



IDEMIA Setup Guide

Overview

This document describes **1** of the options on how to configure the Morpho Manager Bio Bridge integration with Paxton Net2.

A Biometric Enrolment button can be added to the Add Users form within the Net2 software, making it more convenient to enroll the biometrics of new users.

The document describes the configurations needed to get the MA Sigma series readers working in a Biometric/Fingerprint Only authentication mode.

Further information about Morpho Manager and the Morpho readers can be found in the installation directory <u>C:\Program Files\Morpho\Morpho Manager\Client.</u>

Versions of software used in this documentation:

Net2: v5.04 up to v6.01.8113 Morpho Manager: 13.5.1

When installing Morpho Manager, ensure that an instance of SQL Express is installed instead of using the default Compact database

Setting up Net2 Software:

Create a new Operator or use OEM Client

A new Net2 operator, with System Engineer rights, needs to be added to enable Bio Bridge to make a connection to the Paxton Net2 system. For this example, I have select the **"OEM Client"** and I changed the password to **123456789**.

To remove an operator	s and password. bermission' from the 'Operator rights' drop dowr s permissions set their rights to 'None'. anges or 'Cancel' to abort:	n menu.
Name Operator rights Password Confirm password	DEM Client	
	ancel (Back Next)	Finish

CREATE DEPARTMENTS IN NET2

Departments are used by Net2 to make sure users have access through the correct doors. One or more Departments can be added to Paxton Net2, later these Departments will be linked to **MorphoManager's User**



Distribution Groups. Placing a user in the Paxton Net2 Department will then govern on to which Morpho readers the users profile will be distributed by Morpho Manager. Paxton Net2 can only grant access to a user when the users profile is present on the Morpho reader at that door. In this example three groups were created in Net2 called Visitors, Managers, Sales & Contractors.

3 Options	×
Custo <u>m</u> days <u>C</u> amera integration Landlord Tenant permissions Card <u>p</u> rinting <u>G</u> eneral <u>D</u> epartments Door groups Report groups Field <u>n</u> ames <u>T</u> oken typ	
This is a list of current departments Departments Contractors	Add
(none)	Delete
Managers Sales Visitors	Rename

CONFIGURE THE READER TYPE IN NET2

Configure the Reader Type as "Wiegand reader" and the Token data format as "Wiegand 26 bit"

ile <u>V</u> iew <u>G</u> o <u>T</u> ools <u>O</u> ptions <u>H</u> el	lp		
📕 Back 🔹 📫 Forward 👻 🚺	Refresh i 🦪 Print 🤱 Find user 👘	🔋 Open door 🛛 🗧 New door 👻 🔇	Timesheet +
Net2 Access Control	Idemia - Front door		
Events	ACU serial number: 03643313		
🥵 Users	Door name	Idemia - Front door	
Access levels Timezones	Door group	(none)	
Doors	Door open time	3 seconds	
Idemia - Front door	Unlock the door during	At no time	
Triggers and Actions		Only unlock the door once a user l	has been granted access
Reports		Silent operation	
🎊 Net2 operators	Unlock relay 2 during	At no time	
	Name Reader type	Idemia - Front door (In) Wiegand reader None	
	Keypad type Token data format	Wiegand 26 bit	
	Token data format		
	Token data format Operating mode Reader operating mode	Wiegand 26 bit	a selected timezone.
	Token data format Operating mode Reader operating mode	Wiegand 26 bit	a selected timezone.
	Token data format Operating mode Reader operating mode Timed operating modes - This	Wiegand 26 bit	a selected timezone.
	Token data format Operating mode Reader operating mode Internet internet internet internet internet internet. During this timezone: This reader will operate as:	Wiegand 26 bit	a selected timezone.

CONFIGURATION IN NET2 SERVER CONFIGURATION UTILITY

The following configuration needs to be made in the Net2 Server Configuration Utility to enable the MA Sigma series devices to correctly interpret the state of the Green Led line to display the Access Granted & Access Denied message. This Access Granted message will only be displayed on the MA Sigma series device when the Net2 panel has granted access to the user.

