Feature Description Document

Configuring IXM Link for RS2 Technologies

Purpose

This document outlines the process of configuring IXM Link to sync users between Access It! by RS2 Technologies 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 Access It! by RS2 Technologies to keep IXM WEB users in sync with Access It! 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 **Access It! (RS2 Technologies)** icon.

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 the IXM WEB:
   a. If SMTP settings are not configured, a "Copy to Clipboard" icon will appear.

📑 **Request**   ✕

Date Requested	06/21/2022
Time	4:39 PM
License Request	1 Devices
Machine Key	
Module	RS2
Version	2.2.250.0

Send above details to **support@invixium.com**

[🗐] [✔ Send] [✖ Cancel]

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

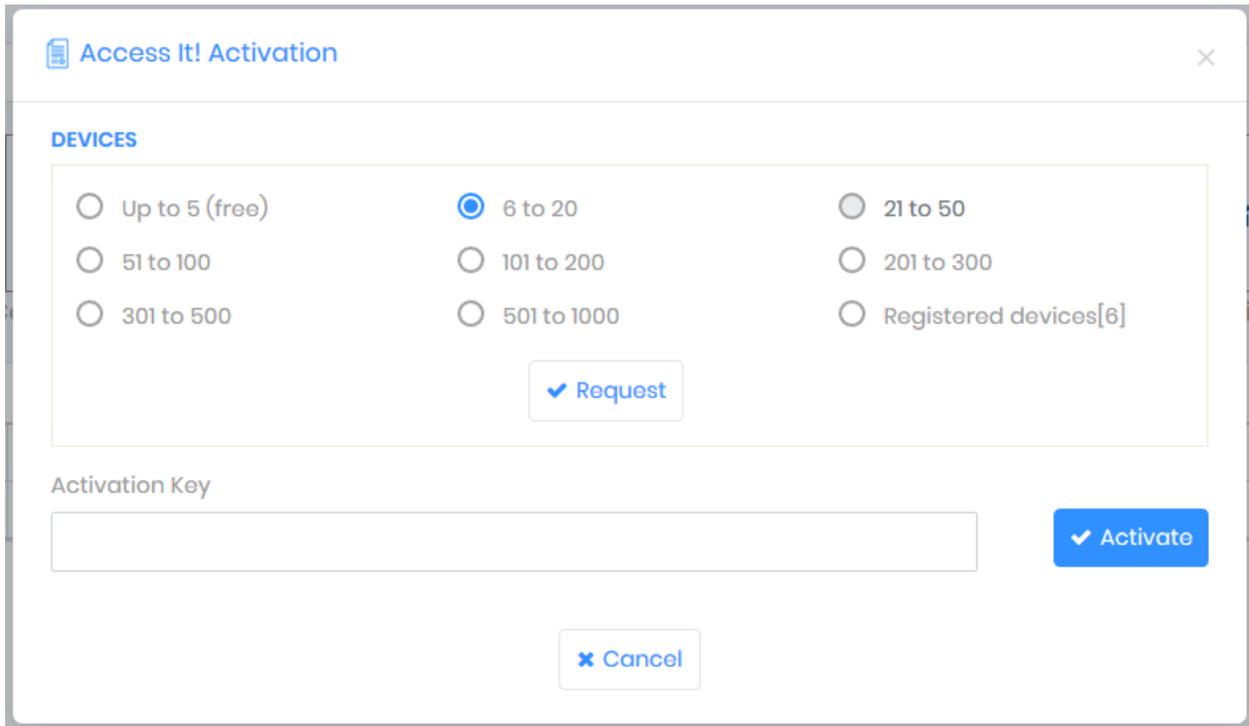b. When SMTP settings are configured, a "Send" button and a "Copy to Clipboard" button will appear.

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.

5. Click **Activate** to apply license.
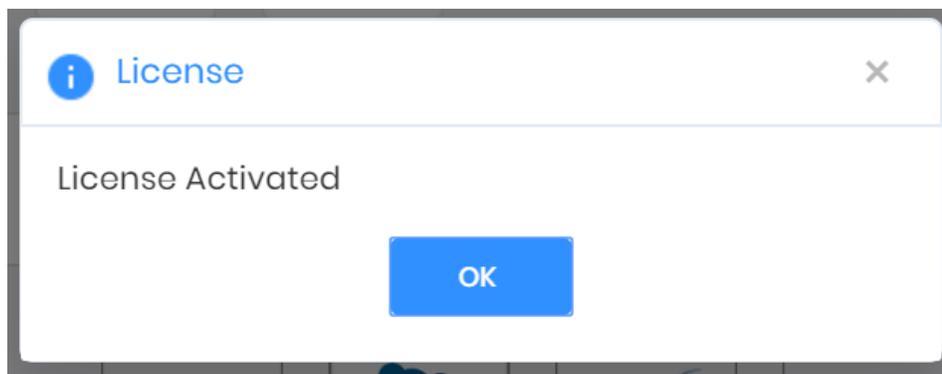
Configuring Wiegand to Output RS2

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.**

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](#)*.*

    EVENTS

    Wiegand

    ID Type

    Default Card ▼

    Employee ID

    Default Card

    Actual Card

    Identification
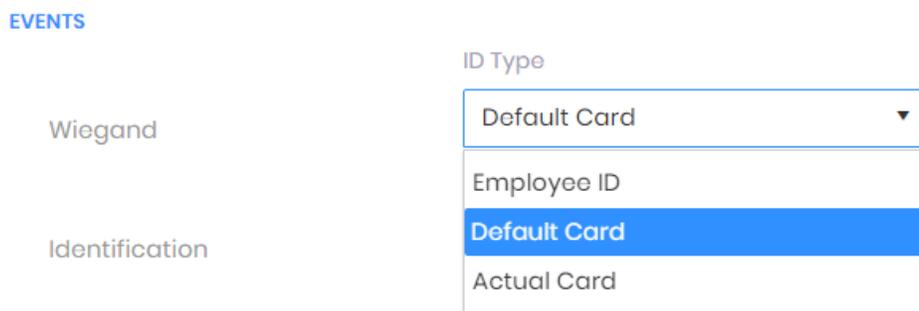
7. Click **Apply**.

