

Quick Guide – Use Putty to connect to EC2 instance over SSH

Objective

This guide has been written to help you understand how to use Putty to connect to an EC2 instance over SSH.

Background

In order to connect to an EC2 instance over SSH, it is necessary to use a tool such as Putty.

Before you begin, you must make sure that:

- the instance is running
- the security group (firewall) permits inbound traffic through port 22
- you have a copy of the EC2 key pair

Further reading

Should you require any further information, please refer to the following resource:

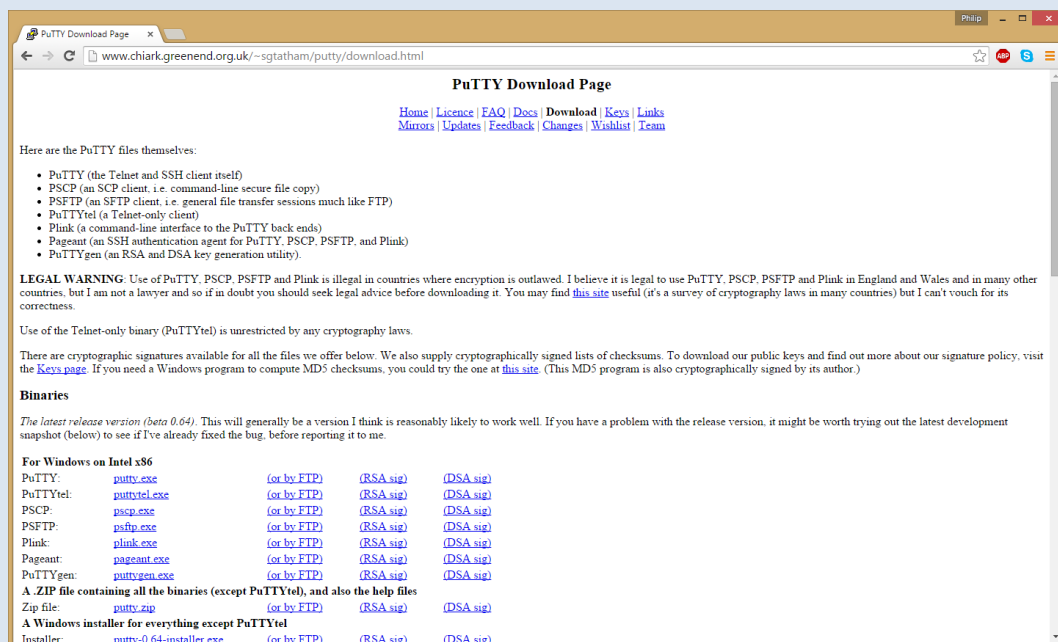
<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/putty.html>

Stage 1 : Download Putty

Step 1

If you do not already have a copy of Putty, you can download it from the following url:

<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>



Step 2

Locate the most appropriate the **putty.exe** binary for your client machine and download a copy to a convenient location.

Binaries

The latest release version (beta 0.64). This will generally be a version I think is reasonably likely to work. I'll post a snapshot (below) to see if I've already fixed the bug, before reporting it to me.

For Windows on Intel x86

PuTTY:	putty.exe	(or by FTP)	(RSA sig)	(DSA sig)
PuTTYtel:	puttytel.exe	(or by FTP)	(RSA sig)	(DSA sig)
PSCP:	pscp.exe	(or by FTP)	(RSA sig)	(DSA sig)
PSFTP:	psftp.exe	(or by FTP)	(RSA sig)	(DSA sig)
Plink:	plink.exe	(or by FTP)	(RSA sig)	(DSA sig)
Pageant:	pageant.exe	(or by FTP)	(RSA sig)	(DSA sig)
PuTTYgen:	puttygen.exe	(or by FTP)	(RSA sig)	(DSA sig)
A .ZIP file containing all the binaries (except PuTTYtel), and also the help files				
Zip file:	putty.zip	(or by FTP)	(RSA sig)	(DSA sig)
A Windows installer for everything except PuTTYtel				
Installer:	putty-0.64-installer.exe	(or by FTP)	(RSA sig)	(DSA sig)
Checksums for all the above files				
MD5:	md5sums	(or by FTP)	(RSA sig)	(DSA sig)
SHA-1:	sha1sums	(or by FTP)	(RSA sig)	(DSA sig)
	the.earth.li/~sgtatham/putty/latest/x86/putty.exe	(or by FTP)	(RSA sig)	(DSA sig)

