



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Enterprise Standards and Best Practices for IT Infrastructure

4th Year 2nd Semester 2014

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Group Number:

Practical Session: Weekday(Friday)

Practical Number : 02

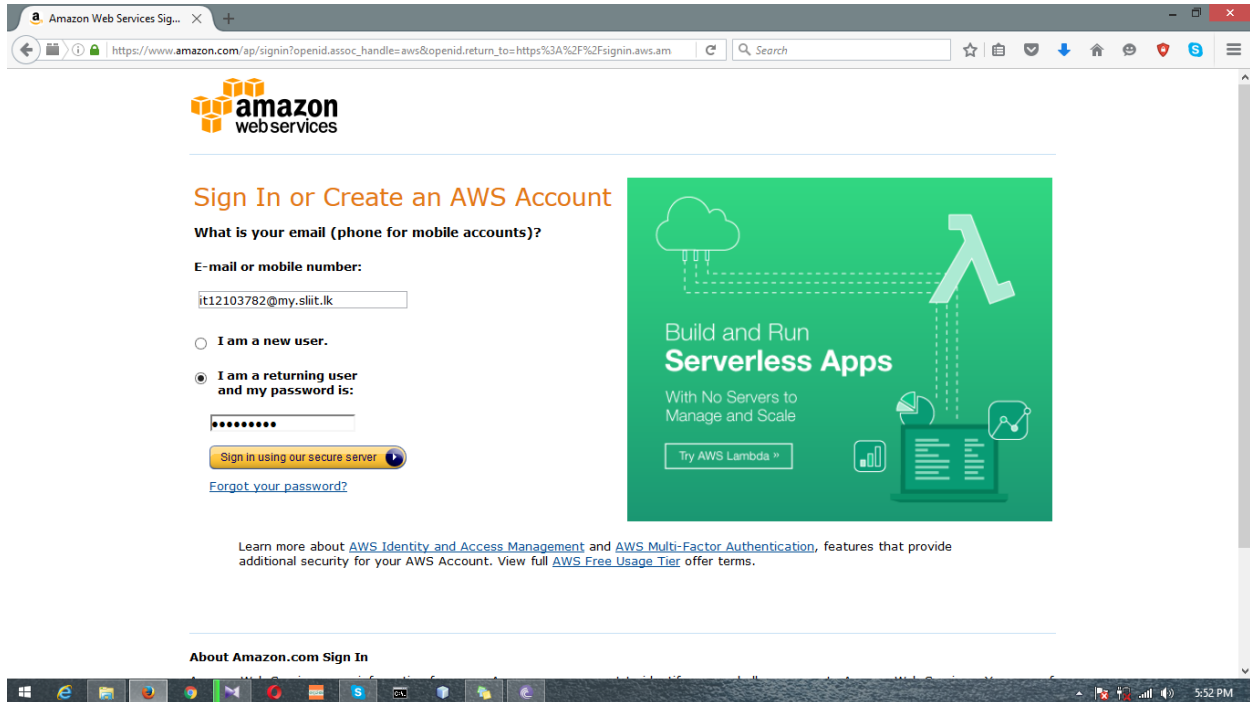
Date of Submission: 2016/07/30

Date of Evaluation : _____

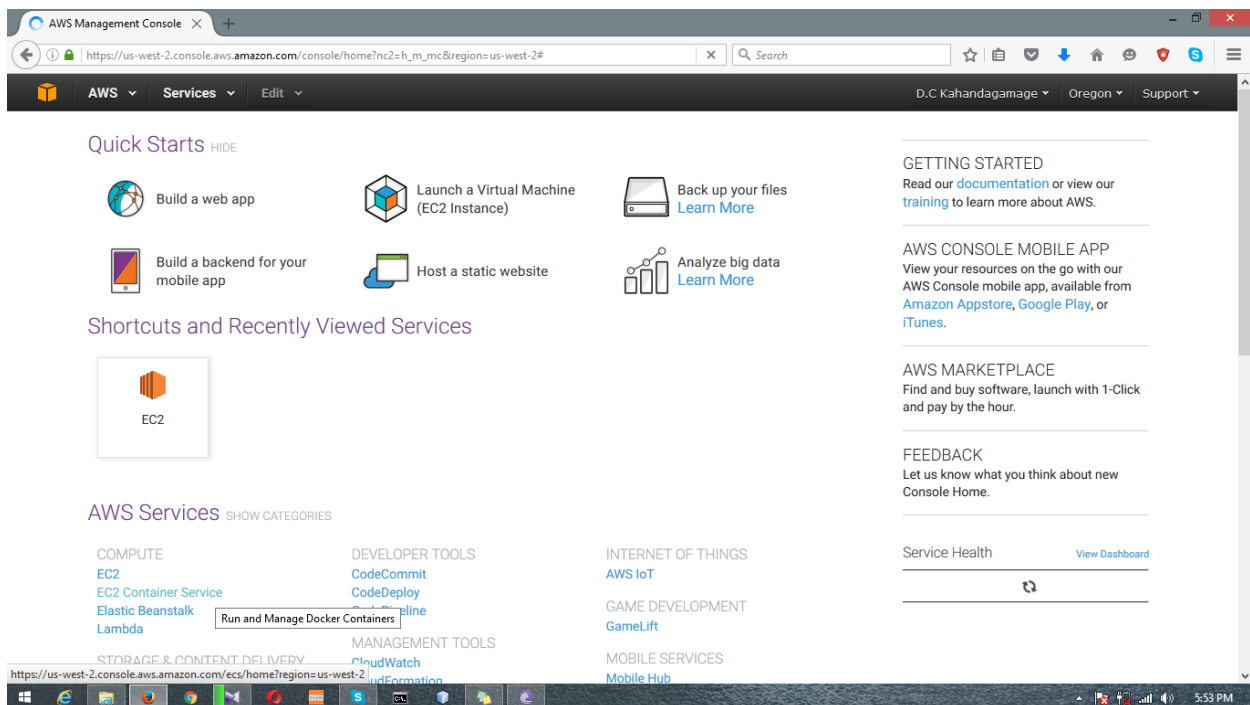
Evaluators Signature : _____

Creating Linux instance:

User needs to log in with proper user name and password



Select EC2



To create new instance

EC2 Management Console

Resources

You are using the following Amazon EC2 resources in the US West (Oregon) region:

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

Build and run distributed, fault-tolerant applications in the cloud with Amazon Simple Workflow Service.

