

\*\*\*You must have experience with Morpho Tool Box and Morpho Manager

You need to know Prox card formats or have that information before attempting the following

# How to have Two or more Prox Card formats with the Sigma family line



This PDF is only for the Sigma Prox Lite, Sigma Extreme Prox, Sigma Prox, MWC



You can create up to 8 different Prox card Formats.



# First Step

First Step download and install the Morpho Tool Box, does not matter what version (the next screen shots is with the 4.2.X version)

You can get the Morpho Tool box from the

<http://service.morphotrak.com/software-links.html>

# Second Step


## Connect to the reader

Terminal Type

**Connection information**

TCP / IP  Serial

Address type  IP4  IP6  Host Name

 Address

Port

Timeout  Seconds [5-30]

Use SSL / TLS

Terminal CA certificate path

Client certificate path

Client certificate password

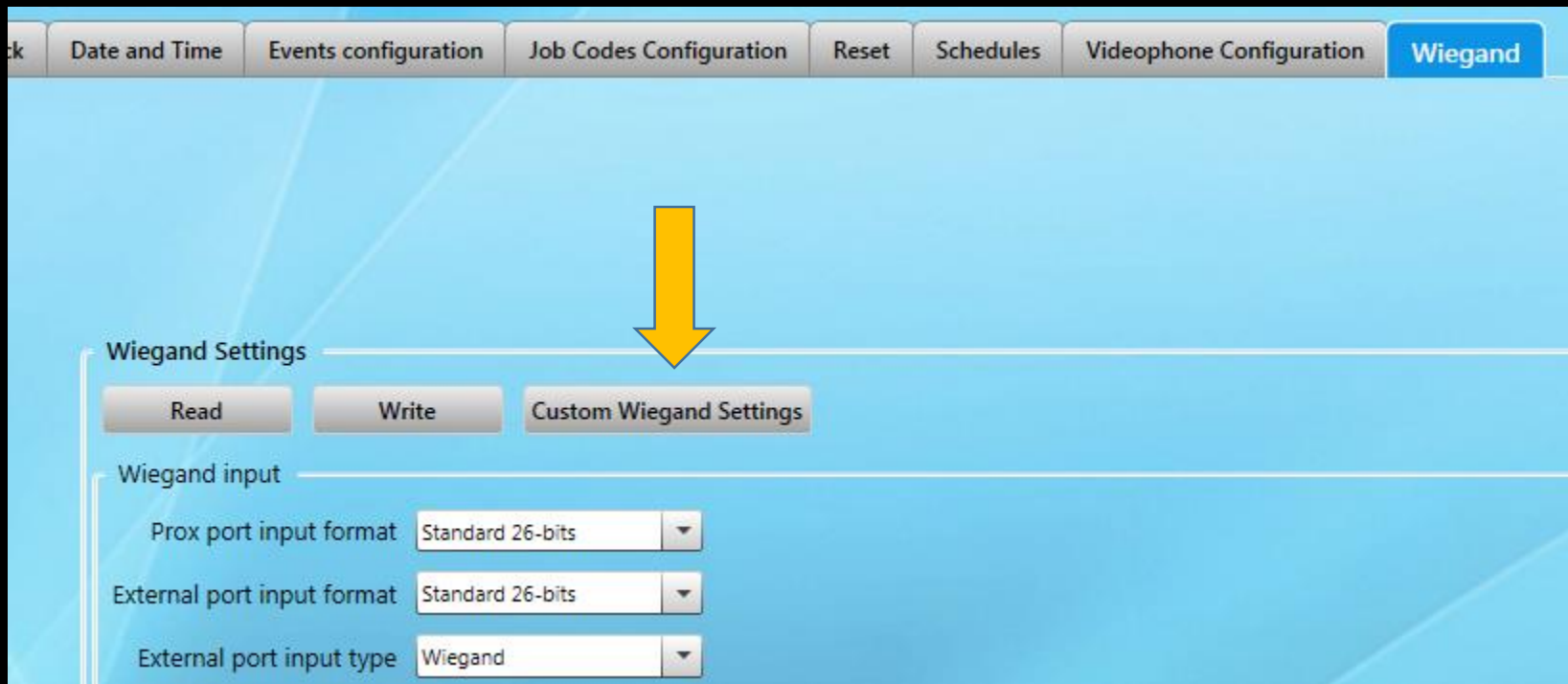
# Configuration Wiegand set up

Click on Second Icon down last tab Wiegand

The screenshot displays the IDEMIA configuration web interface. At the top, a navigation bar contains several tabs: 'Manage Configuration Keys', 'Controller Feedback', 'Date and Time', 'Events configuration', 'Job Codes Configuration', 'Reset', 'Schedules', 'Videophone Configuration', and 'Wiegand'. The 'Wiegand' tab is selected and highlighted in blue. On the left side, a vertical sidebar contains six icons. A yellow arrow points to the second icon from the top, which depicts a