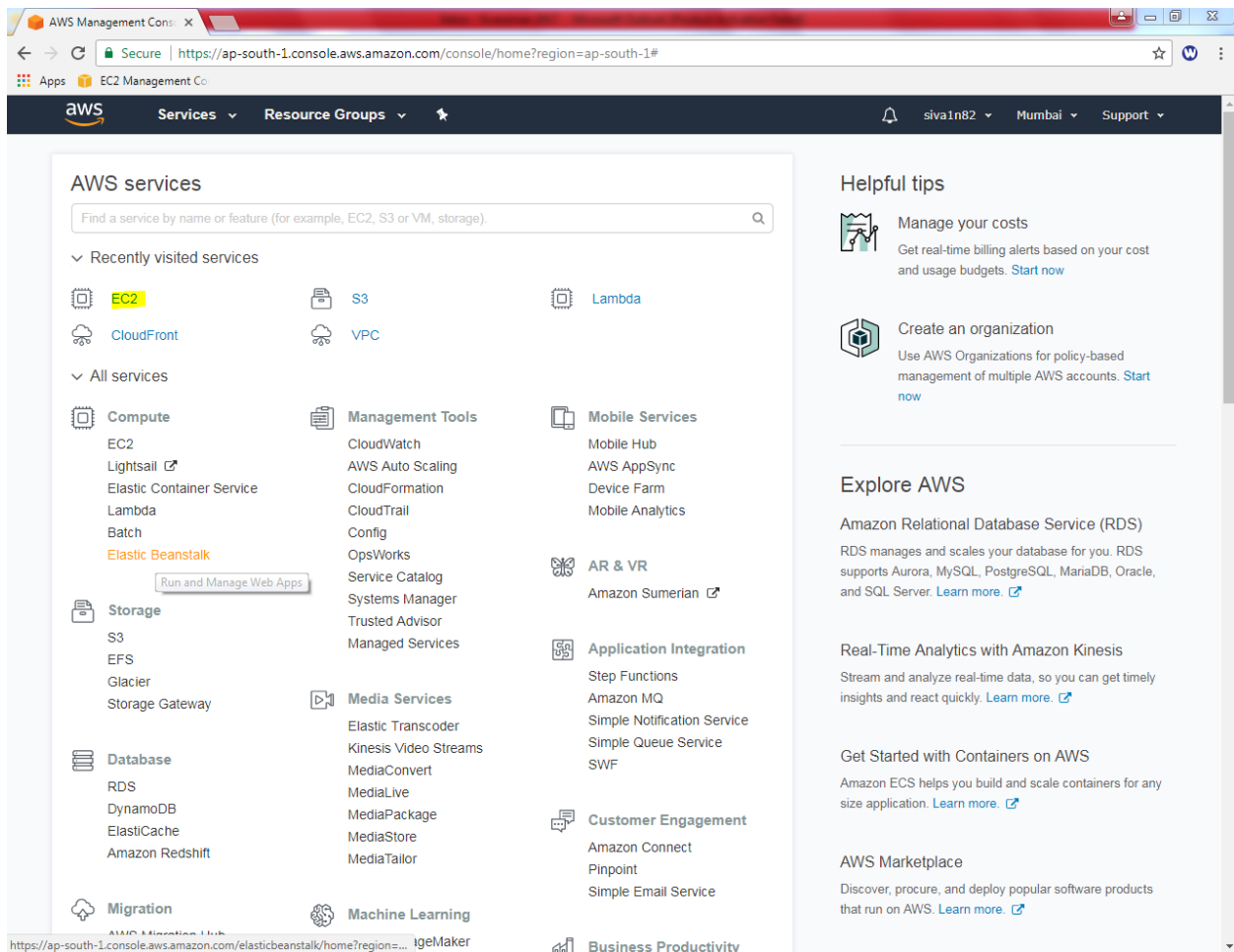


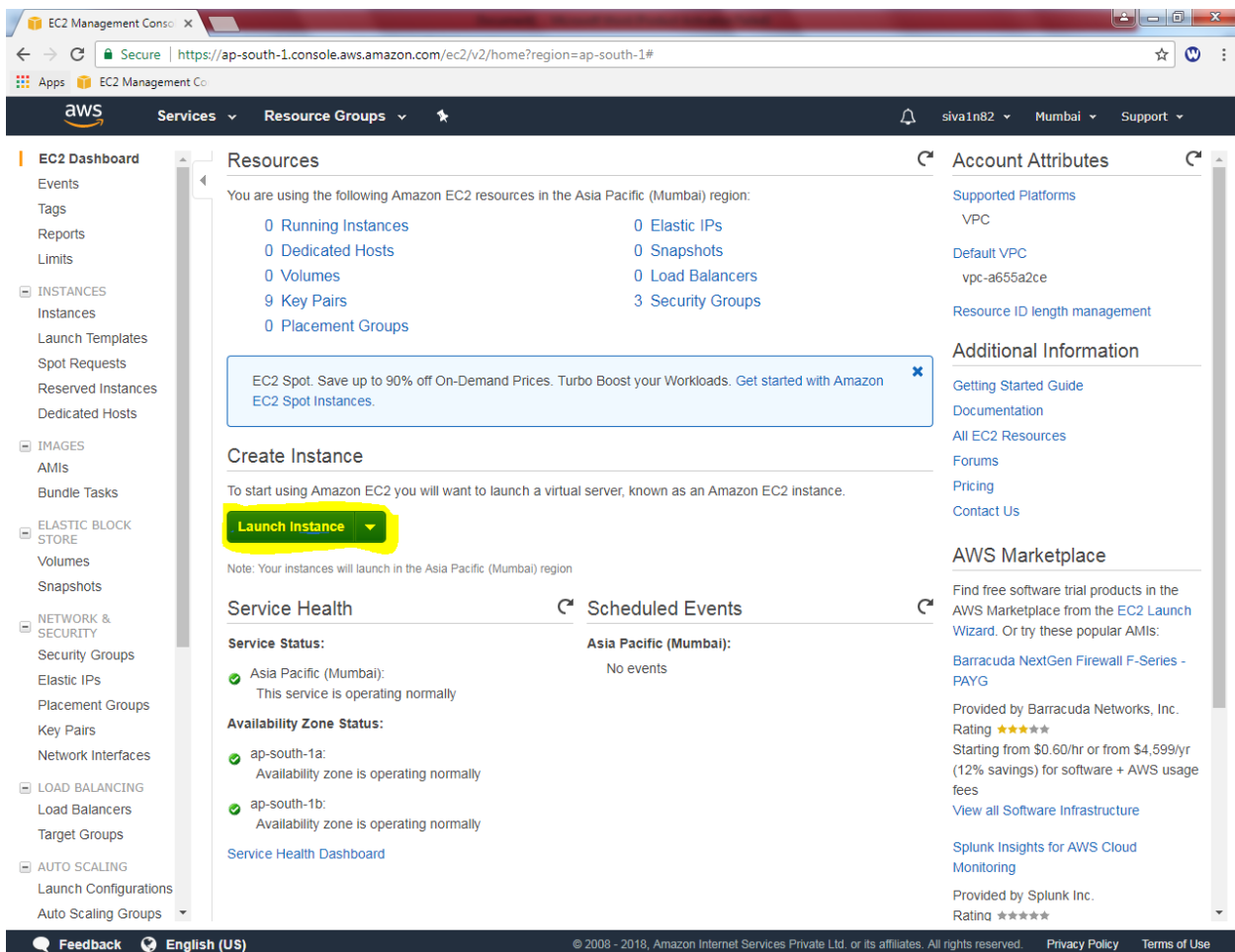
Lab3

Configuring Apache Web server in Linux instance – for Beginners

While logged in to AWS management console, Kindly click “EC2” service.



Click “Launch Instance”.



The screenshot shows the AWS Management Console for the EC2 service in the Asia Pacific (Mumbai) region. The left-hand navigation pane lists various EC2-related services, with 'Launch Instance' highlighted in yellow under the 'INSTANCES' section. The main content area displays the 'Resources' section, showing a summary of EC2 resources: 0 Running Instances, 0 Elastic IPs, 0 Dedicated Hosts, 0 Snapshots, 0 Volumes, 0 Load Balancers, 9 Key Pairs, 3 Security Groups, and 0 Placement Groups. Below this, there is a 'Create Instance' section with a 'Launch Instance' button. The 'Service Health' section shows that the Asia Pacific (Mumbai) service is operating normally. The 'Scheduled Events' section shows no events. The right-hand pane displays 'Account Attributes' and 'Additional Information'.

EC2 Management Console

Services Resource Groups

EC2 Dashboard

Events

Tags

Reports

Limits

INSTANCES

Instances

Launch Templates

Spot Requests

Reserved Instances

Dedicated Hosts

IMAGES

AMIs

Bundle Tasks

ELASTIC BLOCK STORE

Volumes

Snapshots

NETWORK & SECURITY

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

LOAD BALANCING

Load Balancers

Target Groups

AUTO SCALING

Launch Configurations

Auto Scaling Groups

Resources

You are using the following Amazon EC2 resources in the Asia Pacific (Mumbai) region:

- 0 Running Instances
- 0 Elastic IPs
- 0 Dedicated Hosts
- 0 Snapshots
- 0 Volumes
- 0 Load Balancers
- 9 Key Pairs
- 3 Security Groups
- 0 Placement Groups

EC2 Spot. Save up to 90% off On-Demand Prices. Turbo Boost your Workloads. [Get started with Amazon EC2 Spot Instances.](#)

Create Instance

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 Instance.

Launch Instance

Note: Your instances will launch in the Asia Pacific (Mumbai) region

Service Health

Service Status:

- Asia Pacific (Mumbai): This service is operating normally

Availability Zone Status:

- ap-south-1a: Availability zone is operating normally
- ap-south-1b: Availability zone is operating normally

[Service Health Dashboard](#)

Scheduled Events

Asia Pacific (Mumbai):

No events

Account Attributes

Supported Platforms

VPC

Default VPC

vpc-a655a2ce

Resource ID length management

Additional Information

[Getting Started Guide](#)

[Documentation](#)

[All EC2 Resources](#)

[Forums](#)

[Pricing](#)

[Contact Us](#)

AWS Marketplace

Find free software trial products in the AWS Marketplace from the [EC2 Launch Wizard](#). Or try these popular AMIs:

[Barracuda NextGen Firewall F-Series - PAYG](#)

Provided by Barracuda Networks, Inc.

Rating ★★★★★

Starting from \$0.60/hr or from \$4,599/yr (12% savings) for software + AWS usage fees

[View all Software Infrastructure](#)

[Splunk Insights for AWS Cloud Monitoring](#)

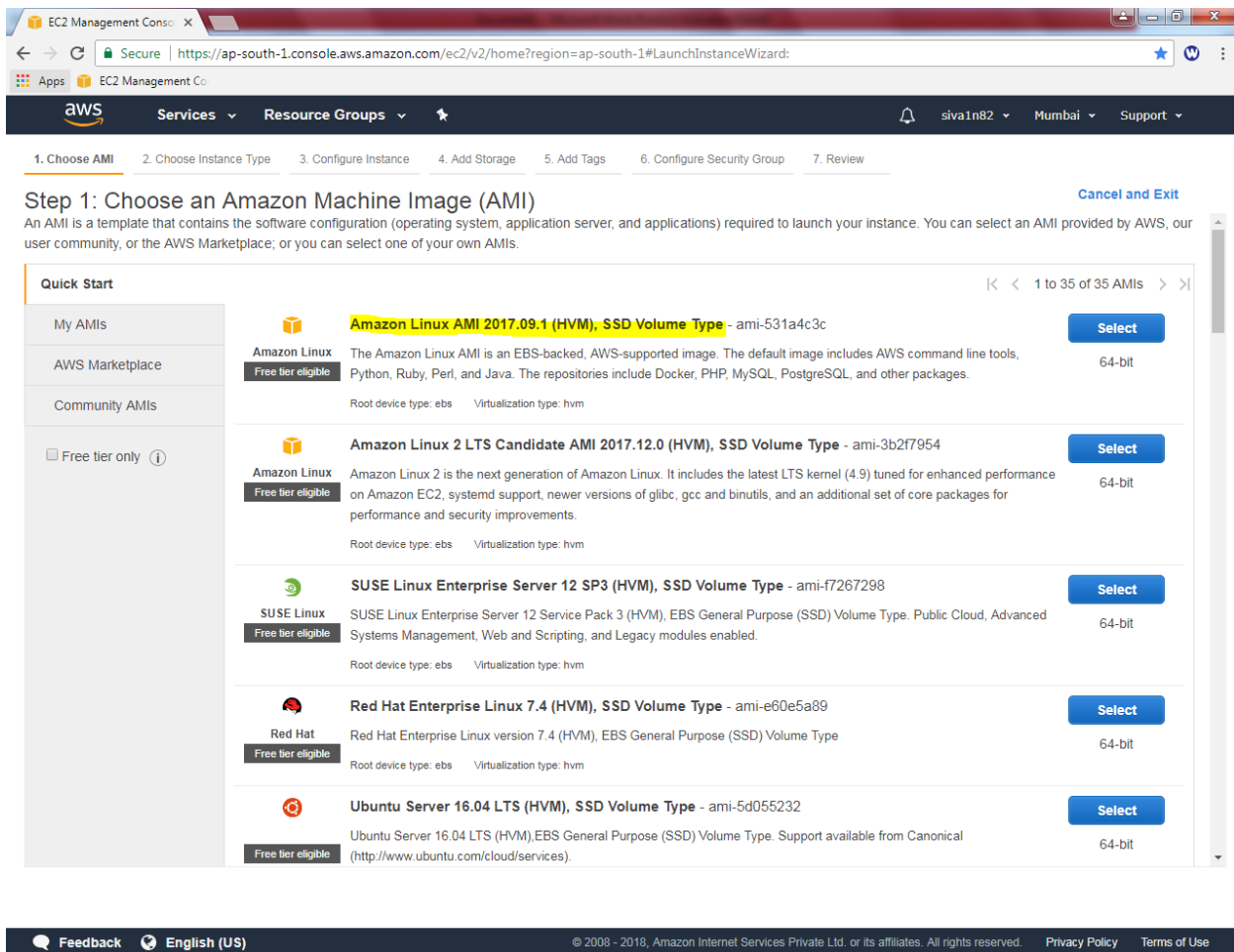
Provided by Splunk Inc.

Rating ★★★★★

Feedback English (US)

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Select “Amazon Linux”.



