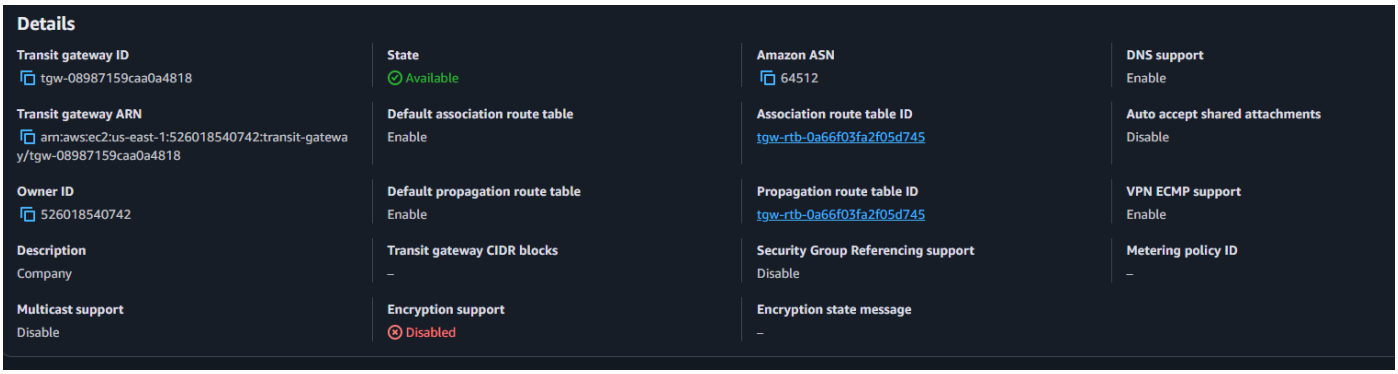
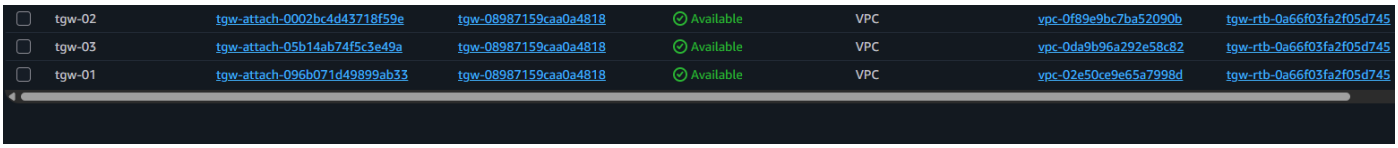
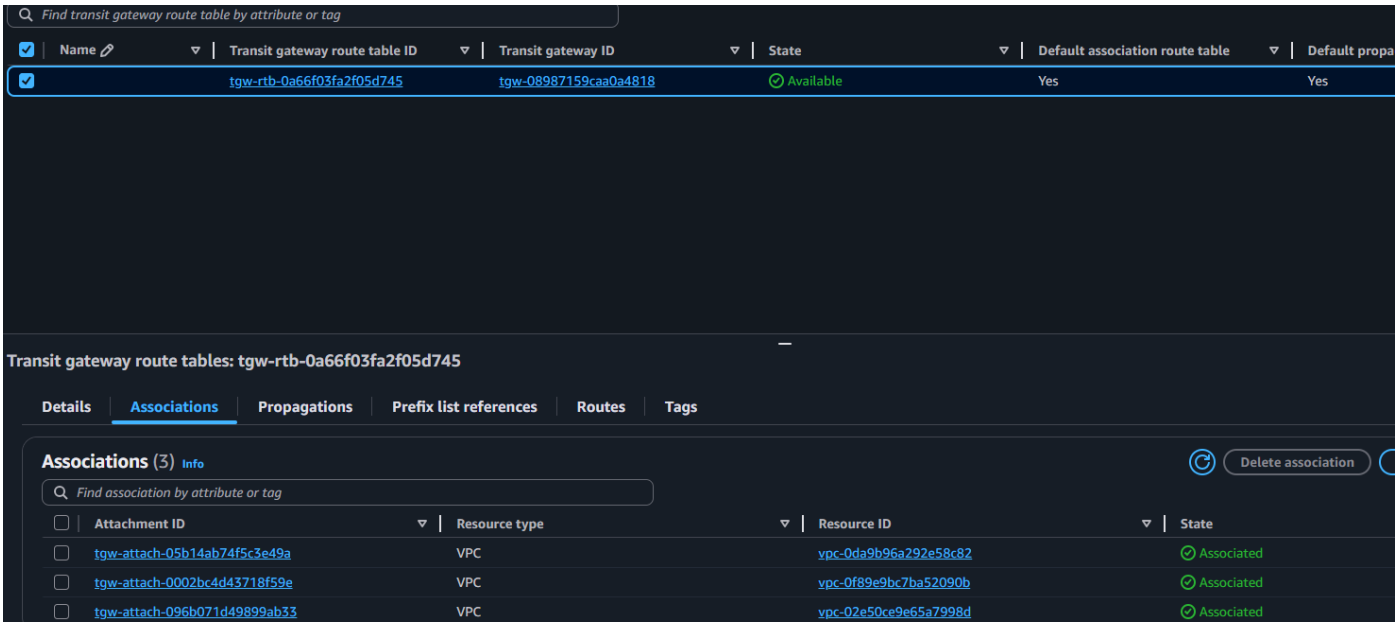
VPC Challenge-01

