

## RD SERVICE INTEGRATION WITH FACE AUTHENTICATION

### (WINDOWS & ANDROID)

As per UIDAI specs, we can use FACE authentication using ACPL RD Service for STARTEK FM220U Fingerprint devices.

Following combinations can be used in authentication with FACE authentication,

- 1. FACE + FINGER authentication**
- 2. FACE + OTP authentication**

Only FACE authentication is not allowed by UIDAI.

If You try to capture only FACE without FINGER or OTP you will receive following error in PID DATA XML,

**errCode="200"**

**errInfo="Invalid Demo structure. Only Face not allowed!"**

You can refer following changes to be made to enable FACE authentication in your application.

As per UIDAI specs, there are **`pCount`** and **`pType`** attributes already defined in **`PidOptions XML`**.

To enable FACE capture in RD Service, we must set **`pCount`** and **`pType`** attribute as follows,

**pCount="1"**

**pType="0"**

Please find structure of PidOptions XML as follows:

```
<PidOptions>
  <Opts fCount="" fType="" iCount="" iType="" pCount="" pType="" format=""
pidVer="" timeout="" otp="" posh="" env="" wadh="" />
  <Demo></Demo>
  <CustOpts>
    <Param name="PARAM_1" value="" />
  </CustOpts>
</PidOptions>
```

For FACE capture demo in WINDOWS & ANDROID, you can go to following link,

1. WINDOWS DEMO: <https://youtu.be/8PIL-ap3YXI>
2. ANDROID DEMO: <https://youtu.be/dPvZko9-1GQ>
3. FACE GESTURE DEMO: <https://youtu.be/6Uepe5COrz4>

After capturing you will find PID DATA XML from RD Service in response.

You can find structure of PID DATA XML as follows,

```
<PidData xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Resp fType="" iCount="" pCount="" errCode="" errInfo="" fCount="" ts=""
nmPoints="" qScore="" />
  <DeviceInfo/>
  <Key ci="(CI_VALUE)">(ENCRYPTED_SKEY_VALUE)</Key>
  <Hmac>(ENCRYPTED_HMAC_VALUE)</Hmac>
  <Data type="X">(ENCRYPTED_PID_BLOCK_VALUE)</Data>
</PidData>
```

**Please make sure to check following detail in case of FACE + FINGER,**

Make sure that at least 1 finger must be captured successfully before FACE capture.

You can verify `fCount` value in response PID DATA XML, it must be greater than 0.

And `pCount` value must be 1 in response PID DATA XML. Otherwise, you won't be able to authenticate FACE.

**You can find Programmer Manuals from following link:**

WINDOWS: [https://www.acpl.in.net/assets/pdf/ACPL\\_RD\\_WIN\\_PROGRAMMER\\_MANUAL.pdf](https://www.acpl.in.net/assets/pdf/ACPL_RD_WIN_PROGRAMMER_MANUAL.pdf)

ANDROID:

<https://www.acpl.in.net/assets/pdf/ACPL%20FM220%20RD%20Document%28FOR%20DEVELOPER%29.pdf>