Goto: <https://www.virtualbox.org/wiki/Downloads> and download appropriate VM software.

Download .iso file for Ubuntu 15.04 (also works in 12)

Download guest additions

Set up VM:

1. Select New
2. Give it a name
3. Give it ram (4+ gig if possible)
4. Make a virtual hard drive. Use the default VDI. I recommend a fixed drive or at least 32 gig
5. Highlight your new machine and click settings.
6. System Tab:
   1. Uncheck floppy drive
   2. Under processor tab, give what cores you can spare
7. Display tab, max out video memory
8. Storage tab:
   1. Delete IDE drive
   2. Add virtual cd drive under SATA, click leave empty
   3. Highlight new empty CD drive and click small disk on far right side of the box
   4. Browse to your .iso file
9. Start up new machine and follow on screen instuctions.
10. Update Ubuntu with auto-update.
11. Click devices and select ‘insert guest additions CD’
12. Restart the VM
13. Open a terminal:
    1. sudo apt-get update
    2. sudo apt-get install python-software-properties
    3. sudo add-apt-repository ppa:webup8team/java
    4. sudo apt-get update
    5. sudo apt-get install git
    6. sudo apt-get install curl
    7. sudo apt-get install oracle-java8-installer
    8. sudo apt-get install eclipse-platform
    9. type eclipse to start eclipse
14. Open a browser and navigate to: <https://developer.android.com/intl/zh-TW/sdk/index.html>
15. Download the Linux SDK only (last option on the first grey box)
16. Unpack SDK into a suitable directory.
17. In eclipse:
    1. Select Help->check for updates and follow directions to update eclipse
    2. Select Help->Install new software
    3. Click Add in top right corner
    4. Put - <https://dl-ssl.google.com/android/eclipse/> in ‘work with’ box and click ok.
    5. Check the box next to Developer Tools and click next
    6. Click next and then Finish (if you get a source warning, just click ok)
    7. Restart eclipse
    8. When the ‘welcome to android development’ comes up, select use existing SDK’s
    9. Browse to the location of the SDK download and click next.
18. Find etc/apt/sources.list and set to root server (Use file explorer, double click sources.list and use drop-down tab or manually edit)
19. Open a terminal:
    1. sudo apt-get update
    2. sudo apt-get install autoconf libtool build-essential pkg-config libevent-dev libssl-dev git –y
    3. git clone <https://github.com/OpenNetworkingFoundation/libfluid.git>
    4. cd libfluid
    5. ./bootstrap.sh
    6. cd libfluid\_base
    7. ./configure –prefix=/usr
    8. make
    9. sudo make install
    10. cd ..
    11. cd libfluid\_msg
    12. ./configure –prefix=/usr
    13. make
    14. sudo make install
    15. cd ..
    16. cp -R libfluid\_base examples/android/jni
    17. cp -R libfluid\_msg examples/android/jni
    18. cd
    19. wget <http://dl.google.com/android/ndk/android-ndk-r8e-linux-x86_64.tar.bz2>
    20. tar xjvf android-ndk-r8e-linux-x86\_64.tar.bz2
    21. mv android-ndk-r8e ndk
    22. cd libfluid/examples/android/jni/
    23. curl -LO <https://github.com/downloads/libevent/libevent/libevent-2.0.21-stable.tar.gz>
    24. tar xzvf libevent-2.0.21-stable.tar.gz
    25. mv libevent-2.0.21-stable libevent
        1. nano build\_libs.sh ->> set NDK-ROOT variable to ~/ndk
    26. Finally: ./build\_libs
20. Assuming all that worked, we’re ready to import the project into eclipse and begin to edit it
    1. Make sure you have android-8 AND android-17 updated in your SDK
    2. Navigate to SDK/tools directory and run ./android then update what you need (8 and 17)
21. Open eclipse and click ->> file, import, general, existing projects into workspace. Import android folder (libfluid/examples/android)
22. Set NDK root folder in eclipse. Window → Preferences → Android → NDK (select ndk folder by using browse button)
23. Debug app to run it on Android device (setup adb make sure the device is identifiable)