

Setting up Raspbian & NodeLink on a Raspberry Pi

Creating the SD Card

Download the latest image here. This is hard-float enabled.

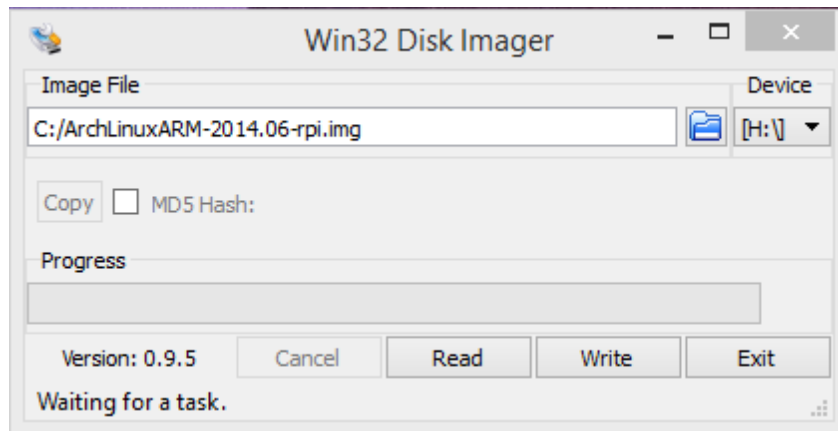
https://downloads.raspberrypi.org/raspbian_lite_latest

To copy this to an SD card (minimum 4GB) you'll be using Win32DiskImager:

<http://sourceforge.net/projects/win32diskimager/>

Insert the card in a card reader and run Win32DiskImager.

Browse to the arch image file (unzipped IMG file), set the drive letter to the SD card, and hit "Write".



Enable SSH

The default install now has SSH disabled. To enable, open the boot partition under Windows and create an empty file called *ssh* (no extension) in the directory.

Getting a Running System

Plug your Pi into the network. You need to do this even if you plan to use Wi-Fi (so that you can setup your Wi-Fi parameters). After booting up your Pi on the network, you need to determine its IP address. I find the easiest way is to look at your router's DHCP table. You can also try pinging "raspberrypi".

I recommend reserving an IP address for your Pi in your router, this way you always know the IP.

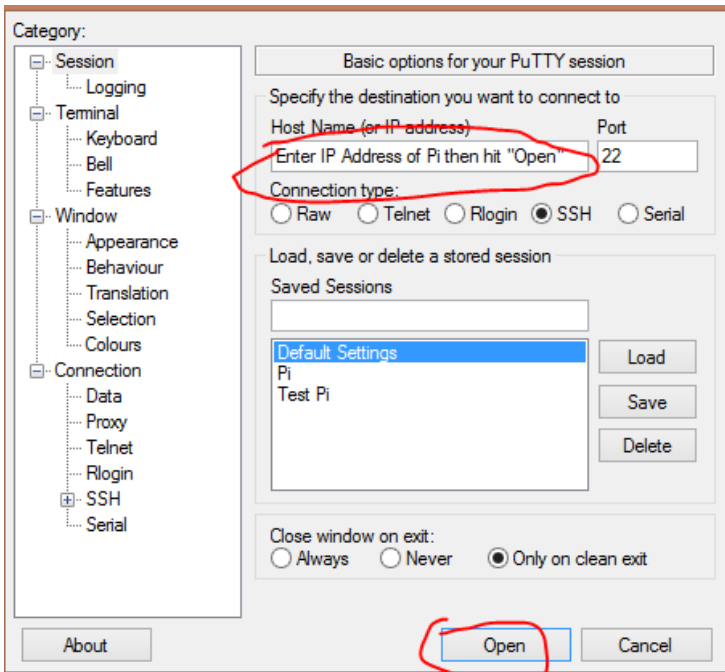
Once you get the IP, use a terminal program such as putty to login in via SSH:

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

A beginner's guide to using SSH/putty can be found here if required:

<http://www.gamexe.net/other/beginner-guide-ssh/>

One very handy shortcut with putty is that right-clicking the mouse pastes your clipboard into the terminal window (useful for cutting and pasting commands from this document).



Point putty to the IP address of your Pi (or just try the hostname raspberrypi) and hit “Open”. You should now be met with the Pi’s login prompt. User is “pi” and password is “raspberrypi”.

After logging in, you should change the root password. To do this type:

`passwd`

At this point there is a change you should make to the raspberry config:

`sudo raspi-config`

Enable wait for network on boot:

```
Raspberry Pi Software Configuration Tool (raspi-config)

1 Change User Password Change password for the current user
2 Network Options      Configure network settings
3 Boot Options         Configure options for start-up
4 Localisation Options Set up language and regional settings to match your location
5 Interfacing Options  Configure connections to peripherals
6 Overclock            Configure overclocking for your Pi
7 Advanced Options     Configure advanced settings
8 Update               Update this tool to the latest version
9 About raspi-config   Information about this configuration tool
```

```
Raspberry Pi Software Configuration Tool (raspi-config)

B1 Desktop / CLI      Choose whether to boot into a desktop environment or the command line
B2 Wait for Network at Boot Choose whether to wait for network connection during boot
B3 Splash Screen      Choose graphical splash screen or text boot
```

Mono Setup and Installing NodeLink

There is now an install script to automate the process of installing NodeLink. In the SSH window type:

`sudo curl -sSL http://automationshack.com/Files/install.sh | bash`

After this is completed you should have a running NodeLink system and can configure NodeLink by pointing a web browser to the address given in the SSH window.