EC2 Management Console

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

Apps EC2 Management Console

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 1: Choose an Amazon Machine Image (AMI)

Cancel and Exit

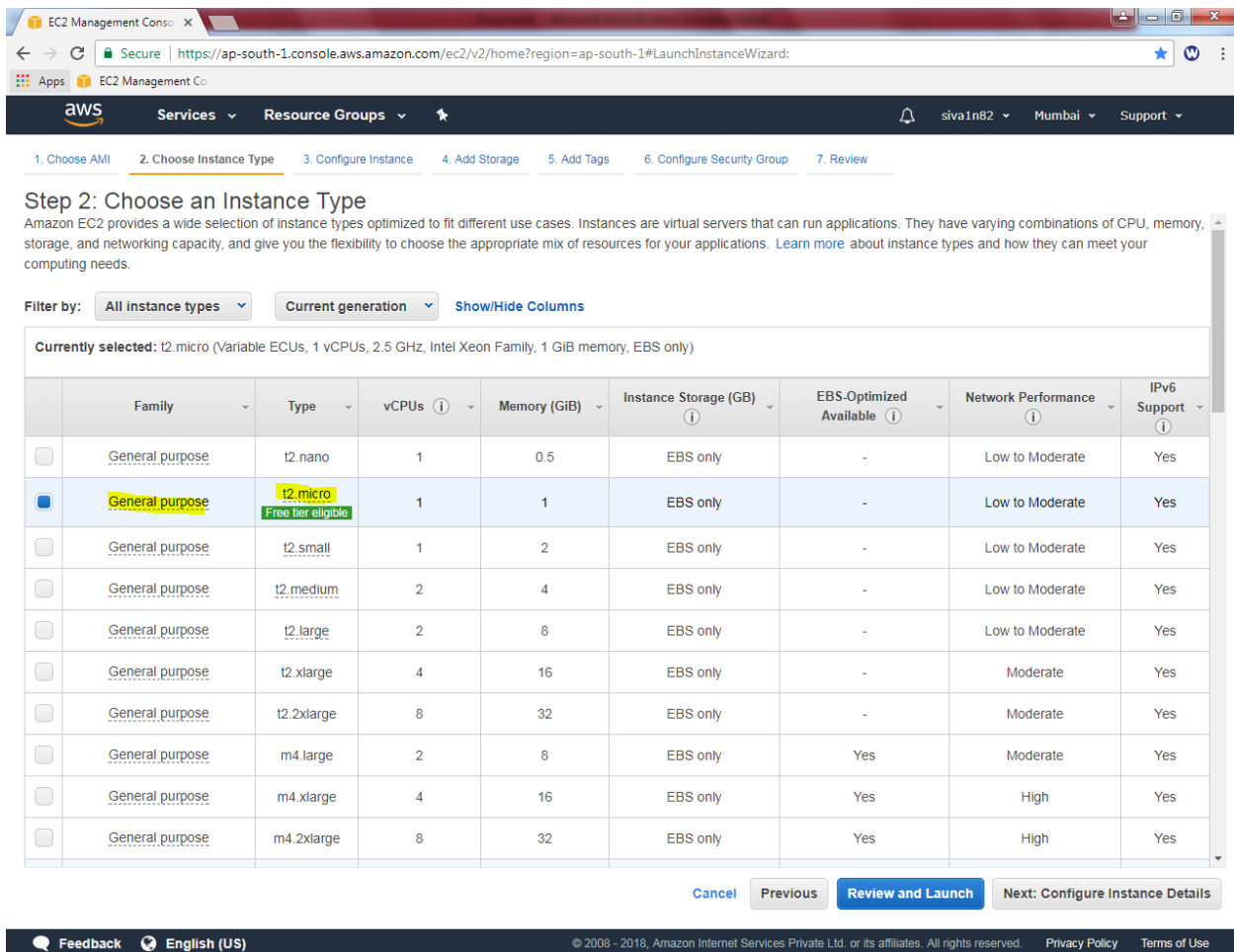
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Quick Start 1 to 35 of 35 AMIs

AMI	AMI ID	Architecture
Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type	ami-531a4c3c	64-bit
Amazon Linux 2 LTS Candidate AMI 2017.12.0 (HVM), SSD Volume Type	ami-3b2f7954	64-bit
SUSE Linux Enterprise Server 12 SP3 (HVM), SSD Volume Type	ami-f7267298	64-bit
Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type	ami-e60e5a89	64-bit
Ubuntu Server 16.04 LTS (HVM), SSD Volume Type	ami-5d055232	64-bit

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Ensure that “General Purpose – t2 micro” is selected.



EC2 Management Console

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

Apps EC2 Management Co

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	m4.large	2	8	EBS only	Yes	Moderate	Yes
<input type="checkbox"/>	General purpose	m4.xlarge	4	16	EBS only	Yes	High	Yes
<input type="checkbox"/>	General purpose	m4.2xlarge	8	32	EBS only	Yes	High	Yes

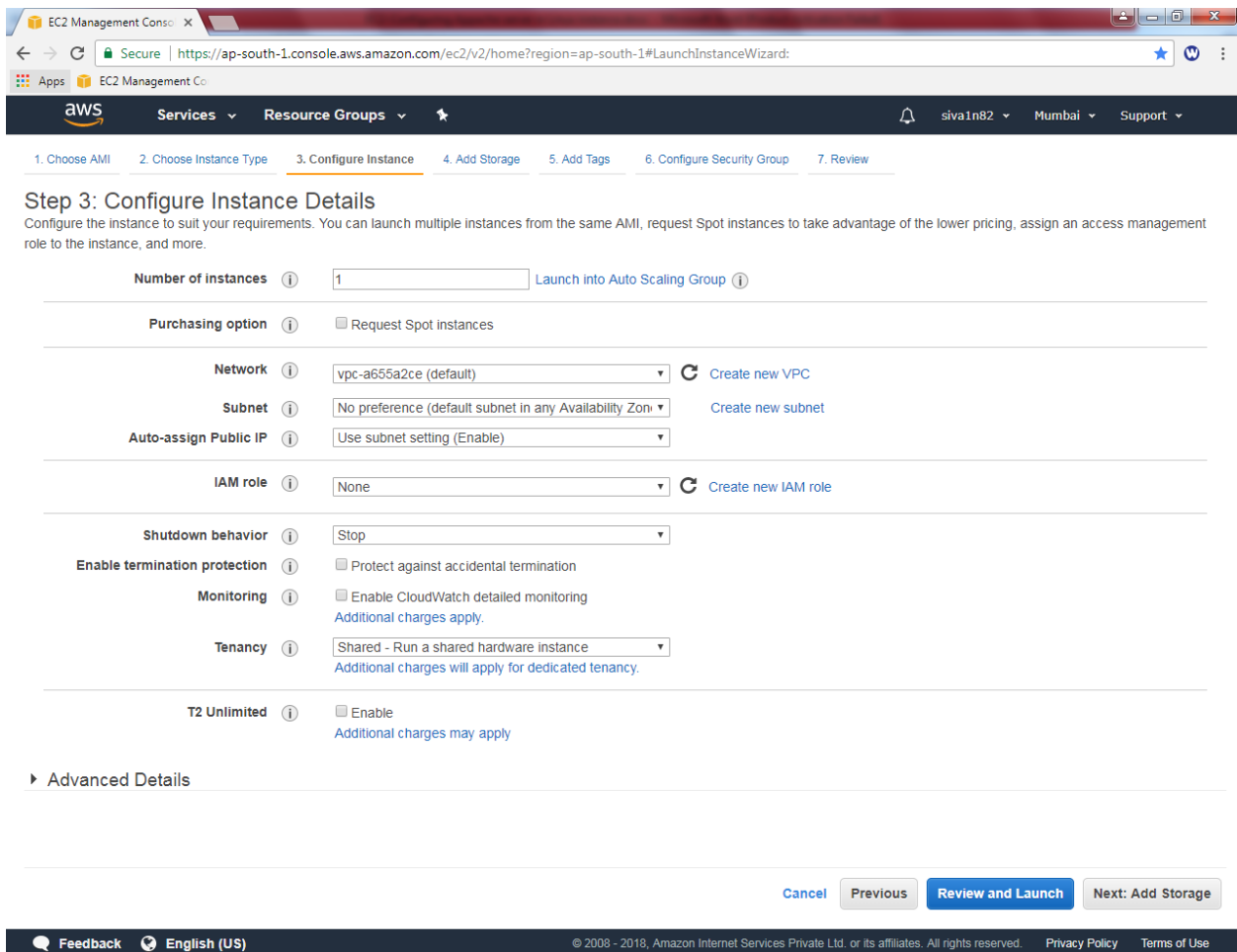
Cancel Previous **Review and Launch** Next: Configure Instance Details

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Click “Next”.

Leave default settings and click “Next”.



The screenshot shows the AWS Management Console interface for the EC2 Launch Wizard. The browser address bar shows the URL: <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:>. The console header includes the AWS logo, navigation tabs (Services, Resource Groups), and user information (siva1n82, Mumbai, Support).

The wizard progress bar shows seven steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance (active), 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 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.

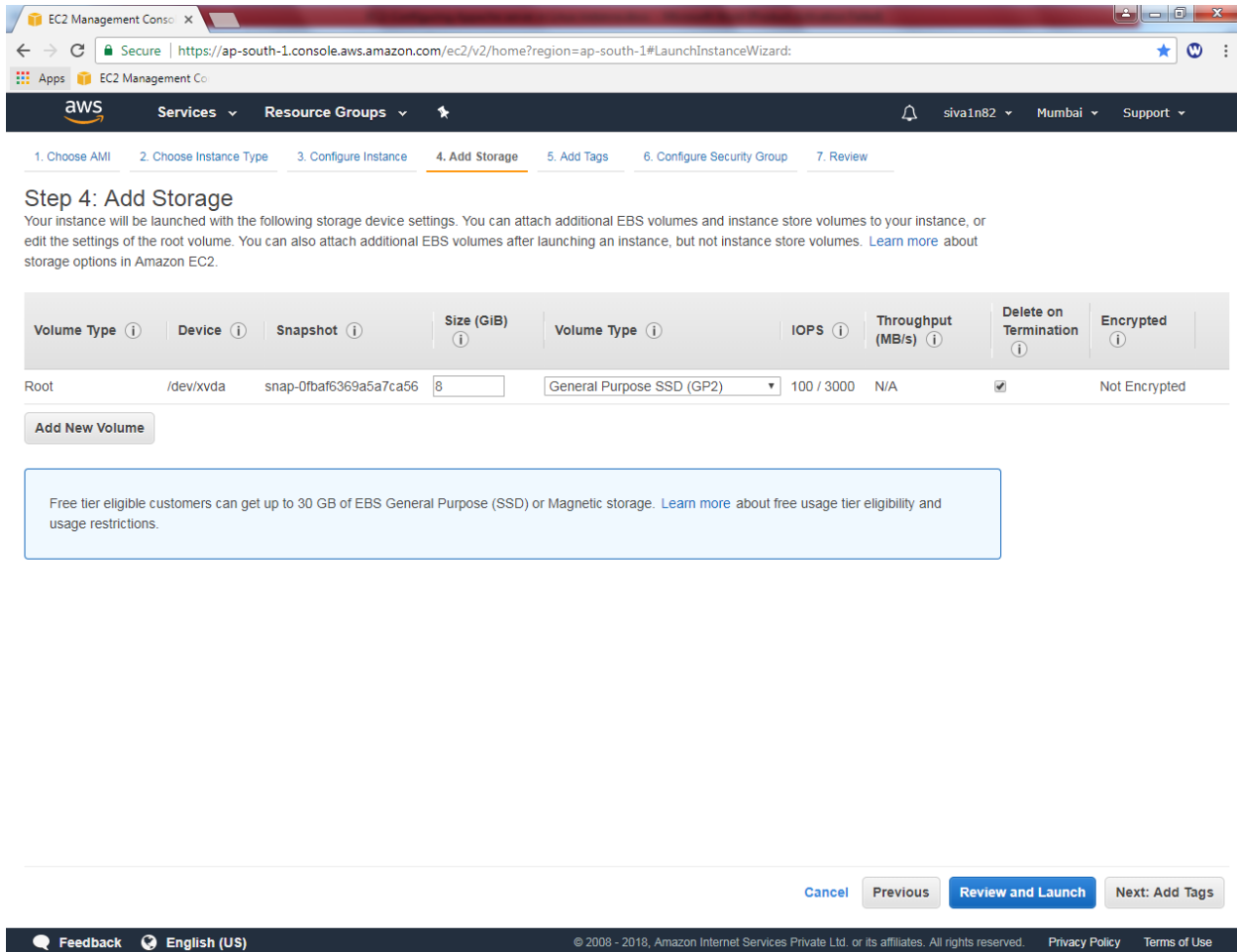
- Number of instances:** 1. [Launch into Auto Scaling Group](#)
- Purchasing option:** ☐ Request Spot instances
- Network:** vpc-a655a2ce (default). [Create new VPC](#)
- Subnet:** No preference (default subnet in any Availability Zone). [Create new subnet](#)
- Auto-assign Public IP:** Use subnet setting (Enable)
- 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.](#)
- T2 Unlimited:** ☐ Enable. [Additional charges may apply](#)

[Advanced Details](#)

Navigation buttons at the bottom: [Cancel](#), [Previous](#), [Review and Launch](#), [Next: Add Storage](#)

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Leave default settings and click “Next”.



The screenshot shows the AWS Management Console interface for the 'Add Storage' step of the EC2 instance launch wizard. The breadcrumb navigation at the top indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (current step), 5. Add Tags, 6. Configure Security Group, and 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/xvda	snap-0fbaf6369a5a7ca56	8	General Purpose SSD (GP2) ▼	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

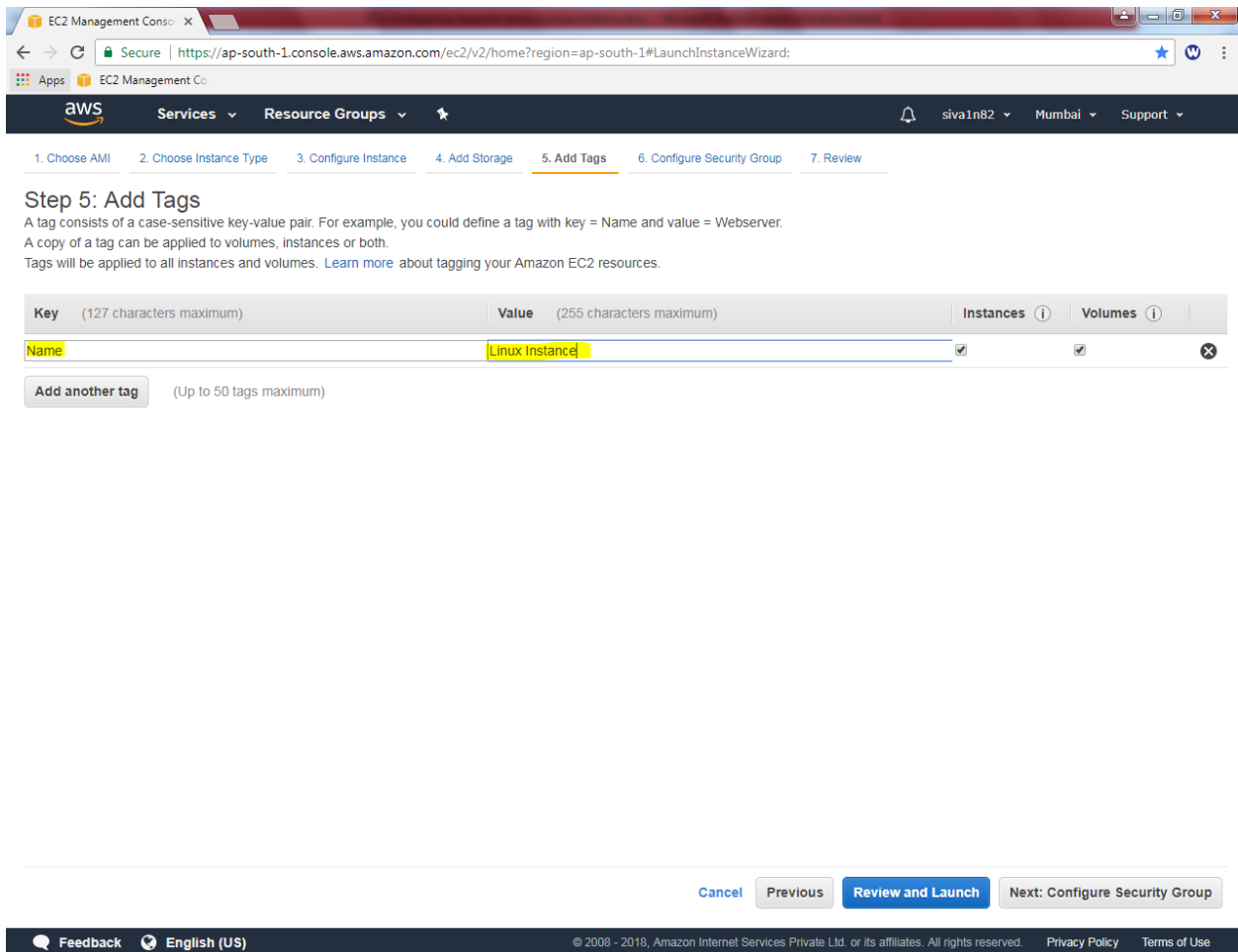
[Add New Volume](#)

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.

