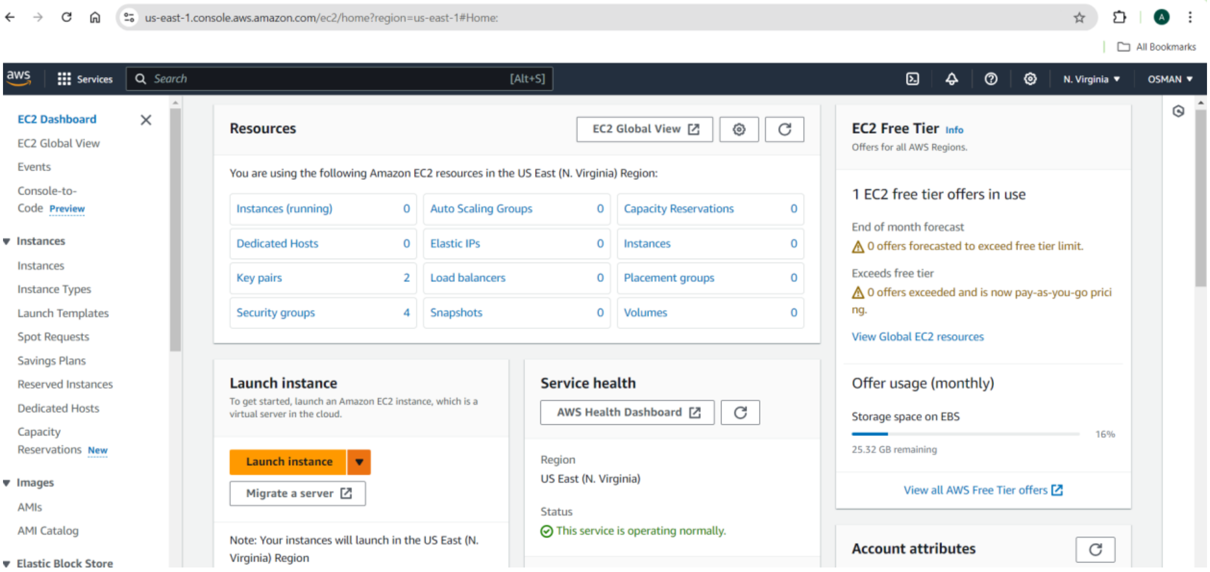
Task on Ec2:

===========

1) Launch one ec2 using Amazon Linux 2 image and add script in user data to install Apache.

- First need Login the console and search for ec2 instance .
- You will see the below interface just click on the Launch instance.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Home:

All Bookmarks

aws Services Search [Alt+S] N. Virginia OSMAN

EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
▼ Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
▼ Images
AMIs
AMI Catalog
▼ Elastic Block Store

Resources — EC2 Global View

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

Instances (running)	0	Auto Scaling Groups	0	Capacity Reservations	0
Dedicated Hosts	0	Elastic IPs	0	Instances	0
Key pairs	2	Load balancers	0	Placement groups	0
Security groups	4	Snapshots	0	Volumes	0

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance ▼

Migrate a server

Note: Your instances will launch in the US East (N. Virginia) Region

Service health

AWS Health Dashboard

Region

US East (N. Virginia)

Status

This service is operating normally.

EC2 Free Tier Info

Offers for all AWS Regions.

1 EC2 free tier offers in use

End of month forecast

⚠ 0 offers forecasted to exceed free tier limit.

Exceeds free tier

⚠ 0 offers exceeded and is now pay-as-you-go pricing.

View Global EC2 resources

Offer usage (monthly)

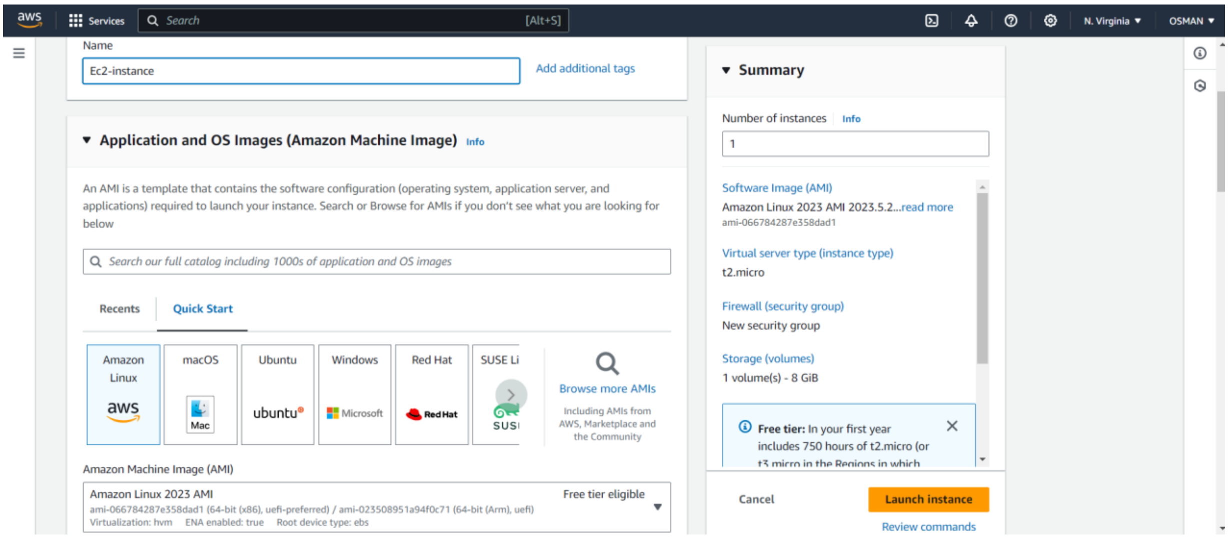
Storage space on EBS 16%

25.32 GB remaining

View all AWS Free Tier offers

Account attributes

- Then you see the below interface.
- Give name and select the AMI
- AMI ---> Ami is pre-configured virtual machine template. That means Ami is the blue print for launching the ec2 instance. You can use an ami to create and launch instances.



aws Services Search [Alt+S] N. Virginia OSMAN

Name

Ec2-instance

Add additional tags

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

Recents Quick Start

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI — Free tier eligible

ami-066784287e358dad1 (64-bit (x86), uefi-preferred) / ami-023508951a94f0c71 (64-bit (Arm), uefi)

Virtualization: hvm ENA enabled: true Root device type: ebs

▼ Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...read more

ami-066784287e358dad1

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

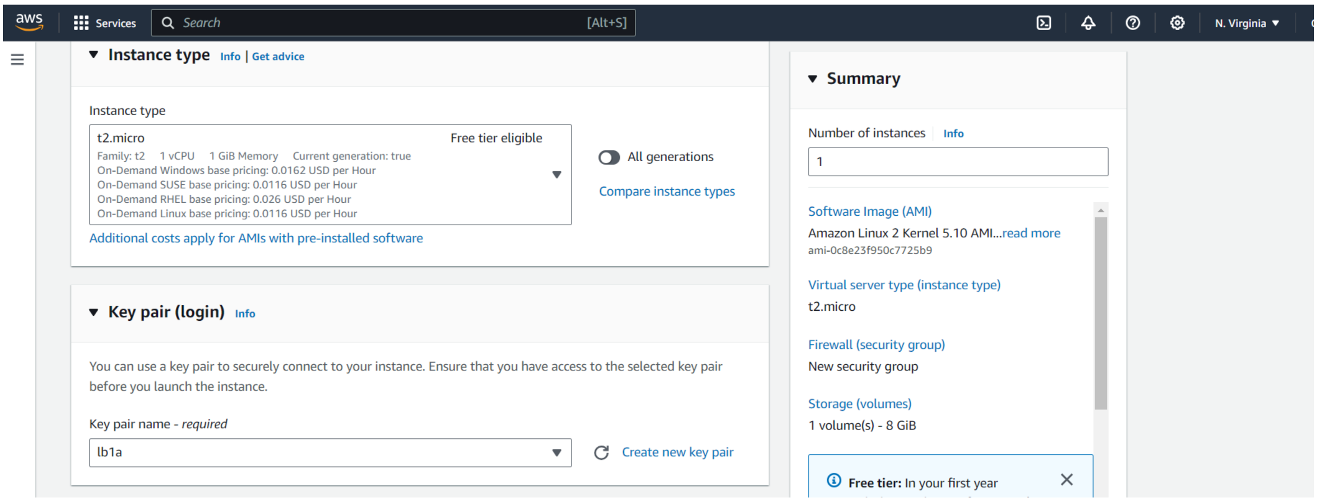
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

Cancel Launch instance

Review commands

- Next you have to select the instance type and key pair.



Instance type

Instance type

t2.micro — Free tier eligible
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.026 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

All generations

Additional costs apply for AMIs with pre-installed software

Key pair (login)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*: lb1a

Summary

Number of instances: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0c8e23f950c7725b9

Virtual server type (instance type): t2.micro

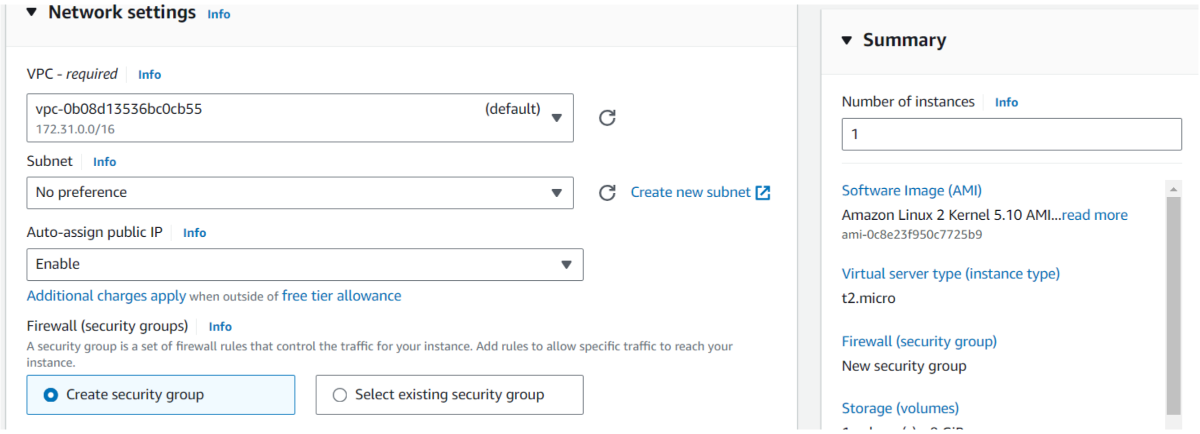
Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

Free tier: In your first year

Next Go to network setting .

