Release Notes - Zebra TC8000 Android L LifeGuard Update 16 Release (GMS)

Highlights

This release contains following software package which is compatible for TC8000 GMS product.

LifeGuard patches are cumulative and include all previous fixes that are part of earlier patch releases.

Note: Downgrade to Patch 6 or older patch version are not allowed on TC8000L devices which contains Hynix 16gb A15nm eMMC Memory.

Software Packages

Package Name	Description
CFE-TC8000-L-XX-021002-G-00-16.zip	LG Package Update

Security Updates

❖ **Android Security Patch Level**: March 05, 2018 (Critical Patch Level: July 01, 2020)
Use the below link to see the Android Security bulletin for more information:

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

CFE v16:

❖ CFE-TC8000-L-XX-021002-G-00-16.zip (GMS)

- SPR38628 - Fixed Scanner mis-reads issue if scanning via DataWedge code 128 bar code

- SPR39819 - Resolved an issue wherein an additional "Enter key" was being added in the barcode data when DataWedge ADF rule for Line feed Action Key Char was set to "Send Char" 10

- Updated following components:
    Scanner Framework Version : 19.62.37.1

CFE v14:

❖ CFE-TC8000-L-XX-021002-G-00-14.zip (GMS)

- SPR38923 – Resolved an issue wherein License manager where same act id can be run multiple times consuming additional licenses

- SPR37272 - Resolved an issue wherein EHS Hostname in title was not reflecting updated Hostname after device reboot

- SPR38538/39257 - Resolved an issue wherein framework reset was observed when barcode was rapidly being scanned into browser

- SPR37771 - Fixed an issue wherein the device was associated to an access Point and does not roam.

- SPR34909 - Resolved an issue when device initiates a connection with Mesh BSSID.

- SPR34976 - Resolved an issue wherein Enterprise Keyboard Autocapitalization doesn't work if you navigate away from the alpha keyboard prior to typing

- SPR37434 – Resolved an issue wherein device heats up when the configuration is pushed as xml file from AirWatch or StageNow

- SPR38341 - Resolved an issue wherein device was getting stuck in boot loop as audio service was getting started a little late.

  Updated following Components:
  - License Manager : 3.2
  - Zebra Data Service : 3.7.0.1004
  - WIFI : FUSION_QA_2.00.0.0.026

CFE v13:

❖ CFE-TC8000-L-XX-021002-G-00-13.zip (GMS)

- SPR37258 - Resolved an issue where DNS Resolution fails when device roams to different subnet.
- SPR36633 - Resolve a scan failure issue when application using EMDK Timed Release api to scan the barcodes.
- SPR36971 - Resolved an issue wherein the device was sometimes sticking to Wi-Fi Access Points even at very low signal levels.
- SPR36522 – Resolved an issue where Enterprise Keyboard crash is happening in default SOTI lockdown profile in device.
- SPR37136 - Resolved an issue where device registers as 11ac client.
- Updated below mentioned components:
  - Scanner Framework: 19.56.37.2

o   WLAN: FUSION_QA_2.00.0.0.021

CFE v12:

❖   CFE-TC8000-L-XX-021002-G-00-12.zip (GMS)

- SPR35912 - Resolved an issue wherein 11k operation depends on 11r functionality
- SPR35838 - Resolved an issue wherein binder death between IMS and DW due to Keyboard switch
- SPR36617 - Resolved an issue wherein device was not connecting to EAP-MSCHAPv2 enabled infra for localized supported countries.
- 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:
    o   Scanner Framework: 19.53.37.0
    o   Bluetooth: 01.018.00

CFE v11:

❖   CFE-TC8000-L-XX-021002-G-00-11.zip (GMS)

- 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 suspend or after resume the device.
- SPR35362 – Resolved an issue to set hardware picklist to scan barcodes which are very close to each other.
- SPR35400 – Resolved an issue where LEAP/FAST authentication was not listed for localized language.
- SPR35368 – Resolved an issue wherein DW demo app has stopped access to SE965 scanner.
- SPR35125 – Resolved an issue wherein Audio MIC gain api's were not working as expected for TC8000.
- SPR35476 – Resolved an issue wherein DW demo app has stopped access to SE965 scanner.
- 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:
    o   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
    o   Bluetooth: 01.015.00

CFEv10:-

❖   CFE-TC8000-L-XX-021002-G-00-10.zip (GMS)

- 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.
- SPR33755 – Resolved an issue wherein the Whitelisted apps were unable to submit XML to MX.
- SPR35536 – Added support for Enterprise Lockdown feature.
- 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
    - ZSL:3.1.1
    - WifiConfigCSP:7.0.1

CFE v9:
❖ CFE-TC8000-L-XX-021002-G-00-09.zip (GMS)

Note: If whitelisting (Applock) is enabled, ZSL functionalities will NOT work. This issue will be fixed in next LifeGuard patch release.

