# *Release Notes – Zebra VC80x Android N – LifeGuard Update 17 for NGMS*

## Introduction

With the VC80x, you can easily migrate your material handling vehicles to the next generation platform for warehouse mobility — Android. You get a well-proven mobility platform, guaranteed security support with Zebra's LifeGuard™ for Android, as well as a common solution platform with other Zebra Android handheld and wearable devices in the warehouse. You can migrate from Windows to Android without changing the experience you have in place today. Designed for the most extreme environments, the VC80x can go everywhere your vehicle operators need to go, including the freezer. And the VC80x is packed with features and options to boost productivity and task accuracy — including the fastest wireless connections and fastest processor in its class, an optional super bright 1,000 NIT screen that's easy to see outside, an optional rugged keyboard and more. The VC80x — ultra-rugged, Android-powered for a smarter warehouse.

## Description

This release contains the following software package which is compatible with the VC80x and MC33 NGMS products.

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

# Component Contents

| Component / Description | Version |
|---|---|
| Product Build Number | 01-01-49.00-NN-U17-STD |
| Android Version | 7.1.2 |
| Linux Kernel | 3.10.84 |
| Android SDK Level | 25 |
| Platform | QC8956 |
| Bluetooth Stack | 1.1 |
| Flash Size | 32GB |
| RAM Size | 4GB |
| Scanning | 19.50.37.0 |
| DataWedge | 7.2.5 |
| EMDK | 7.2.2.2202 |
| MXMF / OSX | MXMF-8.4.1.3 / QCT.71.7.9 |
| Enterprise Keyboard (EKB) | 2.0.1.9 |
| WiFi | FUSION_BA_2_10.0.4.025_N<br>Application: BA_2_10.0.1.012_N<br>Radio: BA_2_10.0.4.022_N<br>Middleware: BA_2_10.0.1.013_N<br>Firmware: 7.35.205.8 (r) |
| PTT | 3.1.35 |
| Touch FW | N/A |

| | |
|---|---|
| RxLogger Utility | 5.4.10.0 |
| B2M | N/A |
| Bluetooth Pairing Utility | 3.11 |
| Zebra Data Services | 1.0.0.1002 |
| File Browser | 1.19.1.5 |
| Stage Now | 3.2.1.0 |
| App Gallery | 3.0.1.7 |
| User Guide | N/A |
| Sensors (Accel, Gyro) | 2061000, 2061000 |
| MobiControl | N/A |
| Zebra Volume Control (ZVC) | 2.0.0.16 |
| Battery Manager | 1.3.8 |
| ActiveEdge | 2.5.16 |
| WorryFreeWiFi (Smart MU) | 3.0.3 |
| Device Central | 2.0.17.0 |
| Zebra Software License Manager | 3.1.1 |
| Audio | 0.24.0.0 |
| Diagnostic Tool | 1.16.1.3 |
| OEM Config | 8.4.0.1 |
| FingerPrint | Zebra/VC80x/VC80x:7.1.2/01-01-49.00-NN-U17-STD/122:user/release-keys |
| Security Patch Level | February 01, 2019 |

1. **CFE v17 Updates:**
   - ❖ CFE_ATLAS_01-01-49.00-NN-U17-STD.zip (NGMS)

CFE v16 numbering is skipped for public posting and reserved for LGE-FOTA Beta.

