IXM WEB Integration with DNA Fusion by Open Options

Installation Instructions

V2.0

P/N XAD-TPI-005-02G

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1. Introduction

Purpose

This document outlines the process of configuring the software integration between DNA Fusion by Open Options and Invixium devices.

Description

IXM Link, a licensed module in IXM WEB, is required to synchronize the user database between IXM WEB (where biometric enrollment for users is performed) and DNA Fusion Software (where access rules for the users and the organization are managed).

Note: To activate IXM Link within IXM WEB, the installer must contact Invixium Support at support@invixium.com to obtain the activation key.

The following sections will describe how to set up and configure IXM Link to keep IXM WEB users in sync with DNA Fusion by using “Web Service” to import and export cardholders.

Acronyms

Acronym	Description
API	Application Programming Interface
IXM	Invixium

Field Mappings

The following are the DNA Fusion fields that are mapped to IXM WEB.

DNA Fusion Field	IXM WEB Field	Notes
First name	First Name	
Last name	Last Name	
Activation	Start Date (Card)	For cases when this is null in IXM WEB, the current date and time will be assigned as the card's activation date.
Deactivation	End Date (Card)	For cases when this is null in IXM WEB, the end date will be one year from the current date and the assign time will be 12 AM (00:00:00).
Credential	Number (Cards)	
Access level Groups	User Group	Access Level Group can only import in IXM WEB.
PIN	Card PIN	
F/C	Facility Code	
Issue	Issue Level	
Card Type	Card Type	Card Type can only import in IXM WEB.
Photo	Photo	

Note: Multiple Cards – DNA Fusion can have multiple identifiers (cards) per person, and IXM WEB supports a maximum of 10 cards per employee.

2. Compatibility

Invixium Readers

TITAN	TFACE	TOUCH2	SENSE2	MERGE2	MYCRO
All models	All models	All models	All models	All models	All models

Software Requirements

Application	**Version**
Open Options	8.1.0.3
Invixium IXM WEB	2.2.252.0
Operating Systems	Windows Server 2008 R2 SP1 Windows Server 2012 Windows Server 2012 R2 Windows 10 Professional Version Windows Server 2016 Standard Windows Server 2019
Microsoft .NET Framework	.NET Framework 4.7.2
Database Engine	SQL Server 2014 or higher
Internet Information Services (IIS)	Microsoft® Internet Information Services version 7.5 or higher
Web Browser	Google Chrome Mozilla Firefox Microsoft Edge (Internet Explorer not recommended)

Other Requirements

Server	2.4 GHz Intel Pentium or higher
RAM	8 GB or higher
Networking	10/100Mbps Ethernet connections

Note: Server requirements mentioned are ideal for small to medium business installations.

For large enterprise installation server requirements, contact support@invixium.com.

Compatibility Matrix for IXM WEB & Open Options Integration:

IXM WEB version	Open Options version	Compatible
IXM WEB 2.2.224.0	8.1.0.3	Yes
IXM WEB 2.2.230.0	8.1.0.3	Yes
IXM WEB 2.2.252.0	8.1.0.3	Yes

Table 1: Compatibility Matrix for IXM WEB & Open Options

3. Checklist

Item List	Interface
Prerequisites For IXM WEB Installation	Invixium
Installation of IXM WEB	Invixium
Email Configuration in IXM WEB	Invixium
IXM WEB And IXM Link Activation	Invixium
Configure IXM Link for DNA Fusion	Invixium
Creation of System User in IXM WEB for enrollment	Invixium
Configure Invixium Reader	Invixium
Add an Invixium device to a device group	Invixium

4. List Summary

Task	IXM WEB Task List	DNA Fusion Task List
1	Configure IXM Link for Open Options	Mandatory configurations for getting access in Open Options
2	Register the IXM Device and configure settings as per the requirement	
3	Configure OSDP settings in the device for integration with Access Panel	
4	Configure Wiegand settings in the device for integration with Access Panel	

Table 2: Task List Summary

5. Prerequisites for Installing Invixium IXM WEB Software

Getting an IXM WEB activation key

Procedure

STEP 1

Complete the online form to receive instructions on how to download IXM WEB: https://www.invixium.com/download-ixm-web/.

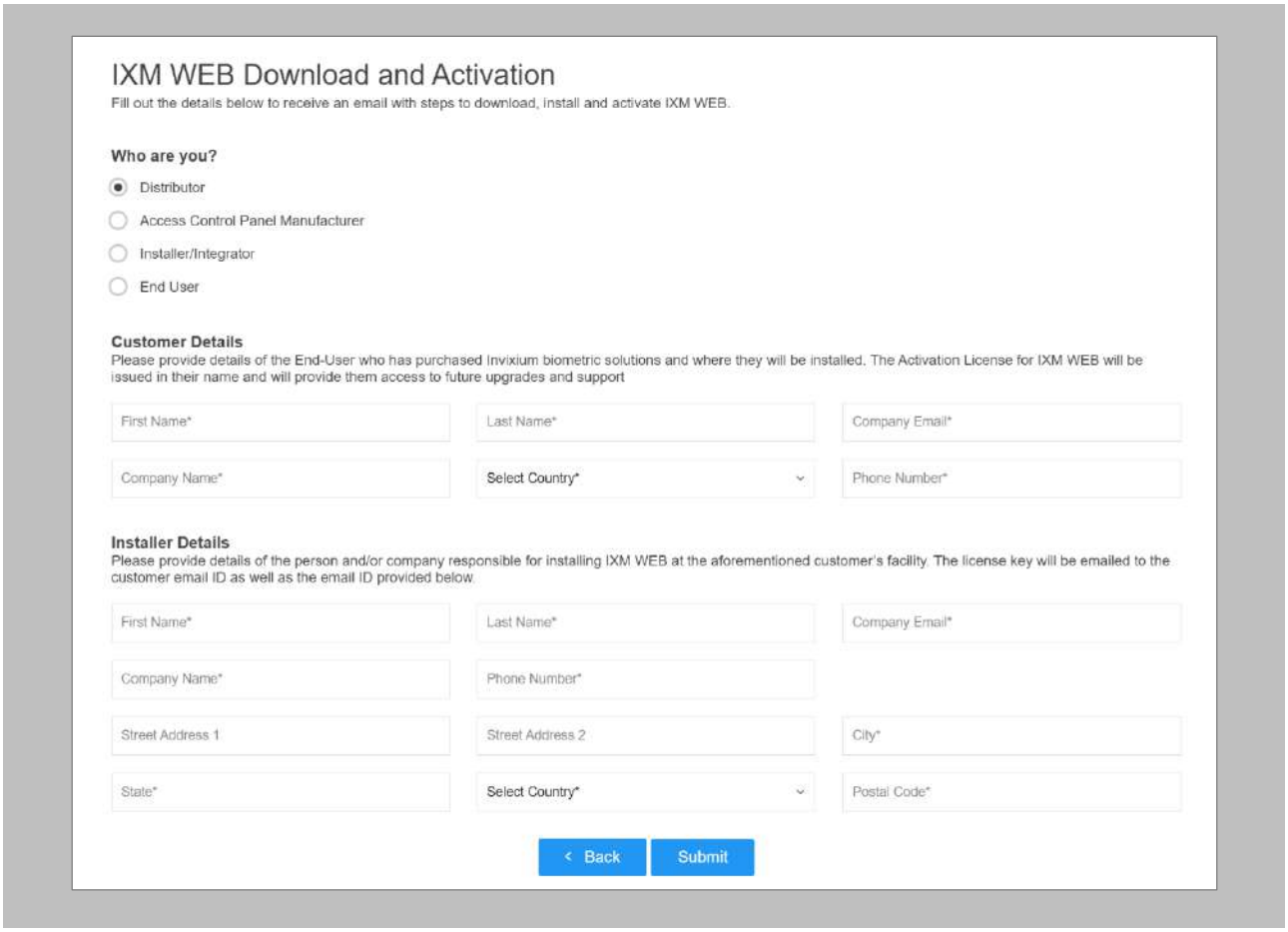
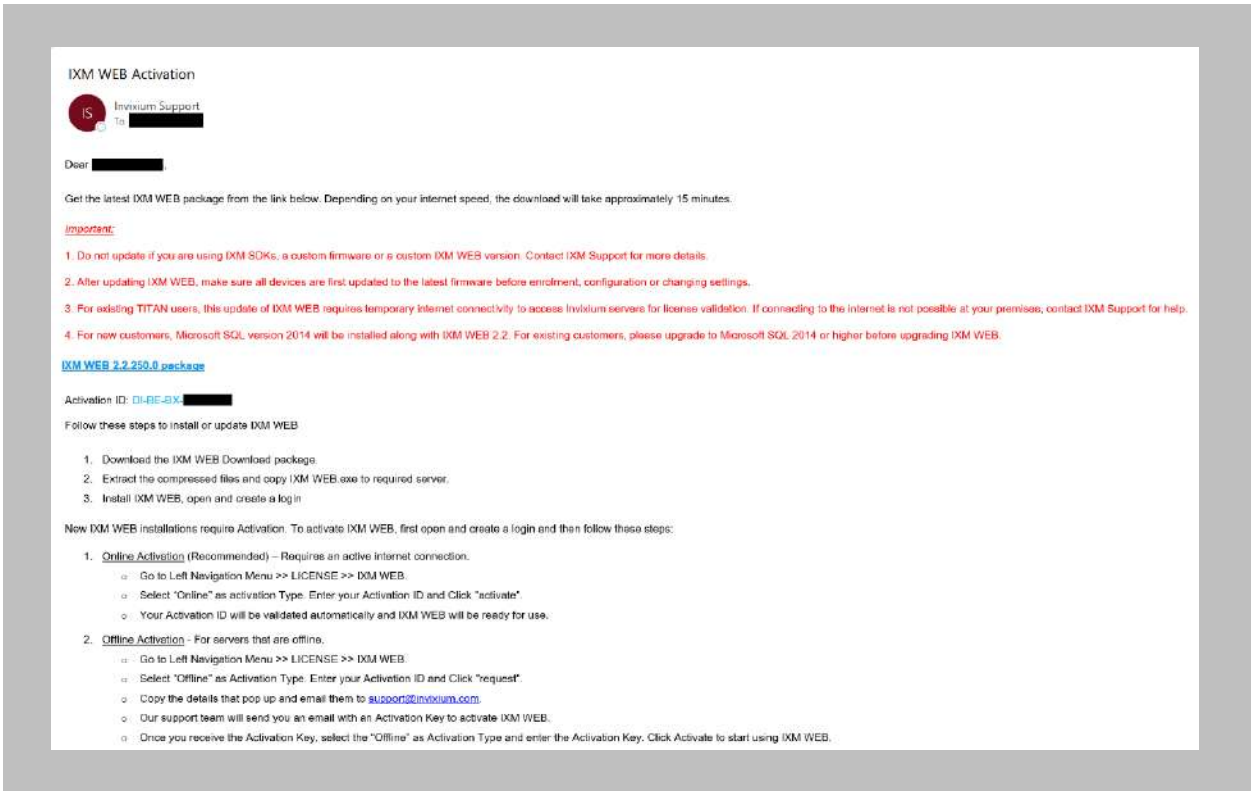


Figure 1: IXM WEB Online Request Form

After submitting the completed form, an email will be sent with instructions from support@invixium.com to the email ID specified in the form.

Please ensure to check the spam or junk folder.

See below for a sample of the activation email that includes instructions on how to download and install IXM WEB along with your Activation ID.



IXM WEB Activation

Invixium Support
To [redacted]

Dear [redacted],

Get the latest IXM WEB package from the link below. Depending on your internet speed, the download will take approximately 15 minutes.

Important:

1. Do not update if you are using IXM SDKs, a custom firmware or a custom IXM WEB version. Contact IXM Support for more details.
2. After updating IXM WEB, make sure all devices are first updated to the latest firmware before enrolment, configuration or changing settings.
3. For existing TITAN users, this update of IXM WEB requires temporary internet connectivity to access Invixium servers for license validation. If connecting to the internet is not possible at your premises, contact IXM Support for help.
4. For new customers, Microsoft SQL version 2014 will be installed along with IXM WEB 2.2. For existing customers, please upgrade to Microsoft SQL 2014 or higher before upgrading IXM WEB.

IXM WEB 2.2.250.0 package

Activation ID: DI-BE-BX-[redacted]

Follow these steps to install or update IXM WEB

1. Download the IXM WEB Download package.
2. Extract the compressed files and copy IXM WEB.exe to required server.
3. Install IXM WEB, open and create a log in

New IXM WEB installations require Activation. To activate IXM WEB, first open and create a login and then follow these steps:

1. Online Activation (Recommended) – Requires an active internet connection.
   - Go to Left Navigation Menu >> LICENSE >> IXM WEB.
   - Select "Online" as activation Type. Enter your Activation ID and Click "activate".
   - Your Activation ID will be validated automatically and IXM WEB will be ready for use.
2. Offline Activation - For servers that are offline.
   - Go to Left Navigation Menu >> LICENSE >> IXM WEB.
   - Select "Offline" as Activation Type. Enter your Activation ID and Click "request".
   - Copy the details that pop up and email them to support@invixium.com.
   - Our support team will send you an email with an Activation Key to activate IXM WEB.
   - Once you receive the Activation Key, select the "Offline" as Activation Type and enter the Activation Key. Click Activate to start using IXM WEB.

Figure 2: Sample Email After Submitting Online Request Form

Minor Checklist and Considerations

Use these tables to verify that you have conducted all required steps.

Other Minor Checklist	
Windows Updates	The Windows Operating system needs to be up to date. System updates should not be pending. If any update is downloaded, you will have to restart the system to complete the Windows update.
User Privileges	The person who is setting up IXM WEB Installation should have full administrator rights.

Table 3: System Related Checklist

Port Assignment	Port
Inbound HTTP Port	9108
TCP	1433
Port to communicate between IXM WEB & Devices	9734
Inbound Port	1255

Table 4: Port Information

6. Installing IXM WEB

Software Install

Procedure

STEP 1

Run the IXM WEB installer (Run as administrator). Click **Install** to continue. It will display a popup window to accept the **License Agreement.**

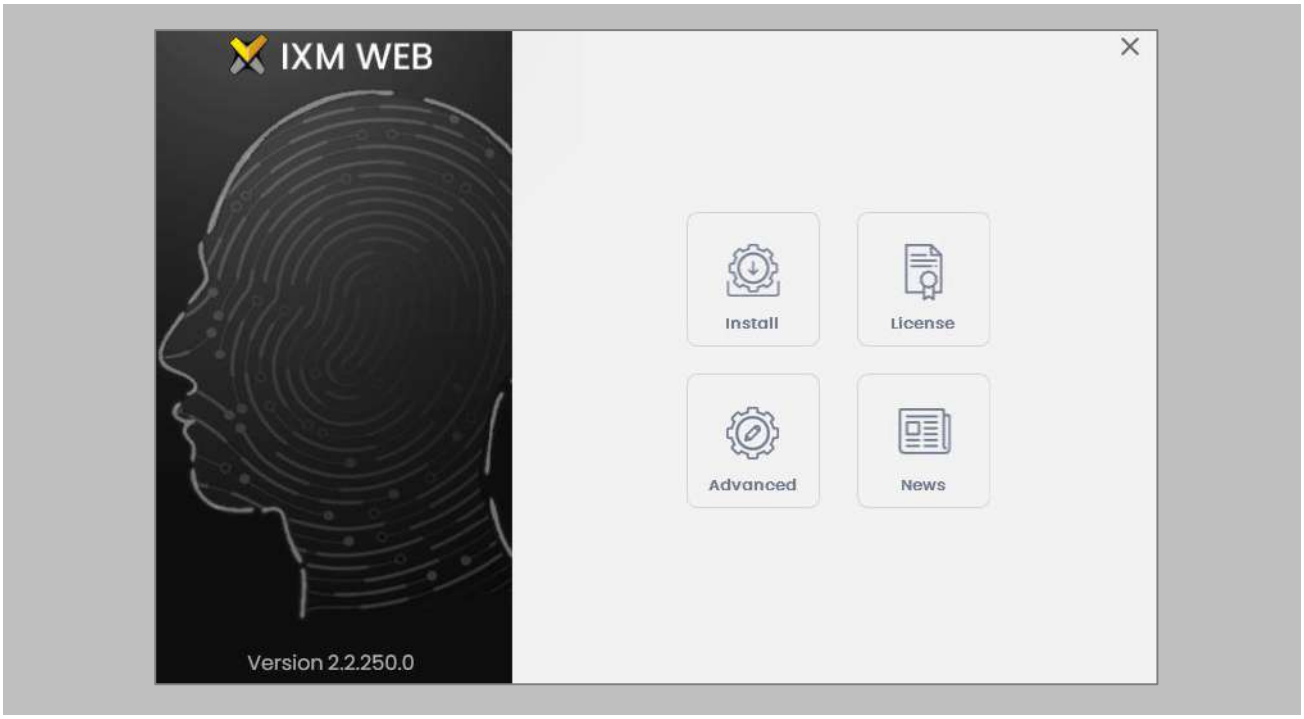


Figure 3: IXM WEB Installer

STEP 2

Click '**Yes**' in the popup window. The IXM WEB installer will start a basic installation process.

STEP 3

By default, IXM WEB performs basic installation and installs software to the default location with the default port number. If the user wants to, they can change the installation path and specify a port number that communicates with the IIS server. Click **Advance**.

