


Comments (12) Dependencies Duplicates (0) Blocking (0) Resources (4)

Bug P3

+ Add Hotlist

 STATUS UPDATE No update yet.

Edit

 DESCRIPTION 12...@qq.com created issue [#1](#) Jul 20,

IMPORTANT: Please read <https://developer.android.com/studio/report-bugs.html> carefully and supply all required information.

Studio Build: Version of Gradle Plugin: 4.0.1 Version of Gradle: 6.1.1 Version of Java: Android Studio Internal OpenJdk 1.8.0_242 OS: Ubuntu Linux and Windows 10 Host GPU: RTX2080Ti Nvidia S Android 10.0+ 30 R6 x86_64 Emulator: 30.0.12

Steps to Reproduce:

1. Write a code of vulkan cpp ndk program
2. when run this code:

```
vkEnumeratePhysicalDevices(m_instance, &gpuCount, nullptr);
```

3. The var gpu count returns 0. This mean that vulkan cannot find GPU.

It works correctly on the Android 29 10.0+ Image. And It works correctly on the Old Android 30 Image (when I use Android Studio 4.0.0).

After I update to the Android Studio 4.0.1, this bug only happens on the lastest stable Android Studio 30 R6 Image.

✓ Links (4)

↗ Links (4)

"IMPORTANT: Please read <https://developer.android.com/studio/report-bugs.html> carefully and supply all required information."

"For more information on what's needed and how to obtain this information please read the guide at <https://developer.android.com/studio/report-bugs#emulator-bugs> ."

"<http://com.android.sy>"

" https://dl.google.com/android/repository/sys-img/google_apis/x... "

COMMENTS

All comments ▾

 vi...@google.com <vi...@google.com> [#2](#) Jul 20, 2

Thanks for the feedback on the emulator. To help us troubleshoot this issue further, we will need more information. Please share detailed reproduction steps and as much as possible of the l information:

1. Emulator version
2. Run the emulator from command line with "\$ANDROID_SDK_ROOT/emulator/emulator -avd <NameOfAVD> -verbose -show-kernel" and send the resulting logs
3. Any relevant Logcat logs
4. The results of running "adb shell top" in the command line.

For more information on what's needed and how to obtain this information please read the guide at <https://developer.android.com/studio/report-bugs#emulator-bugs>.

 12...@qq.com <12...@qq.com> [#3](#) Jul 20, 2

1. Emulator version 3.0.12
2. \$ANDROID_SDK_ROOT/emulator/emulator -avd <NameOfAVD> -verbose -show-kernel

```
emulator: Android emulator version 30.0.12.0 (build_id 6466327) (CL:N/A)
emulator: Found AVD name 'Pixel_3a_XL_API_30'
emulator: Found AVD target architecture: x86_64
emulator: argv[0]: '/home/wjl/Android/Sdk/emulator/emulator'; program directory: '/home/wjl/Android/Sdk/emulator'
emulator: Found directory: /home/wjl/Android/Sdk/system-images/android-30/google_apis/x86_64/

emulator: emuDirName: '/home/wjl/Android/Sdk/emulator'
emulator: try dir /home/wjl/Android/Sdk/emulator
emulator: Trying emulator path '/home/wjl/Android/Sdk/emulator/qemu/linux-x86_64/qemu-system-x86_64'
emulator: Found target-specific 64-bit emulator binary: /home/wjl/Android/Sdk/emulator/qemu/linux-x86_64/qemu-system-x86_64
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64'
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64/gles_angle'
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64/gles_angle9'
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64/gles_angle11'
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64/gles_swiftshader'
emulator: Adding library search path: '/home/wjl/Android/Sdk/emulator/lib64/libstdc++'
```

