

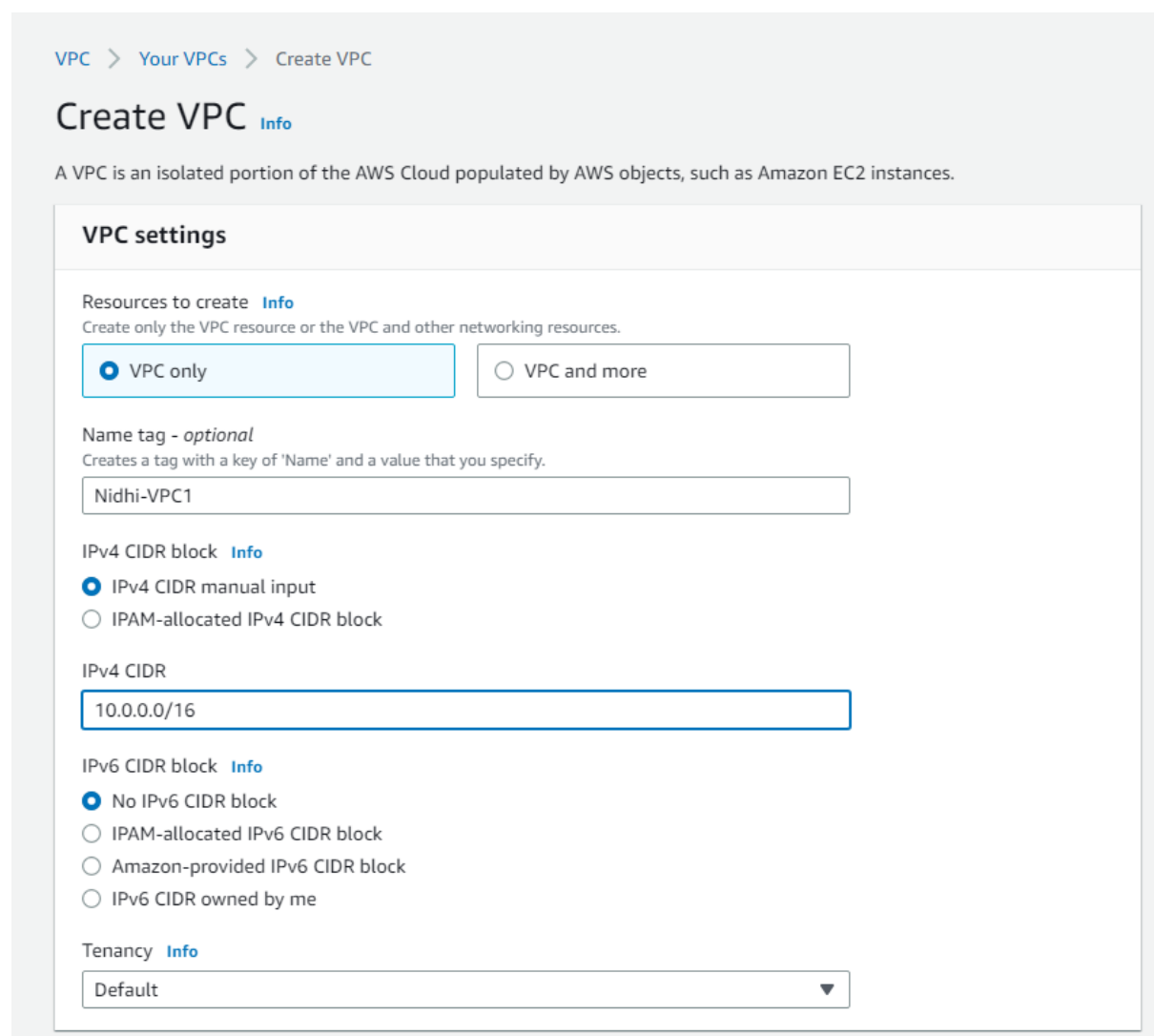
TRANSIT GATEWAY

A *transit gateway* is a network transit hub that you can use to interconnect your virtual private clouds (VPCs) and on-premises networks.

It simplifies the network and puts an end to complex peering. It acts as Cloud router. Each Connection is just made one.

Step 1:

- Create 3 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.

Nidhi-VPC1

IPv4 CIDR block [Info](#)

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

IPv4 CIDR

10.0.0.0/16

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](#)

Default

IPv4 CIDR

10.0.0.0/16

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](#)

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 and filter your resources or track your AWS costs.

