

# Zebra WT6000 Android N LifeGuard Update 27

## Release Notes – June 2023

### Description

This release contains following software package which is compatible with the WT6000 N product. LifeGuard patches are cumulative and include all previous fixes that are part of earlier patch releases. This release documentation contains the details of this release – features, instructions, component details, part numbers supported and known issues/limitations.

### Component Contents

| Package Name                          | Package Description |
|---------------------------------------|---------------------|
| CFE_WT6000_02-12-29.00-NN-U27-STD.zip | CFE package update  |

### Device Support

| USA                                   | SKU            | Comment                           |
|---------------------------------------|----------------|-----------------------------------|
| Standard SKU (1 Gb RAM / 4 Gb Flash)  | WT60A0-TS0LEUS |                                   |
| Premium SKU (2 Gb RAM / 8 Gb Flash)   | WT60A0-TS2NEUS | Cannot be downgraded to Android L |
| WT6000,2GB RAM/8GB FLASH, ENGLISH, US | WT60A0-TX2NEUS |                                   |
| WT6000+KB,2G/8G,St Bat,US             | WT60A0-KS2NEUS |                                   |
| WT6000+KB,2G/8G,Ext Bat,US            | WT60A0-KX2NEUS |                                   |
| <b>Rest of the World</b>              |                |                                   |
| Standard SKU (1 Gb RAM / 4 Gb Flash)  | WT60A0-TS0LEWR |                                   |
| Premium SKU (2 Gb RAM / 8 Gb Flash)   | WT60A0-TS2NEWR | Cannot be downgraded to Android L |
| WT6000,2GB RAM/8GB FLASH, ENGLISH, WW | WT60A0-TX2NEWR |                                   |
| WT6000+KB,2G/8G,St Bat,World          | WT60A0-KS2NEWR |                                   |
| WT6000+KB,2G/8G,Ext Bat,World         | WT60A0-KX2NEWR |                                   |

## New in WT6000 N

- **CFE v27 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U27-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: June 01, 2023)

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

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

- **Updated below mentioned components:**

- WebView -113.0.5672.163

- **SPRs:**

- SPR 47079 - Resolved an issue where Bluetooth continuously crashes when more than 100 devices are paired.

- ❖ Added Device Central Apk 2.1.0.20

- **CFE v25 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U25-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: November 01, 2022)

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

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

- **Updated below mentioned components:**

- WebView - 107.0.5304.54

- ❖ Added support for Corded Adapter (CBL-RS5X6-ADPWT-01) for RS5100, RS6100.

- ❖ Added support for RS6100 Ring scanner.

- **CFE v24 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U24-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: August 01, 2022)

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

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

- **Updated below mentioned components:**

- WebView - 103.0.5060.71

- **CFE v23 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U23-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: February 01, 2022)

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

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

- **Updated below mentioned components:**
  - WebView - 97.0.4692.87
- **CFE v22 Updates:**
  - ❖ CFE\_WT6000\_02-12-29.00-NN-U22-STD.zip
    - **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: November 01, 2021)  
  
Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/>
    - **Updated below mentioned components:**
      - WebView - 95.0.4638.50

- **CFE v21 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U21-STD.zip
  - **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: October 01, 2021)  
  
Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/>

### New Features

- Added support for ILI9805 display IC for WT6000 devices including downgrade protection. This image is backward compatible with existing ILI9805C display ([See Notes](#))

- **CFE v20 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U20-STD.zip
  - **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: August 01, 2021)  
  
Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/>
  - **Updated below mentioned components:**
    - WebView - 92.0.4515.115
    - WiFi: FUSION\_BA\_1\_10.0.4.034\_N
      - Radio: BA\_1\_10.0.4.030\_N
  - SPR43697 - Resolved an issue where device was unable to get new AP address and also device processed death from unconnected AP.

- **CFE v19 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U19-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: May 01, 2021)

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

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

- **Updated below mentioned components:**

- WebView - 90.0.4430.91
- SPR42945 - Resolved an issue where device is experiencing slow WiFi operation when BLE scan/transmit was running on same band.
- SPR43129 - Resolved an issue where WLAN and Bluetooth model names were incorrectly displayed as "WCN3680B".
- SPR43281 - Resolved an issue where device disconnects the wifi when the ARP Response is not received.

- **CFE v18 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U18-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: February 01, 2021)

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

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

- **Updated below mentioned components:**

- WiFi - FUSION\_BA\_1\_10.0.4.032\_N
- WebView - 88.0.4324.93
- SPR40628 - Resolved an issue where Invalid rates set in CCX Rate IE of TSPEC leads to GTK Rotation failure.
- SPR40178 - Resolved an issue where sometimes device didn't respond to pings in suspend state.
- SPR39491 - Resolved an issue wherein voice calls intermittently becomes one way when connected to a FT (802.11r) network.
- SPR40705 - Resolved an issue where device processes deauthentication/disassociation from non-connected Access Point.
- SPR37268 - Resolved an issue where Proxy Service getting killed due to rebinding of proxy call during initial binding.

