



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: WE Tuesday

Practical Number: AWS Summary

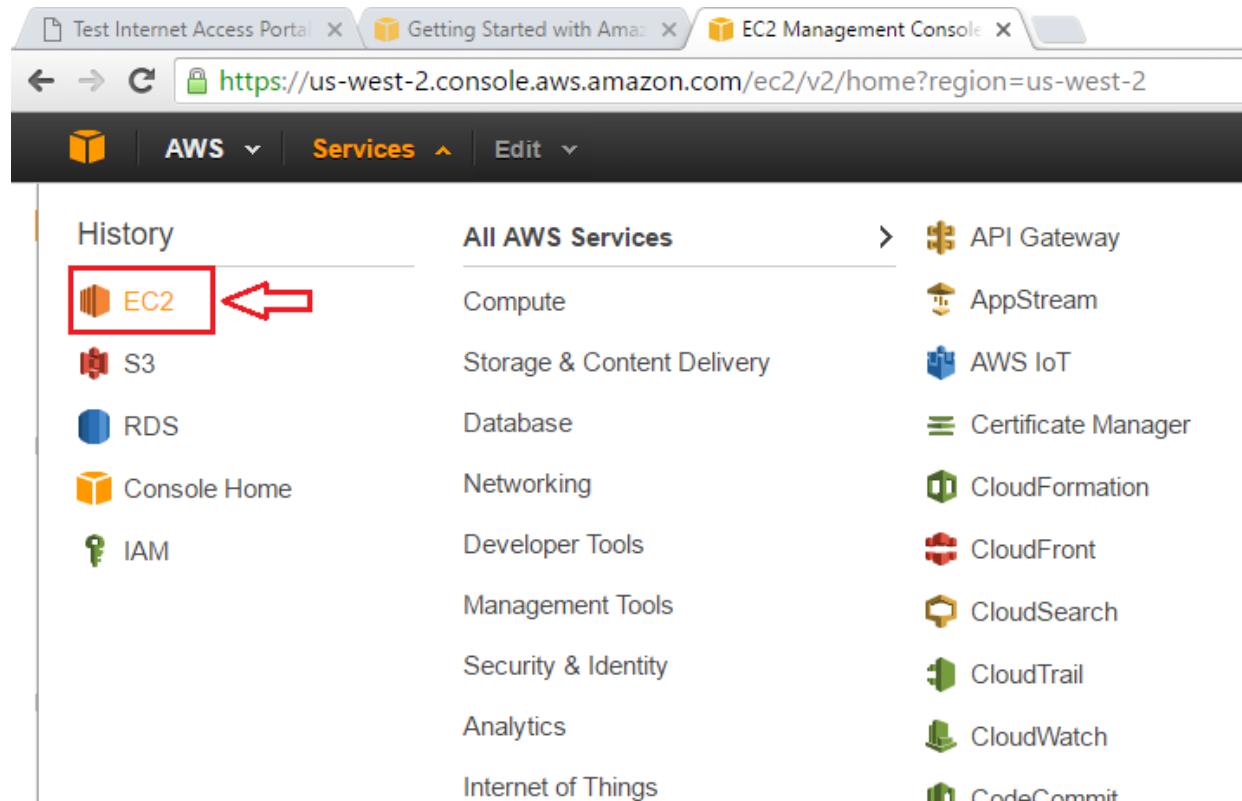
Date of Submission: 30th July 2016

Date of Evaluation : _____

Evaluators Signature : _____

Creating a Windows Instance

1. Open the Amazon EC2 console at <https://console.aws.amazon.com/ec2/>.



- 2.** From the console dashboard, choose **Launch Instance**.

The screenshot shows the AWS EC2 Management Console interface. The left sidebar has a tree view with 'EC2 Dashboard' selected, showing options like Events, Tags, Reports, Limits, Instances, Images, and Elastic Block Store. The main content area is titled 'Resources' and displays usage statistics for the US West (Oregon) region: 0 Running Instances, 0 Dedicated Hosts, 0 Volumes, 0 Key Pairs, 0 Placement Groups, 0 Elastic IPs, 0 Snapshots, 0 Load Balancers, and 1 Security Group. Below this is a callout for Amazon Simple Workflow. A large 'Create Instance' section follows, containing a note that says 'To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.' A prominent blue button labeled 'Launch Instance' is highlighted with a red rectangular box and a red arrow pointing to it from the left.

- 3.** Select the AMI for Microsoft Windows Server 2012 R2 Base or Microsoft Windows Server 2008 R2 Base.

Step 1: Choose an Amazon Machine Image (AMI)

Ubuntu Server 14.04 LTS (HVM), SSD Volume Type - ami-9abea4fb
Ubuntu Server 14.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).
Root device type: ebs Virtualization type: hvm

Select 64-bit

Microsoft Windows Server 2012 R2 Base - ami-8d0acfed
Microsoft Windows 2012 R2 Standard edition with 64-bit architecture. [English]
Root device type: ebs Virtualization type: hvm

Select 64-bit

- On the **Choose an Instance Type** page, you can select the hardware configuration of your instance. Select the t2.micro type, which is selected by default. Notice that this instance type is eligible for the free tier.

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.

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 <small>Free tier eligible</small>	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

- Configure the instance details (No need to do any additional modifications. Keep them as it 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	<input type="text" value="1"/>	Launch into Auto Scaling Group
Purchasing option	<input type="checkbox"/> Request Spot Instances	
Network	vpc-5815523c (172.31.0.0/16) (default)	<input type="button" value="Create new VPC"/>
Subnet	No preference (default subnet in any Availability Zone)	<input type="button" value="Create new subnet"/>
Auto-assign Public IP	Use subnet setting (Enable)	
Domain join directory	None	
IAM role	None	
Shutdown behavior	Stop	
Enable termination protection	<input type="checkbox"/> Protect against accidental termination	
Monitoring	<input type="checkbox"/> Enable CloudWatch detailed monitoring	

Buttons: Cancel, Previous, **Review and Launch**, Next: Add Storage

6. Add storage

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.

Buttons: Cancel, Previous, **Review and Launch**, Next: Tag Instance

7. Review instance launch

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.

AMI Details

Microsoft Windows Server 2012 R2 Base - ami-8d0acfed							
Free tier eligible	Microsoft Windows 2012 R2 Standard edition with 64-bit architecture. [English]						
	Root Device Type: ebs	Virtualization type: hvm					
If you plan to use this AMI for an application that benefits from Microsoft License Mobility, fill out the License Mobility Form . Don't show me this again							

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

Launch

8. Select an existing key pair or create a new key pair

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Create a new key pair
Key pair name: lab1
Download Key Pair

You have to download the **private key file** (*.pem file) before you can continue. **Store it in a secure and accessible location.** You will not be able to download the file again after it's created.

Launch Instances

9. Launch instance

Your instances are now launching
The following instance launches have been initiated: i-02bffb6af4de568da [View launch log](#)

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).

How to connect to your instances
Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.
Click [View Instances](#) to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

Here are some helpful resources to get you started

- Amazon EC2: User Guide
- How to connect to your Windows instance
- Amazon EC2: Microsoft Windows Guide

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10. Connecting to the instance.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Pub
	i-02bffb6af4de568da	t2.micro	us-west-2a	pending	Initializing	None	-	

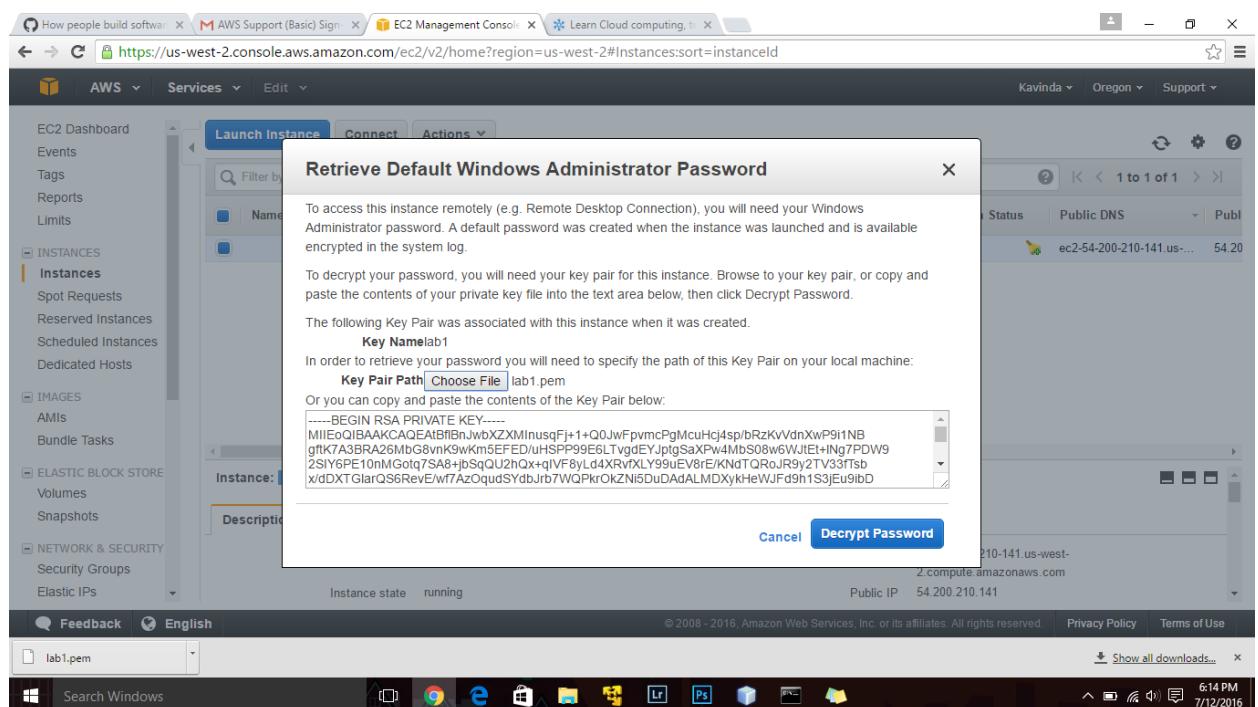
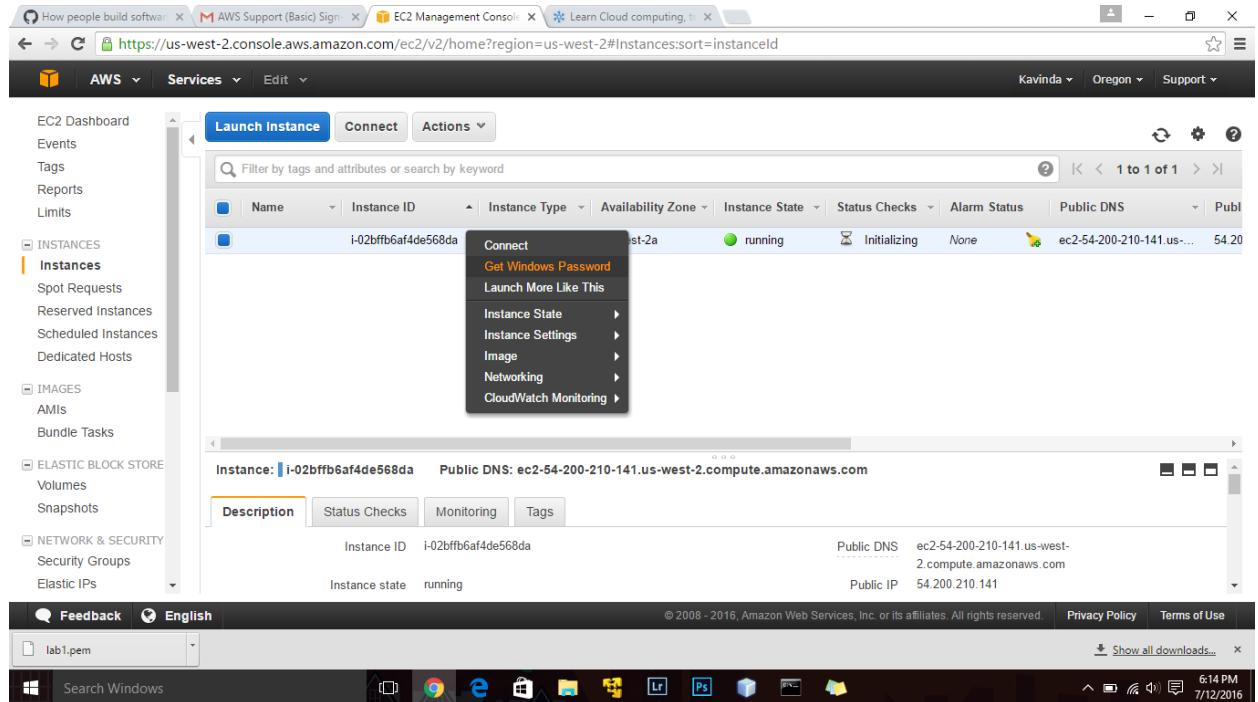
Instance: i-02bffb6af4de568da Private IP: 172.31.31.108

