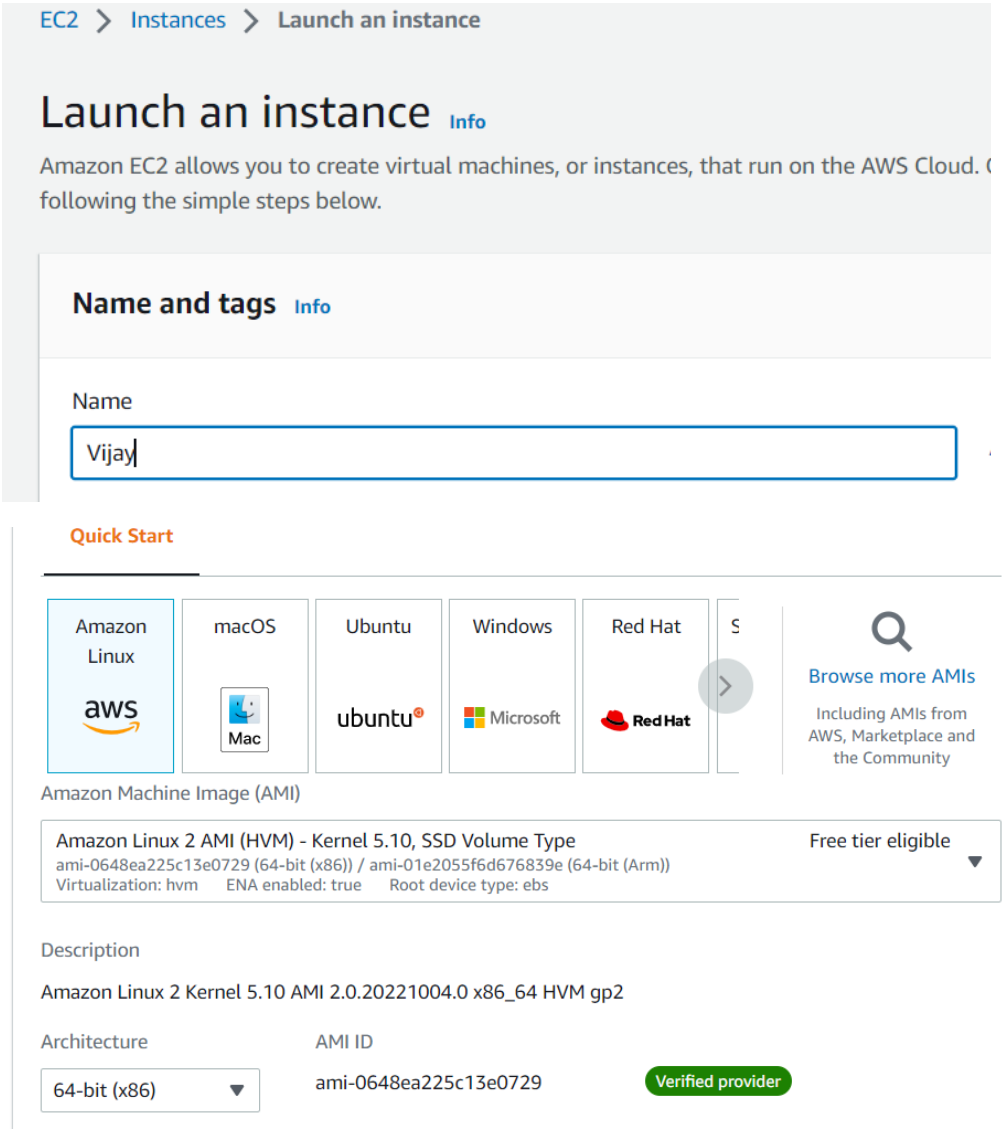
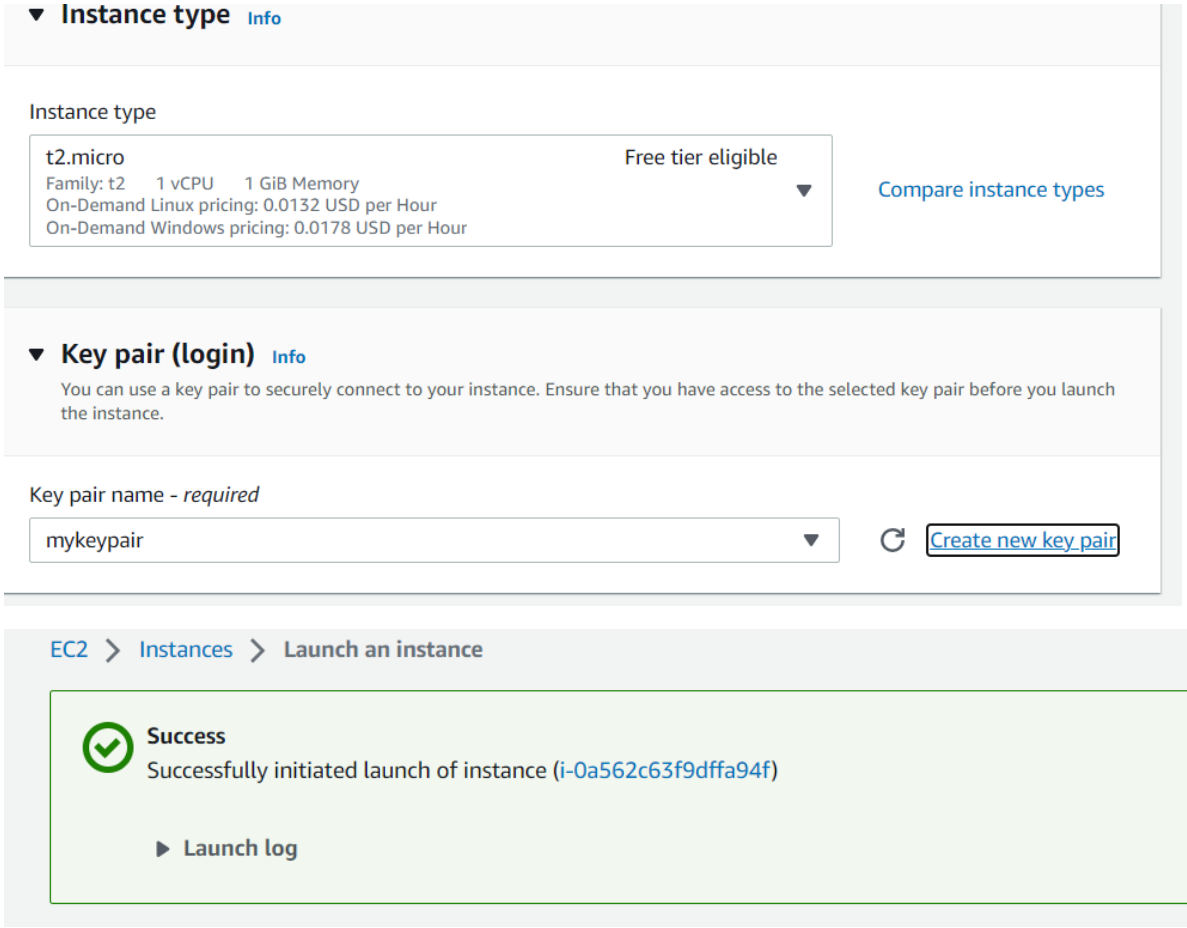
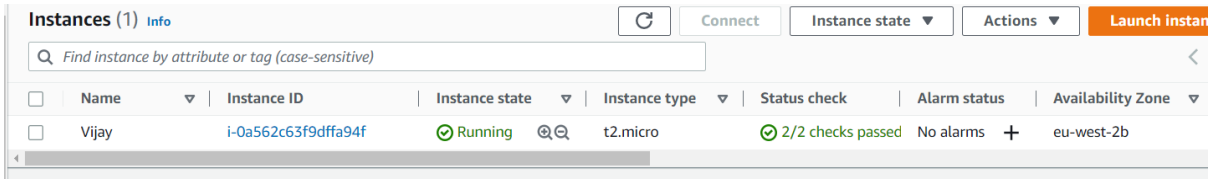
CD – AWS task for the day 19th Oct 2022