- 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 unbox 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.
- 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
- Updated below mentioned components:
    - Datawedge: 6.7.48
    - EKB: 1.7.0.2 (Added as an System application with this CFE 09)
    - MX: 7.2.8.2

CFE v8:
❖ CFE-TC8000-L-XX-021002-G-00-08.zip (GMS)

- 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.
- SPR33823 - Resolved an issue wherein black screen occurred in DataWedge application.
- SPR33674- Resolved a flash corruption issue with multiple symptoms like unable to turn on WIFI.
- 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:
    - Datawedge: 6.7.47
    - StageNow: 2.10.1.1389
    - EMDK: 6.8.21.1121
    - MX: 7.2.1.0
    - File Browser: 1.19.12
    - Diagnostic Tool: 1.15.0.11
    - Scanner Framework: 19.9.35.0
    - Radio: 2.00.0.0.009
    - Bluetooth: 01.12.00

CFE v6:
❖ CFE-TC8000-L-XX-021002-G-00-06.zip (GMS)

CFE v5:
❖ CFE-TC8000-L-XX-021002-G-00-05.zip (GMS)

- SPR32988 - Resolved an issue wherein the BUTTON_R2 has been consumed by both barcode scanner and Google chrome client.
- SPR33233 - Resolved an issue wherein the DataWedge 6.2.24 could not replace separator or non-printable ascii character with $.
- SPR32825 - Resolved an issue wherein BT headset volume up/down was not working during Bluetooth call scenario.
- SPR32463 - Resolved an issue wherein the StageNow File Manager downloads frequently fails due to Socketimeout exception.
- Updated below mentioned components:
    - Datawedge: 6.6.49
    - StageNow: 2.9.1.1344
    - EMDK: 6.7.10.1010
    - MX: 7.1.1.0

CFE v4:
- ❖ CFE-TC8000-L-XX-021002-G-00-04.zip (GMS)

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

CFE v3:
- ❖ CFE-TC8000-L-XX-021002-G-00-03.zip (GMS)

  - 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.
  - SPR31745 - Resolved an issue wherein AOSP doesn't returns a network interface address when myIpAddress/myIpAddressEx is queried.
  - SPR32373 - Resolved an issue wherein the barcode data is not transmitted when "All Decoders" is unchecked and every single decoder is checked.
  - SPR32582 - Added support for Netherlands - Belgium language.
  - 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.
  - SPR32132/SPR32896 - Resolved an issue wherein wifi was getting disabled intermittently when the battery hot swaps were done frequently.
  - 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.

CFE v2:
- ❖ CFE-TC8000-L-XX-021002-G-00-02.zip (GMS)

  - 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.
  - SPR32355 - Resolved an issue wherein dhcp was not able to start due to lengthy host name.
  - 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.
  - 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.

CFE v1:
- ❖ CFE-TC8000-L-XX-021002-G-00-01.zip (GMS)

- • Added Zebra patch version value in Settings to identify the CFE Patch version.

Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	02-10-02-LG-00-A
Android Version	5.1.1
Security Patch level	2018-03-05 (Critical Patch Level: 2020-07-01)
Linux Kernel	3.4.0
Component Versions	Please see Component Version under Addendum section

Important Links

Installation Requirements

- • The Software update requires SKU hardware device.
- • Enterprise Reset and Factory Reset package files are available on the TC8000 Software Download section on Zebra.com

Installation Instructions

BEFORE UPDATING THE OS IMAGE, EXTERNAL POWER MUST BE APPLIED TO THE TERMINAL VIA USB CHARGING CABLE OR CRADLE.

PLEASE ENSURE BATTERY LEVEL IS > 30%

CFE software update procedure for TC8000 GMS:

1. Connect the USB cable from your PC to the device and enable USB mass storage mode on the device.

2. On your PC you should see an internal and external USB mass storage drive (SD card) appears in the File Explore and copy "**CFE-TC8000-L-XX-021002-G-00-16.zip**" file to any storage.

3. Press and hold on the device Power button, click on power off and wait until the screen is turned OFF.

4. Press and hold power, Vol+ button and Scanner button.

5. Keep holding all three buttons until the device vibrates.

6. Device should enter recovery mode.

7. if applying update via Sideload Method

   a. Use the Volume + and – to highlight, "Apply update from ADB" and press the Scanner Key to select it

   b. With your Command Prompt open in the Host machine, type "adb sideload" command and add a space and then drag and drop the CFE on to it and click enter.

   c. Your PC screen will show files being installed and a little blue horizontal progress bar on your device will show status… and after about 6~ minutes it should be done and you should be back at the Android Recovery screen.

   d. *"Reboot system now"* is highlighted. Press the Scanner Key to Reboot.