Select VPC and subnets.



Network settings

VPC - *required*: vpc-0b08d13536bc0cb55 (default)
172.31.0.0/16

Subnet: No preference

Auto-assign public IP: Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

● Create security group ○ Select existing security group

Summary

Number of instances: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0c8e23f950c7725b9

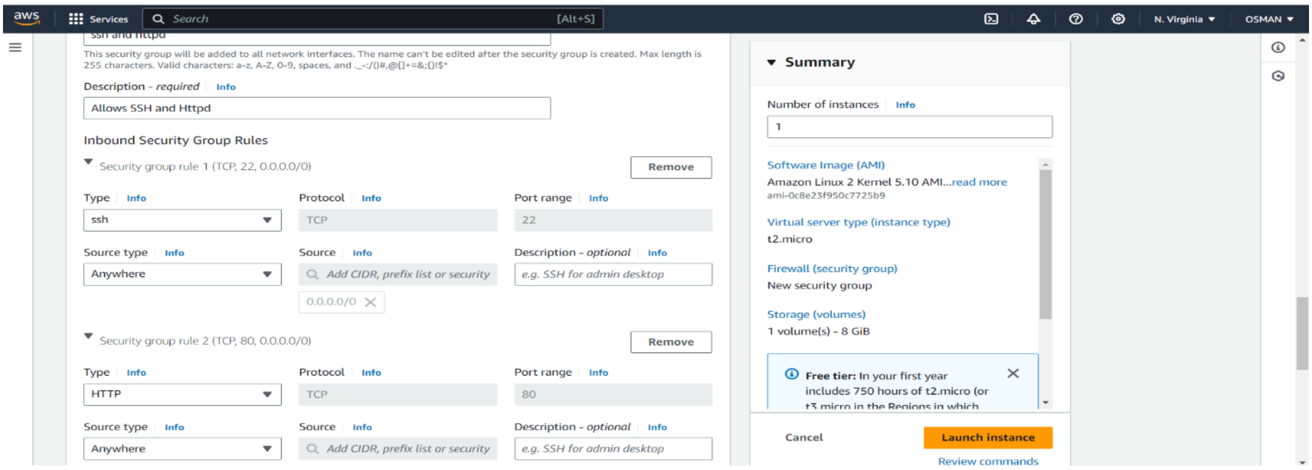
Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes)

Next go to the Security Groups.

If you have already select form directly by clicking existing security group. Otherwise create.



ssh and httpd

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*

Description - *required*: Allows SSH and Httpd

Inbound Security Group Rules

Security group rule 1 (TCP, 22, 0.0.0.0/0)

Type: ssh | Protocol: TCP | Port range: 22

Source type: Anywhere | Source: Add CIDR, prefix list or security — 0.0.0.0/0 | Description - *optional*: e.g. SSH for admin desktop

Security group rule 2 (TCP, 80, 0.0.0.0/0)

Type: HTTP | Protocol: TCP | Port range: 80

Source type: Anywhere | Source: Add CIDR, prefix list or security | Description - *optional*: e.g. SSH for admin desktop

Summary

Number of instances: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0c8e23f950c7725b9

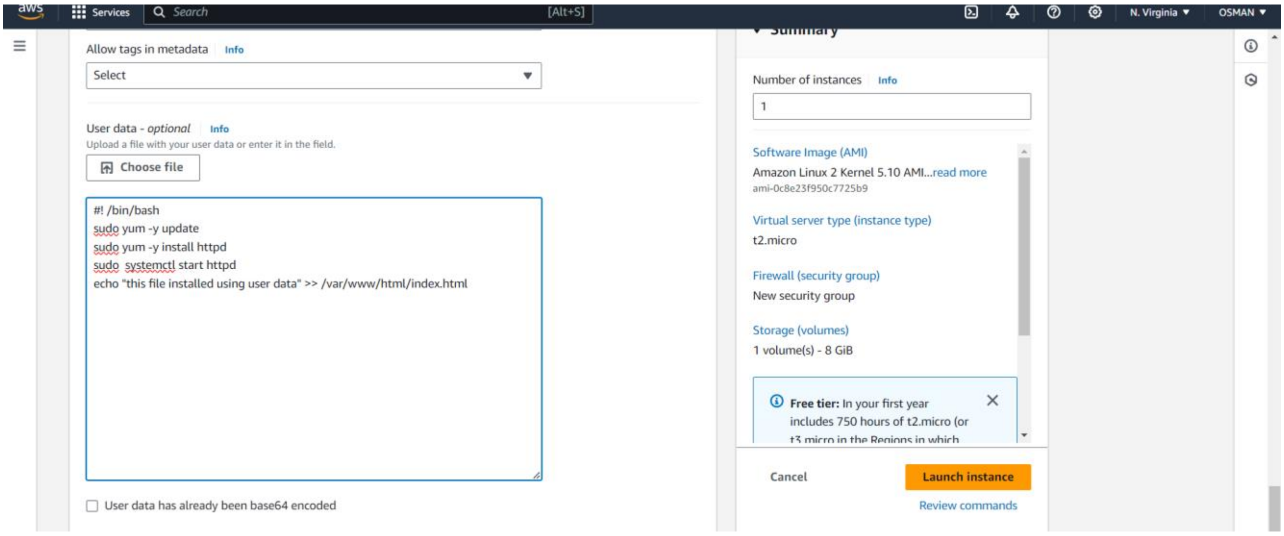
Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

- Click on the advance setting and scroll up last there you find the user data.
- What I am given script give and click launch instance.



Allow tags in metadata Info

Select ▼

User data - *optional* Info

Upload a file with your user data or enter it in the field.

Choose file

```
#! /bin/bash
sudo yum -y update
sudo yum -y install httpd
sudo systemctl start httpd
echo "this file installed using user data" >> /var/www/html/index.html
```

□ User data has already been base64 encoded

Number of instances Info

1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...read more
ami-0c8e23f950c7725b9

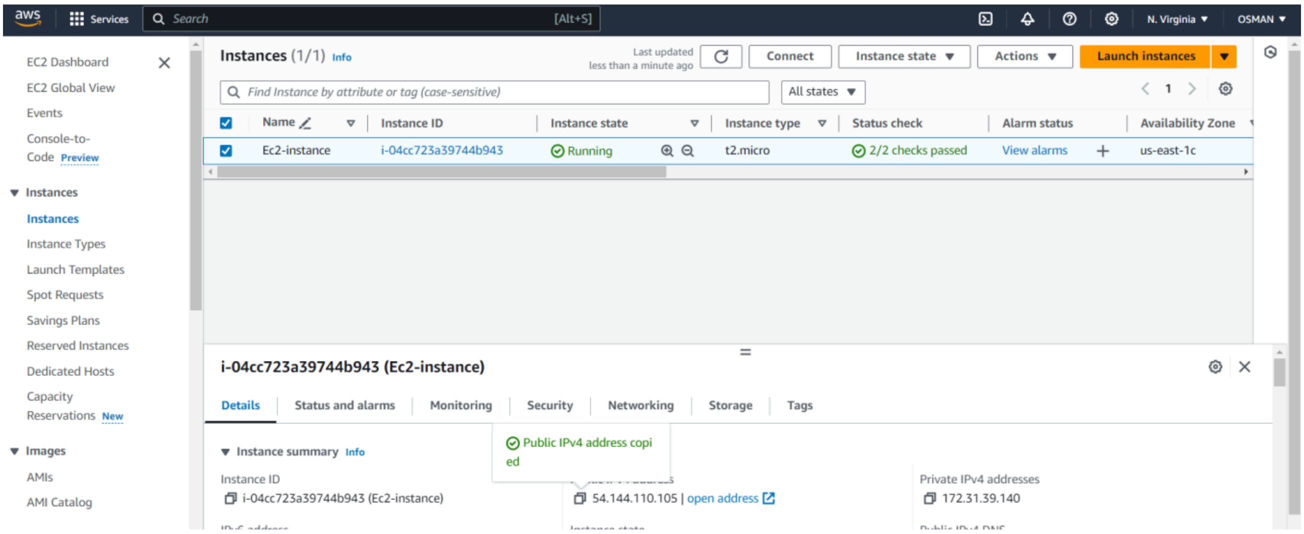
Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

- Now you will see the instance.
- Wait for status check is 2/2 check pass until wait.



Instances (1/1) Info

Last updated less than a minute ago

☑	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
☑	Ec2-instance	i-04cc723a39744b943	✓ Running	t2.micro	✓ 2/2 checks passed	View alarms +	us-east-1c

i-04cc723a39744b943 (Ec2-instance)

▼ Instance summary Info

✓ Public IPv4 address copied

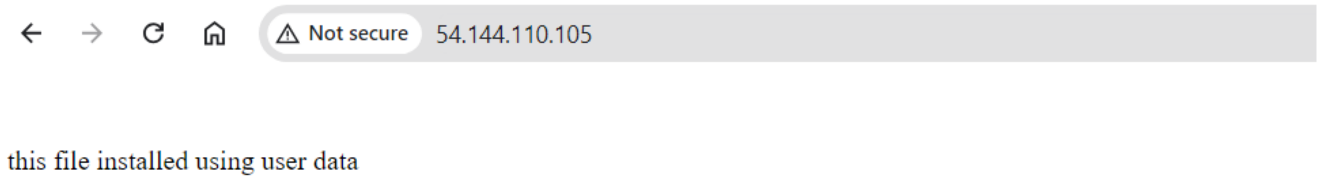
Instance ID
i-04cc723a39744b943 (Ec2-instance)

54.144.110.105 | open address

Private IPv4 addresses
172.31.39.140

Copy the Ip address and pate the google .

