

Instances:

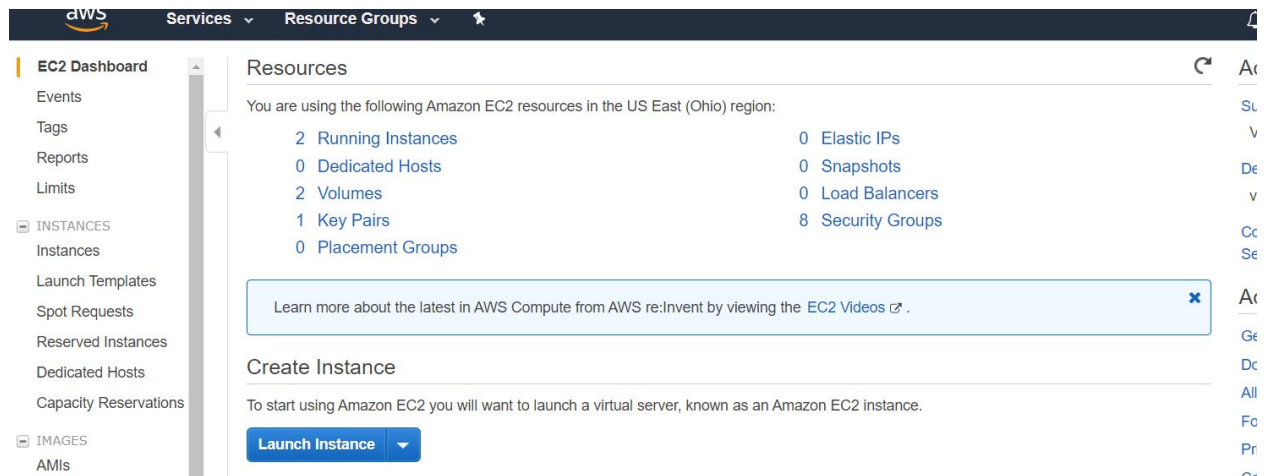
Launch a Linux virtual machine on an Amazon Ec2 instance.

Configure a Linux Virtual machine,

Connect and Terminate Linux virtual instances

Launch a Linux Virtual instance

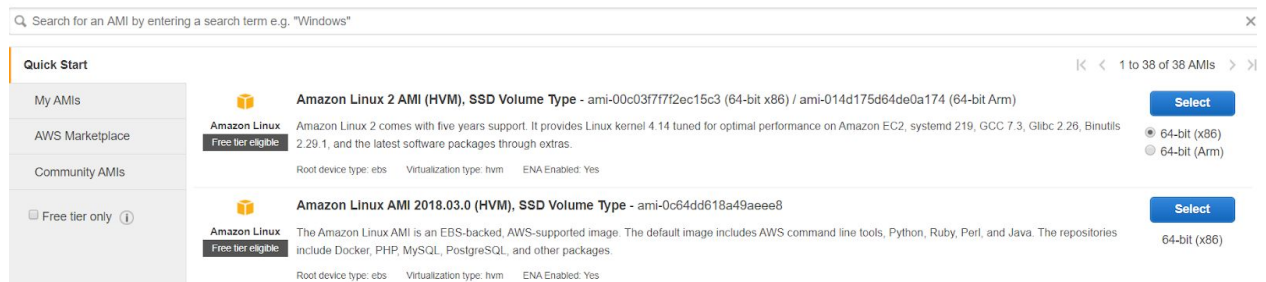
1. Sign-in to the Amazon EC2 Console, enter your username and password
2. Open the AWS Management Console and type *E2* in the search bar and select Amazon EC2 to open the service console.



3. **Launch a new Instance:** Select -- 'Launch Instance' to create and configure the virtual machine.
4. **Configure the new instance:** EC2 Launch Instance Wizard, will help configure and launch the new instance.

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace or you can select one of your own AMIs.



5. In the screen above, options to choose an Amazon Machine Image (AMI) are presented.. AMIs are preconfigured server templates you can use to launch an instance. Each AMI includes an operating system, and can also include applications and application servers.
6. Locate *Amazon Linux AMI* and click Select.

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation [Show/Hide Columns](#)

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro <small>Free tier eligible</small>	1	1	EBS only	-	Low to Moderate	Yes

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Instance Details](#)

- As shown in the screen above, choose an instance type. Instance types comprise of varying combinations of CPU, memory, storage, and networking capacity in order for the user to choose the appropriate mix as per application requirements..
- The default option *t2.micro* is covered within the Free Tier and offers enough compute capacity to handle simple workloads. Click Review and Launch at the bottom of the page.

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. [Learn more about removing existing key pairs from a public AMI.](#)

Choose an existing key pair

Select a key pair

MyKeyPair

☒ I acknowledge that I have access to the selected private key file (MyKeyPair.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) [Launch Instances](#)

- Refer to the screen above: select an existing key pair or create a new key pair. A key pair is used to securely access Linux instances using SSH. AWS stores the public part of the key pair which is just like a house lock and the user downloads and uses the private part of the key pair which is just like a house key.

10. Select 'Create a new key pair' and give it the name MyAWSKeyPair. Next click the Download Key Pair button.
11. Download the MyAWSKeyPair key, and store in a secure location. The instances cannot be accessed if the keypair is lost. Anyone who gets access to the key, will have access to the instance.
12. In windows save the key pair in your user directory in a sub-directory called .ssh (ex. C:\user\{yourusername}\.ssh\MyAWSKeyPair.pem).
13. Once the key pair is stored, click on Launch Instance in order to start the Linux instance.

