Release Notes – Zebra Android 11

11-34-04-RN-U00-STD-HEL-04 Release (NGMS)

Highlights

This Android 11 NGMS release 11-34-04.00-RN-U00-STD-HEL-04 covers TC26 and TC26 HC family of products.

Starting at Android 11, Delta Updates must be installed in sequential order (ascending oldest to newest); Update Package List (UPL) is no longer a supported method. In place of installing multiple sequential Deltas, a Full Update can be used to jump to any available LifeGuard Update.

Please see, device compatibility under Addendum Section for more details.

Software Packages

Package Name	Description
HE_FULL_UPDATE_11-34-04.00-RN-U00-STD-HEL-04.zip	Full package update
HE_DELTA_UPDATE_11-31-27.00-RN-U00-STD_TO_11-34-04.00-RN-U00-STD.zip	Delta package from previous release 11-31-27.00-RN-U00-STD

Security Updates

This build is Compliant up to Android Security Bulletin of April 05, 2023.

LifeGuard Update 11-34-04.00-RN-U00

➢ This LG Delta Update package is applicable for 11-31-27.00-RN-U00-STD-HEL-04 BSP version.

- **New Features**
    - None

- **Resolved Issues**
    - SPR48757 – Resolved an issue wherein audible alerts were not being played for Emergency alert notifications.
    - SPR48758 – Resolved an issue wherein device would show previous phone number in settings app even though a new SIM card was inserted.
    - SPR48648 – Resolved an issue wherein a particular string in Dialer Application was not localized in Japanese.

- **Usage Notes**

- None

LifeGuard Update 11-31-27.00-RN-U00

- o **New Features**
  - Added new feature called 'Reduced Settings with Accessibility' wherein Settings panel access will be limited to Display, Volume, About and Accessibility options.
  - Programmatic method to retrieve KeyStates on Keyboard enabled devices (SHIFT)
  - Added support for new digitizer in L10 device.
  - ET51/ET56 & MC93 camera tuning parameter fixed for unstable auto-focus on rear camera.
  - Added support for Zebra Charge Manager to improve the life of battery (not supported in L10A).

- o **Resolved Issues**
  - SPR47484 – Resolved an issue wherein volume would become low intermittently while using headset in WT6300 devices.
  - SPR47522/47409 – Resolved an issue wherein poor voice quality was observed in VoLTE connections at Nordic carrier.
  - SPR46422 – Resolved an issue wherein after performing long battery hot swap, ringer becomes silenced without notification after reboot.
  - SPR47081 – Resolved an issue wherein USB port would remain powered on if device resume/suspend sequence was done in quick succession.
  - SPR47303 – Resolved an issue wherein device info value was not appearing in resource0.csv.
  - SPR47143 – Resolved an issue wherein few additional log messages were enabled in NFC component.
  - SPR47874 – Resolved an issue wherein Shift and blue key combination was returning incorrect values.
  - SPR47715 – Resolved an issue wherein Autofocus was not working properly.
  - SPR47635 – Resolved an issue wherein both ENT and ENTER keys were returning same keycode.
  - SPR47916 – Resolved an issue wherein downloads using Android Download Manager were failing at 1Mbps.
  - SPR48128 – Resolved an issue wherein Access Manager CSP was reporting "Unable to Initialize" error while using WFC.
  - SPR47436 – Resolved an issue where Power and Volume keys not working when Accessibility Service is enabled for an App.
  - SPR47713/SPR47848 – Resolved an issue wherein intermittent one-way audio issues were observed with TEAMS App.
  - SPR47457 – Resolved an issue wherein EMDK's ProcessProfile API would fail if it was repeatedly executed.

- o **Usage Notes**
  - None

LifeGuard Update 11-30-24.00-RN-U00

- ➢ This LG Delta Update package is applicable for 11-26-05.00-RN-U00-STD-HEL-04 BSP version (Applicable except PS20, VC83).