With ip you can give port also → Ip:80

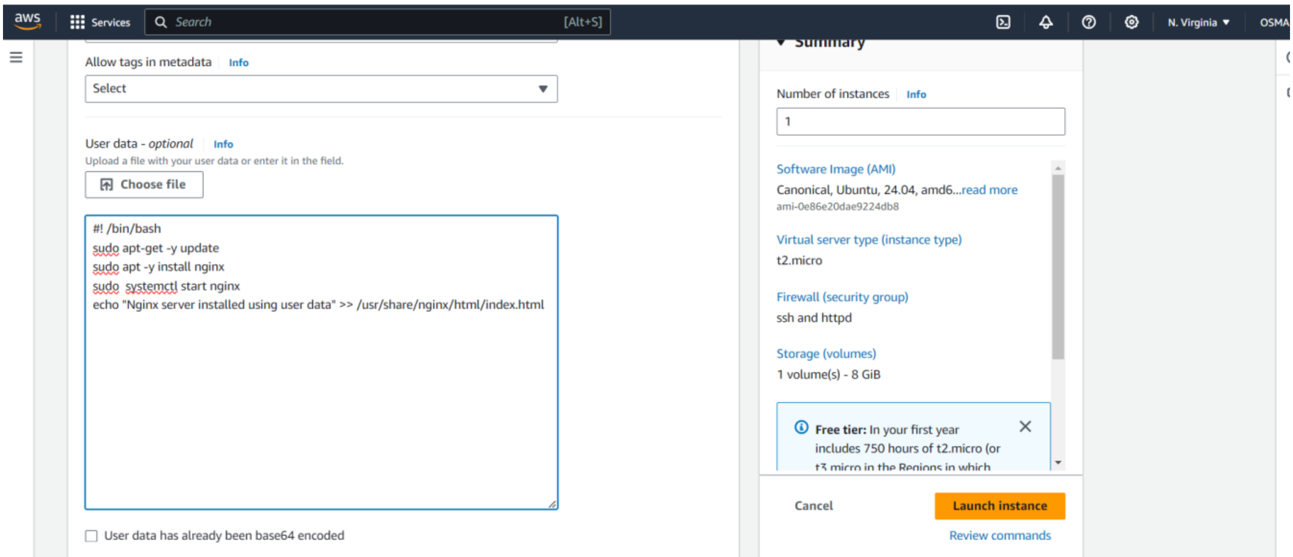


⚠ Not secure 54.144.110.105

this file installed using user data

2) Launch one ec2 using Ubuntu image and add script in user data to install Nginx.

- The above task we use the all steps like, instance type, key pair, Security groups.
- Ami is diff because we using in these task Ubuntu machine.
- here also use same thing but diff is change the script.
- After completed the all configuration go to the user data.



Allow tags in metadata Info

Select

User data - *optional* Info

Upload a file with your user data or enter it in the field.

```
#! /bin/bash
sudo apt-get -y update
sudo apt -y install nginx
sudo  systemctl start nginx
echo "Nginx server installed using user data" >> /usr/share/nginx/html/index.html
```

□ User data has already been base64 encoded

Number of instances Info

1

Software Image (AMI)
Canonical, Ubuntu, 24.04, amd6...read more
ami-0e86e20dae9224db8

Virtual server type (instance type)
t2.micro

Firewall (security group)
ssh and httpd

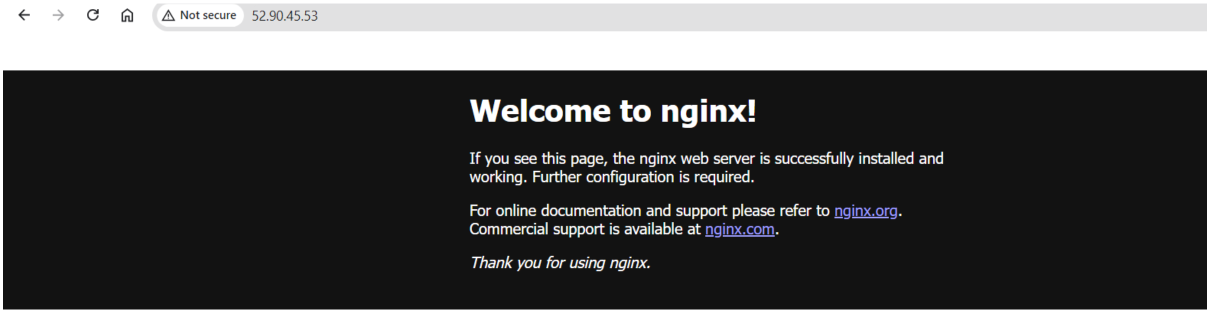
Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

Just click on launch instance.

Copy the Ip address and pate the google.

With ip you can give port also → Ip:80



52.90.45.53

Welcome to nginx!

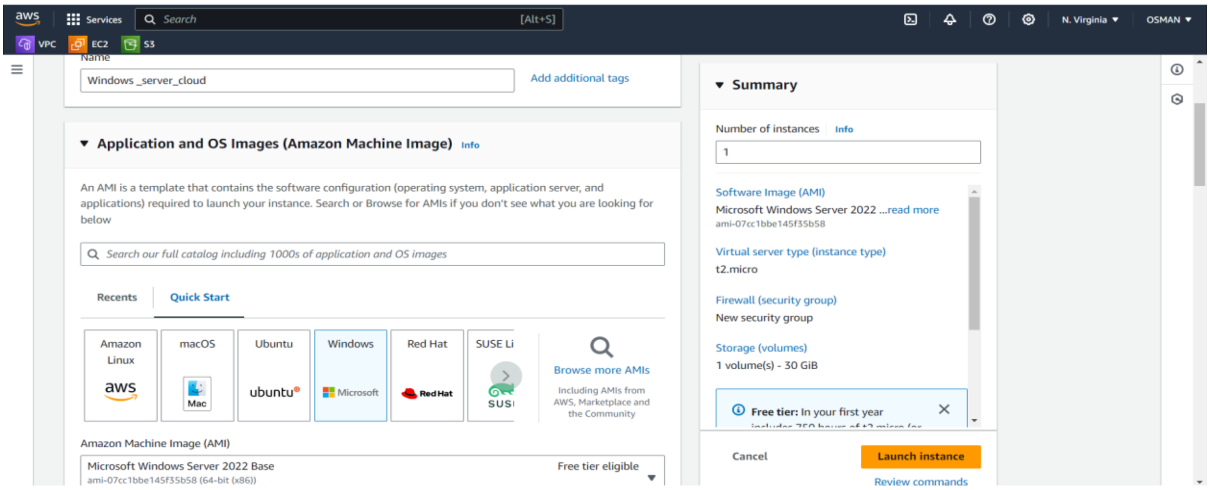
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

3) Launch one windows server and install tomcat in windows.

- just click on the Launch instance.
- You will see the below interface and select Ami is Windows.



Name

Windows _server_cloud

Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

Amazon Machine Image (AMI)

Microsoft Windows Server 2022 Base — Free tier eligible
ami-07cc1bbe145f35b58 (64-bit (x86))

Summary

Number of instances Info: 1

Software Image (AMI): Microsoft Windows Server 2022 ...read more
ami-07cc1bbe145f35b58

Virtual server type (instance type): t2.micro

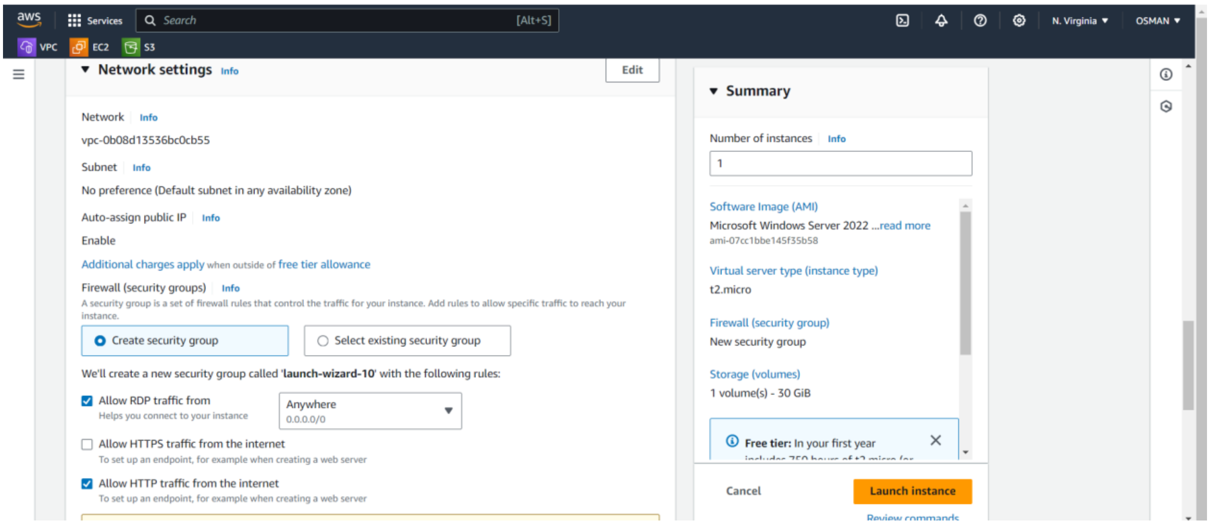
Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 30 GiB

Free tier: In your first year

Next select the key pair.

Go to the network setting select RDP and http.



