

Enterprise Standards and Best Practices for IT Infrastructure

Lab 01 and 02-Lab Report

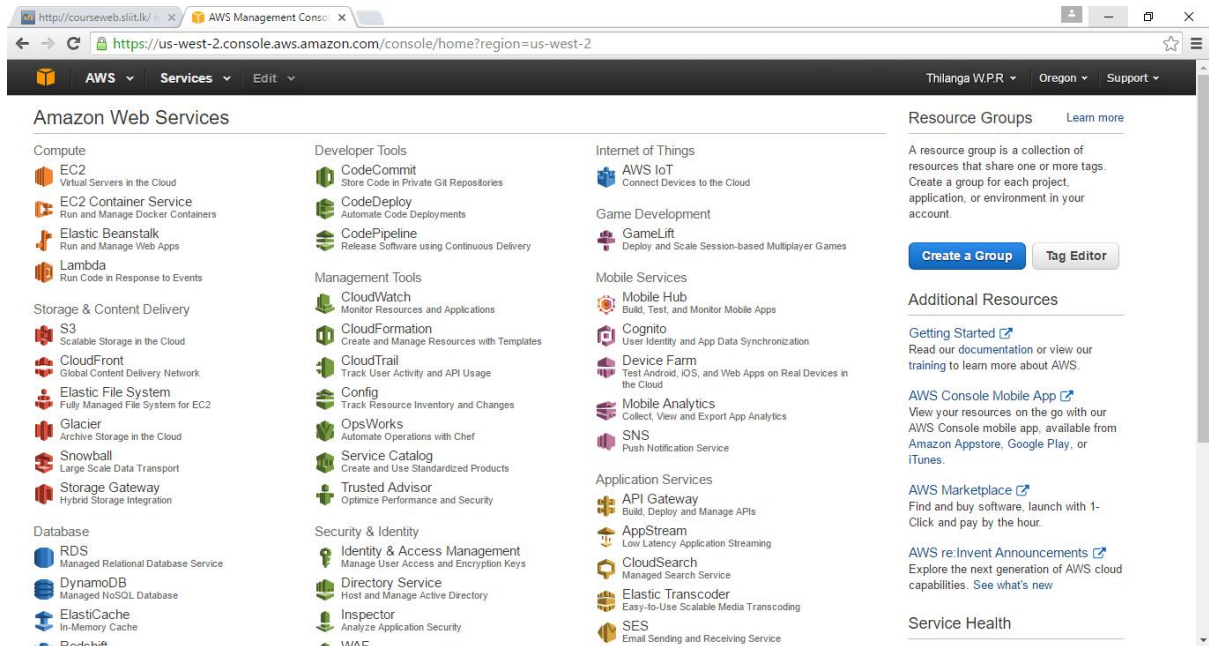
Software Requirements Specification

Thilanga W.P.R
It12086894
Weekend Batch

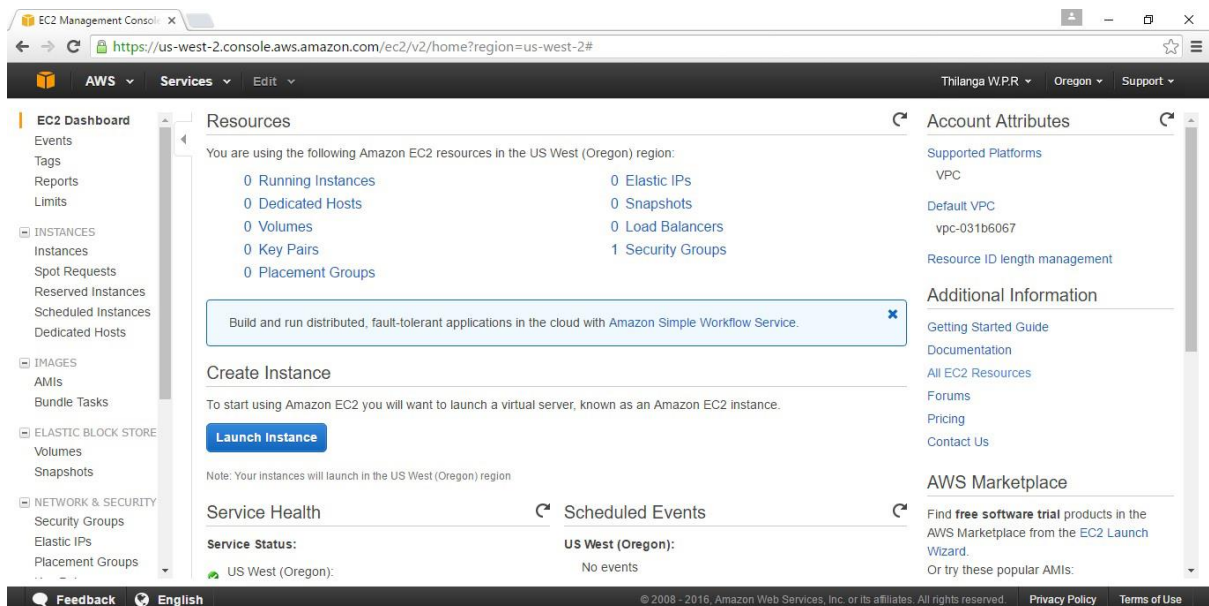
Sri Lanka Institute of Information Technology
B.Sc. Special (Honors) Degree in Information Technology
Specialized in Information Technology

Creating an Amazon EBS-Backed Windows AMI

Step 01: Select EC2 web service from Amazon web servers.



Step 02: Select Launch Instance under Create Instance in main interface.



Step 03: Choose an Amazon Machine image (AMI). (Select Microsoft windows Server 2012 R2 Base)

The screenshot shows the AWS Management Console interface for the 'Launch Instance Wizard'. The first step, 'Choose an Amazon Machine Image (AMI)', is active. The 'Microsoft Windows Server 2012 R2 Base' AMI is selected. The console displays the AMI details, including the root device type (ebs) and virtualization type (hvm). A promotional banner for Amazon RDS is also visible.

Step 1: Choose an Amazon Machine Image (AMI)

Free tier eligible (http://www.ubuntu.com/cloud/services)

Root device type: ebs Virtualization type: hvm

Microsoft Windows Server 2012 R2 Base - ami-8d0acfed

Windows

Free tier eligible

Microsoft Windows 2012 R2 Standard edition with 64-bit architecture. [English]

Root device type: ebs Virtualization type: hvm

Are you launching a database instance? Try Amazon RDS.

