

# Feature Description Document

## Configuring IXM Link for Galaxy



## Purpose

This document outlines the process of configuring IXM Link to sync users between Invixium's IXM WEB and Galaxy's access control system - System Galaxy.

## Applies to

TITAN	TFACE	TOUCH 2	SENSE 2	MERGE 2	MYCRO
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 Galaxy's System Galaxy to keep IXM WEB users in sync with System Galaxy 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 **System Galaxy** icon.

System Galaxy 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 Invixium 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	4:09 PM
License Request	1 Devices
Machine Key	
.	
Module	Galaxy
Version	2.2.250.0

Send above details to [support@invixium.com](mailto:support@invixium.com)

Click to copy the details and paste them in an email to [support@invixium.com](mailto: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** ×

Date Requested	06/21/2022
Time	4:09 PM
License Request	1 Devices
Machine Key	
Module	Galaxy
Version	2.2.250.0

Send above details to [support@invixium.com](mailto:support@invixium.com)

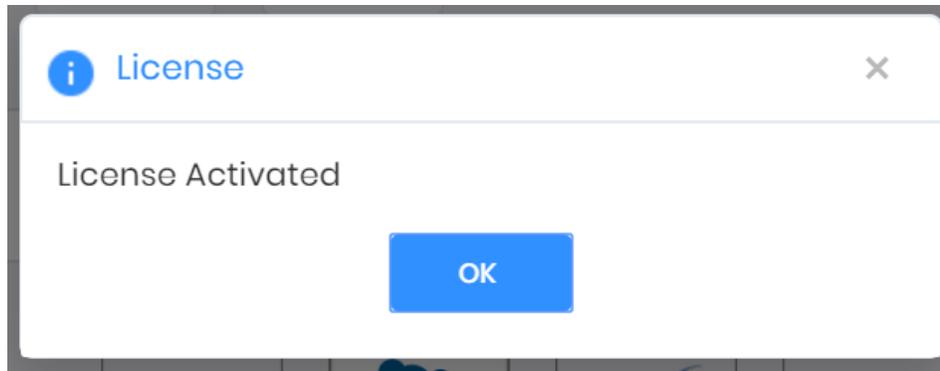
Click **Send** to directly email the details displayed to Invixium support to start the licensing process.



- 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.

A screenshot of a 'System Galaxy Activation' dialog box. The title bar says 'System Galaxy Activation' with a close button. Below the title bar is a section labeled 'DEVICES' containing nine radio button options: 'Up to 5 (free)' (selected), '6 to 20', '21 to 50', '51 to 100', '101 to 200', '201 to 300', '301 to 500', '501 to 1000', and 'Registered devices[5]'. A 'Request' button is located below these options. Below the device selection is an 'Activation Key' field with a blacked-out key and an 'Activate' button. A 'Cancel' button is at the bottom center.

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





## Configuring Wiegand to Output Galaxy

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)

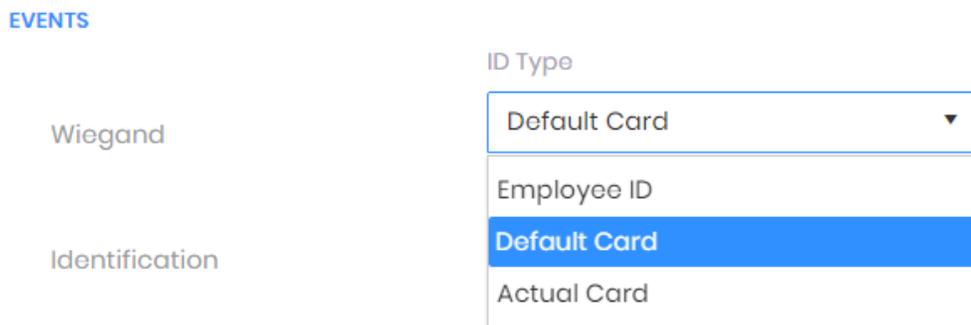
Width 40	Interval 2000
-------------	------------------

Apply Reset

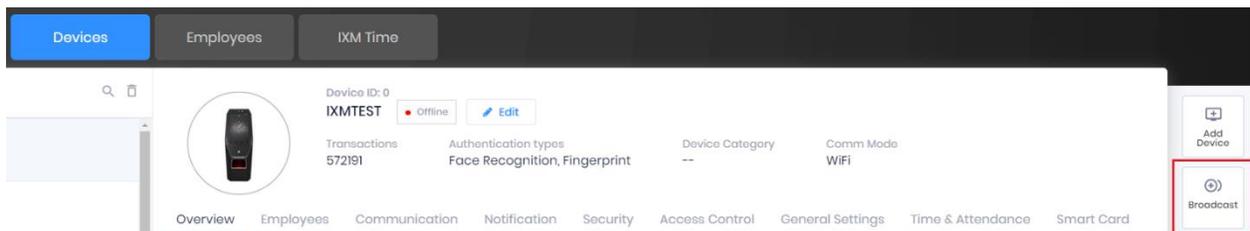


5. Toggle the switch on the right to enable Wiegand Output for the device.
6. Set ID Type of output Wiegand to Employee ID/Default/Actual Card as displayed:

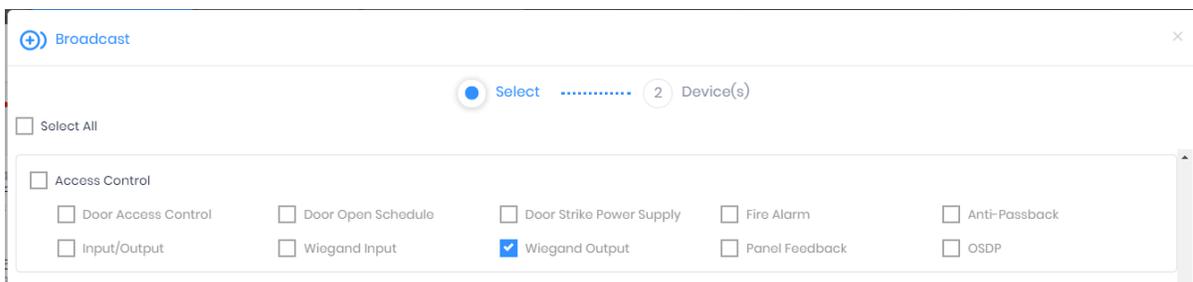
*Note: Invixium devices can have up to 512-bits customizable Wiegand format. The default output is Standard 26-bit. To change the output to a different Wiegand format, refer to the [Configuring Wiegand document](#).*



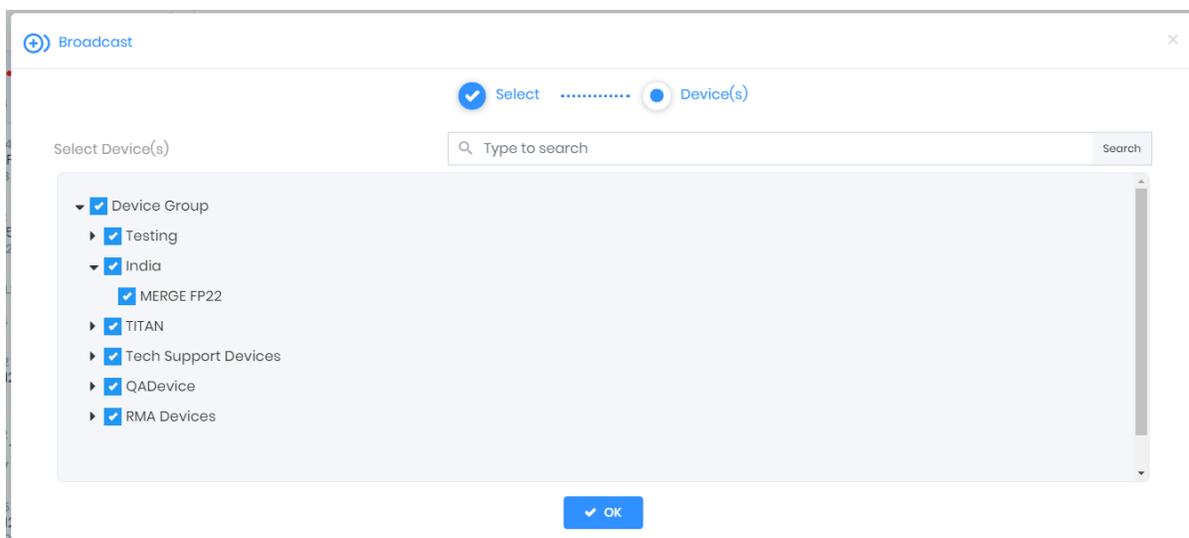
7. Click **Apply**.
8. This will update the Wiegand Output settings of the device selected in step 3.
9. If you have more devices, then follow the next steps to copy all Wiegand settings to all devices simultaneously. *Note: This copies all Wiegand output settings.*
10. From **Home** >> Click the **Devices**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

### 1.1 General Field Mappings

The following are the Galaxy fields mapped with IXM WEB.

Galaxy Field	IXM Field	Notes
<b>Common ID</b>	User ID	Galaxy allows alphanumeric & special characters in Common ID while IXM WEB allows only alphanumeric in User ID. Hence, IXM LINK will sync only those users whose Common ID value is compatible with IXM WEB. Also, Common ID is not mandatory in Galaxy, and User ID in IXM WEB is mandatory; hence if it is blank, users won't be imported from Galaxy to IXM WEB.
<b>First Name</b>	First Name	
<b>Last Name</b>	Last Name	
<b>Phone</b>	Mobile Phone	
<b>Department</b>	Department	The Department of a user in Galaxy will be imported in IXM WEB. And the department selected from IXM WEB will be exported to Galaxy. However, no new department would be created while exporting users from IXM WEB to Galaxy.
<b>Home Phone (Personal Tab)</b>	Home Phone	
<b>Address1 (Personal Tab)</b>	Address – 1	
<b>Address2 (Personal Tab)</b>	Address -2	
<b>City (Personal Tab)</b>	City	
<b>State (Personal Tab)</b>	State	
<b>Zip Code (Personal Tab)</b>	ZIP Code	
<b>Main Photograph (Personal Tab)</b>	Photo	



<b>Date1 (Personal Tab)</b>	Start Date	If both Date1 and Date2 are specified, then they are synced from Galaxy to IXM WEB.
<b>Date2 (Personal Tab)</b>	End Date	If both Date1 and Date2 are specified, then they are synced from Galaxy to IXM WEB.
<b>D.O.B. (Personal Tab)</b>	Birth Date	
<b>Inactive (Personal Tab)</b>	Suspend User	Galaxy doesn't allow deleting users while using through IXM LINK, so records deleted in IXM WEB are flagged inactive in Galaxy.
<b>PIN (Card/Badge Settings – Card1 Tab)</b>	PIN	The PIN in IXM WEB can range from 4 to 10 digits; while in Galaxy, PINs can range from 0 to 65535. Hence, a PIN will be exported to Galaxy if it lies in the range of 0 to 65535 but only those PINs will work with IXM Devices whose range is between 4 to 10 digits.

### 1.2 Prox ID Field Mapping

Card Technology	Field in Galaxy	IXM Field
Barcode	Card Code	Prox ID
Card Code	Card Code	
Galaxy Keypad	Card Code	
Magnetic Stripe	Card Code	
U.S. Government ID (FASCN)	Card Code	
ABA Format (Clock/Data)	Card Code	
26 Bit Wiegand	ID Code	
Cypress 37 Bit	ID Code	
HID 37 Bit Standard H10304	ID Code	
HID Corporate 1000	ID Code	
HID Corporate 1000 (48 Bit)	ID Code	



XceedID 40 Bit	ID Code	
P.I.V.	Credential	
BQT (36 Bit)	Access	

### 1.3 Facility Code Field Mapping

Card Technology	Galaxy Field	IXM Field
Barcode	N/A	Facility Code
Card Code	N/A	
Galaxy Keypad	N/A	
Magnetic Stripe	N/A	
U.S. Government ID (FASCN)	N/A	
ABA Format (Clock/Data)	N/A	
26 Bit Wiegand	Facility Code	
Cypress 37 Bit	Facility Code	
HID 37 Bit Standard H10304	Facility Code	
HID Corporate 1000	Company Code	
HID Corporate 1000 (48 Bit)	Company Code	
XceedID 40 Bit	Site Code	
P.I.V.	Site	
BQT (36 Bit)	Facility	



## 1.4 Issue Level Field Mapping

Card Technology	Galaxy Field	IXM Field
Barcode	N/A	<p>Issue Level The range is 0 to 15 in Galaxy, hence if the value of Issue Level is not in this range in IXM WEB; its value would be set to 0.</p>
Card Code	N/A	
Galaxy Keypad	N/A	
Magnetic Stripe	N/A	
U.S. Government ID (FASCN)	N/A	
ABA Format (Clock/Data)	N/A	
26 Bit Wiegand	N/A	
Cypress 37 Bit	N/A	
HID 37 Bit Standard H10304	N/A	
HID Corporate 1000	N/A	
HID Corporate 1000 (48 Bit)	N/A	
XceedID 40 Bit	N/A	
P.I.V.	N/A	
BQT (36 Bit)	Issue #	



## Configuring LINK for Galaxy

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

The screenshot shows the 'Link System Galaxy' configuration page. At the top left, there is a logo and the text 'Link System Galaxy' with a status switch that is currently turned OFF. Below this, there are several configuration fields: 'Web Service URL', 'Web Service User', 'Web Service Password', 'Card Type' (set to '26 Bit Wiegand'), 'Interval (sec)' (set to '30'), 'Sync Direction' (set to 'IXM WEB ← Galaxy'), and 'Auto Transfer' (set to 'No'). There is also an 'Employee Group' dropdown menu. At the bottom, there are 'Apply' and 'Reset' buttons. A link is provided: 'Visit Galaxy website for more information on setting up System Galaxy for use with Invixium devices'.

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.

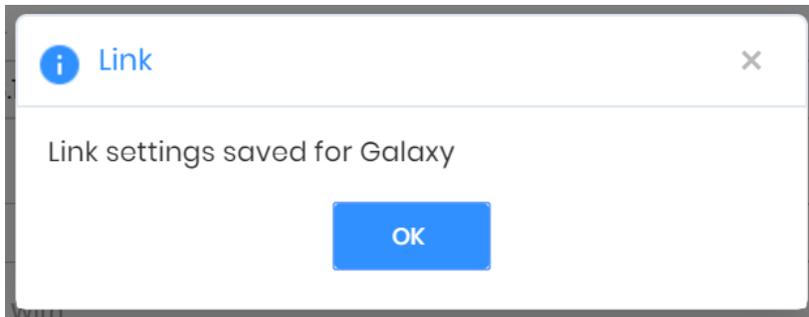
The screenshot shows the 'Link System Galaxy' configuration page with the status switch turned ON. The configuration fields are now populated: 'Web Service URL' is 'http://192.168.1120:8000', 'Web Service User' is 'master', 'Web Service Password' is masked with dots, 'Card Type' is '26 Bit Wiegand', 'Interval (sec)' is '30', 'Sync Direction' is 'IXM WEB ← Galaxy', and 'Auto Transfer' is 'No'. The 'Employee Group' dropdown is still 'Select value'. The 'Apply' and 'Reset' buttons are visible at the bottom. The same informational link is present.

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:



- **Web Service URL:** Galaxy API URL.
- **Web Service User:** Name to log in to Galaxy.
- **Web Service Password:** Password to log in to Galaxy.
- **Card Type:** Valid Card format which allows syncing of cards between Galaxy and IXM WEB.
- **Interval:** Latency acceptable between data transfers.
- **Sync Direction:**
  - Sync data from Galaxy to IXM WEB
  - Sync data from IXM WEB to Galaxy
  - Sync data both ways. LINK will update IXM WEB first and then Galaxy.
- **Auto Transfer:**
  - No: Employees synchronized from Keep will not be automatically added to any of the employee groups present in IXM WEB.
  - Yes: By 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 Keep will be automatically added to the employee group selected on the Link Configuration Page.
- **Employee Group:** Selection of employee group needs to be done foto 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	
Added	0
Updated	0
Deleted	0

Numbers	
Added to IXM WEB	90
Updated in IXM WEB	0
Deleted in IXM WEB	0

Times	
Last run at	11 Oct, 2019 4:05 PM
Next run at	11 Oct, 2019 4:05 PM

[Sync Now](#)

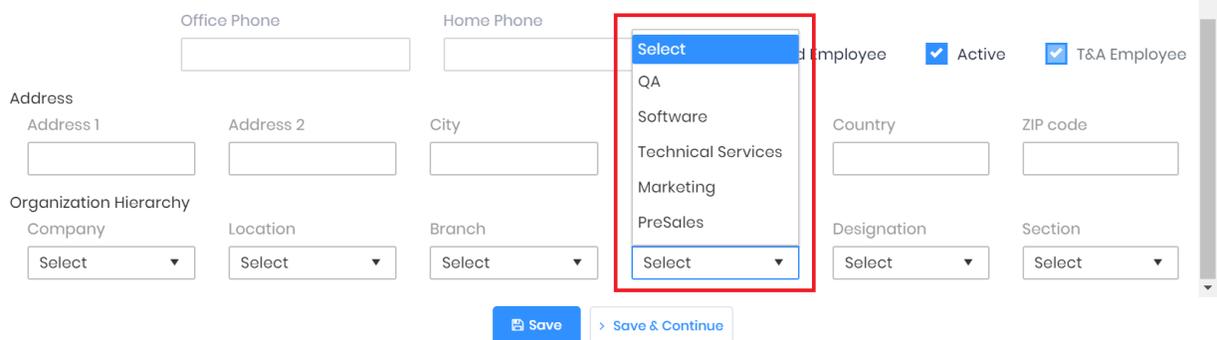
Here you can see some data pertaining to the last and next run times.

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 would change accordingly.

## Department from Galaxy

1. From **Home** >> Click the **Employees** tab on the top >> Click **Add Employee** on the right.
2. Under the Employee Information section, expand the Department drop-down to see departments imported from Galaxy.



Office Phone:  Home Phone:

Address: Address 1:  Address 2:  City:

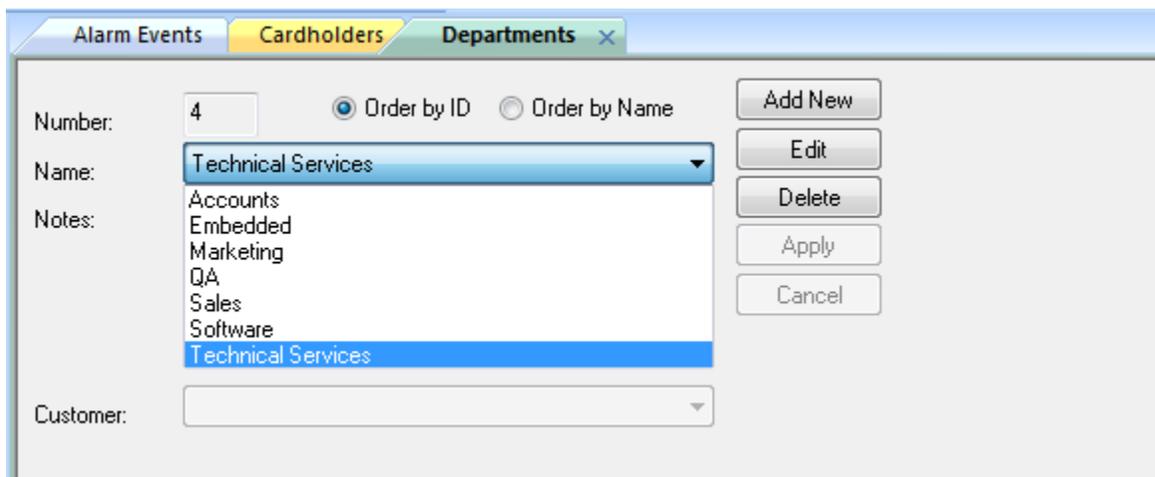
Organization Hierarchy: Company:  Location:  Branch:

Department:  (Dropdown menu open showing: Select, QA, Software, Technical Services, Marketing, PreSales, Select)

Country:  ZIP code:

Designation:  Section:

Buttons:



Alarm Events | **Cardholders** | **Departments** X

Number:   Order by ID  Order by Name

Name:  (Dropdown menu open showing: Accounts, Embedded, Marketing, QA, Sales, Software, Technical Services)

Notes:

Customer:

Buttons:



## Multiple Cards

Galaxy can have multiple cards per user but IXM WEB supports only one Prox card.  
Link selects the first available valid card.



## Configuring Panel feedback with Galaxy

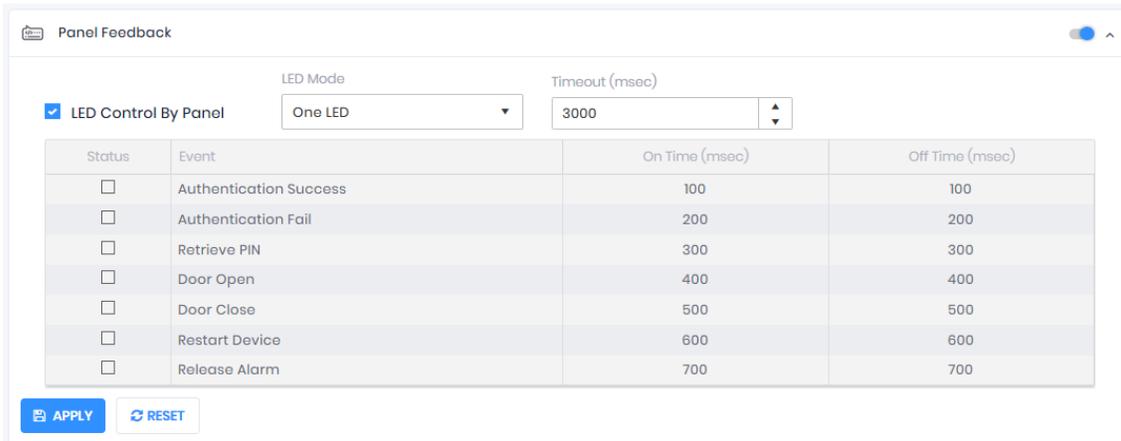
1. Connect Wiegand Data D0 of the Galaxy Panel with WDATA\_OUT0 of the IXM device, Wiegand Data D1 of the Galaxy Panel with WDATA\_OUT1 and Wiegand Ground of the Galaxy Panel with WGND of the IXM Device.
2. Connect LED of Galaxy Panel with ACP\_LED1 of the IXM device.
3. From **Home** >> Click on the **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] [Up Arrow]

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

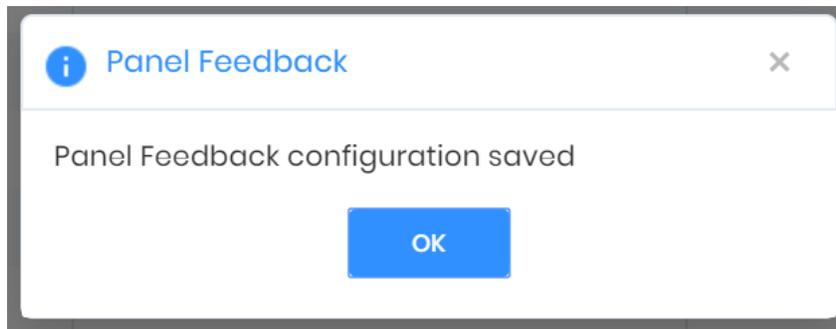
Status	Event	On Time (msec)	Off Time (msec)
<input type="checkbox"/>	Authentication Success	100	100
<input type="checkbox"/>	Authentication Fail	200	200
<input type="checkbox"/>	Retrieve PIN	300	300
<input type="checkbox"/>	Door Open	400	400
<input type="checkbox"/>	Door Close	500	500
<input type="checkbox"/>	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 & Select LED Mode as “One 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](mailto:support@invixium.com)

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