Enterprise Standards and Best Practices for IT Infrastructure

Lab 01 ,02 and 03-Lab Report

K.D.C.Piyamal –IT12080090

Software Requirements Specification

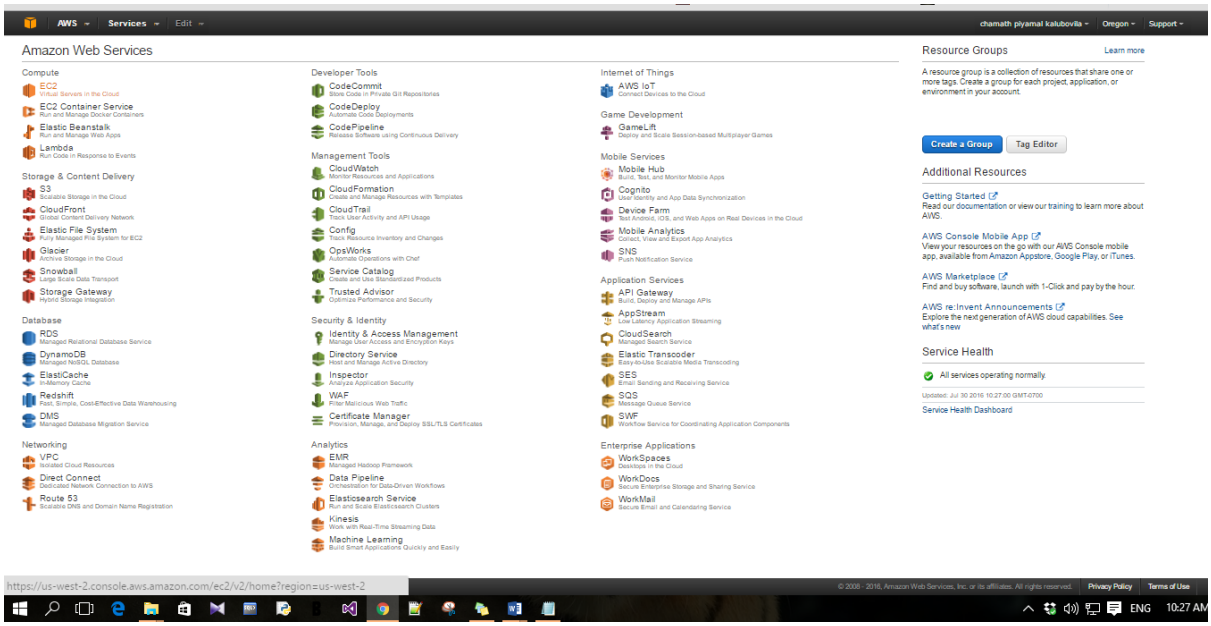
Sri Lanka Institute of Information Technology

B.Sc. Special (Honors) Degree in Information Technology

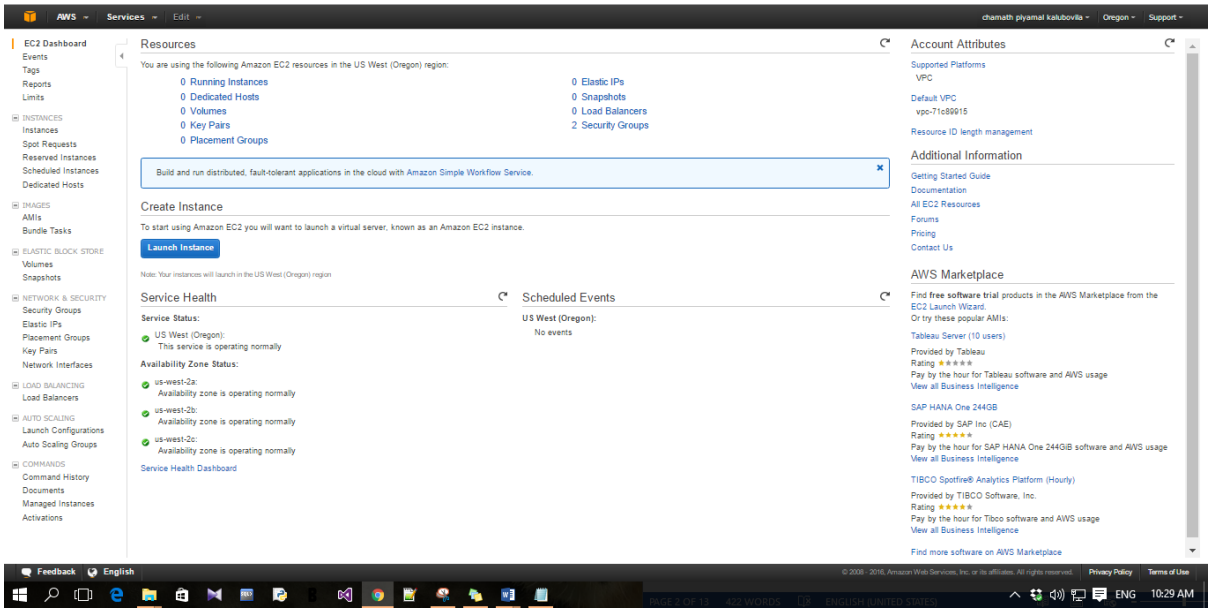
Specialized in Information Technology

Creating an Amazon EBS-Backed Windows AMI

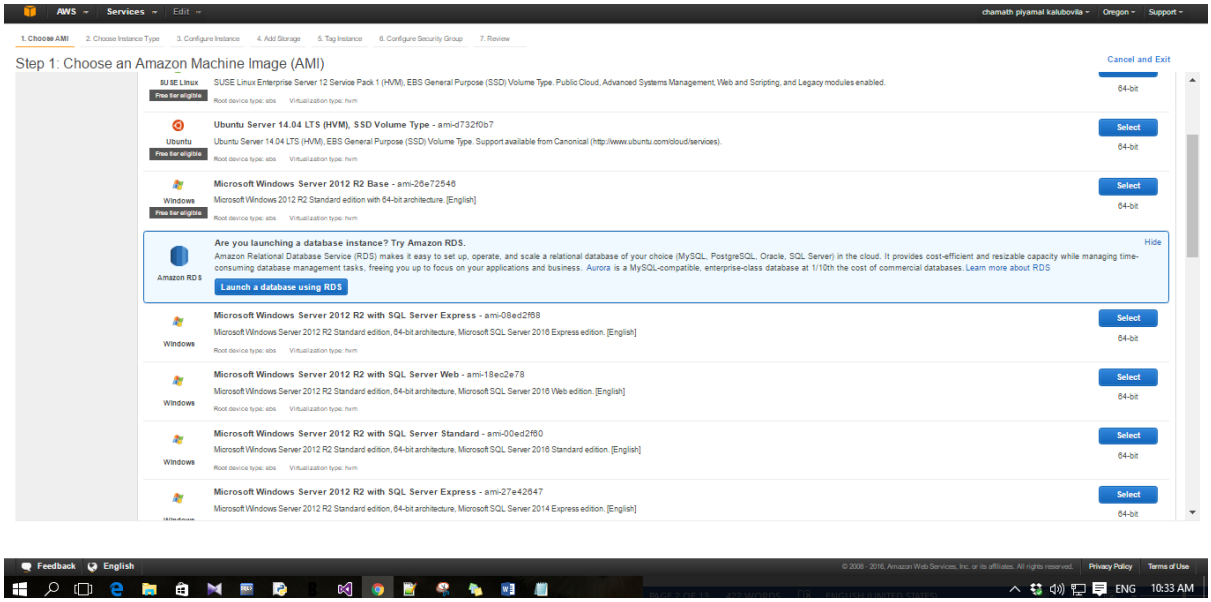
Step 01: Select EC2 web service (virtual server in cloud) from Amazon web servers.



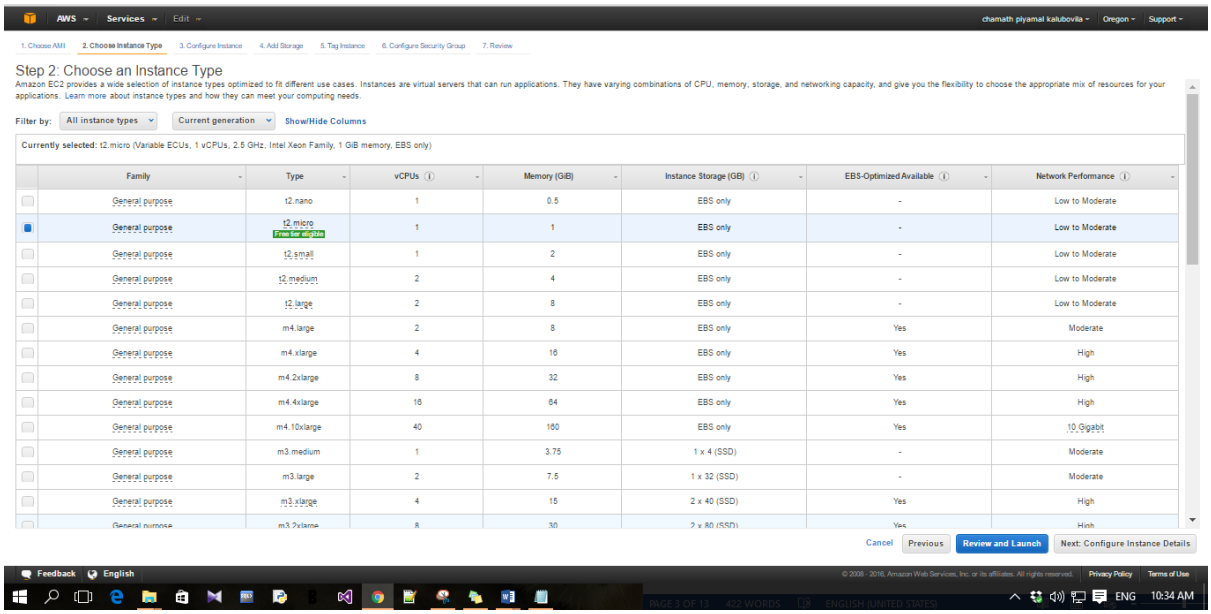
Step 02: Select Launch Instance under Create Instance in main interface.



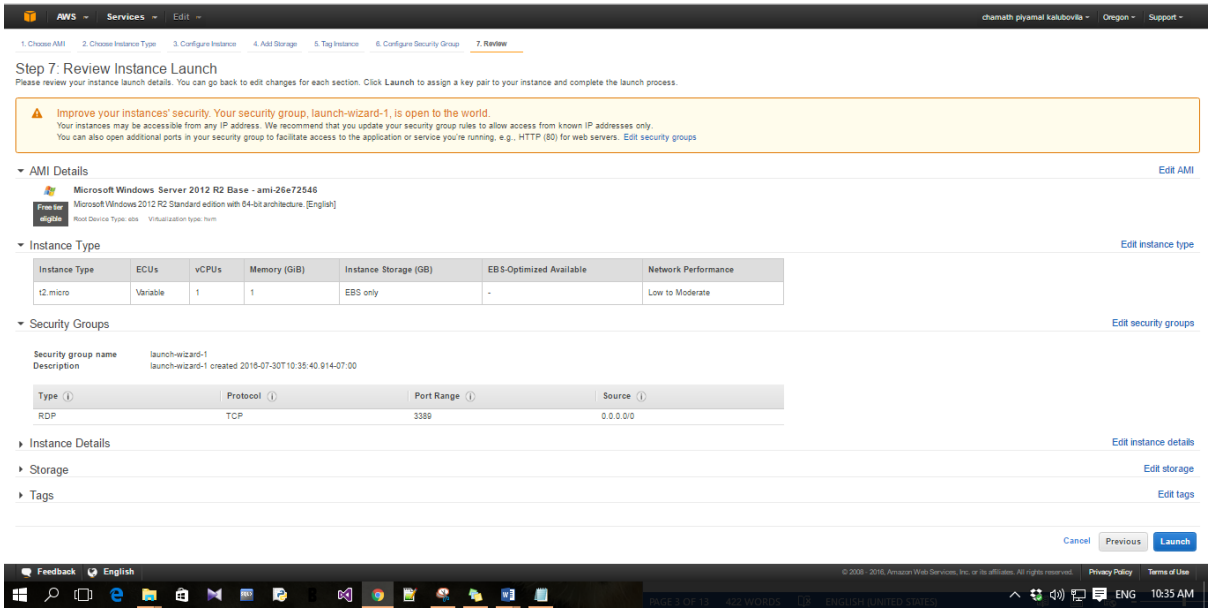
<u>Step 03</u>: Choose an Amazon Machine image (AMI).(Select Microsoft windows Server 2012 R2 Base)



