

Figure - Bug #118302

【BSP】 【DVT】 【Monkey】 执行monkey测试，未正常结束测试；存在多处ANR

2023-05-27 14:29 - SZTS_TEST 邹涛

Status:	CLOSED	Start date:	2023-05-27
Priority:	Normal	Due date:	
Assignee:	SZTS_TEST 邹涛	% Done:	0%
Category:	稳定性	Estimated time:	0.00 hour
Target version:			
Need_Info:	TEST	Found Version:	[ro.build.display.vc1.id]: [01.00.0102.C103]
Resolution:	--	Degrated:	--
Severity:	Major	Verified Version:	
Reproducibility:	Rarely	Fixed Version:	
Test Type:	Monkey Test	Root cause:	
Description			
前置条件： black.txt文件已经push到设备/sdcard下			
操作步骤： 1.执行如下命令：monkey --pkg-blacklist-file /sdcard/blackList.txt --hprof --throttle 500 -s 1234567 --pct-touch 35 --pct-motion 25 --pct-appswitch 30 --pct-pinchzoom 5 --pct-trackball 0 --pct-anyevent 5 --ignore-crashes --ignore-timeouts --ignore-security-exceptions --monitor-native-crashes --pct-syskeys 0 -v -v -v 3200000 >/sdcard/monkey.log 2>&1 &			
预期结果： 1.设备可以正常结束monkey测试			
实际结果： 1.设备未正常结束monkey测试，存在多处ANR			

History

#1 - 2023-05-29 15:04 - CD FW王武军

1、5月29日最新进展

1) monkey停止的原因

从日志中我们可以获取到如下信息：

11-11 07:30:13.869 0 0 W [27012.522260] Mem-Info:
11-11 07:30:13.869 0 0 W [27012.522330] active_anon: 1261745 inactive_anon:180117 isolated_anon:31
11-11 07:30:13.870 0 0 W [27012.522330] active_file: 8387 inactive_file:8494 isolated_file:0
11-11 07:30:13.870 0 0 W [27012.522330] unevictable: 27202 dirty:58 writeback:0 unstable:0
11-11 07:30:13.870 0 0 W [27012.522330] slab_reclaimable: 16895 slab_unreclaimable:63890
11-11 07:30:13.870 0 0 W [27012.522330] mapped: 65309 shmem:3159 pagetables:19934 bounce:0
11-11 07:30:13.870 0 0 W [27012.522330] free: 18885 free_pcp:879 free_cma:0
11-11 07:30:13.870 0 0 W : [27012.522336] Node 0 active_anon:5046980kB inactive_anon:720468kB active_file:33548kB inactive_file:33976kB
unevictable:108808kB isolated(anon):124kB isolated(file):0kB mapped:261236kB dirty:232kB writeback:0kB shmem:12636kB writeback_tmp:0kB unstable:0kB
all_unreclaimable? no
11-11 07:30:13.870 0 0 W : [27012.522344] Normal free:73044kB min:7040kB low:41492kB high:43252kB active_anon:3544024kB
inactive_anon:478540kB active_file:33456kB inactive_file:34468kB unevictable:108216kB writepending:232kB present:5960896kB managed:5799084kB
mlocked:108216kB kernel_stack:43472kB pagetables:79736kB bounce:0kB free_pcp:3408kB local_pcp:252kB free_cma:0kB
11-11 07:30:13.870 0 0 W [27012.522345] lowmem_reserve[]: 0 16384
11-11 07:30:13.870 0 0 W : [27012.522355] Movable free:2496kB min:2544kB low:15000kB high:15636kB active_anon:1503392kB

inactive_anon:241672kB active_file:0kB inactive_file:0kB unevictable:592kB writepending:0kB present:2097152kB managed:2097152kB mlocked:592kB
kernel_stack:0kB pagetables:0kB bounce:0kB free_pcp:248kB local_pcp:248kB free_cma:0kB