1. **EC2 instances (2 machines - 1st machine - name, 2nd machine - surname)**

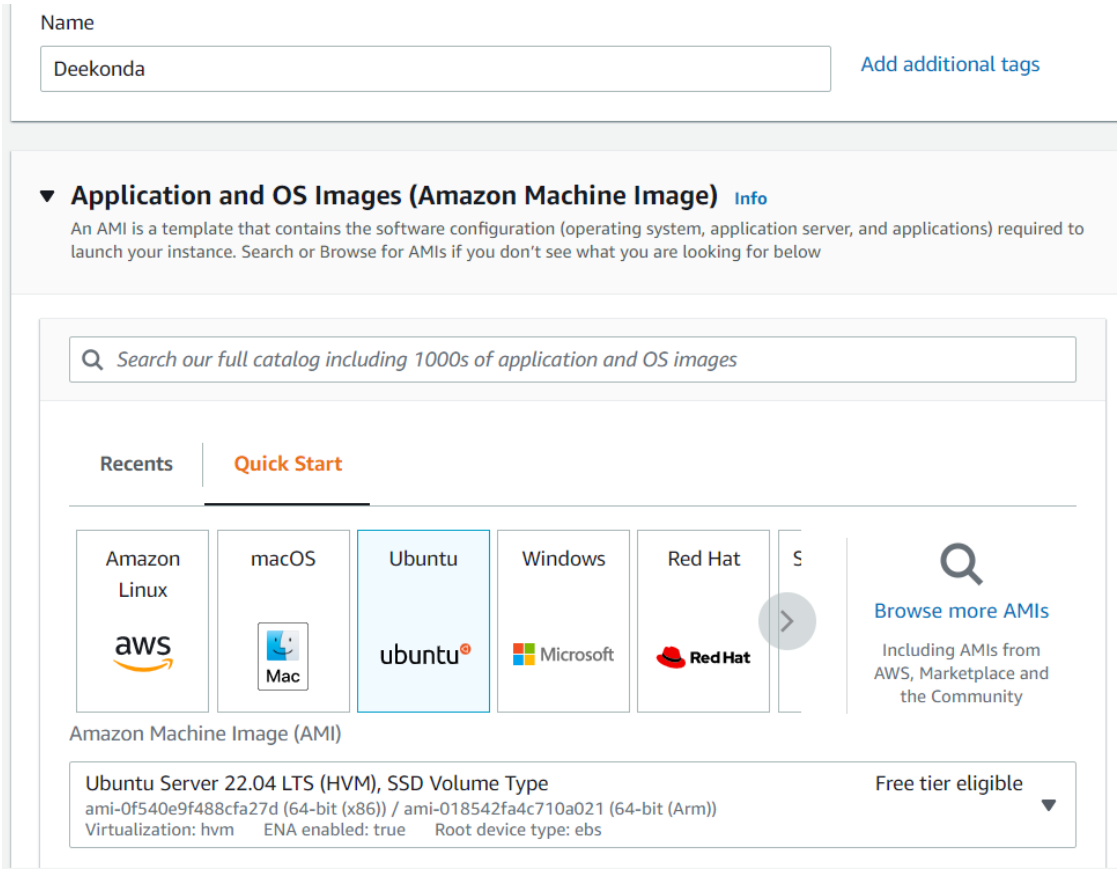




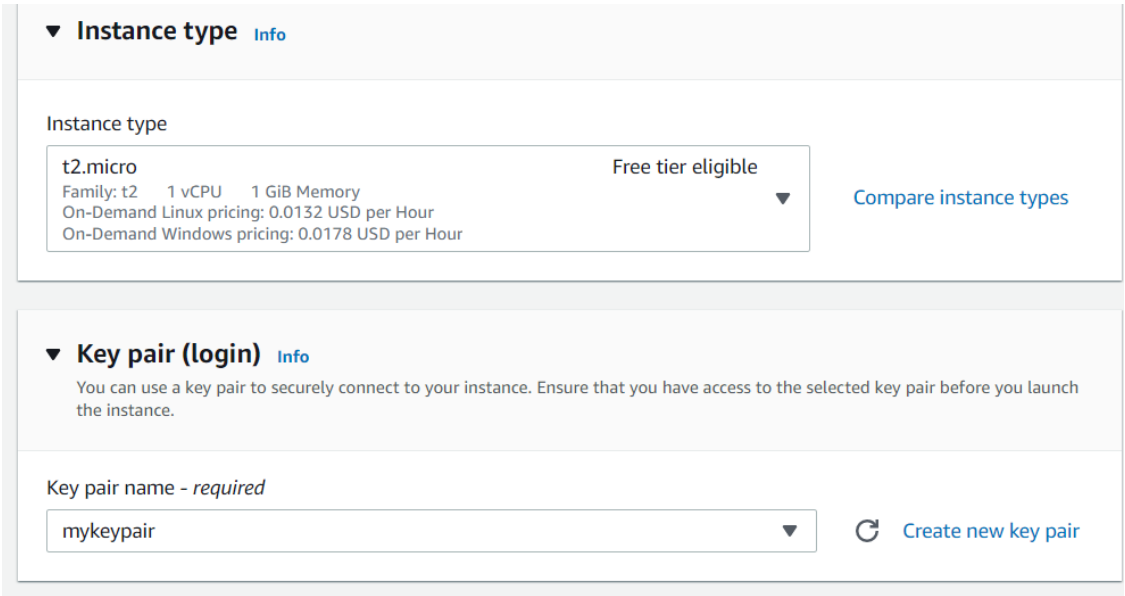
Instance with user name

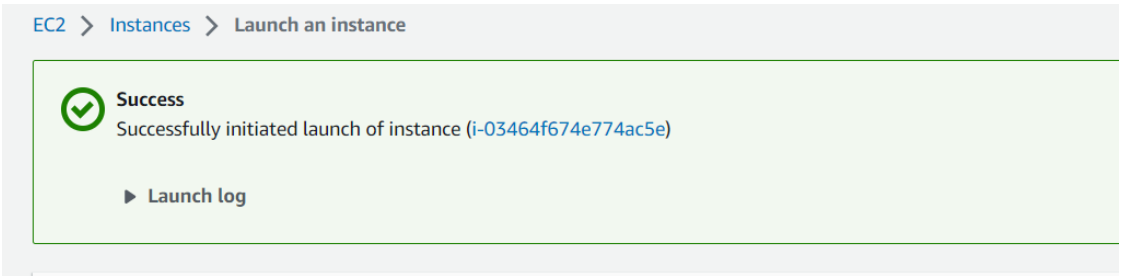


Launching instance with Surname (Ubuntu machine)

