

## Vpc Tasks 03

Design and deploy a scalable network architecture using AWS Transit Gateway to simplify network connectivity between multiple VPCs.

Region Mumbai

The screenshot displays two panels from the AWS Management Console. The top panel shows the 'Transit gateways' page with a success message: 'You successfully created tgw-089e819d0d49eceab / my-tgw-mum.' Below this, a table lists the created transit gateway. The bottom panel shows the 'Route tables' page for 'rtb-011aedca095d8776a / vpc4-rt', displaying details such as Route table ID, VPC, Main status, and Owner ID.

**Transit gateways (1)** [info](#)

[Find transit gateway by attribute or tag](#) [Refresh](#) [Actions](#) [Create transit gateway](#)

<input type="checkbox"/>	Name <a href="#">✎</a>	Transit gateway ID	State
<input type="checkbox"/>	my-tgw-mum	tgw-089e819d0d49eceab	Pending

**Select a transit gateway** [Settings](#) [Close](#)

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**Updated routes for rtb-011aedca095d8776a / vpc4-rt successfully** [Details](#)

[VPC](#) > [Route tables](#) > rtb-011aedca095d8776a

### rtb-011aedca095d8776a / vpc4-rt

[Actions](#)

#### Details [info](#)

Route table ID <input type="checkbox"/> rtb-011aedca095d8776a	Main <input type="checkbox"/> Yes	Explicit subnet associations -	Edge associations -
VPC vpc-057455144e8dee3d4   my-mum-vpc4	Owner ID <input type="checkbox"/> 183631301772		

[Routes](#) | [Subnet associations](#) | [Edge associations](#) | [Route propagation](#) | [Tags](#)

#### Routes (4)

[Filter routes](#) [Both](#) [Edit routes](#) [Previous](#) **1** [Next](#) [Settings](#)

Route tables (1/5) Info

Last updated 1 minute ago

Actions

Create route table

Find resources by attribute or tag

	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VP
<input type="checkbox"/>	-	<a href="#">rtb-02c00f70f7d827e07</a>	-	-	Yes	<a href="#">vp</a>
<input type="checkbox"/>	vpc2-rt	<a href="#">rtb-03f34720b69c33129</a>	-	-	Yes	<a href="#">vp</a>
<input type="checkbox"/>	vpc1-rt	<a href="#">rtb-03295319b602be3e3</a>	-	-	Yes	<a href="#">vp</a>
<input type="checkbox"/>	vpc3-rt	<a href="#">rtb-0dd91bd28f9670a3e</a>	-	-	Yes	<a href="#">vp</a>
<input checked="" type="checkbox"/>	vpc4-rt	<a href="#">rtb-011aedca095d8776a</a>	-	-	Yes	<a href="#">vp</a>

rtb-011aedca095d8776a / vpc4-rt

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Details

Instances (4) Info

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

Instance state = running

Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input type="checkbox"/>	my-ec2-mum-3	<a href="#">i-000ca3ff2b6a0b19c</a>	Running	t3.micro	3/3 checks passec	<a href="#">View alarms</a>	ap-south-1
<input type="checkbox"/>	my-ec2-mum4	<a href="#">i-0870bb3b664d4b6a4</a>	Running	t2.micro	2/2 checks passec	<a href="#">View alarms</a>	ap-south-1
<input type="checkbox"/>	my-ec2-mum2	<a href="#">i-0ac2ff625f160f701</a>	Running	t2.micro	2/2 checks passec	<a href="#">View alarms</a>	ap-south-1
<input type="checkbox"/>	my-ec2-mum1	<a href="#">i-0071b776717208067</a>	Running	t2.micro	2/2 checks passec	<a href="#">View alarms</a>	ap-south-1

Select an instance

Internet gateways (5) Info

Actions

Create internet gateway

Search

	Name	Internet gateway ID	State	VPC ID
<input type="checkbox"/>	-	<a href="#">igw-09603ea004f8d6732</a>	Attached	<a href="#">vpc-0634ba2766ad71dae</a>
<input type="checkbox"/>	my-igw-mum1	<a href="#">igw-0d64fd3e0de155ccc</a>	Attached	<a href="#">vpc-0dcf1c1d19ebfa83d   my-mum-v...</a>
<input type="checkbox"/>	my-igw-mum2	<a href="#">igw-00e5cc42f4833fbe7</a>	Attached	<a href="#">vpc-08ea43ca81b5b1c5b   my-mum-v...</a>
<input type="checkbox"/>	my-igw-mum3	<a href="#">igw-00be08fc050e81819</a>	Attached	<a href="#">vpc-03cae4a02623501b1   my-mum-...</a>
<input type="checkbox"/>	my-igw-mum4	<a href="#">igw-01b2e2301e2e402b3</a>	Attached	<a href="#">vpc-057455144e8dee3d4   my-mum-...</a>