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 US West (Oregon) region

Service Health

Service Status:

US West (Oregon):

This service is operating normally

Scheduled Events

US West (Oregon):

No events

Account Attributes

Supported Platforms

VPC

Default VPC

vpc-fc057d98

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:

Tableau Server (10 users)

EC2 Management Console

Launch Instance

Connect

Actions

Filter by tags and attributes or search by keyword

| Name | Instance ID | Instance Type | Availability Zone | Instance State | Status Checks | Alarm Status | Public DNS | Public IP |
|------|---------------------|---------------|-------------------|----------------|----------------|--------------|---|-------------|
| | i-0a8ec298b668f425f | t2.micro | us-west-2a | running | 2/2 checks ... | None | ec2-54-218-32-6.us-west-2.compute.amazonaws.com | 54.218.32.6 |

Instance: i-0a8ec298b668f425f

Public DNS: ec2-54-218-32-6.us-west-2.compute.amazonaws.com

Description

Status Checks

Monitoring

Tags

Instance ID: i-0a8ec298b668f425f

Public DNS: ec2-54-218-32-6.us-west-2.compute.amazonaws.com

Instance state: running

Instance type: t2.micro

Public IP: 54.218.32.6

Elastic IP:

Select the Linux instance (in my case using the Amazon linux)

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.

Quick Start

1 to 25 of 25 AMIs

| My AMIs | AWS Marketplace | Community AMIs |
|---|-----------------|----------------|
| <input type="checkbox"/> Free tier only | | |

| Image ID | Image Name | Architecture | Root device type | Virtualization type | Buttons |
|--------------|--|--------------|------------------|---------------------|---------|
| ami-7172b611 | Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type | 64-bit | ebs | hvm | Select |
| ami-775e4f16 | Red Hat Enterprise Linux 7.2 (HVM), SSD Volume Type | 64-bit | ebs | hvm | Select |
| ami-d2627db3 | SUSE Linux Enterprise Server 12 SP1 (HVM), SSD Volume Type | 64-bit | ebs | hvm | Select |

After selecting the Amazon machine image(AMI) user can select the instance type.(in my case I select the free tc2 macro)

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 |
|-----------------|-----------|-------|--------------|-----------------------|-------------------------|---------------------|
| General purpose | t2.nano | 1 | 0.5 | EBS only | - | Low to Moderate |
| General purpose | t2.micro | 1 | 1 | EBS only | - | Low to Moderate |
| General purpose | t2.small | 1 | 2 | EBS only | - | Low to Moderate |
| General purpose | t2.medium | 2 | 4 | EBS only | - | Low to Moderate |
| General purpose | t2.large | 2 | 8 | EBS only | - | Low to Moderate |
| General purpose | m4.large | 2 | 8 | EBS only | Yes | Moderate |

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

User needs to configure the instance

EC2 Management Console

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 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-fc057d98 (172.31.0.0/16) (default) [Create new VPC](#)

Subnet subnet-55a02023(172.31.32.0/20) | Default in us-we 4091 IP Addresses available [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.](#)

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

After the configure the instance user needs to allocate the size of the image(in my case configure it as 10GB)

EC2 Management Console

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 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/xvda | snap-d465048a | 10 | 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: Tag Instance](#)

Tag the instance with proper name(Example 1)

EC2 Management Console

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

Step 5: Tag Instance

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. [Learn more](#) about tagging your Amazon EC2 resources.

| Key (127 characters maximum) | Value (255 characters maximum) |
|------------------------------|--------------------------------|
| Name | example1 |

Create Tag (Up to 10 tags maximum)

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

Add security details(SSH ,HTTP, HTTPS)

EC2 Management Console

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 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: launch-wizard-3

Description: launch-wizard-3 created 2016-07-14T18:09:01.445+05:30

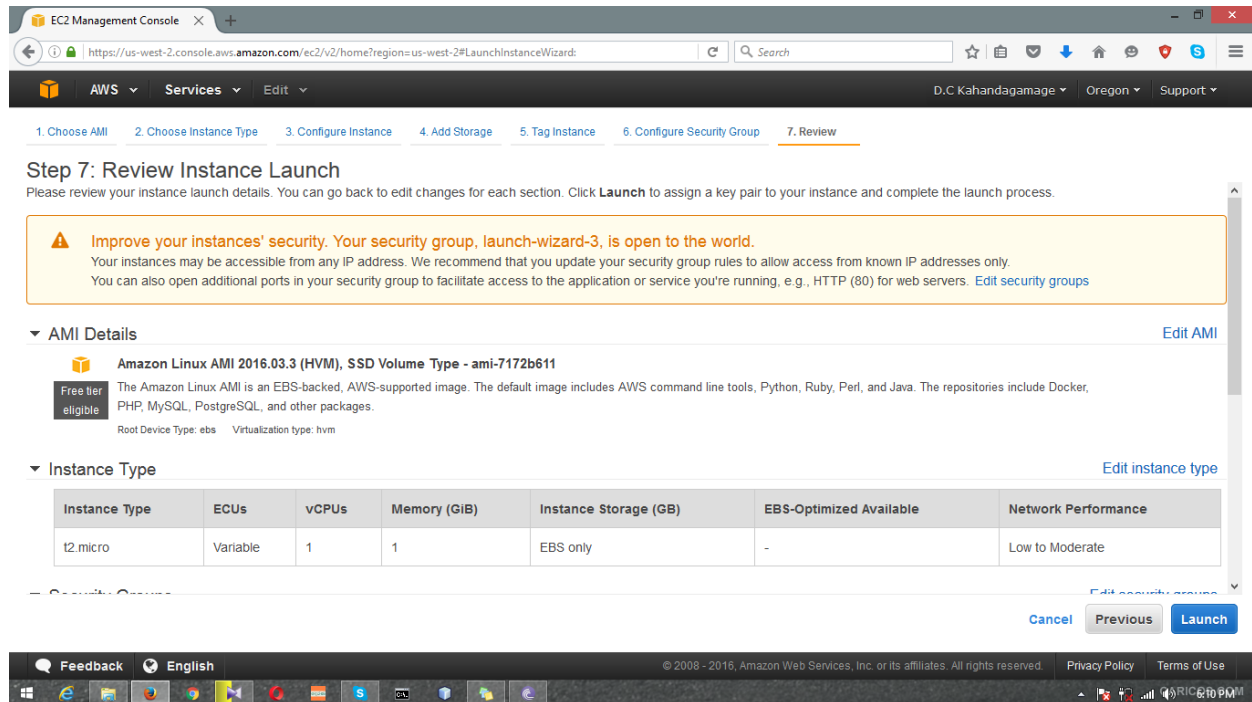
| Type | Protocol | Port Range | Source |
|-------|----------|------------|--------------------|
| SSH | TCP | 22 | Anywhere 0.0.0.0/0 |
| HTTP | TCP | 80 | Anywhere 0.0.0.0/0 |
| HTTPS | TCP | 443 | Anywhere 0.0.0.0/0 |