- **CFE v16 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U16-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: November 01, 2020)

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

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

- Updated WebView version 85.0.4183.120.

- **CFE v15 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U15-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: August 01, 2020)

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

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

- SPR39876 - Updated WebView version 81.0.4044.111.
- SPR40014 - Added new APIs which can set/unset the configurations for app verification on a GMS device for the SafetyNet security check, Same API's will throw unsupported exception as WT6000 is non-GMS device.
- SPR39693 - Fixed an issue when pairing a second HS3100 by NFC fails.
- SPR39823 - Fixed an issue wherein WT6000 does not acquire IP address sometimes when DHCP option 81 is enabled.
- SPR38679 - Resolved an issue where Device loses wireless connectivity during roam in screen off state.

- **CFE v14 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U14-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: May 01, 2020)

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

<https://source.android.com/security/bulletin/2020-05-01>

- SPR39242- Resolved issue where VMWare MX Service was disabled or lost after update to U01.
- Updated the firmware for fixing Kr00k vulnerability issue seen with Broadcom Wi-Fi chipsets.

- **CFE v13 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U13-STD.zip

- **Android Security Patch Level:** October 05, 2019 (Critical Patch Level: November 01, 2019)

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

<https://source.android.com/security/bulletin/2019-11-01>

- Added support for RS5100 Ring Scanner.
    - Added support for WT6000 External Keypad.

| Part Number        | Model No  | Description   |
|--------------------|-----------|---|
| KYPD-WT6XANFASM-01 | KYPD-WT6X | WT6000 External Keypad Assembly, Alphanumeric and Function, Includes Mounting Cleat |

- SPR37767 - Resolved an issue wherein scanner stopped working during rapid scanning with hard trigger.
    - SPR37584 - Fixed an issue where device WiFi not waking up on time to receive the buffered packets from the AP.
    - SPR37601 - Resolved an Issue where English Ireland(en\_IE) and Spanish Mexico (es\_MX) locales were not being applied successfully through Stagenow.
    - SPR38118 - Fixed an issue where disabling Airplane mode via StageNow was not working.
    - SPR37434 - Fixed an issue wherein the device becomes warm after pushing Wi-Fi configuration through StageNow.
    - SPR38531 - Added a Bug report menu inside Power Button Menu list.
    - SPR37841 - Fixed an issue where device WiFi not waking up on time to receive the buffered packets from the AP.

- **CFE v12 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U12-STD.zip

- **Android Security Patch Level:** October 05, 2019

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

<https://source.android.com/security/bulletin/2019-10-01>

- Updated below mentioned components: For more detail, please refer <http://techdocs.zebra.com>
      - DataWedge version – 7.3.26
      - EMDK version – 7.3.21.2321

- **CFE v11 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U11-STD.zip

- **Android Security Patch Level:** August 05, 2019

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

<https://source.android.com/security/bulletin/2019-08-01>

- Updated below mentioned components: For more detail, please refer <http://techdocs.zebra.com>
  - DDT version – 1.17.0.9
  - StageNowClient version – 3.3.1.2000
  - Event injection Service version – 1.0.0.5
  - MXMF version – 9.0.4.3
- B2M client included in disabled mode.
- SPR35062 – Fixed an issue wherein setting Default Launcher was failing when more than one third party launcher was installed in the device.
- SPR34771 – Resolved synchronization issue while checking with accessmanager.
- SPR35928 – Resolved an issue where Clock Manager CSP accepts timezone id in "/Etc" Olson format.
- SPR36994 - Resolved MX initialization issue wherein EHS was calling MX before completion of MX initialization process.
- SPR36958- Resolved an issue wherein disabling Airplane Mode using PowerKey Manager is not working.
- SPR36768- Resolved an issue wherein EHS Hostname in title was not reflecting updated HostName after device reboot.
- DataWedge version – 7.3.25
- SPR37060 – Resolved an issue wherein Datawedge was not disabling the scanner upon resume during app transition from background to foreground causing intermittent scanning failures.
- SPR37124 – Resolved an issue where in ADF rule with crunch spaces was removing last character from barcode data with space.
- EMDK version – 7.3.20.2320
  - SPR36925 – Resolved an issue wherein scanner was not available for second app when an ANR or crash occurred on the first app.
- EnterpriseKeyboard version –2.1.1.3
  - SPR34093 – Resolved an issue wherein AutoCapitalization was not working when you navigate away from Alpha keyboard prior to typing.
  - SPR35603 – Resolved an issue wherein Enterprise Keyboard was not visible when external USB keyboard was connected.
  - SPR37353– Enabled remapping of the right-side emoji icon in the EKB, both left and right emoji icons will be remapped to same key.
- Scanner Framework version – SF\_19.57.37.0
  - SPR37175 – Fixed an issue wherein Two apps can enable the same scanner without one app releasing it.