11-11 07:30:13.872 0 0 W [27012.522356] lowmem_reserve[]: 0 0
11-11 07:30:13.873 0 0 W [27012.522359] Normal: 22*4kB (U) 83*8kB (UE) 19*16kB (U) 11*32kB (UE) 1114*64kB (U) 0*128kB 0*256kB 0*512kB
0*1024kB 0*2048kB 0*4096kB = 72704kB
11-11 07:30:13.873 0 0 W [27012.522463] Movable: 89*4kB (M) 0*8kB 4*16kB (M) 3*32kB (M) 1*64kB (M) 9*128kB (M) 2*256kB (M) 0*512kB 0*1024kB
0*2048kB 0*4096kB = 2244kB
11-11 07:30:13.873 0 0 W : [27012.522493] 53950 total pagecache pages
11-11 07:30:13.873 0 0 W : [27012.522503] 6931 pages in swap cache
11-11 07:30:13.873 0 0 W : [27012.522506] Swap cache stats: add 6899218, delete 6895885, find 2920473/7607719
11-11 07:30:13.873 0 0 W : [27012.522507] Free swap = 0kB
11-11 07:30:13.873 0 0 W : [27012.522509] Total swap = 4194300kB
11-11 07:30:13.873 0 0 W : [27012.522510] 2014512 pages RAM
11-11 07:30:13.873 0 0 W : [27012.522512] 0 pages HighMem/MovableOnly
11-11 07:30:13.873 0 0 W : [27012.522513] 40453 pages reserved
11-11 07:30:13.873 0 0 W : [27012.522514] 89088 pages cma reserved
11-11 07:30:14.251 0 0 E : [27012.902312] Out of memory: Kill process 1209 (tlog) score 0 or sacrifice child
11-11 07:30:14.251 0 0 E : [27012.910121] Killed process 1209 (tlog) total-vm:17772012kB, anon-rss:5345780kB, file-rss:2240kB, shmem-rss:248kB
oom_score_adj=-900
11-11 07:30:14.327 0 0 I [27012.986358] binder: 13372:13372 ioctl 40046210 7fc9627184 returned -22
11-11 15:09:14.816 0 0 W [54554.308411] Mem-Info:
11-11 15:09:14.819 0 0 W [54554.308423] active_anon: 1345599 inactive_anon:192226 isolated_anon:64
11-11 15:09:14.819 0 0 W [54554.308423] active_file: 6405 inactive_file:6187 isolated_file:0
11-11 15:09:14.819 0 0 W [54554.308423] unevictable: 27203 dirty:23 writeback:0 unstable:0
11-11 15:09:14.819 0 0 W [54554.308423] slab_reclaimable: 17448 slab_unreclaimable:56616
11-11 15:09:14.819 0 0 W [54554.308423] mapped: 39207 shmem:3338 pagetables:19584 bounce:0
11-11 15:09:14.819 0 0 W [54554.308423] free: 18368 free_pcp:555 free_cma:99
11-11 15:09:14.819 0 0 W : [54554.308429] Node 0 active_anon:5382164kB inactive_anon:768904kB active_file:25620kB inactive_file:24748kB
unevictable:108812kB isolated(anon):256kB isolated(file):0kB mapped:156828kB dirty:92kB writeback:0kB shmem:13352kB writeback_tmp:0kB unstable:0kB
all_unreclaimable? no
11-11 15:09:14.819 0 0 W : [54554.308437] Normal free:73508kB min:7040kB low:41492kB high:43252kB active_anon:3705980kB
inactive_anon:659008kB active_file:25716kB inactive_file:24328kB unevictable:108216kB writepending:88kB present:5960896kB managed:5799084kB
mlocked:108216kB kernel_stack:38288kB pagetables:78336kB bounce:0kB free_pcp:2216kB local_pcp:252kB free_cma:396kB
11-11 15:09:14.819 0 0 W [54554.308438] lowmem_reserve[]: 0 16384
11-11 15:09:14.819 0 0 W : [54554.308447] Movable free:0kB min:2544kB low:15000kB high:15636kB active_anon:1676184kB inactive_anon:109940kB
active_file:0kB inactive_file:0kB unevictable:596kB writepending:0kB present:2097152kB managed:2097152kB mlocked:596kB kernel_stack:0kB pagetables:0kB
bounce:0kB free_pcp:0kB local_pcp:0kB free_cma:0kB
11-11 15:09:14.819 0 0 W [54554.308448] lowmem_reserve[]: 0 0
11-11 15:09:14.819 0 0 W [54554.308451] Normal: 194*4kB (UM) 18*8kB (M) 21*16kB (M) 39*32kB (UE) 1033*64kB (UE) 0*128kB 0*256kB 0*512kB
0*1024kB 0*2048kB 1*4096kB (H) = 72712kB
11-11 15:09:14.819 0 0 W [54554.308466] Movable: 0*4kB 0*8kB 0*16kB 0*32kB 0*64kB 0*128kB 0*256kB 0*512kB 0*1024kB 0*2048kB 0*4096kB = 0kB
11-11 15:09:14.819 0 0 W : [54554.308477] 44484 total pagecache pages
11-11 15:09:14.819 0 0 W : [54554.308483] 1732 pages in swap cache
11-11 15:09:14.819 0 0 W : [54554.308485] Swap cache stats: add 14203046, delete 14205542, find 6730748/16605858
11-11 15:09:14.819 0 0 W : [54554.308486] Free swap = 434592kB
11-11 15:09:14.819 0 0 W : [54554.308487] Total swap = 4194300kB
11-11 15:09:14.819 0 0 W : [54554.308489] 2014512 pages RAM
11-11 15:09:14.819 0 0 W : [54554.308490] 0 pages HighMem/MovableOnly
11-11 15:09:14.819 0 0 W : [54554.308492] 40453 pages reserved
11-11 15:09:14.819 0 0 W : [54554.308493] 89088 pages cma reserved
11-11 15:09:15.834 0 0 I [54555.328494] oom_reaper: reaped process 26181 (re-initialized>), now anon-rss:0kB, file-rss:0kB, shmem-rss:16kB
11-11 15:09:15.865 0 0 I [54555.358510] oom_reaper: reaped process 26168 (.microsoft.emmx), now anon-rss:0kB, file-rss:0kB, shmem-rss:332kB
11-11 15:09:15.951 0 0 E : [54555.422451] Out of memory: Kill process 1280 (system_server) score 0 or sacrifice child

