



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:

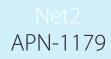
Create a new Operator or use OEM Client

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. Þermission' from the 'Operator righ s permissions set their rights to 'N anges or 'Cancel' to abort:	
Name Operator rights Password Confirm password	OEM Client System engineer	~
	ancel < Back M	Vext > 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.

Custo <u>m</u> days <u>C</u> amera integration Landlord Tenant permissions Card	printing Activation Security
eneral <u>D</u> epartments Door groups Report groups Field <u>n</u> ames	<u>T</u> oken types Token data <u>f</u> ormat
This is a list of current departments Departments Contractors	Add
(none)	Delete
Managers	Rename

CONFIGURE THE READER TYPE IN NET2

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

	ess Control		
le <u>V</u> iew <u>Go T</u> ools <u>O</u> ptions <u>H</u> e		~	
📕 Back 🔹 🛋 Forward 👻 🚺	Refresh 🦪 Print 🤮 Find user	📗 Open door 🛛 🔛 New door 👻 🚯 Ti	mesheet +
Net2 Access Control	Idemia - Front door		
Events	ACU serial number: 03643313		
] 🥵 Users	Door name	Idemia - Front door	
Access levels	Door group	(none)	
😍 Timezones 🗐 Doors	Door open time	3 * seconds	
Doors	Unlock the door during	At no time	
Triggers and Actions		Only unlock the door once a user has	have accorded as a set
🚮 Reports		Silent operation	been granieu access
🐕 Net2 operators	Unlock relay 2 during	At no time	
		The first second se	
	Reader 1 Reader 2 Alarm B	Events Fire alarm inputs Intruder Alarm Ac	cess rights
			oose ngrite j
	Reader details		
	Reader details Name	Idemia - Front door (In)	
	Name	Idemia - Front door (In)	
	Name Reader type	Idemia - Front door (In) Wiegand reader	
	Name Reader type Keypad type	Idemia - Front door (In) Wiegand reader None	
	Name Reader type Keypad type Token data format	Idemia - Front door (In) Wiegand reader None	
	Name Reader type Keypad type Token data format Operating mode Reader operating mode	Idemia - Front door (In) Wiegand reader None Wiegand 26 bit	
	Name Reader type Keypad type Token data format Operating mode Reader operating mode	Idemia - Front door [In] Wiegand reader None Wiegand 26 bit	
	Name Reader type Keypad type Token data format Operating mode Reader operating mode Timed operating modes - This	Idemia - Front door (In) Wiegand reader None Wiegand 26 bit Im Token only s allows for different reader operation during a set	
	Name Reader type Keypad type Token data format Operating mode Reader operating modes - This During this timezone: This reader will operate as:	Idemia - Front door (In) Wegand reader None Wiegand 26 bit Image Token only s allows for different reader operation during a set All day, every day	

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

ite name	ANDREW-HP	
roduct description	Net2 Lite	Upgrade to Net2 Pro
ersion	5.04.6411.3802	
QL Top port	49233	
olling interleave period	0.5 seconds	•
abic server browsing		
splay reader LED's in OEM style (not nano's)		
ide reader LED's (not nano's)		
art Not2 Corner automatically at start up		
evert tokens to mode 1 operation		
able commissioning mode	$\overline{\mathbf{v}}$	
ow duplicate PINs		
able 50,000 user mode		
able "Buy tokens" link		
ow Power Mode	E	

Setting up MorphoManager:

EDITING THE ADMINISTRATOR PASSWORD.

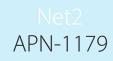
Once the software has been installed the default password of the Administrator user needs to be changed. The Administrator has full access rights in the MorphoManager software.

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	r this Operator		
Key Policy	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.

