Raspberry Pi Initial Configuration – NOOBS

This document will step you through setting up your new Raspberry Pi B+ or Raspberry Pi 2.

The instructions herein require that you have an image of NOOBS on a suitable SD card, and that you are running one of the Pi variants described above. If you require an image of NOOBS, you can grab it from:

https://www.raspberrypi.org/downloads/

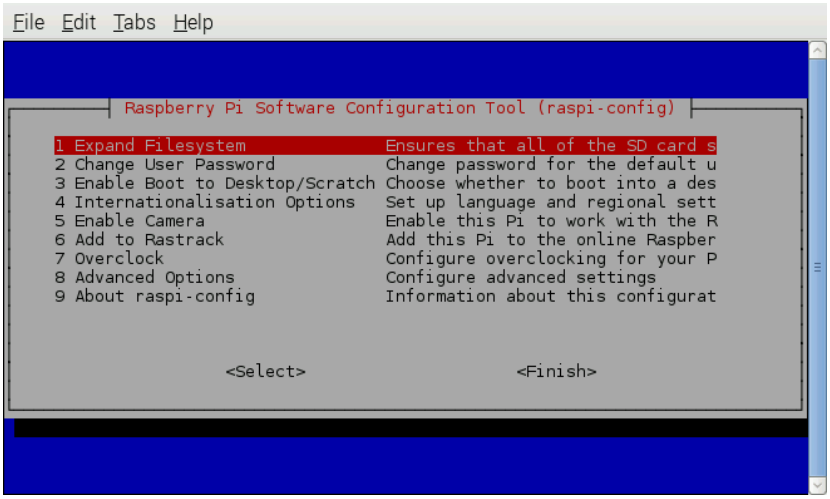
Instructions for getting the image on a SD card can be found here:

https://www.raspberrypi.org/help/noobs-setup/

[ ] Begin by connecting your Pi up as specified in the "Quick Start Guide" that comes with the boxed versions of the Pi. These instructions will assume that you have USB keyboard and mouse connections, HDMI (true or DVI adapted), power, and Ethernet connections.

Instructions will not be provided for Ethernet connections that are wireless or Ethernet connections that require authentication.

Once all connections have been made, the Pi should boot up and present the 'raspi-config' menu:



NOTE: If the Pi fails to boot, check your connections and try again. Ensure that you are using a power adaptor with sufficient current to drive the Pi. If the power LED (red) is blinking the power supply is not producing sufficient current.

Once the menu is up and the power LED is solid red, you are ready to move on.

[ ] The first thing to do is ensure that the Pi is using the correct format for your keyboard. You can check/change this in option #4, item I3. Verify that the selected keyboard configuration is correct for the kwyboard that you have. It tends to default to a UK keyboard.

As you work through the menus you can select defaults for the AltGr, Compose Key, and Control-Alt-Backspace options (or whatever your preferences happen to be).

[ ] Next you should change the user password, using option #2. Pick an appropriate password.

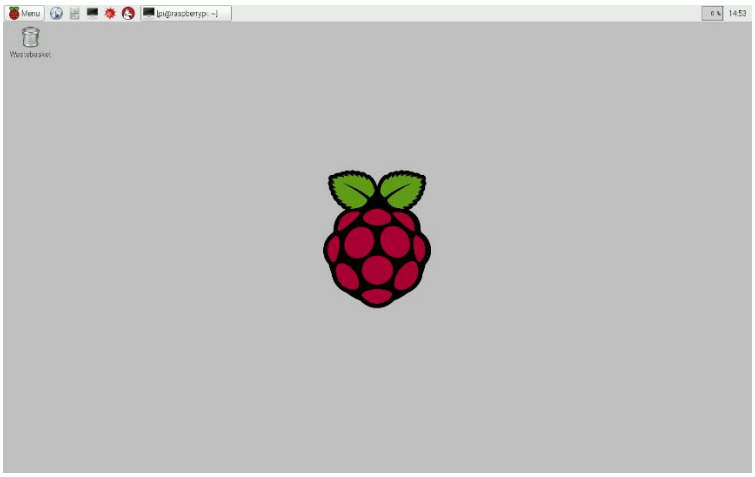
[ ] Next, change the time zone using option #4, item I2. Select your time zone.

