



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Enterprise Standards and Best Practices for IT Infrastructure

4th Year 2nd Semester 2016

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Practical Session: <WD>

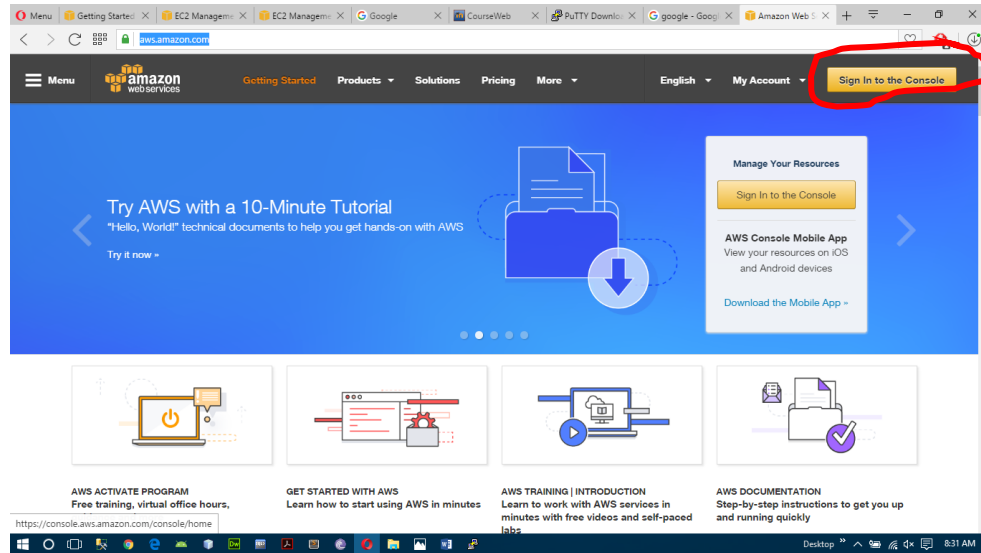
Date of Submission: 30/07/2016

Date of Evaluation : _____

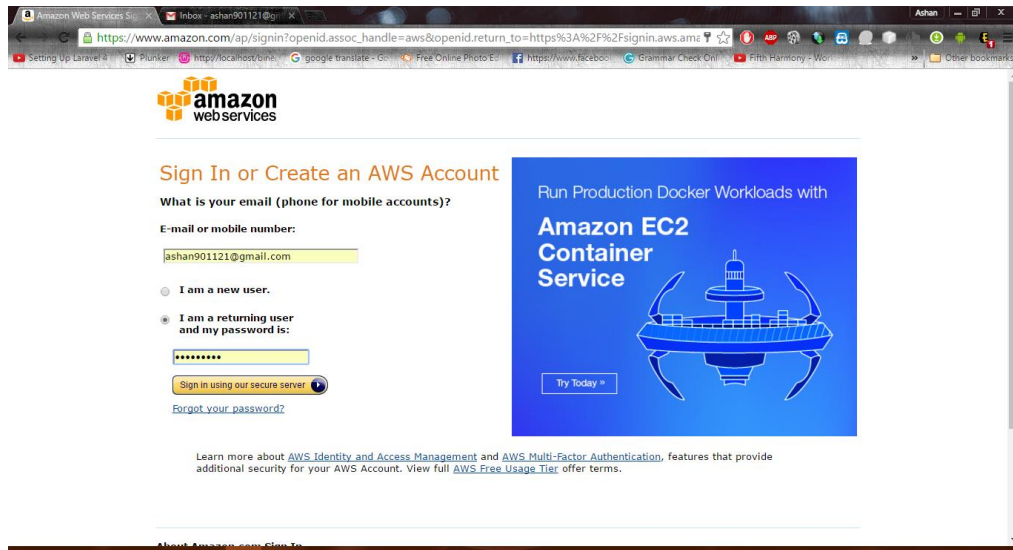
Evaluators Signature : _____

• Create Amazon EC2 Linux Instances

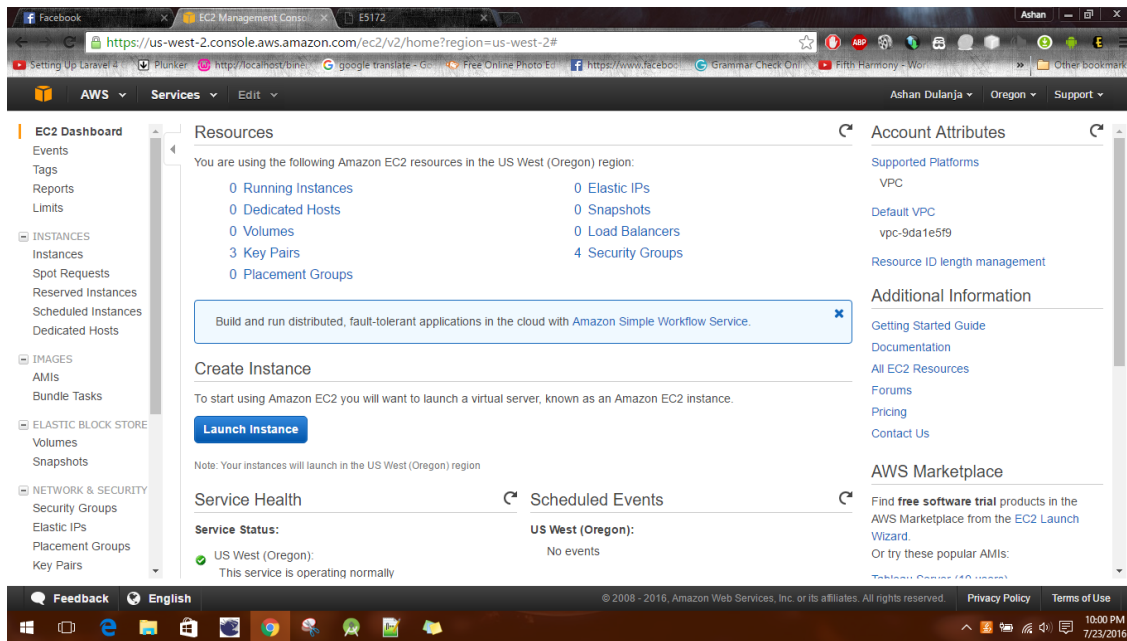
1. When create windows instance ,very first we want to create amazon account, it can do it below link,
<https://aws.amazon.com>.



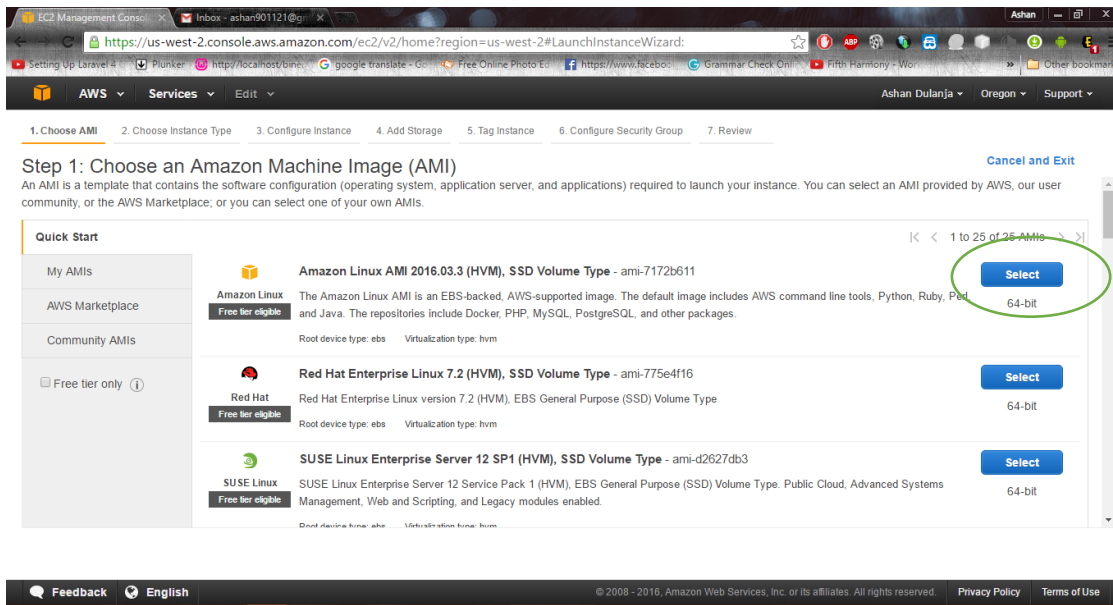
2. After createing the account log into the account and Open the Amazon EC2 console at <https://console.aws.amazon.com/ec2/>



3. Then click the launch instance button



4. Choose the machine image



5. Select the instance type and click the configure instance details button

The screenshot shows the AWS Management Console at the URL <https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#LaunchInstanceWizard>. The navigation bar at the top includes the AWS logo, a Services dropdown, an Edit button, and the user's name 'Ashan Dulanja' with a location of 'Oregon' and a 'Support' link. The wizard progress bar shows seven steps: 1. Choose AMI, 2. Choose Instance Type (active), 3. Configure Instance, 4. Add Storage, 5. Tag Instance, 6. Configure Security Group, and 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
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
<input checked="" type="checkbox"/>	General purpose	t2.micro <small>Free tier eligible</small>	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

Buttons at the bottom: Cancel, Previous, Review and Launch, Next: Configure Instance Details