Your instances are now launching
 The following instance launches have been initiated: [i-0ed5c911a3d83e18e](#) [Hide launch log](#)

Creating security groups	Successful (sg-0e228a57d48d9a624)
Authorizing inbound rules	Successful
Initiating launches	Successful
Launch initiation complete	

Get notified of estimated charges
 Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

Click View Instances on the next screen to view your instances and see the status of the instance you have just started.

14. Next the *Instance State* column on your instance will change to "*running*" and a Public IP address will be shown. The Public IP address of the AWS instance, is used to connect to the instance using SSH in Step 4.

Launch Instance
Connect
Actions

1 to 2 of 2

<input type="checkbox"/>	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP
<input checked="" type="checkbox"/>		i-09b9afad0852e308f	t2.micro	us-east-2b	terminated		None		
<input type="checkbox"/>		i-0ed5c911a3d83e18e	t2.micro	us-east-2b	running	Initializing	None	ec2-3-19-188-85-us-ea...	3.19.188.85

Instance: **i-09b9afad0852e308f** Public DNS: -

Description

Instance ID: i-09b9afad0852e308f

Instance state: terminated

Instance type: t2.micro

Elastic IPs: -

Availability zone: us-east-2b

Security groups: -

Scheduled events: -

AMI ID: amzn2-ami-hvm-2.0.20190823.1-x86_64-gp2 (ami-00c03f7f712ec15c3)

Platform: -

IAM role: -

Public DNS (IPv4): -

IPv4 Public IP: -

IPv6 IPs: -

Private DNS: -

Private IPs: -

Secondary private IPs: -

VPC ID: -

Subnet ID: -

Network interfaces: -

Source/dest. check: False

15. Connect to the Instance using ssh

```

C:\Users\mohan\Downloads>ssh -i MyKeyPair.pem ubuntu@ec2-3-19-188-85.us-east-2.compute.amazonaws.com
The authenticity of host 'ec2-3-19-188-85.us-east-2.compute.amazonaws.com (3.19.188.85)' can't be established.
ECDSA key fingerprint is SHA256:/Fy03CQU60a0Po0PXn8KsT63yjSs8Ml33dT0SyXz2SU.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'ec2-3-19-188-85.us-east-2.compute.amazonaws.com,3.19.188.85' (ECDSA) to the list of known h
sts.
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-1087-aws x86_64)

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

0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-22-156:~$

```

16. Use SSH to connect to your instance. In this case the user name is `ubuntu@ec2-user`, the SSH key is stored in the directory we saved it to in step 3 part d, and the IP address is from step 3 part f. The format is:

17. `ssh -i {full path of your .pem file} ubuntu@ec2-user@{instance IP address}`

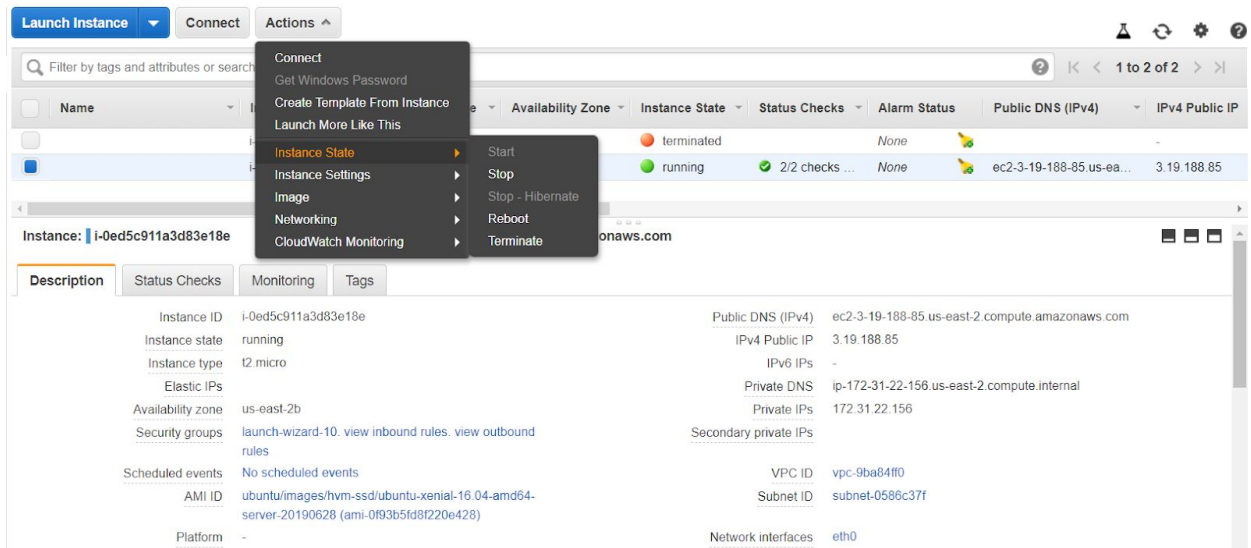
18. Terminating the instance

19. A welcome screen for the instance will be presented and you are now connected to your AWS Linux virtual machine in the cloud.

20. Terminating the instance

21. An instance can be easily terminated from the EC2 console. It is a best practice to terminate instances that are no longer in use and avoid charges.

22. On the EC2 Console, select the box next to the instance and click on the Actions button, navigate to *Instance State*, and click Terminate.



23. To confirm the termination - select Yes, Terminate. This process can take several seconds to complete. Once terminated, the Instance State will change to *terminated* on your EC2 Console.