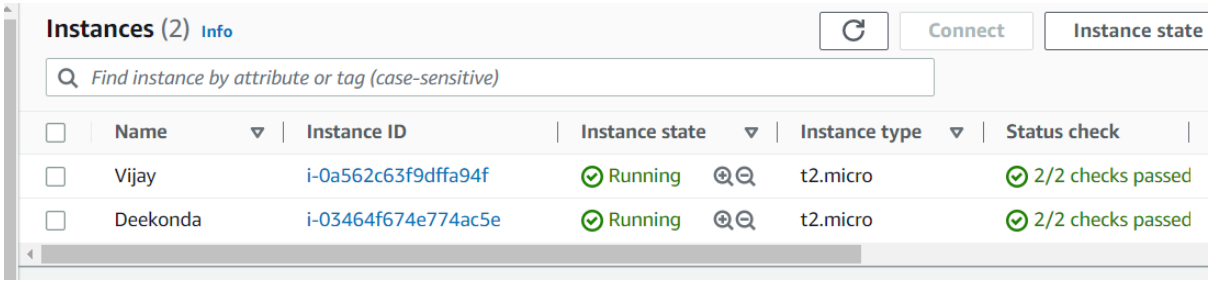


Using same key pair



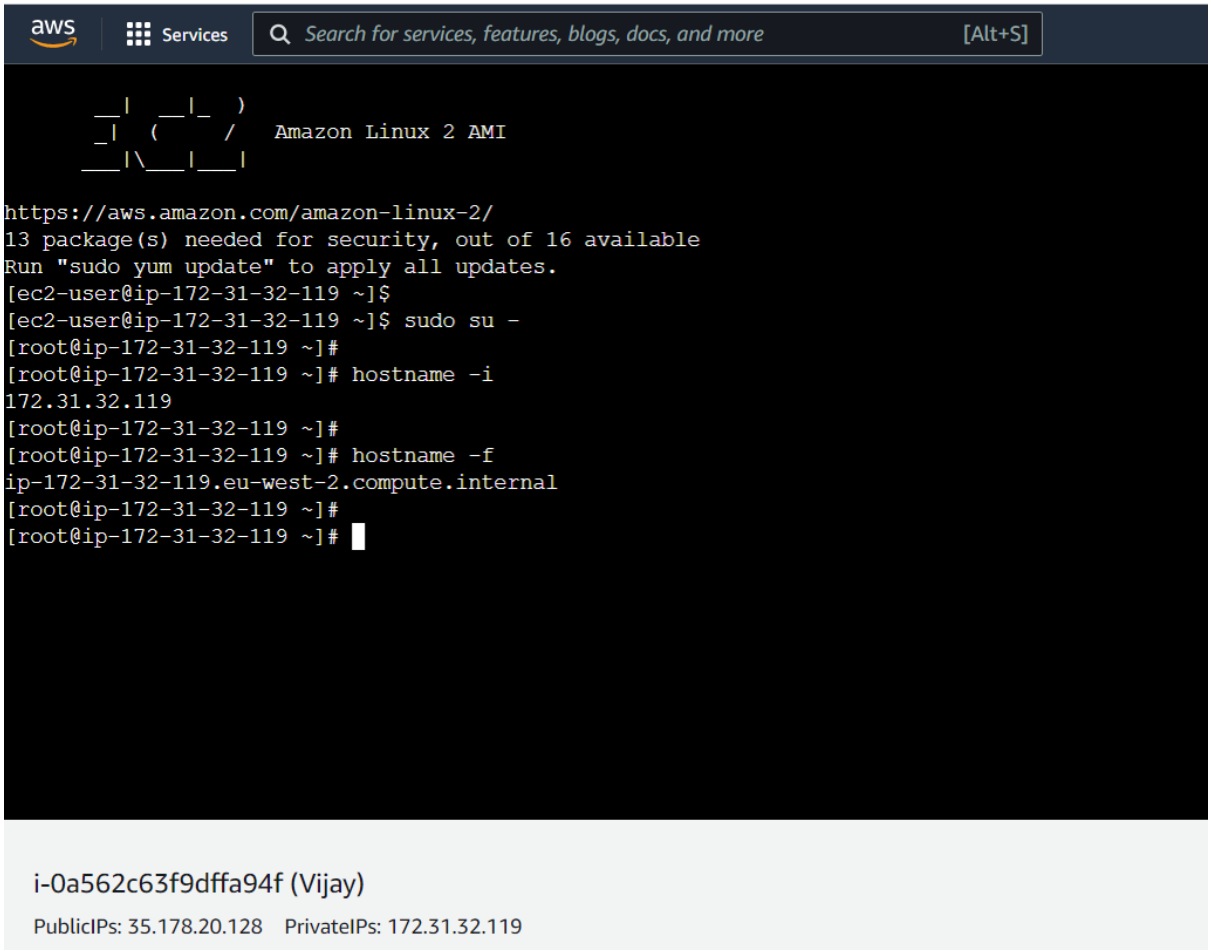


Two Instances with Name(Vijay) and Surname(Deekonda)