Add Rule

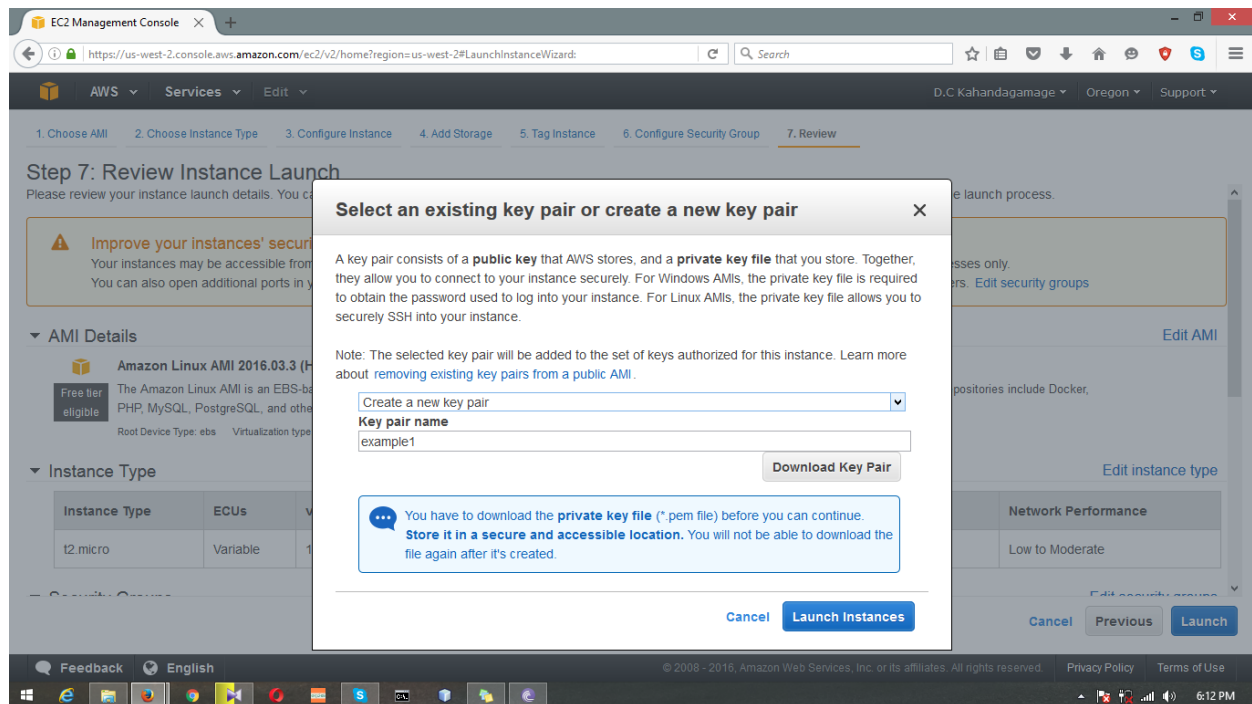
Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

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

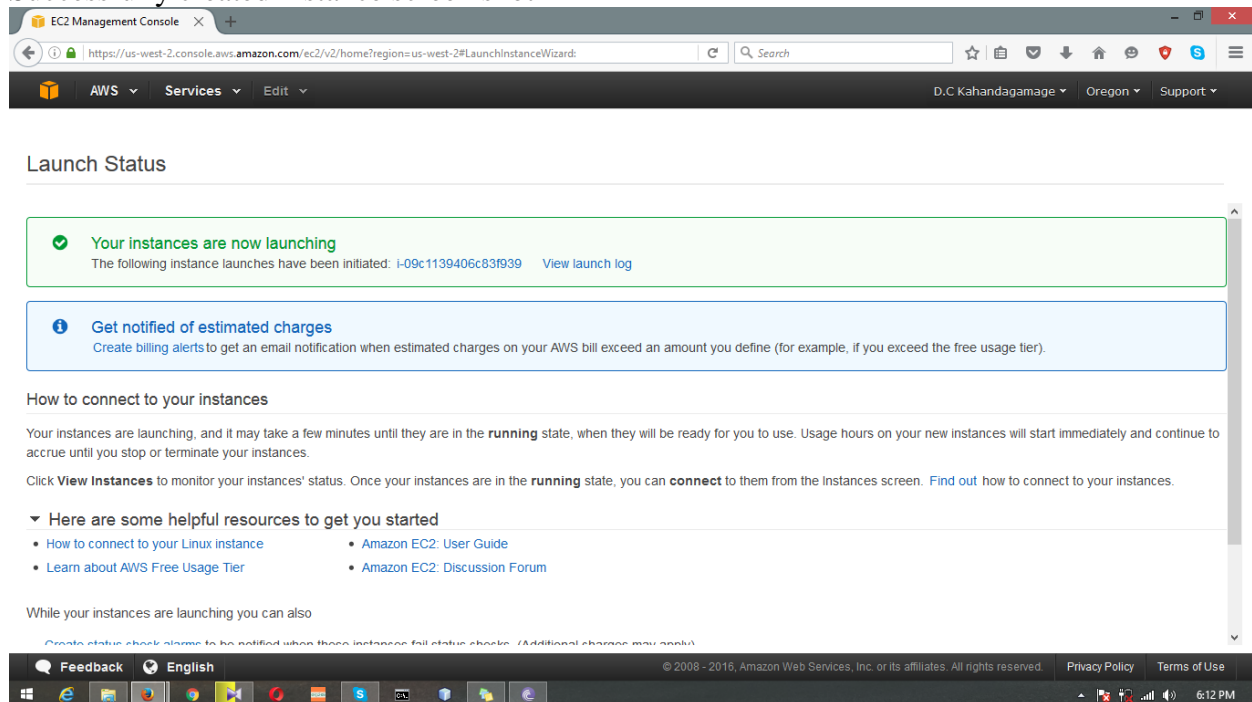
Finally user can view the created instance



