

# AWS Setup Guide

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## Installation Notes

edureka!

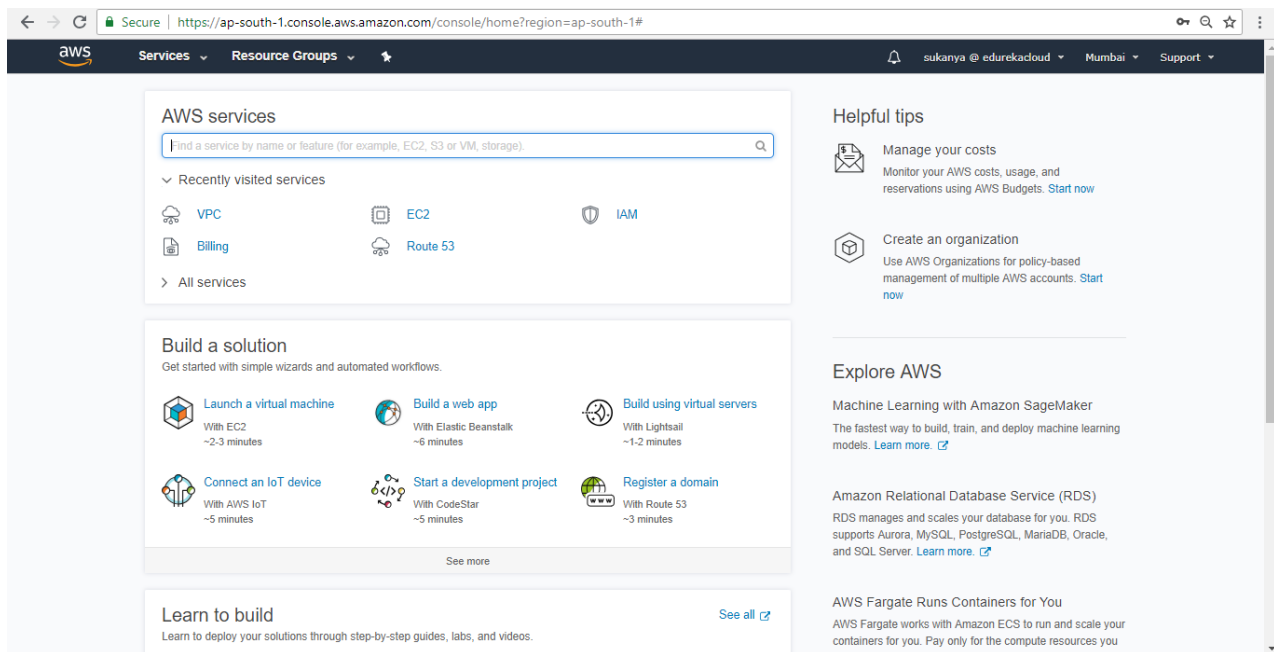
**edureka!**

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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 shows the AWS Management Console for the Asia Pacific (Mumbai) region. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES, IMAGES, ELASTIC BLOCK STORE, and NETWORK & SECURITY. The main content area is titled 'Resources' and lists various EC2 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. Below this is a 'Create Instance' section with a 'Launch Instance' button. The 'Service Health' section shows the status of the Asia Pacific (Mumbai) region and its availability zones. The right sidebar contains 'Account Attributes' and 'AWS Marketplace' information.

#### Step 4. Select Ubuntu Server 16.04

The screenshot shows the 'Step 1: Choose an Amazon Machine Image (AMI)' step of the EC2 Instance Wizard. The wizard is titled 'Step 1: Choose an Amazon Machine Image (AMI)' and has a 'Cancel and Exit' button. The main content area shows a list of AMIs. The selected AMI is 'Ubuntu Server 16.04 LTS (HVM) with SQL Server 2017 Standard - ami-840112e4'. The description of the AMI is: '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 root device type is 'ebs' and the virtualization type is 'hvm'. The 'Select' button is highlighted.