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.
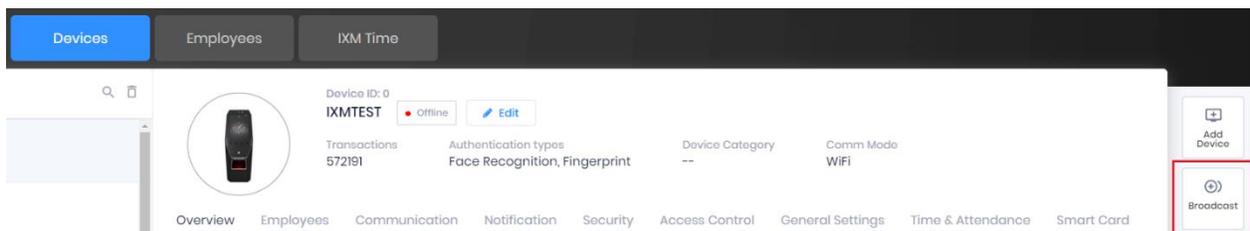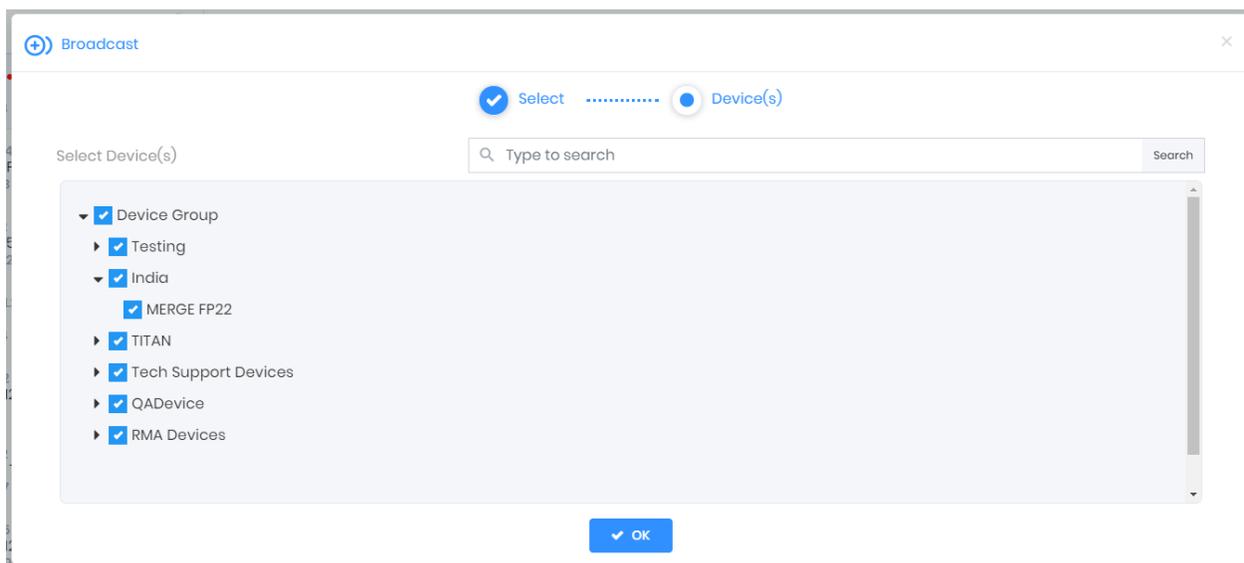
11. Select Wiegand Output as the setting that needs to be broadcasted to other devices as shown below.
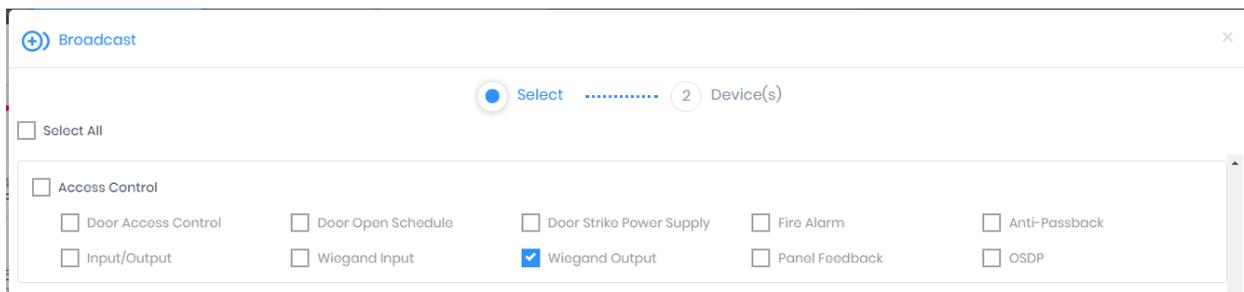
12. Click **Broadcast** and select the rest of the devices to which the setting needs to be copied as displayed. Click **OK** to copy all Wiegand output settings of the source device to all destination devices at once.

Field Mappings

The following are the AI fields mapped with IXM WEB.

RS2 Field	IXM Field	Notes
Last name	Last Name	
First name	First Name	
Cardholder Status	Suspend User	IXM WEB has two values ACTIVE and INACTIVE while AI has three statuses Inactive, Active, and Date based. Active of AI is mapped to INACTIVE, Inactive of AI is mapped to ACTIVE as Suspend User in IXM WEB. The date field is mapped to Start Date & End Date of IXM WEB.
Cardholder status Date is Active (Cardholder status - Date based)	Start Date	AI doesn't allow a value less than 1/1/1970.
Cardholder status Date is Expire (Cardholder status - Date based)	End Date	AI doesn't allow a value greater than 31/12/2035.
Department	Department	
Card number	Prox ID	
Facility Code	Facility Code	
PIN Number	PIN	RS2 has a PIN at card level which is mapped to a PIN at user level since IXM WEB supports only one card per user. The rationale is that the user remembers their PIN which can be used on Invixium devices for authentication. In RS2, the default value for PIN Number is 0. If the PIN Number is 0 then it is considered as