emulator: Adding library search path for Qt: '/home/wjl/Android/Sdk/emulator/lib64/qt/lib'
emulator: Silencing all qWarning(); use qCWarning(...) instead: QT_LOGGING_RULES=default.warning=false
emulator: Setting Qt plugin search path: QT_QPA_PLATFORM_PLUGIN_PATH=/home/wjl/Android/Sdk/emulator/lib64/qt/plugins
emulator: Setting Qt to use software OpenGL: QT_OPENGL=software
emulator: Setting QML to use software QtQuick2D: QMLSCENE_DEVICE=softwarecontext
emulator: Overriding pre-existing bad Qt high dpi settings...
emulator: Setting LD_PRELOAD to /home/wjl/Android/Sdk/emulator/lib64/qt/lib/libfreetype.so.6
emulator: Running :/home/wjl/Android/Sdk/emulator/qemu/linux-x86_64/qemu-system-x86_64
emulator: qemu backend: argv[00] = "/home/wjl/Android/Sdk/emulator/qemu/linux-x86_64/qemu-system-x86_64"
emulator: qemu backend: argv[01] = "-avd"
emulator: qemu backend: argv[02] = "Pixel_3a_XL_API_30"
emulator: qemu backend: argv[03] = "-verbose"
emulator: qemu backend: argv[04] = "--show-kernel"
emulator: Concatenated backend parameters:
/home/wjl/Android/Sdk/emulator/qemu/linux-x86_64/qemu-system-x86_64 -avd Pixel_3a_XL_API_30 -verbose -show-kernel
emulator: autoconfig: -skin pixel_3a_xl
emulator: autoconfig: -skindir /home/wjl/Android/Sdk/skins/
emulator: autoconfig: -kernel /home/wjl/Android/Sdk/system-images/android-30/google_apis/x86_64//kernel-ranchu
emulator: Target arch = 'x86_64'
emulator: Auto-detect: Kernel image requires new device naming scheme.
emulator: Auto-detect: Kernel does not support YAFFS2 partitions.
emulator: autoconfig: -ramdisk /home/wjl/Android/Sdk/system-images/android-30/google_apis/x86_64//ramdisk.img
emulator: Using initial system image: /home/wjl/Android/Sdk/system-images/android-30/google_apis/x86_64//system.img
emulator: Using initial vendor image: /home/wjl/Android/Sdk/system-images/android-30/google_apis/x86_64//vendor.img
emulator: autoconfig: -data /home/wjl/.android/avd/Pixel_3a_XL_API_30.avd/userdata-qemu.img
emulator: autoconfig: -initdata /home/wjl/.android/avd/Pixel_3a_XL_API_30.avd/userdata.img
emulator: autoconfig: -cache /home/wjl/.android/avd/Pixel_3a_XL_API_30.avd/cache.img
emulator: autoconfig: -sdcard /home/wjl/.android/avd/Pixel_3a_XL_API_30.avd/sdcard.img
emulator: Physical RAM size: 8192MB

emulator: VM heap size 256MB is below hardware specified minimum of 576MB, setting it to that value
emulator: System image is read only
emulator: Found 1 DNS servers: 127.0.0.53
emulator: ERROR: Running multiple emulators with the same AVD is an experimental feature.
Please use -read-only flag to enable this feature.

3. Logs

07/20 20:50:29: Launching 'app' on Pixel 3a XL API 30.
\$ adb shell am start -n "com.wjl.simplevulkantest/com.wjl.simplevulkantest.MainActivity" -a android.intent.action.MAIN -c android.intent.category.LAUNCHER
Connected to process 4296 on device 'Pixel_3a_XL_API_30 [emulator-5554]'.
Capturing and displaying logcat messages from application. This behavior can be disabled in the "Logcat output" section of the "Debugger" settings page.
I/implevulkantes: Not late-enabling -Xcheck:jni (already on)
I/implevulkantes: Unquickening 12 vdex files!
W/implevulkantes: Unexpected CPU variant for X86 using defaults: x86_64
D/NetworkSecurityConfig: No Network Security Config specified, using platform default
No Network Security Config specified, using platform default
D/libEGL: loaded /vendor/lib64/egl/libEGL_emulation.so
D/libEGL: loaded /vendor/lib64/egl/libGLESv1_CM_emulation.so
D/libEGL: loaded /vendor/lib64/egl/libGLESv2_emulation.so
W/implevulkantes: Accessing hidden method Landroid/view/View;=>computeFitSystemWindows(Landroid/graphics/Rect;Landroid/graphics/Rect;)Z (greylist, reflect
W/implevulkantes: Accessing hidden method Landroid/view/ViewGroup;=>makeOptionalFitsSystemWindows()V (greylist, reflection, allowed)
D/vulkan: searching for layers in '/data/app/~~a1MRd10dg1DBSudnX9MEWA==/com.wjl.simplevulkantest-HjxP8GCeHB1Z90gzEBHHbg==/lib/x86_64'
searching for layers in '/data/app/~~a1MRd10dg1DBSudnX9MEWA==/com.wjl.simplevulkantest-HjxP8GCeHB1Z90gzEBHHbg==/base.apk!/lib/x86_64'