Both the **Display reader LED's in OEM style & Hide reader LED's** need to be deselected as shown below.

APN-1179-ZA

Site name			
Product description	ANDREW-HP Net2 Lite	Upgrade to Net2 Pro	
Version	5.04.6411.3802	Opgrade to Net2 FID	
SQL Top port	49233		
Polling interleave period	0.5 seconds	•	
nobic server provising			
Display reader LED's in OEM style (not nano's)			
Hide reader LED's (not nano's)			
Btart Not2 Corror automatically at start up Revert tokens to mode 1 operation			
Enable commissioning mode	2		
Allow duplicate PINs	Γ		
Enable 50.000 user mode	Ē		
Enable 'Buy tokens'' link			
Low Power Mode			

Setting up MorphoManager:

EDITING THE ADMINISTRATOR PASSWORD.

Once the software has been installed the default password of the Administrator user needs to be changed. The Administrator has full access rights in the MorphoManager software.

Log into the MorphoManager Client using the default username of Administrator and password "password" Under Administration -> Operators highlight the Administrator and click on Edit. Click on the Reset password checkbox and then enter a new password for the Administrator operator. Click on Finish to save the changes.

ms	Editing Operator	
Operator	Enter the details fo	or this Operator
	Username:	Administrator
Key Policy	First name:	System
Biometric Device Profile	Middle name:	
Biometric Device	Last name:	Administrator
Biometric Device	Job title:	System Administrator
Wiegand Profiles	Authentication method:	Native username/password
User Policy	Administrator:	Check to set full privilege)
Access Schedules	Reset password:	✓ (Check to reset password)
User Distribution	Password:	•••••
Group	Confirm password:	•••••
User Authentication Mode	Active directory domain:	
👷 Operator Role		
Notifications		
Clients		

SETTING TO "AUTO LOGIN"

It is recommended that the MorphoManager client is configured to "Auto Login" as this will nullify the need to enter the login details every time MorphoManager or Biobridge is used.

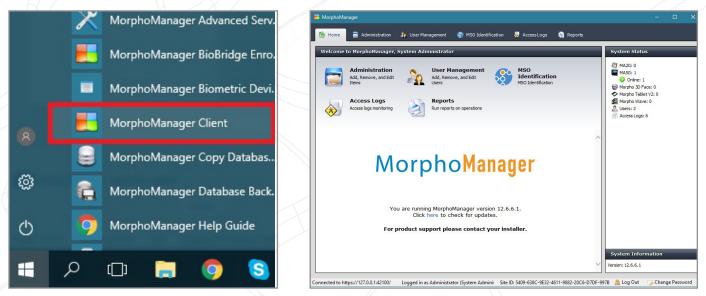


Goto "Programs", under "MorphoManager", select "MorphoManager Advanced Client Configuration"

≡		Microsoft Solitaire Collection	Create	MorphoManager advanced client configuration	×
		Microsoft SQL Server 2008 🛛 🗸	-	Server connection Server connection type: Local computer only	
		Microsoft SQL Server 2012 🛛 🗸	0 🗹	Hostname:	Port: 42100
		Mixed Reality Portal	Outlook 2016	Manage high availability server list	
	\bigcirc	Mixed Reality Viewer		Port: 42100 Certificate binding: Automatic ~	
		Morpho ~ New	w]	Certificate thumbprint:	
		MorphoManager ^	Word 2016	Server certificate validation: None	
		MorphoAccess Sigma Firmware	Net2	Certificate issuer thumbprint:	
	2	MorphoManager Advanced Clie		Automatic login	
	×	MorphoManager Advanced Serv	Net2 Access	Enable automatic login Username: Administrator	
		MorphoManager BioBridge Enro	Control	Password:	
	-	MorphoManager Biometric Devi		Apply changes Revert	changes Close

CREATING A BIOMETRIC DEVICE PROFILE

Open MorphoManager Client



A Biometric Device Profile (BDP) in MorphoManager defines common settings and parameters for the MA Sigma series devices. When the device is added to MorphoManager and a BDP is selected MorphoManager then applies the settings from this BDP to the device.