Stage 2 – Download Puttygen

Step 3

Although you will use Putty to connect to your EC2 instances, you will also need to download Puttygen.

Puttygen is needed to convert any EC2 key pair **pem** file you may have into a **ppk** file which Putty requires.

Step 4

Locate the **puttygen.exe** binary and download a copy to a convenient location.

Binaries

The latest release version (beta 0.64). This will generally be a version I think is reasonably likely to work. I will post a new snapshot (below) to see if I've already fixed the bug, before reporting it to me.

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Plink:	plink.exe	(or by FTP)	(RSA sig)	(DSA sig)
Pageant:	pageant.exe	(or by FTP)	(RSA sig)	(DSA sig)
PuTTYgen:	puttygen.exe	(or by FTP)	(RSA sig)	(DSA sig)

A .ZIP file containing all the binaries (except PuTTYtel), and also the help files

Zip file:	putty.zip	(or by FTP)	(RSA sig)	(DSA sig)
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A Windows installer for everything except PuTTYtel

Installer:	putty-0.64-installer.exe	(or by FTP)	(RSA sig)	(DSA sig)
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Checksums for all the above files

MD5:	md5sums	(or by FTP)	(RSA sig)	(DSA sig)
SHA-1:	sha1sums	(or by FTP)	(RSA sig)	(DSA sig)
SHA-256:	sha256sums	(or by FTP)	(RSA sig)	(DSA sig)
SHA-512:	sha512sums	(or by FTP)	(RSA sig)	(DSA sig)

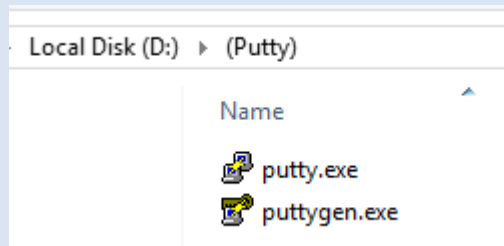
The latest development snapshot. This will be built every day, automatically, from the current development version. I will post a new snapshot (below) to see if I've already fixed the bug, before reporting it to me. On the other hand, you may be able to find a fixed PuTTY here well before the fix makes it into the release version above. On the other hand, you may not find a fixed PuTTY here well before the fix makes it into the release version above. On the other hand, you may not find a fixed PuTTY here well before the fix makes it into the release version above.

the.earth.li/~sgtatham/putty/latest/x86/puttygen.exe

...not date, so it will change every day.

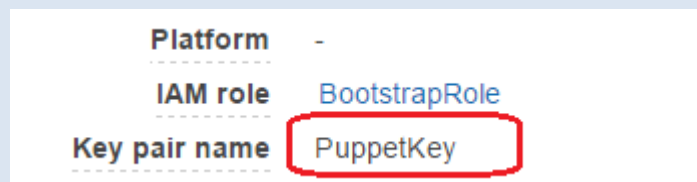
Step 5

You should now have both the binaries downloaded to a convenient location.

