

# ***Release Notes - Zebra TC51, TC70x Android Oreo LifeGuard Update 16 Release (NGMS)***

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## **Introduction**

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Work more efficiently and better serve your customers by giving your employees enterprise class handheld computers that survive life in the field or shop floor, communicate and access information in real time.

The TC70x and TC51 are professional-grade Android devices built from the ground up for the enterprise.

- Zebra's Mobility Extensions (Mx)
- Mobility DNA, a suite of mobility enabling applications, development tools and utilities
- Most advanced scan engine with longer range data capture capability
- Rugged and ready for every day enterprise use inside and outside the four walls.

## **Description**

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This release contains the following software package which is compatible with the TC51 & TC70x products.

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

## Component Contents

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Package Name	Package Description
CFE_ATLAS_02-13-15.00-ON-U16-STD.zip	OTA incremental CFE v16 update software for NGMS build compatible for TC51 & TC70x products.

## Component Version Info

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Component / Description	Version
Product Build Number	02-13-15.00-ON-U16-STD
Android Version	8.1.0
Linux Kernel	3.10.84
Android SDK Level	27
Platform	QC8956
Bluetooth Stack	4.1
Flash Size	16/32GB
RAM Size	2/4GB
Scanning Framework	22.0.6.1
SimulScan	3.0.6 SimulScanEngine 2.0.9
DataWedge	7.3.22
EMDK	7.3.18.2318
MXMF / OSX	MXMF : 9.0.3.1 / OSX : QCT.81.8.8.2
WiFi	FUSION_BA_2_11.0.0.024_O
	Radio: BA_2_11.0.0.017_O
	Application: BA_2_11.0.0.012_O
	Middleware: BA_2_11.0.0.015_O
	Firmware: 7.35.205.8_20181002
NFC	NFC_NCIHALx_AR003C.8.3.0_O_OpnSrc
PTT	3.1.39
Touch FW	TC70x/TC75x = 1.9-Stylus-1-0 & TC51/TC56 = 1.8-Stylus-2.0
RxLogger	5.4.12.0
Bluetooth Pairing Utility	3.14
Zebra Data Service	3.5.0.1162
Files	8.1.0
Stage Now	3.3.1.2000
Battery Swap	1.0
User Guide	1.0
Camera	2.0.002
MSRN	2.01

Zebra Volume Control (ZVC)	2.1.0.14
Battery Manger	1.4.2
ActiveEdge	2.5.16
WorryFree WiFi Analyzer	3.2.20
Device Central	2.1.0.9
Zebra Software License Manager	3.1.1
Audio	0.8.0.0
Acoustic Profiles	TC51: General: AO1.1 Cellular: N/A TC51HC: General: AO2.1 Cellular: N/A TC70x: General: BO1.1 Cellular: N/A
OemInfo	1.0.1.1128
OemConfig	9.0.1.0
Enterprise Keyboard (EKB)	2.1.1.3
WebView	73.0.3683.90
Diagnostic Tool	1.17.0.9
Finger Print	Zebra/TC70x/TC70x:8.1.0/02-13-15.00-ON-U16-STD/96:user/release-keys Zebra/TC51/TC51:8.1.0/02-13-15.00-ON-U16-STD/96:user/release-keys Zebra/TC51/TC51HC:8.1.0/02-13-15.00-ON-U16-STD/96:user/release-keys
Security Patch Level	July 01 2019

## 1. CFE v16 Updates:

❖ CFE\_ATLAS\_02-13-15.00-ON-U16-STD.zip (NGMS)

### 1. Android Security Patch Level: July 01, 2019.

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

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

### 2. Updated below mentioned components: For more detail please refer

<http://techdocs.zebra.com>

- DataWedge – Version 7.3.22
  - a. SYMBOL\_TRIGGER\_6 virtual key can be mapped using KeyManagerCSP to any physical keys and the mapped physical keys can then be used to trigger RFIDWedge.
- MXMF – Version 9.0.3.1
  - a. SPR36768 - Resolved an issue wherein EHS Hostname in title was not reflecting updated Hostname after device reboot.
- EKB – Version 2.1.1.3

- a. SPR37353 - Enabled remapping of the right-side emoji icon in the EKB, both left and right emoji icons will be remapped to same key.
  - EMDK – Version 7.3.18.2318
  - OSx – Version QCT.81.8.8.2
  - Zebra Data Service – Version 3.5.0.1162
  - OemInfo – Version 1.0.1.1128
1. SPR35991 - Resolved an issue wherein when soft-keyboard is switched, sometimes scan data stops to transmit to apps.
  2. SPR36946 - Resolved an issue wherein System UI crashes whenever user tries to open settings related options on user screen in EHS.
  3. SPR36967 - Resolved an issue wherein downgrading LG patch will cause "Error Zebra Plugin Stopped" popup.
  4. CHINA/Indonesia SKU Support - LTE/4G network option/capability is disabled for China/Indonesia SKU's.
  5. Added support for Force Rotation feature & USB Ethernet adapter for CRD-TC5X-1SWS-01 (TC5X Workstation Docking Cradle).