Description Status Checks Monitoring Tags

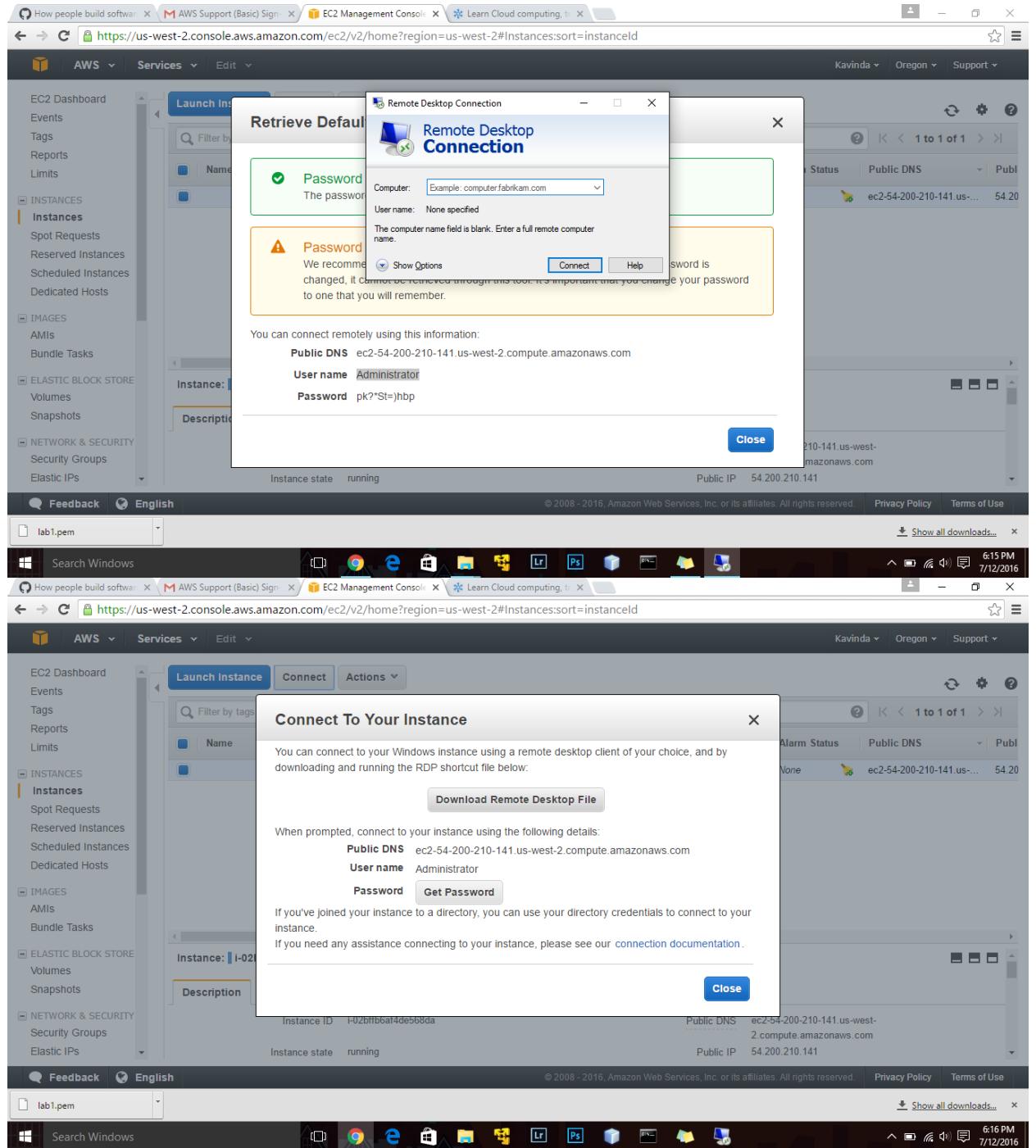
Instance ID: i-02bffb6af4de568da
Instance state: pending
Public DNS: -
Public IP: -
Private IP: 172.31.31.108

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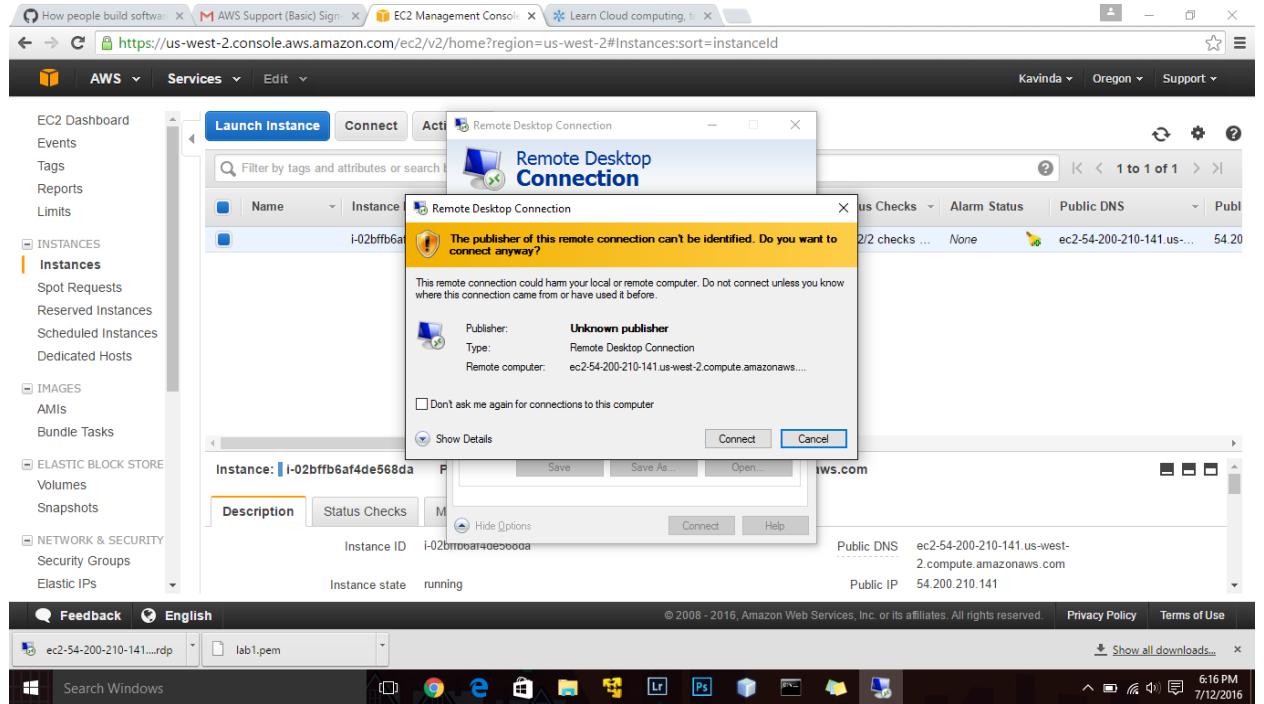
11. Get Windows password



