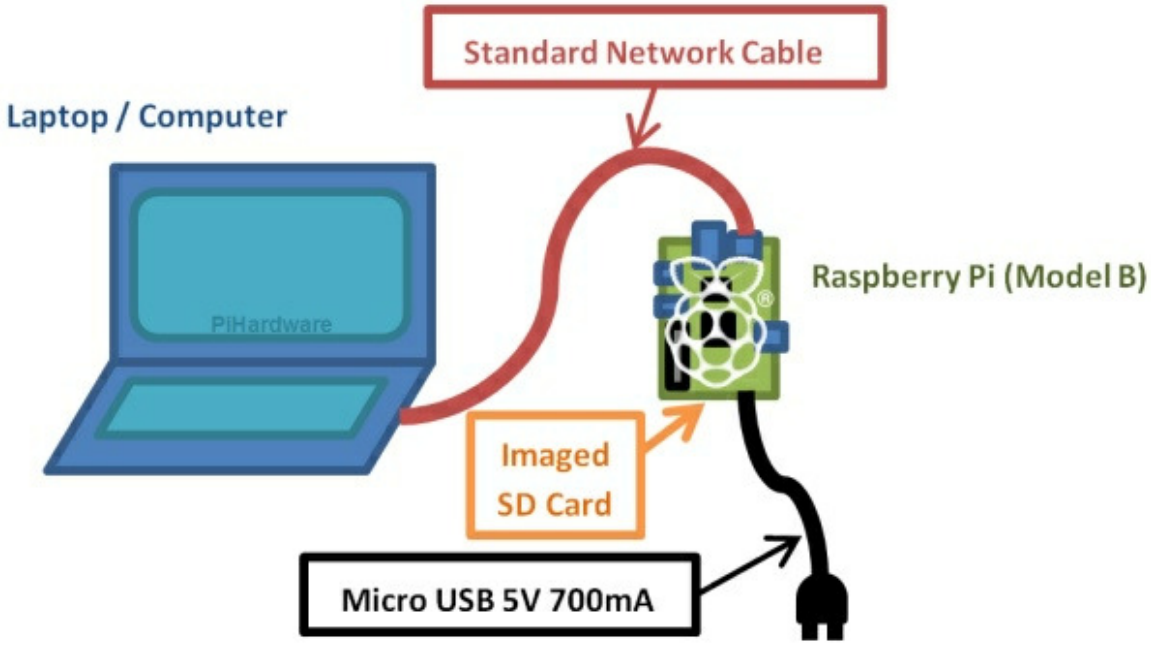
How to use Windows and Raspberrry Pi ?

Notebook: iraspberrypi
Created: 8/21/2014 3:41 PM **Updated:** 8/31/2014 3:52 PM

This article describe, how to use your to use your laptop or desktop's display and keyboard as the display and keyboard for your Pi. You won't need to do any soldering or to buy any special equipment: all you need is a network cable.



Require Hardware:-

Raspberry Pi
SD Card
5 Volt power supply (with adapter if you want to connect Camera Module to RPi)
Ethernet cable
laptop or desktop (with keyboard & mouse)

Require Software:-

putty on Windows (~~http://www.putty.org/~~)
Google Chrome with VNC viewer. (see snap below)
tightvncserver on Raspberry Pi (if you want to use GUI) (see basic Raspberry Pi Setup guide.)
WinScp on Windows - to transfer files between RPi & Windows

Follow the Steps:-

What are we trying to achieve ?
A good way to remotely control a Raspberry Pi is to connect it to a network. This will provide access to the terminal, by usig SSH, even the ability to view the desktop using VNC.

Step 1:-

Windows Instructions:

Find the Laptop's Network Settings
From the Start Menu, run the "Control Panel".
(Windows 7/Vista) Open "Network and Sharing Center" and click on "Change adapter settings" on the left side. (Windows XP) Open "Network Connections"
Find the item which relates to your Wired network adaptor (by default this is usually called "Local Area Connection").
Right-click on it and open "Properties".
Select the item which is called "Internet Protocol (TCP/IP)" or "Internet Protocol Version 4 (TCP/IPv4)" if there are two (the other is Version 6), and open the "Properties".

Hopefully, the IP Address will be set to "Obtain an IP address automatically". If not don't worry, just take a note of the IP address and Subnet Mask set here (you may find the rest of the information useful to keep, but we won't need it this time). If you know what you are doing, you can change this setting to automatic, or you can leave it alone (we shouldn't need to adjust it as long as we know the IP Address).

Mac and Linux:

You will need to locate the settings for your wired adaptor and check to see if the IP Address is configured automatically, or fixed to a specific value.
To get to network settings on Mac OS X:

1) Load System Preferences.
2) Click Networks.

Step 2 – Setting the Raspberry Pi's IP address

1. Ensure the Raspberry Pi is powered off, and remove the SD-Card.

2. Insert the SD-Card into a card reader and plug it into your laptop.

3. Find the drive and you should find several files on the Card (note it a lot smaller than you'd expect since it is only the boot section of the Card (the rest is hidden)).

4. Make a copy of cmdline.txt and rename it cmdline.normal

5. Edit cmdline.txt and add the IP address at the end (be sure you don't add any extra lines).

For network settings where the IP address is obtained automatically, use an address in the range 169.254.X.X (169.254.0.0 – 169.254.255.255): ip=169.254.0.2
For network settings where the IP address is fixed, use an address which matches the laptop/computers address except the last one. ip=192.168.0.2

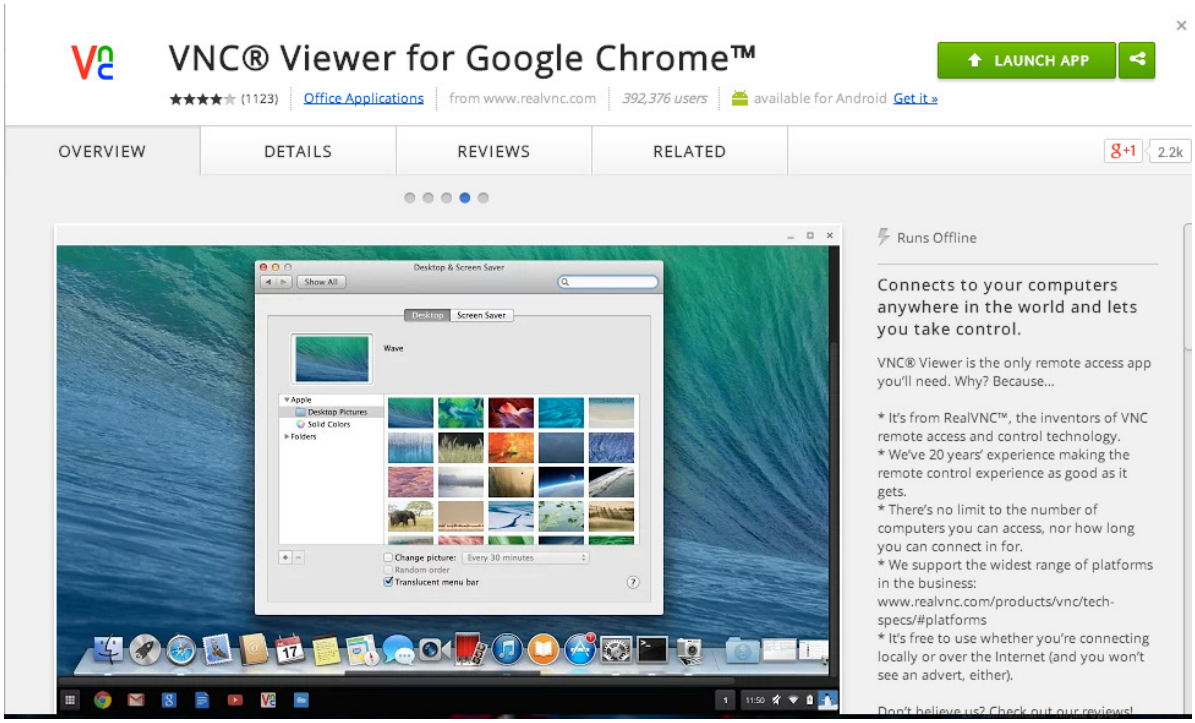
Ensure you take note of this IP address (you will need it every time you want to directly connect to the Raspberry Pi).

6. Make new copy of cmdline.txt and rename it cmdline.direct

7. To swap between configurations, just replace cmdline.txt with either cmdline.normal or cmdline.direct

8. Return the card to the Raspberry Pi. Attach the network cable attached to both the computer and Raspberry Pi and power up.

VNC Viewer



main doc:- http://www.raspberrypi.org/use-your-desktop-or-laptop-screen-and-keyboard-with-your-pi/