

# Release notes for TC75 Android L LifeGuard Update 18 (NON-GMS)

February 2021

# **Description**

This release contains the following software package which is compatible with the TC75 NON-GMS product. LifeGuard patches are cumulative and include all previous fixes that are part of earlier patch releases.

# **Component Contents**

Package Name	Package Description
CFE-TC75-L-XX-021002-N-00-18.zip	CFE package update 18 for TC75 NON-GMS

# **Component Version Info**

Component / Description	Version
Product Build Number	02-10-02-L-00-A
Android Version	5.1.1
Linux Kernel	3.4.0
Android SDK Level	22
Android security patch level	2018-03-05 (Critical Patch Level: 2021-02-01)
Platform	QC 8960 Pro
Bluetooth Stack	01.018.00
Flash Size	8GB
RAM Size	1GB
MSP Package	7.08.85
Scanner Framework	19.56.37.2



SimulScan Demo App	2.6
SimulScanEngine	1.13.6.5
Datawedge	6.7.51
EMDK	6.8.24.1124
Mx / OSX	OSX QC.51.5.2.14/ MXMF version:7.2.10.3
WiFi	FUSION_QA_2.00.0.026
PTT	3.1.27
Touch FW	Stylus-80_GLOVE-105, FW:1.2. AA
RxLog	4.58.5.0
Mlog	MLogPackage v06.54 / MLogManager v06.54 / Service v06.54
Bluetooth Pairing Utility	3.7
File Browser	1.19.12
Stage Now	2.10.1.1389
App Gallery	2.8.4.13
Battery Swap	1.00
Tech Docs	1.0.0
WWAN	QP200-W160926A-6102076
RIL	Qualcomm RIL 1.0
TS.25	JAN092017
IMEI SV	GMS:24 Non-GMS:23
WLAN	WLAN-1240294.1



GPS	GPS-1.0.0
NFC	NFC_NCIHAL_AR3.5.0_Lollipop, FW:122
Sensors (Accel, Gyro, Light, Prox)	1
Camera	CAM-FRONT-1.0.0 / CAM-REAR-1.0.0
MSR	MSR-1.0.8
MobiControl	12.2.0. Build 23469
Zebra Volume Control	1.1.23
IST	App:1.00 build 3/Service: 1.00 build 1/Firmware:1.00 build 5
Battery Manger	1.3.6
DDT	1.15.0.11
Fingerprint	Zebra/TC75/TC75:5.1.1/02-10-02-L-00- A/180316:user/release-keys
ZSL	3.1.1
Zebra Data Service	3.7.1.1003
WifiConfig CSP	7.0.1
ЕКВ	1.7.0.5
License Manager	3.2.0
Android System Webview	55.0.2883.91

#### 1. CFE v18 Updates:

- CFE-TC75-L-XX-021002-N-00-18.zip (NON-GMS)
- Android Security Patch Level: March 05, 2018 (Critical Patch Level: February 01, 2021)

Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/



#### 2. CFE v17 Updates:

CFE-TC75-L-XX-021002-N-00-17.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: October 01, 2020)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

 SPR39290 – Resolved an issue where TC70 faces Intermittent Loss of connection with Bluetooth headset.

## 3. CFE v16 Updates:

CFE-TC75-L-XX-021002-N-00-16.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: June 01, 2020)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

• Added support for Tianma display panel.

## 4. CFE v14 Updates:

CFE-TC75-L-XX-021002-N-00-14.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: Apr 01, 2020)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR38404 "Fixed an issue where there was screeching noise heard after a voip call, and RXDevice was switched to speaker".
- SPR38341 Resolved an issue wherein device was getting stuck in boot loop as audio service was getting started a little late.
- SPR37771 Fixed an issue wherein the device was associated to an Access Point and does not roam.
- SPR33312 Resolved an issue wherein certain StageNow profile was not able to use after upgrading from KitKat to Lollipop OS.
- SPR37434 Resolved an issue wherein device heats up when the configuration is pushed as xml file from AirWatch or StageNow.
- SPR34353 Resolved an issue of unexpected EOF exception in logcat.
- SPR 35766 Resolved an issue wherein device takes longer time to connect when deployed in a denser SSID environment.
- SPR37272 Resolved an issue wherein EHS Hostname in title was not reflecting updated Hostname after device reboot.
- SPR 34909 Resolved an issue when device initiates a connection with Mesh BSSID.
- SPR 32157 Resolved an issue when an invalid Neighbor AP response received from the infrastructure.
- SPR39273 Resolved an issue wherein device use to struck on zebra logo due to slimbus timeout on multiple warmboot.



