Building an Android HTTP Server on Windows using ServerCore.cpp in the XMLFoundation

Download and install the latest Android NDK (developer.android.com/tools/sdk/ndk/index.html)

Do not put a space in the path name that you unzip the NDK into.
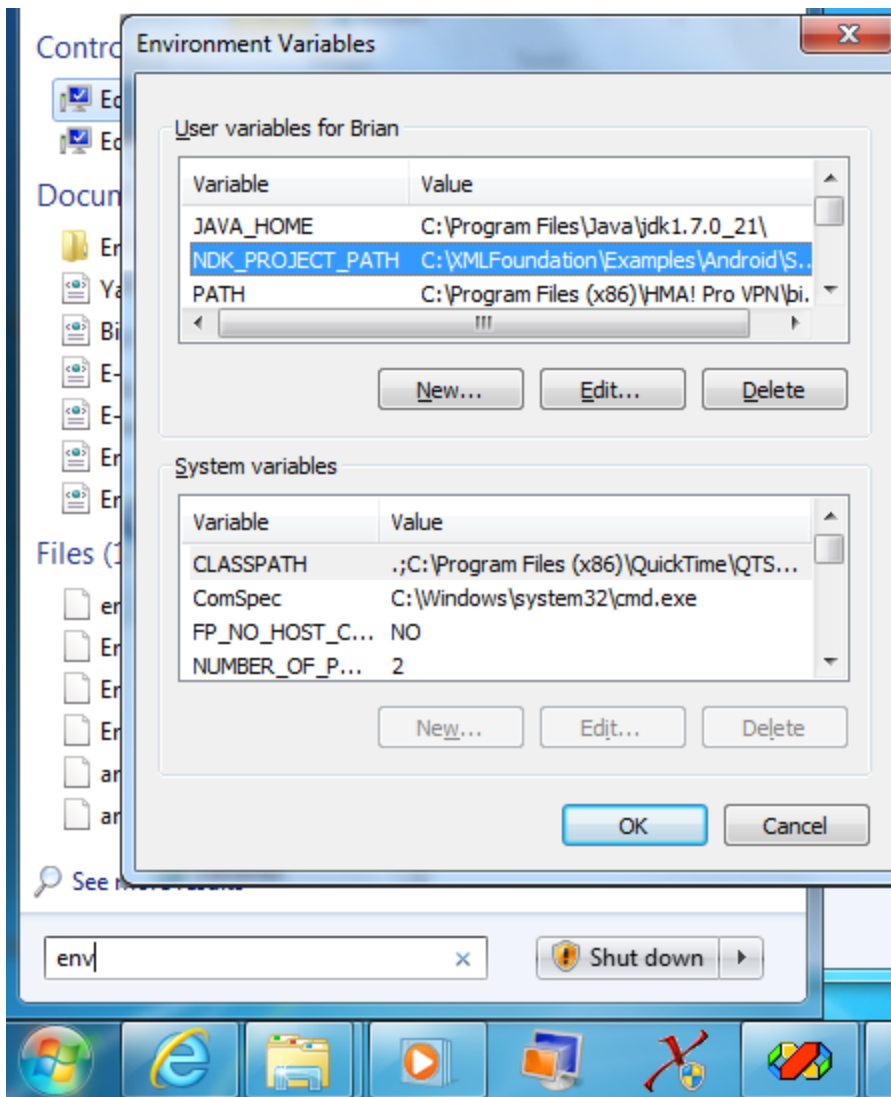
Download and install the latest Android SDK (http://developer.android.com/sdk/index.html)

Download and install the latest JDK (Java Development Kit)
http://www.oracle.com/technetwork/java/javase/downloads/index.html

As shown in the following image,

Add the JAVA_HOME to where you have the JDK installed. Note: on 8/25/2015 the default jdk folder was "C:\Program Files\Java\jdk1.8.0_60"
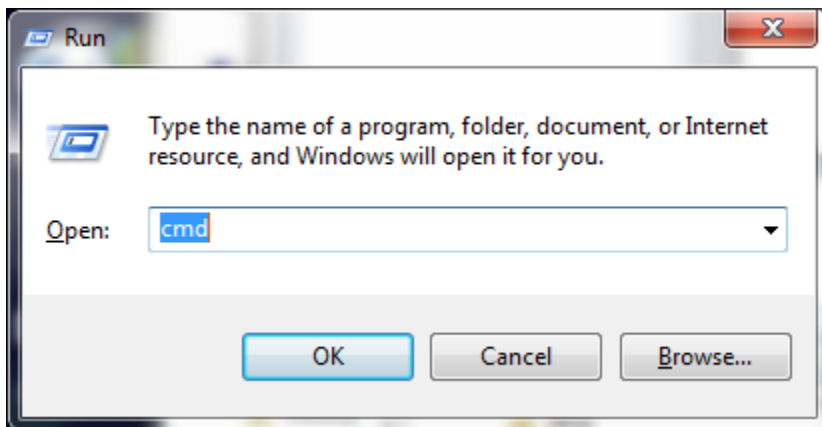
Add the NDK_PROJECT_PATH   environment variable to where ever you have the [\XMLFoundation\Examples\Android\Server] folder from XMLFoundation

Start a new cmd shell. Note that once the env has been changed only a NEW shell will have the current env settings.

Start/Accessories/Command Prompt

Or "WindowKey-R" then type cmd.   WindowKey is next to "Alt" and "R" is short for Run.

In the cmd shell, type "ndk-build" from the folder you unzipped the AndroidNDK into

```
C:\Windows\system32\cmd.exe

02/01/2014  03:45 PM                    201 documentation.html
02/01/2014  03:45 PM                    856 find-win-host.cmd
02/01/2014  03:45 PM                  1,306 GNUmakefile
02/01/2014  03:45 PM                  9,820 ndk-build
02/01/2014  03:45 PM                    292 ndk-build.cmd
02/01/2014  03:45 PM                198,144 ndk-depends.exe
02/01/2014  03:45 PM                 25,349 ndk-gdb
02/01/2014  03:45 PM                    355 ndk-gdb-py
02/01/2014  03:45 PM                    294 ndk-gdb-py.cmd
02/01/2014  03:45 PM                 33,460 ndk-gdb.py
02/01/2014  03:45 PM                863,744 ndk-stack.exe
02/01/2014  03:45 PM                  1,674 ndk-which
02/01/2014  04:01 PM    <DIR>                platforms
02/01/2014  04:15 PM    <DIR>                prebuilt
02/01/2014  03:45 PM                  1,360 README.TXT
02/01/2014  03:45 PM                     13 RELEASE.TXT
02/01/2014  03:45 PM                  1,127 remove-windows-symlink.sh
02/01/2014  03:46 PM    <DIR>                samples
02/01/2014  04:07 PM    <DIR>                sources
02/01/2014  04:26 PM    <DIR>                tests
02/01/2014  04:22 PM    <DIR>                toolchains
               15 File(s)        1,137,995 bytes
               10 Dir(s)   215,026,679,808 bytes free

C:\AndroidDev\NDK>ndk-build_
```
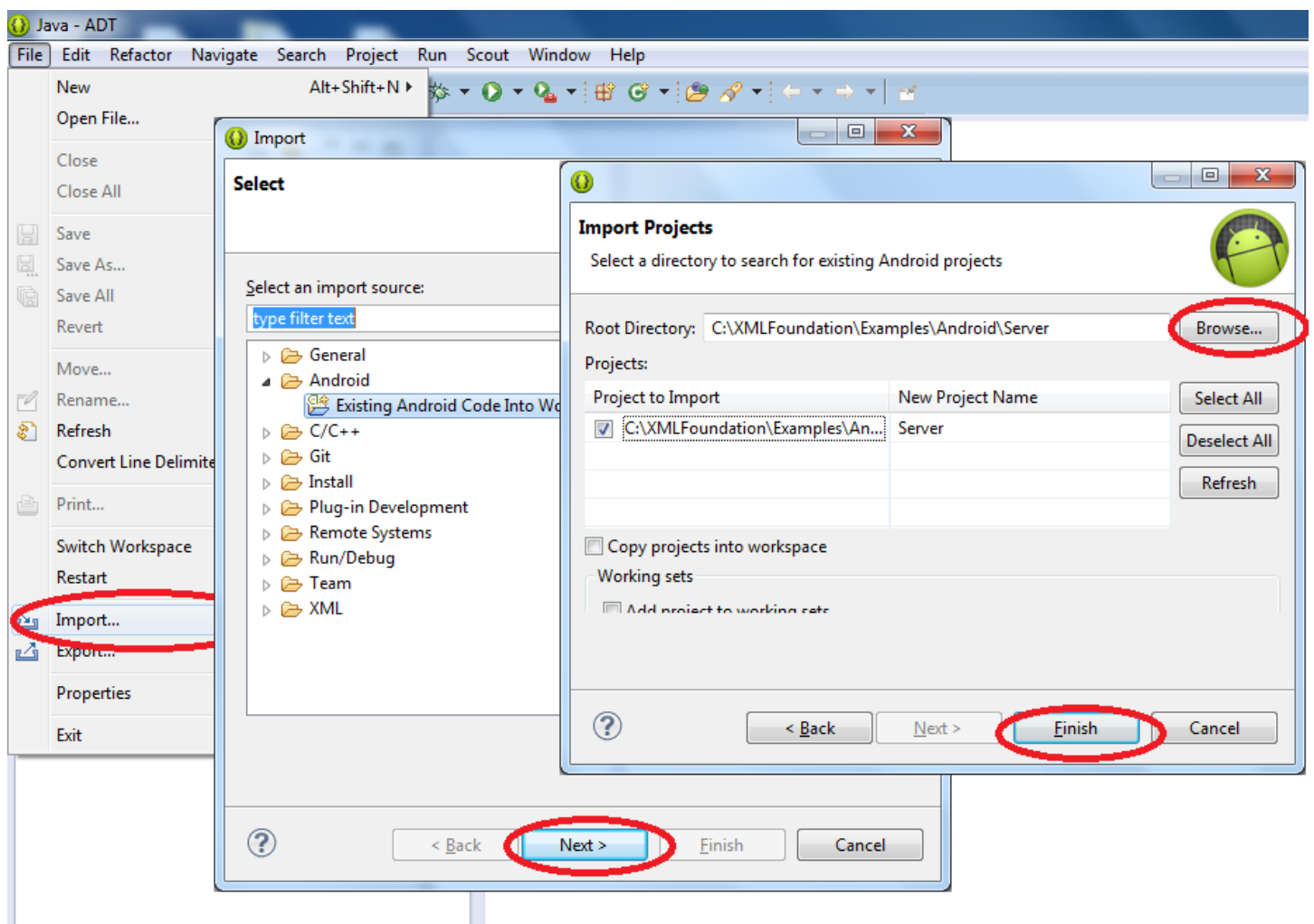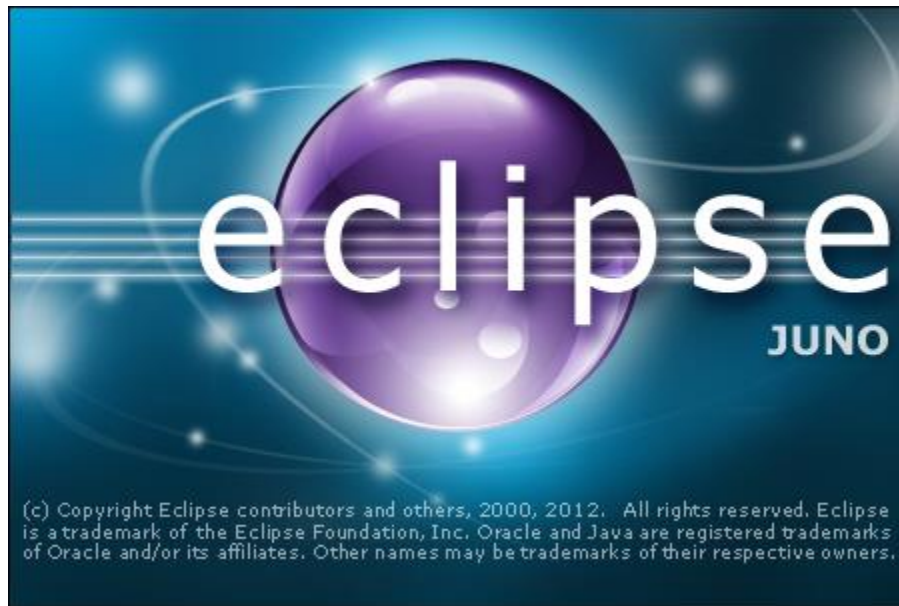
```
cmd
```
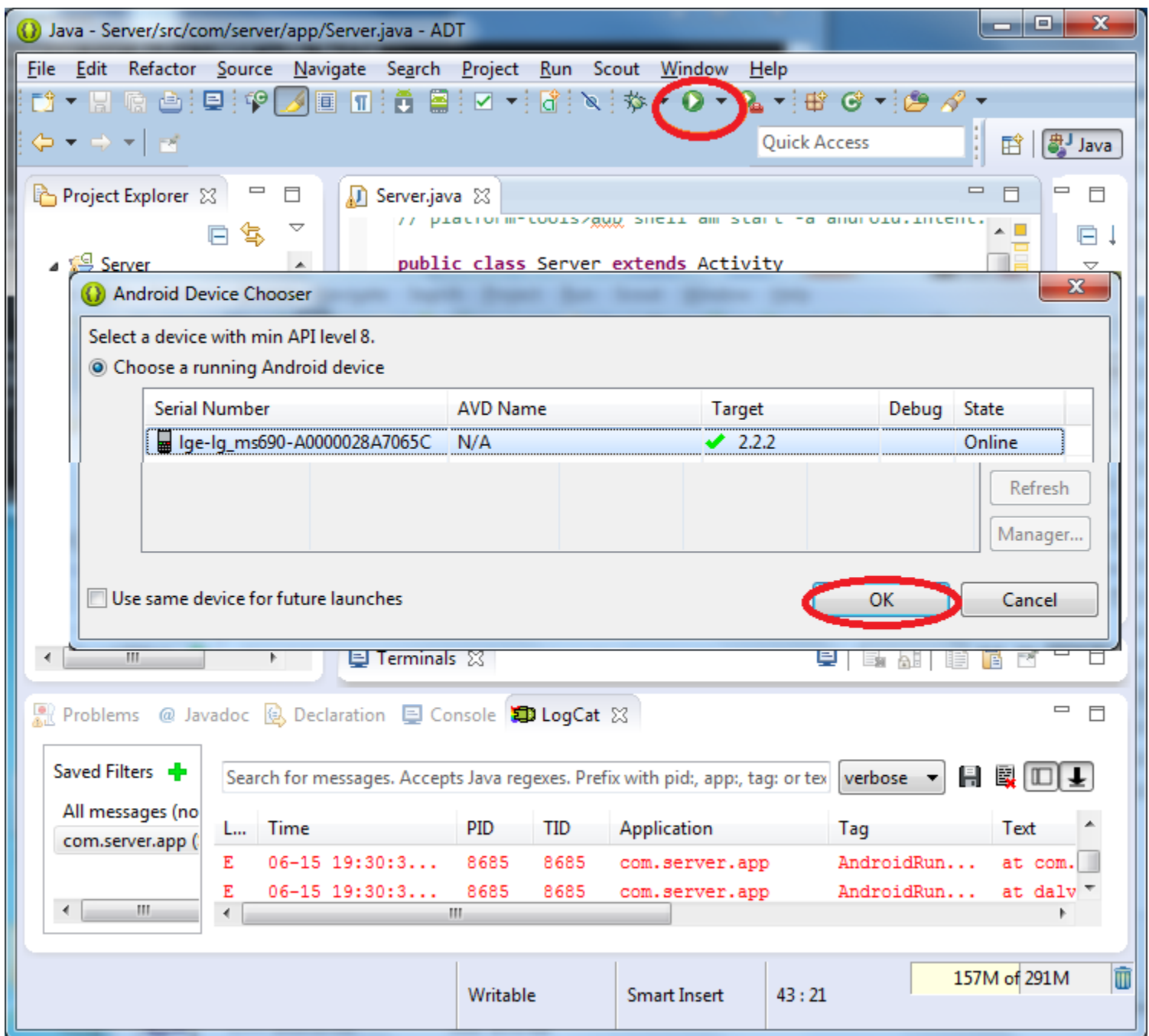
Shut down