#### 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 (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 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 Gbit/s	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

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## Step 7. 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 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

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

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Tags](#)

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## Step 8. Add tags/Label

← → ↻ 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 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. A copy of a tag can be applied to volumes, instances or both. Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (127 characters maximum)	Value (255 characters maximum)	Instances	Volumes
ubuntu	instance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[Add another tag](#) (Up to 50 tags maximum)

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Security Group](#)

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## 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

Instance Type

Instance Type	ECUs	vCPUs
t2.micro	Variable	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

ubkey

Download Key Pair

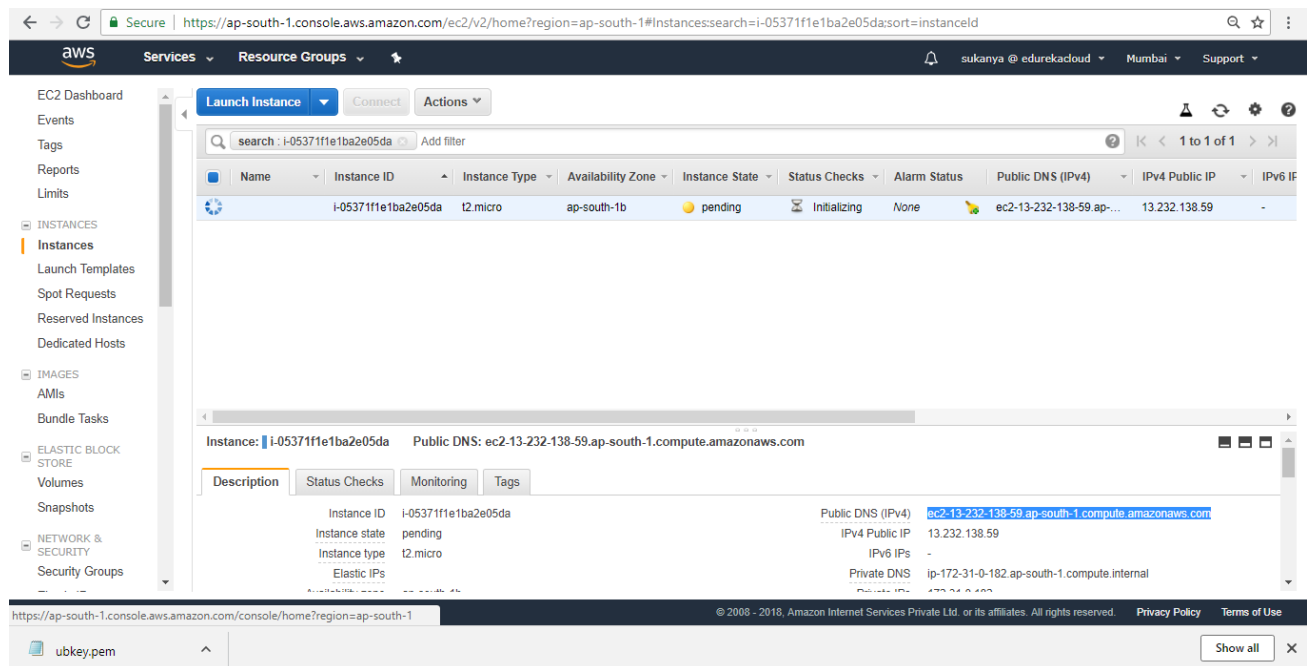
You have to download the private key file (\*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.

Cancel Launch Instances

Feedback English (US)

ubkey.pem

Show all

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

The screenshot shows the AWS Management Console for the ap-south-1 region. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES, IMAGES, ELASTIC BLOCK STORE, and NETWORK & SECURITY. The main content area displays a table of EC2 instances. A search filter is applied: i-05371f1e1ba2e05da. The table shows one instance with the following details:

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-...	13.232.138.59	-

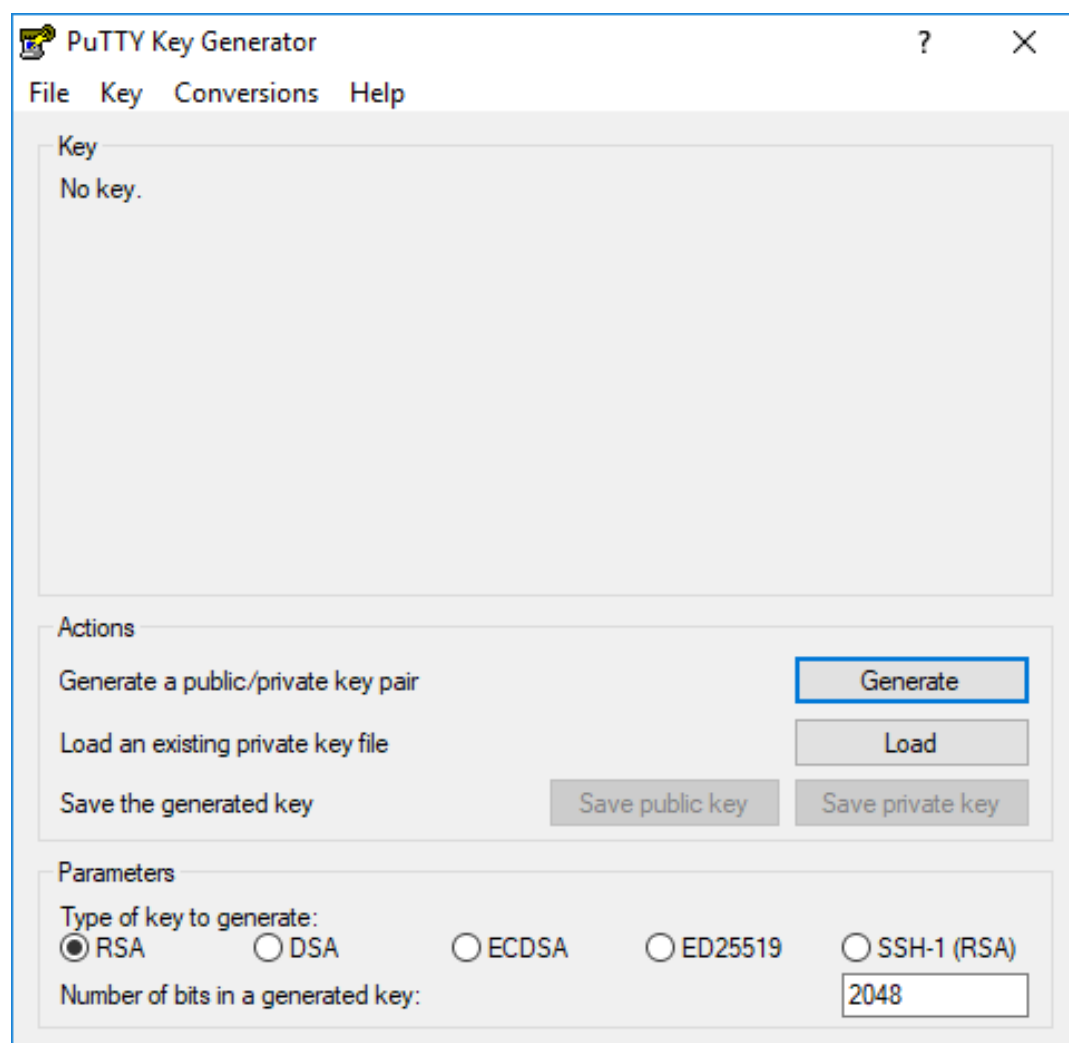
Below the table, the details for the selected instance are shown. The Public DNS is: ec2-13-232-138-59.ap-south-1.compute.amazonaws.com. The instance details are as follows:

Instance: i-05371f1e1ba2e05da		Public DNS: ec2-13-232-138-59.ap-south-1.compute.amazonaws.com	
<b>Description</b>			
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)

