

# AWS Setup Guide

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## Installation Notes

edureka!

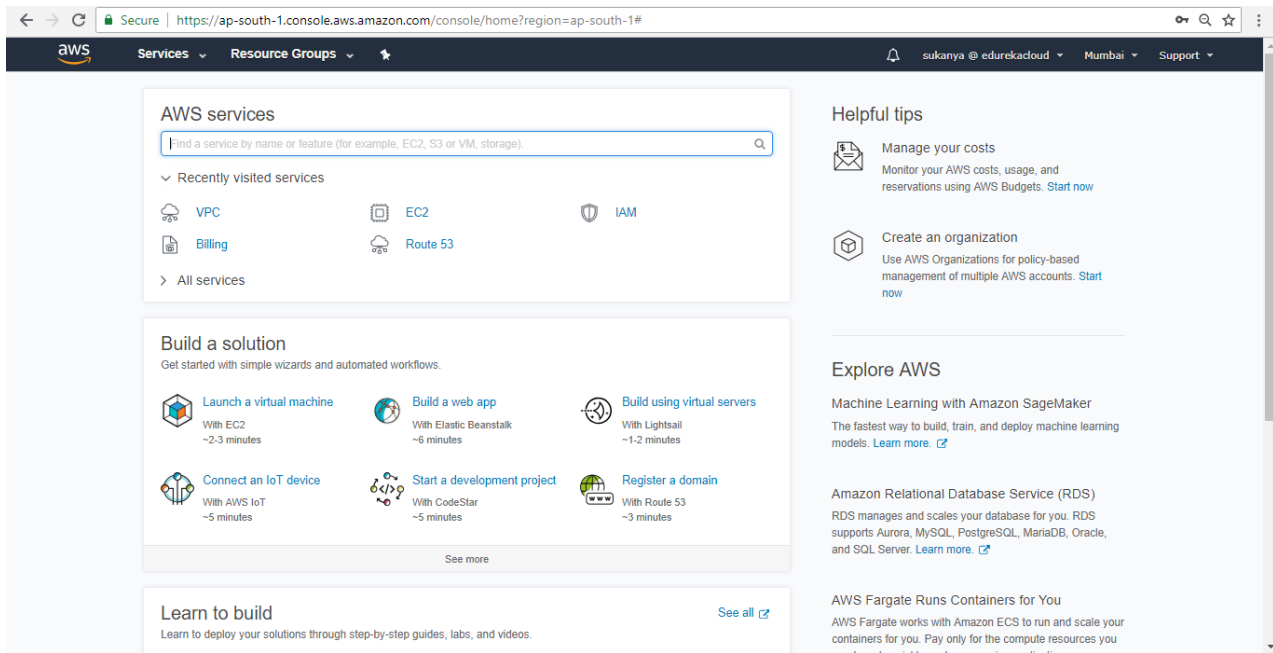
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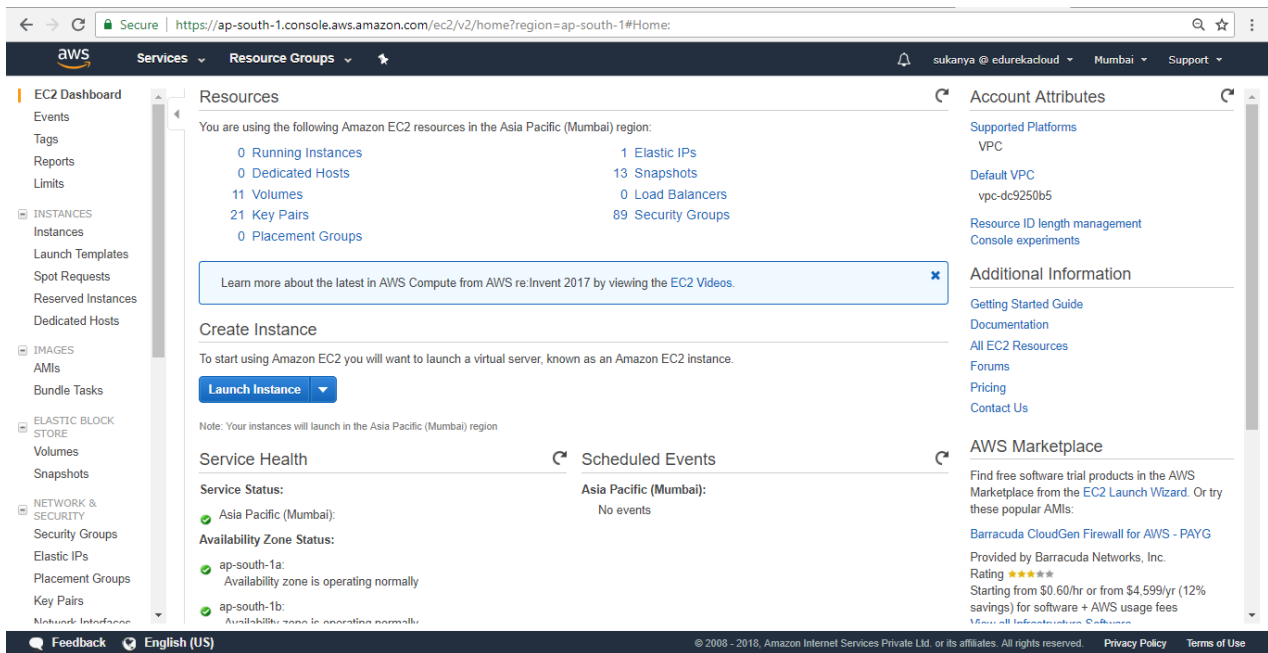
# AWS Setup : Create Instance and connect with putty

