



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Enterprise Standards and Best Practices for IT Infrastructure

4th Year 2nd Semester 2016

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Group Number:

Practical Session: WD

Practical Number: Lab 1

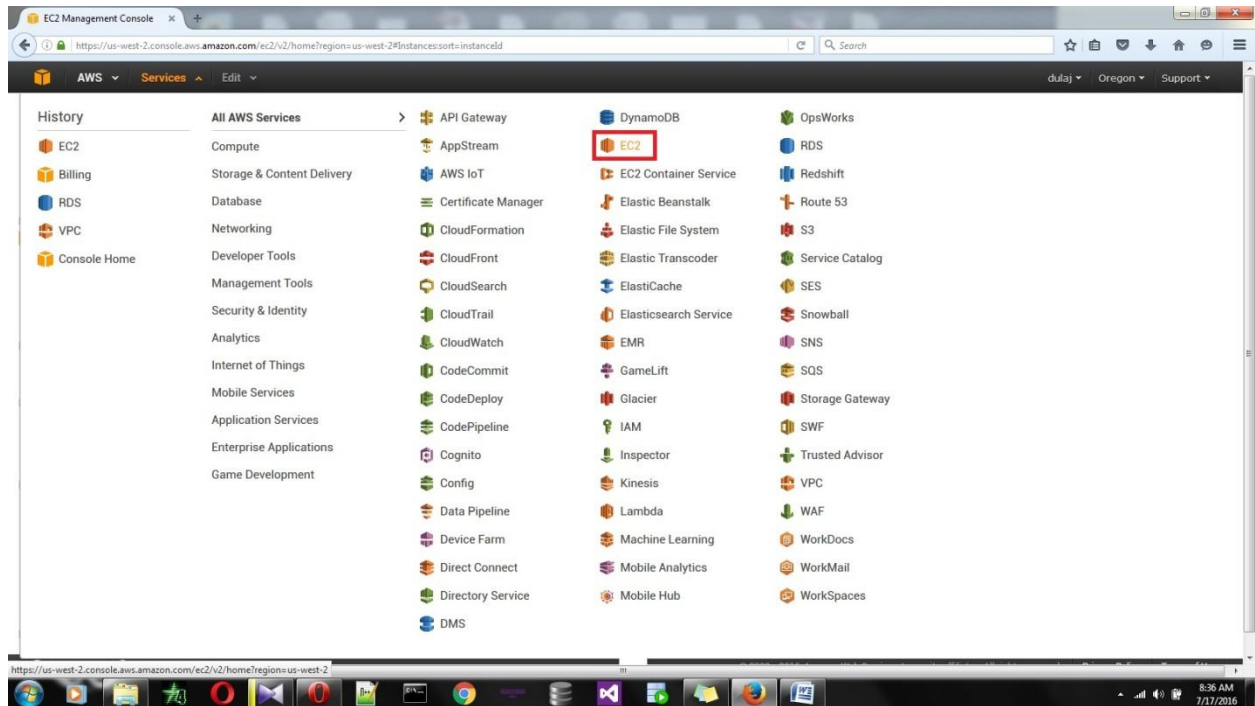
Date of Submission: 28-07-2016

Date of Evaluation : _____

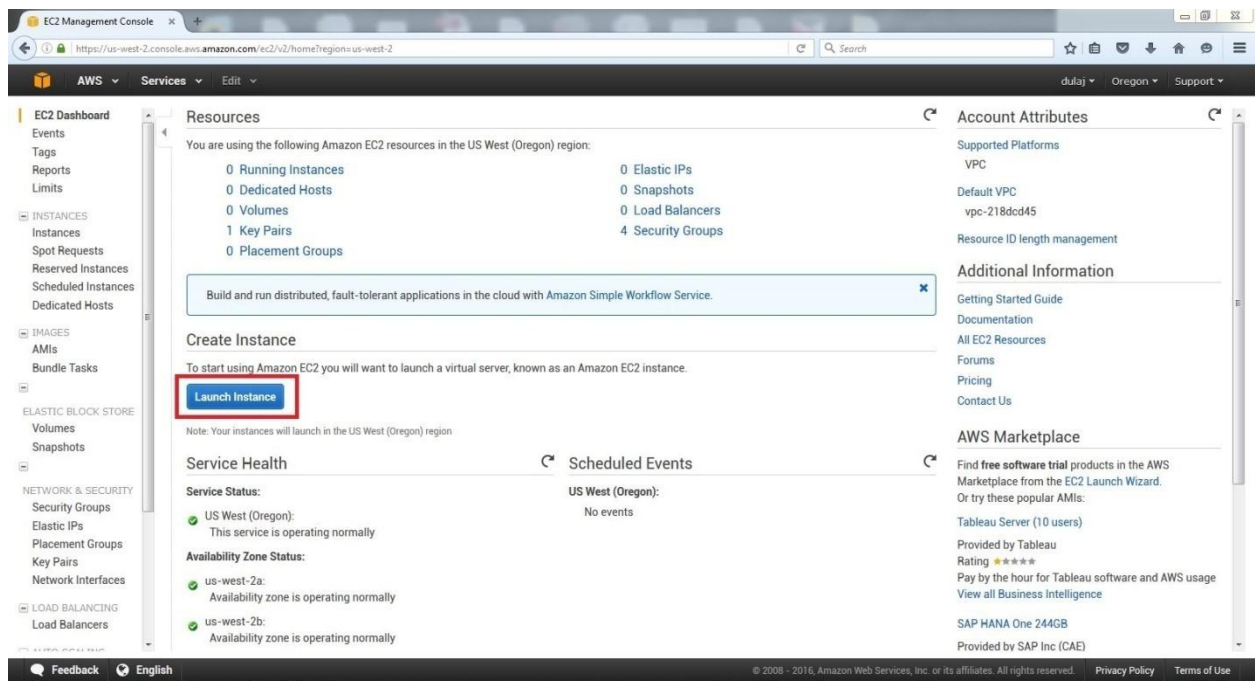