Network settings Info

Network Info: vpc-0b08d13536bc0cb55

Subnet Info: No preference (Default subnet in any availability zone)

Auto-assign public IP Info: Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

● Create security group ○ Select existing security group

We'll create a new security group called '**launch-wizard-10**' with the following rules:

☑ Allow RDP traffic from — Anywhere 0.0.0.0/0
Helps you connect to your instance

□ Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

☑ Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

Summary

Number of instances Info: 1

Software Image (AMI): Microsoft Windows Server 2022 ...read more
ami-07cc1bbe145f35b58

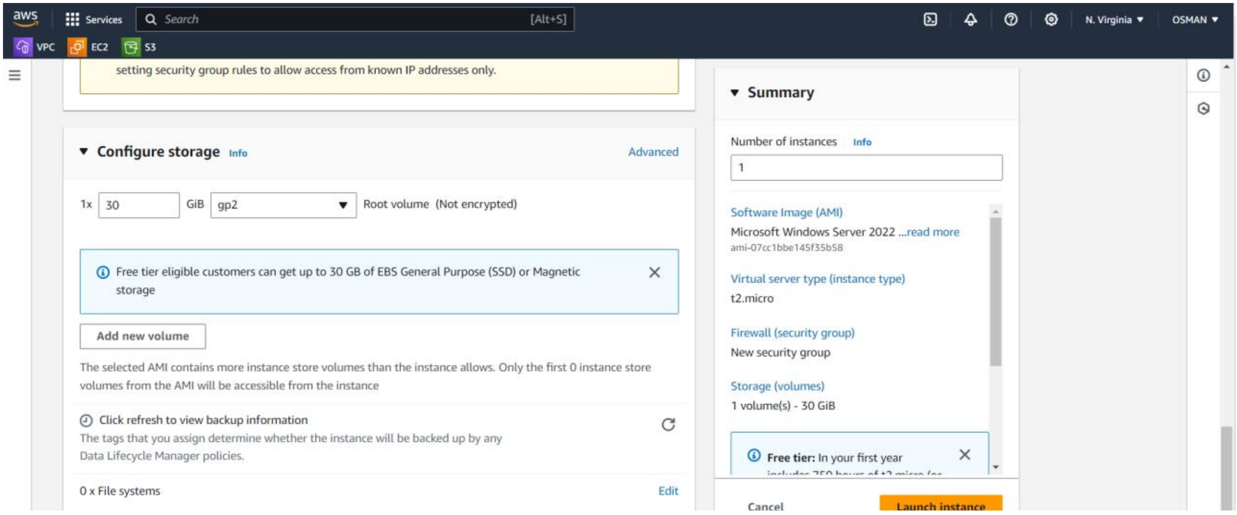
Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 30 GiB

Free tier: In your first year

Here one thing actually any linux server get storage only 8Gb default but in windows you will get 30gb.



setting security group rules to allow access from known IP addresses only.

Configure storage Info

1x 30 GiB gp2 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

Click refresh to view backup information
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems — Edit

Summary

Number of instances Info: 1

Software Image (AMI): Microsoft Windows Server 2022 ...read more
ami-07cc1bbe145f35b58

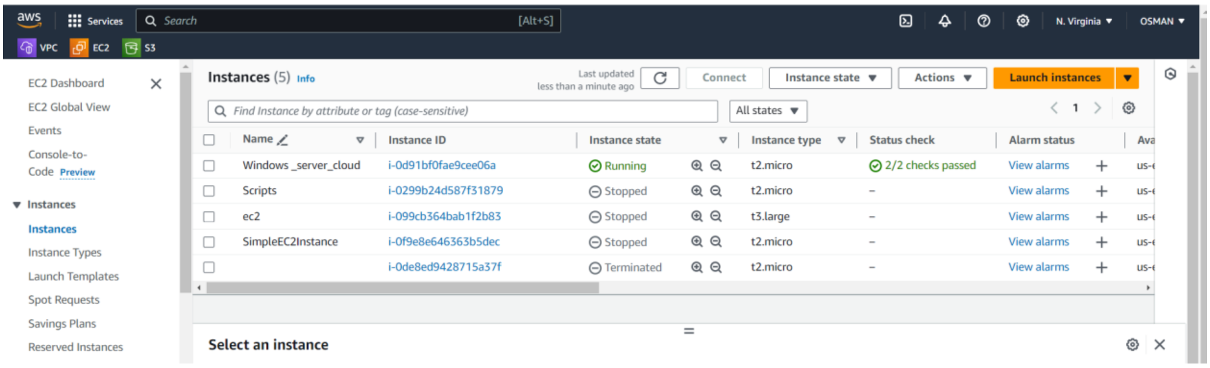
Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 30 GiB

Free tier: In your first year

Just click on launch instance.
Here 2/2 check is pass.

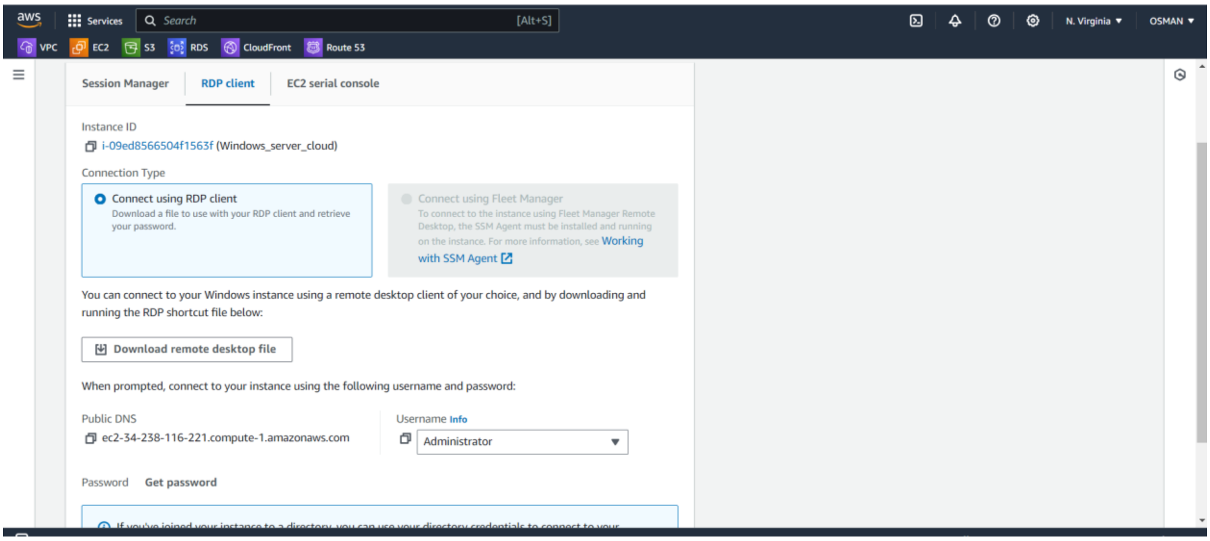


Instances (5) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Ava
Windows _server_cloud	i-0d91bf0fae9cee06a	Running	t2.micro	2/2 checks passed	View alarms	us-
Scripts	i-0299b24d587f31879	Stopped	t2.micro	–	View alarms	us-
ec2	i-099cb364bab1f2b83	Stopped	t3.large	–	View alarms	us-
SimpleEC2Instance	i-0f9e8e646363b5dec	Stopped	t2.micro	–	View alarms	us-
	i-0de8ed9428715a37f	Terminated	t2.micro	–	View alarms	us-

Select an instance

- Just click on connect
- Select RDP client.
- Click on -→ Download remote desktop file



Session Manager | RDP client | EC2 serial console

Instance ID
i-09ed8566504f1563f (Windows_server_cloud)

Connection Type

● Connect using RDP client
Download a file to use with your RDP client and retrieve your password.

○ Connect using Fleet Manager
To connect to the instance using Fleet Manager Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see Working with SSM Agent

You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

Download remote desktop file

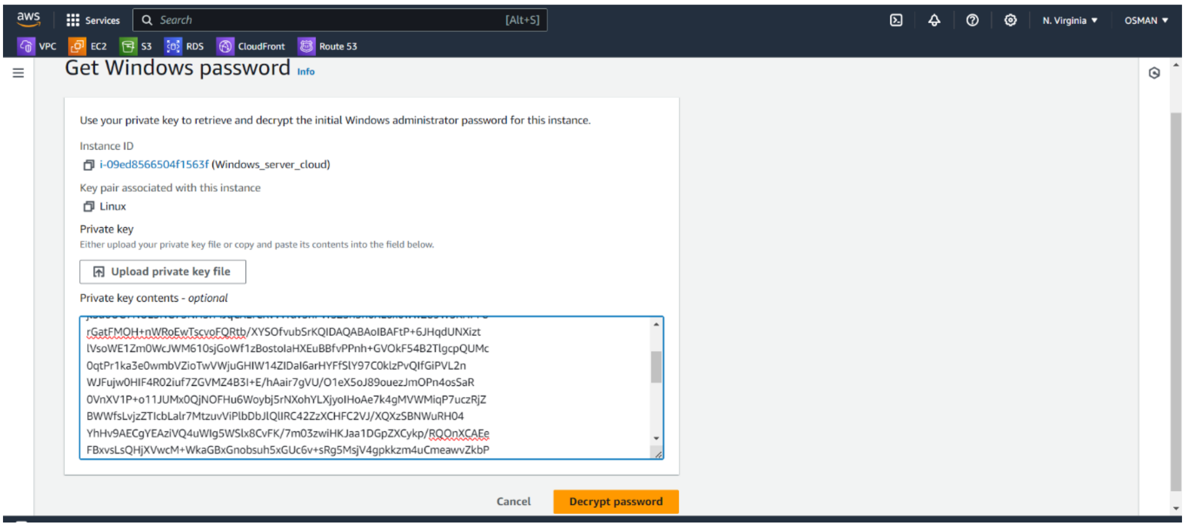
When prompted, connect to your instance using the following username and password:

Public DNS
ec2-34-238-116-221.compute-1.amazonaws.com

Username Info
Administrator

Password Get password

- After click on get password.
- The below interface you will see.
- Here upload the key file and click on the Decrypt password.



Get Windows password Info

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID
i-09ed8566504f1563f (Windows_server_cloud)

Key pair associated with this instance
Linux

Private key
Either upload your private key file or copy and paste its contents into the field below.