Key	Value - optional	
<input type="text" value="Name"/>	<input type="text" value="Nidhi-VPC1"/>	<input type="button" value="Remove"/>
<input type="text" value="Owner"/>	<input type="text" value="nidhi.sharma@cloudeq.com"/>	<input type="button" value="Remove"/>
<input type="text" value="Purpose"/>	<input type="text" value="Training"/>	<input type="button" value="Remove"/>

You can add 47 more tags.

arch

[Alt+S]

N. Virginia

AWSPowerUserAccess/nidhi.sharma@cloudeq.com

Your VPCs (4) [Info](#)

<

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>

<input type="checkbox"/>	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table
<input type="checkbox"/>	Nidhi_VPC2	vpc-0df33eb3d8e4718f8	Available	10.1.0.0/16	-	dopt-085ce0fb7e8ab7...	rtb-02df249232f3ab5eb
<input type="checkbox"/>	Nidhi_VPC3	vpc-0ef6bcb88a7fe64d1	Available	10.0.0.0/24	-	dopt-085ce0fb7e8ab7...	rtb-0a19f14e02c153d35
<input type="checkbox"/>	-	vpc-076eb9b0fa60396b5	Available	172.31.0.0/16	-	dopt-085ce0fb7e8ab7...	rtb-028109ef772915e4c
<input type="checkbox"/>	Nidhi-VPC1	vpc-0bce4965af18eecd	Available	10.0.0.0/16	-	dopt-085ce0fb7e8ab7...	rtb-05f214c9186feb76

Step 2:

- Create 3 Subnet

VPC > Subnets > Create subnet

Create subnet [Info](#)

VPC

VPC ID
Create subnets in this VPC.

Select a VPC ▼

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Select a VPC first to create new subnets.

Add new subnet

Cancel Create subnet

[Alt+S] N. Virginia AWSPowerUserAccess/nidhi.sharma@cloudseq.com

Subnets (4) [Info](#) [Refresh](#) [Actions](#) [Create subnet](#)

Filter subnets

<input type="checkbox"/>	Name ▼	Subnet ID ▼	State ▼	VPC ▼	IPv4 CIDR ▼	IPv6 CIDR ▼	Available IPv4 addresses ▼
<input type="checkbox"/>	Nidhi_subnet2	subnet-0a6decd4f681ef655	Available	vpc-0df33eb3d8e4718f8 Nid...	10.1.0.0/16	-	65531
<input type="checkbox"/>	Nidhi_subnet1	subnet-02041e1529af883c4	Available	vpc-0bce4965af18eecd Nid...	10.0.0.0/16	-	65531
<input type="checkbox"/>	-	subnet-0b478fa403c52677a	Available	vpc-076eb9b0fa60396b5	172.31.80.0/20	-	4090
<input type="checkbox"/>	Nidhi_Subnet3	subnet-04223843e026dd45d	Available	vpc-0ef6bcb88a7fe64d1 Nid...	10.0.0.0/24	-	251

Step 3:

- Create 3 Route Table

VPC > Route tables > Create route table

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.

my-route-table-01

VPC

The VPC to use for this route table.

Select a VPC

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.

No tags associated with the resource.

Add new tag

You can add 50 more tags.

Cancel

Create route table

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

Route tables (7)

Info

Filter route tables

	Name	Route table ID	Explicit subnet associat...	Edge associations	Main	VPC	Owner ID
	-	rtb-05f214c9186fcb76	-	-	Yes	vpc-0bce4965af18eecd Nid...	528519205020
	Nidhi_Rt3	rtb-055c138481a84f27e	-	-	No	vpc-0ef6bcb88a7fe64d1 Nid...	528519205020
	-	rtb-028109ef772915e4c	subnet-0b478fa403c52...	-	Yes	vpc-076eb9b0fa60396b5	528519205020
	Nidhi_Rt1	rtb-082ace762697db978	-	-	No	vpc-0bce4965af18eecd Nid...	528519205020
	-	rtb-02df249232f3ab5eb	-	-	Yes	vpc-0df33eb3d8e4718f8 Nid...	528519205020
	Nidhi_Rt2	rtb-0c6c8bca03f25370f	-	-	No	vpc-0df33eb3d8e4718f8 Nid...	528519205020
	-	rtb-0a19f14e02c153d35	-	-	Yes	vpc-0ef6bcb88a7fe64d1 Nid...	528519205020

Step 4:

➤ Create Transit Gateway

Transit gateways [Info](#)

Actions

Create transit gateway

Filter transit gateways

< 1 > ⚙

Name	Transit gateway ID	Owner ID	State
No transit gateways found			

VPC > Transit gateways > Create transit gateway

Create transit gateway [Info](#)

A transit gateway (TGW) is a network transit hub that interconnects attachments (VPCs and VPNs) within the same AWS account or across AWS accounts.

Details - *optional*

Name tag

Creates a tag with the key set to Name and the value set to the specified string.

Description [Info](#)

Set the description of your transit gateway to help you identify it in the future.