----- beginning of crash
A/libc: /home/wjl/test/Android/SimpleVulkanTest/app/src/main/cpp/native-lib.cpp:35: void VulkanTest::pickPhysicalDevice(): assertion "gpuCount > 0" failed
Fatal signal 6 (SIGABRT), code -1 (SI_QUEUE) in tid 4296 (implevulkantest), pid 4296 (implevulkantest)

4. Top

Tasks: 265 total, 1 running, 264 sleeping, 0 stopped, 0 zombie
Tasks: 265 total, 1 running, 264 sleeping, 0 stopped, 0 zombie
Tasks: 265 total, 1 running, 264 sleeping, 0 stopped, 0 zombie
Mem: 8148632K total, 3632572K used, 4516060K free, 47886336 buffers
Swap: 6111468K total, 0 used, 6111468K free, 2589620K cached
400%cpu 1%user 1%nice 1%sys 396%idle 0%iow 0%irq 0%sirq 0%host
PID USER PR NI VIRT RES SHR S[%CPU] %MEM TIME+ ARGS
5153 u0_a119 20 0 1.3G 148M 113M S 1.3 1.8 0:01.37 com.google.and+
3212 u0_a107 20 0 12G 153M 110M S 0.6 1.9 0:00.63 com.google.and+
638 system 18 -2 13G 339M 249M S 0.6 4.2 1:11.42 system_server
5465 shell 20 0 10G 4.7M 3.6M R 0.3 0.0 0:00.05 top
1358 u0_a107 20 0 12G 189M 137M S 0.3 2.3 0:12.29 com.google.and+
896 u0_a142 20 0 12G 229M 151M S 0.3 2.8 0:04.96 com.android.sy+
259 root 20 0 0 0 0 S 0.3 0.0 0:00.57 [jbd2/vdc-8]
5460 shell 20 0 10G 2.5M 2.0M S 0.0 0.0 0:00.27 logcat -v long+
5219 u0_a119 20 0 1.2G 139M 106M S 0.0 1.7 0:00.73 com.google.and+
5134 u0_a140 20 0 12G 101M 65M S 0.0 1.2 0:00.05 com.google.and+
5053 u0_a118 20 0 12G 147M 106M S 0.0 1.8 0:00.30 com.google.and+

4845	u0_a107	20	0	12G	137M	99M	S	0.0	1.7	0:00.22	com.google.and+
4516	u0_a110	20	0	2.0G	131M	99M	S	0.0	1.6	0:00.56	com.google.and+
4465	u0_a100	20	0	12G	105M	70M	S	0.0	1.3	0:00.08	com.google.and+
4168	u0_a121	20	0	12G	126M	87M	S	0.0	1.5	0:00.56	com.google.and+
3484	u0_a132	20	0	2.0G	141M	108M	S	0.0	1.7	0:00.79	com.google.and+
3382	u0_a106	20	0	2.0G	144M	112M	S	0.0	1.8	0:00.32	com.google.and+
2846	u0_a96	20	0	12G	99M	64M	S	0.0	1.2	0:00.29	com.google.and+
2728	root	20	0	0	0	0	I	0.0	0.0	0:00.02	[kworker/0:3-s+
^C2300	u0_a106	10	-10	2.1G	247M	186M	S	0.0	3.1	0:06.05	com.google.and+

Others:

Buggy System Image:

Google APIs Intel x86 Atom_64 System Image (system-images;android-30;google_apis;x86_64)(revision: 6)

https://dl.google.com/android/repository/sys-img/google_apis/x86_64-30_r06.zip

I have tested on x86_64-30_r05 on the same emulator , and the result is good , no bugs.

Only system image x86_64-30_r06 will occur this bug.

