

## lab 13: Launching an EC2 Instance

- **Objective:** Create a VPC with public and private subnets and 1 EC2 in each subnet, configure private EC2 security group to only allow inbound SSH from public EC2 IP, SSH to the private instance using bastion host.

### Create vpc

Your VPCs (1/3) [Info](#)

Last updated less than a minute ago [Refresh](#) [Actions](#) [Create VPC](#)

<input type="checkbox"/>	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR
<input type="checkbox"/>	-	<a href="#">vpc-0223d40b6201e56d9</a>	Available	172.31.0.0/16	-
<input checked="" type="checkbox"/>	lab	<a href="#">vpc-0d98904aaebd57a5c</a>	Available	192.168.0.0/16	-
<input type="checkbox"/>	project-vpc	<a href="#">vpc-023703d73c5a8e6e3</a>	Available	10.0.0.0/16	-

### Create ec2 instane in different subnet

Instances (1/5) [Info](#)

Last updated less than a minute ago [Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

[All states](#)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input checked="" type="checkbox"/>	lab-pr	<a href="#">i-001de6f82b73fdbbe</a>	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1a
<input type="checkbox"/>	lab-pub	<a href="#">i-058eca141bc5e73c7</a>	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a>	us-east-1a
<input type="checkbox"/>	ansible-control	<a href="#">i-05027e8338f8a86f2</a>	Stopped	t2.micro	-	<a href="#">View alarms</a>	us-east-1b

Name

lab-pub

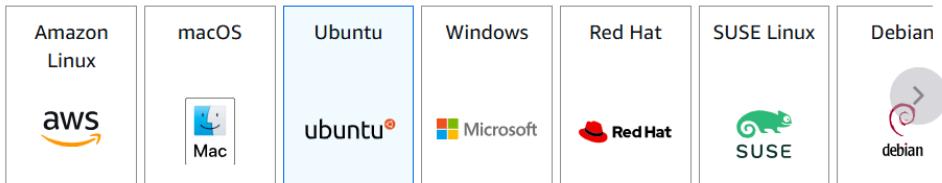
[Add additional tags](#)


## ▼ 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

Recents

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Including AMIs from  
AWS, Marketplace and  
the Community

### Amazon Machine Image (AMI)

Move private-key on local to public ec2 its use to connect in private ec2

```
05/12/2024 17:44:01 /home/mobaxterm/Desktop scp -i ahmed.pem ahmed.pem ubuntu@ec2-3-239-66-83.compute-1.amazonaws.com:/home/ubuntu/ 100% 1674 10.4KB/s 00:00
```

Connect from local to public ec2

```
05/12/2024 17:44:25 /home/mobaxterm/Desktop ssh -i "ahmed.pem" ubuntu@ec2-3-239-66-83.compute-1.amazonaws.com
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1016-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Thu Dec  5 15:44:21 UTC 2024

System load: 0.16          Processes:            105
Usage of /:  23.0% of 6.71GB Users logged in:          0
Memory usage: 19%          IPv4 address for enX0: 192.168.1.20
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled
```

Use command to define private-key to ec2 public

```
ubuntu@ip-192-168-1-20:~$ ssh-add ahmed.pem
identity added: ahmed.pem (ahmed.pem)
ubuntu@ip-192-168-1-20:~$ ssh -A ubuntu@192.168.2.222
The authenticity of host '192.168.2.222 (192.168.2.222)' can't be established.
ED25519 key fingerprint is SHA256:Pu8t4L21RxyufuF4z+b1s/P2Rh1mB7SuRQB0Kf5G89U.
This key is not known by any other names.
```

## Connect from public ec2 to private ec2

```
ubuntu@ip-192-168-1-20:~$ ssh ubuntu@192.168.2.222
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1016-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Thu Dec  5 16:04:39 UTC 2024

System load:  0.0               Processes:    105
Usage of /:   23.0% of 6.71GB   Users logged in:  0
Memory usage: 20%              IPv4 address for enX0: 192.168.2.222
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.
```