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Windows RD Service

RDS ID: IMS.WIN.001 and IMS.WIN.002

Installation & User Guide

Integra Aratek A400 and A600 RD Service User Guide

INDEX

1	INTRODUCTION.....	3
1.1	RD service key features	3
1.2	RD Service on Windows.....	3
2	ESSENTIAL BASIC CHECKS BEFORE INSTALLATION	4
2.1	Prerequisites	4
2.2	Before starting the installation of RD Service, please make sure that the following condition are met:	4
3	FINGER PRINT DEVICE DRIVER INSTALLATION	5
4	INTEGRA RD SERVICE INSTALLATION	6
4.1	Integra Aratek A400 RD Service link.....	6
4.2	Integra Aratek A600 RD Service link.....	6
5	RD SERVICE ERRORS AND SOLUTIONS.....	9
6	RD Service Tray Tool.....	10
7	BROWSER SETTINGS	13
7.1	Internet Explorer	13
7.2	Chrome	15
7.3	Firefox Mozilla.....	15
8	INTEGRA RD SERVICE TEST PAGE	16

1 INTRODUCTION

The Unique Identification Authority of India (UIDAI) has been created, with the mandate of providing a Unique Identity (Aadhaar) to all Indian residents. The UIDAI provides online authentication using demographic and biometric data.

RD service refers to registered device service that allows capture and processing of biometrics for biometric authentication with UIDAI. This RD Service returns encrypted PID block containing signed biometrics (using device private key within the registered devices secure zone) back to the calling application (AUA Application). AUA application which sends this encrypted PID block to UIDAI for online authentication.

1.1 RD service key features

1) **Device identification**

Every device having a unique identifier allowing traceability, analytic, and fraud management

2) **Eliminating use of stored biometric**

Biometric data is signed within the L0 RD Service software using the device key to ensure it is indeed captured live. The Registered Device (RD) Service of the device provider generates the encrypted PID block before returning to the host application (AUA application).

3) **A standardized RD Service provided by the device providers that is certified**

This RD Service (exposed via Service interface defined in **UIDAI RD Service Specification Version 2.0 Revision 7**) encapsulates the biometric capture, any user experience while capture (such as preview), and signing and encryption of biometric all within it.

1.2 RD Service on Windows

The RD service (http / https server) will run on the host machine. The RD service will be listening on the port starting 11100 - 11120 binding only to 127.0.0.1.

AUA Applications should scan these ports and discover the service. Once AUA application finds the RD service port, it can make below calls to the RD service.

- 1) http://127.0.0.1:<port>/<capture-path>
- 2) http://127.0.0.1:<port>/<INFO-path>

2 ESSENTIAL BASIC CHECKS BEFORE INSTALLATION

2.1 Prerequisites

Please ensure the below minimum hardware and software components are available for installing RD service:

Hardware & Software Requirement	
Component	Minimum Requirement
Supported Operating System	Windows 10 and above
RAM	2GB
Hard disk	500 MB free space
Port	11100 to 11120 (RD Service run in any one port)
Permission	Administrator rights to install RD Service
Software Requirement	<div>❖ Net Framework 4.5 & above</div> <div>❖ Microsoft Visual C++ 2010 x64 and x86 Redistributable Setup</div> <div>If these software are not present in the system, please download and install from the following link:</div> <div>https://dotnet.microsoft.com/en-us/download/dotnet-framework/net45</div> <div>Latest supported Visual C++ Redistributable downloads Microsoft Docs</div>

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

- 1) Check the system minimum requirements are met
- 2) Make sure that you have administrator privilege to start the installation
- 3) Make sure USB port are enabled for communication
- 4) Install the device driver, Dot Net framework, Visual C++ runtime environment
- 5) Download / copy the RD Service installer package to the local system from the link below:
- 6) Open the Package folder
- 7) Right click "Install.bat" file and select **Run as administrator**
- 8) Refer the below images for installation of RD service

3 FINGER PRINT DEVICE DRIVER INSTALLATION

Before proceeding to install the RD service, you must install the fingerprint device drivers of the specific fingerprint device. The device drivers are available to download from the link give below:

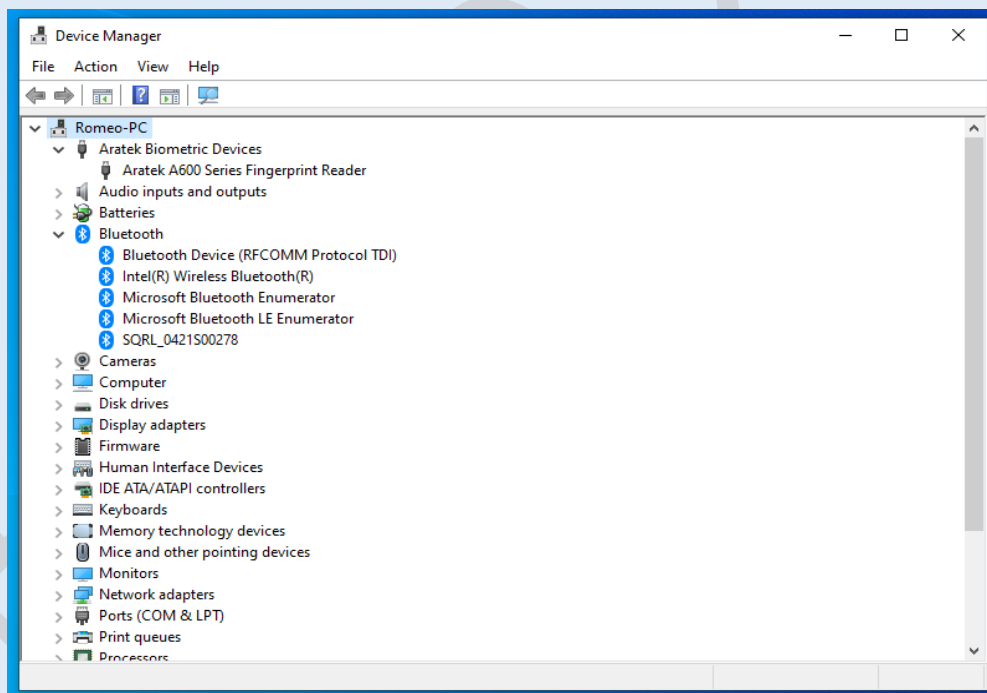
For Aratek A400 and A600 Device Drivers Link:

<https://sftp.imfast.co.in/isftp/index.php/s/IHBfYih5nxleysH>

After driver installation check in the device manger, the device is displayed, refer the images given below.

ForAratek A400 it will be “Aratek A400 series Fingerprint Reader” under “Aratek Biometric Device” tab.

ForAratek A600 it will be “Aratek A600 series Fingerprint Reader” under “Aratek Biometric Device” tab.



4 INTEGRA RD SERVICE INSTALLATION

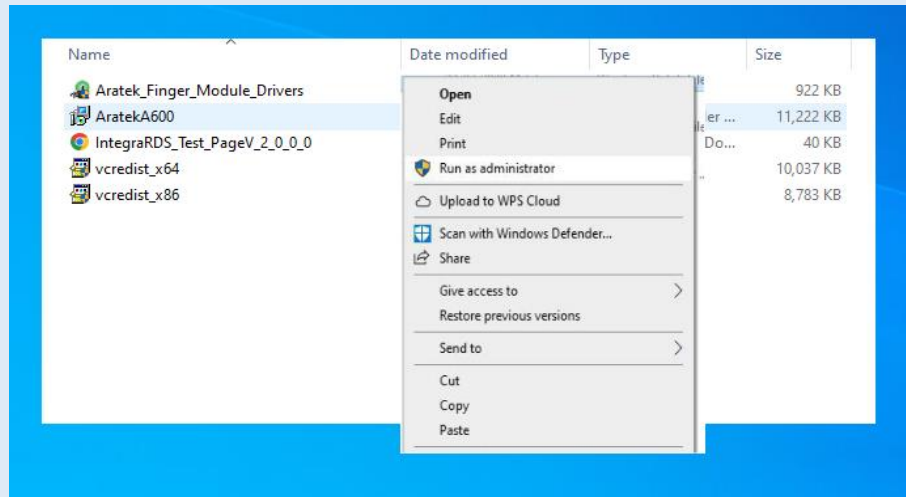
4.1 Integra Aratek A400 RD Service link.

<https://sftp.imfast.co.in/isftp/index.php/s/T92S6ESd8SvDK8A>

4.2 Integra Aratek A600 RD Service link

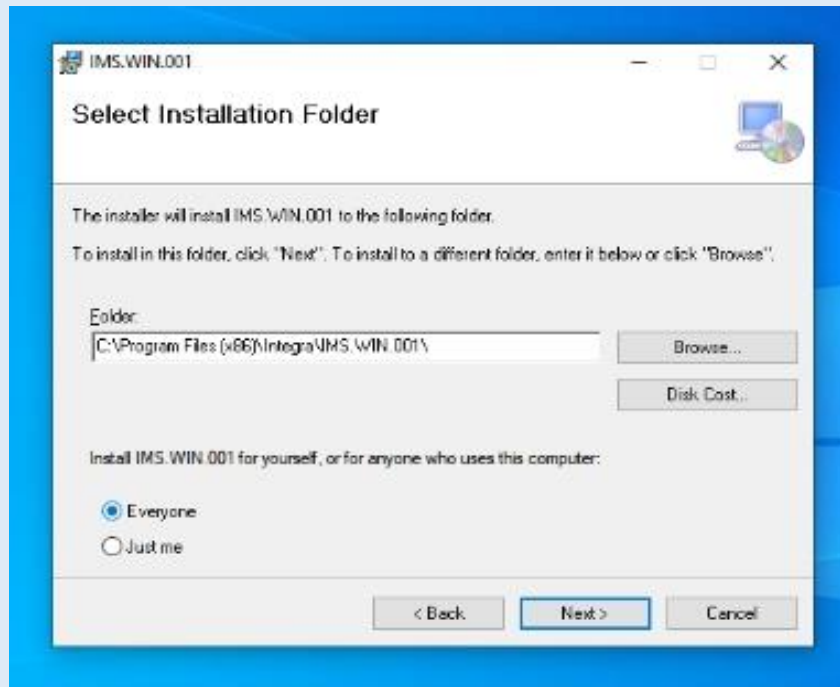
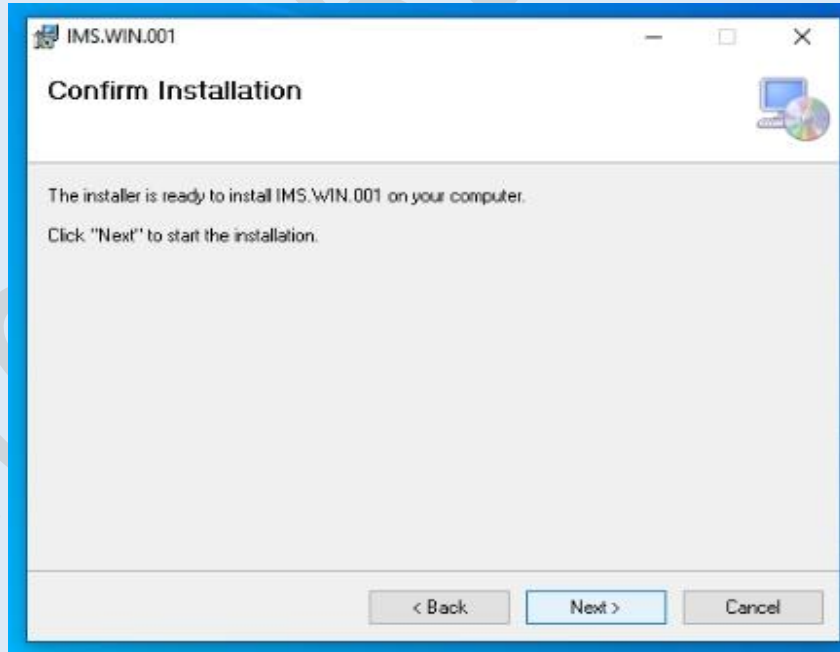
<https://sftp.imfast.co.in/isftp/index.php/s/IPMVyZy6kiDIYWk>

- a. Select the Installer AratekA400/A600, right click and select run as administrator

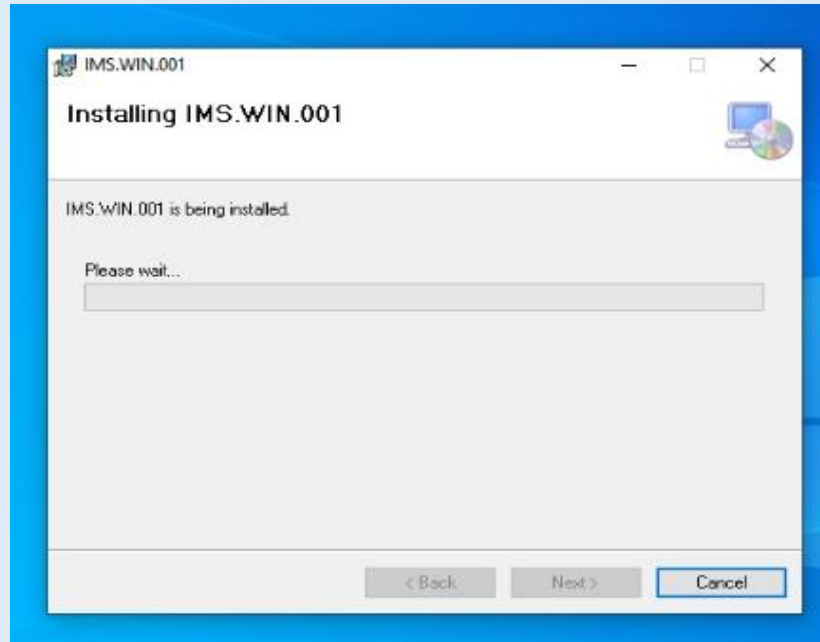


- b. Click Next

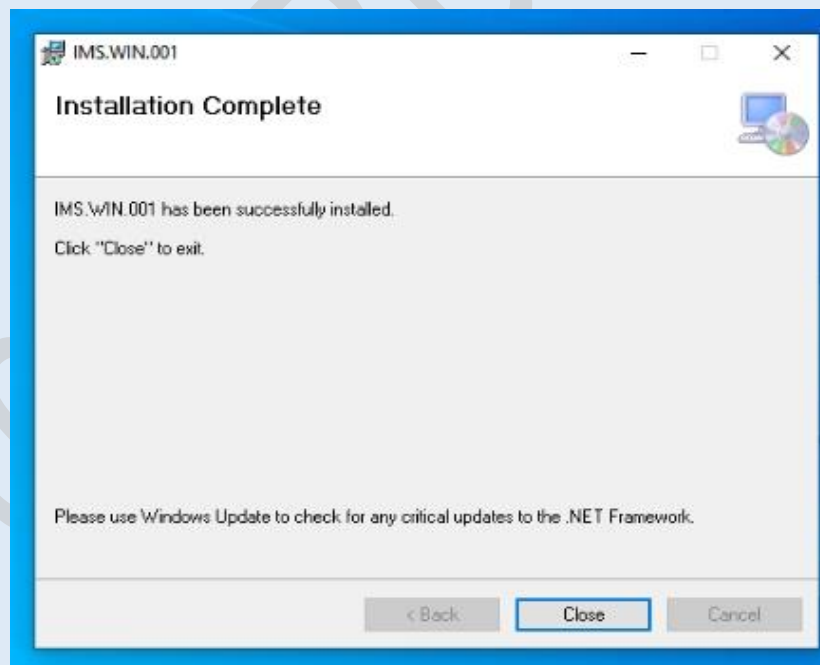


c. Select the path and click Next**d. Click Next**

e. Wait for the installation to complete



f. Click Close



5 RD SERVICE ERRORS AND SOLUTIONS

After successful installation, connect the fingerprint scanner device and start the RD service in the windows Services. RD service will open a popup screen “**RD Service Started**” as below.

If the RD service does not start, an error messages will be displayed. The action to correct the error message is given below.

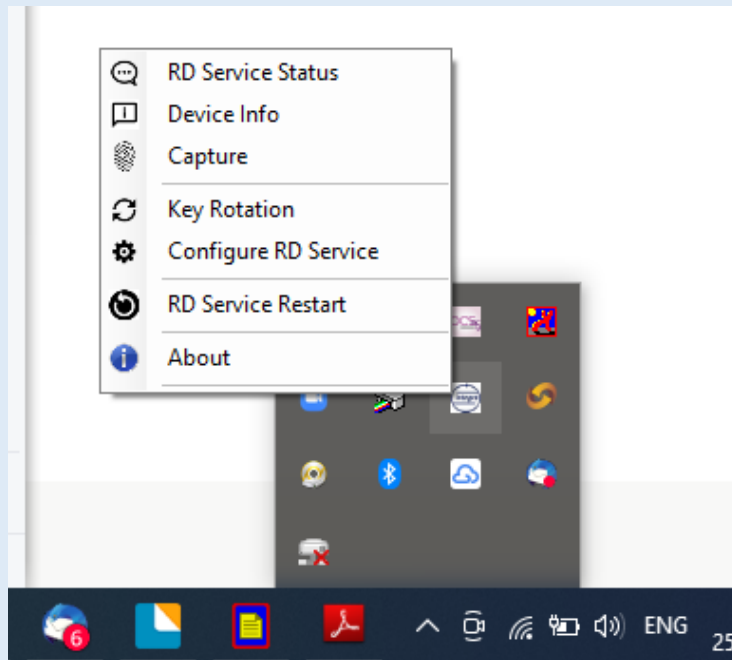
S.No	Error Displayed	Problem description
01	Fingerprint device disconnected	a. Fingerprint scanner is not connected b. fingerprint driver is not installed
02	Couldn't connect to Management server	a. Internet connectivity problem. b. Proxy connection setup is not configured in RD service if the system is using proxy server to connect internet. c. Management server URL is not whitelisted if system is connecting internet through firewall. URL's to be whitelisted https://www.imds.in/iDMS/ http://crl.comodoca.com/COMODORSACertificationAuthority.crl
03	Device is Not registered with management server	Fingerprint scanner is not whitelisted in Integra Management Server. Contact RD support team of Integra for device whitelisting. Ph.+91 9108024385 Email: romeos@integramicro.com
04	Invalid Auth XML version	Application should pass supported valid API PID XML version in authentication request. Please check with the AUA application provider.
05	System time not sync with server	Make sure your system time is synchronized with Network time server (IST).
06	RD Service is in used state	Wait for the earlier capture call to complete.
07	Request XML, invalid parameter	Check the input PID option or request passed to RD service. Please check with the AUA application provider.

More error and solution related to API go through the follow link.

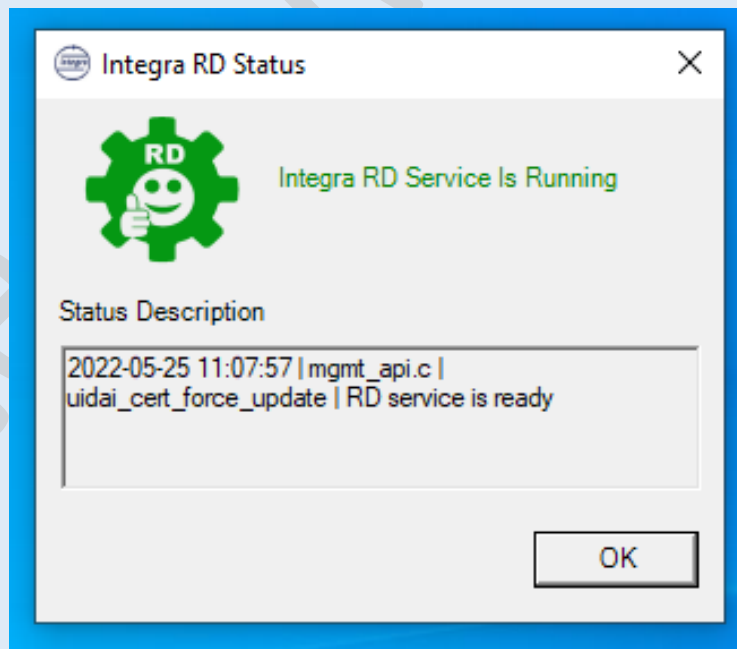
[API Error Handling - Unique Identification Authority of India | Government of India \(uidai.gov.in\)](https://uidai.gov.in/)

6 RD Service Tray Tool

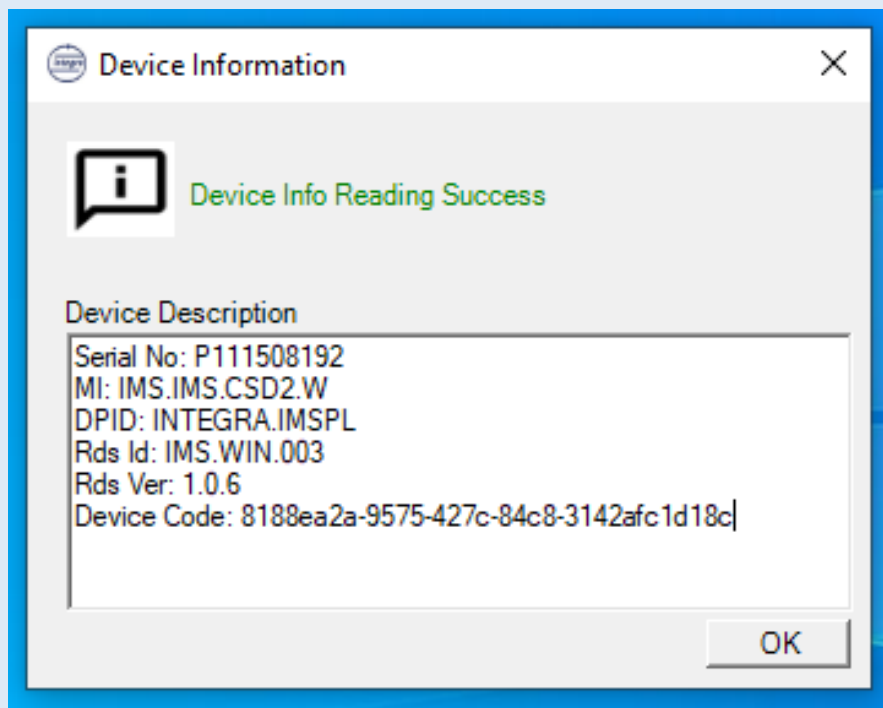
After successful installation, in the screen right bottom corner RD Service enables an icon with Integra logo. This tool provides easy information about the RD Service like - RD Service Status, Device Info, Capture, Key-rotation, Configure RD Service, RD Service Restart and About.



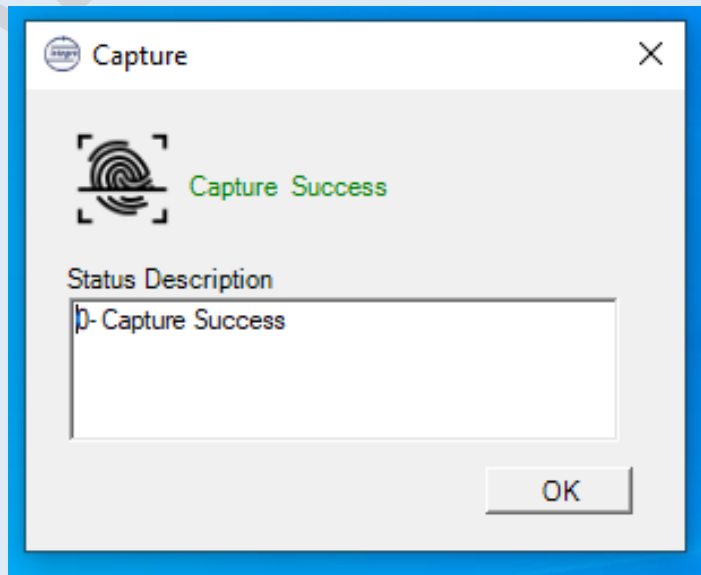
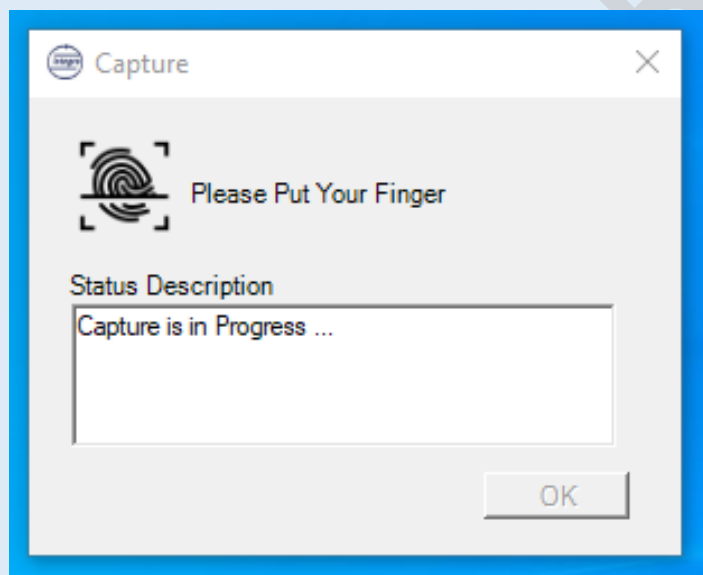
RD Service Status:- To know the RD service status, whether Service is running or not if any error it will display.



Device Info :-It Provides the device details with RD service ID and version.

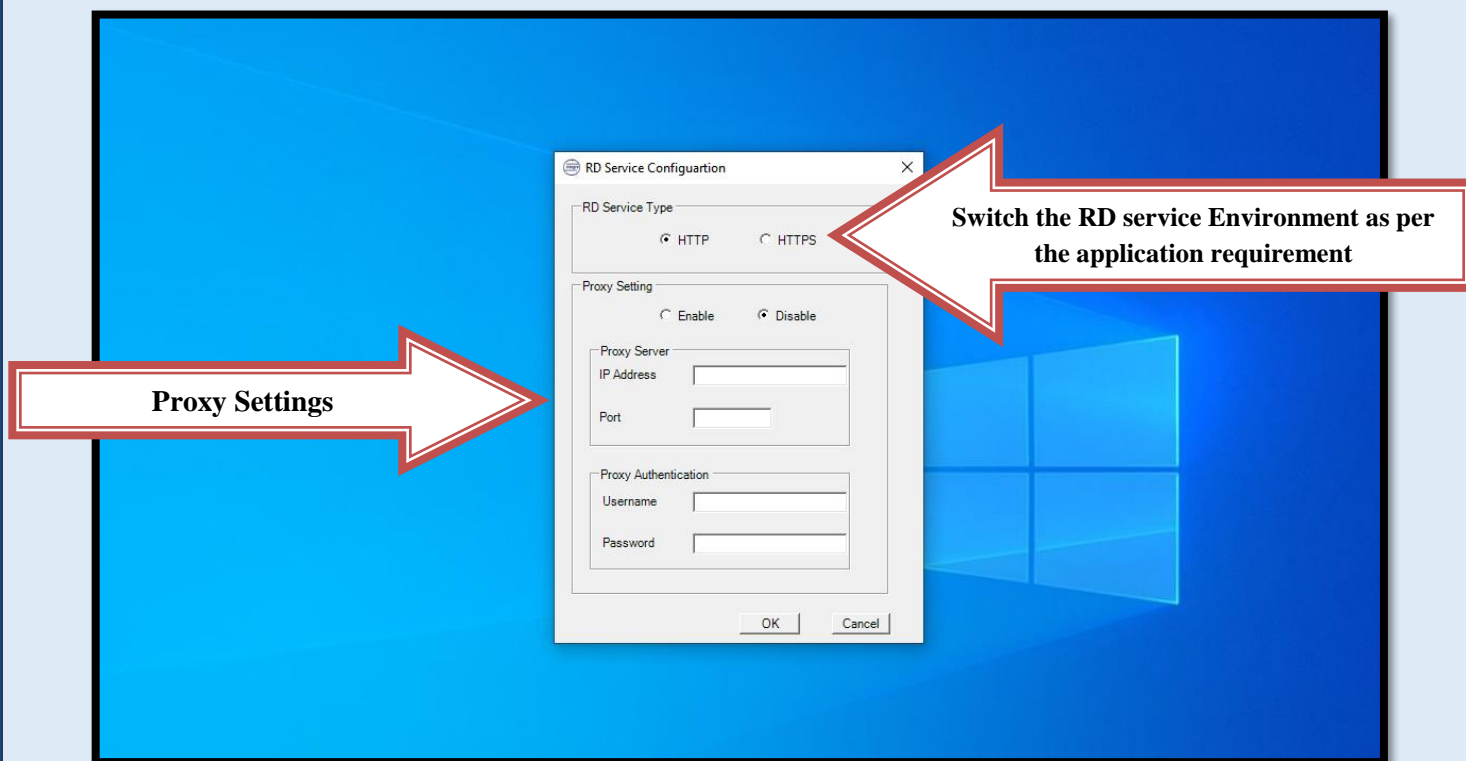


Capture :- Click on the capture icon and place your finger on the biometric scanner.



Key rotation:-It will delete the previous key and generate a new key and restarts the RD service.

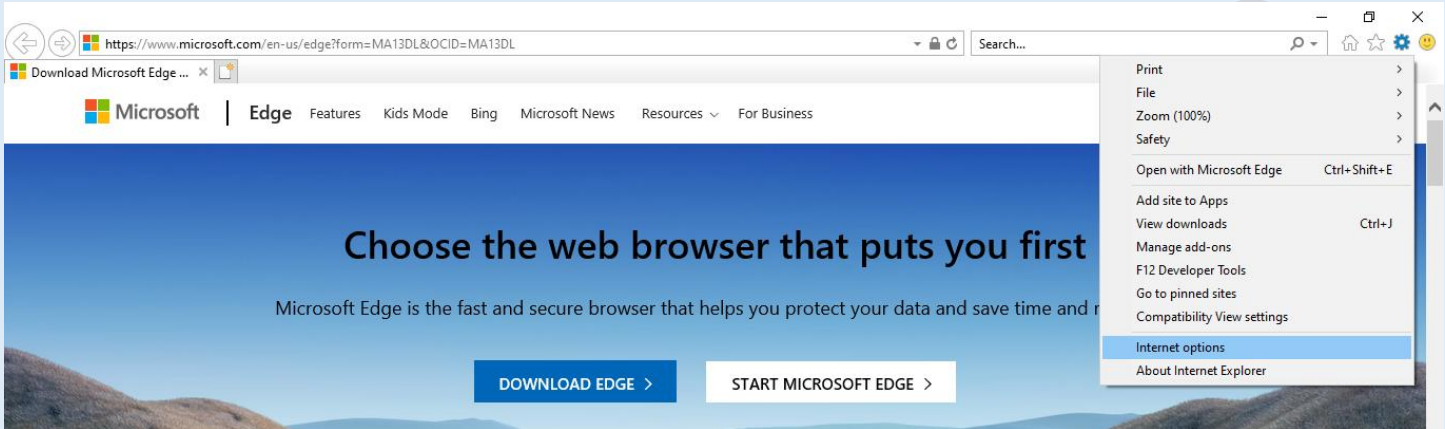
Configure Rd Service: In this option we can change the RD service environment (HTTP/HTTPS) and configure proxy settings.



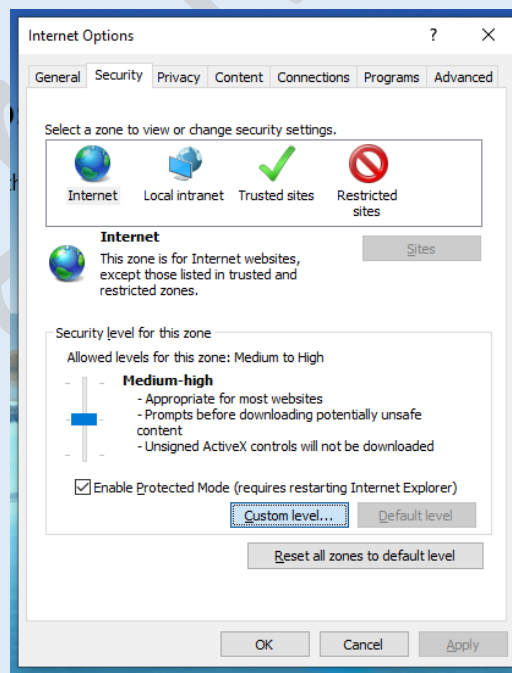
7 BROWSER SETTINGS

7.1 Internet Explorer

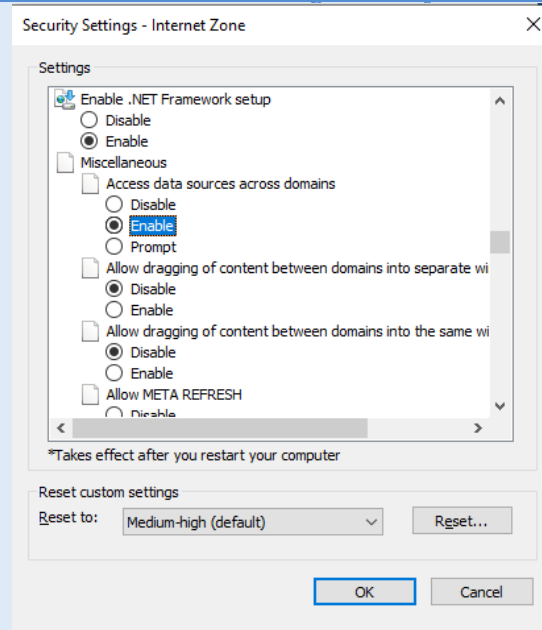
I.) Open the Internet Explorer, click on the settings icon select the internet options, the page will open.



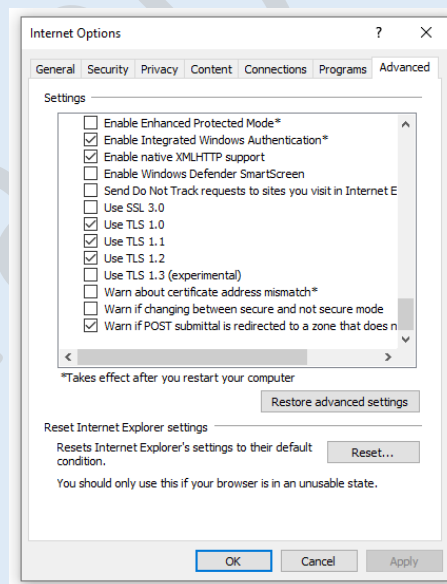
II.) In the Internet Options page click on the Security button select Internet and click on the Custom level.



III.) Go to miscellaneous and enable Access data source across domains and click OK.



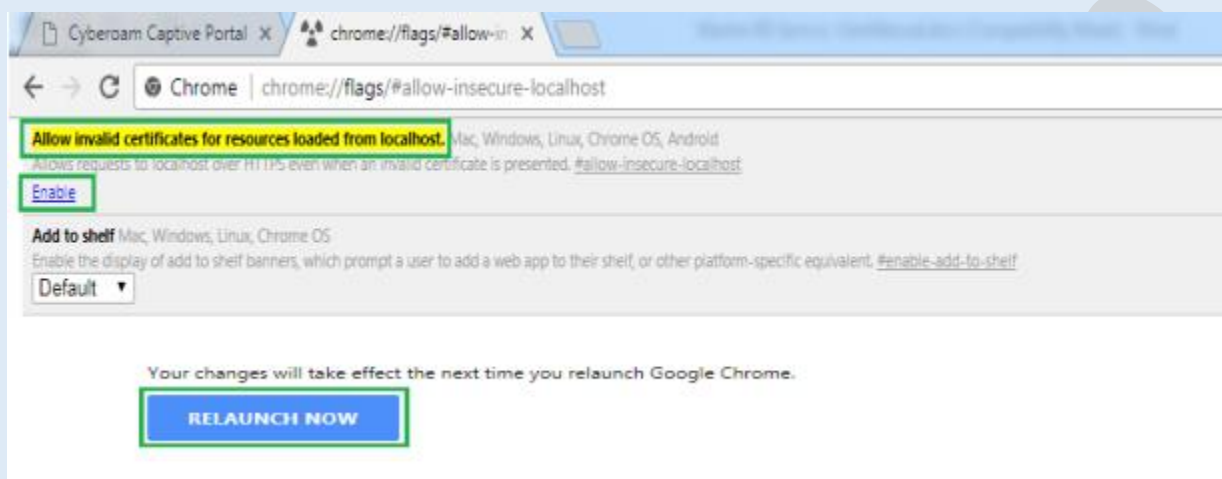
IV.) Now click on Advanced tab and check whether TLS1.2 is enabled or not; if not, then enable the same and click on Apply and then click OK



7.2 Chrome

Open chrome browser and write below in url and click on Enable “Allow invalid certificates for resources loaded from localhost” and then click “RELAUNCH NOW”

chrome://flags/#allow-insecure-localhost



7.3 Firefox Mozilla

Open Firefox browser and write below in url and click on “I Understand the Risks” , click “Add Exception”, it will open Add Security Exception popup and then click “Confirm Security Exception”. **URL:localhost:11100 or 127.0.0.1:11100**

8 INTEGRA RD SERVICE TEST PAGE

Open the Integra Test application for the RD service status, biometric capture and Device info.



Click on the setting icon and Select the RD Service Environment (HTTP or HTTPS), and do the testing.

