RFID Data Management Pro for Fixed Readers

Installation Guide

June 2017
Version 2.40
Preface

This document explains the procedure of the installation and the Confirmation of RFID Data Management Pro for Fixed Readers (Hereafter, it is written, “This tool”). Be sure to read this document before using this tool.

Abbreviations and generic terms used in documents for Fujitsu RFID Integrated Label Solution

The documents use the following abbreviations and generic terms.

<table>
<thead>
<tr>
<th>Name</th>
<th>Abbreviation used in this document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft® Windows® 7 Professional</td>
<td>“Windows 7”</td>
</tr>
<tr>
<td>Microsoft® Windows® 8.1 Professional</td>
<td>“Windows 8.1”</td>
</tr>
<tr>
<td>Microsoft® Windows® 10 Professional</td>
<td>“Windows 10”</td>
</tr>
<tr>
<td>Terminals where Windows 7, Windows 8.1, or Windows 10 has been installed</td>
<td>“PC”</td>
</tr>
<tr>
<td>Personal computer</td>
<td></td>
</tr>
<tr>
<td>Reader/writer devices</td>
<td>“Reader device”</td>
</tr>
<tr>
<td>RFID tags</td>
<td>“Tag”</td>
</tr>
<tr>
<td>Fujitsu’s RFID Integrated Label - 8Kbyte (Large/Medium/Small)</td>
<td>“Large capacity RFID tag” or “high memory tag”</td>
</tr>
<tr>
<td>Fujitsu’s RFID Integrated Label - 1Kbyte (Large/Medium/Small)</td>
<td>“Tag”</td>
</tr>
<tr>
<td>Fujitsu’s 2-kilobit RFID tags</td>
<td></td>
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</tbody>
</table>

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ATA (Air Transport Association of America) Spec 2000 Chapter 9-5

- This tool is designed to read and write data from and to tags in compliance with the specification for Radio Frequency Identification (RFID) on Parts in ATA Spec2000 Chapter 9-5.

High Risk Activity

- This product is designed and manufactured as contemplated for general use, including without limitation, general office use, personal use and household use, but is not designed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter called “High Safety Required Use”), including without limitation, nuclear reaction control, aircraft flight control, air traffic control, mass transport control, life support, and weapon launch control. The customer shall not use this product without securing the sufficient safety required for the High Safety Required Use.
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■ Screenshots and illustrations
- The screenshots and illustrations in this document are only examples, and the actual screens may be slightly different depending on the environment that you are using.
- The screenshots used in the explanations in this document are from a Windows 8.1 environment.

■ How to obtain third-party software (such as Zebra / Motorola products)
- For information about how to obtain third-party software, make inquiries with Fujitsu Customer Support.

■ Other Notes
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- The content of this document may change without prior notice.

■ Revision history

<table>
<thead>
<tr>
<th>Edition</th>
<th>Date issued</th>
<th>Changes</th>
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<tbody>
<tr>
<td>Version 1.00</td>
<td>April 2014</td>
<td>This manual separated from the user's guide.</td>
</tr>
<tr>
<td>Version 1.10</td>
<td>June 2014</td>
<td>Changed product name</td>
</tr>
<tr>
<td>Version 2.20</td>
<td>October 2014</td>
<td>Commercialization version</td>
</tr>
<tr>
<td>Version 2.30</td>
<td>March 2015</td>
<td>Support for Windows 8.1</td>
</tr>
<tr>
<td>Version 2.31</td>
<td>June 2015</td>
<td>Installation procedure changed</td>
</tr>
<tr>
<td>Version 2.32</td>
<td>October 2015</td>
<td>Installation procedure changed &amp; FX7500 addition</td>
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</table>
| Version 2.33  | October 2016| Function enhancement
1) Support for the EPC format for non-serialized parts
2) Support for Windows 10
3) Function addition of logging the written data on tag in XML |
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1 Overview

1.1 Installation Procedure Overview

The following shows the overview of installation operations.

Reference: If an older version of this tool is already installed and you want to update it, please refer to the section 1.2 Update Procedure Overview.

1. Install EMDK for C and setup / configure the FX7500 Fixed Reader (refer to the section 3 Set up Zebra FX7500).
2. Install RFID Data Management Pro for Fixed Readers (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers).

1.2 Update Procedure Overview

The update procedure from older version to V01L02R1 is as below.

Caution: If additional TEIs are configured, it will be necessary to manually reconfigure them after the software update.

In the case that additional TEIs are configured:
1. Confirm the existing additional TEIs in TEI Settings application before updating.
2. Uninstall the older version of the RFID Data Management Pro (refer to the uninstallation procedure in the installation guide for the currently installed version).
3. Reinstall the latest version of the RFID Data Management Pro (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers).
4. Reconfigure the additional TEI.

In the case that no additional TEIs are configured:
1. Uninstall the older version of the RFID Data Management Pro (refer to the uninstallation procedure in the installation guide for the currently installed version).
2. Reinstall the latest version of the RFID Data Management Pro (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers).