6. Configure the instance details and click the add storage button

The screenshot shows the AWS Management Console at the same URL as the previous step. The wizard progress bar now highlights step 3: Configure Instance. The page title is '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: [Launch into Auto Scaling Group](#)

Purchasing option: ☐ Request Spot instances

Network: [Create new VPC](#)

Subnet: [Create new subnet](#)

Auto-assign Public IP:

Domain join directory: [Create new directory](#)

IAM role: [Create new IAM role](#)

Shutdown behavior:

Enable termination protection: ☐ Protect against accidental termination

Buttons at the bottom: Cancel, Previous, Review and Launch (highlighted), Next: Add Storage

7. Add the storage capacity to the instance and click the Review and launch button

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-432bd8be	30	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](#)

8. Finally review the instance we created

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, launch-wizard-5, 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](#)

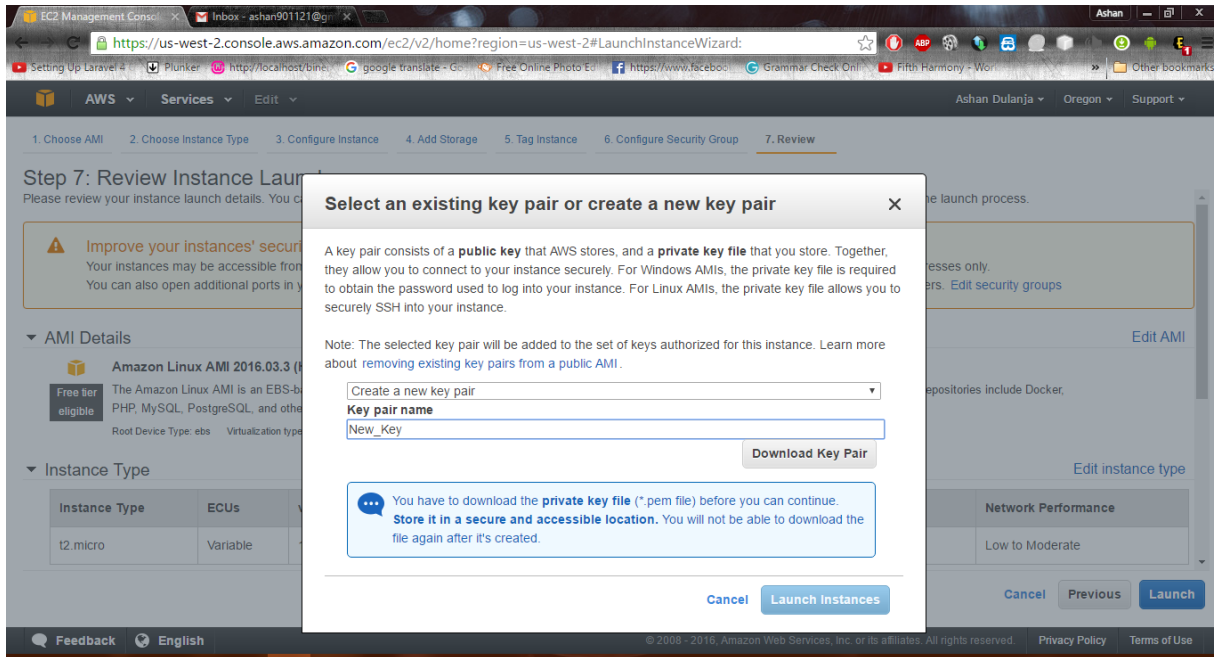
Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type - ami-7172b611
The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.
Root Device Type: 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

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

9. When login into our instance. we need the password ,in pair key windows create the key and user name , Select the create the new key pair and put the name into the key, and download the key pair.



10. Within windows operating system can't connect linux with directly ,so need same software, putty is connecting application.it can download it below link

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

The latest release version (beta 0.67)

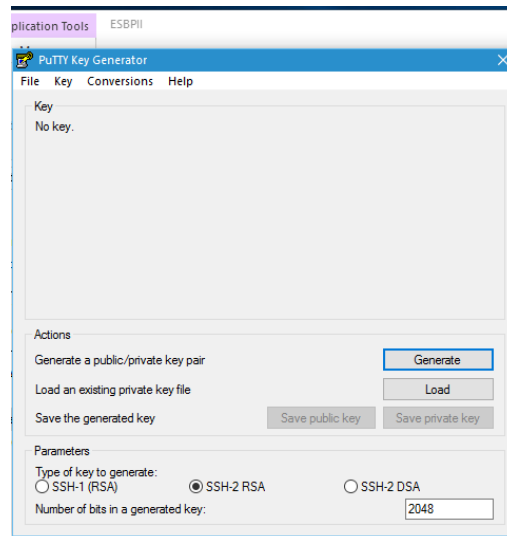
This will generally be a version we think is reasonably likely to work well. If you have a problem with it, please report it, but only after you have already fixed the bug, before reporting it.

