



Mobile App crashes after enabling R8 in release build

+1 2 Hotlists (2) Mark as Duplicate

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WAI Bug P2 + Add Hotlist

STATUS UPDATE No update yet. Edit

DESCRIPTION sg...@google.com created issue #1

This issue has been derived from StackOverflow question [Mobile App crashes after enabling R8 in release build.](#)

I am new to android development. I developed an android application which was working perfectly fine before enabling R8. After obfuscating the application, I am getting the following error. I have following is the Logcat console:

```
2020-01-28 16:16:09.404 5206-5206/? A/DEBUG: *** ** *
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: Build fingerprint: 'samsung/j6lteci/s/j6lte:9/PPR1.180610.011/J600FXXU5BSH5:user/release-keys'
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: Revision: '2'
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: ABI: 'arm'
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: pid: 5073, tid: 5073, name: e.peopleconnect >>> pk.com.ke.peopleconnect <<<
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: signal 6 (SIGABRT), code -6 (SI_TKILL), fault addr -----
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: Abort message: 'interpreter_common.h:269] Check failed: receiver->GetClass()->ShouldHaveEmbeddedVTable()'
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: r0 00000000 r1 000013d1 r2 00000006 r3 00000008
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: r4 000013d1 r5 000013d1 r6 fff98dac r7 0000010c
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: r8 0000000b r9 efecd000 r10 d4dfe09c r11 fff98ed0
2020-01-28 16:16:09.405 5206-5206/? A/DEBUG: ip 00000041 sp fff98d98 lr f3233115 pc f3229fce
2020-01-28 16:16:09.441 3242-3316/? D/SensorService: [S0] -1.307 4.961 9.835
2020-01-28 16:16:09.441 3242-3316/? D/SensorService: [S0] [0 -> 255]
2020-01-28 16:16:09.469 2818-26162/? V/APM_AudioPolicyManager: getAudioPolicyConfig: audioParam;outDevice
2020-01-28 16:16:09.470 2818-26162/? V/APM_AudioPolicyManager: getNewOutputDevice() selected device 0
2020-01-28 16:16:09.470 2818-26162/? V/APM_AudioPolicyManager: ### curdevice : 2
2020-01-28 16:16:09.592 3242-3384/? D/WifiTrafficPoller: TrafficStats TxPkts=394436 RxPkts=647369 TxBytes=46490190 RxBytes=822657331 , Foreground uid=10240 p
2020-01-28 16:16:09.604 5206-5206/? A/DEBUG: backtrace:
2020-01-28 16:16:09.604 5206-5206/? A/DEBUG: #00 pc 0001cfce /system/lib/libc.so (abort+58)
2020-01-28 16:16:09.604 5206-5206/? A/DEBUG: #01 pc 0035e2ff /system/lib/libart.so (art::Runtime::Abort(char const*)+1034)
2020-01-28 16:16:09.604 5206-5206/? A/DEBUG: #02 pc 000071c3 /system/lib/libbase.so (android::base::LogMessage::~LogMessage()+506)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #03 pc 003f68fd /system/lib/libart.so (MterpInvokeVirtualQuick+548)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #04 pc 00417814 /system/lib/libart.so (ExecuteMterpImpl+29972)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #05 pc 001f309c /data/app/pk.com.ke.peopleconnect-3XBY7V7mKYeci83RcRrdaA==/oat/arm/base.vdex (pk.com.ke.peo
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #06 pc 001cc457 /system/lib/libart.so (_ZN3art11interpreterL7ExecuteEPNS_6ThreadERKNS_20CodeItemDataAccesso
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #07 pc 001d0d8f /system/lib/libart.so (art::interpreter::ArtInterpreterToInterpreterBridge(art::Thread*, ar
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #08 pc 001e7b3f /system/lib/libart.so (bool art::interpreter::DoCall<false, false>(art::ArtMethod*, art::Th
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #09 pc 003f688b /system/lib/libart.so (MterpInvokeVirtualQuick+434)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #10 pc 00417814 /system/lib/libart.so (ExecuteMterpImpl+29972)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #11 pc 001f3010 /data/app/pk.com.ke.peopleconnect-3XBY7V7mKYeci83RcRrdaA==/oat/arm/base.vdex (pk.com.ke.peo
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #12 pc 001cc457 /system/lib/libart.so (_ZN3art11interpreterL7ExecuteEPNS_6ThreadERKNS_20CodeItemDataAccesso
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #13 pc 001e7b3f /system/lib/libart.so (art::interpreter::ArtInterpreterToInterpreterBridge(art::Thread*, ar
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #14 pc 001e7b3f /system/lib/libart.so (bool art::interpreter::DoCall<false, false>(art::ArtMethod*, art::Th