At the bottom of the console, there are navigation buttons: [Cancel](#), [Previous](#), [Review and Launch](#) (highlighted in blue), and [Next: Add Tags](#).

The footer of the console includes a [Feedback](#) link, the language set to [English \(US\)](#), and copyright information: © 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. It also includes links for [Privacy Policy](#) and [Terms of Use](#).

In Add tags, Key as “Name” and value as “Linux Instance”.



EC2 Management Console

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 ⓘ
Name	Linux 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](#)

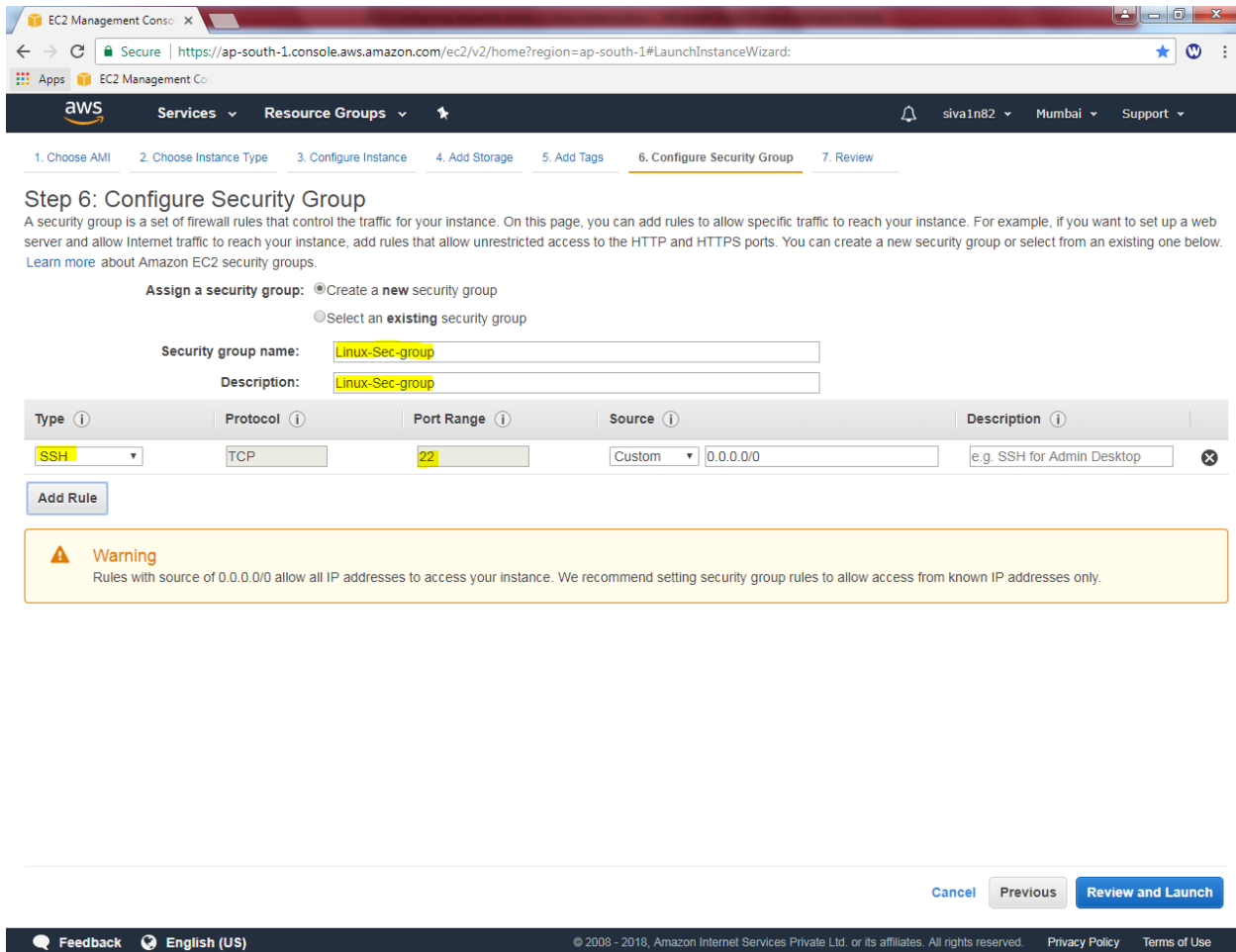
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Click “Next”.

While configuring security group, create a new security group for Linux Instance.

Type security group name as Linux-Sec-Group

Description as Linux-Sec-Group



EC2 Management Console

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

Apps EC2 Management Co

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 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	Custom 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.

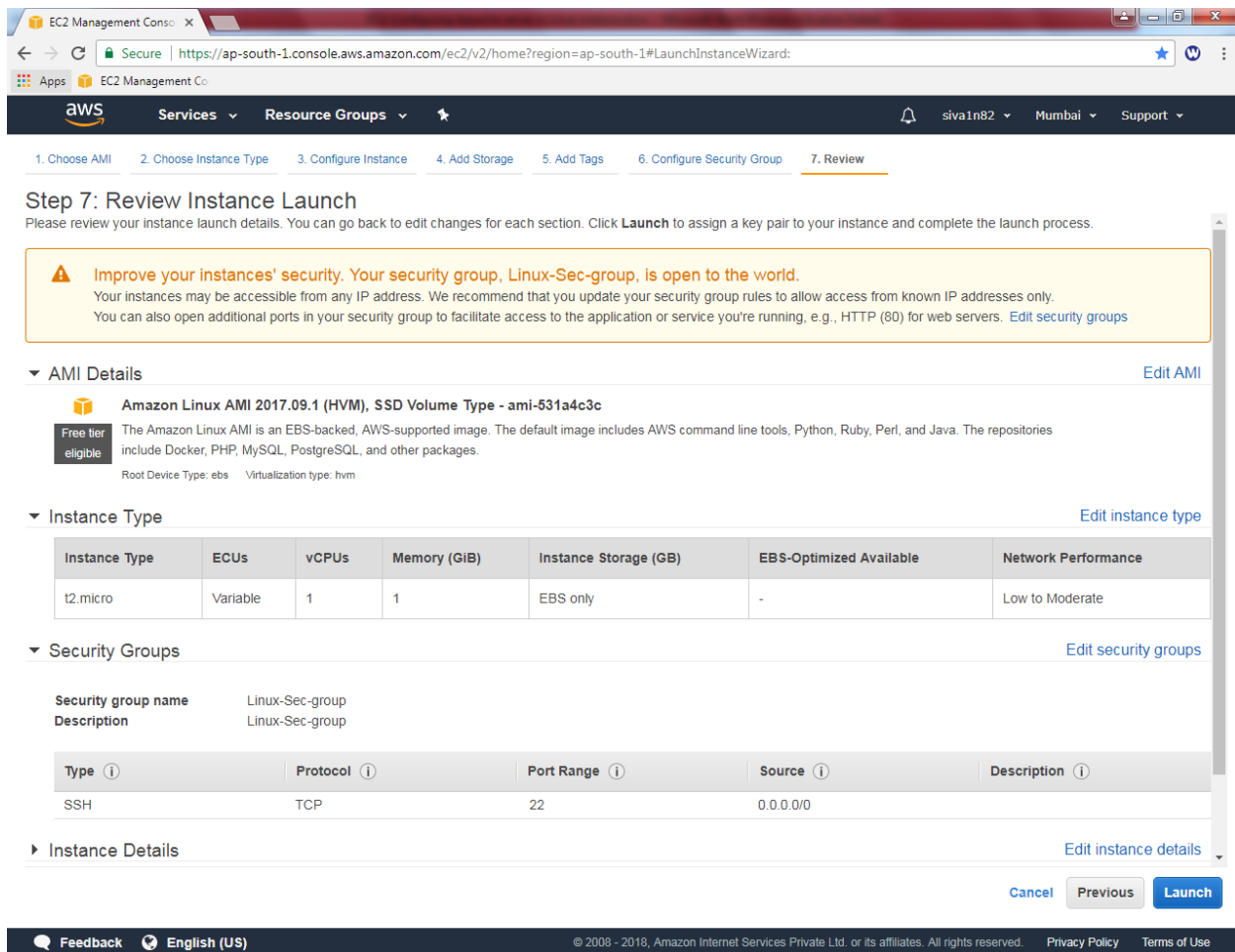
[Cancel](#) [Previous](#) [Review and Launch](#)

Feedback English (US)

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Click "Review and Launch".

Leave default settings and click “Launch”.



EC2 Management Console

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

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 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 security group, Linux-Sec-group, is open to the world.

Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only. You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. [Edit security groups](#)

▼ AMI Details [Edit AMI](#)

Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-531a4c3c

Free tier eligible The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root Device Type: ebs Virtualization type: hvm

▼ Instance Type [Edit instance type](#)

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

▼ Security Groups [Edit security groups](#)

Security group name Linux-Sec-group

Description Linux-Sec-group

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH	TCP	22	0.0.0.0/0	

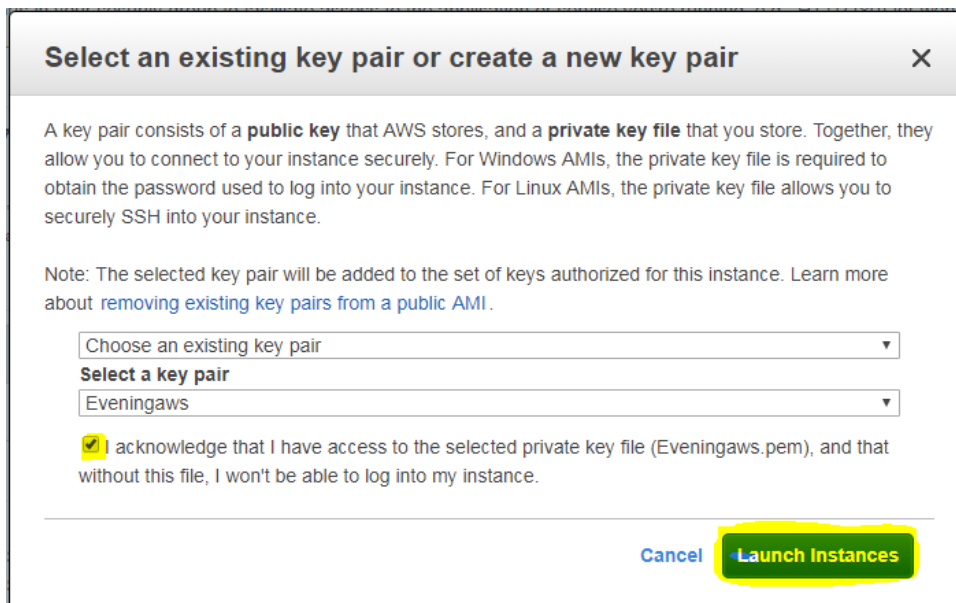
► Instance Details [Edit instance details](#)

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

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While click “launch” it ask to select an existing key pair or create a new key pair option.



Select an existing key pair or create a new key pair X

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

Eveningaws ▼

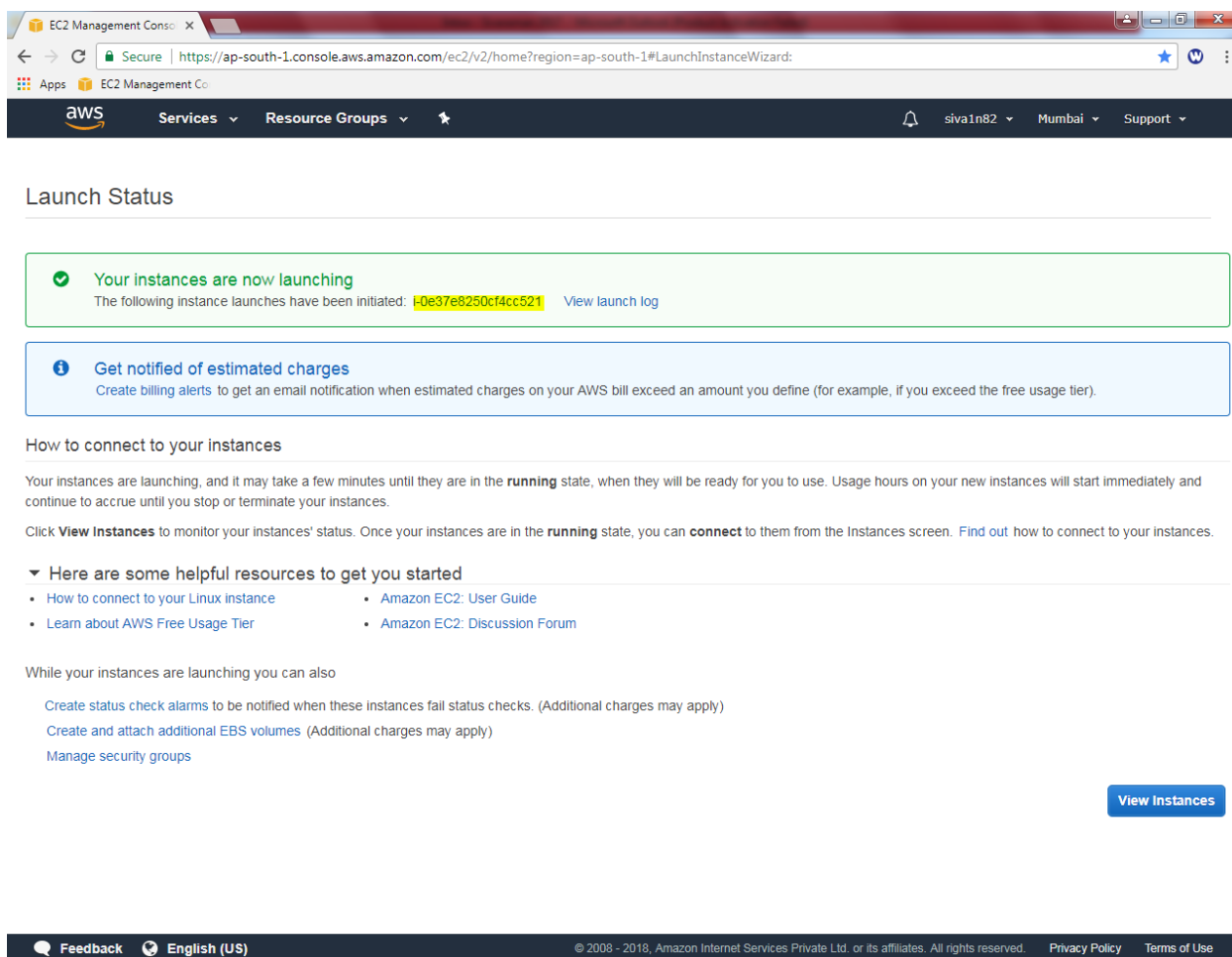
☒ I acknowledge that I have access to the selected private key file (Eveningaws.pem), and that without this file, I won't be able to log into my instance.