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11-11 15:09:15.951  0  0 E   : [54555.431048] Killed process 1280 (system_server) total-vm:20959012kB, anon-rss:0kB, file-rss:0kB, shmem-rss:7548kB
oom_score_adj=-900
11-11 15:09:16.013  0  0 I [54555.506058] oom_reaper: reaped process 1280 (system_server), now anon-rss:0kB, file-rss:150620kB, shmem-rss:7348kB
11-11 15:09:16.781  0  0 I [54556.274834] binder: 26259:26259 ioctl 40046210 ff8a75b0 returned -22
11-11 15:09:16.925  0  0 I [54556.419105] binder: 26248:26295 ioctl 40046210 6fd43b8144 returned -22
11-11 15:09:17.226  0  0 E   : [54556.709719] Out of memory: Kill process 13450 (tlog) score 0 or sacrifice child
11-11 15:09:17.227  0  0 E   : [54556.717320] Killed process 13450 (tlog) total-vm:17837548kB, anon-rss:6373432kB, file-rss:4836kB, shmem-rss:248kB
oom_score_adj=-900
```

可以发现发生了tlog和system_server 发生了oom的问题,
导致system_server被杀了, 可能引起了monkey的杀除。

关于OOM的问题有票<https://share.thundersoft.com/redmine/issues/118126> 在跟进。

2) anr问题

在FSEM_000055_0002_1111150936文件下有大量的anr日志文件
从分析来看, 大多都是几个游戏应用的: com.tencent.tmgp.pubgmhd、com.yymoon.dxc

分析trace文件:

Anr 日志文件: anr_2022-11-11-03-14-28-377

Subject: Input dispatching timed out (Application does not have a focused window)

----- Waiting Channels: pid 32406 at 2022-11-11 03:14:28.378950729+0800 -----

Cmd line: com.tencent.tmgp.pubgmhd

crash_dump failed to dump process 32406: failed to attach to thread 32406, already traced by 1122 (debuggerd)

可以看出针对 com.tencent.tmgp.pubgmhd的trace文件的抓取是失败的, 没有太多的有用信息。

从内存来看

CPU usage from 0ms to 20937ms later (2022-11-11 03:14:27.999 to 2022-11-11 03:14:48.907):

20% 1280/system_server: 13% user + 7.5% kernel / faults: 106999 minor 5 major

14% 914/surfaceflinger: 9.9% user + 4.1% kernel / faults: 2278 minor

13% 32406/com.tencent.tmgp.pubgmhd: 10% user + 3.4% kernel / faults: 29769 minor

13% 852/vendor.qti.hardware.display.composer-service: 8.4% user + 4.6% kernel / faults: 672 minor

11% 1914/com.android.systemui: 9.5% user + 1.9% kernel / faults: 6080 minor