Evaluators Signature : _____

Step 1

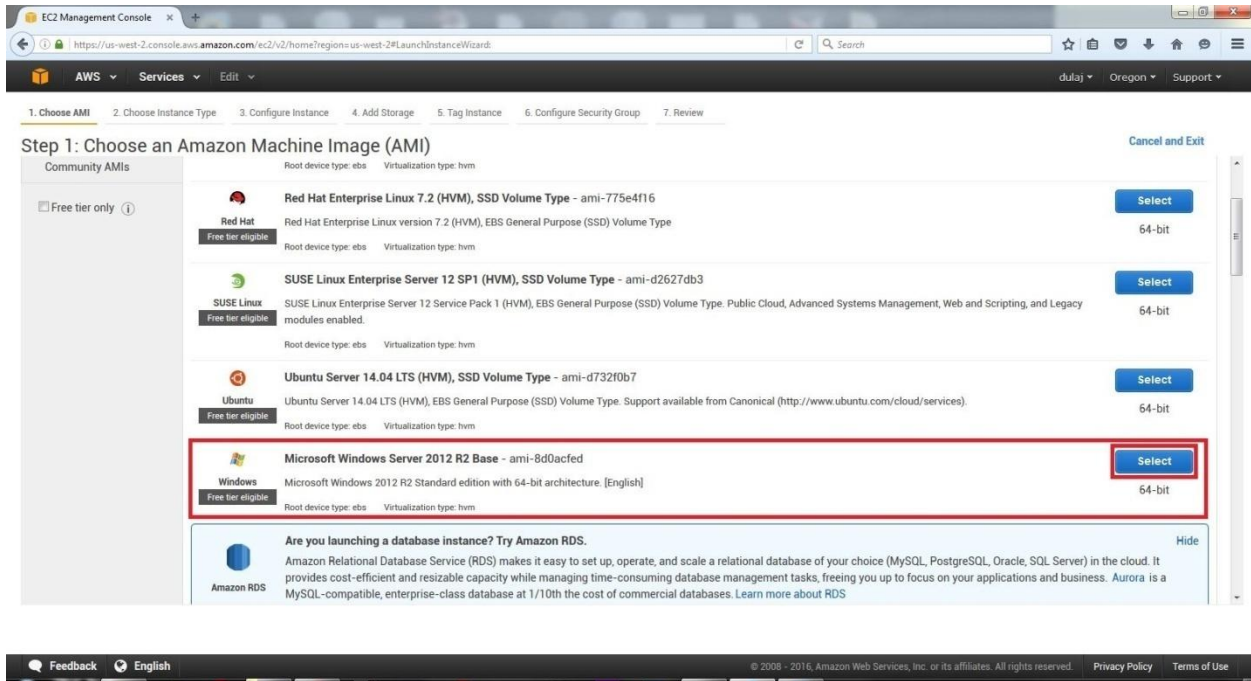
To launch a windows instance, go to “EC2” from the Services.



On the EC2 page, click “Launch Instance”.

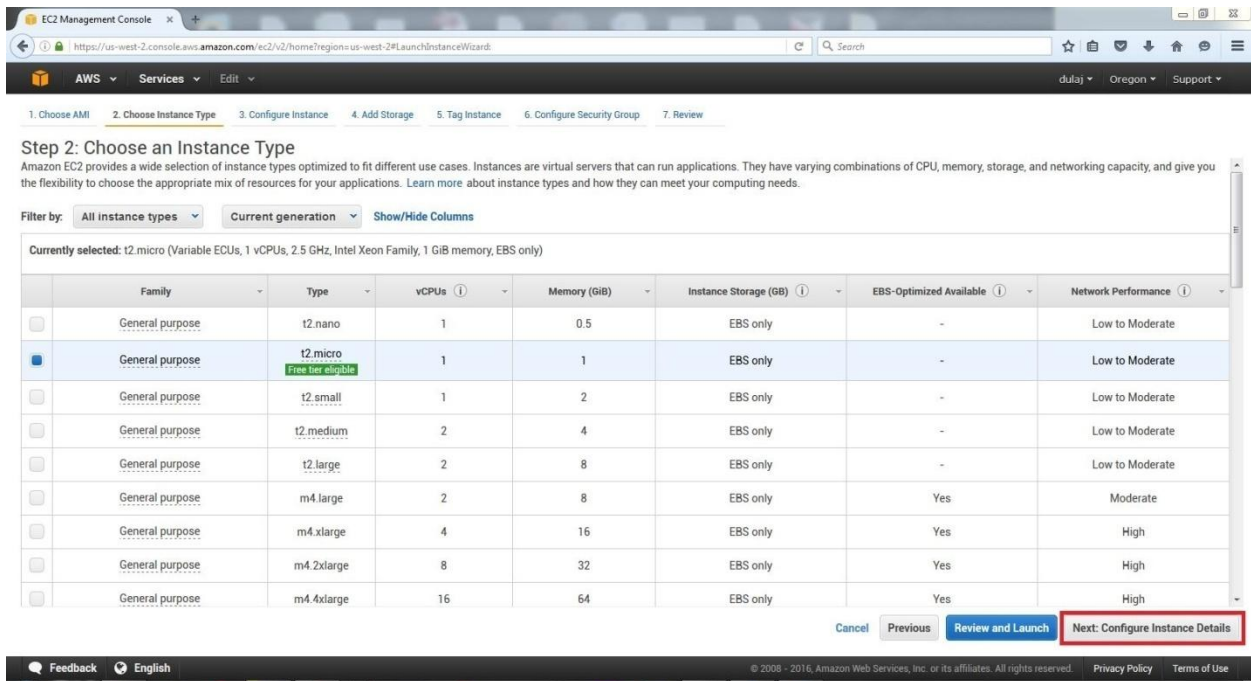


On the resulting page which shows the available AMIs (Amazon Machine Images), click “Select” of “Microsoft Windows Server 2012R2 Base”.