- Updated following Components:
  - License Manager: 3.2
  - o Zebra Data Service: 3.7.0.1004
  - WIFI: FUSION\_QA\_2.00.0.026

#### Known Issue:

On first boot-up after installing the LG CFEv14 patch, the Android OS installs the new ZDS (v3.x), which is conflicting with the old ZDS (v2.x) process which might have already started on boot complete. This is intermittent and one-time issue and does not have any impact on ZDS functionality or the OS

#### 5. CFE v13 Updates:

CFE-TC75-L-XX-021002-N-00-13.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: July 01, 2019)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR36654 Resolved an issue where TC70 experiences BT audio disconnect when WLAN 11d set to Auto
- SPR36991 Resolved an issue wherein with SKT SIM card device will connect to network but shows as No service.
- SPR37104 Resolved a Framework reboot issue when user tries to access missed call message notification on user screen in EHS (MMS is disabled).
- SPR36971 Resolved an issue wherein the device was sometimes sticking to Wi-Fi Access Points even at very low signal levels
- SPR36633 Resolve a scan failure issue when application using EMDK Timed Release api to scan the barcodes.
- SPR37258 Resolved an issue where DNS Resolution fails when device roams to different subnet.
- Updated below mentioned components:
  - Scanner Framework: 19.56.37.2
  - WLAN: FUSION\_QA\_2.00.0.021

#### 6. CFE v12 Updates:

CFE-TC75-L-XX-021002-N-00-12.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: April 05, 2019)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR35912 Resolved an issue wherein 11k operation depends on 11r functionality
- SPR36293 Resolved an issue wherein KT SIM loaded devices failed to connect to LTE network
- SPR35288 Fixed an issue wherein initialization of scanner was taking ~1sec.
- SPR35054 Added support for reduced quite zone barcode decoding.



- SPR34844 Resolved an issue wherein multiple open calls are prevented when multiple application tries to open scanner without releasing previous instance.
- Updated below mentioned components:
  - Scanner Framework: 19.53.37.0
  - Bluetooth: 01.018.00

## 7. CFE v11 Updates:

CFE-TC75-L-XX-021002-N-00-11.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: December 05, 2018)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR36118 Resolved an issue wherein patch version was not updating in cfe.ini.
- SPR34738 Resolved an issue wherein device reboots when VPN connection established over Cellular (AT & T).
- SPR35368 Resolved an issue wherein scanner crash while scan the barcode just before suspending or after resume the device.
- SPR35362 Resolved an issue to set hardware picklist to scan barcodes which are very close to each other.
- SPR33745 Resolved an issue where device advertise as 11ac supported.
- SPR33709 Implemented the intercharacter delay functionality in Datawedge to support RDP session scan data transfer.
- SPR34191 Resolved an issue where Devices not sending the hostname to the DHCP server.
- Updated below mentioned components:
  - MX: 7.2.10.2 (For detail please refer http://techdocs.zebra.com)
  - o Scanner Framework: 19.12.35.0
  - o EKB:1.7.0.5
  - Bluetooth: 01.015.00

# 8. CFE v10 Updates:

CFE-TC75-L-XX-021002-N-00-10.zip (NON-GMS)

 Android Security Patch Level: March 05, 2018 (Critical Patch Level: September 05, 2018)
Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR35025 Resolved an issue where Proxy Auto Config (PAC) did not work properly following stops/restarts of the PacService.
- SPR33977 Resolved an issue wherein set time zone issue observed with StageNow.
- SPR34716 Resolved an issue wherein the MX Framework did not restart properly following events where the service was stopped.
- SPR34679 Resolved an issue wherein setting WiFi Band selection to Auto was not working properly with StageNow.



- SPR34936 Resolved an issue wherein Datawedge used to crash on bootup.
- SettingsEULA has been renamed to Zebra Data Services.
- Updated below mentioned components:
  - MX: 7.2.9.0 (For detail please refer http://techdocs.zebra.com)
  - Scanner Framework: 19.10.35.1
  - o ZSL:3.1.1
  - WifiConfigCSP:7.0.1

## 9. CFE v9 Updates:

CFE-TC75-L-XX-021002-N-00-09.zip (NON-GMS)
Note: If whitelisting is enabled ZSL functionalities will NOT work. This issue will fix in next release.