**Step 1.** Go to <https://aws.amazon.com/console/> and sign in to the console.

**Step 2.** In the search box, search EC2 and click on it.

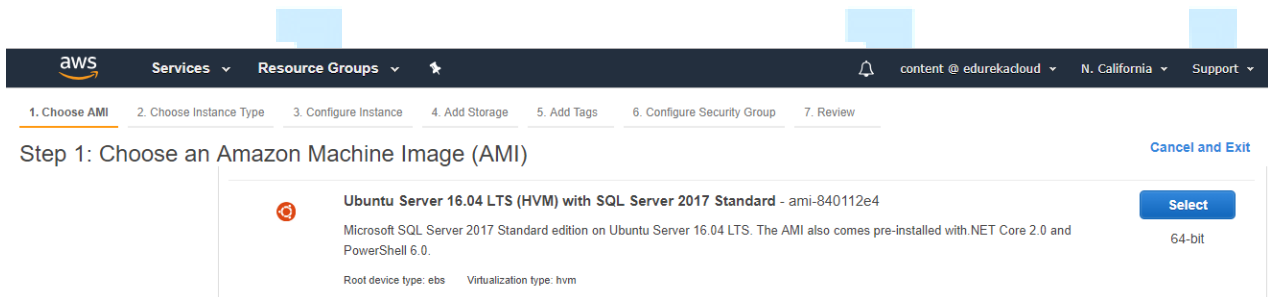


**Step 3.** Click on launch Instance.



The screenshot displays the AWS Management Console for the Asia Pacific (Mumbai) region. The left-hand navigation pane includes sections for EC2 Dashboard, INSTANCES, IMAGES, ELASTIC BLOCK STORE, and NETWORK & SECURITY. The main area shows a summary of resources: 0 Running Instances, 0 Elastic IPs, 0 Dedicated Hosts, 13 Snapshots, 11 Volumes, 0 Load Balancers, 21 Key Pairs, 89 Security Groups, and 0 Placement Groups. A 'Create Instance' button is prominently displayed. The right-hand pane shows account attributes and marketplace offerings.

#### Step 4. Select Ubuntu Server 16.04



This screenshot shows the 'Step 1: Choose an Amazon Machine Image (AMI)' screen in the AWS console. A progress bar at the top indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. The selected AMI is 'Ubuntu Server 16.04 LTS (HVM) with SQL Server 2017 Standard - ami-840112e4'. The description states: 'Microsoft SQL Server 2017 Standard edition on Ubuntu Server 16.04 LTS. The AMI also comes pre-installed with .NET Core 2.0 and PowerShell 6.0.' The 'Select' button is highlighted in blue.

#### Step 5. Keep it as default (Don't do any changes here )

← → ↻ Secure | <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:>

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### 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 (GiB)	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 Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	General purpose	m5.large	2	8	EBS only	Yes	1 In to 10 Gbps	Yes

Cancel Previous **Review and Launch** Next: Configure Instance Details

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## Step 6. Keep settings default

← → ↻ Secure | <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:>

aws Services Resource Groups

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances 1 Launch into Auto Scaling Group

Purchasing option ☐ Request Spot instances

Network vpc-dc9250b5 (default) Create new VPC

Subnet No preference (default subnet in any Availability Zone) Create new subnet

Auto-assign Public IP Use subnet setting (Enable)

Placement group ☐ Add instance to placement group.

IAM role None Create new IAM role

Shutdown behavior Stop

Enable termination protection ☐ Protect against accidental termination

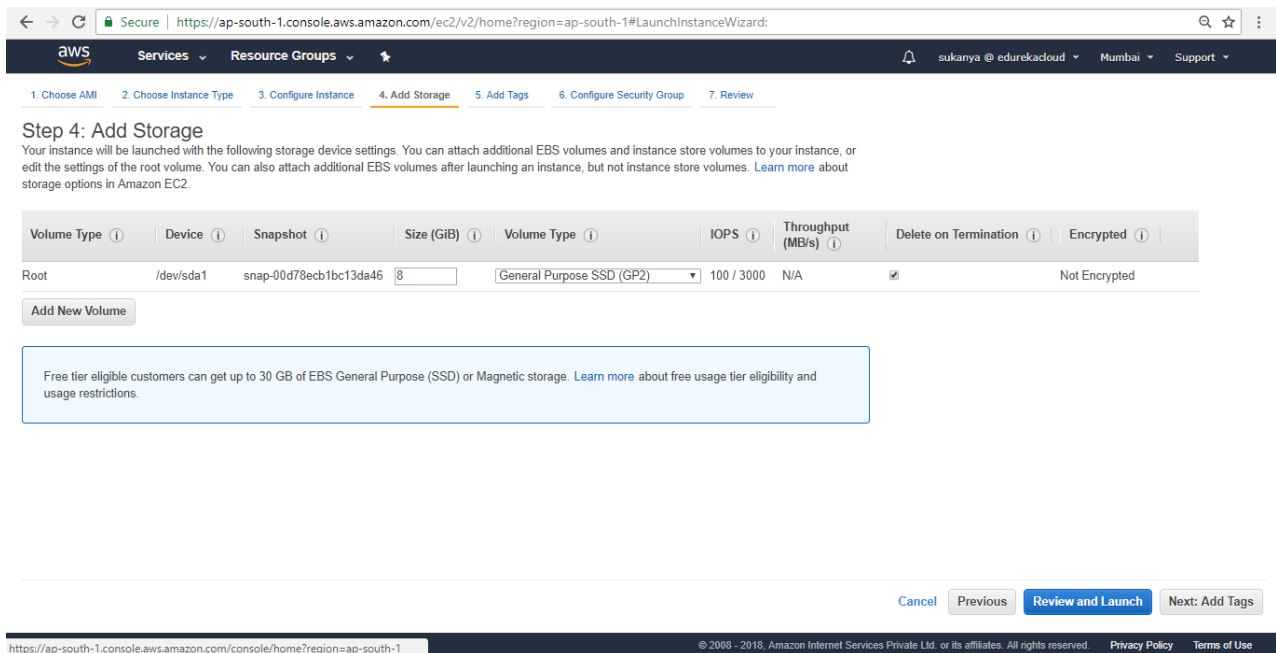
Monitoring ☐ Enable CloudWatch detailed monitoring  
Additional charges apply.

