

TRANSIST GATEWAY

Created 3 VPC and 3 subnet

The screenshot shows two separate sessions of the AWS VPC Console.

VPC Dashboard (Top Session):

- Your VPCs:** Shows four VPCs: -
 - (VPC ID: [vpc-0125c2b61f04b33c](#), State: Available, Block Public: Off, IPv4 CIDR: 172.31.0.0/16)
 - my-vpc1 (VPC ID: [vpc-05b12a6606983ba52](#), State: Available, Block Public: Off, IPv4 CIDR: 10.0.0.0/16)
 - my-vpc2 (VPC ID: [vpc-09548f653231ce154](#), State: Available, Block Public: Off, IPv4 CIDR: 11.0.0.0/16)
 - my-vpc3 (VPC ID: [vpc-07a549ac9b0560be6](#), State: Available, Block Public: Off, IPv4 CIDR: 12.0.0.0/16)

Subnets (Bottom Session):

- Subnets:** Shows six subnets:
 - (Subnet ID: [subnet-0008d95155e9e9a0e](#), State: Available, VPC: [vpc-0125c2b61f04b33c](#), Block Public: Off, IPv4 CIDR: 172.31.1.16.0/24)
 - my subnet-1 (Subnet ID: [subnet-0fe29fff4e262d8ff](#), State: Available, VPC: [vpc-05b12a6606983ba52](#), my-vpc1, Block Public: Off, IPv4 CIDR: 10.0.1.0/24)
 - my subnet-2 (Subnet ID: [subnet-0295e17175edd8c77](#), State: Available, VPC: [vpc-09548f653231ce154](#), my-vpc2, Block Public: Off, IPv4 CIDR: 11.0.1.0/24)
 - my subnet-3 (Subnet ID: [subnet-092258b1cdabee83](#), State: Available, VPC: [vpc-07a549ac9b0560be6](#), my-vpc3, Block Public: Off, IPv4 CIDR: 12.0.1.0/24)

Create 3 routetables and 3 internet gateway

Screenshot of the AWS VPC Console showing the creation of 3 route tables and 3 internet gateways.

RouteTables | VPC Console

Route table rtb-0a168b88ecb599ec8 | my route table_3 was created successfully.

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
my route table_1	rtb-07b2a55a3f34d283c	-	-	No	vpc-05b12a6606983ba52
-	rtb-0fd872199ea7210a0	-	-	Yes	vpc-09548f653231ce154 t
my route table_2	rtb-0ecdfed71b0d4ecda	-	-	No	vpc-09548f653231ce154 t
my route table_3	rtb-0a168b88ecb599ec8	-	-	No	vpc-07a549ac9b0560be6 i

Select a route table

Internet gateways (4) Info

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-09f8f82ebddd2156f	Attached	vpc-0125c2b61f04b333c	947309778595
my int gateway_1	igw-0139f97091af723c1	Attached	vpc-05b12a6606983ba52 my-vpc1	947309778595
my int gateway_2	igw-0efdf6c8f15793ba3c	Attached	vpc-09548f653231ce154 my-vpc2	947309778595
my int gateway_3	igw-03c5279ad0c5c78c5	Attached	vpc-07a549ac9b0560be6 my-vpc3	947309778595

Select an internet gateway above

Create 3 security group and create transit gateway and create the 3 attachment

Security Groups (1/23) Info

Name	Security group ID	Security group name	VPC ID	Description
-	sg-0928854ec766cb87b	default	vpc-05b12a6606983ba52	default VPC sec
<input checked="" type="checkbox"/>	sg-046b56a7c4d96c915	my sg_2	vpc-09548f653231ce154	my sg_2
-	sg-05c84c75e29bf6d29	launch-wizard-7	vpc-0125c2b61f04b333c	launch-wizard-
-	sg-00cd6206705025470	launch-wizard-5	vpc-0125c2b61f04b333c	launch-wizard-
-	sg-09382b1104081fbec	launch-wizard-10	vpc-0125c2b61f04b333c	launch-wizard-
-	sg-06ab9a193f694aaa2	launch-wizard-15	vpc-0125c2b61f04b333c	launch-wizard-

Details

Security group name	sg-046b56a7c4d96c915	Description	VPC ID
Owner	947309778595	Inbound rules count	vpc-09548f653231ce154
		5 Permission entries	
		Outbound rules count	
		1 Permission entry	