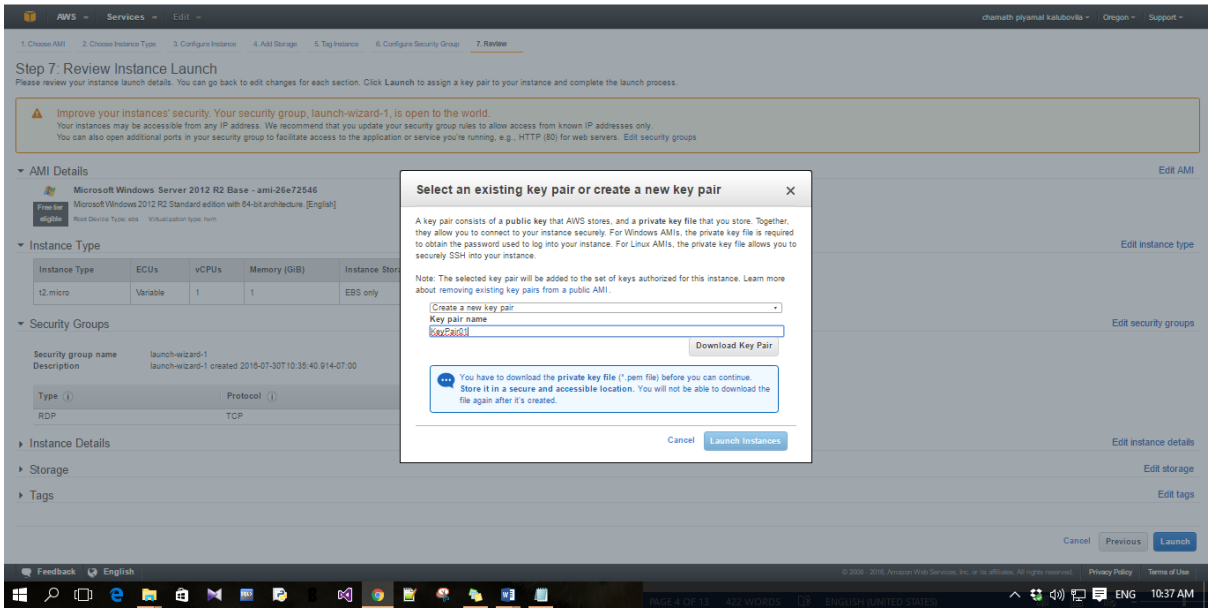
<u>Step 04</u>:Choose an Instance type.



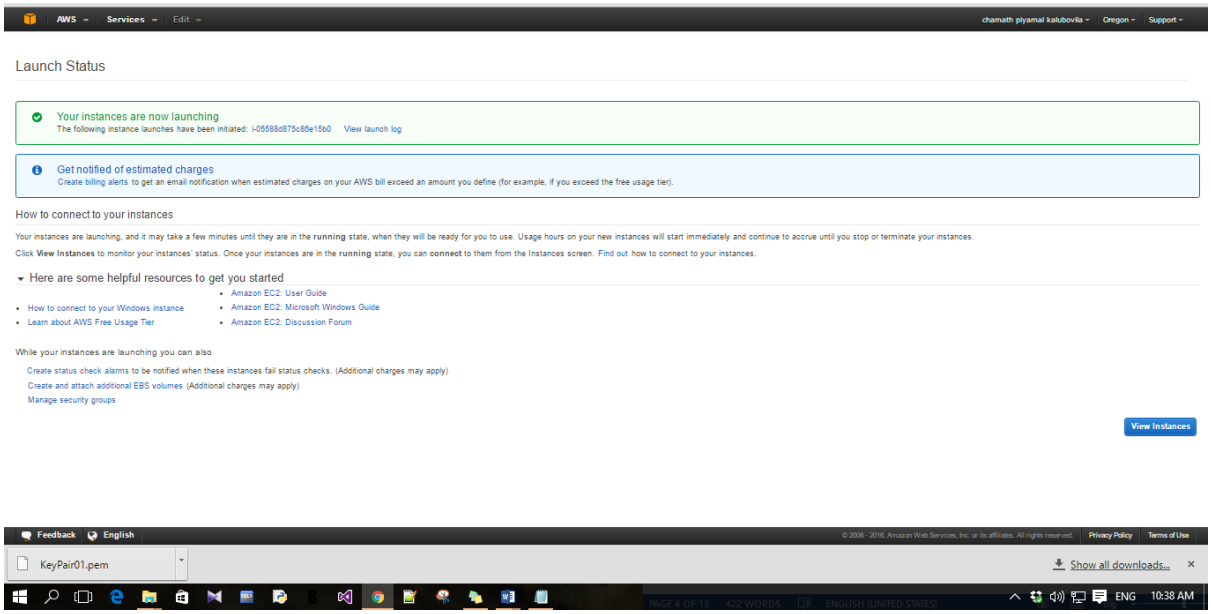
Step 05: Review Instance Launch.



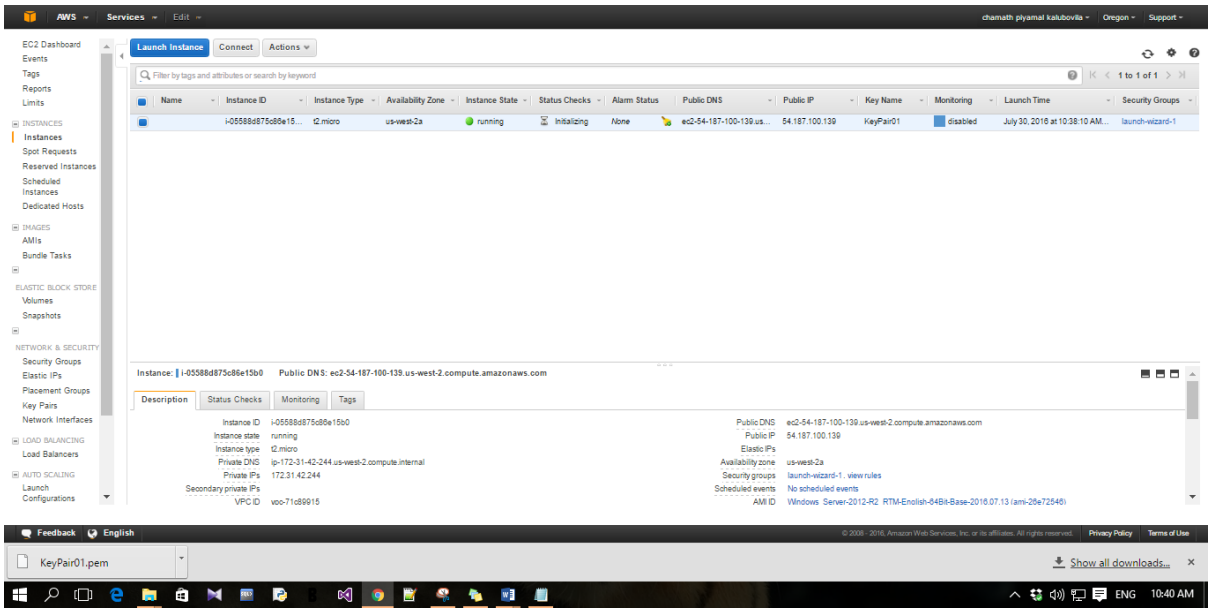
Step 06: After launch there is popup box which is to select an existing key pair or create new key pair. Select new key pair and download the key pair. After downloading the key pair click Launch Instance.



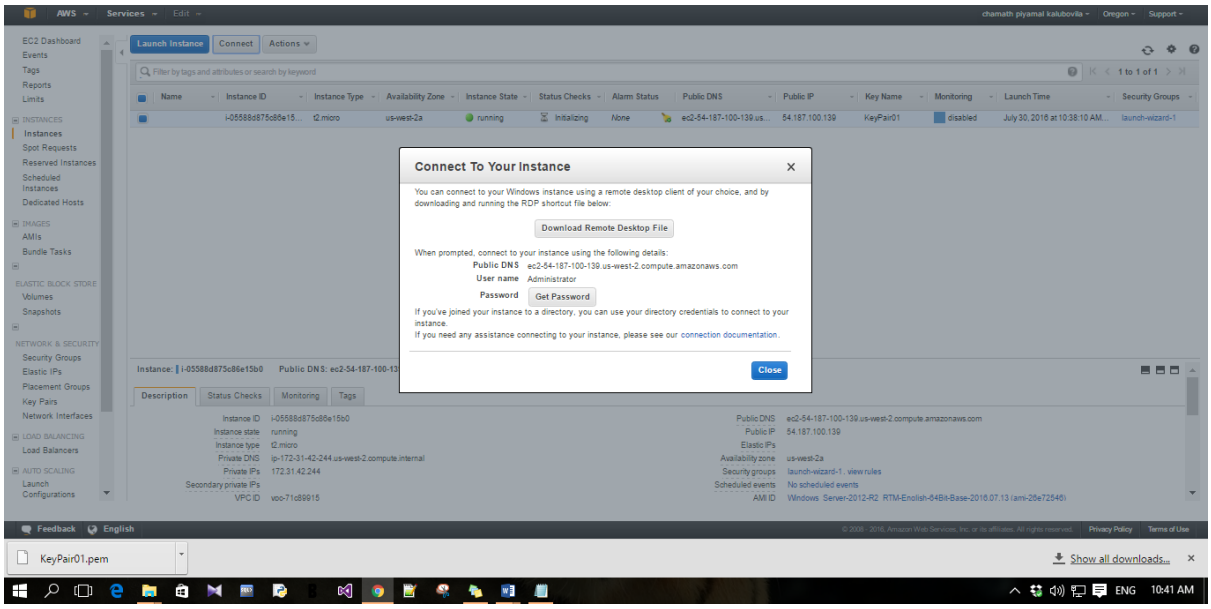
Step 07: View instance after launching.



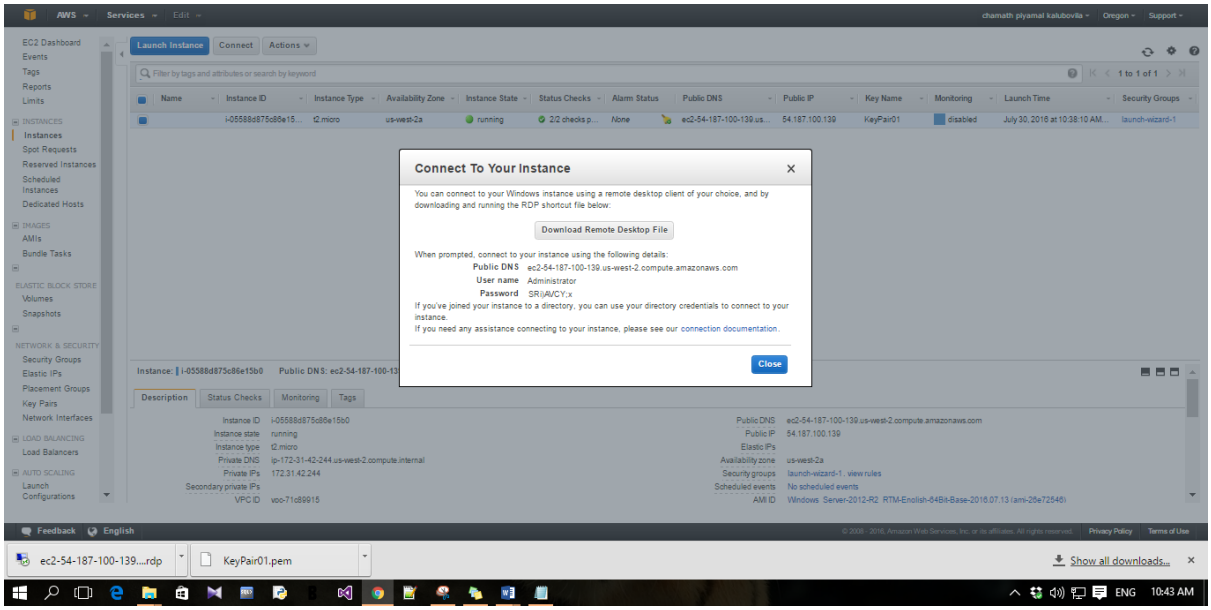
Step 08: Select the created instance and then connect.



