Registered Device Installation Manual
Installation Manual

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<td>Rajabharath S</td>
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Version Changes

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<td>Balasubramaniyan</td>
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<td>24th Nov 17</td>
<td>Rajabharath</td>
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<td>29th Nov 17</td>
<td>Rajabharath</td>
<td>Uninstallation dialog box changed.</td>
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</tbody>
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# Installation Manual

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1. Introduction

1.1. Summary

The Registered Device Service called as RD Service, provides a common interface for the application developers to integrate the STQC certified registered biometric devices. The registered biometric devices implies that the biometric device which is used in the application should be registered with UIDAI server. Our RD Service will automatically register the connected device with UIDAI server. For more information on device registration, check section 2.

1.2. Scope

This document covers detailed description of the procedure involved in the installation of RD Service.

1.3. Audience

The intended audience are software developer, implementation team, system integrators and Customers.

2. Device Registration

The Biometric device which is used in the application should be registered with UIDAI in order to function properly. Once the device is connected to the host system, our RD Service will automatically will detect and register the device with UIDAI Server. Once the registration is successful, then the device will be operational.

Please find the Precision Device Management Server information below to whitelist server details in the internet or proxy server.

<table>
<thead>
<tr>
<th>SL NO</th>
<th>Particular</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DNS Address</td>
<td>pbrdms.precisionbiometric.co.in</td>
</tr>
<tr>
<td>2</td>
<td>Public IP Address</td>
<td>122.183.251.118</td>
</tr>
<tr>
<td>3</td>
<td>Port</td>
<td>443</td>
</tr>
</tbody>
</table>

The biometric device registration with UIDAI Server will happen when you connect the device to the system.

If RD Service prompts an error message as “Device information not available in Precision Management Server, please contact Device Vendor”,

- Connect the biometric scanner to the system and access the URL (https://pbrdms.precisionbiometric.co.in/RDMS_Server_Prod/DeviceInfo.aspx) and provide the below information to activate the device
  - Customer Name
If you are not able to access the URL, share the device serial number to Precision Support team (check the Appendix C for Support Team contact details) to activate the device.

Please note that the device registration in UIDAI Preproduction & Production server will take minimum 24hrs to activate.

3. System Requirement

The following table describes the minimum hardware and software requirement for RD service as per UIDAI specification:

<table>
<thead>
<tr>
<th>SL NO</th>
<th>Component</th>
<th>Minimum Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Hardware Requirement</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Operating System</td>
<td>Windows 7, Windows 8, Windows 8.1 &amp; Windows 10</td>
</tr>
<tr>
<td>2</td>
<td>RAM</td>
<td>2 GB</td>
</tr>
<tr>
<td>3</td>
<td>Hard disk</td>
<td>500 MB free space</td>
</tr>
<tr>
<td>4</td>
<td>Port</td>
<td>11100 to 11120 (RD Service run in any one port)</td>
</tr>
<tr>
<td>5</td>
<td>Rights</td>
<td>Administrator right</td>
</tr>
<tr>
<td>6</td>
<td>Browser</td>
<td>Internet explorer 8 &amp; above, google chrome, Mozilla Firefox, opera</td>
</tr>
<tr>
<td></td>
<td><strong>Software Requirement</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.Net Framework</td>
<td>3.5 or above</td>
</tr>
</tbody>
</table>
4. Installation Procedure

Before starting the installation of RD Service, please make sure that the following condition are met:

1. Check the system minimum requirements are met (check section 3 for more information)
2. Unplug the biometric device from the system.
3. Uninstall the previous version of the RD Service.
   a. Go to “Run” prompt, type “appwiz.cpl” and press enter
   b. Search for “PBRDService”, “PBMClient”, “Precision-UareU4500” and click “Uninstall” button to remove the package.
4. Make sure you have administrator privilege to start the installation.
5. Make sure USB port are enabled for communication
6. Download / copy the RD Service to the local system

Follow the below procedure to installation the RD Service:

1. Login into the system as administrator
2. Open the RD Service Package folder.
3. Right click "PBRDService.exe" and select Run as administrator
4. Please close all running browsers & unplug the fingerprint scanner from the system and press OK button to proceed the installation otherwise click Cancel button to cancel the installation.

5. If the RD Service is already installed the following screen will appear:
   a. Click OK
b. Click **Close**

![Uninstaller Setup: Completed](image)

6. Right click “**PBRDService.exe**” and select **Run as administrator**
7. Please close all running browsers & unplug the fingerprint scanner from the system and press **OK** button to proceed the installation otherwise click **Cancel** button to cancel the installation.