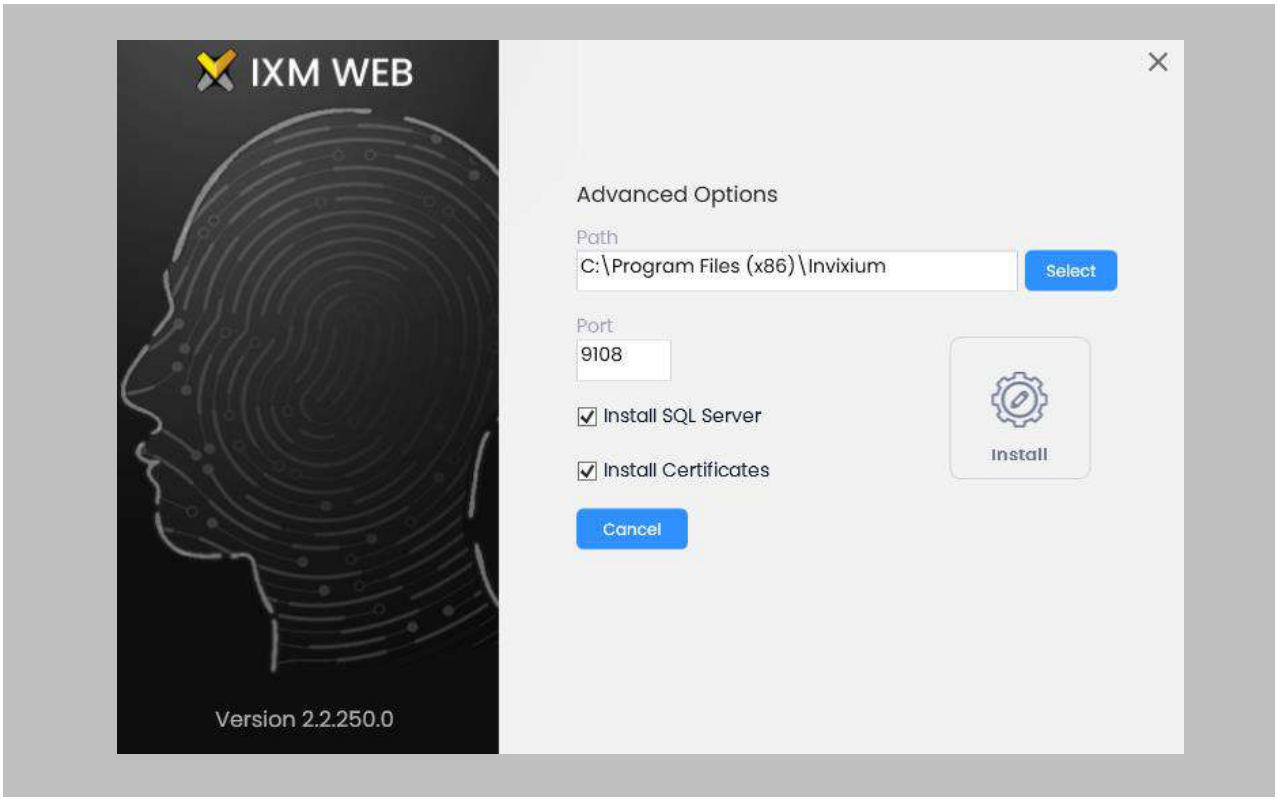


Figure 4: Advanced Option in IXM WEB Installer

STEP 4

In **Advanced** installation, the user can change the following options:

- **Installation Path:** In basic installation, the default path is – "***C:\Program Files (x86)\Invixium***". By changing the path, users can determine the new physical path on the machine where the IXM WEB package will be extracted.

- **Port Number:** By default, the port number is “**9108**”. Users can change the port number that is generally used to communicate between the WEB Server (Internet Information Services) and IXM WEB.

- **Install SQL Server:** By default, this field is always selected. It means that the IXM WEB will install **SQL Server 2014 Express Edition** along with the IXM WEB application. Users can uncheck this field if any other version of SQL Server will be used or if a different machine will be used as a database server.

- **Install Certificates:** By default, the IXM WEB installer installs all the necessary certificates that are used in SSL communication, or specific certificates if configured over the cloud. Users can uncheck this field to prevent IXM WEB from installing all the necessary certificates. Invixium does not recommend deselecting this field.

STEP 5

Once the user completes the changes, click **Install**. IXM WEB packages will continue to install on the machine, and will display the progress when any component is installed in the background.

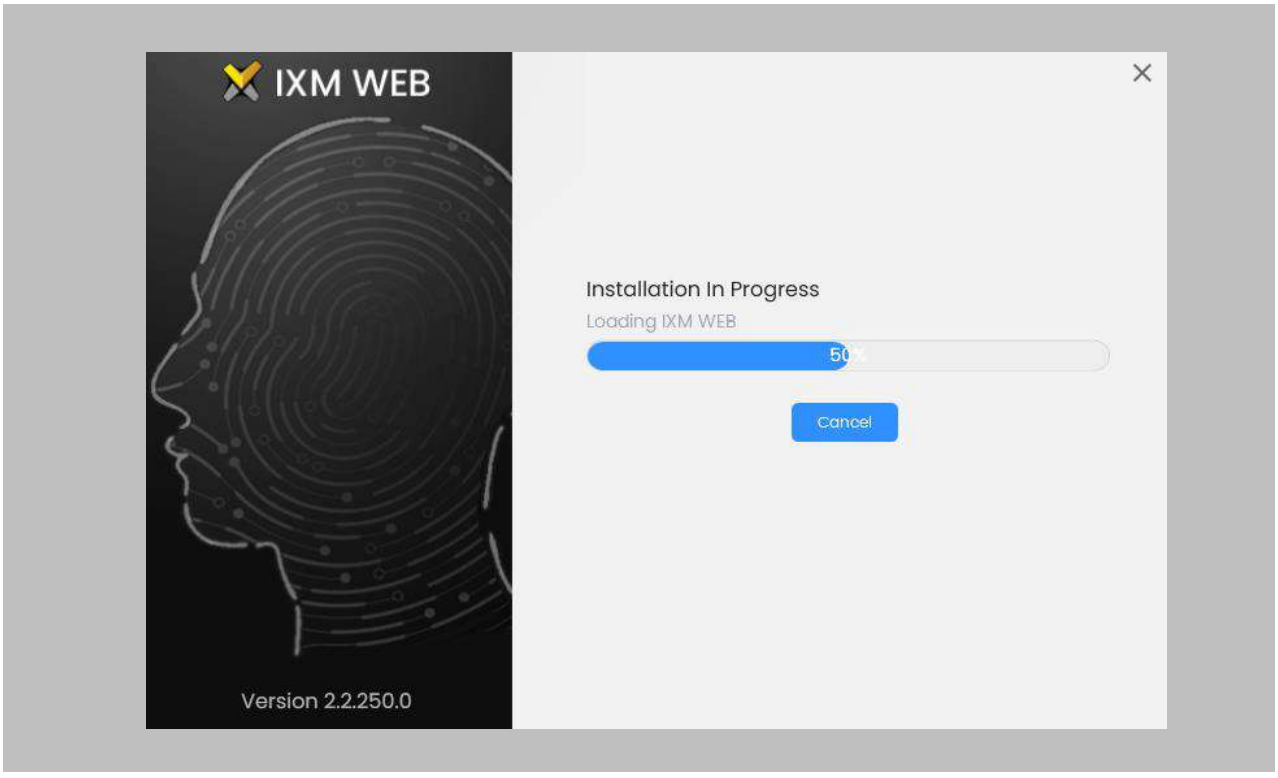


Figure 4: IXM WEB Installation

STEP 6

Once the installation process completes, the user will need to click **Complete** to finish.

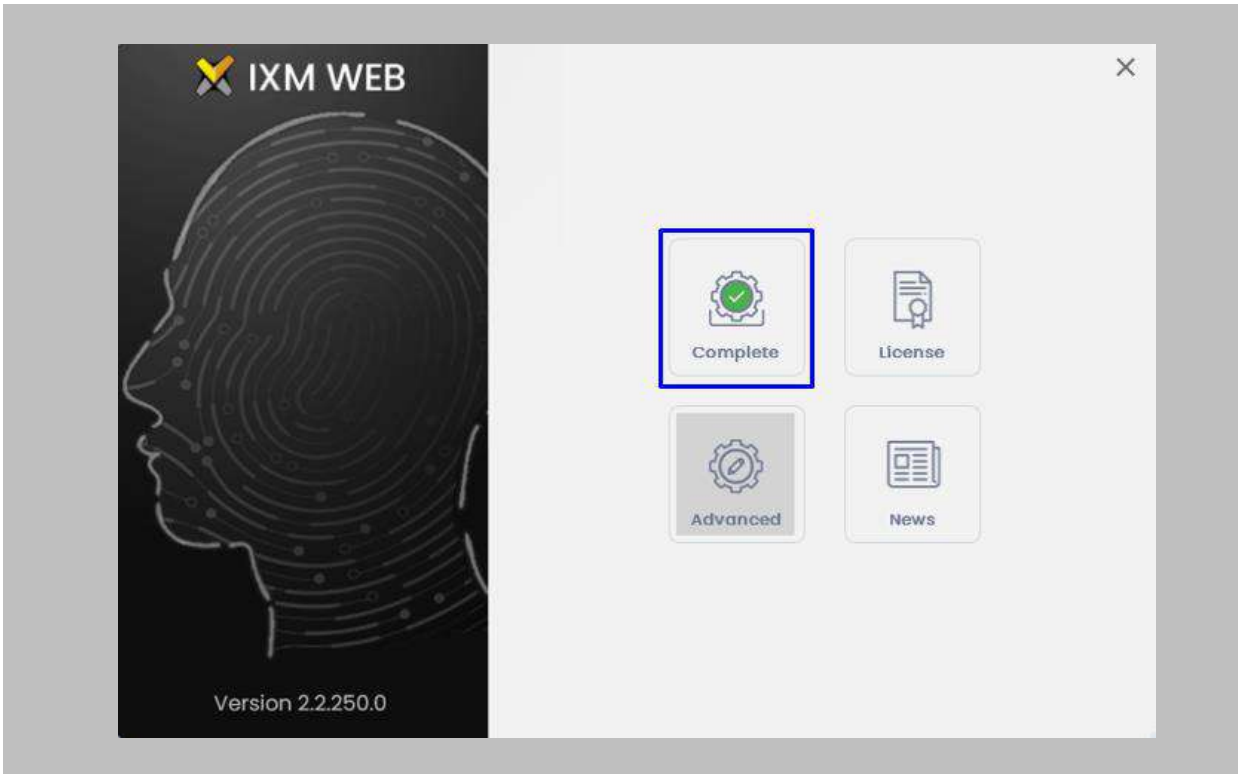


Figure 5: IXM WEB Installation Completed

STEP 7

The IXM WEB package will create a **shortcut icon** on the desktop after the process.

Figure 6: IXM WEB Icon - Desktop Shortcut

STEP 8

Double click on the shortcut icon from the desktop to open **IXM WEB** in the default browser. Users can also open a browser and run the IXM WEB application.

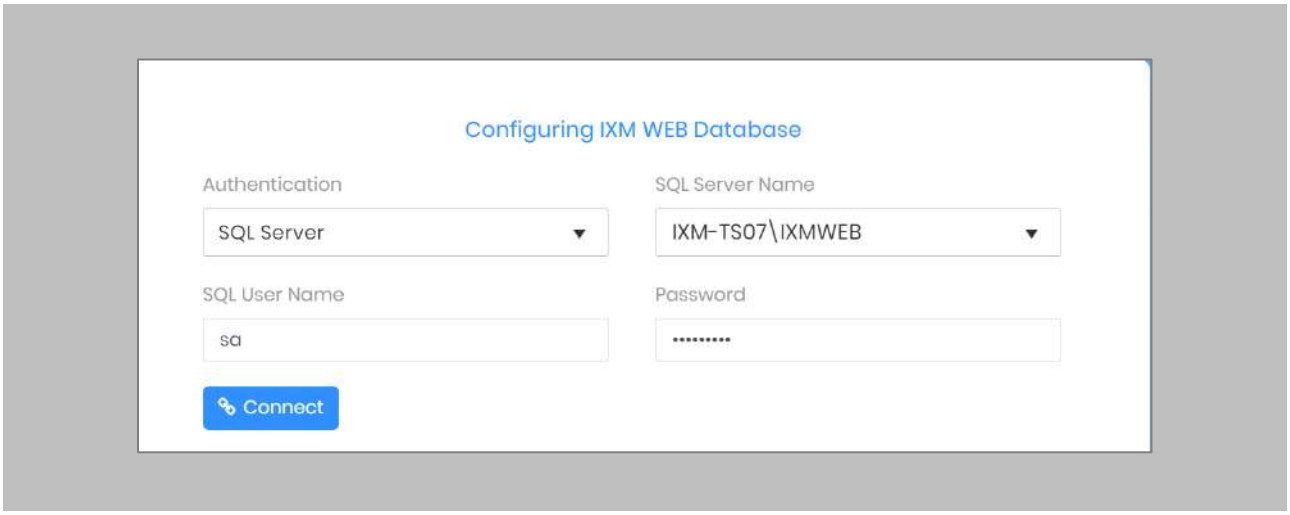


Figure 7: IXM WEB Database Configuration

STEP 9

IXM WEB will populate the default SQL Server name and SQL Server Instance.

STEP 10

If the user wants to configure the database that is installed on another machine, then select the **'SQL Server'** option from the Authentication field. By selecting the **'SQL Server'** option, the user will be required to add credentials (SQL Username and Password) to connect to the database server machine.

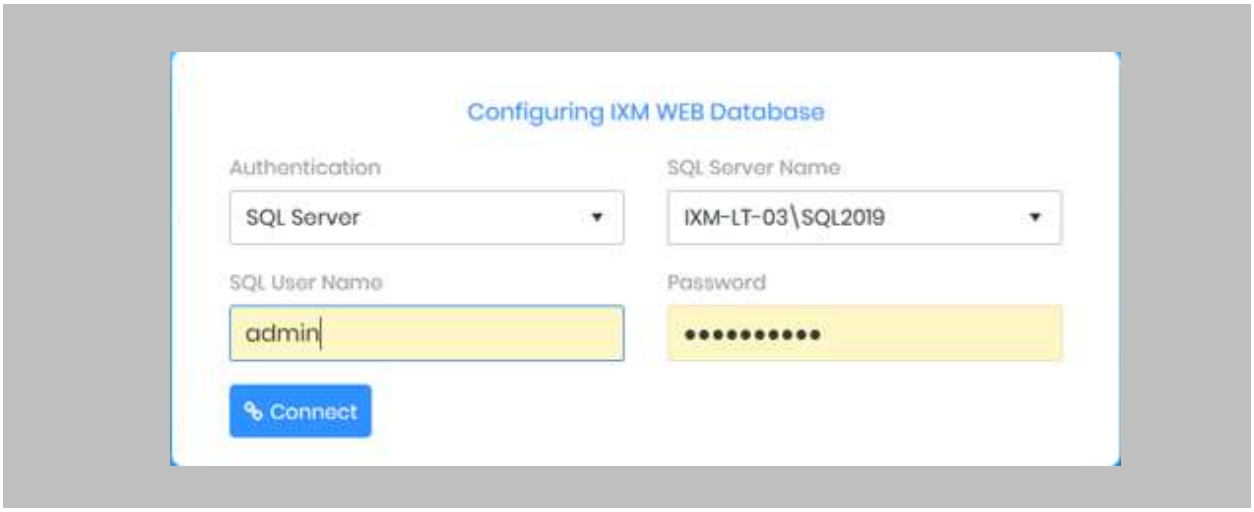


Figure 8: SQL Database Configuration

STEP 11

If a user wants to use the same database instance onthe same machine, then click connect to verify if the connection is established with the SQL Instance.

STEP 12

Enter a new **Database** name if there is no previously set up database available.

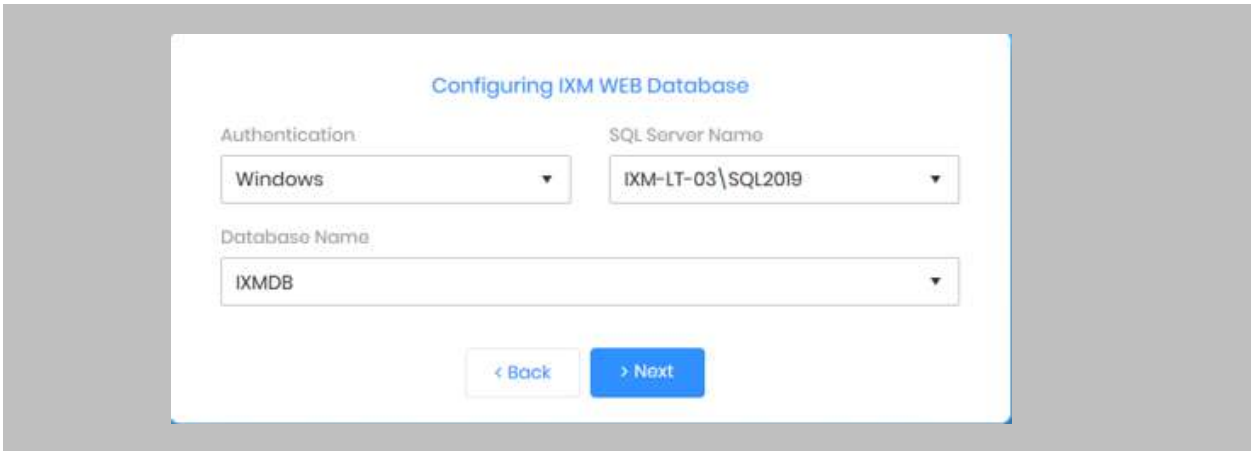


Figure 9: IXM WEB Database Name

STEP 13

Click **Next**.