- o **New Features**

- Added root detection service support for SD660 A11.
- Added new MX feature accessibility' to reduced settings feature.
- Added support for "Do not validate" option for CA certificate while creating Wi-Fi profiles.
- Added new MX feature Host Mode Peripherals: Controls whether to allow all USB peripherals to be used when the device is in USB Host Mode or to restrict usage to peripherals as defined in Rules created by the administrator using the Custom Rules parameter.
- Added new MX feature to support TouchService to allow EMM to configure Haptic Feedback on device.
- RXlogger: Meminfo support in RxLoggerUtility.
- RXlogger: The ability to configure log path for all RxLogger modules is now enabled.
- Oeminfo: Added support for querying SIM EID.
- SKT WWAN certification completed in South Korea.
- MTN WWAN certification completed in South Africa.
- Added allow Battery-Swap with Legic accessory is connected to TC7X in BatteryManager.
- TC7x Legic accessory support and on attaching device NFC will be disabled.
- Added support for new digitizer in L10 device.
- **Datawedge** Added Timed Continuous Trigger Mode on all products.
- **Datawedge** Enabled BT Trigger Remap Feature for MC93 Galactus
- **Datawedge** Added OCR Wedge features - Phase-3 (Container mode, performance optimization)
  - **Datawedge** Added new OCR Wedge version "7.0.0"
  - **Datawedge** OCR Wedge features - Tire Size and Commercial Tire ID support
  - **Datawedge** OCR Wedge features Phase 3 - Localization support for features added in Phase 3
  - **Datawedge** OCR Wedge - Localization support for extended TIN features parameters
- **Datawedge** Added LED Feedback and Hardware Beep feedback support for OCR Wedge features.
- **Datawedge** Expose Country for OCR Wedge License Plate feature.
- **Datawedge** Added support for "Zebra USB Scanner" and "Zebra USB Cradle" for TC21/TC26
- **Datawedge** Released New Firmware – "CAAFZS00-001-R00" for SE965 Scan Engine.
- Added support for Corded Adapter (CBL-RS5X6-ADPWT-01) in WT6300 for RS5100, RS6100.
- Added support for RS6100 Ring Scanner.
- Ability to disable the on-screen mute option in Zebra Volume Control (ZVC)

o Resolved Issues

- SPR46809 – Resolved an issue in Datawedge wherein OCR functionality was not working failing unless text was rotated at 180 degrees.
- SPR46513 --Resolved an issue in Datawedge wherein Enter key char was not being sent.
- SPR46061 -- Resolved an issue in Datawedge wherein invoking GetConfig API was resulting in exception.
- SPR45277 -- Resolved an issue wherein noise and cracking sound was observed on EC55 during voice calls in SWB.
- SPR45016 -- Resolved an issue wherein disabling status bar via MX was not hiding/blocking the status bar completely when used with full screen Apps.
- SPR46530 – Resolved an issue in AppMgr wherein Installing an App using AppMgr Upgrade option was failing in 11.20.18 build onwards.
- SPR47289 – Resolved an issue in KeyRemapping wherein Diamond key was not persisting across reboot.
- SPR46586 -- Resolved an issue wherein user was unable to set EHS as default launcher using Stage Now.
- SPR46771 – Resolved an issue wherein launching Battery Manager App though intent was not working.
- SPR46244 – Resolved an issue wherein soft navigation panel keys were less responsive.

- SPR47350 – Resolved an issue wherein Velocity App updated via play store was getting deleted post an OS update on a device enrolled with MS INTUNE.
- SPR47301/SPR46016 -- Resolved an issue wherein USB connection would not work post suspend and resume when RFD40 was connected to the device.
- SPR46991/SPR47343 -- Resolved an issue wherein NFC functionality was impacted on WT6300 after updating to Lifeguard that included an updated NFC firmware.
- SPR47126/SPR48202 -- Resolved an issue wherein certain VOIP clients that use Telephony Manager APIs were not working on WIFI only devices.
- SPR47101 -- Resolved an issue wherein camera fails to launch.
- SPR46918 - Resolved an issue of Choppy voice quality for WiFi-6 capable devices.