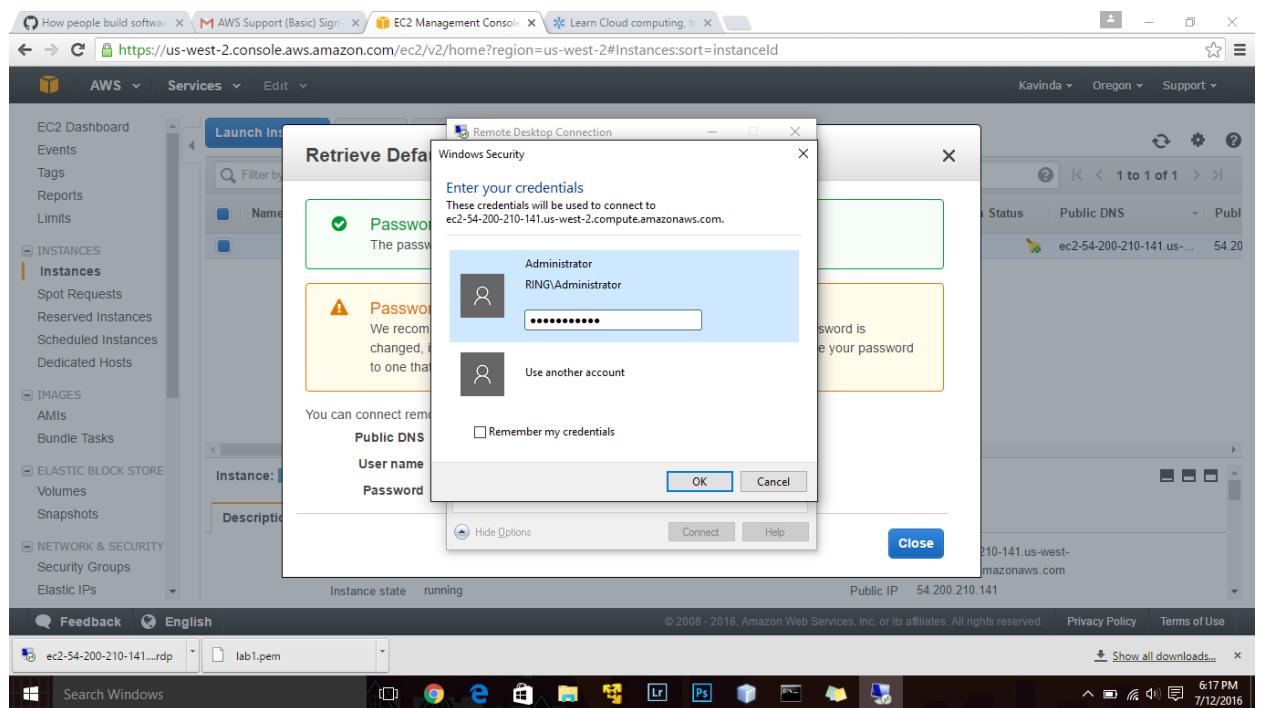
12. Connect to your windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below.

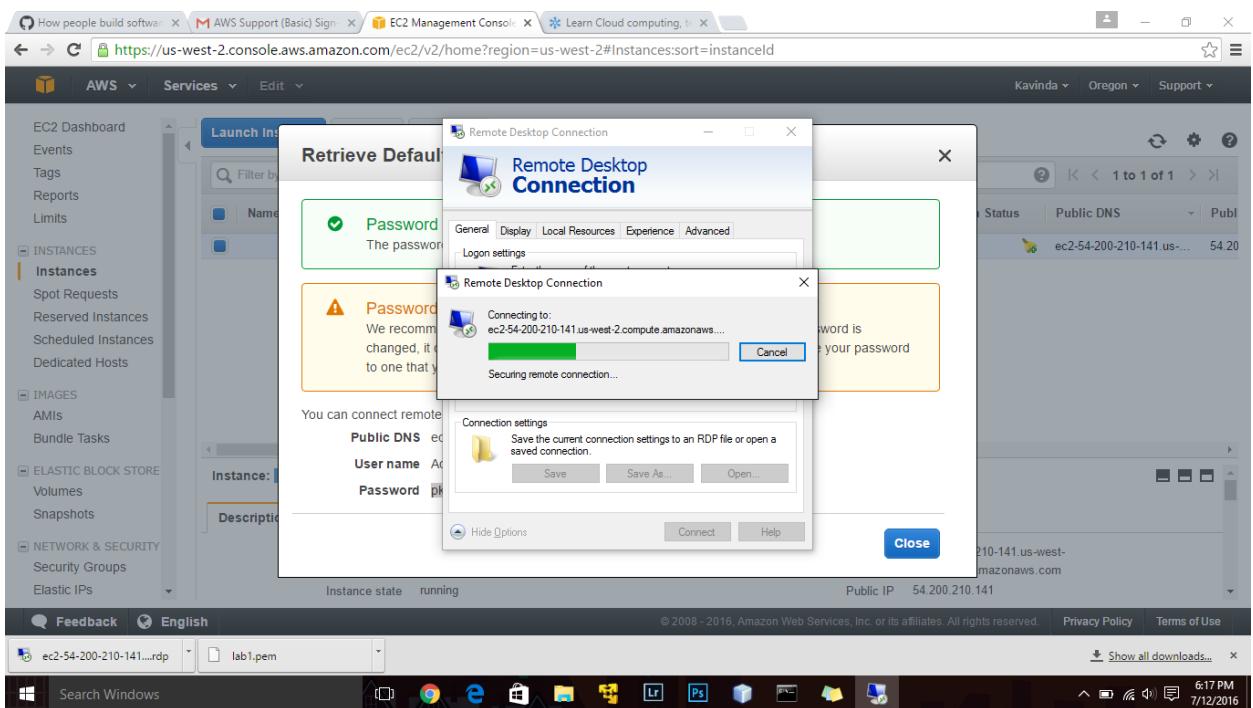


13. Get the remote desktop connection. Provide the public IP address.

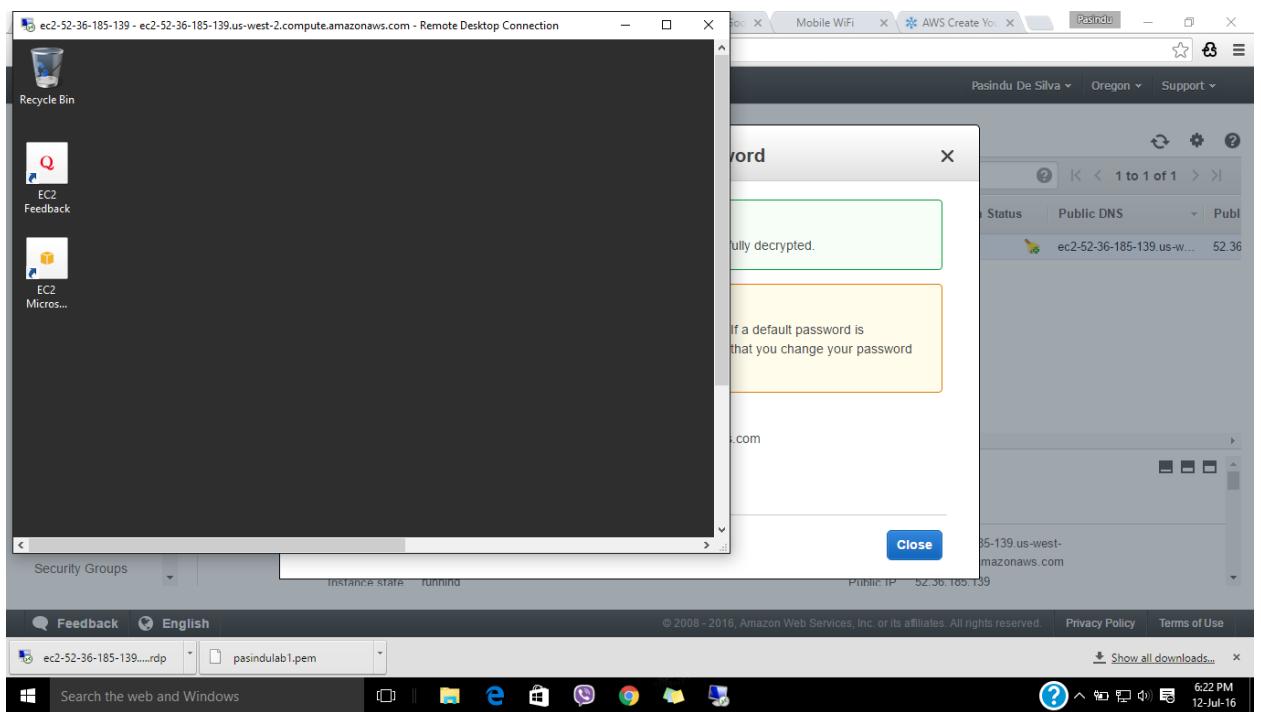


14. Provide user name as Administrator and the encrypted password.





15. Finally you will be connected to the windows remote instance.



16. Terminating the instance.

The screenshot shows the AWS Management Console with the EC2 service selected. In the left sidebar, under the 'Instances' section, 'Instances' is highlighted. On the main pane, a single instance is listed with the ID i-0673420c823f1b18. A context menu is open over this instance, with 'Terminate' highlighted. Below the instance list, the instance details are shown: Instance ID i-0673420c823f1b18, Public DNS ec2-52-36-185-139.us-west-2.compute.amazonaws.com, Instance state running, Public IP 52.36.185.139. At the bottom, a Windows taskbar is visible with icons for RDP and a .pem file.

The screenshot shows the same AWS EC2 Instances page as before, but now a modal dialog box titled 'Terminate Instances' is displayed. The dialog contains a warning message: 'Warning: On an EBS-backed instance, the default action is for the root EBS volume to be deleted when the instance is terminated. Storage on any local drives will be lost.' Below the warning, it asks 'Are you sure you want to terminate these instances?' followed by the instance ID i-0673420c823f1b18 and its public DNS. At the bottom right of the dialog are 'Cancel' and 'Yes, Terminate' buttons. The background of the page shows the same instance details and taskbar as the previous screenshot.

Creating a Linux instance

1. Choose an Amazon Machine image (AMI) to create a Linux instance.

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	AMIs	Select	64-bit
My AMIs	Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type - ami-7172b611	Select	64-bit
AWS Marketplace	Red Hat Enterprise Linux 7.2 (HVM), SSD Volume Type - ami-775e4f16	Select	64-bit
Community AMIs	SUSE Linux Enterprise Server 12 SP1 (HVM), SSD Volume Type - ami-d2627db3	Select	64-bit
<input type="checkbox"/> Free tier only			



2. Choose an instance type for the Linux.

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
<input type="checkbox"/>	General purpose	m4.large	2	8	EBS only	Yes	Moderate



3. Configure instance details.

The screenshot shows the 'Step 3: Configure Instance Details' page of the AWS EC2 Management Console. The URL is <https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#LaunchInstanceWizard>. The page title is 'Configure instance details'. The navigation bar at the top includes tabs for 'Choose AMI', 'Choose Instance Type', 'Configure Instance' (which is selected), 'Add Storage', 'Tag Instance', 'Configure Security Group', and 'Review'. The main content area is titled 'Step 3: Configure Instance Details' with the sub-instruction '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.' It contains several configuration sections:

- Number of Instances:** Set to 1, with an option to 'Launch into Auto Scaling Group'.
- Purchasing option:** An unchecked checkbox for 'Request Spot Instances'.
- Network:** Set to 'vpc-5815523c (172.31.0.0/16) (default)' with a 'Create new VPC' button.
- Subnet:** Set to 'No preference (default subnet in any Availability Zone)' with a 'Create new subnet' button.
- Auto-assign Public IP:** Set to 'Use subnet setting (Enable)'.
- IAM role:** Set to 'None' with a 'Create new IAM role' button.
- Shutdown behavior:** Set to 'Stop'.
- Enable termination protection:** An unchecked checkbox.
- Monitoring:** An unchecked checkbox for 'Enable CloudWatch detailed monitoring' with a note 'Additional charges apply.'
- Tenancy:** Set to 'Shared - Run a shared hardware instance'.

At the bottom are 'Cancel', 'Previous', 'Review and Launch' (highlighted in blue), and 'Next: Add Storage' buttons. The Windows taskbar at the bottom shows various open applications like File Explorer, Edge, and Photoshop.

4. Add storage. We can attach additional ESB volumes and instance store volumes to your instance, or edit the settings of the root volume.

The screenshot shows the 'Step 4: Add Storage' page of the AWS EC2 Management Console. The URL is <https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#LaunchInstanceWizard>. The page title is 'Add storage'. The navigation bar at the top includes tabs for 'Choose AMI', 'Choose Instance Type', 'Configure Instance', 'Add Storage' (selected), 'Tag Instance', 'Configure Security Group', and 'Review'. The main content area is titled 'Step 4: Add Storage' with the sub-instruction '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.' It displays a table for adding storage volumes:

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/xvda	snap-d465048a	8	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

An 'Add New Volume' button is located below the table. A note in a callout box states: '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.' At the bottom are 'Cancel', 'Previous', 'Review and Launch' (highlighted in blue), and 'Next: Tag Instance' buttons. The Windows taskbar at the bottom shows various open applications like File Explorer, Edge, and Photoshop.

5. Configure the security group. It is a set of firewall rules that control the traffic for your instance. We can add rules to allow specific traffic to reach your instance.

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-2

Description: launch-wizard-2 created 2016-07-12T18:34:39.697+05:30

Type	Protocol	Port Range	Source
SSH	TCP	22	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**

6. Then review the instance launch

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.

AMI Details **Edit AMI**

Amazon Linux AMI 2016.03.3 (HVM), SSD Volume Type - ami-7172b611
Free tier eligible 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

Summary **Edit security groups**

Launch **Cancel** **Previous**

7. Selecting an existing key pair or create a new key pair. Then it will help to download the .pem file

Step 7: Review Instance Launch

Please review your instance launch details. You can always change them later.

AMI Details

Amazon Linux AMI 2016.03.3 (HVM, SSD Volume Type)

Instance Type

Instance Type	ECUs
t2.micro	Variable

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Create a new key pair
Key pair name
linuxlab1
Download Key Pair

You have to download the **private key file** (*.pem file) before you can continue. **Store it in a secure and accessible location.** You will not be able to download the file again after it's created.

Launch Instances

Launch Status

Your instances are now launching

The following instance launches have been initiated: i-04c8c53666022fe16 [View launch log](#)

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).

How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click [View Instances](#) to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

Here are some helpful resources to get you started

- [How to connect to your Linux instance](#)
- [Amazon EC2: User Guide](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: Discussion Forum](#)

The screenshot shows the AWS Management Console with the EC2 Management Console selected. The left sidebar shows navigation options like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Images, AMIs, Bundle Tasks, Elastic Block Store, Volumes, Snapshots, and Network & Security. The main area displays a table of instances. One instance, i-02bf1b6af4de568da, is listed as terminated. Another instance, i-04c8c53666022fe1f, is listed as pending. A message at the bottom says "Select an instance above". The status bar at the bottom right shows the date and time as 7/12/2016, 6:36 PM.

8. Download putty.exe and puttyGen.exe.

To download: -

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

This screenshot shows a web browser window displaying the Putty download page. The page provides links for various Putty executables and their signatures. It also includes a section for the latest development snapshot and a note about checksums. The browser's address bar shows the URL: www.chiark.greenend.org.uk/~sgtatham/putty/download.html. The status bar at the bottom right shows the date and time as 7/12/2016, 9:12 PM.

File Type	Link	Description
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	putty.zip	(or by FTP) (signature)
A Windows MSI installer package for everything except PuTTYtel	putty-0.67-installer.msi	(or by FTP) (signature)
Legacy Inno Setup installer: Reportedly insecure! Use with caution, if the MSI fails.	putty-0.67-installer.exe	(or by FTP) (signature)
Checksums for all the above files		
MD5:	md5sums	(or by FTP) (signature)
SHA-1:	sha1sums	(or by FTP) (signature)
SHA-256:	sha256sums	(or by FTP) (signature)
SHA-512:	sha512sums	(or by FTP) (signature)

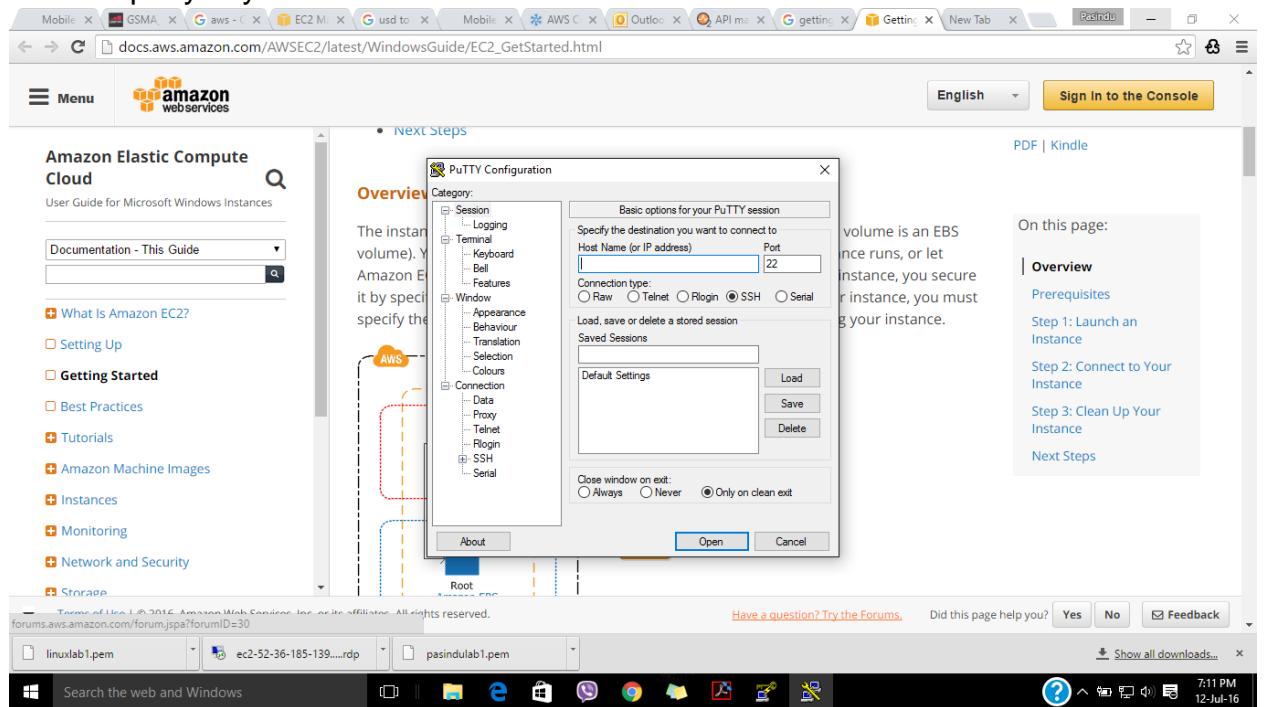
The latest development snapshot

This will be built every day, automatically, from the current development code - in *whatever* state it's currently in. If you need a fix for a particularly inconvenient bug, you may well be able to find a fixed PuTTY here well before the fix makes its way into the release version above. On the other hand, these snapshots might sometimes be unstable.

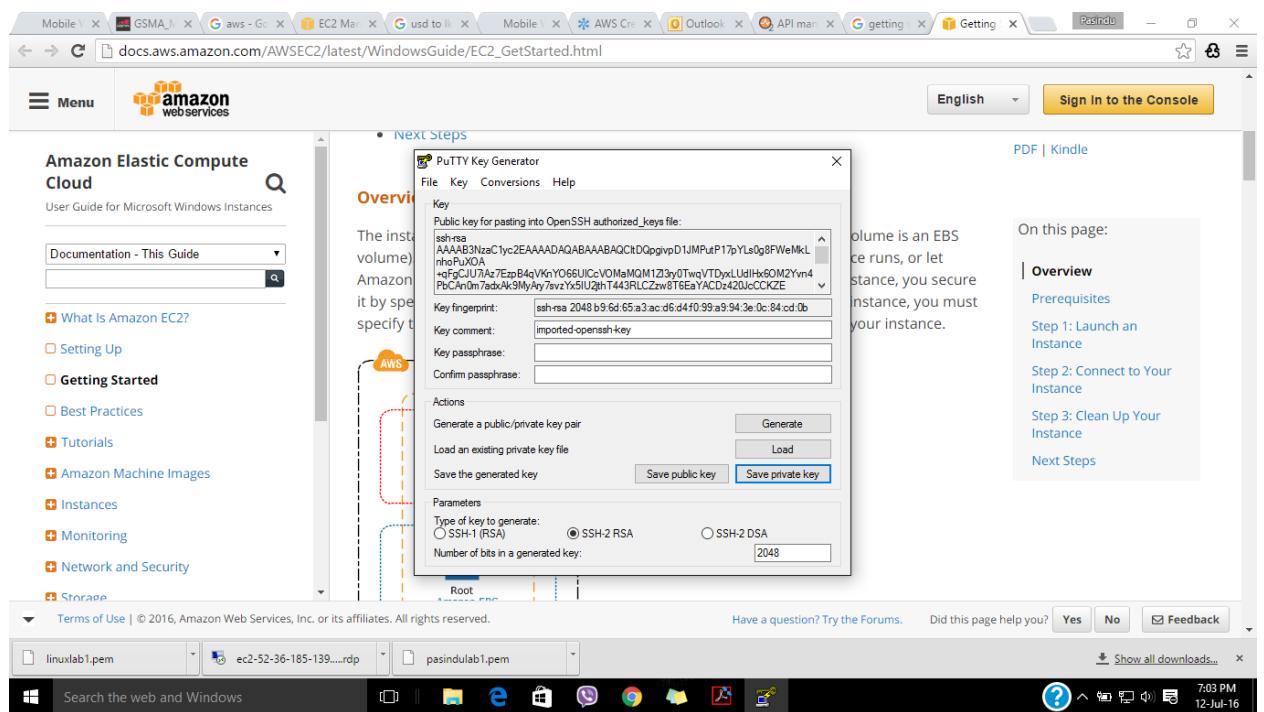
(The filename of the development snapshot installer contains the snapshot date, so it will change every night.)

For Windows on Intel x86

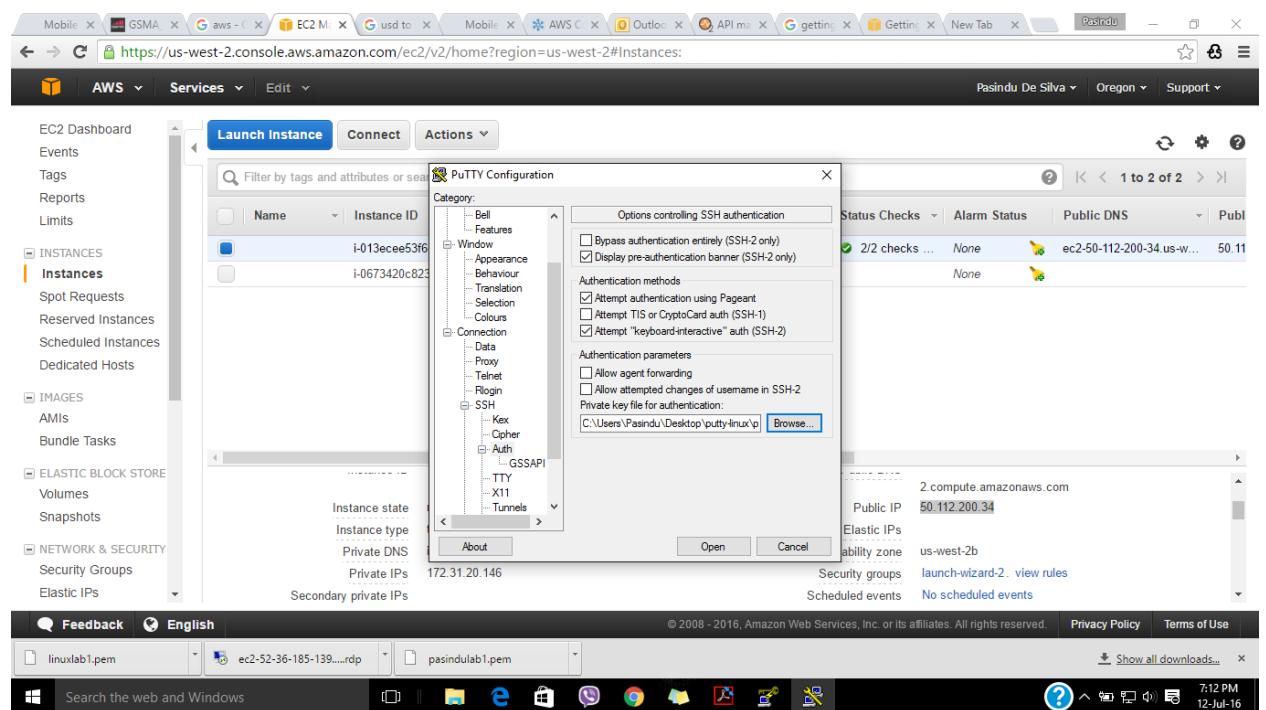
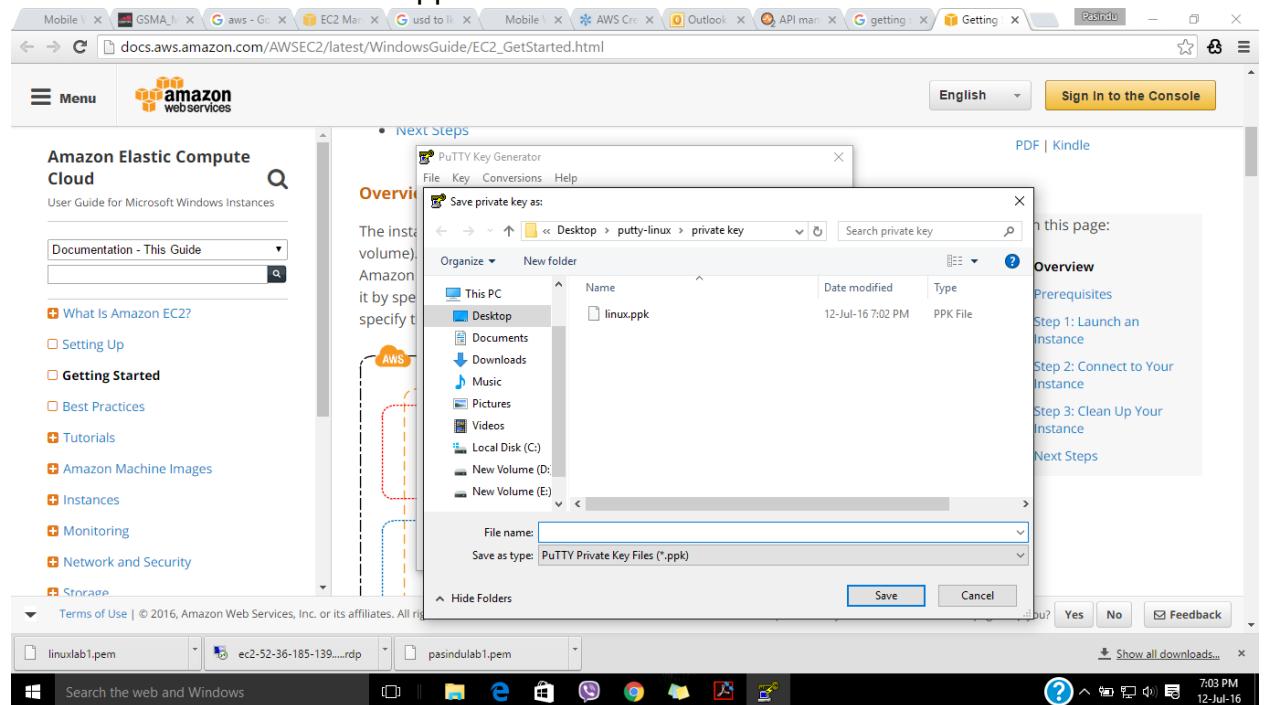
9. Run the putty key



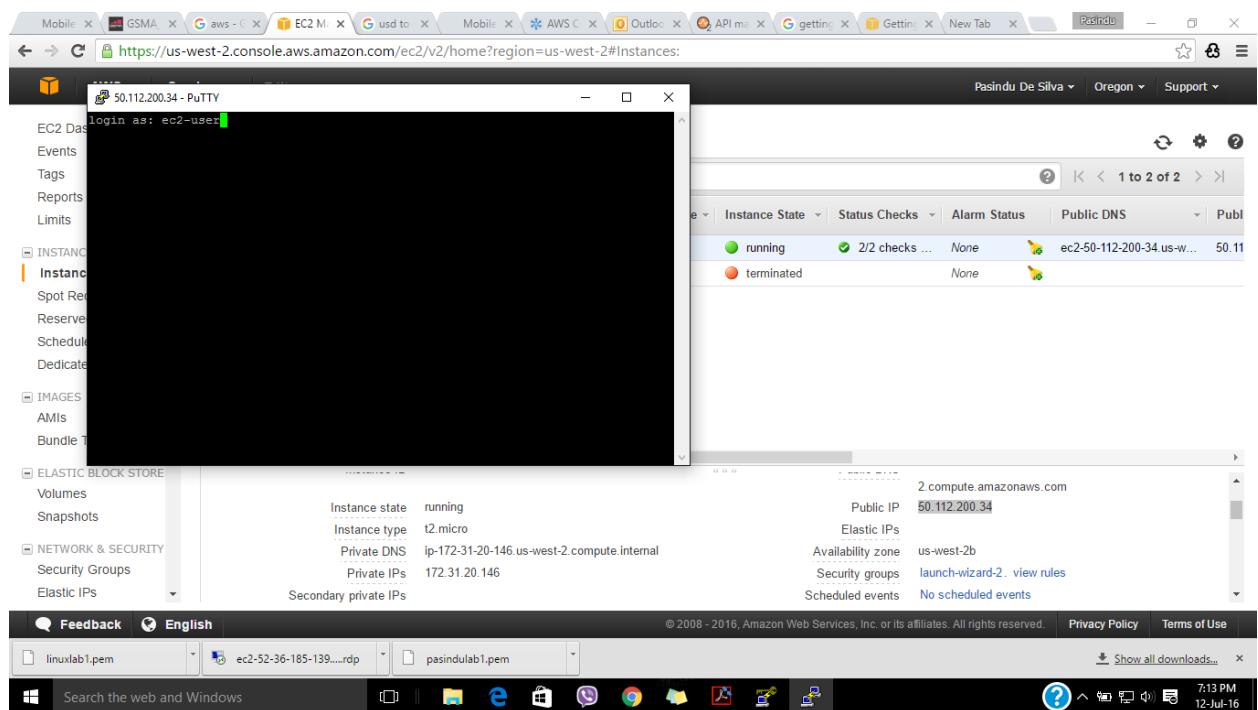
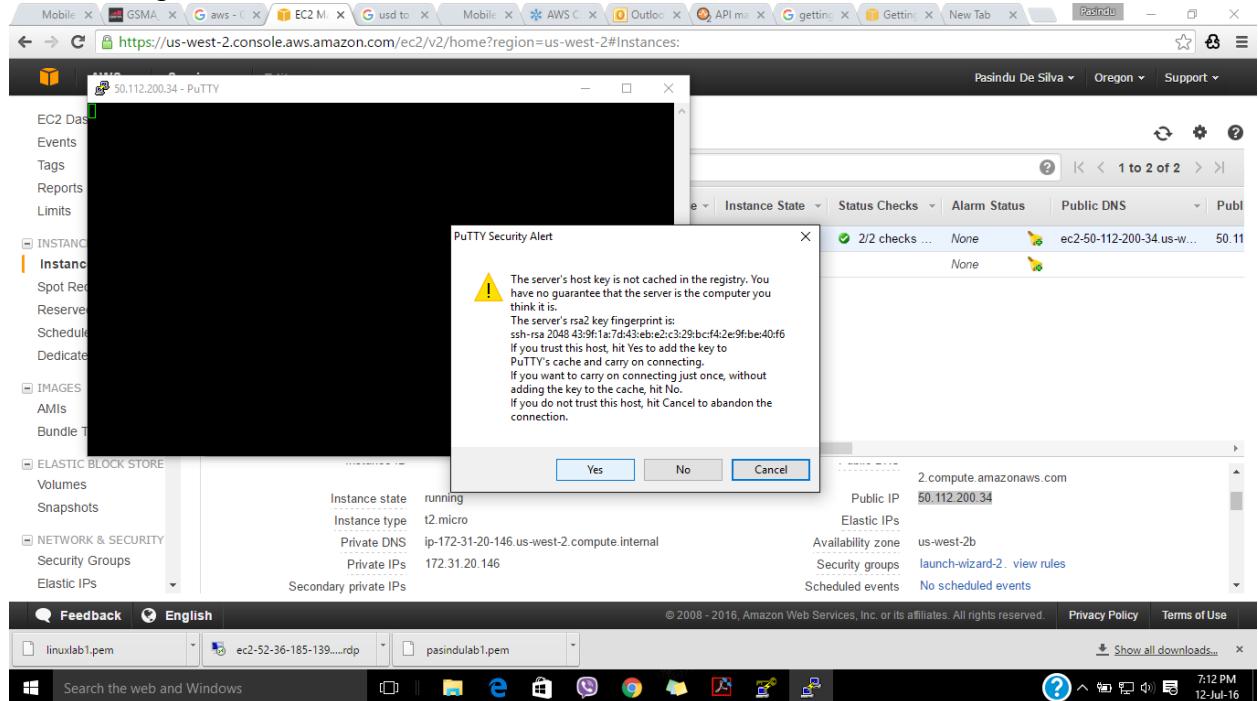
10. Add the key value

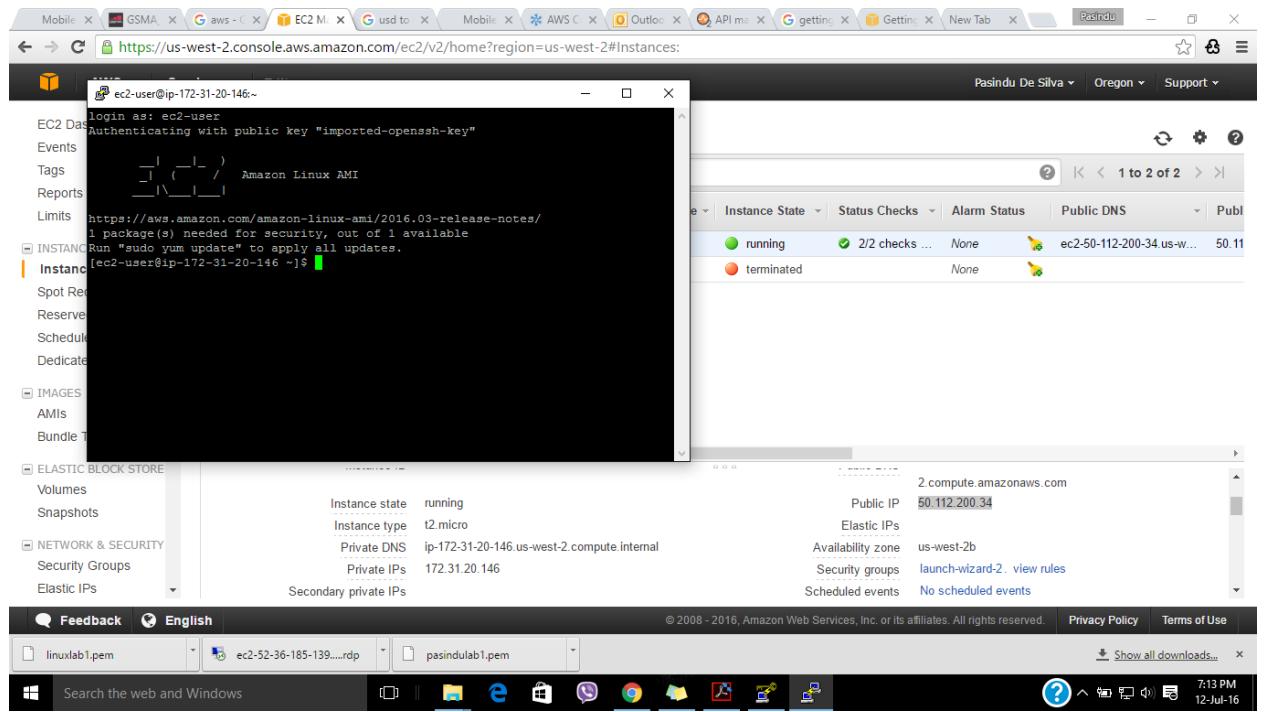


11. Create a file which is called .ppk files.



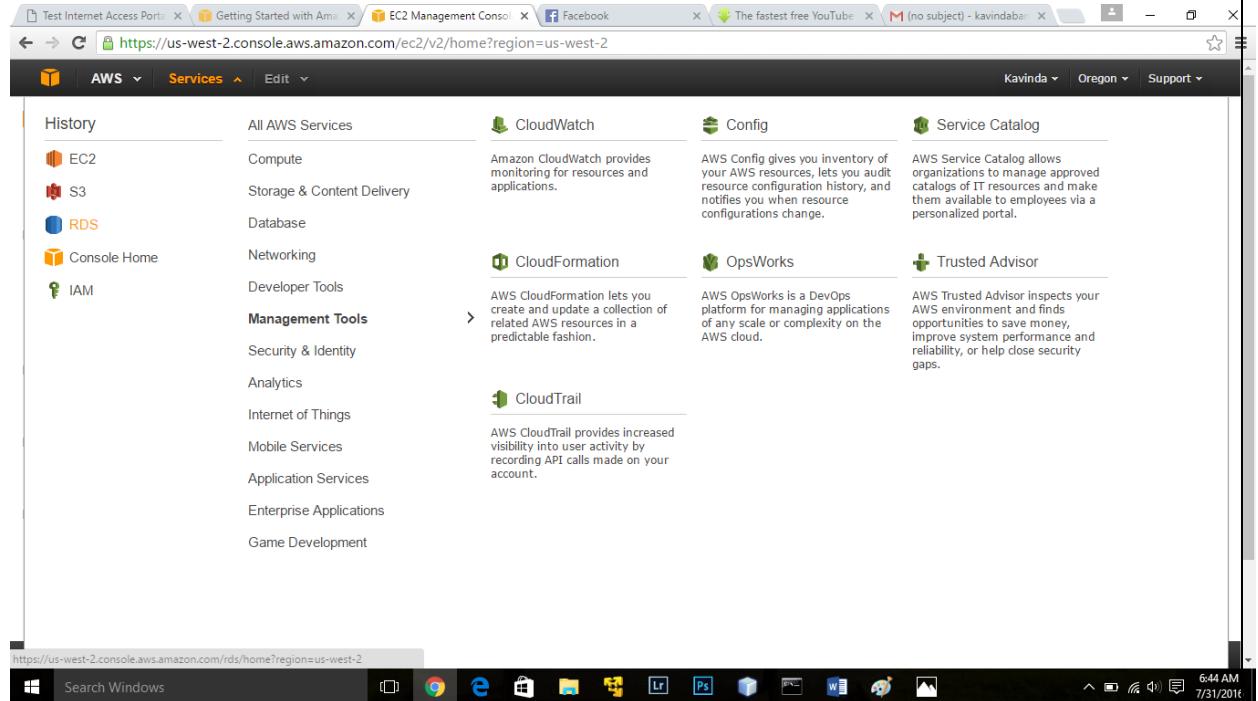
12. Connecting to the Linux instance.





Creating a Database instance

1. Select “RDS” option under DATABASE category.



2. Click “**Launch DB Instance**” and then select MySQL

The screenshot shows the "Select Engine" step of the AWS RDS instance creation wizard. On the left, a sidebar lists steps: Step 1: Select Engine, Step 2: Production?, Step 3: Specify DB Details, and Step 4: Configure Advanced Settings. The main area is titled "Select Engine" with the sub-instruction "To get started, choose a DB Engine below and click Select." A vertical list of engines is shown: Amazon Aurora (selected), MySQL (selected), MariaDB, PostgreSQL, ORACLE, and Microsoft SQL Server. The MySQL entry includes a brief description: "MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database." It also lists four bullet points: "Supports database size up to 6 TB.", "Instances offer up to 32 vCPUs and 244 GiB Memory.", "Supports automated backup and point-in-time recovery.", and "Supports cross-region read replicas." A blue "Select" button is located at the top right of the MySQL section.

3. Select MySQL option and click “**Next Step**”.

The screenshot shows the "Production?" step of the AWS RDS instance creation wizard. The sidebar shows steps 1-4. The main area asks "Do you plan to use this database for production purposes?" and provides two options: "Production" and "Dev/Test". Under "Production", "Amazon Aurora" is selected and labeled "Recommended". Its description states: "MySQL-compatible, enterprise-class database at 1/10th the cost of commercial databases." Under "Dev/Test", "MySQL" is selected. Its description states: "This instance is intended for use outside of production or under the RDS Free Usage Tier." Below the options, a note says "Billing is based on [RDS pricing](#)". At the bottom are "Cancel", "Previous", and "Next Step" buttons. The "Next Step" button is highlighted in blue.

4. Fill the form as below and click “**Next Step**” (associate storage you can put any value below 30 since we are using free tier).

RDS - AWS Console New Tab https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#launch-dbinstance:c=gettingStarted: Kavinda Oregon Support

Step 1: Select Engine
Step 2: Production
Step 3: Specify DB Details
Step 4: Configure Advanced Settings

The following selections disqualify the instance from being eligible for the free tier:
• DB Instance Class
You will be charged normal RDS Prices. [Learn More](#).

Estimate your monthly costs for the DB Instance using the [RDS Instance Cost Calculator](#).

Specify DB Details

Free Tier

The Amazon RDS Free Tier provides a single db.t2.micro instance as well as up to 20 GB of storage, allowing new AWS customers to gain hands-on experience with Amazon RDS. Learn more about the RDS Free Tier and the instance restrictions [here](#).

Only show options that are eligible for RDS Free Tier

Instance Specifications

DB Engine: mysql
License Model: general-public-license
DB Engine Version: 5.6.27

Review the [Known Issues/Limitations](#) to learn about potential compatibility issues with specific database versions.

DB Instance Class: db.t2.small — 1 vCPU, 2 GiB RAM
Multi-AZ Deployment: - Select One -
Storage Type: General Purpose (SSD)
Allocated Storage*: 5 GB

Select the DB instance class that allocates the computational, network, and memory capacity required by planned workload of this DB instance. [Learn More](#).

Details: db.t2.small
Type: Micro Instance - Current Generation
vCPU: 1 vCPU

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RDS - AWS Console New Tab https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#launch-dbinstance:ct=gettingStarted: Kavinda Oregon Support

DB Instance using the RDS Instance Cost Calculator.

DB Instance Class: db.t2.small — 1 vCPU, 2 GiB RAM
 Multi-AZ Deployment: - Select One -
 Storage Type: General Purpose (SSD)
 Allocated Storage*: 5 GB

Warning: Provisioning less than 100 GB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Click here](#) for more details.

Settings

DB Instance Identifier*: dbinstance
 Master Username*: db
 Master Password*:
 Confirm Password*:

Retype the value you specified for Master Password.

* Required Cancel Previous Next Step

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RDS - AWS Console New Tab https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#launch-dbinstance:ct=gettingStarted: Kavinda Oregon Support

Step 1: Select Engine
 Step 2: Production?
 Step 3: Specify DB Details
Step 4: Configure Advanced Settings

Configure Advanced Settings

Network & Security

VPC*: Default VPC (vpc-5815523c)
 Subnet Group: default
 Publicly Accessible: Yes
 Availability Zone: No Preference
 VPC Security Group(s): Create new Security Group
 default (VPC)
 launch-wizard-1 (VPC)
 launch-wizard-2 (VPC)

Database Options

Database Name: lab3
Note: If no database name is specified then no initial MySQL database will be created on the DB instance.

Database Port: 3306
 DB Parameter Group: default.mysql5.6
 Option Group: default.mysq5.6

Specify a string of up to 64 alpha-numeric characters that define the name given to a database that Amazon RDS creates when it creates the DB instance, as in "mydb". If you do not specify a database name, Amazon RDS does not create a database when it creates the DB instance.

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5. Finally, click “Launch DB Instance”

The screenshot shows the AWS RDS console with the URL <https://us-west-2.console.aws.amazon.com/rds/home?region=us-west-2#launch-dbinstance:ct=gettingStarted>. The configuration page includes fields for DB Parameter Group (default.mysql5.6), Option Group (default:mysql-5-6), Copy Tags To Snapshots, and Enable Encryption (No). It also contains sections for Backup (Backup Retention Period: 7 days, Backup Window: No Preference) and Monitoring (Enable Enhanced Monitoring: No). The Maintenance section includes Auto Minor Version Upgrade (Yes) and Maintenance Window (No Preference). At the bottom, there are 'Required' status indicators, 'Cancel' and 'Previous' buttons, and a prominent blue 'Launch DB Instance' button.

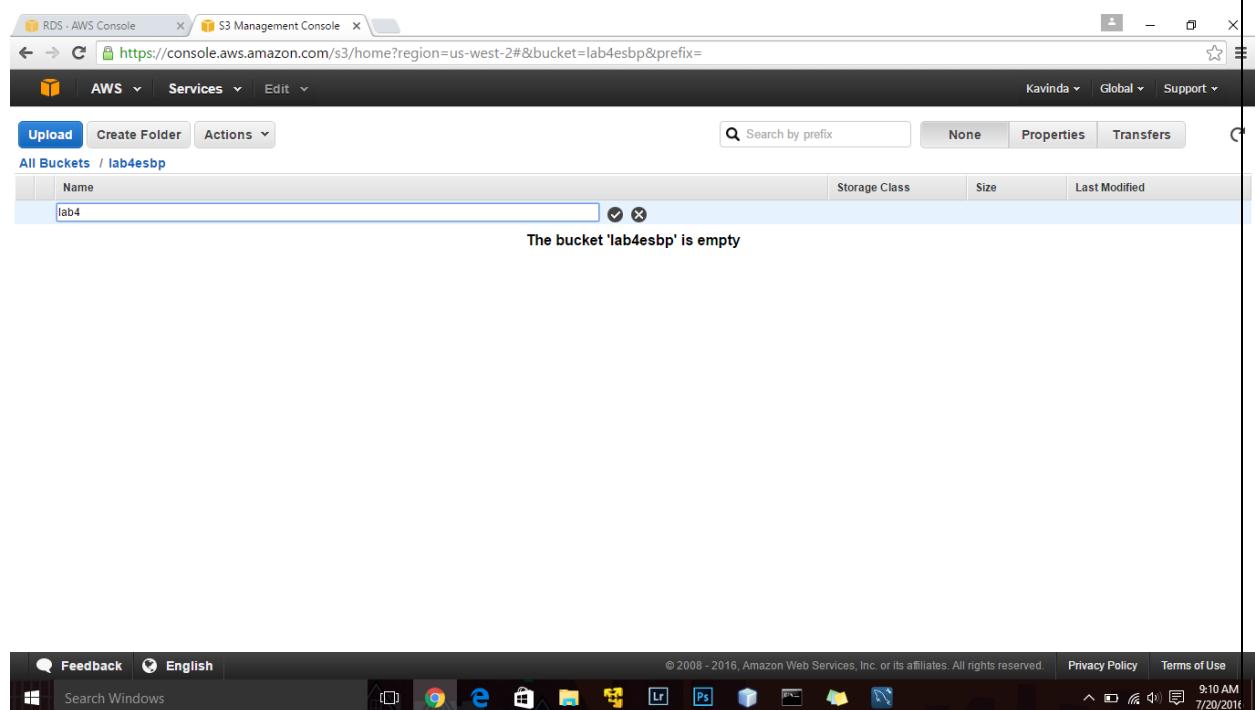
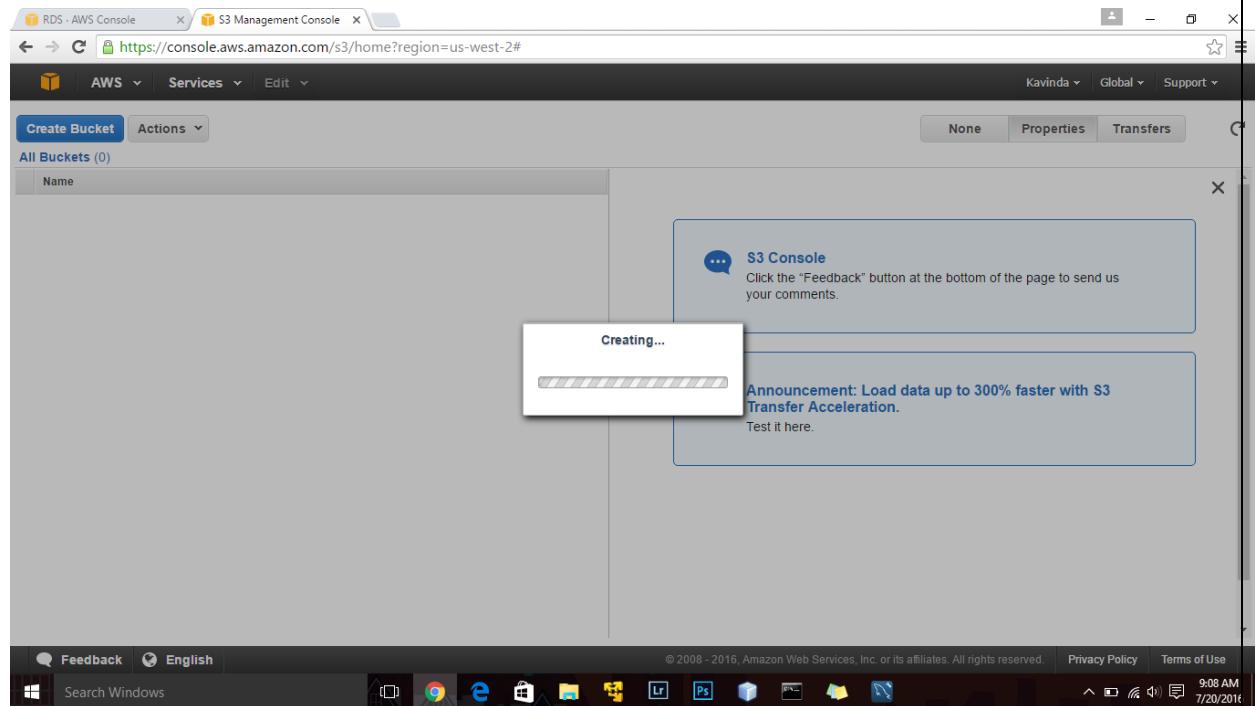
The screenshot shows the AWS RDS console after launching the DB instance. A green box displays the message: "Your DB Instance is being created." Below it, a note says: "Note: Your instance may take a few minutes to launch." The left sidebar lists steps: Step 1: Select Engine, Step 2: Production?, Step 3: Specify DB Details, Step 4: Configure Advanced Settings. The main area also includes sections for "Connecting to your DB Instance" (warning about security group authorization) and "Related AWS Services" (Amazon ElastiCache). A blue "View Your DB Instances" button is at the bottom right.