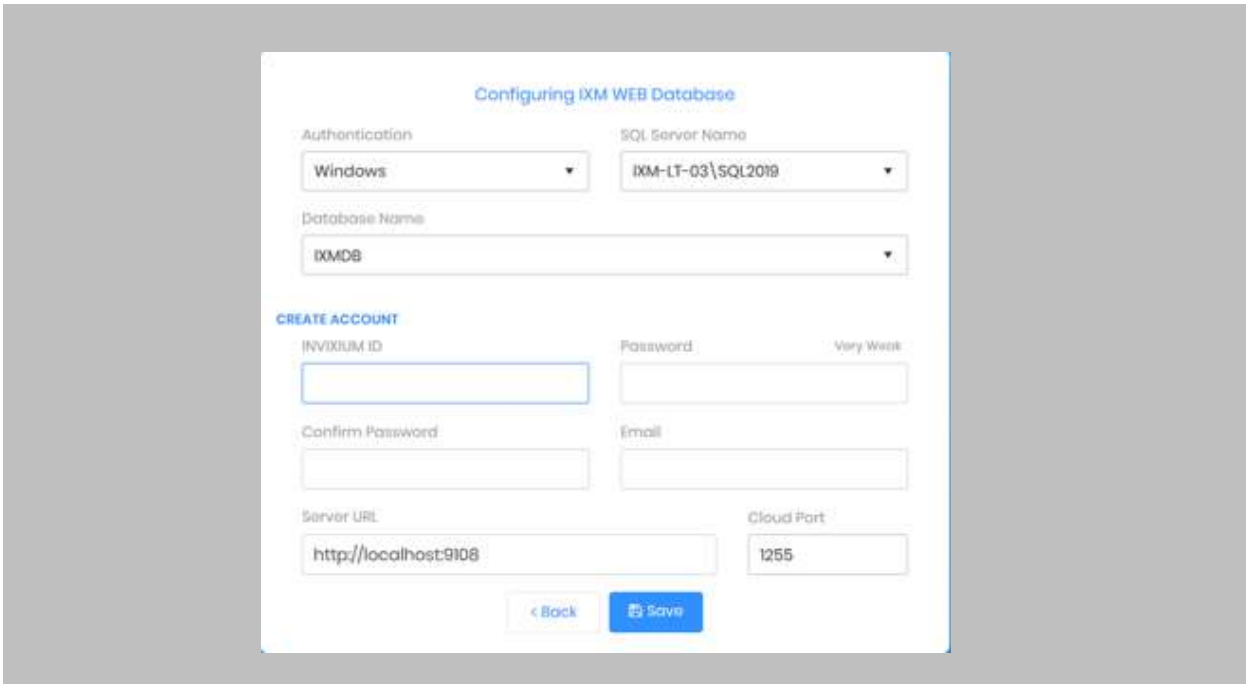


Figure 10: IXM WEB Administrator User Configuration

STEP 14

Users can provide the necessary values to all the fields displayed under the **'Create Account'** section.

STEP 15

The fields and their functions are mentioned below:

- **Invixium ID:** Users can add a username that will have all the rights to access any settings within IXM WEB. This Invixium ID should have a minimum of 5 characters. This Invixium ID configuration will have Administrator rights
- **Password:** Users can set a password. While typing the password, IXM WEB will also display the strength of the entered value to determine how secure the password field is.

- **Confirm Password:** Enter the password value once again. Users need to enter the same password that is entered in the password field.

- **Email:** Set an administrator email address. IXM WEB will use this email address in the future in case the password needs to be reset, or to send any email notifications.

- **Server URL:** Users can set a Web URL or an IP Address of the machine where IXM WEB is installed along with the port number. By default, the port number is 9108. Format: **http://IP_IXMServer:9108**

- **Cloud Port:** If a user wants to configure the devices over WEB Cloud, then a specific port number needs to be mentioned in the Cloud Port field. By default, the Cloud Port value is 1255.

STEP 16

Once the user is done with providing all the values, click **Save**.

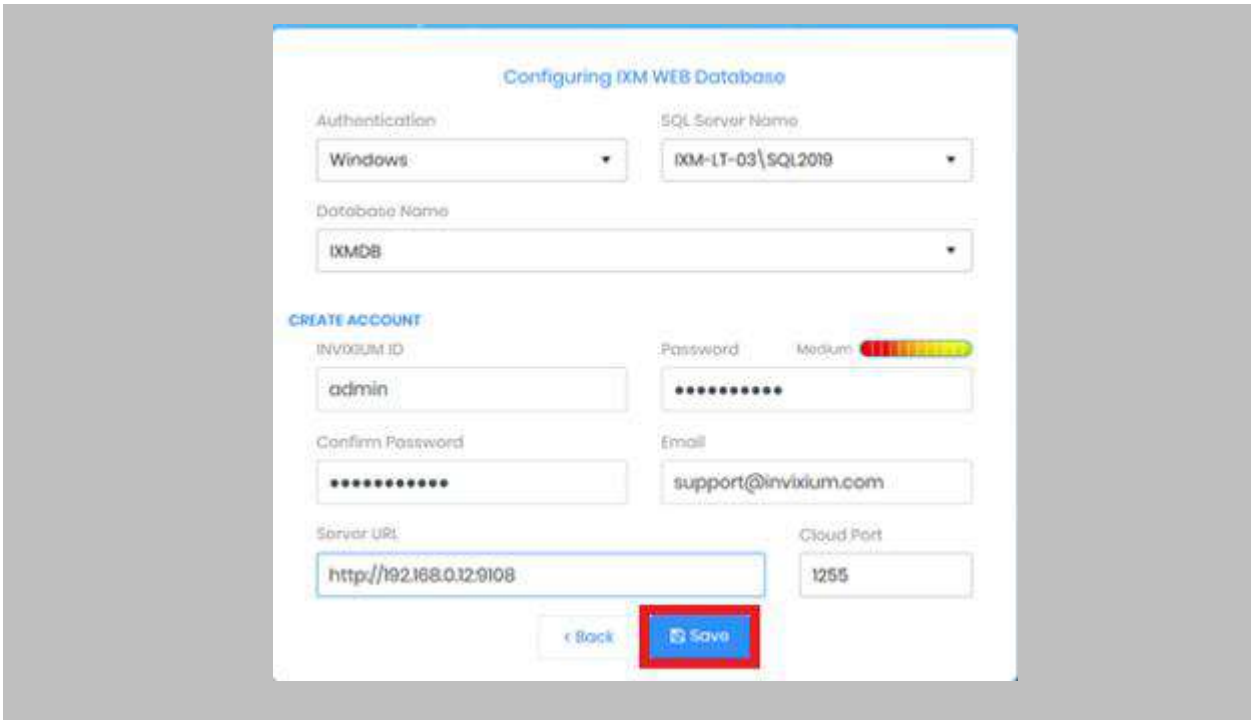


Figure 11: Save Database Configuration

STEP 17

Using the provided values, IXM WEB will create a database and upon success, the user will be redirected to **Login Page**.

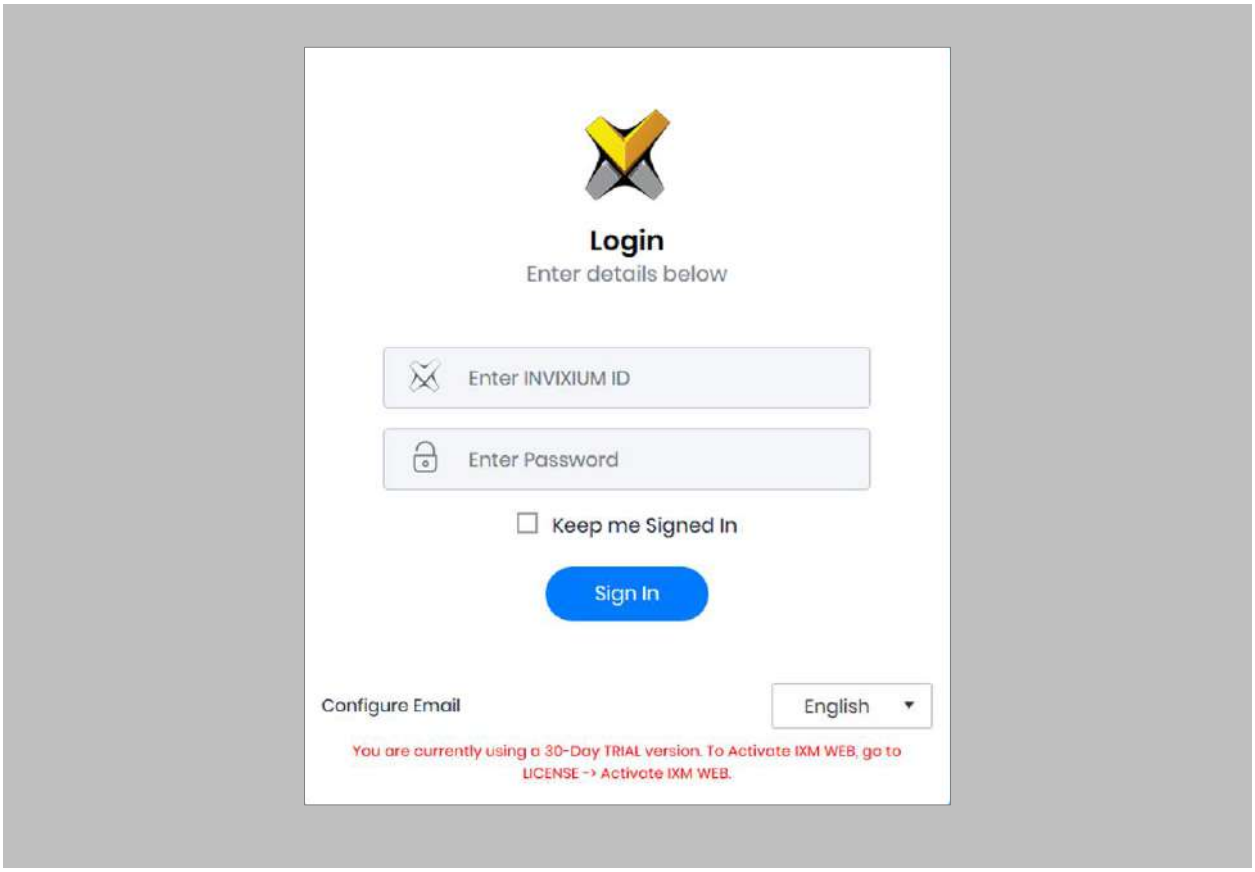


Figure 12: IXM WEB Login Page

7. Configuring Email Settings using IXM WEB

Configuring email settings is highly recommended as one of the first steps after installing IXM WEB. Email configuration settings will help the admin retrieve the password for IXM WEB in case it is forgotten. Valid email configuration makes activation and license key requests easier.

Email Setting Configuration

Procedure

STEP 1

Click **Configure Email** on the Login page**.**

OR

Expand the **Left Navigation Pane** → Navigate to **Notification Settings** → **Email Configuration** → Click **Manage Preferences**.

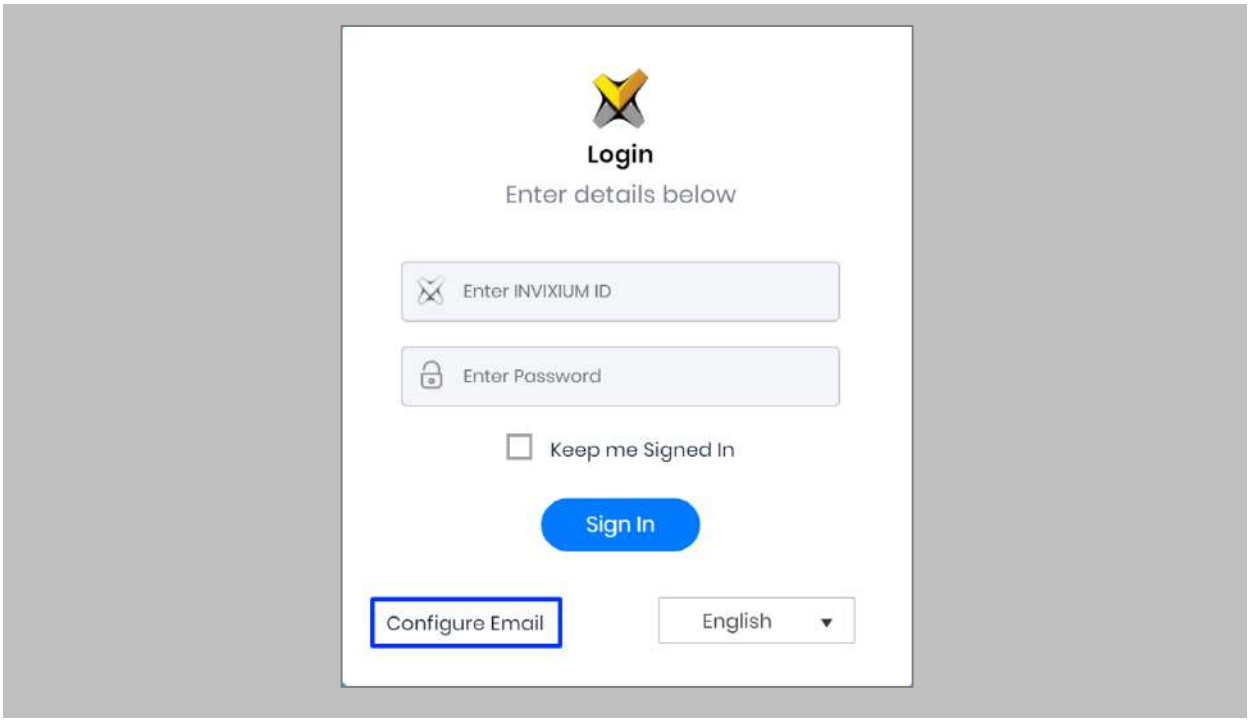


Figure 13: Configure Email

STEP 2

Select **'Enable Email Configuration'** and enter values for **'SMTP Host,' 'SMTP Port',** and **'Send email message from'** fields.

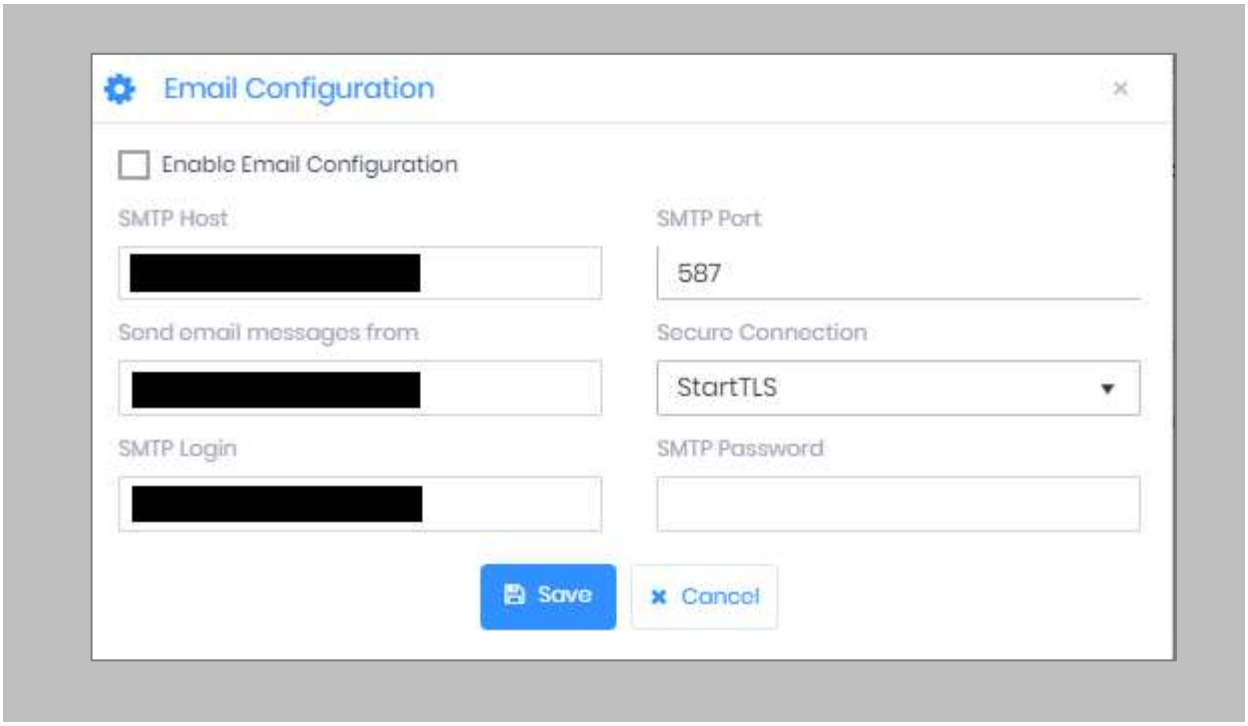


Figure 14: IXM WEB - SMTP Settings

Note: If Gmail/Yahoo/MSN etc. email servers are used for "SMTP Host" then "SMTP Login" and "SMTP Password" values need to be provided. Also in this case, "Secure Connection" needs to be set to either SSL or SSL/StartTLS.

STEP 3

After entering the values, click **Save** to save the SMTP Settings on the IXM WEB database.

