

How to create 2nd ec2-instance .

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances ⓘ1Launch into Auto Scaling Group ⓘ

Purchasing option ⓘ☐ Request Spot instances

Network ⓘvpc-0236d971691b6ff1b | vpc-2Create new VPC

Subnet ⓘsubnet-082dd3e47e958f86b | vpc2-subnet | us-east-251 IP Addresses availableCreate new subnet

Auto-assign Public IP ⓘEnable

Placement group ⓘ☐ Add instance to placement group

Capacity Reservation ⓘOpenCreate new Capacity Reservation

IAM role ⓘNoneCreate new IAM role

Shutdown behavior ⓘStop

Stop - Hibernate behavior ⓘ☐ Enable hibernation as an additional stop behavior

Enable termination protection ⓘ☐ Protect against accidental termination

Monitoring ⓘ☐ Enable CloudWatch detailed monitoring

CancelPreviousReview and LaunchNext: Add Storage

How to create 2nd security group .

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Assign a security group: ☒ Create a new security group☐ Select an existing security group

Security group name: vpc-sg2

Description: launch-wizard-1 created 2020-06-07T12:35:16.673+05:30

| Type ⓘ | Protocol ⓘ | Port Range ⓘ | Source ⓘ | Description ⓘ |
|-----------------|------------|--------------|-------------------------|----------------------------|
| SSH | TCP | 22 | Anywhere 0.0.0.0/0 :::0 | e.g. SSH for Admin Desktop |
| All ICMP - IPv4 | ICMP | 0 - 65535 | Anywhere 0.0.0.0/0 :::0 | e.g. SSH for Admin Desktop |

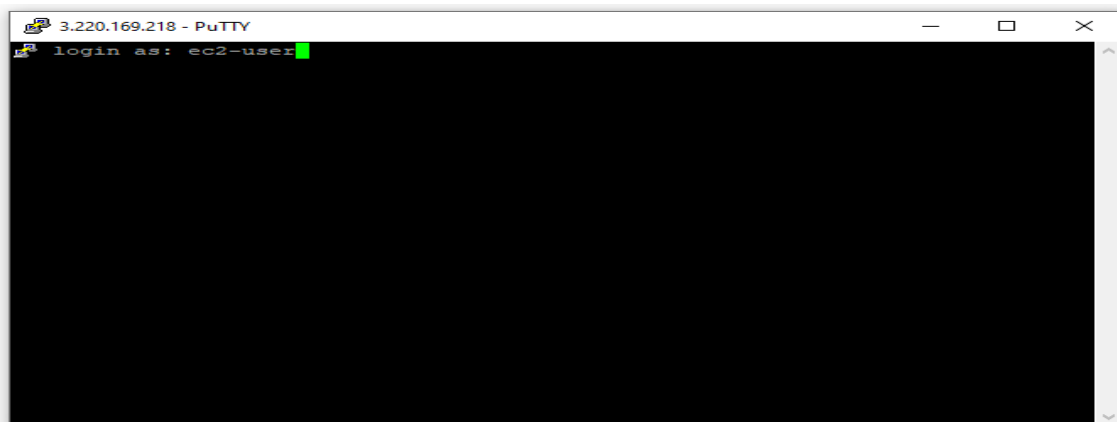
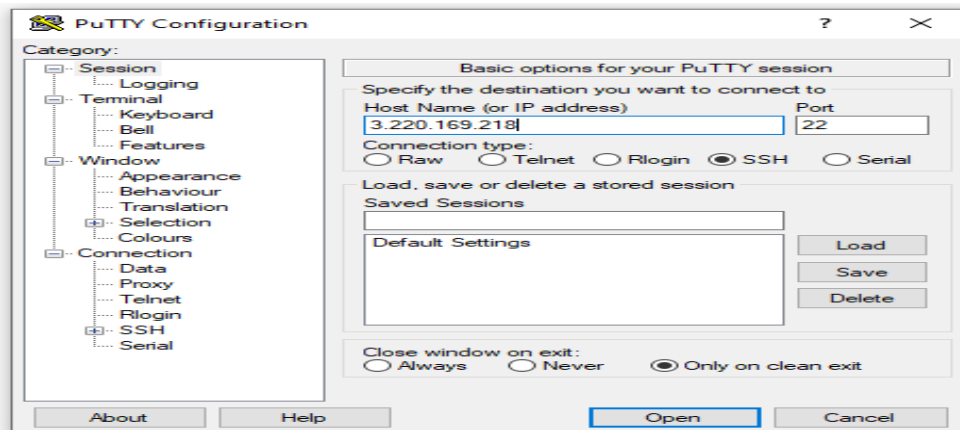
Add Rule