o Usage Notes

- L10A devices with new display ZBR_R47 and digitizer(ro.config.device.digitizer=1) require 11-29-18.00-RN-U00-STD-HEL-04 or higher to ensure full Digitizer functionality.
  - To identify display type, users can check 'ro.config.device.display' property using getprop command from adb.
    - o Devices with new display ZBR_R47 will have [ro.config.device.display]: [513]
  - To identify digitizer device type, users can check 'ro.config.device.digitizer' property using getprop command from adb.
    - o Devices with digitizer will have [ro.config.device.digitizer]: [1]
    - o Devices with without digitizer will have [ro.config.device.digitizer]: [0]
  - User can identify the digitizer firmware version from settings.
    - o Settings -> About Phone -> SW components -> Digitizer FW Version 2140
    - o 2140 is new Digitizer value.

LifeGuard Update 11-27-14.00-RN-U00 (Applicable only for PS20)

➢ This LG Delta Update package is applicable for 11-26-05.00-RN-U00-STD-HEL-04 BSP version.

o New Features

- None

o Resolved Issues

- Fixed intermittent abnormal display behavior during initial device bootup on Zebra splash screen.

o Usage Notes

- None

LifeGuard Update 11-26-05.00-RN-U00

➢ This LG Delta Update package is applicable for 11-23-13.00-RN-U00-STD-HEL-04 BSP version.

o New Features

- TMO (USA) WWAN certification completed.
- DCM Regulatory country approval received.
- PAAFNS00-001-R04 firmware is integrated for SE5500 Scan Engine in Datawedge.
- Added New Workflow for Document Capture with Border highlighting/document fill in Datawedge.
- Added fix for image capture where preview is inverted on MC9300 SE4850 scan engine in Datawedge.
- Added localization support for Workflow input parameters in Datawedge.
  - Supported languages - German, French, Spanish, Italian, Traditional Chinese, Simplified Chinese and Japanese.
- Added support for "Zebra USB Cradle" (USB cradle w/ Bluetooth Scanner) in Datawedge.
- Added support for scanning using new Workstation cradles for the USB scanners and USB cradles in Datawedge.
- Added support for TWT in Fusion for uses cases that have infrequent/intermittent traffic. It is not Enabled Out of Box and can be enabled using Stage Now/MDM.
- Added support for CCX in Fusion for Data Use Cases. It is not Enabled Out of Box and can be enabled using Stage Now/MDM.
- WPA3 Roam behavior Enhancements in Fusion.
- Added new MX feature to support to programmatically retrieve key states on keyboard enabled devices.
- Added new MX feature to support for Bluetooth_Remote_Trigger feature on All SDM660 devices.
- Added new MX feature to support to control whether the device user is prompted to interact with newly inserted SD Card into the device.
- Added new MX feature to support to automatically turn off Airplane Mode after a length of time as configured in the Airplane Mode Timer parameter.
- Added new MX feature to support to select the subsystem on the device to apply the permission being assigned to an app by the Permission Access Action parameter.
- Added support for querying touch mode and WLAN properties in OEM Info.
- Added support for "meminfo -s" command for Snapshot Module in RxLogger.
- Added support the new Schema changes in OemConfig.
- Added support to transfer Device Ownership from one device to other device owner, feature can be used to transfer StageNow device owner to any other device owner application.
- Added support to enable Battery part number BT-000362-50/BT-000262-A0 in WT6300. This will allow the battery to charge in low temperature (2 deg C and above).
- Added support in MX to enable/disable the charging indicator LED (PS20 supported this since MX 8.1)
- 11-26-05.00-RN-U00 onwards, default silent pairing capable list of devices has been disabled OOB. Please refer to https://techdocs.zebra.com/mx/bluetoothmgr/ for silent pairing capable device list and steps to enable them.