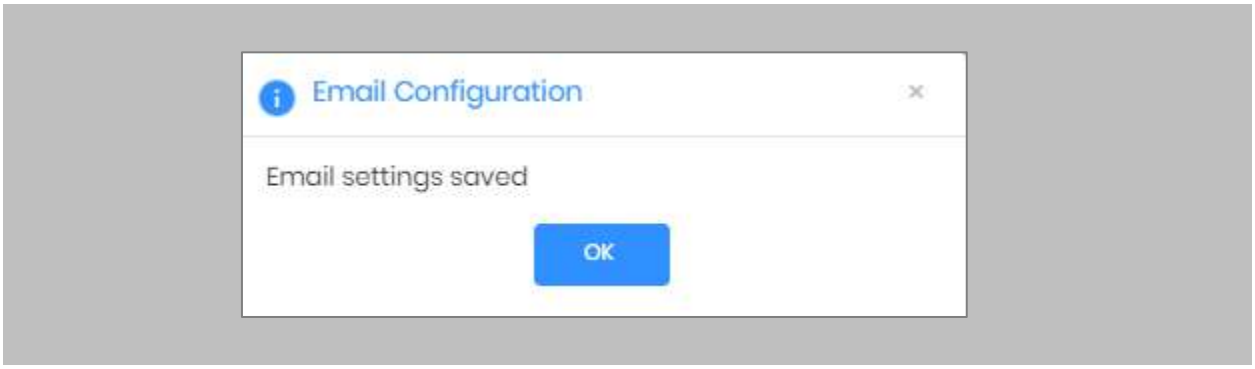


Figure 15: IXM WEB - Save Email Settings

To test the settings, Navigate to **Notification Settings** from **the Left navigation Pane** → Go to **Email Configuration** → Click **the Test Connection** button on the right.

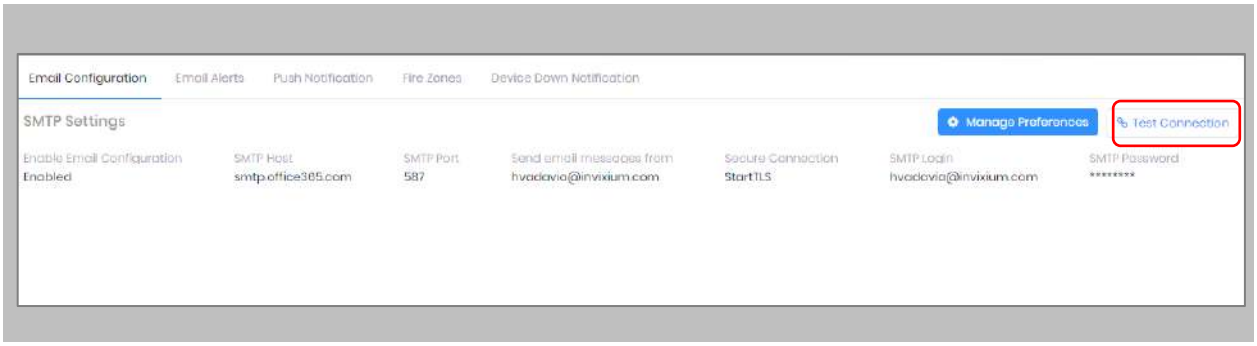


Figure 16: IXM WEB - Test Connection

Provide a valid email address. Click **Send** to send a test email.

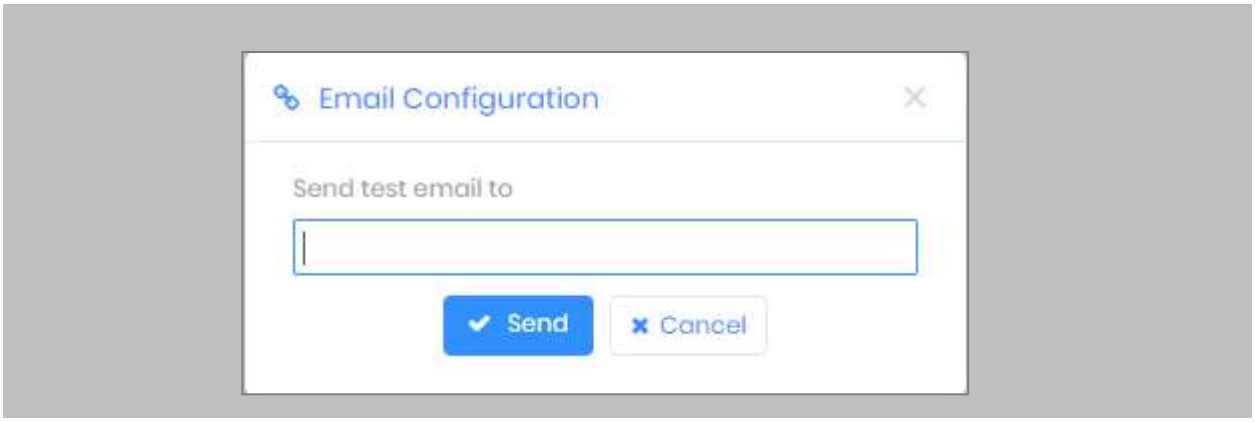


Figure 17: IXM WEB - Enter Email ID

STEP 4

Once Email Configuration is completed, a **Forgot password** link will appear on the Sign In page in its place.

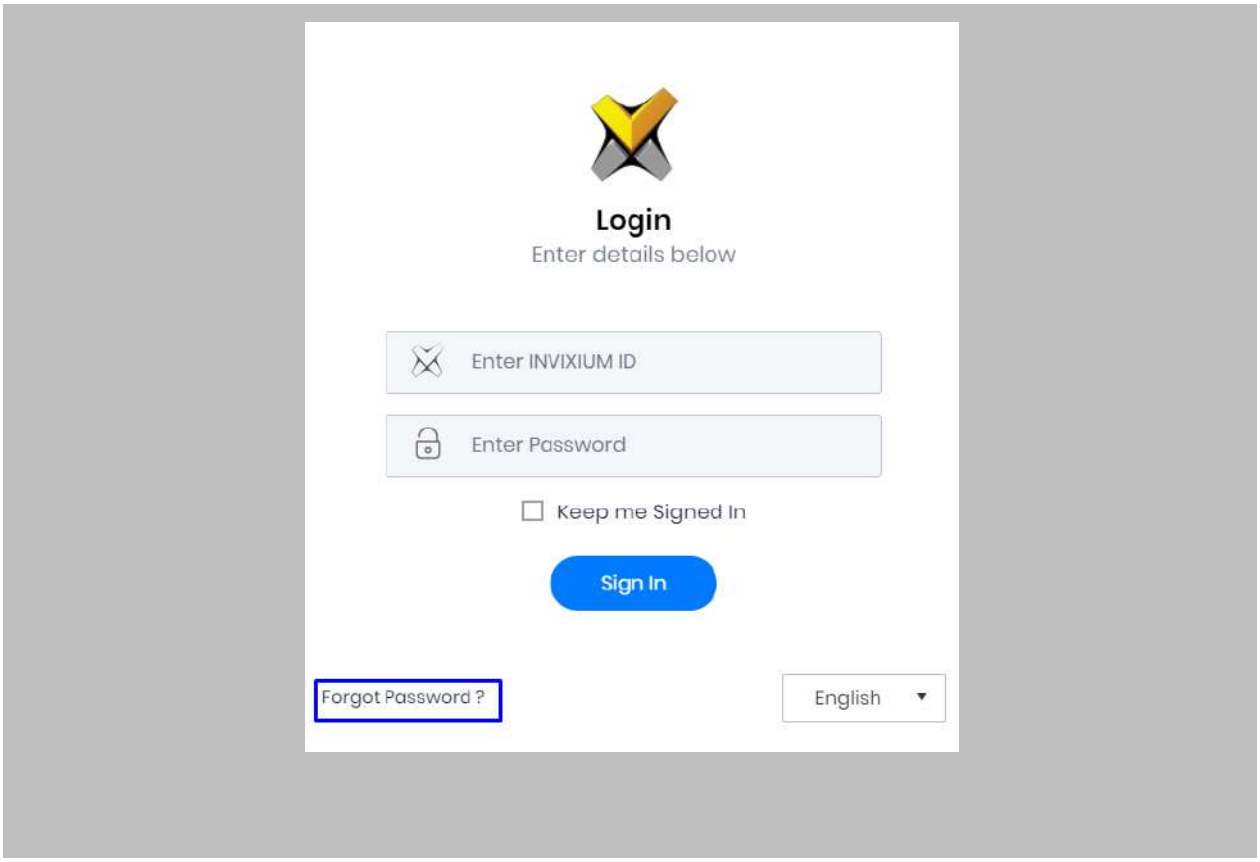


Figure 18: IXM WEB - Forgot Password

8. Software and Module Activation

IXM WEB Activation

Procedure

STEP 1

Log into IXM WEB.

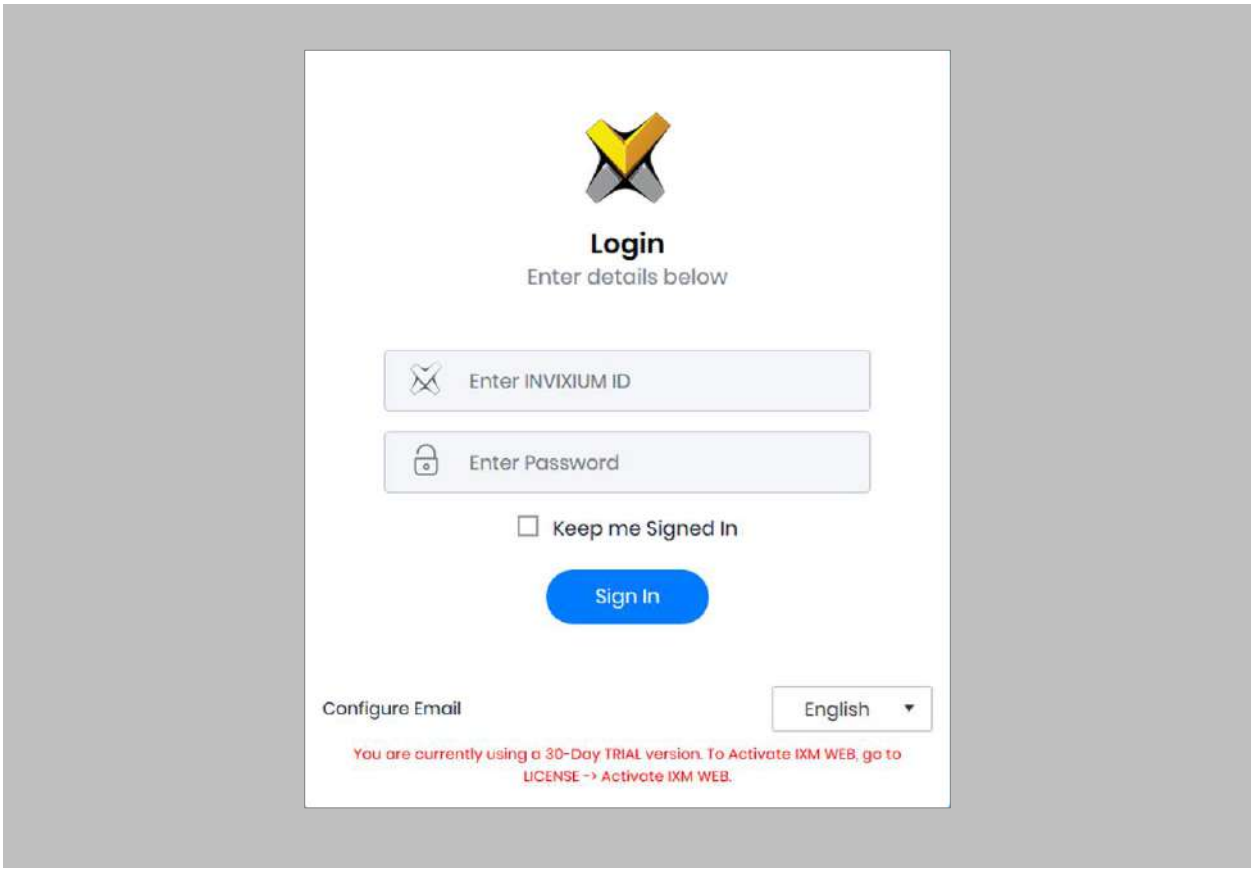


Figure 19: IXM WEB - Enter Login Credentials

STEP 2

Select the **License Tab** and then select the **IXM WEB** module to request an activation key for **IXM WEB.**

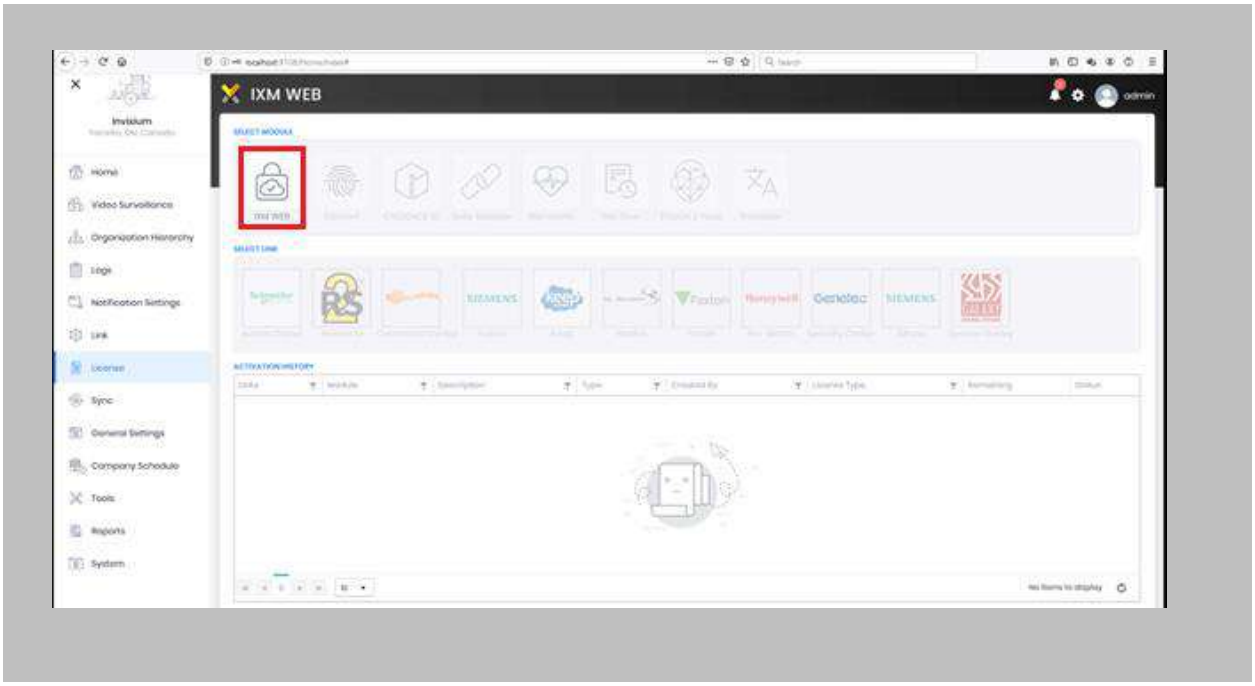


Figure 20: IXM WEB - License Setup

STEP 3

Request Activation Key Online or via Offline Activation Options.

Note: The Activation ID is in the email received when registering. If online activation fails, check with your local IT as the client may be blocked by your network

STEP 4

Once the system is activated, the Status will be displayed as **Active**.

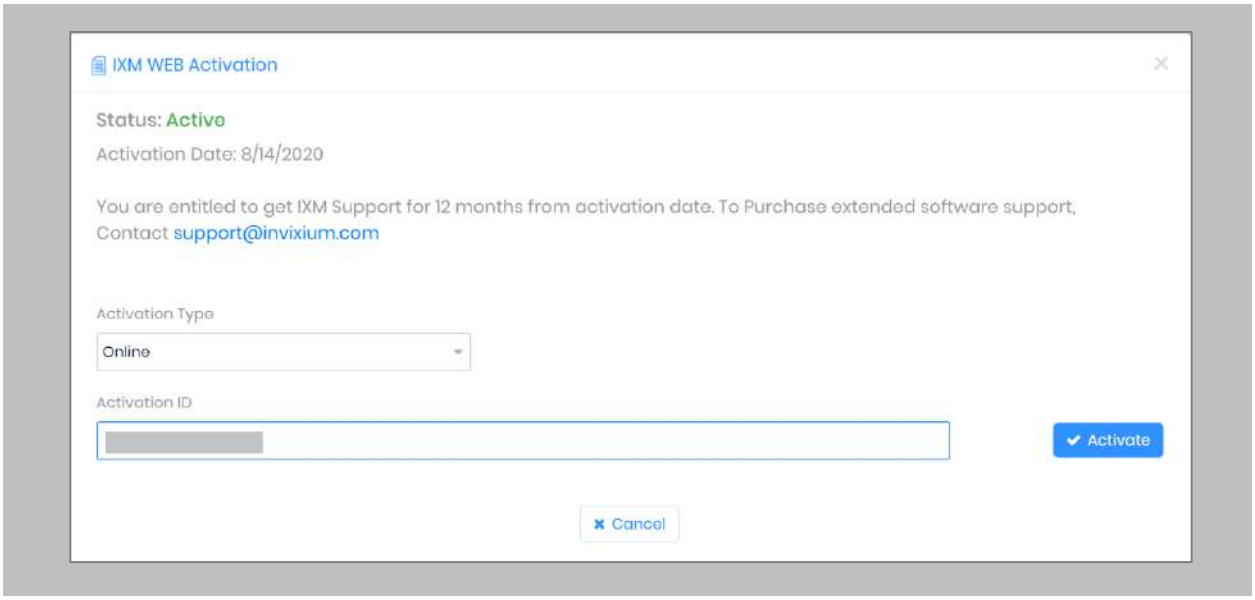


Figure 21: IXM WEB - Online Activation

Open Options Module Activation

The option to request an Open Options License is available under the **License** tab.