Step 2

Select the type of the instance. Here I choose “t2.micro” because is eligible for the free tier since this is for tutorial purposes. Click “Next: Configure Instance Details”.



Step 3

On the “Configure Instance Details”, select the “Network” and “Subnet” and click “Add Storage”.

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-218dcd45 (172.31.0.0/16) (default) Create new VPC

Subnet: subnet-4367c627 (172.31.16.0/20) | Default in us-w... 4091 IP Addresses available Create new subnet

Auto-assign Public IP: Use subnet setting (Enable)

Domain join directory: None Create new directory

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.

Network interfaces

Cancel Previous Review and Launch Next: Add Storage

Step 4

On “Add Storage” page, leave the default values (Size as 30GB). Click “Review and Launch”.

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/sda1	snap-1baab85d	30	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

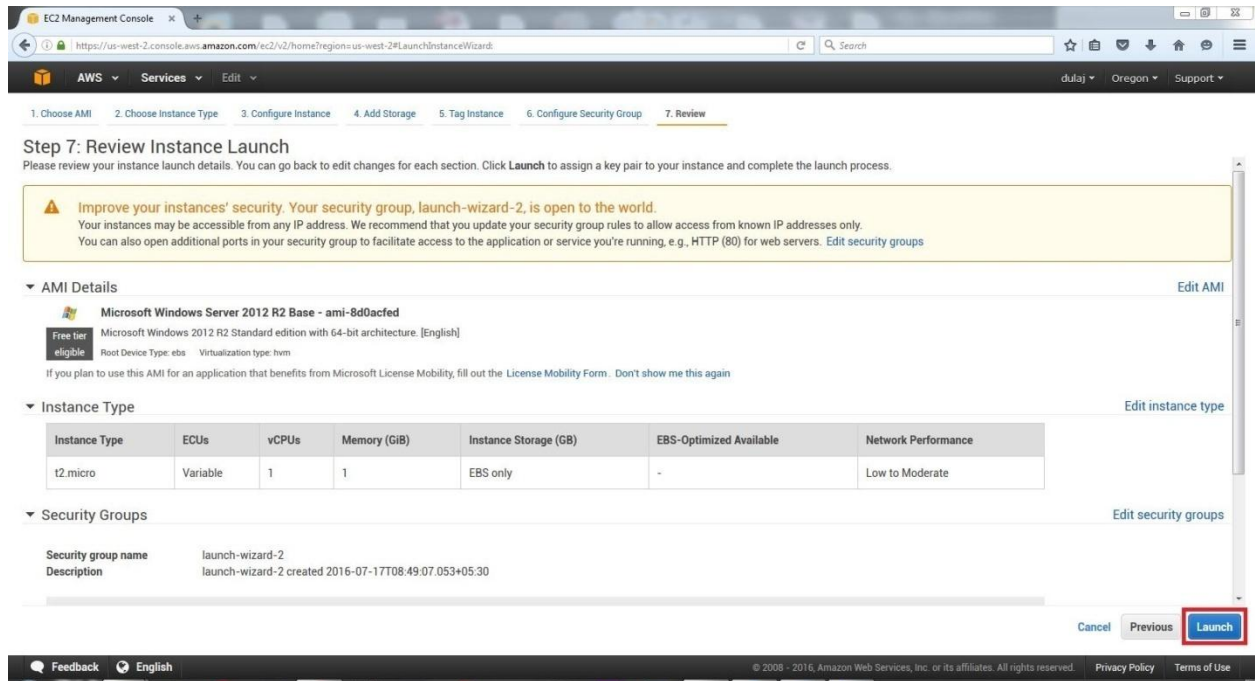
Add New Volume

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

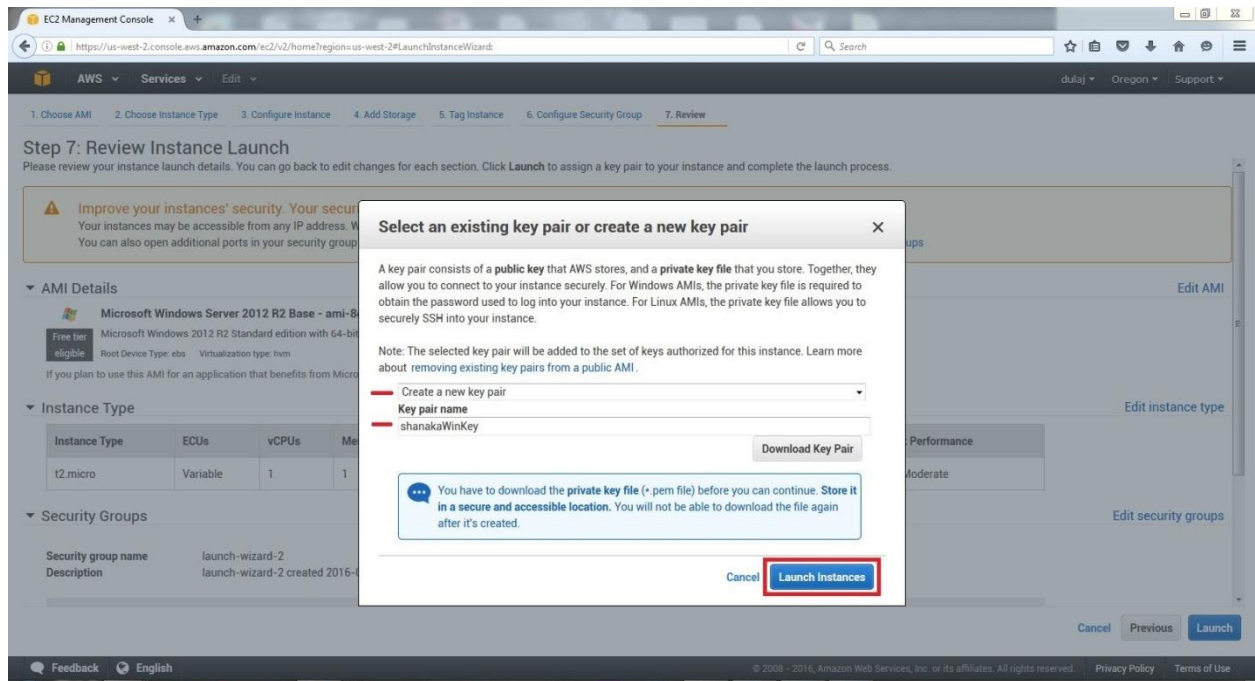
Step 5

Click “Launch” to launch the instance.



Step 6

You will be asked to choose a key pair on the resulting dialog box. Select “Create a new key pair” and enter a name for the Key pair. Here I enter as “shanakaWinKey”. Click “Download Key Pair”. Store the downloaded key pair file in a secure location. Click “Launch Instance”.



Step 7

On the resulting confirmation page, we can see a message saying that the instance had been initiated.