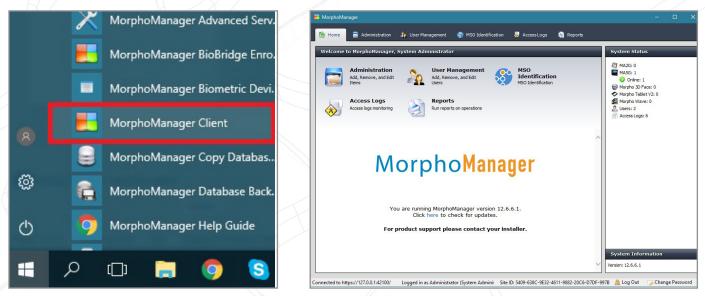


Goto "Programs", under "MorphoManager", select "MorphoManager Advanced Client Configuration"

≡		Microsoft Solitaire Collection	Create	🖉 MorphoManage	er advanced clie	nt configuration			×
		Microsoft SQL Server 2008 🛛 🗸	-	Server connection	type:	Local computer only	~		
		Microsoft SQL Server 2012 🛛 🗸	0 🗹	Hostname:				Port: 42100	
		Mixed Reality Portal	Outlook 2016	Port:		Manage high availability server lis	st		
	\bigcirc	Mixed Reality Viewer		Certificate binding	1:	Automatic	~		
		Morpho Ý New	w]	Certificate thumb					
		MorphoManager ^	Word 2016	Server certificate		None	×		
		MorphoAccess Sigma Firmware	Net2	Certificate issuer					
	2	MorphoManager Advanced Clie		Automatic login					
	×	MorphoManager Advanced Serv	Net2 Access	Enable automa Username:	itic login	strator			
		MorphoManager BioBridge Enro	Control	Password:	•••••	•			
	-	MorphoManager Biometric Devi				Apply changes	Revert cha	anges Close	

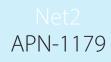
CREATING A BIOMETRIC DEVICE PROFILE

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.



📕 Mo	rphoManager				<u></u>		×
R	Home 📑 Administration	🤰 User Manageme	nt 🛞 MSO Identification 👼 AccessLogs 🧔	Reports			
Ite	ms	Biometric De	vice Profile		-	-	
0	Dperator	Add Edit	X 0 Delete Refresh Import Export				
6	Key Policy	Name	Description	Mode			
	Biometric Device Profile	Default		Express			
C	Biometric Device						
010 010 1011	Wiegand Profiles						
2	User Policy			10.2			

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.

📕 Morph	noManager			-		×
fr Hon	ne 📑 Administration 🤰	User Management 🛛 😵 MSO Identificati	on 👵 AccessLogs	Reports		
Items		Editing Biometric Device Profile	_		_	
8	Operator	Enter details for the Biometric De	evice Profile			
1	Key Policy	Name:	Default			
	Biometric Device	Description: Configuration Mode:	Express	~		
	Profile Biometric Device	Log Retrieval Enabled:		• •		
0007	Wiegand Profiles	Log retrieval interval:	300	(seconds)		
		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		
41	User Policy	MorphoAccess heartbeat interval:	30	(seconds)		
GA.	Access Schedules	Key Policy:	Default	~		
	User Distribution Group	MA Sigma, MA Sigma Lite, MA Sigma Li	ite+, MA Sigma Extrer	ne Only Settings		
	User Authentication Mode	Allow Remote Enrollment:				
	Operator Role	Default User Policy for Remote Enrollment:	Default	~		

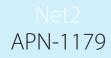
In the Biometric Device Settings window below, change the Wiegand Profile to **Standard 26 bit**, then click on **Next** until you see the **"Access Control Mode Settings"** screen.