Select an internet gateway above

❗ You can visualize and monitor your Transit Gateway(s) from the [AWS Network Manager](#). Register your Transit Gateway by creating a [global network](#) to get started.

### Transit gateway attachments (4) [info](#)



Actions ▾

Create transit gateway attachment

Find transit gateway attachment by attribute or tag

< 1 > ⚙

<input type="checkbox"/>	Name <a href="#">🔗</a> ▾	Transit gateway attachment ID ▾	Transit gateway ID ▾	State ▾	Resourc... ▾	Re
<input type="checkbox"/>	tgw-mum-vpc3	<a href="#">tgw-attach-055190e06cb4c0bcd</a>	<a href="#">tgw-089e819d0d49eceab</a>	✔ Available	VPC	vp
<input type="checkbox"/>	tgw-mum-vpc4	<a href="#">tgw-attach-0a4b52b9ff95f8de9</a>	<a href="#">tgw-089e819d0d49eceab</a>	✔ Available	VPC	vp
<input type="checkbox"/>	tgw-mum-vpc2	<a href="#">tgw-attach-0dfe693451dbf6662</a>	<a href="#">tgw-089e819d0d49eceab</a>	✔ Available	VPC	vp
<input type="checkbox"/>	tgw-mum-vpc1	<a href="#">tgw-attach-0f29ffded3069cf82</a>	<a href="#">tgw-089e819d0d49eceab</a>	✔ Available	VPC	vp

Select a transit gateway attachment



### Transit gateway route tables (1/1) [info](#)



Actions ▾

Create transit gateway route table

Find transit gateway route table by attribute or tag

< 1 > ⚙

<input checked="" type="checkbox"/>	Name <a href="#">🔗</a> ▾	Transit gateway route table ID ▾	Transit gateway ID ▾	State ▾	Default association rout
<input checked="" type="checkbox"/>		<a href="#">tgw-rtb-0fe7a43d41b6beb73</a>	<a href="#">tgw-089e819d0d49eceab</a>	✔ Available	Yes