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale a relational database of your choice (MySQL, PostgreSQL, Oracle, SQL Server) in the cloud. It provides cost-efficient and resizable capacity while managing time-consuming database management tasks, freeing you up to focus on your applications and business. [Learn more.](#)

Launch a database using RDS

Microsoft Windows Server 2012 R2 with SQL Server Express - ami-4817d228

Windows

Microsoft Windows Server 2012 R2 Standard edition, 64-bit architecture, Microsoft SQL Server 2016 Express edition. [English]

Root device type: ebs Virtualization type: hvm

Step 04: Choose an Instance type.

The screenshot shows the AWS Management Console interface for the 'Launch Instance Wizard'. The second step, 'Choose an Instance Type', is active. The 't2.micro' instance type is selected. The console displays a table of available instance types, with 't2.micro' highlighted. The table includes columns for Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, and Network Performance.

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.

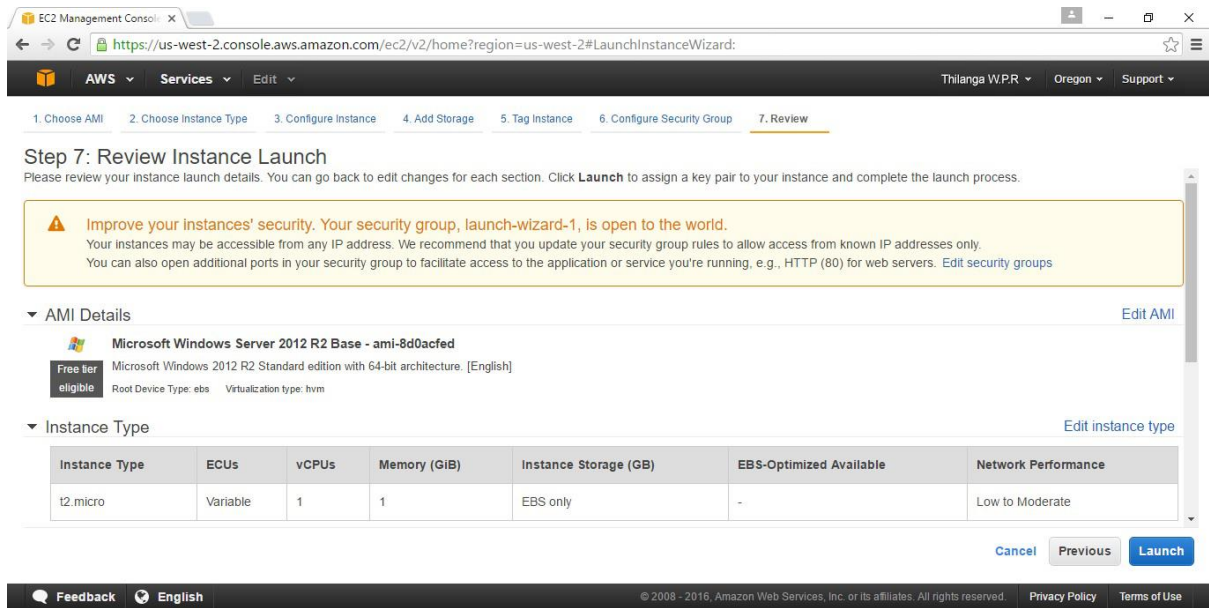
Filter by: **All instance types** **Current generation** **Show/Hide Columns**

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

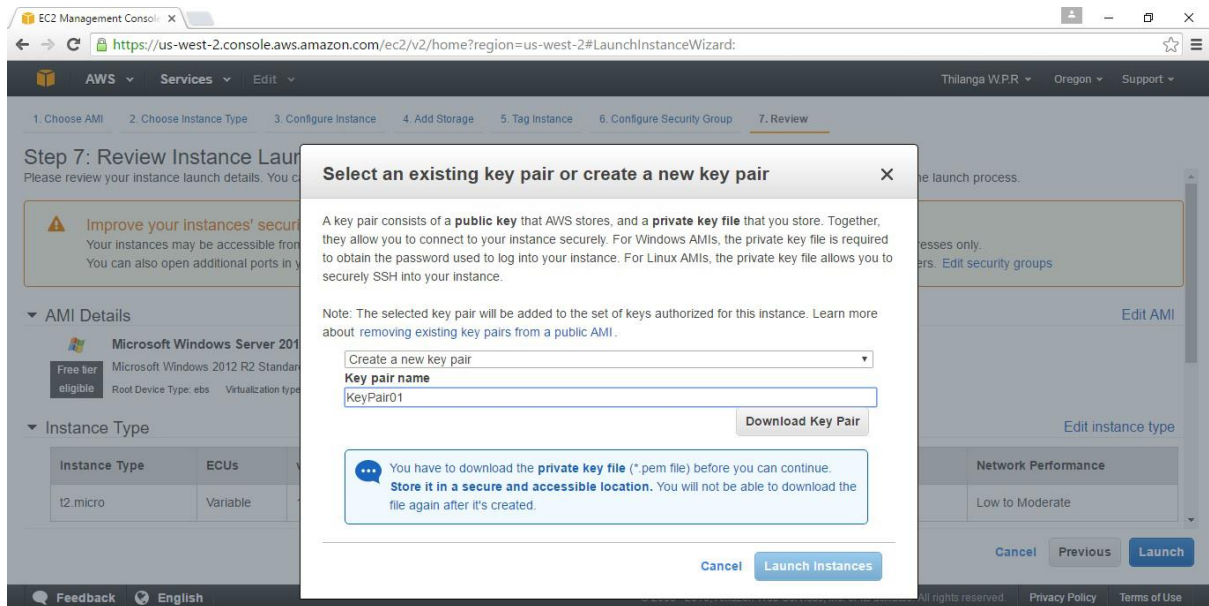
| | Family | Type | vCPUs | Memory (GiB) | Instance Storage (GB) | EBS-Optimized Available | Network Performance |
|-------------------------------------|-----------------|-----------|-------|--------------|-----------------------|-------------------------|---------------------|
| <input type="checkbox"/> | General purpose | t2.nano | 1 | 0.5 | EBS only | - | Low to Moderate |
| <input checked="" type="checkbox"/> | General purpose | t2.micro | 1 | 1 | EBS only | - | Low to Moderate |
| <input type="checkbox"/> | General purpose | t2.small | 1 | 2 | EBS only | - | Low to Moderate |
| <input type="checkbox"/> | General purpose | t2.medium | 2 | 4 | EBS only | - | Low to Moderate |
| <input type="checkbox"/> | General purpose | t2.large | 2 | 8 | EBS only | - | Low to Moderate |