![Precision-RDSService Setup](image)
8. Click on **Next** to start the installation

9. Click on **I Agree**
10. Click on **Next** and make sure that all the checkboxes are checked.

11. Click on **Install**.
12. If Biometric Scanner drivers are installed already, the following screen will appear.
   a. Click on **OK** to remove the previous installation
b. If the Device driver is already installed, the following screen will appear. Select **Repair U.are.U4500 Sensors DDK** and click on **Finish**

![Image of repair wizard]

- Select whether you want to repair or remove U.are.U4500 Sensors DDK.
- Click **Finish** to continue.

c. Click close to close the wizard

![Image of installation complete]

- U.are.U4500 Sensors DDK has been successfully removed.
- Click "Close" to exit.
d. Click **Close** to close the wizard

e. Click on **Next** to start the new installation of U.are.U 4500
f. Click **Next** to continue the installation

![Select Installation Folder]

The installer will install U.are.U4500 Sensors SDK to the following folder:

To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".

**Folder:** C:\Program Files (x86)\Precision Biometric\U.are.U4500 Sensors SDK

![Browse]

Click **Next** to continue the installation

![Confirm Installation]

The installer is ready to install U.are.U4500 Sensors SDK on your computer.

Click "Next" to start the installation.
h. Click **close** to close the wizard

13. If the management client is already installed, the following screen will appear:
   a. Click on **ok** to remove the previous installation

   ![Image of the installation complete screen]

   **Installation Complete**

   U.are.U4500 Sensors DDK has been successfully installed. Click "Close" to exit.

   ![Image of the management client setup screen]

   **Precision-ManagementClient Setup**

   Precision ManagementClient (Precision-ManagementClient) is already installed in this local system. Click 'OK' to remove the installed version or 'Cancel' to cancel this upgrade.

   ![Image of the Uninstaller Setup: Completed screen]

   **Uninstaller Setup: Completed**

   Completed
14. If the following message box appear, Click “Yes” to delete the old certificate

![Root Certificate Store]

15. Click “Yes” to proceed

![Security Warning]
16. Click on **Close** to complete the installation.

![Installation Complete](image)

**Note:**

It is highly recommended to reboot the system after successful installation.

Once the installation is completed, please make sure that the following services are running:

1. Go to **run** prompt, type `services.msc` and press **enter**
2. Search for the following services
   a. PrecisionBiometricService
   b. PrecisionManagementClient
   c. PrecisionRDService
3. The services should be in **started** status. If any one of the services are not found, check the FAQ for more details.
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Procedure to test the scanner:
1. Go to the RD Service installation location (if it is x86 based system, “C:\Program Files\Precision Biometric\PBRDService” and if it is x64 based, the installation folder will be “C:\Program Files(x86)\Precision Biometric\PBRDService”)
2. Connect the scanner to the system and wait for the following notifications. If you are getting any other notification message, Check FAQ section to resolve the issue.

3. Open the “PrecisionRDServiceTestApplication.html” with internet explorer or other supported browser
4. Click on “Discover” button to discover the Precision RD Service

5. If “RDSERVICE Discover Successfully”, Click on “Capture” button to capture the fingerprint
6. If the fingerprint is captured successfully, the following data will be displayed:

Note:
Please note that the device registration in UIDAI server will take minimum 24hrs to take activate.

5. Error Code

This section will brief the list of error codes and their description:

<table>
<thead>
<tr>
<th>SL NO</th>
<th>Error Code</th>
<th>Error Description</th>
<th>Action to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>700</td>
<td>Capture time out</td>
<td>Try capture again</td>
</tr>
<tr>
<td>2</td>
<td>710</td>
<td>Device is used by another application</td>
<td>Biometric capture is involved by another application, try capture image after some time</td>
</tr>
<tr>
<td>3</td>
<td>720</td>
<td>Device not ready</td>
<td>Check info / errInfo element for more information</td>
</tr>
<tr>
<td>4</td>
<td>730</td>
<td>Capture Failed</td>
<td>Try capture again</td>
</tr>
<tr>
<td>5</td>
<td>740</td>
<td>Device needs to be reinitialized</td>
<td>Unplug the device and plug it again</td>
</tr>
</tbody>
</table>

For all other error codes or error message, please contact the appropriate application team to resolve the issue.
Appendix A - Key information

These are the key information, you should know:

**RD Service Installation folder:**

If the windows operating system is x86 based, the installation folder will be “C:\Program Files\Precision Biometric\PBRDService” and if it is x64 based, the installation folder will be “C:\Program Files(x86)\Precision Biometric\PBRDService”.

**RD Management Client Installation folder:**

If the windows operating system is x86 based, the installation folder will be “C:\Program Files\Precision Biometric\PBManagementClient” and if it is x64 based, the installation folder will be “C:\Program Files(x86)\Precision Biometric\PBManagementClient”.

**Access Log files:**

Procedure to be followed to access the log files:

1. Login into the system as administrator
2. Open the “Run” prompt, type “temp” and press enter. If there is any folder with the name “Precision Biometric”, zip it and send the same to Precision Team.
3. Open the “Run” prompt, type “%temp%” and press enter. If there is any folder with the name “Precision Biometric”, zip it and send the same to Precision Team.

Appendix B – Frequently Asked Questions

**1) How to install .Net Framework in the client system?**

Follow the below steps to download and install .Net Framework:

1. Open the following url in web browser or Search for .net framework 4.5.1 offline installer in google website ([https://www.google.co.in](https://www.google.co.in))
2. Download the .Net Framework
3. Double click on the executable to install the .net framework.

If you are facing any issue during installation, search in internet “[how to install or enable .Net framework 3.5 in operating system](https://www.google.co.in).” Replace the work “operating system” with the OS version. For e.g., windows 7 or windows 8 etc.
2) **What I have to do, when there is no “PrecisionBiometricService” service in my system?**

This message will appear due to the following reasons:

1. Biometric Device drivers are not properly installed.

To resolve this issue,

1. Open the **Drivers** folder in RD Service downloaded Package

2. Install the application available in the folder.

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

3) **What I have to do, when there is no “PrecisionManagementClient” service in my system?**

This message will appear due to the following reasons:

1. Precision Management Client application is not installed properly

To resolve this issue,

1. Open the **ManagementClient** folder in RD Service downloaded Package.

2. Install the **PBManagementClient.exe**

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.
4) **What I have to do, when there is no “PrecisionRDService” service in my system?**
   This message will appear due to the following reasons:
   1. RD Service not properly installed

   To resolve this issue,
   1. Install the RD service. Please check the installation section for more information.

   If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

5) **What I have to do, when I get “RD Service not installed, Please install” as notification message?**
   This message will appear due to the following reasons:
   1. RD service not installed properly installed.
   2. Components of RD Service is not installed

   To resolve this issue,
   1. Login into the system as administrator
   2. Reinstall the **RD Service Package** (Check the 4 for more information)

   If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

6) **What I have to do, when I get “Device information not available in Precision Management Server, please contact Device Vendor” as notification message?**
   This message will appear due to the following reasons:
   1. Biometric Scanner serial number is not available in the Precision Management server.

   To resolve these issue,
   1. Make sure that the biometric scanner is purchased from Precision. If yes, share the serial number of the device to Precision Biometric support (Check Section 3 to more information on device registration and Appendix C for more details on contact information)

   If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

7) **What I have to do, when I get “unable to connect to server” as notification message?**
   This message will appear due to the following reasons:
   1. Internet connection is not available
   2. Not able to connect to Precision Management Server
   3. Proxy server details are not configured in the Internet explorer browser

   To resolve this issue
   1. Make sure that the system is connect to internet
2. Make sure that the Precision Management Server IP address or URL is not blocked by the antivirus or windows firewall or proxy server. Check section 2 for more information on Management Server IP Details
3. If the client system is connected under a network, make sure that the Precision Management Server IP address is included as an exception in Network Firewall rules, both Inbound and Outbound rules.
4. Procedure to configure Proxy in IE:
   a. Open the IE browser and go to “Internet Options”
   b. Go to “Connections” tab, click on “LAN Settings”
   c. Click on the check box “Use a proxy server for your LAN” as shown below
   
   ![Proxy Server Configuration](chart.png)
   
   d. Configure the IP Address and port as shown above.
   e. Click **ok** to save the configuration
   f. Click **ok** on Internet Option to save.

   If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

8) **What I have to do, when I get “Updated version of Precision RD Service is available, Install the updated version to continue/Management client update is available, Install the updated version to continue/Device update is available, Install the updated version to continue” as notification message?**

   This message will appear due to the following reasons:
   1. New version of RD Service is available
   2. New version of Management Client is available
   3. New version of Device drivers is available

   To resolve this issue:
   1. Download and install the latest version of rd service.
      a. Click on the **Download** to download the latest rd service version
b. Select a location to save the download

c. Please wait of few minutes for downloading the update from the server (Download time will vary based on your internet speed)

d. Click on the “Install” button to update the rd service and continue the installation procedure or “Install Later” to manually install the update later

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

9) What I have to do, when I get “Fingerprint scanner not connected properly, Please reconnect” as message?

This message will appear due to the following reasons:

1. Precision supported biometric scanner is not connected to the system
2. USB port might be blocked
3. Scanner drivers might not be installed properly

To resolve this issue,

1. Check whether the biometric scanner is connected to the system properly
2. If you are still facing the same problem, unplug the device and connect it in other USB port (Try in all available USB port)
3. If you are still facing the same problem, Login into the system as administrator. Open the Device Manager and find any device with name “PC Camera” under “Imaging Device”.
4. If you are able to find the device, go to “run” prompt and then type “services.msc”, press Enter. Find the service in the name of “PrecisionBiometricService”, restart it and then check in the application. If you are not able to find the device, proceed to next step.

5. If you find any device with “examinatory (!) Or question (?)”, Go to the RD Service Package location and open the “drivers” folder and install the “Precision-UareU4500.exe”. Once the driver installation completed, go to “run” prompt and then type “services.msc”, press enter. Find the service in the name of “PrecisionBiometricService”, restart it and then check in the application.

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

10) What I have to do, when I get “System date and time is incorrect, Please change it to continue” as notification message?
This message will appear due to the following reasons:
   1. System date and time is not synchronous with UIDAI server

To resolve this issue,
   1. Make sure that the system date and time is correct

   2. Make sure that the system time zone is correct. To check the system time zone, follow the below procedure
      a. Click Start and select Control Panel
      b. Make sure that the control panel is arranged by small icons. To Change arrangement, Click View by and select small icons
c. Click on **Date and Time**

![Date and Time setting](image)

d. Make sure that the time zone is set correctly

![Date and Time settings](image)

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.
11) What I have to do, when I get “Device registration with UIDAI failed” as notification message?

This message will appear due to the following reasons:
1. If there is any communication failure between the host system and Precision Management Server

To resolve this issue:
1. Make sure that the internet connection is available
2. Unplug the scanner and plug it again, wait for five minutes.

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

12) What I have to do, when I get “Device key updation with Precision Management Server failed” as notification message?

This message will appear due to the following reasons:
1. If there is any communication failure between the host system and Precision Management Server

To resolve this issue:
1. Make sure that the internet connection is available
2. Unplug the scanner and plug it again, wait for five minutes.

If you are still facing the problem, contact the Precision Biometric – Support Team or write us (rdservices@precisionbiometric.co.in) about the error or contact the support team or concern person.

13) How to enable https support for RD Service?

Procedure to enable https support:
1. Open the web browser where need to enable https support.
2. Type the url (https://localhost:11152) and press enter
3. Follow the step based on browsers
   a. In google Chrome, Click Advanced
Click **Proceed to localhost**

![Image of browser prompt]

This server could not prove that it is localhost; its security certificate is from (missing subjectAltName). This may be caused by a misconfiguration or an attacker intercepting your connection. Learn more.

Proceed to localhost (unsafe)

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a. In Mozilla Firefox,
   i. Click **Menu → Options**

![Image of Firefox options]

ii. Click on **Privacy & Security**

![Image of Firefox privacy and security settings]

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iii. Scroll down to the bottom and click on **View Certificates**

![Image of Firefox options with View Certificates selected]

iv. Click on **Import**

![Image of Certificate Manager with Authority tab selected]

You have certificates on file that identify these certificate authorities:

- AC Camerfinsa SA.
- Chambers of Commerce Root - 2003
- Global Chambersign Root - 2004
- AC Camerfinsa SA CIF A2742387
- Camerfinsa Chambers of Commerce Root
- Camerfinsa Global Chambersign Root
- ACCV
v. Browse for C:\Program Files (x86)\Precision Biometric\PBRDService, Select Precision-CA.cer and click on Open,

![Select File containing CA certificate(s) to import](image1.png)

vi. Make sure the check boxes **Trust this CA to identify websites**, **Trust this CA to identify email users**, **Trust this CA to identify software developers** are checked as shown in the fig., and click **OK**.

![Downloading Certificate](image2.png)

vii. Restart the browser.
Appendix C – Reach us

For any assistance feel free to contact the Precision Biometric Technical Support Team.

<table>
<thead>
<tr>
<th>Escalation</th>
<th>Timeline</th>
<th>Contact Person</th>
<th>Contact No &amp; Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Level</td>
<td>When incident occurs</td>
<td>Remote support engineers</td>
<td><a href="mailto:rdservices@precisionbiometric.co.in">rdservices@precisionbiometric.co.in</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phone: 044-3301 5349 / 351 / 353</td>
</tr>
<tr>
<td>2nd Level</td>
<td>24 hours</td>
<td>Service Desk Manager</td>
<td><a href="mailto:shaikabdullah.shahabuddin@precisionit.co.in">shaikabdullah.shahabuddin@precisionit.co.in</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. Shaik Abdullah</td>
<td>Phone: +91-9940 680 274 / 044-3301 5179</td>
</tr>
<tr>
<td>3rd Level</td>
<td>2 Working days</td>
<td>Technical Support</td>
<td><a href="mailto:techsupport@precisionbiometric.co.in">techsupport@precisionbiometric.co.in</a></td>
</tr>
</tbody>
</table>

Please share us the below information to easy the support process:

a. Installed RD Service Version
b. Name of the customer
c. Contact Details (including mobile number and mail id)
d. Device model
e. Purpose of using the biometric scanner
f. Purchase bill / Invoice copy
g. Screen shot of the issue