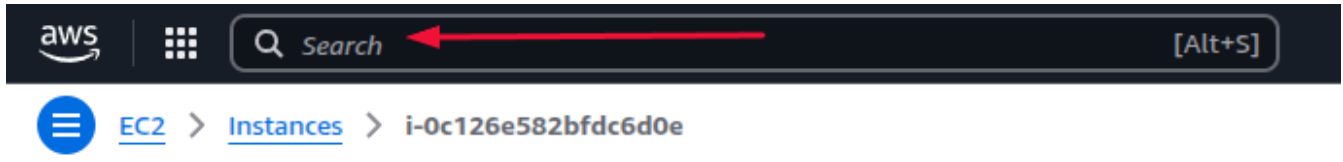
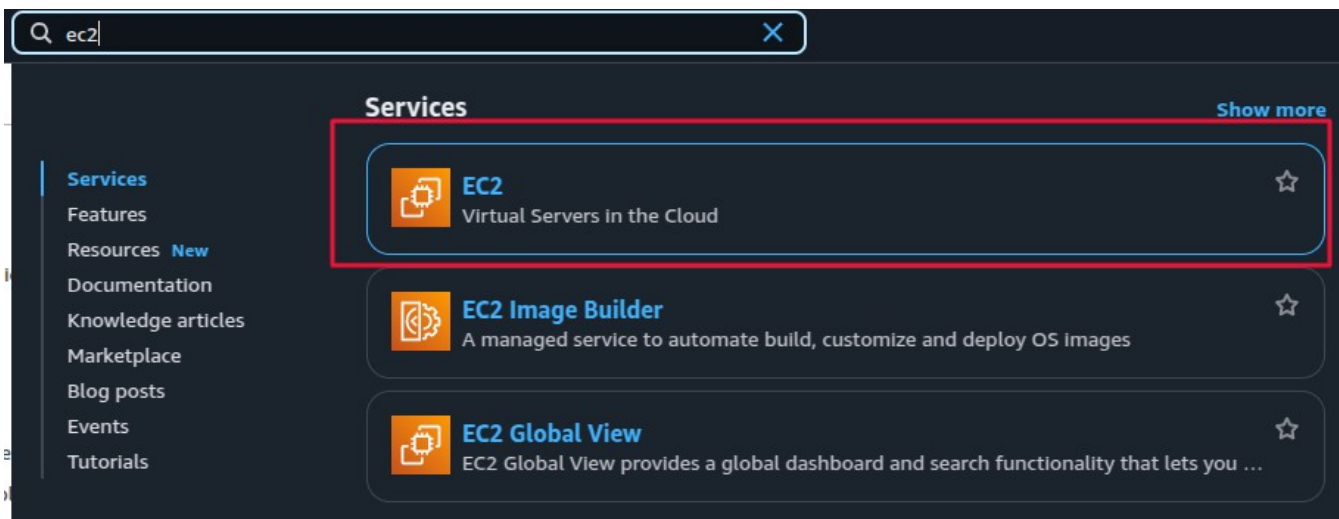


Stage 1: AWS Environment Setup

1. Navigate to <https://aws.amazon.com/free/> and set a free account (credit card information must be provided on step 3 of 5-step-verification process – please provide a valid credit card details)
2. Login to AWS with received credentials
3. Navigate to AWS > Services and search for EC2:



4. Choose EC2 instance:



5. Create EC2 instance with the following parameters:

- a. **Name:** Choose a meaningful name.
- b. **Amazon Machine Image (AMI):** Use **Ubuntu 22.04 LTS** or **Amazon Linux 2**.
- c. **Instance Type:** Choose **t3.micro** (Free Tier eligible).
- d. **Key Pair:** Create/download a key pair if you don't have one.
- e. **Security Group:**
 - i. Allow **SSH (port 22)** for your IP.
 - ii. Allow **HTTP (port 80)** for public access.
 - iii. Allow **HTTPS (port 443)** if using SSL.
- f. Click **Launch**.

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

NewInstanceOfEC2

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

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

Recents

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUSE

Debian

debian

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

ami-0c1ac8a41498c1a9c (64-bit (x86)) / ami-09fdd0b7882a4ec7b (64-bit (Arm))

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

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Canonical, Ubuntu, 24.04, amd64 noble image

Architecture

AMI ID

Publish Date

Username

Info

64-bit (x86)

ami-0c1ac8a41498c1a9c

2025-03-05

ubuntu

Verified provider

▼ Network settings [Info](#)

[Edit](#)

Network [Info](#)

vpc-01ea9fa7dcc6b2422

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-3' 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.

Create key pair



Key pair name

Key pairs allow you to connect to your instance securely.

