Android Public Tracker > App Development > Jetpack (androidx) > Games   277551258 ▾

← ↻ ☆   Memory Advice Cause 8% crash rate when rolled out   +1   Hotlists   Mark as Duplicate   🔔   ⋮

| Comments (7) | Dependencies | Duplicates (0) | Blocking (0) | Resources (1) |

[Fixed] Bug P3 + Add Hotlist

👥 **STATUS UPDATE** No update yet. [Edit]

📄 **DESCRIPTION** wg...@eastsidegamestudio.com created issue #1   Apr 11, 2023 04:50AM ⋮

Component used: Memory Advice Unitypackage
Version used: 1.0.0-beta01
Devices/Android versions reproduced on: A large number

We were not able to reproduce the issue in house, however, rolling out to the general public gave numerous errors all with libmemory_advice.so at the top of the stack captured in bugsnag. We were at ~8% crash rate when attempting to get the state of the memory. We disabled the feature to check for memory remotely.

SIGABRT: Abort program

```
0  libc.so +0x51068        abort
1  libmemory_advice.so +0xe2180 memory_advice::MemoryAdviceImpl::GetAdvice()
2  libmemory_advice.so +0xe0674 memory_advice::MemoryAdviceImpl::GetMemoryState()
3  libil2cpp.so +0xf2b0f0      0x728aea60f4
4  libil2cpp.so +0xf2c218      0x728aea721c
5  libil2cpp.so +0x120fd20     0x728b18ad24
6  libil2cpp.so +0x10c6b08     0x728b041b0c
7  libil2cpp.so +0x1cd0420     0x728bc4b424
8  libil2cpp.so +0x1cd0a48     0x728bc4ba4c
9  libil2cpp.so +0x25520f0     0x728c4cd0f4
10 libil2cpp.so +0x11468ec     0x728b0c18f0
11 libil2cpp.so +0x28496bc     0x728c7c46c0
12 libil2cpp.so +0x2848cb8     0x728c7c3cbc
13 libil2cpp.so +0x28489ec     0x728c7c39f0
14 libil2cpp.so +0xaca9bc      0x728aa459c0
15 libil2cpp.so +0xcb0b34      0x728ac2bb38
16 libunity.so +0x620d24       0x72aa676d28
17 libunity.so +0x624f80       0x72aa67af84
18 libunity.so +0x63a6d8       0x72aa6906dc
19 libunity.so +0x48828c       0x72aa4de290
20 libunity.so +0x546e74       0x72aa59ce78
21 libunity.so +0x546ea8       0x72aa59ceac
22 libunity.so +0x5470ec       0x72aa59d0f0
23 libunity.so +0x69e8d4       0x72aa6f48d8
24 libunity.so +0x6b52e4       0x72aa70b2e8
25 libart.so +0x461550         art_quick_generic_jni_trampoline
26 libart.so +0x20a2ac         nterp_helper
27 base.odex +0xe69428         0x72f3b0742c
28 libart.so +0x209330         nterp_helper
29 base.odex +0xe688a2         0x72f3b068a6
30 boot.oat +0xea1140          android.os.Handler.dispatchMessage
```

📎 **Mon Apr 10 2023 12:49:35 GMT-0600 (Mountain Daylight Time).png**
34 KB View Download

✓ **Links (1)**   Hide all

🔗 **Links (1)**

"https://android-review.googlesource.com/2743801"   ap...@ #6

| COMMENTS | | All comments ▼ | ↓ Oldest first |

⚪ **vr...@google.com** <vr...@google.com>   Apr 11, 2023 10:47PM
Reassigned to ar...@google.com.

⚪ **ar...@google.com** <ar...@google.com> #2   Apr 12, 2023 12:45AM ⋮

Are you able to reproduce this? Any messages in logcat regarding this?

⚪ **wg...@eastsidegamestudio.com** <wg...@eastsidegamestudio.com> #3

Sidebar:

Reporter	⚪ wg...@eastsidegamestudio.c...
Type	Bug
Priority	P3
Severity	S2
Status	[Fixed]
Access	Default access View

Expanded Access ❓

Assignee	⚪ ar...@google.com
Verifier	--
Collaborators 👥	_____ ^
CC	🔔 _____ ^
	ji...@google.com
	vr...@google.com
	wg...@eastsidegamestudio.com

AOSP ID	--
Estimate	--
Found In	--
Targeted To	--
Verified In	--
In Prod	⚪

Show 1 additional field ▼

We cannot seem to reproduce the issue in house with our limited range of devices, but we do see very high amounts of crashes. I'm looking over what logs we have available through Google Play Console's Vital reports. Most of the crashes from the memory advice plugin look like the crash below pulled from Android Vitals.
We will attempt to get logcat logs internally. We typically have a very low crash rate ~0.20%.

