

# Registered Device Installation Manual

# Installation Manual

## Document Information

Attribute	Value
Document Name	RD Service Installation Manual – PB510
Document #	BMS/16/UIDAI-RegisteredDevice/360/001
Date Created	5 <sup>th</sup> May 2022
Author	Arunkumar R
Version	1.6

## Version Changes

Version #	Modification Date	Modified by	Changes done
1.0	08 <sup>th</sup> Jul 17	Balasubramaniyan	
1.1	01 <sup>st</sup> Sep 17	Balasubramaniyan	
1.2	24 <sup>th</sup> Nov 17	Rajabharath	Changed the Dialog boxes with RDService Logo, updated the CA certificate installation in Firefox.
1.3	29 <sup>th</sup> Nov 17	Rajabharath	Uninstallation dialog box changed.
1.4	25 <sup>th</sup> Jun 20	Rajabharath	Port 8443 additionally configured in Precision Management server for SSL support
1.5	31 <sup>st</sup> Mar 21	Arunkumar	TLS version upgraded to 1.2
1.6	5 <sup>th</sup> May 22	Arunkumar	FMR & FIR in a single pid implementation and Management server ssl certificate update in RDService has been done

# Installation Manual

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## Contents

1. Introduction.....	4
1.1. Summary .....	4
1.2. Scope.....	4
1.3. Audience .....	4
2. Device Registration.....	4
3. System Requirement .....	5
4. Installation Procedure .....	5
5. Error Code.....	17
Appendix A - Key information .....	18
Appendix B – Do’s & Don’t’s during image capture .....	19
Appendix C – Frequently Asked Questions.....	20
Appendix D – Reach us .....	30

# Installation Manual

## 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.

SL NO	Particular	Details
1	DNS Address	pbrdms.precisionbiometric.co.in
2	Public IP Address	122.183.251.118, 115.114.95.47
3	Port	443, 8443

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”**,

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

### 3. System Requirement

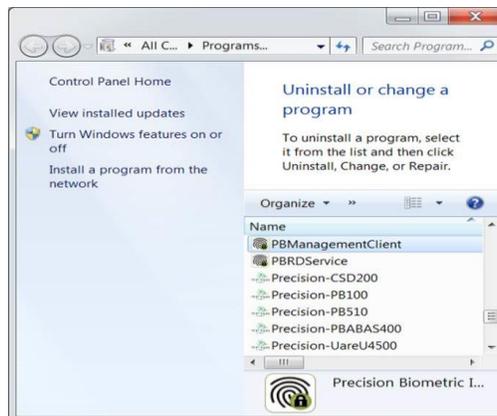
The following table describes the minimum hardware and software requirement for RD service, as per UIDAI specification:

SL NO	Component	Minimum Requirement
<b>Hardware Requirement</b>		
1	Operating System	Windows 8, Windows 8.1, Windows 10 & Windows 11
2	Bit Version	x86 & x64
3	RAM	2 GB
4	Hard disk	500 MB free space
5	Port	11100 to 11120 (RD Service will run in any one of the port)
6	Rights	Administrator right
7	Browser	Internet explorer 8 & above, google chrome, Mozilla Firefox, opera
<b>Software Requirement</b>		
1	.Net Framework	4.5 & above

### 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**”, “**PBManagementClient**”, “**Precision-PB510**” and click “**Uninstall**” button to remove the package.

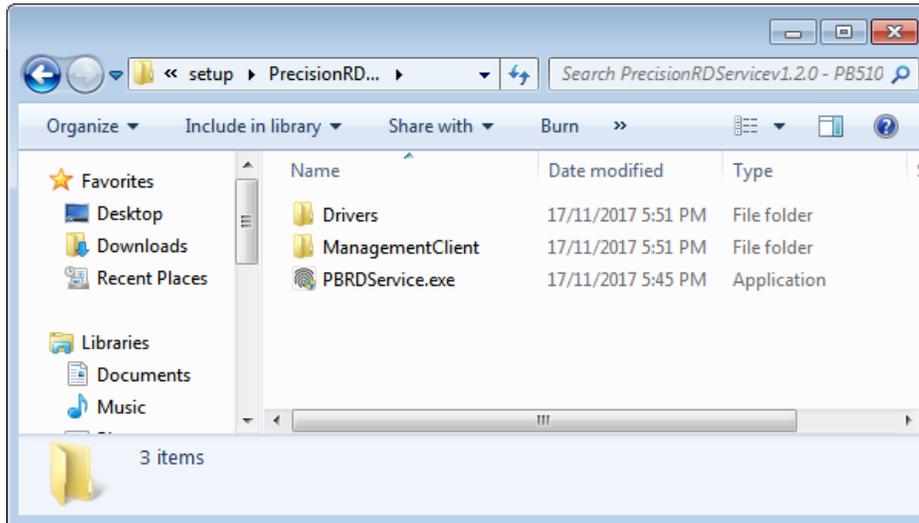


4. Make sure you have administrator privilege to start the installation.

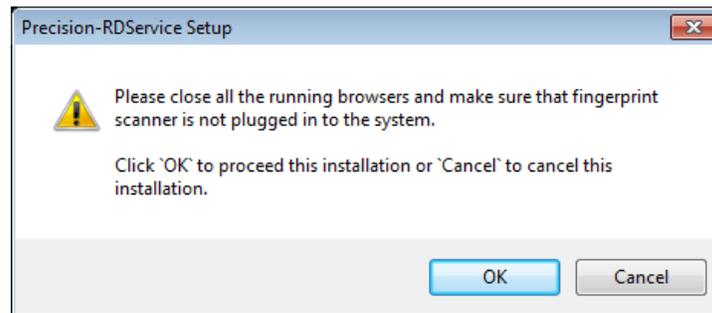
5. Make sure **USB port** are enabled for communication
6. Download / copy the RD Service to the local system

Follow the below procedure to installation the RD Service:

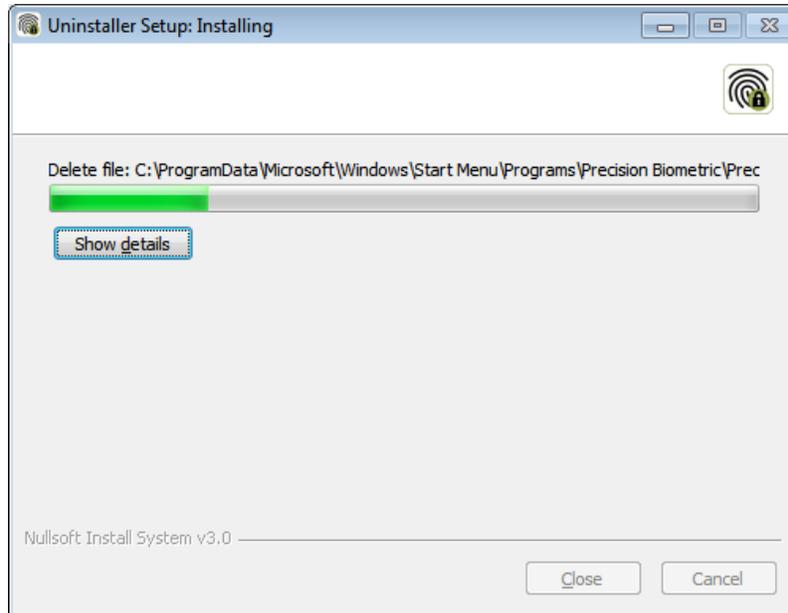
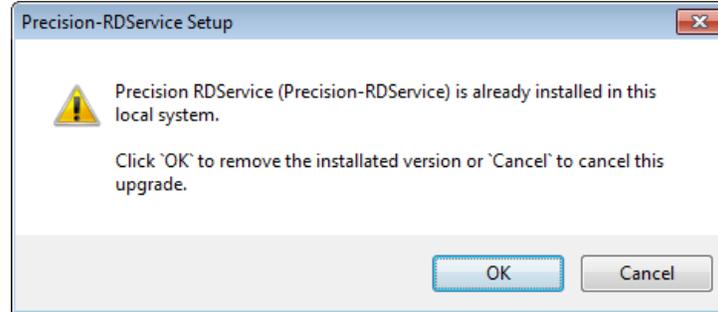
1. Login into the system as **administrator**
2. Open the **RD Service** package folder.