1. **Android Security Patch Level:** February 1, 2019
   Use the link below to see the Android Security bulletin for more information:
   https://source.android.com/security/bulletin/
2. MX, StageNow, EMDK, Datawedge, Enterprise keyboard component updates:
   **Note**: For detailed release notes, please refer http://techdocs.zebra.com
   o MX: v8.4.1.3
      a. SPR35491/35856 - Resolved an issue where in Analytics Manager was throwing "Index out of bound error " when a Stagenow Barcode is scanned.
      b. SPR35928 - Resolved an issue where Clock Manager CSP accepts timezone id in "/Etc" Olson format.
      c. SPR35908 - Resolved an issue wherein admin and user generated certificates could not be downloaded from external server.
      d. SPR35855 - Resolved an issue where in Google Keyboard settings was not persisting.
   o Enterprise Keyboard: v2.0.1.9
   o StageNow: v3.2.1.0
   o EMDK: v7.2.2.2202
   o DataWedge: v7.2.5
   o DDT: v1.16.1.3
   o Oem Config: v8.4.0.1
   o WorryFreeWiFi (SMARTMU): v3.0.3
      a. Added support for WorryFree WiFi CSP
   o Device Central: v2.0.22.1
      a. SPR36473 - Show the Battery percentage on the Device Central App main screen when DS3678-ER connected to the mobile device.
   o Wifi: FUSION_BA_2_10.0.4.025_N
      a. SPR36248 - Resolved an issue where StageNow configuration will not work with TC75x HW ID 33 device.
      b. SPR35982 - Resolved an issue where roaming failure is observed in disconnect suppression state.
      c. SPR36361 - Enhanced device performance by increasing the value of wlan retries to 12 from the current value of 7.
      d. SPR35825 - Resolved an issue wherein one-way audio is observed during a call sometimes.
      e. SPR36075 - Fixed an issue wherein voice packets were not tagged with correct QoS category sometimes which might have caused choppiness in audio call.

3. SPR36275 - Resolved an issue where-in Camera swap option was still visible in camera App even after disabling one of the camera [Front/Rear] in TC7x devices via StageNow.
4. SPR36344 - Resolved an issue wherein device radio states are not recovered if incorrect Battery Swap is performed.

5. SPR36213 - Resolved an issue wherein device would reboot upon enabling data saver when Bluetooth tethering is enabled in DO mode.
6. SPR35347 – Resolved an issue wherein device would not boot to the OS after enabling data saver in DO mode.
7. SPR35950 - Resolved an issue wherein SwiftKey Keyboard Breaks Scanning After Reboot.
8. SPR35991 - Resolved an issue wherein when soft-keyboard is switched, sometimes Scan data stops to transmit to apps.
9. SPR35523 – Resolved an issue wherein Cellular network settings were getting disabled when Airplane Menu item was disabled in power key menu through PowerKeyManager CSP as this setting was getting applied system wide.

- From MXMF-8.4.1.3 /OSx - QCT.71.7.9 onwards, Enabling/Disabling Airplane menu item using PowerKeyMgr CSP will take effect only in PowerKey Menu
- To enable/disable Airplane mode menu item in settings menu and quick settings, user should use Settings Manager CSP.
  Please refer http://techdocs.zebra.com/stagenow/3-1/csp/settingsmgr/


2. **CFE v15 Updates:**
   ❖ CFE_ATLAS_01-01-49.00-NN-U15-STD.zip (NGMS)

   1. **Android Security Patch Level:** January 1, 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:
      o WiFi: FUSION_BA_2_10.0.3.020_N:
        a. SPR35628 - Resolved an issue where validation of Radius server certificate fails.
        b. SPR35593 - Resolved a device reboot issue where DHCP Option received with more than expected length.
      o Scanner Framework: Version 19.50.37.0
        a. SPR35288 - Fixed an issue wherein initialization of scanner was taking ~1sec.
        b. SPR35054 - Added support for reduced quite zone barcode decoding.
        c. SPR34844 – Resolved an issue wherein multiple open calls are prevented when multiple application tries to open scanner without releasing previous instance.
      o OSX – Version QCT.71.7.9
        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
   3. SPR35414 - Resolved an issue to differentiate BT scanners and to avoid multiple paring and un-paring events.

4. SPR36019 - Resolved an issue wherein serial port control signals were not working as expected.

3. **CFE v14 Updates:**
   ❖ CFE_ATLAS_01-01-49.00-NN-U14-STD.zip (NGMS)

   1. **Android Security Patch Level:** December 1, 2018
      Use the link below to see the Android Security bulletin for more information:
      https://source.android.com/security/bulletin/
   2. SPR35256 – Resolved an issue causing NTP synchronization failure.
   3. SPR35065 – Resolved an issue to include the correct EXIF orientation tag data, in the jpeg image capture by camera.
   4. SPR34861 – Resolved an issue wherein earlier versions of velocity app installation (1.x) was not persisting after reboot.
   5. SPR35845 – Resolved an issue wherein, Gallery Application in Non-GMS displays the pictures with incorrect orientation.

