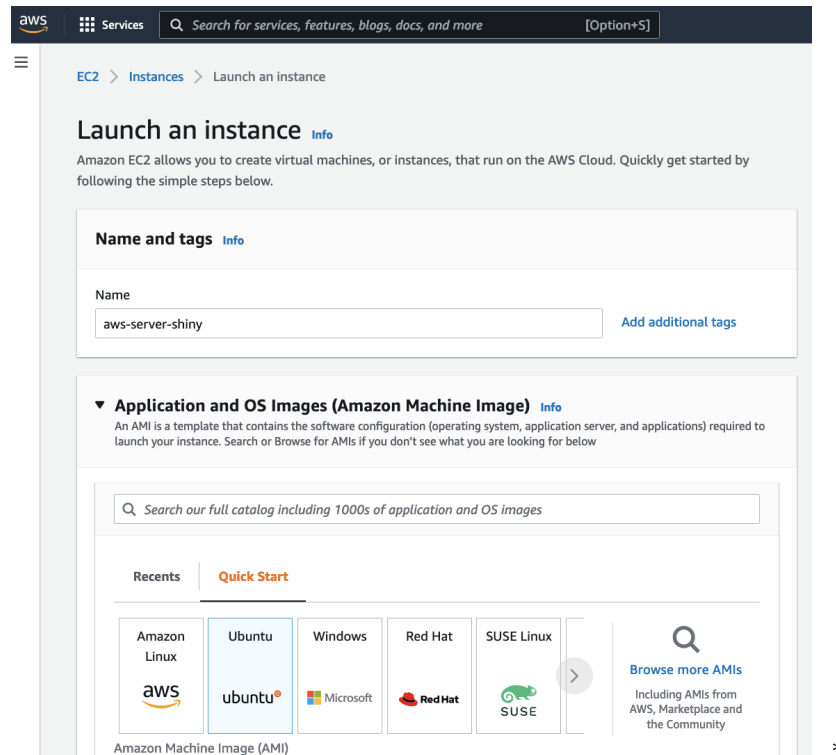# Spin-up virtual server on AWS

true

2022-08-05

Introduction

- Open EC2 console.

```
https://aws.amazon.com/console
```

or

```
https://us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#
```


*

log in * side panel, click "ec2" * side panel, click "Instances" * from top bar, click "Launch Instances"

2. From "Quick Start" click Ubuntu button.

- Name the server say shiny-july22

- `Choose an AMI (instance template, operating system):`

Suggest choose "Ubuntu Server 22.04 LTS", but other linux distributions can be utilized, e.g.u Red Hat, or SUSE.)

e.g. ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20220609

3. Next choose an instance **type**, e.g. "t2-micro". (different instances are mixtures of size, processors, memory, instance storage, network performance) click "Next: Configure Instance Details"

*. choose Key pair (use in place aws18.pem) or set up new pair

Add security group, e.g. 'shiny' (sg-0f37c94ac1e1b6250) allowing ports 80 (http), 22 (ssh), 443 (https), and 3838 (shiny). and 8787

choose 30 GB of EBS General Purpose (SSD) or Magnetic storage

click Launch Instance

Use elastic IP (to allow server to be run "on-demand") * click on elastic IP in left panel * select associate Elastic IP 13.57.139.31 choose an instance (shiny-july22) to associate with.

Log into new instance with ssh from local

```
ssh -i ~/.ssh/aws18.pem ubuntu@13.57.139.31
```

or

```
ssh ec2
```

if you've set up a `config` file in `~/.ssh` (see Tips at the end of the blog)

set up the environment on server. There is only one piece of software to install: Docker.

```
export HOST="134.122.40.112"
ssh root@$HOST


apt-get -y update
apt-get -y upgrade


apt-get install -y \
    docker \
    docker-compose


systemctl enable docker
# or use homebrew for linux
```

Add ubuntu to the docker group

get domain name from Route 53.

Go to godaddy or Amazon route 53 to associate a domain name with the Elastic IP in EC2.

(screenshot)

To associate domain name rgtlab.org. in Route 53:

- click on 'hosted zones' in side panel
- click on rgtlab.org in center panel
- click on checkbox for rgtlab.org type=A line
- then click on edit record in right panel
- change ip address to 13.57.139.31