MorphoManager creates a **Default BDP** for a device to work in Biometric 1:Many mode. For this BDP profile to work with Paxton Net2, some of these settings need to be changed.

📒 Mor	phoManager					×
ਜਿ ਸ	ome 🔂 Administration	2	User Manageme	nt 🛷 MSO Identification 👼 AccessLogs 🧃 Reports		
Iten	15		Biometric De	vice Profile	-	
	Ø Operator	^	Add Edit	X U Delete Refresh Import Export		
0	Key Policy		Name	Description Mode		
	Biometric Device Profile		Default	Express		
	Biometric Device					
8-001- 8-001- 18-001-	Wiegand Profiles					
20	User Policy					

First highlight the Default and select Edit.

The form below will now be shown, click on **Next** as no changes need to be made on this first form.

🖥 MorphoManager			<u> </u>		×
☆ Home Administra	ion 🔹 User Management 🛛 🕸 MSO Identification	n 😽 AccessLogs	: 🧃 Reports		
Items	Editing Biometric Device Profile				
🥮 Operator	Enter details for the Biometric Dev	vice Profile			
Key Policy	Name:	Default		_	
Biometric Device	Description: Configuration Mode:	Express	~		
Biometric Device	Log Retrieval Enabled:				
Wiegand Profiles	Log retrieval interval:	300	(seconds)		
🖓 User Policy	Duplicate check on biometrics:		(MA 100, MA J, MA 500, MA VP, MA Sigma, MA Sigma Lite, MA Sigma Lite+, MA Sigma Extreme and MorphoWave only. Only applicable to new user adds		
OSEP POILCY	MorphoAccess heartbeat interval:	30 🜲	(seconds)		
Access Schedules	Key Policy:	Default	~		
User Distribution Group	MA Sigma, MA Sigma Lite, MA Sigma Lite	e+, MA Sigma Extre	me Only Settings		
User Authentication Mode	Allow Remote Enrollment:				
operator Role	Default User Policy for Remote Enrollment:	Default	~		
A 100 10					

In the Biometric Device Settings window below, change the Wiegand Profile to **Standard 26 bit**, then click on **Next** until you see the **"Access Control Mode Settings"** screen.

Net2 APN-1179-ZA

🛃 MorphoManager					<u> </u>	×
n Home 📑 Administration	y User Management 🛛 🆓 MSO Identificati	ion 👵 AccessLogs	A Reports			
Items	Editing Biometric Device Profile		_	_	_	
Operator	Biometric Device Settings					
Key Policy	General Settings			_		
Biometric Device	Wiegand Profile:	Standard 26 bit		~		
Profile	Language:	English		~		
Biometric Device	Realtime logging enabled:	\checkmark				
Wiegand Profiles	Biometric Threshold Settings					
User Policy	Biometric Threshold:	Recommended	~			
Access Schedules	MorphoAccess Vein Print Mode:	Universal Fast	\sim			
User Distribution	MorphoAccess Fingerprint Threshold:	3	~			
Group	Morpho 3D Face Identification Threshold:	Medium	\sim			
User Authentication Mode	Morpho 3D Face Verification Threshold:	Low	~			
🙊 Operator Role	It is recommended the mode set in in Biometric Device Profile. Using Rejection Rate (FRR) of biometric	a less restrictive mode in User				.t
				~		

The Access Control Mode should be set to "Integrated."

If the Paxton Net2 panel is going to send feedback to the Morpho reader when a person has been accepted, then change the Panel Feedback Mode to **"LED In"** and change the Panel Feedback No Response Timeout to **"3000"** (milliseconds). When the above has been done click on **"Finished"**

Home 🔂 Admi	istration	User Management 🛛 👸 MSO Identific:	ation 👵 Access	Logs 🧃 Reports	
ems		Editing Biometric Device Profile	_		
💭 Operator	^	Access Control Mode Settings			
Key Policy		Access Control Mode:	Integrated	~	
Biometric Devic Profile		Wiegand Out Enabled: Clock and Data Out Enabled:		=	
Biometric Devic		Panel Feedback Mode: Panel Feedback No Response Timeout:	LED In	(in miliseconds)	
Wiegand Profile		Relay Enabled:			
User Policy		Relay Duration: Push To Exit Enabled:	1000	(in 10s of milliseconds)	
Access Schedul	s	Request to Exit Egress Timeout:	25000	(in milliseconds - please refer to the MorphoA Series Administration Guide for further inform	
User Distributio	6	Duress Wiegand Mode:	Reversed	~	
User Authentica Mode	tion	Duress Wiegand Profile:	Automatically ge	nerated random 64 t 🔗	
Operator Role					



ADD READERS INTO MORPHOMANAGER

Readers need to be added to the system before they can be added to a User Distribution Group.

In the MorphoManager home screen navigate to Administration -> Biometric Device and click on Add.

Morphol	Manager		-	- 🗆	×
☆ Home	Administration	훩 User Management 🛛 🐯 MSO Id	dentification 😽 AccessLogs 🧃 Reports		
Items	_	Editing Biometric Device			
	iometric Device rofile	Enter the details for this	Biometric Device		
Bi	iometric Device	Name:	Idemia		
NOT W	/iegand Profiles	Description:	Front Door - In		
<u>a</u> u	ser Policy	Asset ID:	001		
-		Export Value:			
CA A	ccess Schedules	Time Zone:	(UTC+02:00) Harare, Pretoria V		
	ser Distribution roup	Hardware Family: Serial Number:	MA Sigma, MA Sigma Lite, MA Sigma Lite+, MA Sigma Extreme 🗸 🗸		
E Us	ser Authentication	Hostname\IP Address:	192, 168, 1, 100		
		Port:	11010	l:	
()	perator Role	Biometric Device Profile:	Default V		
No.	otifications	Include in Time & Attendance Expo	orts:		
🔲 d	lients	Change User Onsite / Offsite Statu	us:		
24		Onsite Key:	No Key \vee		
<u></u> 50	cheduled Reports	Offsite Key:	No Key \lor		
E Ca	ard Template				

In the Biometric Device window the new reader will be added and an Online/Offline Status will be shown along with a number of **Tasks**. Once the reader has come online then MorphoManager will make all the configuration changes to the Morpho reader as per the BDP, once this is complete the Morpho reader will restart.

Net2 APN-1179-ZA

Morp	hoManager				:
у но	me 🔁 Administration	🦨 User Management 🛛 🐯 MSO Iden	tification 👵 AccessLogs 🧃 F	Reports	
Item	5	Biometric Device			
9	Operator	Add Edit Delete Refresh	Synchronize Get Logs View Sync Lu	og Set Date/Time Rebuild	🍪 🔕 Reboot Set Offline
	Key Policy	Name Desc	npuon cocauon biomeu	synchronization s status	s Tasks
	Biometric Device Profile	Idemia	Front Do Default	🥝 Synchronized 🛛 📀 Onli	ine 0
	Biometric Device				
01010- 01010- 10100-	Wiegand Profiles				
20	User Policy	Details Logs Queued Tasks	s (0) Failed Tasks (0)		Hide Details
A					
	Access Schedules	Idemia			
	Access Schedules User Distribution Group	Idemia Description: Hardware Type:	MA Sigma Lite + Prox WR		
	User Distribution	Description: Hardware Type: Serial Number:	MA Sigma Lite + Prox WR 1606SML0000244		
	User Distribution Group User Authentication	Description: Hardware Type: Serial Number: Firmware version: Hostname\IP Address:	1606SML0000244 3.5.1 192.168.1.100:11010		
	User Distribution Group User Authentication Mode	Description: Hardware Type: Serial Number: Firmware version:	16065ML0000244 3.5.1		

CREATE USER DISTRIBUTION GROUPS

User Distribution Groups are designed to distribute users onto groups of Morpho readers.

In the MorphoManager home screen navigate to Administration -> User Distribution Group. In the User Distribution Group window click Add and give the new group a Name from the departments list in Paxton Net2 e.g. Sales. Click Next.



The window shows a list of all the readers that have been added to MorphoManager, select the Morpho readers you want a person who is a member of this User Distribution Group to have access through. Once you have selected the appropriate readers then click on **Finish**. A Morpho reader can be a member of one or more User Distribution Groups.

🧮 MorphoManager				<u>–</u> 8		×
Administration	🕴 User Management 🛛 🕉 N	150 Identification 🛛 😽 AccessLogs	Reports			
Items	Adding User Distributi	ion Group		_	-	
Operator	Select Biometric Dev					
Biometric Device	lame	Description	Location	Model		
Biometric Device Profile	🗹 1 Jemia		Front Door - In	MA Sigma Lite + P	Prox WR	
Biometric Device						
Wiegand Profiles						

Once all the groups that have been created in MorphoManager will be shown in the main **"User Distribution** Group"

📒 MorphoManager		_		×
📅 Home 📑 Administration	🛊 User Management 🛛 🕸 MSO Identification 🛛 Access Logs 🧟 Reports			
Items	User Distribution Group	-	-	
Operator	⊡ ≥ ⊍ Add Edit Delete Refresh			
Key Policy	Name Description			
Biometric Device Profile	Contractors Managers Color			
Biometric Device	Sales Visitors			
Wiegand Profiles				

CREATE USER POLICIES

User Policies apply an Authentication method to the members of this Policy. To configure BioBridge a User Policy with an **Access Mode of Per User** must be selected.

A **Default** user policy will already be created in MorphoManager, this uses an Authentication Mode of Biometric (1:Many).

Highlight the Default user policy and select Edit.



🧮 MorphoManager		-		×
Administration	User Management 🌸 MSO Identification 😽 AccessLogs 🦓 Reports			
Items	User Policy			
Operator	Add Edit Delete Refresh	Use	r Count: 2	
Key Policy	Name A Description			
	Default Default User Policy			
Biometric Device Profile				

Change the **Access Mode to Per User** and change the Wiegand Profile to the same Wiegand Profile that was used when adding Morpho readers to the system e.g. Standard 26-bit. Click on Finish.

MorphoManager				×
Administration	🤰 User Management 🛛 🛞 MSO Identi	fication 👼 AccessLogs 🧃 Reports		
Items	Editing User Policy			
🥮 Operator	Enter the details for this Use	r Policy		
Key Policy	Name:	Default	ī	
Biometric Device Profile	Description: Access Mode:	Default User Policy Per User		
Biometric Device		Allow MA 500 database selection during user enrollment		
Wiegand Profiles	Access Schedule: Extended User Details:	24 hours, 7 days a week ∨ ✓ Display extended user details		
User Policy	Wiegand Profile:	Standard 26 bit		
Access Schedules	User Authentication Mode: Show Photo Capture Page:	Biometric (1:Many)		
User Distribution Group				

CONFIGURE MORPHOMANAGER'S BIOBRIDGE

From the Home page in MorphoManager navigate to the BioBridge tab through **Administration -> System Configuration.** This is where the link between the Paxton Net2 & MorphoManager's BioBridge systems will be created.