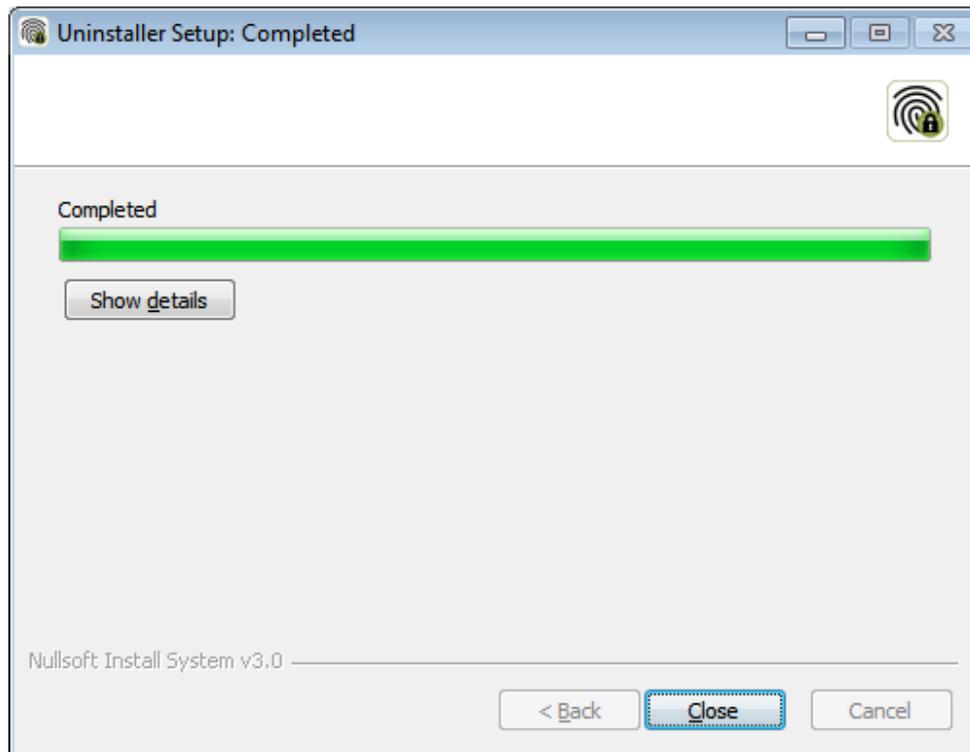
3. Right click "**PBRService.exe**" and select **Run as administrator**
4. Please close all running browsers & unplug the fingerprint scanner from the system and press **OK** button to proceed the installation otherwise click **Cancel** button to cancel the installation.



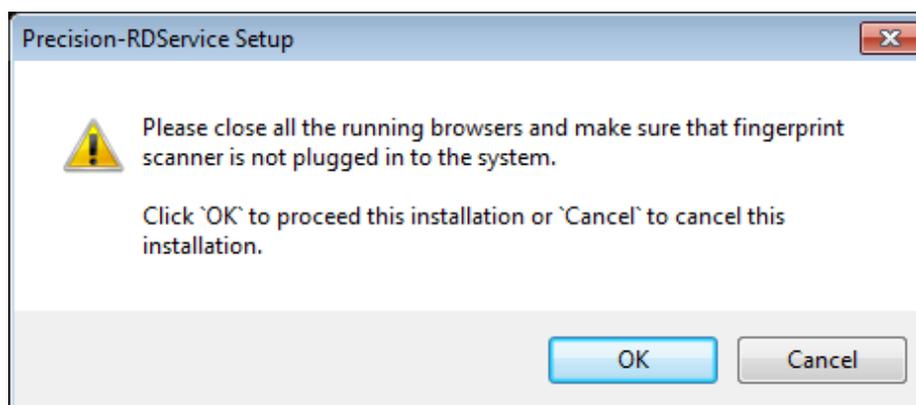
5. If the RD Service is already installed in the system, the following screen will appear, otherwise proceed to next step:
  - a. Click **OK**



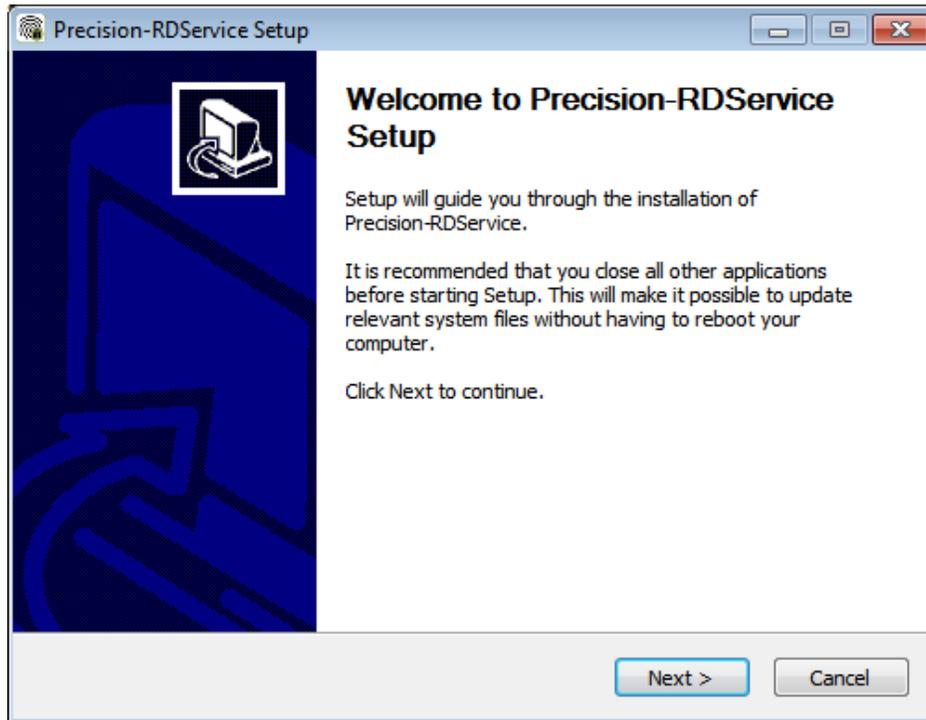
- b. Click **Close**



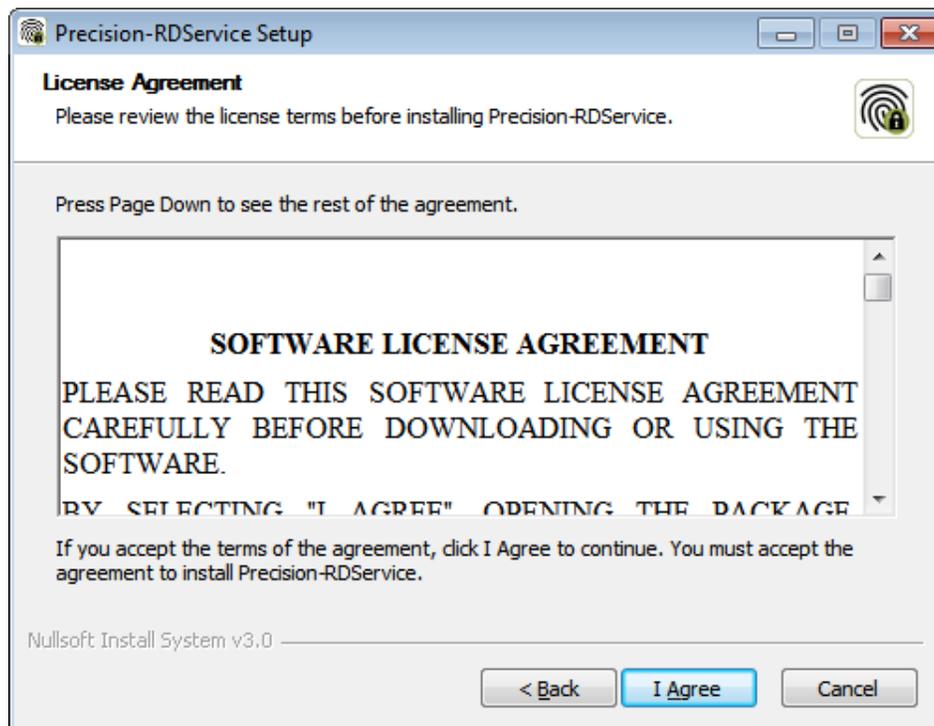
6. Right click "**PBRDService.exe**" and select **Run as administrator**
7. Please close all running browsers & unplug the fingerprint scanner from the system and press **OK** button to proceed the installation otherwise click **Cancel** button to cancel the installation.



