



Name: P Meghana

Course: Aws, Devops

Project: Transit gateway

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Steps:

- For thi transit gateway we have to create more than 2 VPC
- In this task i have taken 3 VPC's
- After that we have to create internet gateway
- And attach these internet gateway to VPC.
- Then we have to create 3 Subnets
- After that we have to create 3 Route Table
- In this Route Tables we have to edit Route
- After that we have to associate subnet
- After that we have to create 3 individual EC2 instances
- Now, we have to create Transit Gateway and also Transit Gateway Attachments
- Now, we have to connect instances
- After that we have to connect in Git Bash through the link in the above figure
- Use sudo -i command to become root user
- apt update -y && apt install nginx -y command for nginx installation
- Use 'curl private address" to connect VPC's

Your VPCs (1/3) Info						
vpcs						
Last updated 1 minute ago						
Actions						
Create VPC						
Search						
< 1 >						
	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	
<input type="checkbox"/>	Vpc2	vpc-02501a13414481138	Available	101.0.0.0/16	-	
<input checked="" type="checkbox"/>	Vpc3	vpc-06188b0fe22b78295	Available	2 CIDRs	-	
<input type="checkbox"/>	Vpc1	vpc-0ca461ed3abab931a	Available	10.0.0.0/24	-	

Subnets (1/3) Info						
subnets						
Last updated 1 minute ago						
Actions						
Create subnet						
Find resources by attribute or tag						
< 1 >						
	Name	Subnet ID	State	VPC	IPv4 CIDR	
<input type="checkbox"/>	Subnet1	subnet-0afd80a6c2e657777	Available	vpc-0ca461ed3abab931a Vpc1	10.0.0.0/24	
<input type="checkbox"/>	Subnet3	subnet-09ceb74000855d2aa	Available	vpc-06188b0fe22b78295 Vpc3	10.0.0.0/24	
<input type="checkbox"/>	Subnet2	subnet-072a1c2cc1ace9338	Available	vpc-02501a13414481138 Vpc2	101.0.0.0/24	

Route tables (1/6) Info						
RouteTables						
Last updated 1 minute ago						
Actions						
Create route table						
Find resources by attribute or tag						
< 1 >						
	Name	Route table ID	Explicit subnet associations	Edge associations	Main	
<input type="checkbox"/>	Route1	rtb-01ec4866a91ae0a20	subnet-0afd80a6c2e657777	-	No	
<input type="checkbox"/>	-	rtb-056450da9820d79c3	-	-	Yes	
<input type="checkbox"/>	-	rtb-0c15458da17488961	-	-	Yes	
<input checked="" type="checkbox"/>	Route3	rtb-0718c4bf808678971	subnet-09ceb74000855d2aa	-	No	
<input type="checkbox"/>	Route2	rtb-034c7b9a0bea9020c	subnet-072a1c2cc1ace9338	-	No	
<input type="checkbox"/>	-	rtb-08da48ccc6372f805	-	-	Yes	

Internet gateways (3) Info				
igws				
Last updated 1 minute ago				
Actions				
Create internet gateway				
Search				
< 1 >				
	Name	Internet gateway ID	State	VPC ID
<input type="checkbox"/>	Internet2	igw-026d03f3a433c1da2	Attached	vpc-02501a13414481138 Vpc2
<input type="checkbox"/>	Internet3	igw-040dc78760b39f8ec	Attached	vpc-06188b0fe22b78295 Vpc3
<input type="checkbox"/>	Internet1	igw-04b4f0ad1938918cd	Attached	vpc-0ca461ed3abab931a Vpc1

Transit gateways (1) info						
<input type="text" value="Find transit gateway by attribute or tag"/> < 1 > ⚙️						
<input type="checkbox"/>	Name ✎	Transit gateway ID	State			
<input type="checkbox"/>	Transit1	tgw-035a9421488ecb004	🟢 Available			

Transit gateway attachments (3) info						
<input type="text" value="Find transit gateway attachment by attribute or tag"/> < 1 > ⚙️						
<input type="checkbox"/>	Name ✎	Transit gateway attachment ID	Transit gateway ID	State	Resource	
<input type="checkbox"/>	Attachment2	tgw-attach-02cde885bccbd90d7	tgw-035a9421488ecb004	🟢 Available	VPC	
<input type="checkbox"/>	Attachment3	tgw-attach-05c3ae79faa5c7d96	tgw-035a9421488ecb004	🟢 Available	VPC	
<input type="checkbox"/>	Attachment1	tgw-attach-0a6665bf2c608d0f5	tgw-035a9421488ecb004	🟢 Available	VPC	