STEP 1

Request a **License**.

STEP 2

From **Home**, expand the **Left Navigation Pane**, and go to the **License** tab. Click on **Open Options.**

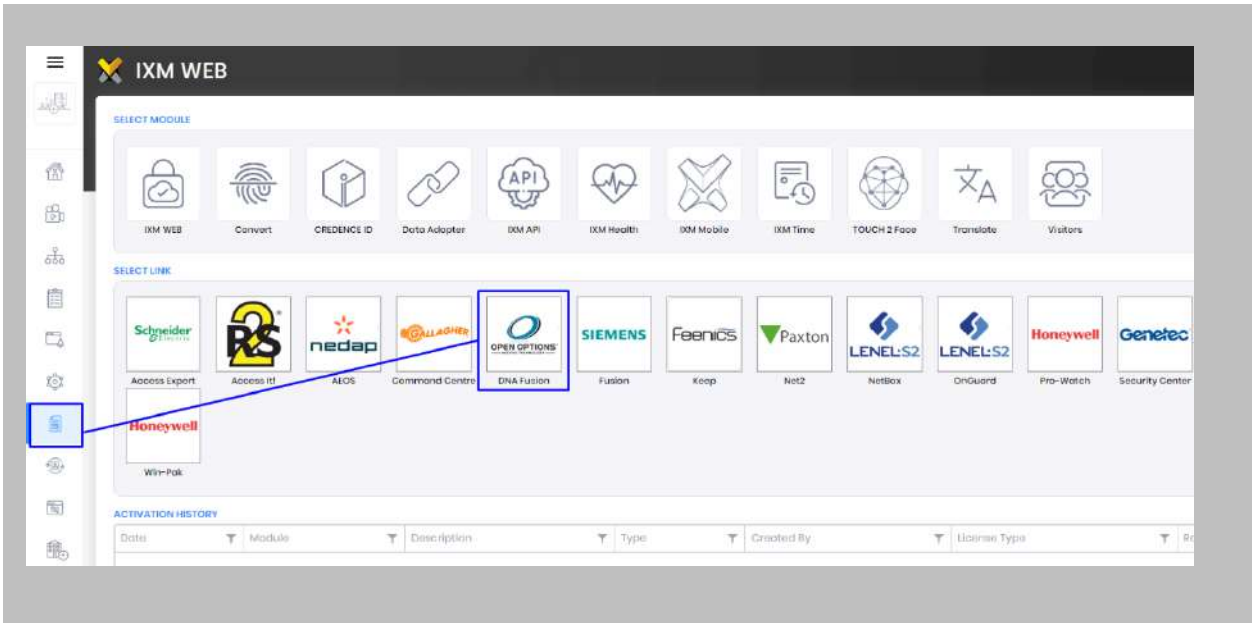


Figure 22: IXM WEB – Open Link Activation

STEP 3

Select the required license based on the number of devices that the install site has and click **Request** to see the details.

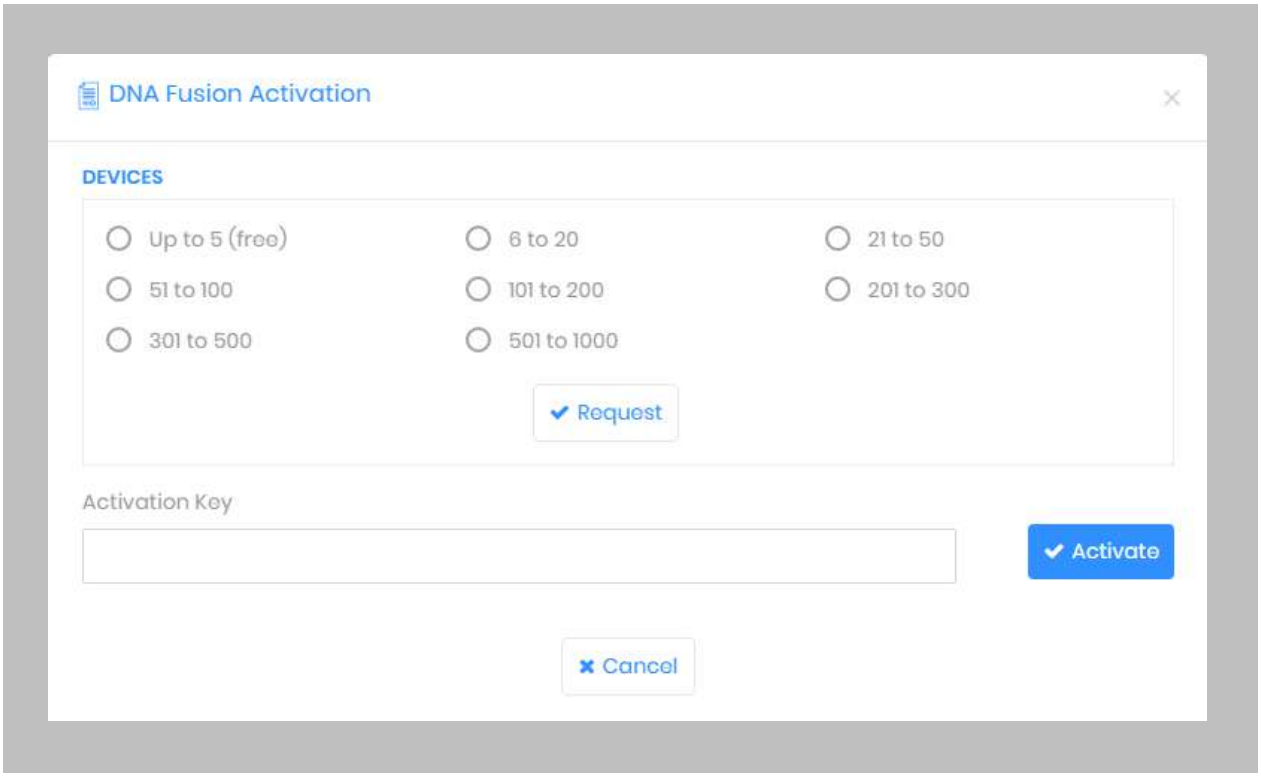


Figure 23: Open Options License Request

Note: The details screen will vary based on whether SMTP settings are configured in IXM WEB. If SMTP settings are not configured, a “Copy to Clipboard” icon will appear. When SMTP settings are configured, a “Send” button and a “Copy to Clipboard” button will appear.

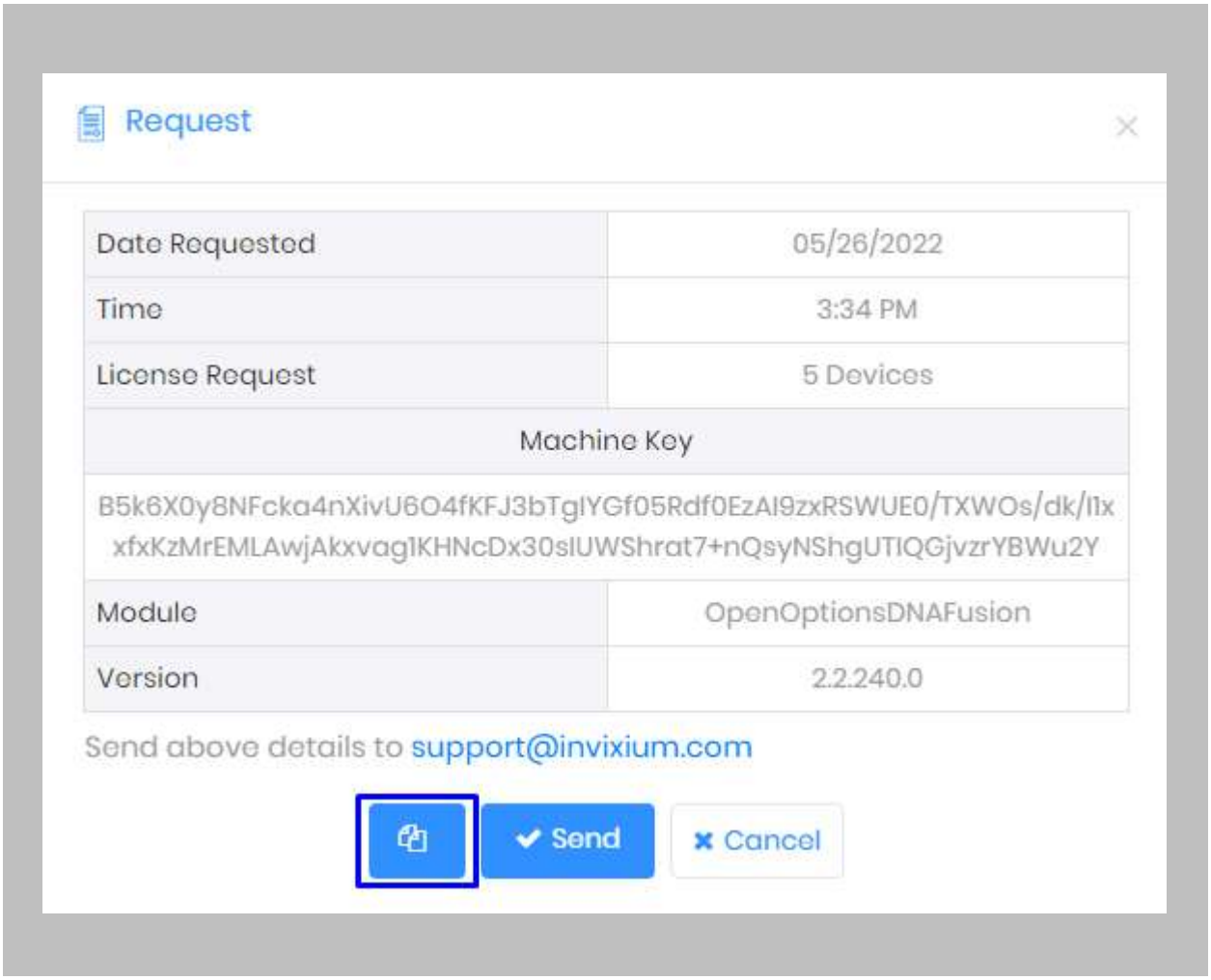
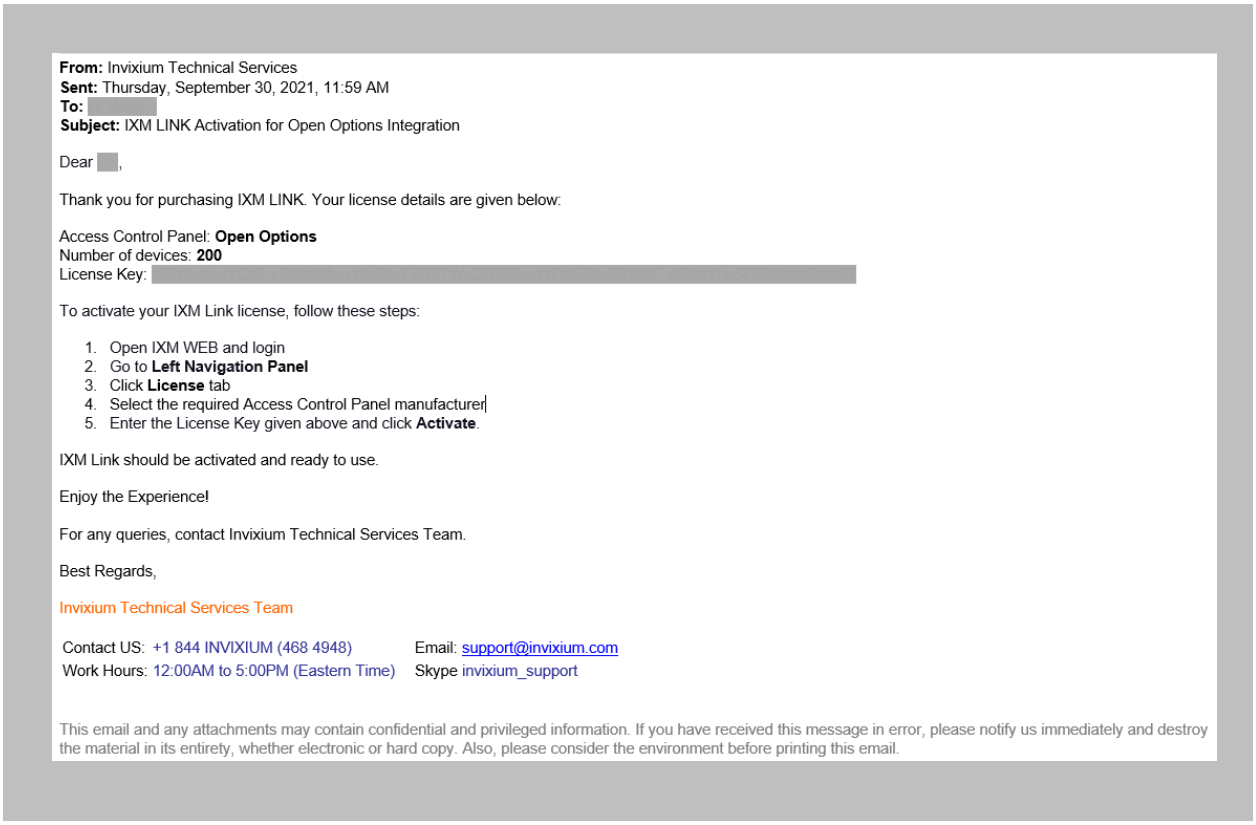


Figure 24: Open Options License

STEP 4

Click Copy to Clipboard and then paste the details in an email to **Invixium Support** to begin the licensing process.

You will receive an email from **Invixium Support** with a license key for the Open Options Activation.



From: Invixium Technical Services
Sent: Thursday, September 30, 2021, 11:59 AM
To: [redacted]
Subject: IXM LINK Activation for Open Options Integration

Dear [redacted],

Thank you for purchasing IXM LINK. Your license details are given below:

Access Control Panel: **Open Options**
Number of devices: **200**
License Key: [redacted]

To activate your IXM Link license, follow these steps:

1. Open IXM WEB and login
2. Go to **Left Navigation Panel**
3. Click **License** tab
4. Select the required Access Control Panel manufacturer
5. Enter the License Key given above and click **Activate**.

IXM Link should be activated and ready to use.

Enjoy the Experience!

For any queries, contact Invixium Technical Services Team.

Best Regards,

Invixium Technical Services Team

Contact US: +1 844 INVIXIUM (468 4948) Email: support@invixium.com
Work Hours: 12:00AM to 5:00PM (Eastern Time) Skype invixium_support

This email and any attachments may contain confidential and privileged information. If you have received this message in error, please notify us immediately and destroy the material in its entirety, whether electronic or hard copy. Also, please consider the environment before printing this email.

Figure 25: Open Options License Key Email

STEP 5

Copy and **paste** the License Key into the Activation Key area in the IXM WEB Open Options Activation, and then select **Activate**.

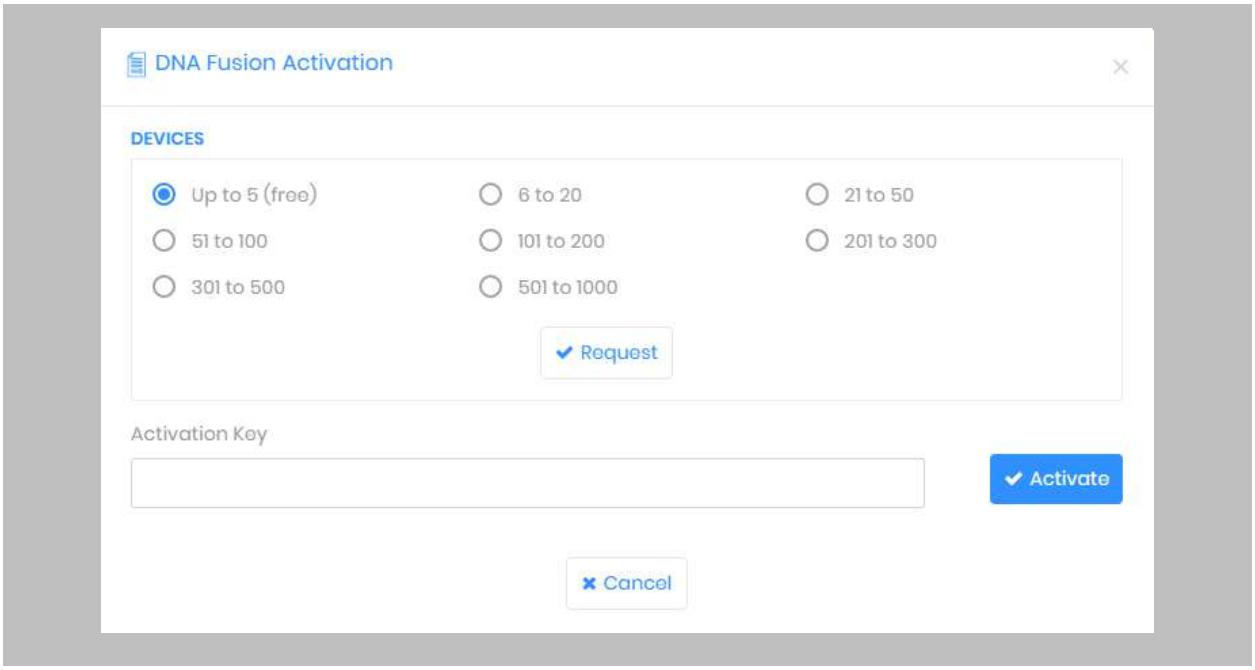


Figure 26: IXM WEB - Activate Open Options Link License

9. Configuring IXM Link for Open Options

Procedure

STEP 1

From the **Left Navigation Pane** → **Link** → click the **Open Options** icon.

