



Feature Description Document

Configuring IXM Link for Paxton Net2



Purpose

This document outlines the process of configuring IXM Link to sync users between Paxton's Net2 software and IXM WEB.

Applies to

TITAN	TFACE	TOUCH 2	SENSE 2	MERGE 2	MYCRO
All Devices	All Devices	All Devices	All Devices	All Devices	All Devices

Description

IXM Link is a licensed module in IXM WEB that helps to synchronize the user database between IXM WEB (from where biometric enrollment for users is performed) and leading Access Control Panel Software (from where access rules for the users and the organization are managed).

This FDD will describe how to set up and configure IXM Link if you are using Net2 by Paxton to keep IXM WEB users in sync with Net2 by using its APIs to import and export users and their cards.



Requesting a License

1. From **Home** >> Expand the **Left Navigation Pane** >> Select the **License** tab >> Click on the **Paxton** icon.

Paxton Activation

DEVICES

Up to 5 (free) 6 to 20 21 to 50
 51 to 100 101 to 200 201 to 300
 301 to 500 501 to 1000 Registered devices[3]

Activation Key

2. Select the required license based on the number of devices and click **Request** to see the details and send them to Invoxium support to request a license.
3. The details screen will vary based on whether [SMTP settings are configured](#) in IXM WEB:
 - a. If SMTP settings are not configured, a “Copy to Clipboard” icon will appear.



Request ×

Date Requested	06/21/2022
Time	12:46 PM
License Request	1 Devices
Machine Key	
Module	Paxton
Version	2.2.250.0

Send above details to support@invixium.com

Click to copy the details and paste them in an email to support@invixium.com to start the licensing process.



- b. When SMTP settings are configured, a "Send" button and a "Copy to Clipboard" button will appear.

Request [Close]

Date Requested	06/21/2022
Time	12:46 PM
License Request	1 Devices
Machine Key	
Module	Paxton
Version	2.2.250.0

Send above details to support@invixium.com

Click **Send** to directly email the details displayed to Invixium support to start the licensing process.

- 4. Once you receive the license key from Invixium, go back to the same page where you requested the license and input the license key in the Key field as shown below.

Paxton Activation [Close]

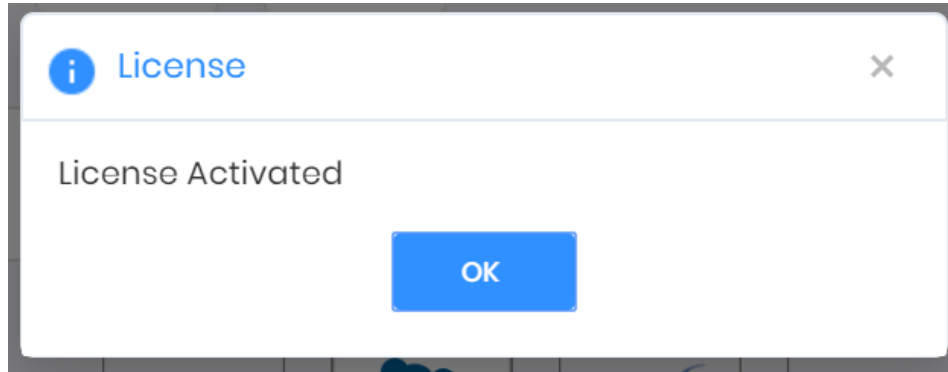
DEVICES

Up to 5 (free) 6 to 20 21 to 50
 51 to 100 101 to 200 201 to 300
 301 to 500 501 to 1000 Registered devices[3]

Activation Key



5. Click **Activate** to activate the license.





Configuring Wiegand to Output Net2 Tokens

1. Register all IXM devices.
2. From **Home** >> Click the **Devices** tab on the top.
3. Select any device.
4. Navigate to the **Access Control** tab for the selected device >> Click on **Wiegand**.