24% TOTAL: 14% user + 8.5% kernel + 0.4% iowait + 1% irq + 0.3% softirq

这个时候的内存使用是正常的未发生明显的异常。

从提供日志中未能找到发生anr时和anr之前时间的logcat信息 (应该是日志缺失了未抓到anr当时的日志)

又分析了其他几个anr文件, 发现情况都不差不多, 暴露问题的进程是com.tencent.tmgp.pubgmhd, 但是并未抓取到正确的trace信息。

综述: 发生anr的对象都是几个游戏应用: com.tencent.tmgp.pubgmhd、com.yymoon.dxc, 问题都是monkey发送给

它们的keyevent、motionevent没有及时响应, 从事件的角度来看这些event游戏应用也许并不能响应。anr的文件又未抓取到正确的trace信息, anr发生时的logcat信息不正确, 从研发的角度并不能从当前的日志和trace中获取有用的信息进行分析。

建议可以尝试继续monkey测试, 复现问题时, 争取抓取到有用的信息 (另外进行测试时最好将系统时间调为当时测试的正确时间)。

2、下一步

1) monkey停止的问题, 根据 <https://share.thundersoft.com/redmine/issues/118126> 的情况验证OOM的问题, 是否还会引起monkey的停止。

2) anr问题, 从目前的日志信息不能分析出具体的原因, 需要测试尝试复现或者继续进行测试, 补充复现问题并抓取到正确和用的日志信息。

#2 - 2023-05-29 16:08 - CD FW 曹覃刚

- Status changed from New to NEED_INFO

- Assignee changed from CD FW 曹覃刚 to CDTS-TEST 周婷

- Need_Info changed from -- to TEST

Hi 周婷

这个票中一共两个问题

1.重启导致monkey停止运行了

2.有许多ANR

关于问题1， 重启导致monkey停止运行了

与 <https://share.thundersoft.com/redmine/issues/118126> 票一样， system组的同学在分析

关于问题2， anr

①发生的ANR基本都是游戏爆出来的

②问题都是monkey发送给它们的keyevent、motionevent没有及时响应， 从事件的角度来看这些event游戏应用也许并不能响应， 在其他设备上跑这些游戏monkey测试可能是一样的

③anr的文件又未抓取到正确的trace信息， anr发生时的logcat信息不正确， 从研发的角度并不能从当前的日志和trace中获取有用的信息进行分析。

④问题1的内存问题， 导致系统可用内存极低， 也可能是造成这些游戏anr问题的原因之一

对于问题2,游戏应用不应该是我们monkey测试的范围， 因此我们理解没有必要再去做对比测试或者复现测试， 请确认

#3 - 2023-05-29 19:29 - CDTs-TEST 周婷

- Assignee changed from CDTs-TEST 周婷 to SZTS_TEST 邹涛

请使用106版本进行monkey 测试

#4 - 2023-06-01 23:05 - CDTs-TEST 周婷

- Category set to 稳定性

#5 - 2023-06-03 14:03 - CD TEST-方永红

- Status changed from NEED_INFO to RESOLVED

6.3

问题1在118126中跟踪， 三方应用ANR暂不处理

#6 - 2023-06-03 14:03 - CD TEST-方永红

- Status changed from RESOLVED to VERIFIED

#7 - 2023-06-03 14:03 - CD TEST-方永红

- Status changed from VERIFIED to CLOSED

Files			
monkey.log	25.9 MB	2023-05-27	SZTS_TEST 邹涛
tlog_35f43216_000055_1111220916.tar.gz	24.9 MB	2023-05-27	SZTS_TEST 邹涛
20230527-142150.jpg	496 KB	2023-05-27	SZTS_TEST 邹涛
Snipaste_2023-05-27_14-24-36.png	83.9 KB	2023-05-27	SZTS_TEST 邹涛
blacklist.txt	117 Bytes	2023-05-27	SZTS_TEST 邹涛