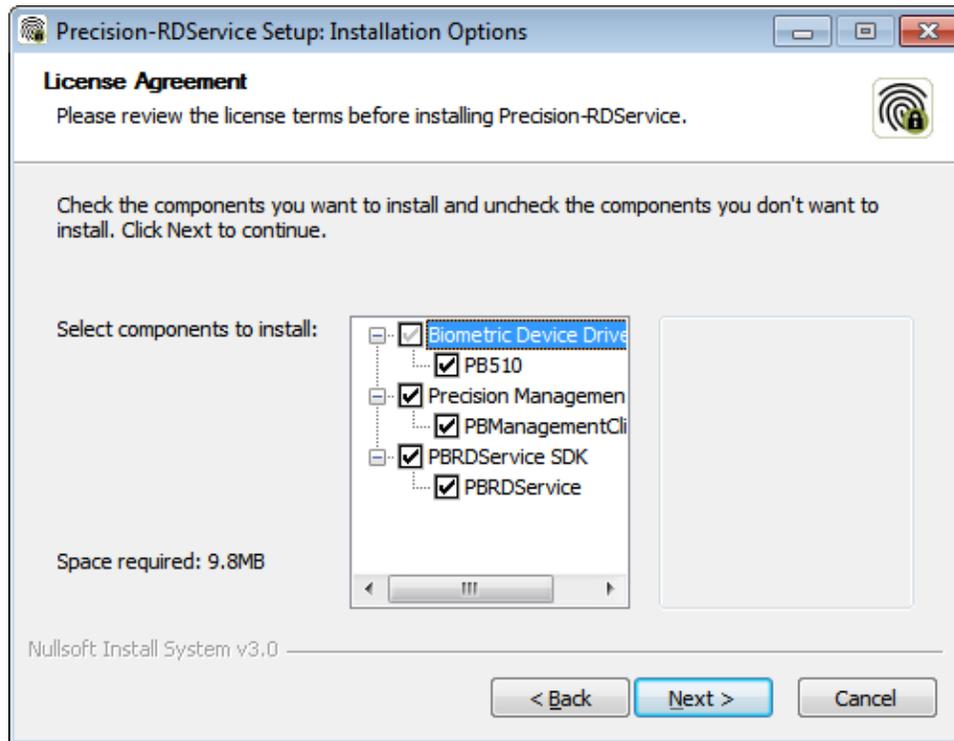
8. Click on **Next** to start the installation