The screenshot shows the 'Launch Status' page in the AWS Management Console. At the top, a green message box states: 'Your instances are now launching. The following instance launches have been initiated: i-0e419b238c142b6e9. View launch log'. Below this, a blue message box says: '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)'. The main content area is titled 'How to connect to your instances' and provides instructions on monitoring instance status and connecting to them. It includes links to 'Amazon EC2: User Guide', 'Amazon EC2: Microsoft Windows Guide', and 'Amazon EC2: Discussion Forum'. A section titled 'Here are some helpful resources to get you started' lists links for 'How to connect to your Windows instance', 'Learn about AWS Free Usage Tier', and 'Amazon EC2: Discussion Forum'. At the bottom, there are links for 'Create status check alarms', 'Create and attach additional EBS volumes', and 'Manage security groups'.

After a few seconds we can see that the instance in running state.

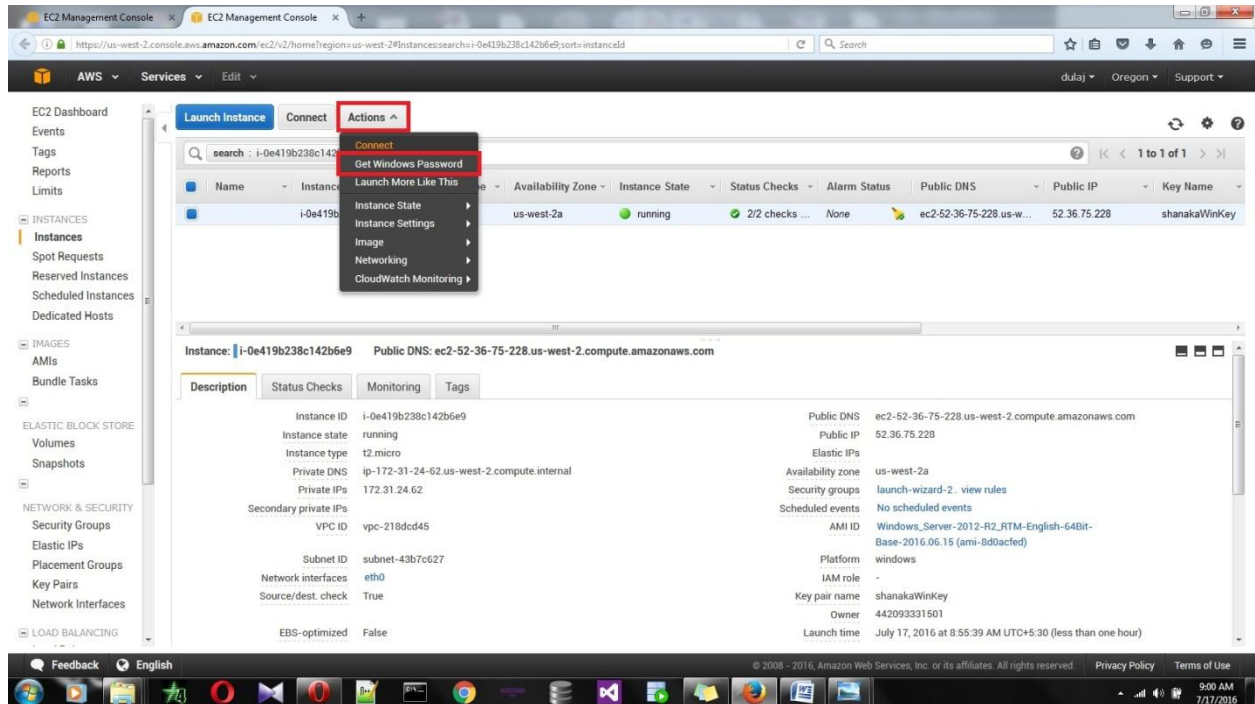
The screenshot shows the 'Instance Details' page in the AWS Management Console. The instance is named 'i-0e419b238c142b6e9' and is in the 'running' state. The instance type is 't2.micro' and it is located in the 'us-west-2a' availability zone. The public IP address is '52.36.75.228' and the public DNS is 'ec2-52-36-75-228.us-west-2.compute.amazonaws.com'. The instance is using the 'Windows_Server-2012-R2_RTM-English-64Bit-Base-2016.06.15 (ami-8d0a6fed)' AMI. The instance is configured with a single network interface 'eth0' and is EBS-optimized. The instance was launched on July 17, 2016, at 8:55:39 AM UTC+5:30.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	Key Name
	i-0e419b238c142b6e9	t2.micro	us-west-2a	running	Initializing	Loading...	ec2-52-36-75-228.us-w...	52.36.75.228	shanakaWinkKey

