

practice 3:

steps:

### 1. Create public subnet

← → ↻ eu-west-2.console.aws.amazon.com/vpc/home?region=eu-west-2#CreateSubnet:

aws Services 🔍 Search [Alt+S]

VPC > Subnets > Create subnet

Create subnet [Info](#)

VPC

VPC ID  
Create subnets in this VPC.  
vpc-063a0704b553bd558 (my-first-vpc) ▼

Associated VPC CIDRs  
IPv4 CIDRs  
10.0.0.0/24

Subnet settings  
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name  
Create a tag with a key of 'Name' and a value that you specify.  
public-subnet-1  
The name can be up to 256 characters long.

Availability Zone [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.  
Europe (London) / eu-west-2a ▼

IPv4 CIDR block [Info](#)  
10.0.0.150/26 ✕

▼ Tags - optional

Key

Value - optional

Q Name ✕ Q public-subnet-1 ✕ Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel Create subnet

### 2. Create private subnet

eu-west-2.console.aws.amazon.com/vpc/home?region=eu-west-2#CreateSubnet:

aws

Services

Search

[Alt+S]

VPC > Subnets > Create subnet

Create subnet [Info](#)

VPC

VPC ID

Create subnets in this VPC.

vpc-063a0704b553bd558 (my-first-vpc) ▼

Associated VPC CIDRs

IPv4 CIDRs

10.0.0.0/24

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name

Create a tag with a key of 'Name' and a value that you specify.

private-subnet-1

The name can be up to 256 characters long.

Availability Zone [Info](#)

Choose the zone in which your subnet will reside, or let Amazon choose one for you.

Europe (London) / eu-west-2a ▼

IPv4 CIDR block [Info](#)

Q 10.0.0.0/26 X

▼ Tags - optional

Key

Value - optional

Q Name X

Q private-subnet-1 X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

### 3. Create ec2 instance and install docker

**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](#)

**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 Linux | macOS | **Ubuntu** | Windows | Red Hat | S | [Browse more AMIs](#)

aws | Mac | ubuntu | Microsoft | Red Hat | [Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type Free tier eligible

ami-0eb260c4d5475b901 (64-bit (x86)) / ami-0e3f80b3d2a794117 (64-bit (Arm))

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

Description

Canonical, Ubuntu, 22.04 LTS, amd64 jammy image build on 2023-05-16

Architecture:  AMI ID: ami-0eb260c4d5475b901 Verified provider

**Instance type** [Info](#)

Instance type:  Free tier eligible

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

On-Demand Windows pricing: 0.0178 USD per Hour

On-Demand RHEL pricing: 0.0732 USD per Hour

On-Demand SUSE pricing: 0.0132 USD per Hour

On-Demand Linux pricing: 0.0132 USD per Hour

☐ All generations [Compare instance types](#)

**Summary**

Number of instances [Info](#):

Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ...[read more](#) ami-0eb260c4d5475b901

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 t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, ...[read more](#)

[Cancel](#) [Launch instance](#) [Review commands](#)

4.

Create key pair

## Create key pair



### Key pair name

Key pairs allow you to connect to your instance securely.

The name can include upto 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 (Not supported for Windows instances)

### 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

### Info



▼

### Info

☐ Select existing security group

### Info

Remove

aws

Services

Search

[Alt+S]

Inbound security groups rules

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

Remove

Type Info

ssh

Protocol Info

TCP

Port range Info

22

Source type Info

Anywhere

Source Info

Add CIDR, prefix list or security

0.0.0.0/0

Description - optional Info

e.g. SSH for admin desktop

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.

Add security group rule

► Advanced network configuration

▼ Configure storage Info

Advanced

1x 8 GiB gp2

Root volume (Not encrypted)

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

add user data:

← → ↺

eu-west-2.console.aws.amazon.com/ec2/home?region=eu-west-2#LaunchInstances:

aws

Services

Search

[Alt+S]

☰

Metadata version [Info](#)

Select

Metadata response hop limit [Info](#)

Select

Allow tags in metadata [Info](#)

Select

User data - optional [Info](#)

Enter user data in the field.

```
sudo apt-get update
sudo apt-get install ca-certificates curl gnupg
sudo install -m 0755 -d /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o
/etc/apt/keyrings/docker.gpg
sudo chmod a+r /etc/apt/keyrings/docker.gpg
echo \
  "deb [arch="$(dpkg --print-architecture)" signed-
by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu \
  "$(. /etc/os-release && echo "$VERSION_CODENAME")" stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin
docker-compose-plugin

```

☐ User data has already been base64 encoded

Instances (1) [Info](#)

↺

Connect

Instance state ▾

Actions ▾

Launch instances ▾

Find instance by attribute or tag (case-sensitive)

Instance ID = i-0be8e5709ddc1475f ✕

Clear filters