Getting started with Raspberry Pi and

Intro

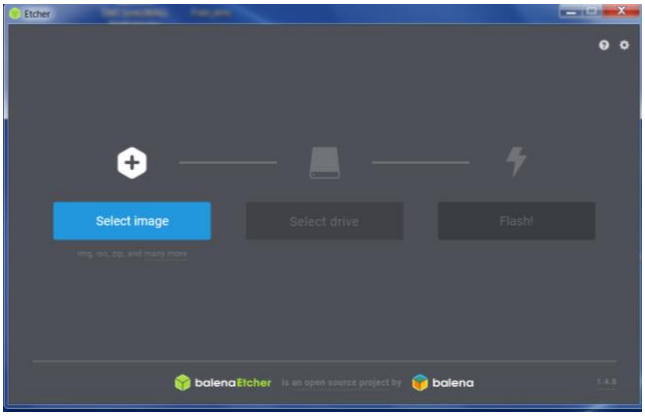
- While the raspberry is very versatile, it isnt easy to use as a standalone. Usually, to use it as a computer, you'll need an hdmi-ready screen, a keayboard and a mouse, each one of them many times the size of a raspberry pi.
- To avoid that, the best way is to access the raspberry pi remotely, using SSH or VNC.
  This tutorial will take you from getting the raspberry running to installing an os, configuring it and finally accessing it remotely.
- You'll need:
- A Raspberry Pi.
- A micro usb charging device, minimum 2.5A output
- For the first-run: HDMI screen, keyboard and mouse. You won't need them after though
- A SD card, 16Gb is a good start
- A SD card adapter (either embedded in your laptop or a SD to USB device)
- an iso of Raspbian or Noobs
- A wifi-connexion sharing device (most android phones have them now)
- Balena Etcher, the software that will transfer Raspbian to the SD card and make it a bootable device
- VNC Viewer and/or Putty

Setting up the raspberry

Set the raspberry on a non-conductive material, plug in the screen, the keyboard and mouse.
Micro-USB powering device will come after, once the SD card is in.

Getting the SD Card ready

- Download either Raspbian or Noobs
- Download balena etcher and install it. The interface is pretty straight forward



- First button let you browse to find Raspbian/noobs Iso file.
- Second lets you select the SD card (it usually does it on its own)

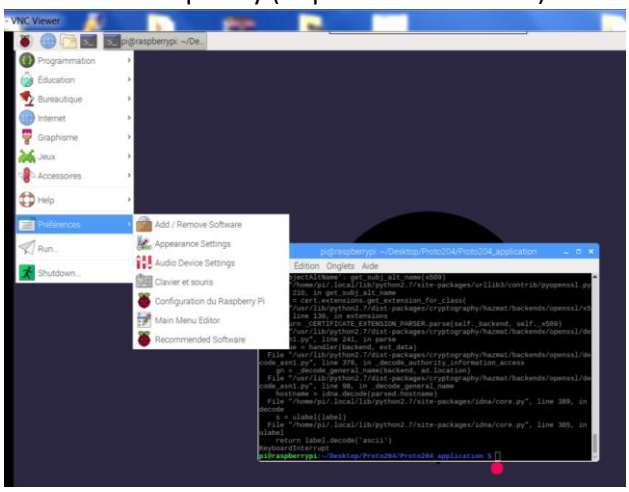
- Last one gets the process started. Usually takes 10/15mns.
- Once it's done, remove the SD Card and insert it in the Raspberry (bottom-side of the PCB)

Getting started

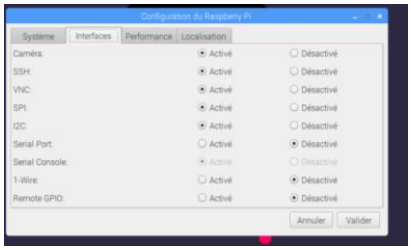
- Plug in the micro-usb powering device.
  If using Noobs, you will be prompted with a screen asking you which OS to install. Pick raspbian. If you picked the raspbian iso, you'll be good to go.
- You should see a rainbow screen, a few raspberries on a loading screen and finally be on the Pi's desktop. If you installed from scratch, you'll be prompted with a first-time interface.
- When it comes to wifi, enable your wifi connection sharing device and configure the raspberry to use it. On your phone screen you should see a notification.
- Click on it, then list of devices and there you should see your raspberry with its IP address.
- Normally, this IP should remain the same as long as the MAC address is the same.

Enabling SSH/VNC

- Click on the raspberry (top left of the screen)



- Then preferences/configuration.
- This menu pops up. Select the second notch

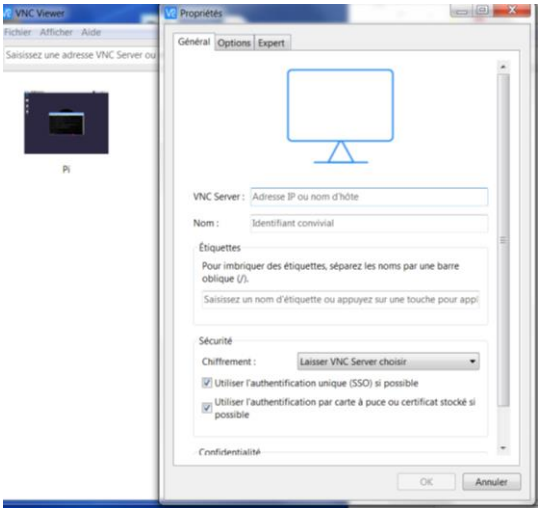


- Enable SSH and VNC, eventually I2C if you plan on using sensors, screens or others.
- Click on Ok/Valider
- Your raspberry will want to reboot so let it do just that.

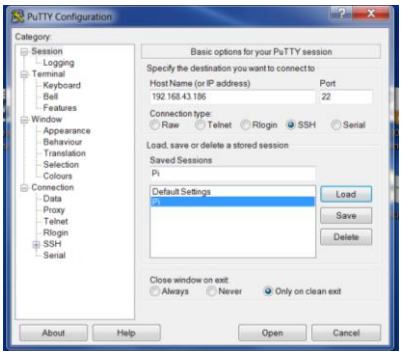
Setup the interface on your computer

- Install VNC Viewer and/or Putty.

- MAKE SURE YOUR COMPUTER IS ALSO CONNECTED TO THE WIFI SHARING DEVICE!
  We're using a local IP so the need to be on the same network
- For VNC Viewer, when on the main window, press Ctrl+N



- Enter the Ip address you saw on your phone, give it a name and press ok. Now you just need to click on the window.
- When you do, a windows pops up and ask you for a login and password. Unless changed (which I highly recommend you do on your own PI, l/p is pi/raspberry
- Now you can use it just as if you were in front of the screen.
- For Putty



- Just enter the IP address.
- hile you're at it, you might want to give it a name on the saved sessions field and then press save. When you're done, press open.
- A terminal window opens up and ask you for the user: pi and a password: raspberry, unless changed.
- Now you can just navigate using the terminal.