



Configuring Windows and Linux Servers on AWS

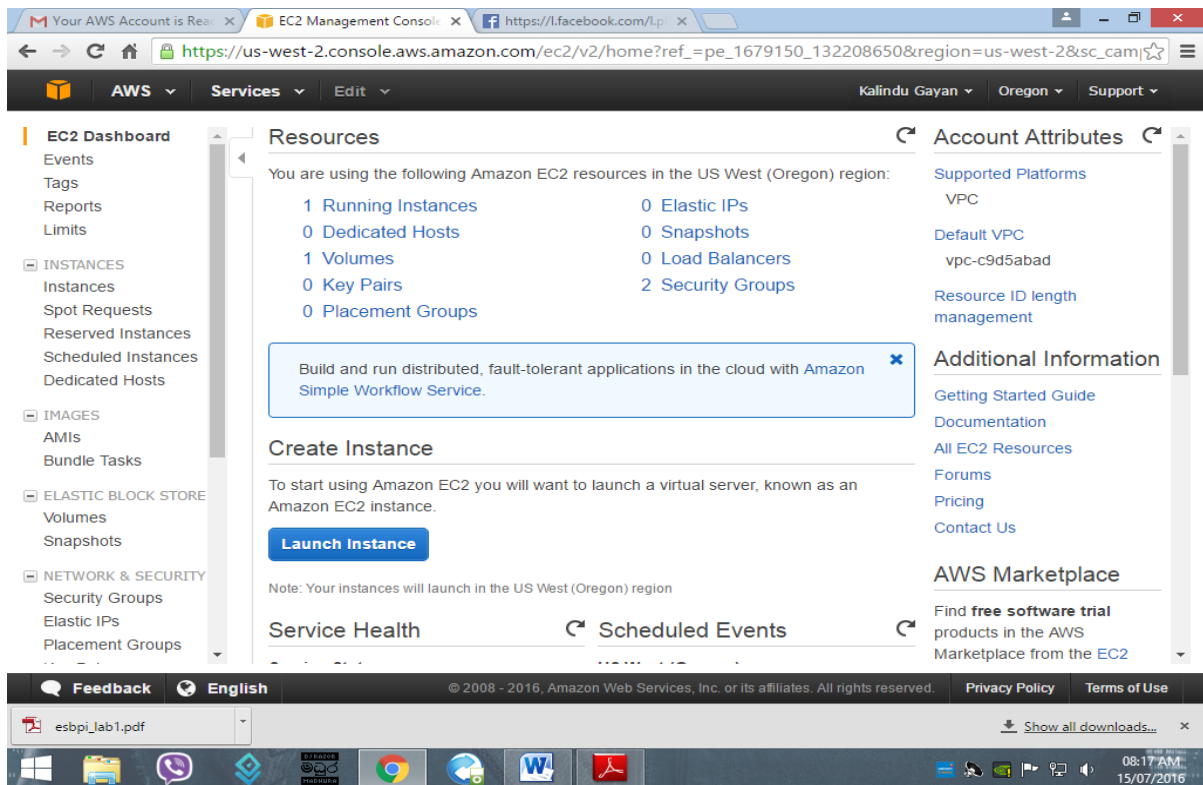
ESBPI LAB ASSIGNMENT 1

GAYAN E.K

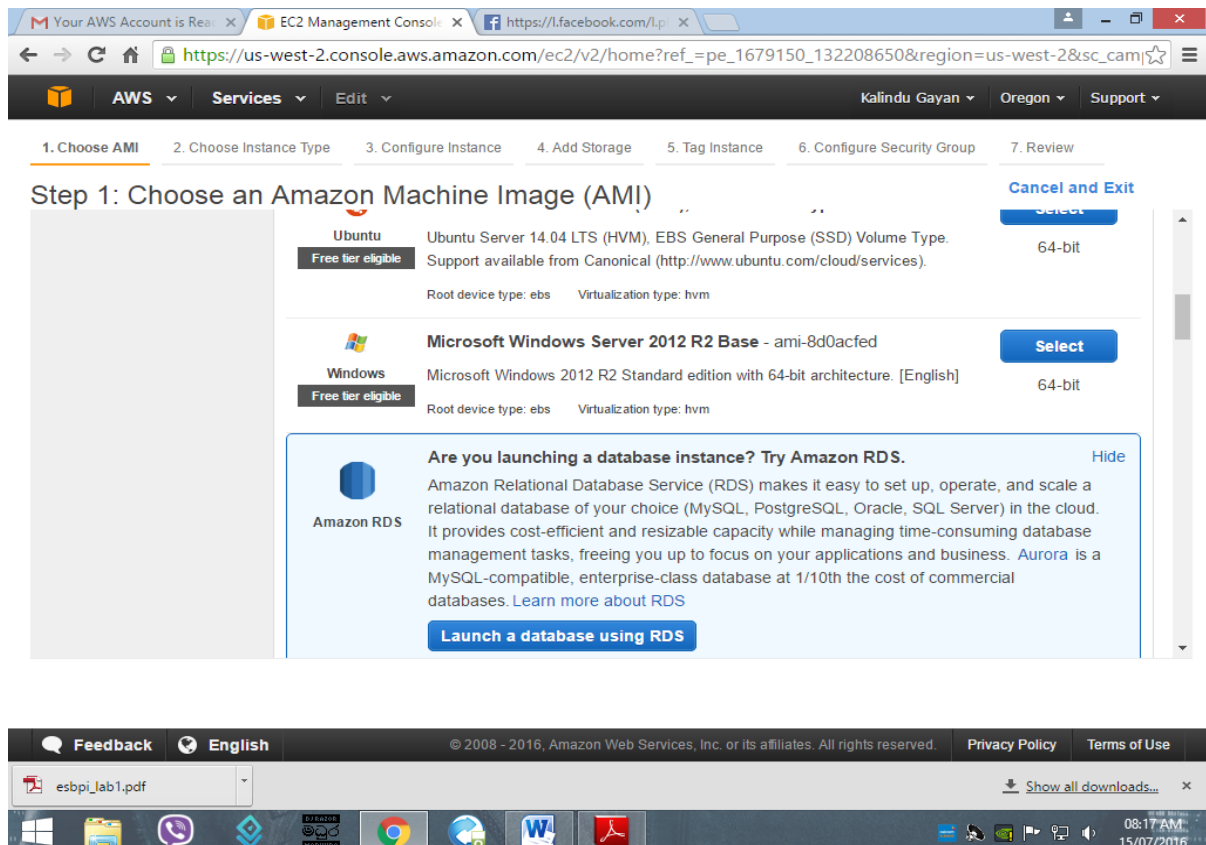
IT12138432

Windows

EC2 Dashboard is seen below, Click 'Launch Instance' to create a new Windows instance.



Click 'Select' in 'Microsoft Windows Server 2012 R2 Base'



Click 'Review and Launch'

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 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 (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 Free tier eligible	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

Cancel Previous Review and Launch Next: Configure Instance Details

Click 'Launch'

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

Step 7: Review Instance Launch

eligible 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

▼ Security Groups [Edit security groups](#)

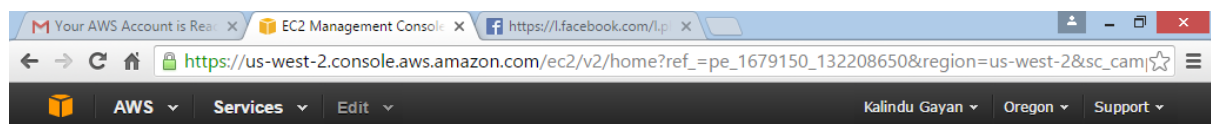
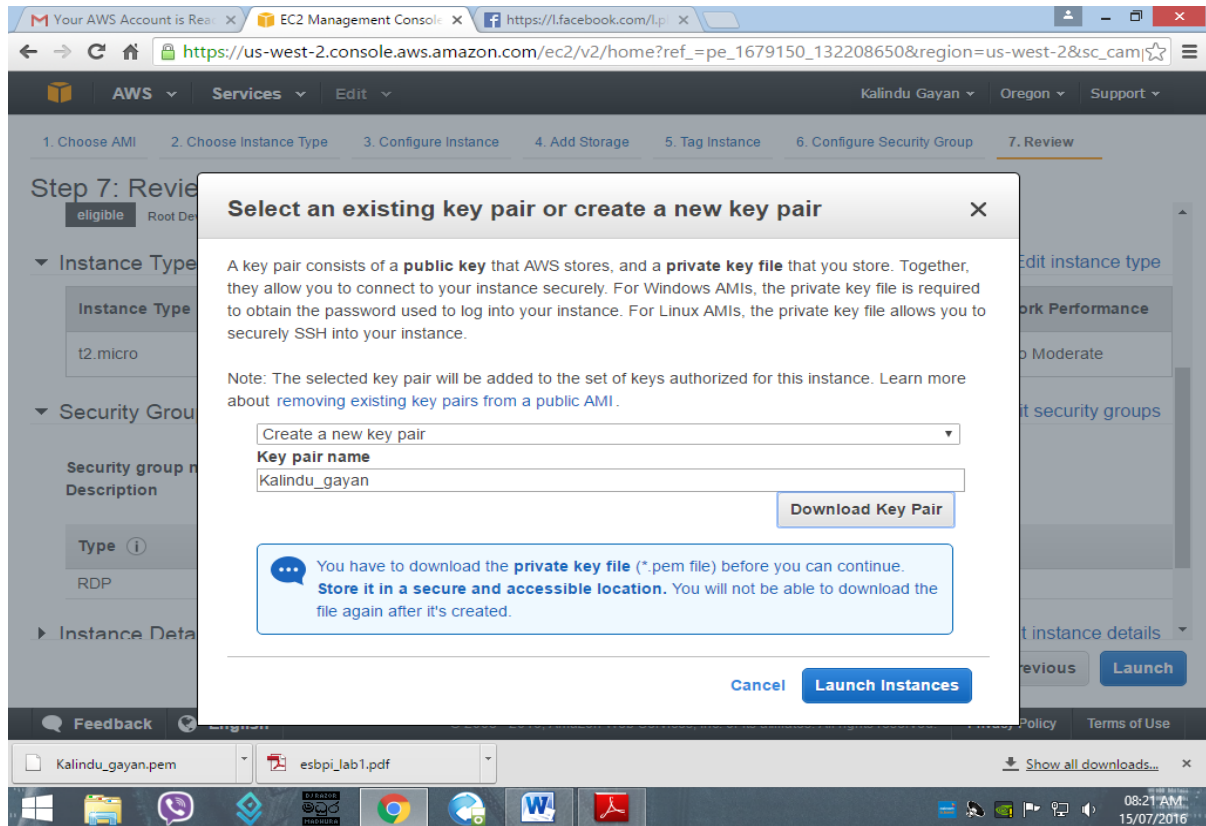
Security group name: launch-wizard-2
Description: launch-wizard-2 created 2016-07-15T08:19:37.587+05:30

Type	Protocol	Port Range	Source
RDP	TCP	3389	0.0.0.0/0

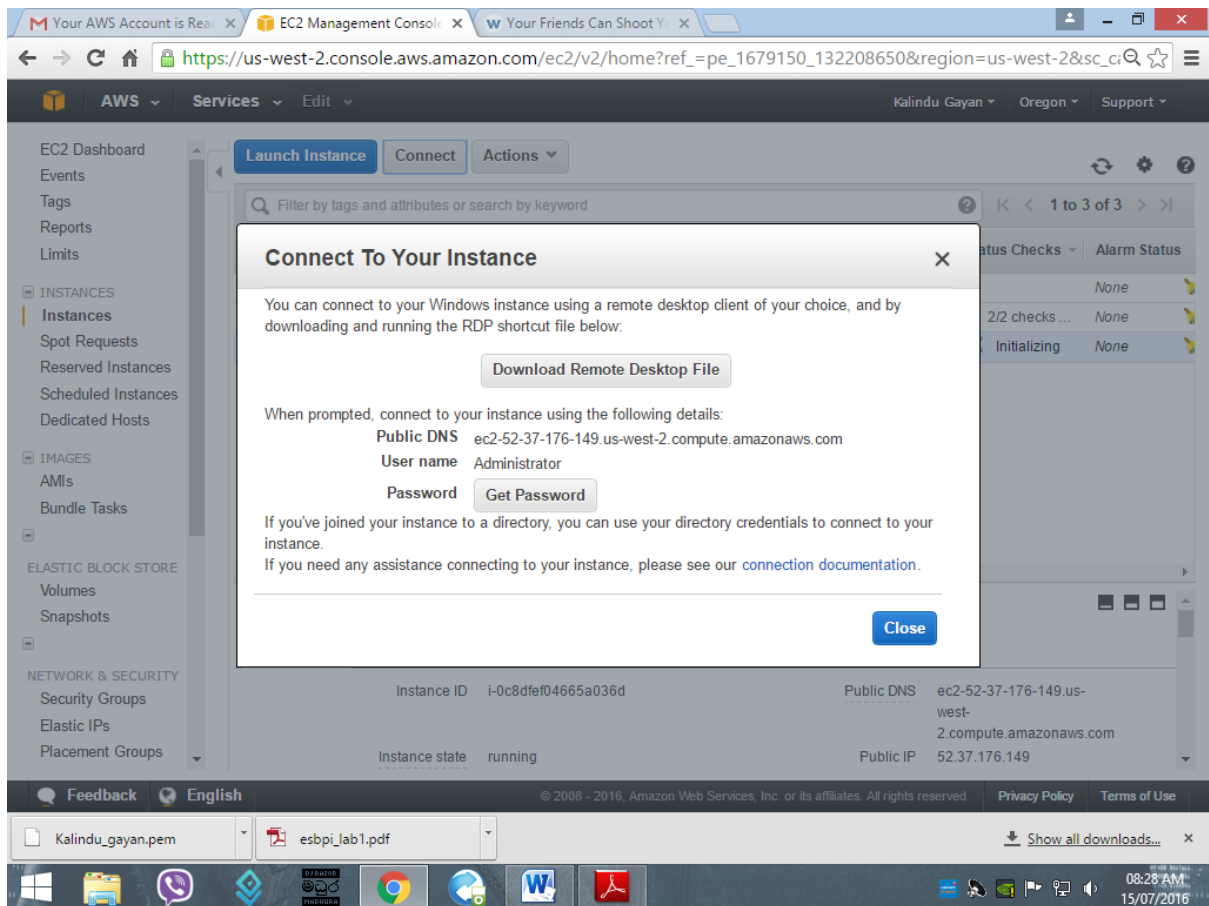
► Instance Details [Edit instance details](#)

Cancel Previous Launch

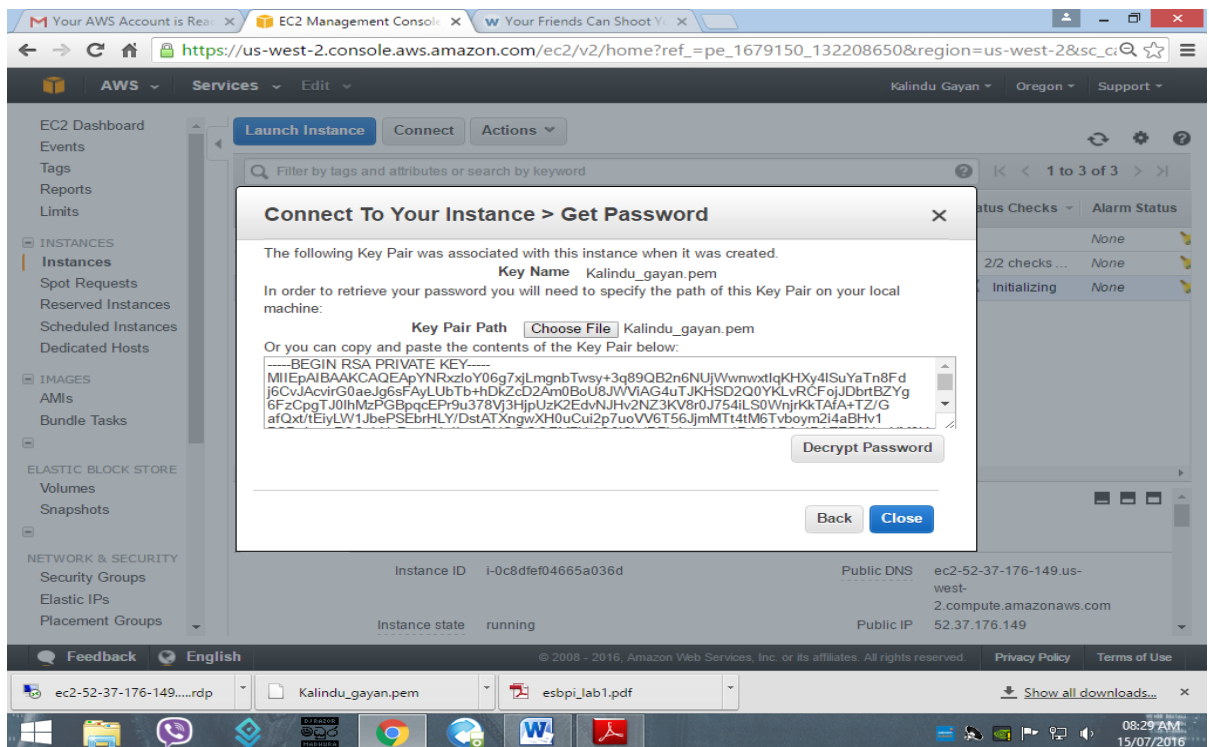
Select 'Create a new key pair' and give any name to 'Key pair name' and click 'Download Key Pair' then a file named Kalindu_gayan.pem will download after that click 'Launch Instances'.



