

# Create VPC:

**VPC dashboard** < Your VPCs

EC2 Global View

Filter by VPC ▾

▼ Virtual private cloud

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- Carrier gateways

**Your VPCs (2)** [Info](#)

Last updated less than a minute ago **Actions** **Create VPC**

Find VPCs by attribute or tag

<input type="checkbox"/>	Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	-	<a href="#">vpc-0d0ba0c809cc775dd</a>	Available	Off	172.31.0.0/16	-
<input type="checkbox"/>	vpc-123	<a href="#">vpc-02c5c75f1041980e8</a>	Available	Off	10.0.0.0/16	-

Select a VPC above

# Create subnets in vpc:

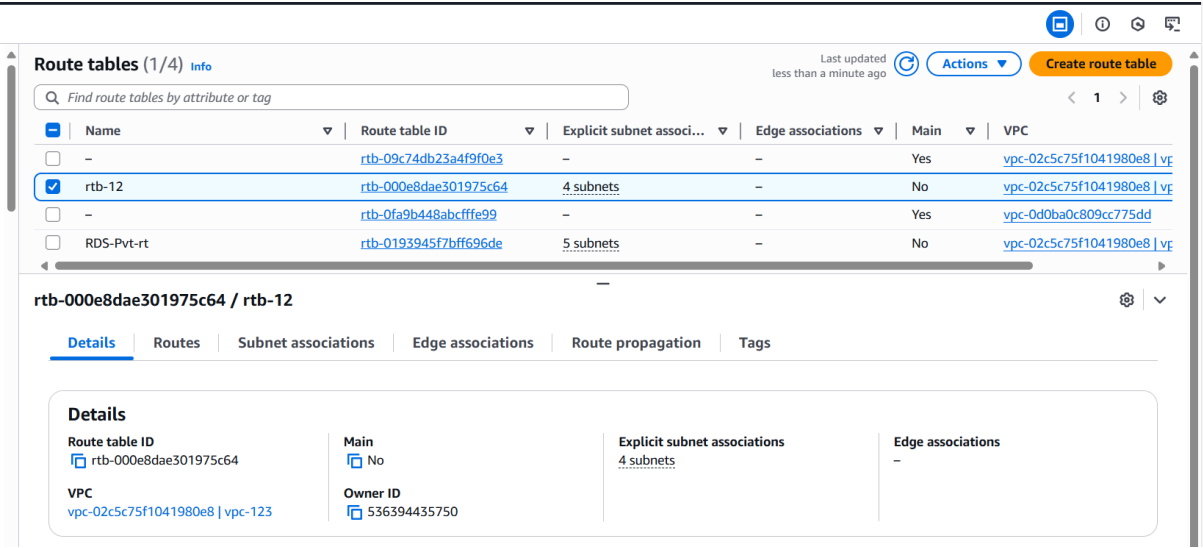
**Subnets (4/15)** [Info](#)