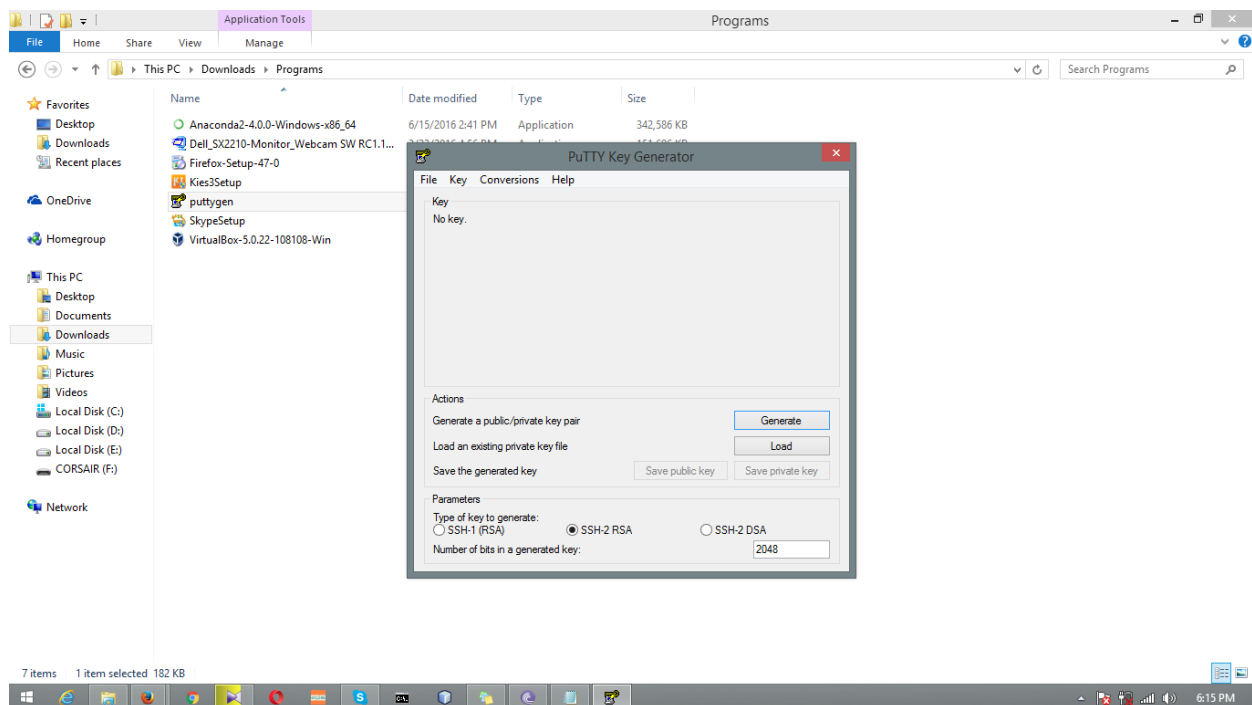
Creating the key pair with proper name



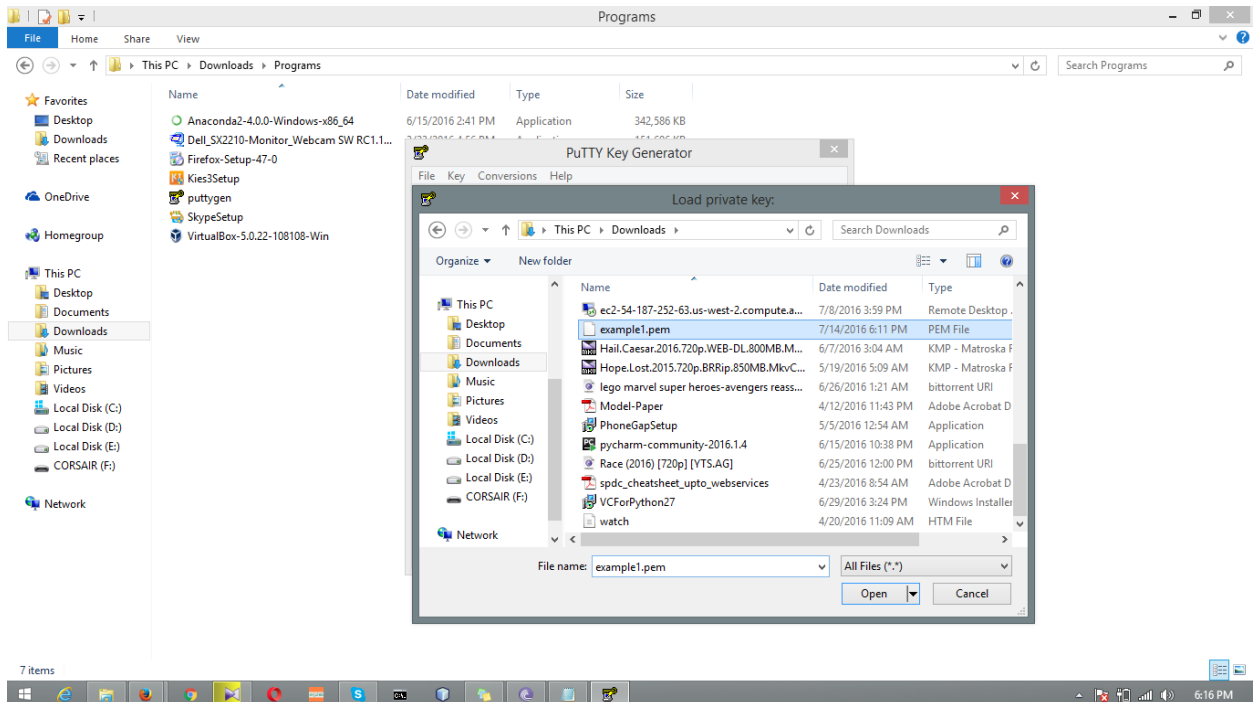
