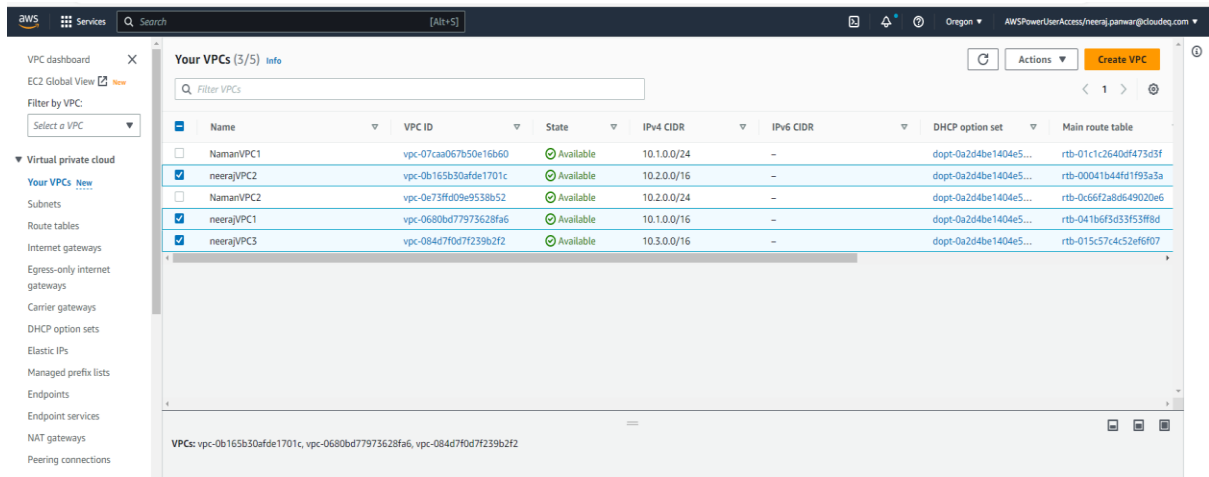


AWS Transit Gateway:

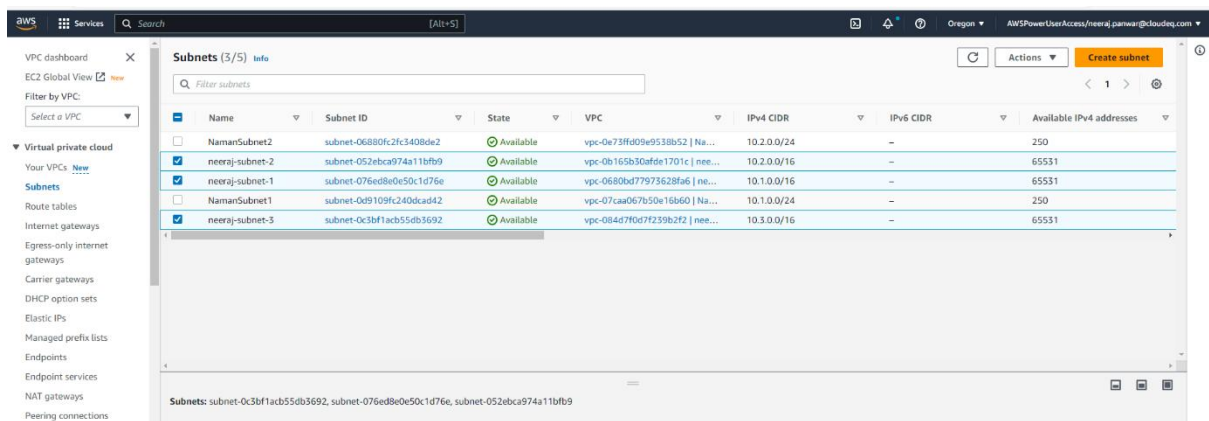
AWS Transit Gateway is a network transit hub that allows you to connect multiple Amazon Virtual Private Clouds (VPCs) and on-premises networks together in a centralized and scalable way, simplifying network management and reducing operational costs.

1. A Transit gateway is a network Transit hub.
2. Transit gateways connect VPC and on-premises networks to a central hub.
3. It simplifies the network and puts an end to the complex peering. It acts as a cloud router.
4. Each connection is just made once.
5. A tag scales elastically and the traffic management is very easy.
6. Our data is automatically encrypted and can never travel over public internet.
7. Inter-region peering connects AWS TG together using AWS global network.
8. Routing through the TG operates at layer 3 which is OSI model.