Transit gateways (1) Info

Name	Transit gateway ID	Owner ID	State
my transit gateway	tgw-02e38885a2b6b7cf	947309778595	Pending

Transit gateway attachments (3) Info

Name	Transit gateway attachment ID	Transit gateway ID	State	Resource type	Resource ID
tg_2	tgw-attach-0331d38e43592b631	tgw-02e38885a2b6b7cf	Pending	VPC	vpc-09548f653231ce154
tg_3	tgw-attach-08bbba1066f70fc	tgw-02e38885a2b6b7cf	Pending	VPC	vpc-07a549ac9b0560b
tg_1	tgw-attach-0cc970d4e78cb297d	tgw-02e38885a2b6b7cf	Pending	VPC	vpc-05b12a6606983ba52

Now go to routes and edit routes type the range of existing ip and add transitgateway like do for all 3 routes

The screenshot displays two separate instances of the AWS VPC 'Edit routes' configuration page, side-by-side.

Top Window (Route Table ID: rtb-07b2a55a3f34d283c):

Destination	Target	Status	Propagated	Route Origin
10.0.0.0/16	local	Active	No	CreateRouteTable
Q 0.0.0.0/0	Internet Gateway	Active	No	CreateRoute
Q 11.0.0.0/16	Transit Gateway	-	No	CreateRoute
Q 12.0.0.0/16	Transit Gateway	-	No	CreateRoute

Bottom Window (Route Table ID: rtb-0ecd0d71b0d4ecda):

Destination	Target	Status	Propagated	Route Origin
11.0.0.0/16	local	Active	No	CreateRouteTable
Q 10.0.0.0/16	Transit Gateway	Active	No	CreateRoute
Q 12.0.0.0/16	Transit Gateway	Active	No	CreateRoute
Q 0.0.0.0/0	Internet Gateway	Active	No	CreateRoute

Both windows include an 'Add route' button at the bottom left, and 'Cancel', 'Preview', and 'Save changes' buttons at the bottom right.

The screenshot shows the 'Edit routes' section of the AWS VPC console. A table lists five routes:

Destination	Target	Status	Propagated	Route Origin
12.0.0.0/16	local	Active	No	CreateRouteTable
10.0.0.0/16	Transit Gateway	Active	No	CreateRoute
11.0.0.0/16	Transit Gateway	Active	No	CreateRoute
0.0.0.0/0	Internet Gateway	Active	No	CreateRoute

Buttons at the bottom include 'Add route', 'Cancel', 'Preview', and 'Save changes'.

Now create 3 instance

The screenshot shows the 'Instances' section of the AWS EC2 console. A table displays three instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
instance_2	i-0072c93058309ea56	Running	t3.micro	3/3 checks passed	View alarms	eu-north-1a	-
instance_3	i-08be42cbfc7876f6	Running	t3.micro	3/3 checks passed	View alarms	eu-north-1a	-
instance_1	i-07a58c712588a498d	Running	t3.micro	3/3 checks passed	View alarms	eu-north-1a	-

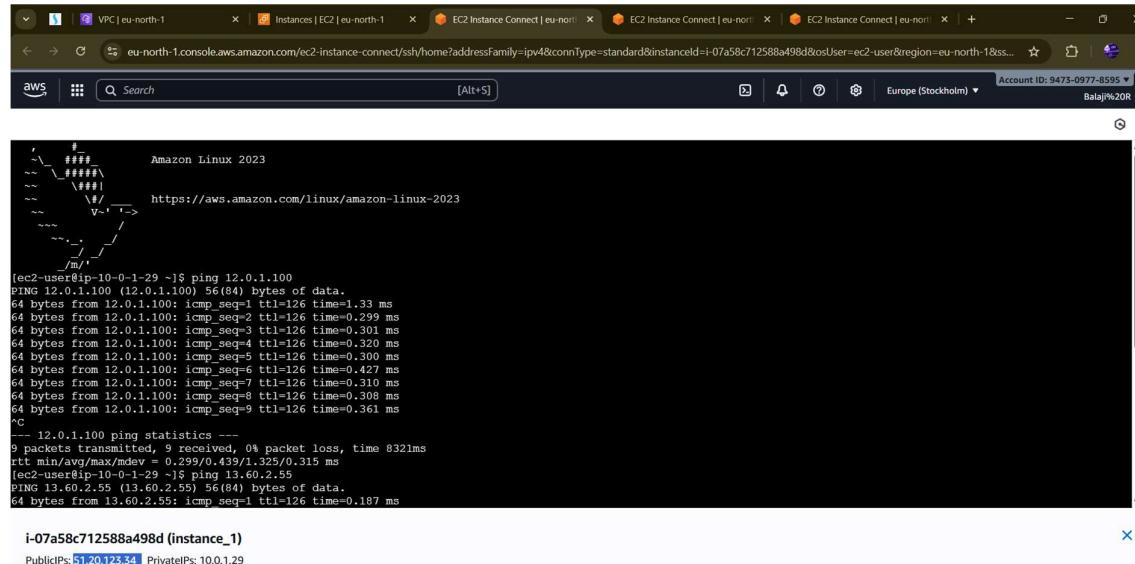
A sidebar on the left shows navigation links for EC2, Dashboard, AWS Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, and Images.