4. **CFE v13 Updates:**
   ❖ CFE_ATLAS_01-01-49.00-NN-U13-STD.zip (NGMS)

   1. **Android Security Patch Level:** November 1, 2018
      Use the link below to see the Android Security bulletin for more information:
      https://source.android.com/security/bulletin/
   2. MX, StageNow, EMDK, Datawedge, Enterprise keyboard component updates:
      **Note**: For detailed release notes, please refer http://techdocs.zebra.com
      o MX: 8.2.3.1
         b. SPR35665 - Resolved an issue wherein Google keyboard settings are not persisting through a reboot when configured directly after factory reset.
         c. SPR34771 - Resolved a synchronization issue in Mx.
      o StageNow client: 3.1.1.1019
      o EMDK: 7.0.0.2000
      o DataWedge: 7.0.4
      o Enterprise Keyboard: 1.9.0.9
         a. SPR35603 - Fixed an issue wherein Enterprise Keyboard was disappearing when an external keyboard was connected.
   3. SPR35692 – Fixed an issue where it was not possible to disable "Show virtual keypad" from "Settings / Languages & Input / Physical Keyboard".
   4. Added enable/disable Settings drawer feature implementation in OSX.
   5. B2M client included in disabled mode.

5. **CFE v12 Updates:**
   ❖ CFE_ATLAS_01-01-49.00-NN-U12-STD.zip (NGMS)

1. **Android Security Patch Level:** October 1, 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:
   o WiFi: FUSION_BA_2_10.0.3.019:
        a. Enable/Disable FAPI support to turn ON/OFF hotspot via CSP.
        b. SPR34760 – Resolved an issue wherein the device was unable to reconnect after some idle hours in low coverage.
        c. Enable/Disable Captive Portal Support.
   o SmartMU: Version 3.0.2:
        a. SmartMU app name change to WorryFreeWiFi
   o Device Central: Version 2.0.17.0
   o Scanning Framework: Version 19.11.37.1
        a. SPR34484 - Resolved an issue wherein exceptions were not thrown when multiple apps try to open scanner instance without earlier instance being released.
3. SPR34300 - Added Auto Screen Rotation to Lock screen.
4. SPR35090 – Resolved an issue wherein disabling captive portal detection was not working.
5. SPR35065 – Resolved an issue to include the correct EXIF orientation tag data in the jpeg image capture by camera.
6. SPR35462 – Fixed an issue wherein keyboard selection notification was being shown on hard keypad devices.
7. SPR35216 – Resolved an issue where Proxy Auto Config (PAC) did not work properly following stops/restarts of the PacService
8. SPR35188 - Disabled QC Quick Charge 3.0 which allows the device to charge at 9v (since many 3rd party cables are rated for only 5v use).
9. SPR34978 – Resolved an issue wherein the device was unable to set private apn through EMDK or StageNow.
10. SPR35021 - Resolved an issue where Auto PAC Proxy settings are not preserved after Android desert update.
11. Added new APN for Telstra-M2M.

6. **CFE v11 Updates:**
   ❖ CFE_ATLAS_01-01-49.00-NN-U11-STD.zip (NGMS)

   1. **Android Security Patch Level:** September 1, 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:
      o Enterprise Keyboard: Version 1.9.0.4

- o Diagnostic Tool: Version 1.16.0.1
- o OEMConfig: Version 8.1.0.9
- o Device Central: Version 2.0.11.0
- o Zebra Software License Manager: Version 3.1.1
- o Zebra Data Services: Version 1.0.0.1002

3. MX, StageNow, EMDK, Datawedge component updates:

   **Note**: For detailed release notes, please refer http://techdocs.zebra.com

   - o MX: Version 8.1.0.10
   - o StageNow: Version 3.1.1.1018
   - o EMDK: Version 6.10.12.1312
   - o Datawedge: Version 6.9.49
     - a. SPR34429 – Resolved an issue wherein DataWedge failed to load "default Profile0".
     - b. SPR34614 – Resolved an issue in DataWedge wherein scanner could not be enabled due to quick enabling and disabling of scanner through Intents.
     - c. SPR34972 – Implemented new parameters in scanner_input_plugin API so that the API takes considerable less time to suspend/reenable of the scanner