Upload private key file

Private key contents - *optional*

rGatFMOH+nWRoEwTscvoFQRtb/XYSOfvubSrKQIDAQABAoIBAFtP+6JHqdUNXizt
lVsoWE1Zm0WcJWM610sjGoWf1zBostoIaHXEuBBfvPPnh+GVOkF54B2TlgcpQUMc
0qtPr1ka3e0wmbVZioTwVWjuGHIW14ZIDal6arHYFfSlY97C0klzPvQIfGiPVL2n
WJFujw0HIF4R02iuf7ZGVMZ4B3I+E/hAair7gVU/O1eX5oJ89ouezJmOPn4osSaR
0VnXV1P+o11JUMx0QjNOFHu6Woybj5rNXohYLXjyoIHoAe7k4gMVWMiqP7uczRjZ
BWWfsLvjzZTIcbLalr7MtzuvViPlbDbJlQlIRC42ZzXCHFC2VJ/XQXzSBNWuRH04
YhHv9AECgYEAziVQ4uWIg5WSlx8CvFK/7m03zwiHKJaa1DGpZXCykp/RQOnXCAEe
FBxvsLsQHjXVwcM+WkaGBxGnobsuh5xGUc6v+sRg5MsjV4gpkkzm4uCmeawvZkbP

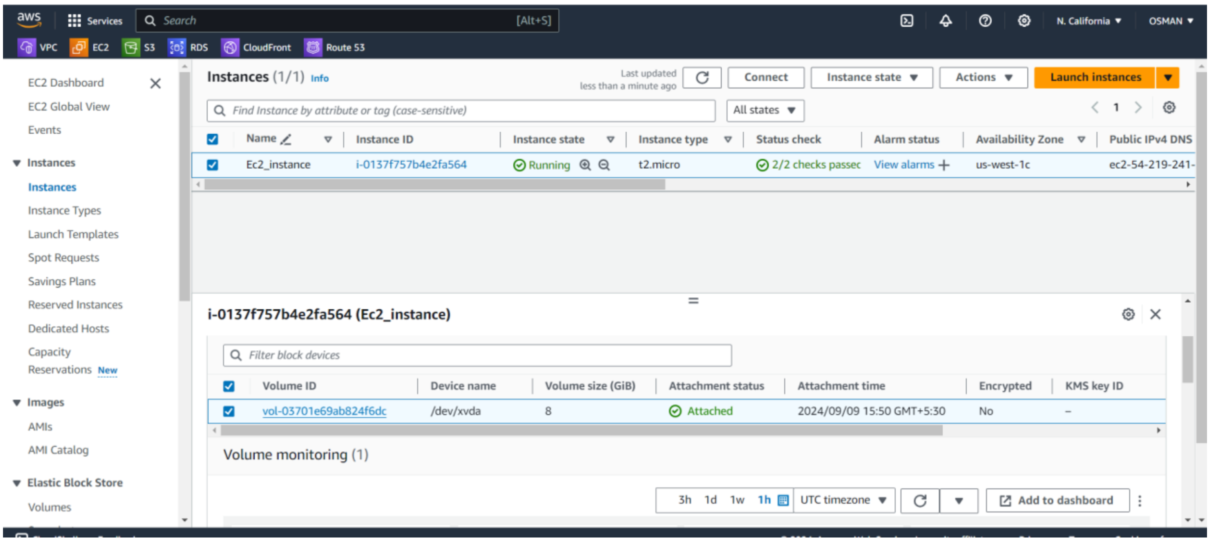
Cancel | Decrypt password

- Then you will get one password keep it any notepad otherwise you loose you password.
- These above task is pending ………………………..

4) Take snapshot of the instance created in Task 1.

Now I am taking the snapshot of the instance.

Select instance and click on storage there you will find volume click on that volume id.



Instances (1/1) Info

☑	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
☑	Ec2_instance	i-0137f757b4e2fa564	Running	t2.micro	2/2 checks passec	View alarms +	us-west-1c	ec2-54-219-241-

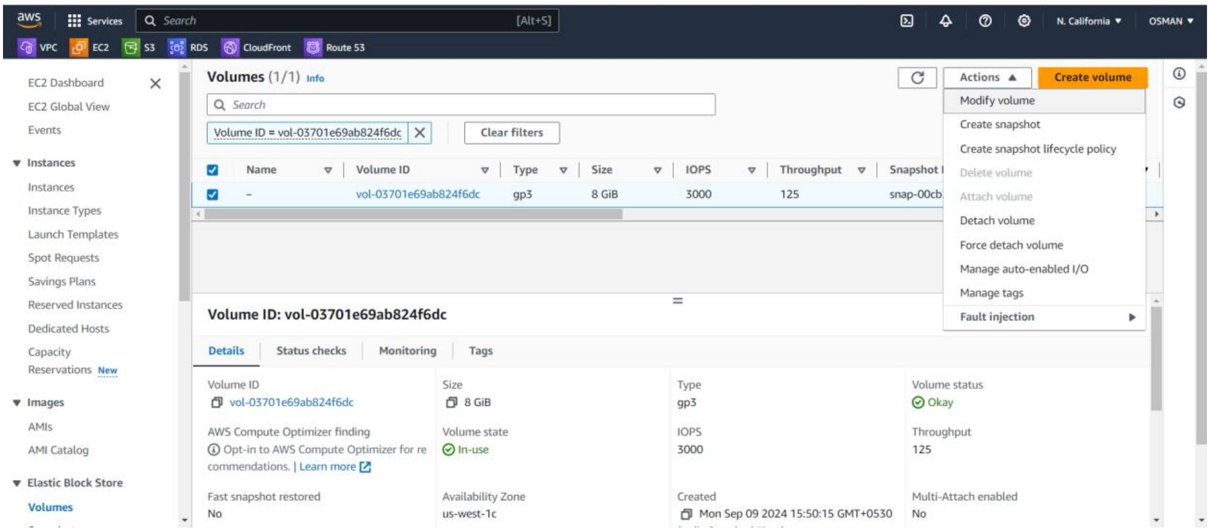
i-0137f757b4e2fa564 (Ec2_instance)

☑	Volume ID	Device name	Volume size (GiB)	Attachment status	Attachment time	Encrypted	KMS key ID
☑	vol-03701e69ab824f6dc	/dev/xvda	8	Attached	2024/09/09 15:50 GMT+5:30	No	–

Volume monitoring (1)

Click on checkbox off volume and go to the actions.

Click on Create snapshot.



Volumes (1/1) Info

Volume ID = vol-03701e69ab824f6dc

☑	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot I
☑	–	vol-03701e69ab824f6dc	gp3	8 GiB	3000	125	snap-00cb

Volume ID: vol-03701e69ab824f6dc

Volume ID: vol-03701e69ab824f6dc

Size: 8 GiB

Type: gp3

Volume status: Okay

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. | Learn more

Volume state: In-use

IOPS: 3000

Throughput: 125

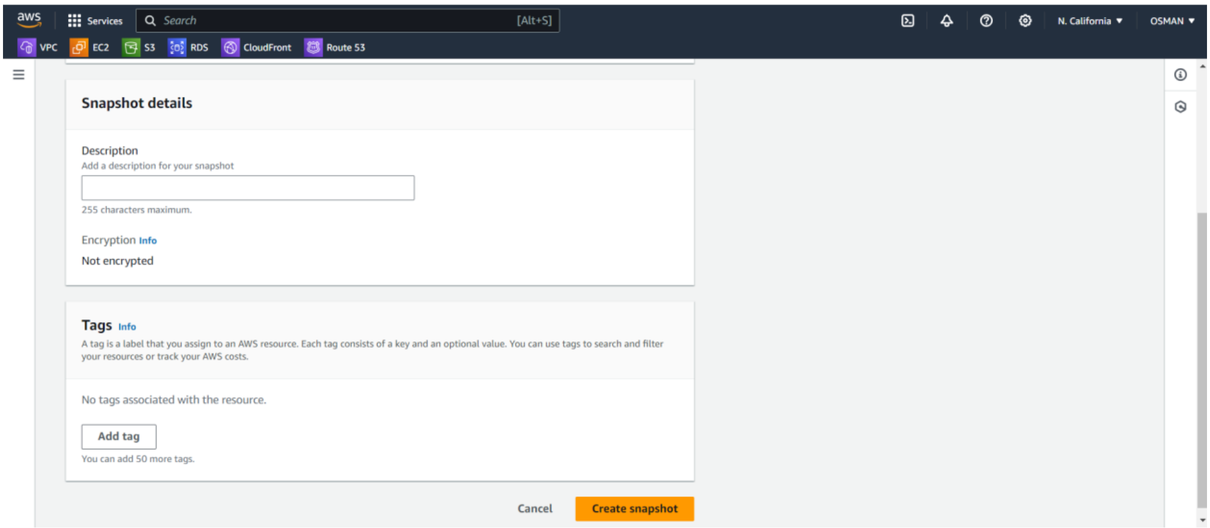
Fast snapshot restored: No

Availability Zone: us-west-1c

Created: Mon Sep 09 2024 15:50:15 GMT+0530

Multi-Attach enabled: No

Give description and click on create snapshot.



Snapshot details

Description
Add a description for your snapshot

255 characters maximum.

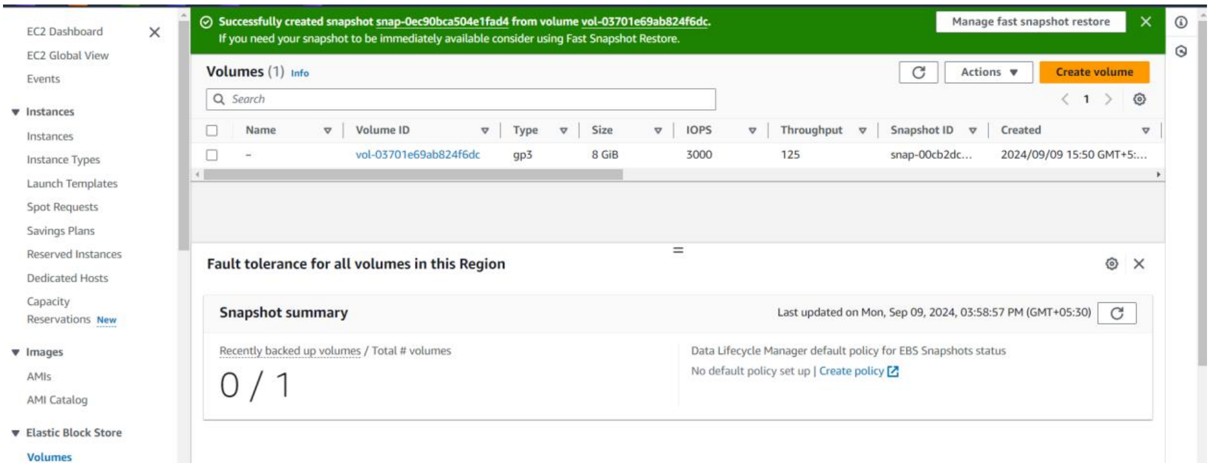
Encryption Info
Not encrypted

Tags Info
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

You can add 50 more tags.