Cancel Launch Instances

Select the choose an existing key pair if you have already downloaded *.pem file. Otherwise click create a new key pair. We have already key with us, hence I have selected choose an existing key pair option. And select the “Eveningaws” key from drop down box. Then click “I acknowledge”.


Click “launch instance”.


Now you have created an instance and launched successfully. Click the highlighted area or view instance to view the Linux instance.



The screenshot shows the AWS Management Console interface. The browser address bar displays the URL: <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:>. The console header includes the AWS logo, navigation tabs for Services, Resource Groups, and a user profile section with the name siva1n82, location Mumbai, and a Support link. The main content area is titled "Launch Status".

Launch Status

 **Your instances are now launching**
The following instance launches have been initiated: [i-0e37e8250cf4cc521](#) [View launch log](#)

 **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).

How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ **Here are some helpful resources to get you started**

- [How to connect to your Linux instance](#)
- [Amazon EC2: User Guide](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: Discussion Forum](#)

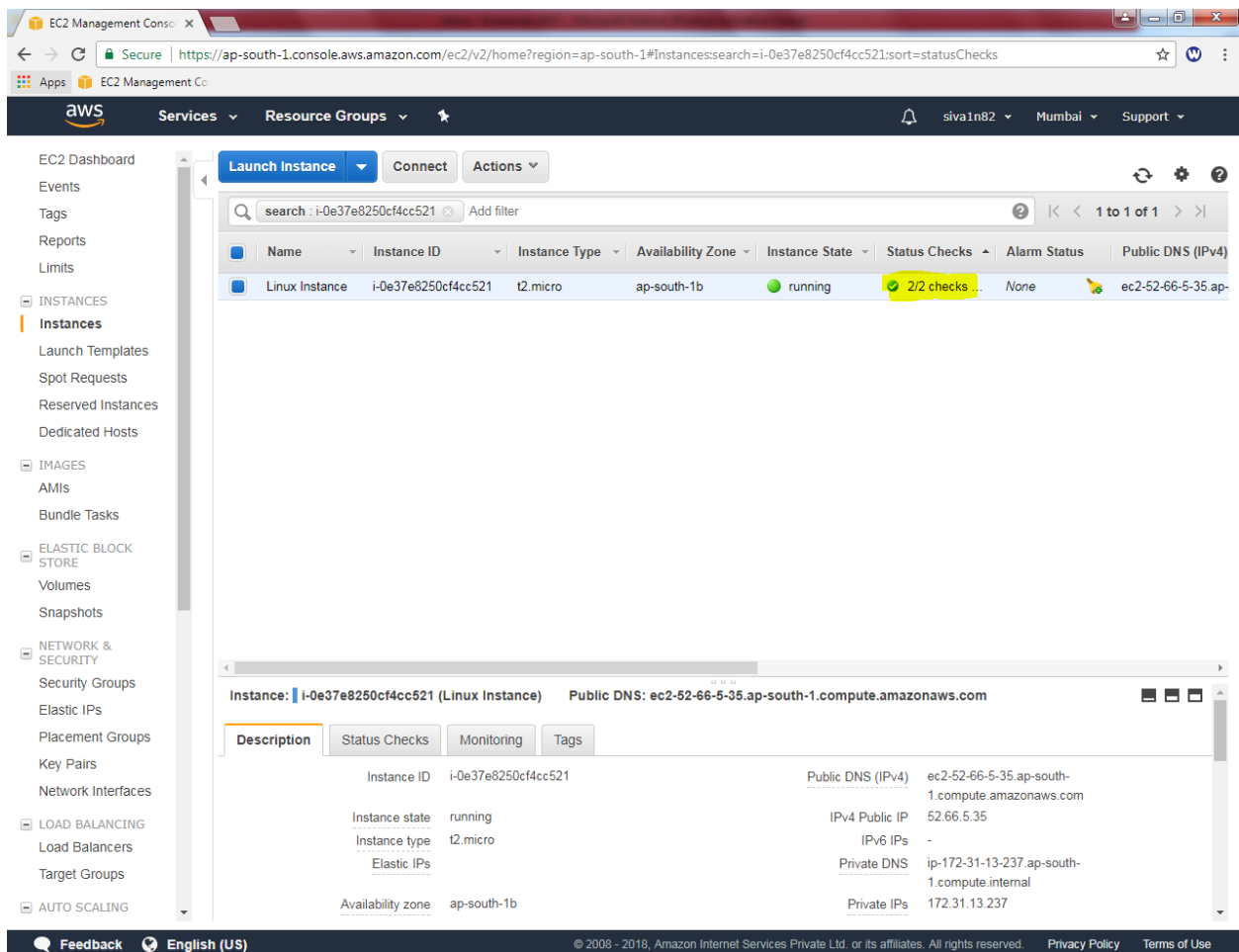
While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

[View Instances](#)

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Please wait up to the status checks becomes 2/2 checks.



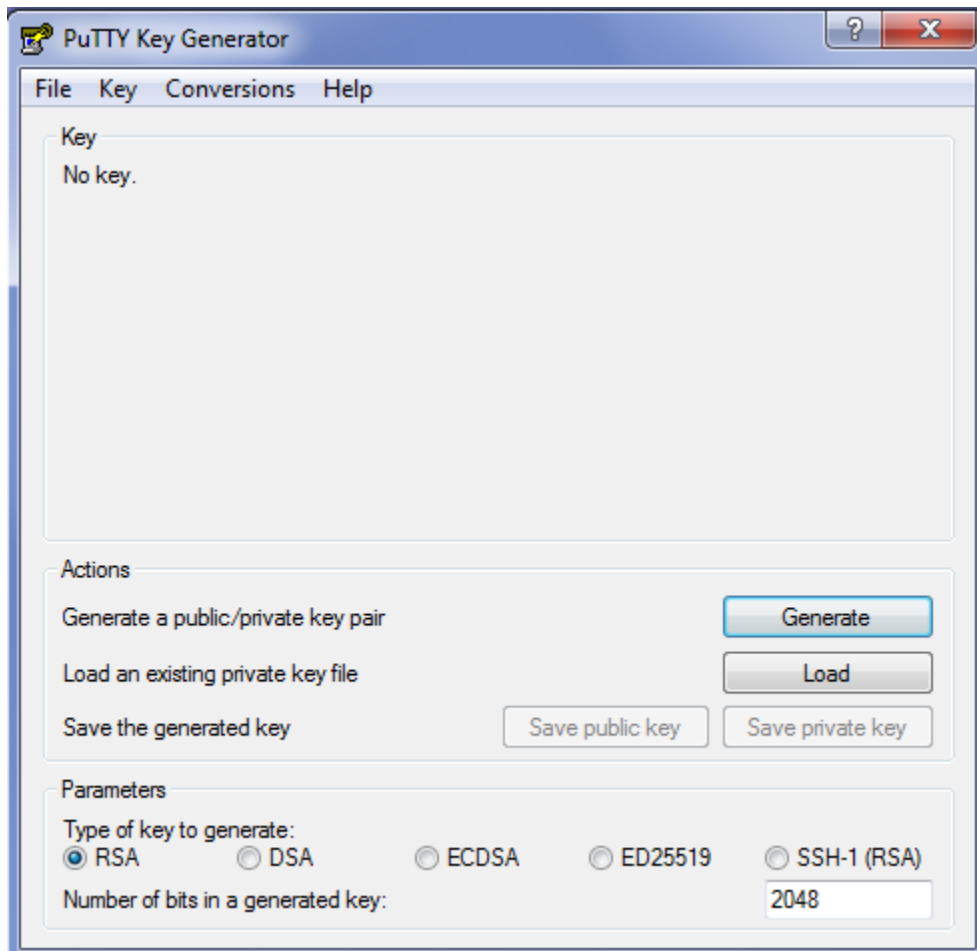
The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information. The left sidebar contains a navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The main content area displays a table of EC2 instances. One instance is highlighted, showing its details in a tabbed view.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Linux Instance	i-0e37e8250cf4cc521	t2.micro	ap-south-1b	running	2/2 checks	None	ec2-52-66-5-35.ap-

Instance: i-0e37e8250cf4cc521 (Linux Instance) **Public DNS: ec2-52-66-5-35.ap-south-1.compute.amazonaws.com**

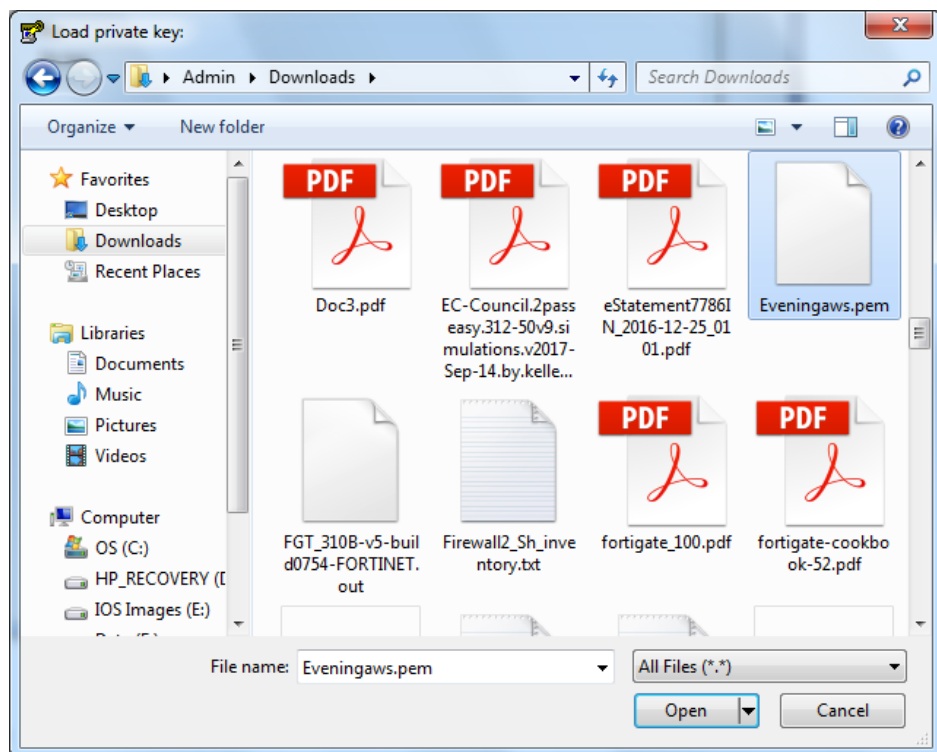
Description		Monitoring		Tags	
Instance ID	i-0e37e8250cf4cc521	Public DNS (IPv4)	ec2-52-66-5-35.ap-south-1.compute.amazonaws.com	IPv4 Public IP	52.66.5.35
Instance state	running	IPv6 IPs	-	Private DNS	ip-172-31-13-237.ap-south-1.compute.internal
Instance type	t2.micro	Private IPs	172.31.13.237		
Elastic IPs					
Availability zone	ap-south-1b				

Install putty application in your machine

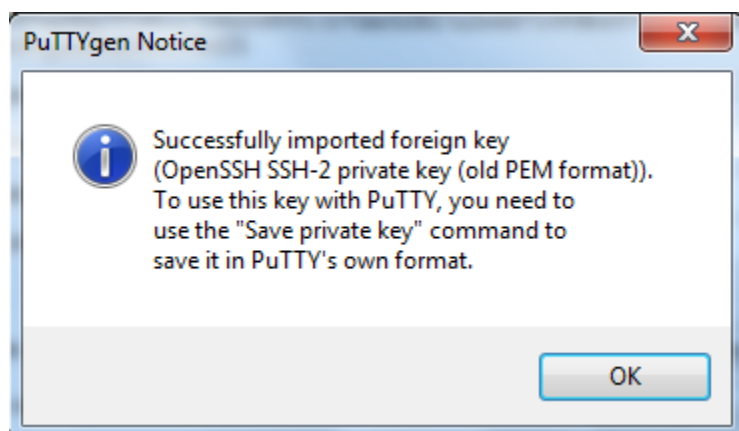


Click File → Load private key

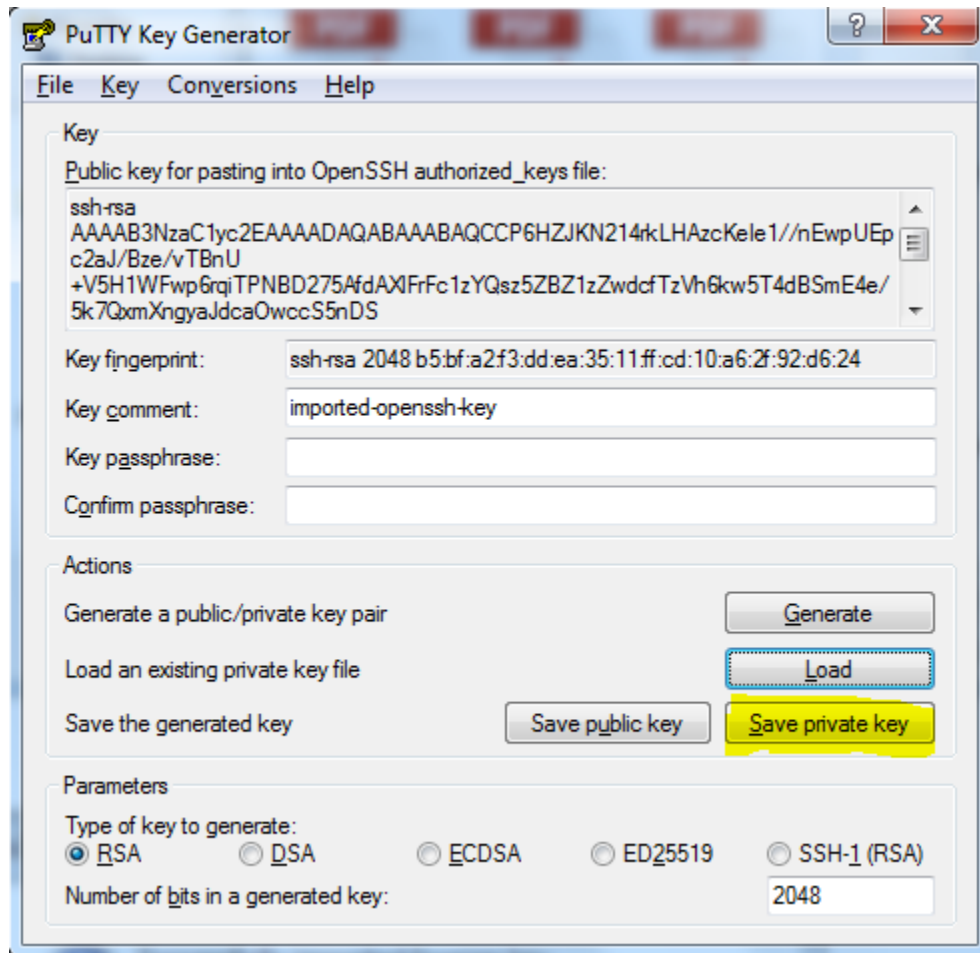
Select the private key file and then click “Open”.



