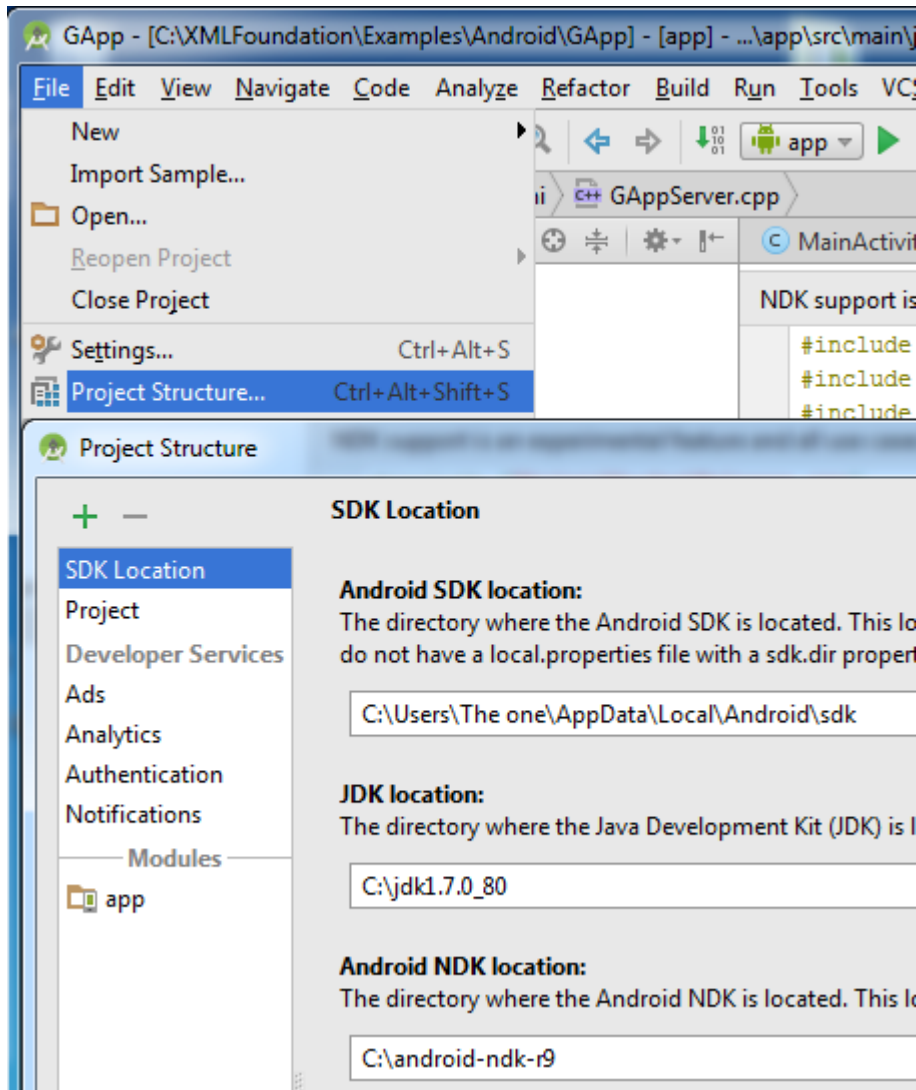


On Windows – Using Android Studio 1.3 – (not the beta version) first obtain the versions of the JDK and NDK pictured here:



Updates for Java SE 7 released after April 2015, and updates for Java SE 6 released after April 2013 are only available to Oracle Customers through My Oracle Support (requires support login). It can be hard to find the JDK from last year on Oracles site, here is a link that may help:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html>

My Windows Android Studio environment works. The binary created from the example source works in the emulator and on my Android devices. I cannot use the most recent versions of JDK or NDK at the moment, I am 1 version back on both of them. When using the most recent NDK, I get this at runtime:

```
09-22 19:00:13.833 809-809/com.android.gapp E/dalvikvm: dlopen("/data/app-lib/com.android.gapp-2/libGAppNative.so") failed: Cannot load library: soinfo_relocate(linker.cpp:975): cannot locate symbol "signal" referenced by "libGAppNative.so"...
```

```
09-22 19:00:13.833 809-809/com.android.gapp W/dalvikvm: Exception Ljava/lang/UnsatisfiedLinkError; thrown while initializing Lgapp/GAppGlobal;
```

09-22 19:00:13.833 809-809/com.android.gapp D/AndroidRuntime: Shutting down VM

So I use NDKr9 to solve that problem for now.