4. CVE-2018-5383 was corrected preventing unauthenticated BT pairing.
5. SPR34716 - Resolved an issue wherein the MX was getting killed by Backup manager and didn't restart properly.
6. Included Zebra Software License Manager v3.1.1.
7. Added LEAP Profile support.
8. Data Analytics changes:
   - o DataAnalytics has been renamed to Zebra Data Service.
   - o DAInBuiltDCA has been renamed to Zebra Data Service Plugin.
   - o SettingsEULA has been renamed to Zebra Data Services.
   - o In this release, the ZDS-EULA pop up during configuring the device, can be automatically skipped if the device is configured for Device Owner mode or when SUWBypass is used.
   - o DO mode configuration mechanism includes NFC bump, QR code, AFW# and Zero touch.
   - o SUW Setup Wizard Bypass can set with PowerMgr CSP.
   - o On Automatic skipping of Zebra EULA, Zebra's default settings and data collection rules will be configured on the device.

7. **CFE v10 Updates:**
   - ❖ CFE_ATLAS_P10_NN_01-01.49.zip (NGMS)

   1. **Android Security Patch Level:** August 1, 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:
     o OSX – Version QCT.71.7.7.1
     o Scanning Framework – Version 19.11.37.0
3. SPR34695 - Resolved an issue wherein Google play protect setting was not persisting across reboot.
4. SPR35062 - Resolved an issue wherein setting Default Launcher was failing when more than one third party launcher was installed in the device.
5. SPR34648 - Resolved an issue where malformed DHCP Option 150 (TFTP Server Address) was passed during DHCP exchange.
6. SPR34445 - Resolved an issue wherein scanner exceptions were observed while scanning DATAMATRIX barcodes using DS3678 scanner resulting in scanner beam failures.
7. SPR34310 - Resolved an issue where in CANCELREAD API was not working when Continuous Mode was enabled.
8. SPR34757 - Resolved an issue where DHCP Option 42 (NTP servers) has more entries than expected.
9. SPR34046 - Resolved an issue wherein there were Bluetooth scanner disconnections noticed while audio was being played simultaneously on BT headset.

8. **CFE v9 Updates:**
   ❖ CFE_ATLAS_P09_NN_01-01.49.zip (NGMS)

   1. **Android Security Patch Level:** July 1, 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:
        o MX – Version 8.0.2.0
        o EKB – Version 1.8.0.8
        o StageNow Client – Version 3.0.1.1038
        o DataWedge – Version 6.8.54
        o WiFi – FUSION_BA_2_10.0.1.019_N
        o SmartMU – Version 3.0.1
        o OSX – Version QCT.71.7.7.0
        o DataAnalytics – Version 3.3.0.1113

   3. After an upgrade from non-EULA to EULA BSP, the Data Analytics Engine (DAE) upgrades to v3.3.0.1113 and takes about 35 secs to initialize for the first time. During this time the Settings->Zebra (EULA) page will show the default status of Device Data toggle button as enabled until initializing is complete.
   4. Audio Optimization resulting in a 75% reduction is buffering between HAL and ALSA in both the RX and TX leg of a VoIP Call reducing device's contribution to the mouth to ear delay significantly. Impact is to VoIP use case only on all SKU's.

5. SPR34894 - Fixed an issue in DataWedge wherein scanner could not be enabled due to quick enabling and disabling of scanner through Intents.
6. SPR34743 - Keyboard configuration properties has been changed for software keyboard pop up scenario.
7. SPR34906 - Resolved an issue wherein device used to get stuck in the boot up screen on Velocity app installed devices.
8. SPR33599 - Resolved an issue wherein few system apps were being disabled after Applock whitelist mode was enabled.
9. SPR33818 - Fixed an issue wherein certain decoder type values were not persisting across a scanner enable/disable cycle.
10. SPR34267 – Resolved an issue wherein user was not able to enable USB debugging option using StageNow.
11. 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.
12. SPR34614 – Resolved an issue in DataWedge wherein scanner could not be enabled due to quick enabling and disabling of scanner through Intents.
13. SPR33920 - Resolved an issue wherein devices failed to connect to WLAN network if the country selection is set to Japan.
14. SPR34717 - Added support for new method of creating the Applock Whitelist.
15. SPR34888 - Resolved an issue wherein user could not launch Key Programmer in Settings App.
16. SPR34595 - Resolved an issue wherein Storage Card path was inaccessible through StageNow.
17. SPR34346 - Resolved an issue wherein Velocity app installation was not persisting after reboot.