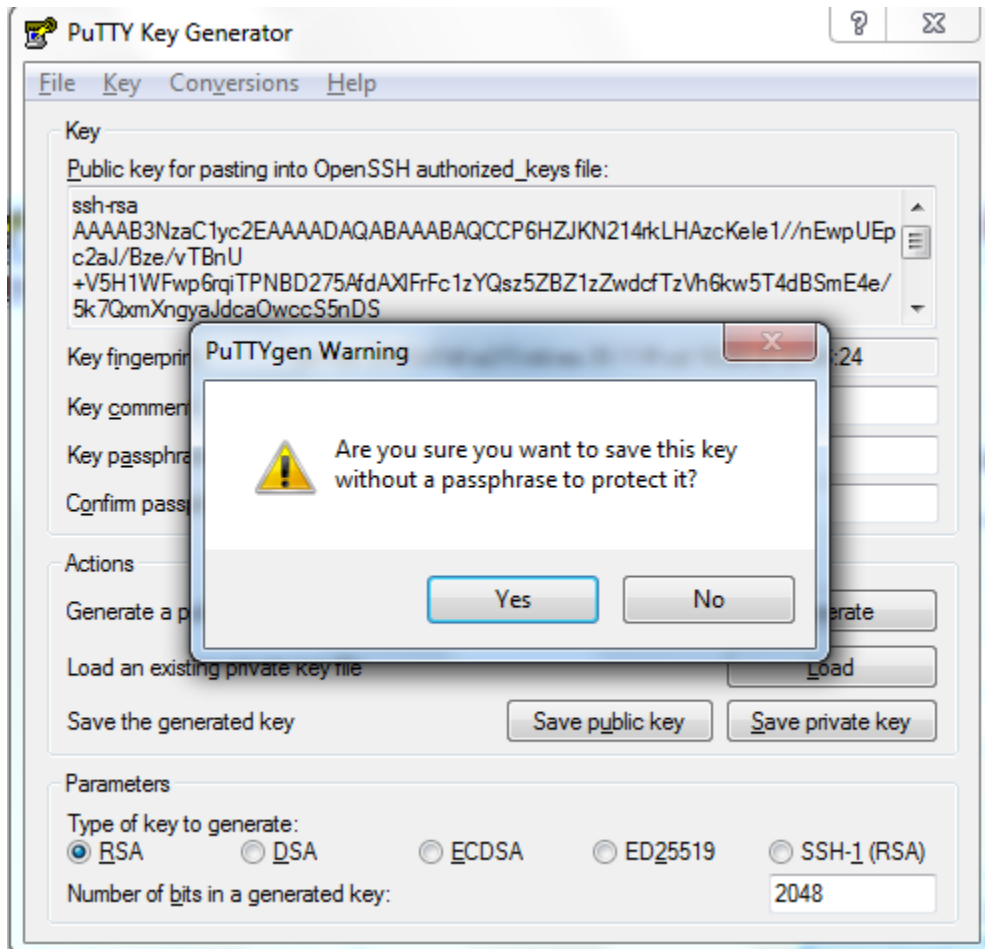
Getting notice that successfully imported the key.



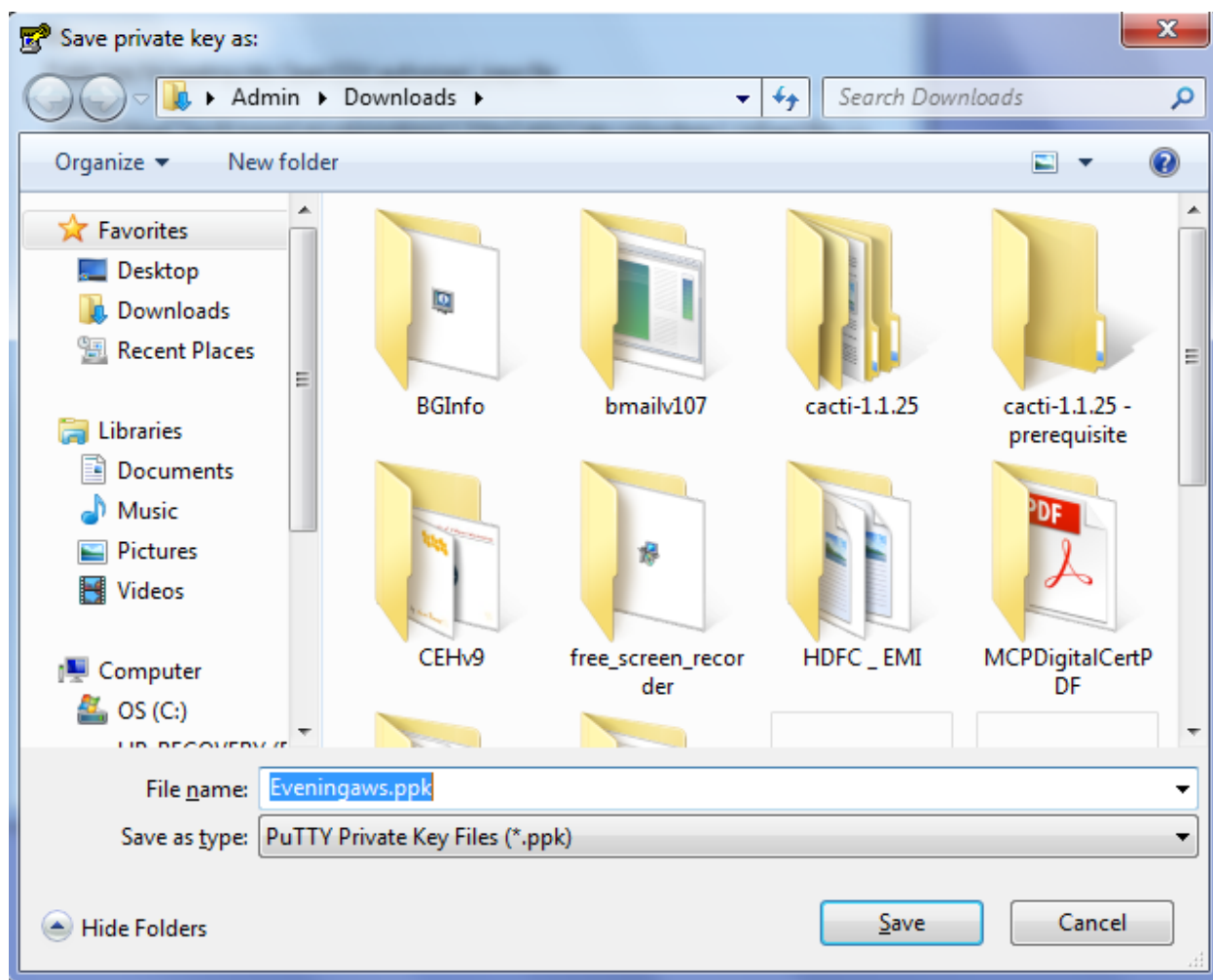
Click “Save Private Key”.



Click "Yes" to continue.

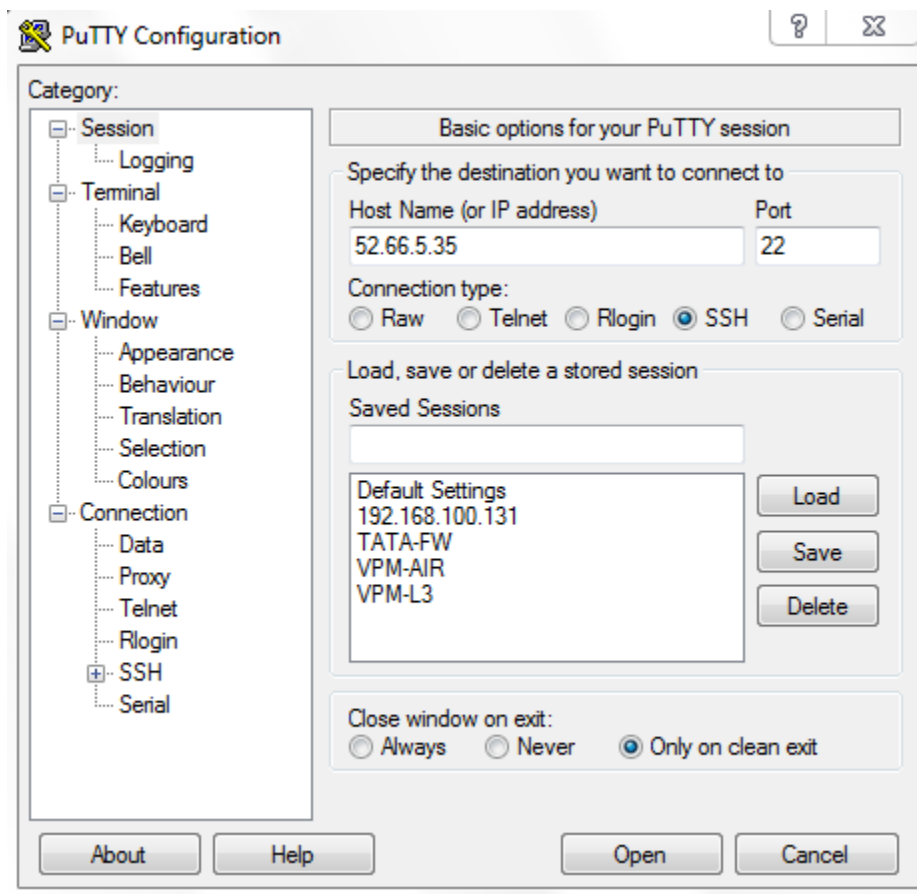


Save the file as “Eveningaws.ppk”

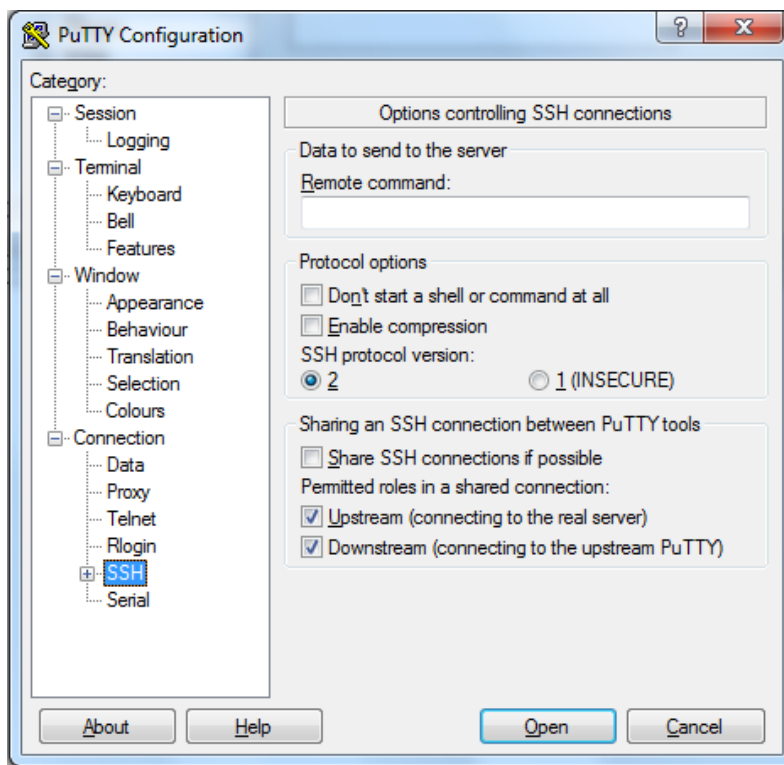


Click “save”.

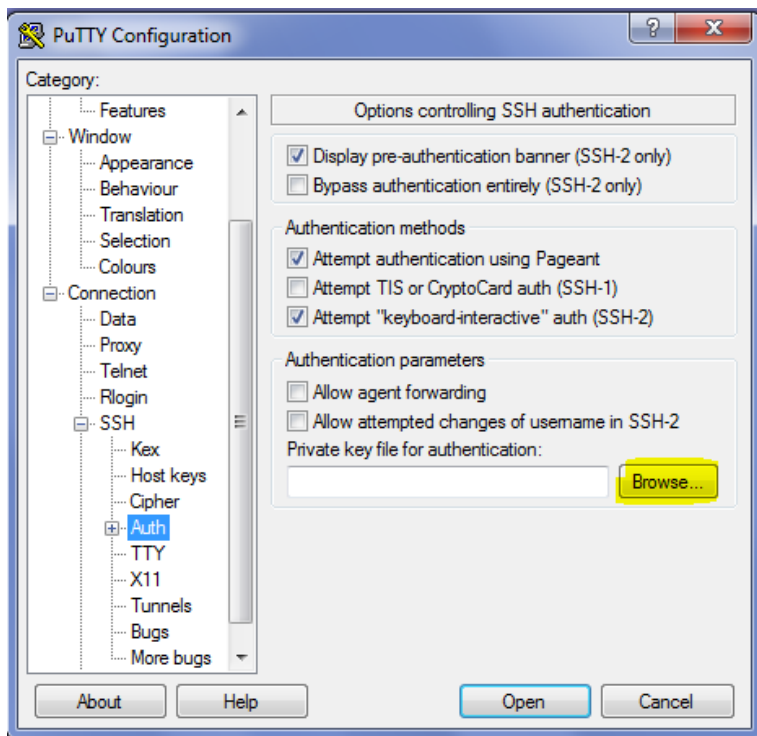
In Putty, type the Public IP address of Linux.