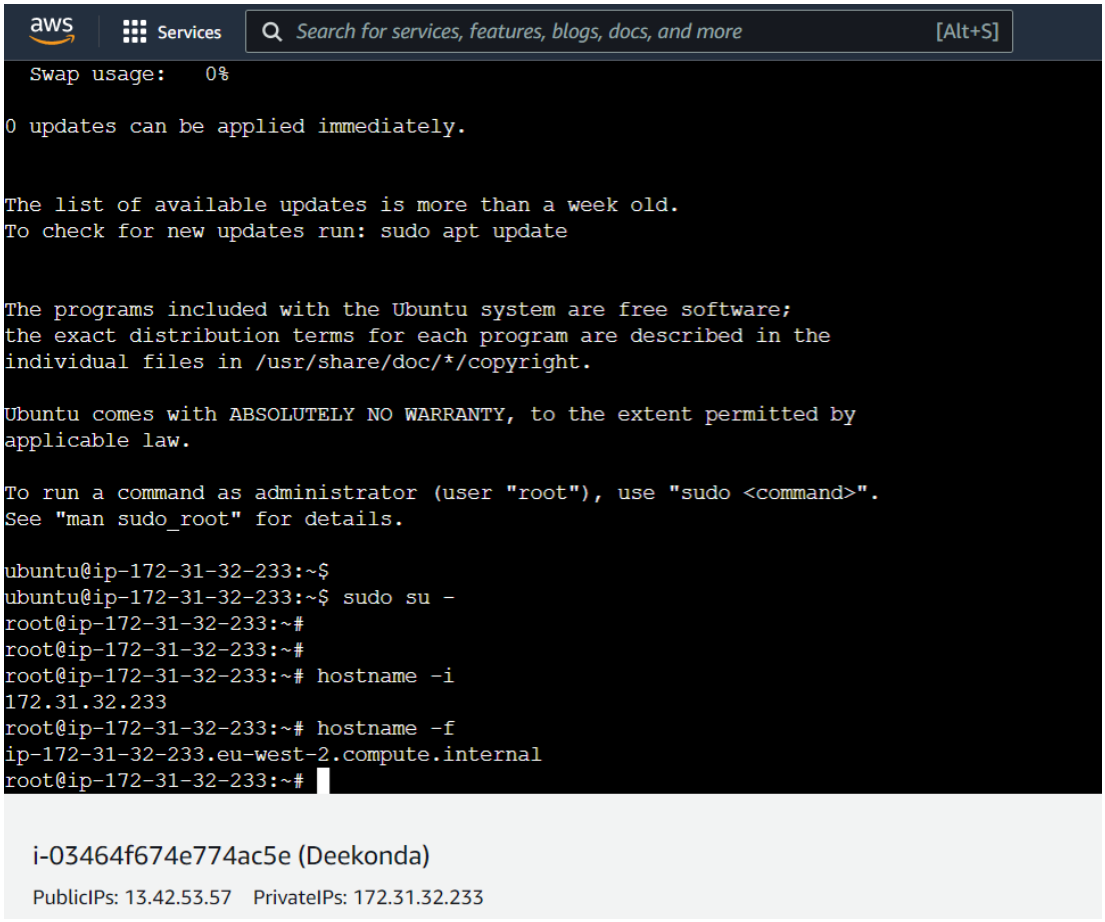


Test Connection

Instance - Vijay

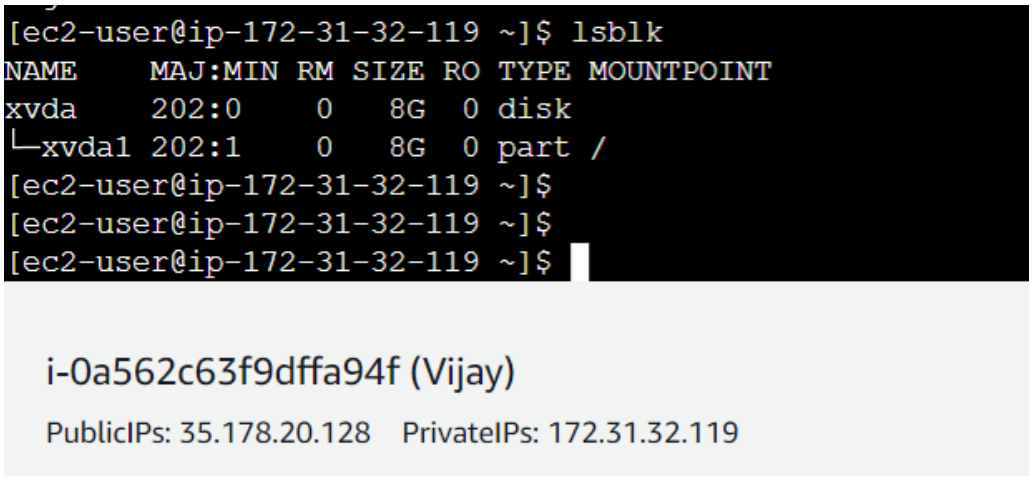


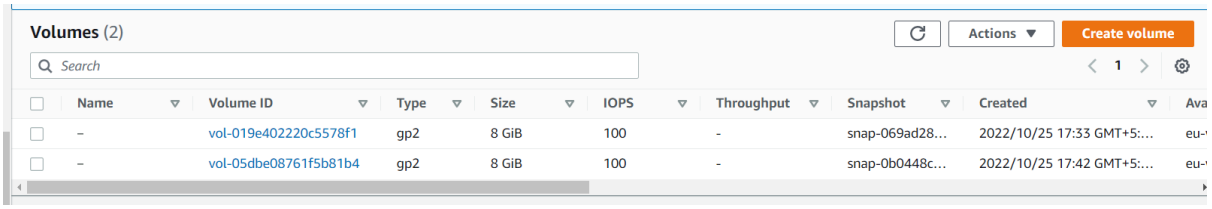
Instance – Deekonda



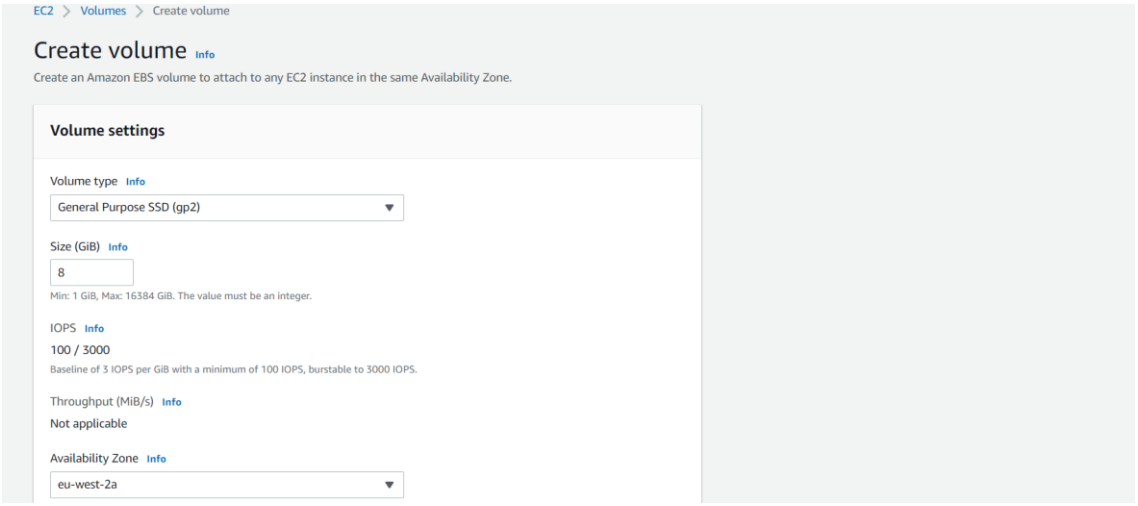
2. EBS volume

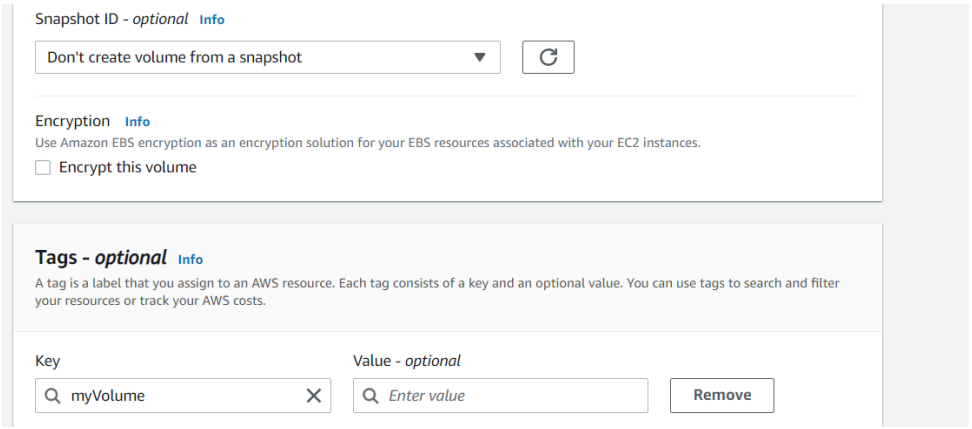
Checking volume before EBS



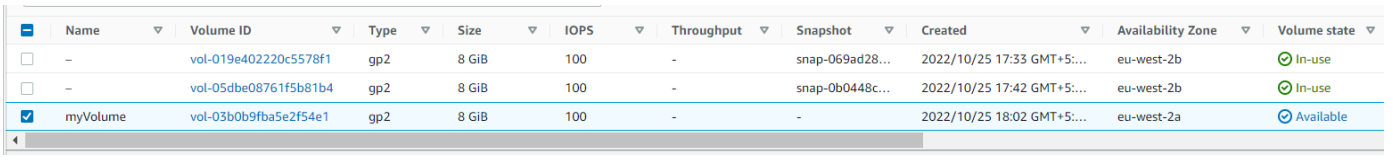


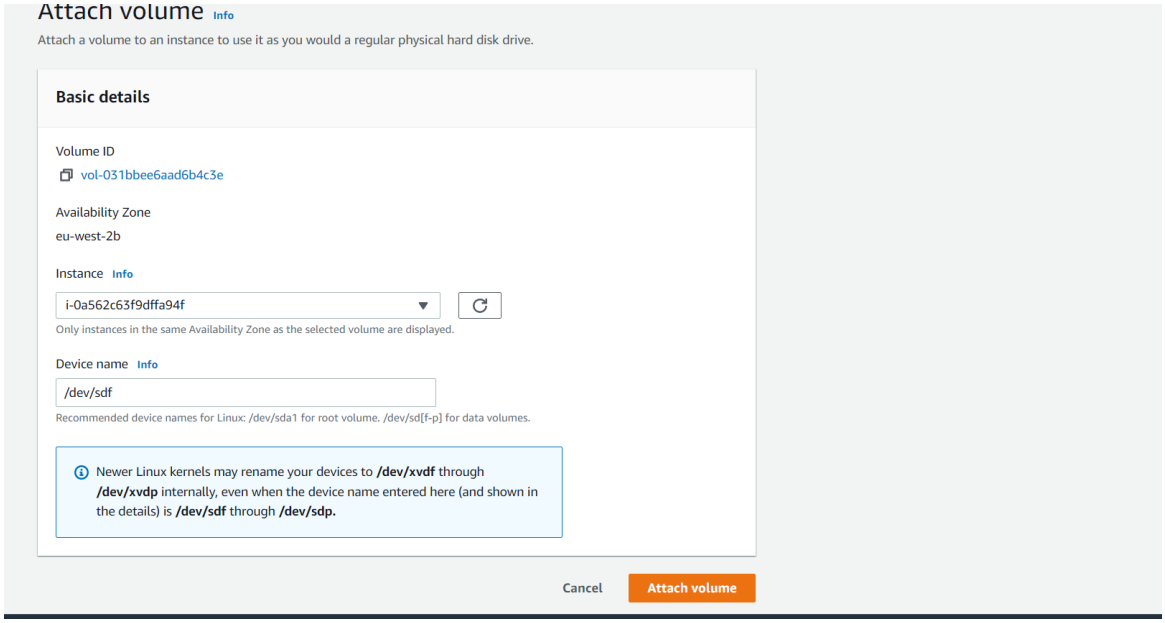
Creating volume