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

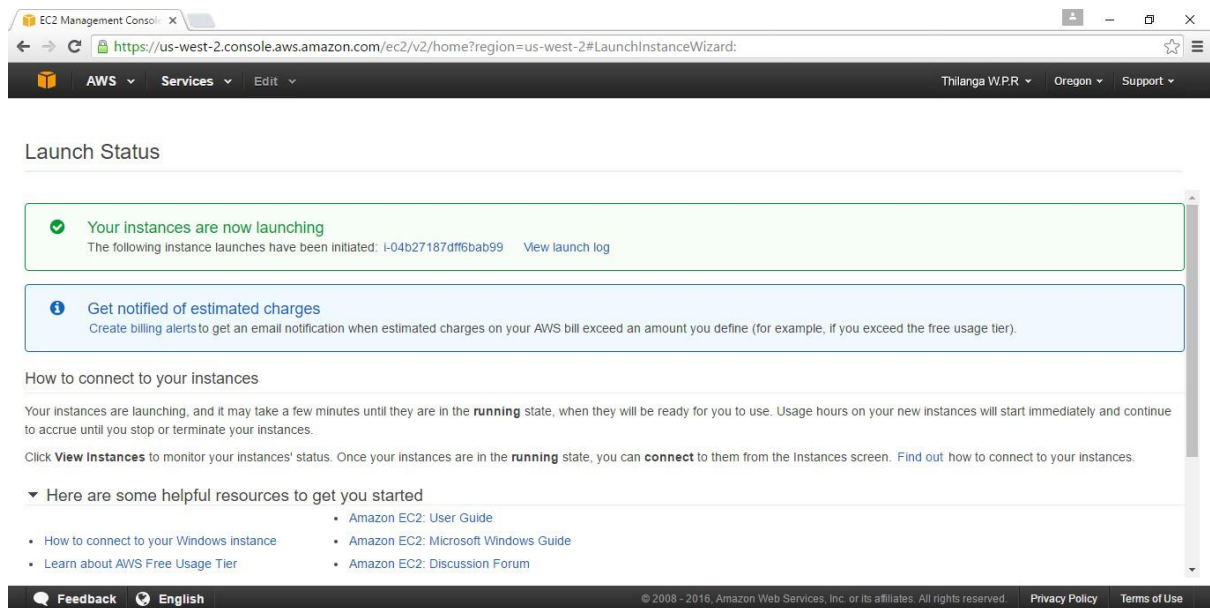
Step 05: Review Instance Launch.



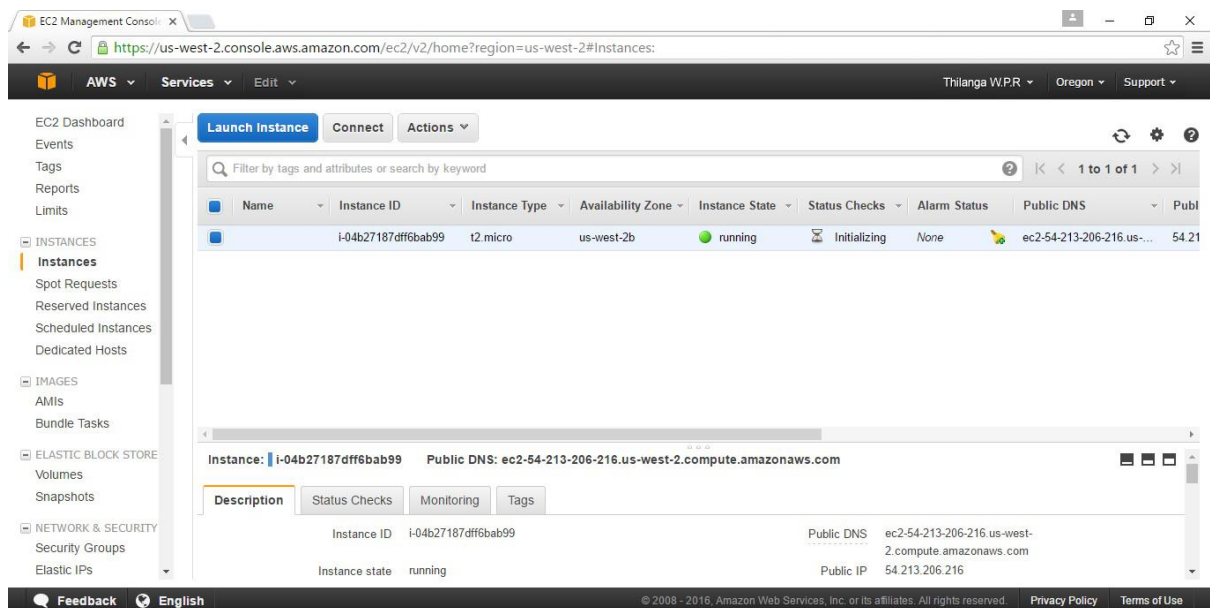
Step 06: There is popup box which is to select an existing key pair or create new key pair. Select new key pair and download the key pair. Then downloading the key pair click Launch Instance.



