Release Notes – Zebra VC80x Android N – LifeGuard Update 08 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.

1. **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.

2. **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. Resolved an issue wherein Bluetooth tethering was not working.

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

Components	New Features
Scanning	• Added support for RS507x • 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: • DataWedge default Template selection to "Default - Barcode 4.xml. • SPR-33973 Wrong profile gets loaded when SwitchToProfile intent is used. • VC80(N) StageNow Barcode Staging not working with DS3608 serial scanner. • DataWedge crash when template file deleted.
EMDK	Fixed the issues: • Unable to create a DataWedge profile using EMDK Profile manager. • "getLabelType()" method returns "UNDEFINED" for mailmark and Hanxin barcode.
OEMConfig	Fixes: • "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: a) Added setting to keep the display on all the time. b) Added setting to keep the builtin speaker on when an M1000 speaker/microphone is plugged in.
Ivanti Velocity	Integrated Velocity ATTE 2.0

4. **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.

5. 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

Component Contents

Component / Description	Version
Product Build Number	01-01-49-NN-00-U08-STD
Android Version	7.1.2
Linux Kernel	3.10.84
Android SDK Level	25
Platform	QC8956
Flash Size	16GB/32GB
RAM Size	2GB/4GB
Security Patch Level	June 1,2018

Installation Requirements

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

IMPORTANT NOTE:

- Upgrading to this OS version (01-01-49-NN-00-U08-STD LG patch v8) blocks the downgrade prior to Update005 releases.
- Users updating from 01-01-49-NN-00-A BSP baseline to LG patch v8 will be allowed only to downgrade till Update005.

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 user 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_P08_NN_01-01.49.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: **8**
    ❖ ADB Shell method: Execute following command from PC's command prompt:
        $ adb shell getprop ro.device.patch.version
        $ **8**

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_P08_NN_01-01.49.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: **8**
   b. ADB Shell method: Execute following command from PC's command prompt:
      $ adb shell getprop ro.device.patch.version
      $ **8**

Downloadable Software Included in this Release

Package Name	Description
CFE_ATLAS_P08_NN_01-01.49.zip	OTA incremental LifeGuard CFE v8 update software for NGMS build compatible for VC80x and MC33 products.

Last Revised: June 14, 2018