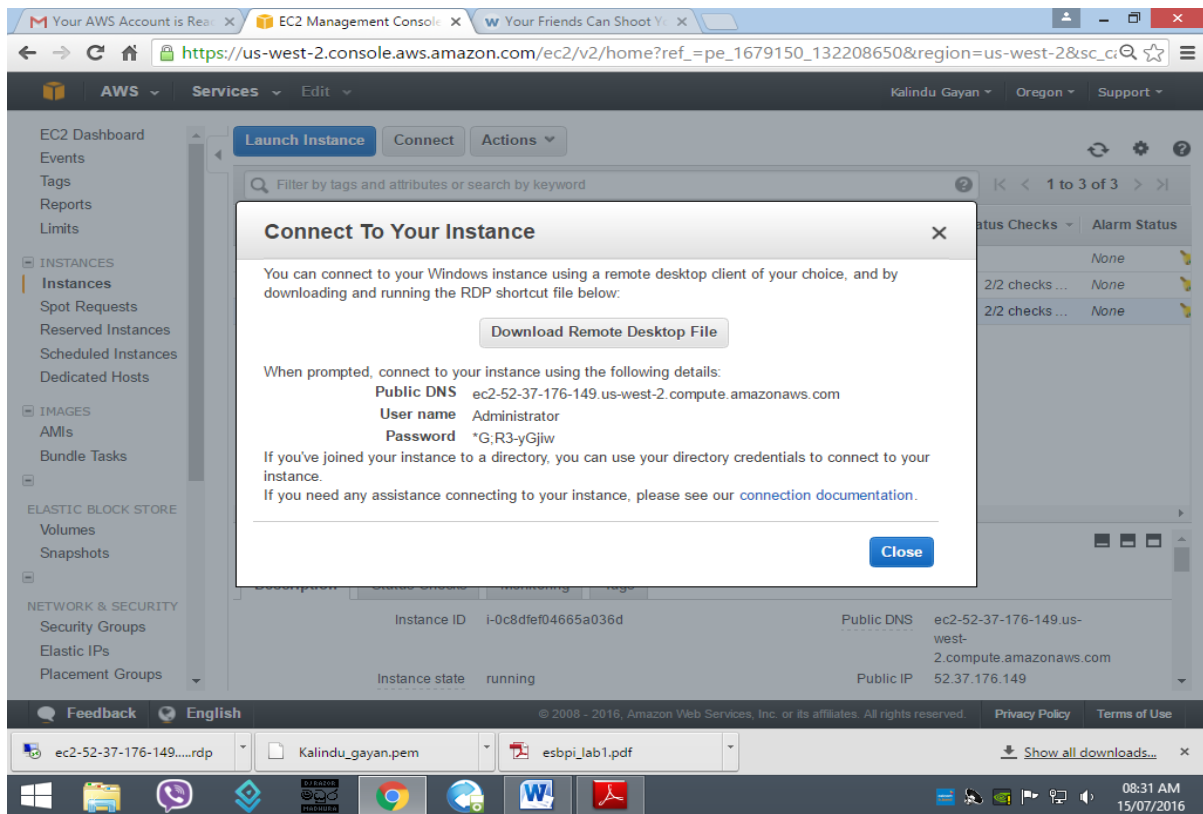
Click 'Connect'



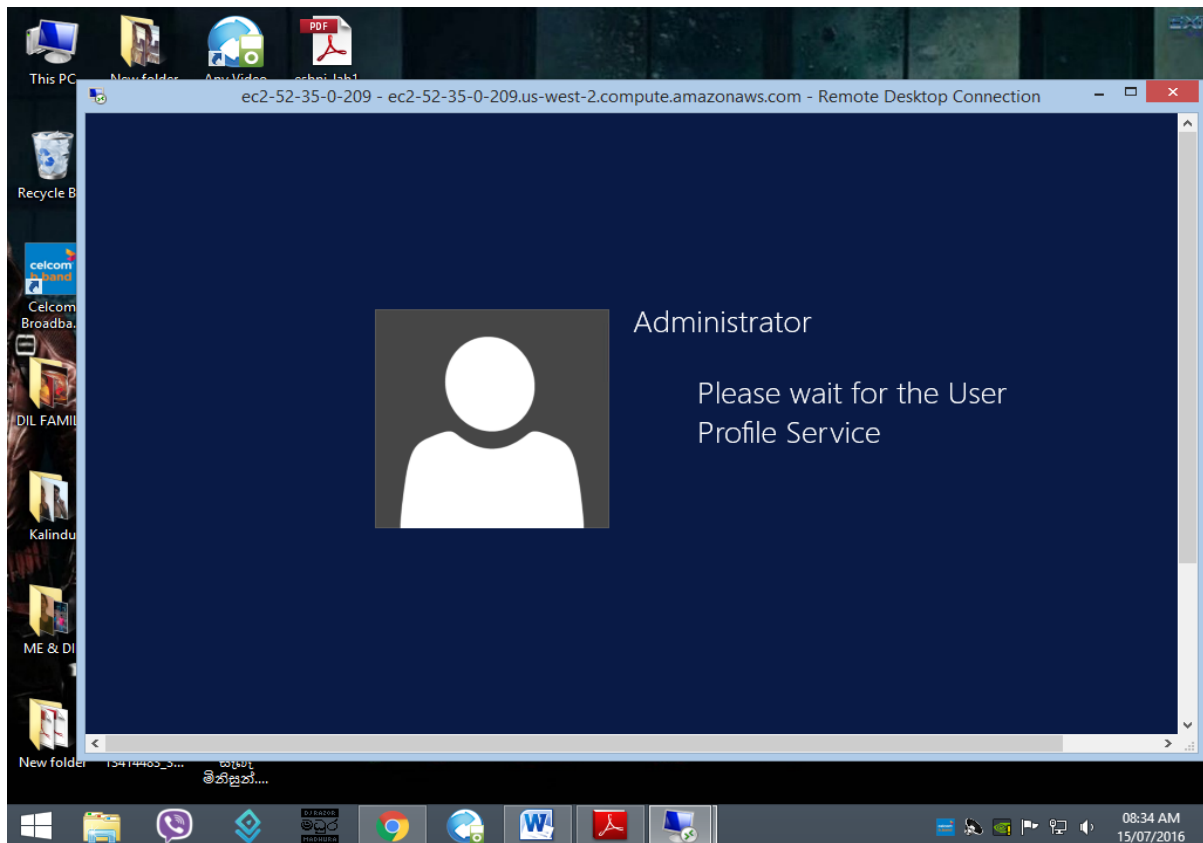
Click 'Get Password' & 'Decrypt Password'.