- **CFE v10 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U10-STD.zip

- **Android Security Patch Level:** May 05, 2019

Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/2019-05-01>

- SPR36830 – Resolved an issue where BT HS3100 voice re-calibration required when other headsets are used.

- **CFE v9 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U09-STD.zip

- **Android Security Patch Level:** April 05, 2019

Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/2019-04-01>

- **CFE v8 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U08-STD.zip

- **Android Security Patch Level:** March 05, 2019

Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/2019-03-01>

- **Updated below mentioned components:**

- WiFi – FUSION\_BA\_1\_10.0.3.019\_N
- SPR36111 – Resolved an issue where WiFi connection drops and unable to recover till a reboot.

- **CFE v7 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U07-STD.zip

- **Android Security Patch Level:** February 05, 2019

Use the link below to see the Android Security bulletin for more information:  
<https://source.android.com/security/bulletin/2019-02-01>

- SPR36331 – Resolved a device reboot issue where DHCP Option received with more than expected length.



- **CFE v6 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U06-STD.zip

- **Android Security Patch Level:** January 05, 2019

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

<https://source.android.com/security/bulletin/2019-01-01>

- **CFE v5 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U05-STD.zip

- **Android Security Patch Level:** December 05, 2018

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

<https://source.android.com/security/bulletin/2018-12-01>

- **CFE v4 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U04-STD.zip

- **Android Security Patch Level:** November 05, 2018

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

<https://source.android.com/security/bulletin/2018-11-01>

- **CFE v3 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U03-STD.zip

- **Android Security Patch Level:** October 05, 2018

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

<https://source.android.com/security/bulletin/2018-10-01>

- B2M client included in disabled mode.
- SPR35849 – Resolved an issue wherein KeyProgrammer fails to open via Device settings.

- **CFE v2 Updates:**

- ❖ CFE\_WT6000\_02-12-29.00-NN-U02-STD.zip

- **Android Security Patch Level:** September 05, 2018

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

<https://source.android.com/security/bulletin/2018-09-01>

- Updated below mentioned components:
  - Diagnostic Tool: Version 1.16.0.1
  - OEMConfig: Version 8.1.0.9
  - Enterprise Keyboard: Version 1.9.0.4
  - DataAnalytics – Version 3.3.0.1113
- MX, StageNow, EMDK, Datawedge component updates:
  - Note:** For detailed release notes, please refer <http://techdocs.zebra.com>
    - MX: Version 8.1.0.10
    - StageNow Client: Version 3.1.1.1018
    - EMDK: Version 6.10.12.1312
  - SettingsEULA has been renamed to Zebra Data Services.
  - Included Zebra Software License Manager v3.1.1.
  - CVE-2018-5383 was corrected preventing unauthenticated BT pairing.
  - WiFi – FUSION\_BA\_1\_10.0.1.017\_N
    - SPR34999 – Resolved a WLAN disconnection issue in 2.4GHz band with BT operation.
  - Datawedge: Version 6.9.49
    - SPR34429 – Resolved an issue wherein DataWedge failed to load “default Profile0”.
    - SPR34614 – Resolved an issue in DataWedge wherein scanner could not be enabled due to quick enabling and disabling of scanner through Intents.
    - SPR34972 – Implemented new parameters in scanner\_input\_plugin API so that the API takes considerably less time to suspend/reenable of the scanner