Wiegand Output ☑ ^

Wiegand	ID Type User ID ▼	Duress None ▼	
Identification	Success None ▼	Fail None ▼	
Verification	Success None ▼	Fail None ▼	
Anti-Shock	Format None ▼	ID Value Device Serial Nu. ▼	
Heart Beat	Format None ▼	ID Value Device ID ▼	Interval (sec) 60 ▲▼
User not found	Format None ▼		

Pulse (µsec)

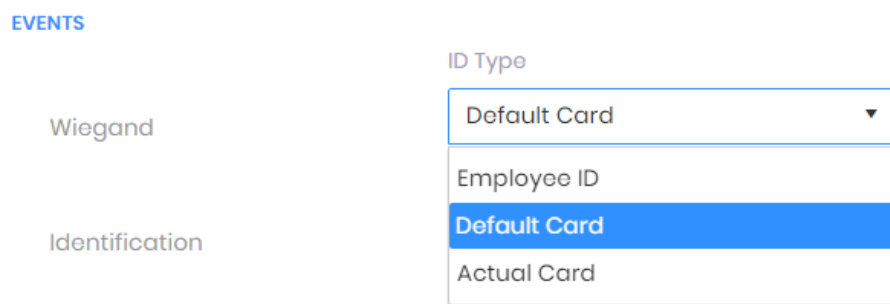
Width 40 ▲▼	Interval 2000 ▲▼
----------------	---------------------

Apply Reset

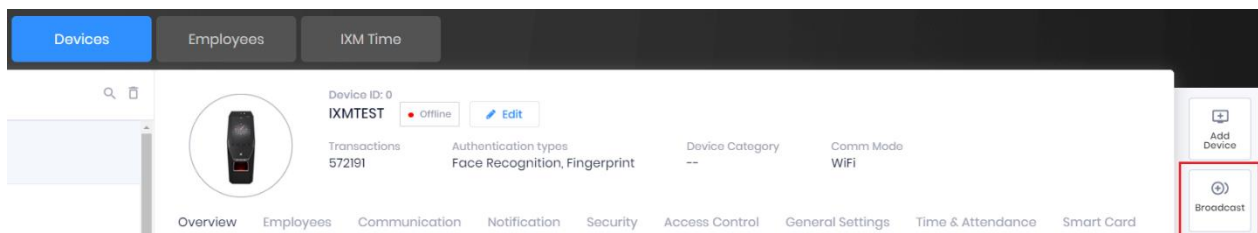


5. Toggle the switch on the right to enable Wiegand Output for the device.
6. Set ID Type of output Wiegand to Employee ID/Default/Actual Card as displayed:

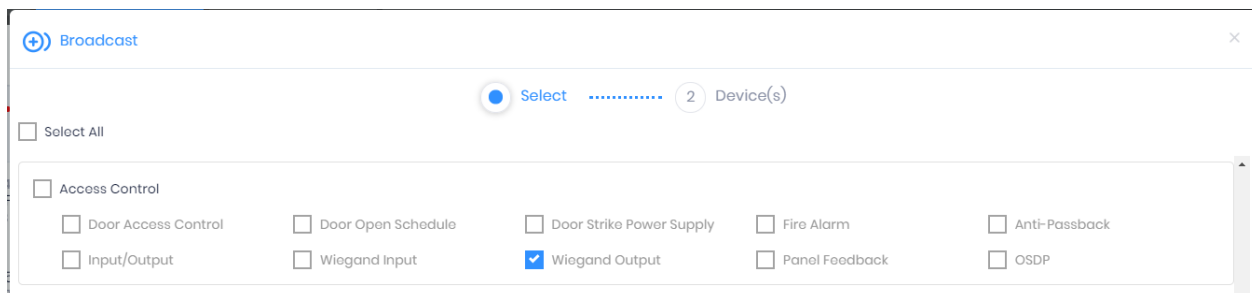
Note: Invixium devices can have up to 512-bits customizable Wiegand format. The default output is Standard 26-bit. To change the output to a different Wiegand format, refer to the [Configuring Wiegand document](#).



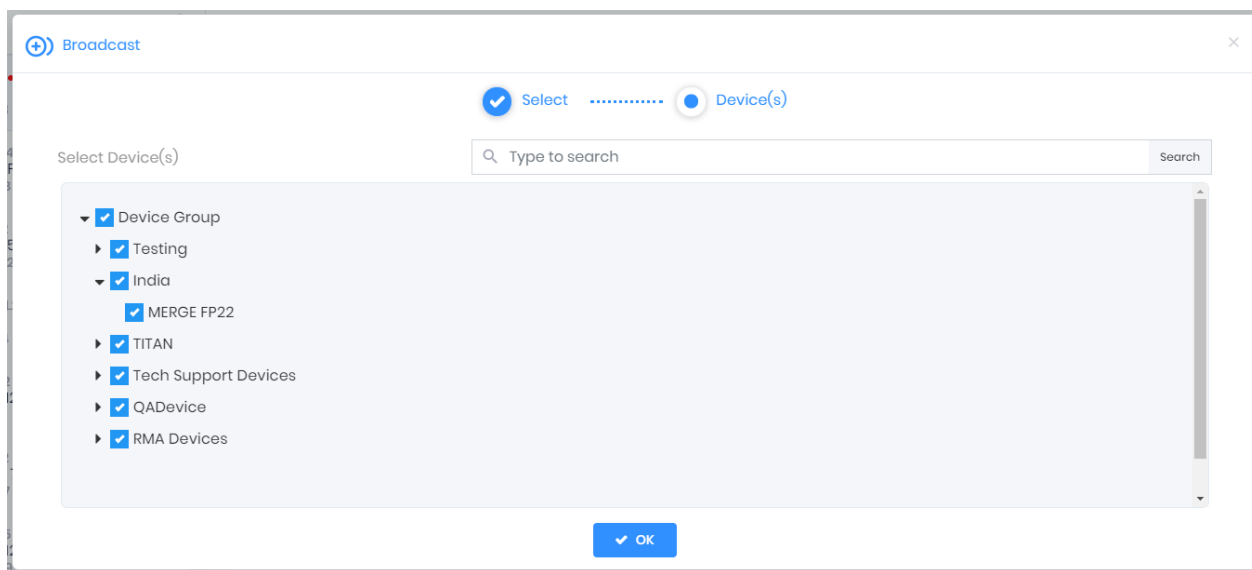
7. Click **Apply**.
8. This will update the Wiegand Output settings of the device selected in step 3.
9. If you have more devices, then follow the next steps to copy all Wiegand settings to all devices simultaneously. *Note: This copies all Wiegand output settings.*
10. From **Home** >> Click the **Devices** tab on the top >> Select the device in step 3 >> Click on **Broadcast** on the right.



11. Select Wiegand Output as the setting that needs to be broadcasted to other devices as shown below.



12. Click **Broadcast** and select the rest of the devices in the popup as displayed. Click **OK** to copy all Wiegand output settings of the source device to all destination devices at once.





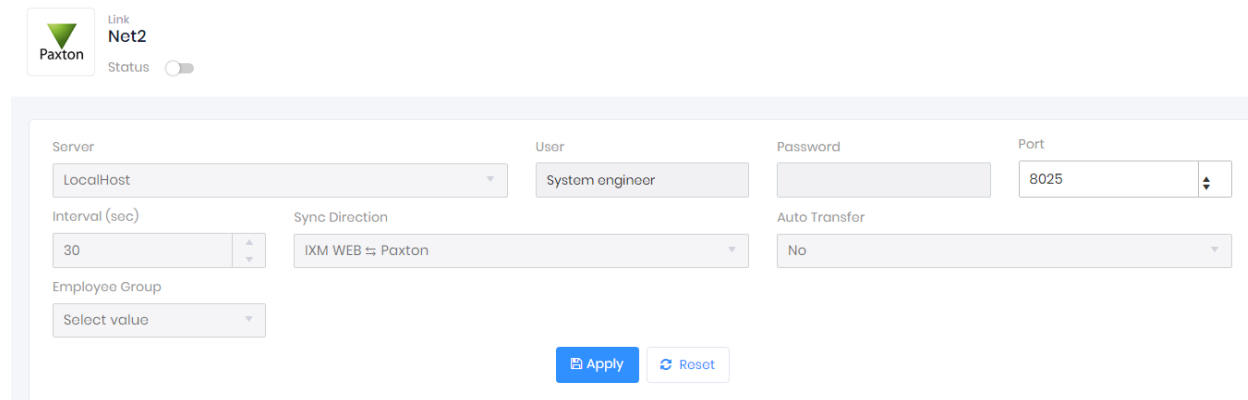
Field Mappings

The following are the Net2 fields mapped with IXM WEB.

Net2 Field	IXM Field	Notes
First name	First Name	
Surname	Last Name	
Department	Department	
Telephone	Office Phone	
Mobile	Mobile	
Valid from	Start Date	If Start Date is null in IXM WEB then this is set to date when sync takes place in Net2.
Expires end	End Date	If End Date is null in IXM WEB then this is set to 31/12/9999 when sync takes place in Net2.
Address 1	Address – 1	
Address 2	Address – 2	
Town	City	
County	State	
Postcode	ZIP Code	
Home telephone	Home Phone	
Email	Email	
PIN	PIN	
Token number	Prox ID	For new users, if this is null/blank then IXM WEB will generate a unique one and assign it to both systems.
AntiPassbackUser	Anti-Passback	This field is not visible in Net2 but it is a mandatory field and the default status is ACTIVE.
LostCard	No equivalent	If Lost Token is marked as true in Net2 then IXM WEB will mark null against PROX ID.