Tenancy Shared - Run a shared hardware instance  
Additional charges will apply for dedicated tenancy.

Cancel Previous **Review and Launch** Next: Add Storage

<https://ap-south-1.console.aws.amazon.com/console/home?region=ap-south-1> © 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use

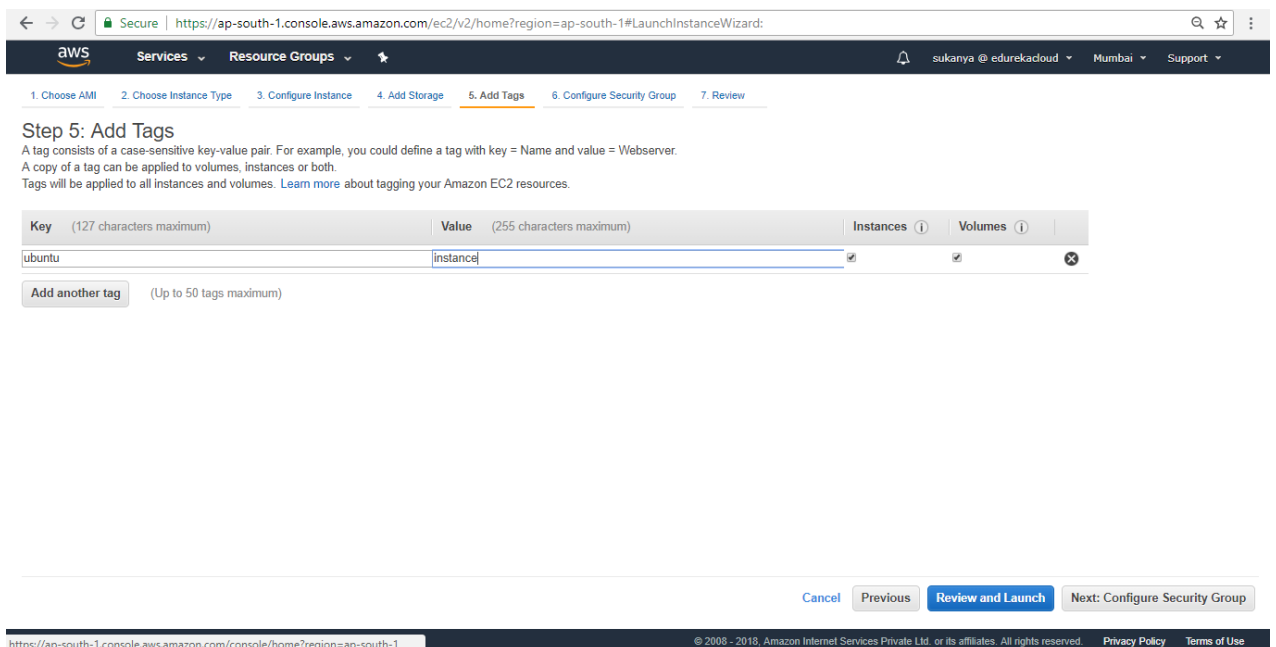
## Step 7. Keep settings default



The screenshot shows the AWS Management Console at the 'Add Storage' step of the EC2 instance launch wizard. The breadcrumb trail indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (current), 5. Add Tags, 6. Configure Security Group, and 7. Review. The main heading is 'Step 4: Add Storage'. Below it, a paragraph explains that the instance will be launched with default storage settings and that additional EBS volumes can be attached. A table lists the default storage configuration for the root volume: Volume Type is 'General Purpose SSD (GP2)', Device is '/dev/sda1', Snapshot is 'snap-00d78ecb1bc13da46', Size is '8 GiB', IOPS is '100 / 3000', Throughput is 'N/A', Delete on Termination is checked, and Encrypted is 'Not Encrypted'. There is an 'Add New Volume' button. A blue box contains a note about free tier eligibility. At the bottom, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Add Tags'.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
General Purpose SSD (GP2)	/dev/sda1	snap-00d78ecb1bc13da46	8	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

## Step 8. Add tags/Label



The screenshot shows the AWS Management Console at the 'Add Tags' step of the EC2 instance launch wizard. The breadcrumb trail indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags (current), 6. Configure Security Group, and 7. Review. The main heading is 'Step 5: Add Tags'. Below it, a paragraph explains that a tag consists of a case-sensitive key-value pair and that tags will be applied to all instances and volumes. A table lists the default tag configuration: Key is 'ubuntu', Value is 'instance', Instances is checked, and Volumes is checked. There is an 'Add another tag' button. At the bottom, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Configure Security Group'.