New volume is created and it is in available state





lsbsk output post attaching volume

```
[ec2-user@ip-172-31-32-119 ~]$ lsblk
NAME    MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0   8G  0 disk
└─xvda1 202:1    0   8G  0 part /
xvdf    202:80   0   8G  0 disk
[ec2-user@ip-172-31-32-119 ~]$
[ec2-user@ip-172-31-32-119 ~]$
```

i-0a562c63f9dffa94f (Vijay)

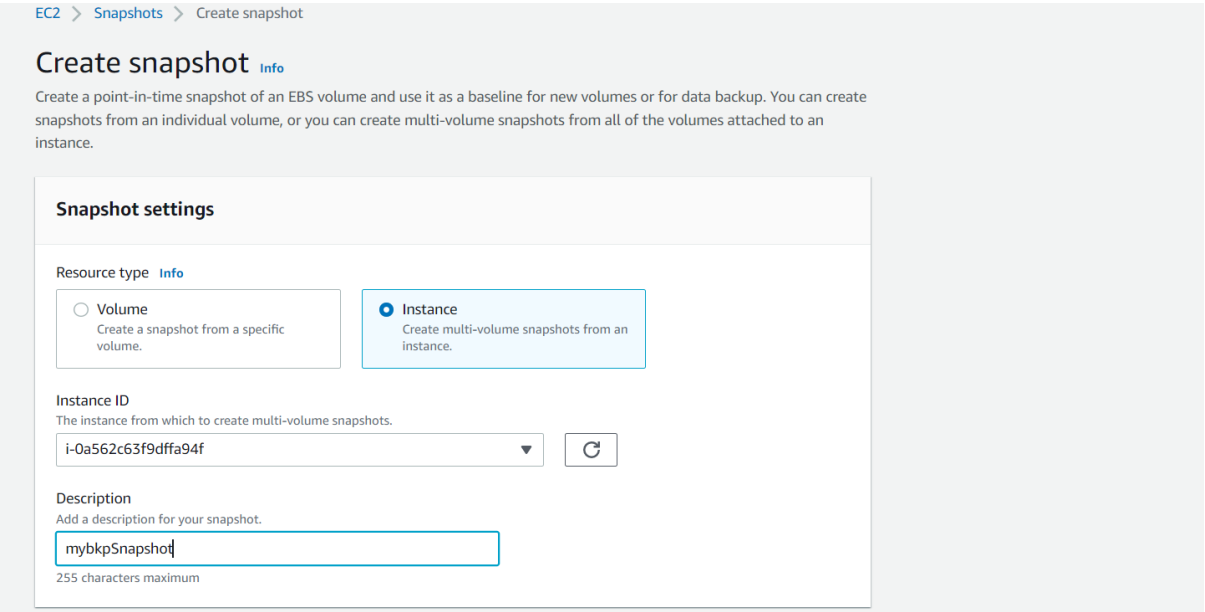
PublicIPs: 35.178.20.128 PrivateIPs: 172.31.32.119