Configuring LINK for Paxton

1. From **Home** >> Expand the **Left Navigation Pane** >> Select **IXM Link** tab >> Click the **Paxton** icon. By default, the Paxton Net2 configuration is turned OFF.

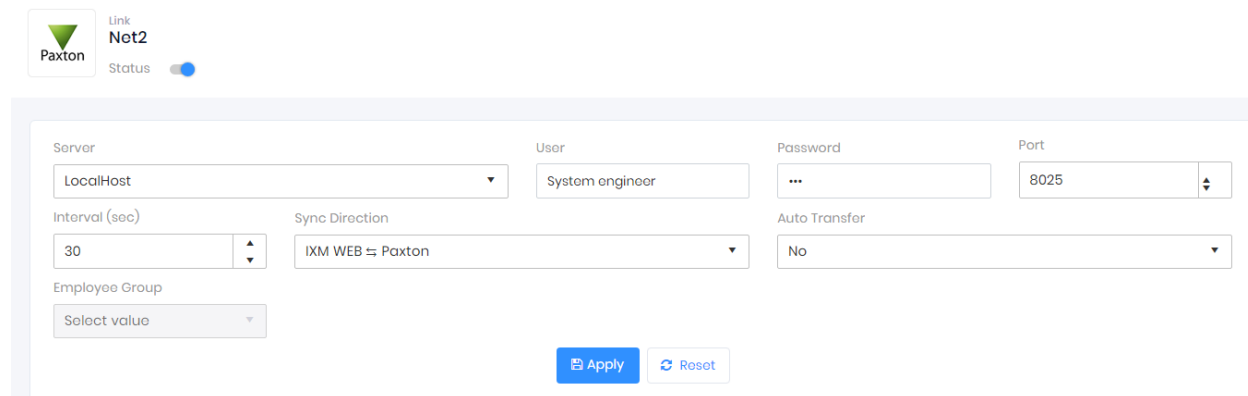


The screenshot shows the 'Link Net2' configuration page for Paxton. At the top left, there is a 'Paxton' icon and a 'Link Net2 Status' toggle switch which is currently turned OFF. Below this is a configuration form with the following fields:

- Server: LocalHost
- User: System engineer
- Password: (empty)
- Port: 8025
- Interval (sec): 30
- Sync Direction: IXM WEB ↔ Paxton
- Auto Transfer: No
- Employee Group: Select value

At the bottom of the form are 'Apply' and 'Reset' buttons.

2. Enable editing configuration by toggling the switch next to the logo to **ON**. Data is not synced when the configuration is applied with this switch in the OFF position.



This screenshot is identical to the one above, but the 'Link Net2 Status' toggle switch is now turned ON. The configuration fields remain the same: Server (LocalHost), User (System engineer), Password (...), Port (8025), Interval (30), Sync Direction (IXM WEB ↔ Paxton), Auto Transfer (No), and Employee Group (Select value). The 'Apply' and 'Reset' buttons are still present at the bottom.



3. Provide values for the Web Service URL, Instance Name, User, Password, interval, Sync Direction, Auto Transfer option, and Sync Card Number fields. Each configuration setting is explained below:

Server: Name or IP of the computer where Net2 service is running.

User: Name of Net2 operator.

Password: Password of Net2 operator.

Port: OS port where Net2 service is listening for an incoming connection.

Interval: Latency acceptable between data transfers.

Sync Direction:

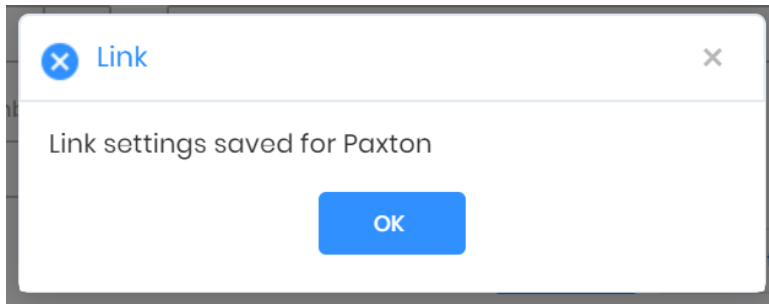
- Sync data from Net2 to IXM WEB.
- Sync data from IXM WEB to Net2.
- Sync data both ways. The link will update the IXM WEB first and then Paxton.