Key	Value	Instances	Volumes
ubuntu	instance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Step 9. Add security group

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group ☐ Select an existing security group

Security group name:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Anywhere [0.0.0.0/0::/0]	e.g. SSH for Admin Desktop
HTTP	TCP	80	Anywhere [0.0.0.0/0::/0]	e.g. SSH for Admin Desktop

Add Rule

**Warning**  
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

[Cancel](#) [Previous](#) [Review and Launch](#)

## Step 10. Create a new pair and click download key. key name : Hello\_putty.pem

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click Launch to assign a key pair to your instance and complete the launch process.

**Improve your instances' security.** Your instances may be accessible from any IP address. You can also open additional ports in your security groups.

**AMI Details**  
Ubuntu Server 14.04 LTS (HVM), SSD Volume Type  
Free tier eligible  
Root Device Type: ebs Virtualization type: hvm

**Instance Type**  
Instance Type: t2.micro ECU: Variable vCPUs: 1

**Security Groups**

**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](#).

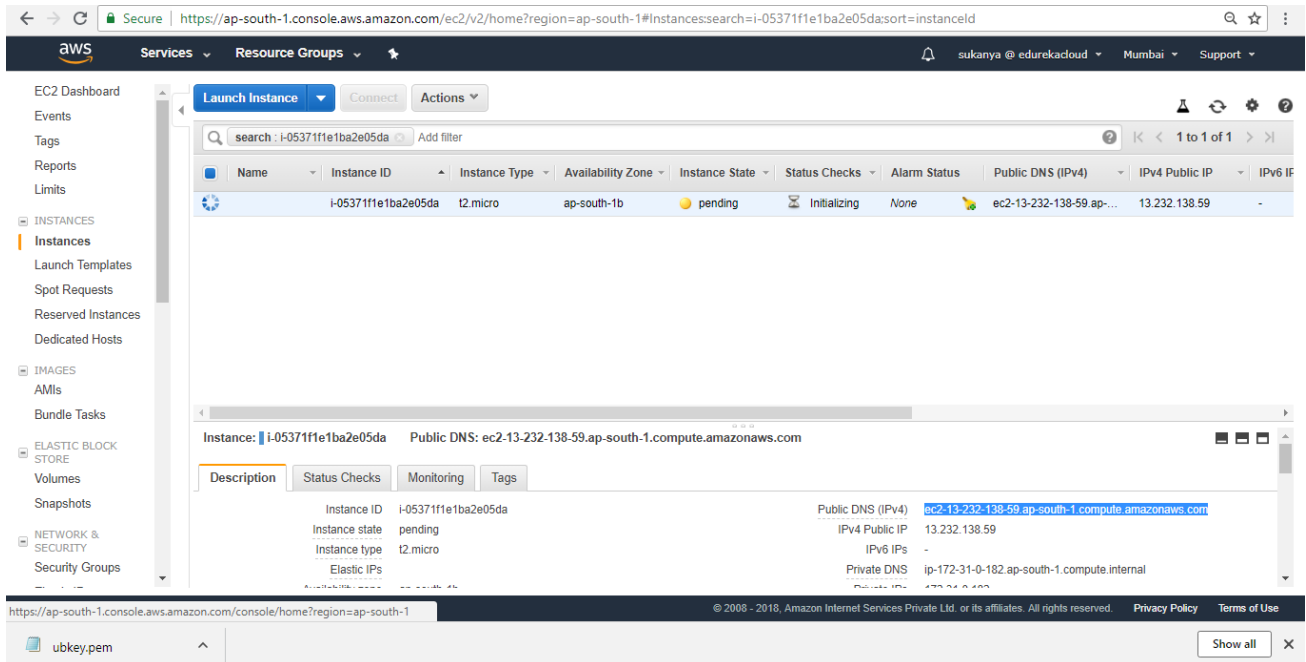
Create a new key pair  
Key pair name:   
[Download Key Pair](#)

You have to download the private key file (\*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.

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

[Feedback](#) [English \(US\)](#)

[ubkey.pem](#) [Show all](#)

**Step 11.** Connect to instance using Public DNS.

The screenshot displays the AWS Management Console for the ap-south-1 region. The left sidebar shows navigation options like EC2 Dashboard, INSTANCES, IMAGES, ELASTIC BLOCK STORE, and NETWORK & SECURITY. The main content area shows a list of EC2 instances. One instance, i-05371f1e1ba2e05da, is highlighted. Below the list, the details for this instance are shown, including its Public DNS (IPv4) as ec2-13-232-138-59.ap-south-1.compute.amazonaws.com and its IPv4 Public IP as 13.232.138.59.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IP
	i-05371f1e1ba2e05da	t2.micro	ap-south-1b	pending	Initializing	None	ec2-13-232-138-59.ap-south-1.compute.amazonaws.com	13.232.138.59	-