**Stage 3 – Convert EC2 key file from pem to ppk****Step 6**

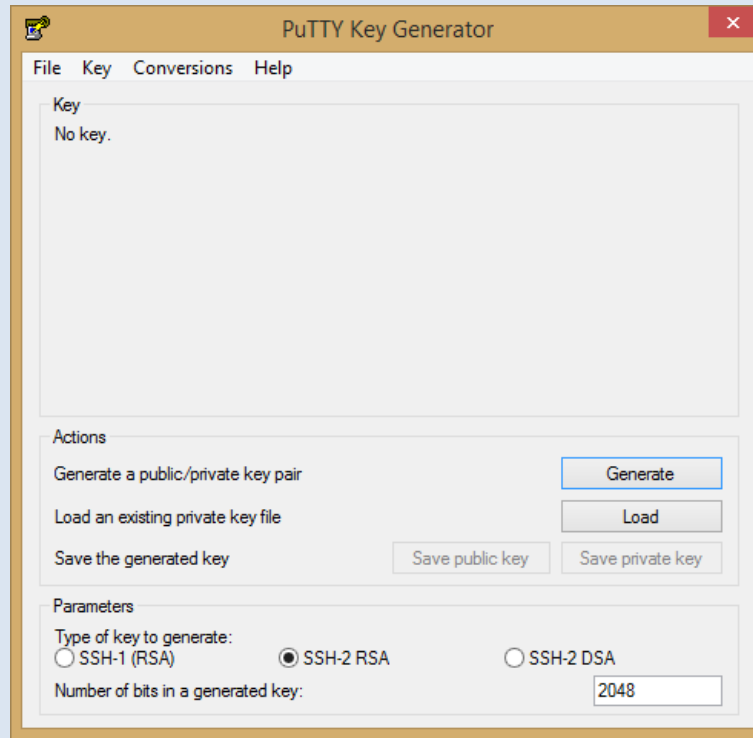
When you launched your EC2 instance, you will have assigned it an EC2 key pair.

If you cannot recall the name of the EC2 key pair that you used, you can always retrieve it by viewing the instance's metadata in the **AWS Console**.



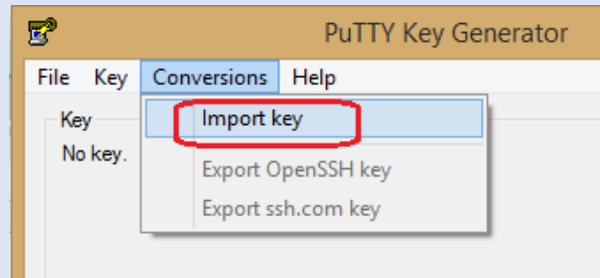
Step 7

Launch **puttygen.exe**.

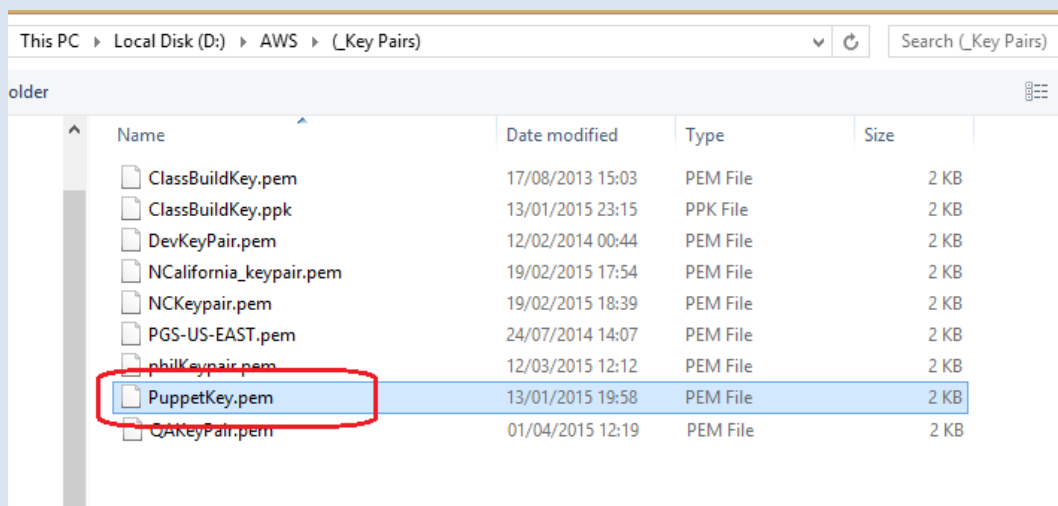


Step 8

Select **Import key** from the **Conversions** menu.

