MorphoManager

Quick Installation Guide

SAFRAN
Morpho

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Prerequisites for MorphoManager

This section outlines the requirements for MorphoManager systems.

Computer Hardware Requirements:

Processor:	Dual Core CPU
RAM:	4 GB
Ports:	Three USB ports
Network:	100Mbs Ethernet port required for client/server connections.
Internet Access:	Required for updates. (If no internet access is available, updates can be installed via USB memory stick or CD Rom)

Supported Operating Systems:

- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista SP1
- Microsoft Windows XP SP3
- Windows Server 2003 R2
- Windows Server 2003 R2 SP2
- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2

Installation

There are two configurations for MorphoManager:

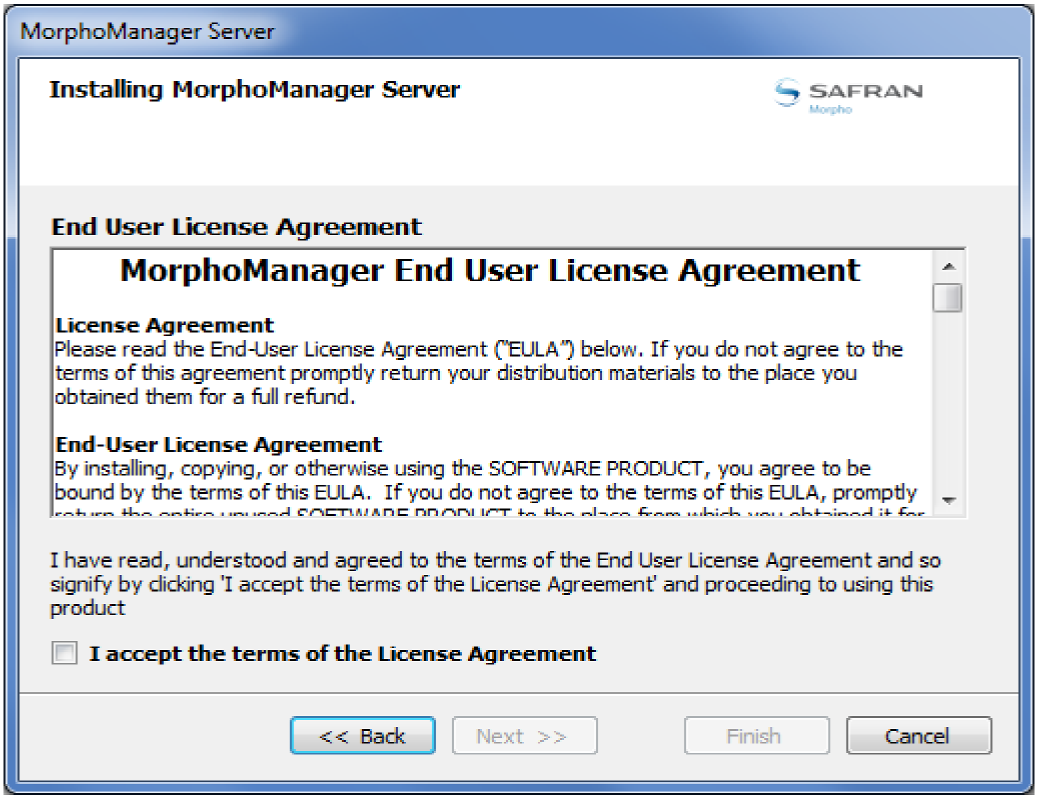
- Client and Server on the same PC

  A PC can have both the client and server software installed. The server software needs to be installed first.

- Server PC and Client PCs

  The server software needs to be installed on the server PC and the client software needs to be installed on each client PC that will connect to the server PC over a LAN or VPN connection. **The server software needs to be installed first**.

Install the Server and Client packages using the defaults given in the software. If the, "I accept the terms of the License Agreement" check off as below is not displayed, cancel the installation and reset the display to Windows default high resolution and regular or small display font.



Installing MorphoManager Server

End User License Agreement

MorphoManager End User License Agreement

License Agreement
Please read the End-User License Agreement ("EULA") below. If you do not agree to the terms of this agreement promptly return your distribution materials to the place you obtained them for a full refund.

End-User License Agreement
By installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, promptly return the entire unused SOFTWARE PRODUCT to the place from which you obtained it for

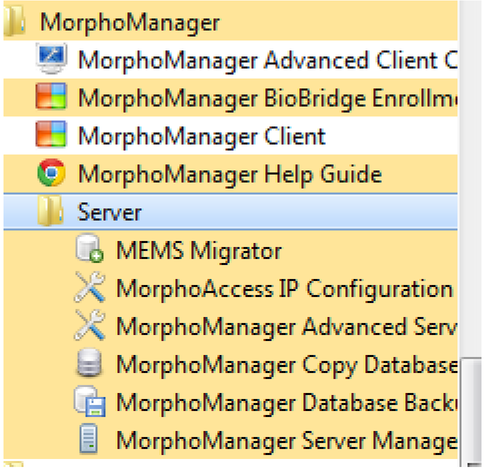
I have read, understood and agreed to the terms of the End User License Agreement and so signify by clicking 'I accept the terms of the License Agreement' and proceeding to using this product

□ I accept the terms of the License Agreement

At the end of the Server installation, it may suggest rebooting the PC. Do not reboot the PC at this point. However, at the end of the Client installation, it will again suggest rebooting the PC; please DO restart/reboot the PC then.

Configuration

After the installation of both the server and the client, under Start, All Programs, there should be a new MorphoManager group created with the following parts.



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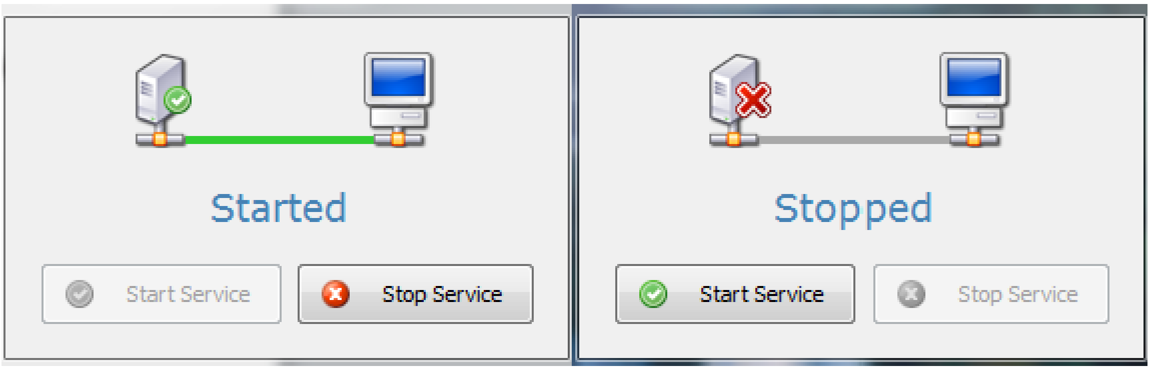
MorphoManager Advanced Serv
MorphoManager Copy Database
MorphoManager Database Back
MorphoManager Server Manage

Server Manager

From the Server Group click on the MorphoManager Server Manager, it should already be running as below. If not, try starting it.



