JNI sources not shown in "Android" project explorer window

WAI Bug P3 + Add Hotlist

STATUS UPDATE No update yet. Edit

DESCRIPTION cc...@gmail.com created issue #1

Android Studio 2020.3.1 Patch 3, Gradle 7.1.1, plugin 7.1.0-alpha05

I used to run AS 4.1 and was seeing my cpp files just fine, now it's just empty and I have to use 'projects' view which I never use, until now.

See screenshot.

I've added jni.srcDirs to my gradle to no effect :(

```
android {
...
  sourceSets {
    main {
      java.srcDirs = ['src/main/java']
      jni.srcDirs = ['src/main/jni']
    }
  }
```

cpp_empty.png
6.4 KB View Download

✓ Links (5)

Links (5)

"Cross-reference: https://issuetracker.google.com/192771759/comment#16"
"...want to see your native sources you should use our external native build support to build you code. It will then be displayed your source. Please https://developer.android.com/studio/projects/add-r
"That screenshot that you showed is using CMake to build the native code and Gradle is setup to delegate the build to CMake as shown here: https://developer.android.com/studio/projects/gradle-ext
"CMakeLists.txt as described here: https://developer.android.com/studio/projects/configure-cmake"
"https://developer.android.com/studio/projects/gradle-external-native-build... "

COMMENTS

cc...@gmail.com <cc...@gmail.com> #2

Upgraded to AS patch 4, no difference.

jl...@google.com <jl...@google.com>

Assigned to an...@google.com.

cc...@gmail.com <cc...@gmail.com> #3

Reverted back to AGP 4.1.3, AG 6.5.1 and NDK 21.1.6352462 and source files are listed again in Android project window.

Though ndkVersion was set to '23.1.7779620' in library module !?

EDIT: I just removed ndk.dir=23.1.... in local.properties and it downloaded 21.1 on its own, even though ndkVersion was set to 23.1 in library module.

Message last modified on Dec 11, 2021 06:21PM

em...@google.com <em...@google.com> #4

Cross-reference: https://issuetracker.google.com/192771759/comment#16

I cannot reproduce this issue with AS-Bumblebee-beta04 with AGP-7.1.0-beta04. What is the location of your source files relative to the library module? Do you have any symbolic links?

cc...@gmail.com <cc...@gmail.com> #5

I'm on windows, and AS behavior demonstrates more than just this issue. Like wrong ndk version being downloaded/used and some obsolete property that are needed to avoir other issues.

Message last modified on Dec 14, 2021 04:27AM

xa...@google.com <xa...@google.com> #6

Status: Won't Fix (Intended Behavior)

The `jni` source set is not used by AGP directly, and has never been (as far as I know). Because of this, to remove confusion we deprecated it from AGP (it'll be removed in 8.0) and we stoppe actually compiling it created confusion (and in fact your native code located in `jni` was never indexed properly in the first place)

If you want to see your native sources you should use our external native build support to build you code. It will then be displayed your source. Please https://developer.android.com/studio/p

cc...@gmail.com <cc...@gmail.com> #7

comment#6: As far as I can see in your documentation, this intended behavior is not following the documentation which shows the files under cpp folder. Please see intended_beahvior.png a

I tried to add jni source dir because source code was no longer shown with some AS/AGP/NDK(?) update... Just saying I tried to solve this bug on my own.
I cannot find your external native build support information in this documentation or any pointer that explains how to show my source code again ?
Except that it is supposed to show the source code once the project is setup, and I did setup my project just fine as I can see source code as long as I don't upgrade.

comment#4: sorry but I was referring to a different version of AGP/AS, so it's irrelevant you can't reproduce, and based on comment#6 you should reproduce else you didn't actually tried.

Now can someone helpful simply explain how to get source code listed again?
Not that I will switch again to bumblebee considering it has other bugs, like not storing passwords when generating apk nor bundles, which are supposedly solved but are not...
But someday in the future I will be force to upgrade and I'd like to know how to get source code listed properly as documented in https://developer.android.com/studio/projects/add-native-c

Thanks.

intended_behavior.png
63 KB View Download

xa...@google.com <xa...@google.com> #8

Can you indicate how your native build is setup?

As I said, just putting files under `jni` won't compile them (and never did, unless you used a *very* experimental Gradle plugin that we stopped supporting years ago). Because of this, the `Andr` did some clean up in Chipmunk around this actually).

That screenshot that you showed is using CMake to build the native code and Gradle is setup to delegate the build to CMake as shown here: https://developer.android.com/studio/projects/g

cc...@gmail.com <cc...@gmail.com> #9

CMakeLists.txt as described here: https://developer.android.com/studio/projects/configure-cmake

xa...@google.com <xa...@google.com> #10

Ah ok, so that's interesting. When you mentioned `src/main/jni` I was confused because it wasn't clear what the setup actually was, and we've had these `jni` folders for a completely separ I mentioned in a previous comment).

If you are using CMake and are configuring your Gradle build to use your CMake base setup to build your native code (using externalNativeBuild), then you should not need to put your cod `android.sourcesets.main.jni.srcDirs`). In fact, if you create a basic C++ project using the `Native C++` template in Studio, you'll see the files are located in `src/main/cpp`.

Note that the actual location of the cpp files does not matter since

- Gradle knows the location of `CMakeList.txt`.
- `CMakeList.txt` lists the location of the cpp files. With this, Studio gets the location of the cpp files, wherever they are, and display them accordingly in the IDE.

I would recommend that you create a basic C++ project in Studio to compare the normal config and the one from your project.