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
pid: 0, tid: 12332 >>> com.eastsidegames.theofficeswm <<<

backtrace:
  #00 pc 0x00000000000531f4 /apex/com.android.runtime/lib64/bionic/libc.so (abort+164)
  #01 pc 0x00000000000e2184 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libmemory_advice.so (memory_advice::MemoryAdviceImpl::GetAdvice()+6108)
  #02 pc 0x00000000000e0678 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libmemory_advice.so (memory_advice::MemoryAdviceImpl::GetMemoryState()+68)
  #03 pc 0x0000000000f2b0f4 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #04 pc 0x0000000000f2c21c /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #05 pc 0x000000000120fd24 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #06 pc 0x00000000010c6b0c /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #07 pc 0x0000000001cd0424 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #08 pc 0x0000000001cd0a4c /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #09 pc 0x00000000025520f4 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #10 pc 0x00000000011468f0 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #11 pc 0x00000000028496c0 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #12 pc 0x0000000002848cbc /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #13 pc 0x00000000028489f0 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #14 pc 0x0000000000aca9c0 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #15 pc 0x0000000000cb0b38 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libil2cpp.so
  #16 pc 0x0000000000620d28 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #17 pc 0x0000000000624f84 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #18 pc 0x000000000063a6dc /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #19 pc 0x0000000000488290 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #20 pc 0x0000000000546e78 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #21 pc 0x0000000000546eac /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #22 pc 0x00000000005470f0 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #23 pc 0x000000000069e8d8 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #24 pc 0x00000000006b52e8 /data/app/~~7PtYLCxs8Va37MLTJ33zVw==/com.eastsidegames.theofficeswm-
xysYVsz5QYseX1lGyTnEyw==/lib/arm64/libunity.so
  #25 pc 0x0000000000461554 /apex/com.android.art/lib64/libart.so (art_quick_generic_jni_trampoline+148)
  #26 pc 0x000000000020a2b0 /apex/com.android.art/lib64/libart.so (nterp_helper+4016)
  #27 pc 0x0000000000209334 /apex/com.android.art/lib64/libart.so (nterp_helper+52)
  #28 pc 0x0000000000a21434 /data/misc/apexdata/com.android.art/dalvik-cache/arm64/boot.oat
```

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ar...@google.com <ar...@google.com>   May 25, 2023 09:09PM

Reassigned to bk...@google.com.

---

ar...@google.com <ar...@google.com>   Jun 1, 2023 01:16AM

Reassigned to ar...@google.com.

---

ar...@google.com <ar...@google.com> #4   Jun 6, 2023 02:19AM ⋮

Seems that `abort()` is caused by an unhandled exception in `Json::object::at()`. We'll see what is the best way of fixing this.

---

ar...@google.com <ar...@google.com> #5   Aug 24, 2023 08:31PM ⋮

Do you have any stats regarding whether it happens on 32-bit or 64-bit devices?

ar...@google.com <ar...@google.com>   Sep 8, 2023 01:22AM

Accepted by ar...@google.com.

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ap...@google.com <ap...@google.com> #6   Sep 9, 2023 12:17AM ⋮

Project: platform/frameworks/opt/gamesdk
Branch: main

commit 6af5fd85f8d0069e9cd5cd96eb75a0ce07c6c8a6
Author: Artyom Palvelev <artyompp@google.com>
Date: Thu Sep 07 16:03:53 2023

    attach MemoryAdvice thread to JVM

    MemoryAdvice functions can be potentially called from any thread.
    As they need to perform JNI calls, it's necessary to make JVM aware of
    the context of the new thread. This commit adds AttachCurrentThread()
    call when necessary.

    Bug: 277551258
    Test: run either AGDKTunnel or Hogger sample
    Change-Id: I09d1f266655c038e444d2587d86890d33f98a34c

M   games-memory-advice/core/memory_advice_impl.cpp
M   include/memory_advice/memory_advice.h
M   src/common/jni/jnictx.cpp

https://android-review.googlesource.com/2743801

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ar...@google.com <ar...@google.com> #7   Sep 14, 2023 01:45AM ⋮

Marked as fixed.

We fixed a threading issue in the memory-advice library. Please check whether the problem has gone. Feel free to re-open this
issue if the problem persists.