Auto Transfer:

- No: Employees synchronized from Paxton will not be automatically added to any of the employee groups present in IXM WEB.
- Yes: On selecting 'Yes' for Auto Transfer, the employee group selection dropdown enables, which displays all the employee groups present in IXM WEB. All the employees synchronized from Paxton will be automatically added to the employee group selected on Link Configuration Page.

Employee Group: Selection of employee group needs to be done to use the Auto transfer functionality.

4. Click **Apply** to save the settings.



Visiting this view while the main switch is ON collapses the Configuration section and expands the Activity section.

Activities

Numbers	Numbers	Times
Added	Added to IXM WEB	Last run at
Updated	Updated in IXM WEB	Next run at
Deleted	Deleted in IXM WEB	
1084	665	10 Oct, 2019 5:09 PM
4	169	10 Oct, 2019 5:10 PM
1058	223	

[Download Add-on](#)
[Sync Now](#)

Here you can see some data of last and next run times.

Clicking **Sync Now** immediately starts synchronizing pending data. This is useful when you don't want to wait until the next scheduled run which is shown in Next Run At.

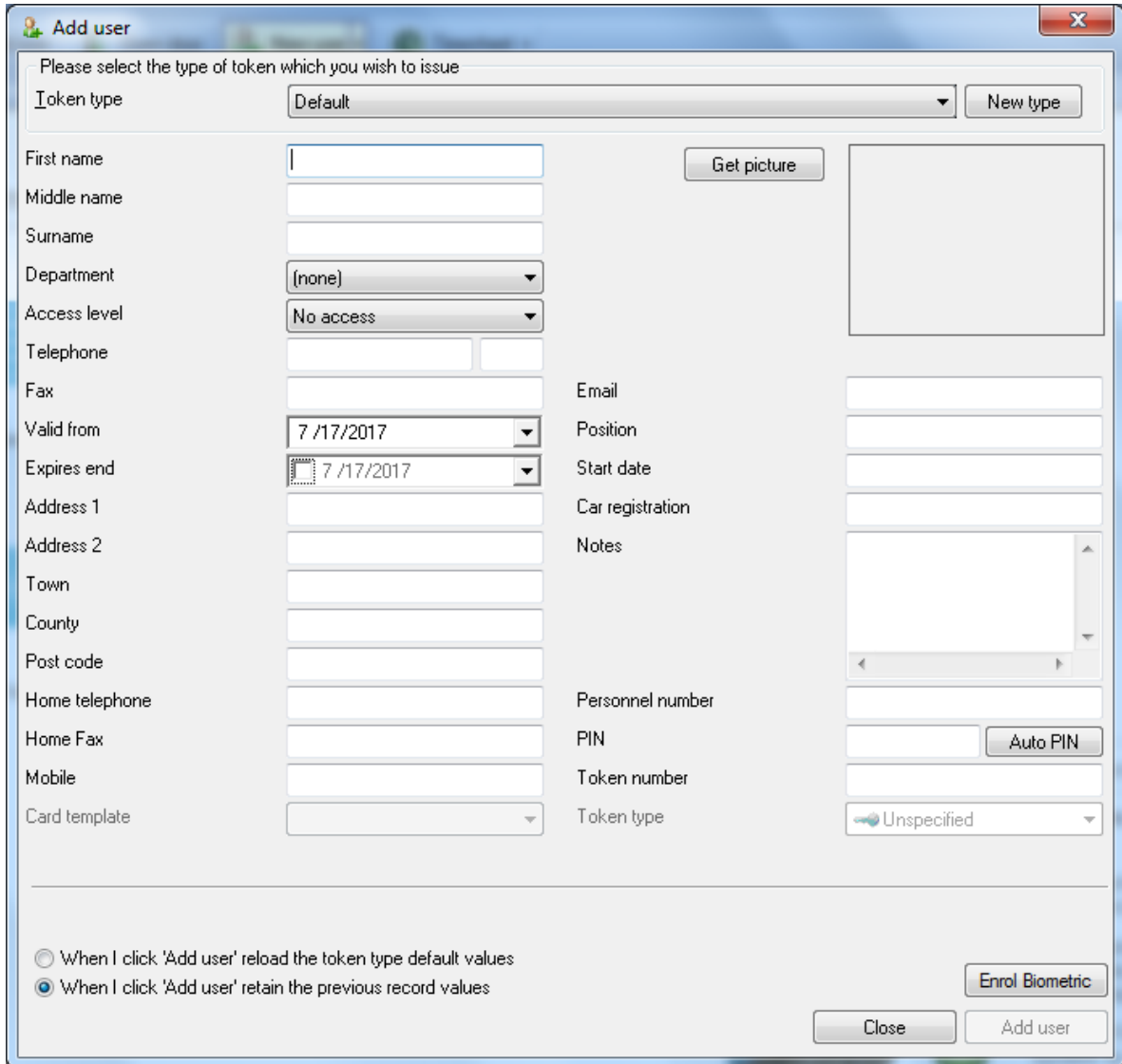
When data is syncing at the given interval, the numbers on the view will change accordingly.