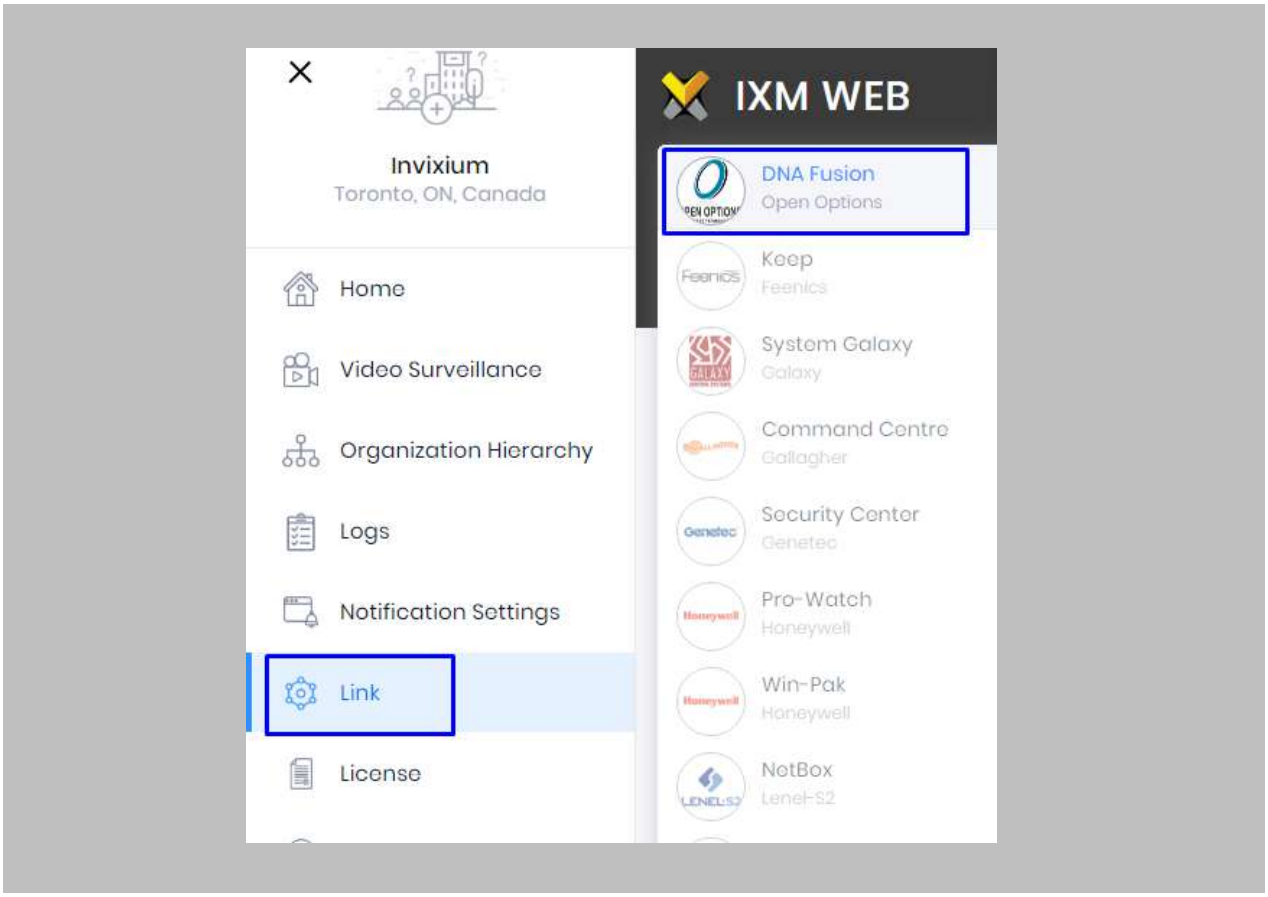


Figure 27: IXM WEB - Link Menu

STEP 2

Toggle the **Status** switch to enable.

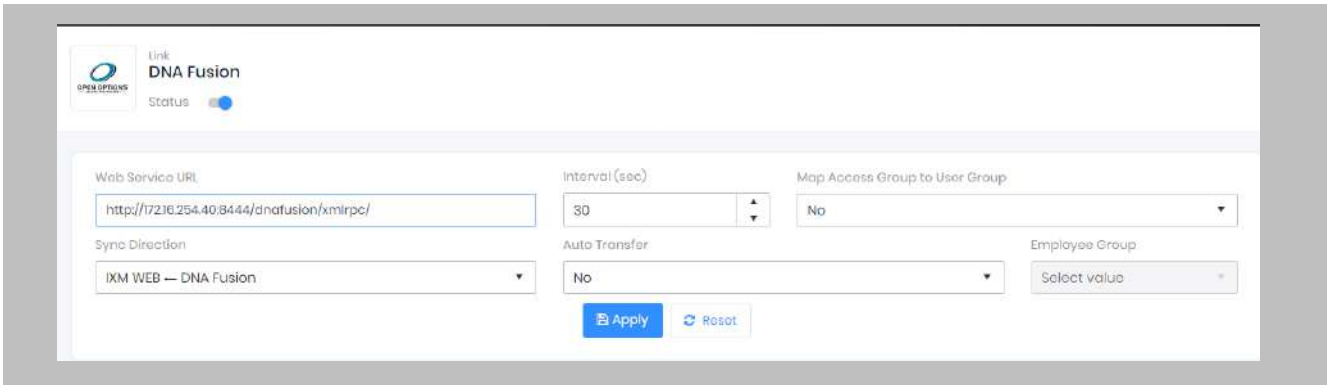


Figure 28: IXM WEB - Enable Open Options Link Module

STEP 3

Enter the **Open Options WEB Service URL**. For example:
https://172.16.254.40:8444/dnafusion/xmlrpc/

STEP 4

Specify in seconds how often **sync** should take place.

STEP 5

Select **Sync Direction.**

Select one-way sync direction IXM WEB ← Open Options to import a Person from Open Options to IXM WEB.

Figure 29: IXM WEB - Sync Direction

STEP 6

Auto Transfer

No: Employees synchronized from Open Options will not be automatically added to any of the employee groups present in IXM WEB.

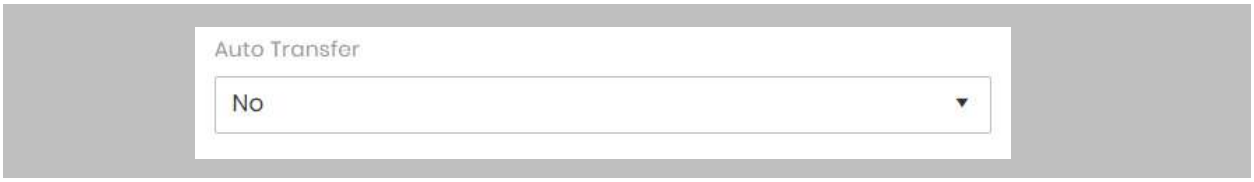


Figure 30: IXM WEB - Auto Transfer No

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 DNA Fusion will be automatically added to the employee group selected on Link Configuration Page.

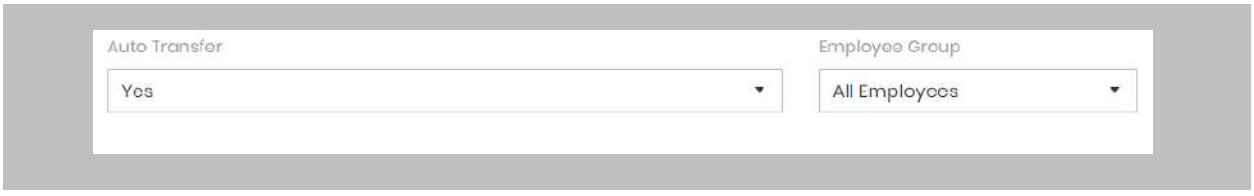


Figure 31: IXM WEB - Auto Transfer Yes

STEP 7

Click **Apply.**

After applying your changes, you should see items being updated on the screen below:

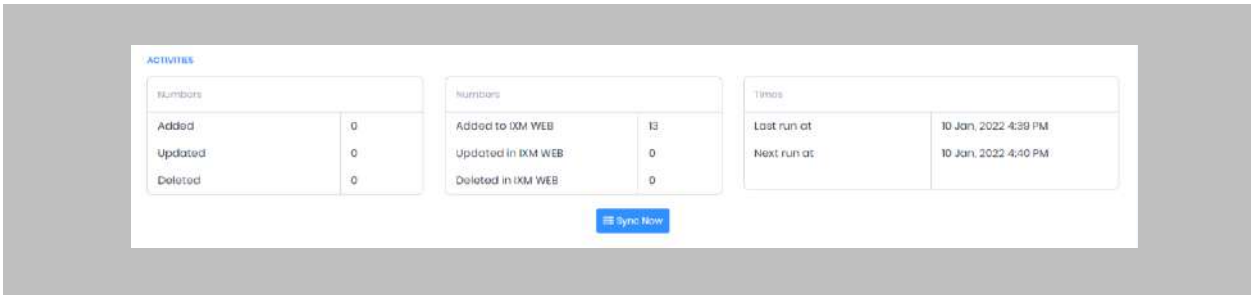


Figure 32:IXM WEB - Sync Activities

STEP 8

Clicking **Sync Now** immediately starts synchronizing pending data. This is useful when you do not want to wait until the next scheduled run shown by “Next Run At”.

RESULT

When data is synchronizing at the given interval, the numbers in view will change accordingly.

10. Adding an Invixium Reader in the IXM WEB application

Procedure

STEP 1

From **Home**, click the **Devices** tab.

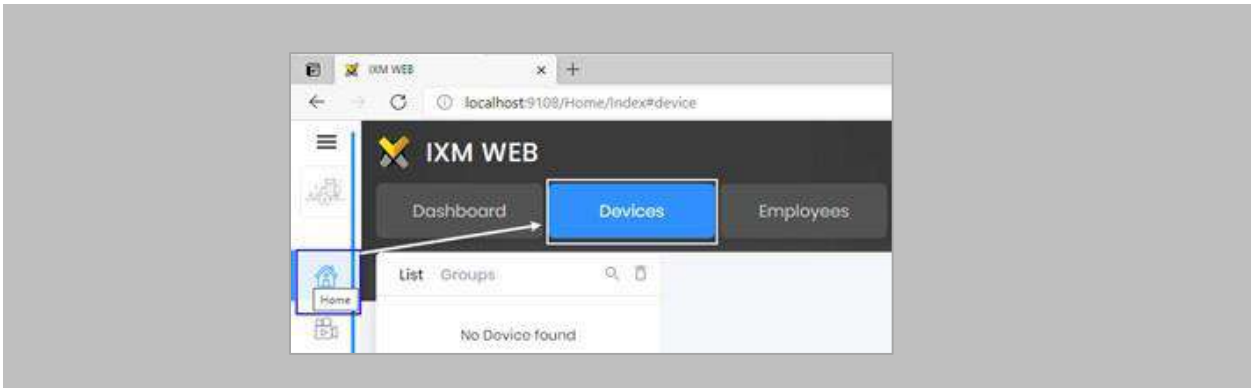


Figure 33: IXM WEB - Devices Tab

STEP 2

Select the **Add Device** button on the right-hand side of the page. Then select the **Ethernet Discovery** option and add the reader's IP in the start IP section. Click on **Search** to find the device.

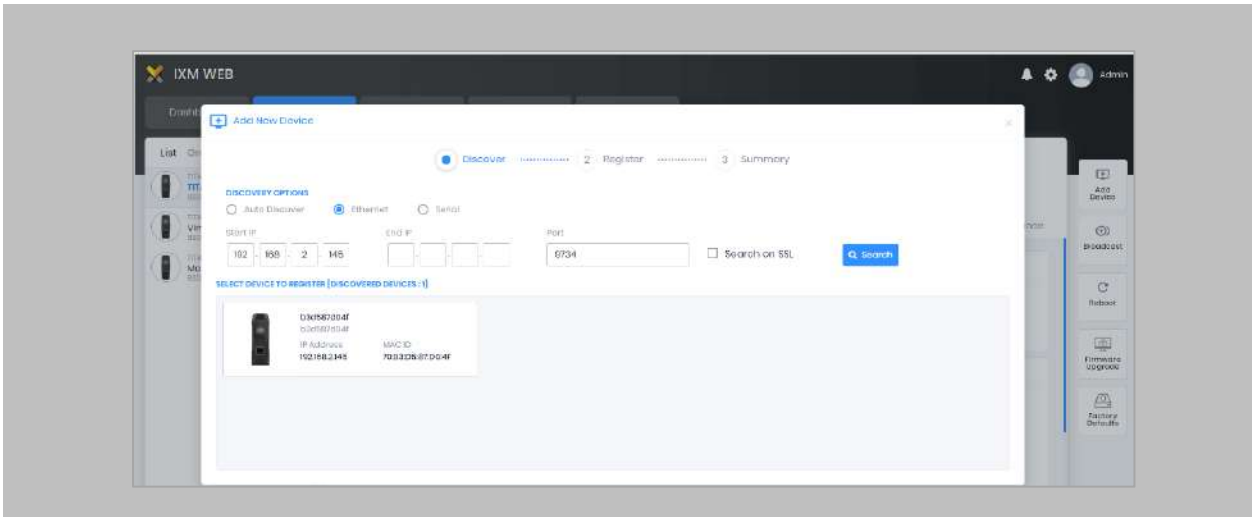


Figure 34: IXM WEB - Search Device Using IP Address

STEP 3

Once the device is found, click on it. Enter the following details:

- **Device Name:** Define the name of the **device** in IXM WEB.
- **Device Group:** Create a **'Default'** device group and select it.
- **Device Mode:** Select device mode as 'Entry', 'Exit', or 'Both' (Based on your requirement).

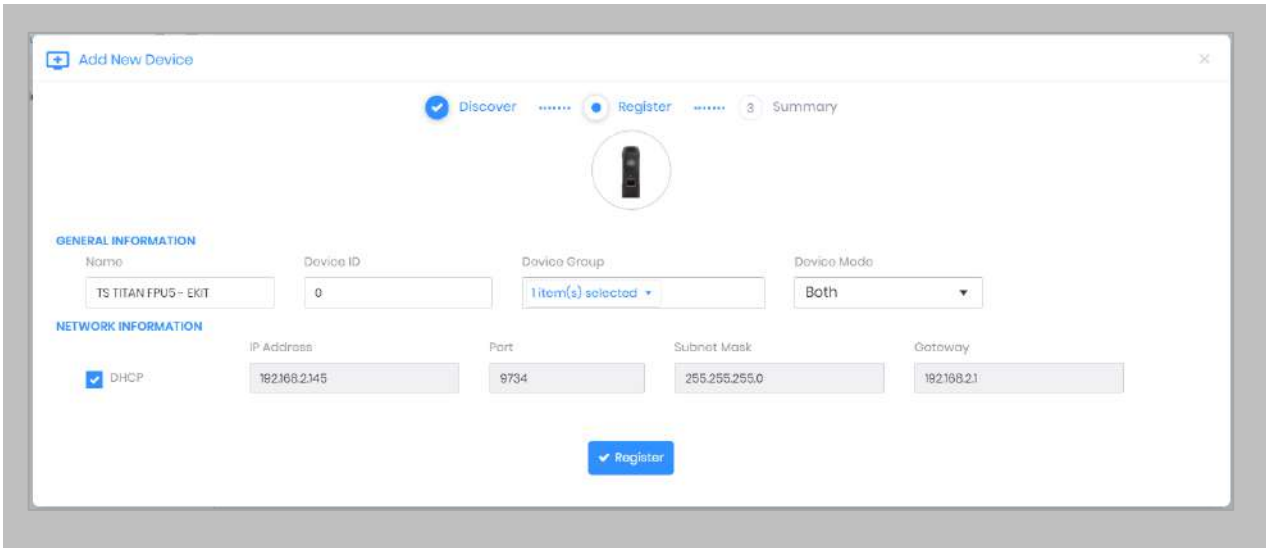


Figure 35: IXM WEB - Register Device

STEP 4

Click **Register**.

STEP 5

Once the device has successfully been **registered**, click **Done**.

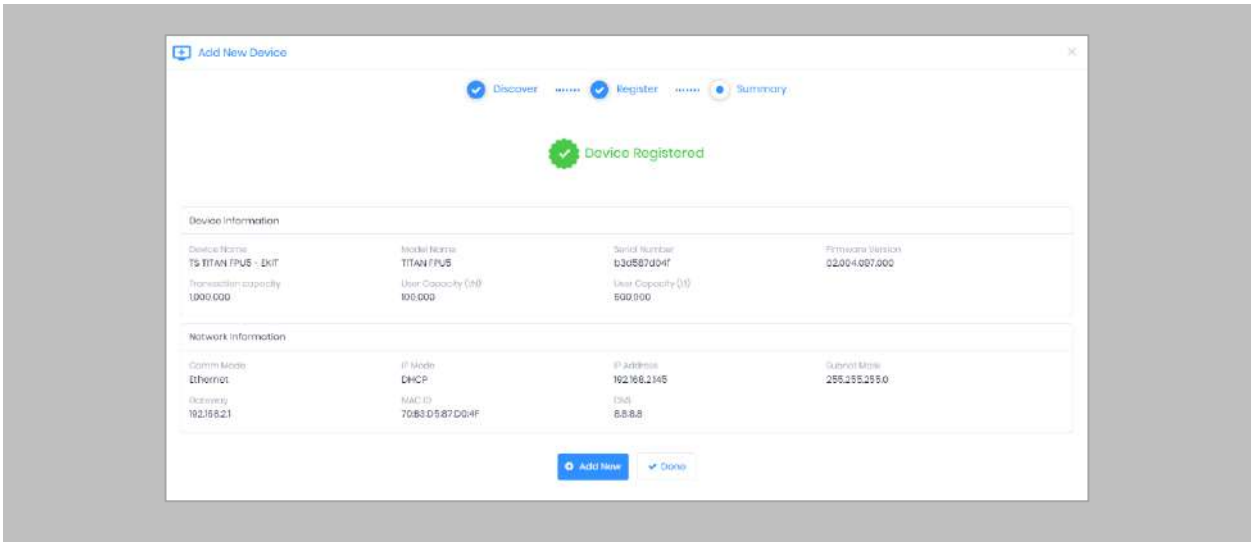


Figure 36: IXM WEB - Device Registration Complete

Go to the **Dashboard**, and confirm that the **Device Status** chart indicates that the reader is online (i.e., hovering will tell you how many devices are online).