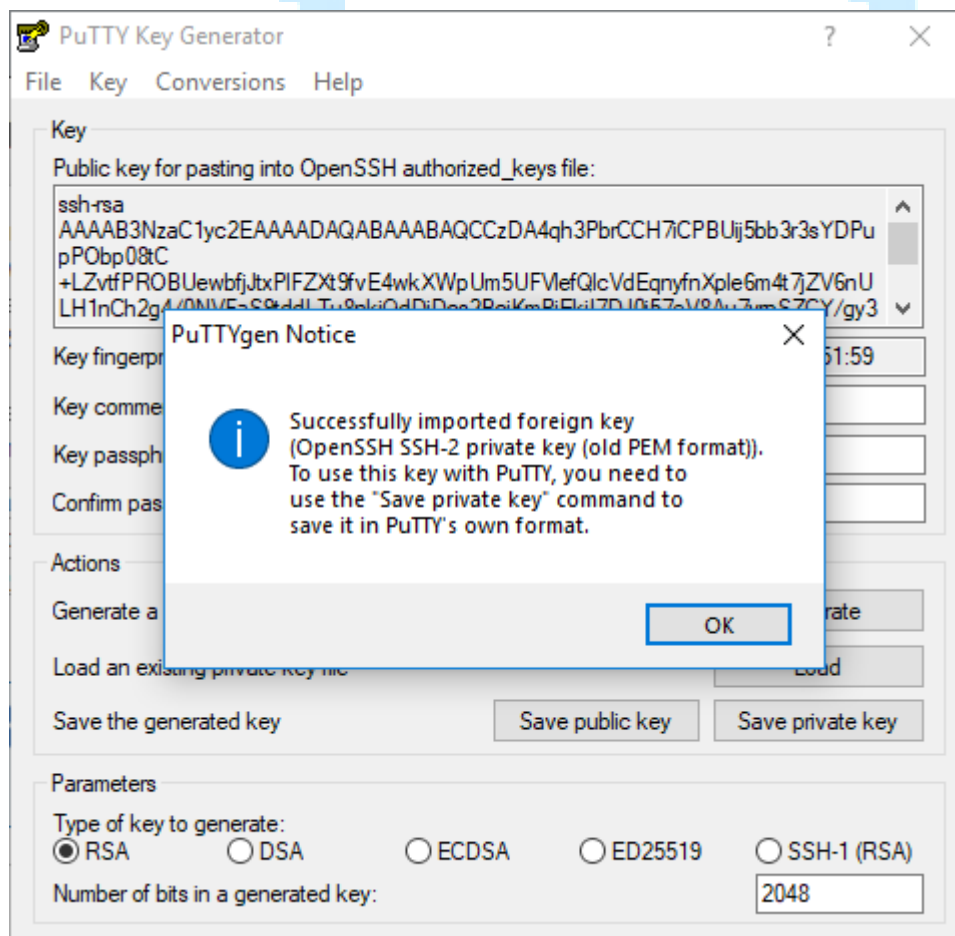
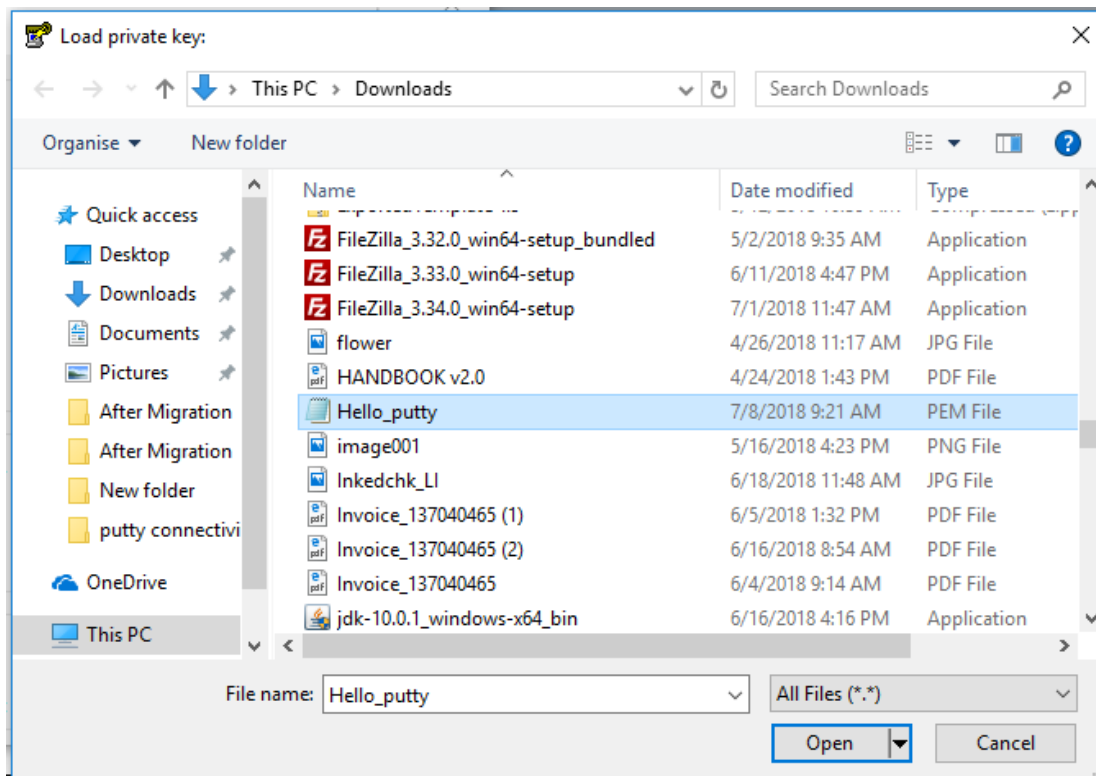
<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