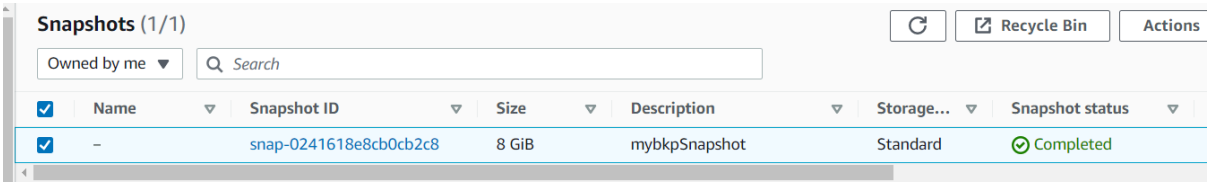
```
[ec2-user@ip-172-31-32-119 ~]$ sudo mkfs -t xfs /dev/xvdf
meta-data=/dev/xvdf              isize=512    agcount=4, agsize=524288 blks
         =                       sectsz=512   attr=2, projid32bit=1
         =                       crc=1        finobt=1, sparse=0
data     =                       bsize=4096   blocks=2097152, imaxpct=25
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0 ftype=1
log      =internal log           bsize=4096   blocks=2560, version=2
         =                       sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                   extsz=4096   blocks=0, rtextents=0
[ec2-user@ip-172-31-32-119 ~]$ sudo mkdir /data
[ec2-user@ip-172-31-32-119 ~]$ sudo mount /dev/xvdf /data
[ec2-user@ip-172-31-32-119 ~]$ lsblk
NAME    MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0   8G  0 disk
└─xvda1 202:1    0   8G  0 part /
xvdf    202:80   0   8G  0 disk /data
[ec2-user@ip-172-31-32-119 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        474M     0  474M   0% /dev
tmpfs           483M     0  483M   0% /dev/shm
tmpfs           483M  412K  482M   1% /run
tmpfs           483M     0  483M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  1.6G  6.5G  20% /
tmpfs            97M     0   97M   0% /run/user/1000
/dev/xvdf       8.0G   41M  8.0G   1% /data
[ec2-user@ip-172-31-32-119 ~]$
```

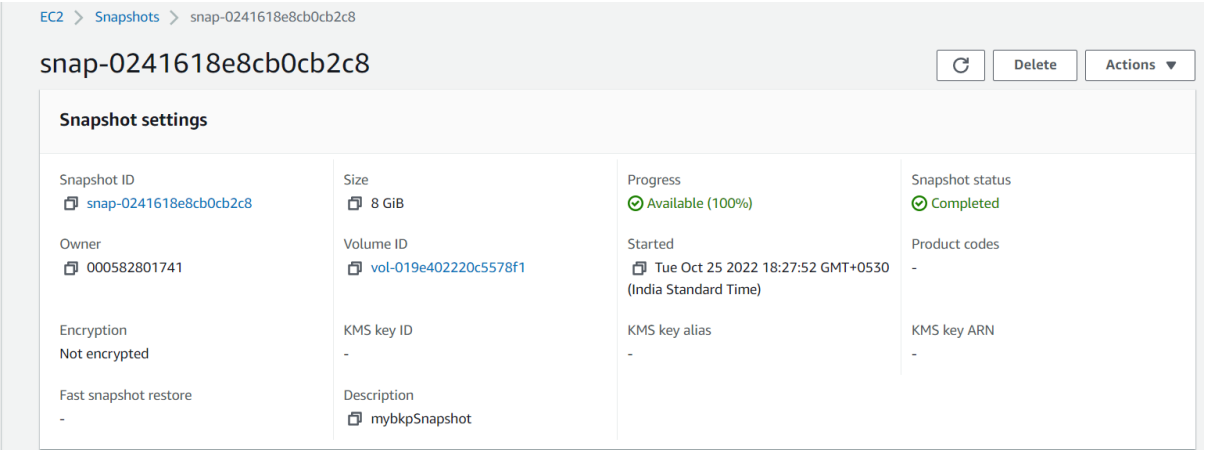
i-0a562c63f9dffa94f (Vijay)