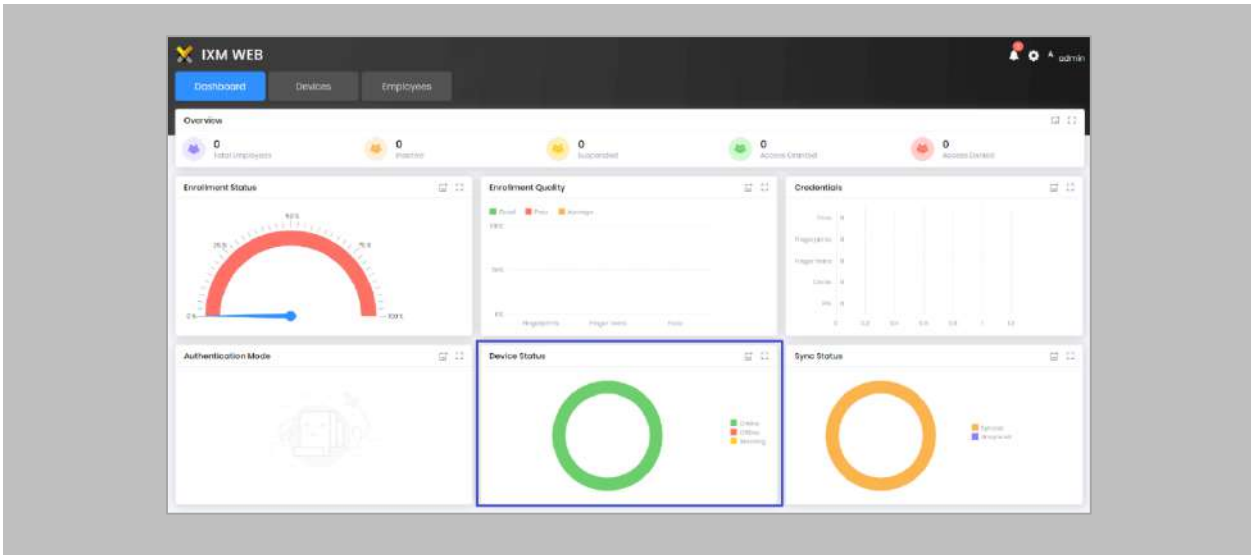


Figure 37: IXM WEB - Dashboard, Device Status

11. Adding an Invixium Device to a Device Group

Procedure

STEP 1

Go to **Devices** → **Groups**.

Add the device from the Right Side pane to the respective **Device Group.**

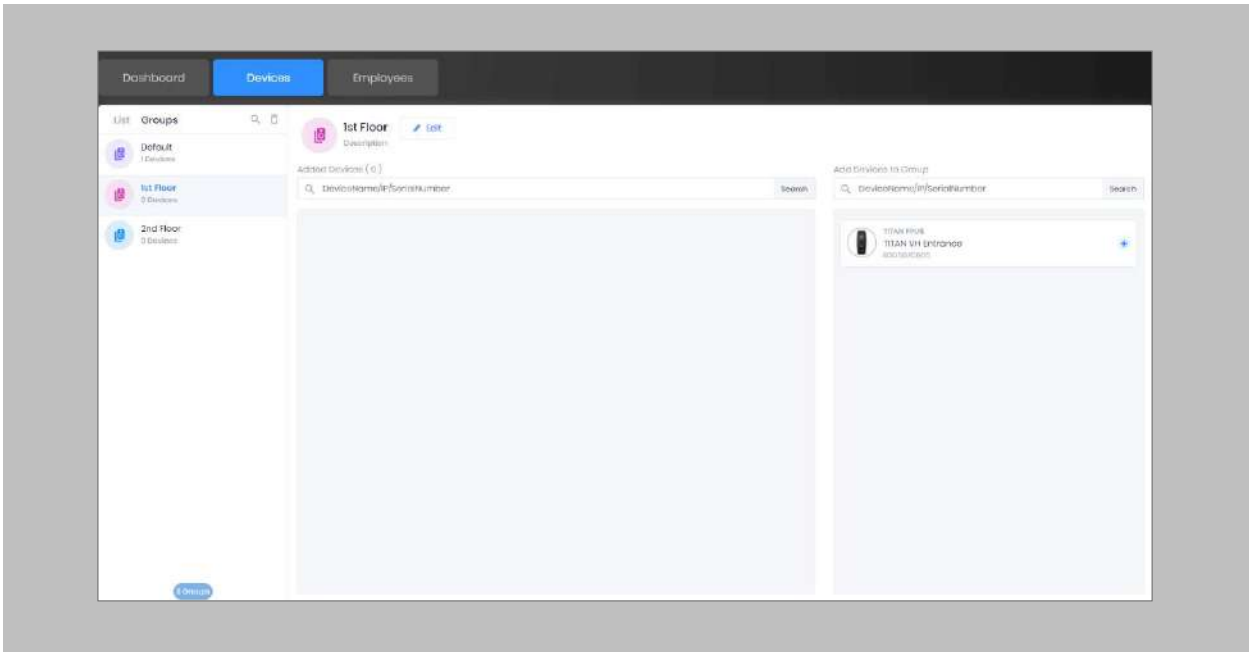


Figure 38: IXM WEB - Assign Device Group

Assign Wiegand to Invixium Readers

Note: Face and finger will always give a Wiegand output based on the initial card that was synced from Open Options to Invixium.

The Standard 26 Bit Wiegand will be used to define which output format will be sent to Open Options.

STEP 1

From **Home** > click the **Devices** tab. Select any device.

STEP 2

Navigate to the **Access Control** tab.

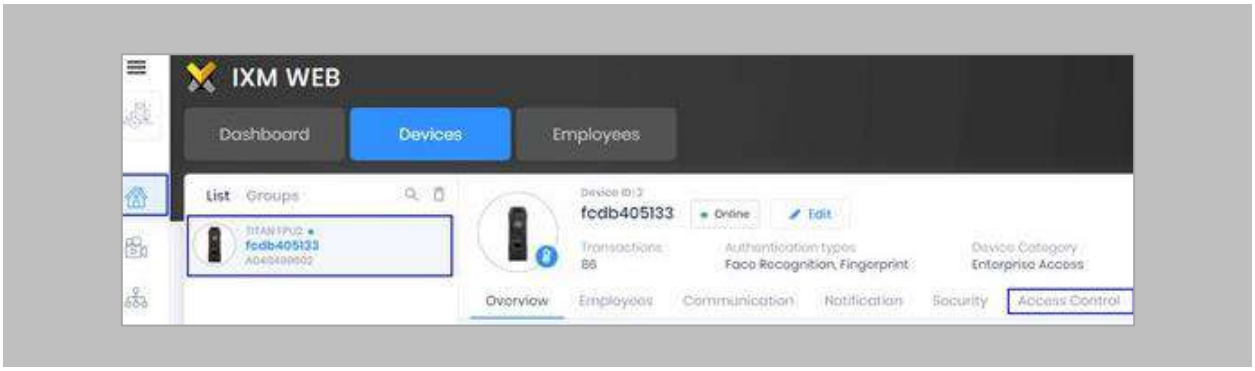


Figure 39: IXM WEB - Navigate to Access Control Tab

STEP 3

Scroll down and click on **Wiegand Output** and toggle the switch on the top right side to enable Wiegand Output for the device.

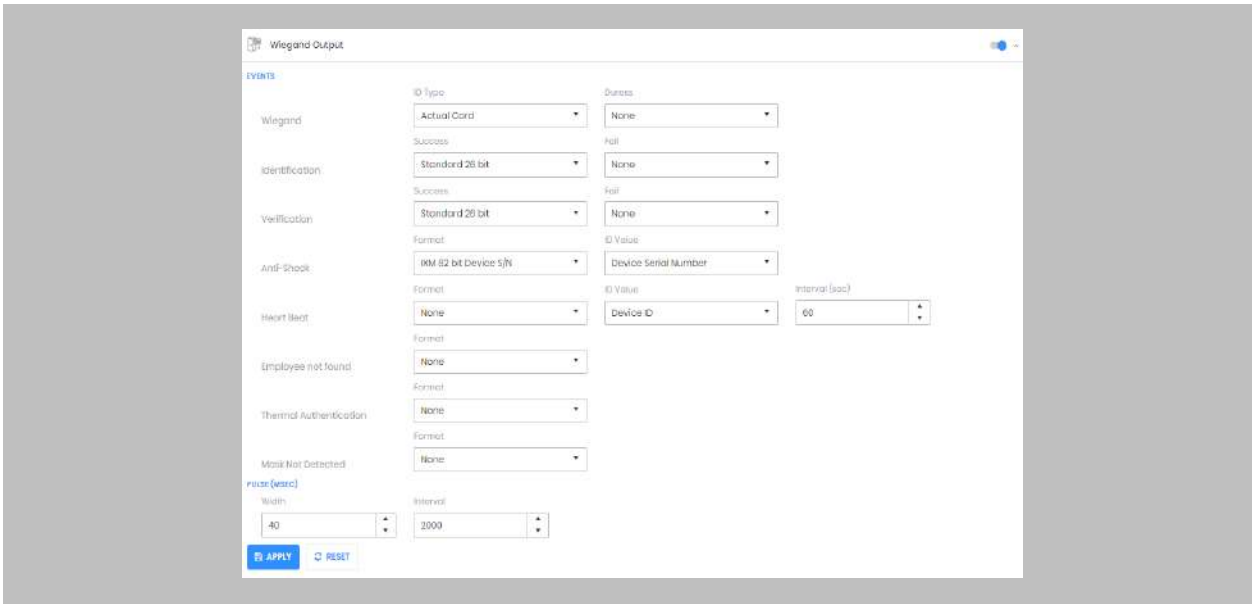


Figure 41: IXM WEB - Wiegand Output

ID types for Wiegand output are as follows:

1. Employee ID
2. Default Card
3. Actual Card

By default, Employee ID is selected in Wiegand Event.

As the Employee ID field is not available in Open Options, select either Default Card or Actual Card.

Actual Card: when more than one card is assigned to the cardholder and you want to generate Wiegand output data for the same card which is presented on the Invixium device.

Default Card: It will generate Wiegand output data for the card which is marked as default in IXM WEB.

Note: For fingerprint and face access, default card Wiegand output data will be generated.

STEP 4

Set the **items**:

Wiegand	Actual Card
Identification	26 - bit
Verification	26 - bit

STEP 5

Click **Apply.**

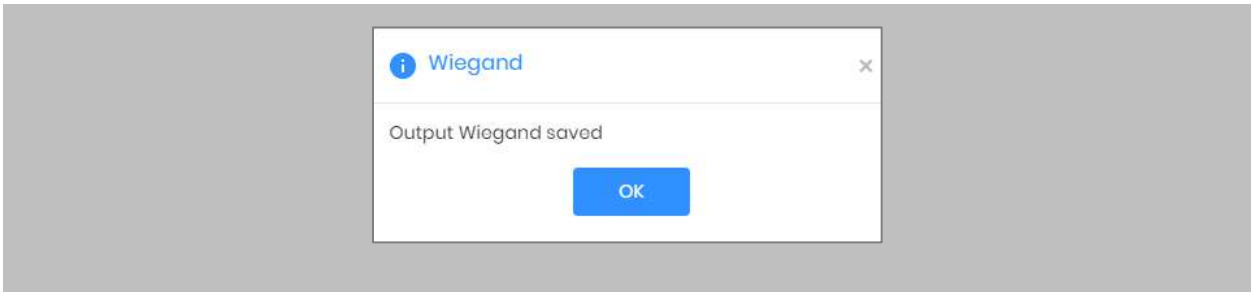


Figure 40: IXM WEB - Save Output Wiegand

RESULT

The Wiegand Output settings of the selected device are now updated.

Note:

- If you have more devices, follow the next steps to copy all Wiegand settings to all devices simultaneously. Note: This copies all Wiegand output settings. See the Appendix for more information.
- If the cardholder was assigned multiple cards, the first assigned card will be the ‘default’ selected card. The details of the card will be sent as the Wiegand bits input to the panel.

Configuring Panel Feedback with Open Options

Procedure

STEP 1

Connect Wiegand Data D0 of Open Options Panel with **WDATA_OUT0** of IXM device, Wiegand Data D1 of Open Options with **WDATA_OUT1** & Wiegand Ground of Open Options Panel with WGND of IXM Device.

STEP 2

Connect the **Green** of Open Options with **ACP_LED1** of IXM device.

STEP 3

On the **Devices** tab, select the required device and navigate to the **Access Control** tab. Scroll down and click on **Panel Feedback**.

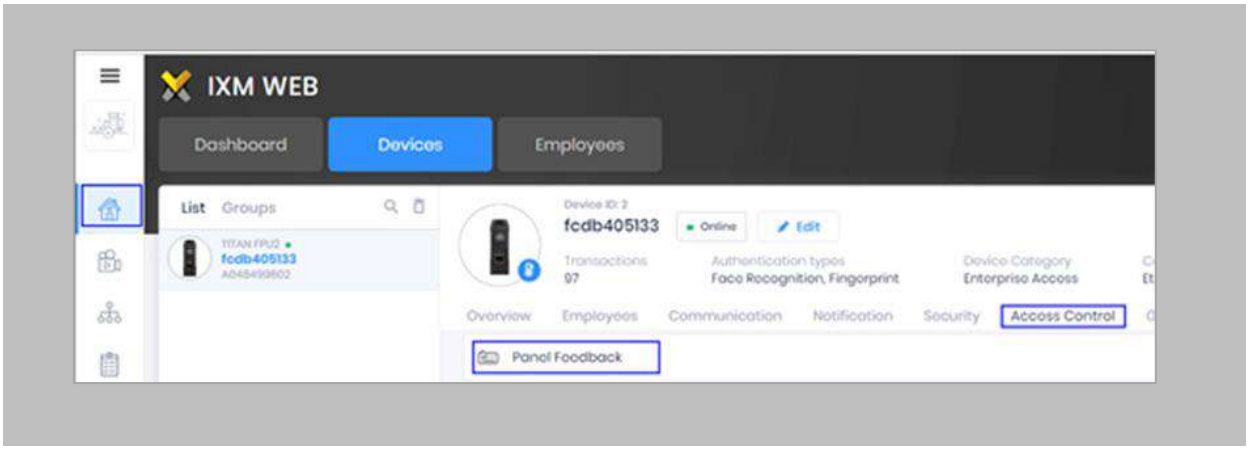


Figure 41: IXM WEB - Panel Feedback

STEP 4

By default, Panel Feedback is turned **OFF**. Toggle the Panel Feedback switch on the top right side to the **ON** position, and then enable **LED Control** by the panel and set the LED Mode to **One LED**.

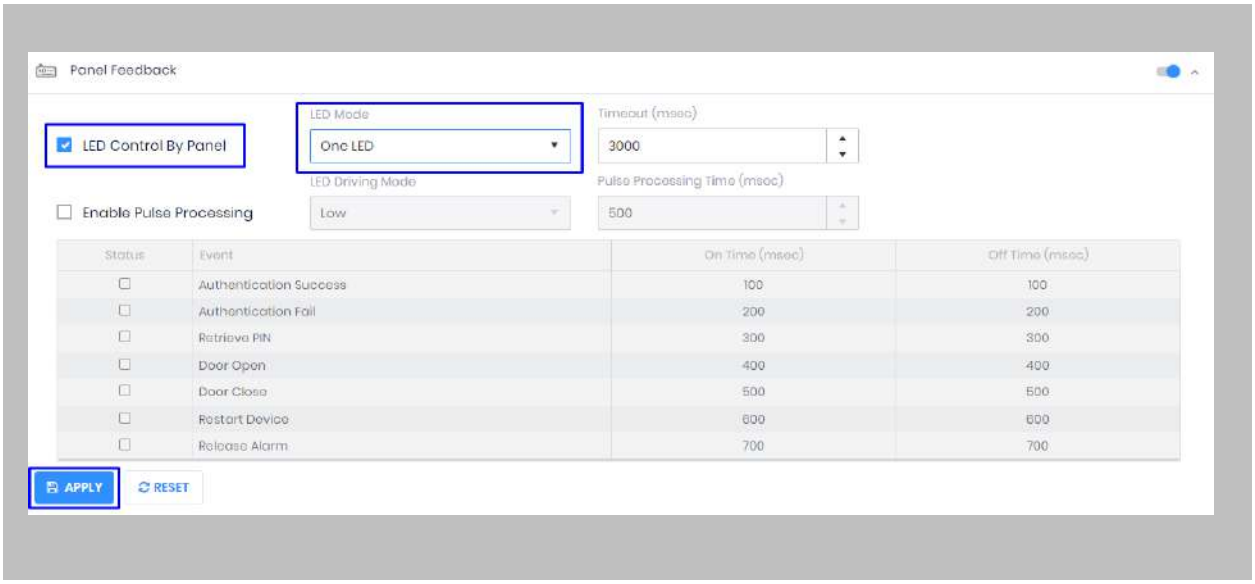


Figure 42: IXM WEB - Configuring Panel Feedback in IXM WEB

STEP 5

Click **Apply**.