6. Now it is shown that the DB instance is created

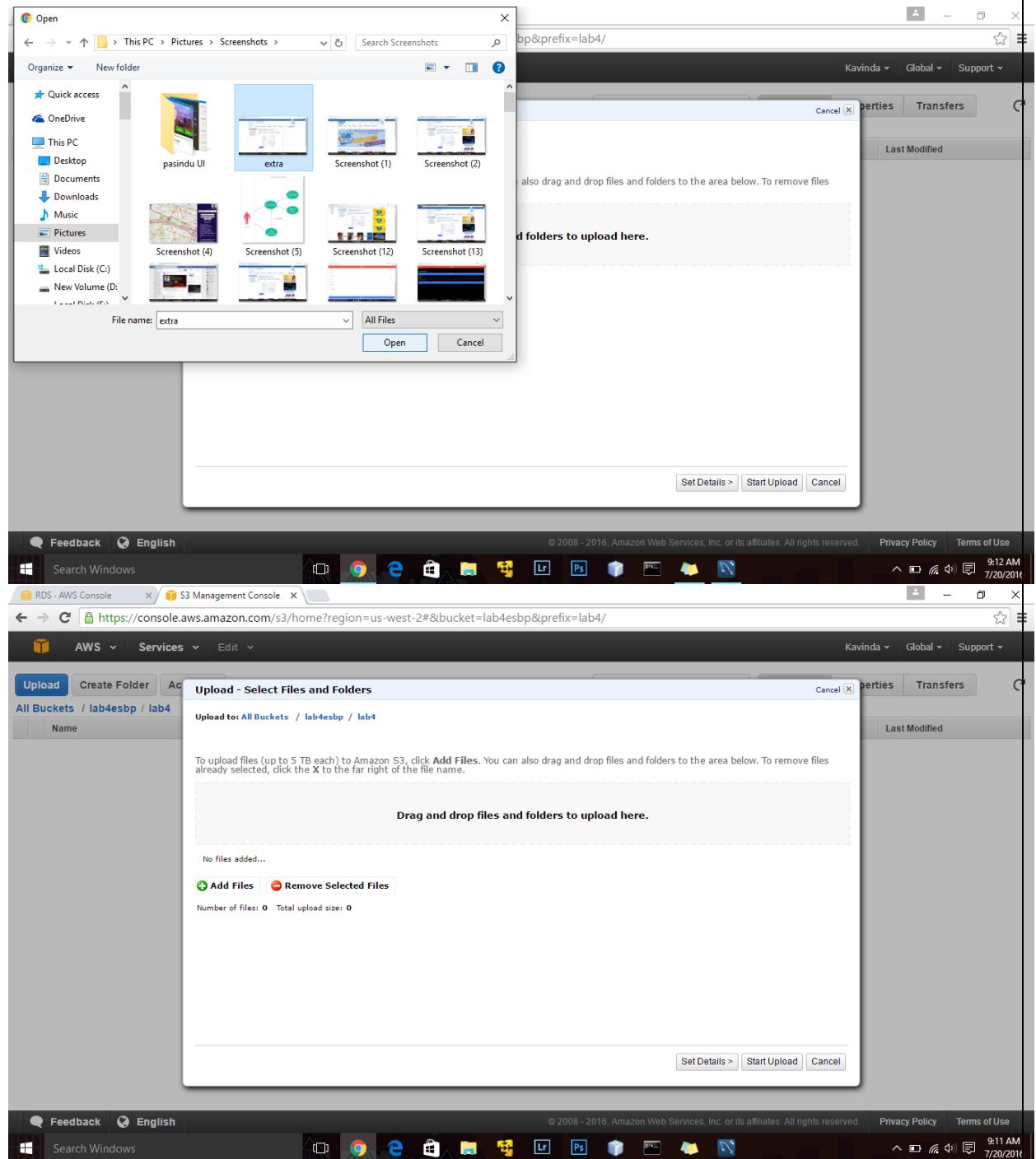
The screenshot shows the AWS RDS Dashboard. On the left, there's a sidebar with options like Instances, Clusters, Reserved Purchases, Snapshots, Security Groups, Parameter Groups, Option Groups, Subnet Groups, Events, Event Subscriptions, and Notifications. The main area has tabs for Launch DB Instance, Show Monitoring, and Instance Actions. A search bar says "Search DB Instances...". A table header includes columns for Engine, DB Instance, Status, CPU, Current Activity, Maintenance, Class, VPC, Multi-AZ, Replication Role, and End Date. Below the header, one row is listed: Engine is MySQL, DB Instance is dbinstance, Status is creating, CPU is None, Class is db.t2.small, VPC is vpc-5815523c, and Multi-AZ is No. At the bottom of the dashboard, there's a footer with links for Feedback, English, Privacy Policy, Terms of Use, and a Windows taskbar.

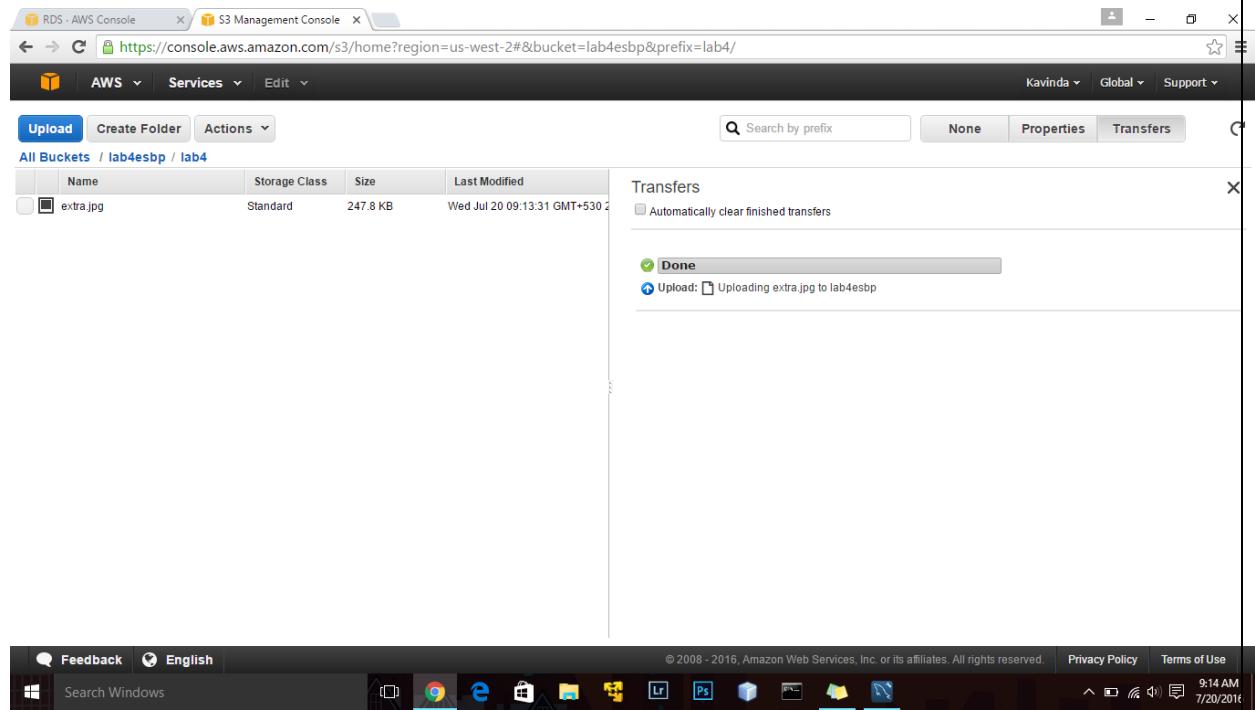
7. Now we are going connect DB instance with MySQL. To do so use MySQL Workbench
First Create a Bucket.

The screenshot shows the AWS S3 Management Console. On the left, there's a sidebar with Create and Add buttons, and icons for Create a bucket in one of several ways, Upload objects to your bucket, and Manage your data with Amazon S3's features. The main area has a "Welcome to Amazon Simple Storage Service" message and an "Additional Information" section about buckets. A modal window titled "Create a Bucket - Select a Bucket Name and Region" is open. It contains fields for "Bucket Name" (set to lab4) and "Region" (set to Mumbai). There are also "Set Up Logging >" and "Cancel" buttons. At the bottom of the modal, there's a "Create" button. The background shows the S3 dashboard with various buckets listed.

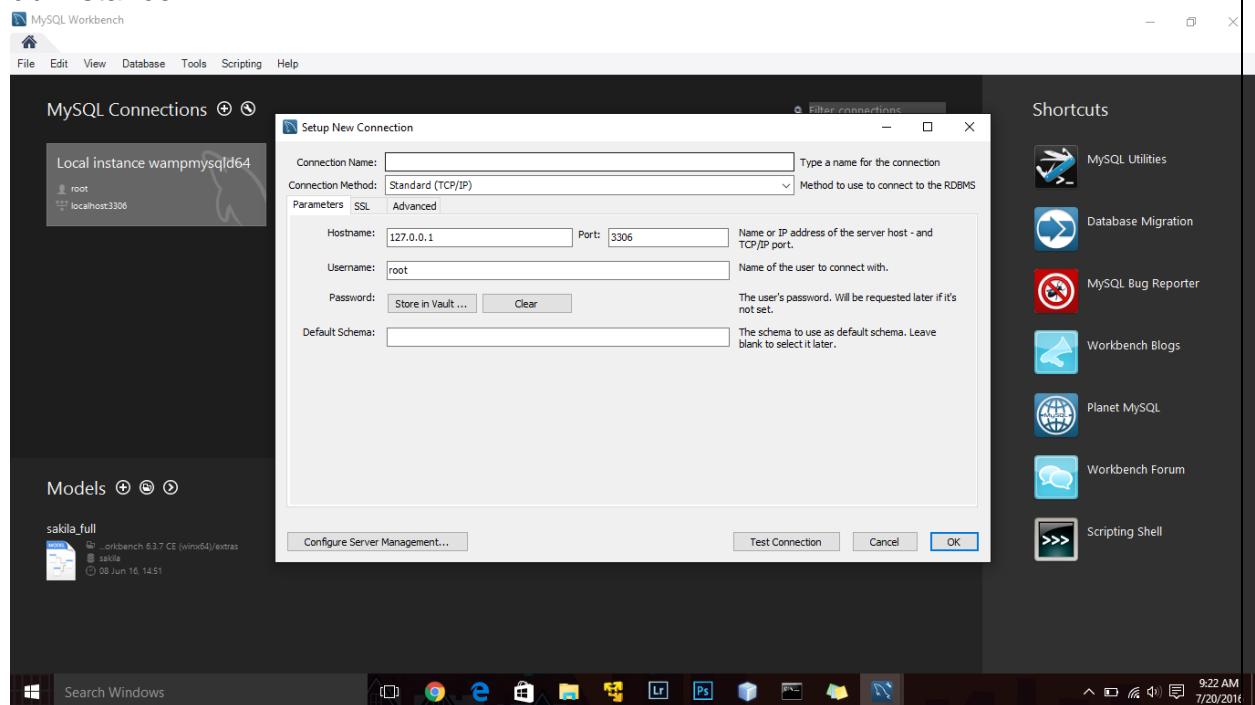


8. Add some files to the bucket.





- Set up a new End point connection in WorkBench using the endpoint of the db instance.



10. SQL Editor is Setup.