12...@qq.com <12...@qq.com> #4

Jul 20, 2

This is my code.

```
#include <jni.h>
#include <string>
#include <vector>
#include <vulkan/vulkan.h>
#include <vulkan/vulkan_android.h>

class VulkanTest {
public:
    void createInstance() {
        VkApplicationInfo appInfo = {};
        appInfo.sType = VK_STRUCTURE_TYPE_APPLICATION_INFO;
        appInfo.pApplicationName = "test";
        appInfo.pEngineName = "test";
        appInfo.apiVersion = VK_API_VERSION_1_0;

        std::vector<const char *> instanceExtensions = {VK_KHR_SURFACE_EXTENSION_NAME};

        instanceExtensions.push_back(VK_KHR_ANDROID_SURFACE_EXTENSION_NAME);

        VkInstanceCreateInfo instanceCreateInfo = {};
        instanceCreateInfo.sType = VK_STRUCTURE_TYPE_INSTANCE_CREATE_INFO;
        instanceCreateInfo.pNext = NULL;
        instanceCreateInfo.pApplicationInfo = &appInfo;
        if (instanceExtensions.size() > 0) {
            instanceCreateInfo.enabledExtensionCount = (uint32_t) instanceExtensions.size();
            instanceCreateInfo.ppEnabledExtensionNames = instanceExtensions.data();
        }
        m_result = vkCreateInstance(&instanceCreateInfo, nullptr, &m_instance);
        assert(m_instance != VK_NULL_HANDLE);
    }

    void pickPhysicalDevice() {
        uint32_t gpuCount = 0;
        vkEnumeratePhysicalDevices(m_instance, &gpuCount, nullptr);
        assert(gpuCount > 0);
        std::vector<VkPhysicalDevice> physicalDevices(gpuCount);
        m_result = vkEnumeratePhysicalDevices(m_instance, &gpuCount, physicalDevices.data());
        uint32_t selectedDevice = 0;
        m_physicalDevice = physicalDevices[selectedDevice];
    }

    VkResult m_result;
    VkInstance m_instance=VK_NULL_HANDLE;
    VkPhysicalDevice m_physicalDevice=VK_NULL_HANDLE;
};

extern "C" JNIEXPORT jstring JNICALL
Java_com_wjl_simplevulkantest_MainActivity_stringFromJNI(
    JNIEnv* env,
    jobject /* this */) {
    std::string hello = "Hello from C++";

    VulkanTest test;
    test.createInstance();
    test.pickPhysicalDevice();


    return env->NewStringUTF(hello.c_str());
}
```

vkEnumeratePhysicalDevices could not work. The var gpucount is 0.

12...@qq.com <12...@qq.com> [#5](#)

Jul 20, 2

The bug-report in the emulator told me that "You do not have permission to create issues in this component." In the component "Android Public Tracker > App Development > Android Studio > Android Studio" I push the bug-report file on the website attachment.

 **bugreport-Pixel_3a_XL_API_30-2020-07-20-21-00-44-7dd6ad7b-e9bd-4ab6-a305-0d952c3357a4.tar.xz**
3.5 MB [Download](#)

12...@qq.com <12...@qq.com> [#6](#)

Jul 20, 2

And my test code.

 **SimpleVulkanTest.tar.xz**
4.9 MB [Download](#)

12...@qq.com <12...@qq.com> [#7](#)

Jul 21, 2

I have tried on emulator 3.0.22 . It is still buggy. It seems only do matter with the google_apix86_64-30_r06.zip system image.

12...@qq.com <12...@qq.com> [#8](#)

Jul 21, 2

Not only me have this problem. My colleagues have this problem as well. Both happened in Windows and Linux. We are all nvidia RTX cards

vi...@google.com <vi...@google.com>

Jul

Assigned to an...@google.com.

12...@qq.com <12...@qq.com> [#9](#)

Jul 27, 2

Anyone talk? The vulkan app cannot run on Image x86_64 30 R6

Message last modified on Jul 27, 2020 03:37AM

12...@qq.com <12...@qq.com> [#10](#)

Jul 30, 2

Anyone talk? The bug is really serious

12...@qq.com <12...@qq.com> [#11](#)

Aug 7, 2

Solved in Android 30 R7 Image. Thanks.

lf...@google.com <lf...@google.com> [#12](#)

Aug 11, 2

Reassigned to lf...@google.com.

Hi, sorry about this. It seems at some point we were using a deprecated way of loading the vulkan ICD, which later revisions to the framework prohibited.

is...@google.com <is...@google.com>

Sep

Status: New