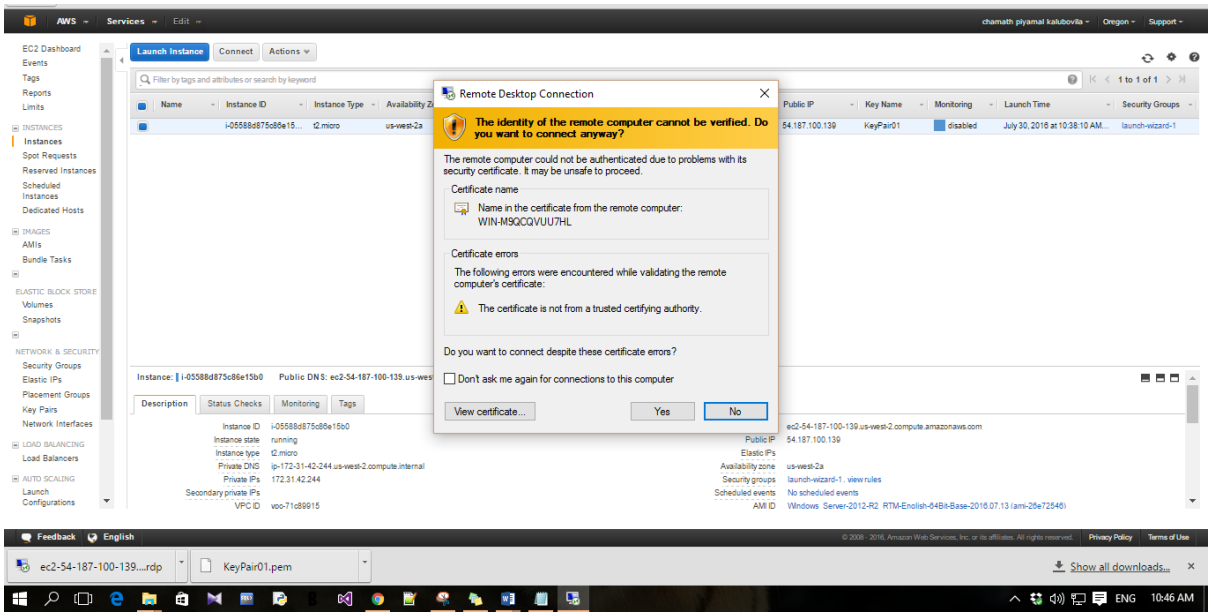
Step 09: Get a password from Connect to Your Instance window.



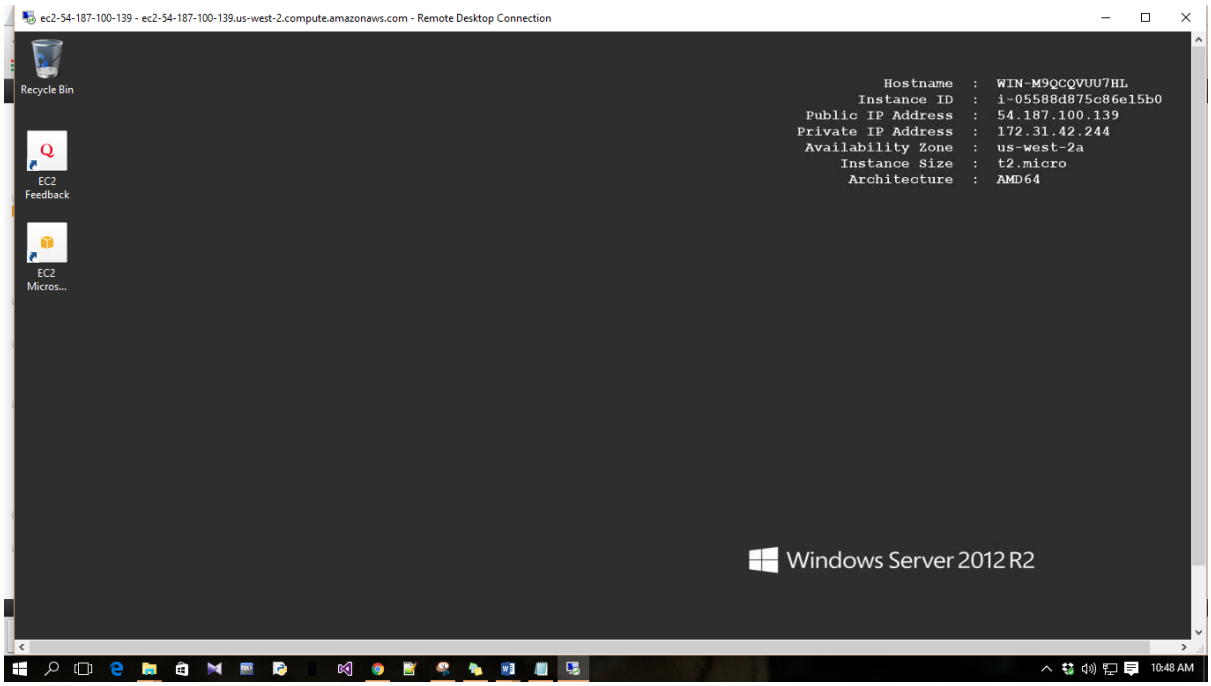
Step 10: Decrypt the password. Note down the user name and the decrypted password.



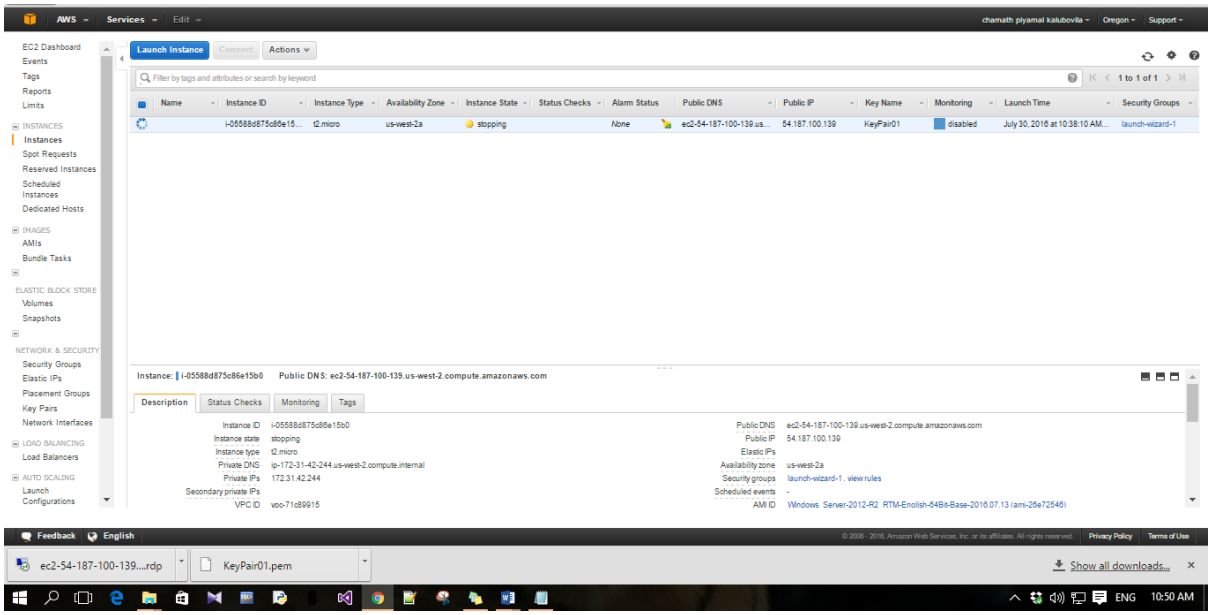
Step 11: Open Remote Desktop Connection. Provide the public IP of the launched instance. After enter password and Connect to the created instance.



Step 12: Log in to Windows Server 2012 R2 using the given user name and the decrypted password.

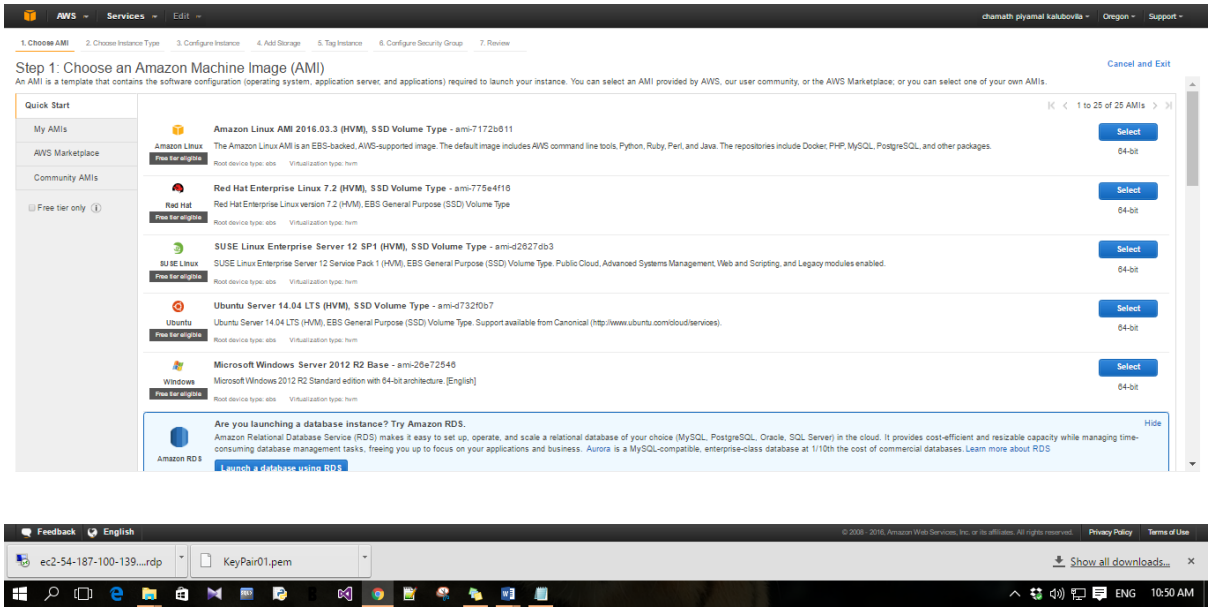


Step 13: Right click on the created server instance and terminate it from the instance state. (Right click on instance -> Instance State -> Stop)

