Release Notes – Zebra MC3300R Android N LifeGuard Update 15 for NGMS

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Introduction

Zebra MC3300R is the next generation key-based, rugged mid-range hand-held mobile computing device that supports RFID UHF tag reading and writing. MC3300R is available with a Mid-range or Long-range and offers different physical key layouts. Running on a stable Android-N (7.1.2) OS, MC3300R offers the Zebra Value Add software solutions to enhance your Enterprise workflow.

The MC3300R is the professional-grade Android device built from the ground up for the Enterprise. It includes:

- Pre-installed RFID Applications and Manager
- 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

This release contains the following software package which is compatible with the MC3300R NGMS product.

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

Note:

MC3300R RFID devices are now supported with LifeGuard Update 14 and newer. Please do not attempt to download older versions (prior to Update 14).

Component Contents

Component / Description	Version
Product Build Number	01-01-49.00-NN-U15-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	7.0.4
EMDK	7.0.2000
MXMF / OSX	MXMF-8.2.3.1 / QCT.71.7.9
Enterprise Keyboard (EKB)	1.9.0.9
WiFi	FUSION_BA_2_10.0.3.020_N Application: BA_2_10.0.1.011_N Radio: BA_2_10.0.3.018_N Middleware: BA_2_10.0.1.013_N Firmware: 7.35.205.8 (r)
PTT	3.1.35

Touch FWN/ARxLogger Utility5.4.10.0B2MN/ABluetooth Pairing Utility3.11Zebra Data Services1.0.0.1002File Browser1.18.1.5Stage Now3.1.1.1019App Gallery3.0.1.7User GuideN/ASensors (Accel, Gyro)2061000, 2061000MobiControlN/AZebra Volume Control (ZVC)2.0.0.16Battery Manager1.3.8ActiveEdge2.5.16WorryFreeWiFi (SmartMU)3.0.2SimulScan Demo SE4750/SE4850 configurations)2.0.3SimulScan Engine (only on Imager input on SE4750/SE4850 configurations)2.0.17.0Zebra Software License Manager3.1.1Audio0.24.0.0Diagnostic Tool1.16.0.1OEM Config8.10.9RFID Manager Application2.0.10.2		
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	Diagnostic Tool	1.16.0.1
RFID Manager Application 2.0.10.2	OEM Config	8.1.0.9
	RFID Manager Application	2.0.10.2

RFID System Service	2.0.4.1
RFID Module	PAAEES00-001-R03
RFID Radio	2.0.30.0
Zebra RFID Mobile (Demo App)	2.2.7.2
Scan Scan Write (Demo App)	2.2.3.0
FingerPrint	Zebra/MC33/MC33:7.1.2/01-01-49.00-NN-U15-STD/114:user/release- keys
Security Patch Level	January 01, 2019

1. 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:
 - WiFi: FUSION_BA_2_10.0.3.020_N:
 - a. SPR35628 Resolved an issue where validation of Radius server certificate fails.
 - b. SPR35593/36008/36078 Resolved a device reboot issue where DHCP Option received with more than expected length.
 - 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.
 - 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.
- 5. SPR36143 Resolved an issue wherein remapping of control modifier keys were not persisting across a reboot.

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

2. MC3300R RFID Devices are now supported. The following RFID Components will be preinstalled on MC3300R devices:

Note: For more information on RFID, RFID SDK and Demo application, please refer to MC3300R support located at <u>http://www.zebra.com/support</u>

- RFID Manager: v2.0.10.2
 - a. Supports RFID configuration, FW download, RFID Debug, RFID Status and Version information.
- Zebra RFID Mobile Demo Application: v2.2.7.2
 - a. Full featured Demo application.
 - b. Preinstalled, launch icon is available on Home screen
- Scan & Write Application: 2.2.3.0
 - a. Application that demonstrates how to program tags based on barcode input.

Device Compatibility

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

Device Part Number	Operating
	System
MC333R-GI2HA4IL	Android N
MC333R-GI2HA4CN	Android N
MC333R-GI4HA4CN	Android N
MC339R-GF4HA4CN	Android N

Device Part Number	Operating
	System
MC339R-GE2HA4CN	Android N
MC339R-GF2HA4CN	Android N
MC339R-GE4HA4CN	Android N

Installation Requirements

The MC3300R Factory Installed Rev A OS or the LifeGuard Update 14 (Non-GMS) Full Package Update is a sufficient baseline to use for future LifeGuard Update releases.

IMPORTANT NOTE:

• Downgrade to older OS versions (01-01-49.00-NN-U13-STD LG patch v13 or earlier) will not work and should not be attempted on MC3300R devices.

Installation Instructions

Using ADB Sideload

The installation instructions assume you have ADB installed on your PC (the adb drivers and such) and your MC3300R has Developer options enabled and USB debugging ON: Instructions on HOW TO enable ADB is also captured in Integrator guide.

- 1. Connect the MC3300R 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".
- Open Command Prompt, run "adb devices" and check to see if you are able to see the device's serial number.
 If yes, proceed to next step

If not please 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 MediaPlayer. This can be ignored.
- 5. Download Image

- a. CFE_ATLAS_01-01-49.00-NN-U15-STD.zip listed above in content section
- b. Reset files (Optional)
- 6. Entering into Recovery Mode
 - a. Option 1: In Command Prompt, type *"adb reboot recovery" and click enter*.
 - b. Option 2:
 - Gun device: Reboot the device and keep the GUN (grip) trigger held.
 - Brick device: Reboot the device and hold both scan triggers on either side of device simultaneously.
 - When Zebra Technologies logo appears on the screen release the trigger
- 7. MC3300R will reboot and land up on the Android Recovery screen.
- 8. If applying patch via sideload method
 - a. Use UP and DOWN keys on the keypad to navigate up/down highlight itemb. Use ENTER key on the keypad to select menu item "Apply update via adb sideload"
- 9. With your Command Prompt, open, type "adb sideload" and add a space and then drag and drop the patch 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.
 - b. Repeat above steps for all mandatory packages
- 10. *"Reboot system now"* is highlighted. Press the Power Key to Reboot.
- 11. Device reboots and you see Zebra on top and POWERED BY android at the bottom and after about 1 minute will transition to the MC3300R splash screen with 5 dancing white dots at bottom... it will stay at this screen for a little over another minute (could be another 7+ minutes if installing GMS) and then you are at the Factory "Welcome" screen.
- 12. If you installed a GMS BSP, you will need to complete the process by setting up Wi-Fi and Email accounts and such. If on AOSP (non-GMS), there is no process to follow.
- 13. 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 "**01-01-49.00-NN-U15-STD**". Now you are on the correct BSP.
 - b. Setting the Date and Time. If you associate to a WLAN AP, do so now, as it should automatically set the time and date... the only thing left is to set the time zone. Go to "Settings" and scroll to and select "Date & time". Scroll down to and select "Select time zone", and scroll down to and select the appropriate time zone and you are done.
- 14. To Check the Android Patch Level after installing the CFE package in the device,
 - a. Settings->About Phone->SW Components: Device Update Version: 15
 - b. ADB Shell method: Execute following command from PC's command prompt:
 - \$ adb shell getprop ro.device.patch.version
 \$ 15

15. Now you are all set to use your MC3300R.

Using External SD card

- 1. Plug the MC3300R into the USB & Charging Cable and then the Cable to the PC. If you have a Cradle with USB connectivity, you may use that as well.
- 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. Download CFE_ATLAS_01-01-49.00-NN-U15-STD.zip and drag & drop the file on External SD card.
- 4. Entering into Recovery Mode
 - Gun device: Reboot the device and keep the GUN (grip) trigger held.
 - Brick device: Reboot the device and hold both scan triggers on either side of device simultaneously.
- When Zebra Technologies logo appears on the screen release the trigger 5. Your MC3300R will reboot and land up on the Android Recovery screen.
- 6. Applying update via External SD card

a. Use UP and DOWN keys on the keypad to navigate up/down highlight item b. Use ENTER key on the keypad to select menu item – "Apply update from External SDCard"

- c. Repeat above steps for all mandatory packages
- 7. "Reboot system now" is highlighted. Press the Power Key to Reboot.
- 8. Device reboots and you see Zebra on top and POWERED BY android at the bottom and after about 1 minute will transition to the MC3300R splash screen with 5 dancing white dots at bottom... it will stay at this screen for a little over another minute (could be another 7+ minutes if installing GMS) and then you are at the Factory "Welcome" screen.
- 9. If you installed a GMS BSP, you will need to complete the process by setting up Wi-Fi and Email accounts and such. If on AOSP (non-GMS), there is no process to follow.
- 10. 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 "**01-01-49.00-NN-U15-STD**". Now you are on the correct BSP.
 - b. Setting the Date and Time. If you associate to a WLAN AP, do so now, as it should automatically set the time and date... the only thing left is to set the time zone. Go to "Settings" and scroll to and select "Date & time". Scroll down to and select "Select time zone", and scroll down to and select the appropriate time zone and you are done.
- 11. To Check the Android Patch Level after installing the CFE package in the device,
 - a. Settings->About Phone->SW Components: Device Update Version: 15
 - b. ADB Shell method: Execute following command from PC's command prompt:

\$ adb shell getprop ro.device.patch.version

\$ 15

12. Now you are all set to use your MC3300R.

Downloadable Software Included in this Release

Package Name	Description
CFE_ATLAS_01-01-49.00-NN-U15-STD.zip	OTA incremental LifeGuard CFE v15 update software for Non-GMS build compatible for MC3300R products

Last Revised: January 28, 2019