Multiple Cards

Paxton's Net2 can have multiple tokens per user but IXM WEB supports only one Prox card. Link selects the first available valid card.

Fingerprint Enrollment from Net2

1. A Net2 add-on (to be run separately) is provided to start IXM WEB fingerprint enrollment for new users added to Net2 directly from Net2. When this add-on is running, it injects a button in Net2 just above “Add User” in the lower right corner.



Add user

Please select the type of token which you wish to issue

Token type: Default New type

First name:

Middle name:

Surname:

Department: (none)

Access level: No access

Telephone:

Fax:

Valid from: 7 /17/2017

Expires end: 7 /17/2017

Address 1:

Address 2:

Town:

County:

Post code:

Home telephone:

Home Fax:

Mobile:

Card template:

Get picture

Email:

Position:

Start date:

Car registration:

Notes:

Personnel number:

PIN: Auto PIN

Token number:

Token type: Unspecified

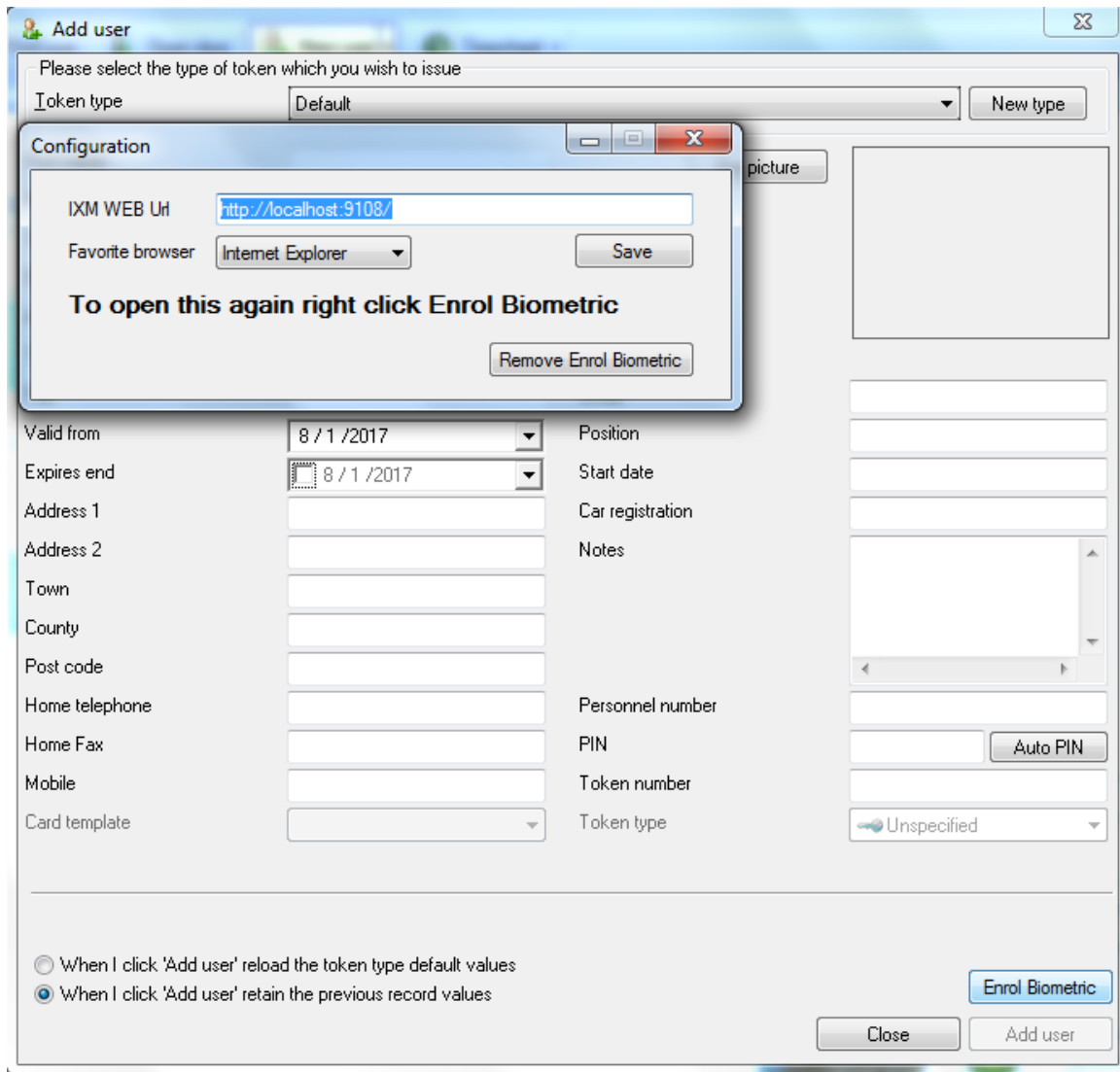
When I click 'Add user' reload the token type default values