Click “SSH”

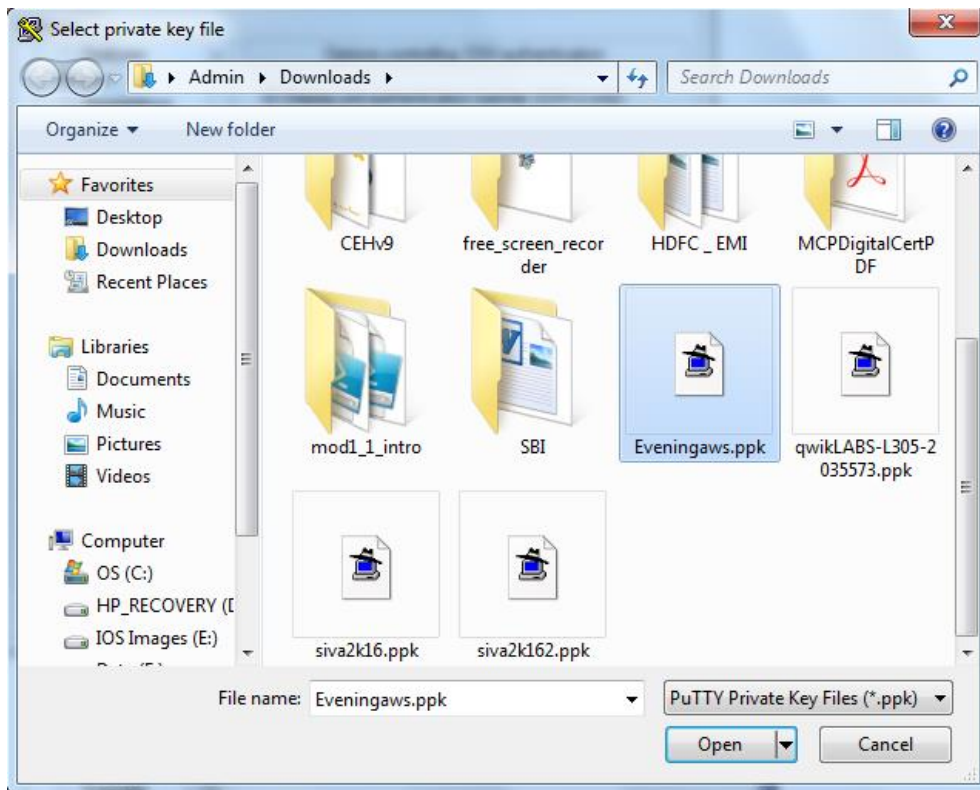


Expand “SSH” then click “Auth”.

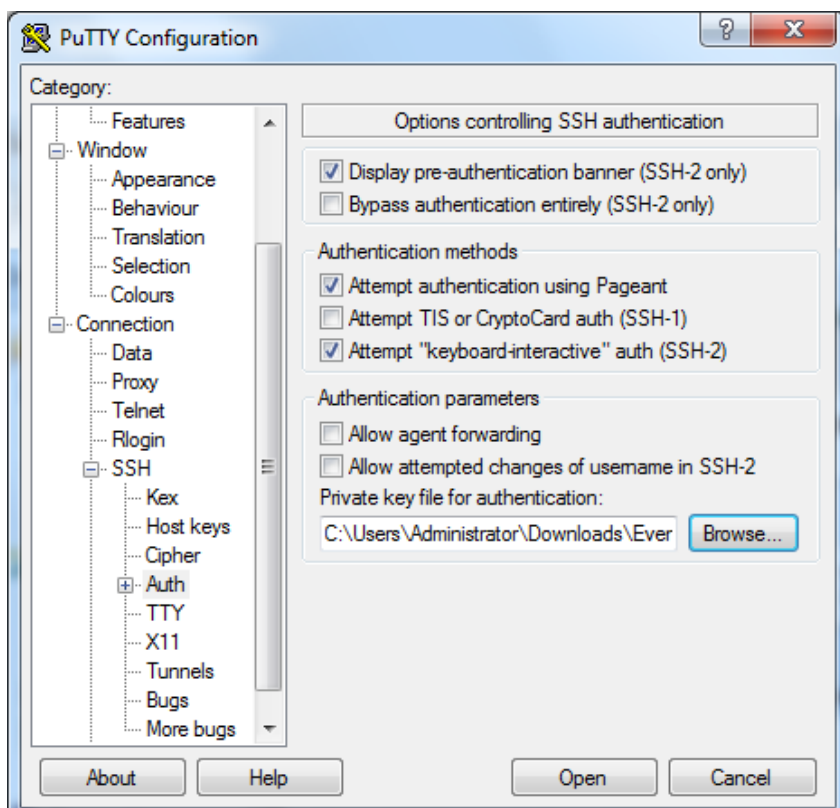


Then Browse and

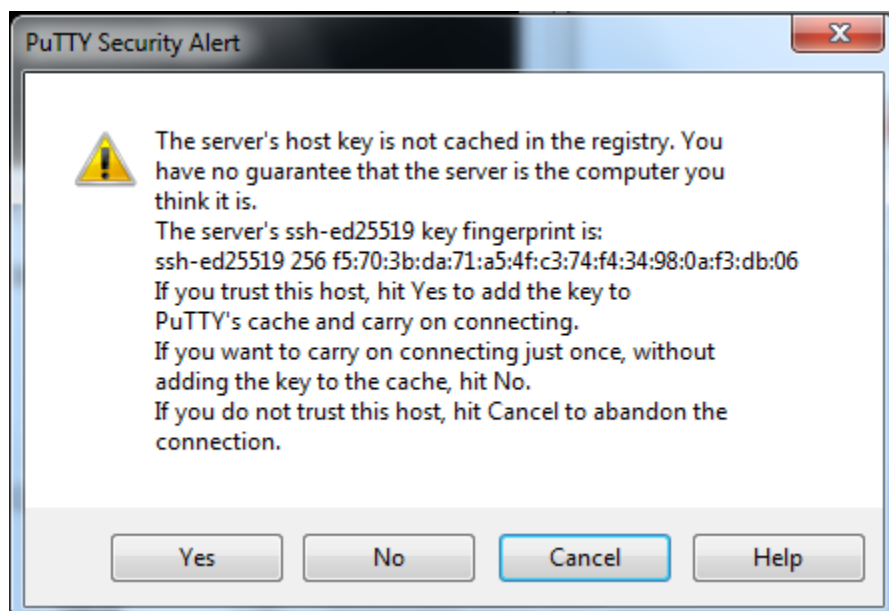
locate the *.ppk file.



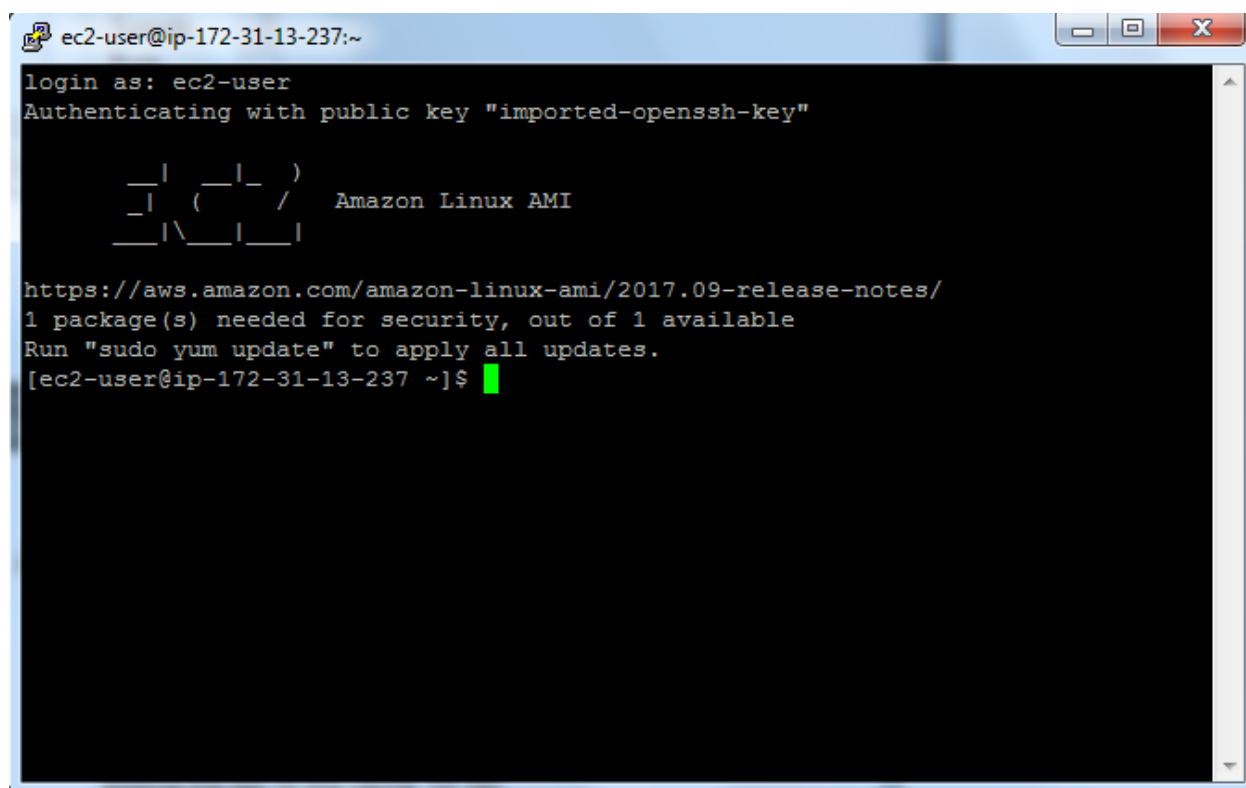
Click “Open”.



Click “Yes”.



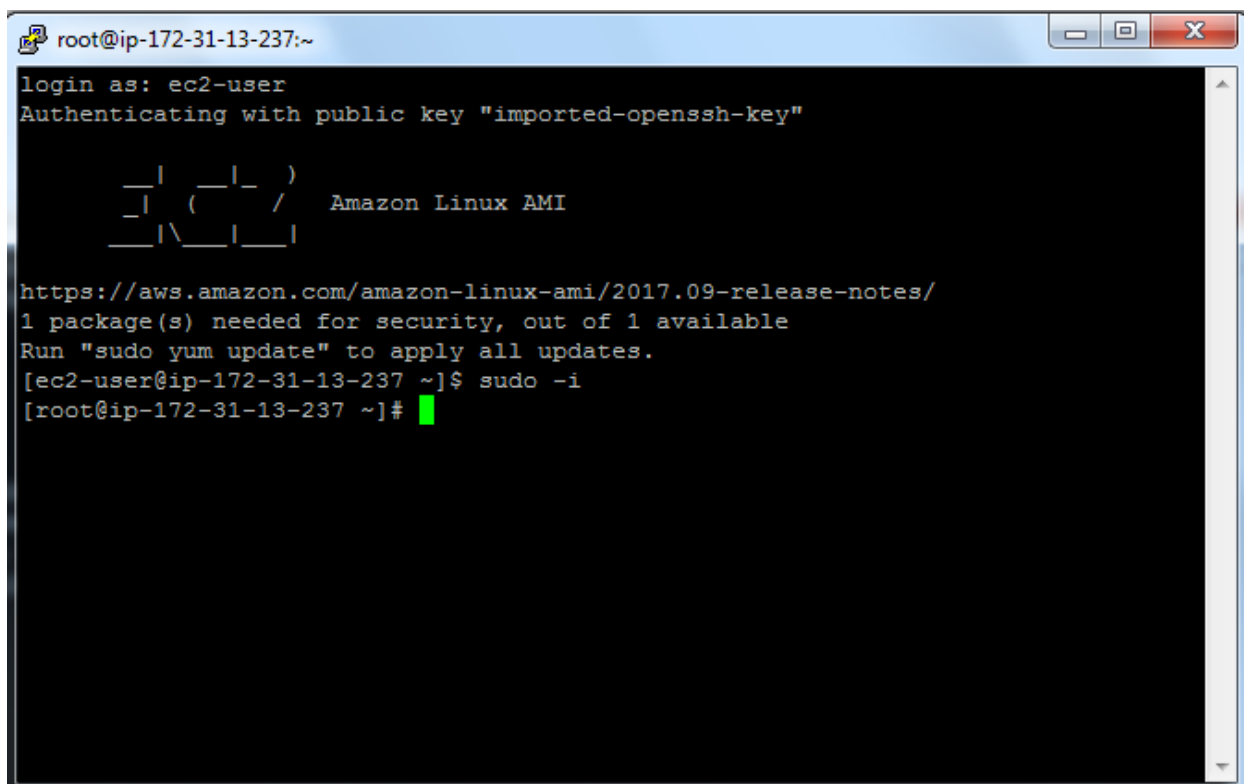
Type user as **ec2-user**



Type,

Sudo -i

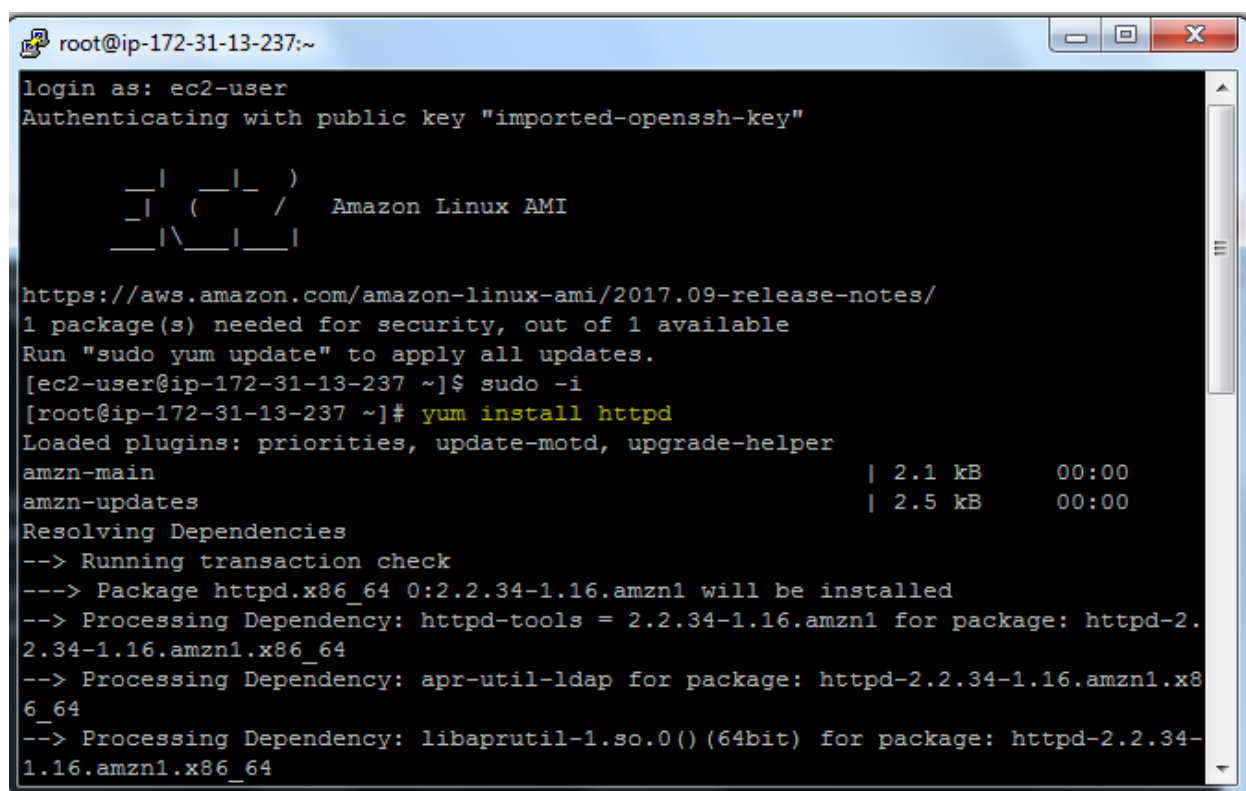
Now it has been switched root privilege account.



```
root@ip-172-31-13-237:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
  
  _|  _|_ )  
 _| (  _| /  Amazon Linux AMI  
__| \__|__|  
  
https://aws.amazon.com/amazon-linux-ami/2017.09-release-notes/  
1 package(s) needed for security, out of 1 available  
Run "sudo yum update" to apply all updates.  
[ec2-user@ip-172-31-13-237 ~]$ sudo -i  
[root@ip-172-31-13-237 ~]#
```