8. If applying update via SD card.

   a. Click on Vol+ or Vol- to navigate and select SD card or internal storage. Press Scanner button to select it.

   b. Click on Vol+ or Vol- to navigate to the recovery update zip file.

   c. Click on Scanner button to select and start the recovery update process.

   d. Device will automatically reboot and will be ready to use.

9. To Check the Android Patch Level after installing the CFE package in the device,

   a. Settings->About Device->SW Components: Device Patch Version: 16

   b. ADB Shell method: Execute following command from PC's command prompt:
      $ adb shell getprop ro.device.patch.version
      $ 16

10. Now you are all set to use your **TC8000**.

Device Support

This software release has been approved for Android TC8000 L models mentioned below.

Device	Operating System
TC80N0-A000K110NA	Android 5.1.1
TC80N0-1000K210NA	Android 5.1.1
TC80N0-2000K210NA	Android 5.1.1
TC80N0-3000K210NA	Android 5.1.1
TC80N0-A001K31CNA	Android 5.1.1
TC80N0-1001K31CNA	Android 5.1.1
TC80N0-2001K31CNA	Android 5.1.1

TC80N0-3001K31CNA	Android 5.1.1
TC80NH-A101K320NA	Android 5.1.1
TC80NH-1101K420NA	Android 5.1.1
TC80NH-2101K420NA	Android 5.1.1
TC80NH-3101K420NA	Android 5.1.1
TC80N0-1101K42ENA	Android 5.1.1
TC80N0-A000K110IN	Android 5.1.1
TC80N0-1000K210IN	Android 5.1.1
TC80N0-2000K210IN	Android 5.1.1
TC80N0-3000K210IN	Android 5.1.1
TC80N0-A001K31CIN	Android 5.1.1
TC80N0-1001K31CIN	Android 5.1.1
TC80N0-2001K31CIN	Android 5.1.1
TC80N0-3001K31CIN	Android 5.1.1
TC80NH-A101K320IN	Android 5.1.1
TC80NH-1101K420IN	Android 5.1.1
TC80NH-2101K420IN	Android 5.1.1
TC80NH-3101K420IN	Android 5.1.1
TC80N0-1101K42EIN	Android 5.1.1
TC80NH-2101K42ENA	Android 5.1.1
TC80NH-2101K42EIN	Android 5.1.1
TC80NH-1102K420NA	Android 5.1.1
TC80NH-3102K420NA	Android 5.1.1
TC80NH-1102K420IN	Android 5.1.1
TC80NH-3102K420IN	Android 5.1.1
TC80NH-1101K42ENA	Android 5.1.1
TC80NH-1101K42EIN	Android 5.1.1

Addendum

Component Versions

Component / Description	Version
Android SDK Level	22
Platform	QC 8960 Pro
Bluetooth Stack	01.018.00
Flash Size	4GB/8GB/16GB
RAM Size	1GB/2GB
MSP Package	7.08.85 (Included for Airwatch support only)
Scanner Framework	19.62.37.1
Datawedge	6.7.51
OSX/ Mx	OSX QC.51.5.2.14 / MXMF version:7.2.10.3
Wi-Fi	FUSION_QA_2.00.0.0.026
Mlog	MLogPackage v06.54 / MLogManager v06.54 / Service v06.54
PTT Express	3.1.27
EMDK Service	6.8.24.1124
RxLogger	4.58.5.0
Touch FW	TTDA.03.04.721053 FW:2.0.860395, TTCONFIG0017
Zebra Volume Control	1.1.23
B2M	1.0.0.297
Bluetooth Pairing Utility	3.7
DataAnalytics	3.7.1.1002
File Browser	1.19.1.2
Stage Now	2.10.1.1389
App Gallery	2.8.4.13
WLAN FW	MAAAAANAZW1240301
NFC	NFC_NCIHAL_AR3.5.0_Lollipop, FW:122
Sensors (Accel, Gyro, Light, Prox)	1
MobiControl	12.2.0. Build 23469
Wavelink Velocity	1.2.104.17026.bb967b9
Tap and Pair	2.0

ZSL	3.1.1
EKB	1.7.0.5
WifiConfigCSP	7.0.1
Zebra Data Service	3.7.1.1002
SimulScan Demo App	3.0.2
SimulScanRes	2.0.2
License Manager	3.2

Revision History

Rev	Description	Date
1.0	Initial Release	July 20, 2020