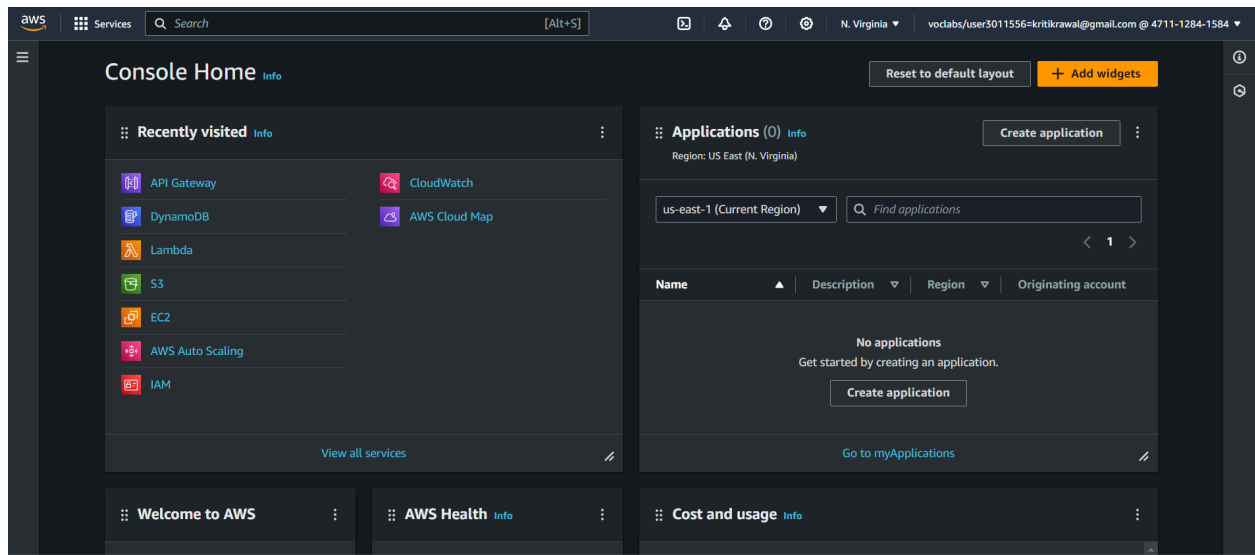
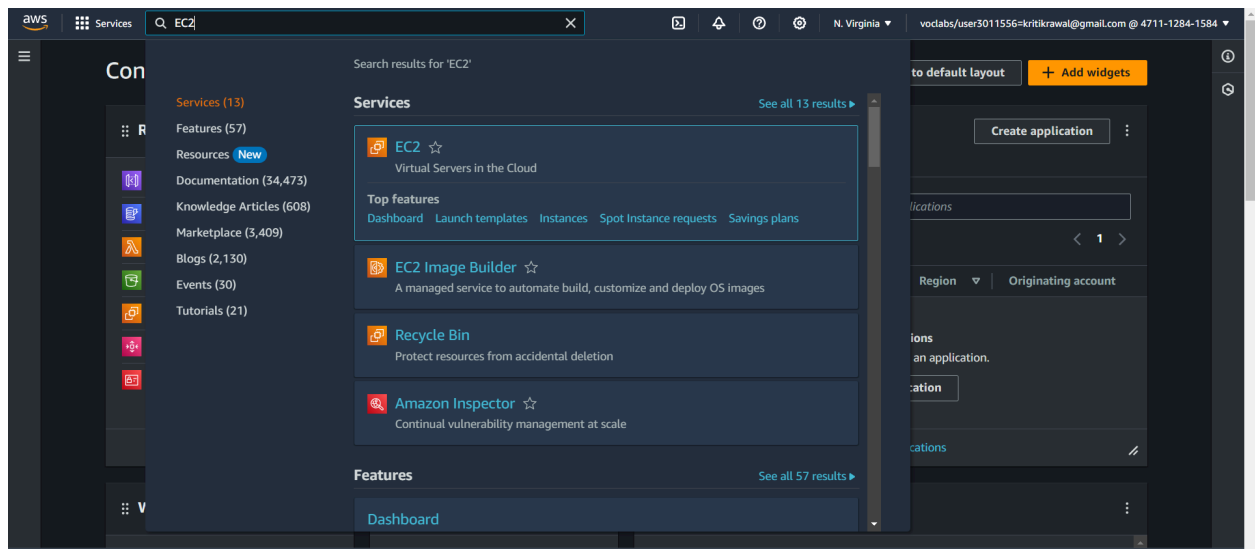