		empty in IXM WEB.
Card status	"No equivalent"	Prox ID, Facility Code, and PIN are set when Card status is not Inactive. Inactive card statuses are not transferred to IXM WEB.
Active (Card status - Date based) & **Expire (Card status - Date based)**	"No equivalent"	If an active date is less than or equal to the current date and expiry date is greater than and equal to the current date then Prox ID, Facility Code, and PIN are transferred to IXM WEB.
Photo	User Image	Upon syncing, IXM WEB fetches all the user's profile pictures from the AccessIt. Users need to ensure that photos have a valid size (it should not be 0 bytes).

Configuring LINK for RS2

1. From **Home** >> Expand the **Left Navigation Pane** >> Select the **IXM Link** tab >> Click the **Access It! (RS2)** icon. By default, the Access It! configuration is turned OFF.

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

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:

Authentication Mode: Windows or SQL Server as an authentication mode for login type.

Server: Name or IP of SQL Server Instance where RS2 database is installed.

User: User Name to log into SQL Server to access database.

Password: Password to log into SQL Server to access database.

Database: Select a database which contains RS2 users.

Interval: Latency acceptable between data transfers.

Sync Direction:
   a. Sync data from RS2 to IXM WEB.
   b. Sync data from IXM WEB to RS2.
   c. Sync data both ways. A link will update IXM WEB first and then RS2.

Auto Transfer:

   ➢ No: Employees synchronized from RS2 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 RS2 will be automatically added to the employee group selected on the 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 changes.
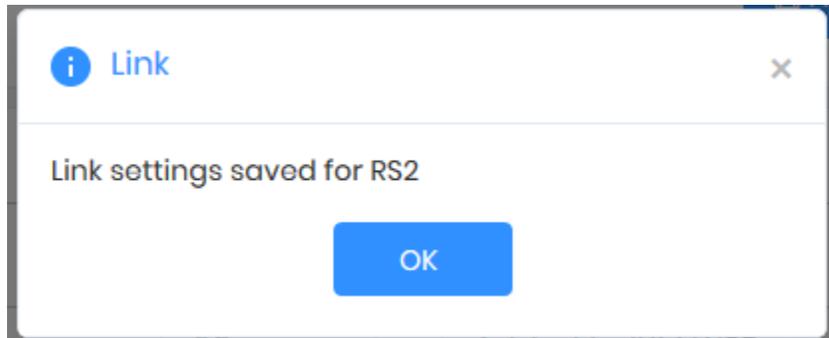
Visiting this view while the main switch is ON collapses the Configuration section and expands the Activity section.

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.

NOTE: When a user is deleted from the RS2, theyalso get deleted from IXM WEB as well.
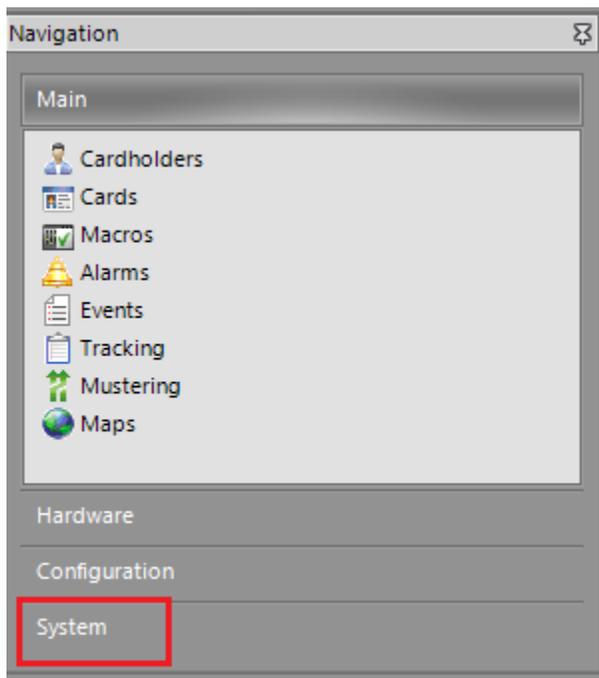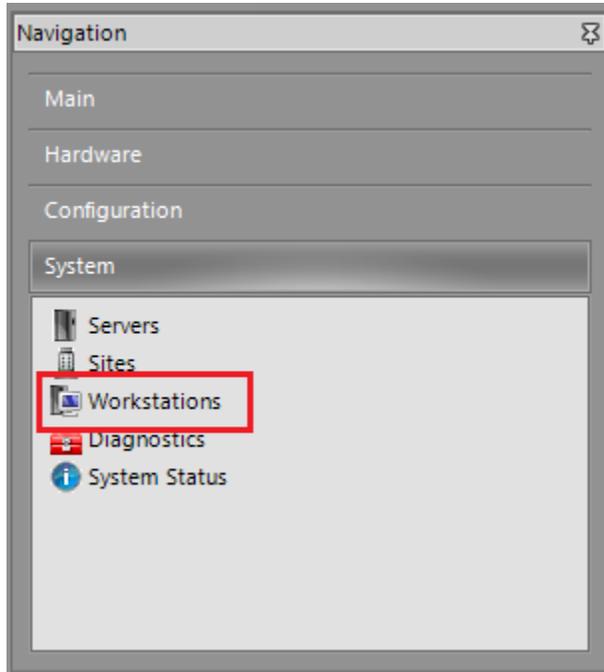
Multiple Cards

