

Final Year Project

Background Research

02/11/2015

**Server/Client Progress** - *Which OS should I choose and why?*

**Raspbian vs Ubuntu**

Originally I decided that because I have experience using Ubuntu and working with the terminal that I would download the latest image of Ubuntu for my raspberry pi. However, after some research I found the OS called raspbian which was developed back in 2012 around the time the first pi was released. Commonly referred to as ‘distro’, raspbian is the most common OS used for the pi. I feel it would benefit me if I choose this OS because it would give me a chance to learn a new OS. Also if I were to run into any problems with setting up the OS/Server, I would have a better chance finding the solution online due to the OS being the most common.

I read [[1]](#endnote-1)online that raspbian comes with APT (Advance Packaging Tool) and raspo-config. These tools allow me to install the latest software from raspbian repositories and also simplify the managing of rapberry pi configurations such as setting up ssh and enabling raspberry pi cameras. So I decided to download the latest [[2]](#endnote-2)version of raspbian which was named Jessie.

The only main difference between version Jessie and the previous version (whezzy) is the OS now boots straight to desktop instead of the command line. The update has also reported the OS to be more stable.

**Setup Process**

Since it was my first time setting up and using the pi, I decided to have a look for some online help.

I came across a [[3]](#endnote-3)tutorial which showed me how to install Jessie onto an SD card through the terminal of my Ubuntu OS.

Steps Involved:

* I had to locate the image which I earlier downloaded and change directories where the location of the image was. (cd /image location/)
* Next I had to view the list of devices which were connected to my machine. Once I could locate the SD card, I could then unmount the card and use the DD tool write the image to it.  
  (ddb bs=1M if=image/name of=location of card) - bite size set to 1 and input/output file set.

Now that my OS was set up, I was able to attempt to SSH to the pi and begin with the server/client connection.



**SSH Progress**

1. http://www.element14.com/community/polls/2103 [↑](#endnote-ref-1)
2. https://www.raspberrypi.org/downloads/raspbian/ [↑](#endnote-ref-2)
3. https://www.youtube.com/watch?v=pqt [↑](#endnote-ref-3)