When using the most recent JDK its bad magic:

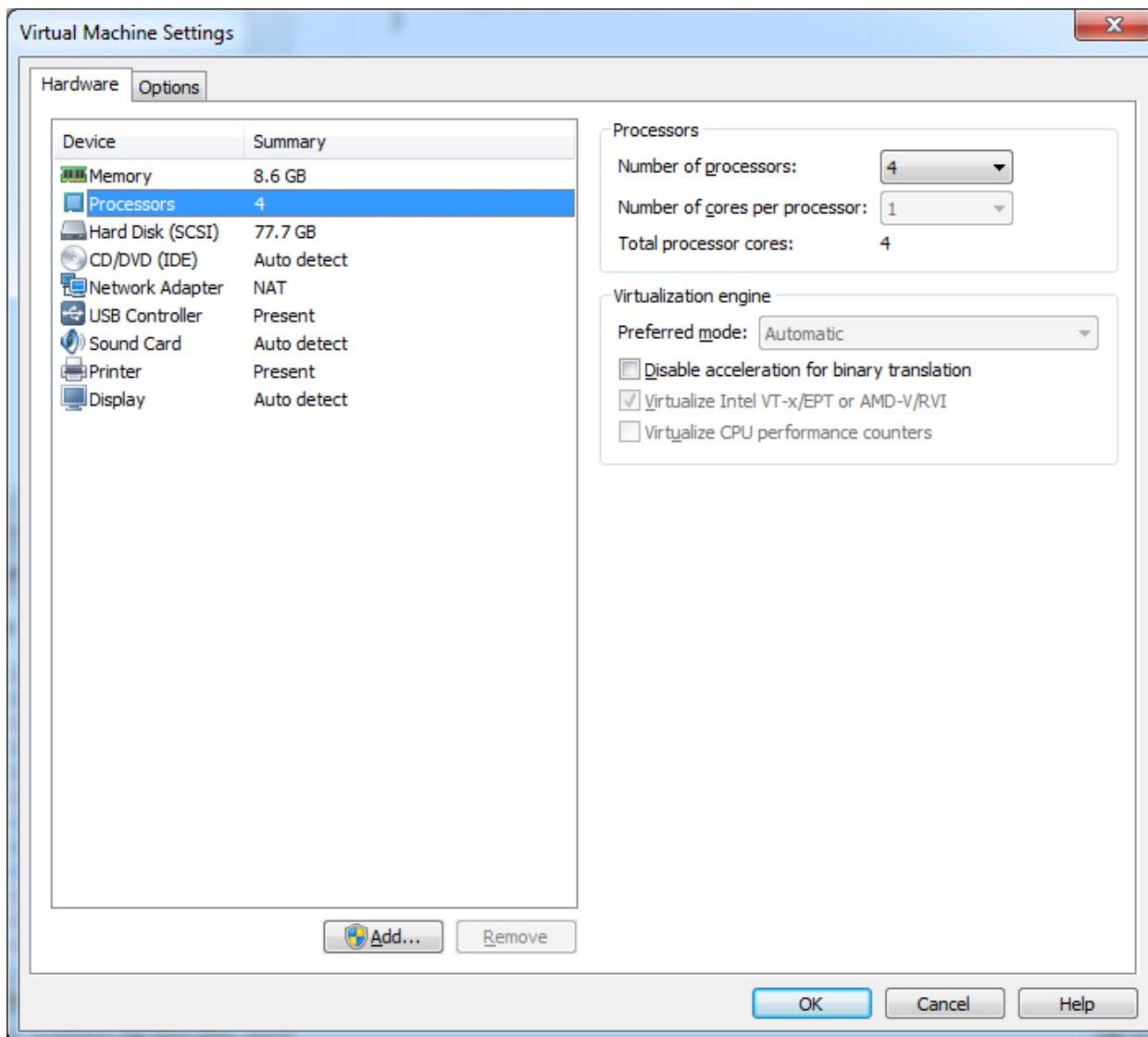
```
Messages: Gradle Sync Gradle Build
Note: C:\XMLFoundation\Examples\Android\GApp\app\src\main\java\gapp\ObjectModel.java uses unchecked o
Note: Recompile with -Xlint:unchecked for details.
:app:compileArm7DebugSources
:app:preDexArm7Debug
:app:dexArm7Debug
UNEXPECTED TOP-LEVEL EXCEPTION:
! com.android.dx.cf.iface.ParseException: bad class file magic (cafebabe) or version (0034.0000)
at com.android.dx.cf.direct.DirectClassFile.parse0(DirectClassFile.java:472)
at com.android.dx.cf.direct.DirectClassFile.parse(DirectClassFile.java:406)
at com.android.dx.cf.direct.DirectClassFile.parseToInterfacesIfNecessary(DirectClassFile.java:388)
at com.android.dx.cf.direct.DirectClassFile.getMagic(DirectClassFile.java:251)
at com.android.dx.command.dexer.Main.parseClass(Main.java:764)
at com.android.dx.command.dexer.Main.access$1500(Main.java:85)
Terminal Messages Android TODO
Gradle build finished with 58 error(s) in 47s 124ms (a minute ago)
```

The good magic is in jdk1.7.0_80

So – this is the bloody cutting edge all raw and unexposed as it really is.