Last updated 1 minute ago **Actions** **Create subnet**

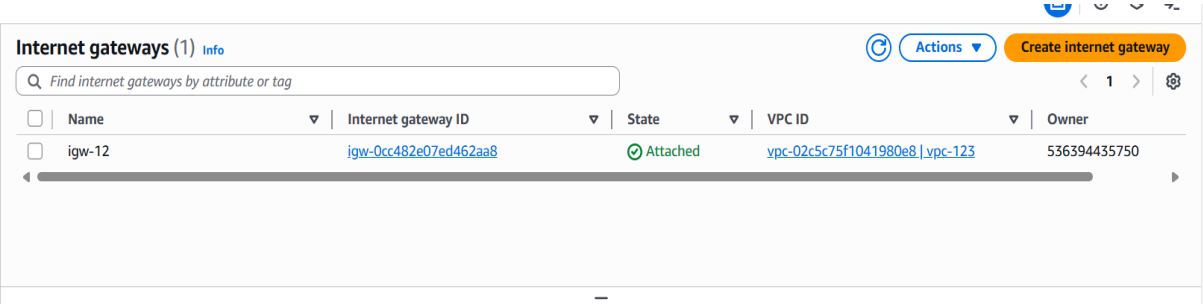
Find subnets by attribute or tag

<input checked="" type="checkbox"/>	Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
<input checked="" type="checkbox"/>	subnet1	<a href="#">subnet-0972e7152c5414616</a>	Available	<a href="#">vpc-02c5c75f1041980e8</a>   <a href="#">vpc-...</a>	Off	10.0.128.0/1
<input type="checkbox"/>	-	<a href="#">subnet-023713b21bf48b13c</a>	Available	<a href="#">vpc-0d0ba0c809cc775dd</a>	Off	172.31.16.0/
<input checked="" type="checkbox"/>	subnet2	<a href="#">subnet-0f9916d131b040339</a>	Available	<a href="#">vpc-02c5c75f1041980e8</a>   <a href="#">vpc-...</a>	Off	10.0.32.0/19
<input type="checkbox"/>	RDS-Pvt-subnet-5	<a href="#">subnet-0f88bde61a89f6b55</a>	Available	<a href="#">vpc-02c5c75f1041980e8</a>   <a href="#">vpc-...</a>	Off	10.0.2.128/2
<input checked="" type="checkbox"/>	subnet-1	<a href="#">subnet-0ceb288ae1953c8b8</a>	Available	<a href="#">vpc-02c5c75f1041980e8</a>   <a href="#">vpc-...</a>	Off	10.0.64.0/18
<input checked="" type="checkbox"/>	subnet-2	<a href="#">subnet-02a6976d8e5231559</a>	Available	<a href="#">vpc-02c5c75f1041980e8</a>   <a href="#">vpc-...</a>	Off	10.0.16.0/20

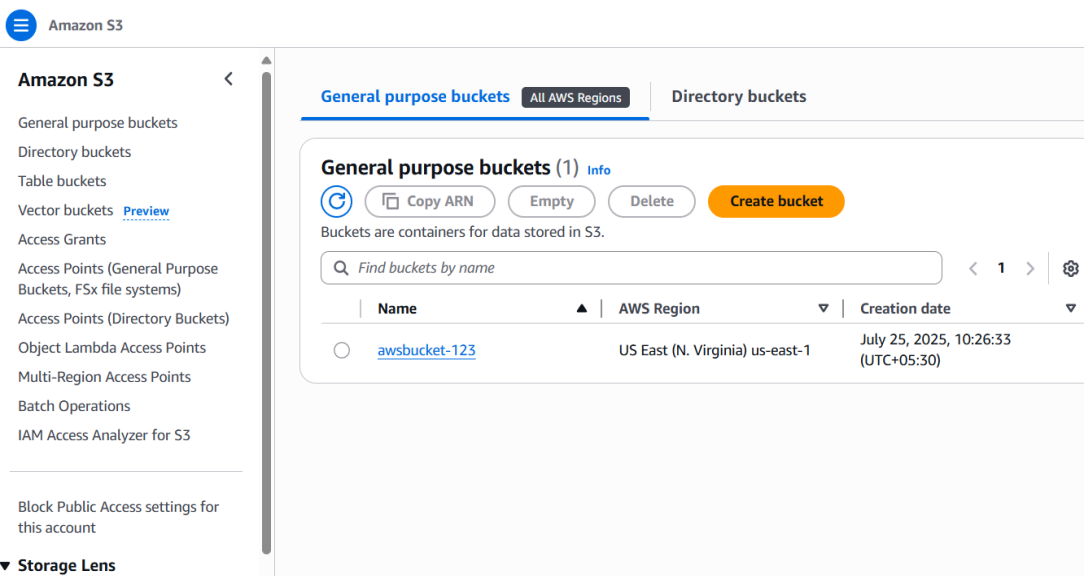
# Create route table and associate subnets to route table:



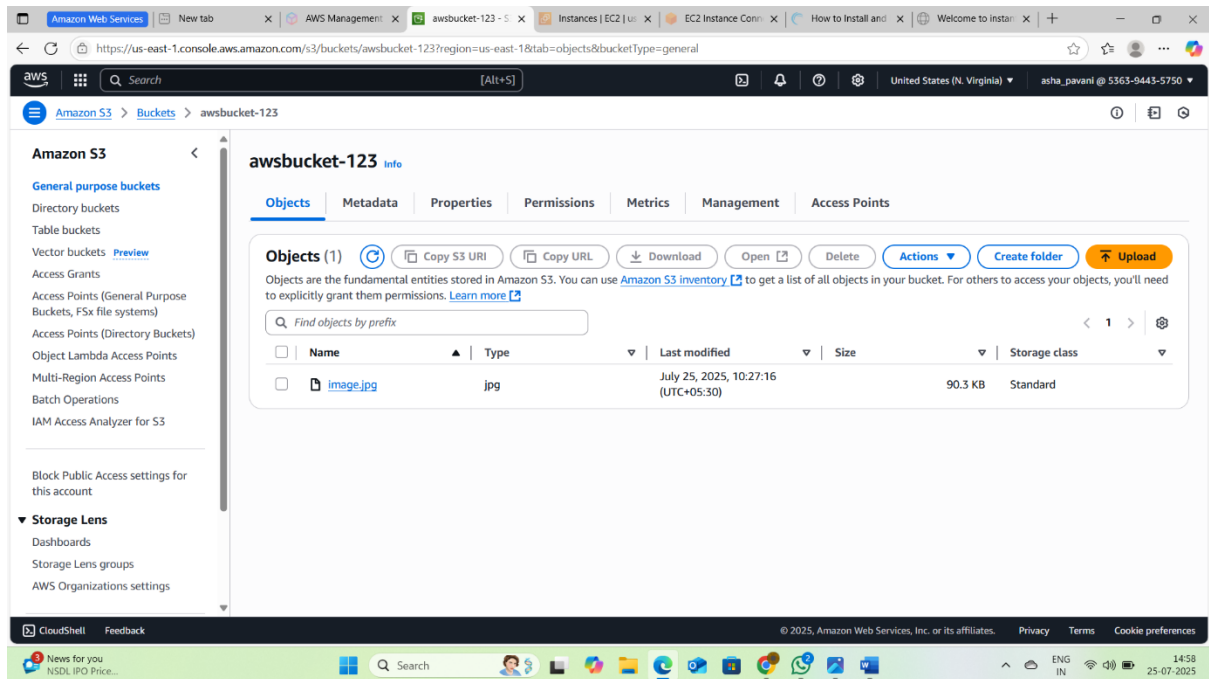
# Create Internet Gateway and attach to VPC:



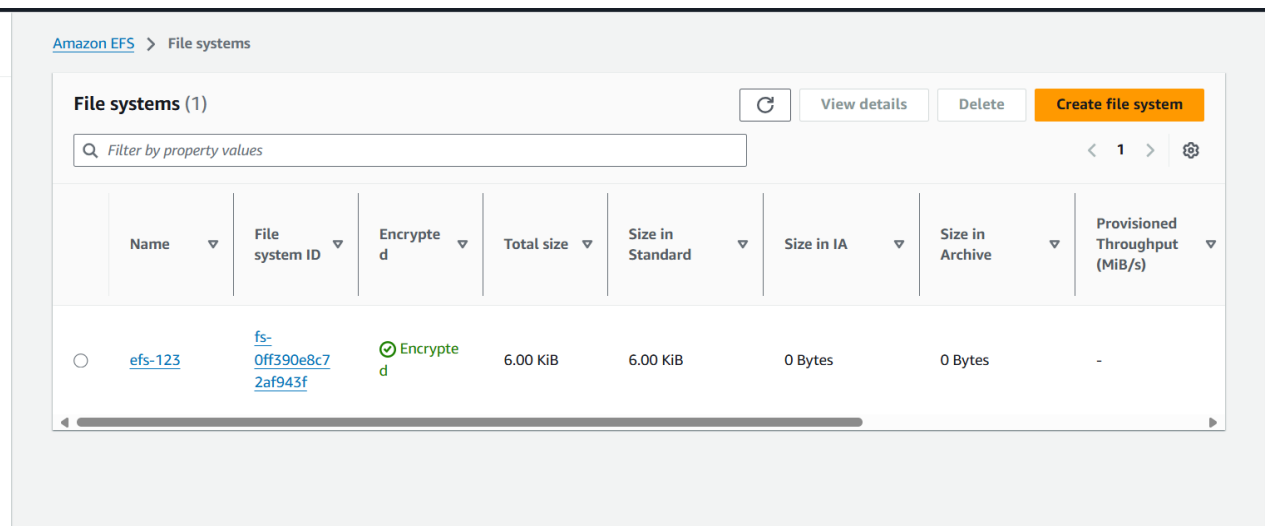
# Create S3 bucket :