**Step 1:** Navigate to <https://us-east-1.console.aws.amazon.com/console/home?region=us-east-1>



**Step 2:** Go to EC2 in the search section.



### Step 3: Click Launch instance.

The screenshot shows the AWS Management Console with the EC2 Dashboard selected. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Console-to-Code, and a list of instance-related options. The main content area is divided into several sections: 'Resources' showing a summary of EC2 resources in the US East (N. Virginia) Region; 'Launch instance' with a prominent orange 'Launch instance' button and a 'Migrate a server' link; 'Service health' with an 'AWS Health Dashboard' link; and 'Zones' showing the available zones. On the right, the 'EC2 Free Tier' section indicates that no free tier offers are currently in use, along with a 'View all AWS Free Tier offers' link.

### Step 4: Name the instance.

The screenshot shows the 'Launch an instance' wizard in the AWS Management Console. The 'Name and tags' section is active, and the 'Name' field is populated with 'ec2inst10'. The 'Application and OS Images (Amazon Machine Image)' section is also visible, showing a search bar and a list of AMIs. The 'Summary' section on the right provides a overview of the instance configuration, including the number of instances (1), the software image (Amazon Linux 2023.3.2), the virtual server type (t2.micro), the firewall (New security group), and the storage (1 volume(s) - 8 GiB). A 'Free tier' notification is displayed, indicating that the instance qualifies for the free tier. The 'Launch instance' button is highlighted in orange.


**Step 5:** Create the key pair and check it.

▼ **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*

keypair10 ▼

 [Create new key pair](#)

## Create key pair

×

**Key pair name**

Key pairs allow you to connect to your instance securely.

keypair10

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

## Step 6: Create a new security group

▼ Network settings Info

VPC - required Info

vpc-0a7ad4b901cc9eb8c172.31.0.0/16(default)↕

Subnet Info

No preference↕

↕ Create new subnet ↗

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

Security group name - required

secgrp10

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 Info

launch-wizard-13 created 2024-02-23T05:23:34.821Z

Inbound Security Group Rules

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

Type Info	Protocol Info	Port range Info
ssh↕	TCP	22

## Step 7: Launch the instance.

EC2 > Instances > Launch an Instance

Launching instance  
Creating security groups

14%

► Details

Please wait while we launch your instance.  
Do not close your browser while this is loading.

EC2 > Instances > Launch an Instance

Success

Successfully initiated launch of instance (i-032f33007580d0560)

► Launch log

## Step 8: Check the instance state.

**Instance summary for i-032f33007580d0560 (ec2inst10)**  
Updated less than a minute ago

Instance ID: i-032f33007580d0560 (ec2inst10)

IPv6 address: -

Hostname type: IP name: ip-172-31-20-31.ec2.internal

Answer private resource DNS name: IPv4 (A)

Auto-assigned IP address: 3.85.226.2 [Public IP]

IAM Role: -

IMDSv2: Required

Instance state: **Running**

Private IP DNS name (IPv4 only): ip-172-31-20-31.ec2.internal

Instance type: t2.micro

VPC ID: vpc-0a7ad4b901cc9eb8c

Subnet ID: subnet-0092d7e9e3f27d351

Private IPv4 addresses: 172.31.20.31

Public IPv4 DNS: ec2-3-85-226-2.compute-1.amazonaws.com

Elastic IP addresses: -

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

Auto Scaling Group name: -

**Details** | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

**▼ Instance details info**

Platform: Amazon Linux (Inferred)

Platform details: Linux/UNIX

Stop protection: Disabled

AMI ID: ami-0440d3b780d96b29d

AMI name: al2023-ami-2023.3.20240219.0-kernel-6.1-x86\_64

Launch time: Fri Feb 23 2024 11:14:59 GMT+0545 (Nepal Time) (3 minutes)

Monitoring: disabled

Termination protection: Disabled

AMI location: amazon/al2023-ami-2023.3.20240219.0-kernel-6.1-x86\_64

## Step 9: Navigate to Elastic IP

**Elastic IP addresses (4)**

Find resources by attribute or tag

	Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID	Private IP address
<input type="checkbox"/>	-	34.199.138.17	Public IP	eipalloc-0ae626825c3676f56	-	-	-
<input type="checkbox"/>	lab-eip-us-east-1a	44.193.104.3	Public IP	eipalloc-09e4c8b1ca1864c4d	-	-	10.0.0.5
<input type="checkbox"/>	-	44.216.95.126	Public IP	eipalloc-084c9b4996937e97b	-	-	-
<input type="checkbox"/>	-	54.91.213.213	Public IP	eipalloc-0b0c335ae4fe0aaab	-	-	-