Done.



Successfully created snapshot snap-0ec90bca504e1fad4 from volume vol-03701e69ab824f6dc.
If you need your snapshot to be immediately available consider using Fast Snapshot Restore.

Volumes (1) Info

□	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot ID	Created
□	-	vol-03701e69ab824f6dc	gp3	8 GiB	3000	125	snap-00cb2dc...	2024/09/09 15:50 GMT+5:...

Fault tolerance for all volumes in this Region

Snapshot summary

Last updated on Mon, Sep 09, 2024, 03:58:57 PM (GMT+05:30)

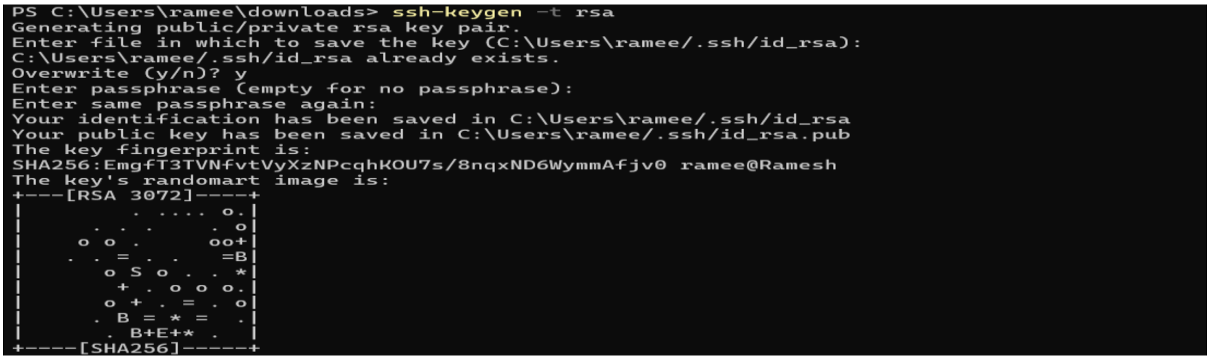
Recently backed up volumes / Total # volumes
0 / 1

Data Lifecycle Manager default policy for EBS Snapshots status
No default policy set up | Create policy

#########Task is Done###################

5) Assign password less authentication for ec2 created on Task 2.

To Assign password less authentication for ec2 created on Task 2 first we have to go the Local terminal and generate ssh key and copy.

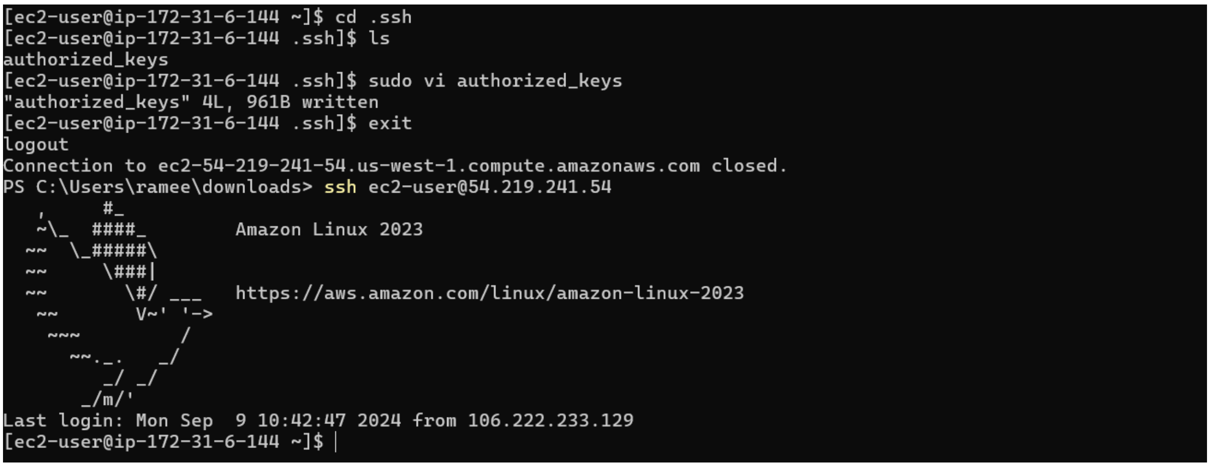


```
PS C:\Users\ramee\downloads> ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (C:\Users\ramee/.ssh/id_rsa):
C:\Users\ramee/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\ramee/.ssh/id_rsa
Your public key has been saved in C:\Users\ramee/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:EmgfT3TVNfvtVyXzNPcqhKOU7s/8nqxND6WymmAfjv0 ramee@Ramesh
The key's randomart image is:
+---[RSA 3072]----+
|       . .... o.|
|    . . .    . o|
|   o o .     oo+|
|  . . = . .   =B|
|     o S o . . *|
|      + . o o o.|
|     o + . = . o|
|    . B = * =  .|
|     . B+E+* .  |
+----[SHA256]-----+
```

Now go to these .ssh dir.

Copy these key CMD-→cat id_rsa.pub and pate in remote ec2.

Here without key pair we are login.

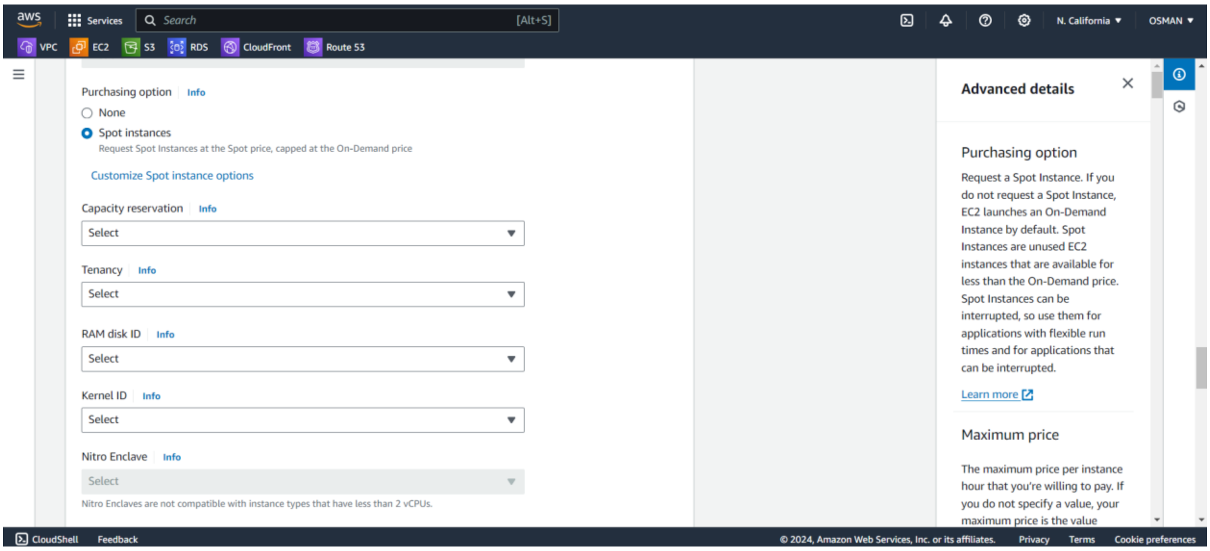


```
[ec2-user@ip-172-31-6-144 ~]$ cd .ssh
[ec2-user@ip-172-31-6-144 .ssh]$ ls
authorized_keys
[ec2-user@ip-172-31-6-144 .ssh]$ sudo vi authorized_keys
"authorized_keys" 4L, 961B written
[ec2-user@ip-172-31-6-144 .ssh]$ exit
logout
Connection to ec2-54-219-241-54.us-west-1.compute.amazonaws.com closed.
PS C:\Users\ramee\downloads> ssh ec2-user@54.219.241.54
   ,     #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
Last login: Mon Sep  9 10:42:47 2024 from 106.222.233.129
[ec2-user@ip-172-31-6-144 ~]$ |
```

#########Task is Done###################

6) Launch any ec2 using spot purchasing option.

- The above task we use the all steps like, AMI, instance type, key pair, Security groups.
- But In advance Setting --- Purchasing option you have to select the option is – Spot instances.



Purchasing option Info

○ None

● Spot instances

Request Spot Instances at the Spot price, capped at the On-Demand price

Customize Spot instance options

Capacity reservation Info: Select ▾

Tenancy Info: Select ▾

RAM disk ID Info: Select ▾

Kernel ID Info: Select ▾

Nitro Enclave Info: Select ▾

Nitro Enclaves are not compatible with instance types that have less than 2 vCPUs.

Advanced details ✕

Purchasing option

Request a Spot Instance. If you do not request a Spot Instance, EC2 launches an On-Demand Instance by default. Spot Instances are unused EC2 instances that are available for less than the On-Demand price. Spot Instances can be interrupted, so use them for applications with flexible run times and for applications that can be interrupted.