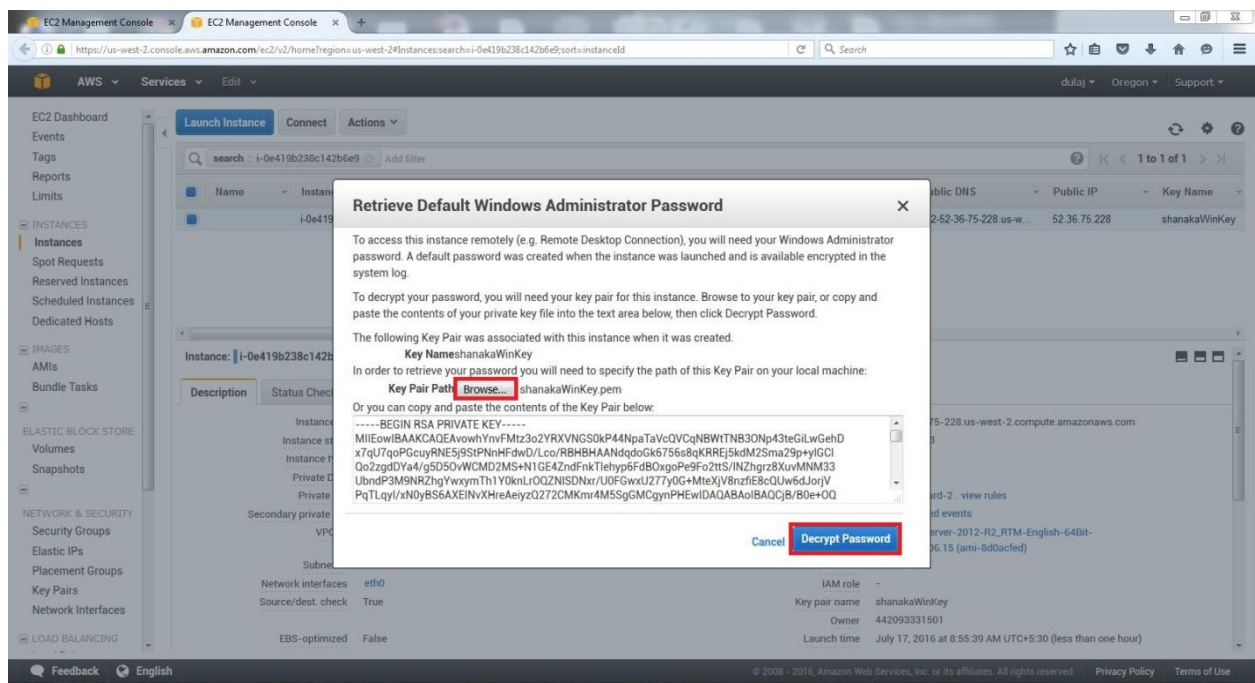
Instance: i-0e419b238c142b6e9		Public DNS: ec2-52-36-75-228.us-west-2.compute.amazonaws.com	
Description	Status Checks	Monitoring	Tags
Instance ID	i-0e419b238c142b6e9	Public DNS	ec2-52-36-75-228.us-west-2.compute.amazonaws.com
Instance state	running	Public IP	52.36.75.228
Instance type	t2.micro	Elastic IPs	
Private DNS	ip-172-31-24-62.us-west-2.compute.internal	Availability zone	us-west-2a
Private IPs	172.31.24.62	Security groups	launch-wizard-2, view rules
Secondary private IPs		Scheduled events	No scheduled events
VPC ID	vpc-218dcd45	AMI ID	Windows_Server-2012-R2_RTM-English-64Bit-Base-2016.06.15 (ami-8d0a6fed)
Subnet ID	subnet-43b7c627	Platform	windows
Network interfaces	eth0	IAM role	-
Source/dest. check	True	Key pair name	shanakaWinkKey
EBS-optimized	False	Owner	442093331501
		Launch time	July 17, 2016 at 8:55:39 AM UTC+5:30 (less than one hour)

Step 8

Select the instance that we have created and click “Actions”. Click “Get Windows Password” to get the password of the created instance.