When I click 'Add user' retain the previous record values

Enrol Biometric

Close Add user

2. Right-clicking Enroll Biometric brings up the configuration view for the add-on as shown below.



The User can make 3 changes here:

- a. Change the IXM WEB URL.
- b. Select a favorite browser where the Enrollment popup will open.
- c. Stop the dynamic injection of a new button by clicking the Remove Enroll Biometric in the lower right corner of the configuration window. The add-on needs to be run again when a button is required. To have the add-on start automatically



when the end-user logs into Windows, create a shortcut in the user's Startup folder

3. Click Save to apply the changes.
4. Clicking **Enroll Biometric** opens the IXM WEB fingerprint enrollment view for the user. The enrollment will open in the browser selected in step 2.
5. The user should be logged in to IXM WEB in the selected browser before starting enrollment.



Configuring Panel Feedback with Paxton

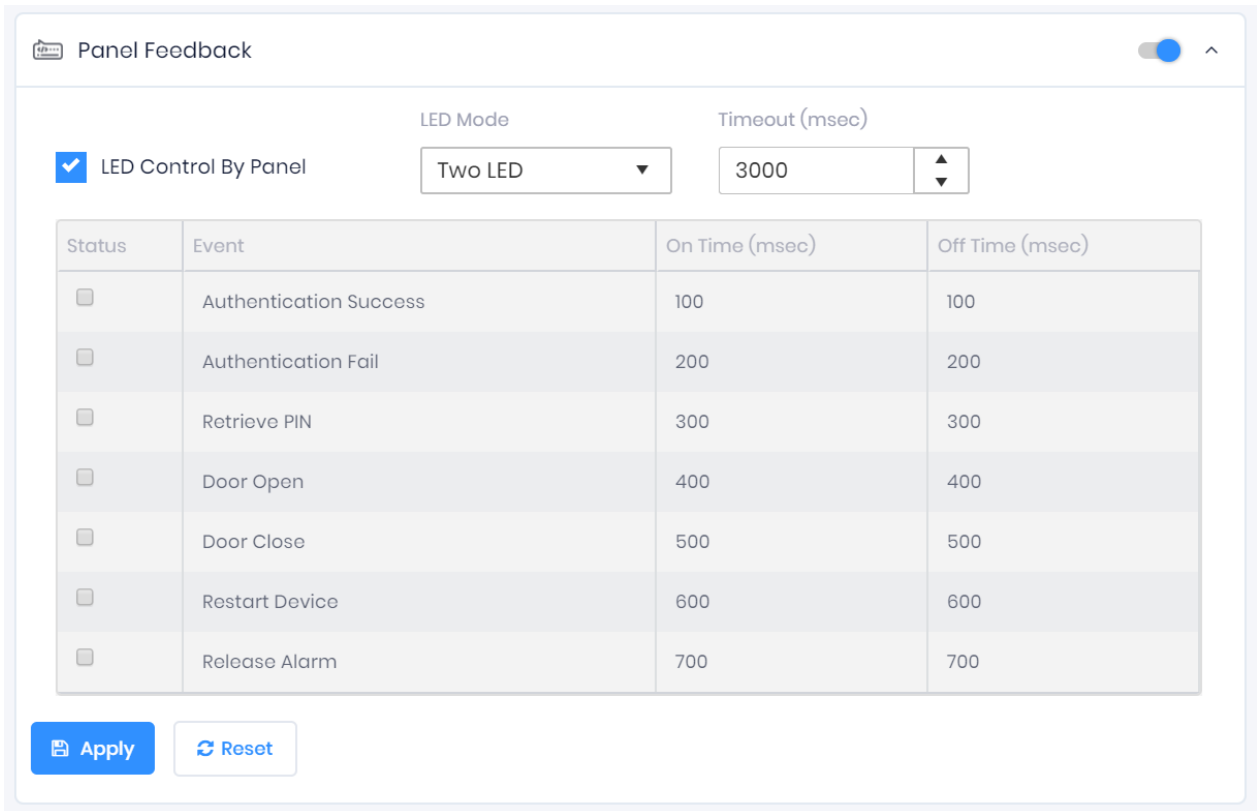
1. Connect Wiegand Data D0 of the Paxton Panel with WDATA_OUT0 of the IXM device, Wiegand Data D1 of the Paxton Panel with WDATA_OUT1 and Wiegand Ground of the Paxton Panel with WGND of the IXM Device.
2. Connect Paxton's green LED with ACP_LED1 of the IXM device and Paxton's red LED with ACP_LED2 of the IXM device.
3. From **Home** >> Click on the **DEVICES** tab on top >> Select the required **device** >> Navigate to the **Access Control** tab >> Click **Panel Feedback**. By default, Panel Feedback is turned OFF.