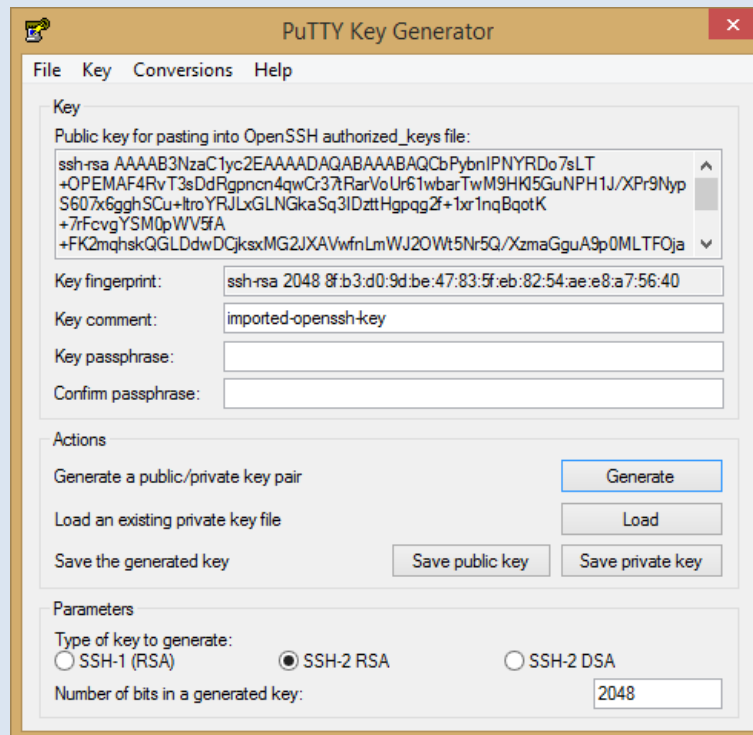
**Step 9**

Locate the EC2 key pair **pem** file that relates to the EC2 instance that you wish to connect to and then click the **Open** button.



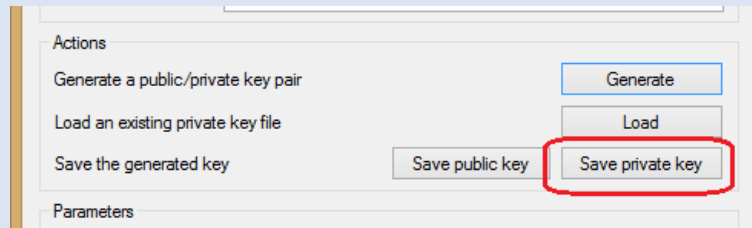
Step 10

You will now see the contents of your half of the EC2 key pair.

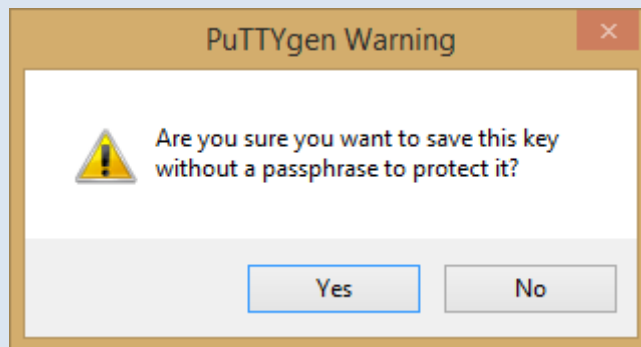


Step 11

Click on the **Save private key** button.