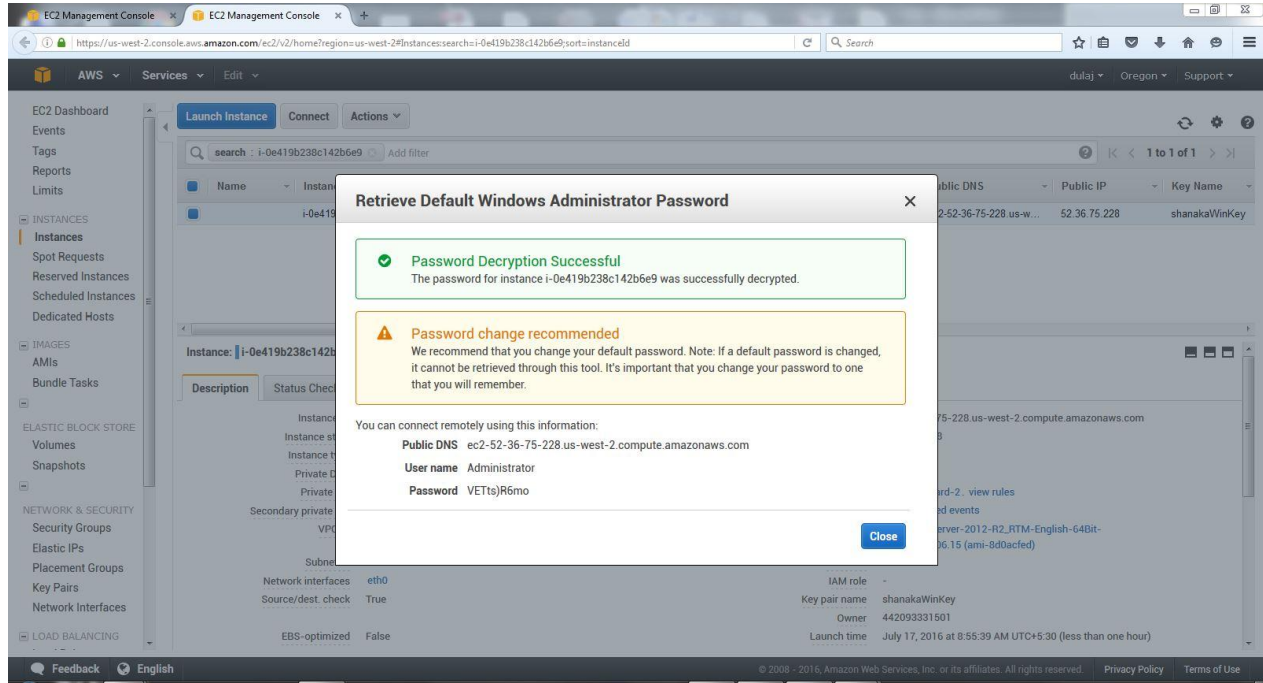


On the resulting dialog box which asks about the Key Pair file, choose the key pair file we downloaded and click “Decrypt Password”.



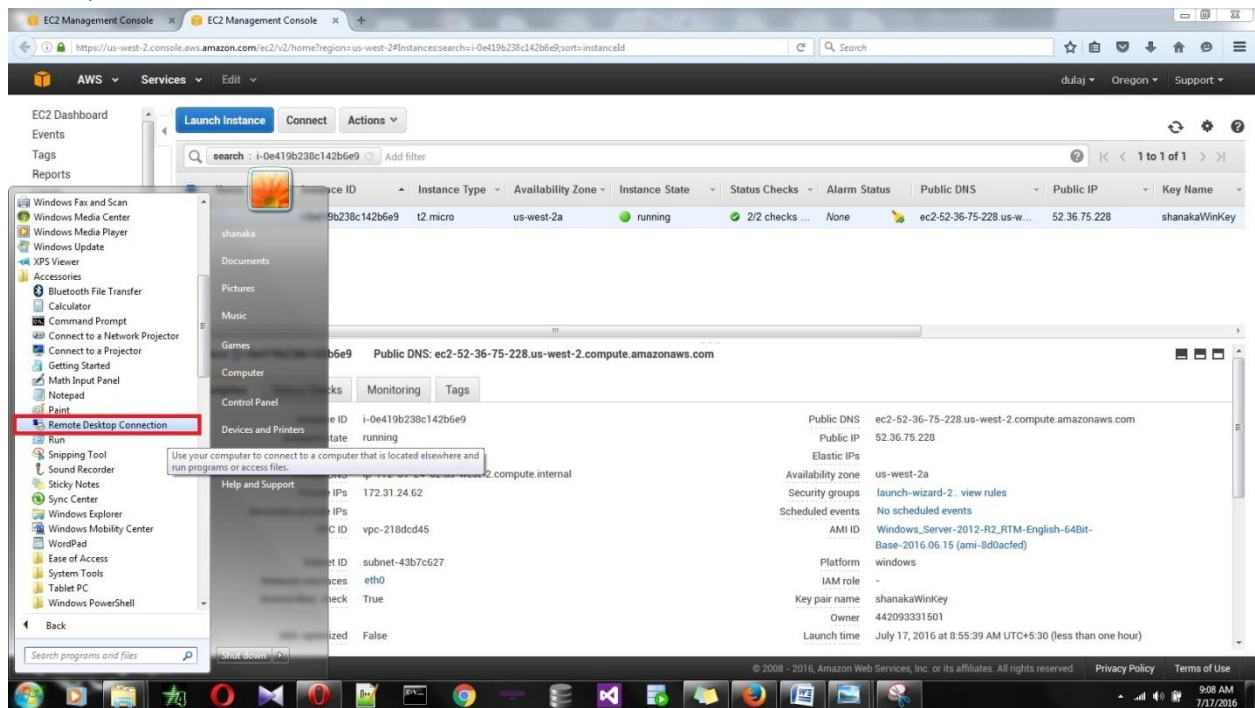
Step 9

On the resulting dialog box, we can see the username and the password for the server that we have created. It is recommended that we change the default created password in a production environment. Click “Close”.