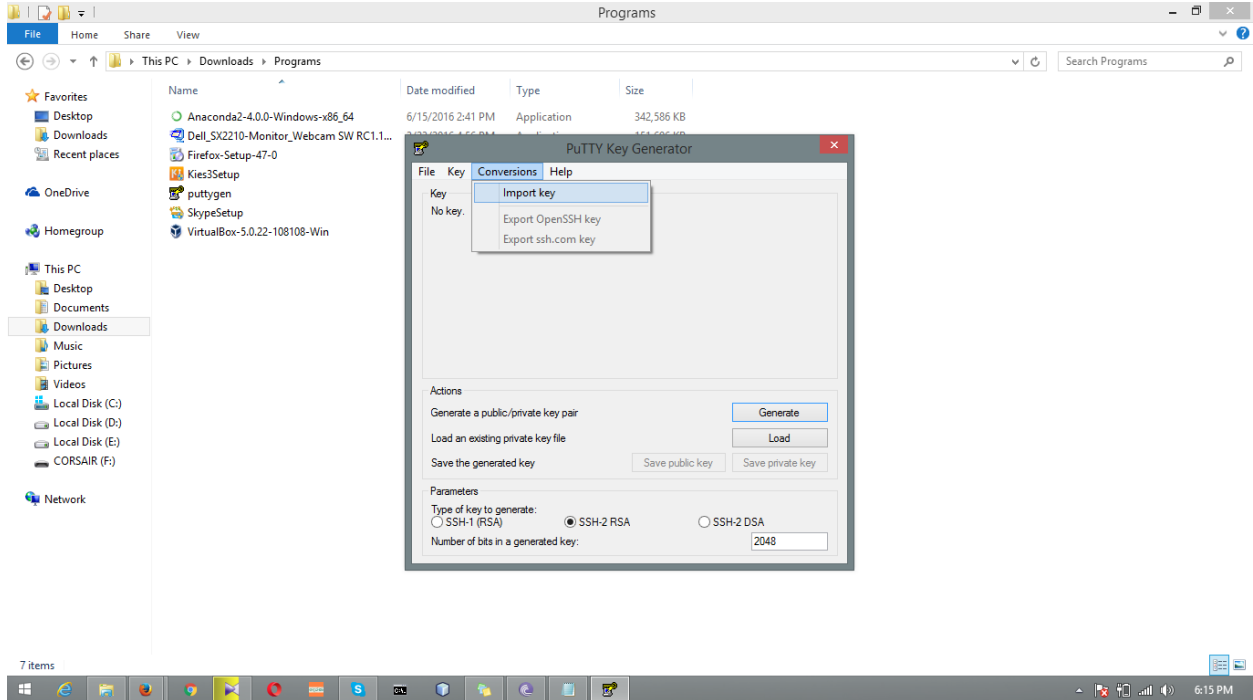
Successfully created instance screen shot

