

1. Operating System: Ubuntu 14.04
2. Github Repo: <https://github.com/cnsgcu/Droidfluid/tree/master/app/src/main>
3. Android Studio 1.4 <http://developer.android.com/sdk/index.html>
4. Android SDK 23.0 Comes with Android Studio
5. Android Build tools 23.0.2
6. Android NDK http://dl.google.com/android/ndk/android-ndk-r10e-linux-x86_64.bin
7. External library
 - a. pcap (Android version): https://github.com/android/platform_external_libpcap
8. update the following files in your project (Assuming your NDK, SDK and libpcap in the following locations of user1)
 - a. local.properties file


```

sdk.dir=/home/user1/Android/Sdk
ndk.dir=/home/user1/Android/Ndk
          
```
 - b. build.gradle


```

def ndkBuild = '/home/user1/Android/Ndk/ndk-build'
def libpcapDir = '/home/user1/Android/Ndk/external/libpcap'
          
```

9. Pre-compile libfluid follow the steps

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-r10e-linux-x86_64.bin
20. tar xjvf android-ndk-r10e-linux-x86_64.tar.bz2
21. mv android-ndk-r10e 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
26. nano build_libs.sh ->> set NDK-ROOT variable to ~/ndk
27. Make sure you have "arm-linux-androideabi-4.8" toolchain in build_libs.sh
28. if you see a different one, change the name to arm-linux-androideabi-4.8


```

PATH=$PATH:$NDK_ROOT/toolchains/arm-linux-androideabi-4.8/prebuilt/linux-x86/bin
PATH=$PATH:$NDK_ROOT/toolchains/arm-linux-androideabi-4.8/prebuilt/linux-x86/include
      
```
29. Finally: ./build_libs

30. Copy libevent, libfluid_msg and libfluid_base to the project Droidfluid/app/src/main/prebuilt

