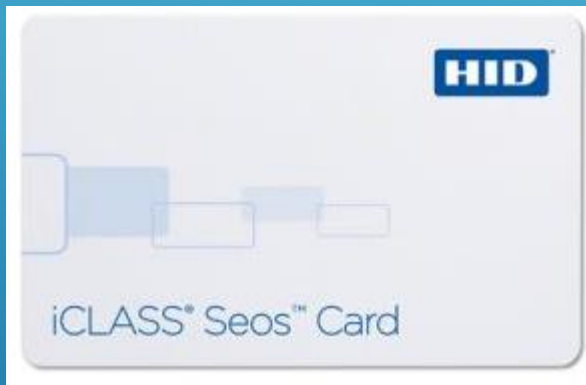


HOW TO USE PRINTED SEOS ICLASS CARD AND FINGER



TO WORK WITH SIGMA ICLASS/ SIGMA ICLASS LITE

ACRONYMS

UP=USER POLICY

BDP=BIOMETRIC DEVICE PROFILE

MM=MORPHO MANAGER

ACP=ACCESS CONTROL PANEL

CSN=CARD SERIAL NUMBER

MORPHOMANAGER DEFAULT LOG IN

USERNAME-ADMINISTRATOR

PASSWORD-PASSWORD

WIEGAND

Path Administration>Wiegand

This section allows you to view, add, edit & delete Wiegand Profiles in MorphoManager. Wiegand Profiles define what information is output over the Wiegand Out interface of the Morpho Biometric Devices when a user is identified. This is most typically used in conjunction with an Access Control System.

WIEGAND SEOS PACS

NEXT COUPLE OF PAGES IS HOW TO MODIFY A EXISTING FORMAT TO ADD SEOS ELEMENT (EXAMPLE ONLY)

- Operator
- Key Policy
- Biometric Device Profile
- Biometric Device
- Wiegand Profiles**
- User Policy
- Access Schedules
- User Distribution Group