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #15 pc 003f5001 /system/lib/libart.so (MterpInvokeInterface+1024)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #16 pc 00413c94 /system/lib/libart.so (ExecuteMterpImpl+14740)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #17 pc 001fcdd8 /data/app/pk.com.ke.peopleconnect-3XBY7V7mKYeci83RcRrdaA==/oat/arm/base.vdex (retrofit.Call
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #18 pc 001cc457 /system/lib/libart.so (_ZN3art11interpreterL7ExecuteEPNS_6ThreadERKNS_20CodeItemDataAccesso
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #19 pc 001d0cdb /system/lib/libart.so (art::interpreter::EnterInterpreterFromEntryPoint(art::Thread*, art::
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #20 pc 003e7ccb /system/lib/libart.so (artQuickToInterpreterBridge+882)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #21 pc 004252ff /system/lib/libart.so (art_quick_to_interpreter_bridge+30)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #22 pc 00987251 /system/framework/arm/boot-framework.oat (offset 0x3fd000) (android.os.Handler.dispatchMess
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #23 pc 009899a3 /system/framework/arm/boot-framework.oat (offset 0x3fd000) (android.os.Looper.loop+1162)
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #24 pc 007e30bb /system/framework/arm/boot-framework.oat (offset 0x3fd000) (android.app.ActivityThread.main
2020-01-28 16:16:09.605 5206-5206/? A/DEBUG: #25 pc 00420d75 /system/lib/libart.so (art_quick_invoke_stub_internal+68)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #26 pc 003f988b /system/lib/libart.so (art_quick_invoke_static_stub+222)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #27 pc 000a181f /system/lib/libart.so (art::ArtMethod::Invoke(art::Thread*, unsigned int*, unsigned int, ar
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #28 pc 00358161 /system/lib/libart.so (art::(anonymous namespace)::InvokeWithArgArray(art::ScopedObjectAcce
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #29 pc 003595b3 /system/lib/libart.so (art::InvokeMethod(art::ScopedObjectAccessAlreadyRunnable const&, _jo
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #30 pc 003080f5 /system/lib/libart.so (art::Method_invoke(_JNIEnv*, _jobject*, _jobjFollowing are default s
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #31 pc 0011328f /system/framework/arm/boot.oat (offset 0x10d000) (java.lang.Class.getDeclaredMethodInternal
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #32 pc 00bdcc4b /system/framework/arm/boot-framework.oat (offset 0x3fd000) (com.android.internal.os.Runtime
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #33 pc 00be2445 /system/framework/arm/boot-framework.oat (offset 0x3fd000) (com.android.internal.os.ZygoteI
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #34 pc 00420d75 /system/lib/libart.so (art_quick_invoke_stub_internal+68)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #35 pc 003f988b /system/lib/libart.so (art_quick_invoke_static_stub+222)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #36 pc 000a181f /system/lib/libart.so (art::ArtMethod::Invoke(art::Thread*, unsigned int*, unsigned int, ar
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #37 pc 00358161 /system/lib/libart.so (art::(anonymous namespace)::InvokeWithArgArray(art::ScopedObjectAcce
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #38 pc 00357f75 /system/lib/libart.so (art::InvokeWithVarArgs(art::ScopedObjectAccessAlreadyRunnable const&
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #39 pc 00299321 /system/lib/libart.so (art::JNI::CallStaticVoidMethodV(_JNIEnv*, _jclass*, _jmethodID*, std
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #40 pc 000712ff /system/lib/libandroid_runtime.so (_JNIEnv::CallStaticVoidMethod(_jclass*, _jmethodID*, ...
```

```
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #41 pc 000737ab /system/lib/libandroid_runtime.so (android::AndroidRuntime::start(char const*, android::Vec
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #42 pc 00002f15 /system/bin/app_process32 (main+728)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: Following are default settings and dependencies used. #43 pc 0008de5d /system/lib/libc.so (__libc_init+48)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #44 pc 00002bfd /system/bin/app_process32 (_start_main+40)
2020-01-28 16:16:09.606 5206-5206/? A/DEBUG: #45 pc 00000306 <anonymous:f45d9000>
```

Following are default settings and dependencies used.

```
buildTypes {
    release {
        minifyEnabled true
        debuggable false
        proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'
        signingConfig signingConfigs.config
    }
}

dependencies {
```

✓ Mentioned issues (1)

🔗 Mentioned issues (1)

-- "Similar top of stack in [b/146905476](#)."

