

L1 Android RD Service Installation Manual & FAQs



Revision History

Reference	Date	Author	Modification
1.0	24th Jun, 2023	RD Integration and Support	Initial Document
1.1	8th Jun, 2024	RD Integration and Support	New RD Service version Release
1.2	1st July, 2024	RD Integration and Support	FAQs Amendment
1.3	17th Feb, 2025	RD Integration and Support	New RD Service version Release
1.4	12th May, 2025	RD Integration and Support	New RD Service version Release

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Purpose of document

To provide pre-requisites to run L1 biometric device on Android Device.

Pre-Requisite for running RD Service

Prerequisite for S/W

Android Smart phone having OS version 7 and above.

Prerequisites for H/W

MSO 1300 E3 RD Sensor

Installation procedure

Users can install **Idemia L1 RD Service** in two ways as follows:

Method 1. If user has the APK file of RD Service (Downloaded from RD Service Online Portal)

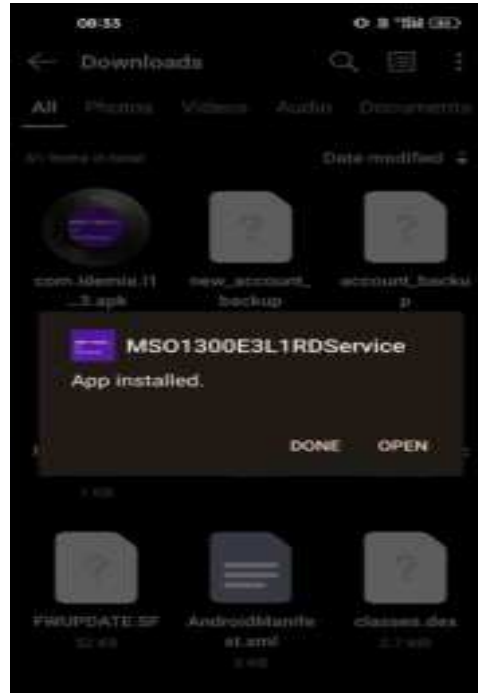
- 1.1. Copy Idemia L1 RD Service apk in phone storage.
- 1.2. Go to phone settings→Security→Unknown sources→check to allow permission for APK installation.
- 1.3. Now click on the APK at the defined path and install it by clicking on **the Install** button.



1.4. Please wait for the installation to be completed.



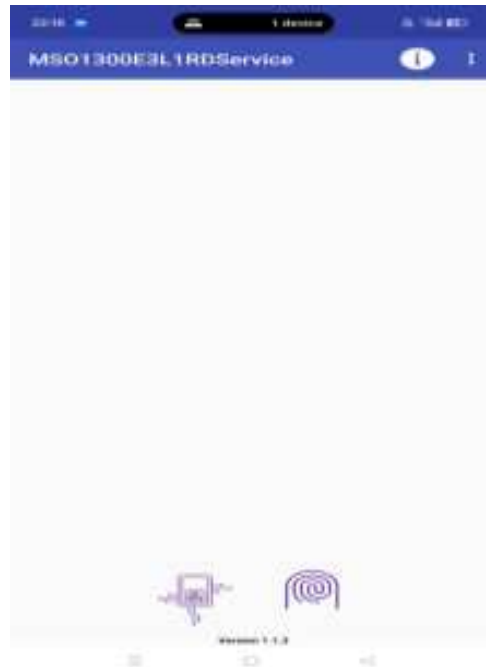
1.5. After Successful installation of APK, below screen will be displayed. Please click on **OPEN** button to launch the APK.



1.6. Please click '**Allow**' to grant permission to the APK.



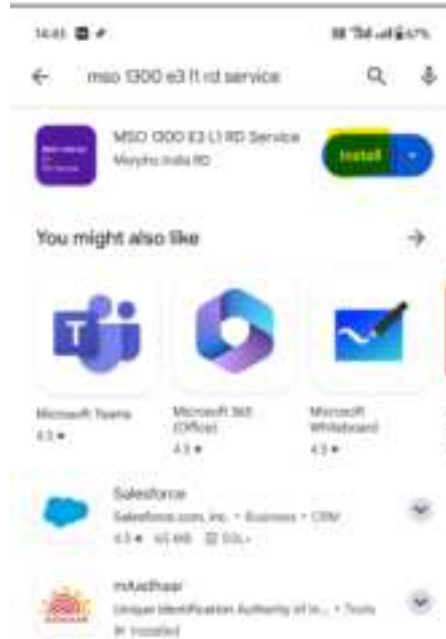
1.7. The following screen will appear after clicking 'Allow' and granting permission to the APK.