Type

Yum install httpd

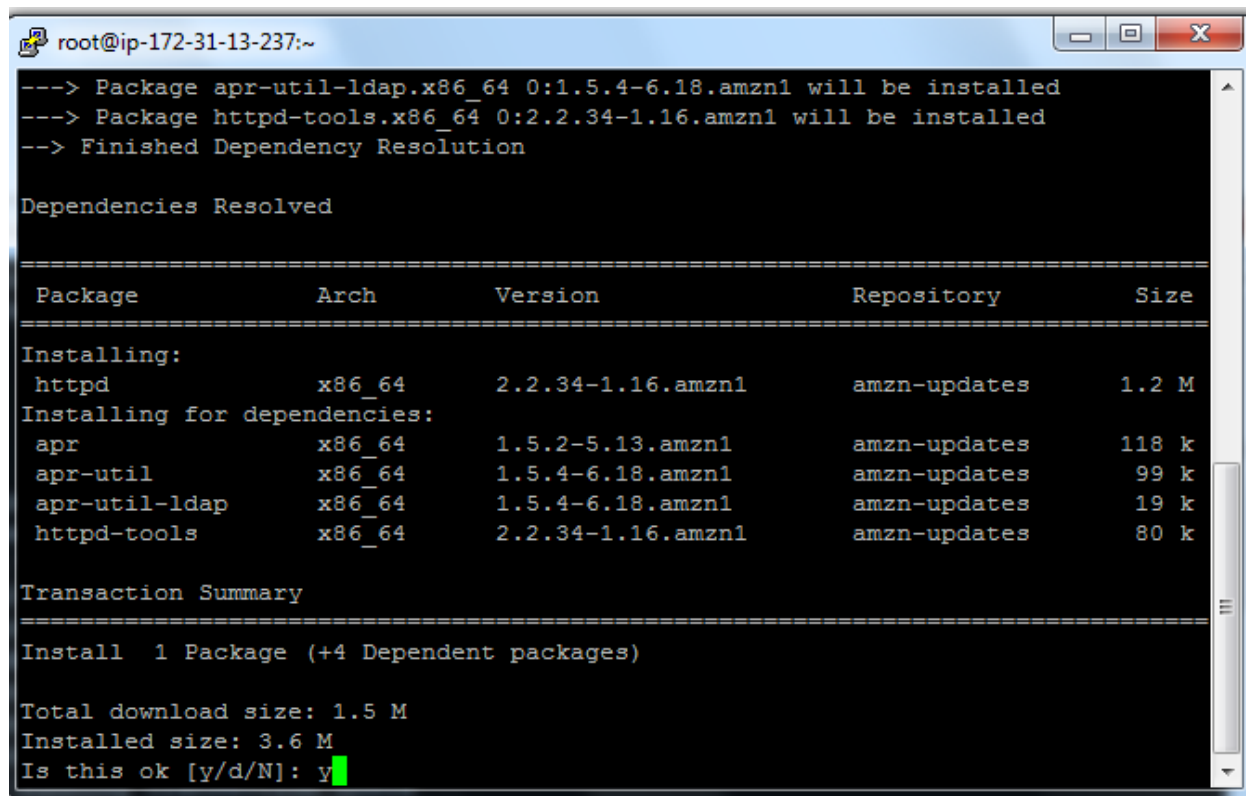


```
root@ip-172-31-13-237:~
login as: ec2-user
Authenticating with public key "imported-openssh-key"

  ____|__|____|____|
  ____|__|____|____| / Amazon Linux AMI
  ____|__|____|____|

https://aws.amazon.com/amazon-linux-ami/2017.09-release-notes/
1 package(s) needed for security, out of 1 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-13-237 ~]$ sudo -i
[root@ip-172-31-13-237 ~]# yum install httpd
Loaded plugins: priorities, update-motd, upgrade-helper
amzn-main | 2.1 kB | 00:00
amzn-updates | 2.5 kB | 00:00
Resolving Dependencies
--> Running transaction check
---> Package httpd.x86_64 0:2.2.34-1.16.amzn1 will be installed
--> Processing Dependency: httpd-tools = 2.2.34-1.16.amzn1 for package: httpd-2.2.34-1.16.amzn1.x86_64
--> Processing Dependency: apr-util-ldap for package: httpd-2.2.34-1.16.amzn1.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.2.34-1.16.amzn1.x86_64
```

Type “Y” to install the packages.



```
root@ip-172-31-13-237:~  
---> Package apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1 will be installed  
---> Package httpd-tools.x86_64 0:2.2.34-1.16.amzn1 will be installed  
--> Finished Dependency Resolution  
  
Dependencies Resolved  
  
=====
```

Package	Arch	Version	Repository	Size
Installing:				
httpd	x86_64	2.2.34-1.16.amzn1	amzn-updates	1.2 M
Installing for dependencies:				
apr	x86_64	1.5.2-5.13.amzn1	amzn-updates	118 k
apr-util	x86_64	1.5.4-6.18.amzn1	amzn-updates	99 k
apr-util-ldap	x86_64	1.5.4-6.18.amzn1	amzn-updates	19 k
httpd-tools	x86_64	2.2.34-1.16.amzn1	amzn-updates	80 k

```
=====
```

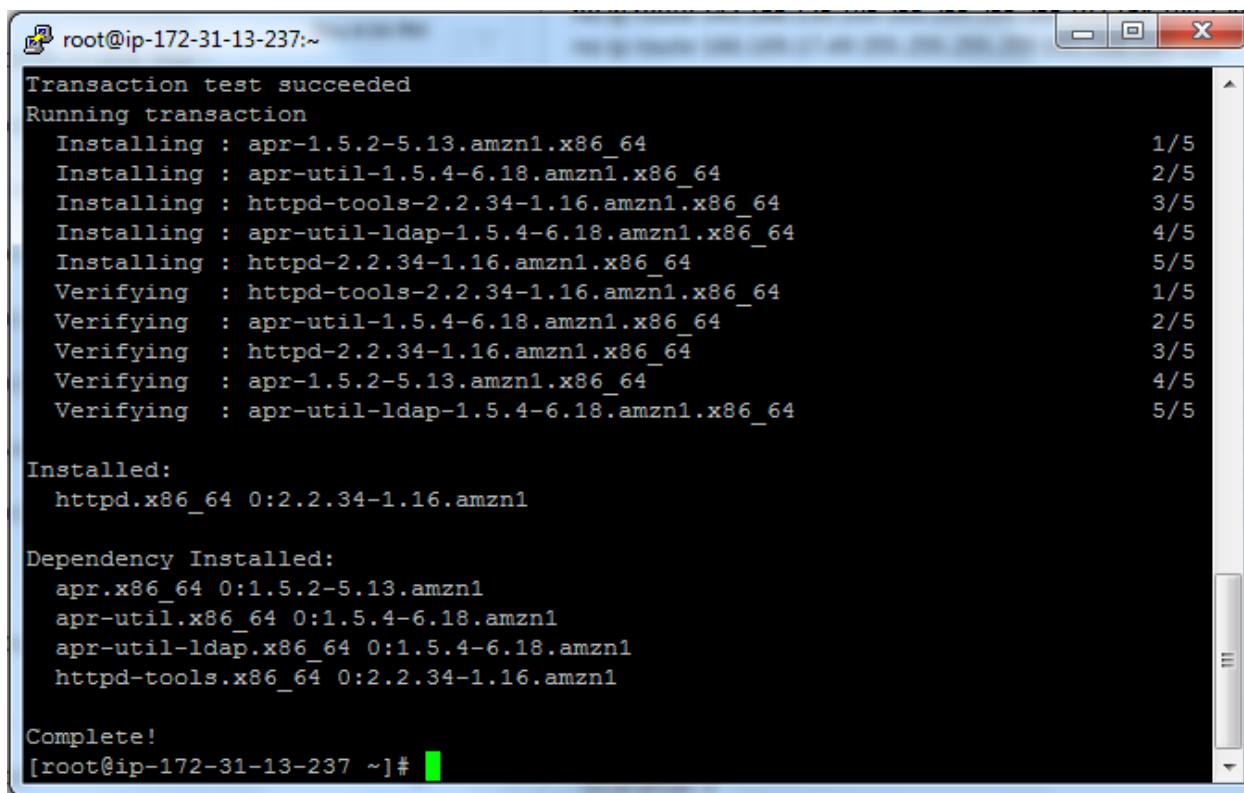
Transaction Summary

=====

Install 1 Package (+4 Dependent packages)

Total download size: 1.5 M
Installed size: 3.6 M
Is this ok [y/d/N]: y

Now web server has been installed successfully.



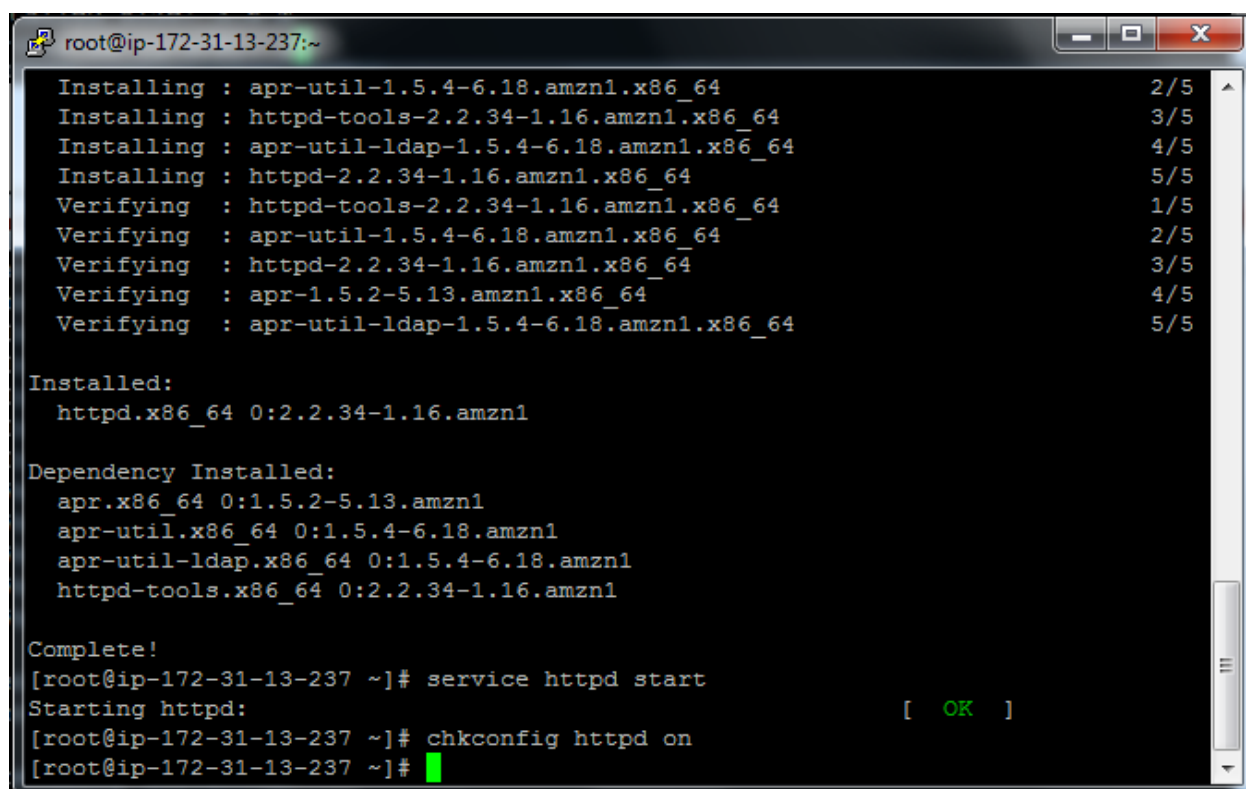
```
root@ip-172-31-13-237:~  
Transaction test succeeded  
Running transaction  
Installing : apr-1.5.2-5.13.amzn1.x86_64 1/5  
Installing : apr-util-1.5.4-6.18.amzn1.x86_64 2/5  
Installing : httpd-tools-2.2.34-1.16.amzn1.x86_64 3/5  
Installing : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 4/5  
Installing : httpd-2.2.34-1.16.amzn1.x86_64 5/5  
Verifying : httpd-tools-2.2.34-1.16.amzn1.x86_64 1/5  
Verifying : apr-util-1.5.4-6.18.amzn1.x86_64 2/5  
Verifying : httpd-2.2.34-1.16.amzn1.x86_64 3/5  
Verifying : apr-1.5.2-5.13.amzn1.x86_64 4/5  
Verifying : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 5/5  
  
Installed:  
httpd.x86_64 0:2.2.34-1.16.amzn1  
  
Dependency Installed:  
apr.x86_64 0:1.5.2-5.13.amzn1  
apr-util.x86_64 0:1.5.4-6.18.amzn1  
apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1  
httpd-tools.x86_64 0:2.2.34-1.16.amzn1  
  
Complete!  
[root@ip-172-31-13-237 ~]#
```