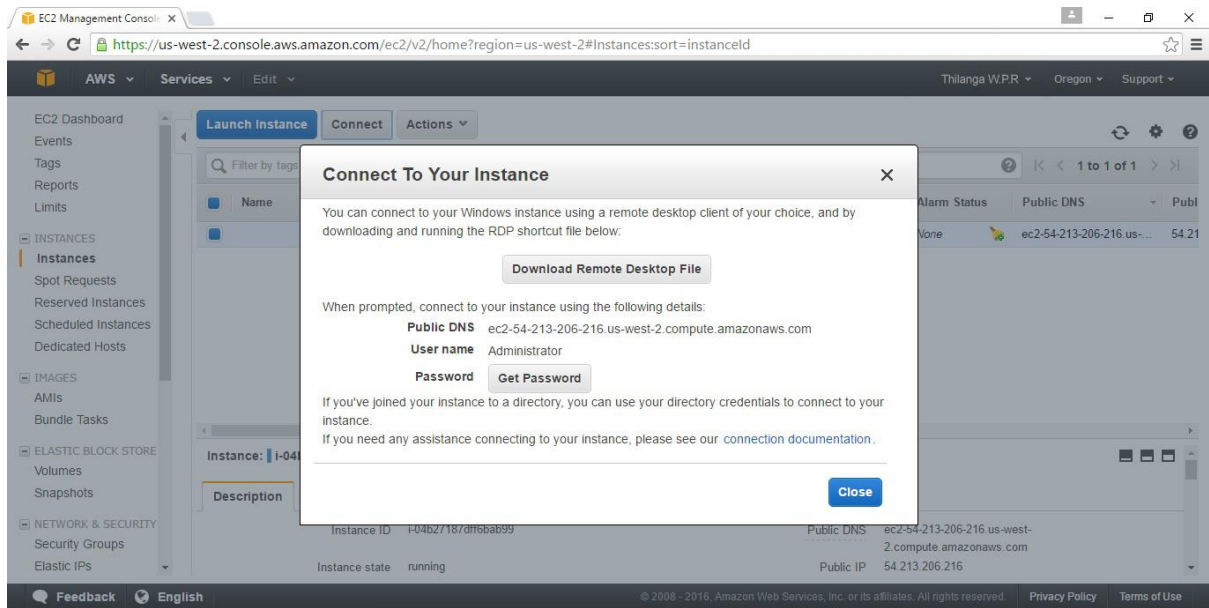
Step 07: View instance after launching.



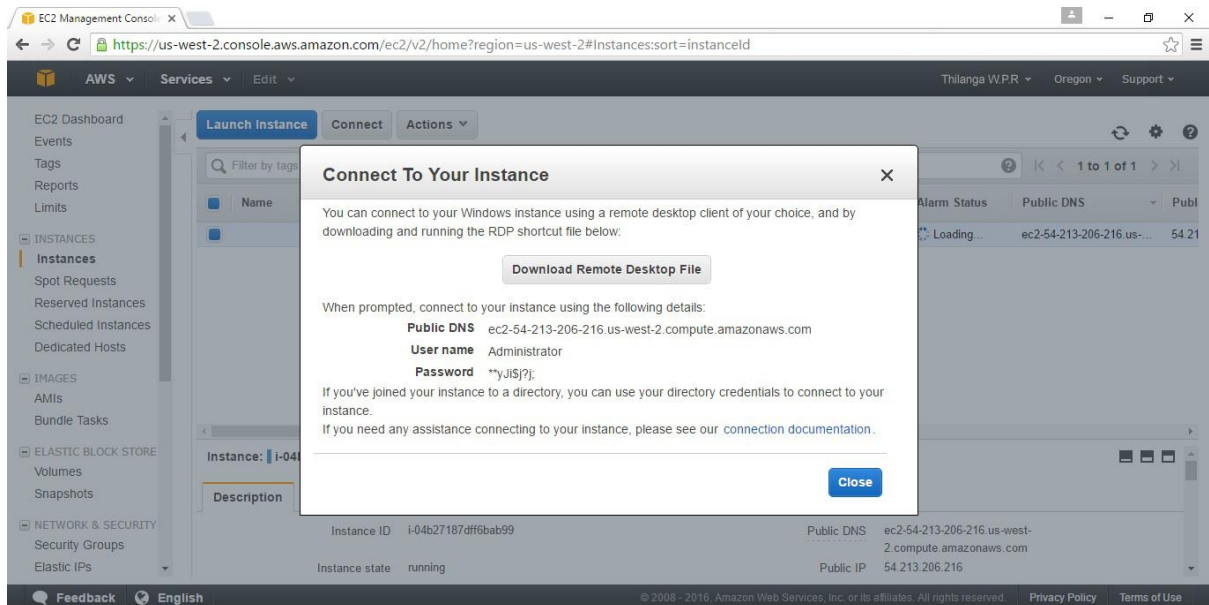
Step 08: Select the created instance and then connect.



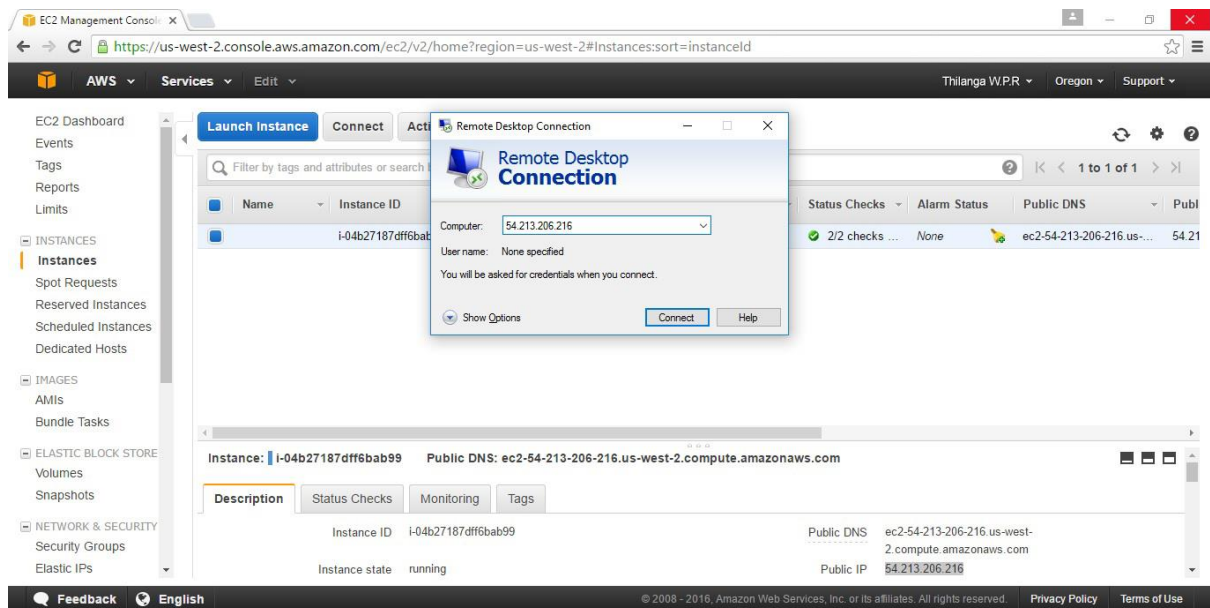
Step 09: Get a password from Connect to Your Instance window.