- **CFE v1 Updates:**

- ❖ CFE\_WT6000\_P01\_NN\_02-12.29.zip

- **Android Security Patch Level:** August 05, 2018

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

<https://source.android.com/security/bulletin/2018-08-01>

| Component / Description   | Version   |
|---------------------------|---|
| Product Build Number      | 02-12-29.00-NN-U27-STD.   |
| Android Version           | 7.1.1   |
| Linux Kernel              | 4.1.15  |
| Android SDK Level         | 25  |
| Platform                  | Freescale imx6  |
| Bluetooth Stack           | Android 7.1.1   |
| Flash Size                | 4GB/8GB   |
| RAM Size                  | 1GB/2GB   |
| Scanning                  | 19.65.40.0  |
| DataWedge                 | 7.3.37  |
| EMDK                      | 7.3.25.2325   |
| MXMF / OSX                | MXMF: 9.4.1.2/ OSX: FSL.71.7.10.1   |
| WiFi                      | FUSION_BA_1_10.0.4.034_N<br>Application: BA_1_10.0.1.013_N<br>Radio: BA_1_10.0.4.030_N<br>Middleware: BA_1_10.0.1.016_N<br>Firmware: 7.35.205.8 |
| PTT                       | 3.1.35  |
| Touch FW                  | 27  |
| RxLogger                  | 5.4.13.0  |
| Elemez (B2M client)       | 1.0.0.408   |
| Bluetooth Pairing Utility | 3.9   |
| DataAnalytics             | 3.6.0.1034  |
| File Browser              | 1.19.1.5  |
| Enterprise Keyboard       | 2.1.1.3   |
| Stage Now                 | 3.4.1.5   |
| App Gallery               | 3.0.1.7   |

|                          |   |
|--------------------------|---|
| User Guide               | 1   |
| Sensors (Accel, Gyro)    | 3060105   |
| MobiControl              | N/A   |
| Zebra Volume Control     | 2.0.0.13  |
| Battery Manager          | 1.5.3   |
| ActiveEdge               | N/A   |
| WorryFreeWifi (SmartMU)  | 9.1.1   |
| Device Central           | 2.1.0.20  |
| Audio                    | 0.6.0.0   |
| Diagnostic Tool          | N/A   |
| Ivanti Velocity          | 2.0.0.18010.9605437   |
| FingerPrint              | Zebra/WT6000/WT6000:7.1.1/02-12-29.00-NN-U12-STD/190919:user/release-keys |
| Security Patch Level     | October 5, 2019 (Critical Patch Level: June 1, 2023)                      |
| Zebra Software Licensing | 3.2.0   |
| Event injection Service  | 1.0.0.5   |
| GMS Version              | N/A   |
| Zebra Data Service       | 7.0.9.1001  |
| NFC                      | NFC_NCIHAL_AR3.2.0_L  |
| Oeminfo                  | 9.0.0.39  |
| WebView                  | 113.0.5672.163  |

## Requirements

1. Requires powered cradle with USB cable or USB Charge cable.
2. Requires Host PC computer.

## Notes

1. The internal battery must be charged to at least 30% to update using recovery mode.
2. New reset packages are uploaded along with CFE v15.
  - reset packages version 2(released in August 2020) are supposed to be used for patch 15 and higher. If used on older patches, cache partition will not be formatted.
  - reset packages version 1(released in July 2018) are supposed to be used for patch 14 and lower. These packages will not work on newer patches due to downgrade protection check.
3. ILI9805 display devices are not allowed to downgrade to any of the older BSPs or Lifeguard Patches

below 21.

- To identify the display type on WT6000 devices user can check the 'ro.config.device.display' property using `adb getprop` command.
  - For WT6000 ILI9805 device [ro.config.device.display]: [254]
  - For WT6000 ILI9805C device [ro.config.device.display]: [250]

Full package update (WT6000\_FULL\_UPDATE\_02-12-29.00-NN-U21-STD.zip) is mainly meant for WT6000 ILI9805 display devices as these devices are not allowed to downgrade to any of the older BSPs.

To identify the display type on WT6000 devices user can go to "Settings" → "About device" → "Hardware config" → "Display"

- Ilitech-ILI9805: new display IC devices
- Ilitech-ILI9805C: old display IC devices

## Usage Notes

- The default mapping for the P3 key is configured as an ENTER command from LG 13 Onwards, on earlier LG it was mapped to Button\_L2.

## Known Issues

- "Draw Over Other Apps" grant permission screen might be observed only after performing Enterprise Reset from SOTI console.
- "Zebra Data Service plugin has stopped" or "Oeminfo has stopped " pop-up might be observed while downgrading from latest patch (LG13) to older patches.

## Installation and setup instructions

### Software update procedure

The installation instructions assume user have ADB installed on their PC (the adb drivers etc..) and the user device has developer options enabled and USB debugging ON.

- [Installation and setup instructions](#)

## Important Links

- <https://developer.zebra.com/>
- [support central](#)

## About WT6000

For warehousing and manufacturing customers who want to improve worker productivity, the WT6000 offers industry leading ergonomics, a modern touch-centric user experience and time saving features, such as NFC tap to pair.

- 6% smaller and 27% lighter than the previous generation wearable computer, so more comfort and less fatigue for workers.
- NFC reader, for quick tap-to-pair with ring scanners, wireless headsets and mobile printers.
- All Touch TE, which enables seamless migration of legacy TE green screens to an intuitive touch screen interface.
- Shared Power Precision+ battery with the RS6000 ring scanner, for simplified battery management.



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