View IP address usage and recommendations to release unused IPs with [Public IP insights](#)

## Step 10: Allocate the Elastic IP and associate it.

**Elastic IP address allocated successfully.**  
Elastic IP address 34.192.196.158

**Elastic IP addresses (1)**

Find resources by attribute or tag

Public IPv4 address: 34.192.196.158

Clear filters

	Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID	Private IP address
<input type="checkbox"/>	-	34.192.196.158	Public IP	eipalloc-0c42e9c3ce7bc52af	-	-	-

## Step 11: Associate the EC2 instance

[EC2](#) > [Elastic IP addresses](#) > [Associate Elastic IP address](#)

### Associate Elastic IP address<sup>Info</sup>

Choose the instance or network interface to associate to this Elastic IP address (34.192.196.158)

**Elastic IP address: 34.192.196.158**

**Resource type**  
Choose the type of resource with which to associate the Elastic IP address.

☒ Instance

☐ Network interface

**⚠️** If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. [Learn more](#)

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

**Instance**

**Private IP address**  
The private IP address with which to associate the Elastic IP address.

**Reassociation**  
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.

☐ Allow this Elastic IP address to be reassociated

🔔 Elastic IP address associated successfully.  
Elastic IP address 34.192.196.158 has been associated with instance i-032f33007580d0560

## Step12: Copy the public IP address and check the instance after association the Elastic IP.

[EC2](#) > [Instances](#) > [i-032f33007580d0560](#)

**Instance summary for i-032f33007580d0560 (ec2inst10)**  
Updated less than a minute ago

Instance ID

i-032f33007580d0560 (ec2inst10)

IPv6 address

—

Hostname type

IP name: ip-172-31-20-31.ec2.internal

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

—

IAM Role

—

IMDSv2

Required

Public IPv4 address copied

34.192.196.158

Open address

Instance state

Running

Private IP DNS name (IPv4 only)

ip-172-31-20-31.ec2.internal

Instance type

t2.micro

VPC ID

vpc-0a7ad4b901cc9ebbfc

Subnet ID

subnet-0092d7e9e3f27d3511

Private IPv4 addresses

172.31.20.31

Public IPv4 DNS

ec2-34-192-196-158.compute-1.amazonaws.com

Open address

Elastic IP addresses

34.192.196.158 [Public IP]

AWS Compute Optimizer finding

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

Auto Scaling Group name

—

Details

Status and alarms **New**

Monitoring

Security

Networking

Storage

Tags

**▼ Instance details** <sup>Info</sup>

Platform

Amazon Linux (Inferred)

Platform details

Linux/UNIX

Stop protection

Disabled

AMI ID

ami-0440d3b780d96b29d

AMI name

al2023-ami-2023.3.20240219.0-kernel-6.1-486\_64

Launch time

Fri Feb 23 2024 11:14:59 GMT+0545 (Nileal Time) (15 minutes)

Monitoring

disabled

Termination protection

Disabled

AMI location

amazon/al2023-ami-2023.3.20240219.0-kernel-6.1-486\_64

1 new notification (Do not disturb on)

**Step 13:** Open terminal to connect the instance via. SSH.

```

TERMINAL          PORTS          PROBLEMS          OUTPUT          DEBUG CONSOLE
PS C:\Users\kritikr\Downloads> ssh -i .\keypair10.pem ec2-user@34.192.196.158
The authenticity of host '34.192.196.158 (34.192.196.158)' can't be established.
ED25519 key fingerprint is SHA256:z2utnJni/IFXHP1vrIl+nhpBmvVq7RXTrfCref/MpAk.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '34.192.196.158' (ED25519) to the list of known hosts.

#
~ \ #### Amazon Linux 2023
~ \ #####
~ \ #####
~ \ ###|
~ \ #/ https://aws.amazon.com/linux/amazon-linux-2023
~ \ V ~ ->
~ ~ ~
~ ~ ~
~ ~ ~
[ec2-user@ip-172-31-20-31 ~]$
```