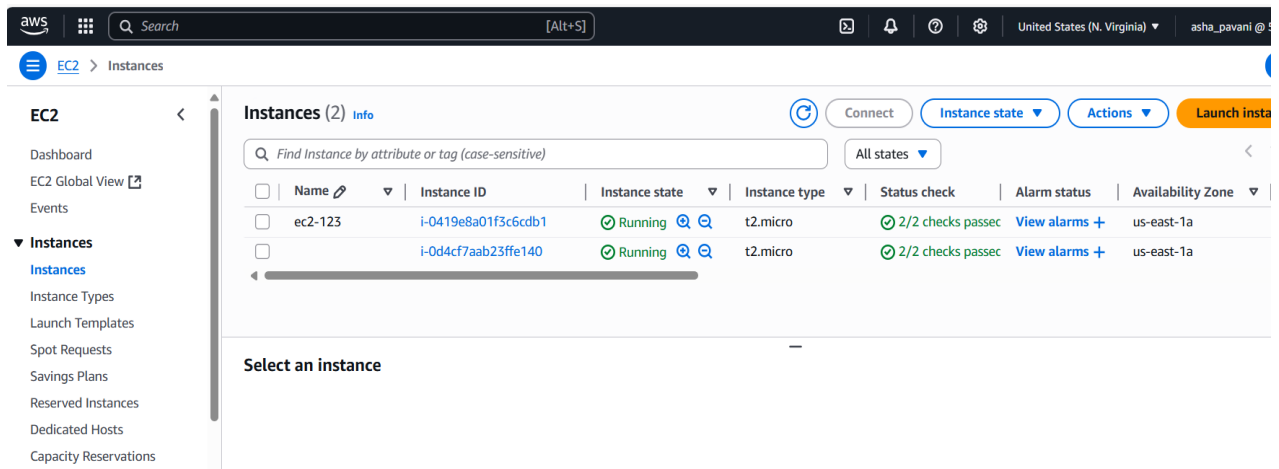
# Add object to s3 bucket:



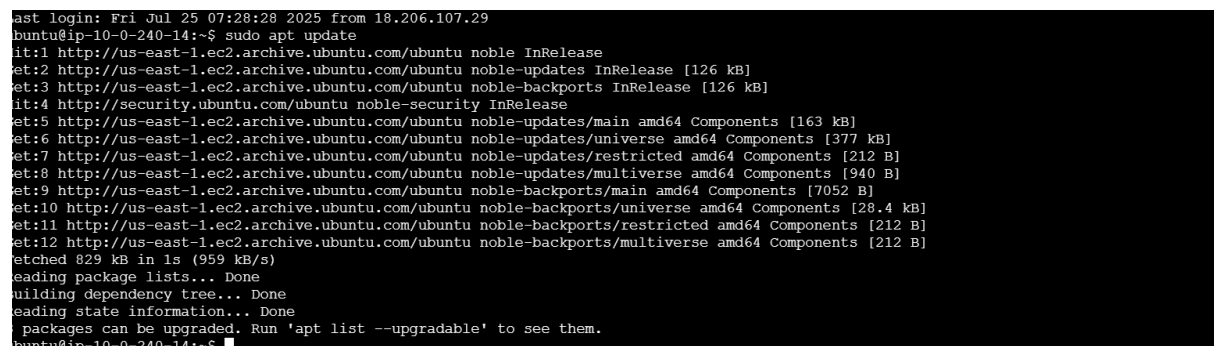
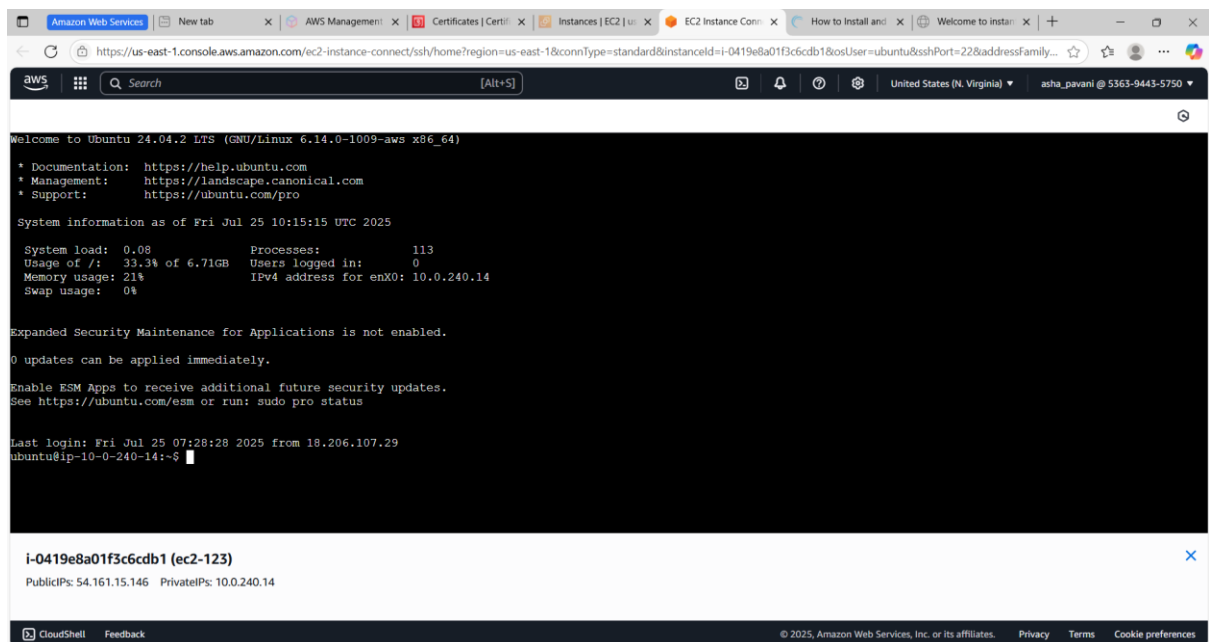
# Create EFS:



# Create EC2 Instance:



# Connect to Ubuntu:



```
buntu@ip-10-0-240-14:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following upgrades have been deferred due to phasing:
  openssh-client openssh-server openssh-sftp-server
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.
buntu@ip-10-0-240-14:~$
```

Install nginx

```
buntu@ip-10-0-240-14:~$ sudo apt install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nginx is already the newest version (1.24.0-2ubuntu7.4).
```

## Check status of nginx:

```
buntu@ip-10-0-240-14:~$ sudo systemctl status nginx
nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
   Active: active (running) since Fri 2025-07-25 06:41:02 UTC; 3h 36min ago
     Docs: man:nginx(8)
  Process: 547 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, status=0/SUCCESS)
  Process: 681 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUCCESS)
 Main PID: 686 (nginx)
    Tasks: 2 (limit: 1121)
   Memory: 3.0M (peak: 3.3M)
      CPU: 26ms
   CGroup: /system.slice/nginx.service
           └─686 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
             └─687 "nginx: worker process"

Jul 25 06:41:00 ip-10-0-240-14 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...
Jul 25 06:41:02 ip-10-0-240-14 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.
buntu@ip-10-0-240-14:~$
```

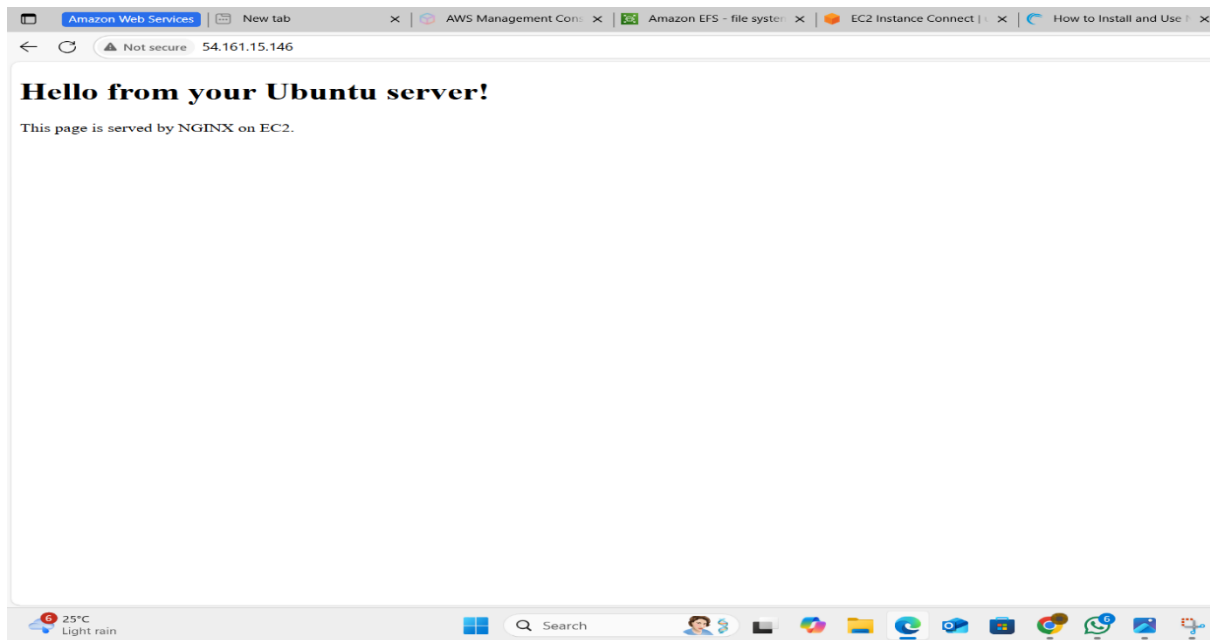
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## Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to [nginx.org](https://nginx.org).  
Commercial support is available at [nginx.com](https://nginx.com).