o **Resolved Issues**

- SPR 46494 – Fixed issue in Code ID Symbol for GS1 Data Matrix barcodes.
- SPR 45935 – Fixed an intermittent scan failure on the MC2700 with SE4100.
- SPR 45951 – Added Support for additional countries.
- SPR 44971 – Resolved an issue wherein BT Audio gateway codec was not working at 8kHz.
- SPR46370 – Resolved an issue wherein Beep action setting under Advanced data formatting in Data wedge was not getting listed when device language was set to Japanese.
- SPR45464 – Resolved an issue wherein touches/taps around bottom area of the screen was not very responsive on MC33x devices.
- SPR44932 – Resolved an issue wherein battery level wouldn't go up to full level while devices were in charging and were reporting different battery levels.
- SPR 46220 – Resolved an issue wherein intermediate files were being retained along with snoop logs when BT Snoop logging was enabled in Rxlogger.
- SPR 46513 – Resolved an issue wherein Char 13 was not being sent via Send Char ADF option after updating to DW 11.3.28.

- SPR 45016 – Resolved an issue wherein disabling status bar via MX was not hiding/blocking the status bar completely when used with full screen Apps.
- SPR 46162 – Resolved an issue wherein user was not able to use USB keyboard when access to USB storage from computer was disabled using MX Access Mgr.
- SPR 46516 – Resolved an issue wherein AudioVolUIMgr settings were not persisting after Enterprise Reset.
- SPR 45657 – Resolved an issue wherein RFID antenna type was not configured correctly resulting in lower regulatory ranges for certain country setting.
- SPR46892 – Resolved an issue wherein devices were randomly getting struck in password dialog upon reboot after updating from A8 to A11.
- SPR 47012 – Change default state of CCKM to disabled.
- SPR 46530 – Resolved an issue wherein Apps were not getting installed via AppMgr using Upgrade option.
- SPR 46195 – Resolved an issue wherein USB hub intermittently fails to resume from suspend.

○ **Usage Notes**

- Touch Mode system property has changed in A11. Please use the following OEMInfo URI - "content://oem_info/oem.zebra.software/persist.sys.touch_mode"

- TC83 & MC93 DPM SKUs should not be downgraded to A11 BSPs below 11-26-05.00-RN-U00-STD-HEL-04.
  - ○ To identify if the device is having DPM SKU please browse the below location in the settings UI
    settings->about phone->software components->scanner->SE4750 (DP)
    settings->about phone->software components->scanner->SE4750 (DPW)

LifeGuard Update 11-23-13.00-RN-U00

➤ This LG Delta Update package is applicable for 11-20-18.00-RN-U00-STD-HEL-04 BSP version.

○ **New Features**

- Added new Soft Trigger API to start, stop or toggle a software trigger for voice input in DataWedge.
- Deprecated the following Voice Input features in DataWedge:
  - ○ Data capture start option - Start phrase
  - ○ Data capture start phrase
  - ○ Data capture end phrase
- Zebra recommends transitioning to using the PTT button to trigger voice capture.
- Added New Data capture start option in DataWedge to trigger voice capture only via intent API.
- Added support for configuration of "Power off" menu item on Power Key Menu.
- Provides Allow/Disallow switch for controlling whether its display and touch panel are turned on/off based on device proximity to a human face.
- Provides ability to set custom dialer application which provides administrators a systematic way to set a calling application which will be used as a default caller which will block the calls across a fleet of devices.
- Added support for new display ZBR_R47.
- Added support for new touch EXC86H82.
- Added support for RFD40 RFID Sled for TC52AX Rear I/O.

○ **Resolved Issues**

- SPR44338 – Resolved an issue wherein scanned barcode data was intermittently getting reported incorrectly.
- SPR45265 – Resolved an issue wherein RFID Wedge App was not working on L10 running A10 and above.
- SPR45376 – Resolved an issue wherein trigger button was emitting beam even after it was remapped to a different key.
- SPR45638 – Resolved an issue wherein User was not able to set DTR state using EMDK Application.
- SPR46167 – Resolved an issue wherein device was not connecting back even though it was within range.
- SPR46405 – Resolved an issue wherein user was unable to Unpair the Bluetooth devices using Device Central on devices running with 11-20-18.00-RN-U00-STD-HEL-04 Build.
- SPR46483 - Resolved an issue wherein StageNow My Lifeguard Updates are failing to apply to BSPs 11-20-18 U00 and 11-20-18 U02.

o Usage Notes

- L10A devices with new display ZBR_R47 and touch EXC86H82 cannot be downgraded to BSPs below 11-20-18.00-RN-U00-STD-HEL-04.