Launch Instance ▼ConnectActions ▼

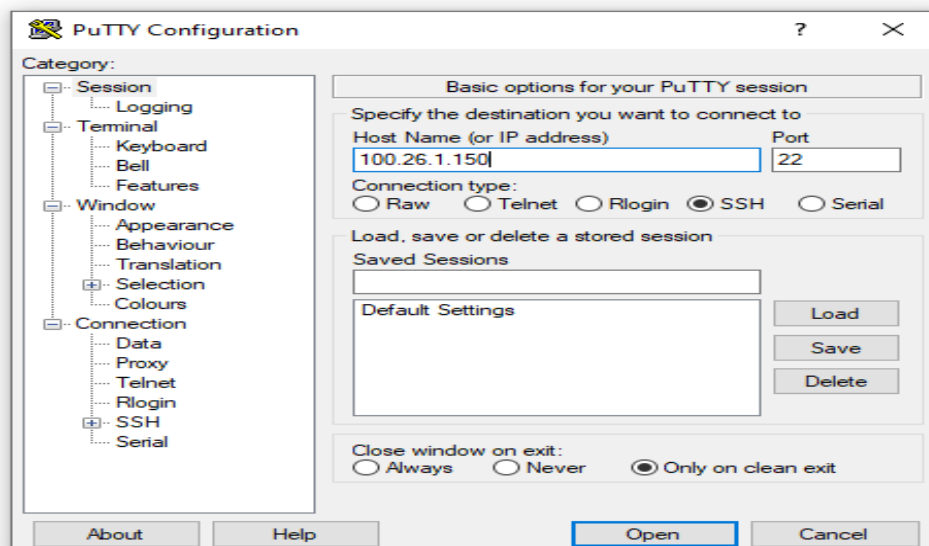
Filter by tags and attributes or search by keyword

| | Name ▲ | Instance ID ▼ | Instance Type ▼ | Availability Zone ▼ | Instance State ▼ | Status Checks ▼ | Alarm Status | Public DNS (IPv4) ▼ | IPv4 Public IP ▼ | IPv6 IPs |
|--|---------|---------------------|-----------------|---------------------|------------------|-----------------|--------------|---------------------|------------------|----------|
| | server1 | i-041db7105f202b71b | t2.micro | us-east-1a | running | Initializing | None | | 3.236.42.238 | - |
| | server2 | i-0e97b978bf0ce0c89 | t2.micro | us-east-1a | running | Initializing | None | | 3.215.180.16 | - |

How to ssh 1st ec2-instance by putty .



How to ssh 2nd ec2-instance .



How to ping ec2-instance .

```
ec2-user@ip-10-0-0-82:~$ ping 192.168.0.65
PING 192.168.0.65 (192.168.0.65) 56(84) bytes of data.
```

```
ec2-user@ip-192-168-0-65:~$ ping 10.0.0.82
PING 10.0.0.82 (10.0.0.82) 56(84) bytes of data.
```

Note :- actually not ping ec2-instance . how to add vpc peering in route table .

How to add 1st route table .

[Route Tables](#) > Edit routes

Edit routes

| Destination | Target | Status | Propagated |
|----------------|-----------------------|--------|------------|
| 192.168.0.0/16 | local | active | No |
| 0.0.0.0/0 | igw-00c6d4e67e51ee9ff | active | No |
| 10.0.0.0/16 | pcx- | | No |

Add route

pcx-06e95fad49c5f358e peering-vpc1-vpc2

* Required

Cancel Save routes

How to add 2nd route table .

[Route Tables](#) > Edit routes

Edit routes

| Destination | Target | Status | Propagated |
|----------------|-----------------------|--------|------------|
| 10.0.0.0/16 | local | active | No |
| 0.0.0.0/0 | igw-07e2d9119db455200 | active | No |
| 192.168.0.0/16 | pcx- | | No |

Add route

pcx-06e95fad49c5f358e peering-vpc1-vpc2

* Required

Cancel Save routes

Ping sucessfull ?

```
ec2-user@ip-10-0-0-82:~$ ping 192.168.0.65
PING 192.168.0.65 (192.168.0.65) 56(84) bytes of data.
64 bytes from 192.168.0.65: icmp_seq=1 ttl=255 time=0.540 ms
64 bytes from 192.168.0.65: icmp_seq=2 ttl=255 time=0.411 ms
64 bytes from 192.168.0.65: icmp_seq=3 ttl=255 time=0.411 ms
64 bytes from 192.168.0.65: icmp_seq=4 ttl=255 time=0.486 ms
```

```
ec2-user@ip-192-168-0-65:~$ ping 10.0.0.82
PING 10.0.0.82 (10.0.0.82) 56(84) bytes of data.
64 bytes from 10.0.0.82: icmp_seq=1 ttl=255 time=0.374 ms
64 bytes from 10.0.0.82: icmp_seq=2 ttl=255 time=0.451 ms
64 bytes from 10.0.0.82: icmp_seq=3 ttl=255 time=0.399 ms
64 bytes from 10.0.0.82: icmp_seq=4 ttl=255 time=0.537 ms
64 bytes from 10.0.0.82: icmp_seq=5 ttl=255 time=0.511 ms
64 bytes from 10.0.0.82: icmp_seq=6 ttl=255 time=0.429 ms
```