Android Security Patch Level: March 05, 2018 (Critical Patch Level: June 05, 2018)

Use the below link to see the Android Security bulletin for more information:

https://source.android.com/security/bulletin/

- SPR33755 Resolved an issue wherein the Whitelisted apps were unable to submit XML to MX.
- SPR33207 Resolved an issue wherein the Device Diagnostic tool had an issue with reading the Battery Cycles in the application for PP+ batteries.
- SPR34267 Resolved an issue where-in user was not able to enable USB debugging option using StageNow.
- SPR33862 Fixed an issue where-in user could not set Display Timeout value of 30min using StageNow.
- SPR34145 Fixed an issue wherein user was unable to connect to WLAN network due to WEP Key Index issue.
- SPR34307 Resolved an issue wherein device out of the box intermittently failed to get staged via StageNow.
- SPR34083/34014/32519 Resolved an issue wherein disabling WWAN radio via Airwatch using StageNow XML fails.
- SPR33639 Resolved an issue wherein the customer app install and launch during device sleep state and device stop emitting scan beam after awake from suspend.
- SPR33876 Resolved an issue wherein Display Timeout was unable set via StageNow.
- SPR33607 Resolved an issue where few fresh devices were unable to stage after unboxing the device.
- SPR33538 Resolved an issue wherein the Scanner beam stuck off and No LED beam while pressing scanner button.
- SPR33981 Resolved an issue Czech Republic Regulatory Country could not be set using Wifi config profile.
- SPR34429 Resolved an issue wherein device failed to emit scan beam if the application was launched during device suspend.
- SPR34614 Fixed an issue in DataWedge wherein scanner could not be enabled due to quick enabling and disabling of scanner through Intents.
- SPR33897 Resolved an issue wherein Dialer screen was not launching when triggered through an intent "android.intent.action.CALL\_BUTTON".
- SPR33156 Provided configurability option to enable or disable A-GPS based on the presence of gpsinfo.txt.



To disable A-GPS, create a dummy file with name "gpsinfo.txt" and copy it to /enterprise/usr and reboot the device.

- SPR34716 Resolved an issue wherein the MX was getting killed by Backupmanager and didn't restart properly.
- SPR34213 Resolved an issue wherein shared preference initialization without launching EKB.
- Added support for Enterprise Lockdown feature.
- Updated below mentioned components:
  - Datawedge: 6.7.48
  - EKB: 1.7.0.2 (Added as a System application with this CFE 09)
  - o MX: 7.2.8.2

#### 10. CFE v7 Updates:

CFE-TC75-L-XX-021002-N-00-07.zip (NON-GMS)

## Android Security Patch Level: March 05, 2018

Use the below link to see the Android Security bulletin for more information:

## https://source.android.com/security/bulletin/

- Spectre & Meltdown correction for variant 1 and variant 2.
- SPR33599 Resolved an issue wherein few of the system applications are getting disabled after enabling whitelist.
- SPR33799 Resolved an issue wherein scanner was unable to read '\n' and '\r'.
- SPR33930 Resolved an issue wherein dhcp address was not acquired by the device, while hostname is greater than 32 characters.
- SPR34123 Resolved an issue wherein super keys are not working in stage now app.
- SPR33823 Resolved an issue wherein black screen occurred in DataWedge application.
- SPR33973- Resolved an issue wherein erroneously loading default profile by providing feature to ignore disabled profiles in DataWedge.
- SPR33671- Resolved an issue wherein user was unable to create WIFI profile with username as backslash followed by number.
- Updated below mentioned components:
  - o Datawedge: 6.7.47
  - StageNow: 2.10.1.1389
  - o EMDK: 6.8.21.1121
  - o MX: 7.2.1.0
  - File Browser: 1.19.12
  - o Diagnostic Tool: 1.15.0.11
  - Scanner Framework: 19.9.35.0
  - Radio: 2.00.0.009
  - o Bluetooth: 01.12.00

#### 11. CFE v6 Updates:

CFE-TC75-L-XX-021002-N-00-06.zip (NON-GMS)

# Android Security Patch Level: January 05, 2018

Use the below link to see the Android Security bulletin for more information:

https://source.android.com/security/bulletin/



#### 12. CFE v5 Updates:

- CFE-TC75-L-XX-021002-N-00-05.zip (NON-GMS)
- Android Security Patch Level: December 05, 2017

Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- SPR33157 Resolved an issue wherein the BUTTON\_L1 has been consumed by both barcode scanner and Google chrome client.
- SPR32825 Resolved an issue wherein BT headset volume up/down was not working during Bluetooth call scenario.
- SPR33233 Resolved an issue wherein the DataWedge 6.2.24 could not replace separator or non-printable ascii character with \$.
- SPR32463 Resolved an issue wherein the StageNow File Manager downloads frequently fails due to Socketimeout exception.
- Updated below mentioned components:
  - o Datawedge: 6.6.49
  - StageNow: 2.9.1.1344
  - o EMDK: 6.7.10.1010
  - o MX: 7.1.1.0

#### 13. CFE v4 Updates:

- CFE-TC75-L-XX-021002-N-00-04.zip (NON-GMS)
- Android Security Patch Level: September 05, 2017

Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- Corrections for KRACK vulnerabilities applied.
- SPR30400/31340 Added support to enable/disable Network Monitoring Notification.