Instances (3) info							
<div> <div>Last updated less than a minute ago</div> <div> <input type="button" value="Refresh"/> <input type="button" value="Connect"/> <input type="button" value="Instance state"/> <input type="button" value="Actions"/> <input type="button" value="Launch instances"/> </div> </div> <div> <input type="text" value="Find Instance by attribute or tag (case-sensitive)"/> <input type="button" value="All states"/> </div> <div> <input type="button" value="Instance state = running"/> <input type="button" value="Clear filters"/> < 1 > ⚙️ </div>							
<input type="checkbox"/>	Name ✎	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input type="checkbox"/>	Ec1	i-01ae3900777069d92	🟢 Running	t2.micro	🟢 2/2 checks passed	View alarms	ap-southeast-1
<input type="checkbox"/>	Ec3	i-008d62d9d91d24076	🟢 Running	t2.micro	🟢 2/2 checks passed	View alarms	ap-southeast-1
<input type="checkbox"/>	Ec2	i-0c9e0cf1e5d6bfe6c	🟢 Running	t2.micro	🟢 2/2 checks passed	View alarms	ap-southeast-1

Output:

```
root@ip-11-0-1-108: ~
$ cat /etc/nginx/nginx.conf
# user nginx www;
worker_processes 1;

error_log /var/log/nginx/error.log;

events {
    worker_connections 1024;
}

http {
    include /etc/nginx/mime.types;
    default_type application/octet-stream;

    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
        '$status $body_bytes_sent "$http_referer" "$http_user_agent" "$http_x_forwarded_for"';
    access_log /var/log/nginx/access.log main;

    sendfile on;
    tcp_nopush on;
    tcp_nodelay on;
    keepalive_timeout 65;
    types_hash_max_size 2048;

    # Main script
    include /etc/nginx/conf.d/*.conf;
    include /etc/nginx/sites-enabled/*;
}
```

```
root@ip-11-0-1-108: ~
$ systemctl restart nginx
$ curl 12.0.1.194
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@ip-11-0-1-108: ~
$ systemctl restart nginx
root@ip-11-0-1-108: ~
$ curl 12.0.1.194
<!DOCTYPE html>
<html>
<head>
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<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@ip-11-0-1-108: ~
$
```

```
root@ip-12-0-1-194:~#
Unpacking nginx (1.24.0-2ubuntu7) ...
Setting up nginx (1.24.0-2ubuntu7) ...
Setting up nginx-common (1.24.0-2ubuntu7) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Pending kernel upgrade!
Running kernel version:
6.8.0-1009-aws
Diagnostics:
The currently running kernel version is not the expected kernel version 6.8.0-1012-aws.

Restarting the system to load the new kernel will not be handled automatically, so you should consider rebooting.

Restarting services...

Service restarts being deferred:
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-12-0-1-194:~# systemctl restart nginx
root@ip-12-0-1-194:~# vi ins2.html
root@ip-12-0-1-194:~# systemctl restart nginx
root@ip-12-0-1-194:~# curl 11.0.1.108
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
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Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>
<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@ip-12-0-1-194:~#
```

```
root@ip-13-0-1-164:~#
Preparing to unpack ./nginx-1.24.0-2ubuntu7_amd64.deb ...
Unpacking nginx (1.24.0-2ubuntu7) ...
Setting up nginx (1.24.0-2ubuntu7) ...
Setting up nginx-common (1.24.0-2ubuntu7) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Pending kernel upgrade!
Running kernel version:
6.8.0-1009-aws
Diagnostics:
The currently running kernel version is not the expected kernel version 6.8.0-1012-aws.

Restarting the system to load the new kernel will not be handled automatically, so you should consider rebooting.

Restarting services...

Service restarts being deferred:
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-13-0-1-164:~# vi ins3.html
root@ip-13-0-1-164:~# systemctl restart nginx
root@ip-13-0-1-164:~# curl 12.0.1.194
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
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Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>
<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@ip-13-0-1-164:~#
```