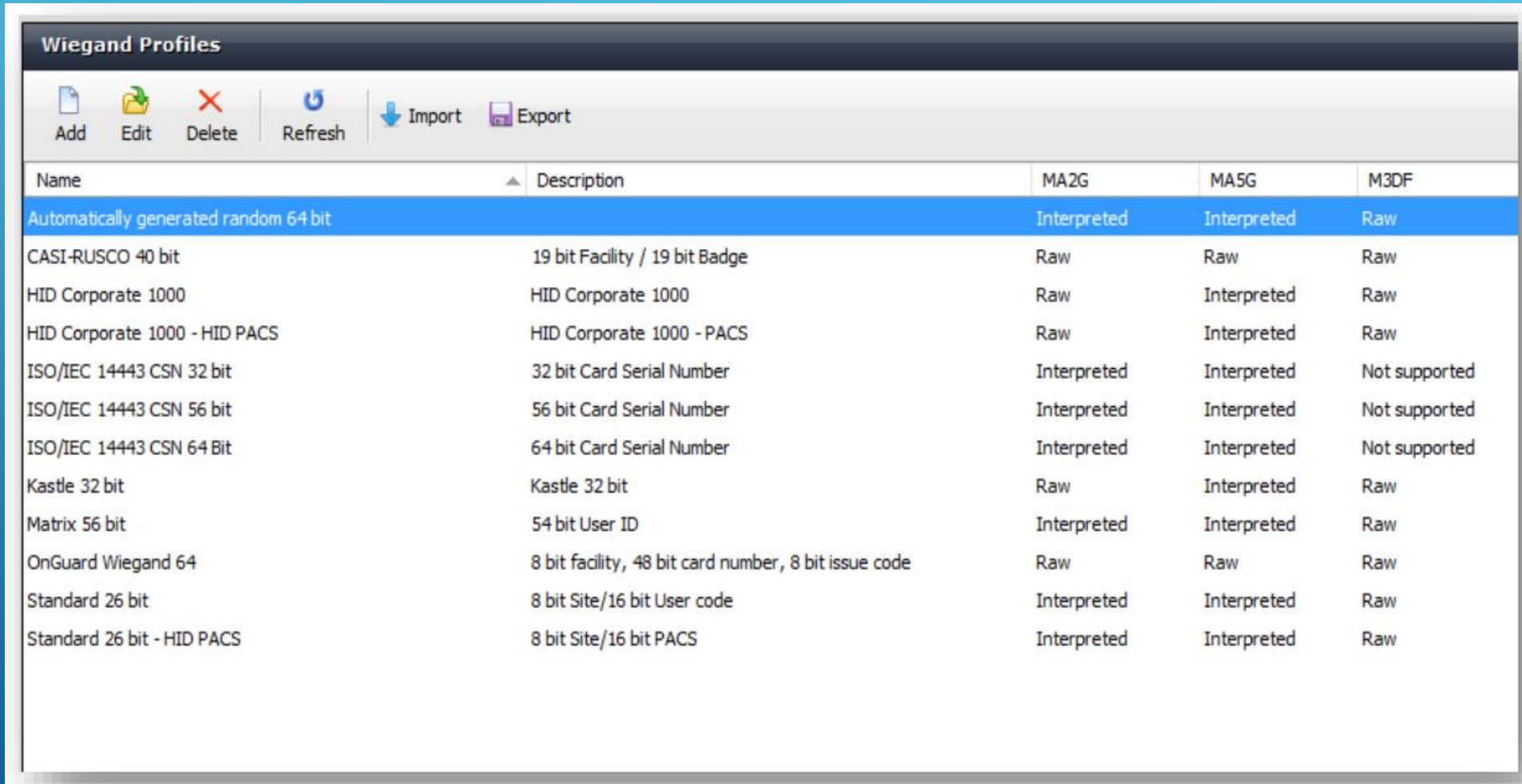
Wiegand Profiles

Add Edit Delete Refresh Import Export

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
HID Corporate 1000 - HID PACS	HID Corporate 1000 - PACS	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
Standard 26 bit - HID PACS	8 bit Site/16 bit PACS	Interpreted	Interpreted	Raw

WIEGAND SEOS PACS

STRONGLY SUGGEST TO CREATE TWO WIEGAND FOMATS ONE WITH SEOS AND ONE NON SEOS OF THE SAME FORMAT



The screenshot shows the 'Wiegand Profiles' application window. It features a toolbar with icons for Add, Edit, Delete, Refresh, Import, and Export. Below the toolbar is a table listing various Wiegand profiles. The table has five columns: Name, Description, MA2G, MA5G, and M3DF. The first row is highlighted in blue.

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
HID Corporate 1000 - HID PACS	HID Corporate 1000 - PACS	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
Standard 26 bit - HID PACS	8 bit Site/16 bit PACS	Interpreted	Interpreted	Raw

WIEGAND SEOS PACS

EXAMPLE TO MODIFY WIEGAND FORMAT WITH SEOS ELEMENT EXAMPLE 26 BIT STANDARD

Name	Description	MA2G	MA5G	M3DF
Automatically generated random 64 bit		Interpreted	Interpreted	Raw
CASI-RUSCO 19 bit	19 bit Facility / 19 bit Badge	Raw	Raw	Raw
HID Corporate 1000	HID Corporate 1000	Raw	Interpreted	Raw
HID Corporate 1000 - HID PACS	HID Corporate 1000 - PACS	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
Standard 26 bit - HID PACS	8 bit Site/16 bit PACS	Interpreted	Interpreted	Raw

**EDIT THE
26 BIT
FORMAT**

WIEGAND SEOS PACS

EXAMPLE TO MODIFY WIEGAND FORMAT WITH SEOS ELEMENT EXAMPLE 26 BIT STANDARD


Enter details for this Wiegand profile

Name:

Description:

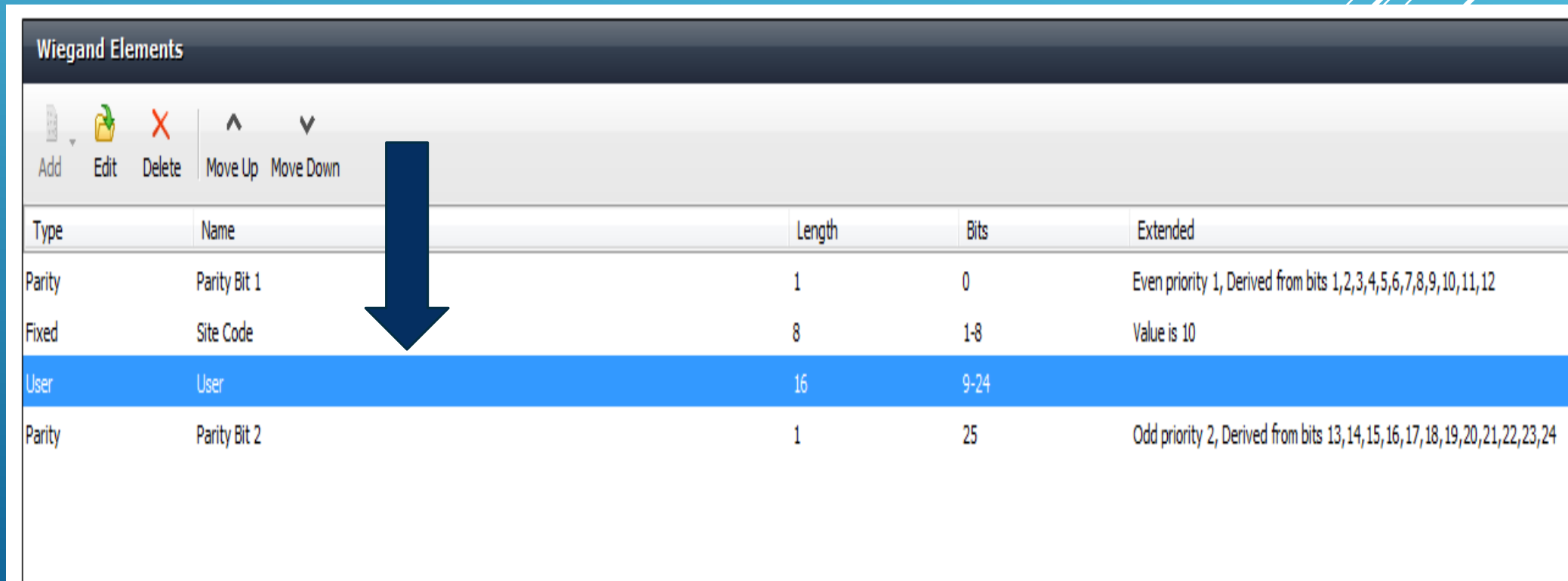
Bit Length:



Next 

WIEGAND SEOS PACS

THIS IS A STANDARD 26 BIT STRUCTURE

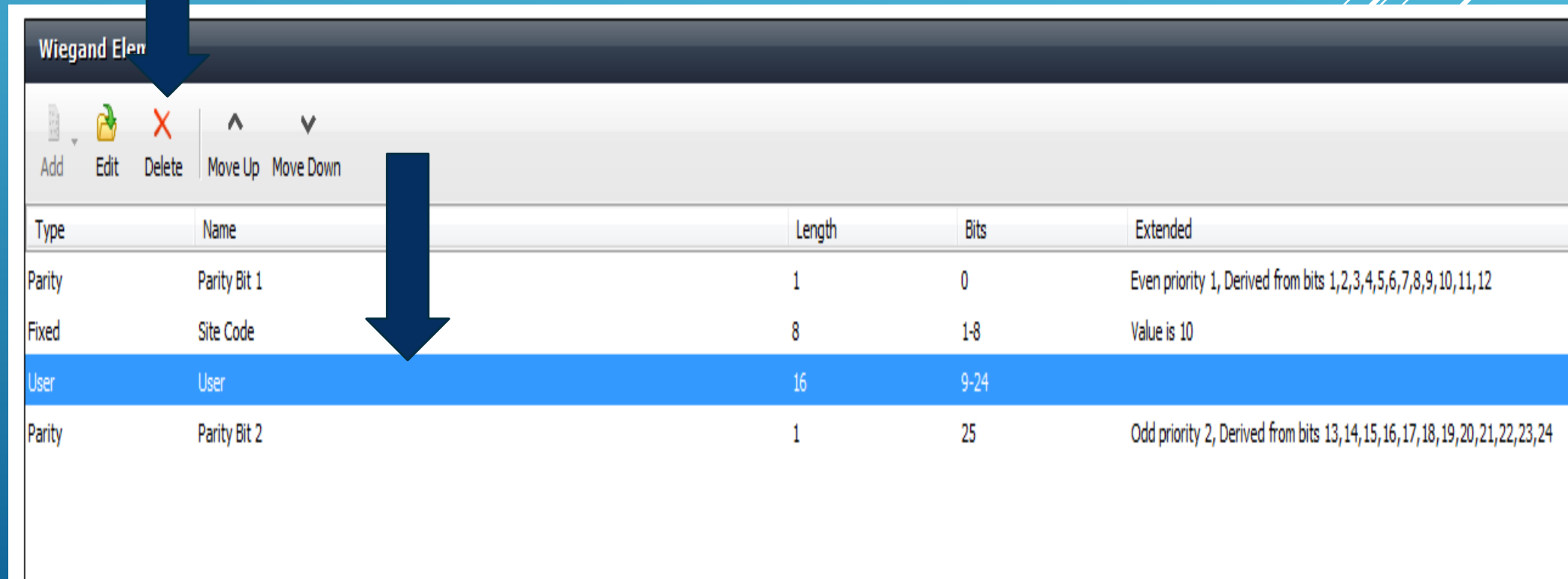


The screenshot shows a software interface titled "Wiegand Elements". It features a toolbar with icons for "Add", "Edit", "Delete", "Move Up", and "Move Down". Below the toolbar is a table with the following columns: "Type", "Name", "Length", "Bits", and "Extended". The table contains four rows of data. The "User" row is highlighted in blue, and a large blue arrow points to it from above.

Type	Name	Length	Bits	Extended
Parity	Parity Bit 1	1	0	Even priority 1, Derived from bits 1,2,3,4,5,6,7,8,9,10,11,12
Fixed	Site Code	8	1-8	Value is 10
User	User	16	9-24	
Parity	Parity Bit 2	1	25	Odd priority 2, Derived from bits 13,14,15,16,17,18,19,20,21,22,23,24

WIEGAND SEOS PACS

DELETE THE USER FOR 16 BITS

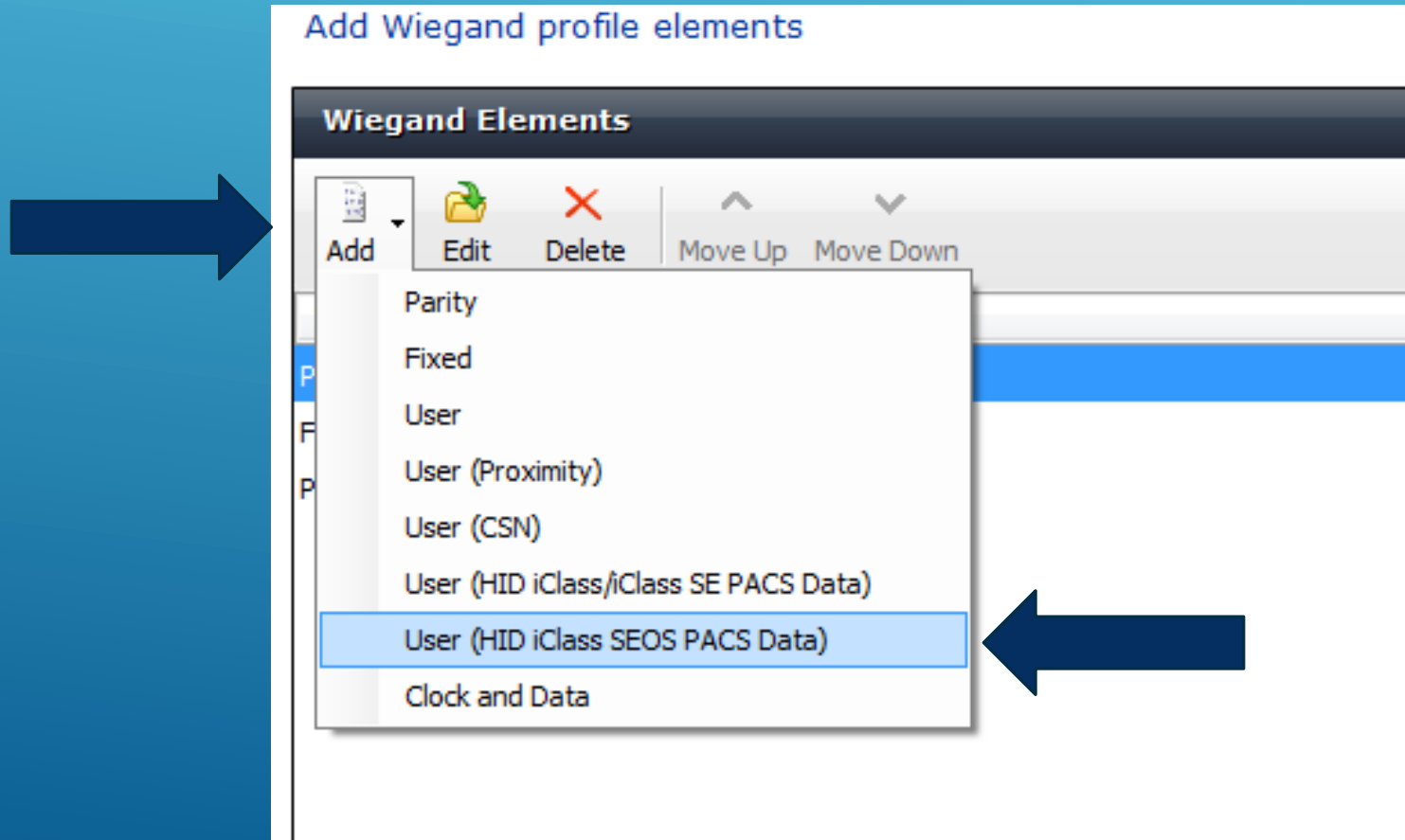


The screenshot shows the 'Wiegand Elements' configuration window. The toolbar includes 'Add', 'Edit', 'Delete', 'Move Up', and 'Move Down' buttons. A table lists the configured elements:

Type	Name	Length	Bits	Extended
Parity	Parity Bit 1	1	0	Even priority 1, Derived from bits 1,2,3,4,5,6,7,8,9,10,11,12
Fixed	Site Code	8	1-8	Value is 10
User	User	16	9-24	
Parity	Parity Bit 2	1	25	Odd priority 2, Derived from bits 13,14,15,16,17,18,19,20,21,22,23,24

WIEGAND SEOS PACS

ADD USER (HID ICLASS SEOS PACS DATA)



WIEGAND SEOS PACS

NAME IT AND ADD THE LENGTH , CLICK NEXT

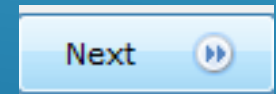
User HID iClass SEOS PACS Data element details

Name:

Hide Value:

Allow Random:



Length:



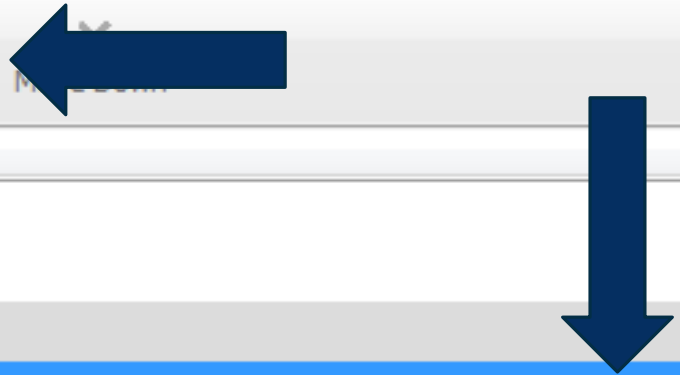
WIEGAND SEOS PACS

NOW YOU ADDED THE SEOS PACS DATA MOVE IT UP ONE POSITION

Wiegand Elements

Add Edit Delete Move Up  

Type	Name	Length	Bits
Parity	Parity Bit 1	1	0
Fixed	Site Code	8	1-8
Parity	Parity Bit 2	1	9
HID iClass SEOS PACS Data	Card number	16	10-25



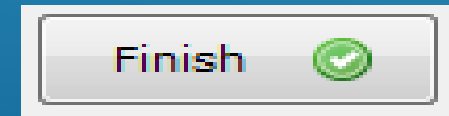
WIEGAND SEOS PACS

THIS IS EXACTLY LIKE A STANDARD 26 BIT BUT MODIFIED FOR SEOS PACS CARD NUMBER

Wiegand Elements

Add Edit Delete Move Up Move Down

Type	Name	Length	Bits
Parity	Parity Bit 1	1	0
Fixed	Site Code	8	1-8
HID iClass SEOS PACS Data	Card number	16	9-24
Parity	Parity Bit 2	1	25



WIEGAND SEOS PACS

CREATE A SECOND 26 STANDARD BIT FORMAT

IN THE END HAVE A STANDARD 26 BIT AND STANDARD 26 BIT WITH SEOS

USE THE STANDARD FOR THE USER POLICY AND THE SEOS FOR THE BIOMETRIC DEVICE PROFILE

Standard 26 bit -



8 bit Site/16 bit PACS

Standard 26 bit - HID PACS

8 bit Site/16 bit PACS

Standard 26 bit - HID SEOS



8 bit Site/16 bit PACS

WIEGAND SEOS PACS

THE GOAL IS TO GET THE DEVICE TO READ THE PRINT CARD NUMBER
OFF THE ICLASS SEOS CARD

MUST CREATE OR MODIFY THE SEOS CARD FORMAT
STRONGLY SUGGEST THAT ONE FORMAT IS SEOS AND ONE IS NON
SEOS OF THE SAME FORMAT

IF YOUR CARD IS NOT LISTED YOU WOULD NEED TO PRE-CREATE THAT
FORMAT FIRST

YOU WOULD NEED TO KNOW THE FULL STRUCTURE OF THAT FORMAT AS
WELL

YOU CAN LOOK AT THE EXAMPLES OF THE OTHER WIEGAND
FORMATS> UNDER WIEGAND PROFILES TO GUIDE YOU

ADD AN BIOMETRIC DEVICE

Administration>Biometric Device

Biometric devices from three different hardware families can be added here; the MA 100, MA J, MA 500, and MA VP family, the MA Sigma, MA Sigma Lite And MA Sigma Lite + MA Sigma Extreme, the Morpho 3D Face, the MorphoWave Tower, MorphoWave Compact, and the Morpho Tablet Terminal.

ADD THE DEVICE AS THE EXAMPLE BELOW

- Operator
- Key Policy
- Biometric Device Profile
- Biometric Device**

Enter the details for this Biometric Device

Name: Sigma Iclass

Description:

Location:

Asset ID:

Export Value:

Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Hardware Family: MA Sigma, MA Sigma Lite, MA Sigma Lite+, MA Sigma Extreme, MA Sigma VP

Serial Number:

Hostname\IP Address: 192.168.1.10

Port: 11010

Biometric Device Profile: Default

Include in Time & Attendance Exports:

Change User Onsite / Offsite Status:

Onsite Key: No Key

Offsite Key: No Key



Finish

CLIENTS



Path Administration>Clients

Clients are computers that have the MorphoManager Client software installed and communicate with a MorphoManager server

Next pages is if you do not own a MSO for capturing fingerprints



ADD YOUR SIGMA TO YOUR CLIENT

Operator

Key Policy

Biometric Device Profile

Biometric Device

Wiegand Profiles

User Policy

Access Schedules

User Distribution Group

User Authentication Mode

Operator Role

Notifications

Clients

Enter the details for this client

Name:

Description:

Location:

Click Next 3 Times

USE A SIGMA TO CAPTURE FINGERPRINTS

Enrollment Devices

3D Face Enrollment

Morpho 3D Face enrollment:

Morpho 3D Face enrollment biometric device:

Contact Enrollment

Morpho Finger biometric enrollment:

Morpho Finger enrollment MorphoAccess:

Contactless Enrollment

Morpho Contactless Finger biometric enrollment:

Morpho Contactless Finger enrollment MorphoAccess:

Smartcard Encoding

Morpho Smartcard encoding:

Morpho Smartcard encoding PC/SC device:

Morpho Smartcard encoding MorphoAccess:

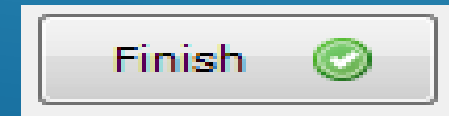
Keys

Key Policy:

DROP DOWN
SELECTED
MORPHOACCESS

SEARCH FOR THE
READER

****IF YOU DO HAVE A MSO NO
CHANGES NEED TO TAKE PLACE**



BIOMETRIC DEVICE PROFILE



Biometric Device
Profile

Path Administration>Biometric Device Profile

The Biometric Device Profile will define common settings and parameters for one or more biometric devices. This profile can be applied when adding units into the system from the Biometric Device section of Administration

BIOMETRIC DEVICE PROFILE

CREATE OR EDIT THE BIOMETRIC DEVICE PROFILE

Operator

Key Policy

Biometric Device Profile

Biometric Device

Wiegand Profiles

User Policy

Access Schedules

User Distribution Group

User Authentication Mode

Enter details for the Biometric Device Profile

Name:

Description:

Configuration Mode:

Log Retrieval Enabled:

Log retrieval interval: (seconds)

Duplicate check on biometrics: (Does not apply to Morpho 3D Face or MorphoTablet. Only applicable to new user adds or rebuild operations)

MorphoAccess heartbeat interval: (seconds)

Key Policy:

Next



BIOMETRIC DEVICE PROFILE

Biometric Device Settings

General Settings

Wiegand Profile: Standard 26 bit - HID SEOS

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 

THE WIEGAND PROFILE MUST BE SET TO WHATEVER THE SEOS CARD FORMAT IS

BIOMETRIC DEVICE PROFILE

Multi-Factor Mode Settings

Multi-Factor Mode:

Contactless Smart Card Mode:

Morpho 3D Face Multi-Factor Mode

Mode:

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

Mode:

MA Sigma, MA Sigma Lite, MA Sigma Lite+, MA Sigma Extreme, MA Sigma VP and MorphoWave Multi-Factor Modes

Biometric:	<input type="checkbox"/>	Mifare Classic:	<input type="checkbox"/>
Proximity Card:	<input type="checkbox"/>	Mifare DESFire 3DES:	<input type="checkbox"/>
Wiegand In:	<input type="checkbox"/>	Mifare DESFire AES:	<input type="checkbox"/>
Clock and Data In:	<input type="checkbox"/>	Keypad:	<input type="checkbox"/>
HID iClass:	<input type="checkbox"/>		
HID iClass SEOS:	<input checked="" type="checkbox"/>		

**MULTI-FACTOR
MODE MUST BE
HID ICLASS SEOS**

Finish



SET THE MULTI-FACTOR MODE SETTINGS AS EXACTLY AS SHOWN

USER POLICY



Path Administration>User Policy

Create new User Policy

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

USER POLICY

CREATE A NEW USER POLICY

Enter the details for this User Policy

Name: SEOS Card and Finger

Description:

Access Mode: All Biometric Devices and Clients

Allow MA 500 database selection during user enrollment

Access Schedule: 24 hours, 7 days a week

Extended User Details: Display extended user details

Wiegand Profile: Standard 26 bit

User Authentication Mode: Contactless Card ID + Biometric (1:1)

Show Photo Capture Page:

Next

WIEGAND PROFILE MUST BE A NON SEOS FORMAT THIS EXAMPLE STANDARD 26
USER AUTHENTICATION MODE IS CONTACTLESS CARD ID+BIOMETRIC

USER POLICY

CLICK TWO FOR FINGER BIOMETRICS

Enter the details for finger biometric options

Finger Biometric Enrollment Minimum Fingers:

Preferred Finger One:

Preferred Finger Two:

Preferred Duress Finger:

Vein / Print Mode:



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

USER POLICY

NONE FOR WAVE ENROLLMENTS

Enter the details for wave biometric options

Wave Enrollment Minimum Hands:

None

Show Wave Biometric Capture Page:

Finish



ENROLLMENT PROCESS

USER MANAGEMENT



User Management

Users are people who will have their biometric data sent to the selected Biometric Device for identification purposes for either access control or time and attendance.

USER MANAGEMENT

CREATE A NEW USER WITH THE USER POLICY CREATED EARLIER

Enter details for this User

User Policy: SEOS Card and Finger

Enabled:

First Name: Joe

Middle Name: |

Last Name: Smith

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



Next



POLICY SEOS CARD AND FINGER


USER MANAGEMENT

MANUALLY TYPE IN THE PRINTED CARD NUMBER

Wiegand Values

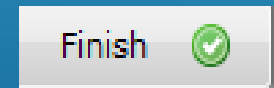
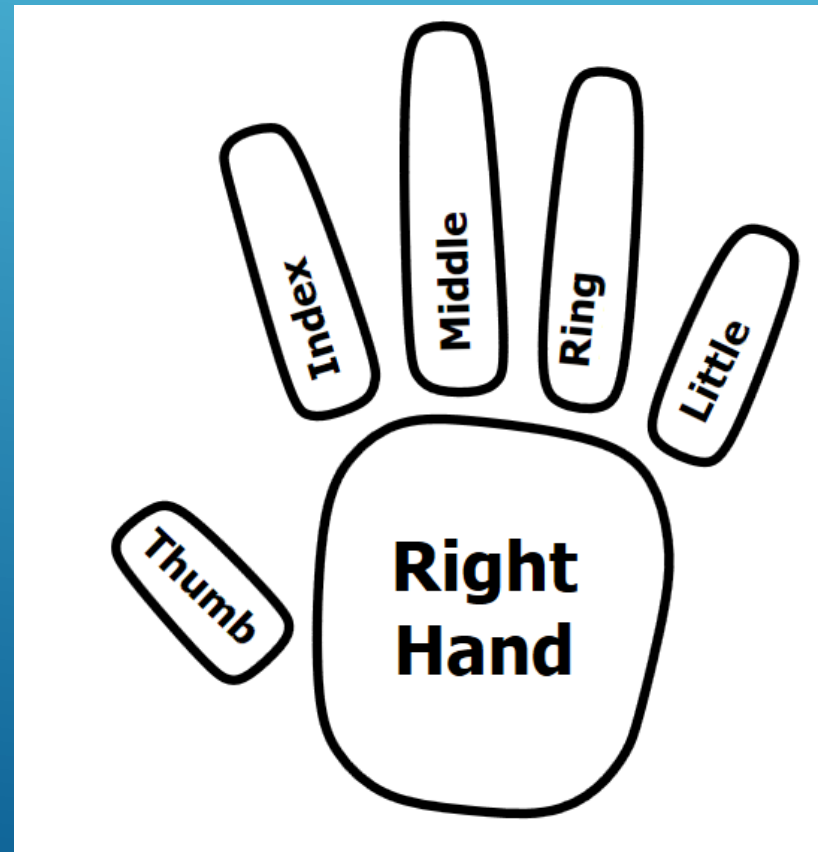
User



Next 

USER MANAGEMENT

CAPTURE YOUR FINGER PRINTS



FINAL RESOLUTION

ONE USER POLICY NEED TO BE CREATED FOR SEOS AND FINGER

TWO WIEGAND FORMATS NEED TO BE CREATED ONE NON SEOS ONE SEOS

BIOMETRIC DEVICE PROFILE NEEDS TO BE CONFIGURED

IF YOUR SEOS CARDS FORMAT DOES NOT MATCH THE PRE FORMATS THAT COME WITH MORPHOMANAGER THEN YOU NEED TO KNOW THE FULL STRUCTURE AND CREATED THAT FORMAT

YOU CAN VIEW OTHER WIEGAND FORMATS TO COMPARE

WEBSITE

Please visit our website,
service.morphotrak.com for
software, firmware, videos and
PDF'S