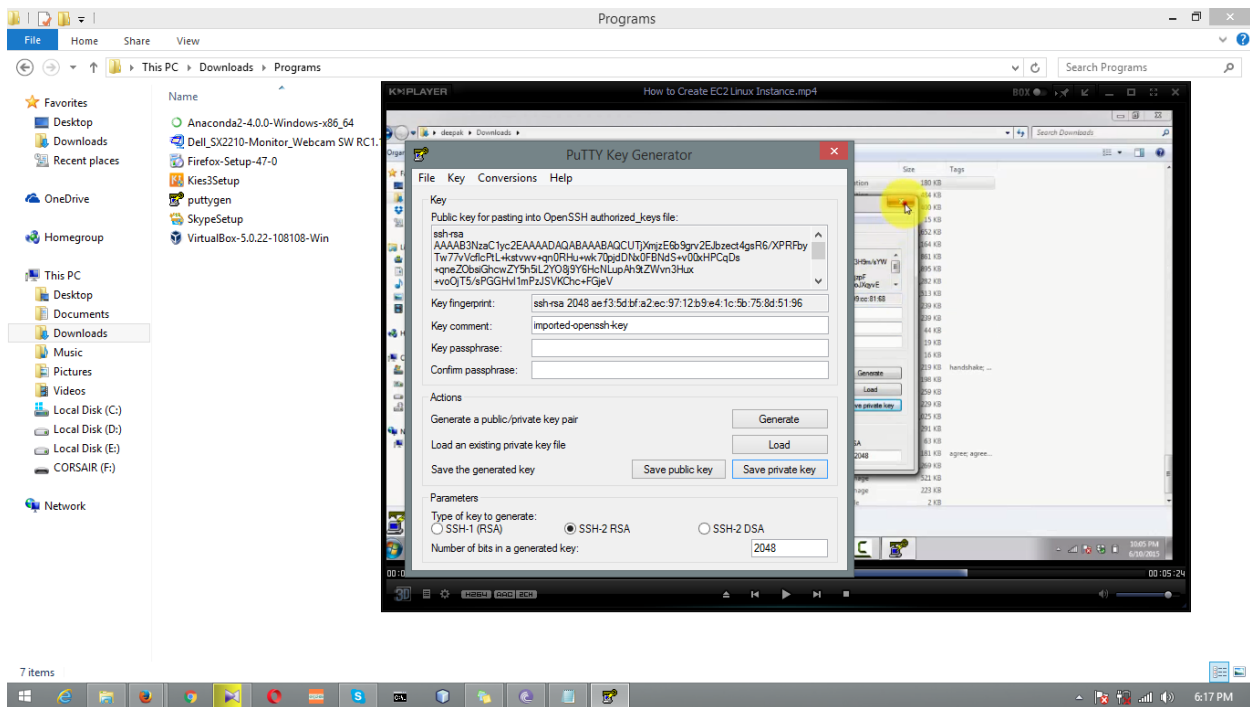
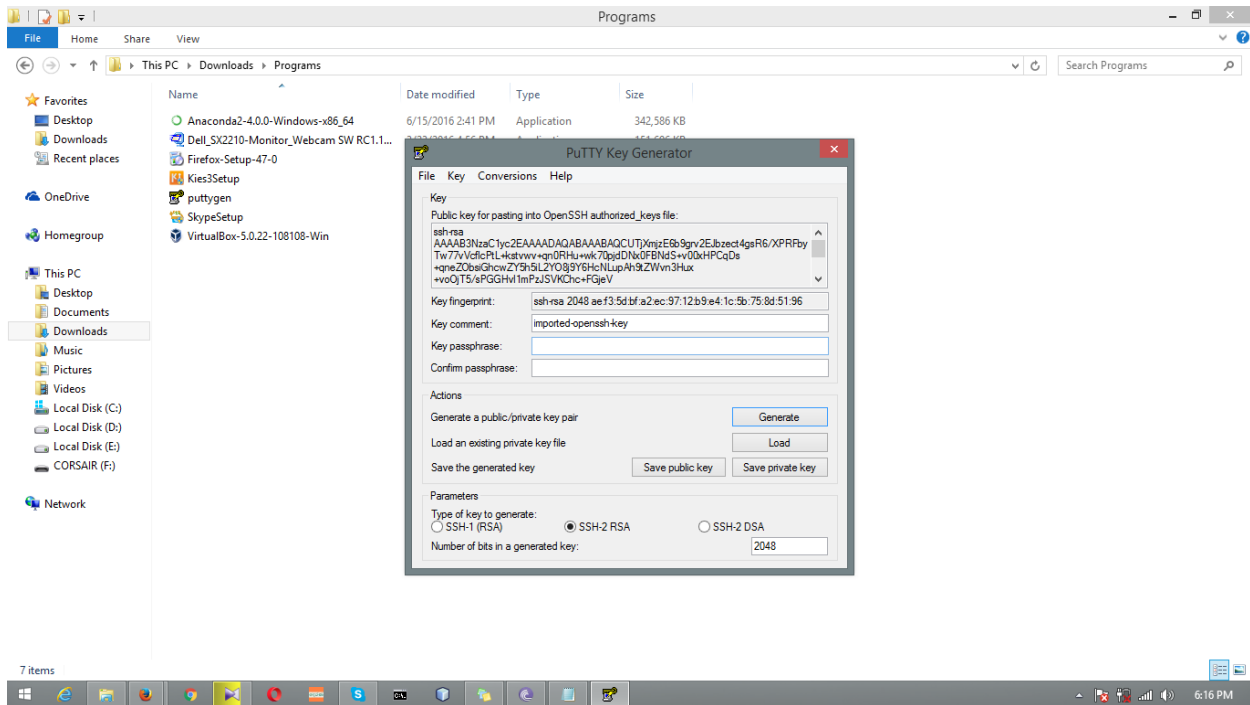