*Thank you for using nginx.*



## Mount EFS TO EC2:

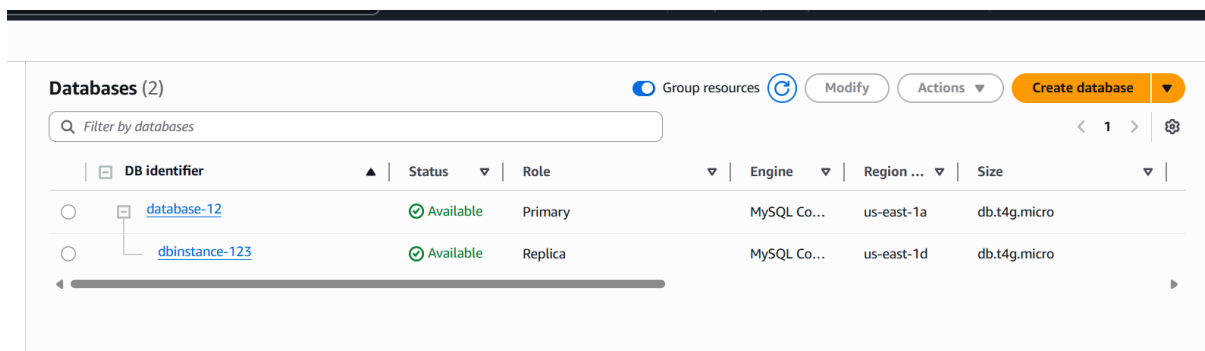
```
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart serial-getty@ttyS0.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service

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.
ubuntu@ip-10-0-240-14:/var/www/html$ sudo mount -t efs -o tls fs-0ff390e8c72af943f:/ /var/www/html/
mount: /var/www/html: unknown filesystem type 'efs'.
dmesg(1) may have more information after failed mount system call.
ubuntu@ip-10-0-240-14:/var/www/html$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-0ff390e8c72af943f.efs.us-east-1.amazonaws.com:/ /var/www/html/
ubuntu@ip-10-0-240-14:/var/www/html$ df -h
Filesystem                Size      Used Avail Use% Mounted on
/dev/root                  6.8G      2.2G   4.6G  33% /
tmpfs                      479M          0   479M   0% /dev/shm
tmpfs                      192M      912K   191M   1% /run
tmpfs                      5.0M          0   5.0M   0% /run/lock
/dev/xvda16                881M     149M    731M  19% /boot
/dev/xvda15               105M      6.2M    99M   6% /boot/efi
tmpfs                      96M       12K    96M   1% /run/user/1000
fs-0ff390e8c72af943f.efs.us-east-1.amazonaws.com:/ 8.0E          0   8.0E   0% /var/www/html
ubuntu@ip-10-0-240-14:/var/www/html$
```