Now we need to start the service httpd

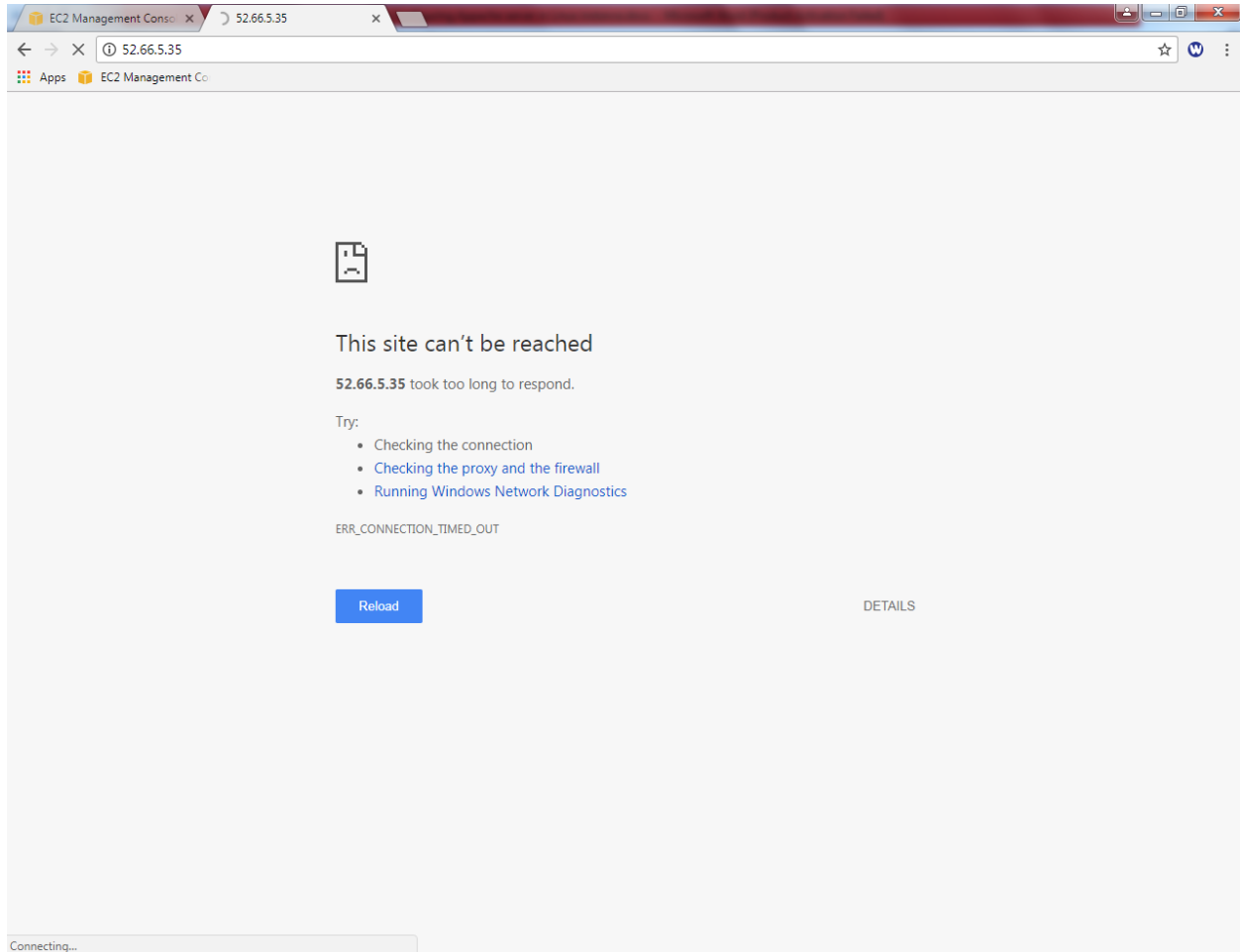
Type command,

Service httpd start

Chkconfig httpd on



```
root@ip-172-31-13-237:~  
Installing : apr-util-1.5.4-6.18.amzn1.x86_64 2/5  
Installing : httpd-tools-2.2.34-1.16.amzn1.x86_64 3/5  
Installing : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 4/5  
Installing : httpd-2.2.34-1.16.amzn1.x86_64 5/5  
Verifying : httpd-tools-2.2.34-1.16.amzn1.x86_64 1/5  
Verifying : apr-util-1.5.4-6.18.amzn1.x86_64 2/5  
Verifying : httpd-2.2.34-1.16.amzn1.x86_64 3/5  
Verifying : apr-1.5.2-5.13.amzn1.x86_64 4/5  
Verifying : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 5/5  
  
Installed:  
  httpd.x86_64 0:2.2.34-1.16.amzn1  
  
Dependency Installed:  
  apr.x86_64 0:1.5.2-5.13.amzn1  
  apr-util.x86_64 0:1.5.4-6.18.amzn1  
  apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1  
  httpd-tools.x86_64 0:2.2.34-1.16.amzn1  
  
Complete!  
[root@ip-172-31-13-237 ~]# service httpd start  
Starting httpd: [ OK ]  
[root@ip-172-31-13-237 ~]# chkconfig httpd on  
[root@ip-172-31-13-237 ~]#
```

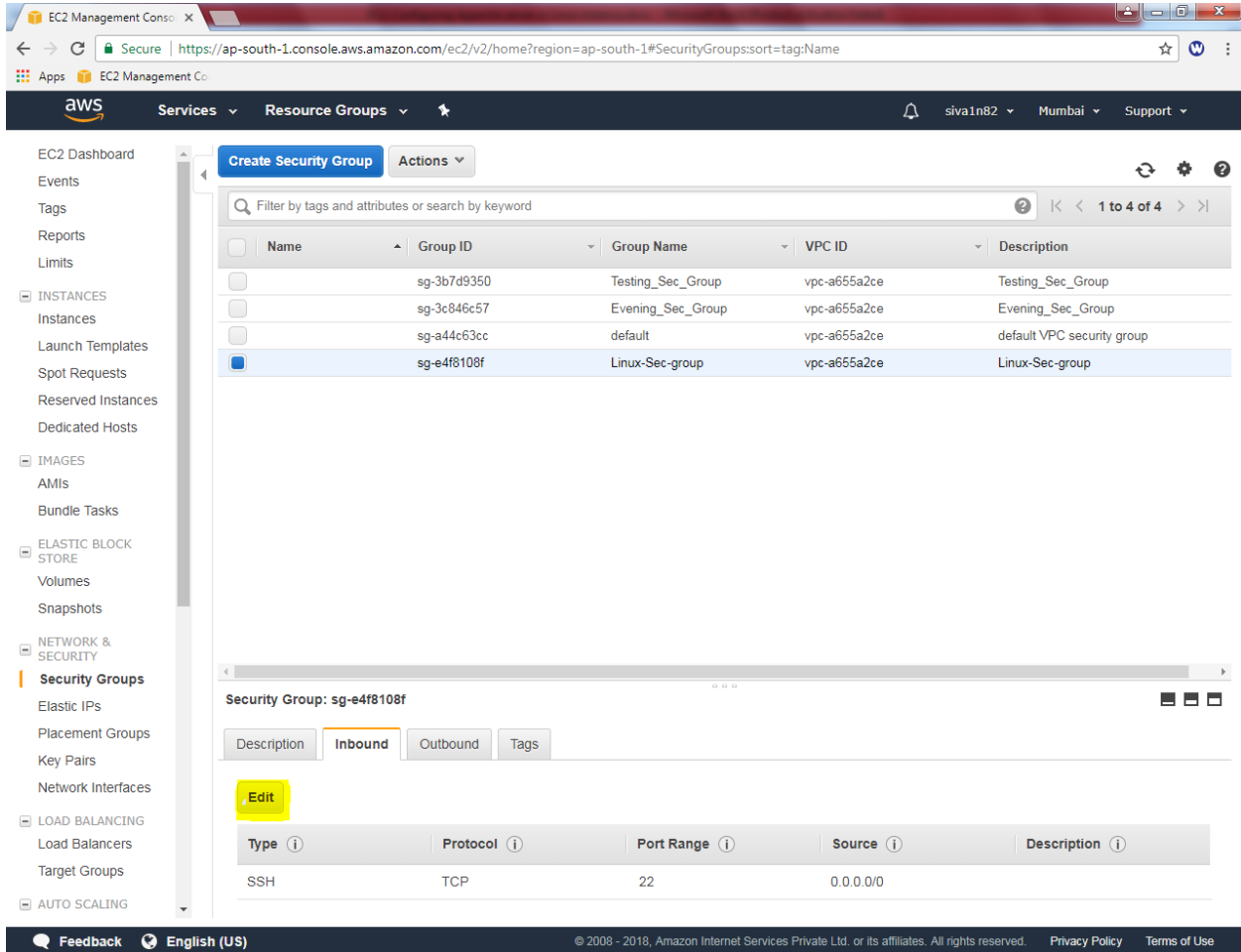


You would not be able to connect, what could be the reason?

In security group, we have permitted only SSH Port (22). Hence we are unable to connect port 80 from outside of the network. Now we need to allow port 80 (HTTP) in security group "Linux-Sec-Group".

Go to security Group in EC2, select Linux-sec-group and then click “Inbound” tab.

Click “Edit”.



The screenshot shows the AWS Management Console interface for EC2 Security Groups. The left sidebar contains navigation links for various AWS services. The main content area displays a list of security groups, with 'Linux-Sec-group' (ID: sg-e4f8108f) selected. Below the list, the 'Inbound' tab is active, showing a rule for SSH access.

Name	Group ID	Group Name	VPC ID	Description
Testing_Sec_Group	sg-3b7d9350	Testing_Sec_Group	vpc-a655a2ce	Testing_Sec_Group
Evening_Sec_Group	sg-3c846c57	Evening_Sec_Group	vpc-a655a2ce	Evening_Sec_Group
default	sg-a44c63cc	default	vpc-a655a2ce	default VPC security group
Linux-Sec-group	sg-e4f8108f	Linux-Sec-group	vpc-a655a2ce	Linux-Sec-group

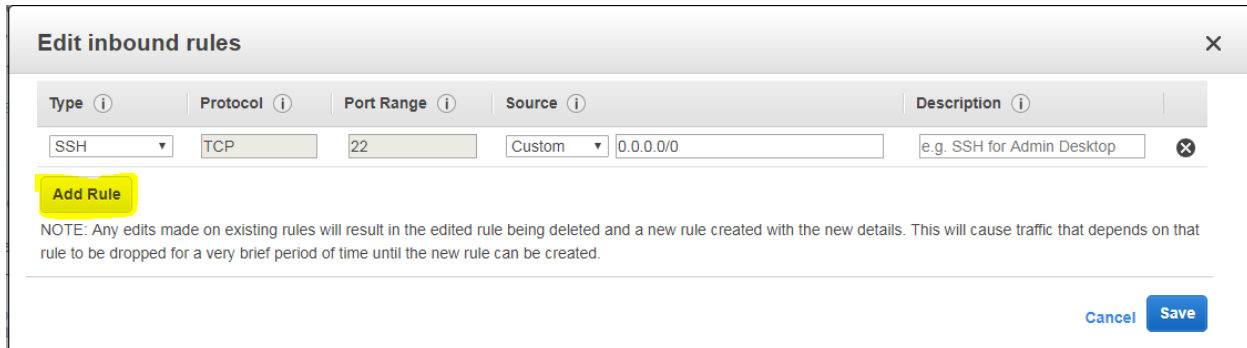
Security Group: sg-e4f8108f

Tab: Inbound

[Edit](#)

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

Click “Add rule” button



Edit inbound rules [X]

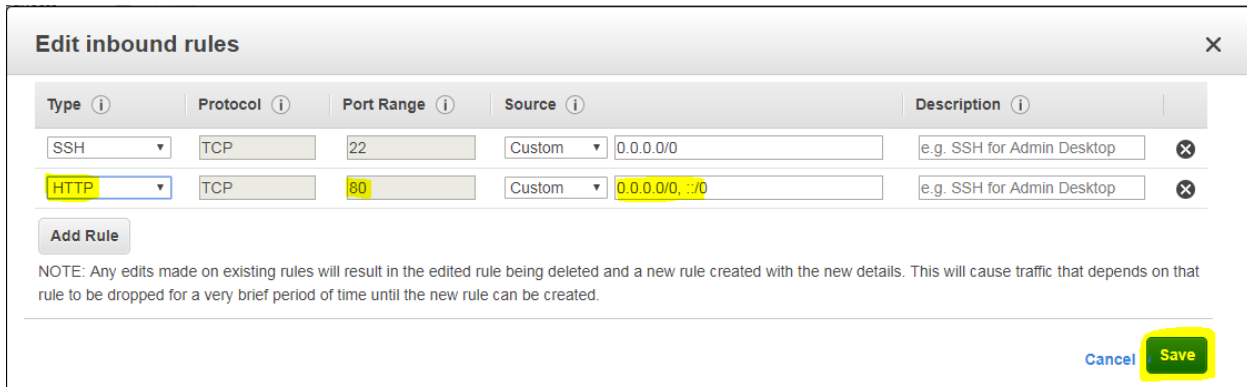
Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH ▾	TCP	22	Custom ▾ 0.0.0.0/0	e.g. SSH for Admin Desktop [X]

Add Rule

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

Cancel Save

Select “HTTP” and custom source as 0.0.0.0/0, (for IPV4) and ::/0 (for IPV6).



Edit inbound rules [X]

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH ▾	TCP	22	Custom ▾ 0.0.0.0/0	e.g. SSH for Admin Desktop [X]
HTTP ▾	TCP	80	Custom ▾ 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop [X]

Add Rule

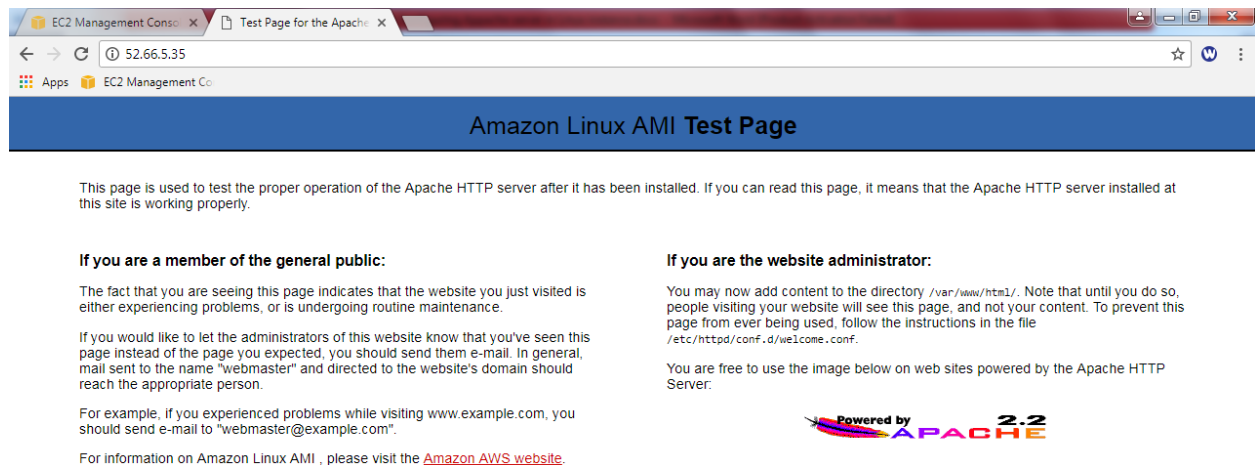
NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

Cancel **Save**

Click “Save”.

Now try to connect the Apache web server in your local machine.

http://52.66.5.35



We have successfully got the web server page.