In the System drop down menu select Paxton Net2 and the click on the **Configure Connection** button.

ame	Date modified	Туре
ApiLicences	06/08/2020 12:32	File folder
Application notes	12/05/2020 16:24	File folder
ar	09/07/2020 11:27	File folder
bg	09/07/2020 11:27	File folder
cs	09/07/2020 11:27	File folder
da	09/07/2020 11:27	File folder
de	09/07/2020 11:27	File folder
DvrMiniDrivers	12/05/2020 16:23	File folder
el	09/07/2020 11:27	File folder
en-us	09/07/2020 11:27	File folder
es	09/07/2020 11:27	File folder
es-mx	09/07/2020 11:27	File folder
l fi	00/07/2020 11-27	File folder

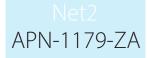
Net2 Server: 127.0.0.1 or localhost, if both the Paxton Net2 & MorphoManager software is installed on the same computer. Enter the IP address of the Net2 server if it is located on a different PC.

Port: leave as the default 8025.

Username: OEM Client – As per Net2 (You could have created any operator in Net2 with System engineer rights)

Password: Same password you gave the operator in Net2

Click on OK.



If everything has been configured correctly you should see that the Departments in Paxton Net2 have been mapped to the User Distribution Group in MorphoManager, see below.

If the names for the **Departments** in Paxton Net2 are different from the names used for the **User Distribution Groups** in

Windows (C:) > Program Files (x86) > Paxton Access > Access Control > ApiLicences				
Name	Date modified	Туре	Size	
C9626f4d-8b2e-48a6-9f75-d19040e000c1	21/09/2020 08:18	LIC File	1 KB	

MorphoManager then you can use the **Manual Department Mode.** The dropdown menus in the User Distribution Group Mappings are then used to manually map the two together.

The BioBridge needs a **Wiegand Profile / Token Type** configured, BioBridge will only synchronise users who have this Token Type configured on their profile in Net2. In this example the Fingerprint **Verification Number** Token is used. Click on **Save** to save the settings.

	System Configuration					
Wiegand Profiles	Time & Attendance Communication Finger Template Capture Options BioBridge Privacy Mod	Display (System Management MorphoWave Password Rules		Connector Servic plication Control slate Management
Access Schedules User Distribution Group	MorphoManager BioBridge So System:		Paxton Net2v6	WebAPI 🗸	Configure co	onnection
User Authentication Mode	Wiegand Profile / Token Type: Bio	oBridge Paxton Net2v6	WebAPI Conr	nection		×
Operator Role	Enable Forced User Policy:	Server				
Notifications	Forced User Policy:	Net2 WebAPI Server: Port:	127.0.0.1 8080 🖨	1		
Clients	User Synchronization Start Tin User Synchronization End Time	Logon details				
Scheduled Reports	Delay Between Each User Syn	Please enter the Net2 k	ogon credential	s below.		

INSTALLING THE MORPHOMANAGER BIOBRIDGE ENROLMENT BUTTON.

The enrolment button in Paxton Net2 was added in MorphoManager v12.6.3.

The Enrolment button is added to the Add User window of the Paxton Net2 software. This button enables the Biometric Enrolment within MorphoManager to be started from within Paxton Net2 when adding a new user into the system.

To install the enrolment button, the file ID1.MM.PaxtonNet2EnrollmentButton.exe needs to be run from the MorphoManager client folder within Program Files (x86).



If the defaults were used during the MorphoManager installation this can be found in:

C:\Program Files (x86)\Morpho\MorphoManager\Client.

After this file has been run a **Paxton Net2 Enrolment Button Provider** icon the following icon will appear in the Windows Taskbar, as shown below.



Right click on the icon and then select **Options**, enter the details of the Net2 Operator added in the previous steps.

Yes		MorphoManager Net2 Button Provider
Paxton Net2 Se	ettings:	
Hostname:	127.0.0.1	Connection was successfully established!
Port:	8025	
Username:	OEM Client	ОК
Password:		10

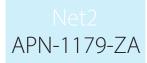
Click on the **Test Connection button** to make sure the settings are correct, if the connection is successful then click on **Save**.

ADDING AND ENROLLING USERS IN NET2

You can now add and enroll users directly from Net2, using the enrolment button which has been injected to the **"Add User"** form.

When adding a new user: Step 1 below:

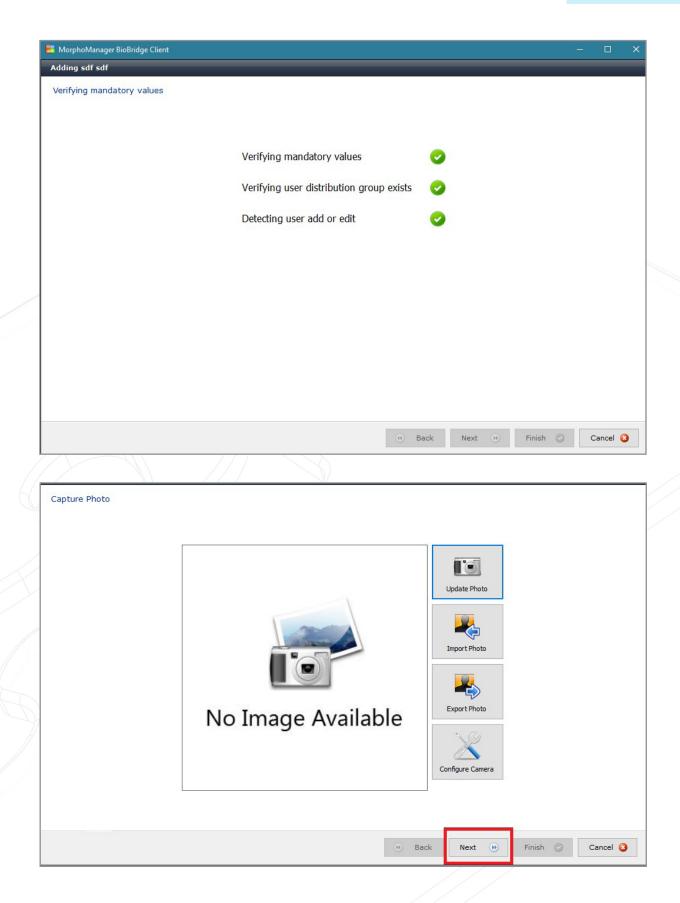
Ensure that you complete all the fields: First name: e.g "Joe" Surname: e.g "Soap"



Select the department: e.g "Managers" Select the Access level: e.g "All hours, all doors"

Add user			×	
Please select the type of toke	n which you wish to issue		1	
<u>I</u> oken type	Default		V New type	
First name	Joe	Get picture		
Middle name		Capture Picture		
Surname 1	Soap			
Department	Managers ~			
Access level	All hours, all doors $\qquad \sim$			
Telephone				
Fax		Email		Step 2:
Valid from	2018/07/13 💌	Position		Token number: Enter a token
Expires end	2018/07/13 💌	Start date		number: e.g "3269 "
Address 1		Car registration		1101110c1. c.g 320 7
Address 2		Notes	^	Taken tunger Coloct "Fingermeint
Town				Token type: Select "Fingerprint
County				verification."
Post code			< >	
Home telephone		Personnel number		Note:
Home Fax		PIN	Auto PIN	It is useful to use "Auto PIN"
Mobile		Token number	3269	to generate random pin codes to
Card template	~	Token type 2	■ Fingerprint verification ∨	ensure there are no duplicates.
			Add user and Enroll biometrics	ensure there are no duplicates.
When I click 'Add user' relo ● When I click 'Add user' relo	ad the token type default values in the previous record values	-	Close Add user	DO NOT use token numbers higher than "65535" on 26-bit Wiegand.
		Step 3:		
	Auto PIN	step st		
3269		Salact the "Add u	user and Enroll bior	matrics button"
Eingerprin	turrification v	Jelect the Add t		netiles button
Add user and E	inroll biometrics			
Close	Add user			
BioBridae enrolm	hent will open in th	ne Net2 workspace	window.	

You will see the follow screens in succession.



Net2 APN-1179-ZA

