spectralink

Technical Bulletin CS-17-08

PIVOT: Optimizing Apps

This technical bulletin explains what is happening when your PIVOT handset is optimizing apps and what you can do to prevent this from happening after every reboot. Please be aware that this document is not comprehensive in capturing scenarios where this process occurs, but identifies the most common occurrences.

System Affected

Spectralink 87-Series PIVOT

Description

As with any Android device, whenever a software update occurs on the device it will be necessary for it to perform application optimization. This process writes each application into a cache for quicker access by the handset. The process typically only happens during an update to the device's firmware but can also be triggered by updates to some Google services and applications. The process is completely normal, but can take quite some time to complete.

One potential problem that can occur if the process is not allowed to finish successfully and then have the device shut down properly is that the handset may have to do it again. Proper shutdown requires using the power button and selecting Power Off from the menu. When the battery is removed from the phone without first powering down, the optimizing apps process will have to run again. As long as the phone is properly powered down via the power button before removing the battery the phone will not need to perform the optimizing apps process again until the next firmware or application update.

The following are the steps to properly power down the phone:

1. Press the power button once to light the screen if it is currently dark.

2. Press and hold the power button again until the Power menu displays

3. Tap "Power off" on the display

4. Phone will display "Power off Shutting down…"

5. Once phone has completely powered down you can remove the battery

It should be noted that the optimizing apps process does not occur every time Google services or apps are updated. It typically only happens after major updates or changes to the applications that require them to be written into cache again. Using an MDM/EMM to manage the installed applications can also help reduce the likelihood of unexpected updates occurring. The optimizing apps process will always happen when performing a firmware upgrade to the handset. The number of apps displayed is fairly random as well. You may see it be 104 one time and 25 the next. This value is partially controlled by the number of applications installed on the phone and what has been updated as part of the firmware update.

It's also possible introduce the optimizing apps process if you interrupt the normal boot up process of the phone. Because the phone is writing application data into cache that cache can become corrupted. That makes it unreadable by the phone so it will have to write it again. Anytime the phone is displaying the PIVOT boot screen is when an improper reboot can introduce the need to optimize apps again. If this happens, allow the phone to complete the process and then shut down the phone properly using the power button. This will ensure that the cache is not corrupted and the phone will not need to perform this operation at the next boot.

In short, it's critical to always allow the handset to finish the optimizing apps process and then properly power down the phone to allow the process flag to be saved and cleared to prevent the process from running at every reboot. However, we must also point out that we do not know all of the possible scenarios where the "Optimizing apps" process occurs. The behavior is integral to Android and is not well documented by Google so we cannot possibily capture every scenario. The ones we have described are the most common occurrences and the best possible ways to prevent them from recurring.

Document Status Sheet

Document Control Number: CS-17-08

Document Title: PIVOT: Optimizing Apps

Revision History: I01 – Released *December 7, 2017*
                      I02 – Released
                      I03 – Released

Date: *December 4, 2017*

Status: ☐Draft ☒Issued ☐Closed

Distribution Status: ☐Author Only ☐Internal ☐Partner ☒Public

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