Step 10

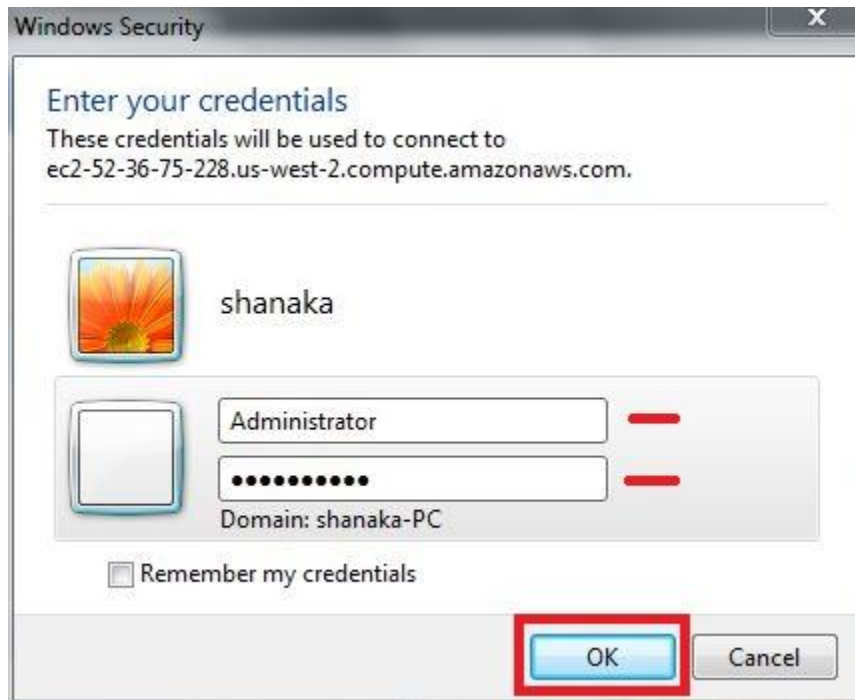
To connect to the windows server we have created, from the taskbar of the windows, open “Remote Desktop Connection”.



Enter the “computer” with the “Public DNS” that we were provided after creating the instance. Click “Connect”.



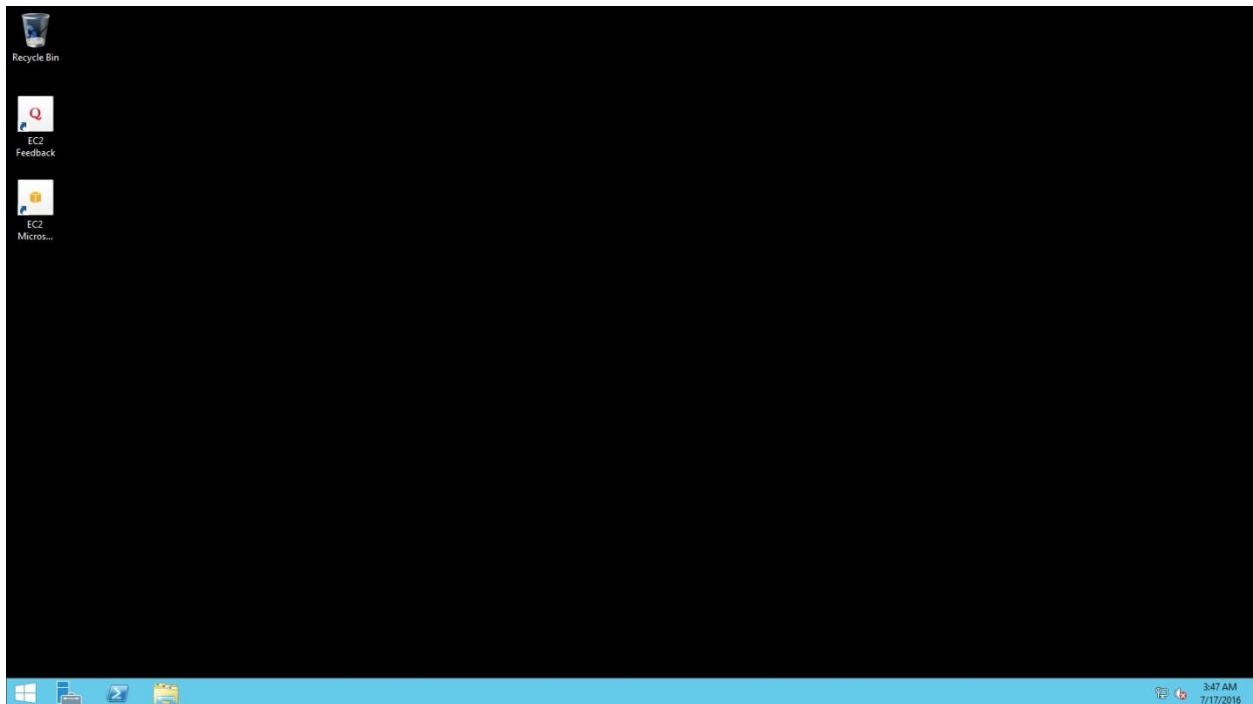
You will then be asked to enter the username and the password. Enter the username and password we got from Step 9. Click “Ok”.



You will be asked about the certification issues. Click “Yes”.