Access It! can have multiple cards for one cardholder, but IXM WEB supports only one card for one user.
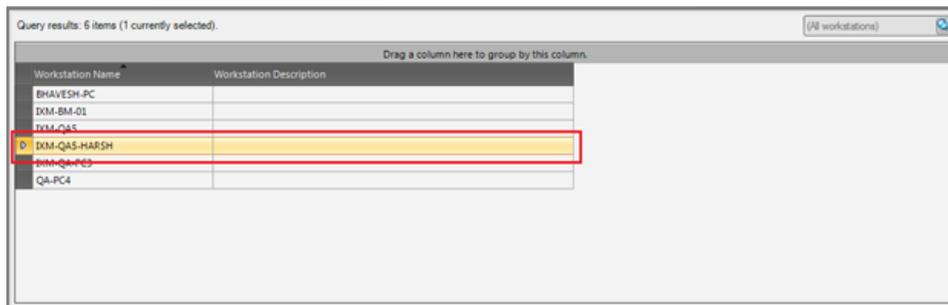
Fingerprint Enrollment from RS2

1. Click the **System tab** on the left-hand menu.
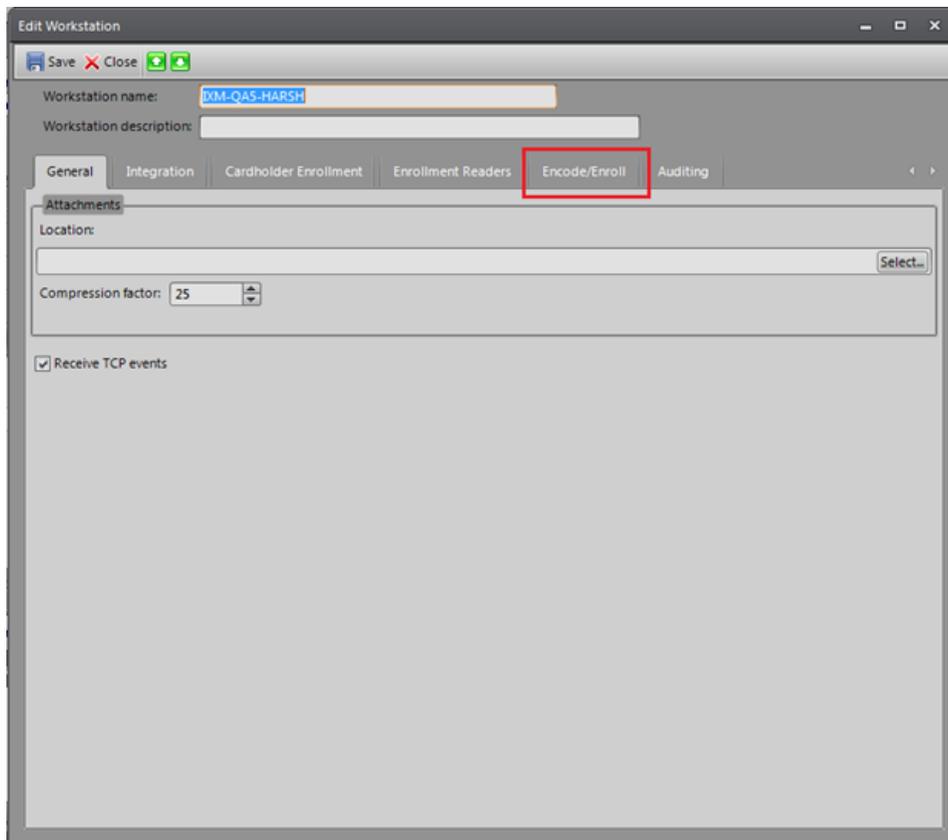
2. Select **Workstations**.

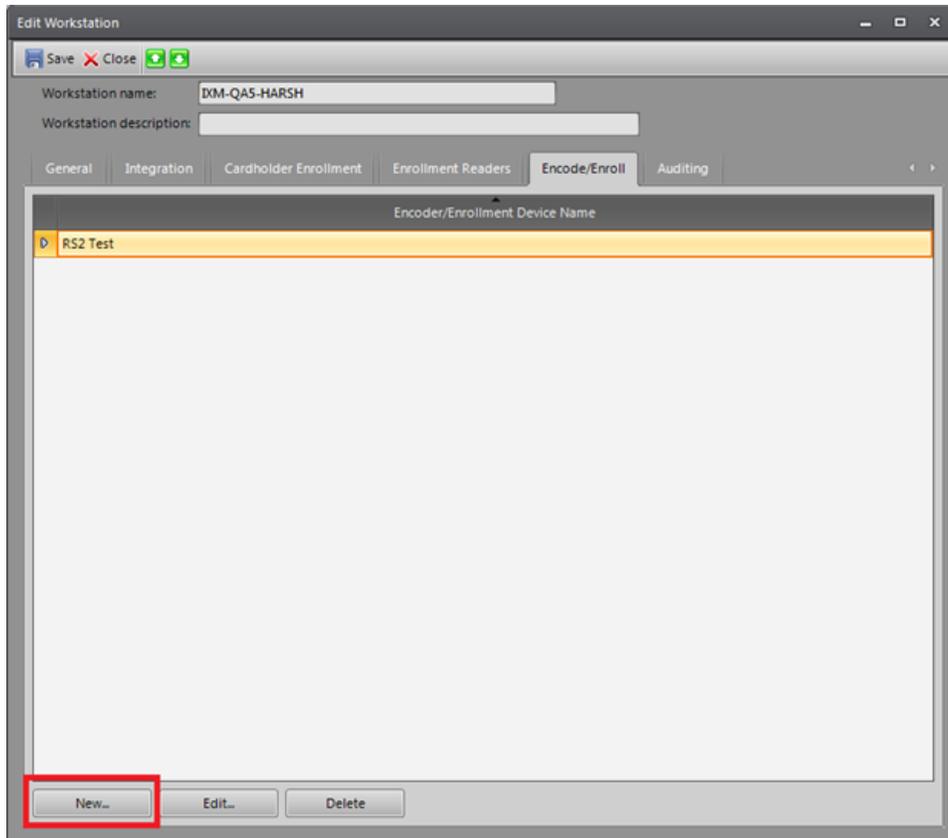3. Edit the workstation you want to enable this on.
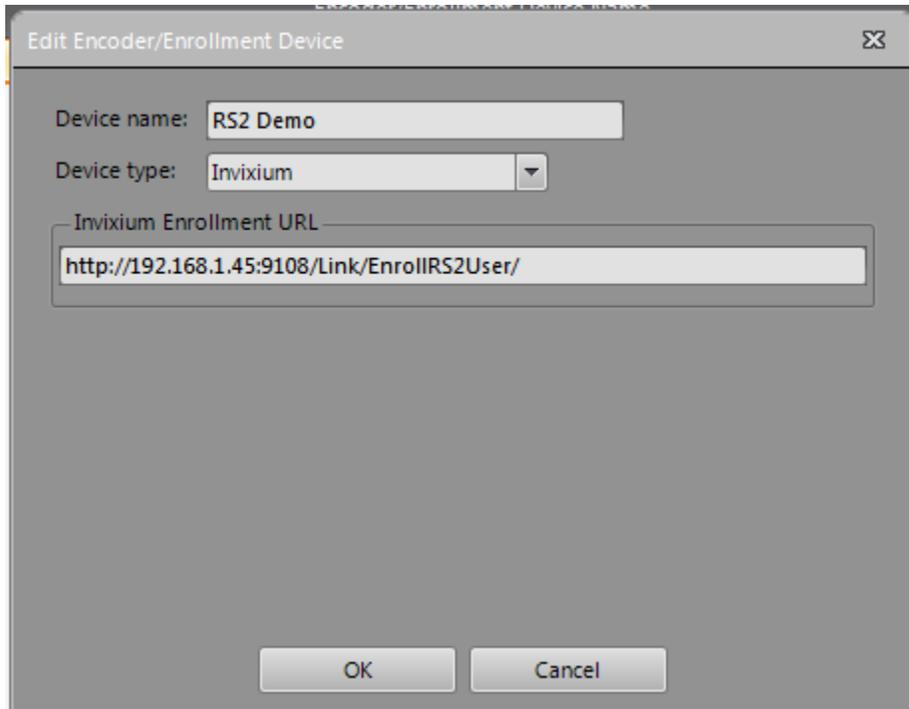
4. Select **Encode/Enroll** tab.