You will see this:

```
C:\Windows\system32\cmd.exe

[armeabi] Compile++ thumb: Server <= MemberDescriptor.cpp
[armeabi] Compile++ thumb: Server <= FileDataSource.cpp
[armeabi] Compile++ thumb: Server <= ObjQueryParameter.cpp
[armeabi] Compile++ thumb: Server <= ProcedureCall.cpp
[armeabi] Compile++ thumb: Server <= Schema.cpp
[armeabi] Compile++ thumb: Server <= SocketHTTPDataSource.cpp
[armeabi] Compile++ thumb: Server <= StackFrameCheck.cpp
[armeabi] Compile++ thumb: Server <= xmlAttribute.cpp
[armeabi] Compile++ thumb: Server <= xmlDataSource.cpp
[armeabi] Compile++ thumb: Server <= xmlElement.cpp
[armeabi] Compile++ thumb: Server <= xmlElementTree.cpp
[armeabi] Compile++ thumb: Server <= XMLException.cpp
[armeabi] Compile++ thumb: Server <= xmlLex.cpp
[armeabi] Compile++ thumb: Server <= xmlObject.cpp
[armeabi] Compile++ thumb: Server <= xmlObjectFactory.cpp
[armeabi] Compile++ thumb: Server <= XMLProcedureDescriptor.cpp
[armeabi] Compile++ thumb: Server <= SwitchBoard.cpp
[armeabi] Compile++ thumb: Server <= DynamicLibrary.cpp
[armeabi] Compile++ thumb: Server <= IntegrationBase.cpp
[armeabi] Compile++ thumb: Server <= IntegrationLanguages.cpp
[armeabi] StaticLibrary  : libstdc++.a
[armeabi] SharedLibrary  : libServer.so
[armeabi] Install        : libServer.so => libs/armeabi/libServer.so

C:\AndroidDev\NDK>_
```
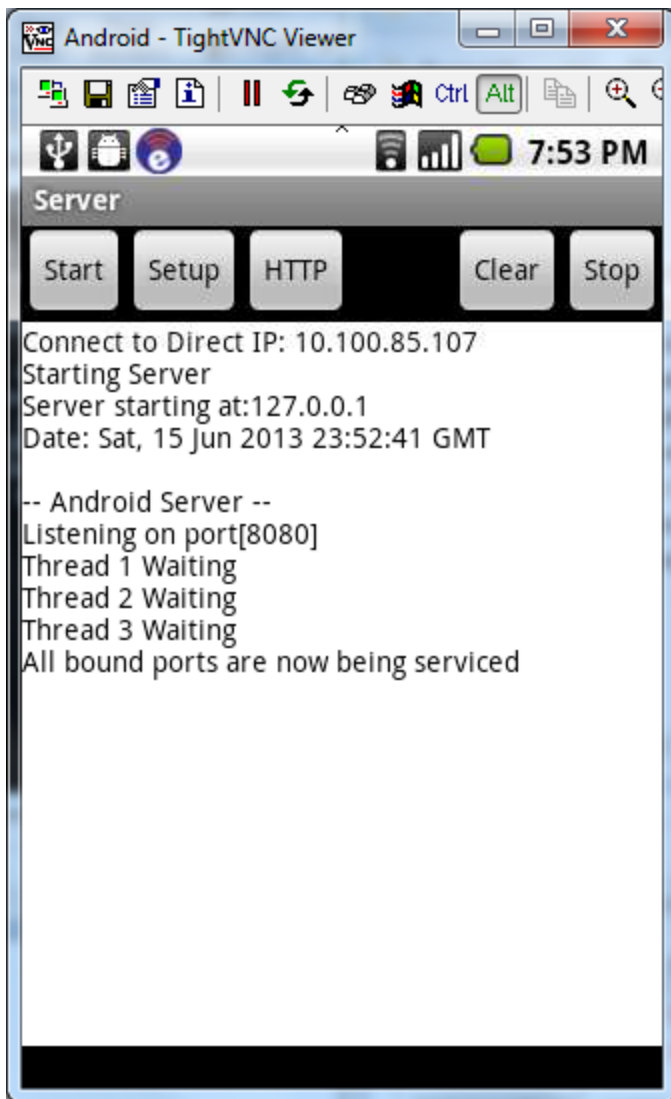
Start Eclipse - the development IDE in the Android SDK

A picture is worth a thousand words.

It will run the HTTP server on your phone/tablet.

That's it. I hope this provides you a helpful starting point for your own project that now has a multithreaded TCP Server core and all the XMLFoundation tools available to you on Android.