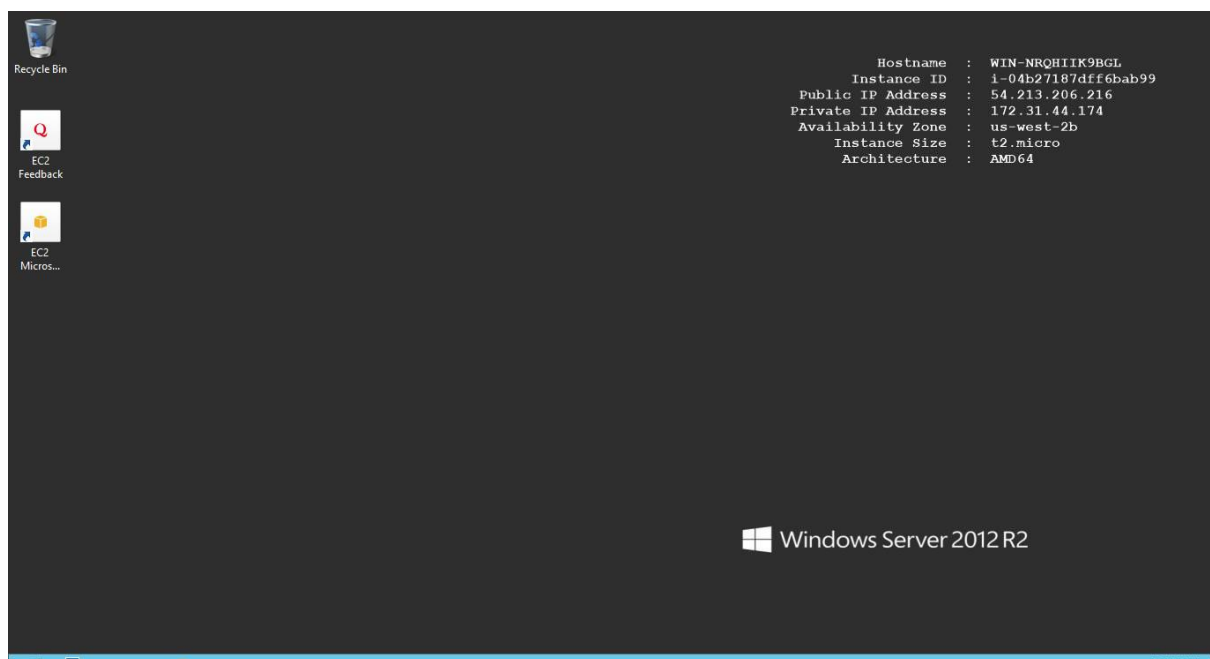
Step 10: Decrypt the password. Note down the user name and the decrypted password.



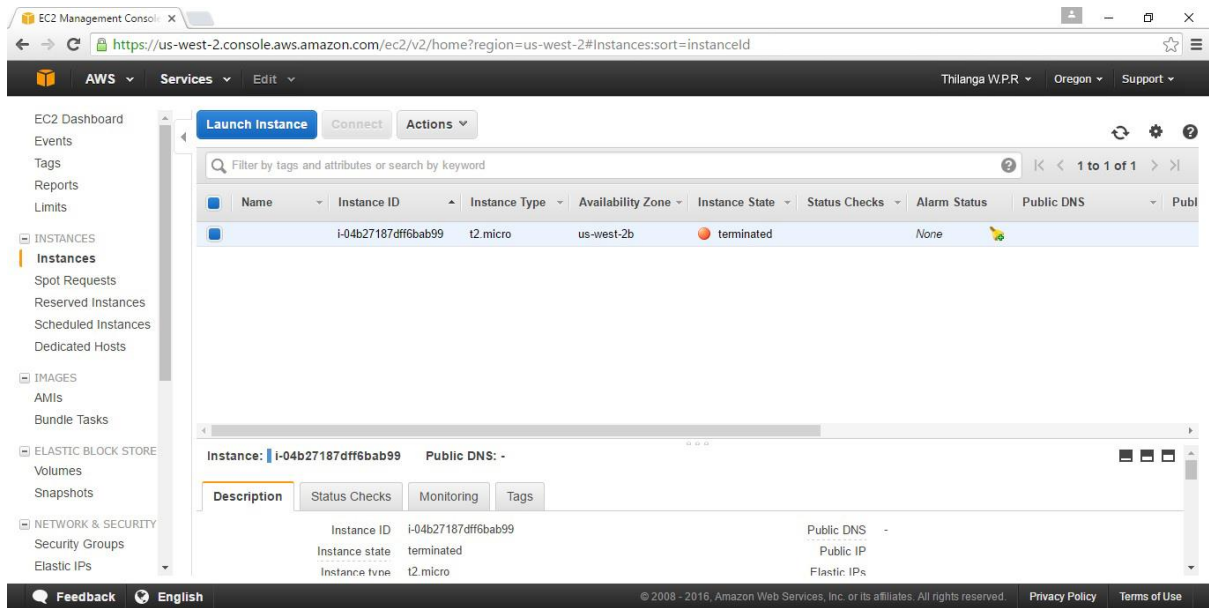
Step 11: Open Remote Desktop Connection. Provide the public IP of the launched instance.



Step 13: Log in to Windows Server 2012 R2 using the given user name and the decrypted password.