## 2. CFE v15 Updates:

- ❖ CFE\_ATLAS\_02-13-15.00-ON-U15-STD.zip (NGMS)
3. **Android Security Patch Level: June 01, 2019.**  
Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/>
  4. Updated below mentioned components: For more detail please refer <http://techdocs.zebra.com>
    - DataWedge – Version 7.3.21
      - a. SPR37060 - Resolved an issue wherein Datawedge was not disabling the scanner upon resume during app transition from background to foreground causing intermittent scanning failures.
      - b. SPR37124 - Resolved an issue wherein ADF rule with crunch spaces was removing last character from barcode data with space.
    - EMDK – Version 7.3.17.2317
      - b. SPR36925: Resolved an issue wherein scanner was not available for second app when an ANR or crash occurred on the first app.
    - MXMF – Version 9.0.2.9
      - a. SPR36994 - Resolved MX initialization issue wherein EHS was calling MX before completion of MX initialization process.
    - EKB – Version 2.1.1.2

- Device Central – Version 2.1.0.9
6. SPR 35943 - Added WebView version 73.0.3683.
  7. SPR36961 - Fixed an issue wherein User installation of RFID apps does not persist on non-RFID devices after reboot.
  8. SPR36897: Added dun type to Telstra-M2M APN.
  9. SPR37175 - Fixed an issue wherein Two apps can enable the same scanner without one app releasing it.
  10. SPR36927 - Resolved an issue wherein scanner was not available for any app when multiple apps enabled the scanner and any app among them disable the scanner when it moves to background.

### 3. CFE v14 Updates:

❖ CFE\_ATLAS\_02-13-15.00-ON-U14-STD.zip (NGMS)

#### 5. **Android Security Patch Level: May 01, 2019.**

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

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

#### 6. Updated below mentioned components: For more detail please refer

<http://techdocs.zebra.com>

- DataWedge – Version 7.3.18
  - StageNow – Version 3.3.1.2000
  - EMDK – Version 7.3.14.2314
  - MXMF – Version 9.0.2.4
  - DDT – Version 1.17.0.9
  - EKB – Version 2.1.1.0
  - OemConfig – Version 9.0.1.0
  - Scanning Framework – Version 22.0.6.1
    - a. DotCode Symbology support is added for SE4750, SE4850, SE4710 and Camera Scanning.
    - b. Digimarc barcode decoding support is added for Camera Scanning.
    - c. Support for new Symbologies named FebraBan and Gridmatrix is added.
    - d. Instant Data Reporting (MultiBarcode) feature support is added.
  - OSx – Version QCT.81.8.7
11. SPR36170 - Fixed an issue wherein ntp sync does not work when parameters are updated using Stagenow.

12. SPR36143 - Resolved an issue wherein remapping of control modifier keys were not persisting across a reboot.

#### 4. CFE v13 Updates:

❖ CFE\_ATLAS\_02-13-15.00-ON-U13-STD.zip (NGMS)

1. **Android Security Patch Level: April 01, 2019.**

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

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

2. Updated below mentioned components: For more detail please refer

<http://techdocs.zebra.com>

- PTT - Version 3.1.39
- Device Central - Version 2.0.22.1
- OSX - Version QCT.81.8.6\_4
  - a. SPR36117/36095 – Resolved an issue wherein the scanned data would not come to the Apps, Airplane menu item was missing in the Power key menu and Home and recent buttons were not functional.

#### 5. CFE v12 Updates:

❖ CFE\_ATLAS\_02-13-15.00-ON-U12-STD.zip (NGMS)

3. **Android Security Patch Level: February 01, 2019.**

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

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

4. Updated below mentioned components: For more detail please refer

<http://techdocs.zebra.com>

- WorryFree WiFi Analyzer – Version 3.2.20
- MX: 8.4.1.3
  - a. SPR35665 – Resolved an issue wherein Google Keyboard settings was not persisting.
  - b. SPR35491/35856 – Resolved an issue wherein Analytics Manager was throwing "Index out of bound error " when a StageNow Barcode is scanned.
  - c. SPR35928 – Resolved an issue where Clock Manager CSP accepts timezone id in "/Etc" Olson format.
  - d. SPR35908 – Resolved an issue wherein admin and user generated certificates could not be downloaded from external server.
  - e. SPR34771 – Resolved synchronization issue while checking with accessmanager.
- StageNow client: 3.2.1.0
- OEMConfig: 8.4.0.1
- Datawedge: 7.2.5
- EKB: 2.0.1.9

- a. SPR35603 – Fixed an issue wherein Enterprise Keyboard was getting disappeared when external Keyboard was connected.
  - EMDK: 7.2.2.2202
  - DDT: 1.16.1.3
5. SPR36019 – Resolved an issue wherein serial port control signals were not working as expected.