1.3 Uninstallation Procedure Overview

Refer to the section 4 Uninstallation.
1.4 Installation Prerequisites

The following hardware and settings are required to install and use this tool.

1.4.1 PC

1.4.1.1 Hardware Requirements

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>A CPU with a 1.0 GHz processor or higher (manufactured by Intel or AMD)</td>
</tr>
<tr>
<td>Memory</td>
<td>1 GB or more</td>
</tr>
<tr>
<td>Hard disk capacity</td>
<td>400 MB or more</td>
</tr>
<tr>
<td>Text resolution</td>
<td>96 DPI</td>
</tr>
<tr>
<td>Display size</td>
<td>XGA (1024 x 768) or higher</td>
</tr>
</tbody>
</table>

Reference: Administrator rights on the PC are necessary to install this tool.

1.4.1.1 Software Requirements

- Internet Explorer 10
- In the case of Windows 8 or later version, install .Net Framework 3.5 (includes .Net 2.0 and 3.0) in advance.
- EMDK for C v2.8 (available at: Zebra Technologies Web site)
- RFID Data Management Pro for Fixed Reader (provided with the CD)

1.4.2 RFID Reader

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Type</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zebra Technologies</td>
<td>Fixed Reader</td>
<td>FX7500</td>
</tr>
</tbody>
</table>
2 Install the RFID Data Management Pro for Fixed Readers

If the following operating procedure completes normally, the RFID Data Management Pro for Fixed Readers will have been installed.

■ Operating procedure

(1) Turn on the PC where this tool is to be installed and log in as either the PC administrator or a member of the Administrators group.
(2) Perform the procedure in section “3 Set up Zebra FX7500”.
(3) In the case of Windows 8 or later version, install .Net Framework 3.5 (includes .Net 2.0 and 3.0) in advance.
(4) Insert the setup CD that comes with this tool into the CD drive on the PC.
(5) Open the CD using Explorer, and then double-click “Setup.exe” in the “Module” folder.

! Caution
• If the PC does not have a CD drive, use another PC to copy the content of the “Module” folder on the CD to USB memory (or a similar device), and then execute “Setup.exe” from there.

(6) The installation starts.
(7) Click the **Next** button.

(8) Click the **Install** button.

(9) If the following warning dialog box is displayed, click the **Yes**.
(10) After the installation completes, click the **Finish** button.

(11) When the installation completes, **Fujitsu / RFID Data Management Pro** will be registered under the **Start / Programs** menu. The following icon will also be created on the desktop: **RFID Data Management Pro for Fixed Readers**.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Name of the desktop icon</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFID Data Management Pro</td>
<td>RFID Data Management Pro for Fixed Readers</td>
</tr>
</tbody>
</table>

(12) Remove the setup CD from the PC.
(13) Restart the PC manually.

This completes the installation procedure for this tool.
2.2 License Activation

This section explains about licensing of this tool. The license key is required to activate this tool and the procedure to receive the “License Key” is explained in section “2.2.1 Commercial License”. This tool also provides the trial license for 30-day use without “License Key” and the procedure to start this tool in trial use is explained in section “2.2.2. Trial License”.

2.2.1 Commercial License

(1) Click the “RFID Data Management Pro for Fixed Readers” icon.

(2) Check the “Registration ID” and send the information to Fujitsu Customer Support.

Reference:  • After receiving the “Registration ID”, Fujitsu Customer Support will send the “License Key” by email.
• While waiting the license key, it is also possible to use this tool as trial mode. (refer to 2.2.2 Trial License)
(3) Enter the License Key and click the **Activate Now** button.

![License Activation Window]

(4) RFID Data Management Pro for Fixed Readers will start up.

![RFID Data Management Pro Window]
2.2.2 Trial License

(1) Click the “RFID Data Management Pro for Fixed Readers” icon.

(2) Click the **Trial Use** button.

(3) Click the **OK** button.
(4) RFID Data Management Pro(DEMO) will start up.
3 Set up Zebra FX7500

This section explains the installation and setup procedure for the Zebra FX7500. Note: Refer to the *FX7500 RFID Reader Integrator Guide* provided by Zebra for details.

- **Operating procedure**
  
  1. Install EMDK for C (available at: Zebra Technologies Web site). Execute EMDK Installer and then follow the wizard to install EMDK for C as follows.
  
  2. Click the **Next** after the installation wizard comes up.
(3) Read and accept the license agreement and click the I Agree.

(4) Click the Install.
(5) Click the box if you want to view the readme file and click the Finish.

![Image]

(6) Connect the PC and the FX7500.
Connect the FX7500 to the PC via the LAN.

![Diagram]

(7) Configure network connection settings on the PC side. (Part 1)
1. Select the Start > Control Panel > Network and Sharing Center > Change adapter settings. Then right-click the Local Area Connection and select the Properties.
2. In the Local Area Connection Properties window, select the Internet Protocol Version 4 (TCP/IPv4), and then click the Properties button.
3. Select the Obtain an IP address automatically radio button.