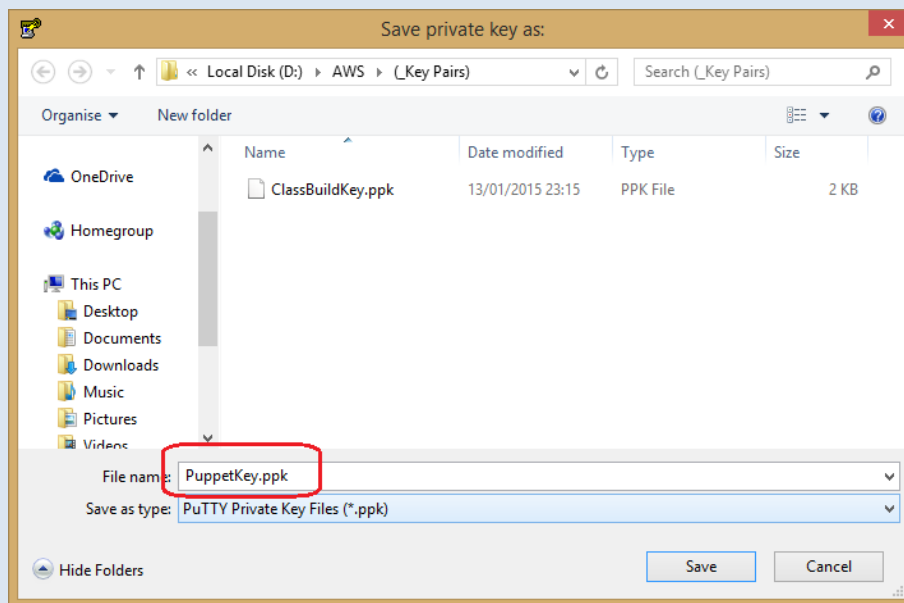
**Step 12**

You will be warned about generating a private key file without a passphrase. Go ahead and click the **Yes** button.



Step 13

In the **Save private key as** dialog, supply a name for your key file. Ideally, you should use the same filename as you used for the source **pem** file. Click the **Save** button.



Step 14

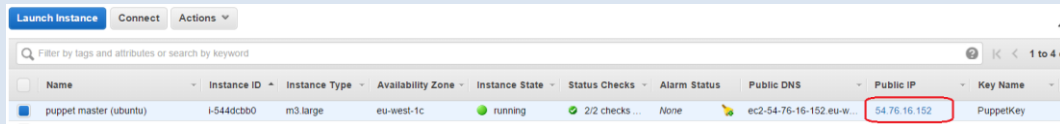
Now that you have generated a **ppk** file from your EC2 key pair **pem** file, you are ready to connect to an EC2 instance.

Note. There is no need to generate a new **ppk** file each time you want to connect to an EC2 instance. Once you have a **ppk** file to match the appropriate **pem** file, you can simply continue to use it.

Stage 4 – Connect to an EC2 instance using Putty

Step 15

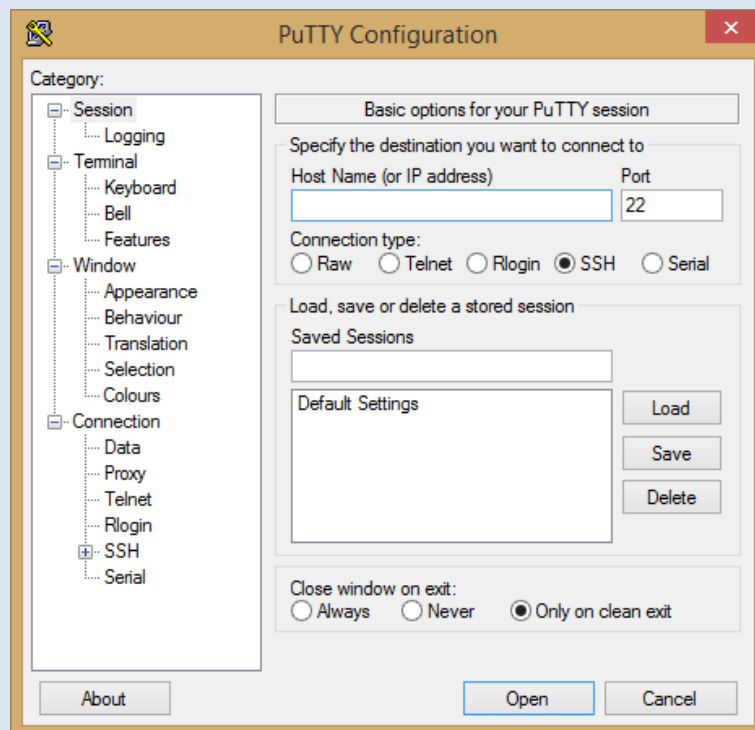
Locate the public IP of your running EC2 instance and make a note of it.



Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	Key Name
puppet master (ubuntu)	i-544dcb0	m3.large	eu-west-1c	running	2/2 checks ...	None	ec2-54-76-16-152.eu-w...	54.76.16.152	PuppetKey

Step 16

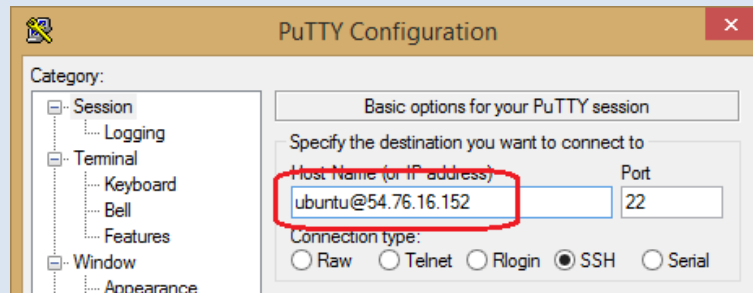
Launch **putty.exe**.



Step 17

Enter the EC2 instance's public IP address prefixed with the appropriate username using the format:

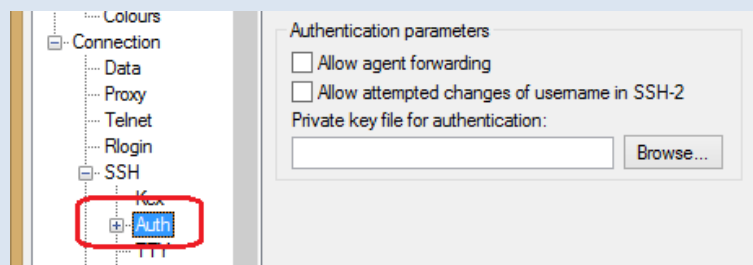
<username>@<public-IP>



Note. The user name depends on the type of EC2 instance. If it is an Ubuntu server then the username will be **ubuntu**. However, if you are connecting to a Linux server, the username will be **ec2-user**.

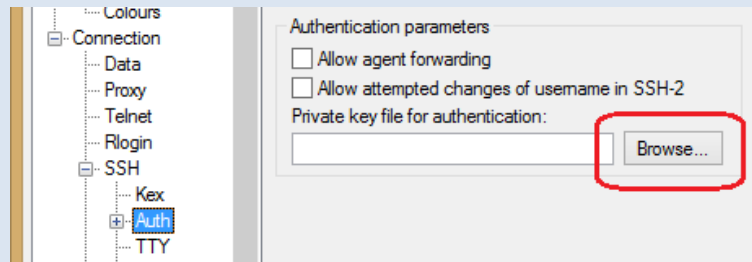
Step 18

Expand the **Connection** category and click on the **Auth** node.

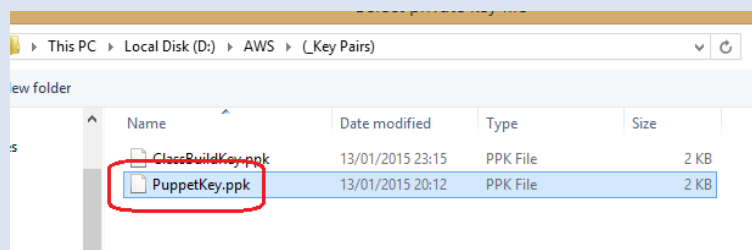


Step 19

Click on the **Browse** button to locate the required **ppk** file.

