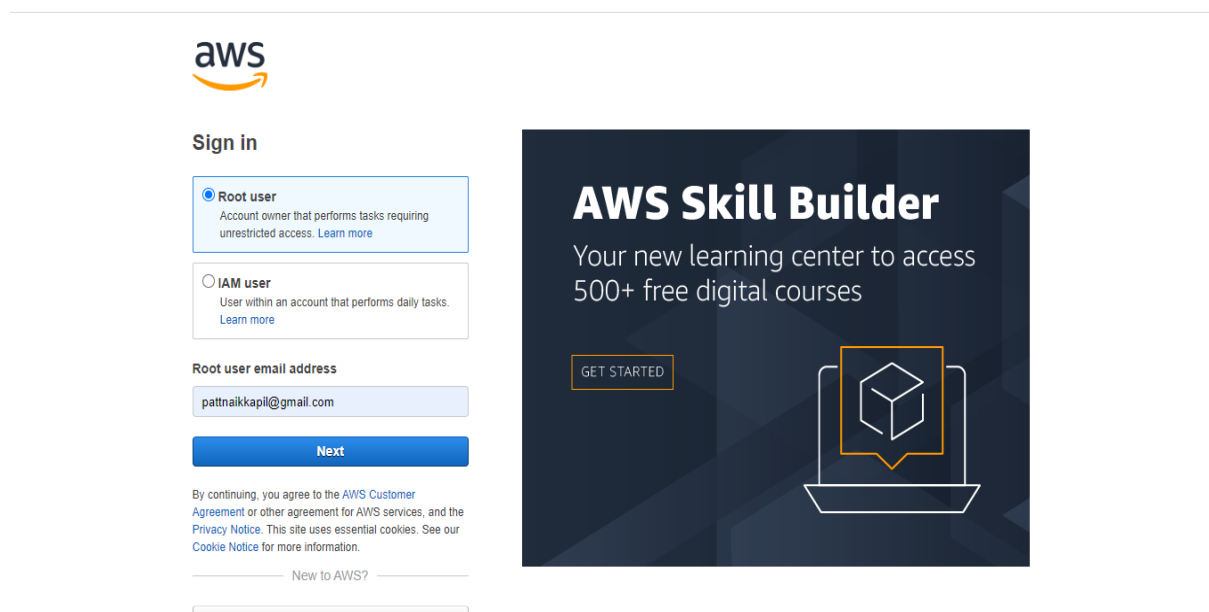


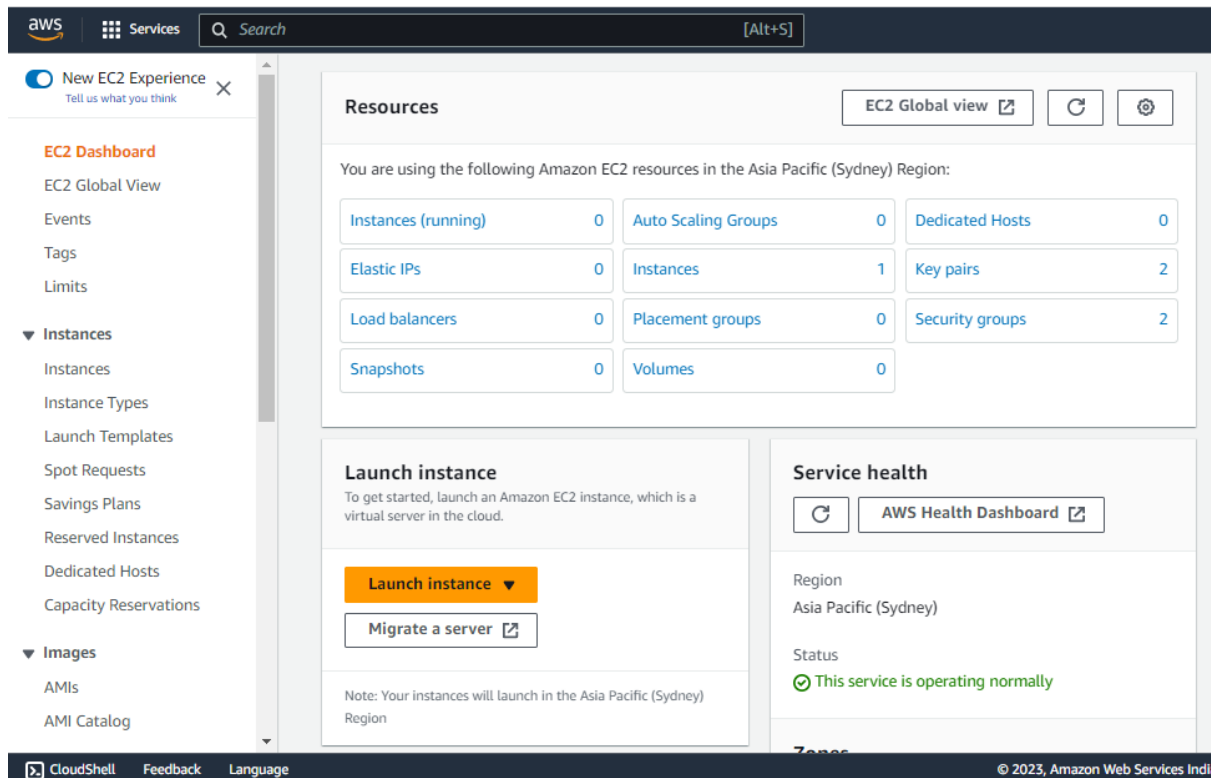
## Creating an EC2 instance.