Connet all 3 instance and type ping in instance 1 add paste instance 3 and instance 2 ip add now you see the output like do for 2nd and 3rd instance for 2nd instance try first instance ip or 3rd instance ip to see the result like do for 3rd instance

```
64 bytes from 13.60.2.55: icmp_seq=5 ttl=126 time=0.206 ms
^C
--- 13.60.2.55 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4158ms
rtt min/avg/max/mdev = 0.187/0.228/0.283/0.033 ms
[ec2-user@ip-10-0-1-29 ~]$ ping 13.60.242.198
PING 13.60.242.198 (13.60.242.198) 56(84) bytes of data.
64 bytes from 13.60.242.198: icmp_seq=1 ttl=126 time=0.266 ms
64 bytes from 13.60.242.198: icmp_seq=2 ttl=126 time=0.194 ms
64 bytes from 13.60.242.198: icmp_seq=3 ttl=126 time=0.238 ms
64 bytes from 13.60.242.198: icmp_seq=4 ttl=126 time=0.255 ms
64 bytes from 13.60.242.198: icmp_seq=5 ttl=126 time=0.194 ms
64 bytes from 13.60.242.198: icmp_seq=6 ttl=126 time=0.191 ms
^C
--- 13.60.242.198 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5188ms
rtt min/avg/max/mdev = 0.191/0.223/0.266/0.031 ms
[ec2-user@ip-10-0-1-29 ~]$
```

i-07a58c712588a498d (instance_1)