Panel Feedback [Toggle] ^

LED Control By Panel LED Mode: Two LED Timeout (msec): 3000

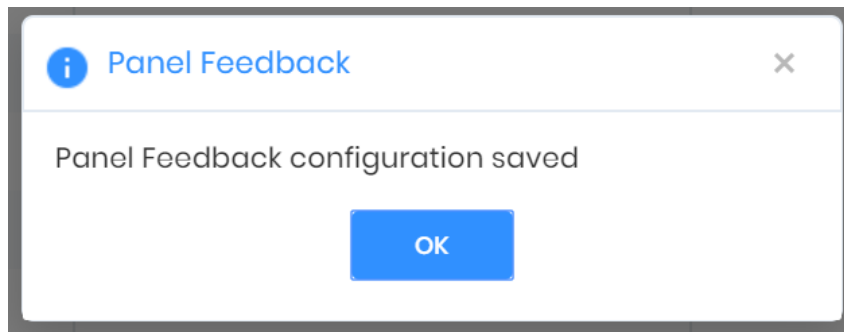
Status	Event	On Time (msec)	Off Time (msec)
<input type="checkbox"/>	Authentication Success	100	100
<input type="checkbox"/>	Authentication Fail	200	200
<input type="checkbox"/>	Retrieve PIN	300	300
<input type="checkbox"/>	Door Open	400	400
<input type="checkbox"/>	Door Close	500	500
<input type="checkbox"/>	Restart Device	600	600
<input type="checkbox"/>	Release Alarm	700	700

4. Toggle the Panel Feedback switch on the right to **ON**, then Enable LED Control by Panel and Select LED Mode as “Two LED”.



Status	Event	On Time (msec)	Off Time (msec)
<input type="checkbox"/>	Authentication Success	100	100
<input type="checkbox"/>	Authentication Fail	200	200
<input type="checkbox"/>	Retrieve PIN	300	300
<input type="checkbox"/>	Door Open	400	400
<input type="checkbox"/>	Door Close	500	500
<input type="checkbox"/>	Restart Device	600	600
<input type="checkbox"/>	Release Alarm	700	700

5. Click **Apply** to save the changes.





Support

For more information relating to this Feature Description document, please contact us at support@invixium.com

Disclaimers and Restrictions

This document and the information described throughout are provided in their present condition and are delivered without written, expressed, or implied commitments by Invixium Inc. and are subject to change without notice. The information and technical data herein are strictly prohibited for the intention of reverse engineering and shall not be disclosed to parties for procurement or manufacturing.

This document may contain unintentional typos or inaccuracies.

TRADEMARKS

The trademarks specified throughout the document are registered trademarks of Invixium Access Inc. All third-party trademarks referenced herein are recognized to be trademarks of their respective holders or manufacturers.

Copyright © 2022, INVIXIUM. All rights reserved.