  To identify display type, users can check 'ro.config.device.display' property using getprop command from adb.
  - o Devices with new display ZBR_R47 will have [ro.config.device.display]: [513]
  - o Devices with display EP101R1912N1000TG will have [ro.config.device.display]: [2001]

  To identify touch type, users can check 'ro.config.device.touch property using getprop command from adb.
  - o Devices with new touch EXC86H82 will have [ro.config.device.touch]: [32770]
  - o Devices with touch EXC3161 will have [ro.config.device.touch]: [32768]

LifeGuard Update 11-20-18.00-RN-U00

➢ This LG Delta Update package is applicable for 11-20-18.00-RN-U00-STD-HEL-04 BSP version.

o New Features

- Added support for Friendly Zebra Scanner Interface for seamless support of Zebra Bluetooth and USB Scanners via Scan Framework & Datawedge.
- Added Mobility DNA OCR Wedge v1 Early Access (Camera Only) family of licensed configurations.
  - o Tire Identification Number (TIN)
  - o Identification Documents (ID)
  - o License Plate
  - o Meter Reading
  - o Vehicle Identification Number (VIN)
- Added Datawedge support for Free-Form Image Capture (Camera/Imager)
- Added Datawedge support for Barcode Highlighting (Camera/Imager)
- Added support for Multi-Barcode – Minimum count & timeout duration to support decoding a changing number of barcodes.
- Added Datawedge support for Scan QR Code to Launch a Link.
- Added Datawedge Support for handling notifications for license updates (Activate & Deactivate). Third party agent will be notified immediately when the license status gets changed.

- SE5500 GA Release
- Added new MX feature to give admin complete control over the quick settings tiles.
- Added new MX feature for Battery Saver and Vibration Control.
- Added new MX feature for Dark Theme ON/OFF option.
- Added support for Signing Key Change to Support App Bundles.
- Added support for interface check before doing G-ARP.
- Added support for Save and restore to preserve the previous setting performed by KTI APIs.
- Added support for improved noise reduction on phones calls using Bluetooth connection
- Added support for pause and resume feature in FOTA client.
- Added support for LGE 3.0 A/B Streaming.
- Added support for Persist MDNA Enterprise Upgrade License.
- Updated the new launcher icon and splash screen for VOD app and fixed an issue related to Back button which was opening and displaying the videos even after pressing back button to exit the application.
- Added support for BMI270/ICM42607 Gyroscope/accelerometer Sensors.
- This release support TC52ax HC product.

o Resolved Issues

- SPR45099 – Resolved an issue wherein the check digit rule was not working as expected on MSI barcode symbology with newer ZBACK scanner.
- SPR45159 – Resolved an issue wherein DisAllowApplicationUpgrade was leading to Apps getting crashed.
- SPR44942 – Merged additional touch configurations to handle different touch configurations.
- SPR44618 and SPR44765 – Resolved an issue wherein Audio was intermittently getting routed via device mic instead of BT headset.
- SPR44619 – Fixed an issue of Ghost screen touches.
- SPR44265 – Fixed an issue of BT showing incorrect battery usage in bug report.
- SPR44833 – Fixed an issue of 'EthernetMgr' manual proxy config not working.
- Fixed Zebra Pay PD20 timer issue.
- Fixed Settings ANR issues
- Fixed RxLogger EOF issue
- Fixed WPA3-SAE compatibility with CISCO AP
- Fixed Voice quality and Stability enhancement

o Usage Notes

- BMI270/ICM42607 Gyroscope/accelerometer sensor devices require 11-20-18.00-RN-U00-STD or higher to ensure full G-sensor functionality.

