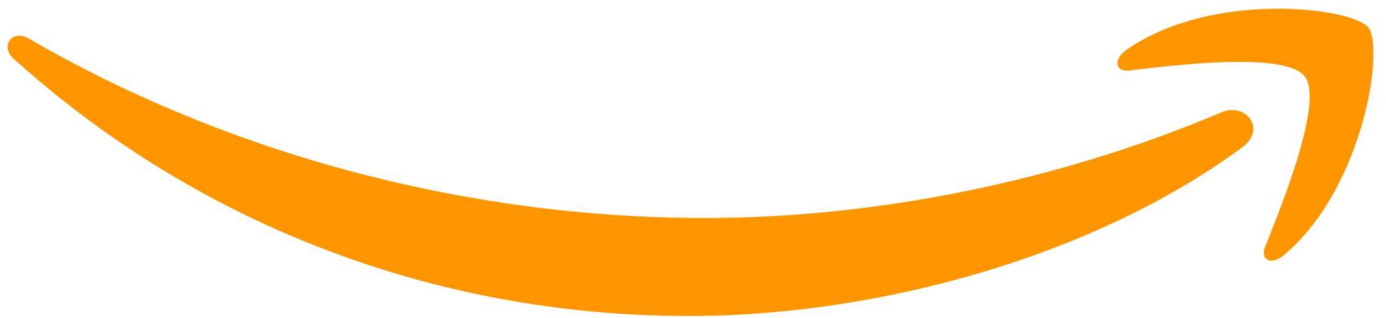




Step 1 – What is AWS

aws



AWS is Amazon's **cloud** service.

It let's you

1. Rent servers
2. Manage domains
3. Upload objects (mp4 files, jpgs, mp3s ...)
4. Autoscale servers
5. Create k8s clusters

...



The offering we will be focussing on today is **Renting servers**

☰ AWS Deploying (EC2) 3 of 8

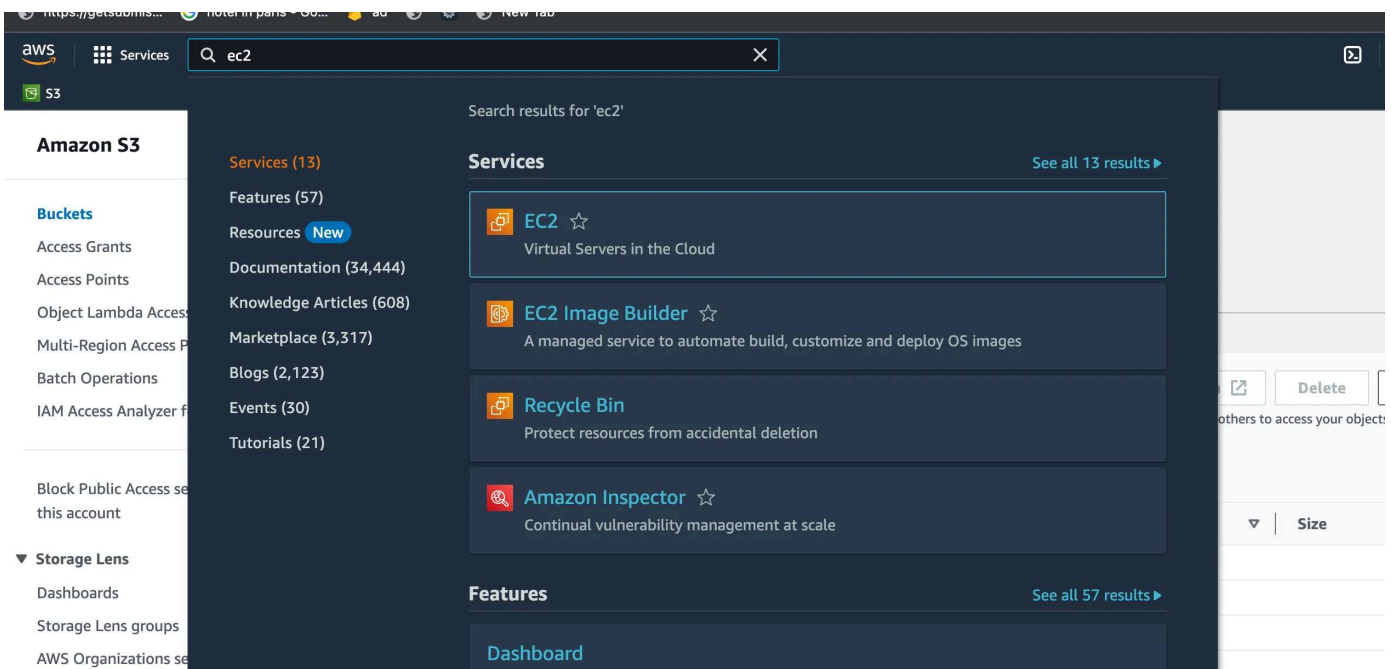
Step 2 – EC2 servers

VMs on AWS are called **EC2 Servers**

EC2 stands for Elastic compute Version 2.