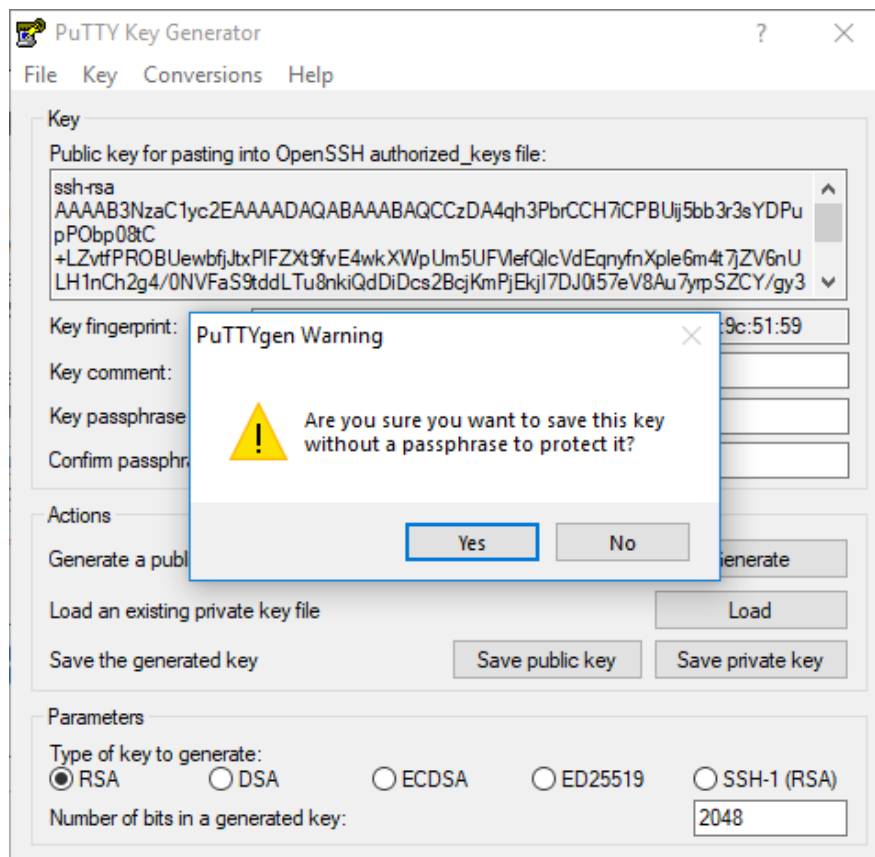
**Step 13.** Click load in Putty Key Generator. Select the .pem file