### Transit gateway route tables: tgw-rtb-0fe7a43d41b6beb73



#### Associations (4) [info](#)



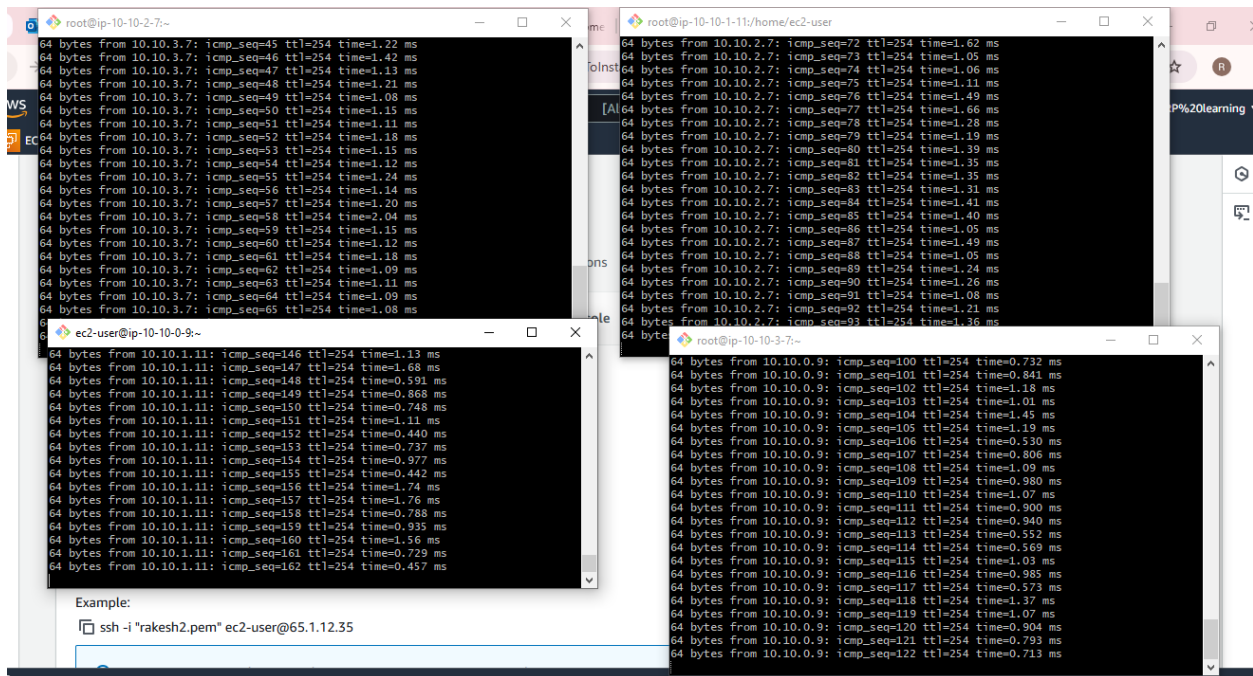
Delete association

Create association

Find association by attribute or tag

< 1 > ⚙

<input type="checkbox"/>	Attachment ID ▾	Resource type ▾	Resource ID ▾	State ▾
<input type="checkbox"/>	<a href="#">tgw-attach-0a4b52b9ff95f8de9</a>	VPC	<a href="#">vpc-057455144e8dee3d4</a>	✔ Associated
<input type="checkbox"/>	<a href="#">tgw-attach-0f29ffded3069cf82</a>	VPC	<a href="#">vpc-0dcf1c1d19ebfa83d</a>	✔ Associated
<input type="checkbox"/>	<a href="#">tgw-attach-055190e06cb4c0bcd</a>	VPC	<a href="#">vpc-03cae4a02623501b1</a>	✔ Associated
<input type="checkbox"/>	<a href="#">tgw-attach-0dfe693451dbf6662</a>	VPC	<a href="#">vpc-08ea43ca81b5b1c5b</a>	✔ Associated



## Eu Frankfurt Region

The image shows two screenshots of the AWS Management Console in the Frankfurt region. The top screenshot shows the 'Your VPCs (5)' page, which lists four VPCs: my-frank-vpc1, my-frank-vpc2, my-frank-vpc3, and my-frank-vpc4. The bottom screenshot shows the 'Subnets (7)' page, which lists four subnets: my-frank-sub1, my-frank-sub2, my-frank-sub3, and my-frank-sub4. A green notification banner at the top of the bottom screenshot states: 'You have successfully created 1 subnet: subnet-0be3a5021bff42b91'.

Dashboard

Global View

by VPC

private cloud

EC2s

Subnets

Load balancers

Transit gateways

Only internet

Access

Transit gateways

You successfully created VPC attachment tgw-attach-0938e6e33bda954a9 / tgw-frank4.

### Transit gateway attachments (4)

Find transit gateway attachment by attribute or tag

<input type="checkbox"/>	Name	Transit gateway attachment ID	Transit gateway ID	State	Resource type
<input type="checkbox"/>	tgw-frank4	tgw-attach-0938e6e33bda954a9	tgw-04501fd8b781e71b8	Pending	VPC
<input type="checkbox"/>	tgw-frank3	tgw-attach-0a78524c662d73dbc	tgw-04501fd8b781e71b8	Pending	VPC
<input type="checkbox"/>	tgw-frank1	tgw-attach-0a938aaecfda9223	tgw-04501fd8b781e71b8	Available	VPC
<input type="checkbox"/>	tgw-frank2	tgw-attach-0fcc889d2c29546c4	tgw-04501fd8b781e71b8	Pending	VPC

Select a transit gateway attachment

Instances

### Instances (4)

Last updated less than a minute ago

Find Instance by attribute or tag (case-sensitive)

All states

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input type="checkbox"/>	ec2-frank3	i-082a75461af8d0f5d	Running	t2.micro	Initializing	View alarms	eu-central-1
<input type="checkbox"/>	ec2-frank4	i-006572184e5d358f2	Running	t2.micro	Initializing	View alarms	eu-central-1
<input type="checkbox"/>	ec2-frank1	i-0cb3f116b9cdca31f	Running	t2.micro	2/2 checks passed	View alarms	eu-central-1
<input type="checkbox"/>	ec2-frank2	i-0e7a13973723d6e59	Running	t2.micro	2/2 checks passed	View alarms	eu-central-1