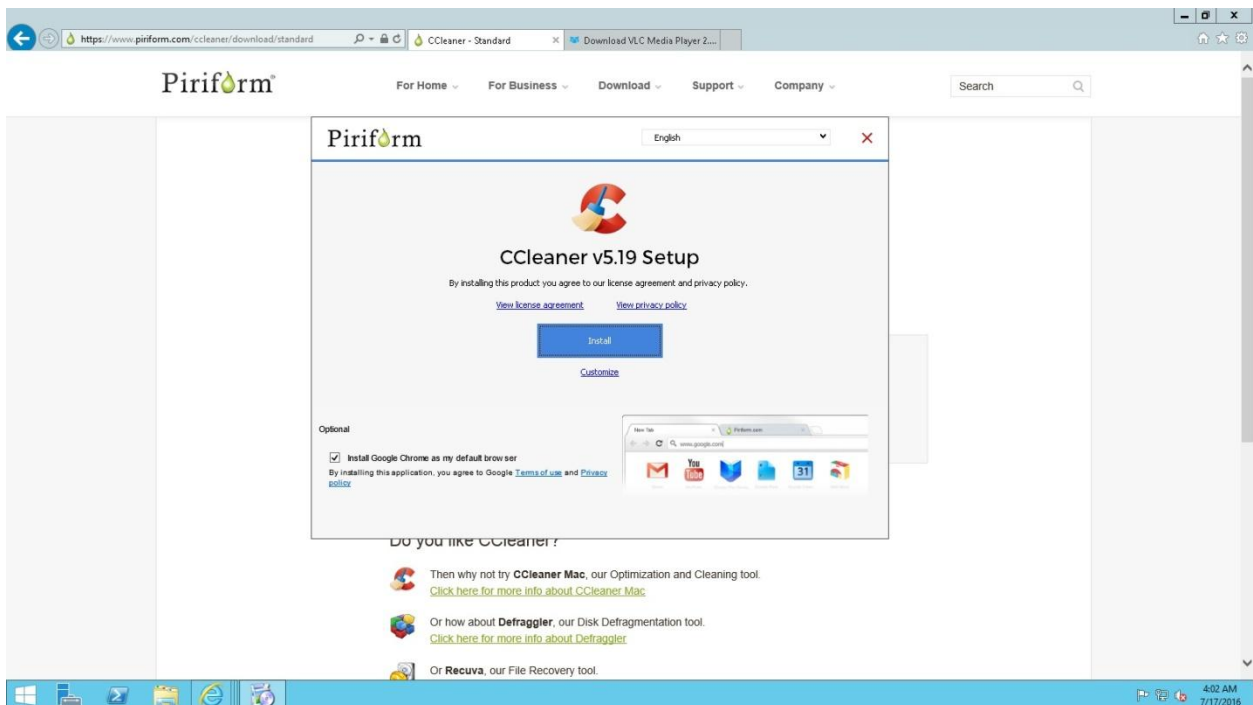
After a few seconds we would be able to work with the windows server we created.

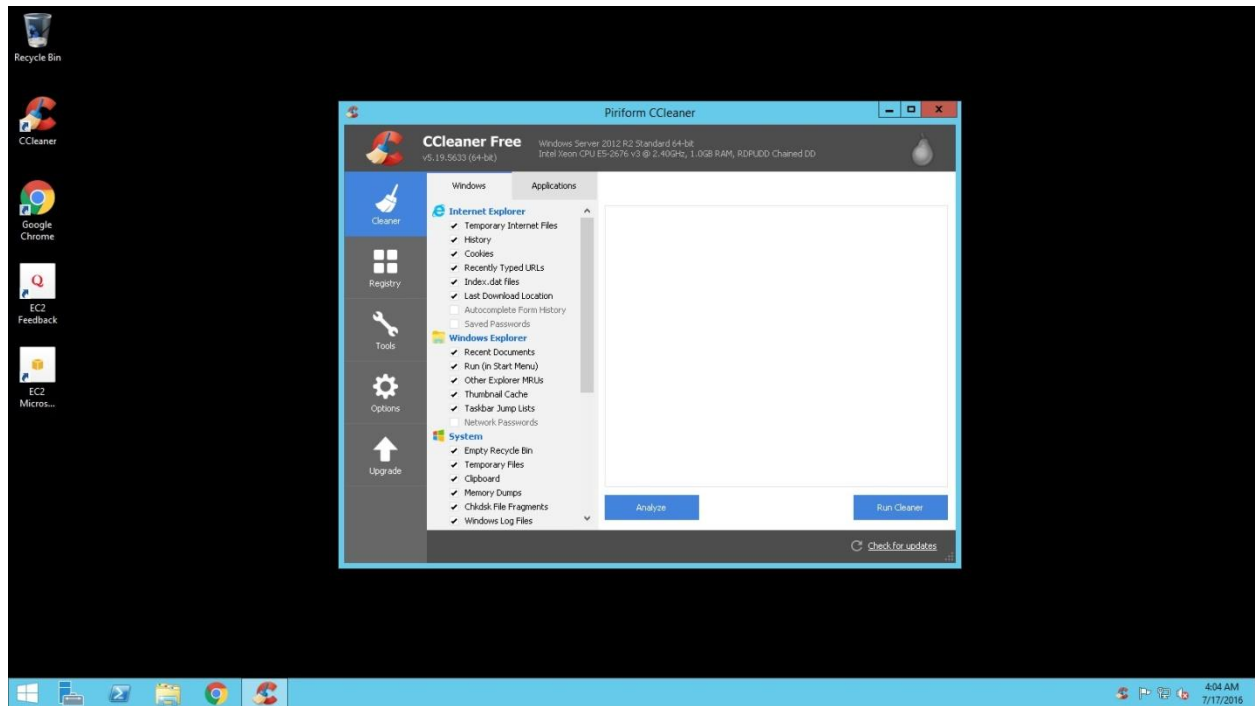


Step 11

Lets try installing some applications on the server.

Here I choose *CCleaner* application which is available for free.





Likewise we can use this server instance as of our own.

***** End of assignment 1 *****