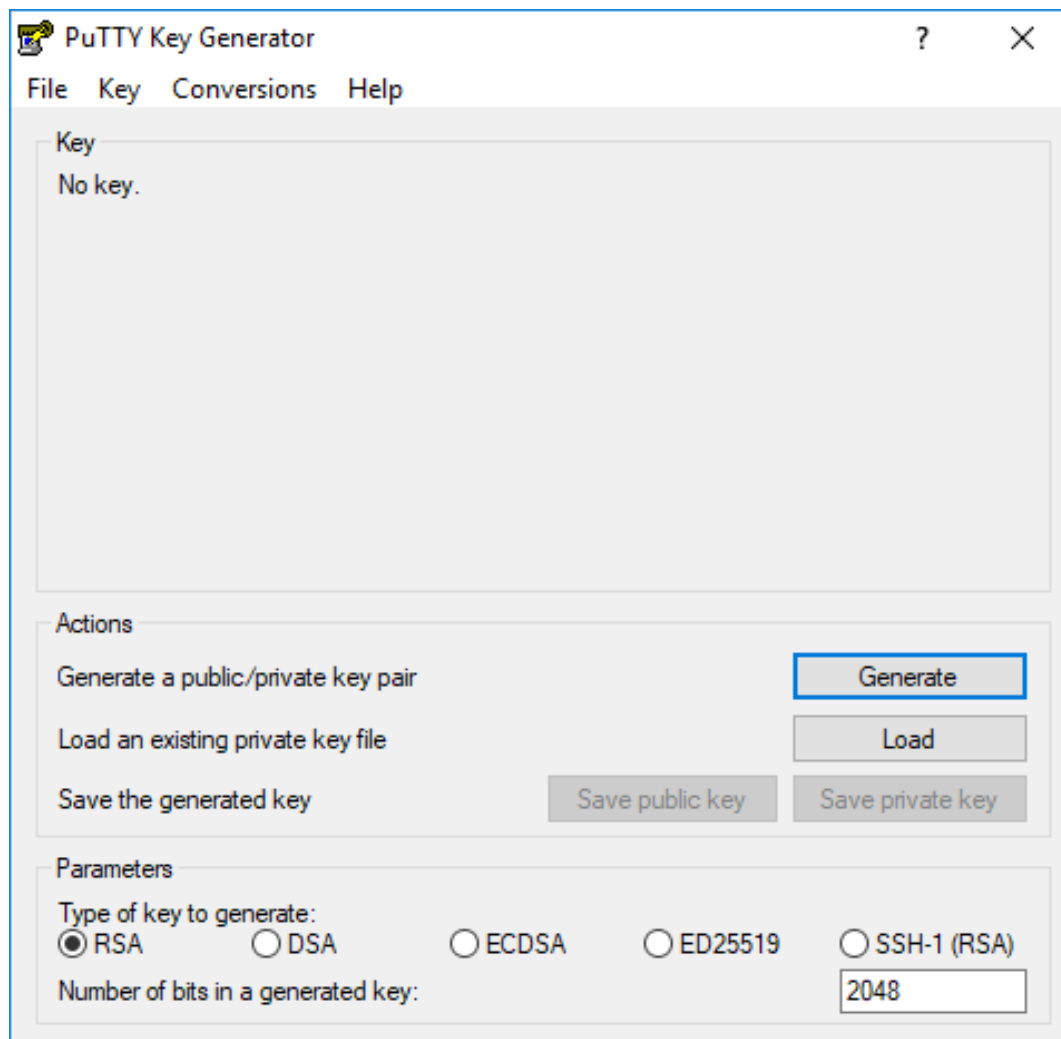
  

Instance: i-05371f1e1ba2e05da		Public DNS: ec2-13-232-138-59.ap-south-1.compute.amazonaws.com	
Description	Status Checks	Monitoring	Tags
Instance ID	i-05371f1e1ba2e05da	Public DNS (IPv4)	ec2-13-232-138-59.ap-south-1.compute.amazonaws.com
Instance state	pending	IPv4 Public IP	13.232.138.59
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-172-31-0-182.ap-south-1.compute.internal

**Step 12.** Download Puttygen from the below link : (If you have 64-bit OS then click on 64-bit MSI)

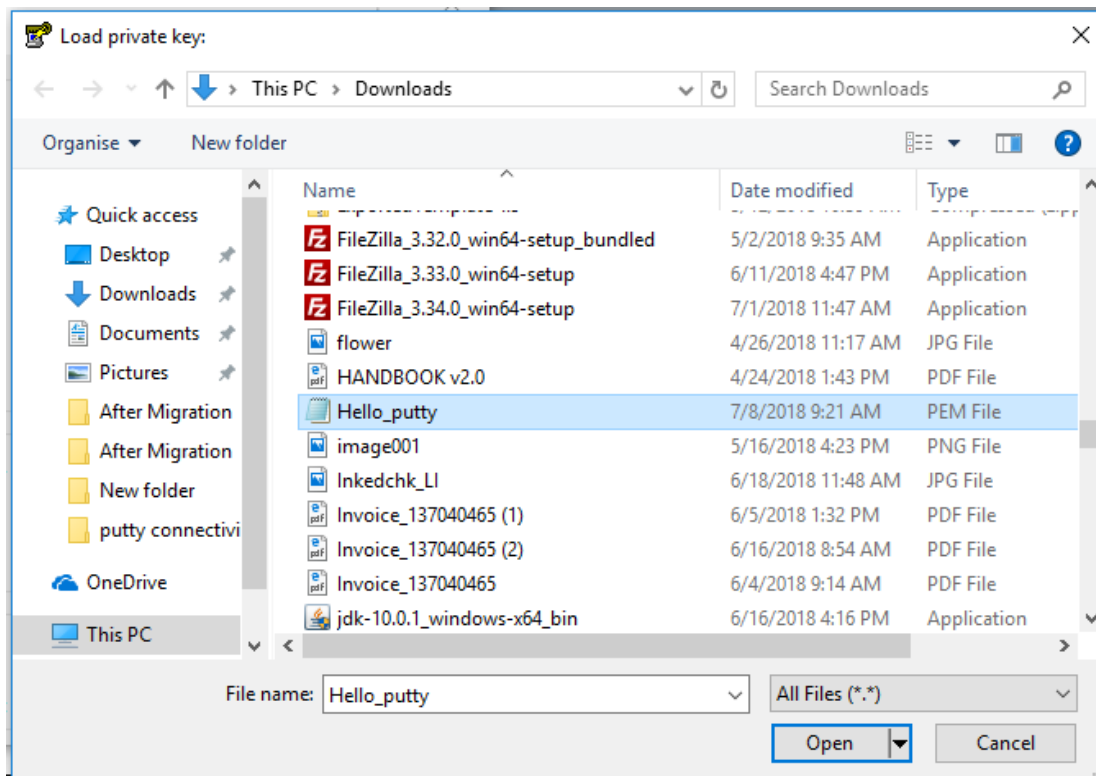
<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

