



Step 1 – What is AWS

aws



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

It let's you

1. Rent servers

[Back to home](#)

[Jump To ↗](#)

[< Prev](#)

[Next >](#)

[Go to Top ↑](#)



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

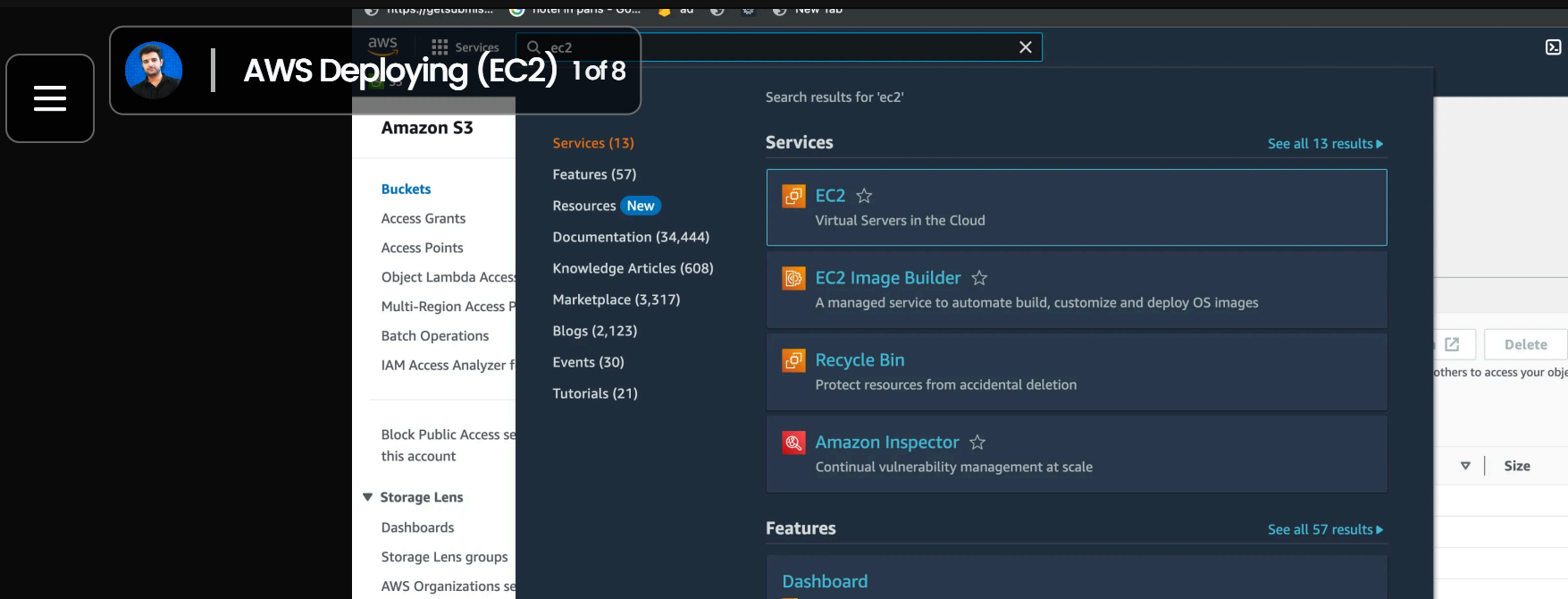
Step 2 – EC2 servers

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

3. Select an OS

4. Select size

5. Create a new Key pair

6. Select Size

7. Allow traffic on http/https



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

```
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>



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



6. Start backend

```
node index.js
```



Step 5 – Install the repo

Clone the repo

```
https://github.com/hkirat/sum-server
```





Step 6 – Try hitting the server

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

Try visiting the backend



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`



Step 7 – nginx

<https://www.nginx.com/resources/glossary/nginx/>

What is a reverse proxy?



```
sudo apt update  
sudo apt install nginx
```



This should start a **nginx server** on port 80

Try visiting the website

Create reverse proxy

```
sudo rm sudo vi /etc/nginx/nginx.conf  
sudo vi /etc/nginx/nginx.conf
```



```
events {  
    # Event directives...  
}
```



```
http {  
    server {  
        listen 80;  
        server_name be1.100xdevs.com;  
  
        location / {  
            proxy_pass http://localhost:8080;  
            proxy_http_version 1.1;  
            proxy_set_header Upgrade $http_upgrade;
```



AWS Deploying (EC2) 1 of 8

```
proxy_set_header Connection 'upgrade';
proxy_set_header Host $host;
proxy_cache_bypass $http_upgrade;
}
}
}
```

```
sudo nginx -s reload
```



Start the Backend server

```
node index.js
```



Visit the website

```
https://be1.100xdevs.com/
```





AWS Deploying (EC2) 1 of 8

Step 8 – Certificate management

Use <https://certbot.eff.org/>