[ ] If you are going to be using the I2C module on the Pi to interface with external devices, you may enable I2C using option #8, item A7. Pick “Yes” for both enabling the I2C interface and loading the I2C kernel module.

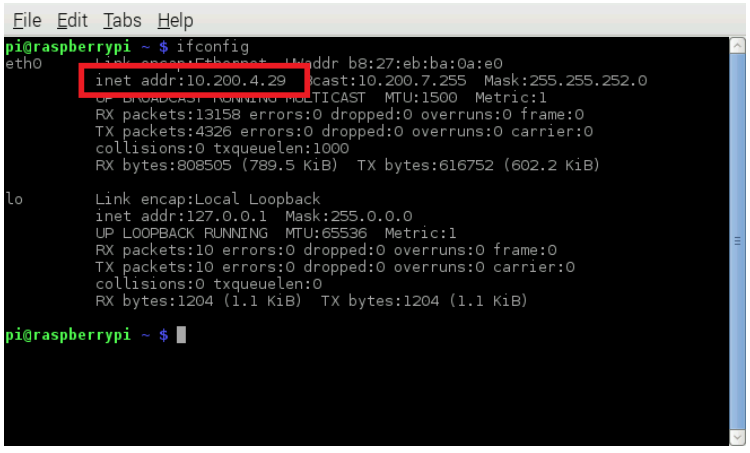
[ ] Use option #3 to select “Desktop Log in as user ‘pi’ at the graphical desktop”. This will ensure that the Pi boots to the graphical desktop automatically.

You may exit raspi-config at this point. Ensure that you use the “Finish” button to exit the program (not ESC). If you’ve done it correctly, it will ask if you want to reboot. Say yes.

After reboot, the Pi should boot straight to the desktop:



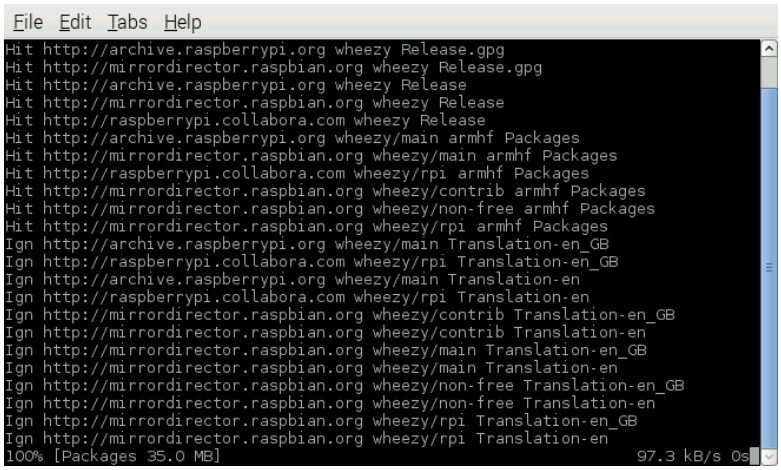
The remaining steps require that you have a functional Ethernet connection. If you are at home and you are plugging into a router, you will likely need to do nothing special. If you are using a wireless USB dongle, you can use the built in WiFi Configuration tool found on the Preferences menu. To ensure that you do have a connection, run the LXTerminal program and type “ifconfig” to see if you have a valid IP address:



NOTE: Some networks will provide an IP address, but will require you to open and use a web browser to enter your login credentials, or to accept an end-user agreement.

If you have a valid address then you should be able to proceed through the next steps.

[ ] Update the Pi using your internet connection by typing in “sudo apt-get update” in a console window:



What you should see is the Pi downloading a bunch of stuff. If you see a bunch of errors, you need to troubleshoot your internet connection. If what you have looks somewhat like the above, then you are probably ready to apply updates to your Pi.

[ ] Upgrade the Pi using your internet connection by typing in “sudo apt-get upgrade” in a console window.

Depending on how old the image is that you are using, it could take some time for the Pi to resolve what needs to be upgraded. When it is done churning for a while, it will tell you how much space it will require to do the upgrade, and if you wish to proceed. Say yes.