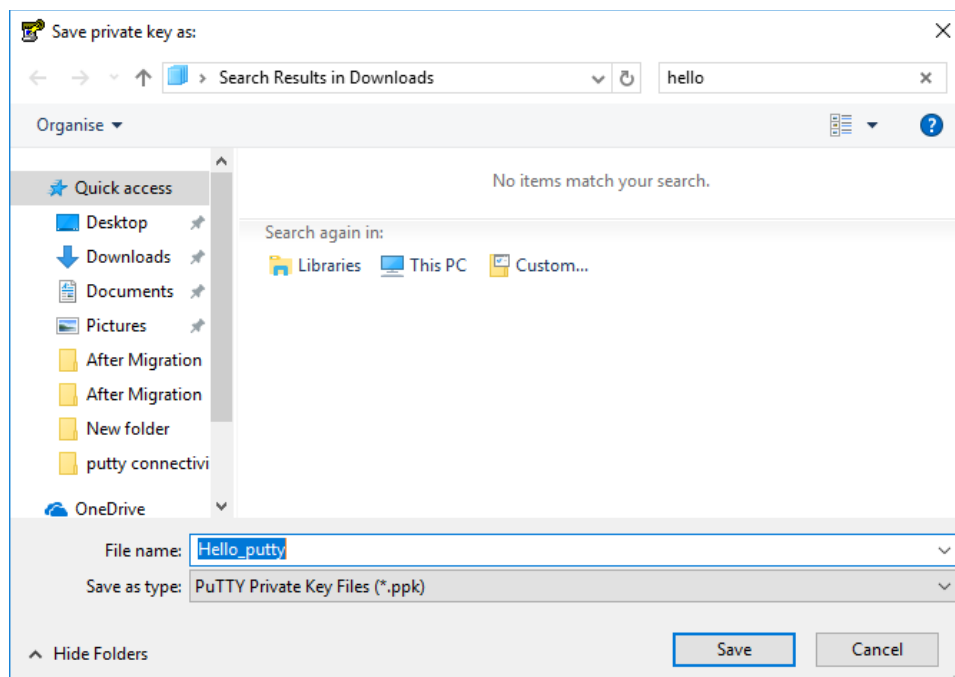
**Step 14.** After that, follow the below steps:



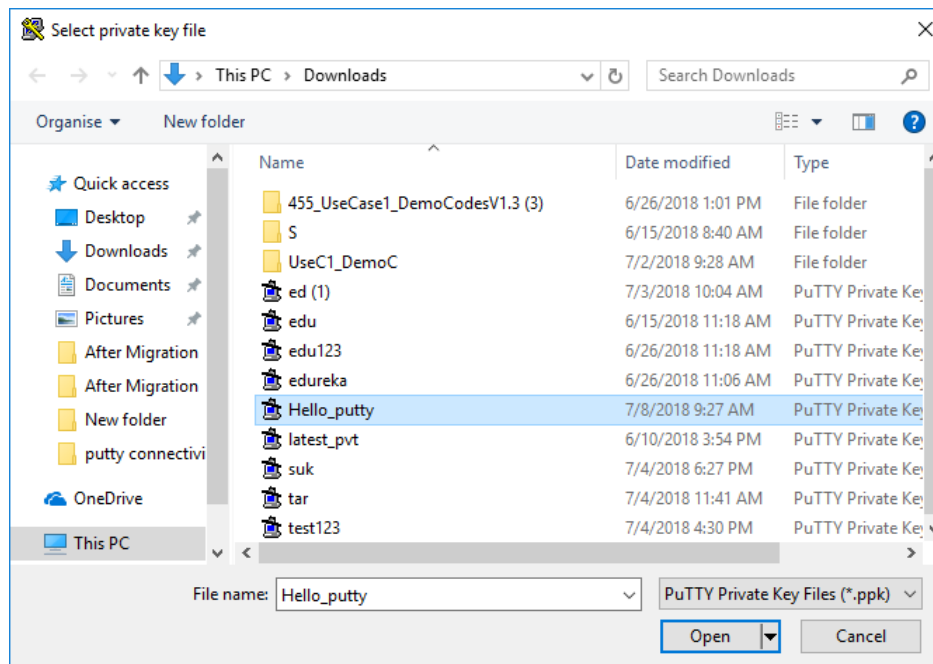
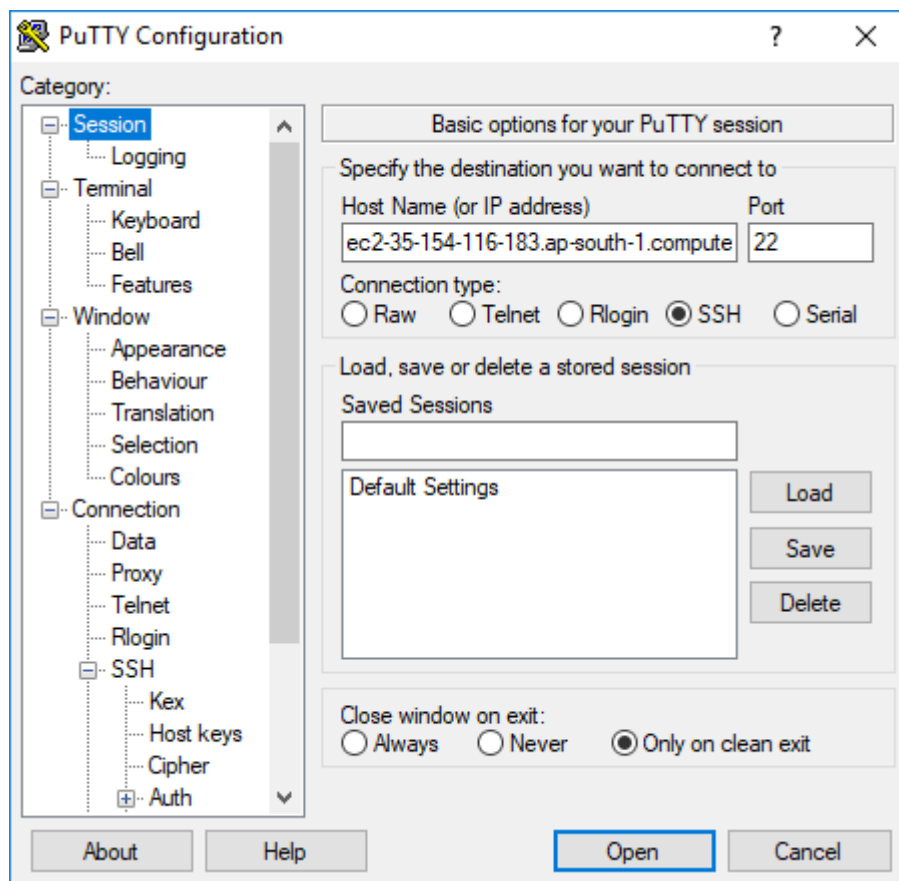