Learn more

Maximum price

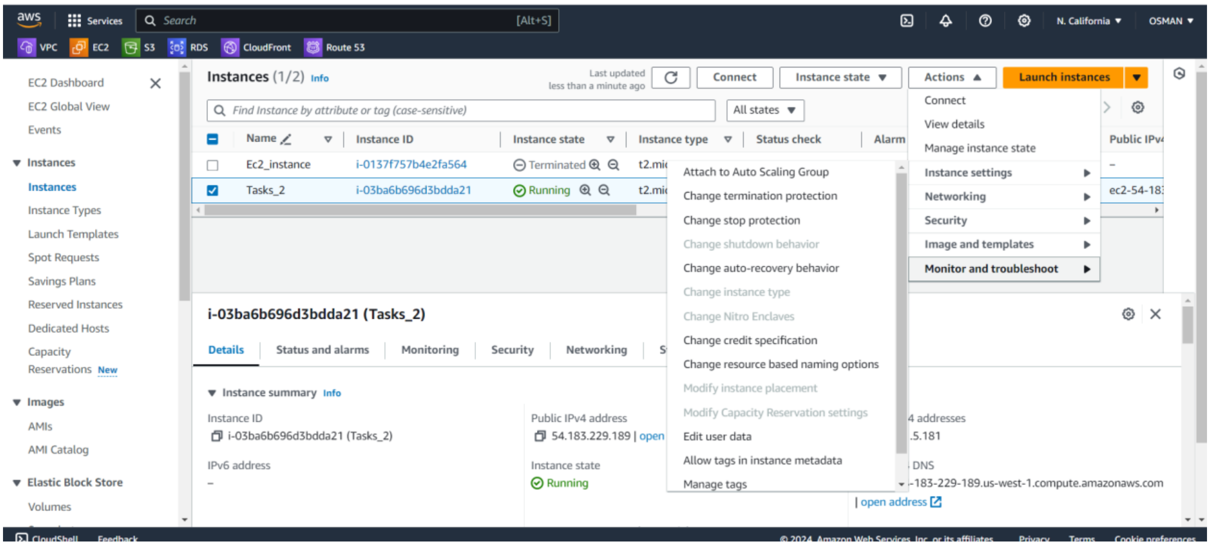
The maximum price per instance hour that you're willing to pay. If you do not specify a value, your maximum price is the value

- Just launch click on launch instance.

#########Task is Done###################

7) Enable Termination policy on ec2 created in Task 2.

- Select the instance by clicking on the checkbox next to the instance ID.
- Click the **Actions** button at the top.
- Under "Instance Settings," click on **Change Termination Protection**.



Instances (1/2)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm
□	Ec2_instance	i-0137f757b4e2fa564	Terminated	t2.mi		
☑	Tasks_2	i-03ba6b696d3bdda21	Running	t2.mi		

i-03ba6b696d3bdda21 (Tasks_2)

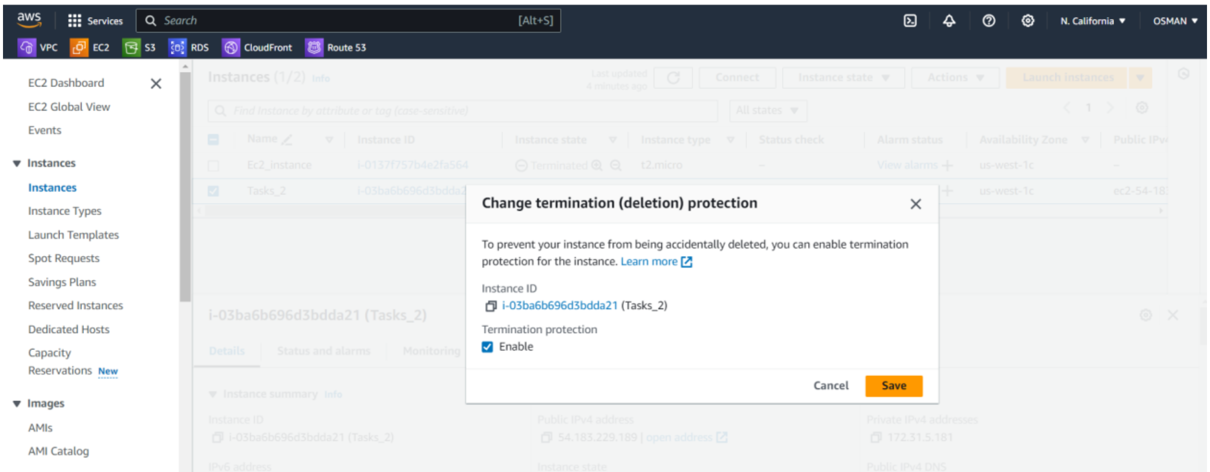
Instance ID: i-03ba6b696d3bdda21 (Tasks_2)

Public IPv4 address: 54.183.229.189 | open

Instance state: Running

IPv6 address: –

- In the pop-up window, select **Enable** and click **Save**.



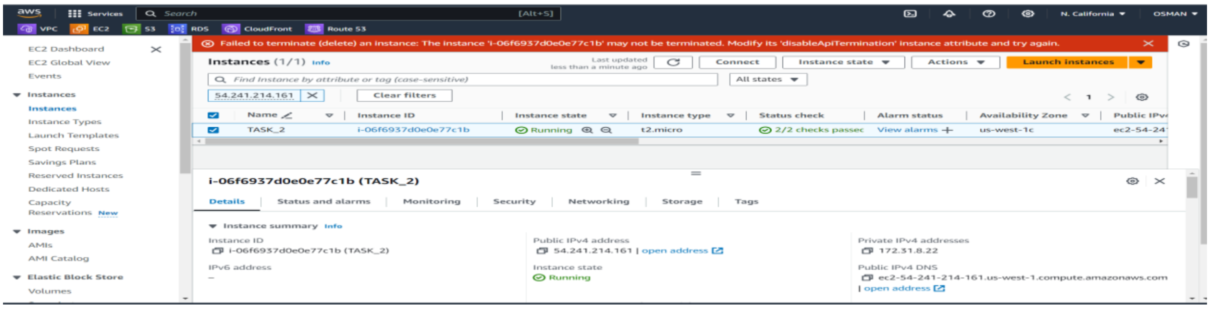
Change termination (deletion) protection

To prevent your instance from being accidentally deleted, you can enable termination protection for the instance. Learn more

Instance ID: i-03ba6b696d3bdda21 (Tasks_2)

Termination protection: ☑ Enable

- Try to delete the instance but instance will not deleted.



Failed to terminate (delete) an instance: The instance 'i-06f6937d0e0e77c1b' may not be terminated. Modify its 'disableApiTermination' instance attribute and try again.

Instances (1/1)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
☑	TASK_2	i-06f6937d0e0e77c1b	Running	t2.micro	2/2 checks passec	View alarms	us-west-1c	ec2-54-24

i-06f6937d0e0e77c1b (TASK_2)

Instance ID: i-06f6937d0e0e77c1b (TASK_2)

Public IPv4 address: 54.241.214.161 | open address

Private IPv4 addresses: 172.31.8.22

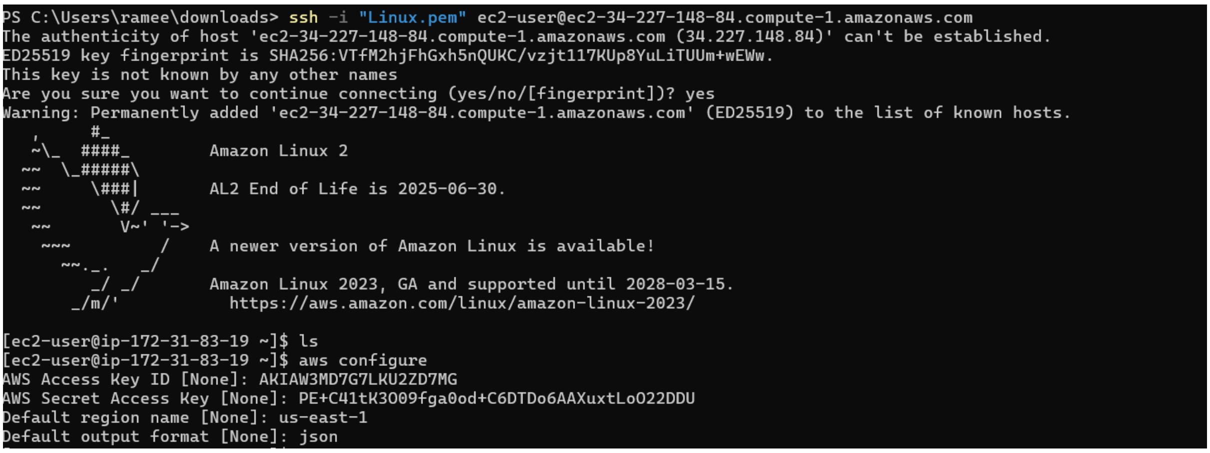
Instance state: Running

Public IPv4 DNS: ec2-54-241-214-161.us-west-1.compute.amazonaws.com | open address

##########Task is Done####################

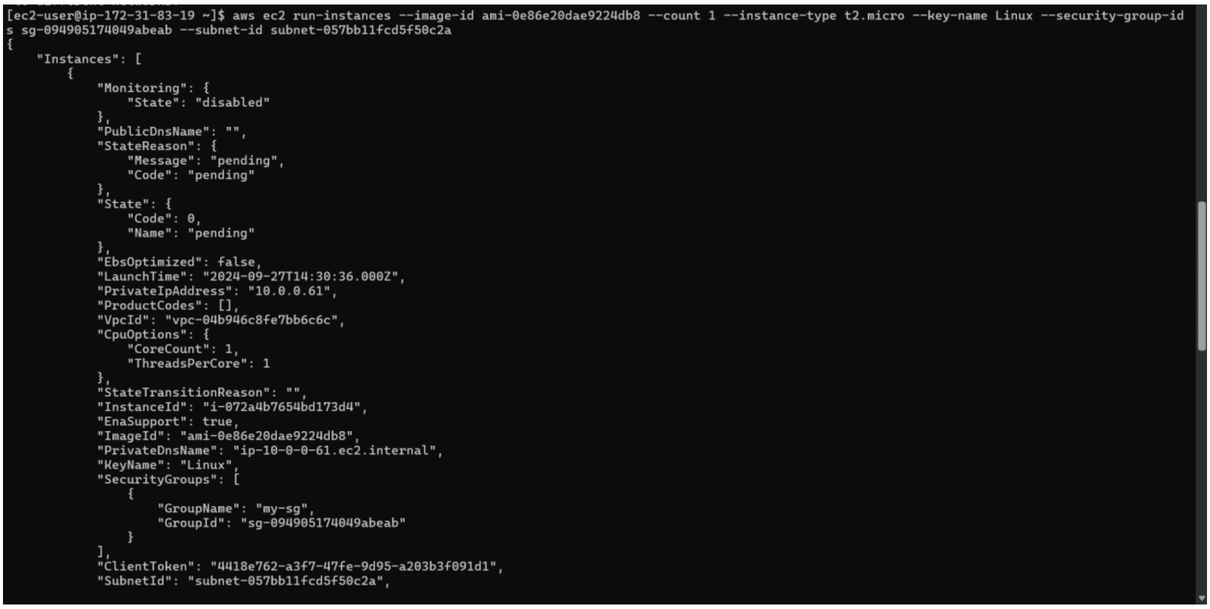
8) Launch one ec2 using Aws CLI.