This is my Centos configuration

You need a VM that has VT-x/EPT if you will want to run the emulator in your VM – so you will have to go out of your way to select that when you create the VM. As of September 2015 - The best source to create from is a Torrent called “CentOS-7.0-1406-x86_64-Everything”.



Problem #1: build runs for ever, you see this error in the Gradle Console window:

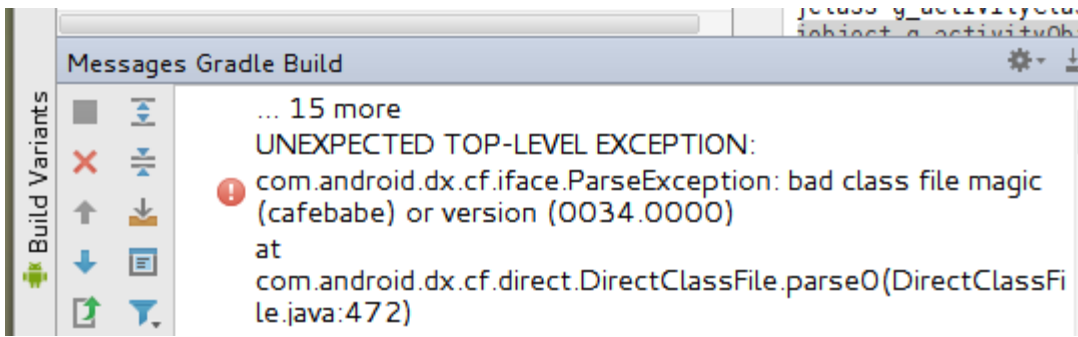
```
AAPT err(1707828520): /home/user/android-sdk-linux/build-tools/23.0.0/aapt: error while loading shared libraries: libz.so.1: cannot open shared object file: No such file or directory
```

This is because, Android SDK is compiled for a 32-bit GNU/Linux system, and your system is a 64-bit system. To solve this error, install the 32-bit versions of all the most commonly used libraries, by installing the `ia32-libs` package

```
sudo yum install ia32-libs
```

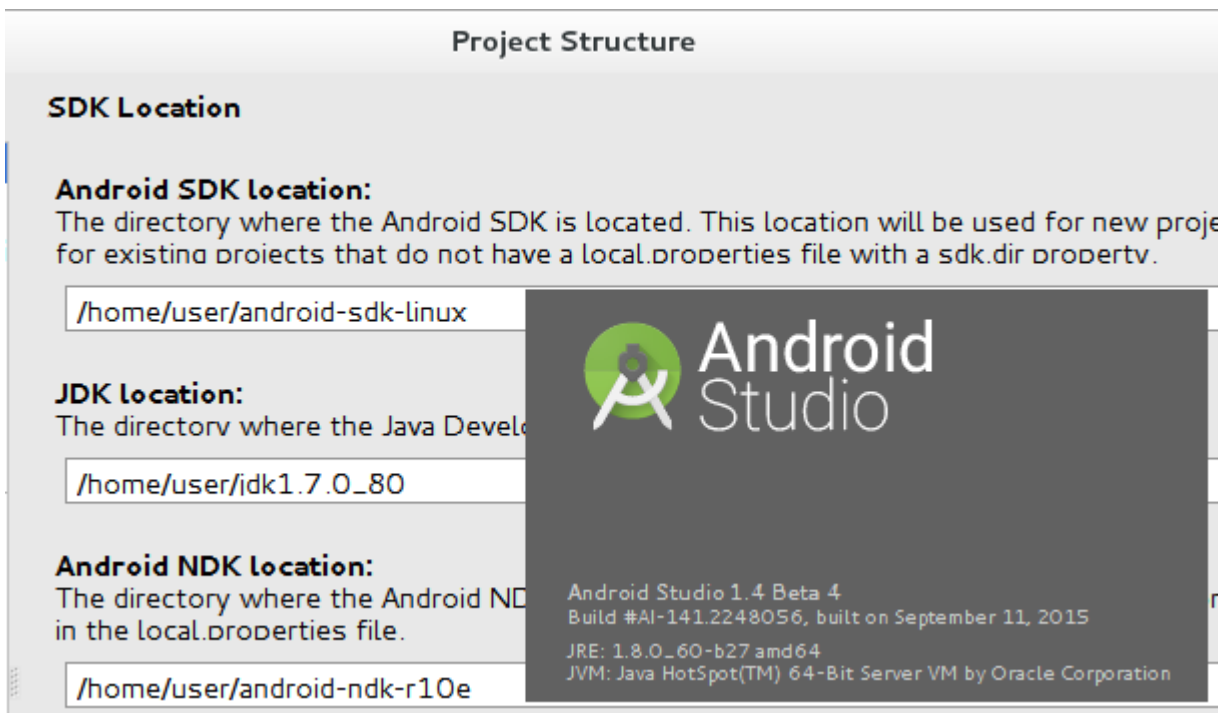
```
sudo yum install zlib.i686 libstdc++.i686
```

This should be the next error...