9. **CFE v8 Updates:**
   ❖ CFE_ATLAS_P08_NN_01-01.49.zip (NGMS)

   1. **Android Security Patch Level:** June 1, 2018
      Use the link below to see the Android Security bulletin for more information:
      https://source.android.com/security/bulletin/
   2. Resolved an issue wherein KeyProgrammer fails to open via Device settings.
   3. Build Number format has been updated.
   4. Added First Api Level property for MC33 and VC80x products.

10. **CFE v7 Updates:**
    ❖ CFE_ATLAS_P07_NN_01-01.49.zip (NGMS)

    1. **Android Security Patch Level:** May 1, 2018
       Use the link below to see the Android Security bulletin for more information:
       https://source.android.com/security/bulletin/

2. Fix for Zebra setup wizard popup after OS upgrade.
3. **Updated below components:**
    o MX: 8.0.0.10
    o StageNow client: 3.1.0.1037
    o DataWedge: 6.8.50
    o Enterprise Keyboard: 1.8.0.8
    o EMDK: 6.9.16.1216
4. Build ID format has been updated.
5. Included Zebra Software License Manager v3.0.1.
6. SPR34179 – Resolved an issue wherein device connects slowly to an AP.
7. SPR34175 – Resolved an issue wherein device does not show preview information in Messaging App when language toggles from right-to-left.
8. SPR34259 – Added support to use USBMgr CSP to limit the standard 4 options on device to only allow UsbExternalStorageUsage.
9. SPR34307 – Resolved an issue wherein the device was unable to be staged via StageNow.
10. SPR34083/34014/32519 – Resolved an issue wherein disabling WWAN radio via Airwatch using StageNow XML fails.
11. SPR33977 – Resolved an issue wherein set time zone issue observed with StageNow.
12. SPR34213/31491 – Resolved an issue wherein the device was unable to stage via StageNow.
13. SPR34420 – Resolved an issue wherein floating scan bubble issue observed with Enterprise Keyboard.
14. SPR33755 - Resolved an issue wherein the Whitelisted apps were unable to submit XML to MX.
15. SPR33207 - Resolved an issue wherein the Device Diagnostic tool had an issue with reading the Battery Cycles in the application for PP+ batteries.
16. SPR33671 - Resolved an issue wherein user was unable to create WIFI profile with username as backslash followed by number.
17. SPR33862 - Resolved an issue wherein the Screen Time off settings using Display manager CSP was not working.
18. SPR34145 - Resolved an issue wherein indexing of the WEP key was not handled correctly.
19. SPR33973 - Resolved an issue wherein erroneously loading default profile by providing feature to ignore disabled profiles in DataWedge.
20. SPR33848 - Added support to included category field in intent profile in StageNow.
21. SPR34189 - Resolved an issue wherein low ram and oom limit adjustments to provide more free memory.
22. SPR33876 - Resolved an issue wherein Display Timeout was unable set via StageNow.
23. SPR33607 - Resolved an issue where few fresh devices were unable to stage after unbox the device.

24. SPR33538 - Resolved an issue wherein the Scanner beam stuck off and No LED beam while pressing scanner button.
25. SPR33981 - Resolved an issue Czech Republic Regulatory Country could not be set using Wifi config profile.
26. Added Enterprise Browser package (com.symbol.enterprisebrowser) to white listed apps.
27. Resolved an issue wherein Settings App crashes while performing "Network Settings Reset".
28. A new device settings menu and an initial setup screen have been added to easily configure the Zebra analytics engine. The initial setup screen will be displayed upon bootup following an Enterprise Reset or Factory Reset.  This screen can be skipped on an Enterprise Reset by provisioning using a StageNow profile (PowerMgr CSP), similar to what is available for the Google setup wizard bypass.
29. Resolved an issue wherein Bluetooth tethering was not working.