## 6. CFE v11 Updates:

❖ CFE\_ATLAS\_02-13-15.00-ON-U11-STD.zip (NGMS)

### 1. **Android Security Patch Level: December 01, 2018.**

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

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

### 2. Updated below mentioned components: For more detail please refer

<http://techdocs.zebra.com>

- WLAN - Version FUSION\_BA\_2\_11\_0.0.024\_O
- ZVC - Version 2.1.0.14
- OemInfo - Version 1.0.0.1059

## Installation Requirements

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- ADB installed on the PC (including adb drivers)
- USB debugging turned ON (from Developer options)
- TC51/TC70x has at least:
  - Version 02-13-15.00-ON-U01-STD

## Installation Instructions

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### CFE software update procedure for TC51 and TC70x:

The installation instructions assume you have ADB installed on your PC (the adb drivers etc..) and your TC51/TC70x has developer options enabled and USB debugging ON. Instructions on HOW TO enable ADB is also captured in the user guide.

1. Connect the TC51/TC70x to the PC using the USB data cable or through the cradle.
2. You may need to pull down the top menu and if you see “USB for charging”, touch it and then change it to “File transfers”.
3. Open Command Prompt, run “adb devices” and check if you can see the device’s serial

number... If yes, proceed... if not, you will need to get the PC set up with the proper drivers or install an External SD Card.

4. You may also get a pop up on your PC (Win 7) that you will be connected as a Portable Media Player... this can be ignored.

#### ❖ Download Image

a) CFE\_ATLAS\_02-13-15.00-ON-U16-STD.zip listed above in content section

5. Entering Recovery Mode
  - a. Choice 1: In Command Prompt, type *"adb reboot recovery"* and click enter.
  - b. Choice 2:
    - Reset and hold PTT key
    - When Zebra Technologies logo appears on the screen release the PTT Key
6. Your TC51/TC70x will reboot and put you on the Android Recovery screen.
7. If applying update via sideload Method
  - a. Use the Volume + and – to highlight, *"Apply update from ADB"* and press the Power key to select it for applying OS upgrade package
8. if applying update via External SD card
  - a. Use the Volume + and – to highlight *"Apply update from SD card"* and press the Power Key to select it
  - b. Use the Volume + and – to highlight package CFE\_ATLAS\_02-13-15.00-ON-U16-STD.zip and press the Power Key to select it.
  - c. Go to Step 10 once above steps are completed
9. With your Command Prompt open in the Host machine, type *"adb sideload"* command and add a space and then drag and drop the CFE\_ATLAS\_02-13-15.00-ON-U16-STD.zip file on to it and click enter.
  - a. 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 (could be 10+ minutes if installing GMS) it should be done and you should be back at the Android Recovery screen.
10. *"Reboot system now"* is highlighted. Press the Power Key to Reboot.
11. At the Home Screen, we need to verify that the BSP upgrade took place and set the Date & Time.
  - a. Go to *"Settings"* and scroll down to *"About phone"* and look at the *"Build number"*. It should start with ***"02-13-15.00-ON-U16-STD release keys"***. Now you are on the correct BSP.
12. Now you are all set to use your TC51/TC70x.



## Device Compatibility

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This software release has been approved for use on the following devices.

TC51	
Device Part Number	Operating System
TC510K-1PAZU2P-US	Android M, N, O
TC510K-1PAZU2P-A6	Android M, N, O
TC510K-1PAZU4P-US	Android M, N, O
TC510K-1PAZU4P-A6	Android M, N, O
TC510K-1HDZU2P-US	Android M, N, O
TC510K-1HDZU4P-US	Android M, N, O
TC510K-1HDZU2P-A6	Android M, N, O
TC510K-1HDZU4P-A6	Android M, N, O
TC510K-1PAZU2P-IA	Android M, N, O
TC510K-1PAZU4P-IA	Android M, N, O

TC70x	
Device Part Number	Operating System
TC700K-02B22B0-A6	Android M, N, O
TC700K-02B24B0-A6	Android M, N, O
TC700K-02B22B0-US	Android M, N, O
TC700K-02B24B0-US	Android M, N, O
TC700K-02B22B0-IA	Android M, N, O

Supported FIPS and TAA Compliant SKUS:

FIPS and TAA Compliant SKUS	
Device Part Number	Operating System
TC510K-1PAZU4P-FT	Android M, N, O
TC510K-1HDZU4P-FT	Android M, N, O
TC700K-02B24B0-FT	Android M, N, O

## Known Issues and Limitations

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1. USB audio headset is not supported on Workstation Cradle.
2. If reboot is performed when the TC5x is placed on Workstation cradle, headset icon will not disappear on status bar even after undocking the TC5x from the cradle. As a workaround, user need to place the TC5x on the workstation cradle & undock it.

3. For an existing Data wedge profile which is configured for Image barcode scanning, if the user updates the profile for SimulScan data capture and reboots the device, the decoder list is shown as blank under DataWedge settings. As a workaround, user needs to use two different Data wedge profiles one for Imager barcode scanning and other profile for Simul scan data capture.
4. Velocity application stops if user use the Android Recent button to close Velocity app. As a workaround, user can close the application from the velocity application client menu.
5. Ethernet shows Connected state when device is configured with Static IP and placed in multi-slot cradle without Ethernet cable.

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