Go get the correct JDK

<http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html>



On Centos with the very latest spit installed as of Sept 22, 2015 – and it builds – then fails in the emulator . OK Im close on CentOS.

<http://dl.google.com/android/ndk/android-ndk-r9-darwin-x86.tar.bz2>

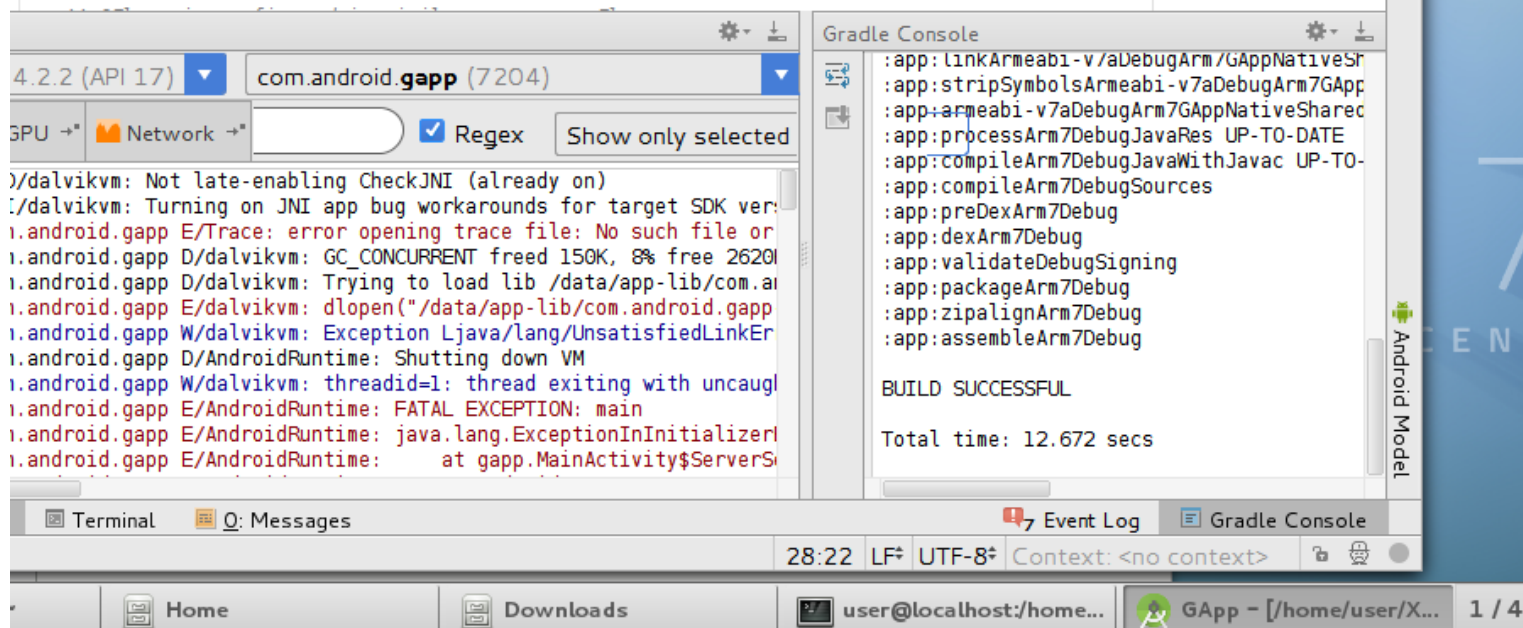
See:

```

cppFlags += "-c"
cppFlags += "-O3"
cppFlags += "-w"
cppFlags += "-D_LINUX"
cppFlags += "-D_ANDROID"
cppFlags += "-fpermissive"

cppFlags += "-I/home/user/XMLFoundation/Libraries/XMLFoundation/inc"
cppFlags += "-I/home/user/XMLFoundation/Libraries/XMLFoundation/src"
cppFlags += "-I/home/user/XMLFoundation/Servers/Core"

```



09-22 17:19:54.672 803-803/com.android.gapp E/dalvikvm: dlopen("/data/app-lib/com.android.gapp-1/libGAppNative.so") failed: Cannot load library: soinfo_relocate(linker.cpp:975): cannot locate symbol "signal" referenced by "libGAppNative.so"...

This is the problem:

<https://code.google.com/p/android/issues/detail?id=177530>

I will return to this issue because I'd like to have this in Centos just so I can share the development VM.