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







VPC Challenge-01

```
[ec2-user@ip-192-168-0-8 ~]$ ping 172.132.0.13
PING 172.132.0.13 (172.132.0.13) 56(84) bytes of data.
64 bytes from 172.132.0.13: icmp_seq=1 ttl=126 time=0.694 ms
64 bytes from 172.132.0.13: icmp_seq=2 ttl=126 time=0.372 ms
64 bytes from 172.132.0.13: icmp_seq=3 ttl=126 time=0.467 ms
^C
--- 172.132.0.13 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2044ms
rtt min/avg/max/mdev = 0.372/0.511/0.694/0.135 ms
[ec2-user@ip-192-168-0-8 ~]$ ping 172.168.0.5
PING 172.168.0.5 (172.168.0.5) 56(84) bytes of data.
64 bytes from 172.168.0.5: icmp_seq=1 ttl=126 time=1.60 ms
64 bytes from 172.168.0.5: icmp_seq=2 ttl=126 time=0.428 ms
64 bytes from 172.168.0.5: icmp_seq=3 ttl=126 time=0.420 ms
64 bytes from 172.168.0.5: icmp_seq=4 ttl=126 time=0.429 ms
64 bytes from 172.168.0.5: icmp_seq=5 ttl=126 time=0.524 ms
^C
--- 172.168.0.5 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4116ms
rtt min/avg/max/mdev = 0.420/0.679/1.596/0.459 ms
```

```
[ec2-user@ip-172-168-0-12 ~]$ ping 192.168.0.8
PING 192.168.0.8 (192.168.0.8) 56(84) bytes of data.
64 bytes from 192.168.0.8: icmp_seq=1 ttl=126 time=0.687 ms
64 bytes from 192.168.0.8: icmp_seq=2 ttl=126 time=0.758 ms
64 bytes from 192.168.0.8: icmp_seq=3 ttl=126 time=0.395 ms
^C
--- 192.168.0.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2108ms
rtt min/avg/max/mdev = 0.395/0.613/0.758/0.157 ms
[ec2-user@ip-172-168-0-12 ~]$ ping 172.132.0.13
PING 172.132.0.13 (172.132.0.13) 56(84) bytes of data.
64 bytes from 172.132.0.13: icmp_seq=1 ttl=126 time=0.866 ms
64 bytes from 172.132.0.13: icmp_seq=2 ttl=126 time=0.461 ms
64 bytes from 172.132.0.13: icmp_seq=3 ttl=126 time=0.454 ms
^C
--- 172.132.0.13 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2051ms
rtt min/avg/max/mdev = 0.454/0.593/0.866/0.192 ms
```

```
[ec2-user@ip-172-132-0-13 ~]$ ping 192.168.0.8
PING 192.168.0.8 (192.168.0.8) 56(84) bytes of data.
64 bytes from 192.168.0.8: icmp_seq=1 ttl=126 time=0.649 ms
64 bytes from 192.168.0.8: icmp_seq=2 ttl=126 time=0.410 ms
64 bytes from 192.168.0.8: icmp_seq=3 ttl=126 time=0.413 ms
^C
--- 192.168.0.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2052ms
rtt min/avg/max/mdev = 0.410/0.490/0.649/0.111 ms
[ec2-user@ip-172-132-0-13 ~]$ ping 172.168.0.12
PING 172.168.0.12 (172.168.0.12) 56(84) bytes of data.
64 bytes from 172.168.0.12: icmp_seq=1 ttl=126 time=0.922 ms
64 bytes from 172.168.0.12: icmp_seq=2 ttl=126 time=0.590 ms
64 bytes from 172.168.0.12: icmp_seq=3 ttl=126 time=0.454 ms
^C
--- 172.168.0.12 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2047ms
rtt min/avg/max/mdev = 0.454/0.655/0.922/0.196 ms
```

VPC Challenge-01

- Configure VPC endpoints to securely access AWS services without internet gateways or NAT gateways, ensuring data privacy and minimizing exposure to external threats.

```
[ec2-user@ip-172-132-0-29 ~]$ aws --version
aws-cli/2.32.1 Python/3.9.25 Linux/6.1.158-180.294.amzn2023.x86_64 source/x86_6
.amzn.2023
[ec2-user@ip-172-132-0-29 ~]$ ping google.com
PING google.com (142.250.31.138) 56(84) bytes of data.
^C
--- google.com ping statistics ---
3 packets transmitted, 0 received, 100% packet loss, time 2063ms

[ec2-user@ip-172-132-0-29 ~]$ aws configure
AWS Access Key ID [None]: AKIAXU6JF6TDIRCBM4FQ
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
[ec2-user@ip-172-132-0-29 ~]$ aws s3 ls
2026-01-07 07:53:18 amzns23demo
2026-01-06 11:58:13 testflow-09
[ec2-user@ip-172-132-0-29 ~]$
```

```
[ec2-user@ip-192-168-0-21 ~]$ ping google.com
PING google.com (64.233.180.113) 56(84) bytes of data.
^C
--- google.com ping statistics ---
2 packets transmitted, 0 received, 100% packet loss, time 1058ms

[ec2-user@ip-192-168-0-21 ~]$ aws configure
AWS Access Key ID [None]: AKIAXU6JF6TDIRCBM4FQ
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
[ec2-user@ip-192-168-0-21 ~]$ aws s3 ls
2026-01-07 07:53:18 amzns23demo
2026-01-06 11:58:13 testflow-09
```