1, Environmental requirements

Ubuntu

Space : 100 GB

<https://source.android.com/source/downloading.html>

# **Requirements**

<https://source.android.com/source/initializing.html>

For **Gingerbread (2.3.x)** and **newer versions**, including the master branch, **a 64-bit environment is required.** Older versions can be compiled on 32-bit systems.

<https://source.android.com/source/requirements.html>

The [Android Open Source Project (AOSP)](https://android.googlesource.com/) master branch is traditionally developed and tested on Ubuntu Long Term Support (LTS) releases, but other distributions may be used. See the list below for recommended versions.

* Android 2.3.x (Gingerbread) - Android 5.x (Lollipop): Ubuntu 12.04 (Precise)

Jelly Bean >>4.1.x version >> Supports Nexus S 4G

<https://source.android.com/source/build-numbers.html>

Execute a command

sudo apt-get update

After the resumption of execution

2, Download the GIT program

Git is a version control software. Input in the terminal:

sudo apt-get install git-core gnupg flex bison gperf build-essential \zip curl zlib1g-dev libc6-dev libncurses5-dev x11proto-core-dev \libx11-dev libreadline6-dev libgl1-mesa-dev tofrodos python-markdown \libxml2-utils

3, Set download directory

$ mkdir ~/bin

$ PATH=~/bin:$PATH

$ curl https://dl-ssl.google.com/dl/googlesource/git-repo/repo > ~/bin/repo

$ chmod a+x ~/bin/repo

Create a folder for download, save the contents of the

$ mkdir WORKING\_DIRECTORY

$ cd WORKING\_DIRECTORY

4, To download the kernel source code

My git account details : rukmalhe/rukmal123

repo init -u https://android.googlesource.com/platform/manifest -b android-4.1.1\_r6

Get https://gerrit.googlesource.com/git-repo/clone.bundle

checkout source code to our set working directory:

$ repo sync

May encounter errors

1)error: RPC failed; result=56, HTTP code = XX MiB | XX KiB/s

Encounter the above problems, the general Git is not installed correctly, please re install the use of the second step

Increase git buffer

git config --global http.postBuffer 2M

Ref > <https://docs.joomla.org/Using_Github_on_Ubuntu>

2) error: Failed connect to android.googlesource.com:443;Connection refused while accessing

fatal: HTTP request failed

error: Cannot fetch platform/tools/motodev

error: Cannot fetch platform/frameworks/base

error: Cannot fetch platform/prebuilts/sdk

error: Exited sync due to fetch errors

**Solution:** to edit the /etc/hosts file

$ vim /etc/hosts

Add the following content, save (ahead of time saved):

74.125.31.82 www.googlesource.com

74.125.31.82 android.googlesource.com

203.208.46.172 cache.pack.google.com

59.24.3.173cache.pack.google.com

If unable to save the case (generally because hosts is read-only), use the following command editor:

$sudo gedit /etc/hosts

Edit and save hosts file after the re input:

$ repo sync

Build Errors

=========

/usr/lib/x86\_64-linux-gnu/libSDL.so: file not recognized: File format not recognized

collect2: ld returned 1 exit status

make: \*\*\* [out/host/linux-x86/obj/EXECUTABLES/emulator-ui\_intermediates/emulator-ui] Error 1

make: \*\*\* Waiting for unfinished jobs....

/usr/lib/x86\_64-linux-gnu/libdl.so: file not recognized: File format not recognized

collect2: ld returned 1 exit status

make: \*\*\* [out/host/linux-x86/obj/EXECUTABLES/emulator-arm\_intermediates/emulator-arm] Error 1

Note: Some input files use unchecked or unsafe operations.

Note: Recompile with -Xlint:unchecked for details.

**Setting env for AOSP**

Ref : <http://forum.xda-developers.com/showthread.php?t=2639611>