computer monitor with a gear icon. The main content area is titled 'Wiegand Settings' and features three sub-tabs: 'Read', 'Write', and 'Custom Wiegand Settings'. The 'Write' sub-tab is active. Under the 'Wiegand input' section, there are three dropdown menus: 'Prox port input format' (Standard 26-bits), 'External port input format' (Standard 26-bits), and 'External port input type' (Wiegand). Below this, there is a section for 'Active wiegand output' which is currently unchecked. This section includes several dropdown menus for 'Verification pass', 'Verification fail', 'Identification pass', 'Identification fail', 'Duress', and 'Tamper', along with input fields for 'Pulse width' (60) and 'Pulse interval' (2000). At the bottom, the 'External port output type' is set to 'Wiegand'. A second yellow arrow points to the 'Wiegand' tab in the top navigation bar.

# Configuration Wiegand set up

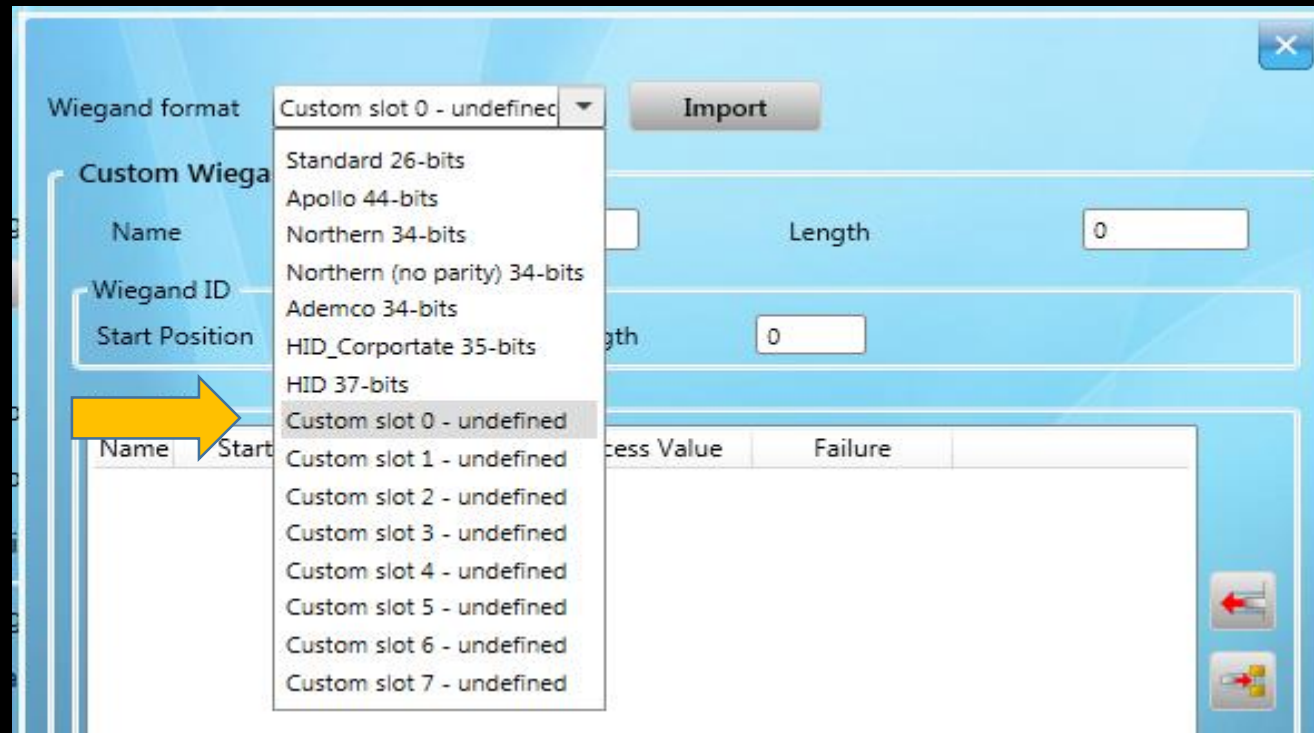
Click on Custom Wiegand settings





# Configuration Wiegand set up

Pick one of the Custom Slots(only use Custom slots)



# Configuration Wiegand set up

Fill in what is required (not shown you can add parity as well)



Wiegand format: Custom slot 0 - undefined

**Custom Wiegand**

Name: 26 bit format Length: 26

**Wiegand ID**

Start Position: 9 Length: 16

**User fields**

Name	Start Position	Length	Success Value	Failure
Site Code	1	9	225	0

Two yellow arrows point to the 'Start Position' input fields in the 'Wiegand ID' and 'User fields' sections.