For Windows on Intel x86

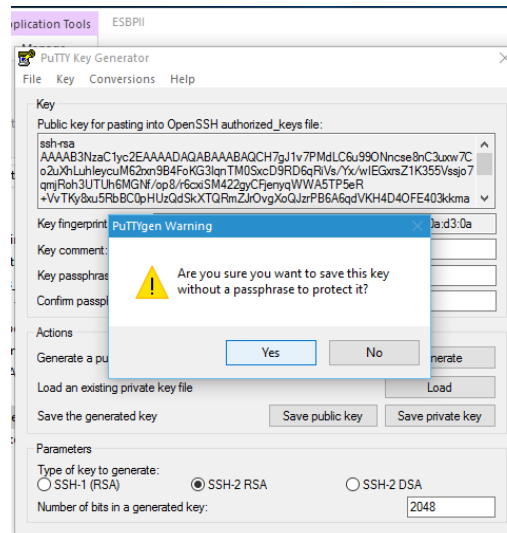
PuTTY:	putty.exe	(or by FTP)	(signature)
PuTTYtel:	puttytel.exe	(or by FTP)	(signature)
PSCP:	pscp.exe	(or by FTP)	(signature)
PSFTP:	psftp.exe	(or by FTP)	(signature)
Plink:	plink.exe	(or by FTP)	(signature)
Pageant:	pageant.exe	(or by FTP)	(signature)
PuTTYgen:	puttygen.exe	(or by FTP)	(signature)

A.ZIP file containing all the binaries (except PuTTYtel), and also the help files

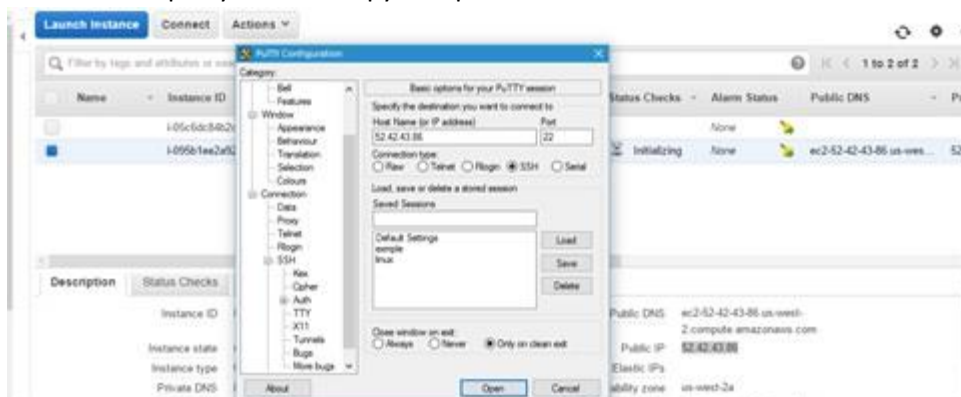
11. To decrypt the key need other software call puttygen .
12. After downloading that 2 software first run the puttygen.exe



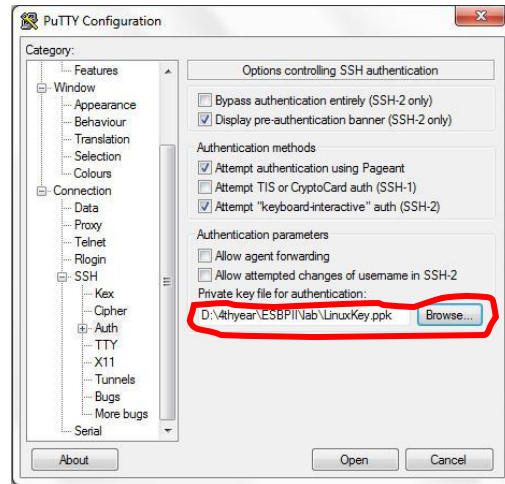
13. Click the conversion tab and click the import key then open brows select the download key pair file and click ok button ,the windows show like below,



14. Click save private key button and save the key in your machine,
15. Then run the putty.exe and copy the ip address which in aws instance details tab



16. Go to the SSH and click the Auth tab, then brows the key where the save file using puttygen ,



17. After configure the setting click the open button ,open putty windows like below

```
ec2-user@ip-172-31-36-45: ~  
login as:  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
  
  _|_  _|_ )  
  _| ( _|_ /  Amazon Linux AMI  
  _|\_|_ )  
  
https://aws.amazon.com/amazon-linux-ami/2016.03-release-notes/  
3 package(s) needed for security, out of 12 available  
Run "sudo yum update" to apply all updates.  
[ec2-user@ip-172-31-36-45 ~]$ who  
ec2-user pts/0      2016-07-18 02:57 (61.245.165.25)  
[ec2-user@ip-172-31-36-45 ~]$
```

18. Provide login as :ec2-user .