Download the puttygen

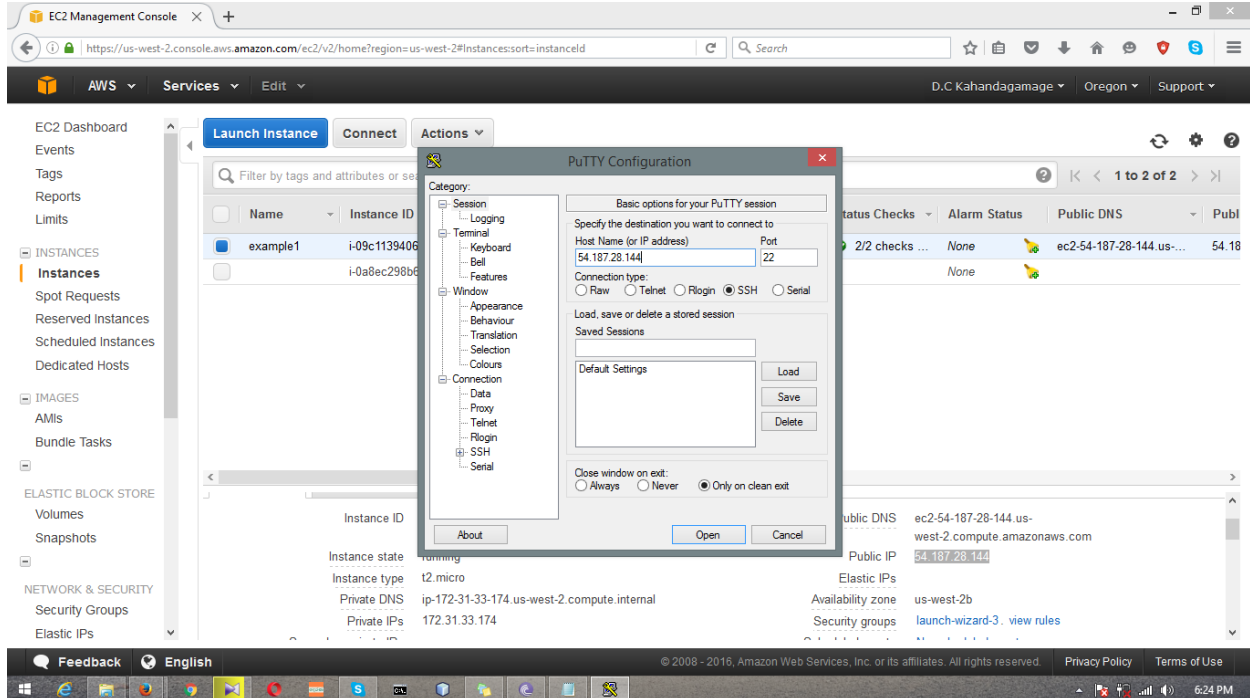


Adding the “.pem” downloaded file to puttygen

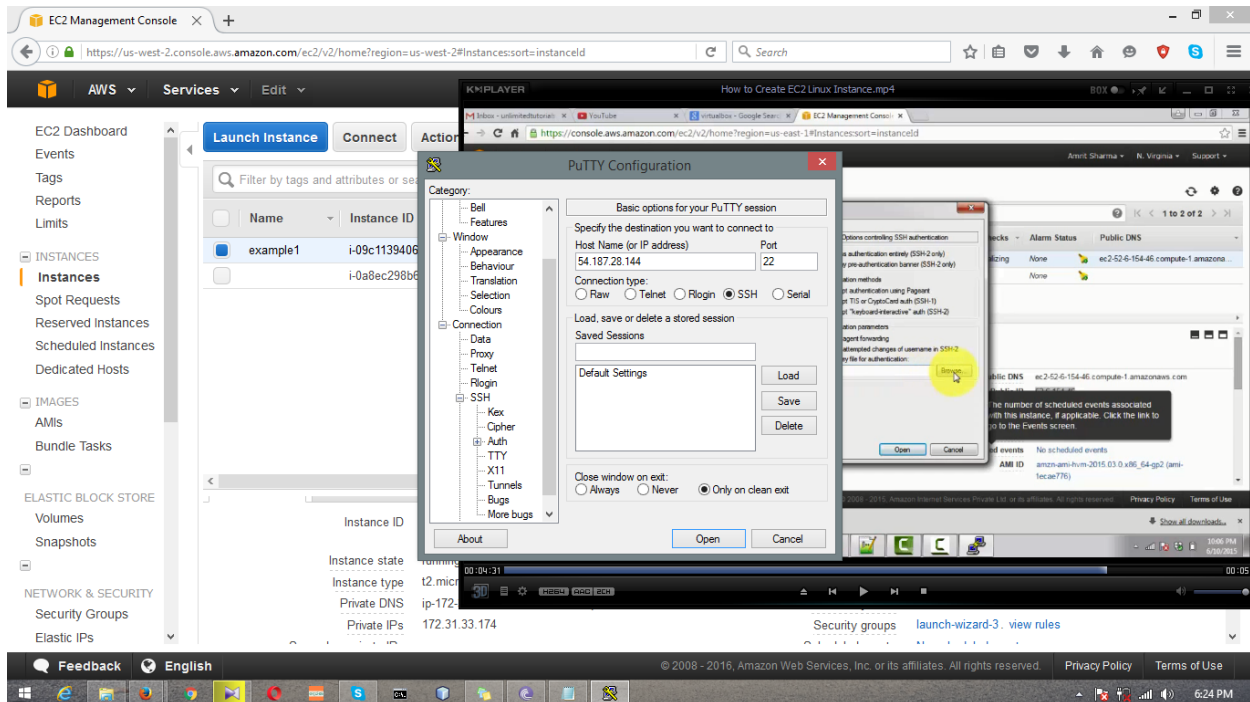


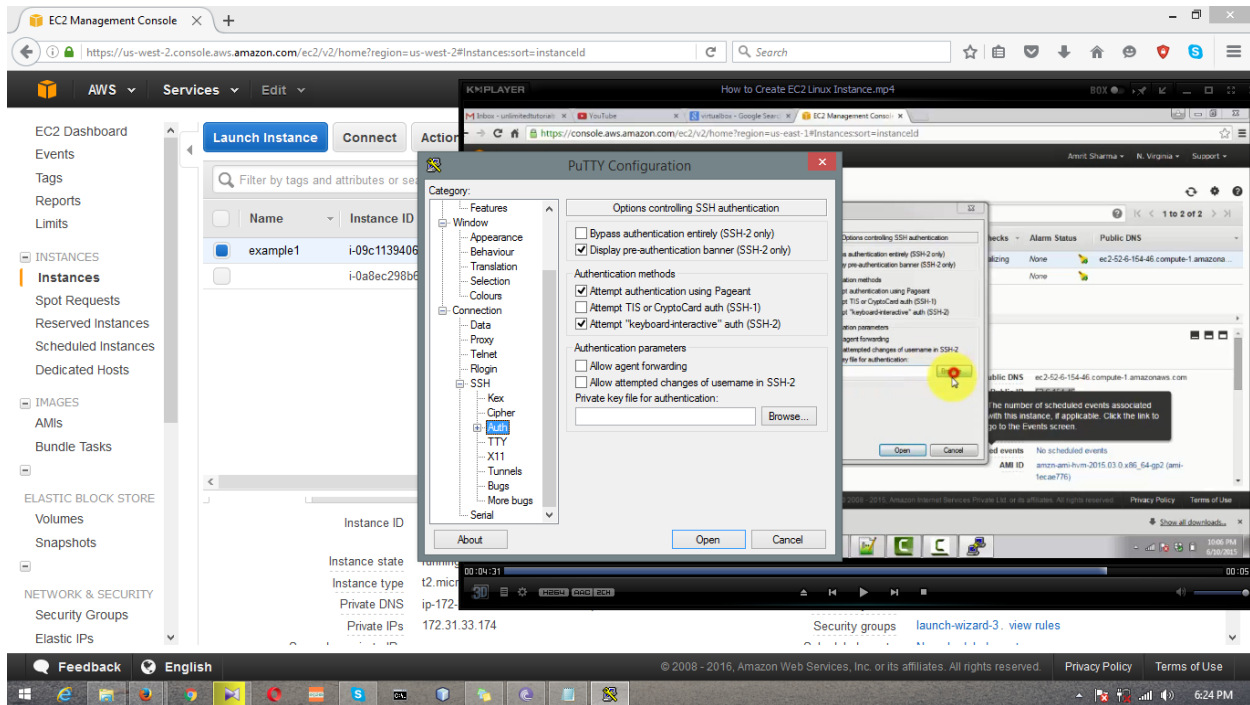


Configure the puttygen with proper IP address