Select an instance

Services Search [Alt+S] Frankfurt RP%20learning

Updated routes for rtb-043722c30da96b95d / frank3-rt successfully

Details

VPC > Route tables > rtb-043722c30da96b95d

rtb-043722c30da96b95d / frank3-rt

Actions

Details Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-043722c30da96b95d	Yes	-	-
VPC	Owner ID		
vpc-03f599eea3e7955f1   my-frank-vpc3	183631301772		

Routes Subnet associations Edge associations Route propagation Tags

Routes (5)

Filter routes

Both Edit routes

Transit gateways (1) info

Find transit gateway by attribute or tag

Create transit gateway

Name	Transit gateway ID	State
my-tgw-frankfurt	tgw-04501fd8b781e71b8	Available

Select a transit gateway

## TGW peering

Services Search [Alt+S] Frankfurt RP%20learning

Accept transit gateway peering attachment(tgw-attach-00ea69fb2949a1a21) succeeded.

Transit gateway attachments (5) info

Find transit gateway attachment by attribute or tag

Create transit gateway attachment

Name	Transit gateway attachment ID	Transit gateway ID	State	Resource
	tgw-attach-00ea69fb2949a1a21	tgw-04501fd8b781e71b8	Pending	Peering
tgw-frank4	tgw-attach-0938e6e33bda954a9	tgw-04501fd8b781e71b8	Available	VPC
tgw-frank3	tgw-attach-0a78524c662d73dbc	tgw-04501fd8b781e71b8	Available	VPC
tgw-frank1	tgw-attach-0a938aaeacfd9a223	tgw-04501fd8b781e71b8	Available	VPC

