blahbl4hblah

19th February 2012, 07:26 AM *(Last edited by blahbl4hblah; 8th September 2012 at 05:04 AM.)*

#1

Recognized Developer - **OP**
Thanks Meter **1451**
Posts: **5,473**
Join Date: **Oct 2010**
Location: **Los Angeles, CA**

[GUIDE]Compile AOKP and CyanogenMod for HTC Sensation on Ubuntu (ONLY 64-bit)

First of all, BIG BIG thanks to SparksCo for his guide for compiling CM7, I used his guide as a base for this

Credits:
CyanogenMod for giving their source to everyone
SparksCo for teaching me what I know
Vorbeth for releasing the original source for Sensation
Elelinux for his hardwork on adding things to the device tree

I'm making this guide for those who don't want to wait for a new CyanogenMod or AOKP build and want to build it themselves.
Working on both ubuntu 11.10 and 12.04

NOTE: DEPENDING ON YOUR COMPUTER'S HARDWARE, COMPILING TIME WILL BE DIFFERENT
If you have a MAC OSX, I do not have a guide for that as I don't have one.

Be aware for which part is for AOKP and CyanogenMod
I have put "AOKP" and "CyanogenMod" Labels to help

EVERYTHING THAT IS IN A BOX, OPEN TERMINAL AND ENTER THE COMMAND IN THAT SECTION

Guide Requirements:
- Computer
- Common Sense
- Some Linux Experience
- Ubuntu 64-bit Installed
- At least 4GB of ram with a dual core processor.

Required Software to Install:

For 32-bit and 64-bit System

Code:

```
sudo apt-get install git-core gnupg flex bison python rar original-awk gawk p7zip
```

For 64-bit System

Code:

```
sudo apt-get install g++-multilib lib32z1-dev ia32-libs lib32ncurses5-dev lib32re
```

Other Required Software:

Code:

```
sudo apt-get install libc6-dev x11proto-core-dev libx11-dev libgl1-mesa-dev mingw
```

Link libx11

Code:

```
sudo ln -s /usr/lib/i386-linux-gnu/libX11.so.6 /usr/lib/i386-linux-gnu/libX11.so
```

You must have a 1.6.x to compile on the ics branch of cyanogenmod.

MUST Install Java 1.6 (NOT Java 1.7):

1a. *Download **Java JDK** for Linux 64-bit from Java site*

Code:

```
http://www.oracle.com/technetwork/java/javase/downloads/index.html
```

Be sure to download (## will change if there's an update):

Code:

```
jdk-6u##-linux-x64.bin
```

1b. *Move the downloaded Java JDK into your home directory*

1c. *Be sure to completely remove ALL OTHER JAVA*

Don't worry if some things are asked to be installed just accept!

Code:

```
sudo apt-get purge openjdk-\* icedtea-\* icedtea6-\*
```

1d. *Copy Java JDK into /opt/java/64*

Code:

```
sudo mkdir -p /opt/java/64/
sudo cp jdk-6u##-linux-x64.bin /opt/java/64
sudo su -
cd /opt/java/64
chmod +x jdk-6u##-linux-x64.bin
./jdk-6u##-linux-x64.bin
exit
```

1e. *Add the needed PATH to .bashrc*

Code:

```
gedit ~/.bashrc
```

Add these lines to .bashrc (Better to be near the top):

Code:

```
# Java PATHs
export JAVA_HOME=/opt/java/64/jdk1.6.0_##
export PATH=$PATH:$JAVA_HOME/bin
```

Setting Up Android SDK

2a. Download Android SDK at http://developer.android.com/sdk/index.html

2b. Extract it to your home folder [Ex. ~/android/sdk]

2c. Add Android SDK Path

gedit ~/.bashrc
Enter the Following:

Code:

```
#Android PATH
export PATH=$PATH:~/android/sdk
export PATH=$PATH:~/android/sdk/platform-tools
export PATH=$PATH:~/android/sdk/tools
```

2d. Add Extra Path For Device:

sudo gedit /etc/udev/rules.d/99-android.rules (Text Editor will open up)
Enter this in it:

Code:

```
#Acer
SUBSYSTEM==usb, SYSFS{idVendor}==0502, MODE=0666
#ASUS
SUBSYSTEM==usb, SYSFS{idVendor}==0b05, MODE=0666
#Dell
SUBSYSTEM==usb, SYSFS{idVendor}==413c, MODE=0666
#Foxconn
SUBSYSTEM==usb, SYSFS{idVendor}==0489, MODE=0666
#Garmin-Asus
SUBSYSTEM==usb, SYSFS{idVendor}==091E, MODE=0666
#Google
SUBSYSTEM==usb, SYSFS{idVendor}==18d1, MODE=0666
#HTC
SUBSYSTEM==usb, SYSFS{idVendor}==0bb4, MODE=0666
#Huawei
SUBSYSTEM==usb, SYSFS{idVendor}==12d1, MODE=0666
#K-Touch
SUBSYSTEM==usb, SYSFS{idVendor}==24e3, MODE=0666
#KT Tech
SUBSYSTEM==usb, SYSFS{idVendor}==2116, MODE=0666
#Kyocera
SUBSYSTEM==usb, SYSFS{idVendor}==0482, MODE=0666
#Lenevo
SUBSYSTEM==usb, SYSFS{idVendor}==17EF, MODE=0666
#LG
SUBSYSTEM==usb, SYSFS{idVendor}==1004, MODE=0666
#Motorola
SUBSYSTEM==usb, SYSFS{idVendor}==22b8, MODE=0666
#NEC
SUBSYSTEM==usb, SYSFS{idVendor}==0409, MODE=0666
#Nook
SUBSYSTEM==usb, SYSFS{idVendor}==2080, MODE=0666
#Nvidia
SUBSYSTEM==usb, SYSFS{idVendor}==0955, MODE=0666
```

After this, close it and then enter:

Code:

```
sudo chmod +x /etc/udev/rules.d/99-android.rules
```

If your using ANY AOSP rom like AOKP or CM9 and CM10
Go into developer options and go to root access and change it from "Apps only" to Apps and ADB"

2e. Install Certain Android SDK Tools

Type:

Code:

```
android
```

```
android
```

Check Android SDK Tools and Android SDK platform-tools and Install them

Setting Up the .bashrc file

gedit ~/.bashrc
Enter the Following:

Code:

```
#Android PATH
export PATH=$PATH:~/android/sdk
export PATH=$PATH:~/android/sdk/platform-tools
export PATH=$PATH:~/android/sdk/tools

#Java PATH
export JAVA_HOME=/opt/java/64/jdk1.6.0_32
export PATH=$PATH:$JAVA_HOME/bin
```

3b. After your done setting this up, close .bashrc file.

Setup Workplace

4a. Download CyanogenMod 9 Source

Code:

```
mkdir -p ~/bin
mkdir -p ~/android/system
curl https://dl-ssl.google.com/dl/googlesource/git-repo/repo > ~/bin/repo
chmod a+x ~/bin/repo (Reboot your computer after this)
```

4b. Add Repo Path

gedit ~/.bashrc

Enter the following:

Code:

```
export PATH=$PATH:~/bin
```

4c. Setup Necessary Source

For CyanogenMod 9

Code:

```
cd ~/android/system
repo init -u git://github.com/CyanogenMod/android.git -b ics
```

For CyanogenMod 10

Code:

```
cd ~/android/system
repo init -u git://github.com/CyanogenMod/android.git -b jellybean
```

4d. Download Necessary Source

Code:

```
repo sync
```

4e. Download Extra Needed Files

Code:

```
~/android/system/vendor/cm/get-prebuilts
```

Your Final .bashrc

It SHOULD Look Something Like This:

Code:

```
#Android PATH
export PATH=$PATH:~/android/sdk
export PATH=$PATH:~/android/sdk/platform-tools
export PATH=$PATH:~/android/sdk/tools
export PATH=$PATH:~/bin

#Java PATH
export JAVA_HOME=/opt/java/64/jdk1.6.0_##
export PATH=$PATH:$JAVA_HOME/bin
```

Building CyanogenMod

Code:

```
. build/envsetup.sh; lunch cm_pyramid-userdebug; mka bacon
```

Making a New Build

Go inside to your source folder and delete the 'out' folder

THEN Do This:

Code:

```
repo sync
```

Code:

```
. build/envsetup.sh; lunch cm_pyramid-userdebug; mka bacon
```

Before you even ask for help, do help yourself and search for it first!

[

REPLY

The Following 64 Users Say Thank You to blahbl4hblah For This Useful Post: [Click to Expand]