# Configuration Wiegand set up

Create your format and hit write at the bottom

Wiegand format: Custom slot 0 - undefinec

**Custom Wiegand**

Name: 26 Length: 26

Wiegand ID


Start Position: 9 Length: 16

**User fields**

Name	Start Position	Length	Success Value	Failure
Site code	1	8	225	0

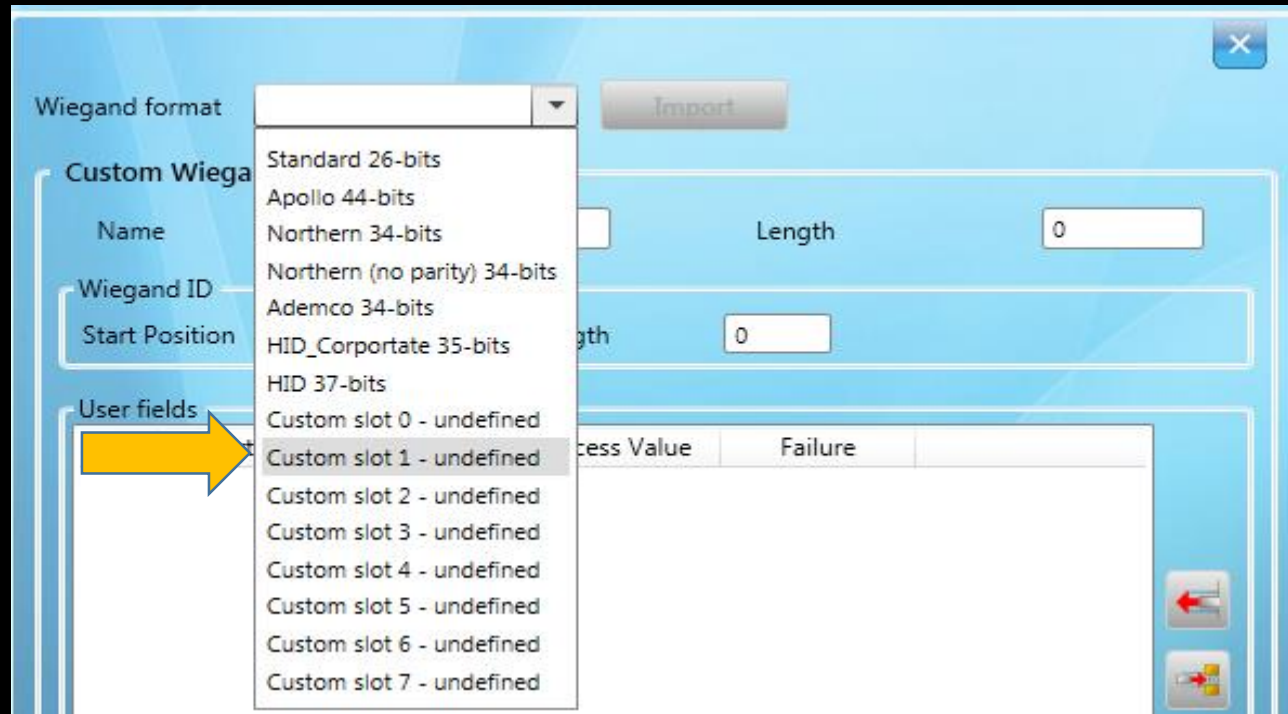
**Parity bits**

Bit Position	Parity Type	Parity Mask
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# Configuration Wiegand set up

Create your second Format with a new Custom Slot



# Configuration Wiegand set up

Fill in what is required

The screenshot shows a configuration window for a Wiegand interface. At the top, there is a dropdown menu for 'Wiegand format' set to 'Custom slot 1 - undefinec' and an 'Import' button. Below this is a 'Custom Wiegand' section with a 'Name' field containing '35 format' and a 'Length' field containing '35'. Underneath is a 'Wiegand ID' section with a 'Start Position' field containing '14' and a 'Length' field containing '35'. A yellow arrow points to the 'Start Position' field. Below that is a 'User fields' table with the following data:

Name	Start Position	Length	Success Value	Failure
Site Code	2	12	123	0

A second yellow arrow points to the 'Success Value' field in the 'Site Code' row. At the bottom right of the table, there are two icons: a red arrow pointing left and a multi-colored circular icon.

# Configuration Wiegand set up

When finish hit write at the bottom

Wiegand format: Custom slot 1 - undefined [Import]

**Custom Wiegand**

Name: 35 Format Length: 35

Wiegand ID

Start Position: 14 Length: 35

**User fields**

Name	Start Position	Length	Success Value	Failure
Site Code	2	12	123	0

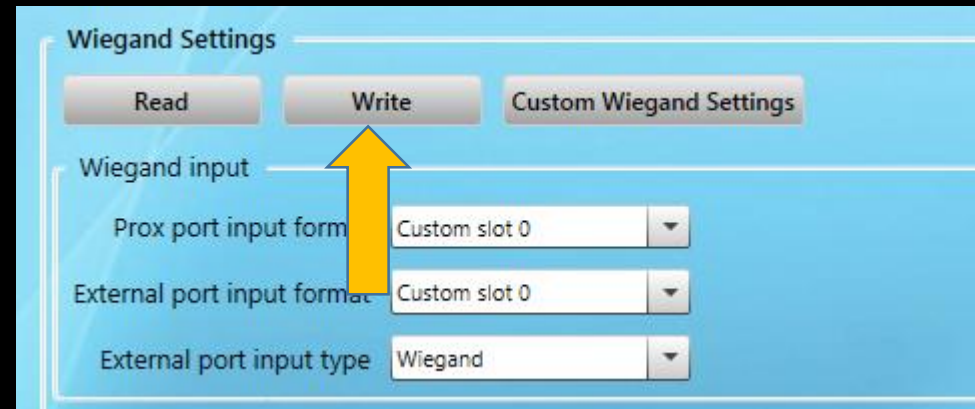
**Parity bits**

Bit Position	Parity Type	Parity Mask
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[Export] [Read] [Write] [Cancel]

# Configuration Wiegand set up

When finish with all your formats make sure you hit Write on the main page



The screenshot shows a software interface titled "Wiegand Settings". At the top, there are three buttons: "Read", "Write", and "Custom Wiegand Settings". Below these buttons is a section labeled "Wiegand input" containing three dropdown menus. The first dropdown is labeled "Prox port input form" and is set to "Custom slot 0". The second dropdown is labeled "External port input format" and is also set to "Custom slot 0". The third dropdown is labeled "External port input type" and is set to "Wiegand". A yellow arrow points from the "Write" button down to the "Prox port input form" dropdown.

## Third Step

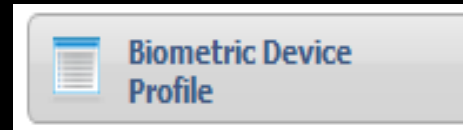
# Morpho Manager Configuration

The next screen shots are all with Morpho Manager software



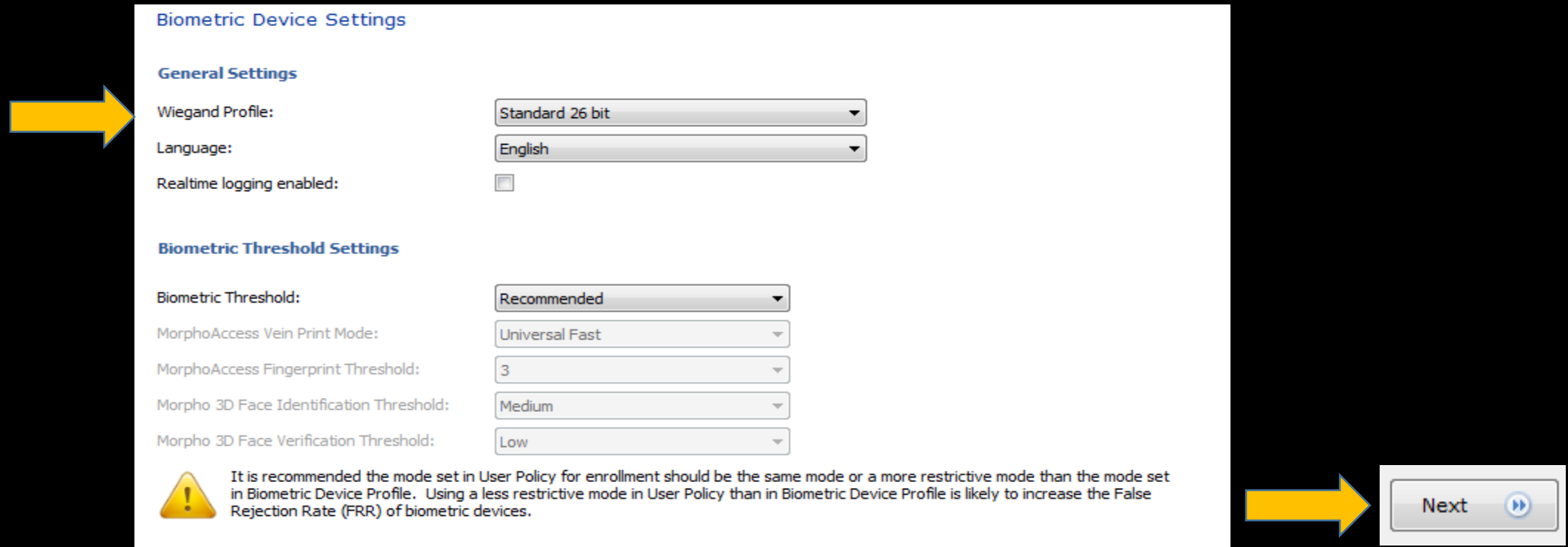
# Morpho Manager Configuration(BDP)

Edit or create your Biometric Device Profile(BDP)



# Morpho Manager Configuration(BDP)

The Biometric Device settings for wiegand profile is not needed to be set to any specific format



**Biometric Device Settings**

**General Settings**

Wiegand Profile: Standard 26 bit

Language: English

Realtime logging enabled:

**Biometric Threshold Settings**


Biometric Threshold: Recommended


MorphoAccess Vein Print Mode: Universal Fast

MorphoAccess Fingerprint Threshold: 3

Morpho 3D Face Identification Threshold: Medium

Morpho 3D Face Verification Threshold: Low


 It is recommended the mode set in User Policy for enrollment should be the same mode or a more restrictive mode than the mode set in Biometric Device Profile. Using a less restrictive mode in User Policy than in Biometric Device Profile is likely to increase the False Rejection Rate (FRR) of biometric devices.

Next 

# Morpho Manager Configuration(BDP)

The Biometric Device settings for Multi-Factor Mode needs to be set to Proximity Card

**Multi-Factor Mode Settings**

Multi-Factor Mode:  Proximity Card

Contactless Smart Card Mode: Contactless Smart Card


**Morpho 3D Face Multi-Factor Mode**

Mode: Biometric Only

**MA 100, MA J, MA 500, MA VP Multi-Factor Mode**

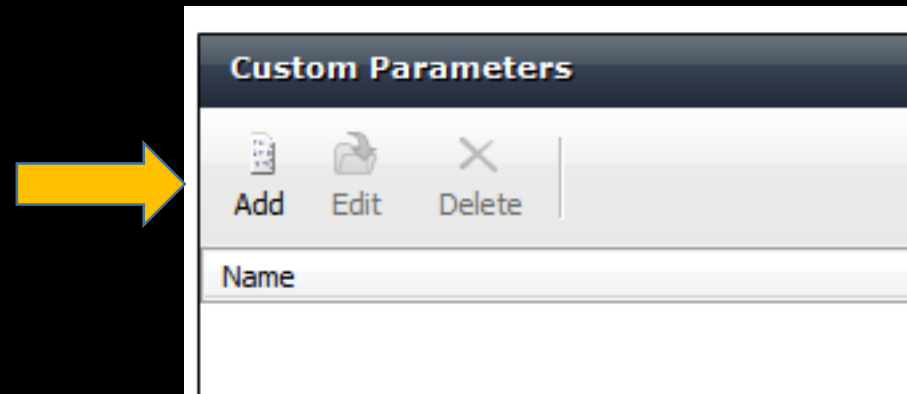
Mode: Biometric Only



Next 

# Morpho Manager Configuration(BDP)

Click next till you get to Custom Parameters



# Morpho Manager Configuration(BDP)

In Custom Parameters please add the following keys:

wiegand.event\_verify\_pass to 18-sends out different wiegand formats  
wiegand.prox\_port\_input\_format to 18- reads different Wiegand inputs  
wiegand.site\_code\_propagation to 1- reads different FC on the card

Name	Value
wiegand.event_verify_pass	18
wiegand.prox.port_input_format	18
wiegand.site_code_propagation	1



# Morpho Manager Configuration Wiegand

User Policy Wiegand value



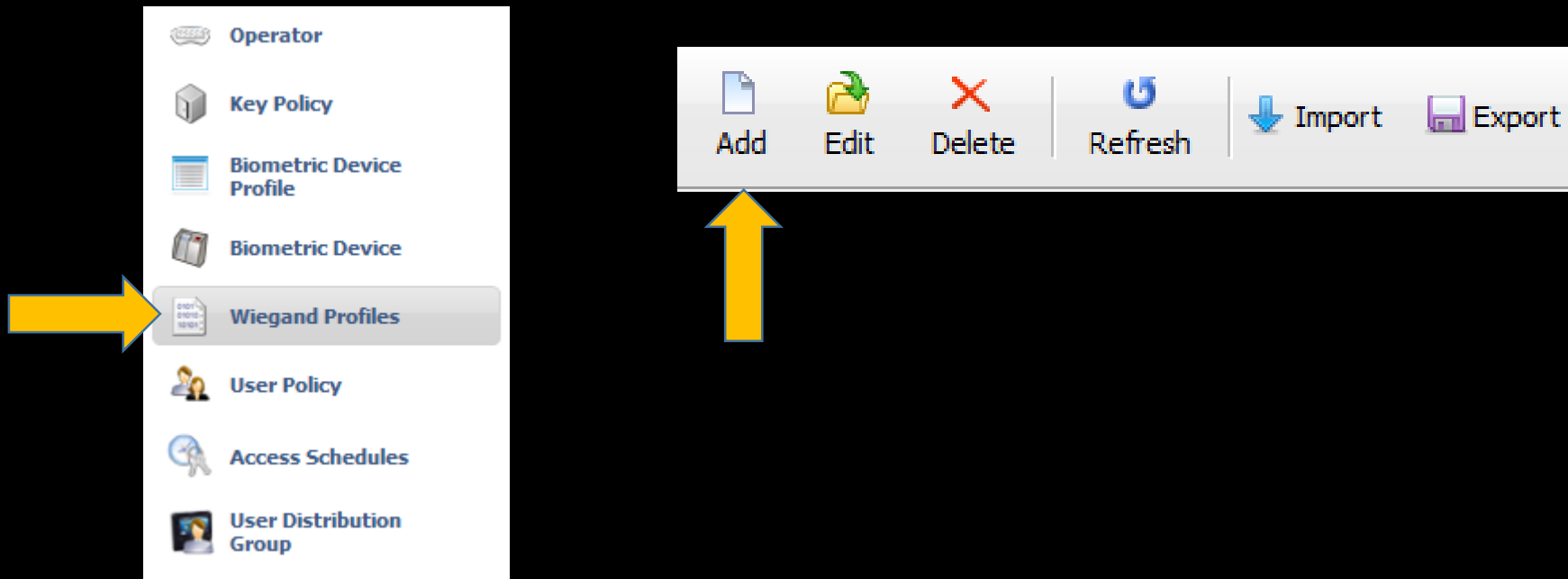
# Morpho Manager Configuration Wiegand

In this Example I have two different formats 35 bit and 26 bit format.

In Morpho Manager under Wiegand profile create a new wiegand format, create the format that is the highest bits.

# Morpho Manager Configuration Wiegand

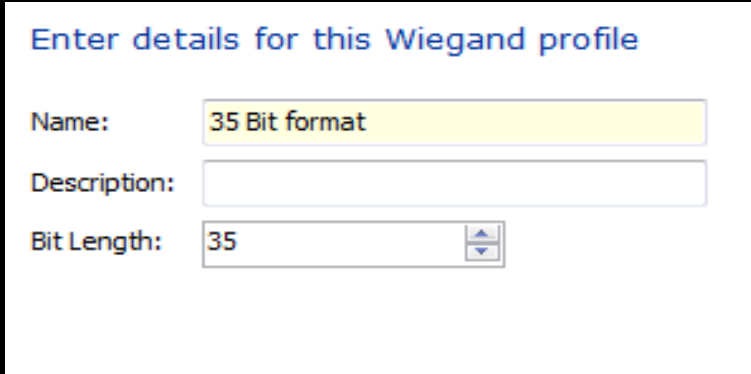
Under Wiegand Format create a new format with the highest value in this example 35





# Morpho Manager Configuration Wiegand

Under Wiegand Format create a new format with the highest value in this example 35



Enter details for this Wiegand profile

Name: 35 Bit format

Description:

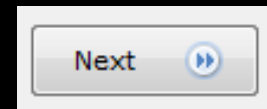
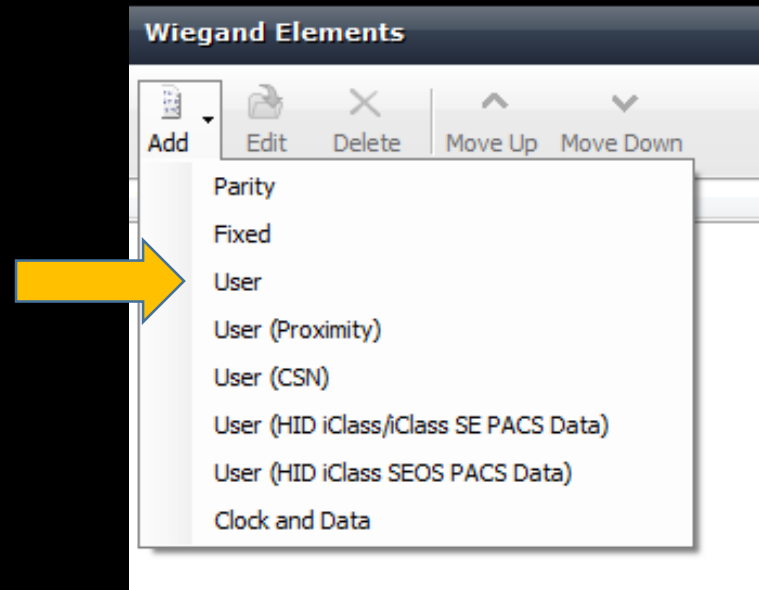
Bit Length: 35

