

Contents

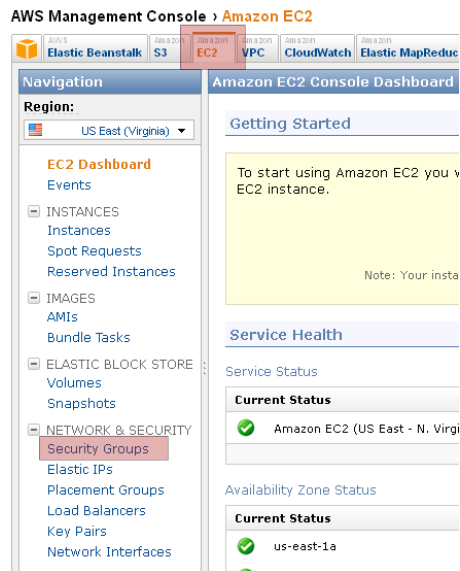
Installing Oxwall completely in Amazon Cloud	1
PART 1 – Creating AWS Instance	1
Section 1 – Security Group.....	1
Section 2 - A LAMP-friendly instance	2
Section 3 - The Elastic IP	5
PART 2 - Connect To Amazon EC2 Linux Instance Using PuTTY	6
PART 3 - Installing LAMP via SSH	9
PART 4 – Installing Oxwall in Linux Server	11

Installing Oxwall completely in Amazon Cloud

PART 1 – Creating AWS Instance

Section 1 – Security Group

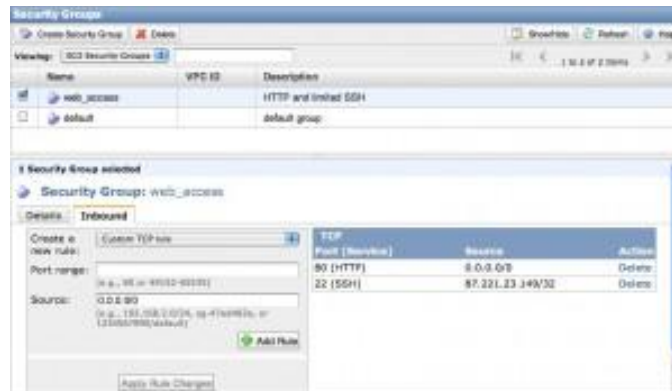
- 1) Login to Amazon AWS Console using the link <https://console.aws.amazon.com/console/home> .
- 2) Go to the EC2 tab and click “Security Groups” section.



- 3) Now we need to create a Security Group that allows HTTP connections and limited SSH to configure the instance. Click on Security Groups > Create Security Group and complete the following form.



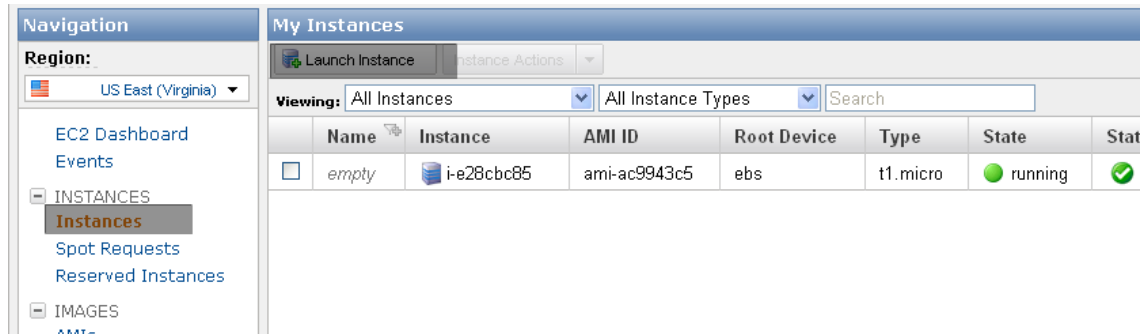
- 4) Choose an appropriate name and description for the Security Group. We will use the name *web_access* through this tutorial.
- 5) Once the Security Group is created we need to add the Inbound Rules that allow HTTP and SSH access. Click on the newly created Security Group, then select the Inbound tab.
- 6) Select HTTP from the Create a new rule drop-down and leave the Source as 0.0.0.0/0 to allow HTTP connections from anywhere. Click on Add Rule.