**11. Update005 Updates:**
   ❖ CFE-VC80x_MC33-01-01-48-NN-00-A-05.zip (NGMS)

| Components | New Features |
|---|---|
| Scanning | • Added support for RS507x<br>• Fixed Bluetooth scanner firmware update failure |
| OSX | DS3608 USB SSI scanner can now scan the "Skip GMS Setup Wizard" barcode |
| Stage Now | Stage Now can now be used with RS232 serial scanners |
| DataWedge | Fixed the issues:<br><br>• DataWedge default Template selection to "Default - Barcode 4.xml.<br>• SPR-33973 Wrong profile gets loaded when SwitchToProfile intent is used.<br>• VC80(N) StageNow Barcode Staging not working with DS3608 serial scanner.<br>• DataWedge crash when template file deleted. |
| EMDK | Fixed the issues:<br><br>• Unable to create a DataWedge profile using EMDK Profile manager.<br>• "getLabelType()" method returns "UNDEFINED" for mailmark and Hanxin barcode. |
| OEMConfig | Fixes:<br>• "SignalOccurrenceOfThreat" parm is not added in threatStep |

| | |
|---|---|
| Device Central | Added support for RS507x |
| USB memory | File Browser now shows the USB flash memory stick under /storage. |
| Battery Manager | Battery Manager now displays correct battery manufacture date for all batteries. |
| VC settings | Configuration for Vehicle Computer settings:<br>a) Added setting to keep the display on all the time.<br>b) Added setting to keep the builtin speaker on when an M1000 speaker/microphone is plugged in. |
| Ivanti Velocity | Integrated Velocity ATTE 2.0 |

12. **CFE v4 Updates:**
   ❖ CFE-VC80x_MC33-01-01-48-NN-00-A-04.zip (NGMS)

   1. **Android Security Patch Level:** March 5, 2018
      Use the link below to see the Android Security bulletin for more information:
      https://source.android.com/security/bulletin/
   2. **Updated below components:**
      o Datawedge: 6.7.34
      o StageNow: 2.10.1.1386
      o EMDK: 6.8.20.1120
      o MX: 7.2.0.6
      o File browser: 1.19.1.2
   3. SPR33311 – Resolved an issue wherein RS507 is unable to connect via Bluetooth using Voxware voice application.
   4. SPR33302 – Resolved an issue wherein disabling the oval capacitive key via StageNow fails.
   5. SPR34267 – Resolved an issue wherein USB debugging failed to get enabled via StageNow.
   6. SPR33639 – Resolved an issue wherein device stops emitting scan beam after waking up from suspend state.
   7. SPR33799 – Resolved an issue wherein DataWedge was sending char 10 instead of char 13.

13. **CFE v3 Updates:**
   ❖ CFE-VC80x_MC33-01-01-48-NN-00-A-03.zip (NGMS)

   1. Spectre and Meltdown (CVE-2017-5753, 5715, 5754) remediation provided by updates to timer access for CVE-2017-13218.
   2. Fix for bug: BT connection state does not persist across reboots, if location settings is in enabled state

# Device Compatibility

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

| USA | |
|---|---|
| Warehouse AOSP | VC80X-10SSRAABBA-U |
| Freezer AOSP | VC80X-10FSRAABBA-U |
| Outdoor AOSP | VC80X-10SORAABBA-U |
| | |
| **Rest of the World** | |
| Warehouse AOSP | VC80X-10SSRAABBA-I |
| Freezer AOSP | VC80X-10FSRAABBA-I |
| Outdoor AOSP | VC80X-10SORAABBA-I |
| | |
| **India** | |
| Warehouse AOSP India | VC80X-10SSRAABBA-IN |
| Outdoor AOSP India | VC80X-10SORAABBA-IN |

# Installation Requirements

Install baseline 01-01-48-NN-00-A (NGMS) build.

IMPORTANT NOTE:

- Upgrading to this OS version (01-01-49.00-NN-U17-STD LG patch v17) blocks the downgrade prior to Update005 releases.
- Users updating from 01-01-49-NN-00-A BSP baseline to LG patch v17 will be allowed only to downgrade till Update005, using the Update005 package. The Base OS versions cannot be flashed anymore.