Next

The image shows a configuration window titled "Enter details for this Wiegand profile". It contains three input fields: "Name" with the value "35 Bit format", "Description" which is empty, and "Bit Length" with the value "35". A yellow arrow points from the left towards the "Name" field. Another yellow arrow points from the "Next" button on the right towards the right edge of the frame.

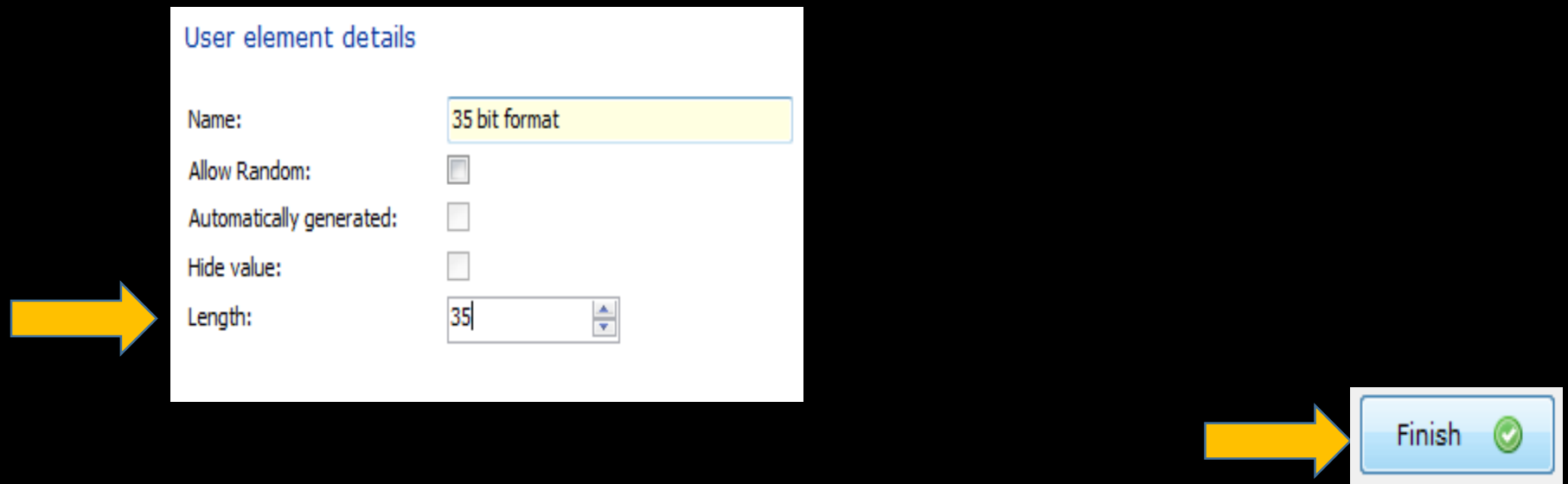
# Morpho Manager Configuration Wiegand

Add User




# Morpho Manager Configuration Wiegand

Name it and the length is going to be the highest value in this example 35



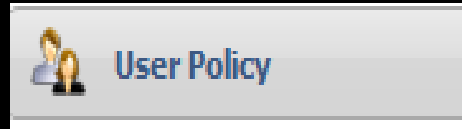
The screenshot displays the 'User element details' configuration window. A yellow arrow points to the 'Length' field, which is set to 35. Another yellow arrow points to the 'Finish' button, which includes a green checkmark icon.

User element details	
Name:	35 bit format
Allow Random:	<input type="checkbox"/>
Automatically generated:	<input type="checkbox"/>
Hide value:	<input type="checkbox"/>
Length:	35

Finish 

# Morpho Manager (UP)

Create or Edit your User Policy



# Morpho Manager (UP)

Use the Wiegand Profile that you created earlier.  
(The highest bit format)

Enter the details for this User Policy

Name:

Description:

Access Mode:   Allow MA 500 database selection during user enrollment

Access Schedule:

Extended User Details:  Display extended user details

Wiegand Profile:

User Authentication Mode:

Show Photo Capture Page:




# Morpho Manager User Management

Enrollment:

Use the User Policy we created earlier

Enter details for this User

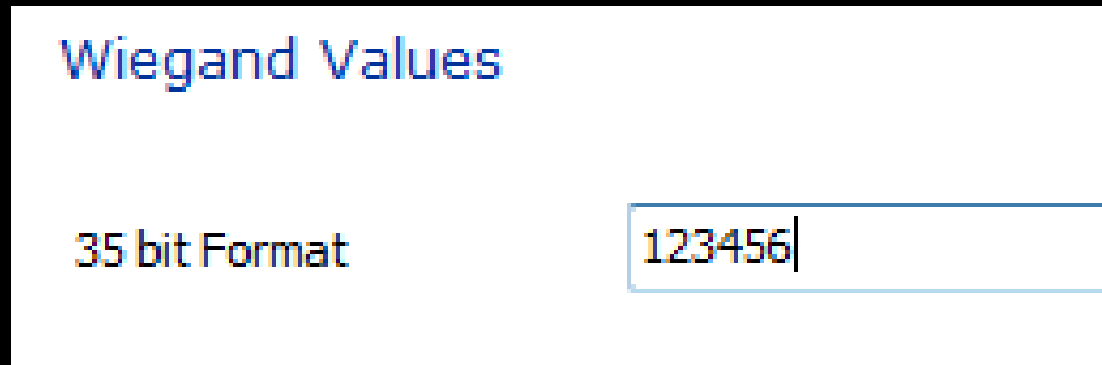
User Policy:		two Card formats
Enabled:	<input checked="" type="checkbox"/>	
First Name:		John
Middle Name:		
Last Name:		Smith
Date of Birth:		

Use M/d/yyyy eg. 3/24/1986.

# Morpho Manager User Management

Wiegand Values:

This has to be the Prox card number

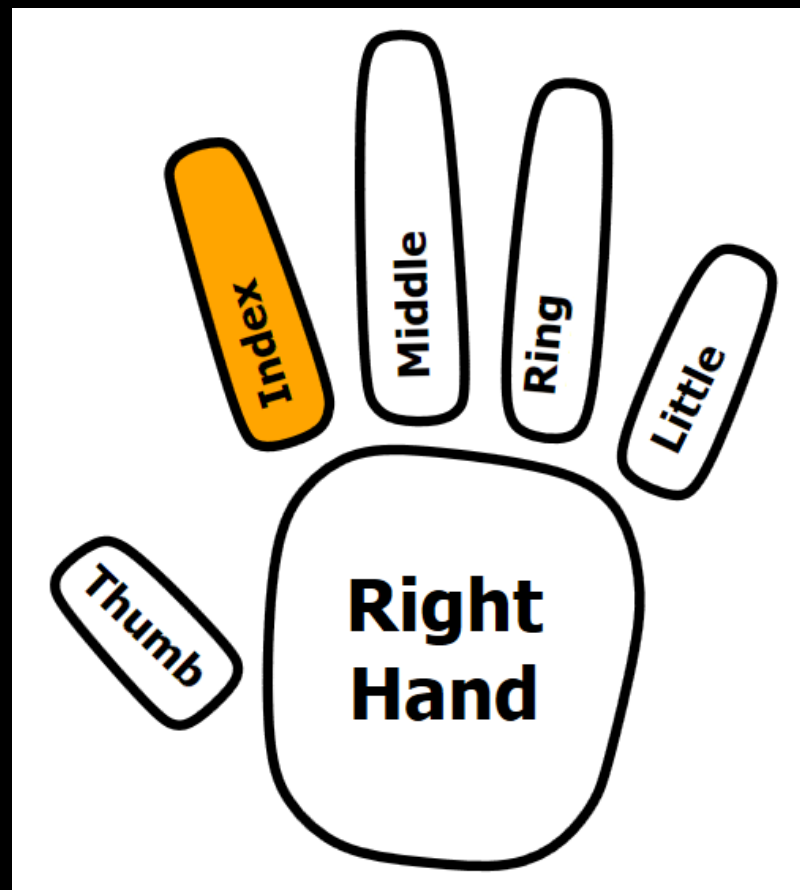


The screenshot shows a white rectangular window with a blue title bar. The title bar contains the text "Wiegand Values" in blue. Below the title bar, there are two labels: "35 bit Format" on the left and a text input field on the right. The input field contains the number "123456" and has a vertical cursor at the end of the text.

Label	Value
35 bit Format	123456

# Morpho Manager User Management

You can complete the enrollment like normally





# \*\*\*IMPORTANT\*\*\*

\*\*Important that this is PER UNIT setting which means that you have to configure each unit with the Morpho Tool box with your different formats first

# Website

Please visit our website,  
[Service.morphotrak.com](http://Service.morphotrak.com) for software,  
firmware, videos and PDF's.