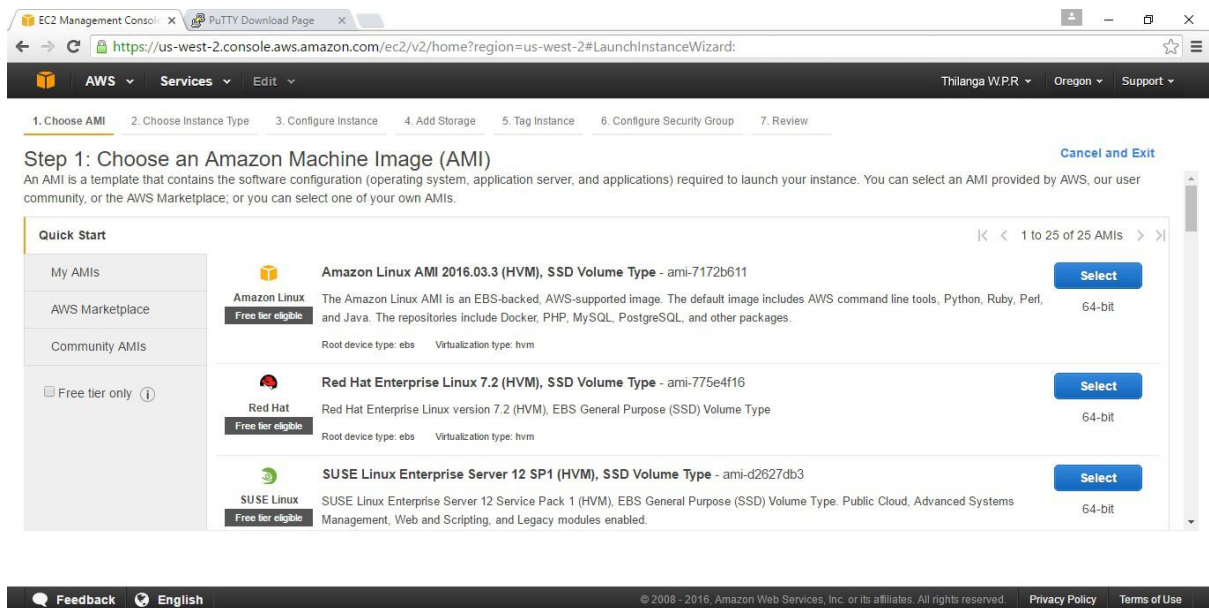


Step 14: Right click on the created server instance and terminate it from the instance state. (Right click on instance -> Instance State -> Stop)



Creating an Amazon EBS-Backed Linux AMI

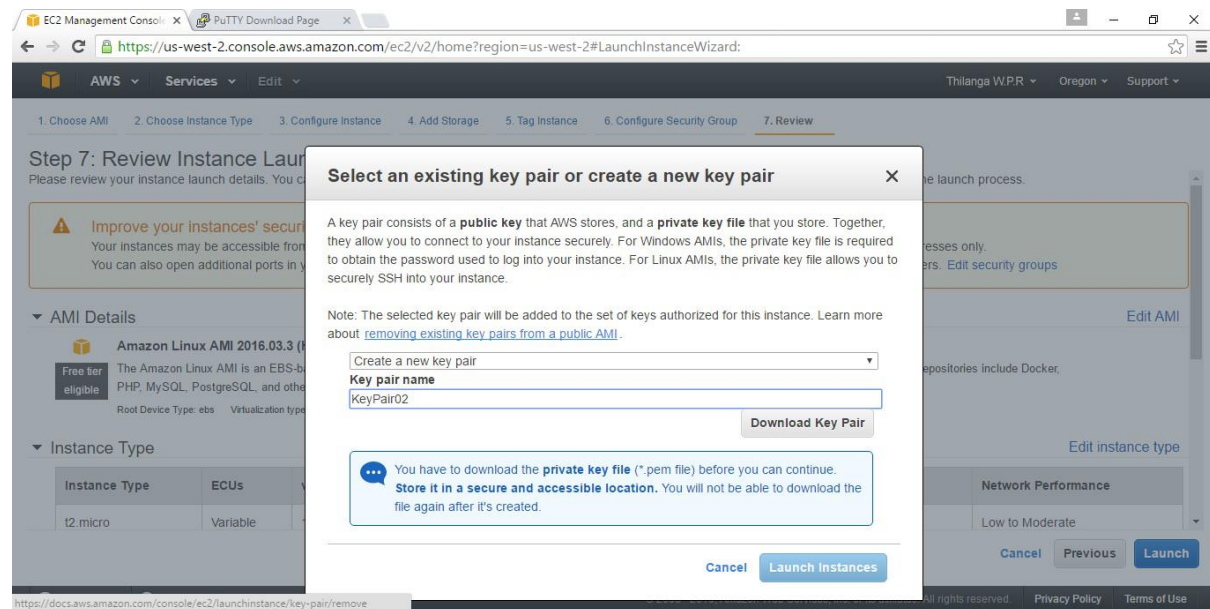
Step 01: Choose an Amazon Machine Image (AMI). Select Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type



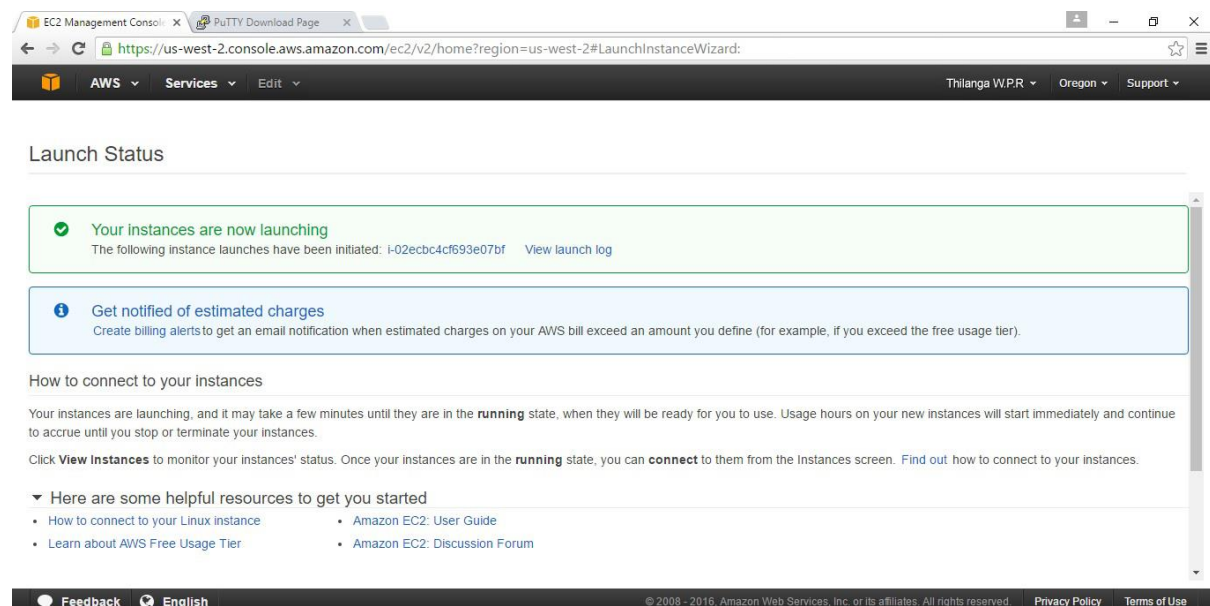
Step 02: Choose an Instance Type. Then review and launch

Step 03: Review Instance Launch.

