📁 Android Public Tracker > Framework   200818664   ⌄

← C ☆   Recent security update to Android 11 causing problems with recording from a widget   (+1 ⁶)   Hotlists (3)   Mark as Duplicate   🔔   ⋮

Comments (13)   Dependencies   Duplicates (0)   Blocking (0)   Resources (11)

Fixed   Bug   P3   + Add Hotlist   [AOSP] assigned

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

📄 **DESCRIPTION** di...@gmail.com created issue #1

A recent update to Android 11 is causing sporadic failures when starting a recording from a widget. The widget is using a PendingIntent with startServiceForeground. This works most of the time

This is something that is explicitly allowed by the Android documentation: https://developer.android.com/guide/components/foreground-services#bg-access-restriction-exemptions

Allowed: "The service is started by interacting with app widgets."

For example:

```
#11: PendingIntentRecord{240a774 com.digipom.easyvoicerecorder.pro startForegroundService}
      uid=10245 packageName=com.digipom.easyvoicerecorder.pro featureId=null type=startForegroundService flags=0x0
      requestIntent=act=com.digipom.easyvoicerecorder.pro.WIDGET_REQUESTS_START_RECORD_ACTION cmp=com.digipom.easyvoicerecorder.pro/com.digipom.easyvoicereco

09-22 06:19:26.206  1000  1441  1568 I ActivityManager: Start proc 32715:com.digipom.easyvoicerecorder.pro/u0a245 for service {com.digipom.easyvoicerecorder.
09-22 06:19:26.577  1000  1441  2362 W ActivityManager: Foreground service started from background can not have location/camera/microphone access: service co
```

✓ Mentioned issues (1)   ✓ Links (6)

⚙ **Mentioned issues (1)**

P2   September Pixel security update changed the behaviour of startForeground   "https://issuetracker.google.com/200781185"

🔗 **Links (6)**

"This is something that is explicitly allowed by the Android documentation: https://developer.android.com/guide/components/foreground-services#bg-access-restriction-exemptions"

"http://com.digipom.easyvoicerecorder.pro"

"http://com.digipom.easyvoicerecorder.pro/com.digipom.easyvoicerecorder.ser… "

"http://com.digipom.easyvoicerecorder.pro/u0a245"

"ADB bugreport: https://drive.google.com/drive/folders/1_5Yf98Oh-0sj2u4gMAqSYUSvoZEj5bbS?usp=s… "

"APK here: https://drive.google.com/drive/folders/1DTBlP8KSCXzHsgmzs3HsDgCuLBjsEHZk?u… "

COMMENTS

⚪ **di...@gmail.com** <di...@gmail.com> #2

This might be a related issue: https://issuetracker.google.com/issues/200781185

⚪ **gg...@google.com** <gg...@google.com>

Assigned to gg...@google.com.

⚪ **di...@gmail.com** <di...@gmail.com> #3

ADB bugreport: https://drive.google.com/drive/folders/1_5Yf98Oh-0sj2u4gMAqSYUSvoZEj5bbS?usp=sharing

⚪ **gg...@google.com** <gg...@google.com> #4

Thank you for reporting this issue. For us to further investigate this issue, please provide the following additional information:

Android build
Which Android build are you using? (e.g. PPP5.180610.010)

Device used -- Device Make, Model, Android OS Version
Which device did you use to reproduce this issue?

Please provide a sample project or apk to reproduce the issue. Also mention the steps to be followed for reproducing the issue with the given sample project or apk.

Steps to reproduce

What steps are needed to reproduce this issue?

What is the expected output?

What is the current output?

Screen record of the issue
Please capture screen record or video of the issue using following steps:
adb shell screenrecord /sdcard/video.mp4
Subsequently use following command to pull the recorded file:
adb pull /sdcard/video.mp4
Attach the file to this issue.

Note: Please avoid uploading directly to the issue using attachments. Please upload to google drive and share the folder to <u>android-bugreport@google.com</u>, then share the link here.