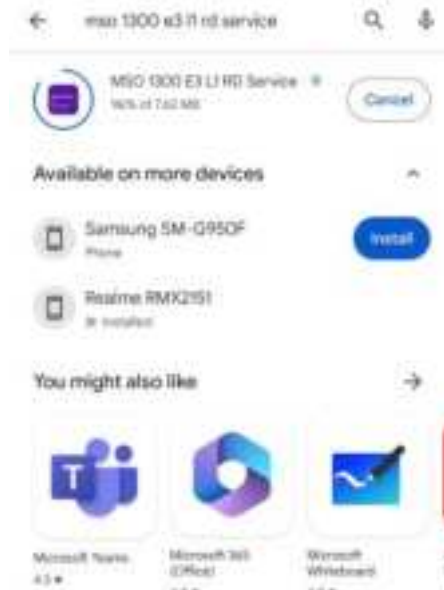


Method 2. If user has installed the APK from play store

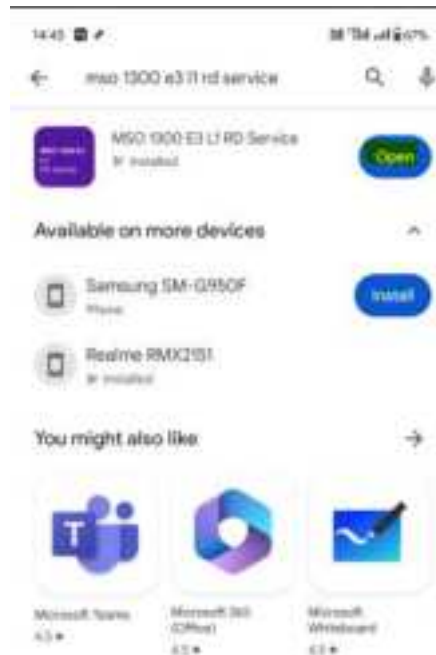
1.1. Go to google play store and search for **MSO 1300 E3 L1 RD Service** and click on **Install**.



1.2. The installation progress will be displayed as shown below



1.3. After successful APK installation click on **Open**.



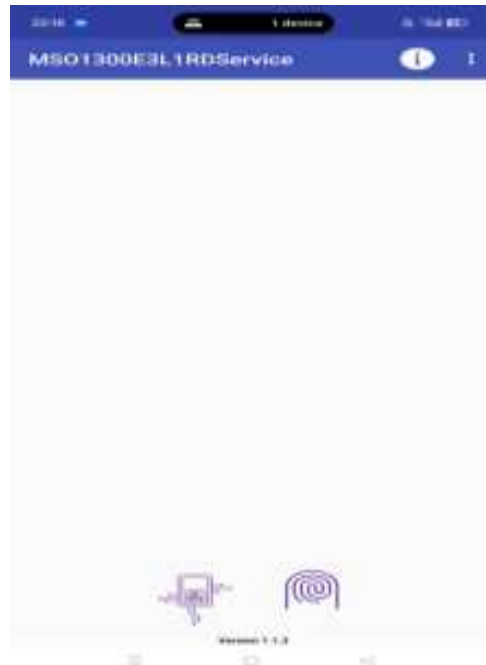


1.4. Please click '**Allow**' to grant permission to the APK.





1.5. The following screen will appear after clicking '**Allow**' and granting permission to the APK.



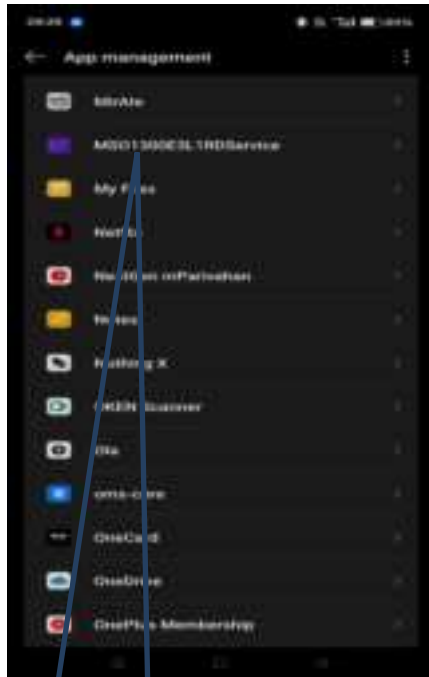
Play store URL to download and install the APK.

