Revision List				
Version-Revision	Reference	Modification	Modified By	Date
1.0.0		Initial Version	BioEnable	30/12/10
1.0.1		Application Update	BioEnable	22/02/11
1.0.2		Application Update	BioEnable	07/10/11
1.0.3		Application Update	BioEnable	25/03/13
1.0.4		Application Update	BioEnable	25/03/15
1.0.5		Application Update	BioEnable	19/06/15

BioEnable VDM

User's Manual

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User Manual for BioEnable FP VDM Version 1.3.2 (August 2015)
User manual Version 1.0.5.

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Overview

This guide provides procedures for the installation of software and hardware components necessary for operating BioEnable's VDM software for UID.

BioEnable's VDM software supports DactyScan84c device. It is compliant with the "Aadhaar Biometric Capture Device API" standard. The following features are

Provided:

• Supports the DactyScan84c fingerprint scanner by allowing capture of the right four fingers, left four fingers, and two thumbs. Each fingerprint image is sized up to 1600 x 1500 pixels.

• Runs as a Windows service without user intervention

• Provides auto-detection of device connection and disconnection

• Supports both Windows XP, Windows Vista and Windows 7,Windows 8.1

1. Prerequisite:

The software, which includes Drivers and VDM, was designed for UID India.

Operating System

- Windows 2000® SP3
- Windows XP® SP1(32bit)
- Windows Vista/7 32-bit/64-Bit,Windows 8.1 32/64-Bit

Hardware requirements

- Processor: Pentium IV @ 2,8 GHz or better, recommended Intel® Core™2 Duo @1.8 GHz or better
- Memory Size: 512MB or more
- Interface to Scanner (i.e., USB) : 2.0 (high Speed)
- Rated FSB (effective speed in bits/second of the Front Side Bus) : 800 Mhz
- Memory Speed 1 (FSB:DRAM ratio) 200 Mhz , recommended : 233 Mhz
- Memory Speed 2 (RAM Test Speed) 2m 27s,

Biometric Hardware

The VDM and other required software are developed to work with Following Hardware

- DactyScan84c

2. Driver Installation:

Before installation of the devices, keep these things in mind:

- Do not connect DactyScan84c fingerprint device before or during the driver installation.

For installing driver setup for first time, follow these steps:

Browse the CD or provided setup files to get the **"2. Drivers"** folder, then go to

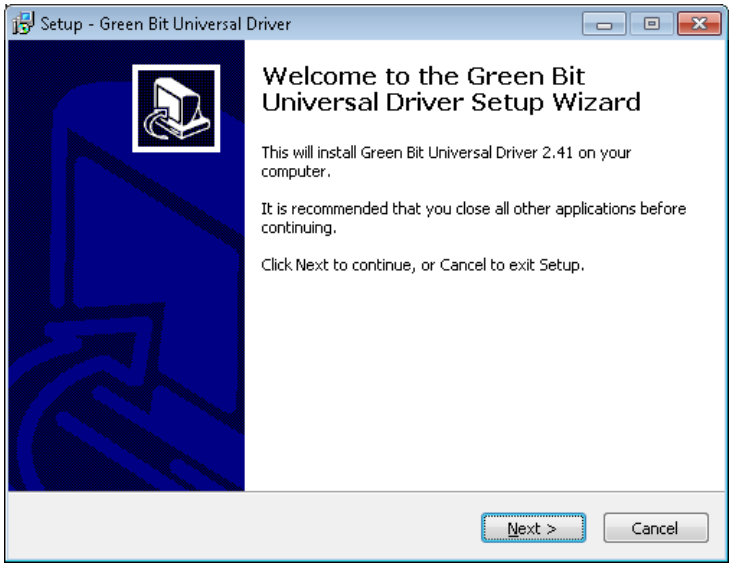
"x86" folder for 32 bit system and **"x64"** folder for 64 bit and run the appropriate .exe to install the drivers.

The driver will ask to install "Green bit universal driver", select yes, and follow the default steps.