PublicIPs: 35.178.20.128 PrivateIPs: 172.31.32.119

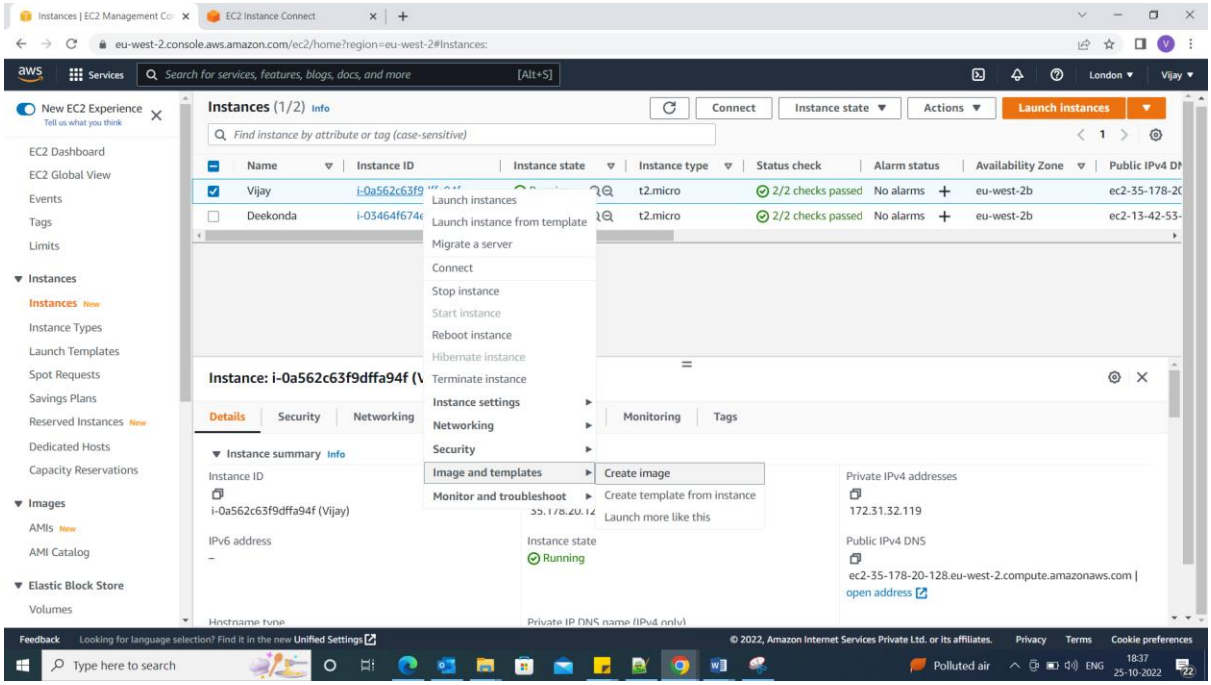
3. Snapshot

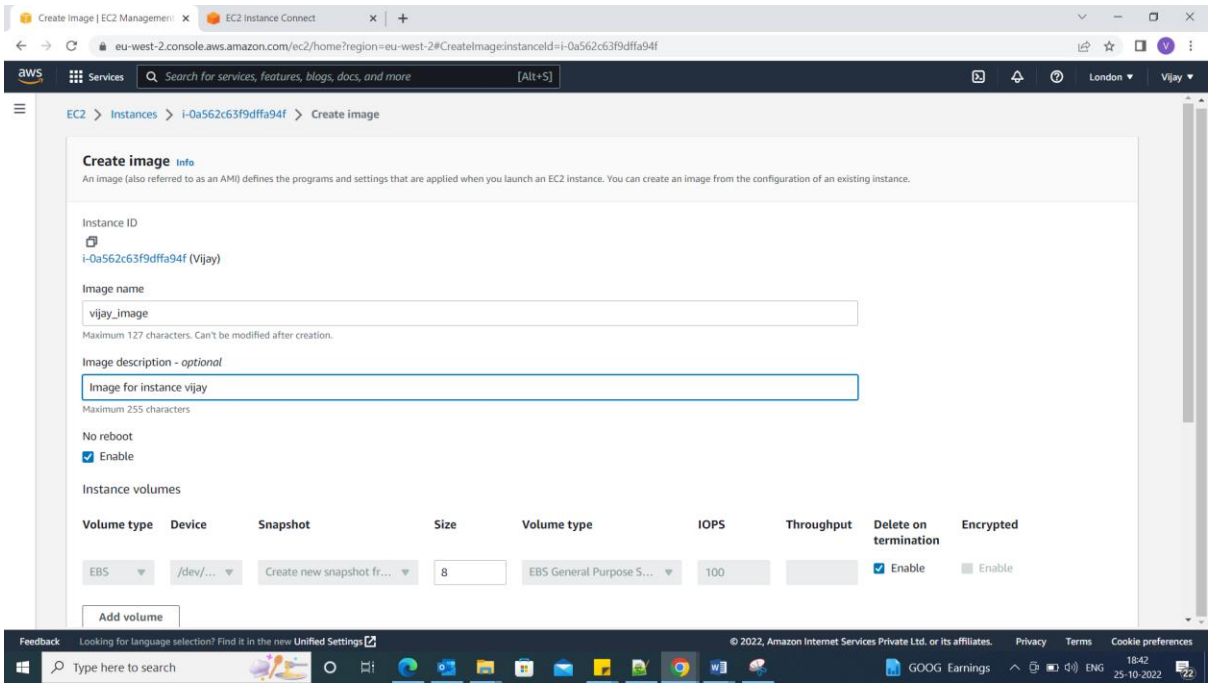

EC2 > Snapshots > Create snapshot
Create snapshot Info
Create a point-in-time snapshot of an EBS volume and use it as a baseline for new volumes or for data backup. You can create snapshots from an individual volume, or you can create multi-volume snapshots from all of the volumes attached to an instance.
Snapshot settings
Resource type Info
Volume
Create a snapshot from a specific volume.
Instance
Create multi-volume snapshots from an instance.
Instance ID
The instance from which to create multi-volume snapshots.
i-0a562c63f9dffa94f
Description
Add a description for your snapshot.
mybkpSnapshot
255 characters maximum

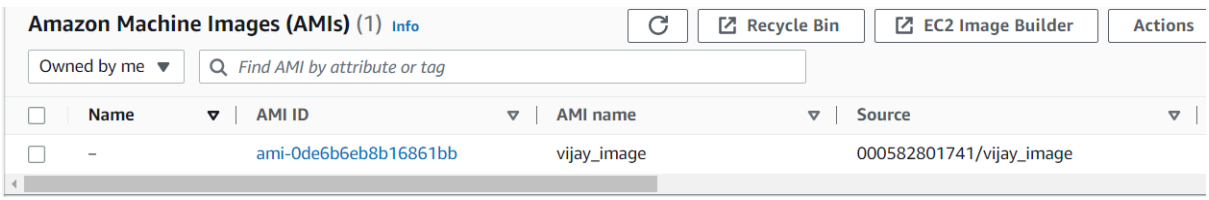

Snapshots (1/1)
Recycle Bin
Actions
Owned by me
Search
Name
Snapshot ID
Size
Description
Storage...
Snapshot status
–
snap-0241618e8cb0cb2c8
8 GiB
mybkpSnapshot
Standard
Completed


EC2 > Snapshots > snap-0241618e8cb0cb2c8
snap-0241618e8cb0cb2c8
Delete
Actions
Snapshot settings
Snapshot ID
snap-0241618e8cb0cb2c8
Size
8 GiB
Progress
Available (100%)
Snapshot status
Completed
Owner
000582801741
Volume ID
vol-019e402220c5578f1
Started
Tue Oct 25 2022 18:27:52 GMT+0530 (India Standard Time)
Product codes
-
Encryption
Not encrypted
KMS key ID
-
KMS key alias
-
KMS key ARN
-
Fast snapshot restore
-
Description
mybkpSnapshot

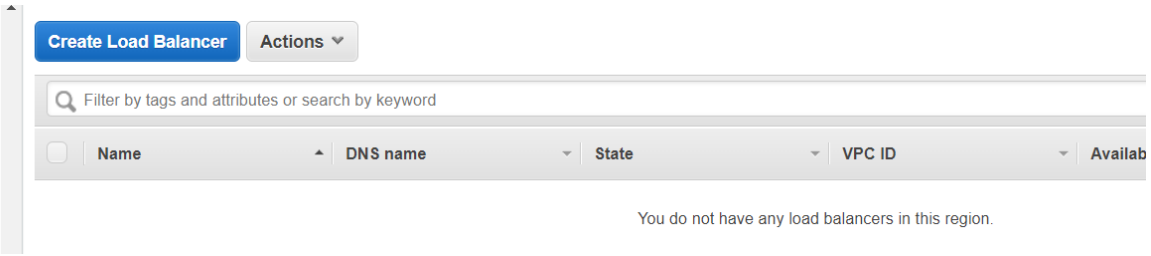
4. AMI


Instances (1/2) Info
Connect
Instance state
Actions
Launch instances
Launch instances
Launch instance from template
Migrate a server
Connect
Stop instance
Start instance
Reboot instance
Hibernate instance
Terminate instance
Instance settings
Networking
Security
Image and templates
Monitor and troubleshoot
Create image
Create template from instance
Launch more like this
Instance: i-0a562c63f9dffa94f
Details
Security
Networking
Monitoring
Tags
Instance summary Info
Instance ID
i-0a562c63f9dffa94f (Vijay)
IPv6 address
Instance state
Running
Private IPv4 addresses
172.31.32.119
Public IPv4 DNS
ec2-35-178-20-128.eu-west-2.compute.amazonaws.com
open address


