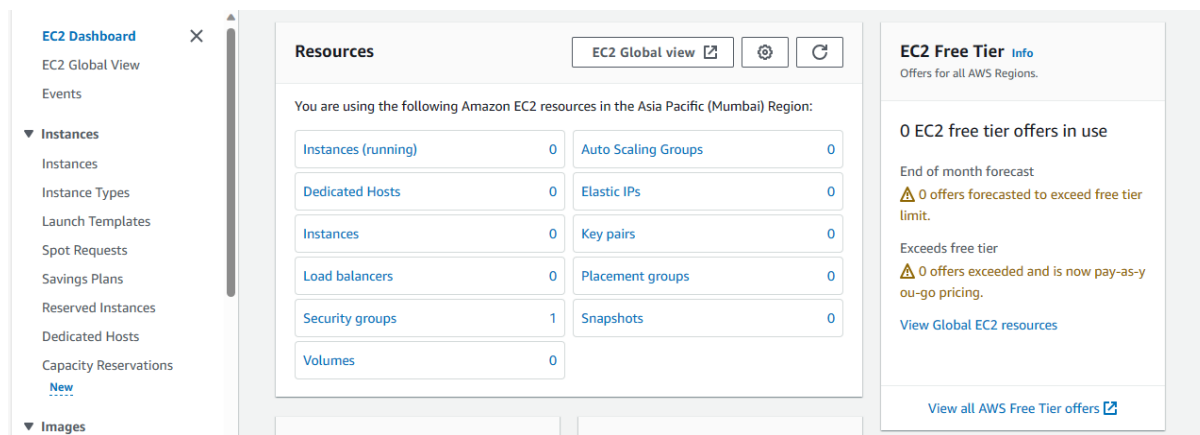


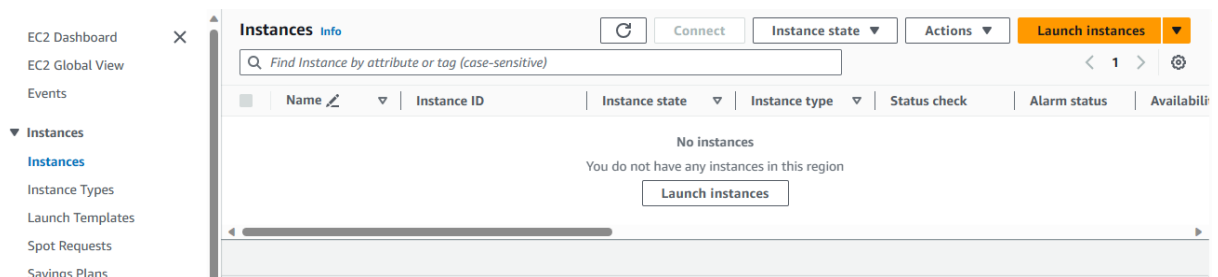
TASK 1: Launch an EC2 Instance:

Steps to launch a new EC2 instance using the Amazon Linux 2 AMI using AWS console.:

1. Search EC2 and select it and you'll be redirected to EC2 dashboard .



2. Now select “Instances” and In that click on “Launch Instance”.



- Now name your instance as “MyFirstInstance” and Scroll down . In the Quick start section Select Amazon Linux 2 AMI(HVM) and select 64-bit Architecture . Select t2.micro as Instance type . Now we have to generate key pair so name your key pair “EC2-instance” , select key pair type as RSA and select file format as .pem and select on “Create Key Pair”. Now select “Anywhere” and select “Allow SSH traffic from” and “Allow HTTP” traffic from the internet . Now in configuration storage select 8gb and Now click on Launch Instance .

[EC2](#) > [Instances](#) > Launch an instance

Launch an instance [Info](#)


Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.


Name and tags [Info](#)


Name


[Add additional tags](#)


Quick Start


Amazon Linux



macOS


Ubuntu


Windows


Red Hat


SUS



[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-039e1f129f345d75f (64-bit (x86)) / ami-0dd022e543c91b005 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible ▼

Description

Amazon Linux 2 Kernel 5.10 AMI 2.0.20240124.0 x86_64 HVM gp2

Architecture

64-bit (x86) ▼

AMI ID
ami-039e1f129f345d75f

Verified provider

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro

Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Linux base pricing: 0.0124 USD per Hour

On-Demand Windows base pricing: 0.017 USD per Hour

On-Demand RHEL base pricing: 0.0724 USD per Hour

On-Demand SUSE base pricing: 0.0124 USD per Hour

☒ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

Create key pair



Key pair name

Key pairs allow you to connect to your instance securely.

EC2-Instance

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

☒ RSA

RSA encrypted private and public key pair

☐ ED25519

ED25519 encrypted private and public key pair



Private key file format

☒ .pem

For use with OpenSSH

☐ .ppk

For use with PuTTY

 When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** [Learn more](#) 

Cancel

Create key pair

▼ Network settings Info

Edit

Network Info

vpc-08e4e2a3c7a763669

Subnet Info

No preference (Default subnet in any availability zone)

Auto-assign public IP Info

Enable

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-1' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere
0.0.0.0/0

☐ 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

4. Now we can see that our instance has been created . We can see our instance “MyFirstInstance” running in the Instances section .