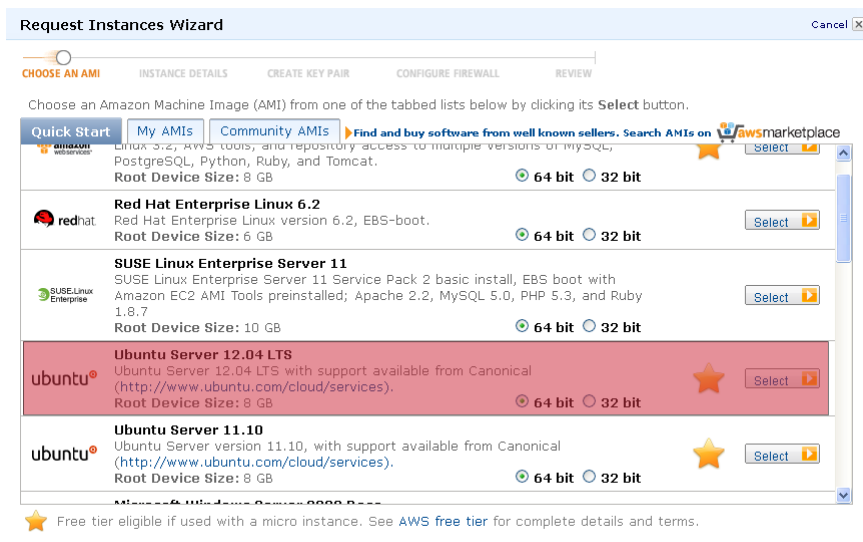
- 7) Select SSH from the Create a new rule drop-down and change the Source to your IP address to restrict SSH connections to your computer or network; you don't want anyone to be able to log in to the instance. Or simply use 0.0.0.0/0 for IP address. Again click on Add Rule.
- 8) Now click on Apply Rule Changes; your changes won't be saved unless you press this button.

Section 2 - A LAMP-friendly instance

- 1) Now we need to create an EC2 instance that provides a very clean and quick LAMP installation. Click on Instances > Launch Instance to initiate the Request Instance Wizard.



- An instance is created from an AMI, an acronym for Amazon Machine Image. Surprisingly, Amazon's AMIs does not provide the most straightforward LAMP installation. Click on the Quick Start tab and wait until the list loads (might take a while).



- We will use a 32-bit Ubuntu Server 12.04 LTS boot provided. Click on Select to move to the next step. The star icon represents that it's eligible for Free Tier for new AWS customers.
- From now on we will mostly use default settings. If you want to save some cents, select Micro from the Instance Type drop-down to choose the lowest-end hardware. Click on Continue.



- 5) Leave all the default settings in Advanced Instance Options and click Continue.



- 6) You can safely ignore the tags and click Continue.



- 7) You will now need to generate a new Key Pair (or use an existing one if you already have one). The Key Pair will allow you to log in to the instance via SSH. Enter a suitable name (we will use mykeypair in this tutorial) and click on Create & Download your Key Pair.



- 8) A mykeypair.pem file will be downloaded. Save it somewhere easily accessible as you will need it in a few minutes. If you plan on using this instance for production, make sure the file is properly secured. Click on Continue.

- 9) In Configure Firewall select Choose one or more of your existing Security Groups. Choose the Security Group that we created on step 1 and click on Continue.



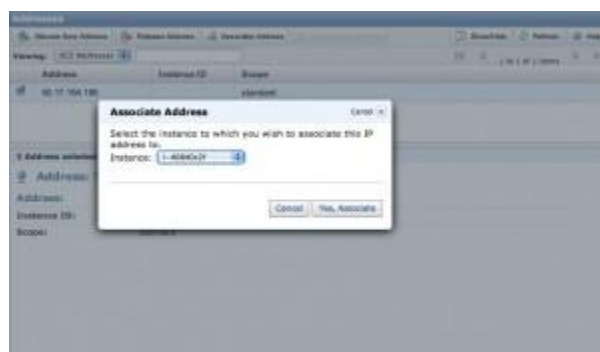
- 10) Review all the settings and click on Launch. The instance has to boot and thus will take a few seconds to be ready. In the meantime, take note of the instance identifier which will be needed to create an Elastic IP for the instance.

Section 3 - The Elastic IP

- 1) Amazon EC2 instances have a public a DNS name which is rather long and cumbersome to use. It is much more practical to use an IP address to reference an instance. Luckily, Amazon provides Elastic IPs which are free as long as they are associated to a running instance.