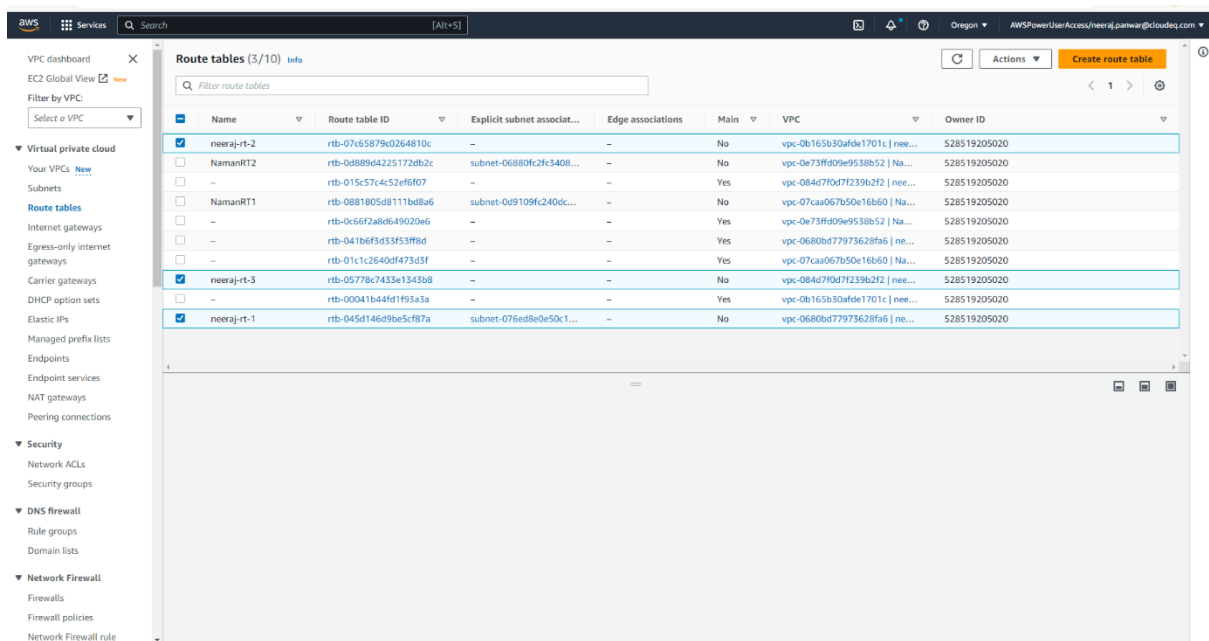
Create Three VPCs:



Create Three Subnets:



Create Three Route Tables:



Create Transit Gateway:

The screenshot shows the 'Create transit gateway' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Transit gateways > Create transit gateway'. The page title is 'Create transit gateway' with an 'Info' link. A brief description states: 'A transit gateway (TGW) is a network transit hub that interconnects attachments (VPCs and VPNs) within the same AWS account or across AWS accounts.'

The form is divided into three main sections:

- Details - optional**:
 - Name tag**: A text input field with the value 'neeraj-tg'. A tooltip explains: 'Creates a tag with the key set to Name and the value set to the specified string.'
 - Description**: A text input field with the value 'learning'. A tooltip explains: '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)**: A text input field with the value '65534'. A tooltip is present.
 - Options**:
 - ☒ **DNS support** (Info link)
 - ☒ **VPN ECMP support** (Info link)
 - ☒ **Default route table association** (Info link)
 - ☒ **Default route table propagation** (Info link)
 - ☐ **Multicast support** (Info link)
- Configure cross-account sharing options**:
 - ☐ **Auto accept shared attachments** (Info link)

The footer of the console shows 'CloudShell', 'Feedback', 'Language', and copyright information for 2023.

Create Three Transit Gateway Attachments:

The screenshot shows the 'Create transit gateway attachment' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Transit gateway attachments > Create transit gateway attachment'. The page title is 'Create transit gateway attachment' with an 'Info' link. A brief description states: 'A transit gateway (TGW) is a network transit hub that interconnects attachments (VPCs and VPNs) within the same AWS account or across AWS accounts.'

The form is divided into two main sections:

- Details**:
 - Name tag - optional**: A text input field with the value 'neeraj-tga-1'. A tooltip explains: 'Creates a tag with the key set to Name and the value set to the specified string.'
 - Transit gateway ID**: A dropdown menu showing 'tgw-0b36fa17080cd8a48 (neeraj-tg)'.
 - Attachment type**: A dropdown menu showing 'VPC'.
- VPC attachment**:
 - Options**:
 - ☒ **DNS support** (Info link)
 - ☐ **IPv6 support** (Info link)
 - ☐ **Appliance Mode support** (Info link)
 - VPC ID**: A dropdown menu showing 'vpc-0680bd77973628fa6 (neerajVPC1)'.
 - Subnet IDs**:
 - ☒ **us-west-2a**: A dropdown menu showing 'subnet-076ed8e0e50c1d76e (neeraj-subnet-1)'.
 - ☐ **us-west-2b**: A dropdown menu showing 'No subnet available'.