- First you need to connect Ec2 instance or go to your local terminal.
- You are using Local terminal you need to install the AWS cli.
- Here I am connected to EC2 so no need to install aws cli.
- After connecting EC2 you need to configure.
- Give the access key and secret key.



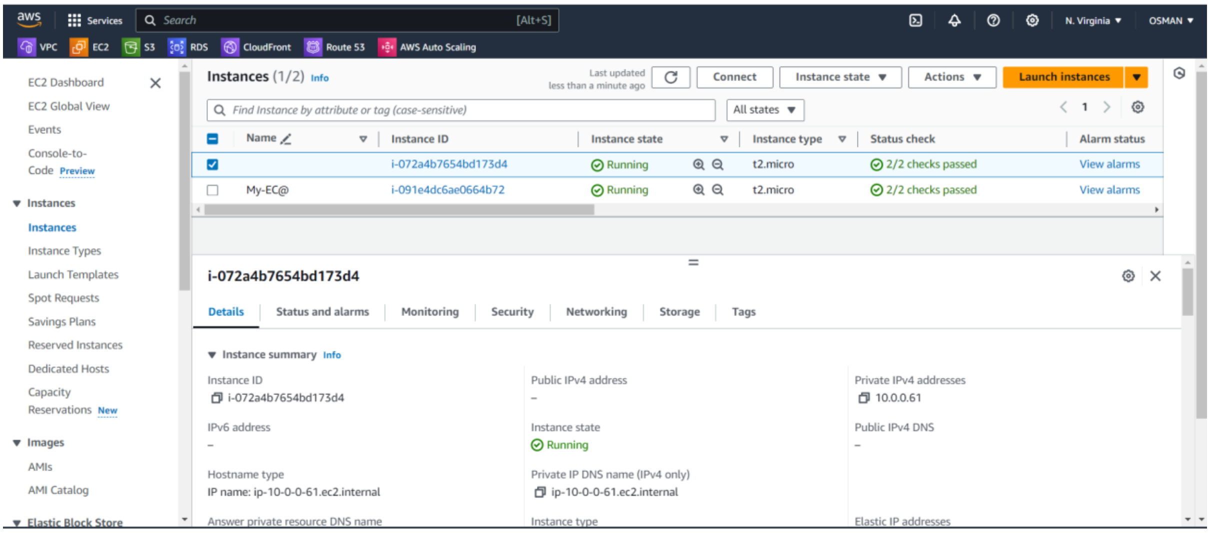
```
PS C:\Users\ramee\downloads> ssh -i "Linux.pem" ec2-user@ec2-34-227-148-84.compute-1.amazonaws.com
The authenticity of host 'ec2-34-227-148-84.compute-1.amazonaws.com (34.227.148.84)' can't be established.
ED25519 key fingerprint is SHA256:VTfM2hjFhGxh5nQUKC/vzjt117KUp8YuLiTUUm+wEWw.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-34-227-148-84.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
   ,     #_
   ~\_  ####_        Amazon Linux 2
  ~~  \_#####\
  ~~     \###|       AL2 End of Life is 2025-06-30.
  ~~       \#/ ___
   ~~       V~' '->
    ~~~         /    A newer version of Amazon Linux is available!
      ~~._.   _/
         _/ _/       Amazon Linux 2023, GA and supported until 2028-03-15.
       _/m/'           https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-172-31-83-19 ~]$ ls
[ec2-user@ip-172-31-83-19 ~]$ aws configure
AWS Access Key ID [None]: AKIAW3MD7G7LKU2ZD7MG
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
```

- If you have already key pair, security group, subnet in aws account just copy the id’s and paste.
- Make sure the subnet and security group within the same network.



```
[ec2-user@ip-172-31-83-19 ~]$ aws ec2 run-instances --image-id ami-0e86e20dae9224db8 --count 1 --instance-type t2.micro --key-name Linux --security-group-id
s sg-094905174049abeab --subnet-id subnet-057bb11fcd5f50c2a
{
    "Instances": [
        {
            "Monitoring": {
                "State": "disabled"
            },
            "PublicDnsName": "",
            "StateReason": {
                "Message": "pending",
                "Code": "pending"
            },
            "State": {
                "Code": 0,
                "Name": "pending"
            },
            "EbsOptimized": false,
            "LaunchTime": "2024-09-27T14:30:36.000Z",
            "PrivateIpAddress": "10.0.0.61",
            "ProductCodes": [],
            "VpcId": "vpc-04b946c8fe7bb6c6c",
            "CpuOptions": {
                "CoreCount": 1,
                "ThreadsPerCore": 1
            },
            "StateTransitionReason": "",
            "InstanceId": "i-072a4b7654bd173d4",
            "EnaSupport": true,
            "ImageId": "ami-0e86e20dae9224db8",
            "PrivateDnsName": "ip-10-0-0-61.ec2.internal",
            "KeyName": "Linux",
            "SecurityGroups": [
                {
                    "GroupName": "my-sg",
                    "GroupId": "sg-094905174049abeab"
                }
            ],
            "ClientToken": "4418e762-a3f7-47fe-9d95-a203b3f091d1",
            "SubnetId": "subnet-057bb11fcd5f50c2a",
```

- Now go to the Aws instance there you will find out the new server.
- Successfully we are launched one ec2 instance through CLI.



Instances (1/2) Info

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
☑		i-072a4b7654bd173d4	Running	t2.micro	2/2 checks passed	View alarms
□	My-EC@	i-091e4dc6ae0664b72	Running	t2.micro	2/2 checks passed	View alarms

i-072a4b7654bd173d4

Instance summary Info

Instance ID: i-072a4b7654bd173d4

Public IPv4 address: –

Private IPv4 addresses: 10.0.0.61

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-10-0-0-61.ec2.internal

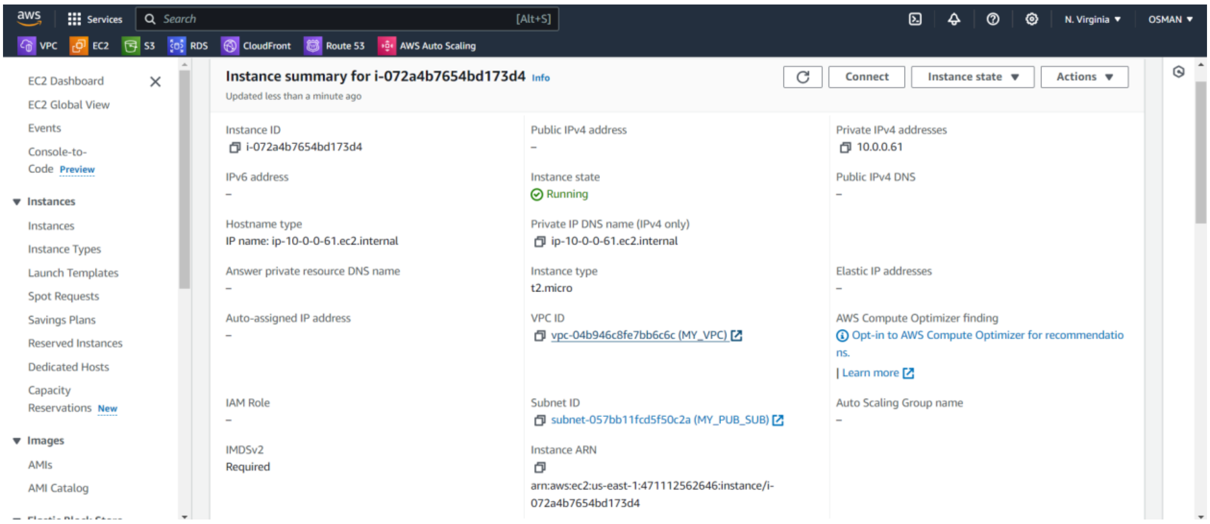
Private IP DNS name (IPv4 only): ip-10-0-0-61.ec2.internal

Answer private resource DNS name

Instance type

Elastic IP addresses

Once check the details like, SG, Key pair, subnet.



Instance summary for i-072a4b7654bd173d4 Info

Updated less than a minute ago

Instance ID: i-072a4b7654bd173d4

Public IPv4 address: –

Private IPv4 addresses: 10.0.0.61

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-10-0-0-61.ec2.internal

Private IP DNS name (IPv4 only): ip-10-0-0-61.ec2.internal

Answer private resource DNS name: –

Instance type: t2.micro

Elastic IP addresses: –

Auto-assigned IP address: –

VPC ID: vpc-04b946c8fe7bb6c6c (MY_VPC)

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. | Learn more

IAM Role: –

Subnet ID: subnet-057bb11fcd5f50c2a (MY_PUB_SUB)

Auto Scaling Group name: –

IMDSv2: Required

Instance ARN: arn:aws:ec2:us-east-1:471112562646:instance/i-072a4b7654bd173d4

#########Task is Done###################