- 2) Click on Elastic IPs > Allocate New Address > Yes, Allocate. This will create a new Elastic IP but will not associate it to the instance yet. Write down the IP number as you will need it in a few minutes.



- 3) Select the newly created IP address and click on Associate Address. Choose the instance created on Step 2 from the drop-down and click on Yes, Associate.
- 4) By now the instance should be up and running (which you can confirm by returning to the Instances section and checking if the status indicator is green). It's time to connect via SSH to it.

Now we have got the Private Key to connect to SSH of our server instance. Let us see how to login to the server to install Oxwall using this key.

PART 2 - Connect To Amazon EC2 Linux Instance Using PuTTY

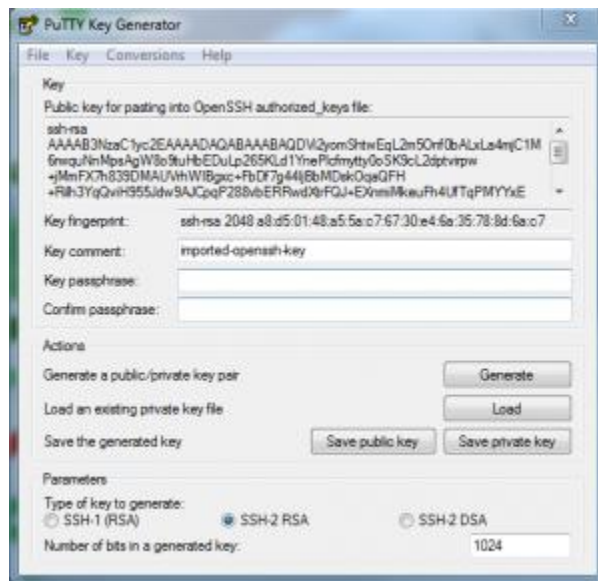
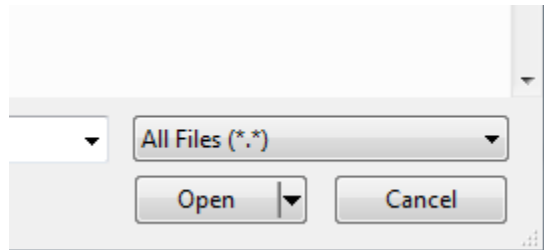
- 1) Download the PuTTY resources needed to connect to our instance, [PuTTY Download page](#). Go ahead and download the PuTTY and PuTTYGen executable files to your desktop.

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)
Pagant:	pagant.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-0.61-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)
SHA-256:	sha256sums	(or by FTP)	(RSA sig) (DSA sig)
SHA-512:	sha512sums	(or by FTP)	(RSA sig) (DSA sig)

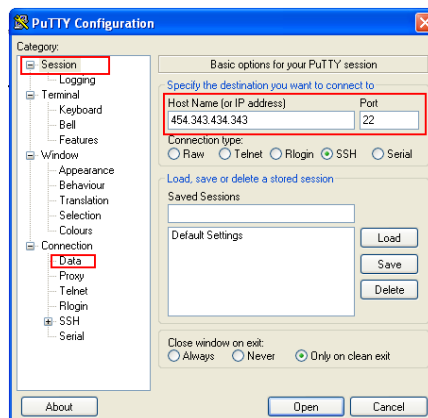
- 2) Open the PuTTYGen executable and your screen should look like the image below. This is where we are going to take your .pem file and convert it into a putty private key.



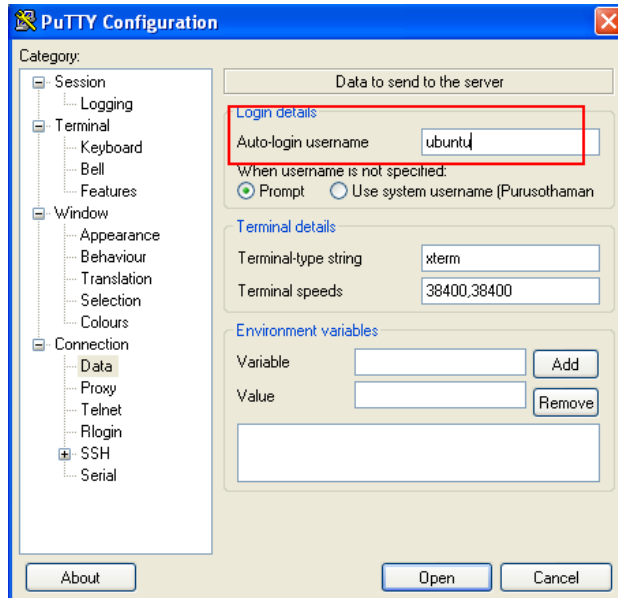
- 3) Select the “load” button and Windows Explorer should appear for you to select a file. You will have to select the option to view “all” files as the image shows. From there you will load your .pem file.