5. Click **New.**

6. Enter name.

7. Select Device Type as Invixium.
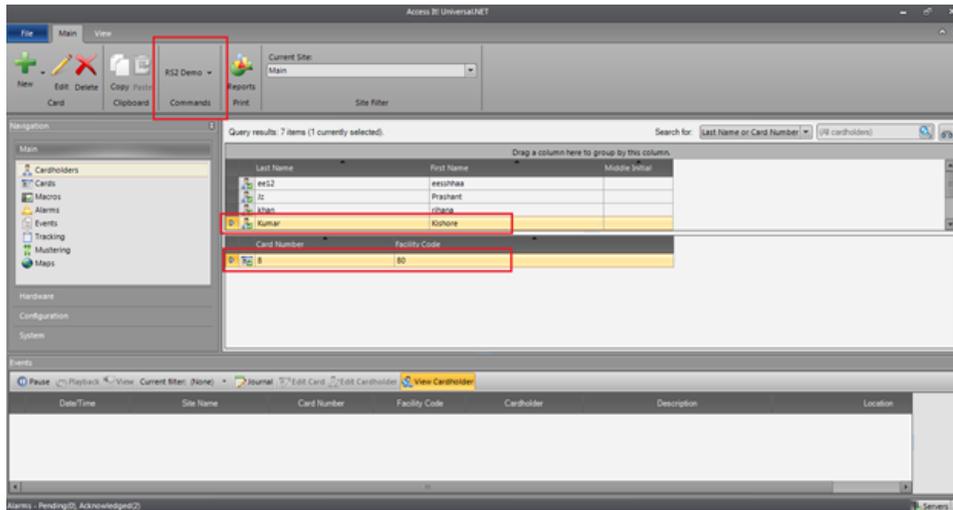
8. Enter **Error! Hyperlink reference not valid.** (for example: http://192.168.1.118:9108/Link/EnrollRS2User) in the enrollment URL field.
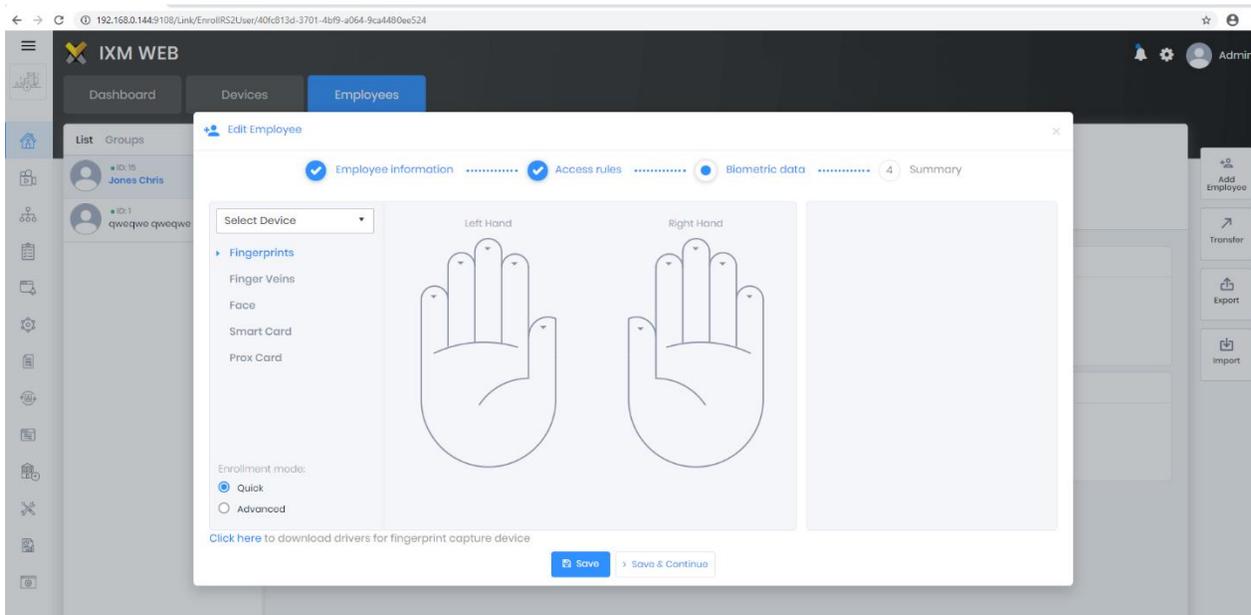
9. Click **OK.**