Select a transit gateway attachment

Cross Rigon Ping

ec2-user@ip-10-10-0-9:~

```
~/.ssh/
#_
##### Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/

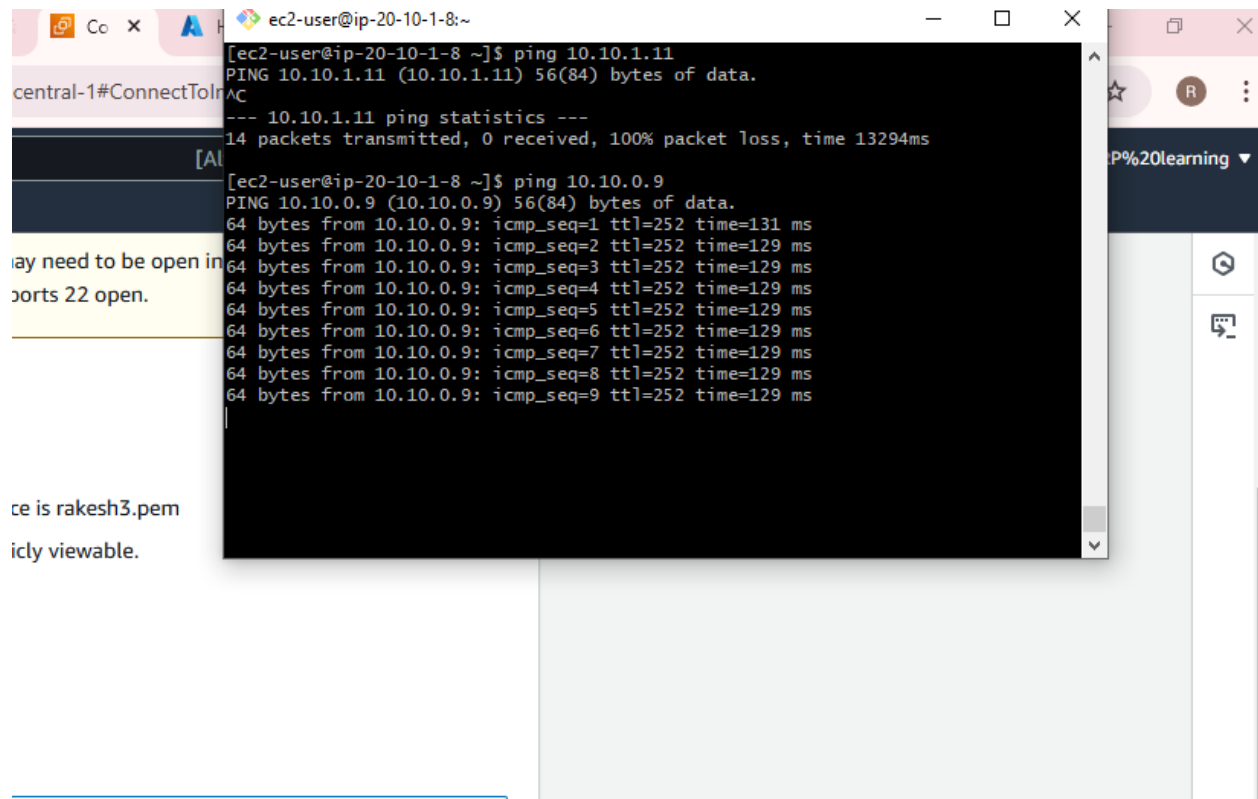
[ec2-user@ip-20-10-0-10 ~]$
[ec2-user@ip-20-10-0-10 ~]$ client_loop: send disconnect: Connection reset by peer

nani@DESKTOP-05K4621 MINGW64 ~/Downloads
$ ssh -i "rakesh3.pem" ec2-user@3.120.190.207
Last login: Wed Nov 13 13:13:36 2024 from 49.37.152.146

#_
##### Amazon Linux 2
#####
##### AL2 End of Life is 2025-06-30.
#####
##### A newer version of Amazon Linux is available!
#####
##### Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-20-10-0-10 ~]$
[ec2-user@ip-20-10-0-10 ~]$ ping 20.10.2.4
PING 20.10.2.4 (20.10.2.4) 56(84) bytes of data.
64 bytes from 20.10.2.4: icmp_seq=1 ttl=254 time=2.80 ms
64 bytes from 20.10.2.4: icmp_seq=2 ttl=254 time=1.75 ms
64 bytes from 20.10.2.4: icmp_seq=3 ttl=254 time=2.51 ms
64 bytes from 20.10.2.4: icmp_seq=4 ttl=254 time=1.74 ms
64 bytes from 20.10.2.4: icmp_seq=5 ttl=254 time=1.56 ms
64 bytes from 20.10.2.4: icmp_seq=6 ttl=254 time=2.45 ms
64 bytes from 20.10.2.4: icmp_seq=7 ttl=254 time=1.51 ms
64 bytes from 20.10.2.4: icmp_seq=8 ttl=254 time=1.98 ms
64 bytes from 20.10.2.4: icmp_seq=9 ttl=254 time=1.73 ms
64 bytes from 20.10.2.4: icmp_seq=10 ttl=254 time=2.55 ms
64 bytes from 20.10.2.4: icmp_seq=11 ttl=254 time=2.04 ms
64 bytes from 20.10.2.4: icmp_seq=12 ttl=254 time=1.88 ms
64 bytes from 20.10.2.4: icmp_seq=13 ttl=254 time=2.13 ms
64 bytes from 20.10.2.4: icmp_seq=14 ttl=254 time=2.10 ms
64 bytes from 20.10.2.4: icmp_seq=15 ttl=254 time=3.76 ms
64 bytes from 20.10.2.4: icmp_seq=16 ttl=254 time=1.98 ms
64 bytes from 20.10.2.4: icmp_seq=17 ttl=254 time=2.21 ms
64 bytes from 20.10.2.4: icmp_seq=18 ttl=254 time=2.12 ms
64 bytes from 20.10.2.4: icmp_seq=19 ttl=254 time=1.77 ms
64 bytes from 20.10.2.4: icmp_seq=20 ttl=254 time=1.97 ms
64 bytes from 20.10.2.4: icmp_seq=21 ttl=254 time=2.77 ms
64 bytes from 20.10.2.4: icmp_seq=22 ttl=254 time=2.14 ms
64 bytes from 20.10.2.4: icmp_seq=23 ttl=254 time=2.07 ms
64 bytes from 20.10.2.4: icmp_seq=24 ttl=254 time=2.29 ms
64 bytes from 20.10.2.4: icmp_seq=25 ttl=254 time=1.78 ms
```





ay need to be open in  
ports 22 open.

ce is rakesh3.pem  
icly viewable.