Ec2KeyPair

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

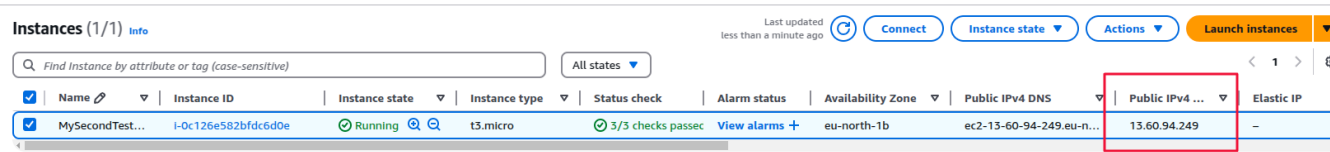


When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more](#)

Cancel

Create key pair

6. On your computer (Linux, terminal/Windows, Putty) run command to connect to AWS machine:
ssh -i your-key.pem ubuntu@your-ec2-public-ip (you can pick up public address of your AWS instance in ECS > Dashboard > Instances):



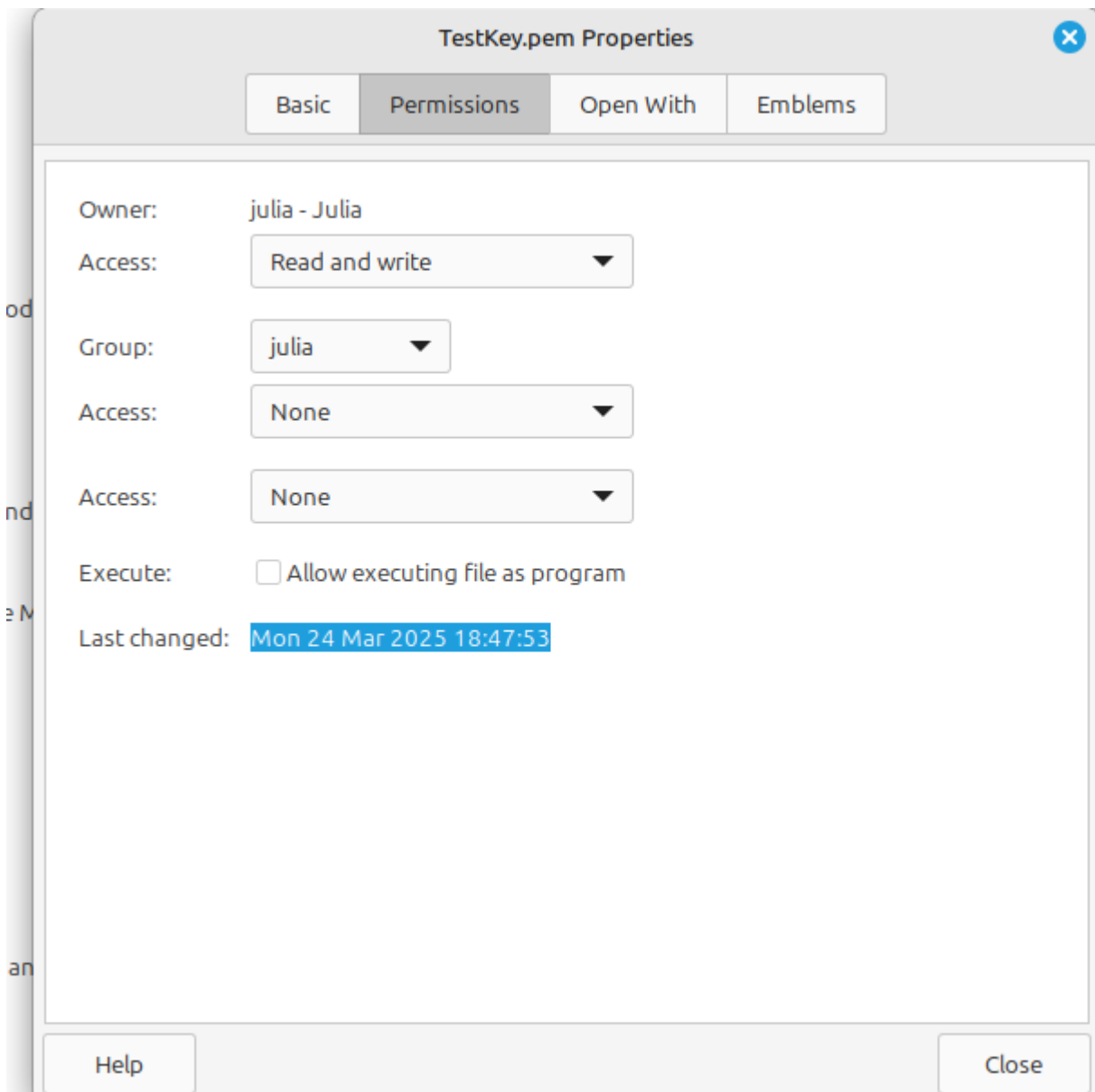
Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive) All states

Connect Instance state Actions Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
MySecondTest...	i-0c126e582bfdc6d0e	Running	t3.micro	3/3 checks passed	View alarms +	eu-north-1b	ec2-13-60-94-249.eu-n...	13.60.94.249	-

Note: there maybe issues with using your .key file. If the file is not accepted, navigate to File>Properties>Permissions and set Group Access to None:



7. Install Apache server by running following sequence of commands on your AWS machine:
 - a. `sudo apt update`
 - b. `sudo apt install apache2 -y`
 - c. `sudo systemctl enable apache2`
 - d. `sudo systemctl start apache2`
8. Verify: Visit **`http://your-ec2-public-ip`** in a browser to see a public Apache landing page
9. Create an index.html file:
`echo '<h1>Hello from Julia on EC2!</h1>' | sudo tee /var/www/html/index.html`

Note: You may add any text with echo command:

