

Sri Lanka Institute of Information Technology



ESBP II

Year 4, Semester 2 – 2016

Lab Assignment 1

Configuring Windows and Linux Servers on AWS

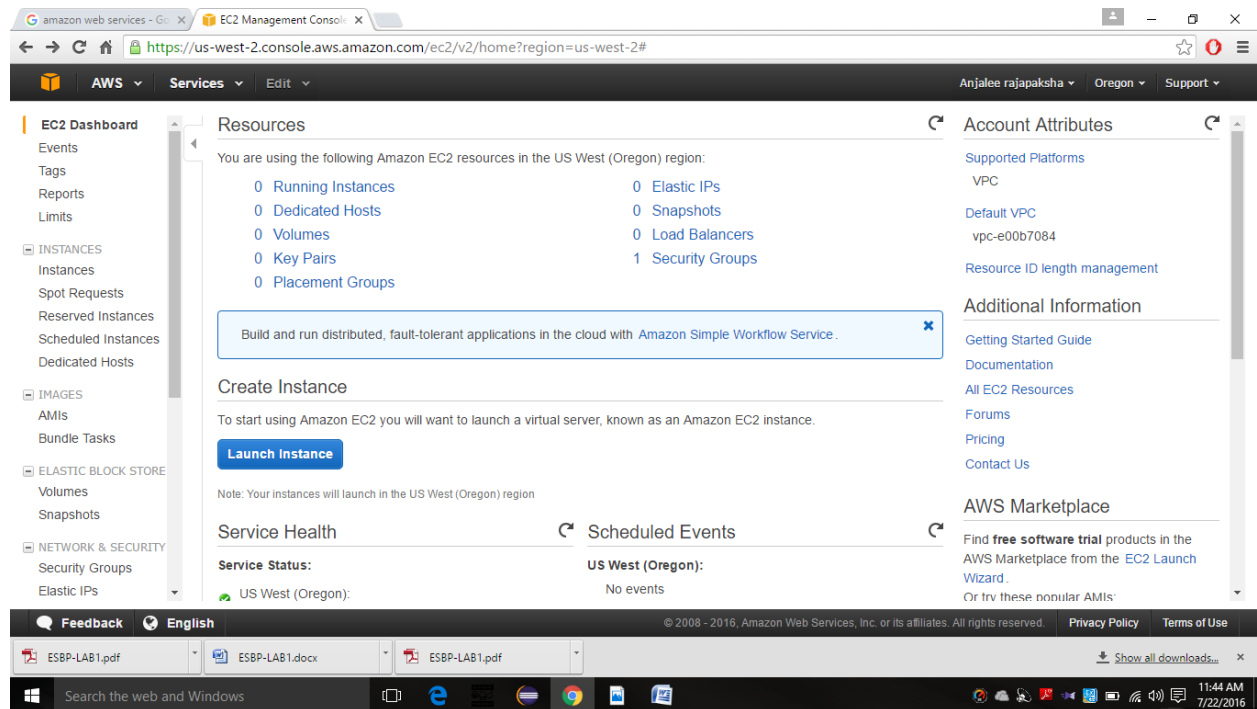
Madushani R.P.A

IT12138814

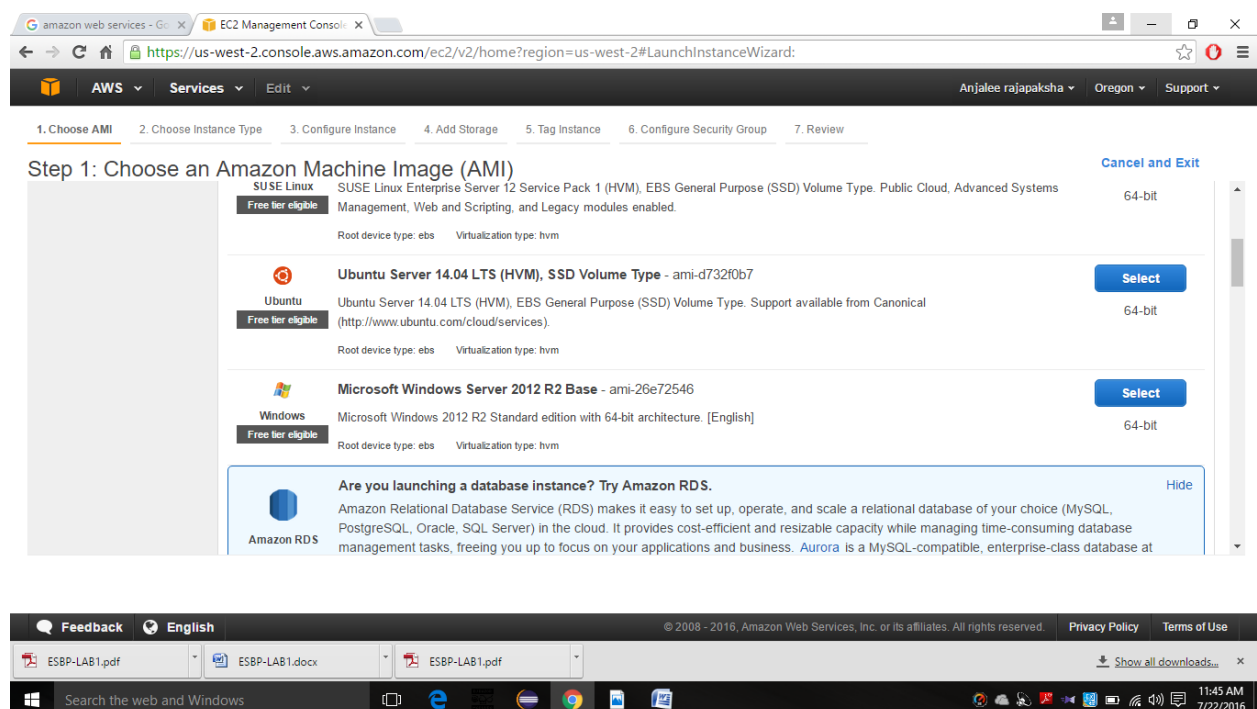
Weekdays

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'

amazon web services - G... EC2 Management Console X

https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#LaunchInstanceWizard:

AWS Services Edit

Anjalee rajapaksha Oregon Support

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
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate

Cancel Previous **Review and Launch** Next: Configure Instance Details

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ESBP-LAB1.pdf ESBP-LAB1.docx ESBP-LAB1.pdf Show all downloads...

Search the web and Windows 11:45 AM 7/22/2016

Click 'Launch'

amazon web services - G... EC2 Management Console X

https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#LaunchInstanceWizard:

AWS Services Edit

Anjalee rajapaksha Oregon Support

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-1, 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](#)

Microsoft Windows Server 2012 R2 Base - ami-26e72546

Free tier eligible Microsoft Windows 2012 R2 Standard edition with 64-bit architecture. [English]
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

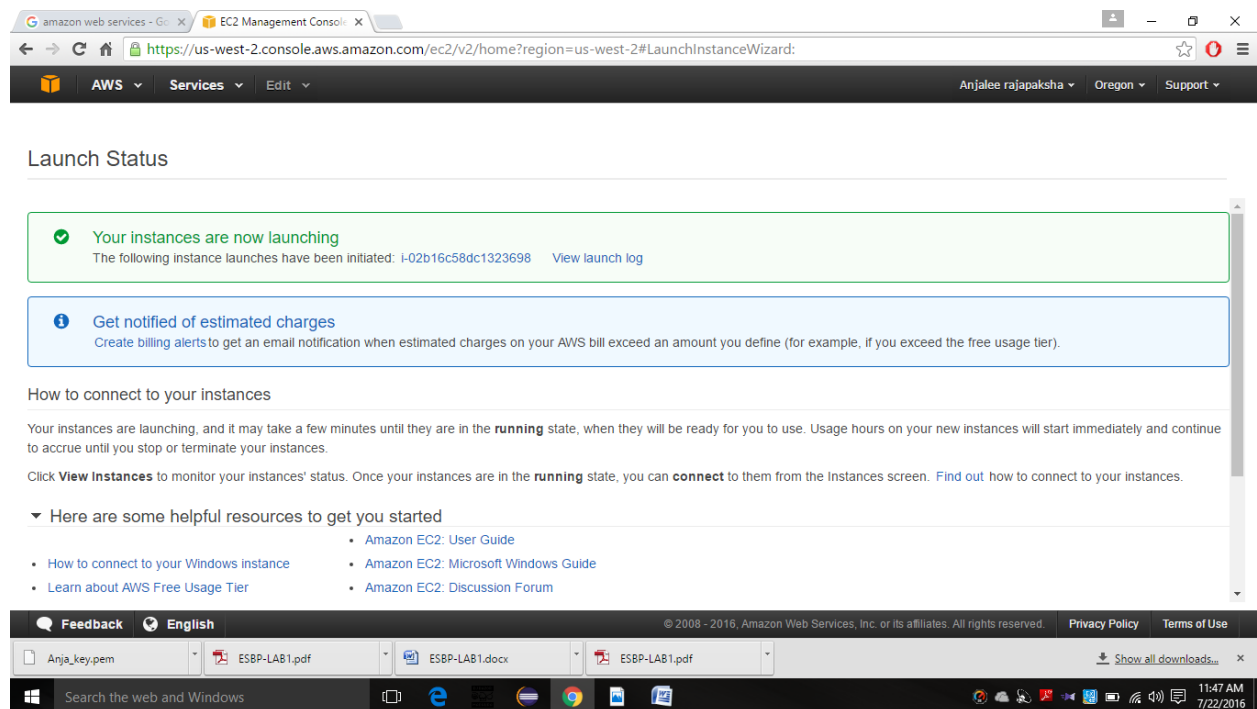
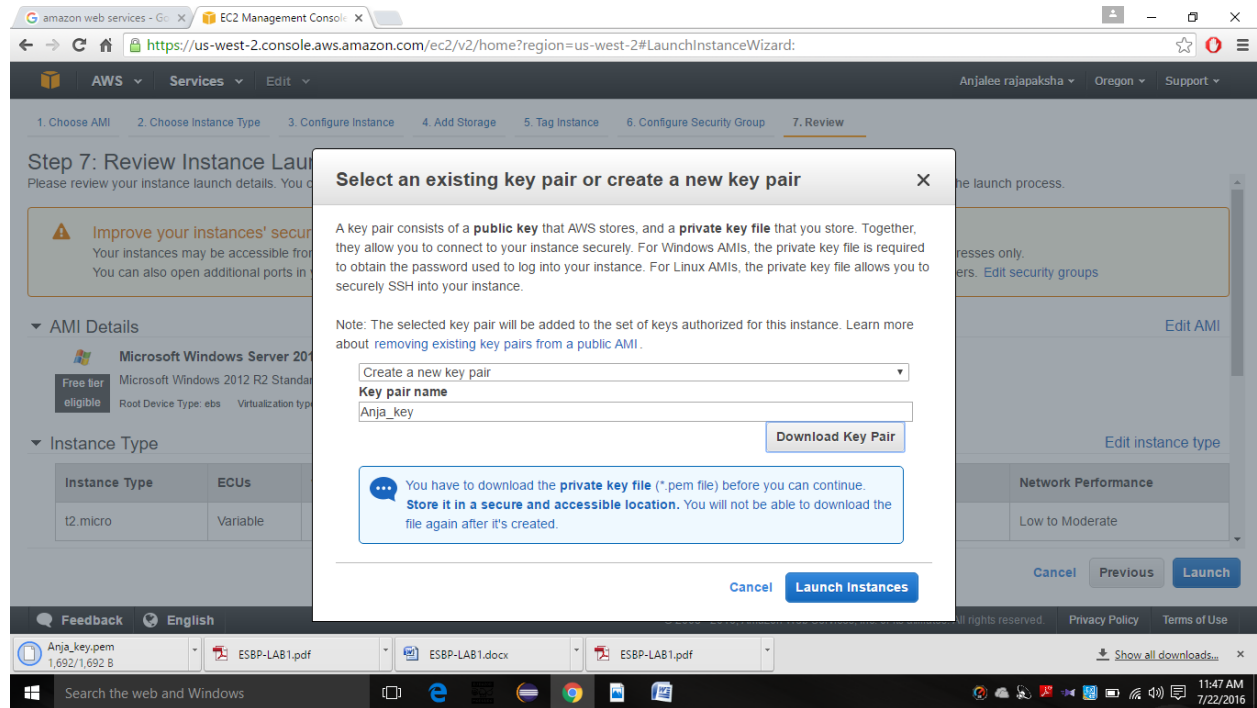
Cancel Previous **Launch**

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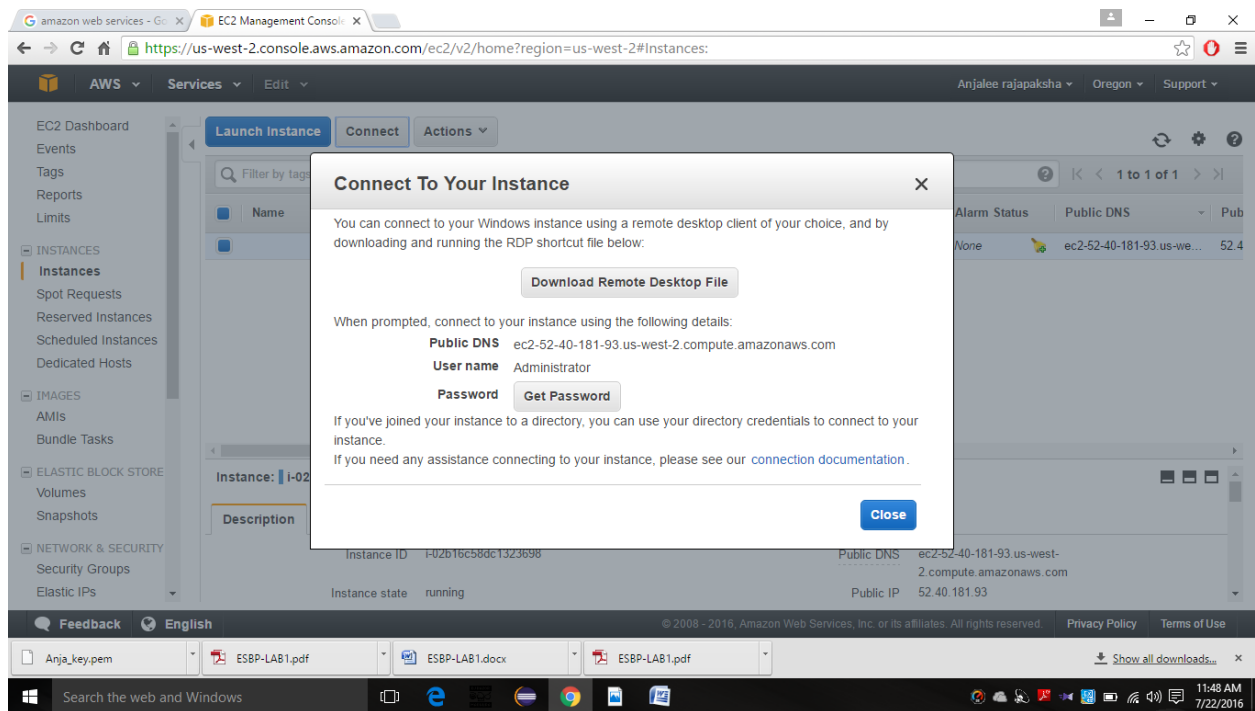
ESBP-LAB1.pdf ESBP-LAB1.docx ESBP-LAB1.pdf Show all downloads...

Search the web and Windows 11:46 AM 7/22/2016

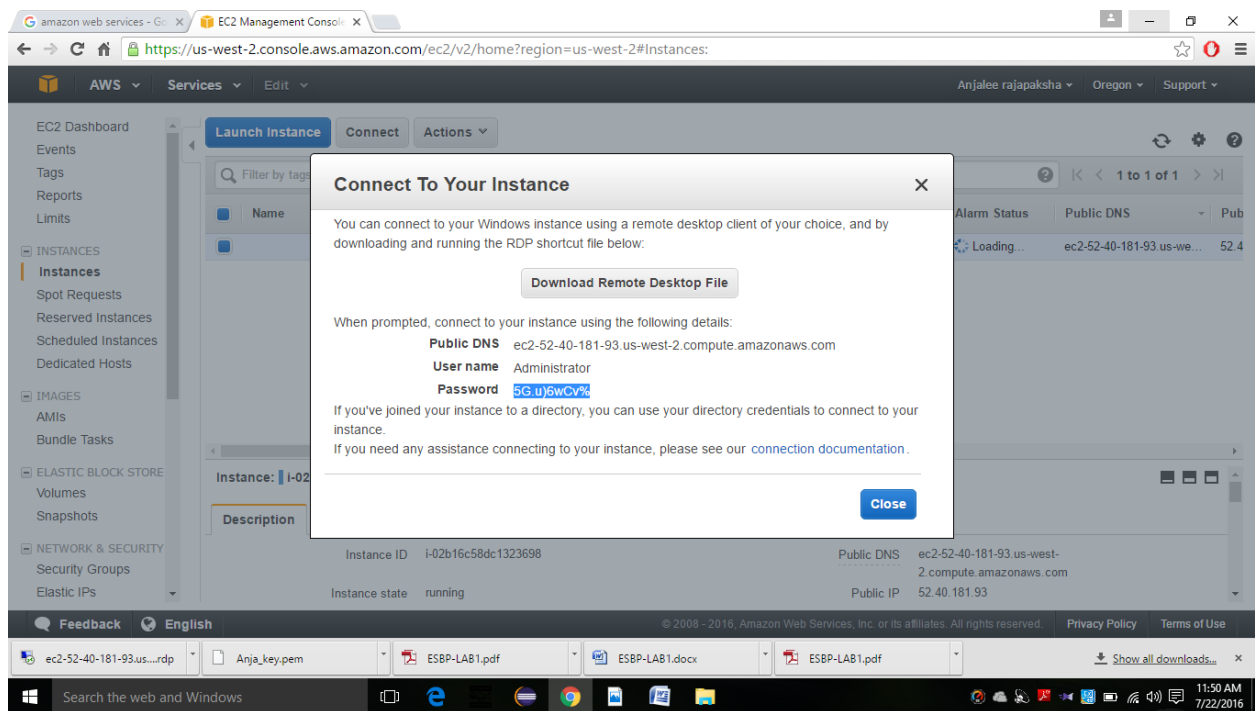
Select 'Create a new key pair' and give any name to 'Key pair name' and click 'Download Key Pair' then a file named Anja_key.pem will download after that click 'Launch Instances'.

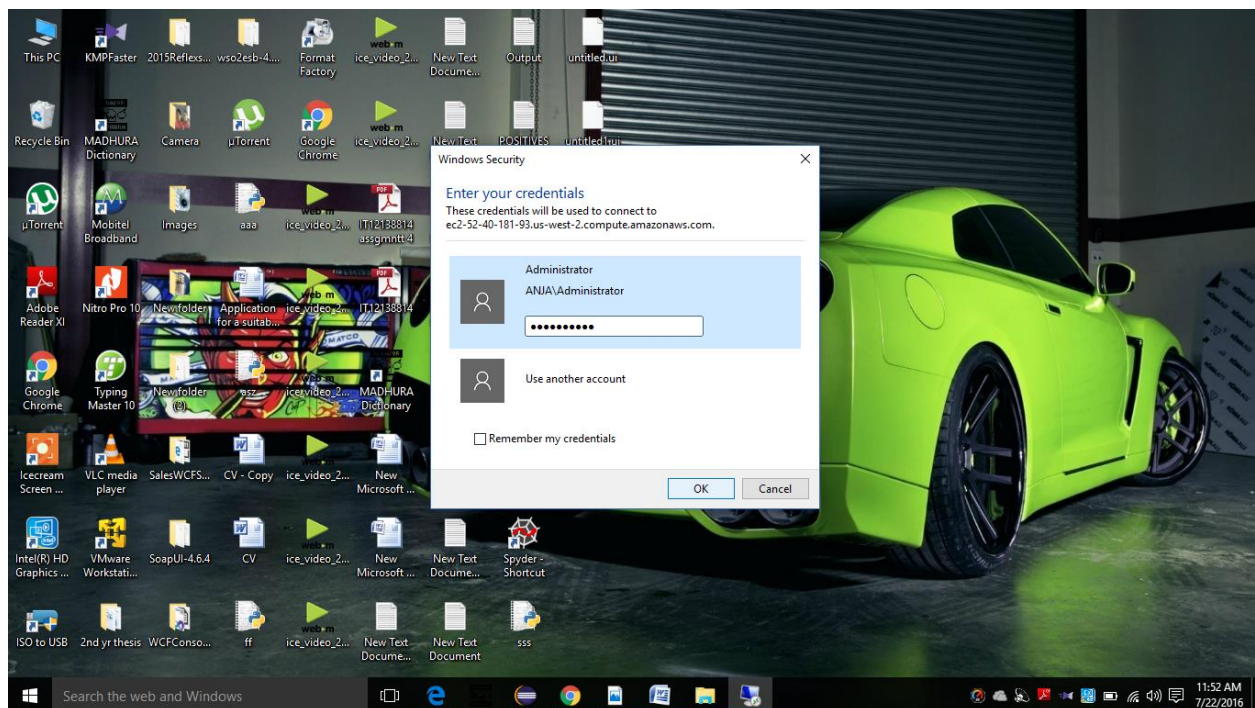
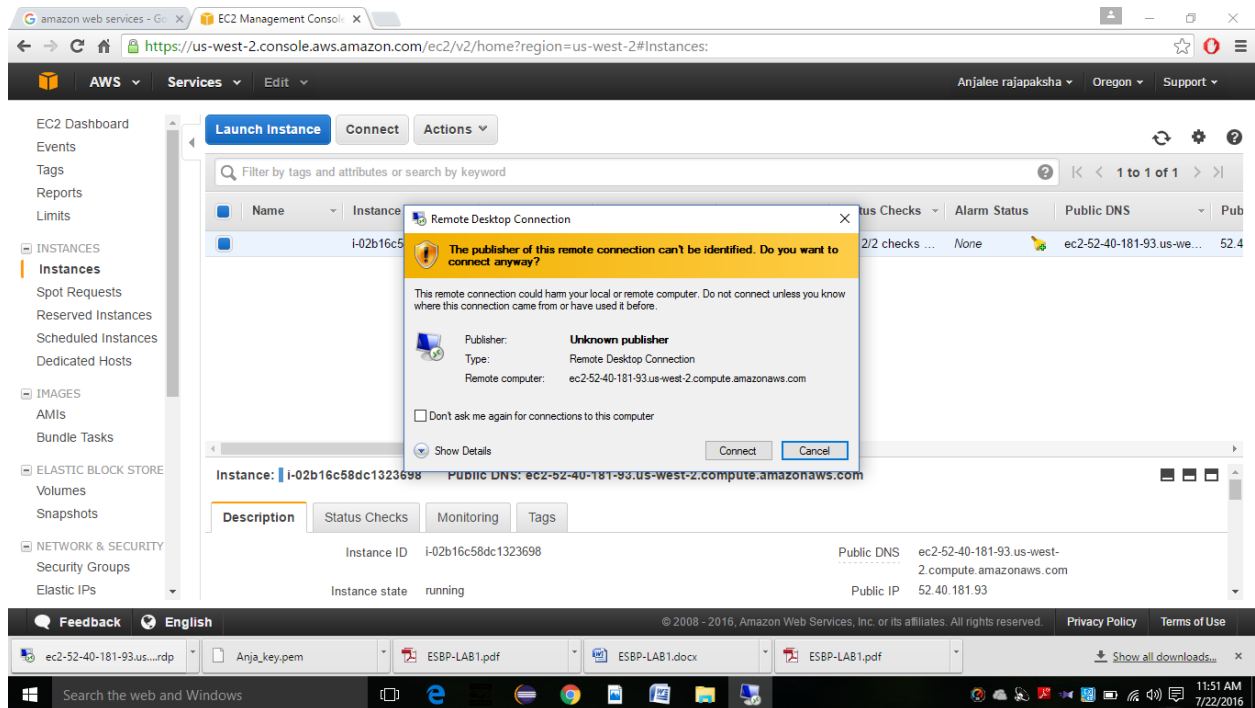


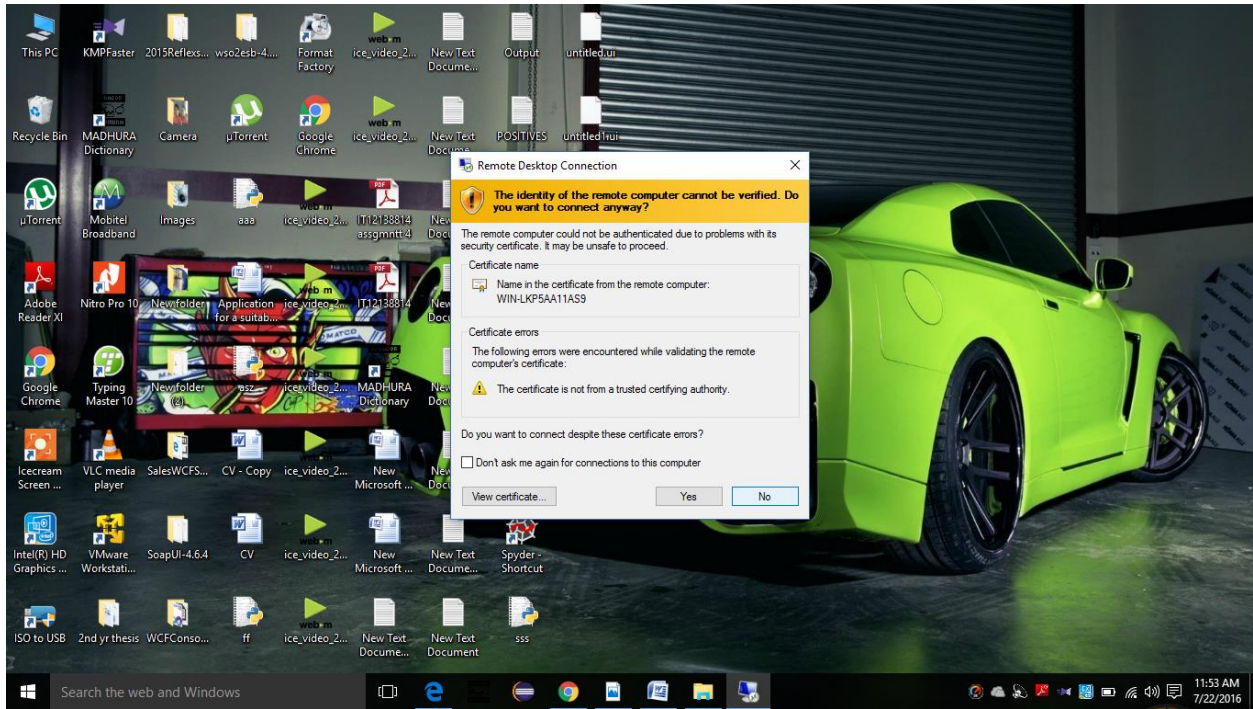
Click 'Connect'



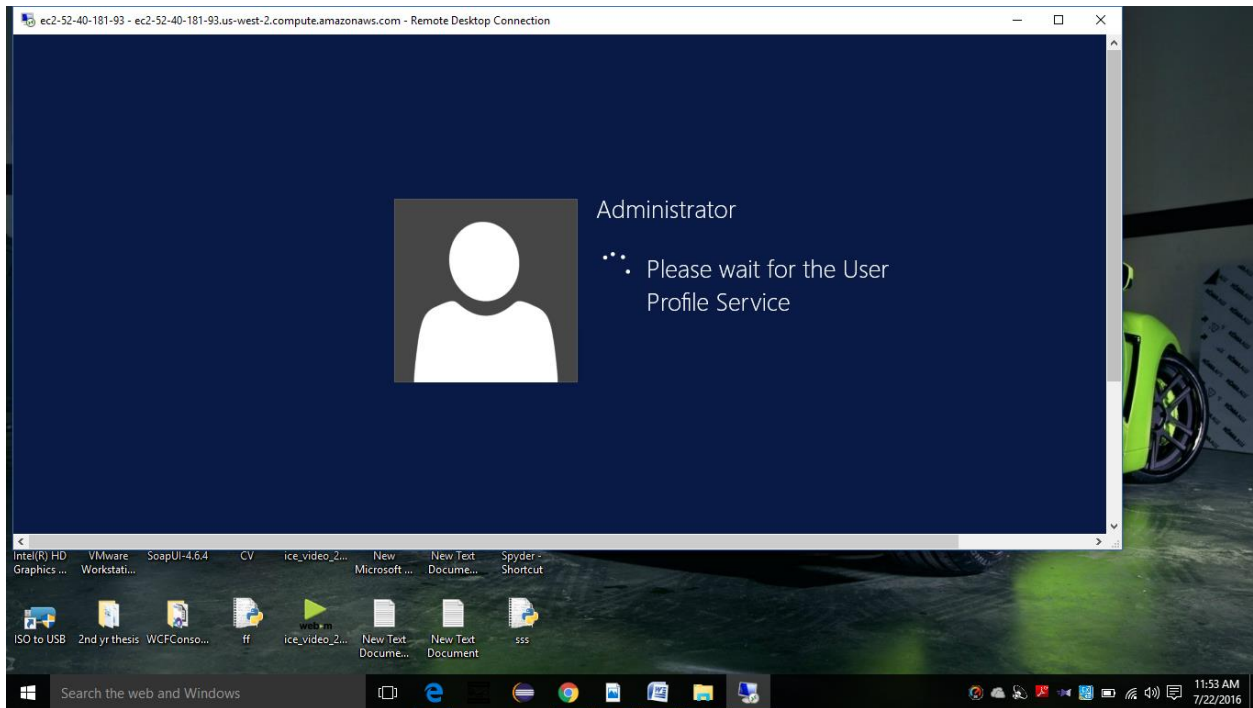
Click 'Get Password' & 'Decrypt Password'.



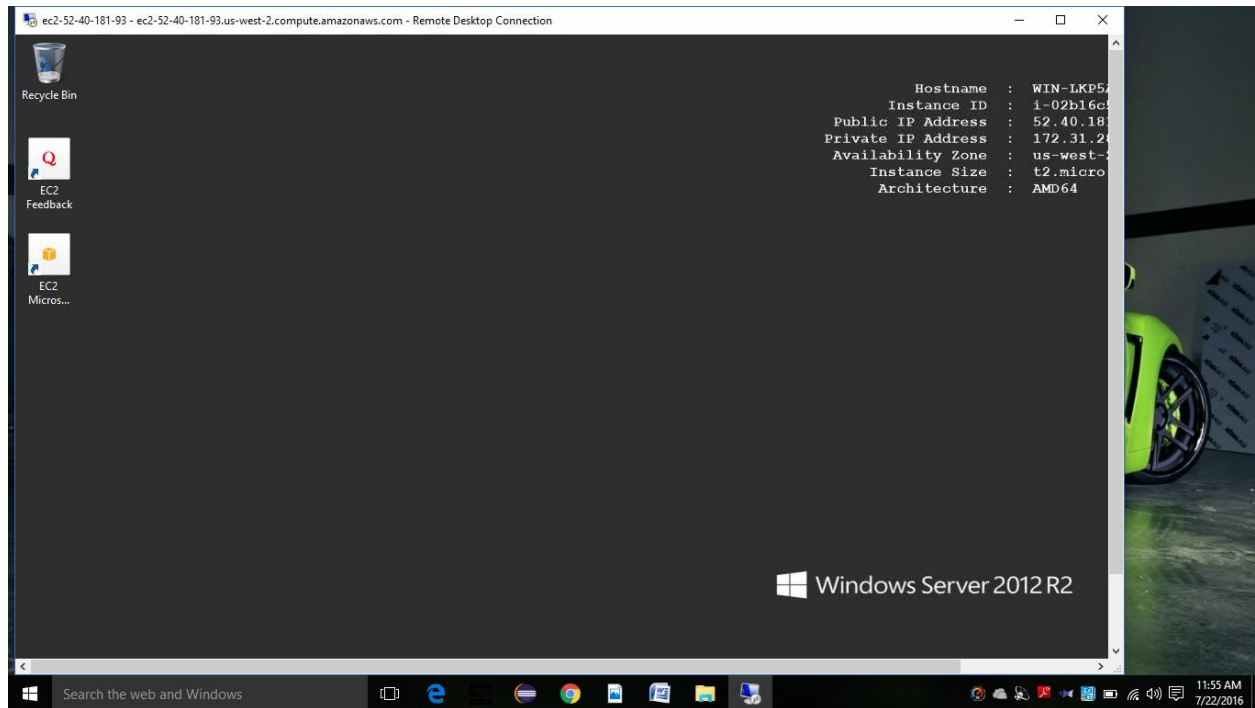




Now go to Remote Desktop Connection and provide the public IP and then click 'connect'.



Now you can see the 'Windows Server'.



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

My AMIs
AWS Marketplace
Community AMIs

☐ Free tier only

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

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

Root device type: ebs Virtualization type: hvm

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.

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.

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<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

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

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-6, 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'.

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

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
t2.micro	Variable

Security Groups [Edit security groups](#)

Security group name: launch-wizard-6
Description: launch-wizard-6

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

Anja_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](#)

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

Now click 'View Instances'.

Launch Status

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
- Learn about AWS Free Usage Tier
- Amazon EC2: User Guide
- Amazon EC2: Discussion Forum

While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

[View Instances](#)

Instance is running.

Instances

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
	i-02b16c58dc1323698	t2.micro	us-west-2a	terminated		None	
	i-08edd662f516b40f0	t2.micro	us-west-2b	terminated		None	
	i-09b40073289f00235	t2.micro	us-west-2b	terminated		None	
	i-0be14771eae4040a	t2.micro	us-west-2a	terminated		None	
	i-0f23da883fad9ad20	t2.micro	us-west-2b	running	Initializing	None	ec2-52-35-162-69.us-we... 52.3

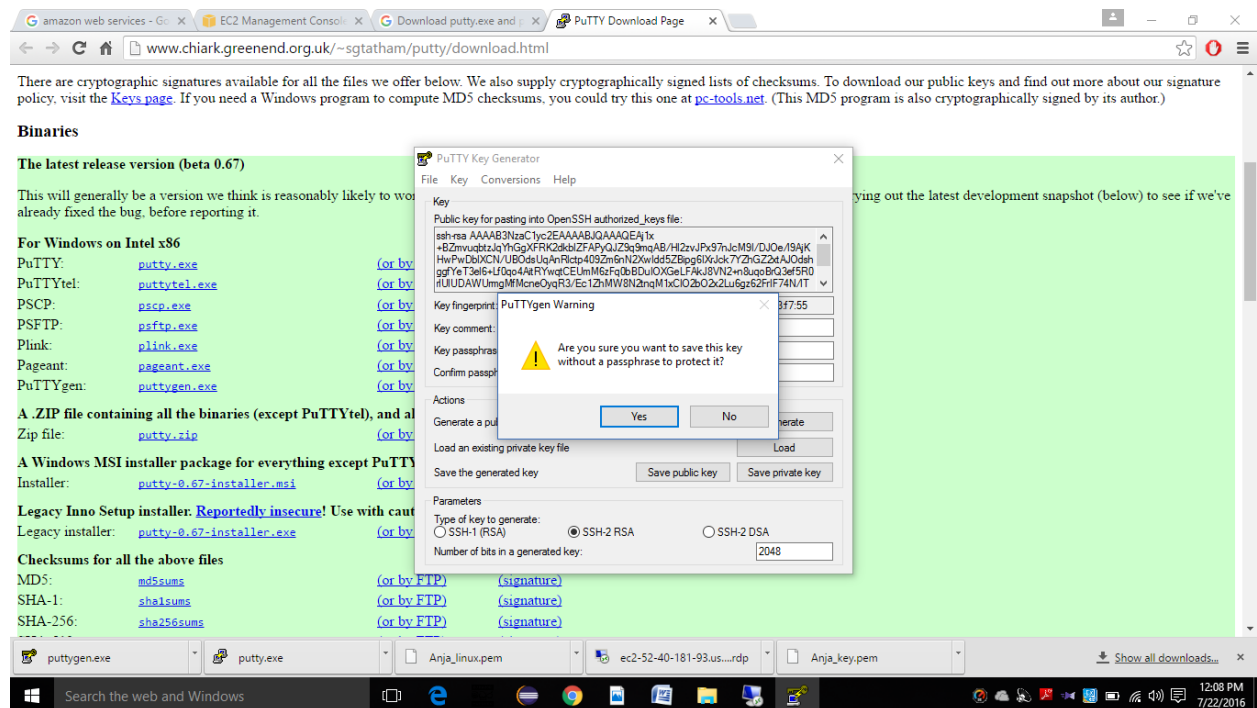
Instance: i-0f23da883fad9ad20 Public DNS: ec2-52-35-162-69.us-west-2.compute.amazonaws.com

Description	Status Checks	Monitoring	Tags
Instance ID	i-0f23da883fad9ad20	Public DNS	ec2-52-35-162-69.us-west-2.compute.amazonaws.com
Instance state	running	Public IP	52.35.162.69
Instance type	t2.micro	Elastic IPs	
Private DNS	ip-172-31-40-52.us-west-2.compute.internal	Availability zone	us-west-2b
Private IPs	172.31.40.62	Security groups	launch-wizard-6, view rules

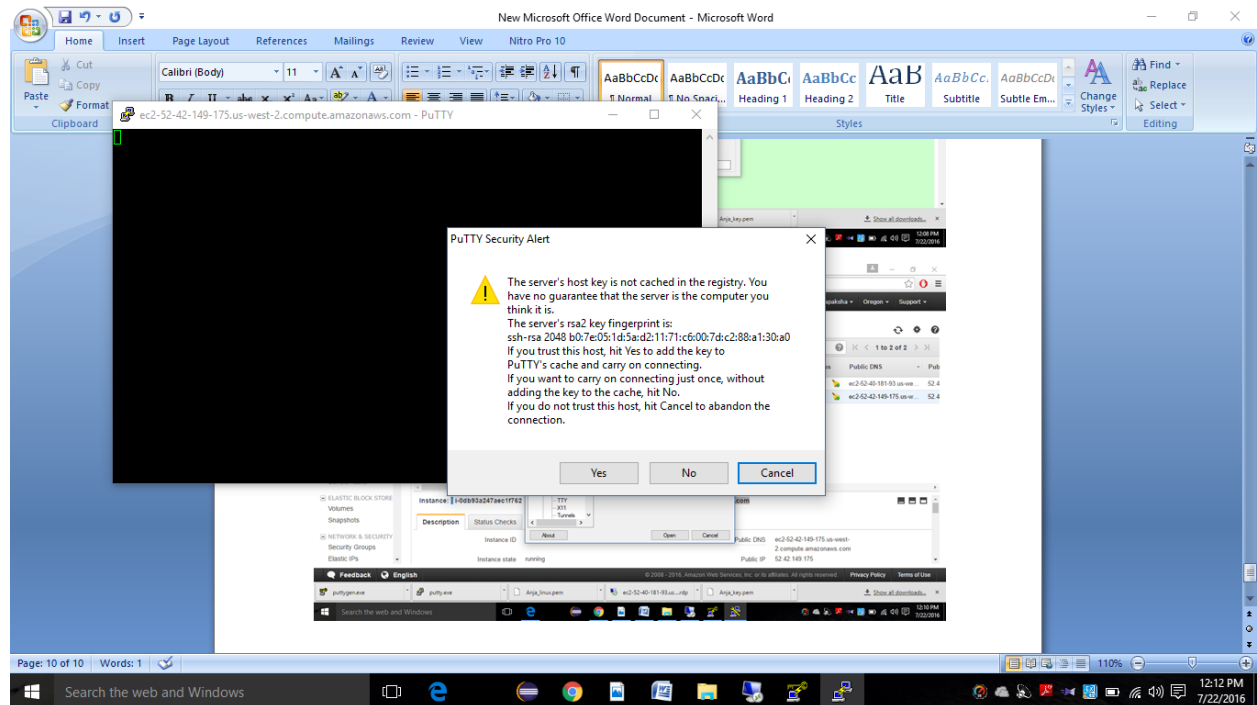
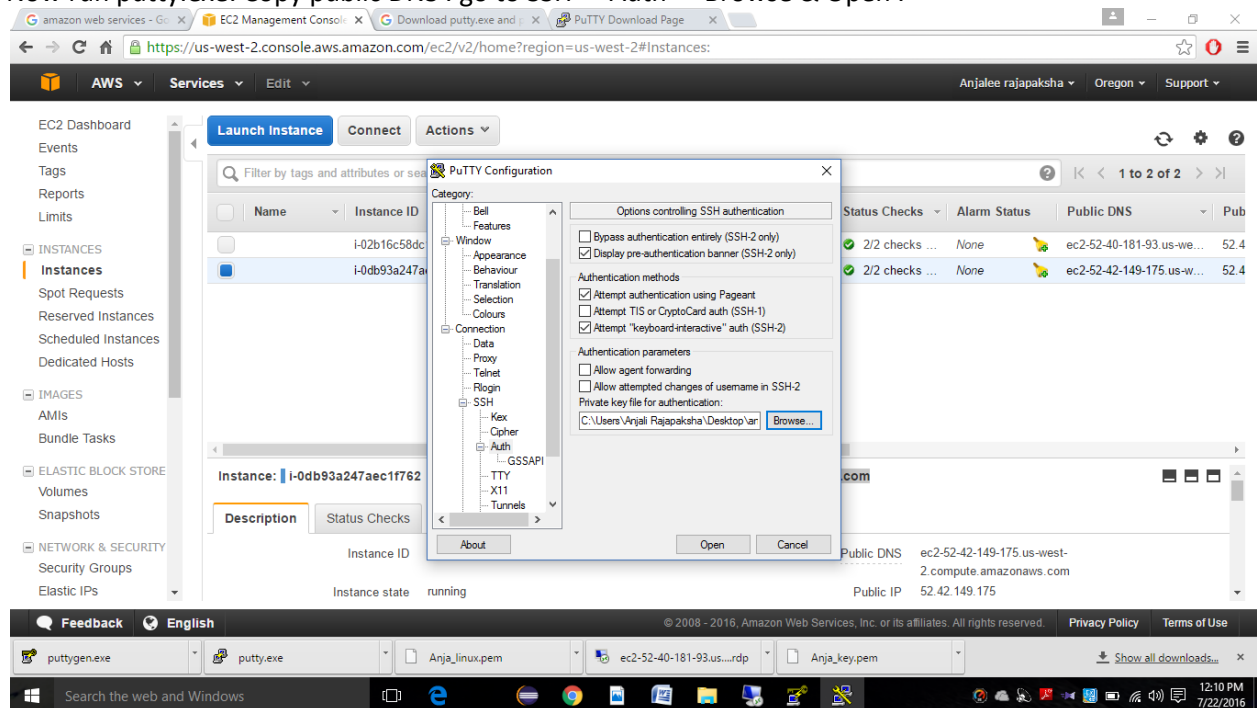
Download putty.exe and puttygen.exe.



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



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



Click 'Yes'.

The screenshot shows the AWS Management Console for the us-west-2 region. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES, IMAGES, ELASTIC BLOCK S, and NETWORK & SECURITY. The main content area displays a list of EC2 instances. One instance is in the 'running' state with a status of '2/2 checks ...'. A terminal window is open, showing the login process for the 'ec2-user' on an Amazon Linux AMI. The terminal output includes the login prompt, the public key path, the Amazon Linux logo, and the URL for the Amazon Linux release notes. Below the terminal, the instance details are shown, including the instance type (t2.micro), private DNS (ip-172-31-25-35.us-west-2.compute.internal), and private IPs (172.31.25.35). The bottom of the console shows the footer with 'Feedback', 'English', '© 2008 - 2016, Amazon Web Services, Inc. or its affiliates. All rights reserved.', 'Privacy Policy', and 'Terms of Use'. The Windows taskbar at the bottom shows the search bar and various application icons.

EC2 Management Console

https://us-west-2.console.aws.amazon.com/ec2/v2/home?region=us-west-2#Instances:sort=desc:instanceState

AWS Services Edit

Anjalee rajapaksha Oregon Support

EC2 Dashboard

Events

Tags

Reports

Limits

INSTANCES

Instances

Spot Requests

Reserved Instances

Scheduled Instances

Dedicated Hosts

IMAGES

AMIs

Bundle Tasks

ELASTIC BLOCK S

Volumes

Snapshots

NETWORK & SECURITY

Security Groups

Instance type: t2.micro

Private DNS: ip-172-31-25-35.us-west-2.compute.internal

Private IPs: 172.31.25.35

Public DNS: ec2-52-42-57-255.us-west-2.compute.amazonaws.com

Public IP: 52.42.57.255

Elastic IPs

Availability zone: us-west-2a

Security groups: launch-wizard-7. view rules

Feedback English

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Anja.pem

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