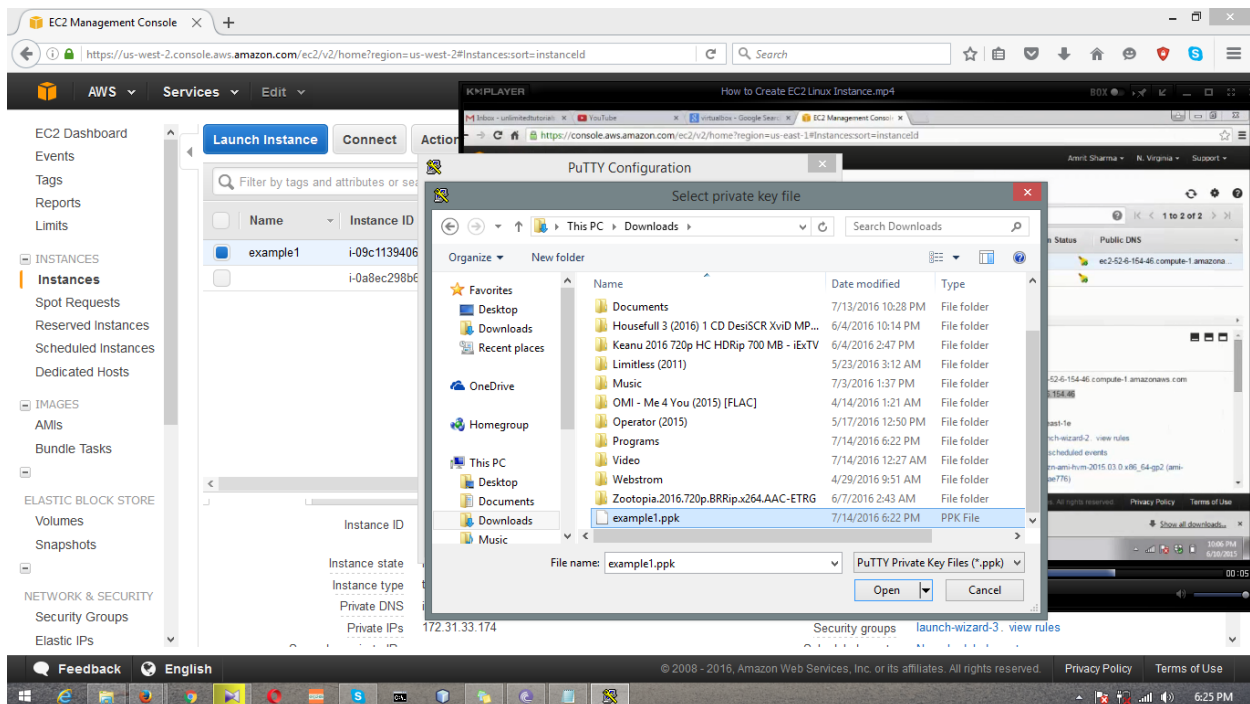


Configure the puttygen

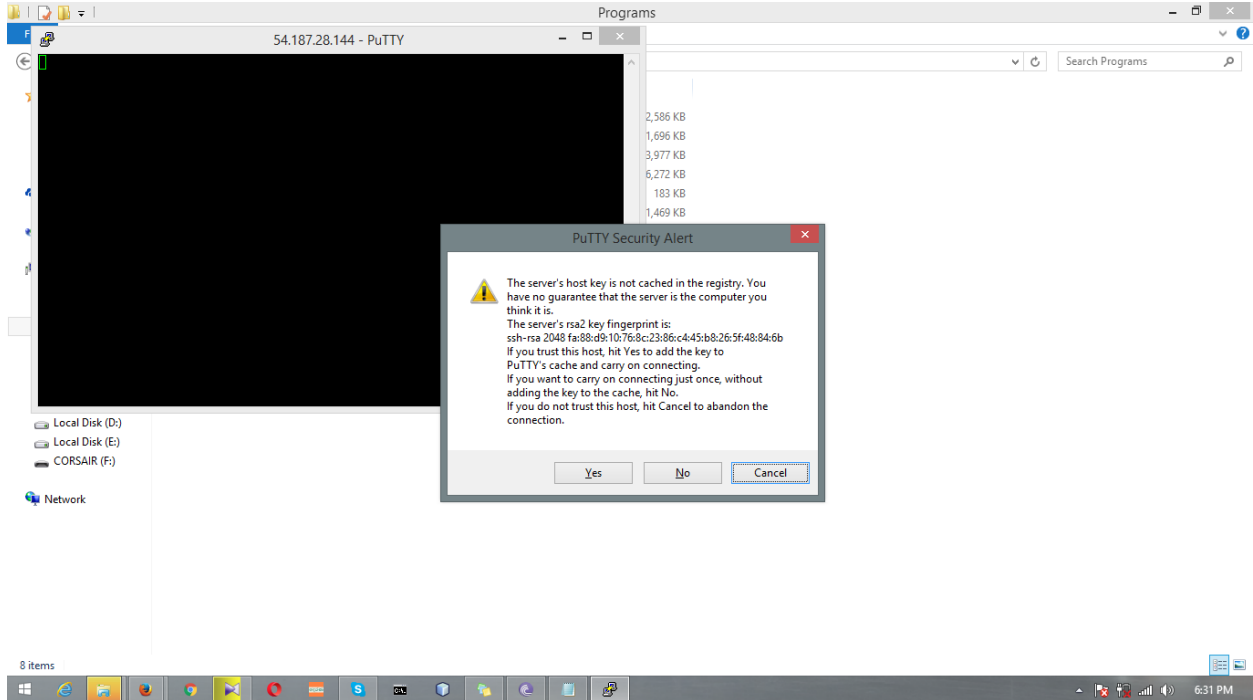




Then browse the Duplicate “.pem”



Then run the puttygen



If you need to connect and open instance type “ec2-user” on the command line