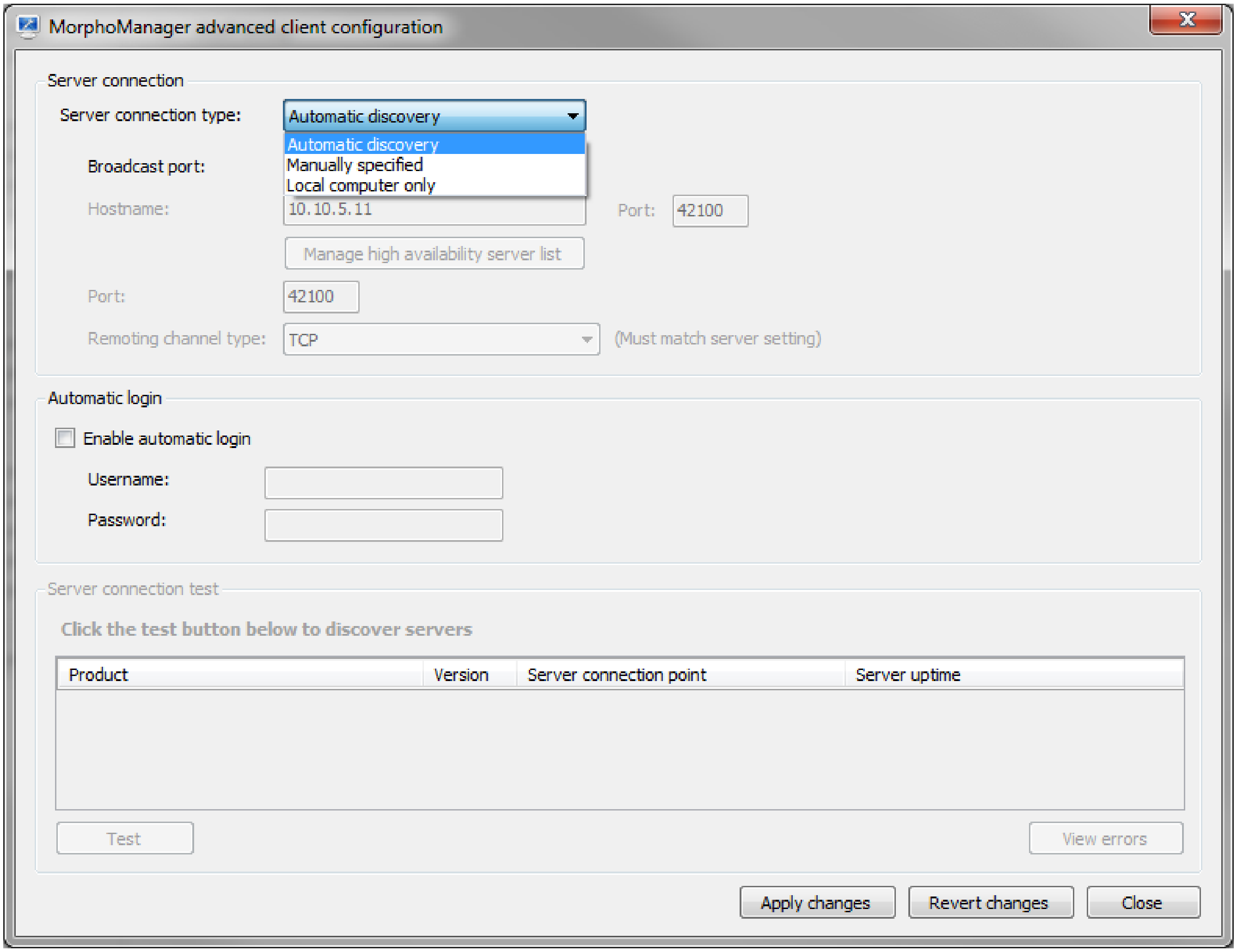
If the server is running, close the Server Manager and continue to Advanced Client Configuration. It’s the first item in the MorphoManager group.

Advanced Client Configuration

For most installations, the default of **Automatic discovery** for the **Server connection type** will be suitable. Select the **Enable automatic login** option and fill in the Username: administrator (all in lower case) and the Password: password (all in lower case). This will save time while setting up and configuring MorphoManager and also speed demos and testing along.

Please note, in permanent installations, it is not recommended to leave the automatic logon enabled or to leave the default user name administrator and the password as password. Please refer to the MorphoManager

Select **Apply changes** button and then select the **Test** button. If using Automatic discovery, the current PC the server is installed on should be displayed. If there is another PC displayed or none, set the **Server Connection type** as **Local computer only**, click **Apply changes,** and then **Close**.



MorphoManager advanced client configuration

Server connection

Server connection type: Automatic discovery

Broadcast port:

Hostname: 10.10.5.11 Port: 42100

Port: 42100

Remoting channel type: TCP (Must match server setting)

Automatic login

□ Enable automatic login

Username:

Password:

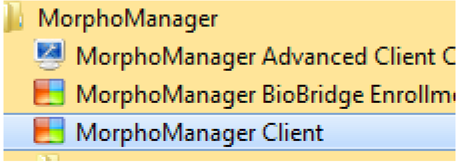
Server connection test

Click the test button below to discover servers

Product	Version	Server connection point	Server uptime

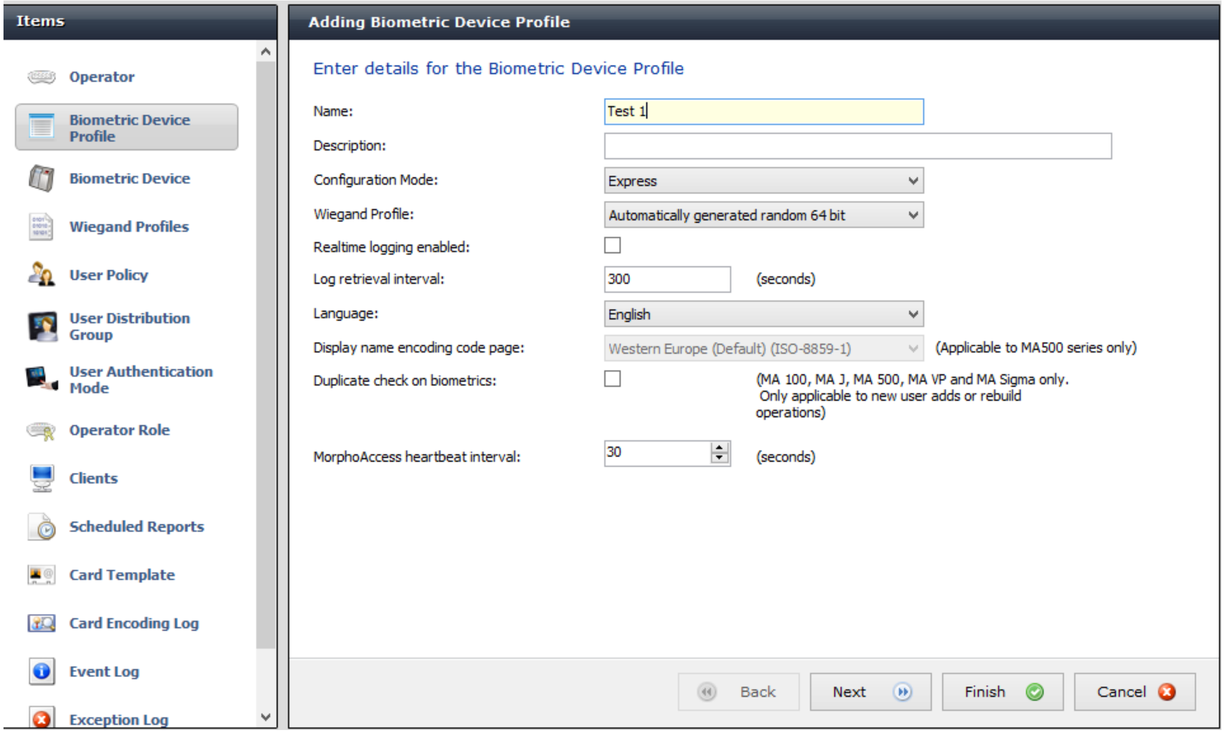
Initial MorphoManager Client Setup

Select the **MorphoManager Client** program icon from Start> All Programs> MorphoManager to launch the application.


MorphoManager
MorphoManager Advanced Client C
MorphoManager BioBridge Enrollm
MorphoManager Client

Adding a Biometric Device Profile

When the Client opens, select the **Administration** tab, then **Biometric Device Profile** from the items list, and lastly the **Add** button in the toolbar.



Adding Biometric Device Profile

Enter details for the Biometric Device Profile

Name: Test 1

Description:

Configuration Mode: Express

Wiegand Profile: Automatically generated random 64 bit

Realtime logging enabled: □

Log retrieval interval: 300 (seconds)

Language: English

Display name encoding code page: Western Europe (Default) (ISO-8859-1) (Applicable to MA500 series only)

Duplicate check on biometrics: □ (MA 100, MA J, MA 500, MA VP and MA Sigma only. Only applicable to new user adds or rebuild operations)

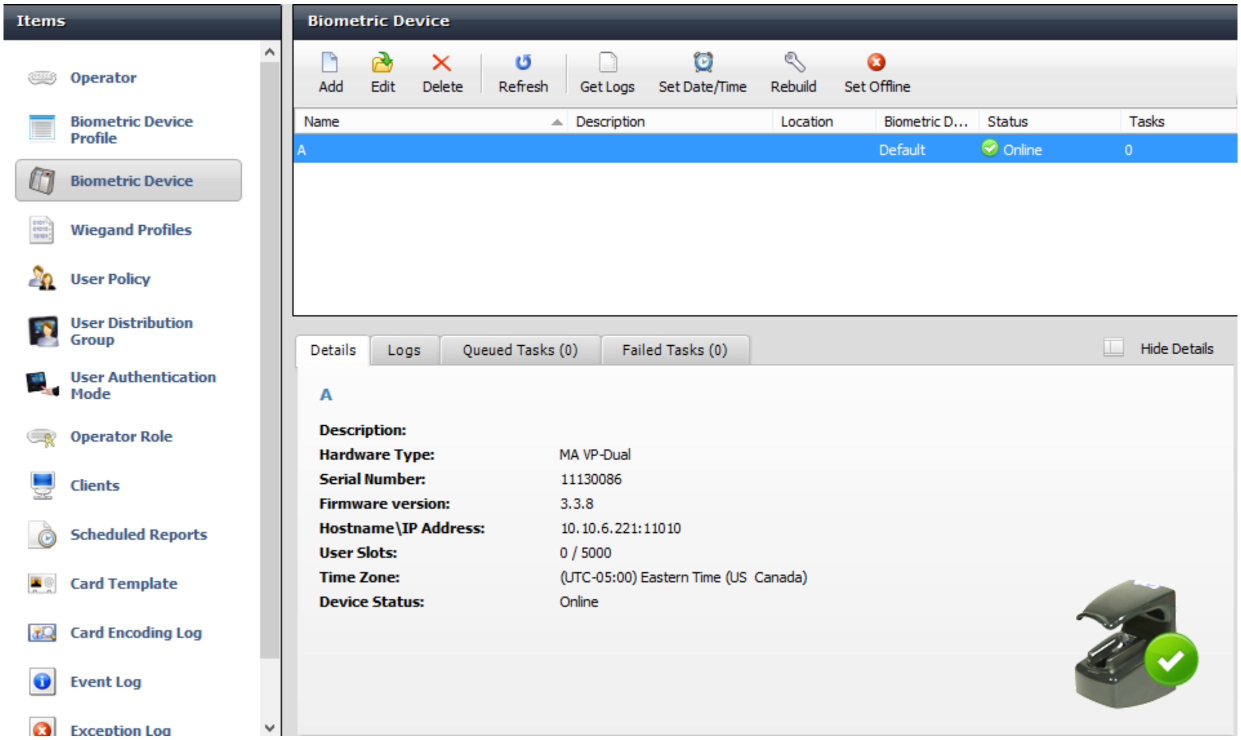
MorphoAccess heartbeat interval: 30 (seconds)

In order to create the most basic profile utilizing biometrics stored on the devices you wish to use, simply give your profile a name and click **Finish**. Please reference the MorphoManager User Manual for more detail on all the various properties that can be assigned to a Biometric Device Profile including the use of smartcards.

If you plan on using a Wiegand Profile, you will need to set the Wiegand Profile for the Biometric Device(s) here. The Wiegand Profile you choose for your devices must marry to the one being utilized for your users set in the User Policy section of this guide.

Adding a Biometric Device

Now that you have created your Biometric Device Profile you can add your Biometric Devices to the system. Select **Biometric Device** from Administration and then click **Add** in the toolbar.

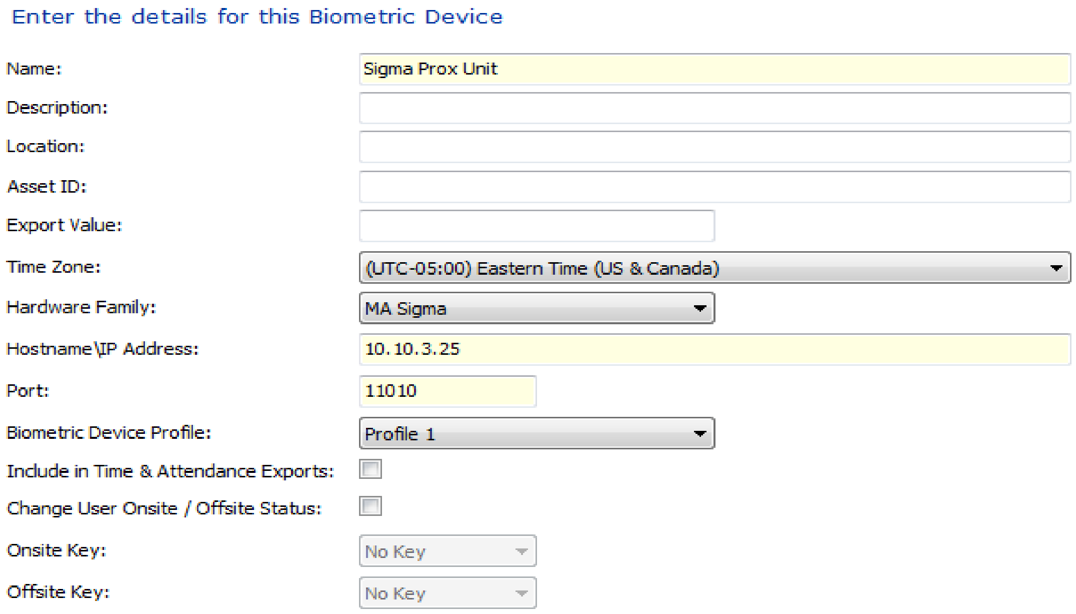


Name	Description	Location	Biometric D...	Status	Tasks
A			Default	Online	0

A

Description:	
Hardware Type:	MA VP-Dual
Serial Number:	11130086
Firmware version:	3.3.8
Hostname\IP Address:	10.10.6.221:11010
User Slots:	0 / 5000
Time Zone:	(UTC-05:00) Eastern Time (US Canada)
Device Status:	Online

On the first wizard screen for adding a device fill out all mandatory information such as the, Name, Hardware Family your device is in, the IP address, and Biometric Device Profile you created. Once you have done so select **Finish**. The device should come online in the list of Biometric Devices.

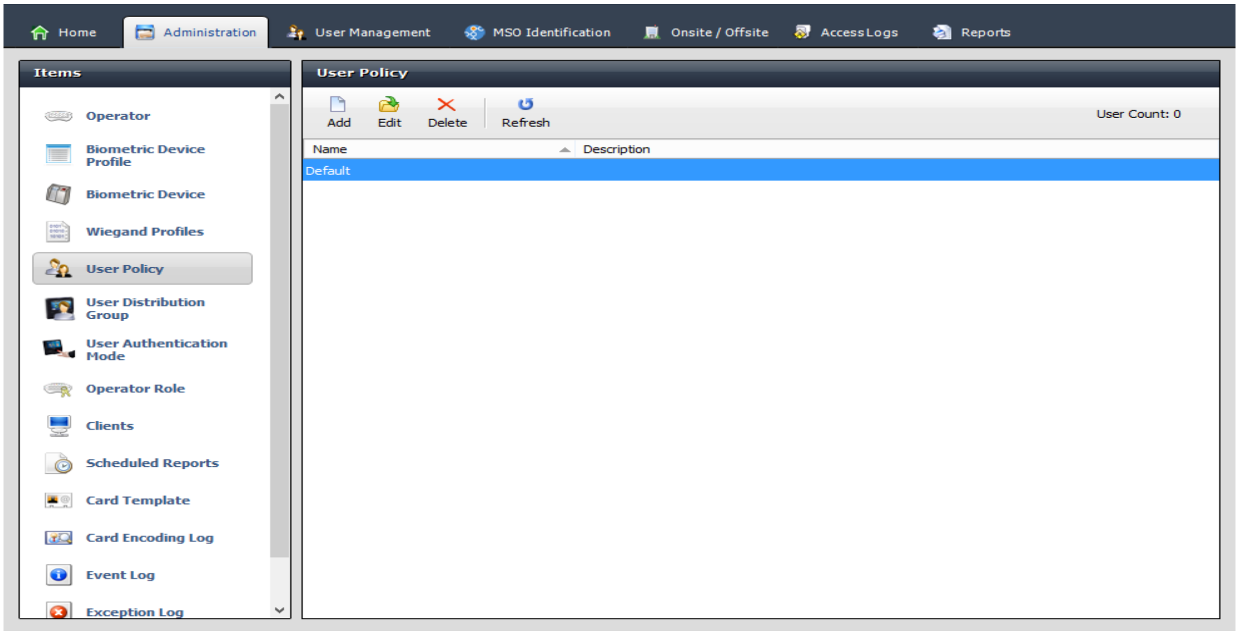


Enter the details for this Biometric Device

Name:	Sigma Prox Unit
Description:	
Location:	
Asset ID:	
Export Value:	
Time Zone:	(UTC-05:00) Eastern Time (US & Canada)
Hardware Family:	MA Sigma
Hostname\IP Address:	10.10.3.25
Port:	11010
Biometric Device Profile:	Profile 1
Include in Time & Attendance Exports:	☐
Change User Onsite / Offsite Status:	☐
Onsite Key:	No Key
Offsite Key:	No Key

User Policy Setup

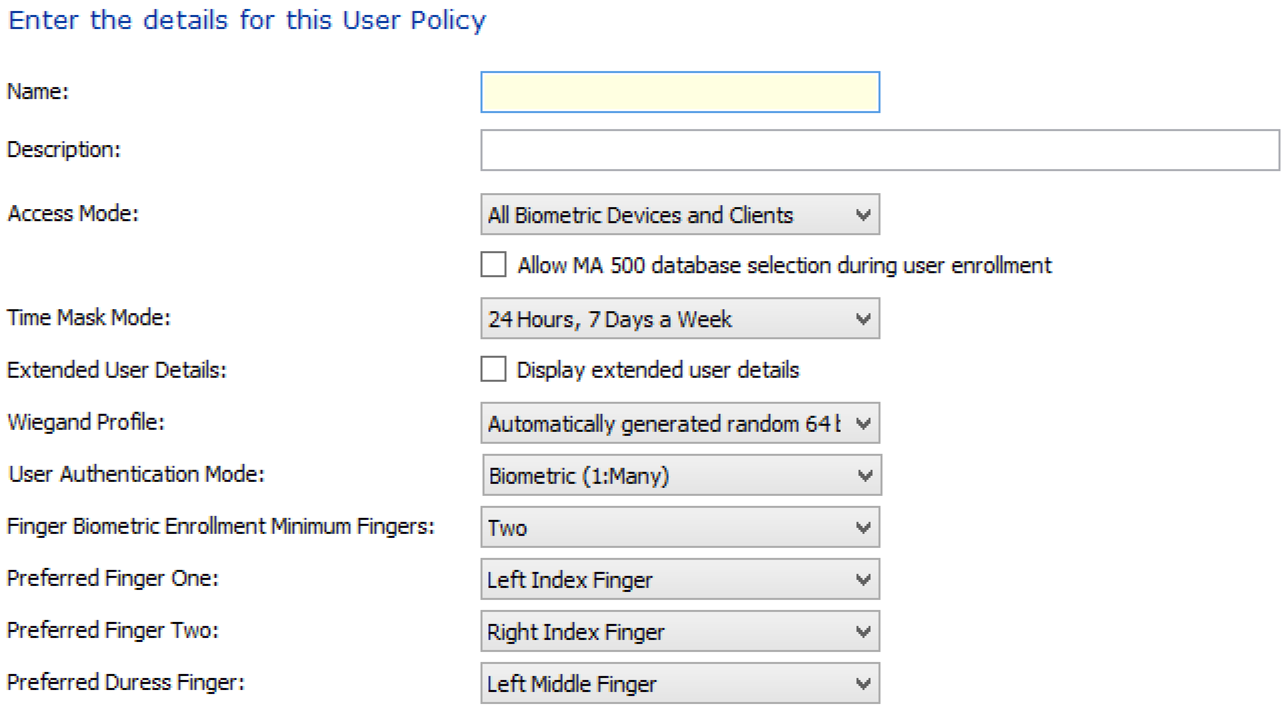
The next step will be to add your User Policy. Select the **User Policy** item on the Administration list



Name	Description
Default	

Select the **Add** icon. On the first wizard screen type in any name preferred and click **Next**.

If you plan on using a Wiegand Profile, you will need to set it here in order for the users enrolled in this User Policy to have a particular Wiegand Profile. The Wiegand Profile you choose for your users must marry to the one you utilize for your biometric access devices set in the Biometric Device Profile section of this guide.



Enter the details for this User Policy

Name:	
Description:	
Access Mode:	All Biometric Devices and Clients
	☐ Allow MA 500 database selection during user enrollment
Time Mask Mode:	24 Hours, 7 Days a Week
Extended User Details:	☐ Display extended user details
Wiegand Profile:	Automatically generated random 64 I
User Authentication Mode:	Biometric (1:Many)
Finger Biometric Enrollment Minimum Fingers:	Two
Preferred Finger One:	Left Index Finger
Preferred Finger Two:	Right Index Finger
Preferred Duress Finger:	Left Middle Finger

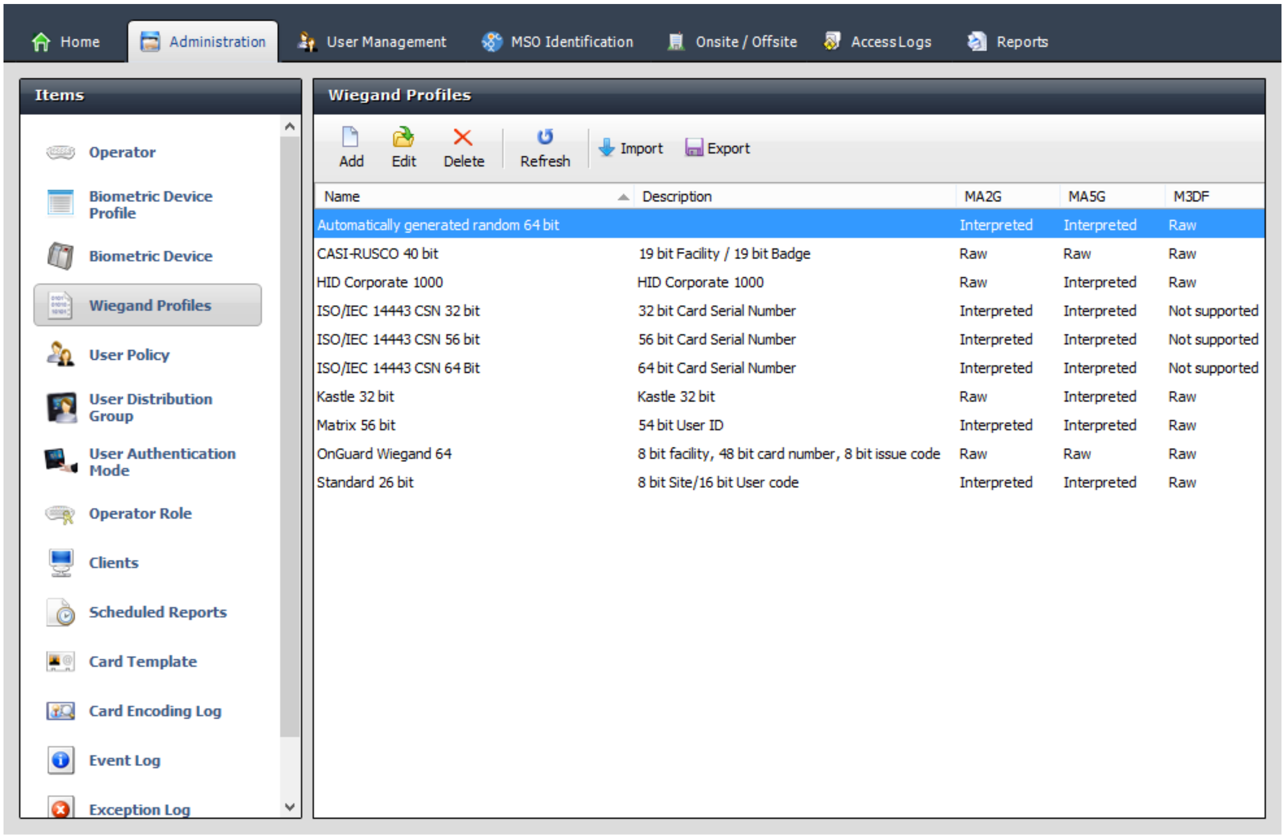
Please reference the MorphoManager User Manual for more detail on all the various properties that can be assigned to a User Policy including Wiegand Profile, Finger Biometric Enrollment Minimum, Fingers, Access Modes and User Authentication Modes.

Wiegand Setup (IMPORTANT!)

Many installations use backend systems that take the Wiegand signals from the MA units and feed them to an access control program/device that decides which people are allowed in and out at what times and through which doors. If being used for demonstrations or tests that do not use this feature, this requires no adjustment.

However, if the Wiegand output will be used, it will be set at the User Policy level from the Wiegand Profile drop down (See User Policy Setup screenshot on page 9). This drop down list reflects all of the Wiegand Profiles in the system. Users that are then added to MorphoManager will take on the Wiegand Profile of their assigned User Policy.

If you need to add a Wiegand Profile to the system, you can import them on the Wiegand Profiles section of Administration.



Name	Description	MA2G	MA5G	M3DF
Automatically generated random 64 bit		Interpreted	Interpreted	Raw
CASI-RUSCO 40 bit	19 bit Facility / 19 bit Badge	Raw	Raw	Raw
HID Corporate 1000	HID Corporate 1000	Raw	Interpreted	Raw
ISO/IEC 14443 CSN 32 bit	32 bit Card Serial Number	Interpreted	Interpreted	Not supported
ISO/IEC 14443 CSN 56 bit	56 bit Card Serial Number	Interpreted	Interpreted	Not supported
ISO/IEC 14443 CSN 64 Bit	64 bit Card Serial Number	Interpreted	Interpreted	Not supported
Kastle 32 bit	Kastle 32 bit	Raw	Interpreted	Raw
Matrix 56 bit	54 bit User ID	Interpreted	Interpreted	Raw
OnGuard Wiegand 64	8 bit facility, 48 bit card number, 8 bit issue code	Raw	Raw	Raw
Standard 26 bit	8 bit Site/16 bit User code	Interpreted	Interpreted	Raw

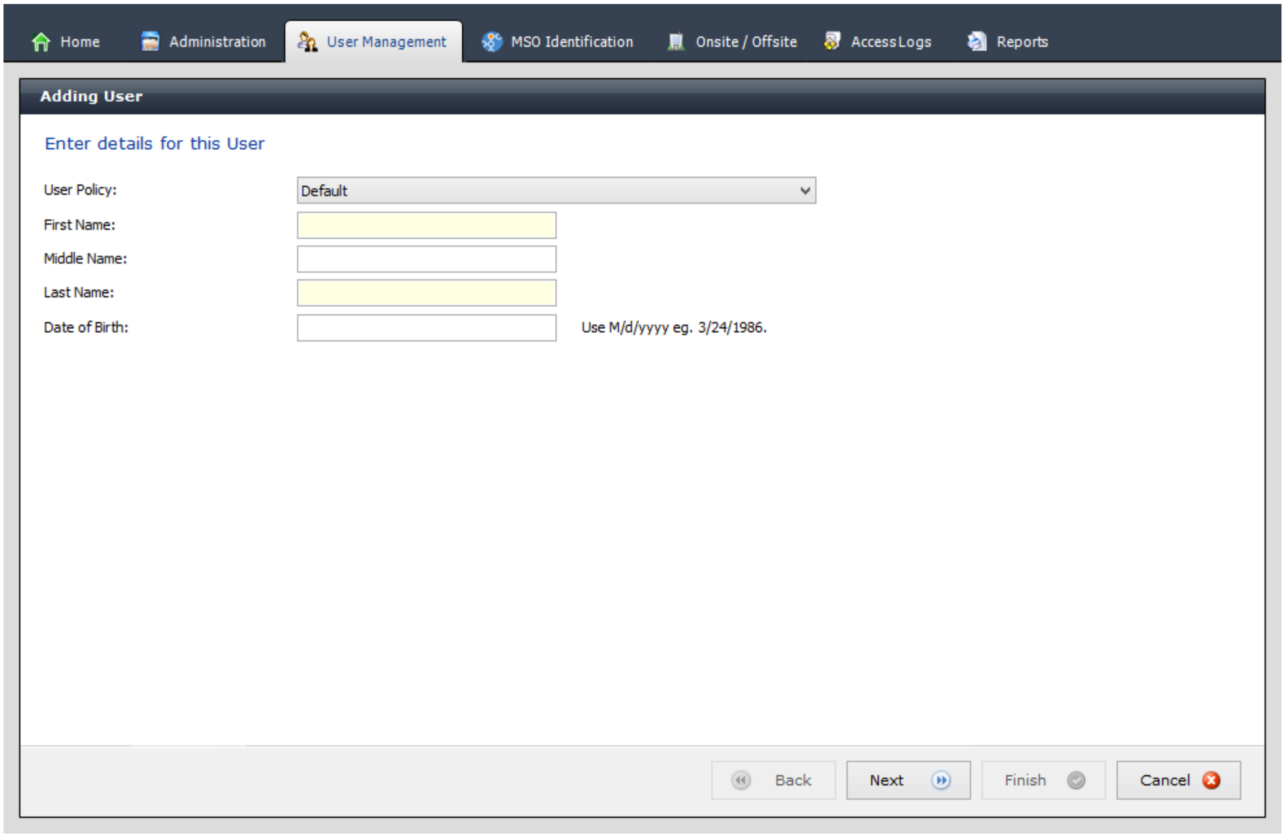
User Management and Adding Users

Users are people who will have their biometric data (or minutia) sent to the selected Biometric Device for identification purposes for either access control or time and attendance. Select the **User Management** tab to access this area.

To create a new user, select the **Add** button on the Toolbar. This will display the User Wizard.

Screen 1 – User Details

Enter the details for the new user.



Adding User

Enter details for this User

User Policy: Default

First Name:

Middle Name:

Last Name:

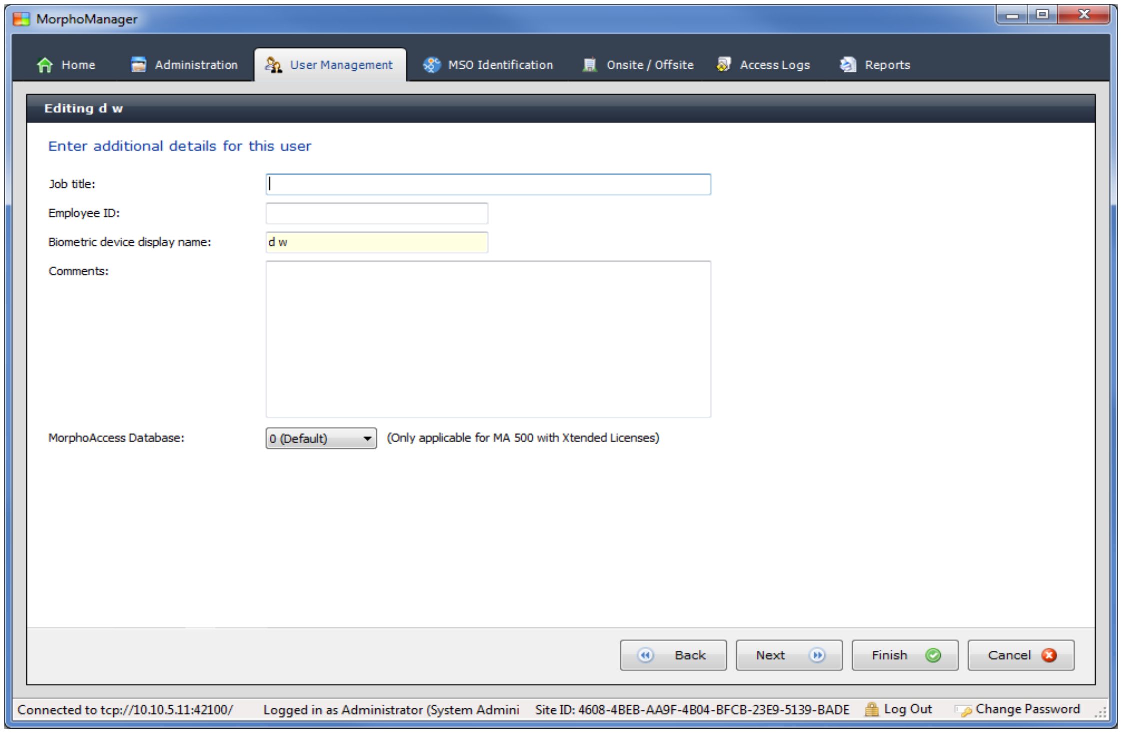
Date of Birth: Use M/d/yyyy eg. 3/24/1986.

User Policy: Select the User Policy that this user will belong to. This is an important selection, as the User Policy will determine Biometric Device access as well as other access control and time & attendance settings.

First Name: User's first Name **(Required)**

Last Name: User's Last Name **(Required)**

Screen 2 – Additional Details



Editing d w

Enter additional details for this user

Job title:

Employee ID:

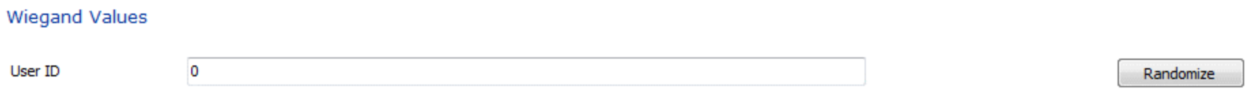
Biometric device display name: d w

Comments:

MorphoAccess Database: 0 (Default) (Only applicable for MA 500 with Xtended Licenses)

Connected to tcp://10.10.5.11:42100/ Logged in as Administrator (System Admini Site ID: 4608-4BEB-AA9F-4B04-BFCB-23E9-5139-BADE

Screen 3 – Wiegand Details (If a Wiegand Profile is set)

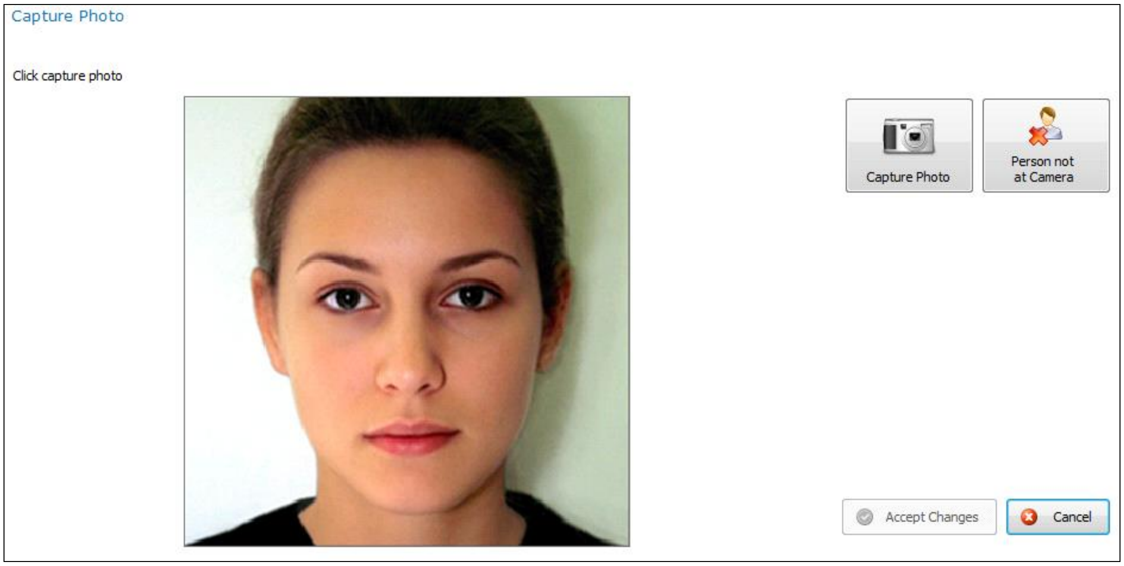


Wiegand Values

User ID 0

A User ID can be added manually or a random one can be generated by clicking **Randomize**.

Screen 4 – Photo Capture

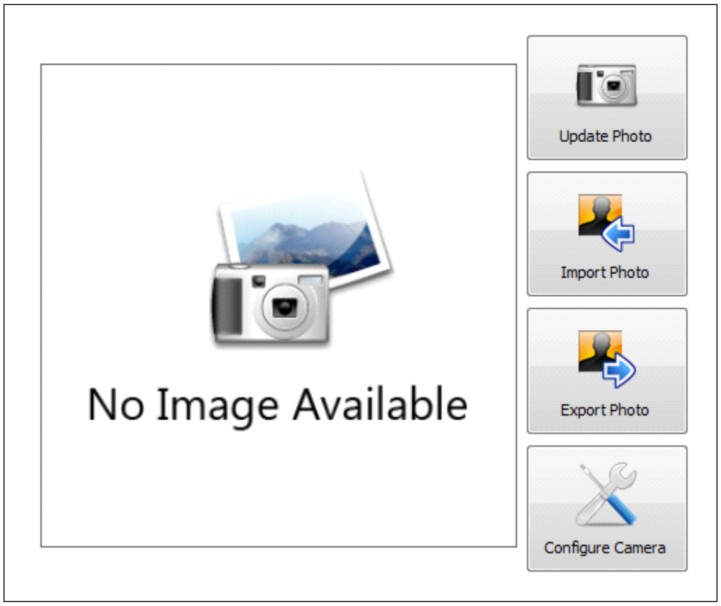


Capture Photo

Click capture photo

Position the person in front of a plain background so that all of their face is visible in the picture, similar to a passport photo. Once the user is positioned correctly click **Capture Photo**. Click on the image in the top left corner and drag towards the bottom right drawing a square around the part of the photo to keep. This can be done many times until the correct area is selected. Click **Accept Changes** to accept the changes if no camera is connected just click **Next**.

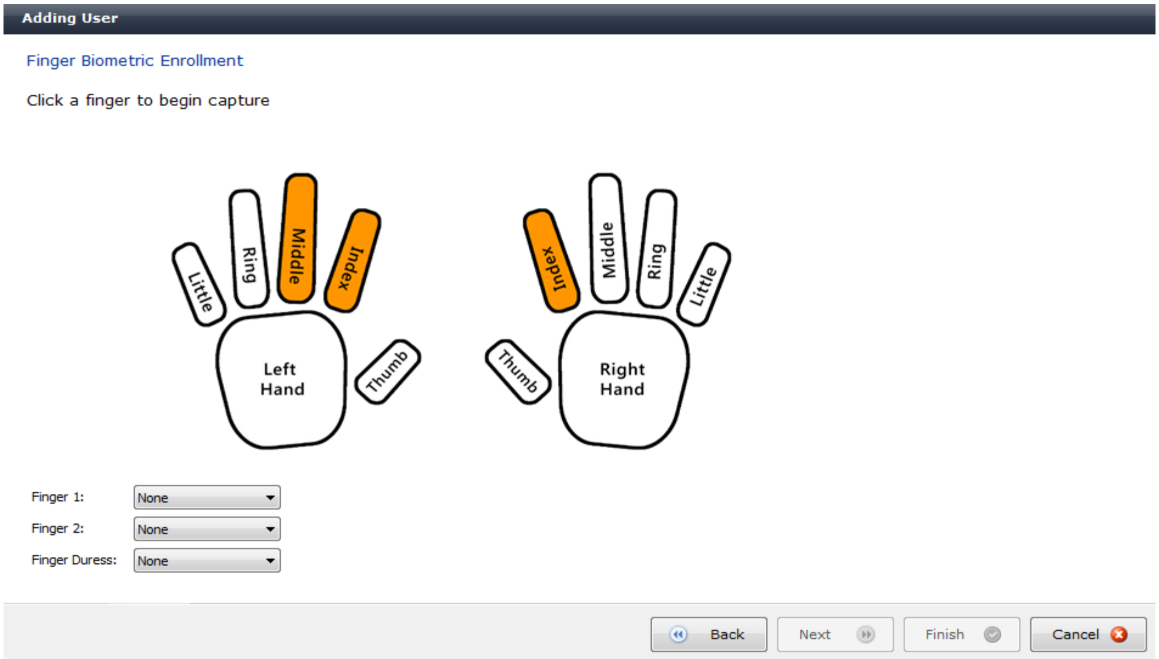
If the person is not available to have their photo taken, click **Person not at Camera**, to skip photo capture.



No Image Available

If the photo is not acceptable, click **Update Photo** to recapture the photo. Photos can be imported and exported using the corresponding buttons. Additional configuration options for the camera can be changed by clicking on **Configure Camera**.

Screen 5 – Fingerprint Capture



Adding User

Finger Biometric Enrollment

Click a finger to begin capture

Finger 1: None

Finger 2: None

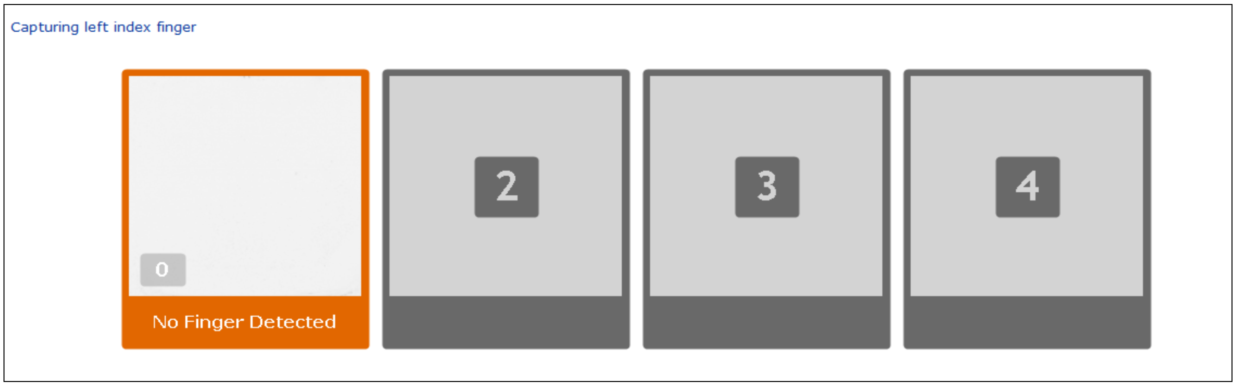
Finger Duress: None

The default fingers that the system suggests you enroll is defined in the User Policy settings (page 9) that your user is assigned to on the first wizard screen of this process. In this example both Index Fingers and the left Middle Finger are flashing orange based on the User Policy settings defining "Finger Biometric Enrollment Minimum Fingers", "Preferred Finger One", "Preferred Finger Two", and "Preferred Duress Finger".

You do not need to use these fingers as you can click on others.

The User Policy setup is usually set to expect at least two fingers to be enrolled so that the user will still have access should one fingerprint become unreadable due to minor events, such as knife cuts, Band-Aids etc.

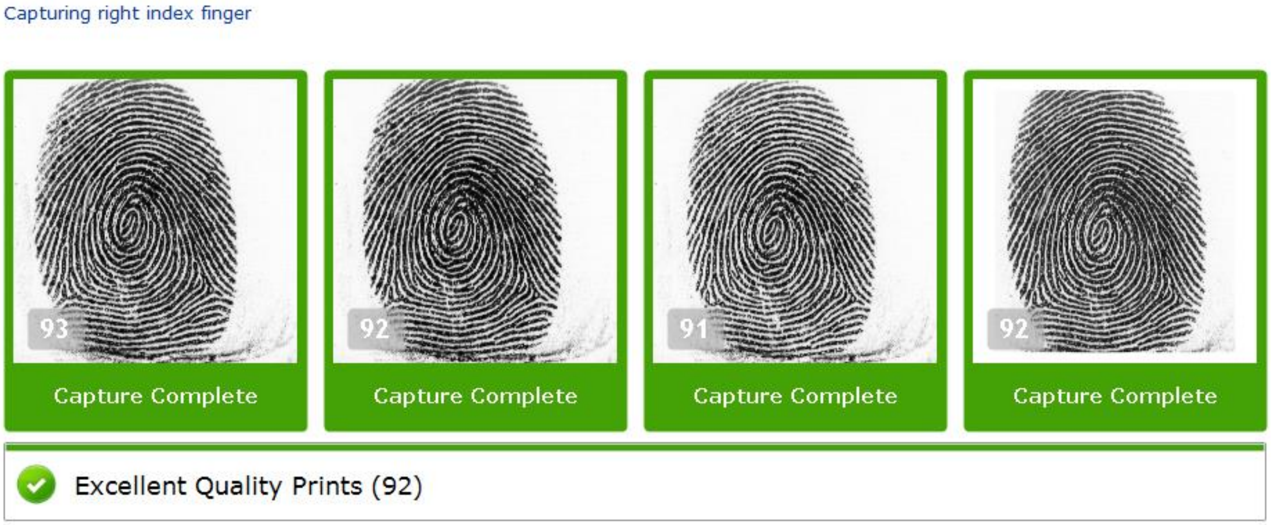
Click on a finger. If the reader is connected correctly the following screen will be displayed.



Capturing left index finger

Have the user place their finger in the center of the scanner glass. You will then see the print appear on screen. There are four scans performed on each finger; the first three are used to create the biometric template. The fourth print is used for verification purposes. Below each enrollment image a color bar will be displayed indicating the quality of the print as it is being captured. Green indicates quality is above recommended quality. Orange indicates the quality is above the minimum but below the recommended quality. Operators with administrative rights are permitted to accept fingerprints of this quality. Red indicates the quality is below the minimum.

Follow the instructions on screen. Green indicates ready to capture. Orange indicates that a finger is presented but the capture has not finished yet. Check the instructions to ensure the finger is placed correctly. Continue until all boxes are filled as in the image below.



Capturing right index finger

Capture Complete

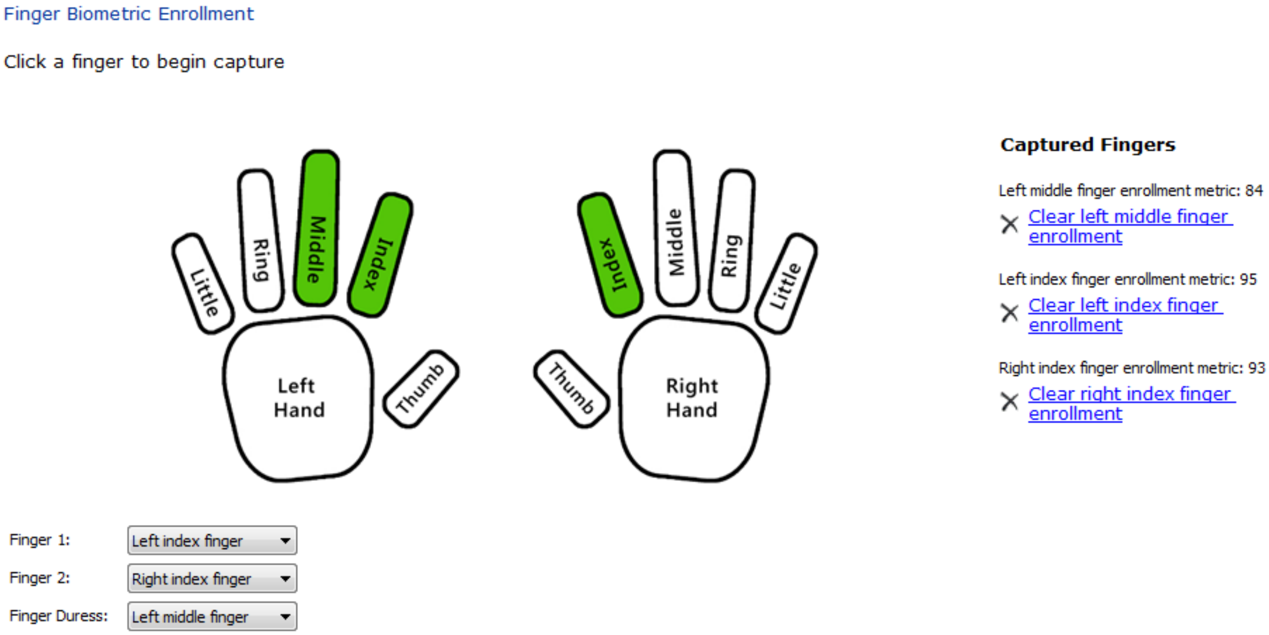
Capture Complete

Capture Complete

Capture Complete

✓ Excellent Quality Prints (92)

Once the enrollment is complete for both the fingers, you will see this screen. Captured finger quality is displayed on the right. In the event a user is not being recognized at any Biometric Device with one or both enrolled fingers, click **Clear <*enrolled finger*> finger enrollment** to allow re-enrollment.



Finger Biometric Enrollment

Click a finger to begin capture

Captured Fingers

Left middle finger enrollment metric: 84

× Clear left middle finger enrollment

Left index finger enrollment metric: 95

× Clear left index finger enrollment

Right index finger enrollment metric: 93

× Clear right index finger enrollment

Finger 1: Left index finger

Finger 2: Right index finger

Finger Duress: Left middle finger

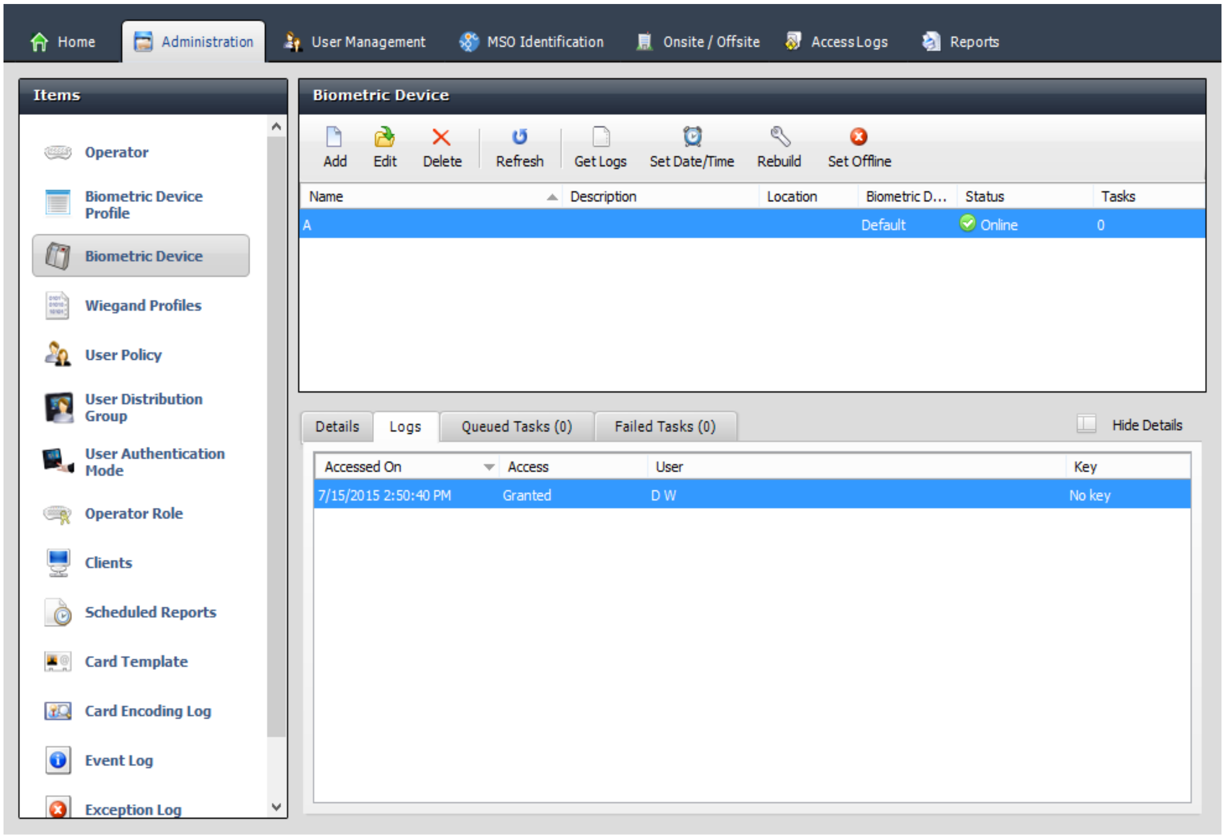
Positive Identification and general performance of MorphoManager is maximized by the quality of the fingerprint captured during enrollment. MorphoManager has been designed to reject poor quality fingerprints; however it is still possible they may slip through.

The key to capturing a high quality fingerprint is to visually look for a clearly presented pattern that is centered and square with the right amount of pressure. Don't hesitate to retry the capture if you are unsatisfied. For assistance refer to the fingerprint capture guide in the MorphoManager User Manual. Click **Finish** to save the user or cancel to discard changes.

Testing the Added Users

Once enrollment is complete, the user's record is sent to any connected Biometric Devices authorized for that User and their User Policy. The Biometric Device unit will very briefly flash and then the fingerprint pad light will come on.

Presenting the enrolled finger will trigger a green flash and maybe hear a slight buzz and or click if the relay fires on the unit. In any event, select the **Administration** tab, select **Biometric Device**, and then select the unit the finger was presented to (it may be already selected if it is the only one present). Finally, select the **Get Logs** tab for that unit and confirm **Yes** to the confirmation message.



Name	Description	Location	Biometric D...	Status	Tasks
A			Default	Online	0

Accessed On	Access	User	Key
7/15/2015 2:50:40 PM	Granted	D W	No key

If the log tab is not displayed as above, select the **Show Details** icon in the lower right on the screen.