1. **Elastic** – Can increase/decrease the size of the machine
2. **Compute** – It is a machine

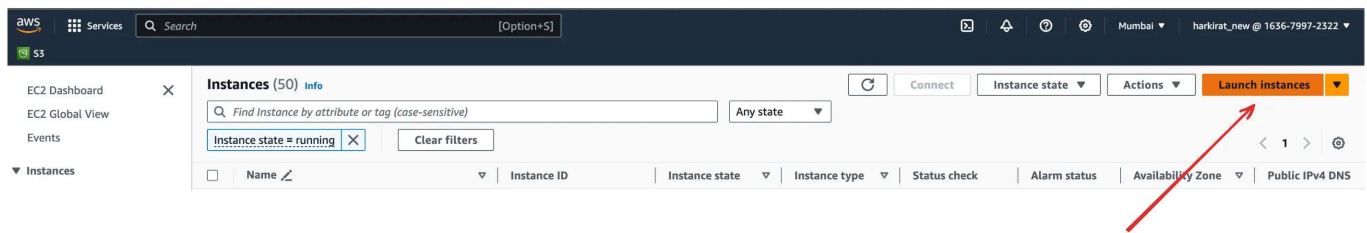
You can spin up a new EC2 instance from the aws dashboard





Step 3 – Creating a new EC2 server

1. Click on **Launch a new instance**



2. Give a name

AWS Deploying (EC2) 3 of 8

instances, that run on the AWS Cloud. Quickly get started by

Name and tags [Info](#)

Name

backend

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

My AMIs

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUSE

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Summary

Number of instances [Info](#)

1

Canonical, Ubuntu, 22.04 LTS, ...[read more](#)

ami-03f4878755434977f

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, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Launch instance

Review commands

3. Select an OS

Hold Cmd and Double-click or press Cmd + Enter to edit points

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

backend

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

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×

Cancel

Launch instance

[Review commands](#)

☰ ➤ AWS Deploying (EC2) 3 of 8

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

t2.nano

Family: t2 1 vCPU 0.5 GiB Memory Current generation: true

On-Demand SUSE base pricing: 0.0062 USD per Hour

On-Demand Linux base pricing: 0.0062 USD per Hour

On-Demand Windows base pricing: 0.0085 USD per Hour

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

t2.small

Family: t2 2 vCPU 2 GiB Memory Current generation: true

On-Demand SUSE base pricing: 0.0548 USD per Hour

On-Demand Linux base pricing: 0.0248 USD per Hour

On-Demand RHEL base pricing: 0.0848 USD per Hour

On-Demand Windows base pricing: 0.034 USD per Hour

t2.medium

Family: t2 2 vCPU 4 GiB Memory Current generation: true

On-Demand Linux base pricing: 0.0496 USD per Hour

On-Demand Windows base pricing: 0.0676 USD per Hour

On-Demand RHEL base pricing: 0.1096 USD per Hour

On-Demand SUSE base pricing: 0.1496 USD per Hour

t2.large

Auto-assign public IP [Info](#)

Enable

Summary

Number of instances [Info](#)

1

Canonical, Ubuntu, 22.04 LTS, [read more](#)

ami-03f4878755434977f

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, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

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

5. Create a new Key pair

Step 4 – SSH into server

1. Give ssh key permissions

```
chmod 700 kirat-class.pem
```

2. ssh into machine

```
ssh -i kirat-class.pem ubuntu@ec2-65-0-180-32.ap-south-1.compute.amazonaws.com
```

3. Clone repo

☰ AWS Deploying (EC2) 3 of 8
git clone https://github.com/hkirat/sum-server



If your aws machine shows you the following error, your aws machine doesn't have access to the internet

Solution - <https://www.tecmint.com/resolve-temporary-failure-in-name-resolution/>

4. Install Node.js



<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-20-04>

5. Install all dependencies

```
cd sum-server  
npm install
```



6. Start backend

```
node index.js
```



Step 5 - Install the repo



AWS Deploying (EC2) 3 of 8

Clone the repo

<https://github.com/hkirat/sum-server>





hitting the server

You have an ip/DNS that you can hit to access your ec2 server

Try visiting the backend

`your_domain:3000`

Notice you **can't** visit the website during this time

Security group

You can either open port 8080, or process on port **80**

`http://your_domain:8080`


```
proxy_set_header Connection 'upgrade';  
    }  
    }  
}
```

```
sudo nginx -s reload
```

Start the Backend server

```
node index.js
```

Visit the website

<https://be1.100xdevs.com/>

Step 8 – Certificate management



AWS Deploying (EC2) 3 of 8