<https://play.google.com/store/apps/details?id=com.idemia.l1rdservice>

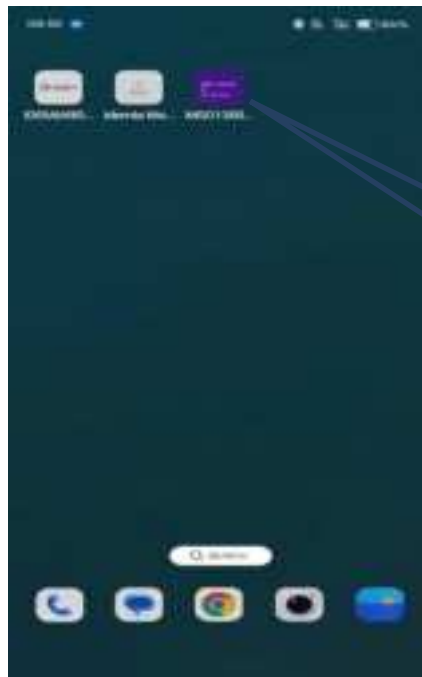
Please note that the RD service will not work if the mobile device is rooted or modified

Location of the installed RD Service on Android Device.

After successful installation of RD Service apk, user can verify successful installation by checking presence of RD Service in Apps listing.



RD Service Application will be installed and will be accessible through icon in application manager.



RD Service Application will be installed and will be accessible through icon in application list/launcher area.

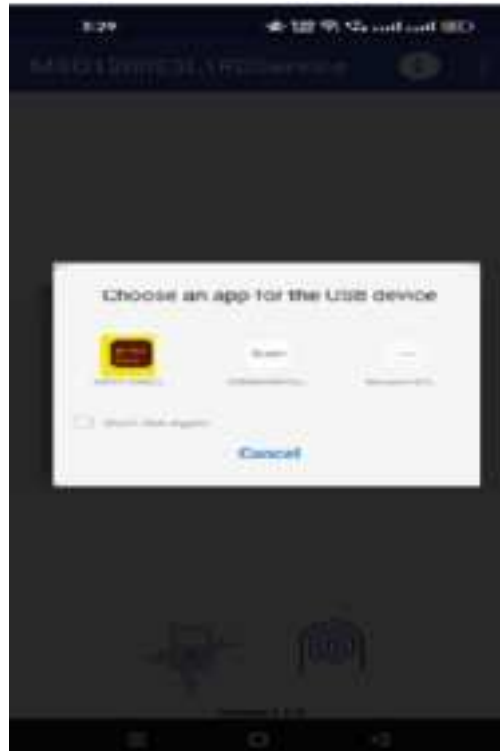
Getting The Device Ready For Use

The Automatic Registration process will start when the user plugs the L1 Biometric device to mobile phone.

1. Connect L1 Biometric (**MSO 1300 E3 RD**) device to mobile phone.
2. If only the **MSO 1300 E3 L1 RD** Service is installed on the mobile device, the following prompt will appear. Please click '**OK**' to grant permission and initiate the device readiness process.



3. If L0 RD service is also installed on the mobile phone, then after connecting Idemia L1 biometric device, chooser option will be displayed on the screen. Please select an appropriate RD service (MSO 1300 E3 L1 RD) from chooser option like below.

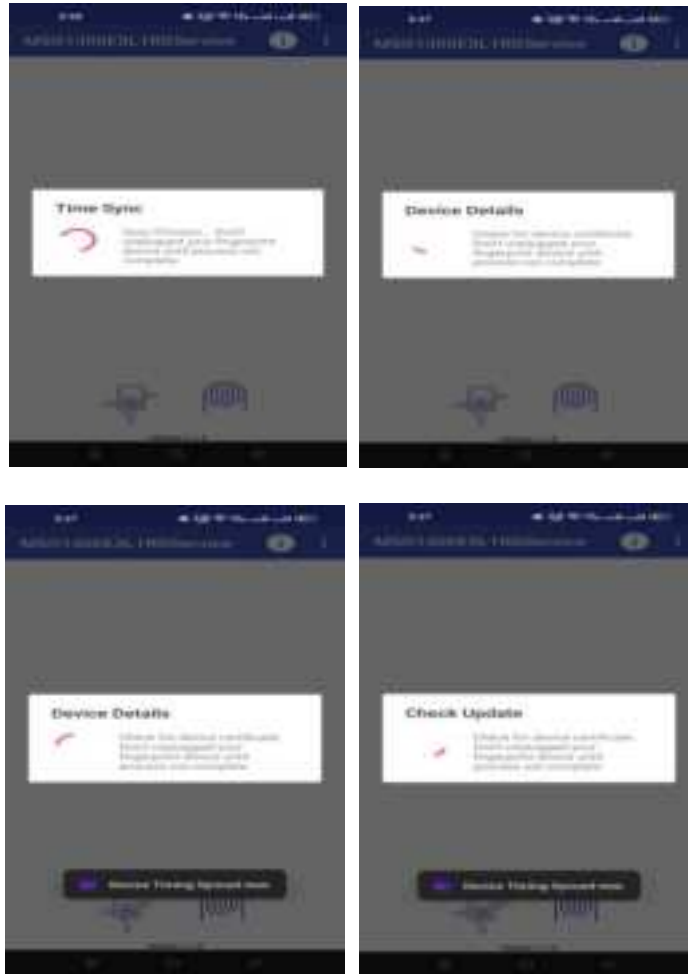


Please make sure that any older version of Morpho RD service is not installed on the mobile device. Please uninstall the same if already installed.

4. After Appropriate RD service selection from chooser option, the following prompt will appear. Please click '**OK**' to grant permission and initiate the device readiness process.



5. A specific set of APIs will start running when the device readiness process begins. Please find the screenshots below for your reference.



Firmware Upgrade on Biometric Device

Below are the pre-requisites and steps if firmware upgrade on biometric device is required

1. Pre-requisites

- Ensure that the fingerprint device remains plugged in throughout the firmware upgrade process.
- The Android device must have at least 50% battery before starting the upgrade.

2. Steps To Upgrade The Firmware

If a firmware upgrade is required, the following steps will guide the user through the process.

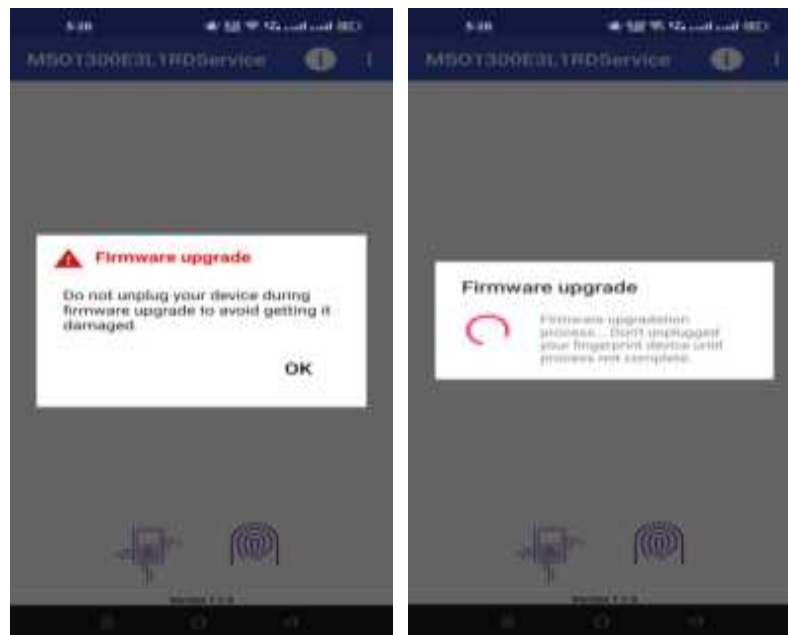
2.1: Firmware Upgrade Notification

- When a firmware upgrade is available, a notification screen will appear.
- Click **"OK"** to proceed



2.2: Initiating the Upgrade

- After clicking "OK", the firmware upgrade process will begin.
- A progress screen will be displayed.



2.3: Device Attachment/Detachment

- During the upgrade, the fingerprint device will automatically connect and disconnect 2-3 times. (You don't need to do this activity manually)
- This is a normal part of the upgrade process. (Always click **OK**)



Please do not disconnect the biometric device or stop the firmware upgrade process, as it may cause the device to stop working or device might become malfunctioned.

2.4: Upgrade Completion

- Once the firmware upgrade is successfully completed, a confirmation screen will be shown. Now Click "**OK**" to finalize the process.



- The device will now be ready for use and below screen will be displayed to user





After successful device readiness, user can check the device for biometric capture through client application.

If the firmware upgrade on the biometric device fails, the user can contact the helpdesk team at "CBISHelpdesk@idemia.com."

Please note that RD service must be integrated with client application before using the device for biometric capture.



FAQs

1. What are the components involved in Register Device Solution by IDEMIA?

The solution involves three core components – as listed below:

RD service – Register Device Service

MC – Management Client

MS – Management Server: This is the heart of RD Service Server Solution. The central web service that facilitates registration/deregistration of devices as per UIDAI 2.0 specification.

2. What does RD service do?

This core service closely deals with hardware and captures the biometrics information from the Biometric Device.

3. What does MC do?

Acts as an interface between RD service and Management Server.

4. What does MS do?

This is the heart of RD Service Server Solution. The central web service that facilitates registration/deregistration of devices as per UIDAI 2.0 specification.

5. Which Android Versions are supported for RD?

Android version 7 and above.

6. Is Internet connectivity required for RD solution to work?

Yes. RD solution needs internet access.

The RD Service connects to Management server over internet for functions such as device registration, certificate issuance and status checks. If the RD service cannot communicate with Management Server, it will fail the biometric capture and/or authentication.

7. Does the device need to be whitelisted/any mechanism for whitelisting the device involved?

Yes! Before the device can communicate with MS, it needs to be whitelisted on MS. i.e. the device's Desktop S/N and P/N needs to be stored in MS database.

8. What functionality is handled by the Device Provider and what is handled by UIDAI?

The Device Provider handles the functionality of registering a biometric device and issuing a device certificate. The RD Service also provides the core functionality of biometric capture. The UIDAI server on the other hand, provides the functionality of authenticating the biometric data captured by the RD service against its own database – via AUA/ASA eco system.

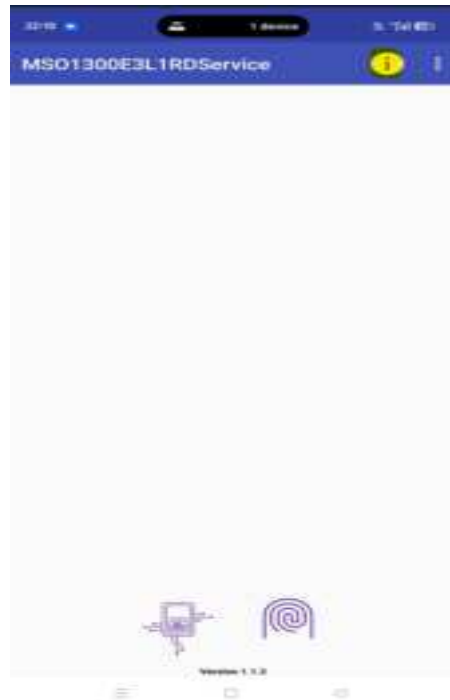
9. Do I need to whitelist any URL?

Yes. Consult your IT team to whitelist the following URL if request is going through bank proxy server.

- prod.rdms.co.in

10. How can I get biometric device serial number?

Biometric device serial number can be checked by clicking on the **info** icon available at upper right corner of the apk. Please make sure that biometric device is connected to mobile phone when trying to get the device detail.



11. Where I can get support for RD service in case of any issue?

In case of any problem using RD Service, please drop an email on "CBISHelpdesk@idemia.com" on weekdays between 9:00 AM – 6:00 PM IST (except holidays).

12. Can IDEMIA biometric device be used with type C connector android device?

Yes. Since IDEMIA biometric device is available in micro USB and standard USB models so user has to use micro USB/USB to type-C convertor for connecting biometric device with Android Device.

Common Errors

Error 9999: Please try again

Possible Causes: Communication failure with the Management Server

Possible Solutions

- Check Android device internet connection.
- Check whether the URL prod.rdms.co.in OR preprod.rdms.co.in is whitelisted on network or not.

Error 9996: Please try again

Possible Causes: Internet connection failed.

Possible Solutions

- Check Android device internet connection.

Error 9998: Please try again

Possible Causes: Device is unable to build the request.

Possible Solutions

- Unplug the device and connect the device then try again.

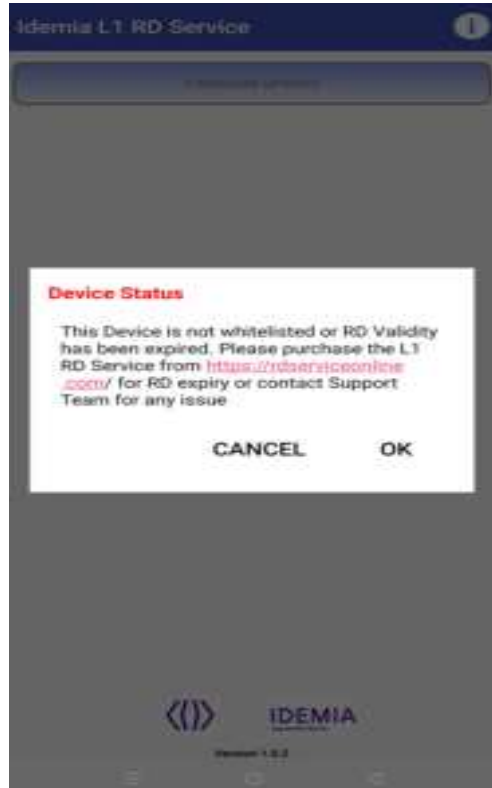
Error 9997: Please try again

Possible Causes: Device not connected or permission missing.

Possible Solutions

- Please check whether biometric device is properly connected to android device and permission has been granted or not.

Error 7: Connected Fingerprint device not whitelisted.



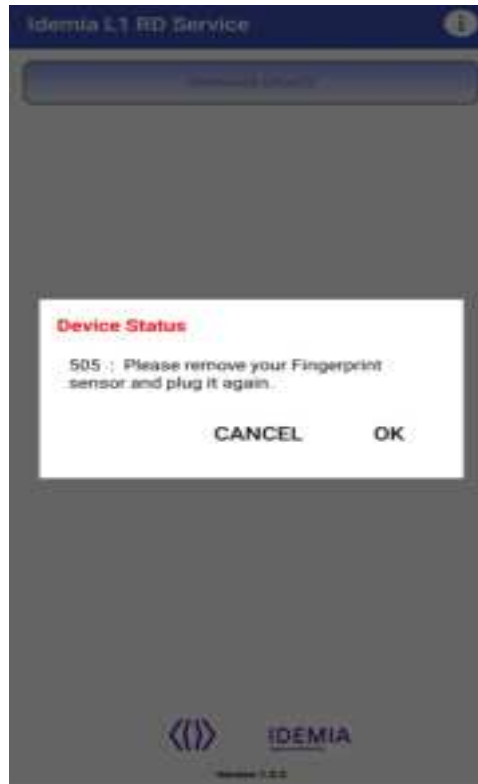
Possible Causes

- Device is not whitelisted at MS server.

Possible Solutions

- Contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for device whitelisting request.
- Re-connect the biometric device to mobile phone after whitelisting done at Management Server.

Error 505: Device Firmware Version is missing At Management Server



Possible Causes

- Device firmware version is missing at management server.

Possible Solutions

- Contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for firmware availability issue.
- Re-connect the biometric device to mobile phone once firmware is added at Management Server.

Error 507: Management Client Version is missing At Management Server



Possible Causes

- The management server version is missing at management server.