### Login to AWS Console

- To start the lab, you need to open the Amazon Console by visiting the following link:  
<https://aws.amazon.com/console/>
  - Click on the button Sign in to the Console. Enter registered credentials namely, email address and password to login in the AWS console.
- Note: If not already registered, click on Create a new AWS Account and register yourself on Amazon. After successful registration, you will receive a call from Amazon
- After successfully login to AWS console, you will see the following web page:



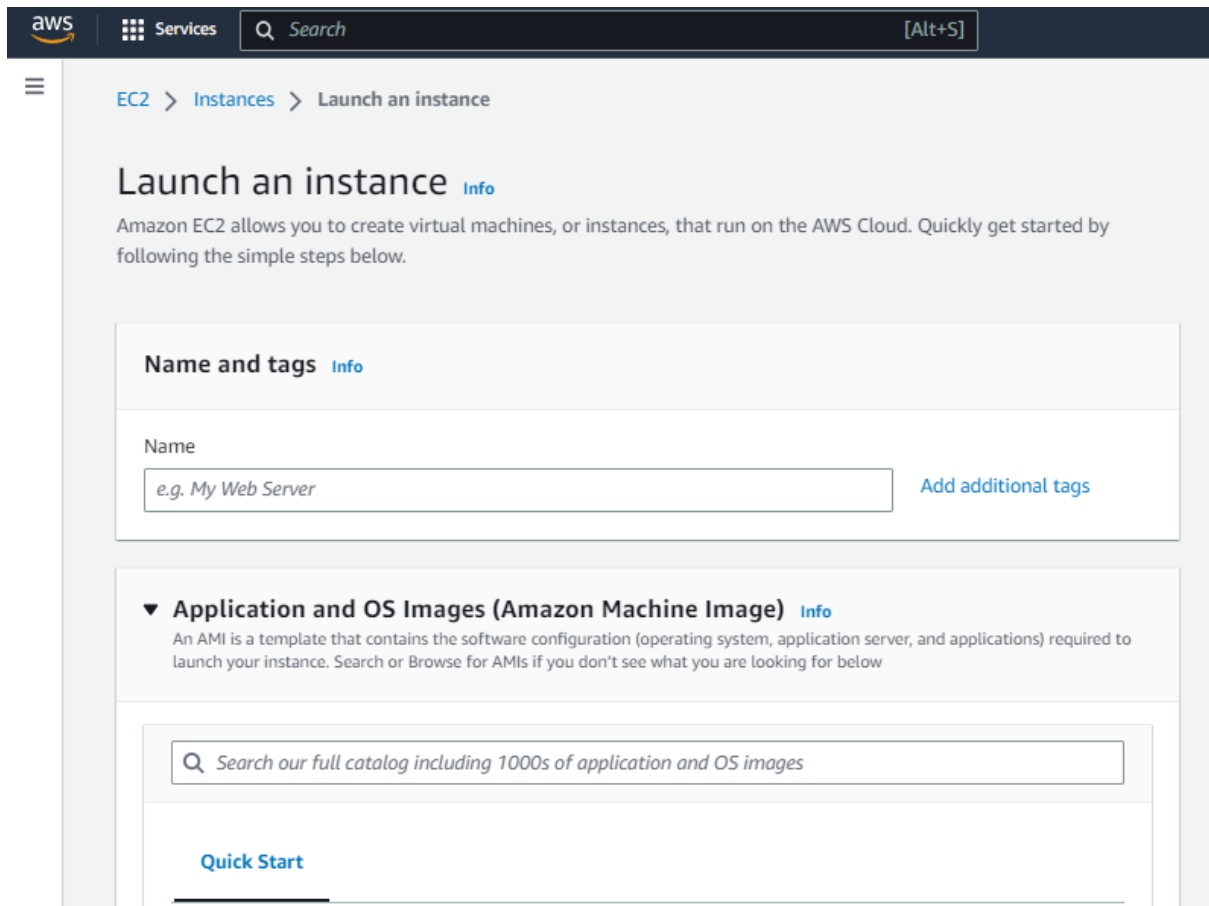
## Step 1: Sign in to the AWS Management Console