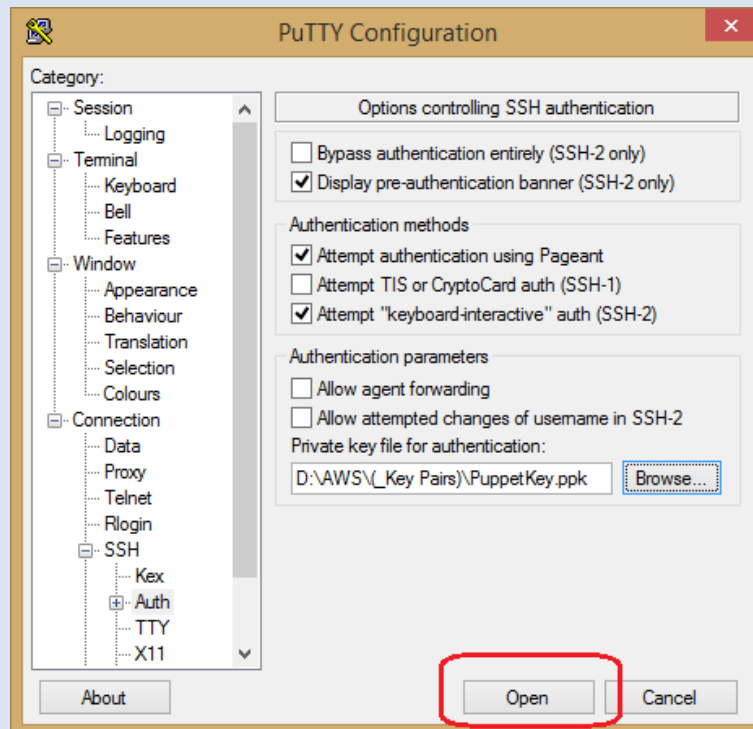
**Step 20**

Locate and select the required **ppk** file and click the **Open** button.



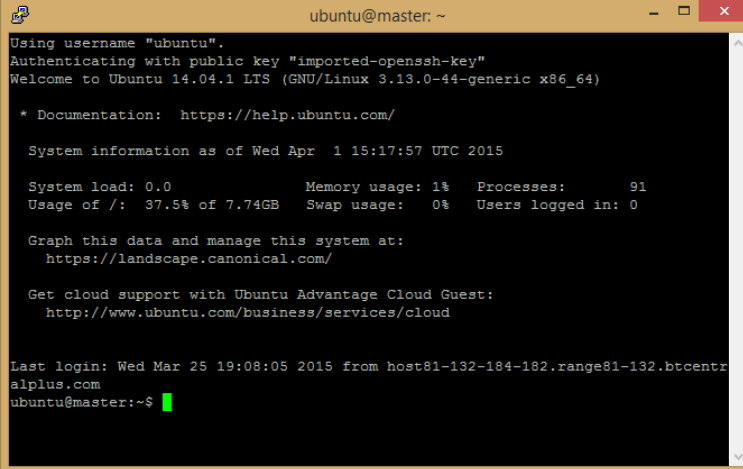
Step 21

Finally. Click the **Open** button to open a Command window to your EC2 instance.



Step 22

What you do now is entirely up to you.

A screenshot of a terminal window titled 'ubuntu@master: ~'. The terminal shows the following text:

```
Using username "ubuntu".
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 14.04.1 LTS (GNU/Linux 3.13.0-44-generic x86_64)

 * Documentation:  https://help.ubuntu.com/

System information as of Wed Apr  1 15:17:57 UTC 2015

System load: 0.0          Memory usage: 1%    Processes:   91
Usage of /:  37.5% of 7.74GB Swap usage:  0%    Users logged in: 0

Graph this data and manage this system at:
https://landscape.canonical.com/

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

Last login: Wed Mar 25 19:08:05 2015 from host81-132-184-182.range81-132.btcentr
alplus.com
ubuntu@master:~$
```

Step 23

Congratulations. You have successfully downloaded **putty.exe** and **puttygen.exe**, used **puttygen.exe** to generate a **ppk** file and then used **putty.exe** to connect to an EC2 instance over SSH.