🛃 MorphoManager					<u></u>	×
Administration	🕴 User Management 🛛 🎇 MSO Identificati	on 👼 AccessLogs	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:					
Wiegand Profiles	Biometric Threshold Settings					
🦓 User Policy	Biometric Threshold:	Recommended	~			
Access Schedules	MorphoAccess Vein Print Mode:	Universal Fast	~			
User Distribution	MorphoAccess Fingerprint Threshold:	3	~			
Group	Morpho 3D Face Identification Threshold:	Medium	~			
User Authentication Mode	Morpho 3D Face Verification Threshold:	Low	~			
🙊 Operator Role	It is recommended the mode set in in Biometric Device Profile. Using a 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 🔂 Ad	Iministration	🔓 User Management 🛛 🐯 MSO Identific	ation 👵 Access	Logs 🍓 Reports	
:ms	-	Editing Biometric Device Profile	2		
🕮 Operator	^	Access Control Mode Settings			
Key Policy		Access Control Mode:	Integrated	~	
Biometric Dev Profile	vice	Wiegand Out Enabled: Clock and Data Out Enabled:		=	
Biometric Dev	vice	Panel Feedback Mode: Panel Feedback No Response Timeout:	LED In 3000	(in mi jiseconds)	
Wiegand Prof	iles	Relay Enabled:			
User Policy		Relay Duration: Push To Exit Enabled:	1000	(in 10s of milliseconds)	
Access Sched	lules	Request to Exit Egress Timeout:	25000	(in milliseconds - please refer to the N Series Administration Guide for furthe	
User Distribut	tion	Duress Wiegand Mode:	Reversed	~	
User Authent Mode	ication	Duress Wiegand Profile:	Automatically ge	enerated random 64 t \sim	
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.

MorphoMana	ager			-	×
☆ Home	Administration	🤰 User Management 🛛 🚳 MSO Iden	tification 😽 AccessLogs 🧃 Reports		
Items	_	Editing Biometric Device			
Biome	etric Device e	Enter the details for this Bio	metric Device		
Biome	etric Device	Name: Description:	Idemia		
Wiega	and Profiles	Location:	Front Door - In		
🦄 User I	Policy	Asset ID: Export Value:	001		
Acces	s Schedules	Time Zone:	(UTC+02:00) Harare, Pretoria	1	
Group	Distribution	Hardware Family: Serial Number:	MA Sigma, MA Sigma Lite, MA Sigma Lite+, MA Sigma Extreme \sim		
User / Mode	Authentication	Hostname \IP Address:	192. 168. 1. 100	1	
🙊 Opera	ator Role	Port:	11010		
Notific	cations	Biometric Device Profile: Include in Time & Attendance Exports:	Default ~		
Client	5	Change User Onsite / Offsite Status:			
Sched	luled Reports	Onsite Key: Offsite Key:	No Key 🗸		
Card 1	Template				

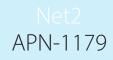
In the Biometric Device window the new reader will be added and an Online/Offline Status will be shown along with a number of **Tasks**. Once the reader has come online then MorphoManager will make all the configuration changes to the Morpho reader as per the BDP, once this is complete the Morpho reader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

Morp	hoManager								- 🗆 X
∩ но	me 🔂 Administration	🧤 User Man	agement	MSO Ident	ification 👵 Acces	sLogs 谢 Re	ports		
Items	5	Biomet	ric Device	-	_	_	_	_	_
9	Operator		👌 🗙 Edit Delete	e Refresh	Synchronize Get Lo	gs View Sync Log	Discontinue (Set Date/Time	Rebuild Reboot	3 Set Offline
	Key Policy	Name		🔺 Descr			Synchronization S		TIdSKS
	Biometric Device Profile	Idemia			Fron	t Do Default	Synchronized 🤡	😌 Online	0
	Biometric Device								
0101 - 01010- 10101-	Wiegand Profiles								
20	User Policy	Deterle		Queued Tasks	(0) Failed Tasks	(0)			Hide Details
R	Access Schedules	Details Idem		Queued Tasks		(0)			
	User Distribution Group	Descrip	ption: are Type:		MA Sigma Lite + Prox WF				
	User Authentication Mode	Serial I	Number: are version:		1606SML0000244 3.5.1				
	Operator Role		ame\IP Addre		192.168.1.100:11010				
	Notifications	Time Z	one:		2 / 500 (UTC+02:00) Harare, Pr	etoria		6	
	Clients	Synchr	ronization Mo ronization Sta Status:	atus:	Automatic Synchronized Online				

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.