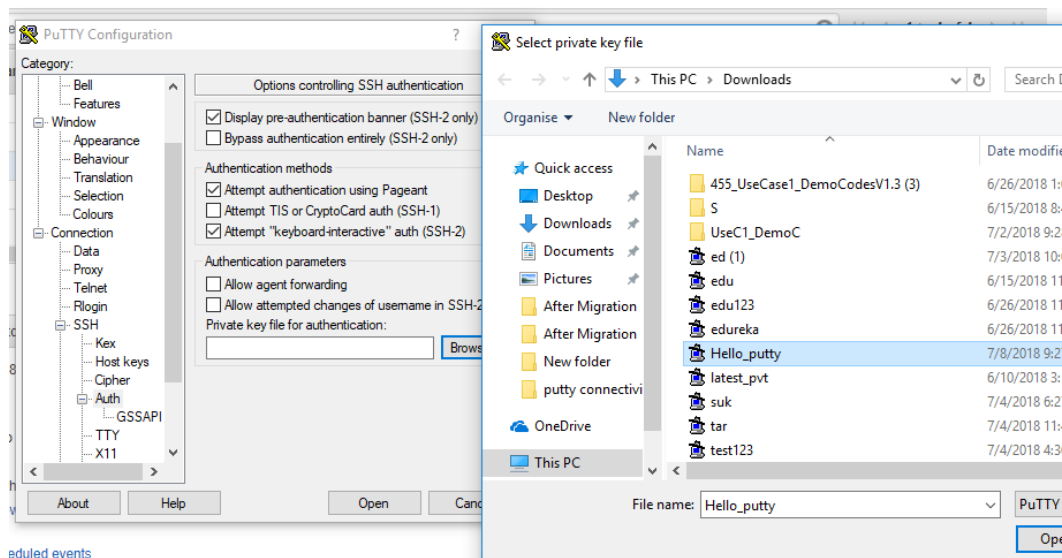


**Step 15.** Save the file with .ppk extention



**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.