**Step 13.** Click load in Putty Key Generator. Select the .pem file

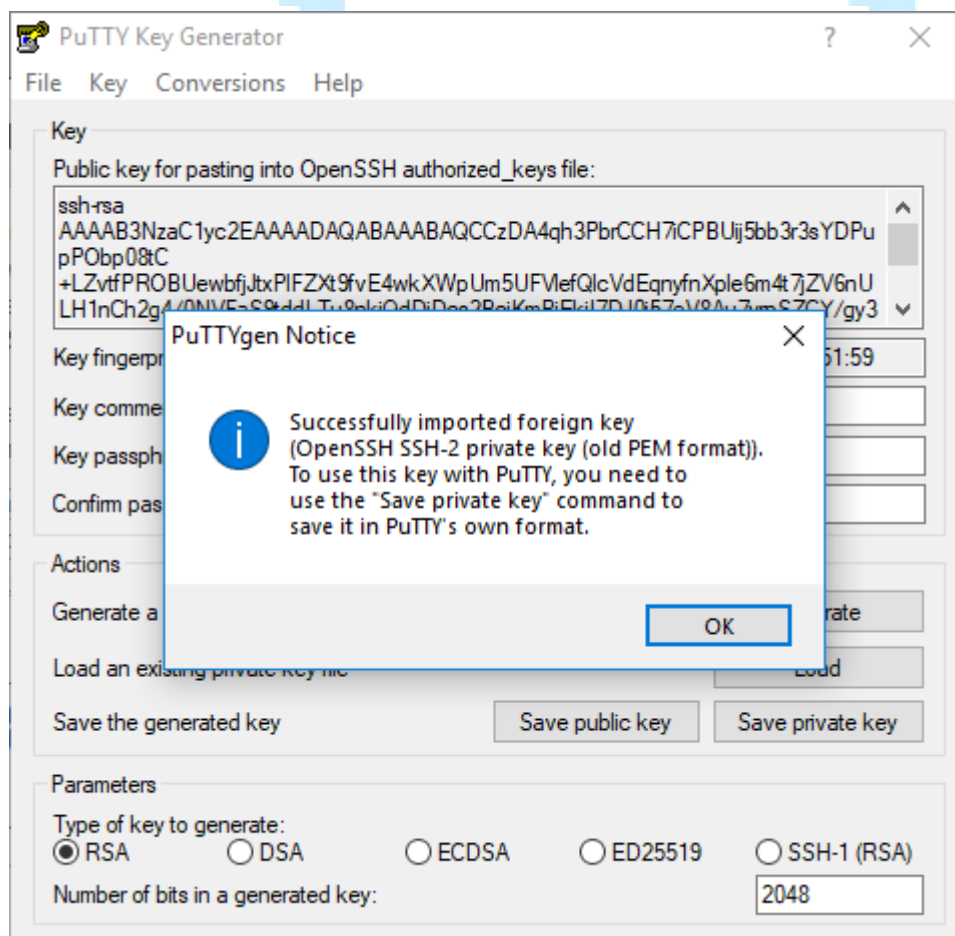


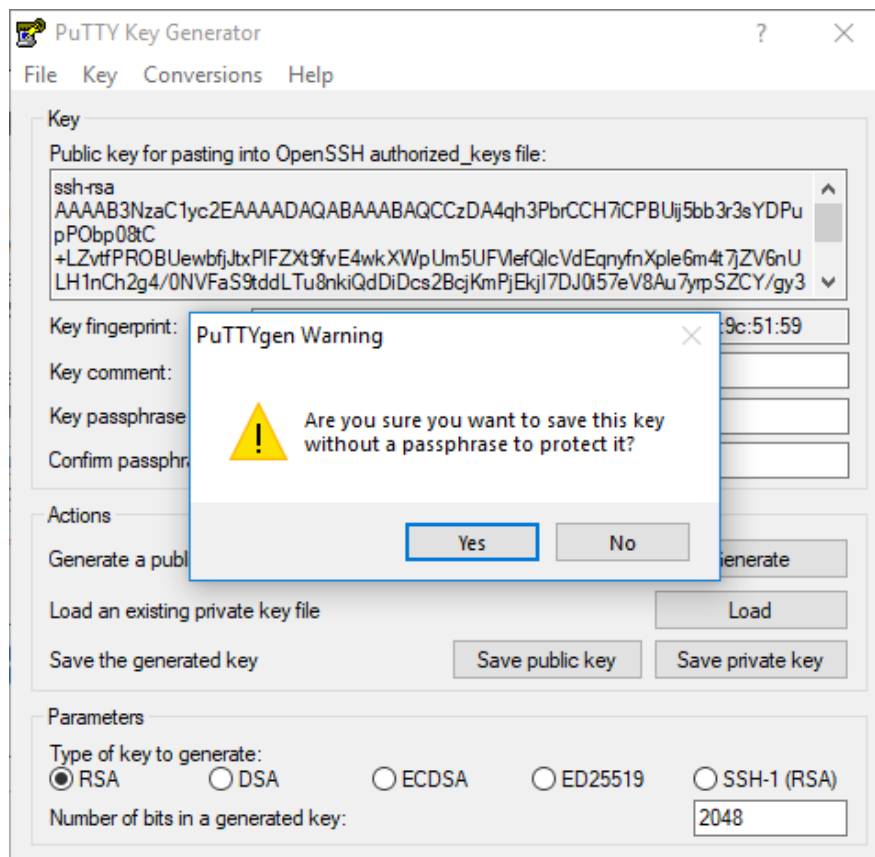
**Step 14.** After that, follow the below steps:



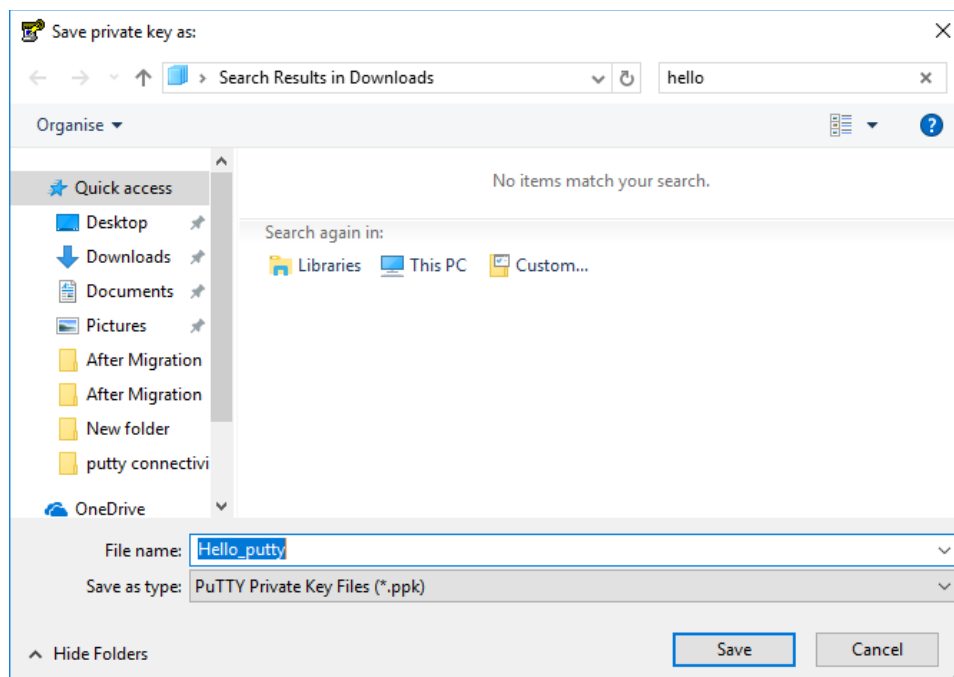


click on Save private key

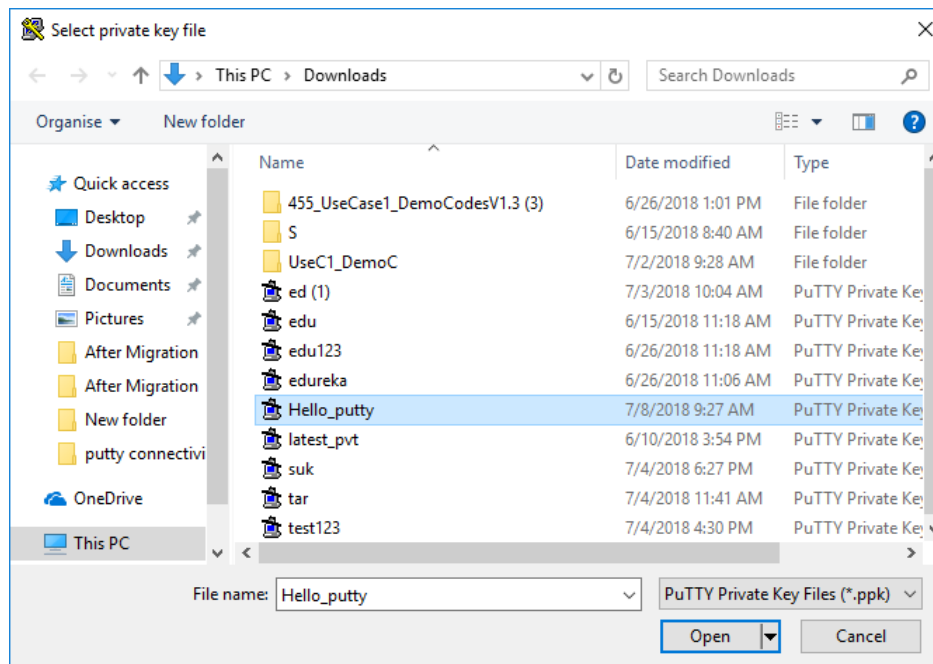
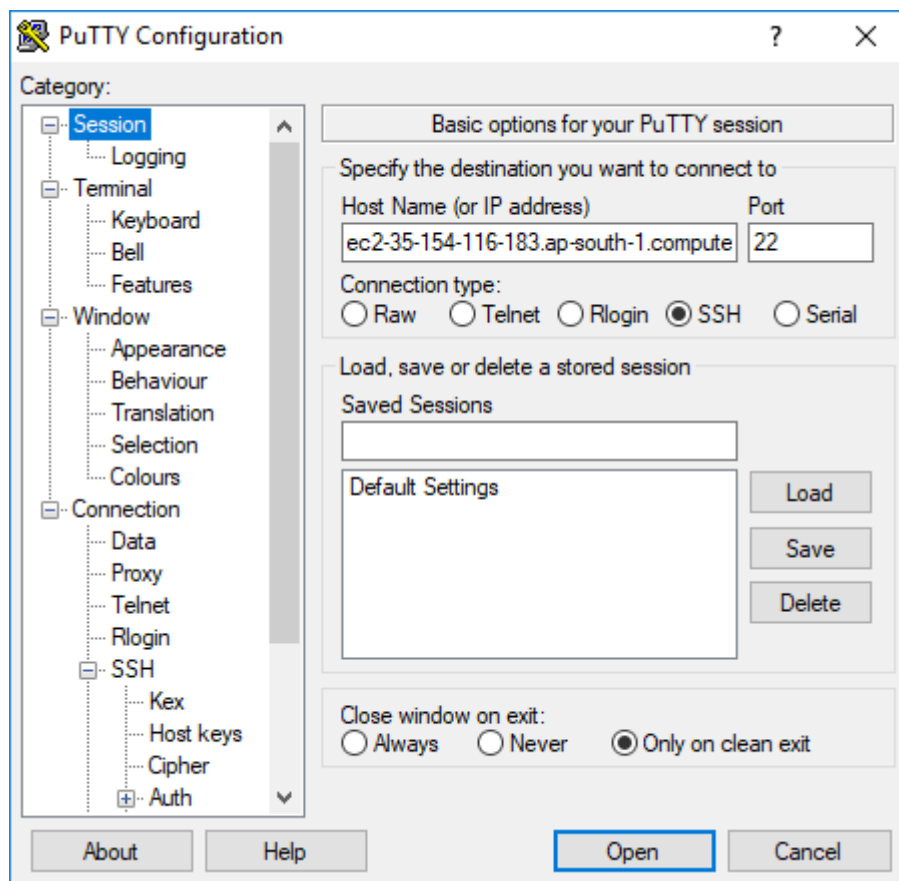


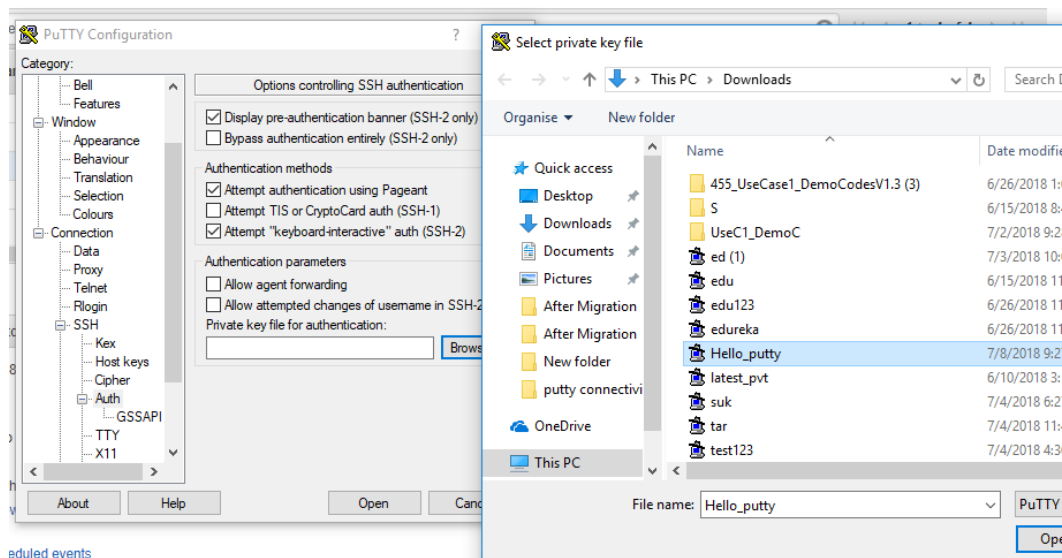


**Step 15.** Save the file with .ppk extension



**Step 16.** Go to Putty. In the host name, give Public Dns. Now go to ssh->auth and add the Hello\_putty.ppk file





### Step 17. Give username: ubuntu

```
ubuntu@ip-172-31-12-202: ~  
System information as of Sun Jul  8 04:27:16 UTC 2018  
  
System load: 0.0          Memory usage: 5%    Processes:      82  
Usage of /: 10.2% of 7.74GB  Swap usage:  0%    Users logged in: 0  
  
Graph this data and manage this system at:  
https://landscape.canonical.com/  
  
Get cloud support with Ubuntu Advantage Cloud Guest:  
http://www.ubuntu.com/business/services/cloud  
  
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.  
  
ubuntu@ip-172-31-12-202:~$
```

**Step 18.** Now, you can install git, Jenkins, puppet, docker, ansible, Kubernetes, Nagios (all DevOps tools) manually with the help of installation document which are provided you in your LMS.