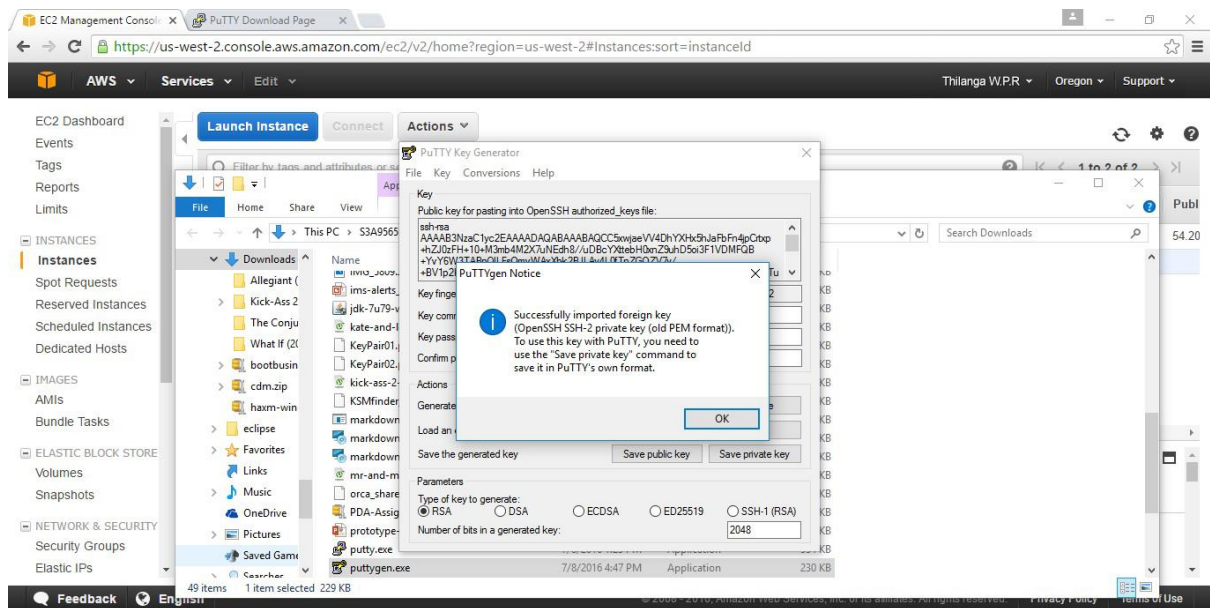
Step 04: Choose create a new key pair to download a new key pair. Then give a key pair name. Then select Launch Instance.



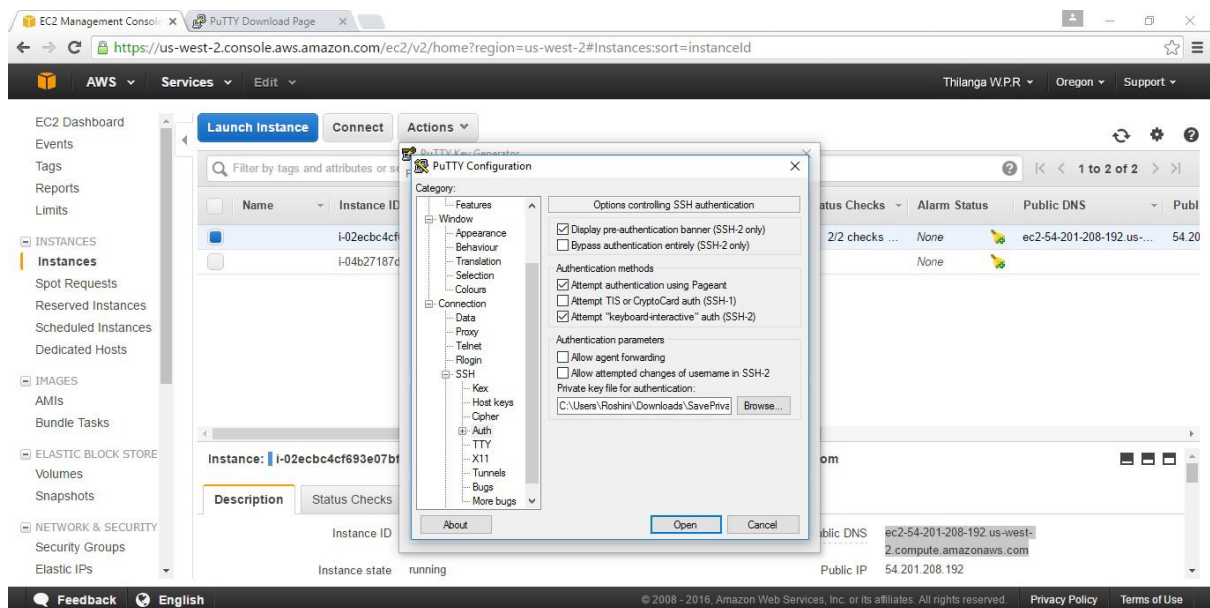
Step 05: View Instances after launching.



