Setting up raspbian in R-Pi from SD Card.

I would teach these for Linux users, I would lay down the precise steps

- You need to have an active internet connection, a >=4GD sd card and its adapter, and a .img file of the latest distribution of raspbian, which can be found here. <u>http://www.raspberrypi.org/downloads</u> Get the latest image file and extract it to any folder.
- 2) Now plug your adapter with SD card in your laptop, and you need to format it. So open up terminal and type **sudo gparted**, if you do not have gparted just get it from net, by typing **sudo apt-get install gparted**. It will open a window, select GParted-> Devices-> /dev/sdb. You should get something like this.

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/dev/sdb1 7.40 GiB					
rtition	File System	Size	Used	Unused	Flags
dev/sdb1	Fat32	7.40 GiB	14.79 MiB	7.38 GiB	
Inallocated	unallocated	2.00 MiB			

- 3) Now right click the above selected (or something similar) and format as fat32. Then click on the green tick mark on the panel and apply the changes you just did.
- 4) Now go to terminal and unmount the SD card type sudo umount /dev/sdb1. Your laptop may not have opened the SD card in sdb1 like me so just put there whatever the gparted showed you like in the above image.
- 5) Now we need to burn the image file of Raspbian into your SD card, so just type in the terminal shell **sudo dd bs=4M if=~/Downloads/2013-12-20**wheezy-raspbian.img of=/dev/sdb

Here you will have to make changes, Downloads is where my .img file was, and the wheezy was my version in your case it might be a different location of .img file and different raspbian distribution, so just use your corresponding file path. IMPORTANT, it is sdb and not sdb1 or sdb2 so be careful. 6) Go and have a cup of coffee, this will take a while. Its finished when you get something like.



- 7) Now your SD card is ready, remove the adapter and plug it in again, you will see two disks coming up, one named boot and other something else. Open up the terminal and type **sudo nautilus**, again if you do not have nautilus get it by **sudo apt-get install nautilus**. Your home folder will open, do not close this window, we will change the IP configuration of R-pi using this rooted file access.
- 8) Navigate to the directory other then boot, go to ext->network and open up the file name Interfaces, now you need to edit it like in window below.



- 9) You can keep your address as 192.168.0.xx and the rest are usually the same, Gateway and netmask is usually the same as your wi-fi router settings. Remember the IP you have defined.
- 10) If you have DNS servers, like in IITB you need to change one more thing, go back to ext folder and search for resolv.conf. and edit it with your DNS server as shown.



- 11) Finally, after 10 steps you are done. Insert SD card into R-pi and connect it with Ethernet cable with your laptop or router, the power up the R-pi with micro-USB cable. You will see a red LED and then few moments later all the LED should light up. Its booted!
- 12) To excess it , just type in terminal ssh -X <u>pi@192.168.0.xx</u> Default password is raspberry.
- 13) Check out how to proceed from here in the next tutorial.

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