PublicIPs: 51.20.123.34 | PrivateIPs: 10.0.1.29



```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

(ec2-user@ip-10-0-1-29 ~)$ ping 12.0.1.100
PING 12.0.1.100 (12.0.1.100) 56(84) bytes of data.
64 bytes from 12.0.1.100: icmp_seq=1 ttl=126 time=0.33 ms
64 bytes from 12.0.1.100: icmp_seq=2 ttl=126 time=0.299 ms
64 bytes from 12.0.1.100: icmp_seq=3 ttl=126 time=0.301 ms
64 bytes from 12.0.1.100: icmp_seq=4 ttl=126 time=0.320 ms
64 bytes from 12.0.1.100: icmp_seq=5 ttl=126 time=0.300 ms
64 bytes from 12.0.1.100: icmp_seq=6 ttl=126 time=0.427 ms
64 bytes from 12.0.1.100: icmp_seq=7 ttl=126 time=0.310 ms
64 bytes from 12.0.1.100: icmp_seq=8 ttl=126 time=0.308 ms
64 bytes from 12.0.1.100: icmp_seq=9 ttl=126 time=0.361 ms
^C
--- 12.0.1.100 ping statistics ---
9 packets transmitted, 9 received, 0% packet loss, time 8321ms
rtt min/avg/max/mdev = 0.299/0.439/1.325/0.315 ms
(ec2-user@ip-10-0-1-29 ~)$ ping 13.60.2.55
PING 13.60.2.55 (13.60.2.55) 56(84) bytes of data.
64 bytes from 13.60.2.55: icmp_seq=1 ttl=126 time=0.187 ms
```

```
/m'
[ec2-user@ip-11-0-1-241 ~]$ ping 51.20.123.34
PING 51.20.123.34 (51.20.123.34) 56(84) bytes of data.
64 bytes from 51.20.123.34: icmp_seq=1 ttl=126 time=0.187 ms
64 bytes from 51.20.123.34: icmp_seq=2 ttl=126 time=0.190 ms
64 bytes from 51.20.123.34: icmp_seq=3 ttl=126 time=0.200 ms
64 bytes from 51.20.123.34: icmp_seq=4 ttl=126 time=0.197 ms
64 bytes from 51.20.123.34: icmp_seq=5 ttl=126 time=0.233 ms
^C
--- 51.20.123.34 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4197ms
rtt min/avg/max/mdev = 0.187/0.201/0.233/0.016 ms
[ec2-user@ip-11-0-1-241 ~]$ ping 13.60.2.55
PING 13.60.2.55 (13.60.2.55) 56(84) bytes of data.
64 bytes from 13.60.2.55: icmp_seq=1 ttl=126 time=0.254 ms
64 bytes from 13.60.2.55: icmp_seq=2 ttl=126 time=0.196 ms
64 bytes from 13.60.2.55: icmp_seq=3 ttl=126 time=0.212 ms
64 bytes from 13.60.2.55: icmp_seq=4 ttl=126 time=0.190 ms
64 bytes from 13.60.2.55: icmp_seq=5 ttl=126 time=0.203 ms
64 bytes from 13.60.2.55: icmp_seq=6 ttl=126 time=0.214 ms
64 bytes from 13.60.2.55: icmp_seq=7 ttl=126 time=0.205 ms
64 bytes from 13.60.2.55: icmp_seq=8 ttl=126 time=0.200 ms
64 bytes from 13.60.2.55: icmp_seq=9 ttl=126 time=0.194 ms
64 bytes from 13.60.2.55: icmp_seq=10 ttl=126 time=0.187 ms
^C
--- 13.60.2.55 ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9351ms
rtt min/avg/max/mdev = 0.187/0.205/0.254/0.018 ms
```

i-0072c93058309ea56 (instance_2)

PublicIPs: 13.60.242.198 PrivateIPs: 11.0.1.241

```
/_
/_m'
[ec2-user@ip-12-0-1-100 ~]$ ping 51.20.123.34
PING 51.20.123.34 (51.20.123.34) 56(84) bytes of data.
64 bytes from 51.20.123.34: icmp_seq=1 ttl=126 time=0.218 ms
64 bytes from 51.20.123.34: icmp_seq=2 ttl=126 time=0.218 ms
64 bytes from 51.20.123.34: icmp_seq=3 ttl=126 time=0.217 ms
64 bytes from 51.20.123.34: icmp_seq=4 ttl=126 time=0.353 ms
64 bytes from 51.20.123.34: icmp_seq=5 ttl=126 time=0.210 ms
64 bytes from 51.20.123.34: icmp_seq=6 ttl=126 time=0.212 ms
^C
--- 51.20.123.34 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5212ms
rtt min/avg/max/mdev = 0.210/0.238/0.353/0.051 ms
[ec2-user@ip-12-0-1-100 ~]$ ping 13.60.242.198
PING 13.60.242.198 (13.60.242.198) 56(84) bytes of data.
64 bytes from 13.60.242.198: icmp_seq=1 ttl=126 time=0.195 ms
64 bytes from 13.60.242.198: icmp_seq=2 ttl=126 time=0.279 ms
64 bytes from 13.60.242.198: icmp_seq=3 ttl=126 time=0.195 ms
64 bytes from 13.60.242.198: icmp_seq=4 ttl=126 time=0.198 ms
64 bytes from 13.60.242.198: icmp_seq=5 ttl=126 time=0.286 ms
64 bytes from 13.60.242.198: icmp_seq=6 ttl=126 time=0.330 ms
64 bytes from 13.60.242.198: icmp_seq=7 ttl=126 time=0.204 ms
^C
--- 13.60.242.198 ping statistics ---
7 packets transmitted, 7 received, 0% packet loss, time 6256ms
rtt min/avg/max/mdev = 0.195/0.241/0.330/0.051 ms
[ec2-user@ip-12-0-1-100 ~]$
```

i-08be42cbfffc7876f6 (instance_3)

PublicIPs: 13.60.2.55 PrivateIPs: 12.0.1.100