Configure the transit gateway

Amazon side Autonomous System Number (ASN) [Info](#)

☒ DNS support [Info](#)

☒ VPN ECMP support [Info](#)

☒ Default route table association [Info](#)

Transit gateway CIDR blocks

CIDR - optional [Info](#)

10.1.0.0/16 ✕

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

✕

Remove

✕

✕

Remove

Add new tag

You can add 48 more tags.

Cancel

Create transit gateway

Transit gateway ID: tgw-01af31d1b6c9cc06b ✕

Clear filters

<input checked="" type="checkbox"/>	Name ▾	Transit gateway ID ▾	Owner ID ▾	State
<input checked="" type="checkbox"/>	Nidhi_TGW	tgw-01af31d1b6c9cc06b	528519205020	✔ Available

Step 5

- Now Create 3 Transit gateway attachment for every VPC.

Create transit gateway attachment [Info](#)

A transit gateway (TGW) is a network transit hub that interconnects attachments (VPCs and VPNs) within the same AWS account or across AWS accounts.

Details

Name tag - *optional*

Creates a tag with the key set to Name and the value set to the specified string.

Nidhi_TGWA1

Transit gateway ID [Info](#)

tgw-01af31d1b6c9cc06b (Nidhi_TGW)

▼

Attachment type [Info](#)

VPC

▼

VPC attachment

Select and configure your VPC attachment.

☒ DNS support [Info](#)

☐ IPv6 support [Info](#)

☐ Appliance Mode support [Info](#)

VPC ID

Select the VPC to attach to the transit gateway.

vpc-0bce4965af18eecd (Nidhi-VPC1)

Subnet IDs [Info](#)

Select the subnets in which to create the transit gateway VPC attachment.

☒ us-east-1a

subnet-02041e1529af883c4 (Nidhi_subnet1)

☐ us-east-1b

No subnet available

☐ us-east-1c

No subnet available

☐ us-east-1d

No subnet available

☐ us-east-1e

No subnet available

☐ us-east-1f

No subnet available

subnet-02041e1529af883c4

✕

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

✕

Q Nidhi_TGWA1

✕

Remove

Q owner

✕

Q nidhi.sharma@cloudeq.com

✕

Remove

Q purpose

✕

Q training

✕

Remove

Transit gateway attachments (1/3) [Info](#)

↻

Actions ▾

Create transit gateway attachment

Q Filter transit gateway attachments

< 1 > ⚙

<input checked="" type="checkbox"/>	Name ▾	Transit gateway attachment ID ▾	Transit gateway ID ▾	Resource type ▾	Resource ID ▾	State ▾	Association route table ID
<input checked="" type="checkbox"/>	Nidhi_TGWA3	tgw-attach-03038935154130467	tgw-01af31d1b6c9cc06b	VPC	vpc-0ef6bcb88a7fe64d1	Available	tgw-rtb-05c9d357ad6e357a1
<input type="checkbox"/>	Nidhi_TGWA2	tgw-attach-047f5a7a6c32c1243	tgw-01af31d1b6c9cc06b	VPC	vpc-0df33eb3d8e4718f8	Available	tgw-rtb-05c9d357ad6e357a1
<input type="checkbox"/>	Nidhi_TGWA1	tgw-attach-0dcb2271b62b6d07c	tgw-01af31d1b6c9cc06b	VPC	vpc-0bce4965af18eecd	Available	tgw-rtb-05c9d357ad6e357a1

Step 6

- Now go to Route table and select route ID and click add route to all the Route tables and enter your Transit Gateway CIDR and its ID and Click save changes.

VPC > Route tables > rtb-082ace762697db978 > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	<input type="text" value="local"/>	Active	No
<input type="text" value="10.1.0.0/16"/>	<input type="text" value="tgw-01af31d1b6c9cc06b"/>	-	No
<input type="button" value="Add route"/>			
<input type="button" value="Remove"/>			

Hence We connect 3 VPC with the help of Transit gateway.

Now Delete all the resources once done.

	Name	Transit gateway attachment ID	Transit gateway ID	Resource type	Resource ID	State	Association route table ID
<input checked="" type="checkbox"/>	Nidhi_TGWA3	tgw-attach-03038935154130467	tgw-01af31d1b6c9cc06b	VPC	vpc-0ef6bcb88a7fe64d1	Deleting	tgw-rtb-05c9d357ad6e357
<input type="checkbox"/>	Nidhi_TGWA2	tgw-attach-047f5a7a6c32c1243	tgw-01af31d1b6c9cc06b	VPC	vpc-0df33eb3d8e4718f8	Deleting	tgw-rtb-05c9d357ad6e357
<input type="checkbox"/>	Nidhi_TGWA1	tgw-attach-0dcb2271b62b6d07c	tgw-01af31d1b6c9cc06b	VPC	vpc-0bce4965af18eecd	Deleting	tgw-rtb-05c9d357ad6e357

END