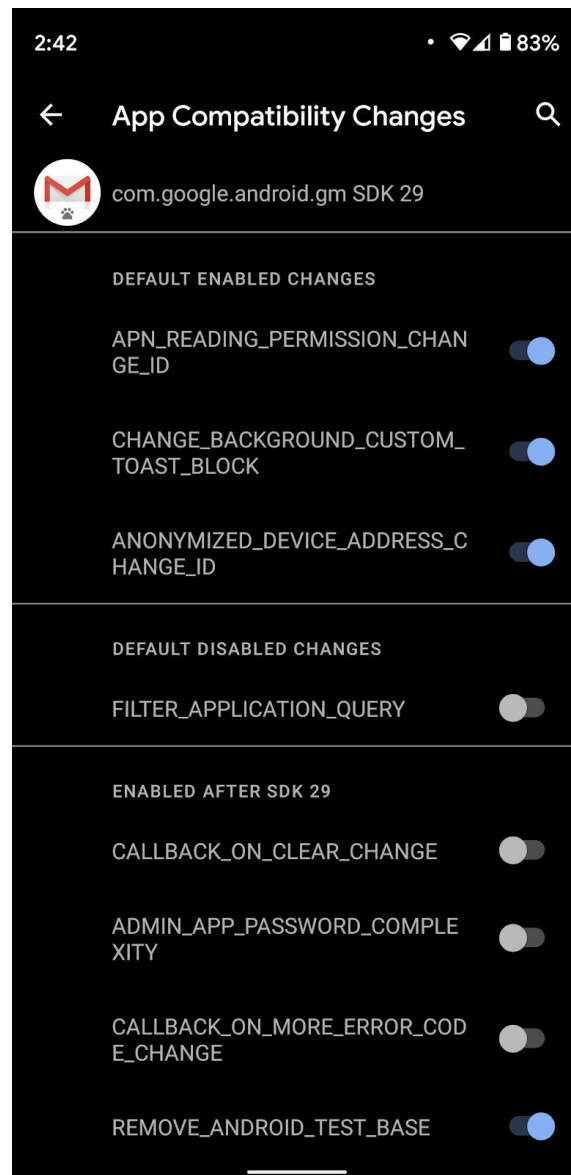


1. New tools to make it easier to test and debug apps.
 - a. Part of new compatibility framework
 - b. Enables the changes individually (in the setting app)
 - c. Types of App Compatibility Changes
 - i. Affect all apps
 - ii. Affect based on targetSDK (30)
 - iii. <https://developer.android.com/preview/test-changes>



2. Practice
 - a. Assuming that there is an example targeting Android 11, and the developer option has been enabled.
 - b. Go to the setting and find the app compatibility changes in the developer option

- c. We can turn on or off the app compatibility changes. (Toggleable)

Using Logcat and ADB

Example logcat output of enabled changes:

```
D CompatibilityChangeReporter: Compat change id reported: 141455849; UID 10265; state: ENABLED
```

To see all compat changes known to the system and their current overrides via ADB:



```
adb shell dumpsys platform_compat
```

ADB command to toggle changes

```
adb shell am compat enable|disable|reset \  
<CHANGE_ID|CHANGE_NAME> <PACKAGE_NAME>
```

- d. As soon as we toggle a change off, then we might see the crash log through logcat.
- e. If we are reluctant to use the GUI, then there is an alternative, using ADB.
- f. Id and name associated with the app compatibility change are defined in d.android.com.

Toggling Changes

Build type	Non-debuggable app	Debuggable app	
	All changes	Target SDK gated changes	All other changes
DP / Beta Build	 Can't Toggle	 Can Toggle	 Can Toggle
Public user build	 Can't Toggle	 Can Toggle	 Can't Toggle

- g. We can find the restrictions on toggling due to the app and build type of Android 11 platform.
- 3. All the purpose of the app compatibility framework is... to make it easier to get apps working on android 11 easier.