-				- 48	-	~
🧮 MorphoManager						×
Administration	🍇 User Management 🛛 🚳 M	1SO Identification 😽 AccessLogs	Reports			
Items	Adding User Distributi	on Group				
🥮 Operator	Select Biometric Devi					
Key Policy	Select All 🧏 Clear All	🔍 Filter				
Biometric Device	lame	Description	Location	Model		
Biometric Device Profile	🗹 1 Jemia		Front Door - In	MA Sigma Lite + P	rox 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		-		×
Administration	🛊 User Management 🛯 🕸 MSO Identification 😽 AccessLogs 🧃 Reports			
Items	User Distribution Group	-	-	
Operator	Image: Book of the sector			
Key Policy	Name Description			
Biometric Device Profile	Contractors Managers			
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.



E MorphoManager		-		×
🟫 Home 📑 Administration 🛔	e User Management 🛛 🕸 MSO Identification 😽 AccessLogs 🧃 Reports			
Items	User Policy			
Operator	Add Edit Delete Refresh	Us	er Count: 2	2
Key Policy	Name 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			
Coperator	Enter the details for this Use	r Policy		
Key Policy	Name:	Default	1	
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	
fi	00/07/2020 11-27	File folder	

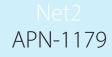
Net2 Server: 127.0.0.1 or localhost, if both the Paxton Net2 & MorphoManager software is installed on the same computer. Enter the IP address of the Net2 server if it is located on a different PC.

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.

ms						
	System Configuration					
Wiegand Profiles	Time & Attendance Communication Finger Template Capture Options BioBridge Privacy Mode	Display (Options	vstem Management MorphoWave ssword Rules		Connector Servic plication Control late Management
Access Schedules	MorphoManager BioBridge Set	ttings				
User Distribution Group	System:	Į	Paxton Net2v6 Web	dapi ~	Configure co	onnection
User Authentication Mode	Wiegand Profile / Token Type: Biol	Bridge Paxton Net2v6	WebAPI Connect	ion		×
👷 Operator Role	Enable Forced User Policy:	Server				
Notifications	Forced User Policy:	Net2 WebAPI Server: Port:	127.0.0.1			
Clients	User Synchronization Start Tin	Logon details				
Scheduled Reports		Please enter the Net2 k	ogon credentials be	łow.		
Scheduled Reports						

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	ttings:	
Hostname:	127.0.0.1	Connection was successfully established!
Port:	8025	
Username:	OEM Client	ОК
Password:		

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			
<u>I</u> oken type	Default		✓ New type	
First name	Joe	Get picture		
Middle name		Capture Picture		
Sumame 1	Soap	Capture Freture		
Department	Managers ~			
Access level	All hours, all doors $\qquad \lor$			
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		3
Address 2		Notes	^	Token type: Select "Fingerprint
Town				verification."
County			~	vermeation.
Post code Home telephone		Personnel number	< >	
Home Fax		Personner number PIN	Auto PIN	Note:
Mobile		Token number	3269 AUTO PIN	It is useful to use "Auto PIN"
Card template			E Fingerprint verification V	to generate random pin codes to
and to oppose		Token type 2	Add user and Enroll biometrics	ensure there are no duplicates.
			And that and childh ordination	
				DO NOT use token numbers
When I click 'Add user' relo When I click 'Add user' reta	ad the token type default values			higher than "65535" on
When I click Add user lea	an me previous record values		Close Add user	26-bit Wiegand.
			Close Mod user	zo-bit wiegand.
	Auto PIN	Step 3:		
3269				
		Select the "Add	user and Enroll bior	netrics button"
Eingerprin	Lucrification 14			
Add user and F	Enroll biometrics			
8				
Close	Add user			
CIOSE	Add user			
Dio Dridgo oprola	a ant will an an in th	- Not 2 Morthers	awindow	
biobliage enfolt	nent will open in th	ie netz workspaci		

You will see the follow screens in succession.