EC2 > Instances > Launch an instance

Success

Successfully initiated launch of instance (i-04b1587a5d9e612f9)

▶ Launch log

Next Steps

Q What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing and free tier usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

Create billing alerts

Connect to your instance

Once your instance is running, log into it from your local computer.

Connect to instance

Learn more

Connect an RDS database

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

Connect an RDS database

Create a new RDS database

Learn more

Create EBS snapshot policy

Create a policy that automates the creation, retention, and deletion of EBS snapshots

Create EBS snapshot policy

Activate Windows
Go to Settings to activate Windows.

Instances (1/1) Info							
Find Instance by attribute or tag (case-sensitive)							
<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input checked="" type="checkbox"/>	MyFirstInstance	i-04b1587a5d9e612f9	Running	t2.micro	2/2 checks passed	View alarms	ap-south-1a

SUBTASK 2: Configure Security group with port 22 and 80 open (can be done during the creation of the EC2 Instance):

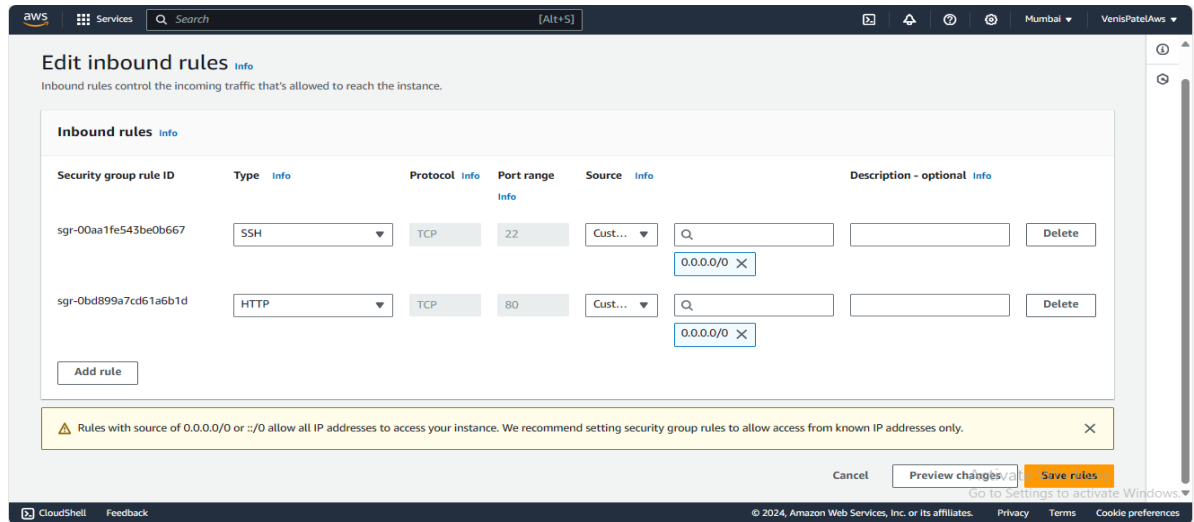
1. Select EC2 instance "MyFirstInstance", Then select security group in myLinux2Server's details. Then click on launch-wizard-3 under security group.

The screenshot displays the AWS Management Console interface. On the left, the navigation pane shows the 'Instances' section. The main content area shows the details for the instance 'MyFirstInstance' (ID: i-04b1587a5d9e612f9). The instance is currently in a 'Stopped' state. The 'Security' tab is active, showing the instance's security group as 'launch-wizard-3' (sg-0aabb179b1935f196b). The instance summary shows it is a t2.micro instance in the ap-south-1a availability zone.

2. Now select the security group and click on Inbound rules and then click on edit inbound rules.

The screenshot displays the AWS Management Console interface for the 'Security Groups' section. The 'Inbound rules' tab is selected for the security group 'launch-wizard-1' (sg-08e4e2a3c7a763669). The 'Inbound rules' section shows two rules: 'SSH' (TCP, port 22) and 'HTTP' (TCP, port 80). The 'Edit inbound rules' button is visible.

- Here add HTTP and SSH rules and their port numbers are 80 and 22 respectively. After that click on save rules.



Steps:

1. Open Terminal and navigate to the folder where the “MyAmazonLinux2KeyPair.pem” is located.
2. Then enter the following command to connect to ec2 instance using ssh:

```
P5 C:\Users\promact\Desktop\AWS Assignment 2> ssh -i .\MyAmazonLinux2KeyPair.pem ec2-user@13.126.222.222
The authenticity of host '13.126.222.222 (13.126.222.222)' can't be established.
ED25519 key fingerprint is SHA256:36B1dema4oZSpw48EvvrAVdfMV8AhoQJ40Ut4V1BCls.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '13.126.222.222' (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-172-31-34-157 ~]$
```