### EC2 dashboard

To create an EC2 instance, you first need to sign in to the AWS Management Console. If you don't already have an AWS account, you'll need to create one. Once you're signed in, navigate to the EC2 dashboard and Launch an instance.

## Step 2: Choose a name of your instance



The screenshot shows the AWS Management Console interface for launching an EC2 instance. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and a keyboard shortcut '[Alt+S]'. Below this, a breadcrumb trail reads 'EC2 > Instances > Launch an instance'. The main heading is 'Launch an instance' with an 'Info' link. A descriptive paragraph states: '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.' The first section is 'Name and tags' with an 'Info' link. It contains a 'Name' label and a text input field with the placeholder 'e.g. My Web Server'. To the right of the input field is a link 'Add additional tags'. The second section is 'Application and OS Images (Amazon Machine Image)' with an 'Info' link. It includes a sub-description: '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'. Below this is a search bar with the placeholder text 'Search our full catalog including 1000s of application and OS images'. At the bottom of the visible section is a 'Quick Start' link.

Select a name of your instance as per your likability

## Step 3: Choose an Amazon Machine Image (AMI)

▼ **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

**Quick Start**

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

**Amazon Linux 2023 AMI**

ami-0d0175e9dbb94e0d2 (64-bit (x86), uefi-preferred) / ami-0f9027638c7635698 (64-bit (Arm), uefi)

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

Free tier eligible

Selecting AMI for your instance

An Amazon Machine Image (AMI) is a pre-configured virtual machine that serves as a template for your EC2 instance. You'll be prompted to choose an AMI from a list of available options. You can choose from Amazon Linux, Ubuntu, Windows, and many other options.

#### Step 4: Choose an Instance Type

▼ **Instance type** [Info](#)

Instance type

**t2.micro**

Family: t2    1 vCPU    1 GiB Memory

On-Demand Linux pricing: 0.0146 USD per Hour

On-Demand Windows pricing: 0.0192 USD per Hour

On-Demand SUSE pricing: 0.0146 USD per Hour

On-Demand RHEL pricing: 0.0746 USD per Hour

Free tier eligible

[Compare instance types](#)

An instance type determines the computing resources (CPU, RAM, storage, etc.) available to your EC2 instance. There are a variety of instance types to choose from, ranging from small and low-cost to large and high-performance. Select the instance type that best fits your needs and budget.

### Step 5: Create a key pair


▼ Key pair (login) Info

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*

Select

▼

 [Create new key pair](#)

Create a key pair if you have never created one and store it in a safe place because it will act as a key to log in to your instance.

### Step 6: Configure Security Group

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-2'** 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

 Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

×

Security groups act as virtual firewalls for your EC2 instance, controlling inbound and outbound traffic. You can configure security groups to allow or deny traffic from specific IP addresses, protocols, and ports. In this step, you'll need to create a new security group or select an existing one.

## Step 7: Add Storage

▼ **Configure storage** [Info](#) Advanced

1x  GiB  ▼

Root volume (Not encrypted)

ⓘ

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

×

Add new volume

0 x File systems

[Edit](#)

EC2 instances require storage for the operating system, applications, and data. In this step, you can add and configure storage volumes for your instance. You can choose from different types of storage, including Amazon Elastic Block Store (EBS) volumes and instance store volumes.

## Step 8: Review and Launch

▼ Summary

Number of instances [Info](#)

Software Image (AMI)

Amazon Linux 2023 AMI 2023.0.2...[read more](#)  
ami-0d0175e9dbb94e0d2

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 for t2.micro in the



Cancel

Launch instance

[Review commands](#)

Before launching your instance, review all the details to make sure everything is correct. You can also modify any settings that need to be changed. Once you're ready, click the "Launch" button to start your EC2 instance.