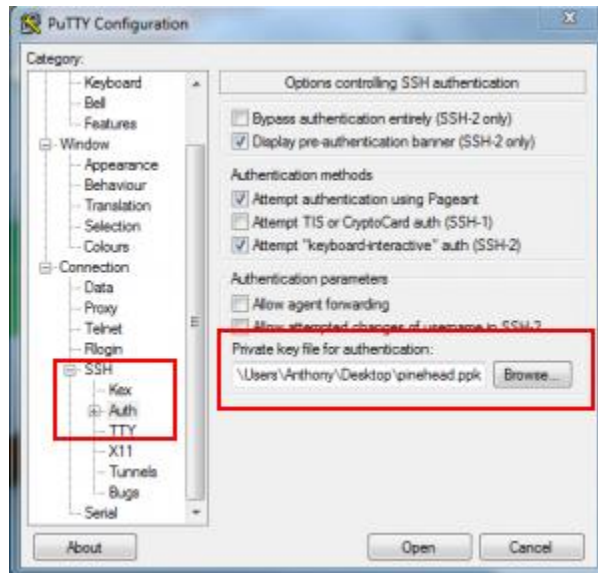
- 4) Once you’ve loaded the .pem file your screen will look like the following. Once this is complete select “Save private key.” It will ask you if you want to save without a pass code. You may choose to use a pass code but it is not necessary.
- 5) Open PuTTY and enter your Elastic IP address that you got in the previous steps.



- 6) Select “data” on the left hand side under “auto-login username” enter the user “ubuntu”.



- 7) Select “Auth” on the left hand side then under “private key for authentication” select the .ppk file we just created with PuTTYGen.



- 8) Now click *Open* to connect to your instance. It will open the SSH shell for your Linux instance.

PART 3 - Installing LAMP via SSH

- 1) If the above steps are successful, you will see a command prompt like DOS. This is where you will enter all your commands. Before installing LAMP we need to update the package database of the Ubuntu installation. To do this:

```
sudo apt-get update
```

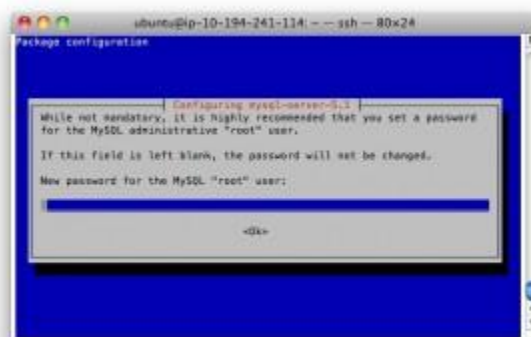
- 2) Now we can install LAMP using [tasksel](#), which is already present in this installation.

```
sudo tasksel
```

- 3) Scroll down to LAMP server and press space, then Enter.



- 4) The LAMP installation should run smoothly. You will be only asked to provide and confirm the password of the root user of the MySQL database.



- 5) Once the installation has finished the Apache server should be up and running. To test it, open a browser and type the IP address of the instance. A webpage stating "It works!" should load.
- 6) Finally, we will install phpMyAdmin in order to test the PHP and MySQL installation and also to conveniently configure the MySQL database. From the SSH session:

```
sudo apt-get install phpmyadmin
```

7) Select apache2 as the web server...



8) Leave the database configuration for later (choose No on the second prompt).



9) phpMyAdmin should now be running under <http://<instance IP>/phpmyadmin>. You can log in using the root username and the database password that you provided earlier.



Congratulations! You have successfully created an Amazon EC2 instance with LAMP!

This tutorial just scratches the surface of what can be done with Amazon AWS; we recommend learning (and breaking) a bit more about EC2 before using instances like these for production.

Purusothaman Ramanujam

PART 4 – Installing Oxwall in Linux Server

Detailed guide is in progress.

For time being, I have just provided the link below to install Wordpress. The process is same for Oxwall too.

<http://tuts.pinehead.tv/2011/12/15/configuring-apache-and-installing-wordpress-on-linux-ec2/>