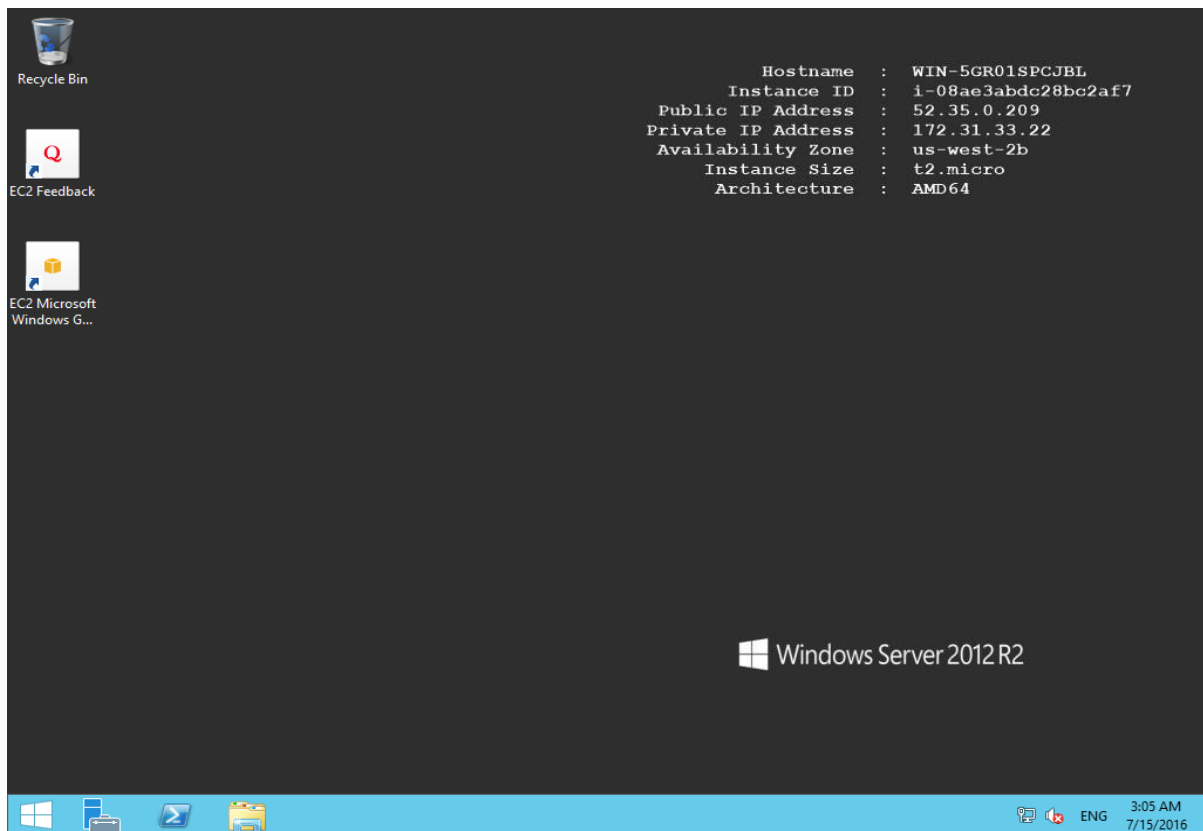
Click 'Choose File' and choose Kalindu_gayan.pem.



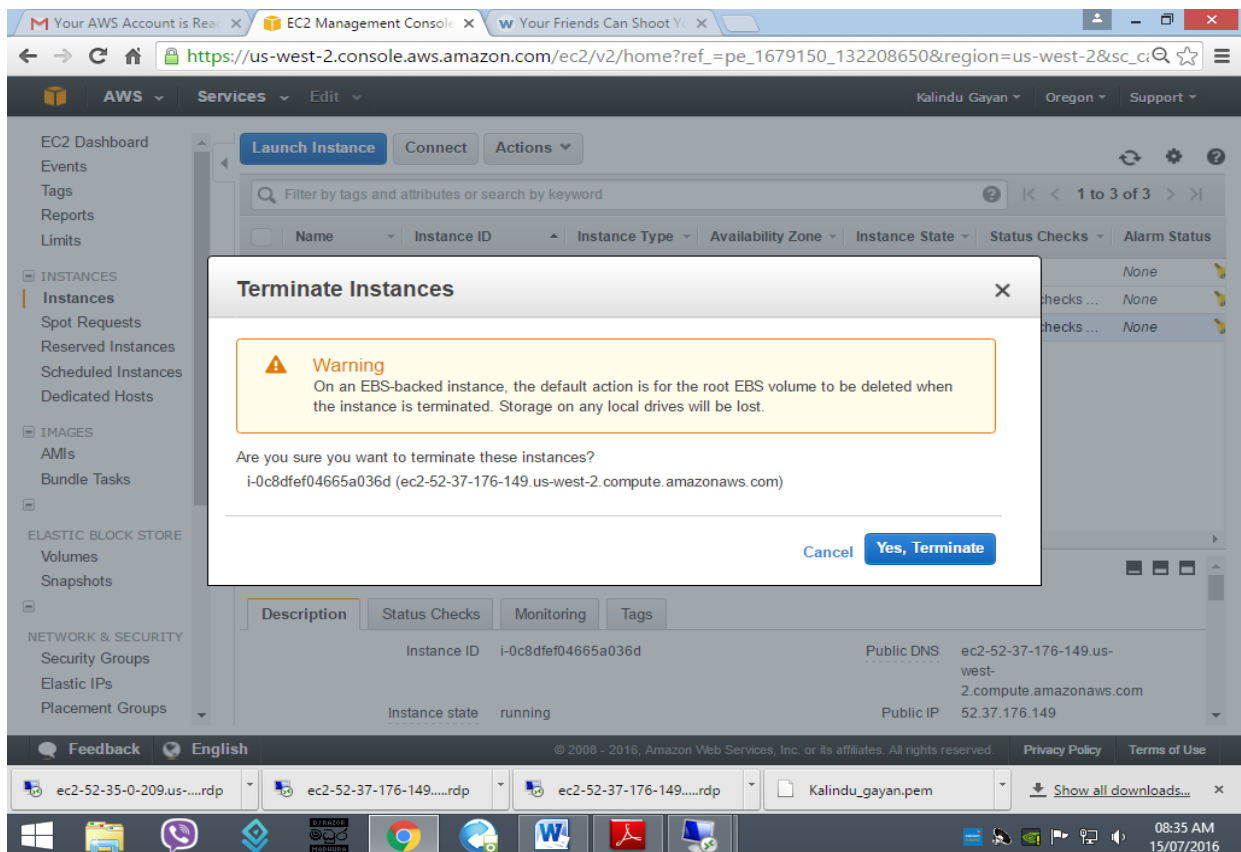
Now go to Remote Desktop Connection and provide the public IP and then click 'connect'.



Now you can see the 'Windows Server'.



When you are terminating the instance right click -> terminate-> Yes, Terminate.



LINUX

Select Amazon Linux Now

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

AMI	Description	Root device type	Virtualization type	Architecture
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.	ebs	hvm	64-bit
Red Hat Enterprise Linux 7.2 (HVM), SSD Volume Type - ami-775e4f16	Red Hat Enterprise Linux version 7.2 (HVM), EBS General Purpose (SSD) Volume Type	ebs	hvm	64-bit
SUSE Linux Enterprise Server 12 SP1 (HVM), SSD Volume Type - ami-d2627db3	SUSE Linux Enterprise Server 12 Service Pack 1 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.	ebs	hvm	64-bit

Now click 'Review and Launch'.

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 Free tier eligible	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

Review and Launch Next: Configure Instance Details

Click 'Launch'

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

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-4, 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](#)

Select 'Create a new key pair' from the dropdown and give any name to 'Key pair name' and click 'Download Key Pair'.

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-4, 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](#)

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

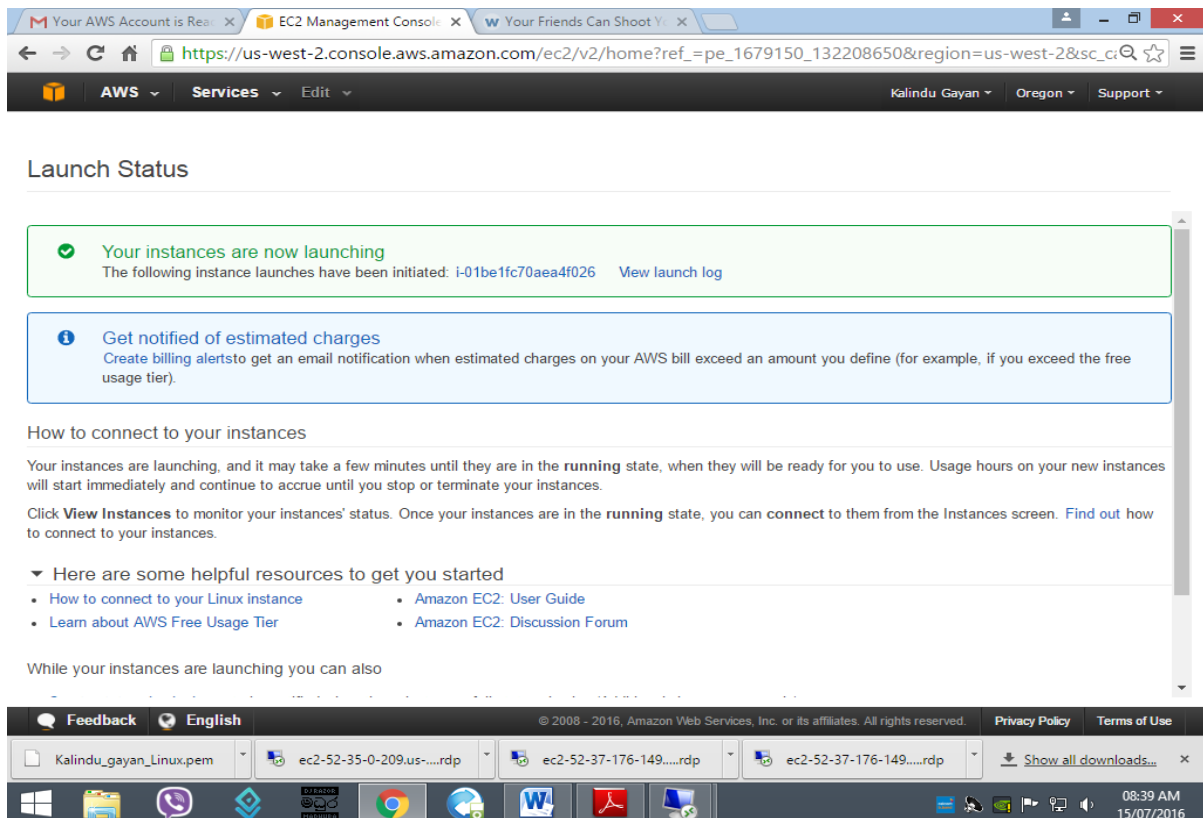
Kalindu_gayan_Linux

[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.

[Cancel](#) [Launch Instances](#)

Now click 'View Instances'.



Launch Status

✓ **Your instances are now launching**
The following instance launches have been initiated: [i-01be1fc70aea4f026](#) [View launch log](#)

ℹ **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.

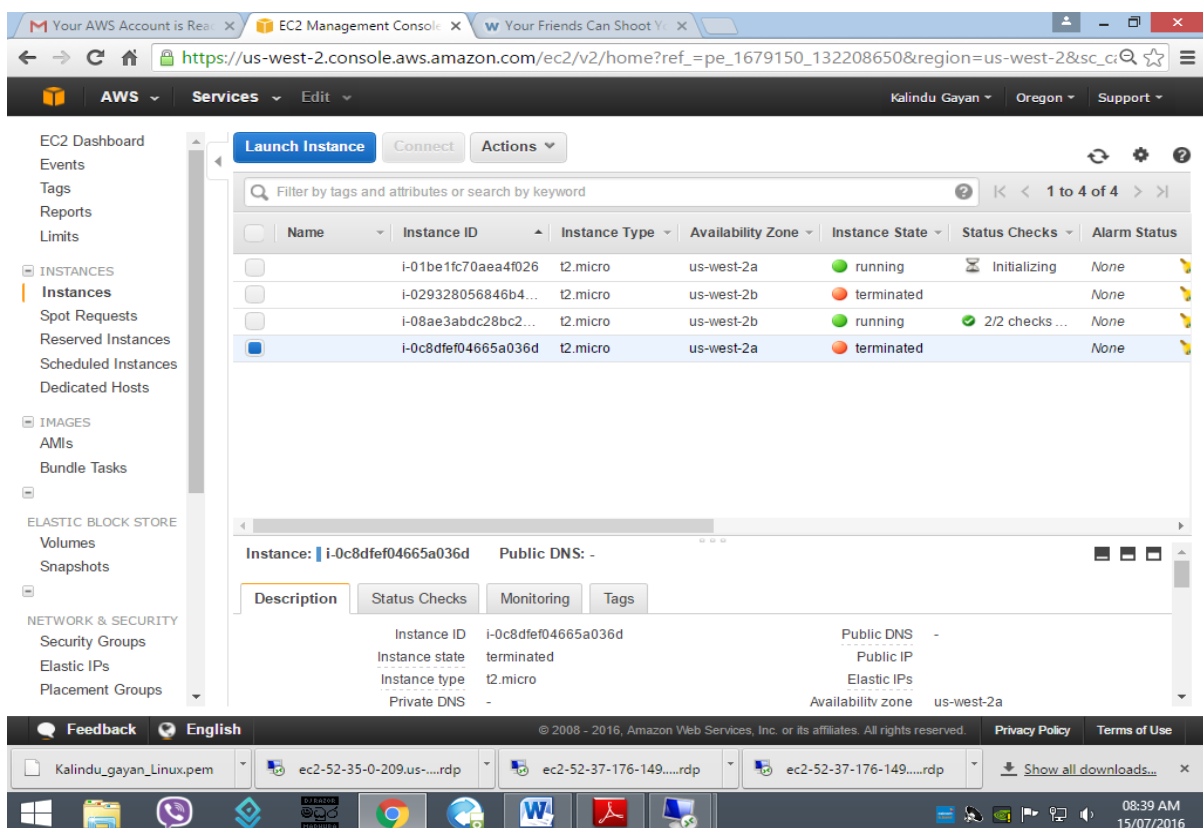
Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can connect to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ 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](#)

While your instances are launching you can also

Instance is running.



EC2 Dashboard

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
	i-01be1fc70aea4f026	t2.micro	us-west-2a	running	Initializing	None
	i-029328056846b4...	t2.micro	us-west-2b	terminated		None
	i-08ae3abdc28bc2...	t2.micro	us-west-2b	running	2/2 checks ...	None
	i-0c8dfef04665a036d	t2.micro	us-west-2a	terminated		None

Instance: **i-0c8dfef04665a036d** Public DNS: -

Description Status Checks Monitoring Tags

Property	Value
Instance ID	i-0c8dfef04665a036d
Instance state	terminated
Instance type	t2.micro
Private DNS	-
Public DNS	-
Public IP	-
Elastic IPs	-
Availability zone	us-west-2a

Download putty.exe and putygen.exe.

The screenshot shows a web browser window with the address bar displaying 'www.chiark.greenend.org.uk/~sgtatham/putty/download.html'. The page content is titled 'The latest release version (beta 0.67)' and provides instructions for downloading PuTTY binaries. It lists various executables for Windows on Intel x86, including PuTTY, PuTTYtel, PSCP, PSFTP, Plink, Pageant, and PuTTYgen, each with links to download the file, via FTP, or to verify the signature. It also provides a ZIP file containing all binaries except PuTTYtel, and a Windows MSI installer package. A section for 'The latest development snapshot' is also visible. The browser's taskbar at the bottom shows several open windows, including 'Kalinidu_gayan_Linux.pem', 'ec2-52-35-0-209.us-....rdp', and 'ec2-52-37-176-149-....rdp'. The system clock in the bottom right corner indicates 08:41 AM on 15/07/2016.

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 the release version, it might be worth trying out the latest development snapshot (below) to see if we've 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

Zip file: [putty.zip](#) (or by FTP) (signature)

A Windows MSI installer package for everything except PuTTYtel

Installer: [putty-0.67-installer.msi](#) (or by FTP) (signature)

Legacy Inno Setup installer. Reportedly insecure! Use with caution, if the MSI fails.

Legacy installer: [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 it into the release version above. On the other hand, there

Run puttygen.exe and click 'Load' and browse Gims.pen.

The screenshot shows a Windows desktop environment. In the background, an Adobe Reader window titled 'esbpi_lab1.pdf' is open. Overlaid on top of it is the 'PuTTY Key Generator' window. The 'Key' tab is selected, showing a public key for pasting into an OpenSSH authorized_keys file. The key is an SSH-RSA key with a comment of 'rsa-key-20160715'. The key fingerprint is displayed as 'ssh-rsa 2048 a0:da:05:27:18:09:99:17:9e:22:ae:1d:34:ca:ff:e8'. The 'Key comment' field contains 'rsa-key-20160715'. The 'Key passphrase' and 'Confirm passphrase' fields are empty. The 'Actions' section has buttons for 'Generate', 'Load', 'Save public key', and 'Save private key'. The 'Parameters' section shows 'Type of key to generate' set to 'SSH-2 RSA' and 'Number of bits in a generated key' set to '2048'. In the background, the Adobe Reader window shows the 'Tools' menu with 'Export PDF' and 'Sign' options. The system clock in the bottom right corner indicates 08:48 AM on 15/07/2016.

esbpi_lab1.pdf - Adobe Reader

File Edit View Window Help

15 / 16 150%

Tools Sign Comment

Sign In

Export PDF Files

Adobe Export PDF

Convert PDF files to Word or Excel online.

Select PDF File:

esbpi_lab1.pdf 1 file / 4.15 MB

Convert To:

Microsoft Word (*.docx)

Recognize Text in English(U.S.)

Change

Convert

Create PDF Files

Send Files

PuTTY Key Generator

File Key Conversions Help

Key

Public key for pasting into OpenSSH authorized_keys file:

ssh-rsa
AAAAB3NzaC1yc2EAAAABJQAAAAQEA9qUir/ydlqOqoFVWGEVnKBnHYSPQumV4Cu
Uu10n1ZdFp
zLHf1+3UwBjVdFNQsLDQPhS2KJ93N7Eg2mK6A1eVnwYrN/lw7ZfsGDYoojw1
66Wx5ZiczGTJtp2r/tc6p4dnURzVWD5IgP/Px0xUXmsNjLHvCeU8Gb5nUaaJtBC/MP

Key fingerprint: ssh-rsa 2048 a0:da:05:27:18:09:99:17:9e:22:ae:1d:34:ca:ff:e8

Key comment: rsa-key-20160715

Key passphrase:

Confirm passphrase:

Actions

Generate a public/private key pair Generate

Load an existing private key file Load

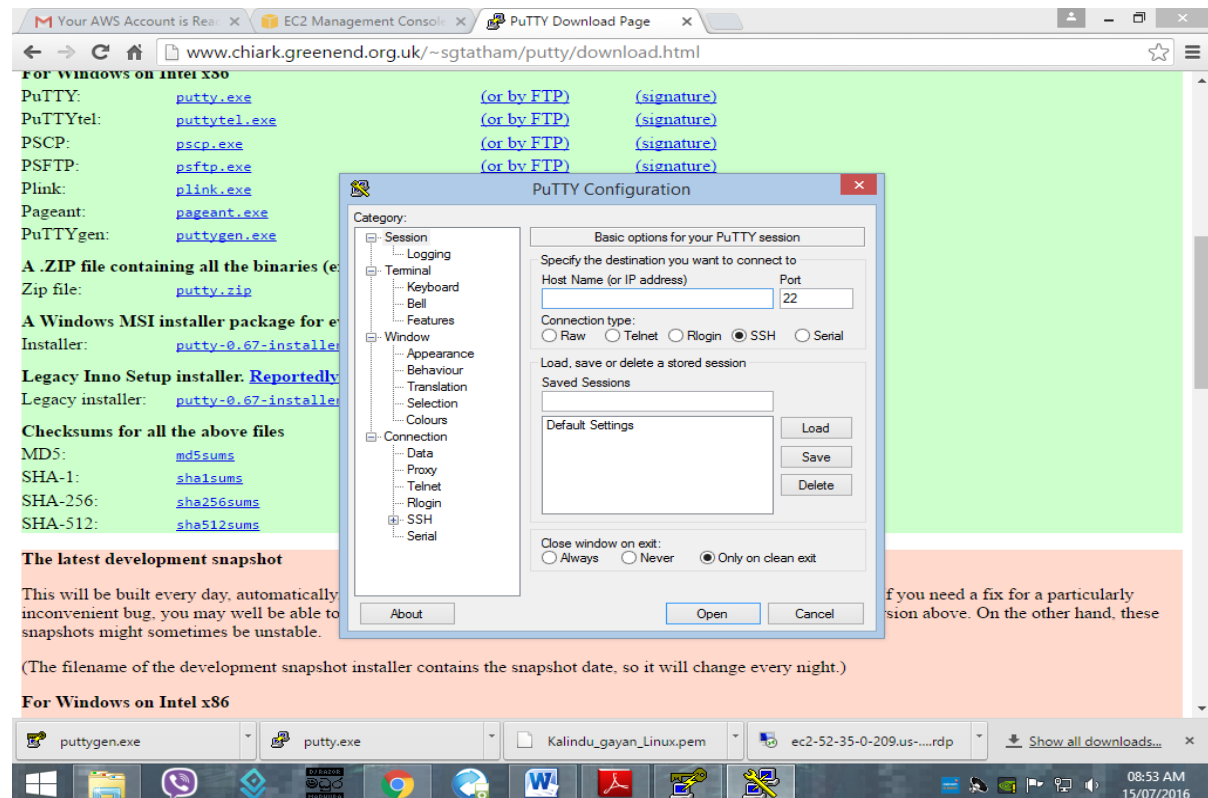
Save the generated key Save public key Save private key

Parameters

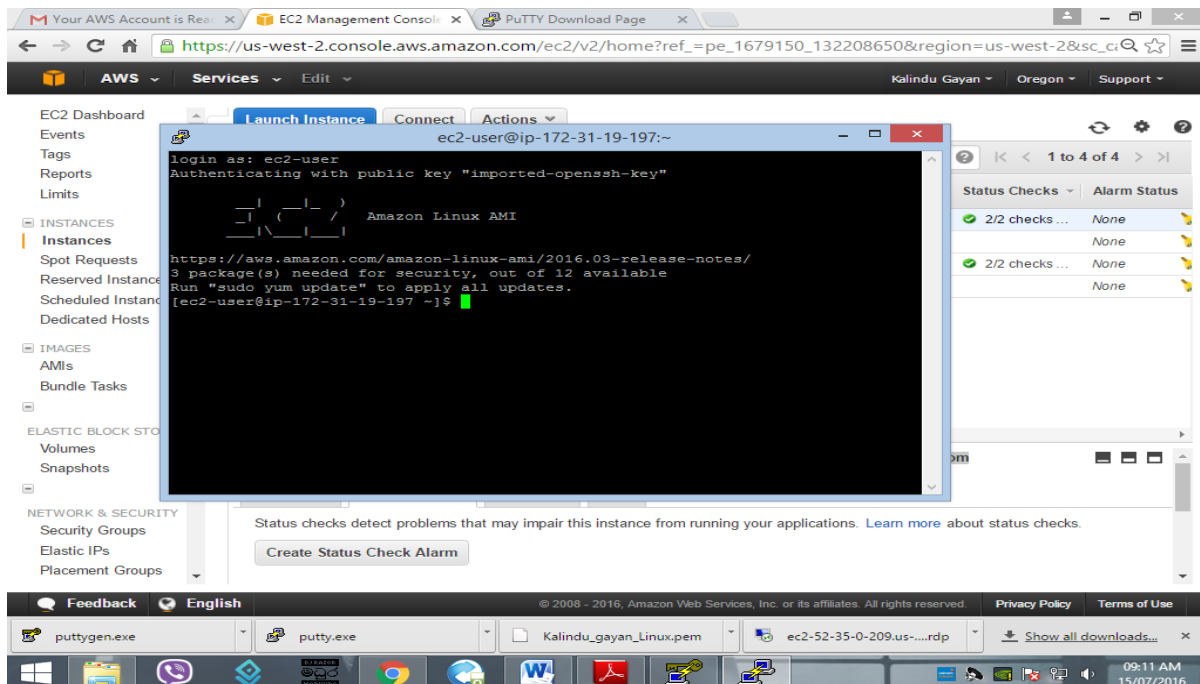
Type of key to generate: ☒ SSH-2 RSA ☐ SSH-2 DSA

Number of bits in a generated key: 2048

Now run putty.exe. Copy public DNS . go to SSH -> Auth -> Browse & Go to SSH -> Auth -> Browse -> Open .



Click 'Yes'.



THANK YOU