## Step 9: Connect to Your Instance

The screenshot shows the AWS Management Console interface for connecting to an EC2 instance. The breadcrumb navigation at the top reads: EC2 > Instances > i-09b40e9969c55ea11 > Connect to instance. The main heading is 'Connect to instance' with an 'Info' link. Below the heading, it says 'Connect to your instance i-09b40e9969c55ea11 using any of these options'. There are four tabs: 'EC2 Instance Connect' (selected), 'Session Manager', 'SSH client', and 'EC2 serial console'. Under the 'EC2 Instance Connect' tab, the 'Instance ID' is shown as i-09b40e9969c55ea11. The 'Public IP address' is 54.206.31.155. The 'User name' field is labeled 'ec2-user'. A note box states: 'Note: In most cases, the default user name, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.' At the bottom right, there are 'Cancel' and 'Connect' buttons.

After launching your instance, you can connect to it using various methods, such as SSH or Remote Desktop Protocol (RDP). You can also use the AWS Systems Manager Session Manager to connect to your instance securely without the need for a public IP address.

Proceed to the Connecting using Linux / macOS or Connecting using Windows instructions depending on your local operating system.

Note: These are SSH usernames:

For Amazon Linux, a standard SSH user is ec2-user.

For Ubuntu images, a standard SSH user is ubuntu.

For CentOS images, a standard SSH user is centos.

For Debian images, a standard SSH user is admin.

For Red Hat 6.4 and later images, a standard SSH user is ec2-user.



## Connecting MobaXTerm on Windows to Amazon Linux Instance.

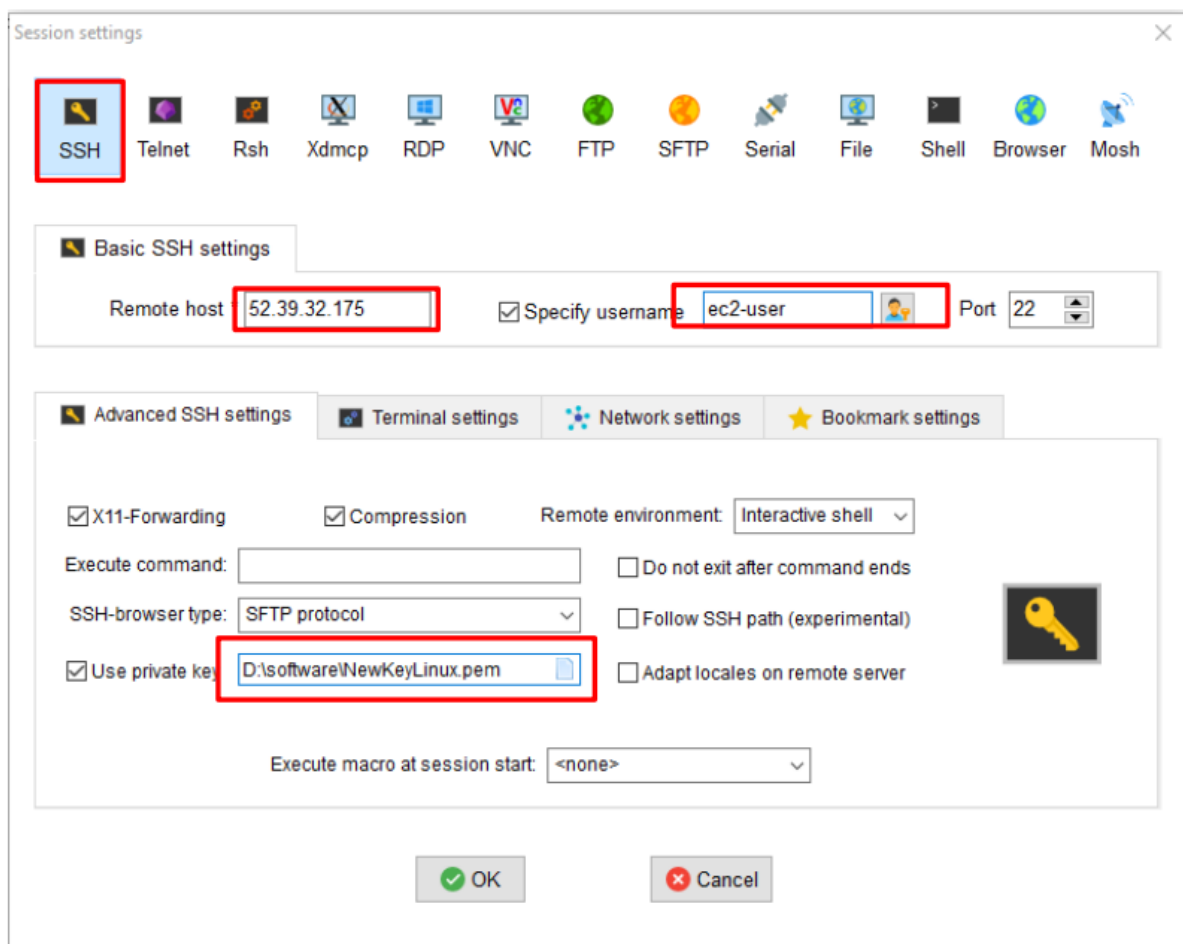
Open MobaXTerm application.