(8) Confirm the network connection settings on the PC side (Part 2)
1. Open a command prompt and execute “>ipconfig”. Make sure that the IP address “169.254.xxx.xxx” has been allocated.
Note: It may take some time before the IP address is assigned.
Note: If the Obtain IP Address via DHCP (described below) is set to Off then an IP address will not be assigned. In this case, make inquiries with the administrator of the FX7500 in question to verify the fixed IP address. Then set an IP address on the same network as the IP address specified in Step 4, “Configure network connection settings on the PC side (Part 1)”.

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(9) Log in to the FX7500.
1. Start a Web browser, enter “http://FX7500xxxxx” in the URL field, and then press <Enter>.

Note: For “xxxxx”, see the label attached to the case of the FX7500.

2. Log in by entering the following user name and password in the login window that is displayed.
   User Name → admin
   Password → change
(10) Set up the IP address for the FX7500.
1. Select the **Communication** from the list on the left-hand side.
2. Change the **Obtain IP Address via DHCP** from **On** to **Off**.
3. Set the IP address assigned by network administrator for the **Current IP Address**. The default address is set as "169.254.10.1".
4. Set the **Subnet Mask** corresponding to the IP address. The default mask is set as "255.255.0.0".
5. If the **Current IP Address** is set as an address other than the default address, open “DeviceProviders.config” under the installation folder of RFID Data Management Pro and add the following element under <Provider> element.

```
<TargetIPAddress_Port>IP Address: 5084</TargetIPAddress_Port>
```

**Reference:**
- The “DeviceProviders.config” is stored in the following folder;
  - In the case of 32-bit PC: “C:\Program Files\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers”
  - In the case of 64-bitPC: “C:\Program Files (x86)\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers”
- Because it is prohibited to directly modify files under the Program Files, please copy the “DeviceProviders.config” to another location such as the "Documents" folder. And then, edit the file and relocate it to the original folder.
- If the warning dialog of User Account Control, click the **Yes**.

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(11) Apply the IP address settings for the FX7500.
1. Select the **Commit/Discard** from the list on the left-hand side.
2. Click the **Commit** button.
3. Restart the FX7500 (disconnect and connect to Power again). After the green LED on the Reader is lightning please logon to the Reader again.

(12) Set the port number for the FX7500.
1. Select the **LLRP** from the list on the left-hand side.
2. Set “5084” for the **Client Port**.
3. After these settings are complete, select the **Logout** from the list on the left-hand side.
(13) Set up the fixed IP address for the PC.
1. Select the Start > Control Panel > Network and Sharing Center > Change adapter settings. Then right-click the Local Area Connection and select the Properties.
2. In the Local Area Connection Properties window, select the Internet Protocol Version 4 (TCP/IPv4), and then click the Properties button.
3. Select the Use the following IP address radio button.
4. For the IP address, set an IP address on the same network as "(10)Set up the IP address for the FX7500."
5. For the Subnet mask, set the value corresponding to IP address.
6. For the Default gateway, set the IP address that was set for the FX7500 in the step "(6) Set up the IP address for the FX7500". The default value is “169.254.10.1”.
7. Open a command prompt and execute the command ">ping IP Address".

(14) If the ping command succeeds, then this means that the PC is connected to the FX7500.

(15) A regional setting and the method of test of program operation of FX7500 are executed referring to the operating manual of FX7500.
4 Uninstallation

4.1 Uninstall the RFID Data Management Pro for Fixed Readers

This section explains how to uninstall the RFID Data Management Pro for Fixed Readers.

- Operating procedure
  (1) Select Control Panel, Programs and then Programs and Features from the Start menu.
  (2) Select RFID Data Management Pro for Fixed Readers from the Uninstall or change a program list, and then click the Change button. Click the Next button.

(3) Select the Remove and then click the Next button.
(4) Click the Remove button.

(5) If the following warning dialog box is displayed, click the Yes.

(6) Uninstallation of this tool will start.
(7) After the uninstallation completes, click the **Finish** button.

![Finish button](image)

(8) Check that the **RFID Data Management Pro for Fixed Readers** has been deleted from the **Currently installed programs** list.

**Caution**
- Folders that contain the files created after the installation will not be deleted.
- If these folders need to be deleted completely, use Explorer or some other file manager to directly delete the following folder.
  - “C:\Users\Public\RFID Data Management Pro”
  - “C:\Users\Public\Documents\Fujitsu\RFID Data Management Pro”
- In the case of 32-bit PC:
  - “C:\Program Files\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers”
- In the case of 64-bit PC: “C:\Program Files (x86)\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers”

(9) Restart the PC manually.

This completes the uninstallation procedure for this tool.
4.2 Uninstall the EMDK for C

This section explains how to uninstall the EMDK for C.

■ Operating procedure

(1) Select Control Panel, Programs and then Programs and Features from the Start menu.

(2) Select Motorola EMDK for C from the Uninstall or change a program list, and then click the Uninstall.

(3) The following confirmation message is displayed. Click the YES button.

(4) Uninstallation of the EMDK for C will start.
(5) Click the Close button.

(6) Check that the Motorola EMDK for C has been deleted from the Currently installed programs list.

(7) Restart the PC manually.

This completes the uninstallation procedure for the EMDK for C.