- The installed Gyroscope/Accelerometer sensors can be identified either in SETTINGS or via ADB command:

  Settings:

  a. Devices with BMI270/ ICM42607 Gyroscope/accelerometer sensor will list sensor type as BMI270/ ICM42607 on "Settings-->About phone-->SW components-->Gyroscope" or "Settings-->About phone-->SW components -- >Accelerometer".

  ADB:

  Check the ro.config.device.gyro & ro.config.device.accelerometer property using getprop command from adb.

a. Devices with BMI270 Gyroscope/accelerometer sensor will have ro.config.device.gyro = 32 ro.config.device.accelerometer=120

b. Devices with ICM42607 Gyroscope/accelerometer sensor will have ro.config.device.gyro = 260 ro.config.device.accelerometer=2052

Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	11-34-04.00-RN-U00-STD-HEL-04
Android Version	11
Security Patch level	April 05, 2023
Component Versions	Please see Component Versions under Addendum section

Device Support

The products supported in this release are TC26 and TC26 HC family of products.

Please see device compatibility details under Addendum Section.

Known Constraints

- In-order to avoid any inconsistencies in Settings UI it is recommended to wait for a few seconds after the device boots up before launching settings UI.

- On upgrading a device from A8/A9/A10 to A11, NFC manager configuration need to be re-applied.

- Starting Android 11 on SDM660, an UPL file cannot consist of both Full OTA and Delta OTA package. On A11 customer can directly install the Full OTA package of required LG image

- One second Bluetooth jitter noticed in 2.4GHz band.

- Ethernet UI is accessible from settings despite being disabled.

- RxLogger fails to store logs in internal storage when external SDCard is formatted as internal/adaptable, or it is ejected during run time.

- BLE FW update will not work without enabling location service under settings.

- When working with files on the Desktop, using mouse-drag to select, move and/or copy files causes some file management apps to crash. Zebra recommends using right-click copy and paste functions instead.

- "Always-ON VPN" is grayed out for IKEv2-RSA/PSK/MSCHAPv2 after a reboot. User will have to manually select 'VPN on' to activate the VPN.

Important Links

- Installation and setup instructions (if the link does not work, please copy It to browser and try)

- Zebra Techdocs
- Developer Portal

Addendum

Device Compatibility

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

Device Family	Part Number		Device Specific Manuals and Guides
TC26	TC26CK-12A222-CN TC26CK-12B212-CN	TC26CK-16B224-CN TC26CK-12A423-CN	TC26 Home Page
TC26 HC	TC26CK-16B224-CN		TC26 Home Page

Component Versions

Component / Description	Version
Linux Kernel	4.19.157-perf
AnalyticsMgr	10.0.0.1002
Android SDK Level	30
Audio (Microphone and Speaker)	0.31.0.0
Battery Manager	1.3.2
Bluetooth Pairing Utility	3.27
Camera	2.0.002
DataWedge	11.4.122
EMDK	11.0.134.4034
License Manager and License agent	6.0.13 and 6.0.45.5.0.3
MXMF	11.8.0.9
NFC	NFC_NCIHALx_AR18C0.b.1.0
OEM info	9.0.0.828

OSX	QCT.110.11.19.35
RXlogger	7.0.3.8
ZWC	1.7.42
Scanning Framework	37.8.11.0
StageNow	11.8.0.9
WiFi5	FUSION_QA_2_1.11.0.0.014_R Radio: QA_2_1.11.0.0.009_R Application: QA_2_1.11.0.0.005_R Middleware: QA_2_1.11.0.0.008_R Supplicant: QA_2_1.11.0.0.001_R Firmware: FW:3.3.5.1.1003.1 HW:HW_VERSION=40050000.
WorryFree WiFi	WA_A_2_7.4.0.026_R
Zebra Bluetooth	11.1.0
Zebra Volume Control	3.0.0.81
Zebra Data Service	10.0.4.1224
Touch FW	2.2.0-Finger-1-0:0*6e29bd Mode: Finger Only
Zebra Device Manager	11.8.0.9
Zebra Software License Manager	6.0.13
Android WebView and Chromium	107.0.5304.105

Revision History

Rev	Description	Date
1.0	Initial release	April 20, 2023