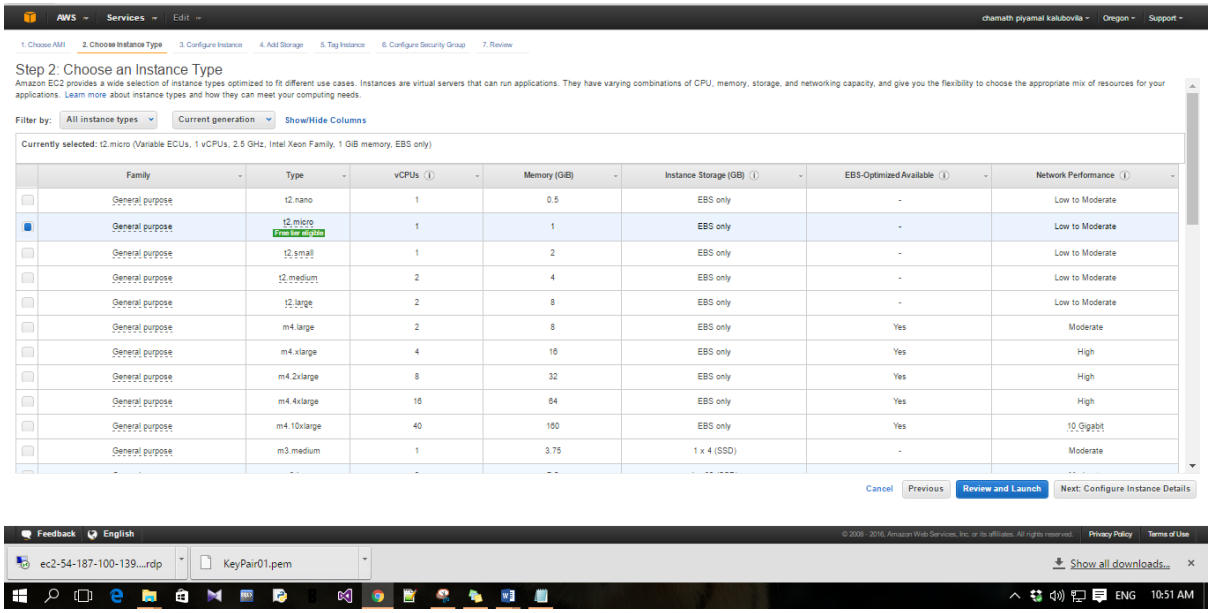


Creating an Amazon EBS-Backed Linux AMI

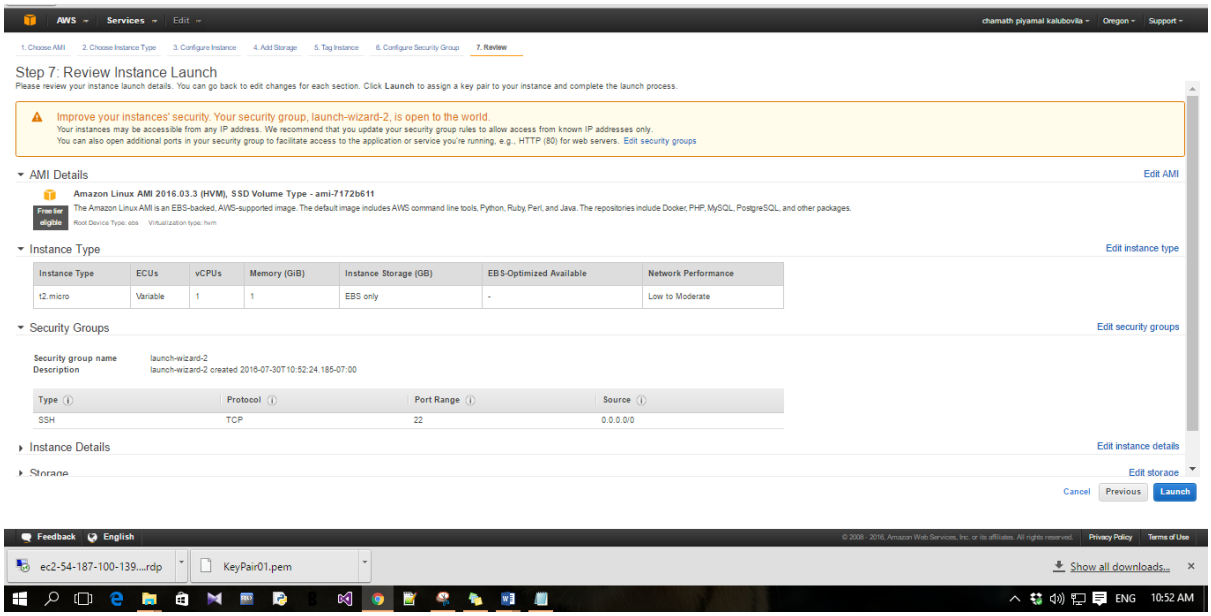
Step 01: Choose an Amazon Machine Image (AMI).Select Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type



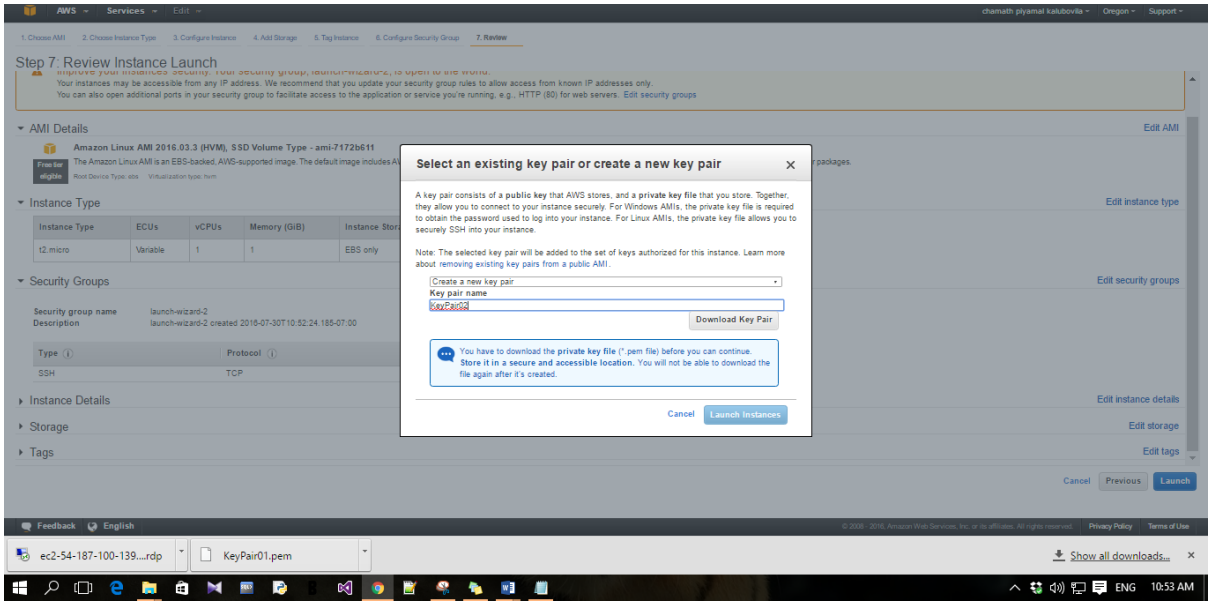
Step 02: Choose an Instance Type. Then review and launch



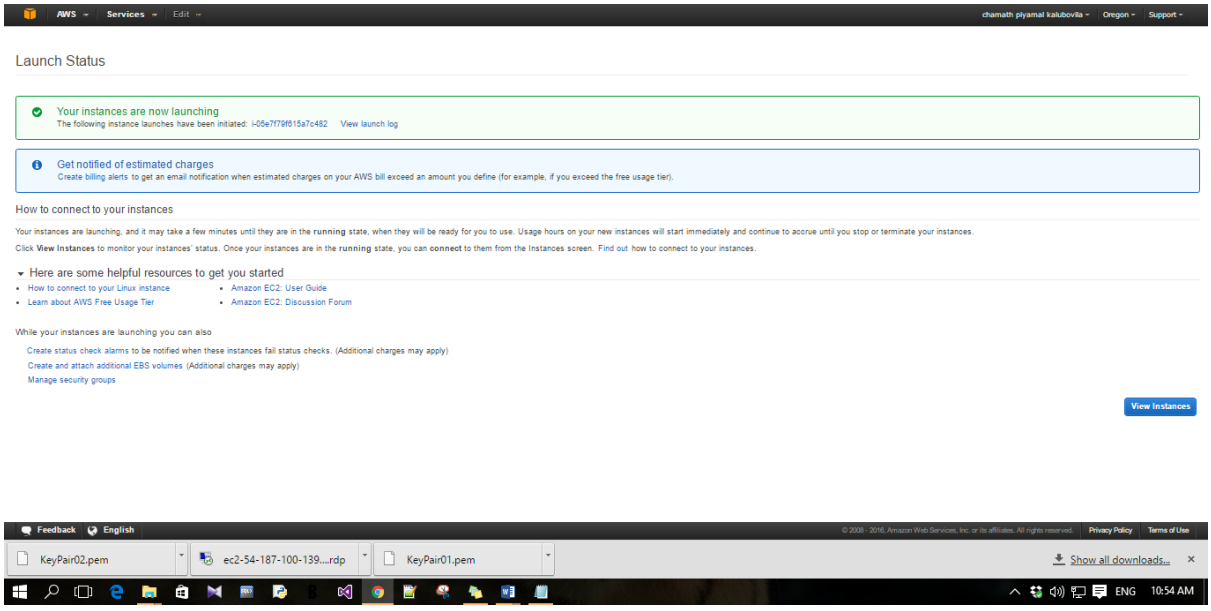
Step 03: Review Instance Launch.



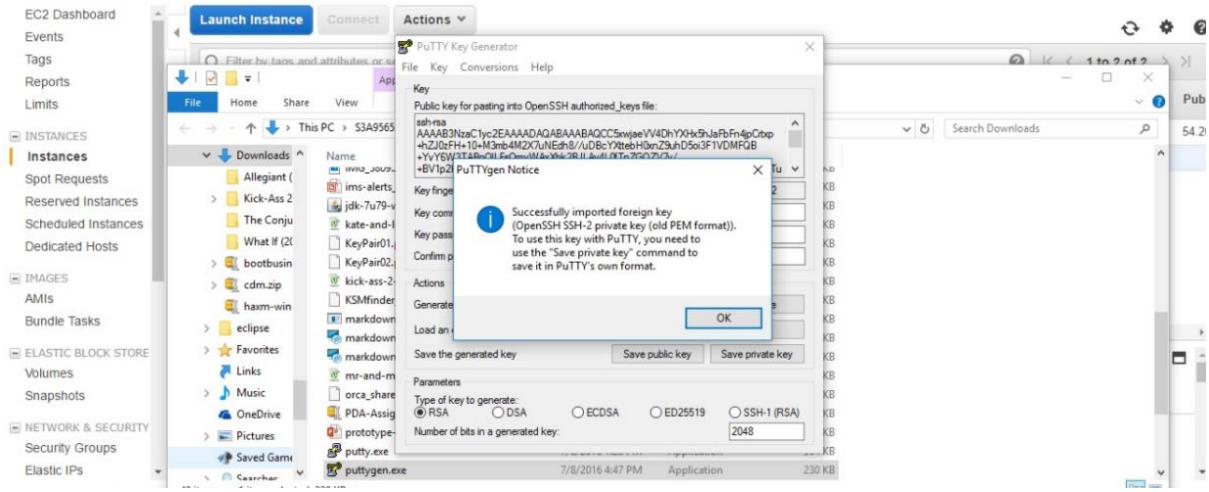
Step 04: Choose create a new key pair to download a new key pair. Then give a key pair name. Then select Launch Instance.



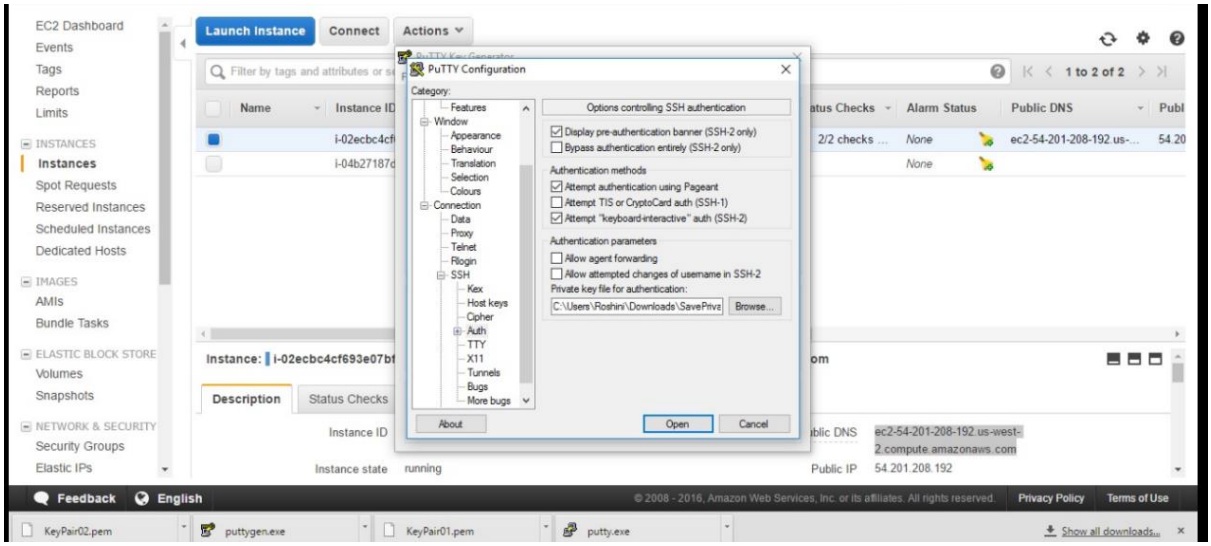
Step 05: View Instances after launching.



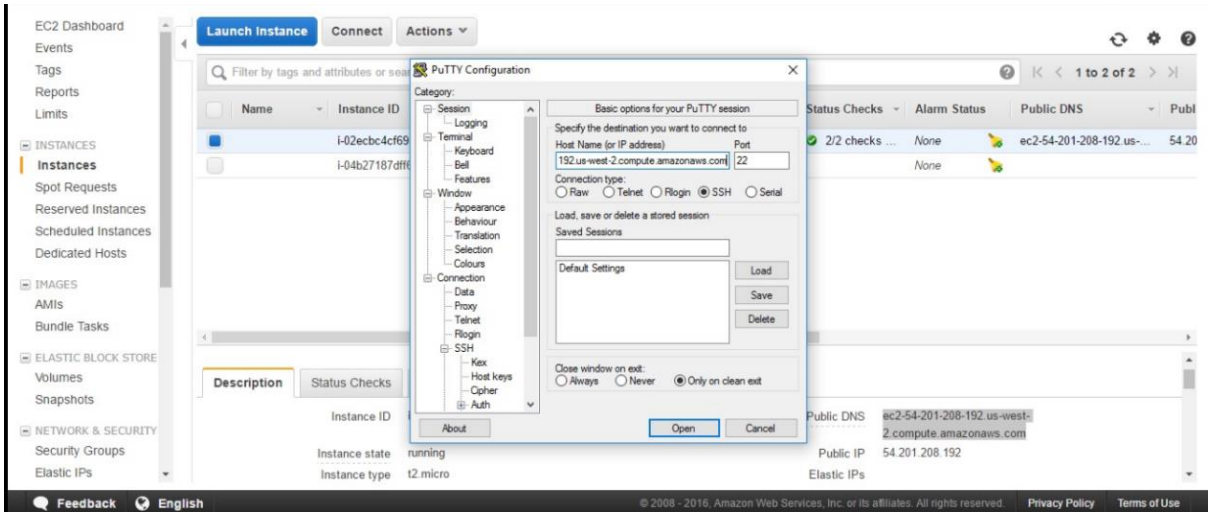
Step 06: Open PUTTY Key Generator. Then browse and load the downloaded key pair file and save it as a private key.



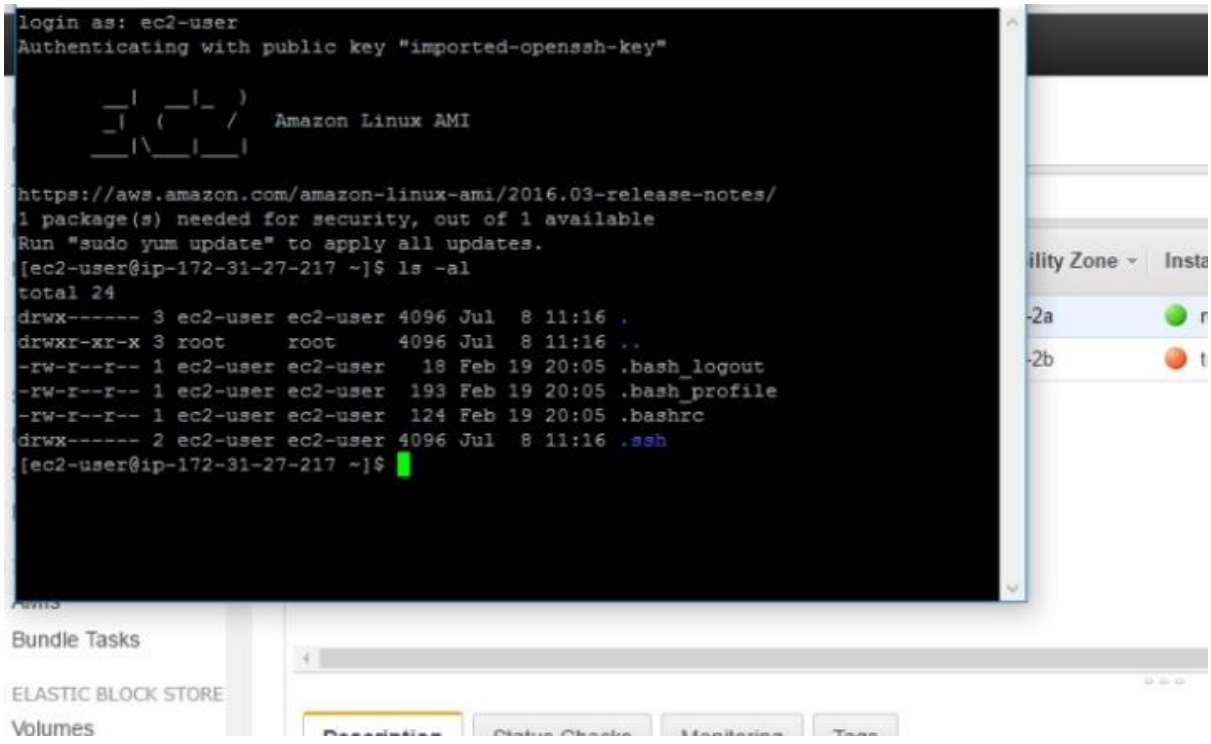
Step 07: Open PUTTY Configuration. Go to Connection category for SSH authentication. (Connection -> SSH -> Auth) Then under authentication parameters browse saved private key and open.



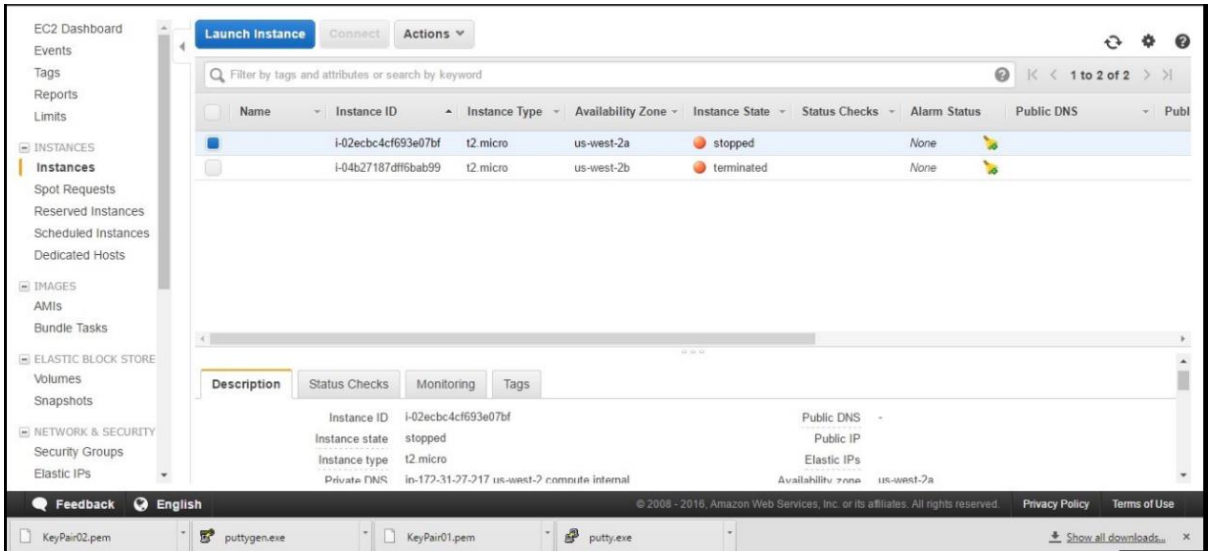
Step 8: Go back to Session category in PUTTY Configuration. Copy the Public DNS of created instance and paste it under Host Name. Set Connection type to SSH and open.



Step 9: Log in to Linux by giving user name in the kernel. (ec2-user). Type some Linux commands to check. (ls -al)



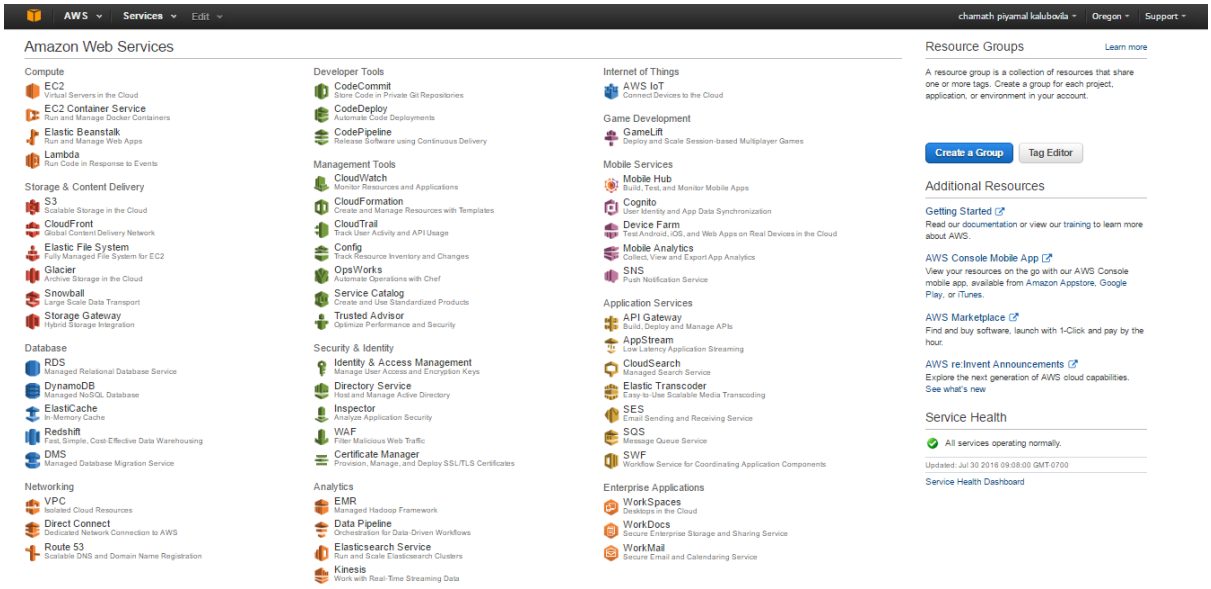
Step 10: Terminate or stop the instance from instance state.(Right click on instance -> Instance State -> Terminate/ Stop).



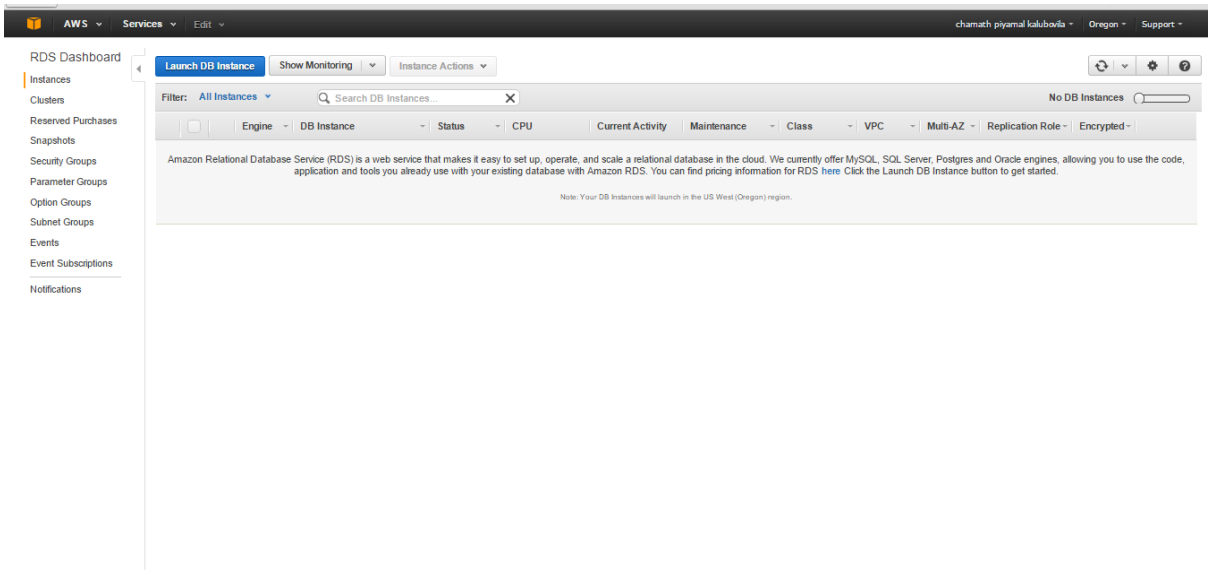
End of Lab 01 and Lab 02

Lab 03 - Creating an Amazon RDS Database)

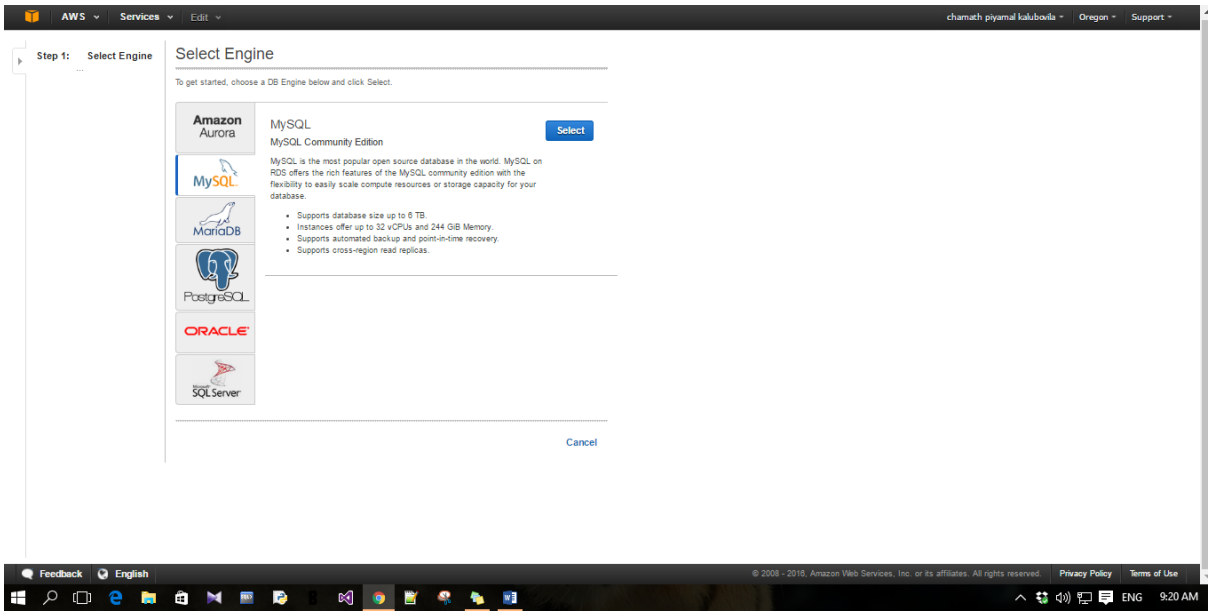
Step 01: Select RDS from Amazon Web Services. (Services -> RDS)



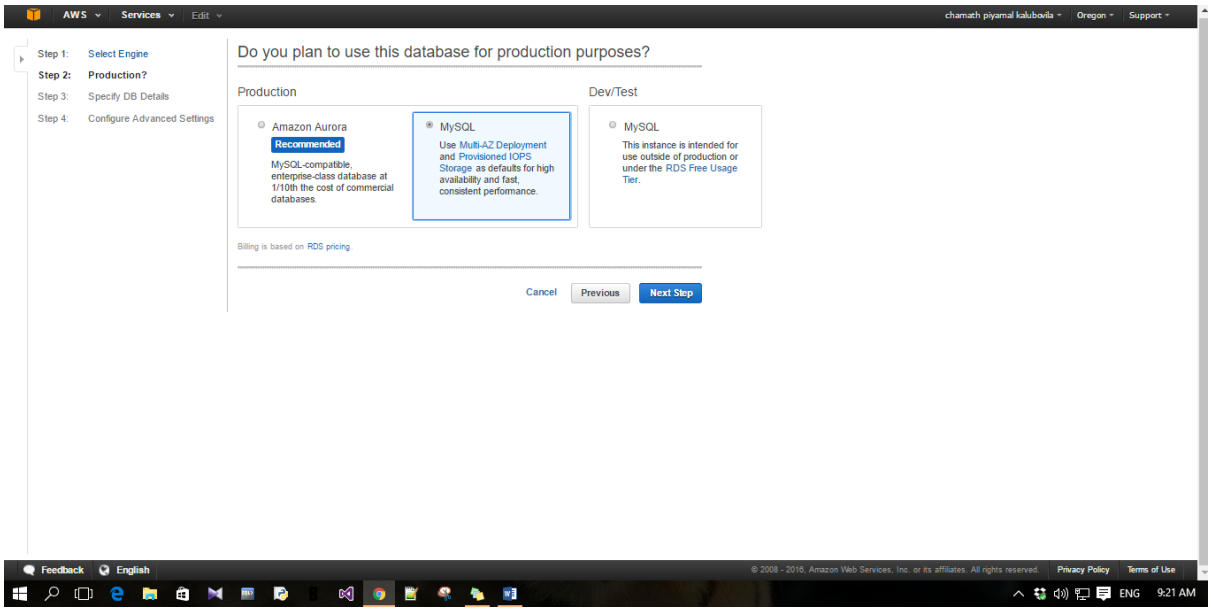
Step 02: Choose Instances from RDS Dashboard. Select Launch DB Instance.



Step 03: Choose MySQL from ‘Select Engine’ tab.



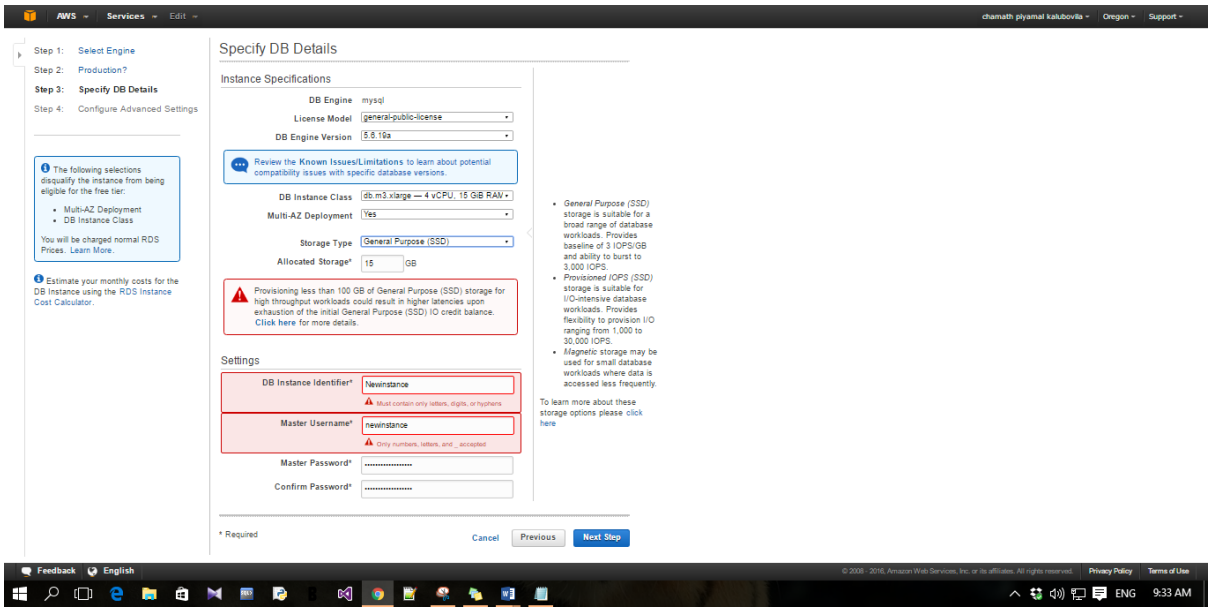
Step 04: Select MySQL under ‘Production’ category. Then proceed to next step.



<u>Step 05</u>: Specify the DB details. (Instance Specifications and Settings)

- License Model: general-public-license
- DB Engine Version: 5.6.19a
- DB Instance Class: db.t2.micro – 1 vCPU, 1 GiB RAM
- Multi-AZ Deployment: No
- Storage Type: General Purpose (SSD)
- Allocated Storage: 15 GB

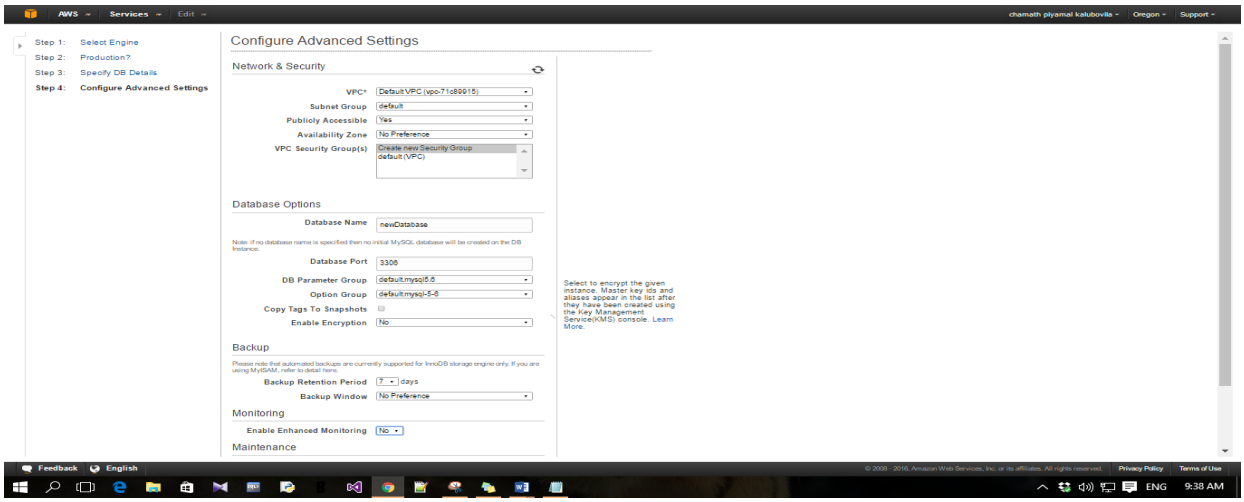
Provide a DB instance identifier, a master username and a master password.