## Create RDS and Read Replica:



# Connect EC2 to RDS:

```
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-240-14:~$ mysql -h database-12.c834eam4ykh0.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 46
Server version: 8.0.41 Source distribution

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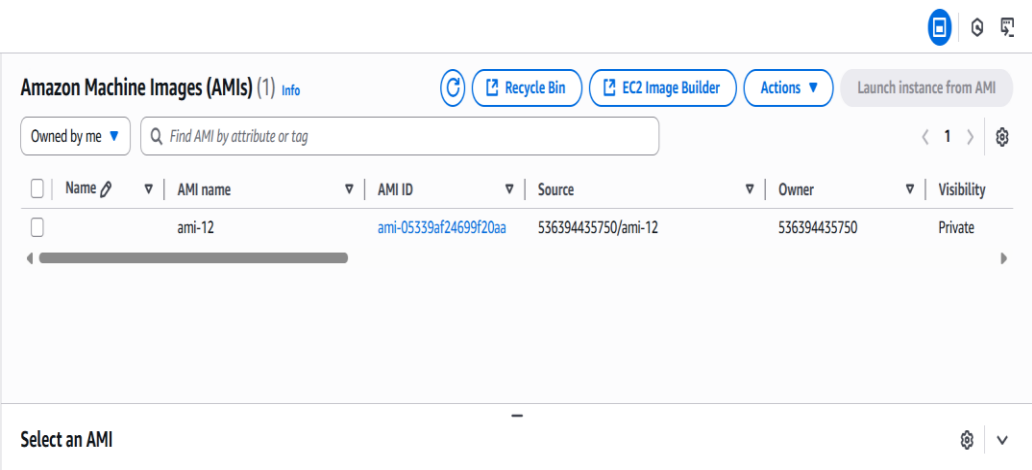
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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

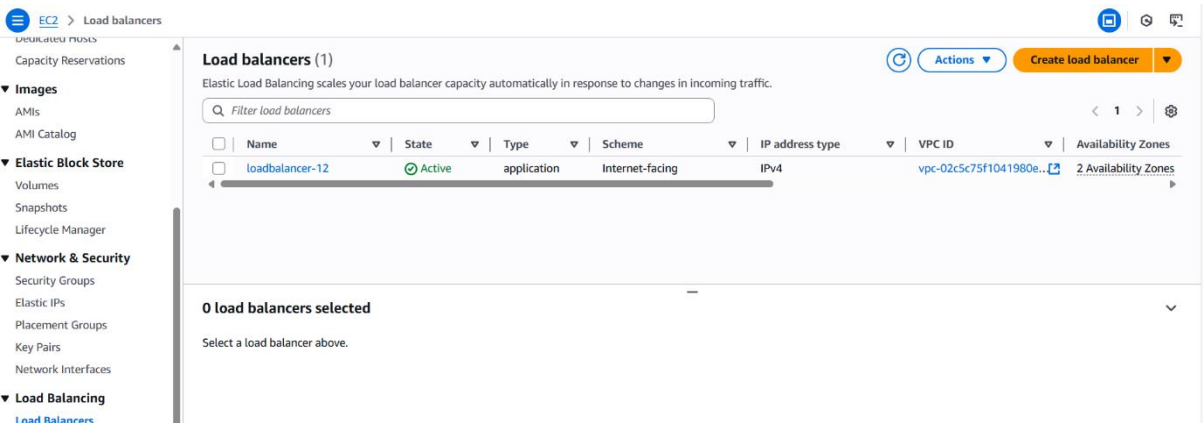
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.01 sec)

mysql>
```

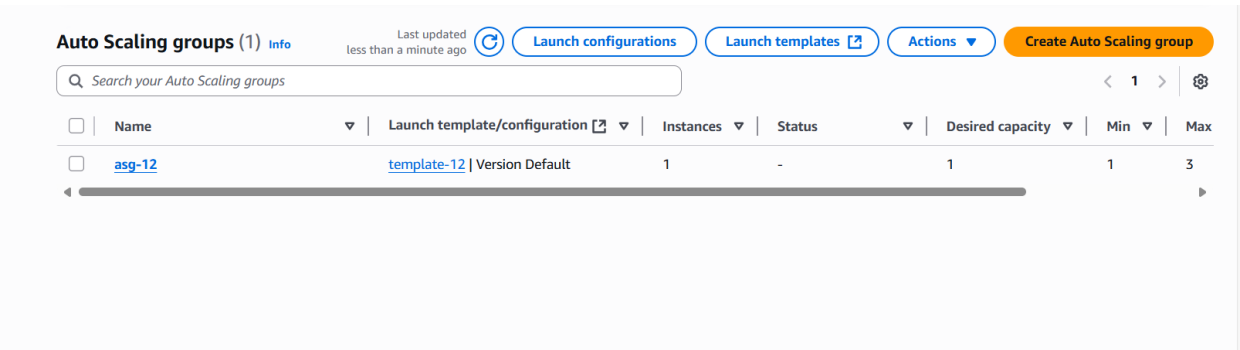
# Create AMI:



# Create Load Balancer:



# Create Auto Scaling Group:



# Create cloudFront:

