

FX7500 2.3.23 Release Notes

Release Notes for FX7500 V2.3.23

Released on 20/Apr/2017

Contents

Introduction.....	1
Software Download	1
Installation Requirements	3
Installation Instructions	3
New Features summary.....	3
Issues Fixed	5
Known Issues	6

Introduction

The FX7500 RFID reader is a powerful EPC Gen-2 compliant business class fixed reader. It is a Linux based device driven by a new and powerful RFID engine that enables users to integrate RFID into their business logic and applications with great ease and high efficiency.

Release Notes lists new features, any specific usage instructions, and any known issue.

The features and the issues mentioned in this document are applicable for all FX7500 SKUs

Software Download

The version 2.3.23 software update package includes the files required to update FX7500 RFID Reader.

An FTP/SCP/FTPS server is required to upgrade the readers.

The software for fx7500 reader is available at Zebra support site.

Contents of the release package:

IMAGE TYPE	VERSION	FILE NAME	DATE
RM Server	2.3.23	platform_2.3.23.0.tar.gz	04/20/2017
LLRP Server	2.3.23		
X-Loader	2.0.4	x-load_2.0.4.bin.ift	01/05/2017
U-Boot	2.0.11	u-boot_2.0.11.0.bin	01/05/2017
Operating System	2.0.7	ulmage_2.0.7.0	01/05/2017
Root FS	2.0.2	rootfs_2.0.2.0.jffs2	01/05/2017
OsUpdate Utility	1.0.0	Osupdate.elf	01/05/2017
Response	N/A	response.txt	01/05/2017

Fx7500 2.3.23 Release Notes

RFID3 CAPI DLL	5.5.1.6	Rfidapi32.so	3/3/2016
RFID3 JNI DLL	1.4.0.27	librfidapi32jni	3/3/2016
RFID3 Java API	1.4.0.27	Symbol.RFID.API3.jar	3/3/2016
Linux Kernel	2.6.32		
NGE Firmware	1.4.68		
NGE Radio API	1.4.60		

Host API release Version Info:

IMAGE TYPE	VERSION	FILE NAME	DATE
C API DLL	5.5.1.6	RFIDAPI32PC.DLL	3/3/2016
RFID3 .NET DLL	1.5.1.2	Symbol.RFID3.*.dll	3/3/2016
RFID3 Java JNI DLL	1.4.0.27	RFIDAPI3_JNI_HOST.dll	12/10/2015
RFID3 Java API	1.4.0.27	Symbol.RFID.API3.jar	12/10/2015

Native DLL available for both 32bit and 64bit

Contents of the API release package:

IMAGE TYPE	FILE NAME	REMARKS
RFID_FX7500_EMDKForC	EMDKForC_CC.zip	Includes header files, lib, dll and sample apps for C
RFID_FX7500_EMDKForDotNet	EMDKForDotNet_CC.zip.zip	Includes header files, lib, dll and sample apps for .NET

Packages also include documentation in \doc folder for C, .NET in respective folder. For Java, documentation is included as part of MSI package

FX7500 2.3.23 Release Notes

Installation Requirements

- A Java enabled browser on a PC is required to initiate the upgrade process. A USB drive can also be used directly. The recommended browser is Mozilla FireFox

Installation Instructions

There are three supported ways to upgrade the FX7500 RFID reader

Method 1:

Unzip images and copy to a USB drive. Connect USB drive to FX7500reader. Upgrade will automatically start in 7-10 seconds.

Method 2:

Copy images to local drive of PC, log in to the reader, select 'File based upgrade' on reader upgrade webpage, Enter username and password of reader. Select image to upgrade from local PC. Click 'Start upgrade'

Note :- There is a separate package available to perform File based upgrade to the reader.

Method 3:

Copy images to FTP server. Navigate to the reader upgrade webpage and select 'FTP upgrade' page. Enter username and password of the FTP server. 'Start upgrade'.

- ✓ FTP/SCP/FTPS server can be used to upgrade the readers.
- ✓ The latest version of PowerSession demo application (0.40.8 and higher) can also be used to upgrade multiple readers with a single operation. Please refer to the Integrator Guide document for detailed upgrade procedures.

New Features summary

This release includes the following new features (as compared to 1.3.13 release).

- Added country support for Philippines and Indonesia
- Allow/disallow Guest User
 - Option to control whether Guest User is allowed or not to access the reader using the web console. When Checked (default) this option is enabled and Guest user is allowed to login to view the reader settings. Disabling this option prevents Guest user login to the reader's web console.
- Display of ECC errors on home screen
 - Amber status LED to be turned on if any ECC conversion error is detected
- All partitions are converted from to 1-Bit to 4-Bit ECC for the content stored in the NAND flash
- Calculation of checksum for each partition is added
- "-c" parameter is added in "response.txt" file to calculate checksum value for each partition
- "Java Applets has been updated with a valid certificate
- Remove password change traces from syslog
- Allow special characters in password when changing password using the web console
- Modifications to the Japan regulatory as below
 1. Modify the Japan SKU to not support LBT configuration. LBT is disabled for Japan SKU
 2. Allow channel configuration in addition to hopping. By default hopping will be on.

Fx7500 2.3.23 Release Notes

Allow/disallow Guest User

Option to control whether Guest User is allowed or not to access the reader.

ZEBRA **FX7500**

Reader Parameters

Zebra - FX7500 16034010502406

Configure Reader

Name: FX750080089B FX750
Description: FX750080089B Advanced Reader
Location:
Contact: Zebra Technologies Corporation
Operation Status: Enabled
Antenna Check: Enabled
Idle Mode Timeout (secs): 0
Radio Power State: On
Power Negotiation: Disabled
Allow Guest User:

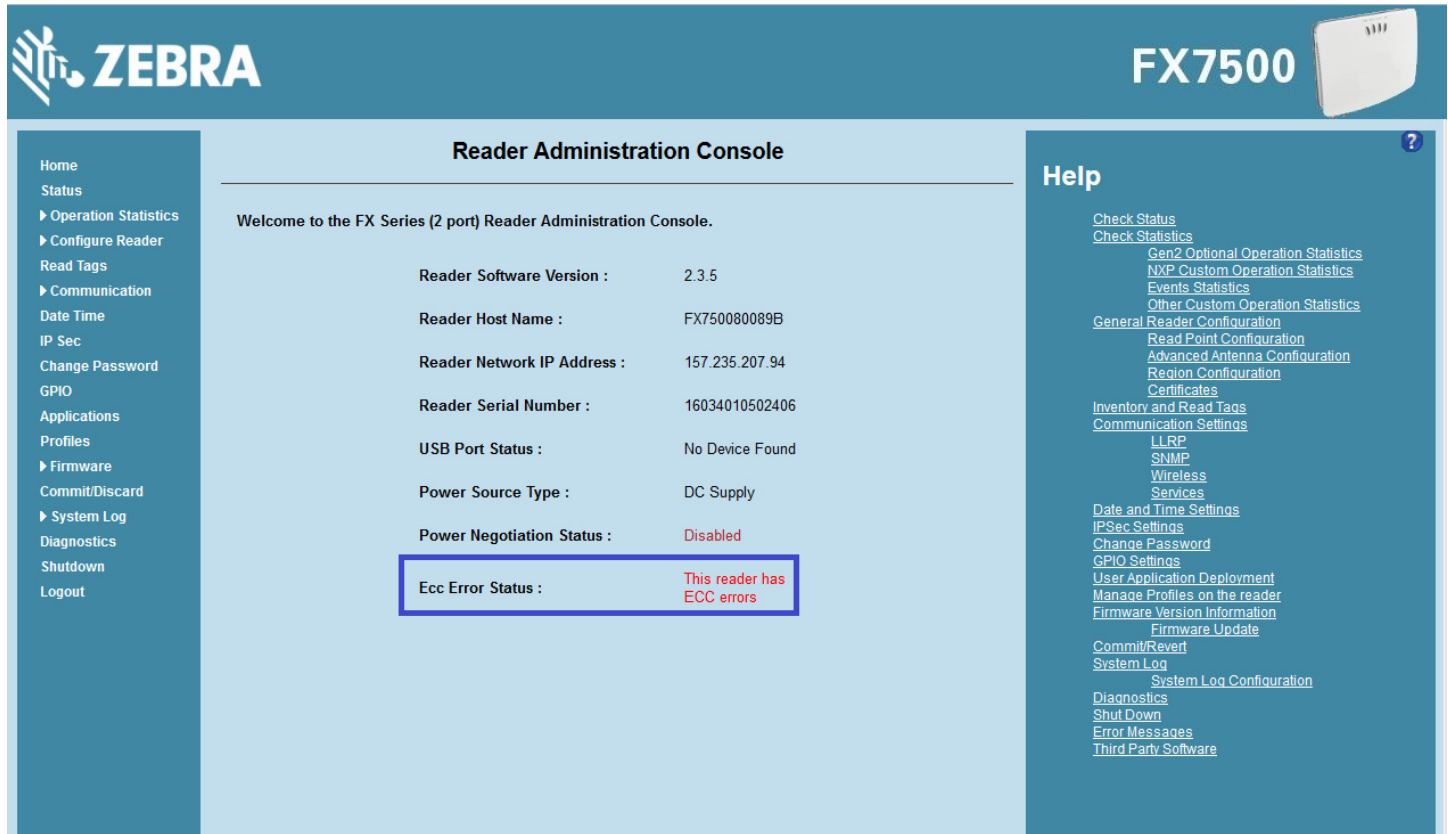
Set Properties

- reader. Accepts alpha numeric characters with a maximum size of 32 characters.
- Operation status** - Displays the current operation status of the reader. Can be 'Enabled', 'Disabled' or 'Unknown'.
- Antenna check** - Option to control the antenna sensing feature on the reader. If this feature is 'Disabled' the reader does not attempt to check if any antenna is connected on the ports. When 'Enabled' the reader will monitor the presence of antenna on the port and will transmit RF only if an antenna is connected.
- Idle Mode Timeout (secs)** - Option to turn off radio when the reader is idle for the specified time interval. Timeout value 0 disables this feature. Enabling idle mode timeout will also turn off the antenna check feature when inventory is not going on. Idle mode values can be set between 10 to 60000 seconds when the feature is turned on.
- Radio Power State** - Displays the current state ('ON' or 'OFF') of the radio. The radio can be turned off if idle mode timeout is set to non zero value and the radio is not doing RF operations for a time period greater than the time specified by idle mode timeout. The radio will be turned on automatically when starting RF operation if it is turned off.
- Power Negotiation** - Option to control the power negotiation feature on the reader. If this feature is 'Disabled' the reader does not attempt to negotiate the power from the PoE source. When 'Enabled' the reader will check if it is powered by a CDP enabled Cisco Switch and attempts to negotiate extra power so as to obtain power in the range of PoE+.
- Allow Guest User** - Option to control whether Guest User is allowed or not to access the reader using the web console. When Checked (default) this option is enabled and Guest user is allowed to login to view the reader settings. Disabling this option prevents Guest user login to the reader's web console.
- Set Properties** - Clicking on 'Set Properties' button sends the user changes to the reader.

FX7500 2.3.23 Release Notes

Display ECC errors on Home Screen

Amber status LED to be turned on if any ECC conversion error is detected



The screenshot displays the Zebra FX7500 Reader Administration Console. The interface includes a top navigation bar with the Zebra logo and 'FX7500' text. A left sidebar contains navigation options such as Home, Status, Operation Statistics, Configure Reader, Read Tags, Communication, Date Time, IP Sec, Change Password, GPIO, Applications, Profiles, Firmware, Commit/Discard, System Log, Diagnostics, Shutdown, and Logout. The main content area is titled 'Reader Administration Console' and displays system information:

Reader Software Version :	2.3.5
Reader Host Name :	FX750080089B
Reader Network IP Address :	157.235.207.94
Reader Serial Number :	16034010502406
USB Port Status :	No Device Found
Power Source Type :	DC Supply
Power Negotiation Status :	Disabled
Ecc Error Status :	This reader has ECC errors

The 'Ecc Error Status' field is highlighted with a red border. A right sidebar titled 'Help' contains a list of links for various system settings and diagnostics.

Issues Fixed

- Support for the ETSI RE-d regulatory standard
 - Filters have been adjusted to handle the new ETSI regulations (RE-d).
 - Removed the FM0 link profiles (profiles 1,2,24,25) for EU regulatory.
- Improved unique tag read performance using sessions S2 and S3 by using NAK when CRC error are detected
- Fix for clickjacking (SPR 31385, P99: Introduced Apache Server side protection: X-Frame-Options to protect admin console page from clickjacking)
- Fix for limiting max power in regulatory's (China, Indonesia and Malaysia) to max 29.2 dbm instead of 30.
- FX7500 EU SKU will not support FM0 profiles. In the current version, the profiles 320 FM0 have been removed for the EU SKU.

Fx7500 2.3.23 Release Notes

Known Issues

1. FX7500 release 1.3.13 is expecting the presence of “platform_*.*.*” image at the line of 13th from “response.txt” [Do not modify anything in this file when updating from 1.3.13]
2. Updating from 1.3.13 to 2.x.x version using File based update needs to use the update package specifically meant for File based update.