COMMENTS

 **sg...@google.com** <sg...@google.com> [#2](#)

Question for the original reporter:

1. As far as I can see this happens on a Samsung Galaxy J6 phone. Does it happen on other phones or emulator?
2. Would it be possible for you to share the .apk which has this issues, so we can look at it? You can share it privately with sgjesse@google.com or christofferqa@google.com.

 **sg...@google.com** <sg...@google.com> [#3](#)

Similar top of stack in [b/146905476](#).

 **za...@gmail.com** <za...@gmail.com> [#4](#)

Yes, I have tried on other phones as well. Plus, I have emailed the application. It crashes on login. I've also emailed you test credentials. Kindly check.

 **sg...@google.com** <sg...@google.com> [#5](#)

Thanks for providing the APK.

I have tried it on a recent Android Build (from master), and there is does not give a native crash, but this Java crash:

```
01-30 12:10:03.584 10812 10812 E AndroidRuntime: java.lang.AbstractMethodError: abstract method "java.lang.String pk.com.ke.peopleconnect.c.v$a.f()"
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at pk.com.ke.peopleconnect.activities.K.a(SourceFile:497)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at pk.com.ke.peopleconnect.activities.K.success(SourceFile:486)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at retrofit.CallbackRunnable$1.run(SourceFile:45)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at android.os.Handler.handleCallback(Handler.java:883)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at android.os.Handler.dispatchMessage(Handler.java:100)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at android.os.Looper.loop(Looper.java:214)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at android.app.ActivityThread.main(ActivityThread.java:7356)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at java.lang.reflect.Method.invoke(Native Method)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at com.android.internal.os.RuntimeInit$MethodAndArgsCaller.run(RuntimeInit.java:492)
01-30 12:10:03.584 10812 10812 E AndroidRuntime: at com.android.internal.os.ZygoteInit.main(ZygoteInit.java:930)
```

I looked a bit further into the APK, and the class `pk.com.ke.peopleconnect.c.v$a` is abstract:

```
.class public abstract Lpk/com/ke/peopleconnect/c/v$a;
.super Ljava/lang/Object;
.source "SourceFile"

# annotations
.annotation system Ldalvik/annotation/EnclosingClass;
    value = Lpk/com/ke/peopleconnect/c/v;
.end annotation
```

```
.annotation system Ldalvik/annotation/InnerClass;
    accessFlags = 0x1
    name = "Data"
.end annotation

# virtual methods
.method public abstract a()Ljava/lang/String;
.end method

.method public abstract b()Ljava/lang/String;
.end method

.method public abstract c()Ljava/lang/String;
.end method

.method public abstract d()Ljava/lang/String;
.end method

.method public abstract e()Ljava/lang/String;
.end method

.method public abstract f()Ljava/lang/String;
.end method

.method public abstract g()Ljava/lang/String;
.end method
```

Also, I did not find any subclasses of `pk.com.ke.peopleconnect.c.v$a` in the APK. Looking a bit on the class `pk.com.ke.peopleconnect.c.v$a` and its outer class `pk.com.ke.peopleconnect.c.v` reflection. If that is the case make sure to have sufficient keep rules for these classes/methods/fields.

You can start by looking in the mapping file `app/build/outputs/mapping/release/mapping.txt` to figure out which original class name `pk.com.ke.peopleconnect.c.v` by looking for the

```
<original class name -> pk.com.ke.peopleconnect.c.v:
```

As a side note I also tried your app on an x86 emulator running Android P, and there I also got a native crash. It was not the same as you got on the Samsung phone, it said *Abort message: java.lang.IllegalStateException: Can't create handler inside thread that has already called exit.* the emulator is running a userdebug build it might also have additional asserts active in the code. But it again indicates that additional keep rules are required around the class `pk.com.ke.peopleconnect.c.v`.

Hope this can help you resolve the problem.

sg...@google.com <sg...@google.com> [#6](#)

Status: Won't Fix (Intended Behavior)

Closing this for now. Feel free to open it again if strengthening the keep rules does not seem to address the problem.