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Android Public Tracker > App Development > Android Studio > Editing > C++ Editor   233421978

Extended JNI support is not working in Android Studio Chipmunk | 2021.2.1 Build #AI-212.5712.43.2112.8512546

+1 2   Hotlists   Mark as Duplicate

Comments (24)   Dependencies   Duplicates (0)   Blocking (0)   Resources (3)

Can't Repro   Bug   P3   + Add Hotlist

STATUS UPDATE No update yet. Edit

DESCRIPTION sw...@gmail.com created issue #1   May 21, 2022 10:17PM

Extended JNI support for native development using C/C++ is not working.
Code completion and hints for C++ code is not shown, also Studio cannot find declaration of native methods.
i.e Code navigation is also not working

Tried attempts:
(1) Invalidate cache and restarts
(2) clear cache folder
(3) removed extra versions of CMake

Nothing helps, please look into the issue.

NDK version : 21.4.7075529
CMake version : 3.18.1

More info :
Build: AI-212.5712.43.2112.8512546, 202204281627,
AI-212.5712.43.2112.8512546, JRE 11.0.12+7-b1504.28-7817840x64 JetBrains s.r.o, OS Windows 10(amd64) v10.0 , screens 2880.0x1620.0

AS: Chipmunk | 2021.2.1; Kotlin plugin: 212-1.6.21-release-334-AS5457.46; Android Gradle Plugin: 7.2.0; Gradle: 7.3.3; Gradle JDK: version 11.0.12; NDK: from local.properties: (not specified), latest from SDK: 22.1.7171670; LLDB: pinned revision 3.1 not found, latest from SDK: (package not found); CMake: from local.properties: (not specified), latest from SDK: 3.18.1-g262b901-dirty, from PATH: (not found)

✓ Links (3)   Hide all

Links (3)

"For what is extended JNI support (Google IO) : https://www.youtube.com/watch?v=9-oK7MthtJQ&ab_channel=AndroidDevelopers"	sw...@ #2
"Re comment#7: Instructions to configure the NDK are here: https://developer.android.com/studio/projects/configure-agp-ndk"	em...@ #9
" ...here is some issue related to indexing as stated here : https://stackoverflow.com/questions/68872896/android-studio-native-code-navigation-is-not-working"	sw...@ #11

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sw...@gmail.com <sw...@gmail.com> #2   May 21, 2022 10:19PM

For what is extended JNI support (Google IO) : https://www.youtube.com/watch?v=9-oK7MthtJQ&ab_channel=AndroidDevelopers

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ls...@google.com <ls...@google.com>   May 23, 2022 11:25AM

Assigned to an...@google.com.

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em...@google.com <em...@google.com> #3   May 24, 2022 03:43AM

I cannot reproduce this issue. I tried with (Chipmunk + AGP 7.2.0) on Windows and Linux, and JNI features worked correctly (eg., cross navigation, auto-completion, etc)

Can you attach your `idea.log` file ("Help > Show log in Explorer")?

Can you reproduce this problem with a clean new project created using "New Project > C++ Native Activity"?

---

sw...@gmail.com <sw...@gmail.com> #4   May 24, 2022 03:10PM

Yes, definitely I tried creating several new clean projects, but no luck

PFA files.

idea.log
4.3 MB View Download

build.gradle
1.6 KB Download

em...@google.com <em...@google.com> #5 May 25, 2022 12:51AM

I still cannot reproduce this issue.

> Code completion and hints for C++ code is not shown, also Studio cannot find declaration of native methods.

Do you have code completion, hints, etc. issues on ALL of your C++ files, or do you have them only for JNI methods (i.e., when switching across Java/C++ boundary)?

Did this for you on the previous version of Android Studio, i.e., Bumblebee?

sw...@gmail.com <sw...@gmail.com> #6 May 25, 2022 03:36AM

I have the issue (in code completion, hints, etc.) in ALL C++ files

Can't say about Bumblebee, because I've started native development in Chipmunk only.

There is issue in somewhere, See attached screenshot it's not working for me.

jshort_is_shown_as_typo.jpg
271 KB View Download

cannot_find_fun_declarartion.jpg
237 KB View Download

sw...@gmail.com <sw...@gmail.com> #7 May 25, 2022 03:58AM

And wanted to ask, is NDK location under project structure non-editable?
PFA screenshot

NDK_location_non-editable.jpg
73 KB View Download

em...@google.com <em...@google.com> #8 May 26, 2022 01:30AM

Do you have Gradle Sync errors? Can you hit "Sync Project with Gradle Files" and check the output in the `Build > Sync` tab?

From the screenshot `jshort_is_shown_as_typo.jpg` in comment#6, I see that on the bottom-right corner there is `Context: <no context>` when a C++ file is open in the Editor. This means the IDE doesn't know anything about the C++ Configuration (i.e., so it's pretty-much blind when it comes to anything inside that file). What it's supposed to say is something like this: `Context: NDKExampleOne.app | debug | arm64-v8a`. If you have Gradle sync errors, that can cause this.

em...@google.com <em...@google.com> #9 May 26, 2022 01:31AM

Re comment#7: Instructions to configure the NDK are here: https://developer.android.com/studio/projects/configure-agp-ndk

sw...@gmail.com <sw...@gmail.com> #10 May 26, 2022 05:22PM

I've done `"Sync Project with Gradle Files"` mutliple times, also have configured NDK correctly.

There is no error in building and `apk` gets installed and runs correctly.

PFA build sync tab screenshot after `"Sync Project with Gradle Files"`

build_sync_op_after_gradle_sync_project_files.jpg
235 KB View Download

sw...@gmail.com <sw...@gmail.com> #11 May 26, 2022 05:24PM

I think there is some issue related to indexing as stated here : https://stackoverflow.com/questions/68872896/android-studio-native-code-navigation-is-not-working

em...@google.com <em...@google.com> #12 May 27, 2022 12:08AM

Reassigned to jo...@google.com.

jomof@ do you have any ideas? the C++ context does not exist, what else might be causing that (other than a sync error)?

sw...@gmail.com <sw...@gmail.com> #13 Jun 1, 2022 03:50AM

Hello jomof@, Any progress?

jo...@google.com <jo...@google.com> #14 Jun 1, 2022 04:52AM

Could you reproduce the issue in a newly created project, zip the project and attach it here?

I'm looking for the .cxx/ and build/ folders so please be sure not to clean or remove those.

Message last modified on Jun 1, 2022 04:54AM

sw...@gmail.com <sw...@gmail.com> #15 Jun 2, 2022 03:15PM

Hello jomof@,

I've zipped the entire project file. It includes `.cxx/` and `build/` folders.

Hope that you'll find the issue, it's really needed.

NDKExampleThree.rar
202 KB Download

sw...@gmail.com <sw...@gmail.com> #16 Jun 3, 2022 04:22PM

Hello jomof@, did you check the zip?

jo...@google.com <jo...@google.com> #17 Jun 7, 2022 06:29AM

From the zip, there's no indication that sync failed. The relevant files (mainly compile_commands.json) are intact.

Could you try using CMake 3.18.2 instead of 3.10.2? In build.gradle:

```
android {
  externalNativeBuild {
    cmake {
      version "3.18.2"
    }
  }
}
```

You would need to download CMake and possibly put it on your PATH.

sw...@gmail.com <sw...@gmail.com> #18 Jun 8, 2022 02:09AM

Hello jomof@, I tried building with `cmake version 3.18.2`, but no luck.

By PATH, if you mean that I've to specify `cmake.dir` in `local.properties`; I've already tried it, it doesn't work.

sw...@gmail.com <sw...@gmail.com> #19 Jun 8, 2022 02:10AM

Interestingly, Code Navigation works in Visual Studio Code but not in Android Studio

sw...@gmail.com <sw...@gmail.com> #20 Jul 16, 2022 02:56PM

Hello jomof@, Any resolution or suggestions?

jo...@google.com <jo...@google.com> #21 Aug 12, 2022 10:04AM

Status: Won't Fix (Not Reproducible)

We are not able to reproduce the issue here. My only suggest is to try a different machine or build environment. If you can provide exact repro steps that we can follow to reproduce the problem then please reactivate the bug. Without that, there's really nothing we can do.

sw...@gmail.com <sw...@gmail.com> #22 Aug 12, 2022 03:55PM

Hello jomof@, What worked for me :

0. Installing old version and Updating Android Studio didn't work
1. Uninstall current version of Android Studio completely with all settings and SDKs
2. Fresh install latest (also current in my case) version again

Maybe there is some internal thing which causes this issue, I can't debug that deep. So, this mentioned solution might be useful for other people facing the same issue.

BTW, thanks!

Message last modified on Aug 12, 2022 03:56PM

cj...@gmail.com <cj...@gmail.com> #23 Sep 15, 2022 12:44PM

Hello i don't know if i can help

Make sure there are no spaces in the path to the NDK-generated project folder.

NDK builds will fail if there are spaces.

---

sw...@gmail.com <sw...@gmail.com> #24 Sep 22, 2022 06:00PM

Hello, Problem wasn't related to NDK build, it was building successfully. The problem was with native code navigation.

Thanks!