The footer of the console shows 'CloudShell', 'Feedback', 'Language', and copyright information for 2023.

Verified Access instances [New](#)

Verified Access trust providers [New](#)

Verified Access groups [New](#)

Verified Access endpoints [New](#)

▼ Transit gateways

Transit gateways

Transit gateway **attachments**

Transit gateway policy tables

Transit gateway route tables

Transit gateway multicast

▼ Traffic Mirroring

Mirror sessions

Mirror targets

Mirror filters

▼ VPC Lattice

Getting started [New](#)

Service networks [New](#)

Services [New](#)

Target groups [New](#)

Network Manager [New](#)

Cloud WAN [New](#)

VPC IP Address Manager [New](#)

CloudShell Feedback Language

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

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 (3/3) info

Filter transit gateway attachments

<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"/>	neeraj-tga-2	tgw-attach-026c86b7f050d1740	tgw-0b36fa17080cd8a48	VPC	vpc-0b165b30afde1701c	Available	tgw-rtb-006f24c3d454d813e
<input checked="" type="checkbox"/>	neeraj-tga-1	tgw-attach-0e4c6ee3ba559f739	tgw-0b36fa17080cd8a48	VPC	vpc-0680bd77973628fa6	Available	tgw-rtb-006f24c3d454d813e
<input checked="" type="checkbox"/>	neeraj-tga-3	tgw-attach-0ed619903aceadb1d	tgw-0b36fa17080cd8a48	VPC	vpc-084d7f0d7f239b2f2	Available	tgw-rtb-006f24c3d454d813e

Transit gateway attachment IDs: tgw-attach-0ed619903aceadb1d, tgw-attach-0e4c6ee3ba559f739, tgw-attach-026c86b7f050d1740

Edit Routes in each Route Tables created earlier & add IP of Transit Gateway.

VPC > Route tables > rtb-045d146d9be5cf87a > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.1.0.0/16	local	Active	No
0.0.0.0/0	igw-04b347ae58617482a	Active	No
10.0.0.0/16	tgw-0b36fa17080cd8a48	-	No

Add route

Cancel Preview Save changes

Adding IP in last Route Table 3

The screenshot shows the 'Edit routes' page in the AWS Management Console. The breadcrumb navigation indicates the path: VPC > Route tables > rtb-05778c7433e1343b8 > Edit routes. The page title is 'Edit routes'. Below the title, there is a table with columns: Destination, Target, Status, and Propagated. The first row shows a destination of 10.3.0.0/16 with a target of 'local', which is 'Active' and has not been propagated. The second row shows a destination of 10.0.0.0/16 with a target of 'tgw-0b36fa17080cd8a48', which is in a pending state (indicated by a dash) and has not been propagated. There is a 'Remove' button next to this row. At the bottom of the table is an 'Add route' button. Below the table area are 'Cancel', 'Preview', and 'Save changes' buttons.

Destination	Target	Status	Propagated
10.3.0.0/16	local	Active	No
10.0.0.0/16	tgw-0b36fa17080cd8a48	-	No

Buttons: Add route, Cancel, Preview, Save changes

The screenshot shows the 'Transit gateway route tables' page in the AWS Management Console. The breadcrumb navigation indicates the path: VPC > Transit gateway route tables > tgw-rtb-006f24c3d454d813e. The page title is 'tgw-rtb-006f24c3d454d813e'. Below the title, there is a 'Details' section with a table showing the following information:

Transit gateway route table ID	State	Default association route table	Default propagation route table
tgw-rtb-006f24c3d454d813e	Available	Yes	Yes

Below the details section, there are tabs for 'Associations', 'Propagations', 'Prefix list references', 'Routes', and 'Tags'. The 'Associations' tab is selected, showing a table with 3 associations. The table has columns: Attachment ID, Resource type, Resource ID, and State. All three associations are in the 'Associated' state.

Attachment ID	Resource type	Resource ID	State
tgw-attach-026c86b7f050d1740	VPC	vpc-0b165b30afde1701c	Associated
tgw-attach-0ed619903aceadb1d	VPC	vpc-084d7f0d7f239b2f2	Associated
tgw-attach-0e4c5ee3ba559f739	VPC	vpc-0680bd77973628fa6	Associated

Buttons: Delete association, Create association