# Installation Instructions

**Using ADB Sideload**

*The installation instructions assume you have ADB installed on your PC (the adb tools and Zebra USB drivers) and your VC80x has Developer options enabled and USB debugging ON.*

*Instructions on how to enable ADB is in Integrator guide.*

1. Remove the radio antenna cover (four Torx T-10 screws)

2. Connect the VC80x to the PC using a USB data cable

3. Open Command Prompt, run *"adb devices"* and check to see if you can see the device's serial number.
   If yes, proceed to next step
   If not please install the Zebra USB drivers and set up Device Manager on your PC to recognize the VC80

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

5. Download update files to a folder on your PC.
   a. **CFE_ATLAS_01-01-49.00-NN-U17-STD.zip** and any applicable patches listed above in content section.
   b. Factory or Enterprise reset files (Optional)

6. Entering Recovery Mode
   a. Option 1: In Command Prompt, run *"adb reboot recovery"*
   b. Option 2:
      • Reboot the VC80x using the power button menu.
      • When the screen goes black, hold the Power and + buttons.
      • When the Zebra Technologies logo appears on the screen release the buttons
7. The VC80x will reboot and display the Android Recovery screen.

8. Apply update via sideload method
      • Use + and – buttons to move the highlight item up or down.
      • Use the Power button to select menu item "Apply update via adb sideload"

9. In the Command Prompt, type "adb sideload" and the filename of the update to install.
   a. Your PC screen will show files being installed and a blue horizontal progress bar on your device will show status. After several minutes (could be 10+ minutes if installing GMS) it should be done and you should be back at the Android Recovery screen.

   b. Repeat above steps for all mandatory packages

10. Highlight the "Reboot system now" menu item and press the Power Key to reboot.

11. Device reboots and you will first see the "Zebra Powered by Android" boot screen followed by the VC80x boot screen. The boot process can take several minutes. (could be 7+ minutes if installing GMS).

12. If you installed a GMS BSP, you will need to complete the Setup Wizard by setting up Wi-Fi and E-mail accounts and such. If on AOSP (non-GMS), there is no process to follow.

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

❖ Settings->About Phone->SW Components: Device Update Version: **17**
❖ ADB Shell method: Execute following command from PC's command prompt:
$ adb shell getprop ro.device.patch.version
$ **17**


Using External USB memory stick

This installation method does not require an adb connection between your PC and the VC80x. If the VC80x is connected to your PC via a USB cable, disconnect it so that the external USB host ports are enabled on the VC80x.

1. Download Images **CFE_ATLAS_01-01-49.00-NN-U17-STD.zip** and Reset Files (Optional) to your PC. Copy the files onto an external USB memory stick

2. Entering Recovery Mode
   - Reboot the VC80x using the power button menu.
   - When the screen goes black, hold the Power and + buttons.
   - When the Zebra Technologies logo appears on the screen release the buttons

3. The VC80x will reboot and display the Android Recovery screen.

4. Applying update via USB memory stick
   - Use + and – buttons to move the highlight item up and down

   - Use the Power button to select menu item "Apply update from USB drive"
   - Select the update to apply

5. Highlight the "Reboot system now" menu item and press the Power Key to reboot.

6. Device reboots and you will first see the "Zebra Powered by Android" boot screen followed by the VC80x boot screen. The boot process can take several minutes. (could be 7+ minutes if installing GMS).

7. If you installed a GMS BSP, you will need to complete the Setup Wizard by setting up Wi-Fi and E-mail accounts and such. If on AOSP (non-GMS), there is no process to follow

8. To Check the Android Patch Level after installing the CFE package in the device,
   a. Settings->About Phone->SW Components: Device Update Version: **17**
   b. ADB Shell method: Execute following command from PC's command prompt:
   $ adb shell getprop ro.device.patch.version
   $ **17**

# Downloadable Software Included in this Release

| Package Name | Description |
|---|---|
| CFE_ATLAS_01-01-49.00-NN-U17-STD.zip | OTA incremental LifeGuard CFE v17 update software for NGMS build compatible for VC80x and MC33 products. |

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