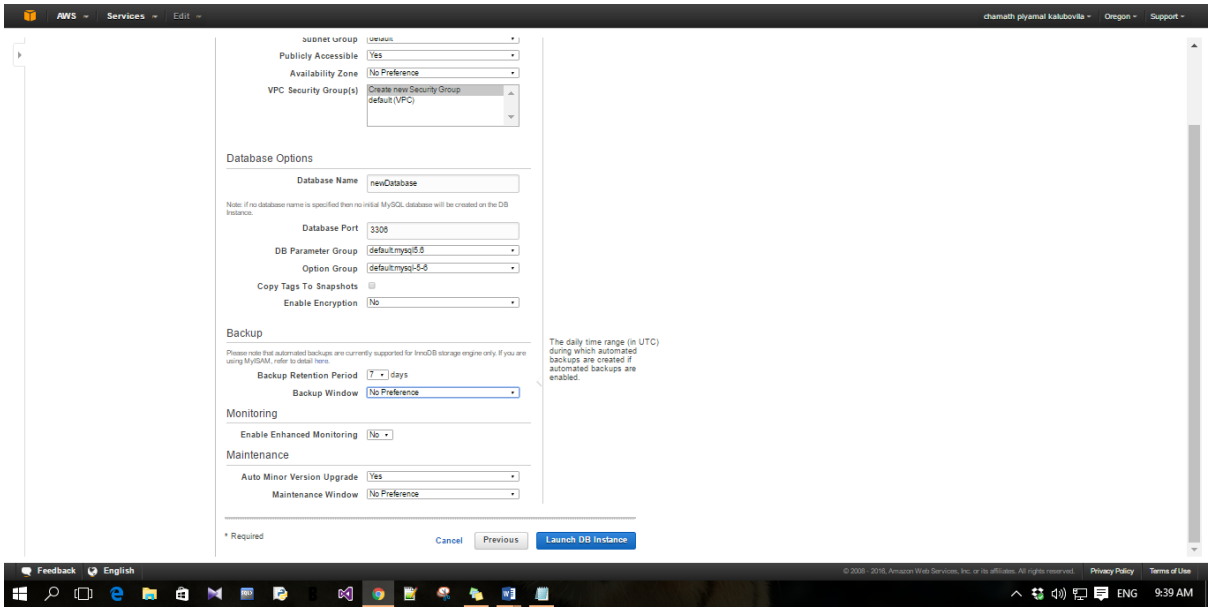


<u>Step 06</u>: Give a database name in 'Configure Advanced Settings' tab. (Database Options)

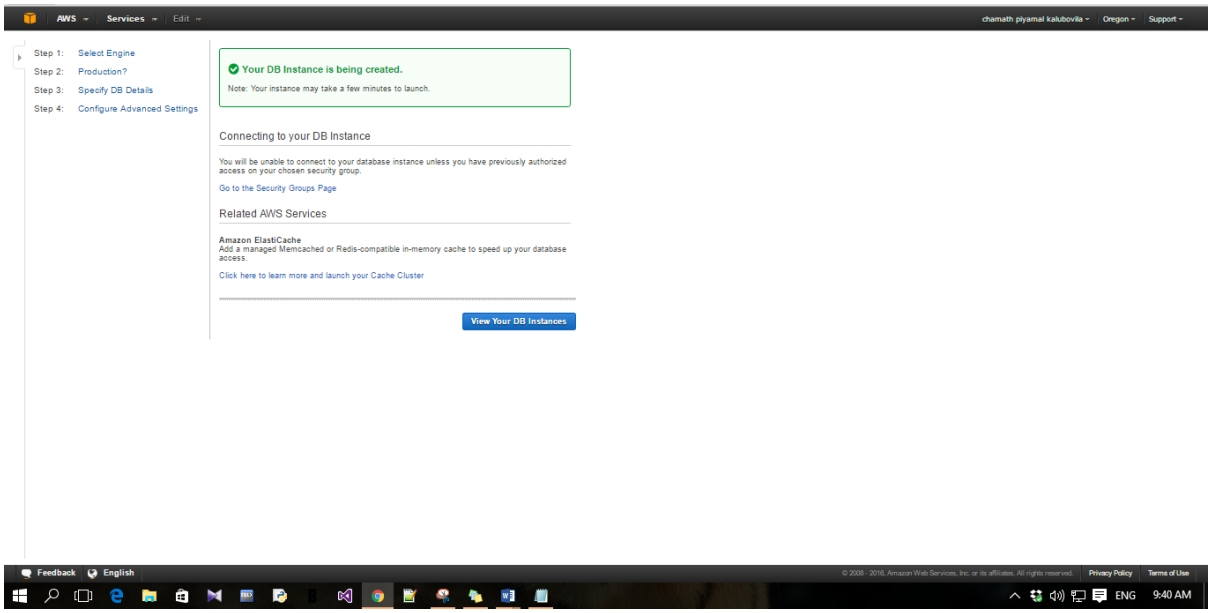
Choose 'No' in Enable Enhanced Monitoring. (Monitoring)

Click 'Launch DB Instance'.



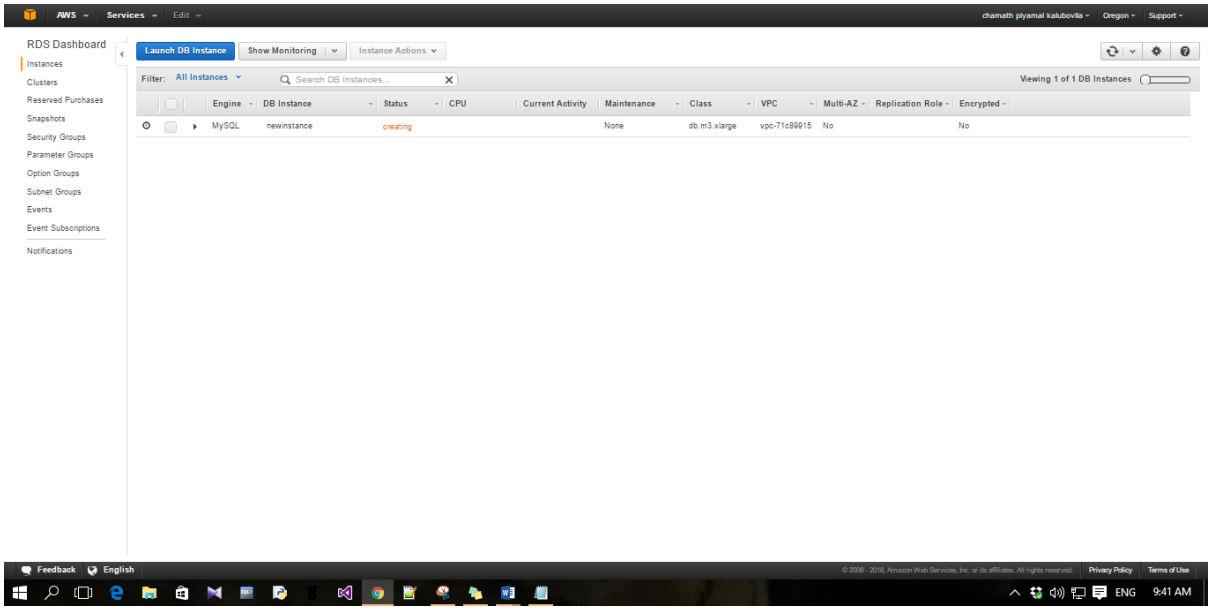


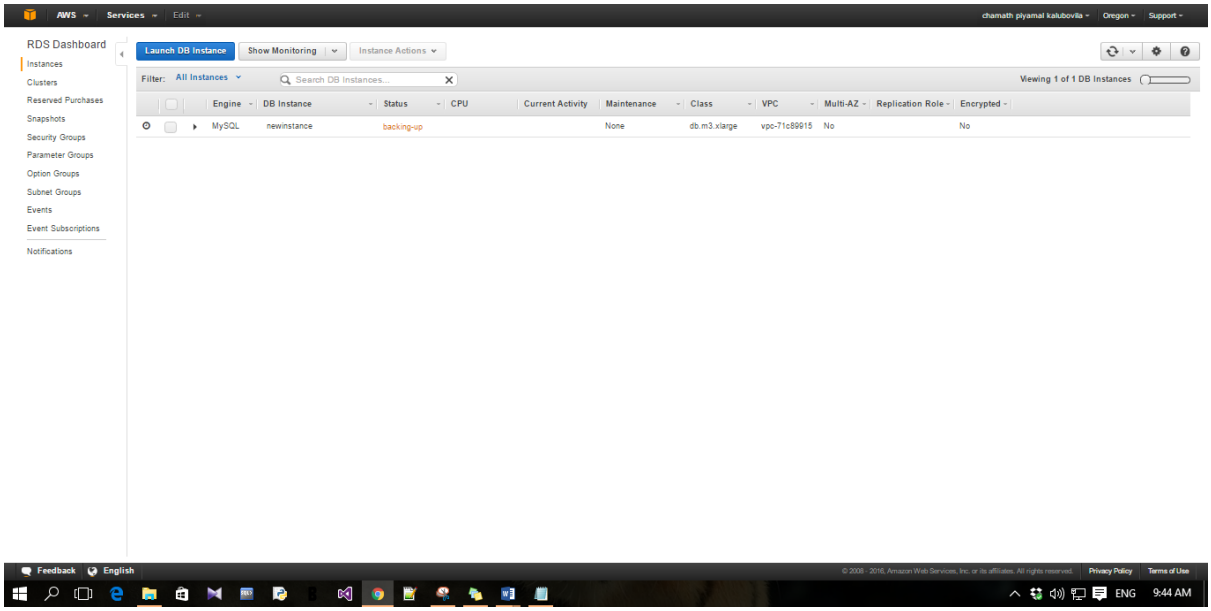
Step 07: Click 'View Your DB Instances' from next window.

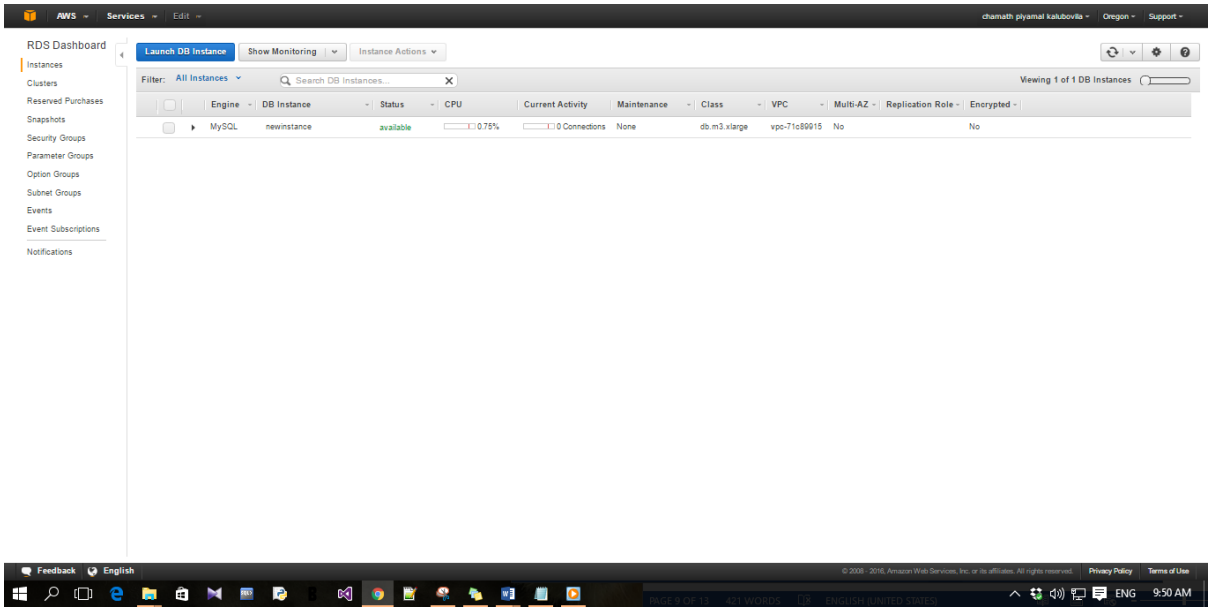


<u>Step 08</u>: Wait until the instance status change to ‘available’ from ‘creating’.

(creating -> backing-up -> available)

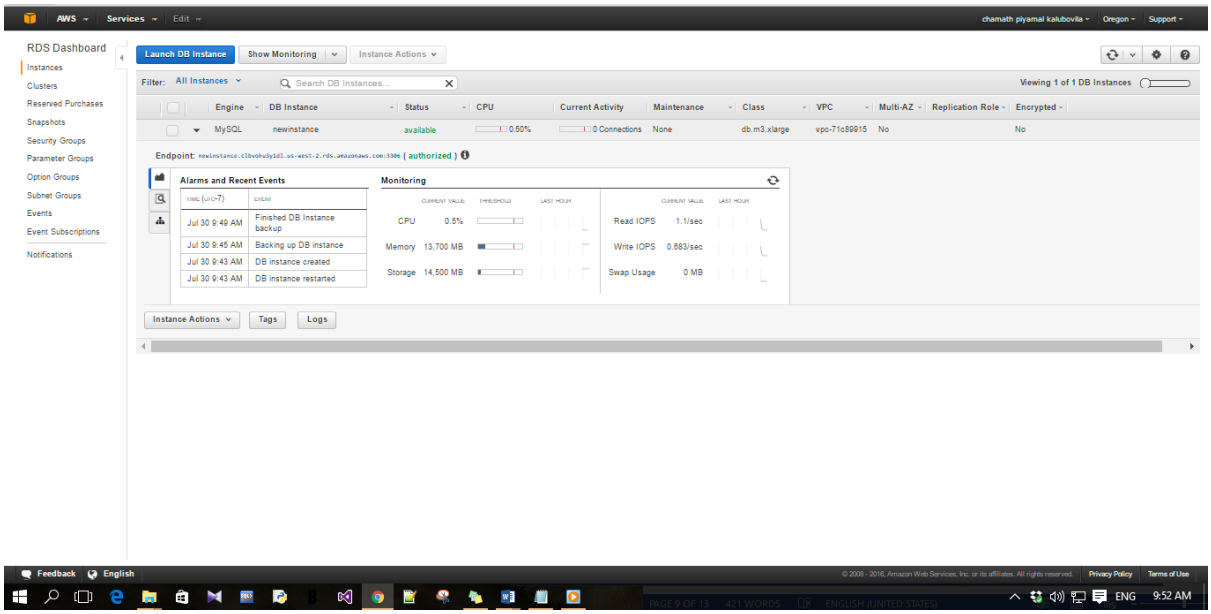






Step 09: Expand the instance to view Endpoint.