To create a new session, in Terminal menu, click Session.



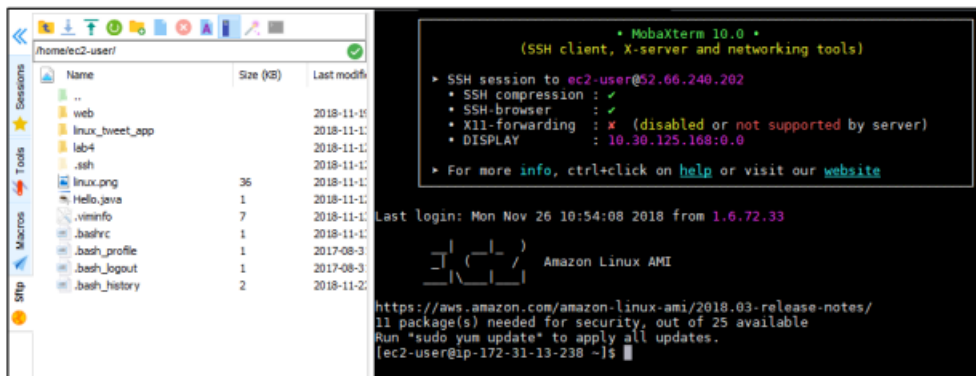
The Session settings window is opened.

- In SSH tab, enter the Remote Host address, which is, address of running Amazon Linux instance on your machine.
- Following image shows the details to be provided in the settings:



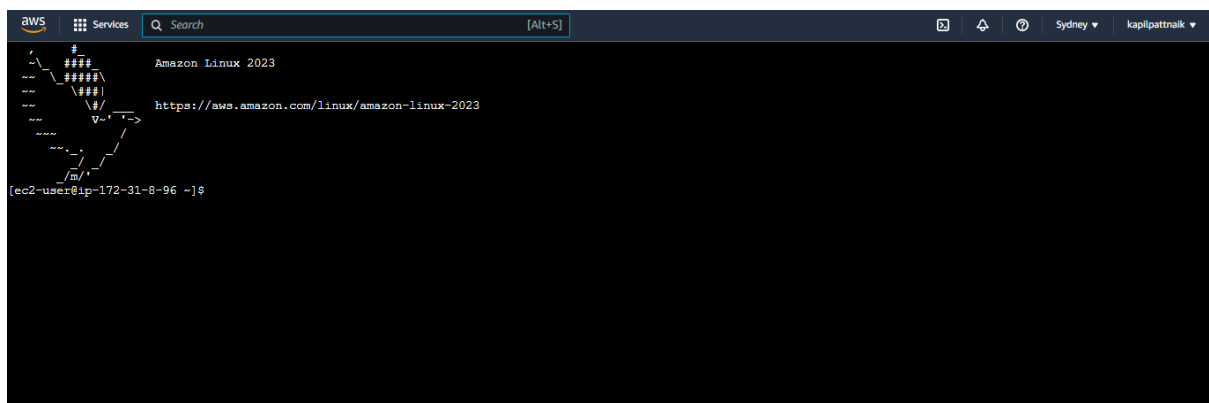
Click ok to start the session.

You will be logged in the session as shown:



Currently, you will be logged in as ec2-user on the Linux system.

## Conclusion



Creating an EC2 instance in AWS is a simple and straightforward process. With just a few clicks, you can launch a virtual machine in the cloud and start using it right away. By following the steps outlined in this guide, you can create your own EC2 instance in no time.