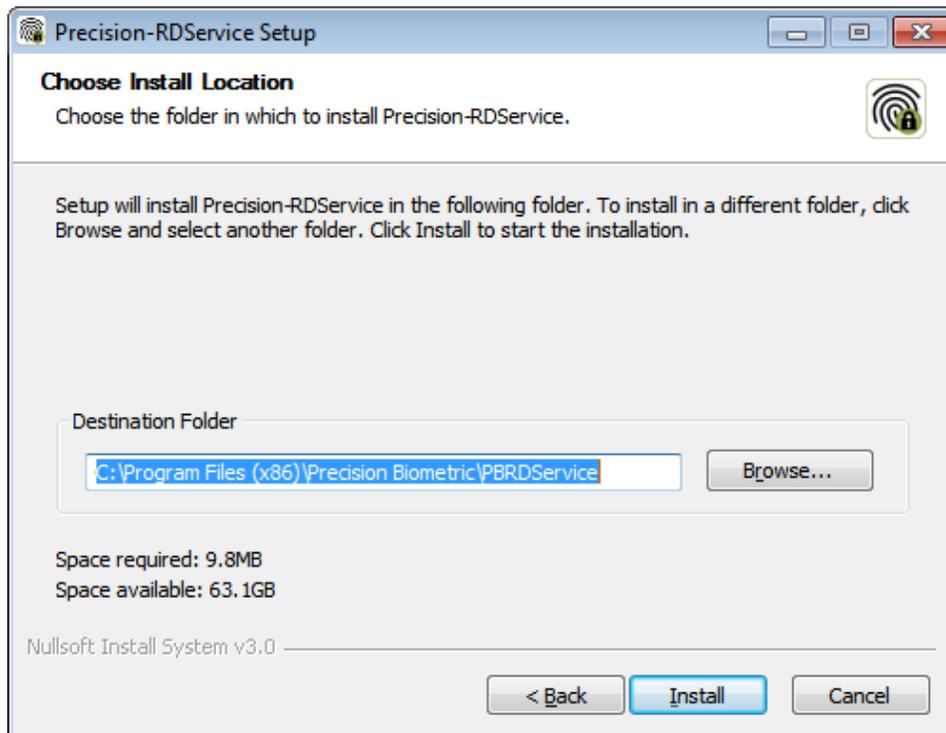
9. Click on **I Agree**

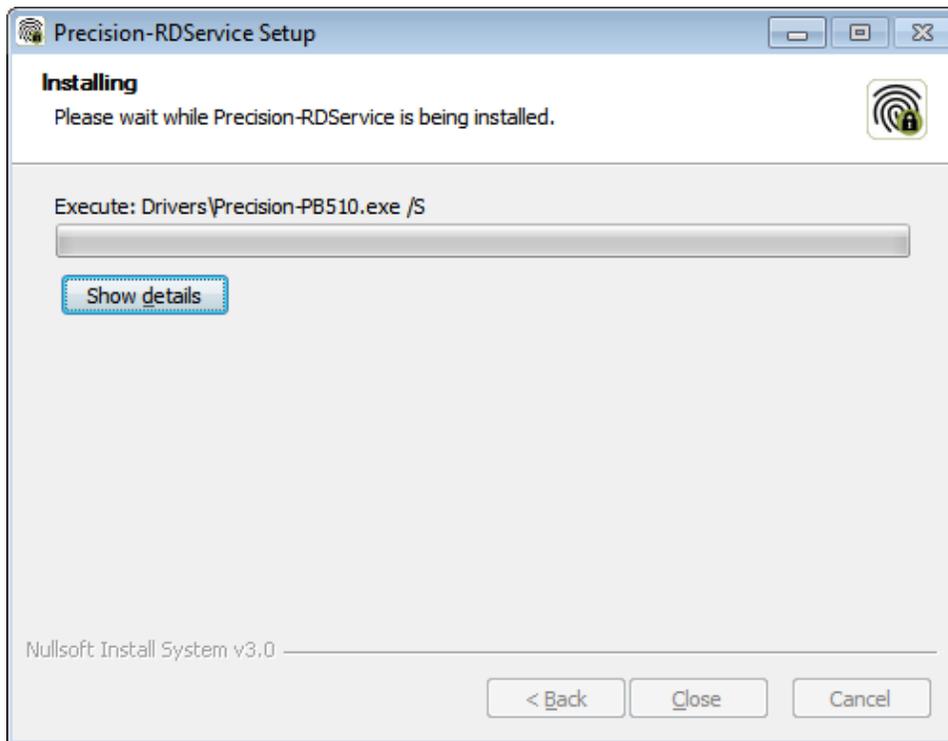


10. Click on **Next**, Make sure all the checkbox are checked

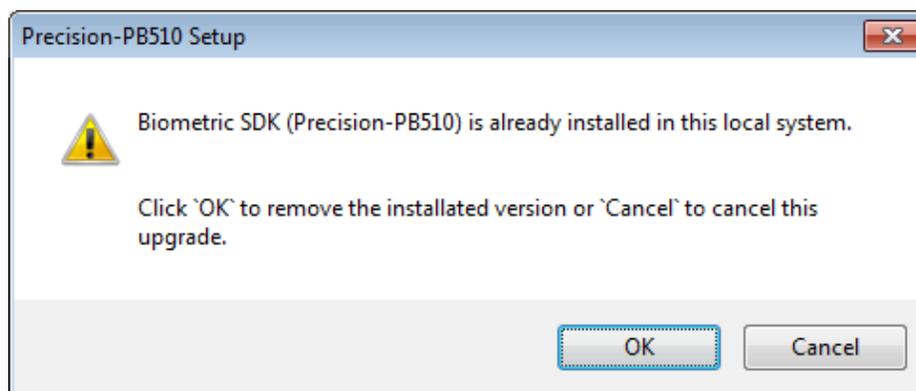


11. Click on **Install**

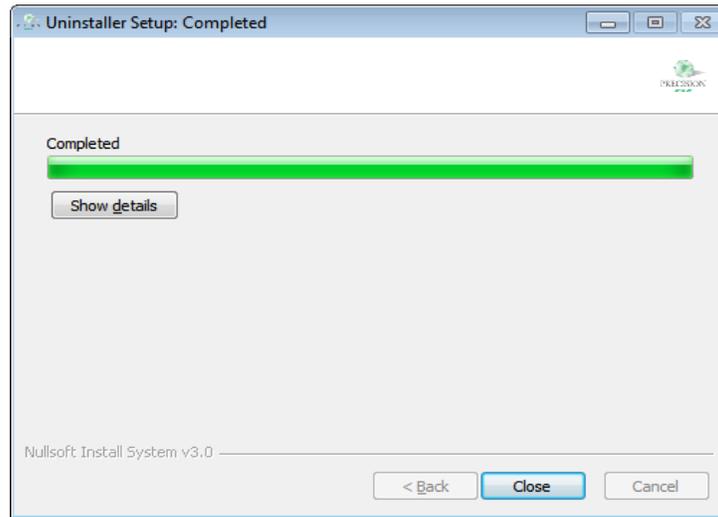




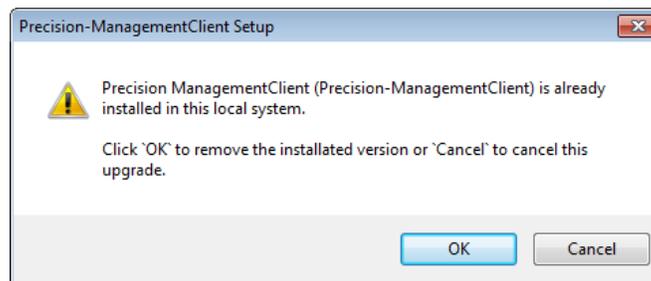
12. If Biometric Scanner drivers are installed already, the following screen will appear.
- Click on **OK** to remove the previous installation



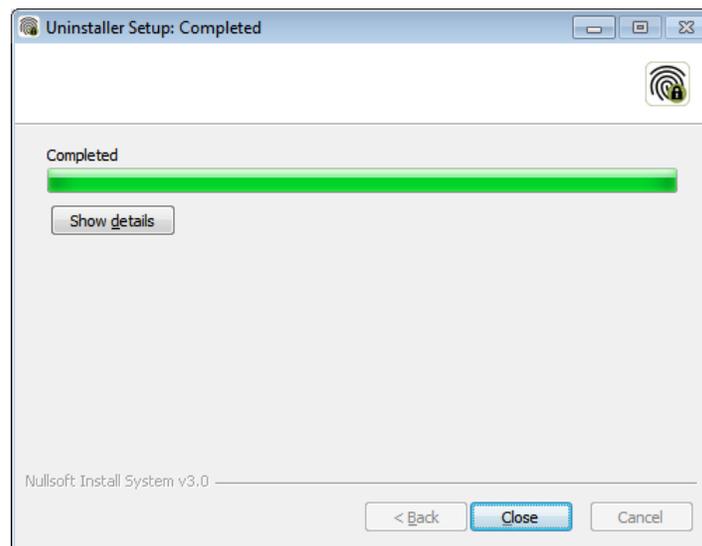
- b. Click **Close** to close the wizard



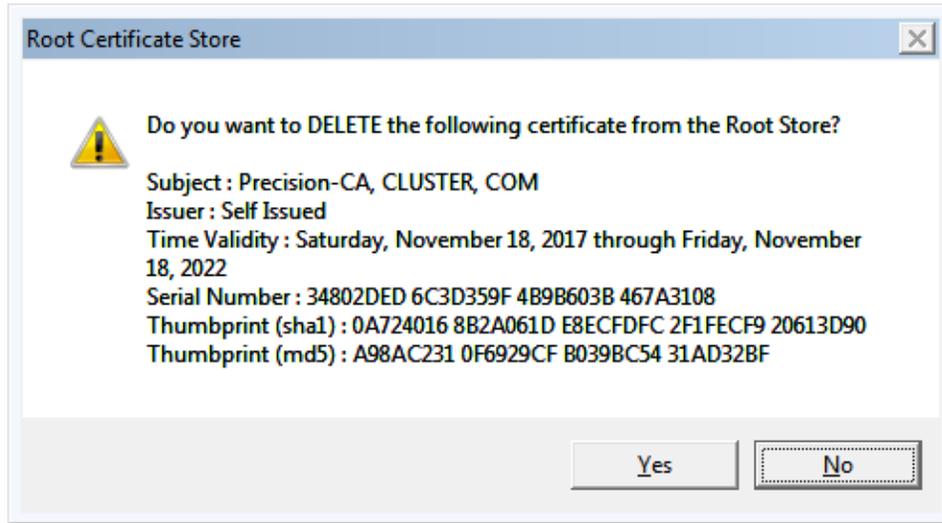
- 13. If the management client is already installed, the following screen will appear:
  - a. Click on **ok** to remove the previous installation



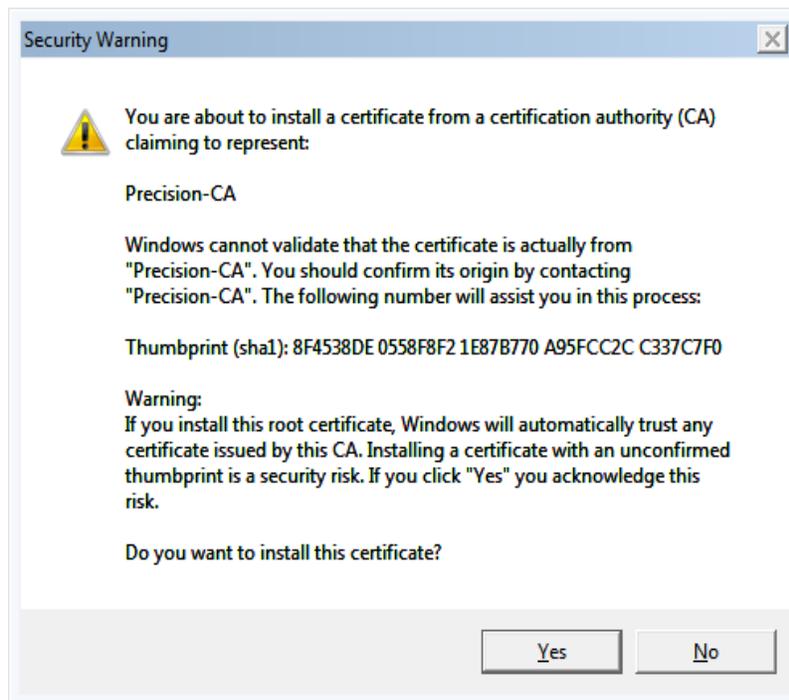
- b. Click on **Close**



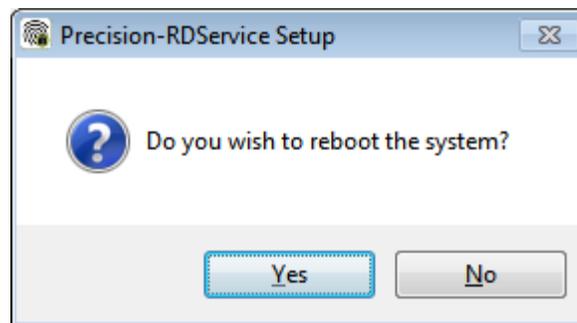
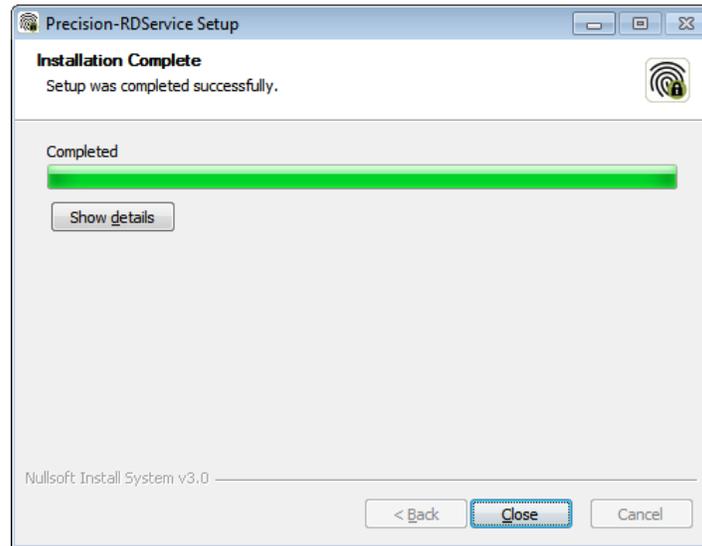
14. If the following message box appear, Click “Yes” to delete the old certificate



15. Click “Yes” to proceed



16. Click on **Close** to complete the installation and click **YES** to reboot the system.



**Note:**

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

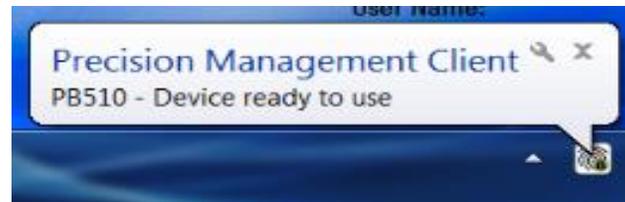
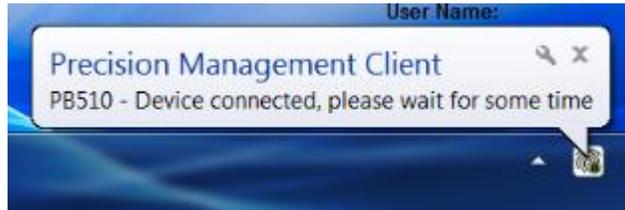
Once the installation is completed, please make sure that the following services are running:

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.

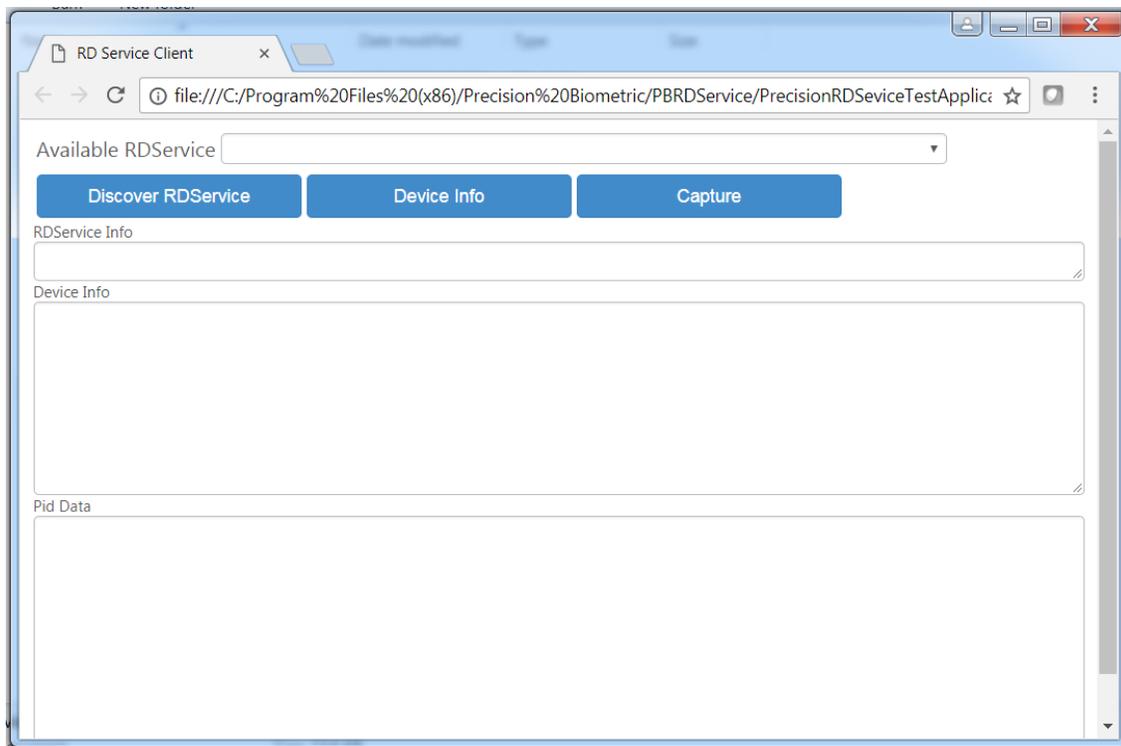
Power	Manages p...	Started	Automatic
PrecisionBiometricService		Started	Automatic
PrecisionManagementClient	Precision Bi...	Started	Automatic
PrecisionRDService	Precision Bi...	Started	Automatic
Print Spooler	Loads files t...	Started	Automatic

Procedure to test the scanner:

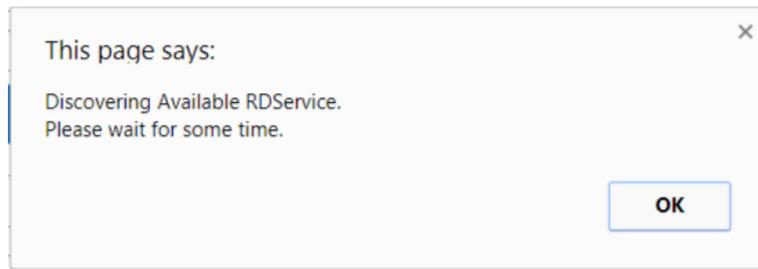
1. Go to the RD Service installation location (if it is x86 based system, “**C:\Program Files\Precision Biometric\PBRDService**” and if it is x64 based, the installation folder will be “**C:\Program Files(x86)\Precision Biometric\PBRDService**”)
2. Connect the scanner to the system and wait for the following notifications. If you are getting any other notification message, Check FAQ section to resolve the issue.



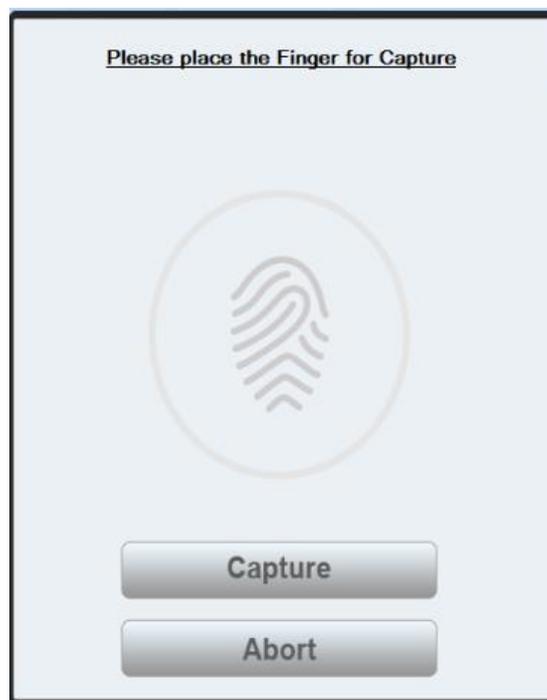
3. Open the “**PrecisionRDServiceTestApplication.html**” with internet explorer or other supported browser



4. Click on **“Discover”** button to discover the Precision RD Service

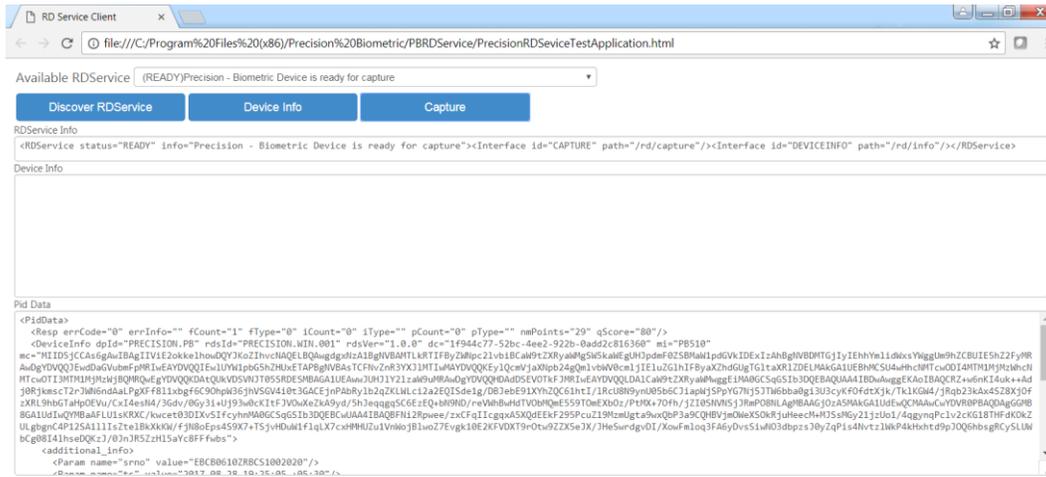


5. If **“RDService Discover Successfully”**, Click on **“Capture”** button to capture the fingerprint



# Installation Manual

6. If the fingerprint is captured successfully, the following data will displayed



**Note:**

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

## 5. Error Code

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

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

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:

By default, log is Disabled. For to activate log, follow the procedure

- a. x64 based operating system

Open registry and move to “HKEY\_LOCAL\_MACHINE\SOFTWARE\ WOW6432Node \Precision Biometric\InnaITAadhaar\L0” and set **enableLog** value to 1.

- b. x86 based operating system

Open registry and move to “HKEY\_LOCAL\_MACHINE\SOFTWARE\Precision Biometric\InnaITAadhaar\L0” and set **enableLog** value to 1.

Log file location can be set by changing **logLocation** value. System Restart required if you change these registry values.

## Appendix B – Do’s & Don’t’s during image capture

### Do’s:

Follow the below procedure to capture the fingerprint image to maximize the authentication result:

1. Place the finger firmly and fully on the sensor as shown below.



### Don’t’s:

Avoid the following situation to maximize the authentication result:

1. Don’t place the finger as shown below.



## Appendix C – 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.microsoft.com/en-in/download/details.aspx?id=40779>
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 4.5.1 in operating system”**. Replace the work “operating system” with the operation system version. For e.g., windows 7 or windows 8 etc.

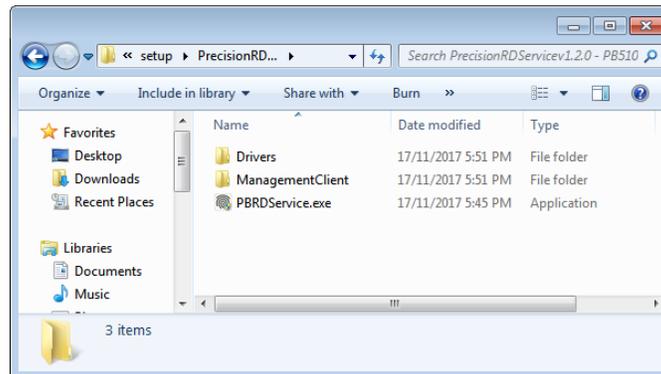
### 2) What I have to do, when there is no “PrecisionBiometricService” service in my system?

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](mailto:rdservices@precisionbiometric.co.in)) about the error or contact the support team or concern person.

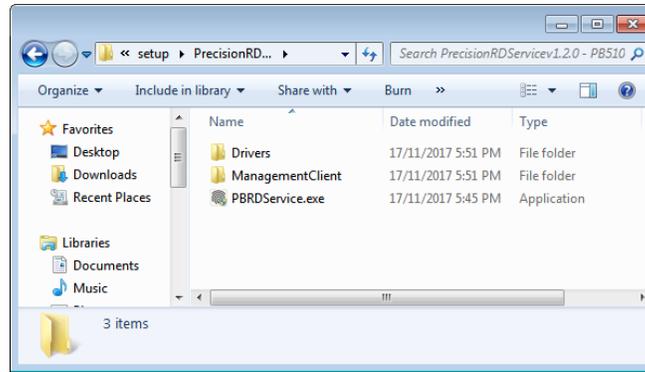
### 3) What I have to do, when there is no “PrecisionManagementClient” service in my system?

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 D 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.

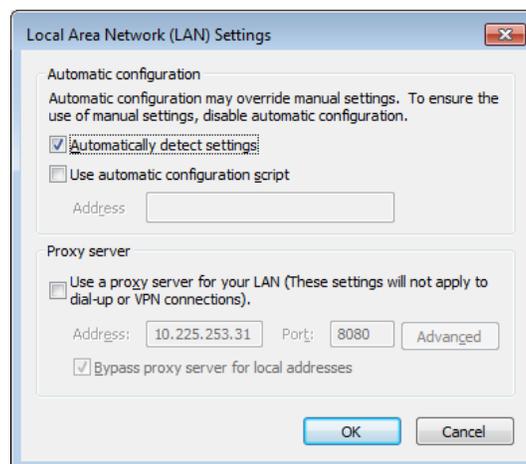
## 7) What I have to do, when I get “Unable to connect to the Precision device Management server” as notification message?

This message will appear due to the following reasons:

1. Internet connection is not available
2. Not able to connect to Precision Management Server through network or proxy
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, 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 or proxy, 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



- 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.

# Installation Manual

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.

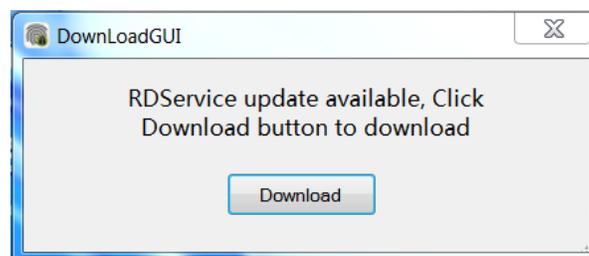
**8) What I have to do, when I get “Updated version of Precision RD Service is available, Install the updated version to continue/Management client update is available, Install the updated version to continue/Device update is available, Install the updated version to continue” as notification message?**

This message will appear due to the following reasons:

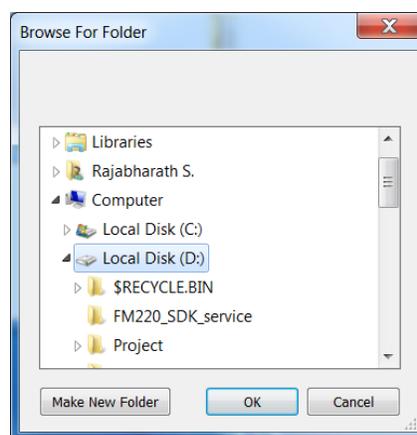
1. New version of RD Service is available
2. New version of Management Client is available
3. New version of Device drivers is available

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 (check the installation section) 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 “**USB Composite Device**” or “**Human Interface Devices**”.



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-PB510.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

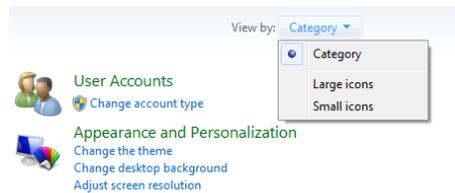
To resolve this issue,

1. Make sure that the system date and time is correct

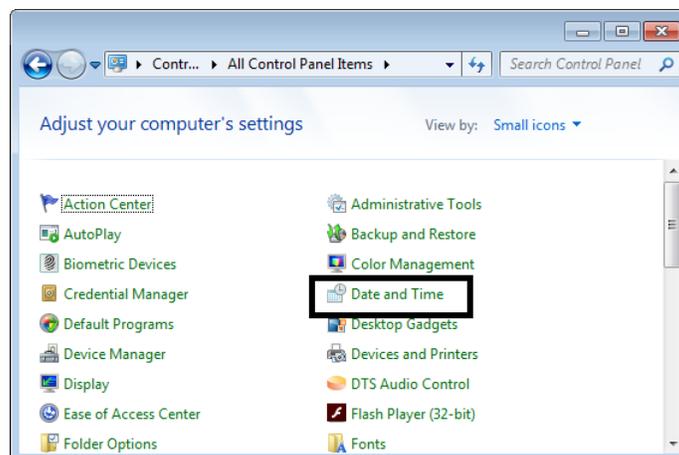


2. Make sure that the system time zone is correct. To check the system time zone, follow the below procedure

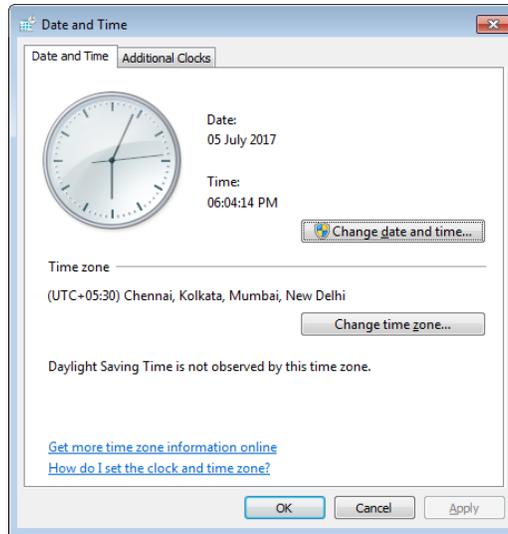
- a. Click **Start** and select **Control Panel**
- b. Make sure that the control panel is arranged by **small icons**. To Change arrangement, Click **View by** and select **small icons**



- c. Click on **Date and Time**



- d. Make sure that the time zone is set correctly



If you are still facing the problem, contact the Precision Biometric – Support Team or write us ([rdservices@precisionbiometric.co.in](mailto: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](mailto: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:

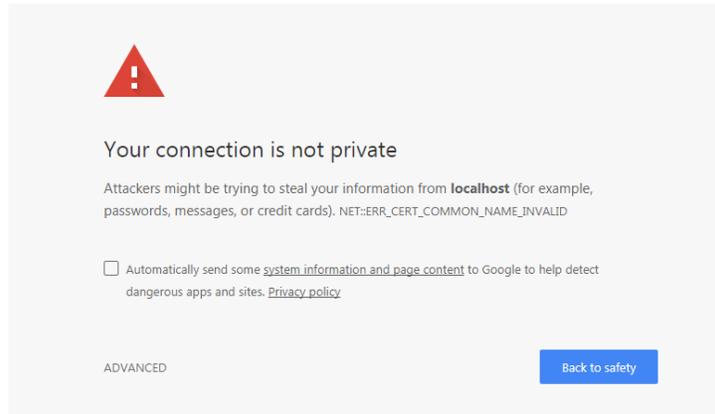
1. Make sure that the internet connection is available
2. Unplug the scanner and plug it again, wait for five minutes.

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

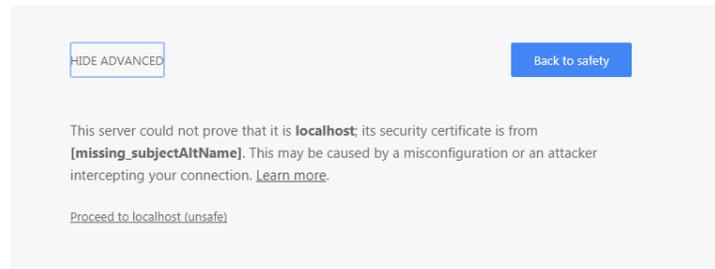
### 13) How to enable https support for RD Service?

Procedure to enable https support:

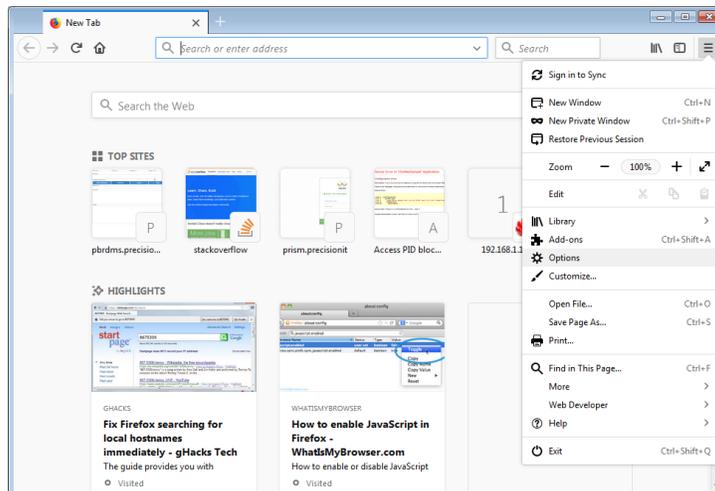
1. Open the web browser where need to enable https support.
2. Type the url (<https://localhost:11152>) and press enter
3. Follow the step based on browsers
  - a. In google Chrome, Click **Advanced**



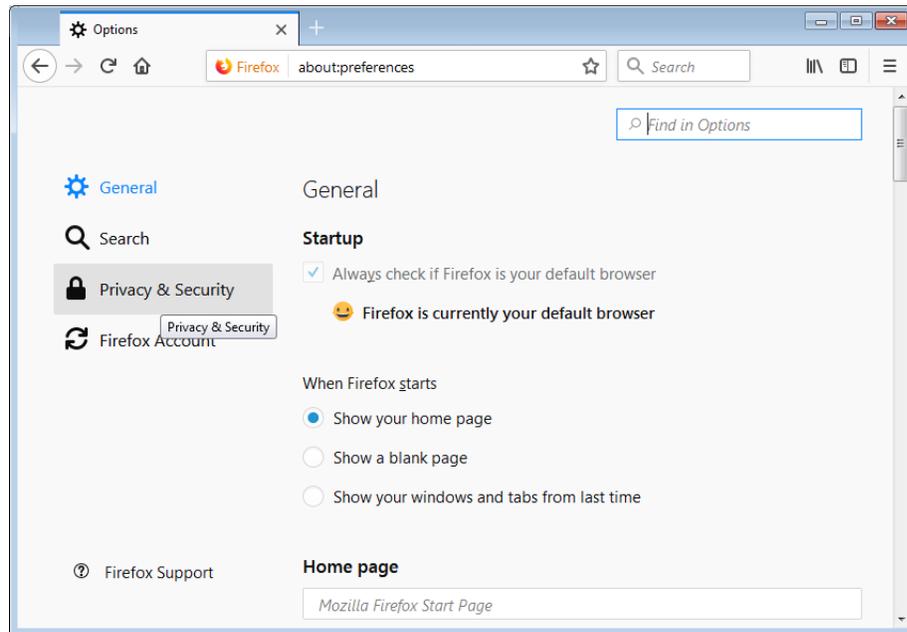
Click **Proceed to localhost**



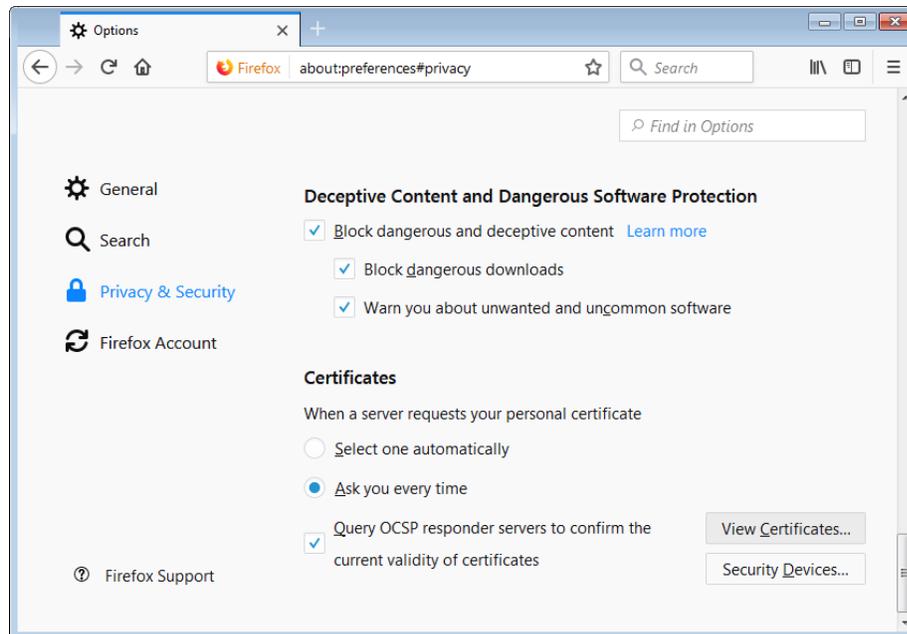
- b. In Mozilla Firefox,
  - i) Click **Menu**→**Options**



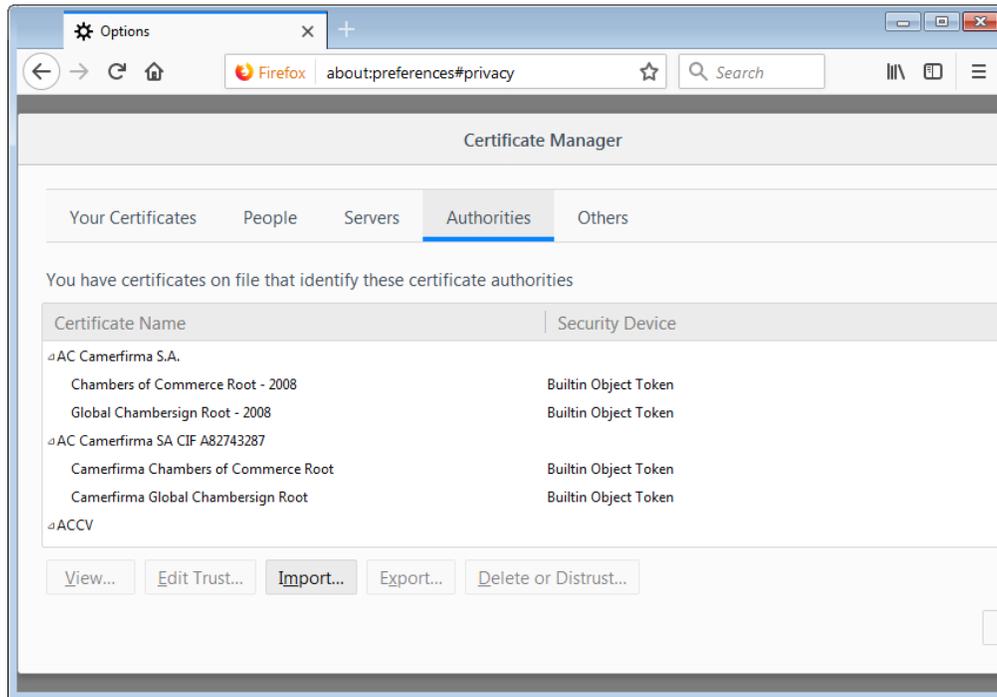
ii) Click on **Privacy & Security**



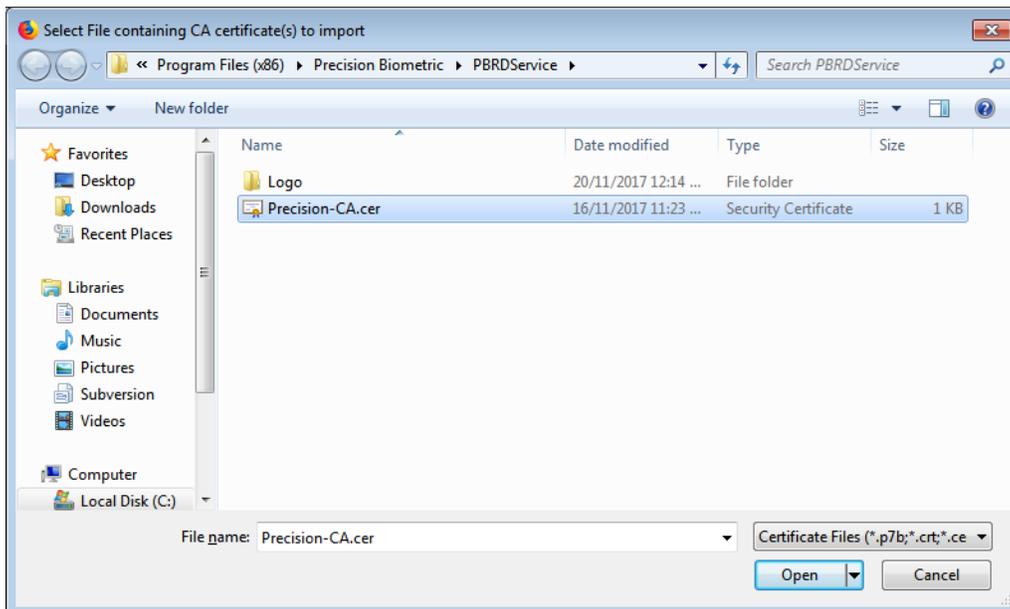
iii) Scroll down to the bottom and click on **View Certificates**



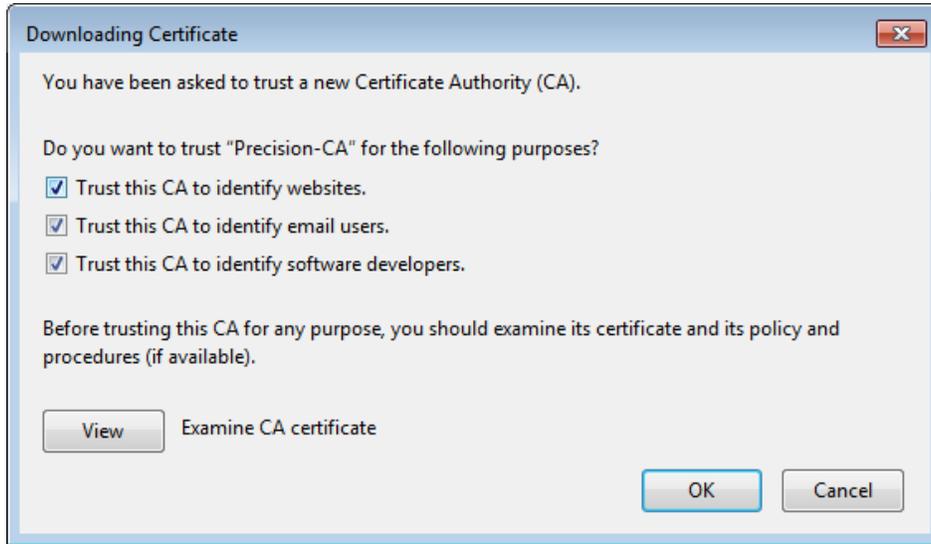
iv) Click on **Import**



v) Browse for **C:\Program Files (x86)\Precision Biometric\PBRService**, Select **Precision-CA.cer** and click on **Open**,



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**.



vii) Restart the browser.

## Appendix D – Reach us

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

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

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

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