Copy the Endpoint without the port number.



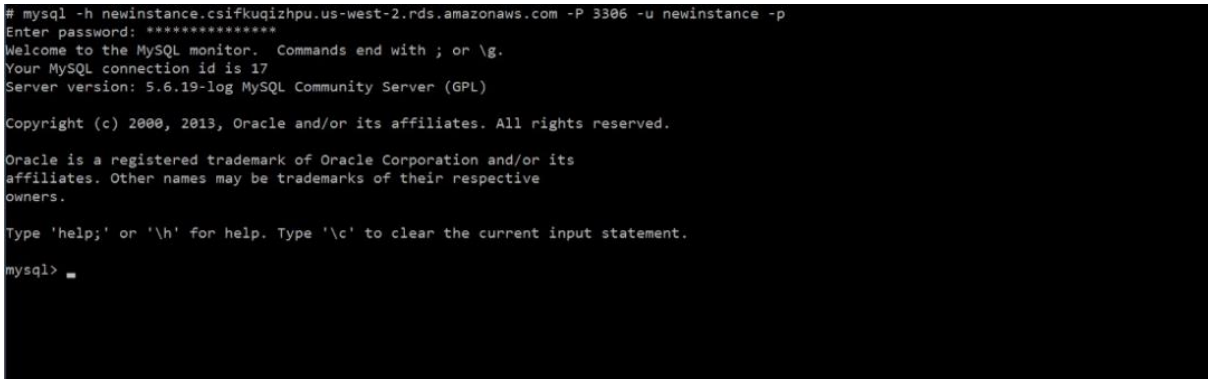
Step 10: Open XAMPP Control Panel.

Start MySQL.

Step 11: Go to the Shell in XAMPP Control Panel.

Type the command. (mysql -h <endpoint> -P <portnumber> -u <instancename> -p)

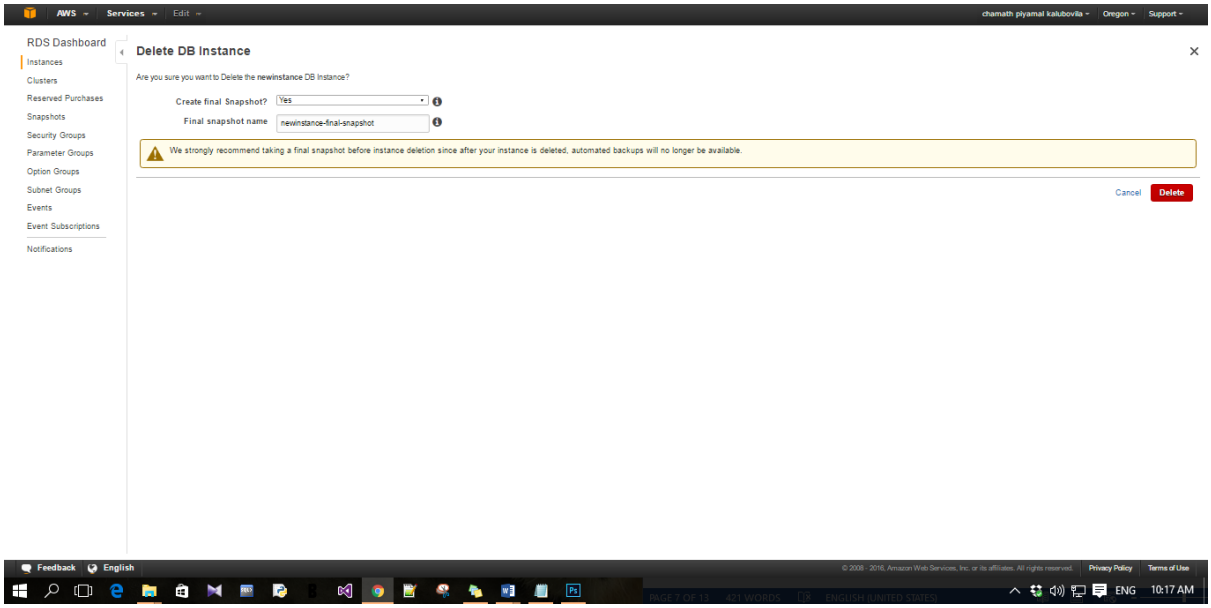
Enter master password.

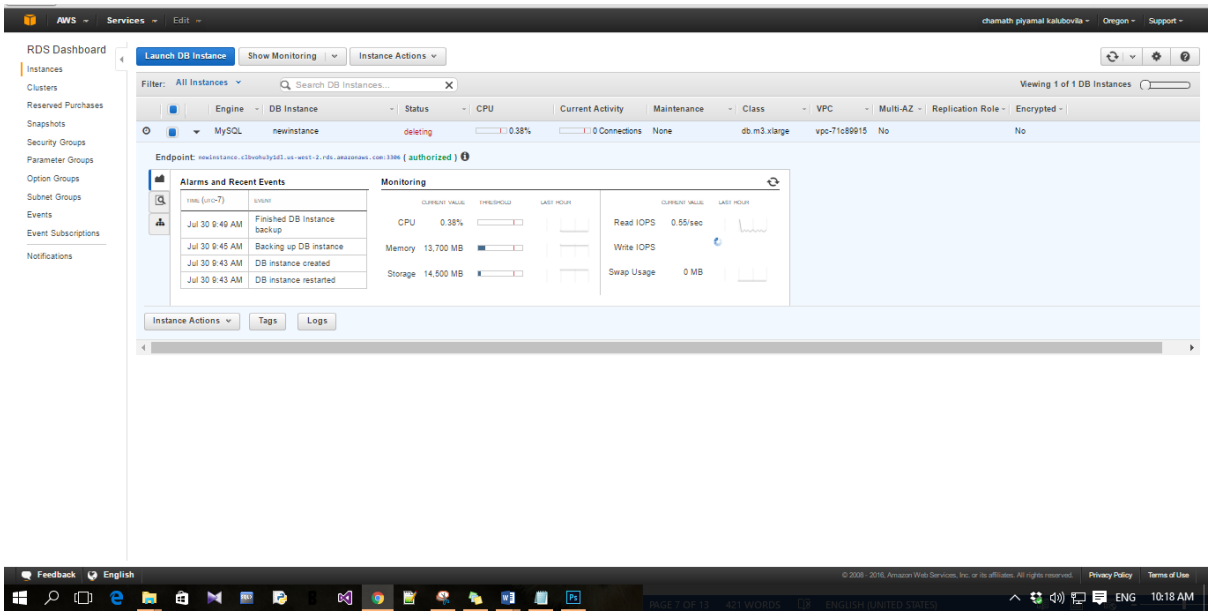


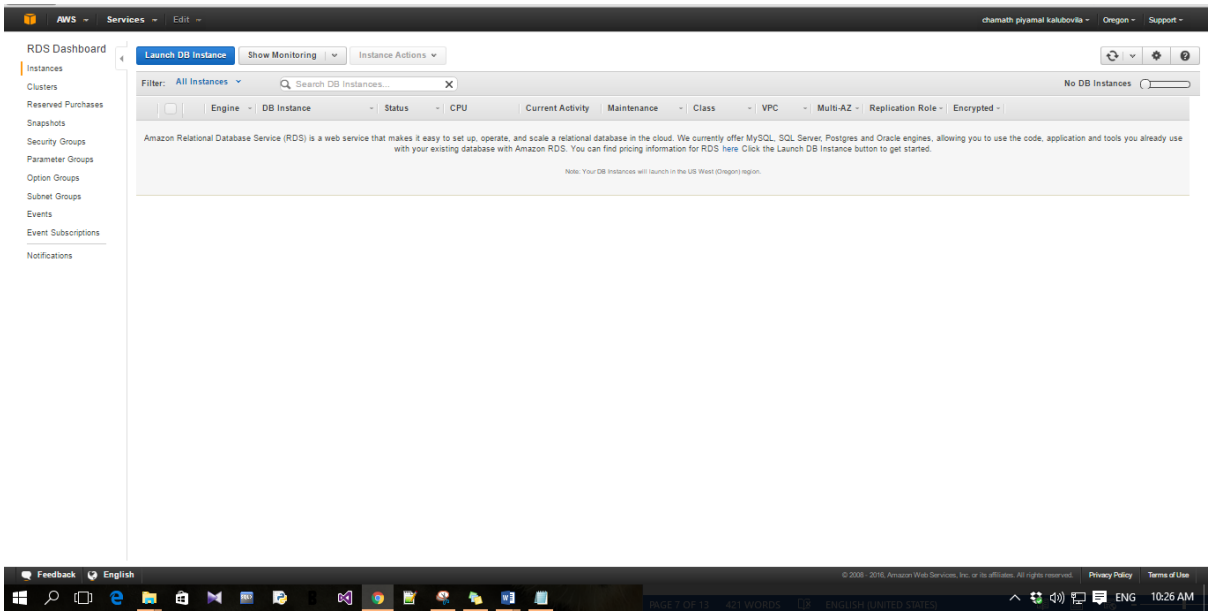
<u>Step 12</u>: Delete the created DB instance. (Instance Actions -> Delete)

Choose ‘No’ in Create final Snapshot.

Confirm delete by clicking ‘Delete’.




AWS
Services
Edit
chamath piyamal kalubovila
Oregon
Support
RDS Dashboard
Instances
Clusters
Reserved Purchases
Snapshots
Security Groups
Parameter Groups
Option Groups
Subnet Groups
Events
Event Subscriptions
Notifications
Launch DB Instance
Show Monitoring
Instance Actions
Filter: All Instances
Search DB Instances...
Viewing 1 of 1 DB Instances
Engine
DB Instance
Status
CPU
Current Activity
Maintenance
Class
VPC
Multi-AZ
Replication Role
Encrypted
MySQL
newinstance
deleting
0.38%
0 Connections
None
db.m3.xlarge
vpc-71c89915
No
No
Endpoint:
(authorized)
Alarms and Recent Events
Jul 30 9:49 AM
Finished DB Instance backup
Jul 30 9:45 AM
Backing up DB instance
Jul 30 9:43 AM
DB instance created
Jul 30 9:43 AM
DB instance restarted
Monitoring
CPU 0.38%
Memory 13,700 MB
Storage 14,500 MB
Read IOPS 0.55/sec
Write IOPS
Swap Usage 0 MB
Instance Actions
Tags
Logs
Feedback
English
Privacy Policy
Terms of Use
ENG
10:18 AM


AWS
Services
Edit
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Oregon
Support
RDS Dashboard
Instances
Clusters
Reserved Purchases
Snapshots
Security Groups
Parameter Groups
Option Groups
Subnet Groups
Events
Event Subscriptions
Notifications
Launch DB Instance
Show Monitoring
Instance Actions
Filter: All Instances
Search DB Instances...
No DB Instances
Engine
DB Instance
Status
CPU
Current Activity
Maintenance
Class
VPC
Multi-AZ
Replication Role
Encrypted
Amazon Relational Database Service (RDS) is a web service that makes it easy to set up, operate, and scale a relational database in the cloud. We currently offer MySQL, SQL Server, Postgres and Oracle engines, allowing you to use the code, application and tools you already use with your existing database with Amazon RDS. You can find pricing information for RDS here Click the Launch DB Instance button to get started.
Note: Your DB instances will launch in the US West (Oregon) region.
Feedback
English
Privacy Policy
Terms of Use
ENG
10:26 AM