[ ] You are now ready to install some software. Again, this will require an active internet connection.

There are *many* applications that you may install on the Pi, as it is pretty much just a Linux computer. To get you up and running, consider the following applications:

Application	**Purpose**
geany	An editor for many text formats, and pretty good for Python
mono-complete	The Mono runtime
monodevelop	A full IDE for writing C#/C++ code on the Pi (requires xterm)
monodevelop-versioncontrol	SVN/Git Version Control for MonoDevelop
xterm	Another terminal program (used by monodevelop)
rapidsvn	A SVN client
libreoffice	A complete Office compatible suite of programs
i2c-tools	Tools to assist with and operate the I2C bus.

To download and install any of these (or other) applications use:

sudo apt-get install *application*

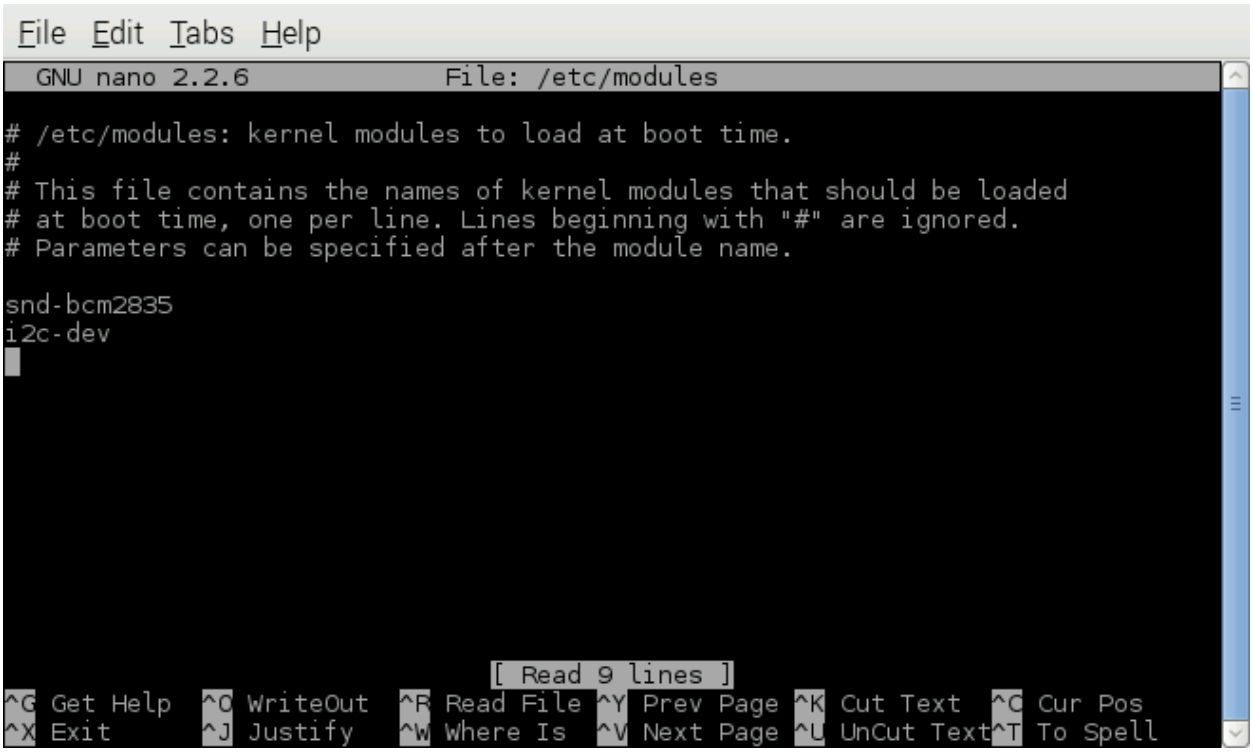
…where *application* is the program you want to install.

[ ] If you intend to use the I2C bus to connect to external devices, you will need to edit a file or it won't work.

In a console, type:

sudo nano /etc/modules

In the editor that appears, add the line "i2c-dev":



Once done, hit <Ctrl> X to exit. Ensure that you save and overwrite the file on the way out.

Reboot the Pi and you should be good to go!