#### 14. CFE v3 Updates:

CFE-TC75-L-XX-021002-N-00-03.zip (NON-GMS)

#### Android Security Patch Level: September 05, 2017

Use the below link to see the Android Security bulletin for more information: https://source.android.com/security/bulletin/

- Updated below mentioned components:
  - MXMF Version 7.0.2.1
  - DataWedge Version 6.5.61
  - EMDK Version 6.6.14.914
  - Staging Client Version 2.8.1.1221
- Resolved an issue in MX to prevent leakage of configuration parameters.
- Included fix for BlueBorne vulnerability.
- Included fix for blank screen seen during boot.
- SPR32582 Added support for Netherlands Belgium language.
- SPR32385 Resolved an issue wherein Simulscan API fails to read Chinese passports.



- SPR32008\_SPR31820 Resolved an issue wherein scanning PDF417 barcodes which contain embedded 0x0D characters resulted in continuous line of data instead of displaying in different lines.
- SPR32666 Resolved an issue wherein device reboots when it roams from secured to open Wi-Fi network.
- SPR32676 Resolved an issue wherein DataWedge App crashes when Velocity App tries to send an Intent to enable the scanner plugin.
- SPR32775 Resolved an issue wherein the notification class created with FLAG\_INSISTENT was not getting cleared upon pulling down the notification drawer.

## 15. CFE v2 Updates:

CFE-TC75-L-XX-021002-N-00-02.zip (NON-GMS)

# Android Security Patch Level: August 05, 2017

Use the below link to see the Android Security bulletin for more information:

https://source.android.com/security/bulletin/

- SPR29912 Resolved an issue wherein certificates installation failed through stagenow.
- SPR30401 Added support to get the CFE version via MDM clients.
- SPR31954 Resolved an issue wherein dhcpd was not able to start due to lengthy host name.
- SPR32135 Resolved an issue wherein Settings screen does not revert to its normal state even though the locale language is changed from Arabic to English via EMDK.
- SPR32240 Resolved an issue wherein the scanner service was not responding while switching between applications.
- SPR32193\_SPR32230 Resolved an issue wherein devices experiencing authentication failures and were not able to recover.
- SPR32539 Resolved an issue wherein build certificates were lost randomly even though certificates were not expired.
- SPR32326 Resolved an issue wherein Settings application crashed while trying to set enterprise keyboard as the default keyboard and disable AOSP keyboard through the stageNow profile.
- SPR32413 Resolved an issue wherein after selecting the static option in the ethernet settings, changes are not reflecting in interface and the interface was always dhcp.

# Note

# Tianma display devices are not allowed to downgrade to any of the older BSPs or Patches

- To identify the display type on TC75 devices user can check the 'persist.sys.hw.display.id' property using adb getprop command.
  - For TC75 Innolux device [persist.sys.hw.display.id]: [600]
  - For TC75 Tianma device [persist.sys.hw.display.id]: [512]

CFE v15 was a beta release. However, devices can be updated from v14 to v16 or v15 to v16.

Full package update (FPU-TC75-L-XX-021002-N-00-16.zip) is mainly meant for TC75 Tianma display devices as these devices are not allowed to downgrade to any of the older BSPs.



# **Important Links**

- Requirements and Instructions
  - o Installation and setup instructions
- Zebra Techdocs
- Developer Tools

# **Device Compatibility**

This software release has been approved for Android TC75 L models mentioned below.

Device	Operating System
TC75AH-KA11ES-A2	Android 5.1.1
TC75AH-KA11ES-A1	Android 5.1.1
TC75BH-KA11ES	Android 5.1.1
TC75BH-KA11ES-BR	Android 5.1.1
TC75BH-KA11ES-IA	Android 5.1.1
TC75BH-KA11ES-ID	Android 5.1.1
TC75BH-KA11ES-TW	Android 5.1.1
TC75BH-KA11MS-CN	Android 5.1.1

Last Revised: 09<sup>th</sup> February 2021