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di...@gmail.com <di...@gmail.com> #5

> Which Android build are you using? (e.g. PPP5.180610.010) RQ3A.210905.001

> Device used -- Device Make, Model, Android OS Version Pixel 4, Android 11

> Please provide a sample project or apk to reproduce the issue. Also mention the steps to be followed for reproducing the issue with the given sample project or apk.

APK here: https://drive.google.com/drive/folders/1DTBlP8KSCXzHsgmzs3HsDgCuLBjsEHZk?usp=sharing

> Steps to reproduce

1. Open the app and locate or create a recording of at least 1 minute long.
2. Create a recording to ensure all permissions have been granted to the app.
3. Add a recorder widget to the home screen.
4. Open the app, go to the listen tab and play the recording.
5. Return to the Home Screen, wait at least 5 seconds, then tap on the record button.

> What is the expected output?

Should work. It does work if using the workaround here: https://issuetracker.google.com/issues/200781185

> What is the current output?

Fails with "Foreground service started from background can not have location/camera/microphone access". Appears related to calling startForeground() to update a notification.

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di...@gmail.com <di...@gmail.com> #6

Video: https://drive.google.com/drive/folders/1DTBlP8KSCXzHsgmzs3HsDgCuLBjsEHZk?usp=sharing

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di...@gmail.com <di...@gmail.com> #7

After further feedback from customers, the workaround in https://issuetracker.google.com/issues/200781185 doesn't fix all instances of the issue. It's still happening for some users even w

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di...@gmail.com <di...@gmail.com> #8

For example, following the same sequence on a Samsung device running Android 11:

```
2021-09-27 15:54:12.430 1367-1567/? E/AppOps: evalMode() Allowed Record OP returned IGNORE, uid - 10291, capability - 0
2021-09-27 15:54:12.430 795-24328/? E/ServiceUtilities: Request denied by app op: 27
2021-09-27 15:54:12.430 795-24328/? E/AudioPolicyIntefaceImpl: getInputForAttr permission denied: recording not allowed for uid 10291 pid 8843
2021-09-27 15:54:12.430 795-24328/? E/AudioFlinger: createRecord() getInputForAttr return error -1
2021-09-27 15:54:12.430 8843-9187/? E/IAudioFlinger: createRecord returned error -1
2021-09-27 15:54:12.430 8843-9187/? E/AudioRecord: createRecord_1(0): AudioFlinger could not create record track, status: -1
2021-09-27 15:54:12.431 8843-9187/? E/AudioRecord-JNI: Error creating AudioRecord instance: initialization check failed with status -1.
2021-09-27 15:54:12.432 8843-9187/? E/android.media.AudioRecord: Error code -20 when initializing native AudioRecord object.
```

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di...@gmail.com <di...@gmail.com> #9

OK it seems that the problem has also come back on Pixel devices and that the workaround in https://issuetracker.google.com/issues/200781185 didn't really fix it. This is bizarre.

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di...@gmail.com <di...@gmail.com> #10

Not affecting Android 12 Pixel devices, only Android 11.

di...@gmail.com <di...@gmail.com> #11

After further investigation I believe I've traced it down to a behavior change around startForeground and stopForeground. I still need feedback from more users on different devices, but it app being more restrictive in Android 11) and different behavior based on if the app has one or multiple foreground services running.

I don't think these changes are all being universally applied or this may be unintended behavior since the behavior isn't there on Android 12 and depends on the circumstances on Android 11. release the permissions, even if the app is otherwise already in the foreground.

gg...@google.com <gg...@google.com> #12

Thank you for reporting this issue. We've shared this with our product and engineering teams and will continue to provide updates as more information becomes available.

gg...@google.com <gg...@google.com>

Reassigned to bo...@google.com.

bo...@google.com <bo...@google.com>

Reassigned to su...@google.com.

su...@google.com <su...@google.com> #13

Marked as fixed.

The development team has fixed the issue that you have reported.