EC2 > Instances > i-0a562c63f9dffa94f > Create image
Create image Info
An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.
Instance ID
i-0a562c63f9dffa94f (Vijay)
Image name
vijay_image
Maximum 127 characters. Can't be modified after creation.
Image description - optional
Image for instance vijay
Maximum 255 characters
No reboot
Enable
Instance volumes
Volume type
Device
Snapshot
Size
Volume type
IOPS
Throughput
Delete on termination
Encrypted
EBS
/dev/...
Create new snapshot fr...
8
EBS General Purpose S...
100
Enable
Enable
Add volume

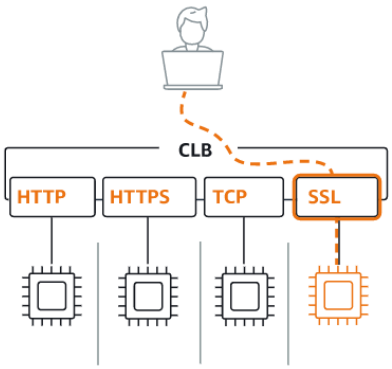

Amazon Machine Images (AMIs) (1) Info
Recycle Bin
EC2 Image Builder
Actions
Owned by me
Find AMI by attribute or tag
Name
AMI ID
AMI name
Source
ami-0de6b6eb8b16861bb
vijay_image
000582801741/vijay_image

5. Load Balancer



▼ Classic Load Balancer - *previous generation*

Classic Load Balancer Info



Choose a Classic Load Balancer when you have an existing applicatio network.

AWS will be retiring the EC2-Classic network on August 15, 2(

Create

Step 1: Define Load Balancer

Basic Configuration

This wizard will walk you through setting up a new load balancer. Begin by giving your new load balancer a unique name so that you can identify it from other load balancers yo need to configure ports and protocols for your load balancer. Traffic from your clients can be routed from any load balancer port to any port on your EC2 instances. By default, balancer with a standard web server on port 80.

Load Balancer name: MyLB-vijay

Create LB Inside: My Default VPC (172.31.0.0/16)

Create an internal load balancer: ☐ (what's this?)

Enable advanced VPC configuration: ☐

Listener Configuration:

Load Balancer Protocol	Load Balancer Port	Instance Protocol	Instance Port
HTTP	80	HTTP	80

Add

Step 2: Assign Security Groups

You have selected the option of having your Elastic Load Balancer inside of a VPC, which allows you to assign security groups to your load balancer. Please select the securit load balancer. This can be changed at any time.

Assign a security group: ◉ Create a **new** security group

○ Select an **existing** security group

Security group name: MySecurity-vijay

Description: quick-create-1 created on Tuesday, October 25, 2022 at 6:51:42 PM UT

Type	Protocol	Port Range	Source
HTTP	TCP	80	Anywhere 0.0.0.0/0

Add Rule

Step 3: Configure Security Settings

Improve your load balancer's security. Your load balancer is not using any secure listener.

If your traffic to the load balancer needs to be secure, use either the HTTPS or the SSL protocol for your front-end connection. Y
listeners under Basic Configuration section. You can also continue with current settings.

Step 4: Configure Health Check

Your load balancer will automatically perform health checks on your EC2 instances and only route traffic to instances that pass the health check. If an instance fails th
removed from the load balancer. Customize the health check to meet your specific needs.

Ping Protocol	HTTP
Ping Port	80
Ping Path	/index.html

Advanced Details

Response Timeout	5 seconds
Interval	30 seconds
Unhealthy threshold	2
Healthy threshold	10

Step 5: Add EC2 Instances

The table below lists all your running EC2 Instances. Check the boxes in the Select column to add those instances to this load balancer.

VPC vpc-0ffe128cd26969d07 (172.31.0.0/16)

Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
i-0a562c63f9dffa94f	Vijay	running	launch-wizard-1	eu-west-2b	subnet-0da489e...	172.31.32.0/20
i-03464f674e774ac5e	Deekonda	running	launch-wizard-2	eu-west-2b	subnet-0da489e...	172.31.32.0/20

Availability Zone Distribution

1 instance in eu-west-2b

Enable Cross-Zone Load Balancing

Enable Connection Draining 300 seconds

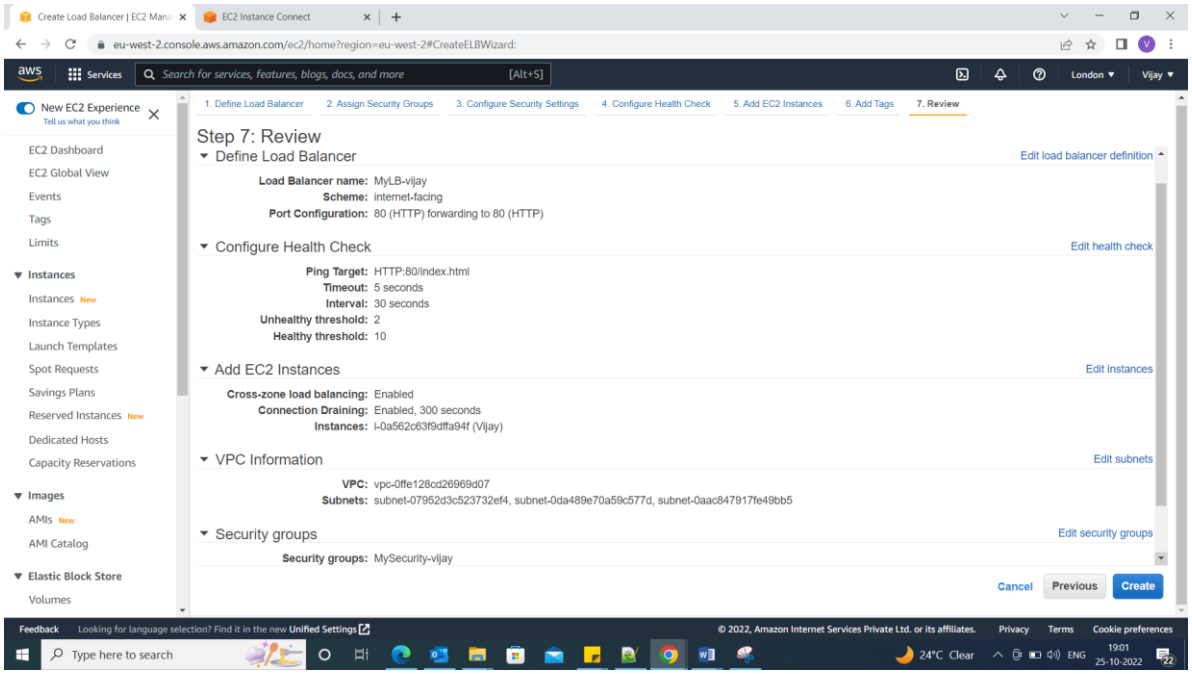
Step 6: Add Tags

Apply tags to your resources to help organize and identify them.

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. Learn r

Key	Value
MyLB	loadbalencer

Create Tag



Load Balancer Creation Status

Successfully created load balancer

Load balancer MyLB-vijay was successfully created.

Note: It may take a few minutes for your instances to become active in the new load balancer.