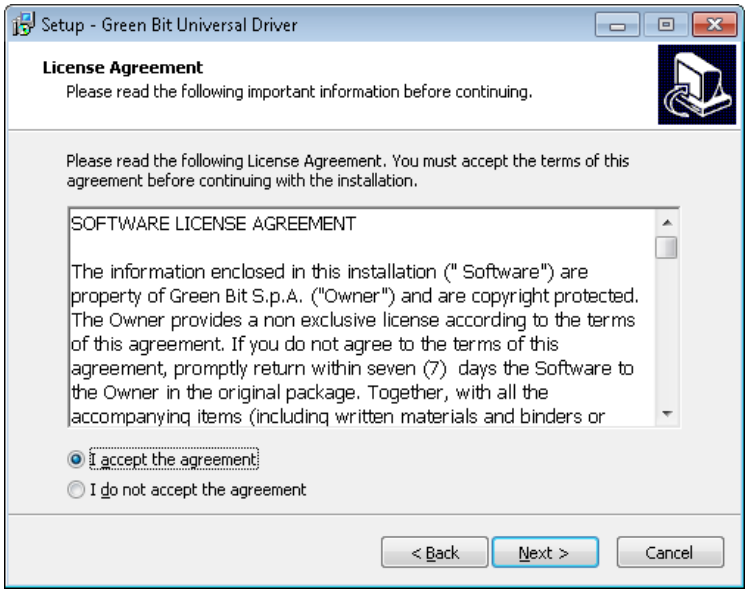
Normal users should follow the default (standard) setup of the installation script. Only experienced users should select custom setup.

Running the setup will require administrator privileges.

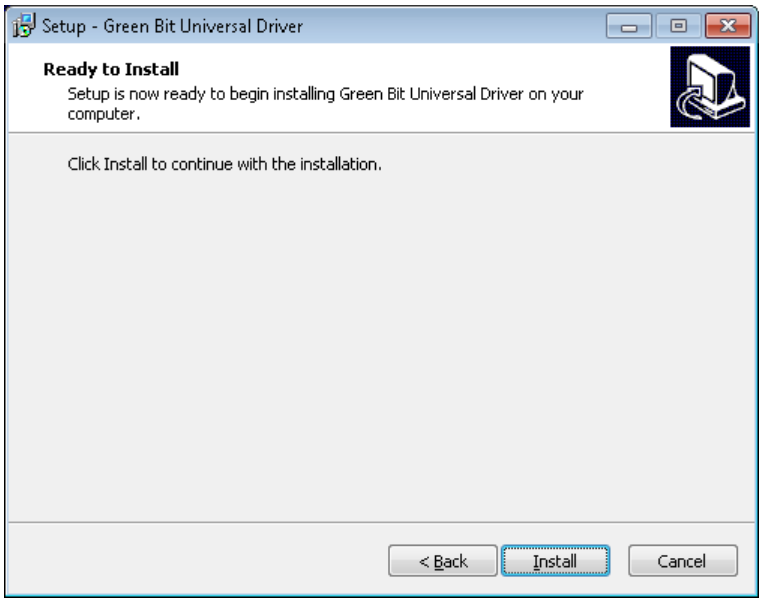
1. Start the Driver Setup. Click on **"Next"** button. (See below snapshot)



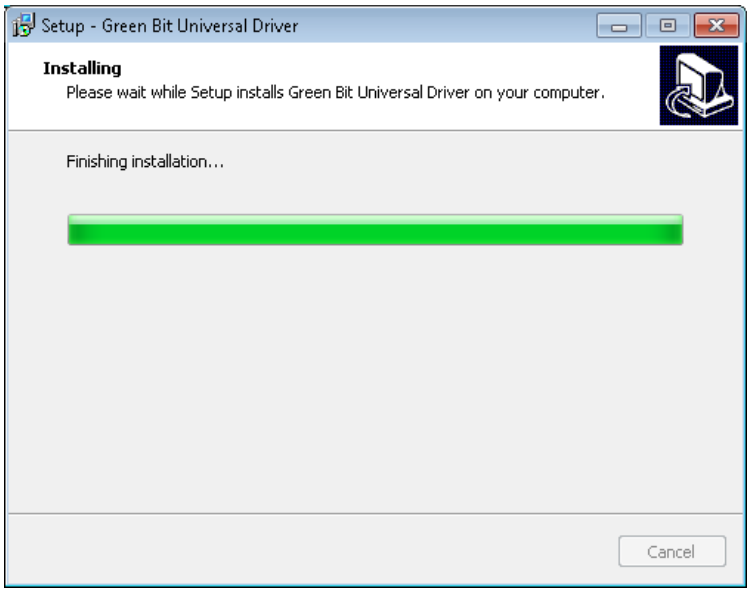
2. Accept the License Agreement.



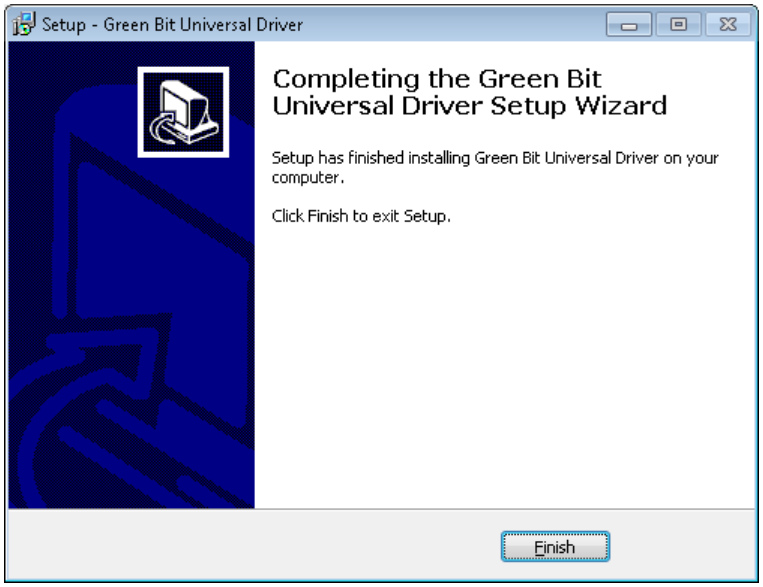
3. Driver will ask confirmation before starting installation so click here on **"Install"** button. (See below snapshot).



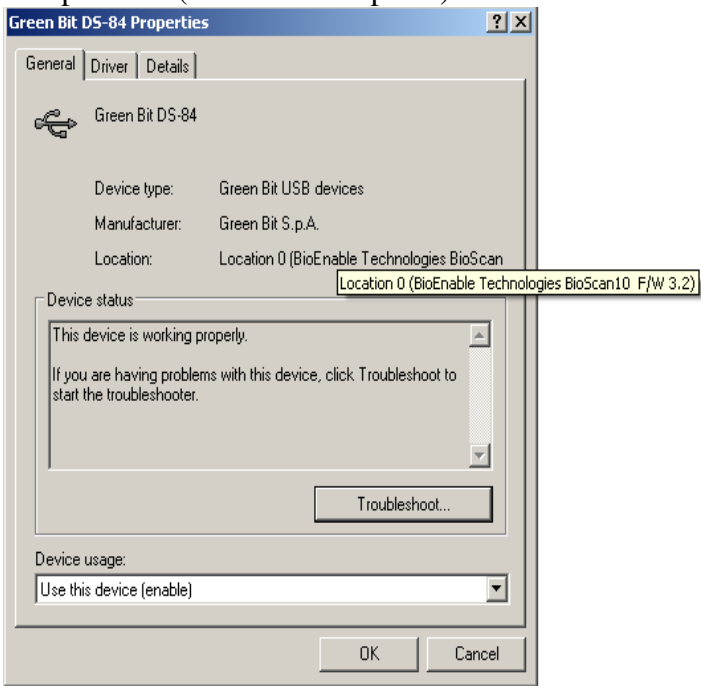
4. Wait for current process to complete. (See below snapshot).



5. Click **"Finish"** to complete the universal driver setup on following window.



We can see the driver install location. (Go to, START→Control Panel→Device Manager) and select “Green Bit USB devices”, double-click on the same we will get sub-option “Green Bit DS-84” Right-click on the same and then click on “Properties”. (See below snapshot)



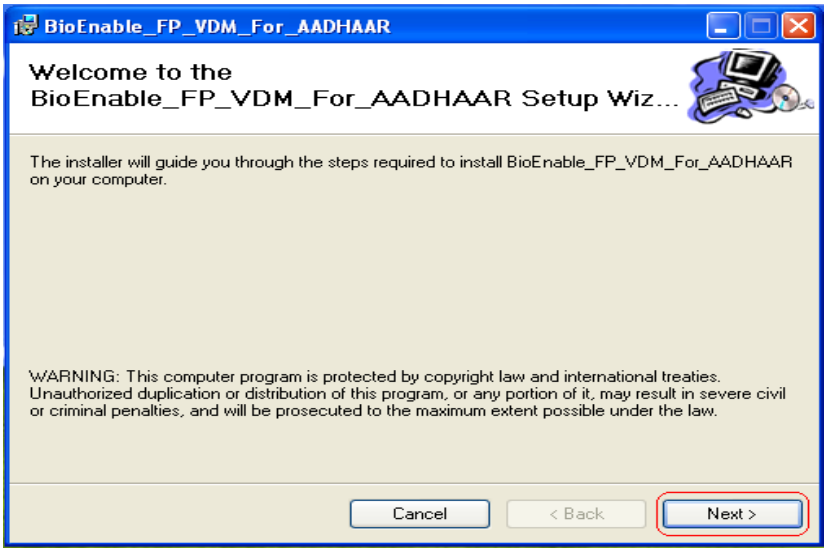
3. VDM Installation:

Browse the CD or provided setup files to get to "BioEnable FP VDM" folder, and run the appropriate Setup.exe and install the VDM by following standard/ default options provided.

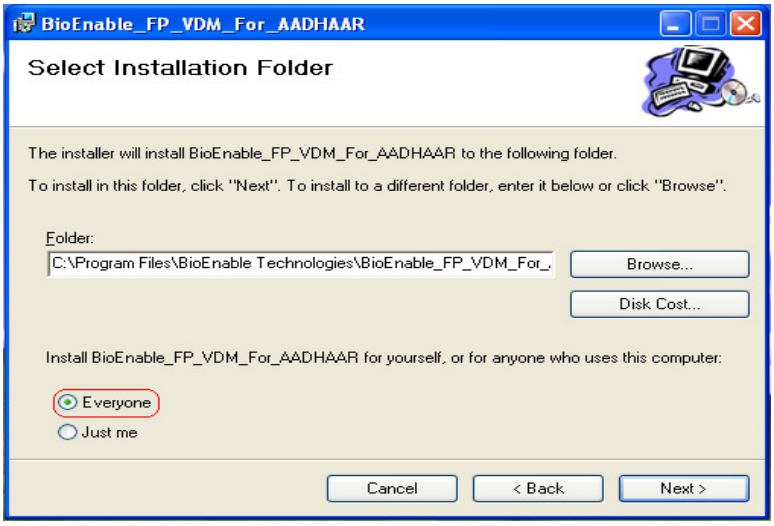
Running this setup will require Administrator privileges.

GO to "**3. VDM Setup \ x86"** folder and then run **"Setup.exe".**

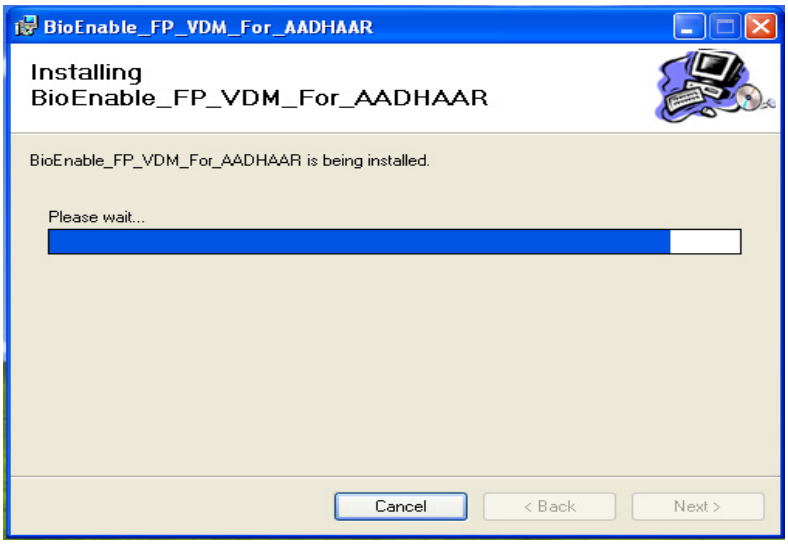
1. Start the setup by double-clicks on **"Setup.exe".**



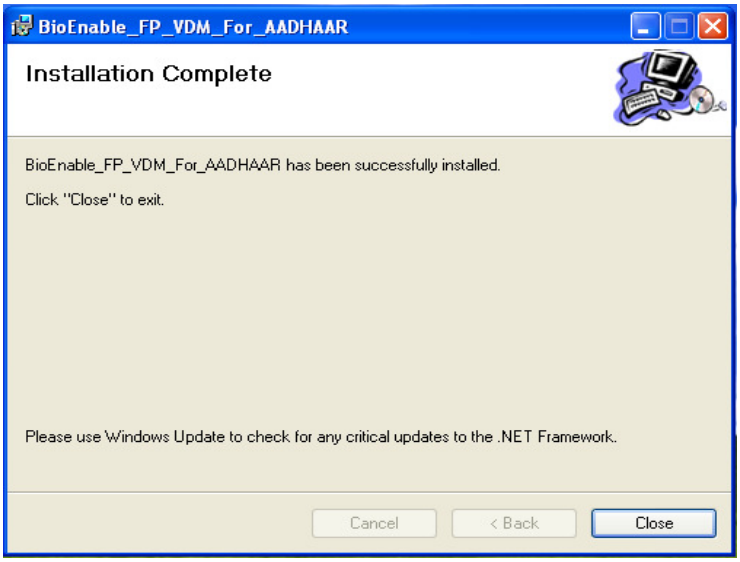
2. Select **"Everyone"** for the following screen.



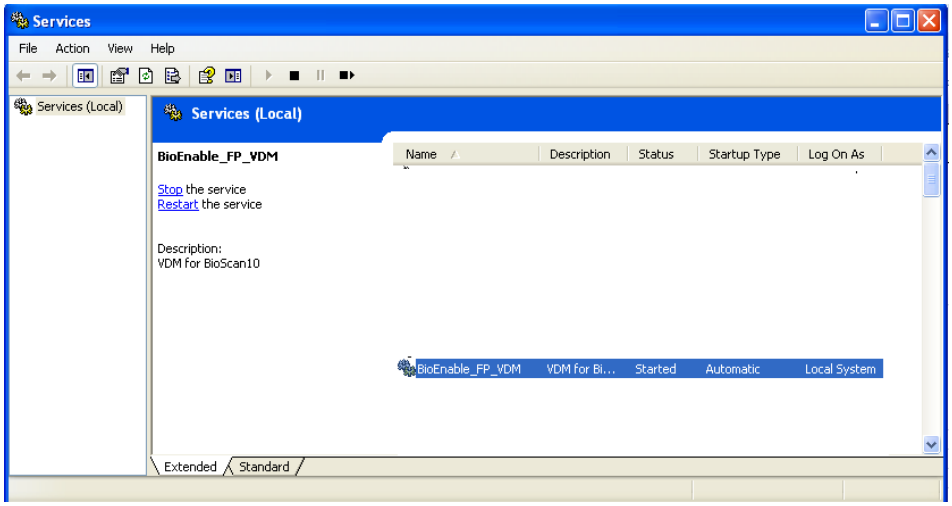
3. After clicking on **"Next"** button on above screen, wait for current process to complete.



4. Click **"Close"** button to complete the VDM installation.

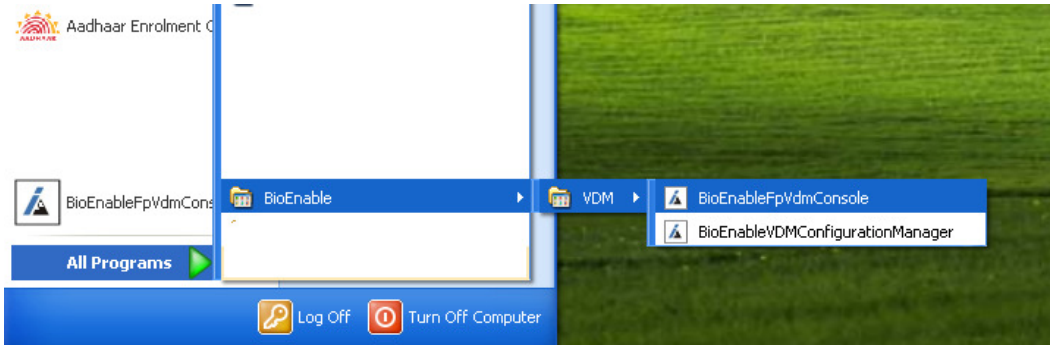


-Once the installation is complete, you can see the entry under Services Listing for "BioEnable FP VDM", as shown below.



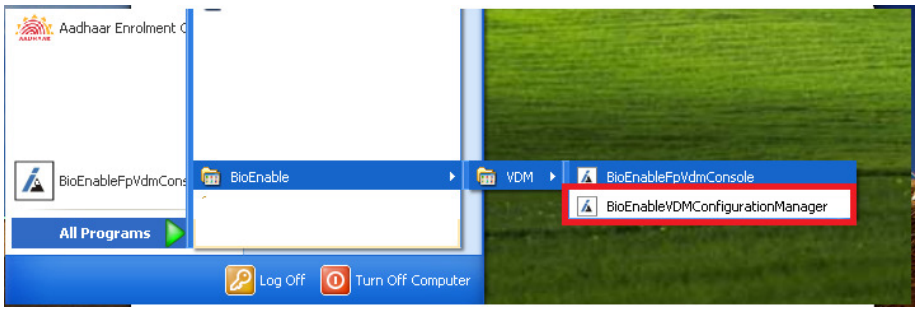
-The service is installed as Automatic, after every restart of the computer, the service will start automatically.

- The Installer will create Shortcuts in Program Menu, as shown below

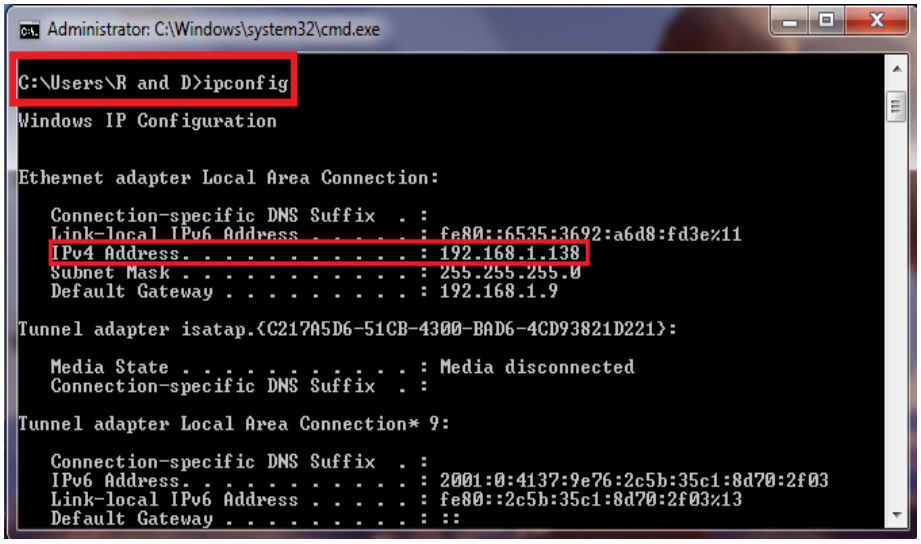


4. Quick Start Guide:

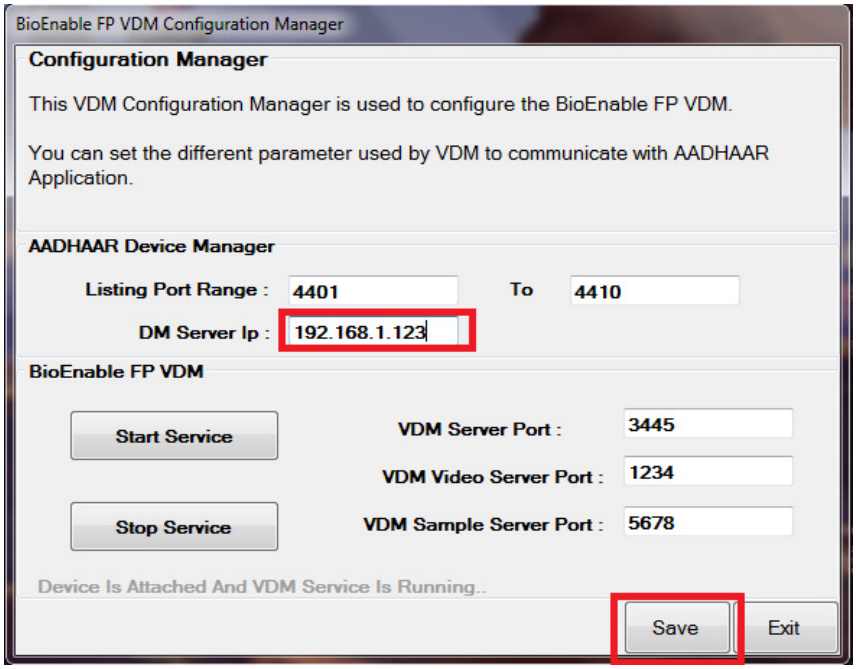
Go to All programs -> BioEnable-> BioEnableVDMConfigurationManager.



1. Open command prompt and type “ipconfig”, to get the IPAdrress.



2. Enter the IP address of your computer in the field DM Server IP and click on **Save** button.

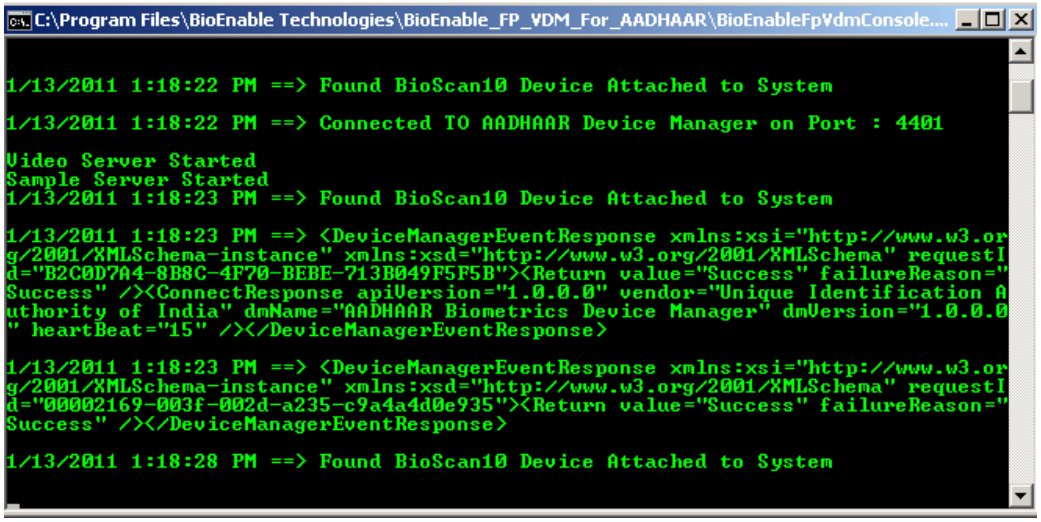


3. Now click on “Start Service” button, this will start the BioEnable FpVDM service, and you can start the capture process.

5. Configuring & Debugging the VDM:

Once the VDM is installed, it does not require any configuration and it works with default values. Although VDM installer installs two more applications, following are those, which can be accessed through Programs Menu, as shown in above snapshot

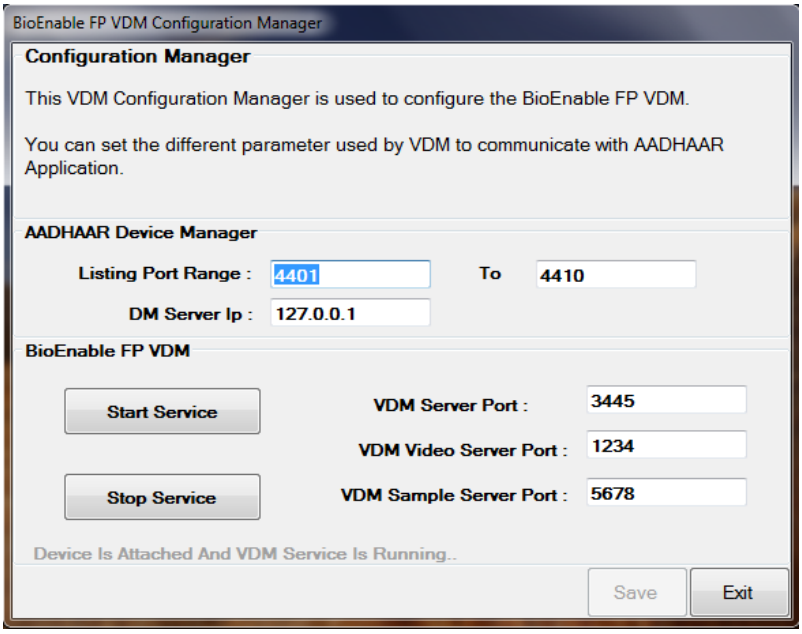
5.1 **BioEnable FP VDM Console:** This application is a VDM in console mode, which presents all its operations in Console mode, this is good for debugging issues related to communication with Aadhaar Device Manager or Aadhaar Application. When this application starts, its closes down VDM service, Following are snapshot for this application in action



5.2 BioEnable VDM Configuration Manager: This utility is provided to Control the VDM (starting and stopping the VDM service) and configure the VDM for

a. TCP Ports for AADHAR Device Manager Communication.
b. TCP ports on which VDM listens for requests
c. TCP port on which VDM hosts Video for AADHAR Application.
d. TCP Port on which VDM provides Samples to AADHAR Application

Note: After any change in setting the VDM Service needs to be restarted.



6. Instructions for using Fingerprint device:

Only place the finger or thumb when the appropriate LEDs are orange and stable.

Do not Place finger/thumb, if there is no LED glowing or LEDs are blinking. LED Blinking indicates that scanner has detected sliding finger or Scanner surface is not clean, in such case when Orange LEDs blinks, perform following actions to rectify the issue.

- Clean the scanning surface with a tissue paper or soft cloth.
- Remove fingers and place them back after the LEDs are stable.

Also go through the troubleshooting.xls for more Information.

7. Appendix:

VDM	Vendor-specific Device Manager
ISO 19794-4	Finger image data ISO Standard
NIST	National Institute Of Science and Technology
AFIS	Automated Fingerprint Identification System
LED	Light Emitting Diode
NFIQ	NIST fingerprint Image Quality

8. Contact Us:

Support Team

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