Possible Solutions

- Contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for management client availability issue.
- Re-connect the biometric device to mobile phone once management client is added at Management Server.

Error 504: RD Service Version is missing At Management Server



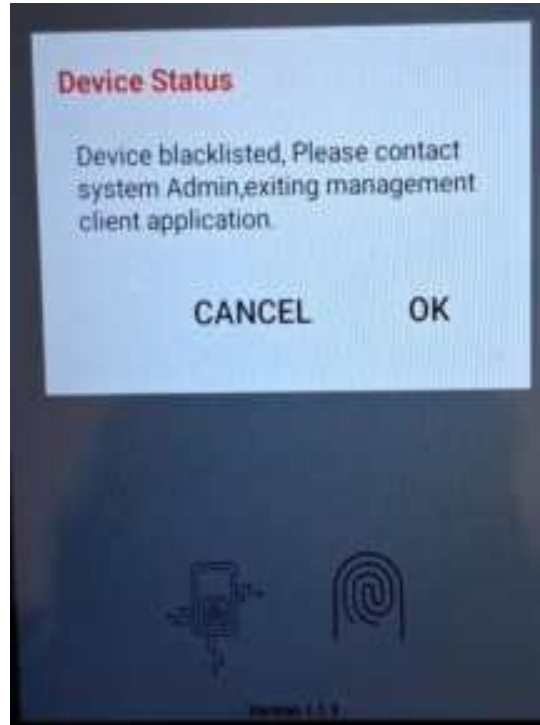
Possible Causes

- The RD service version is missing at management server.

Possible Solutions

- Contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for firmware availability issue.
- Re-connect the biometric device to mobile phone once RD is added at Management Server.

Error: Biometric Device Blacklisted



Possible Causes

- Biometric device is not whitelisted at management server.
- Biometric device is whitelisted in different environment and user is trying to use the same in different environment.

Possible Solutions

- Please make sure that biometric device is whitelisted at management server or Contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for device whitelisting.
- Please use the biometric device on that environment only where it is whitelisted, i.e. if the device is whitelisted in the production environment, then it should be used in the production environment only.
-

Error 301: UIDAI Registration Error



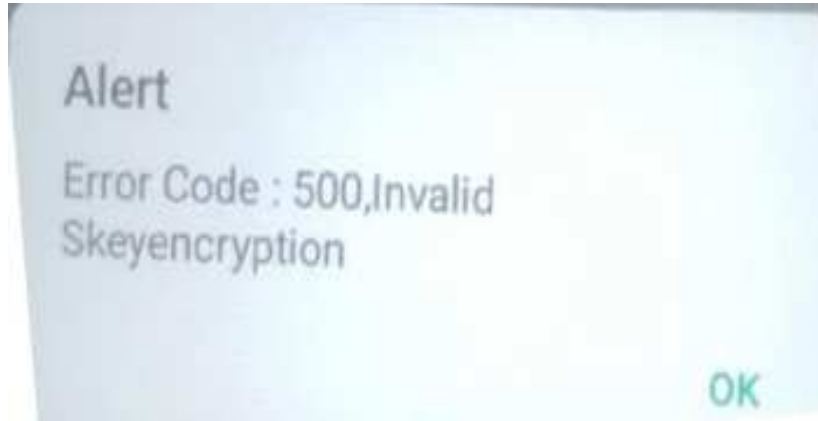
Possible Causes

- Device Registration failed at UIDAI end.

Possible Solutions

- Please contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** and share the device details to check.

Error 500: Invalid Skey Encryption



Possible Causes

- RD Service & Firmware version are not compatible to each other.

Possible Solutions

- Please ensure that RD service version installed on the device is 1.1.3 and firmware version of biometric device is 06.04.e.
- Please contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** for any further assistance.



Error: Time sync Failed on Device

Possible Causes

- The request is not going to RD management server due to network connectivity issues.
- If the device got corrupted during the firmware upgrade process.

Possible Solutions

- Please ensure that proper network connectivity is there while device is connected to mobile phone.
- Please contact Helpdesk team at CBISHelpdesk@idemia.com or at toll number **0806 936 8000** if firmware upgrade got failed and time sync issue is coming on the device.



THANK YOU