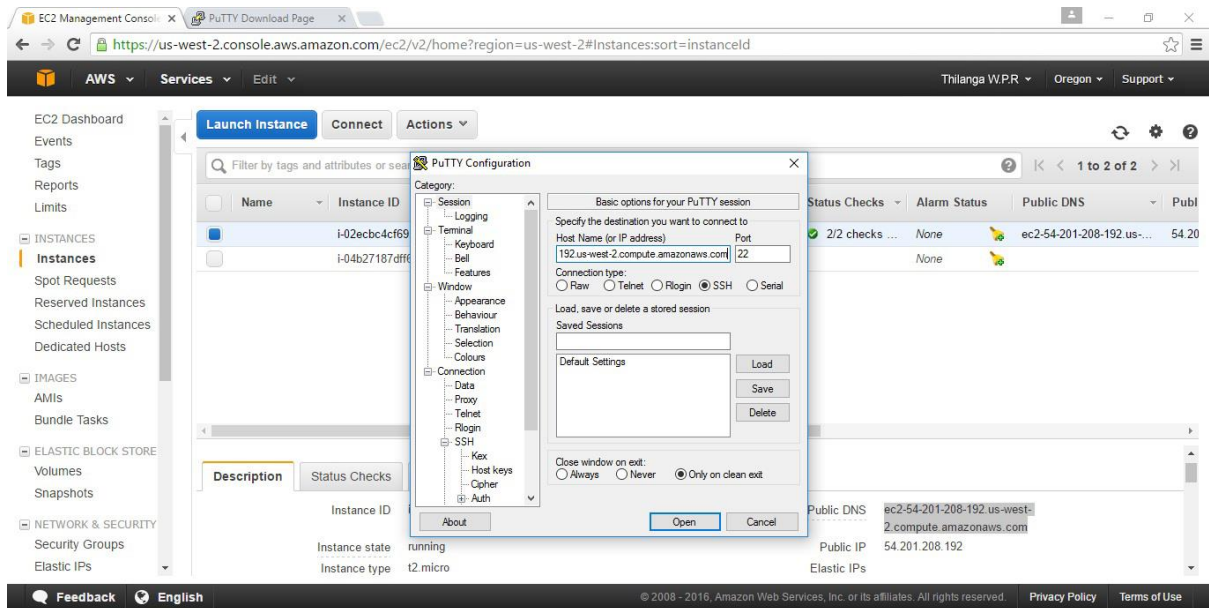
Step 06: Open PUTTY Key Generator. Then browse and load the downloaded key pair file and save it as a private key.



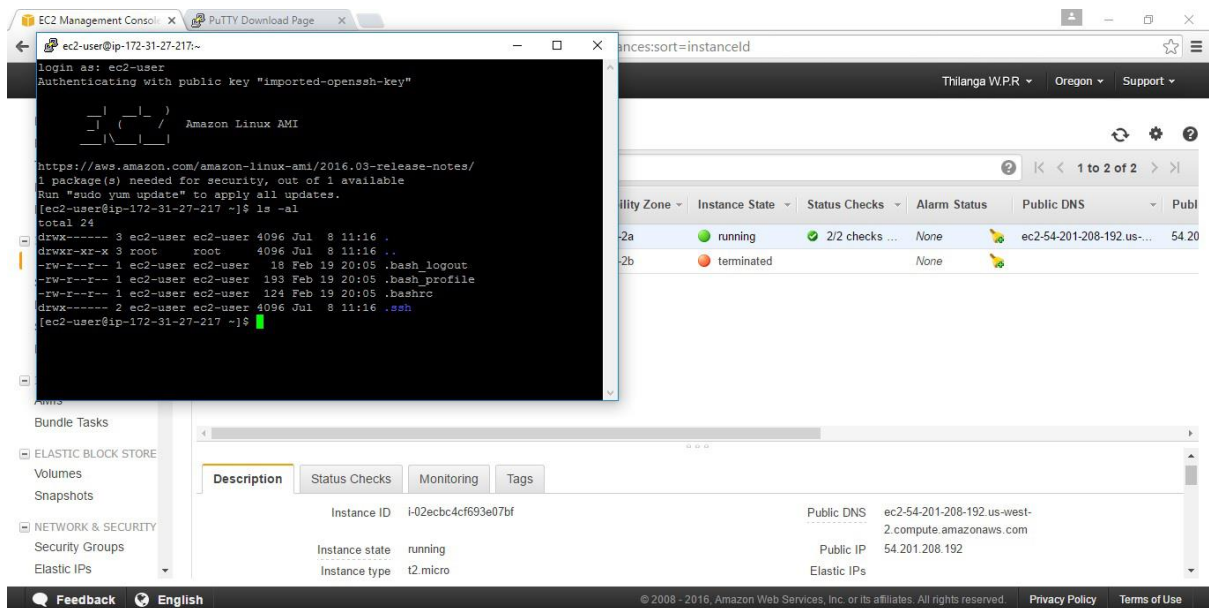
Step 07: Open PUTTY Configuration. Go to Connection category for SSH authentication.



Step 8: Go back to Session category in PUTTY Configuration. Copy the Public DNS of created instance and paste it under Host Name.



Step 9: Log in to Linux by giving user name in the kernel. Type some Linux commands to check.



Step 10: Terminate or stop the instance from instance state

EC2 Management Console

PUTTY Download Page

https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#Instances:sort=instancetype

Thilanga W.P.R Oregon Support

EC2 Dashboard

Events

Tags

Reports

Limits

INSTANCES

Instances

Spot Requests

Reserved Instances

Scheduled Instances

Dedicated Hosts

IMAGES

AMIs

Bundle Tasks

ELASTIC BLOCK STORE

Volumes

Snapshots

NETWORK & SECURITY

Security Groups

Elastic IPs

Launch Instance

Connect

Actions

Filter by tags and attributes or search by keyword

1 to 2 of 2

| | Name | Instance ID | Instance Type | Availability Zone | Instance State | Status Checks | Alarm Status | Public DNS | Publ |
|-------------------------------------|------|---------------------|---------------|-------------------|----------------|---------------|--------------|------------|------|
| <input checked="" type="checkbox"/> | | i-02ecbc4cf693e07bf | t2.micro | us-west-2a | stopped | | None | | |
| <input type="checkbox"/> | | i-04b27187dff6bab99 | t2.micro | us-west-2b | terminated | | None | | |

Description

Status Checks

Monitoring

Tags

Instance ID

Instance state

Instance type

Private DNS

Public DNS

Public IP

Elastic IPs

Availability zone

i-02ecbc4cf693e07bf

stopped

t2.micro

ip-177-31-77-217 us-west-2 compute internal

-

us-west-2a

Feedback

English

© 2009 - 2016, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use