10. Close and reopen the software.

11. Go to Main >> Cardholder >> Select user >> Click on card number. This will show a device name that was created previously in the menu bar.

12. Click on the device name to launch IXM WEB using the "Invixium Enrollment URL" with the cardholder ID appended for enrollment.

Configuring Panel Feedback with RS2

1. Connect Wiegand Data D0 of the RS2 Panel with WDATA_OUT0 of the IXM device, Wiegand Data D1 of the RS2 Panel with WDATA_OUT1 and Wiegand Ground of the RS2 Panel with WGND of the IXM Device.

2. Connect LED of RS2 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			
		LED Mode	Timeout (msec)	
☐ LED Control By Panel		Two LED ▾	3000	
Status	**Event**		**On Time (msec)**	**Off Time (msec)**
☐	Authentication Success		100	100
☐	Authentication Fail		200	200
☐	Retrieve PIN		300	300
☐	Door Open		400	400
☐	Door Close		500	500
☐	Restart Device		600	600
☐	Release Alarm		700	700

APPLY   RESET

4. Toggle the Panel Feedback switch on the right to ON, then Enable LED Control by Panel & Select LED Mode as "One LED".
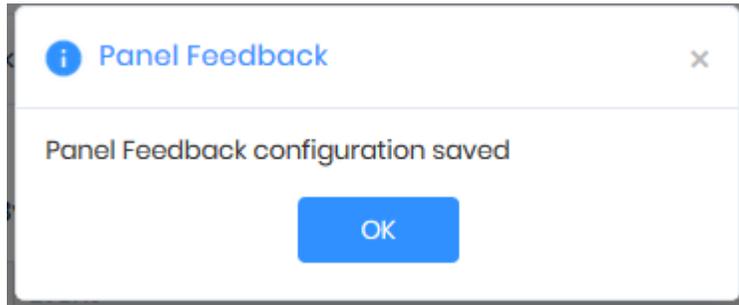

5. Click **Apply** to save the changes.

Support

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

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