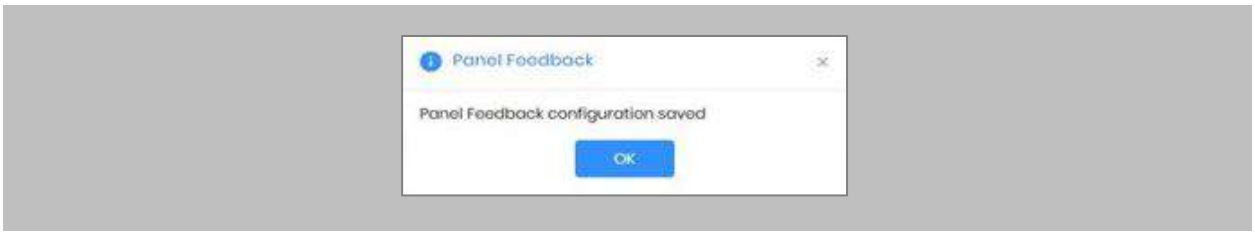


Figure 43: IXM WEB - Save Panel Feedback

12. Enrollment Best Practices

Fingerprint Enrollment Best Practices

- Invixium recommends using the index, middle, and ring fingers for enrollment.
- Make sure your finger is flat and centered on the sensor scanning area.
- The finger should not be at an angle and should be straight when placed on the sensor.
- Ensure that the finger is not too dry or too wet. Moisten your finger during enrollment if required.

Avoid Poor Fingerprint Conditions

- Wet Finger: Wipe excessive moisture from the finger before placement.
- Dry Finger: Use moisturizer or blow warm breath over the finger before placement.
- Stained Finger: Wipe stains from finger before placement.

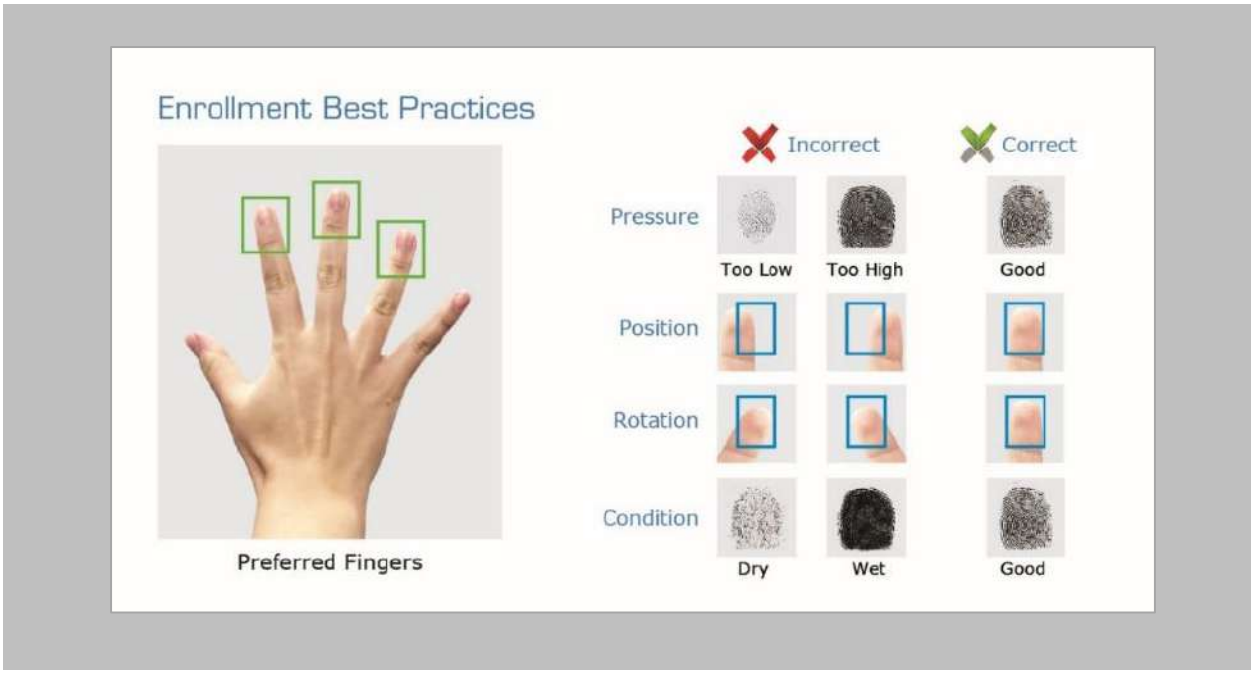


Figure 44: Fingerprint Enrollment Best Practices

Fingerprint Image Samples

Fingerprint Sample	Result	Recommendation
	Good Fingerprint	Always try and get a good fingerprint like this for a good enrollment score
	Fingerprint with cuts	Invixium recommends using Card + Biometrics or Card + PIN
	Dry finger	Moisten finger and re-enroll for better results
	Wet/Sweaty finger	Rub finger on clean cotton cloth and re-enroll for better results

Figure 45: Fingerprint Images Samples

Fingerprint Imaging Do's and Don'ts

Do's:

- Capture the index finger first for the best quality image. If it becomes necessary to capture alternate fingers, use the middle or ring fingers next. Avoid pinkies and thumbs because they generally do not provide a high-quality image.
- Ensure that the finger is flat and centered on the fingerprint scanner area.
- Re-enroll a light fingerprint. If the finger is too dry, moistening the finger will improve the image.
- Re-enroll a finger that has rolled left or right and provided a partial finger capture.

Remember to:

- Identify your fingerprint pattern.
- Locate the core.
- Position the core in the center of the fingerprint scanner.
- Capture an acceptable quality image.

Don'ts:

- Don't accept a bad image that can be improved. This is especially critical during the enrollment process.
- Don't assume your fingerprint is placed correctly.

Finger Vein Enrollment Best Practices

- Invixium recommends using the index and middle fingers for enrollment.
- Make sure your fingertip is resting on the finger guide at the back of the sensor cavity.
- The finger should be completely straight for the best finger vein scan.

Ensure that the finger is not turned or rotated in any direction.

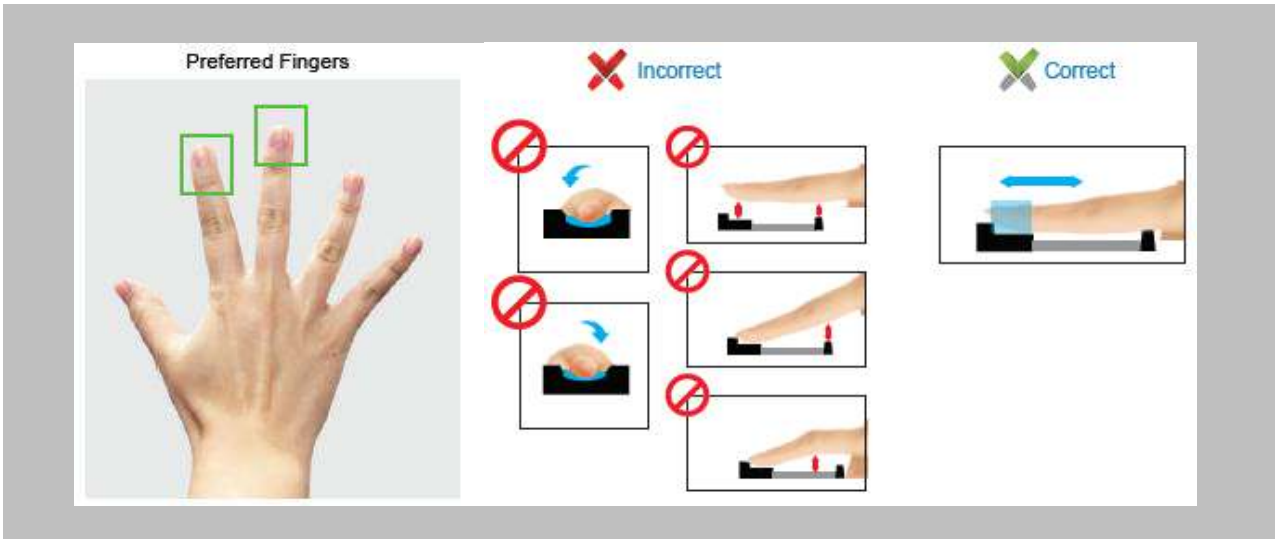


Figure 46: Finger Vein Enrollment Best Practices

Face Enrollment Best Practices

- Invixium recommends standing at least 2 to 3 feet from the device when enrolling a face.
- Make sure your entire face is within the frame corners, which will turn green upon correct positioning.
- Look straight at the camera when enrolling your face. Avoid looking in other directions or turning your head during enrollment.

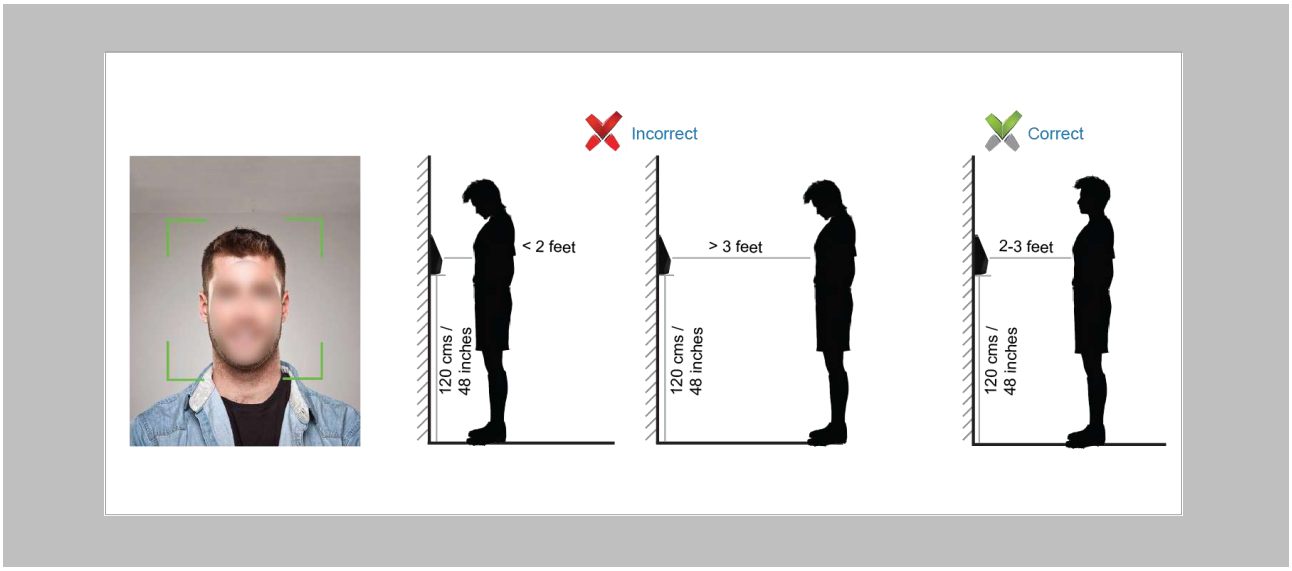


Figure 47: Face Enrollment Best Practices

13. Appendix

Pushing Configurations to Multiple Invixium Readers

Procedure

STEP 1

To push these configurations to other Invixium readers, while the configured Invixium device is selected, click the **Broadcast** option on the right-hand side.

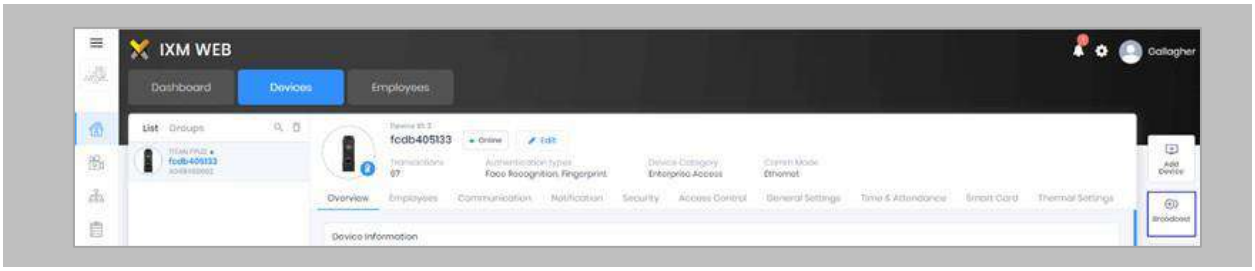


Figure 48: IXM WEB - Broadcast Option

STEP 2

Scroll down to the **Access Control** section and check the **Wiegand Output** option

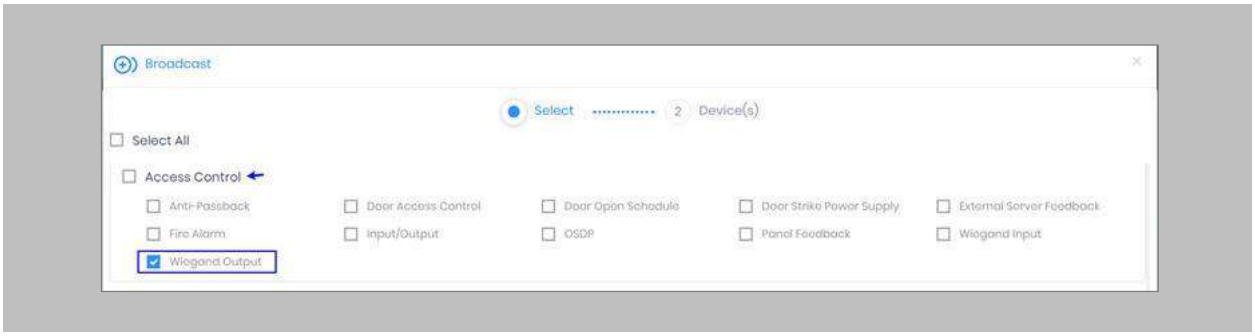


Figure 49: IXM WEB - Wiegand Output Selection in Broadcast

STEP 3

Click **Broadcast.**

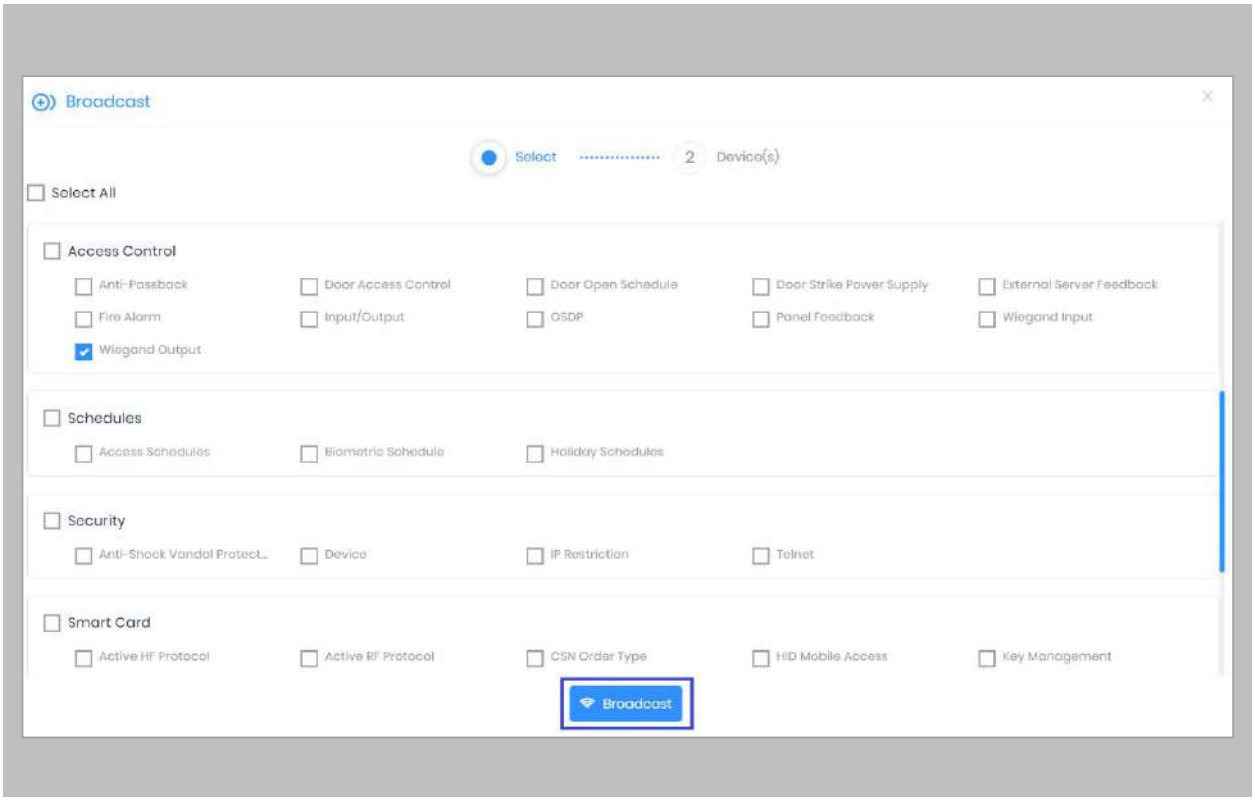


Figure 50: IXM WEB - Broadcast Wiegand Output Settings

STEP 4

Select the rest of the devices in the popup. Click **OK** to copy all Wiegand output settings of the source device to all destination devices.

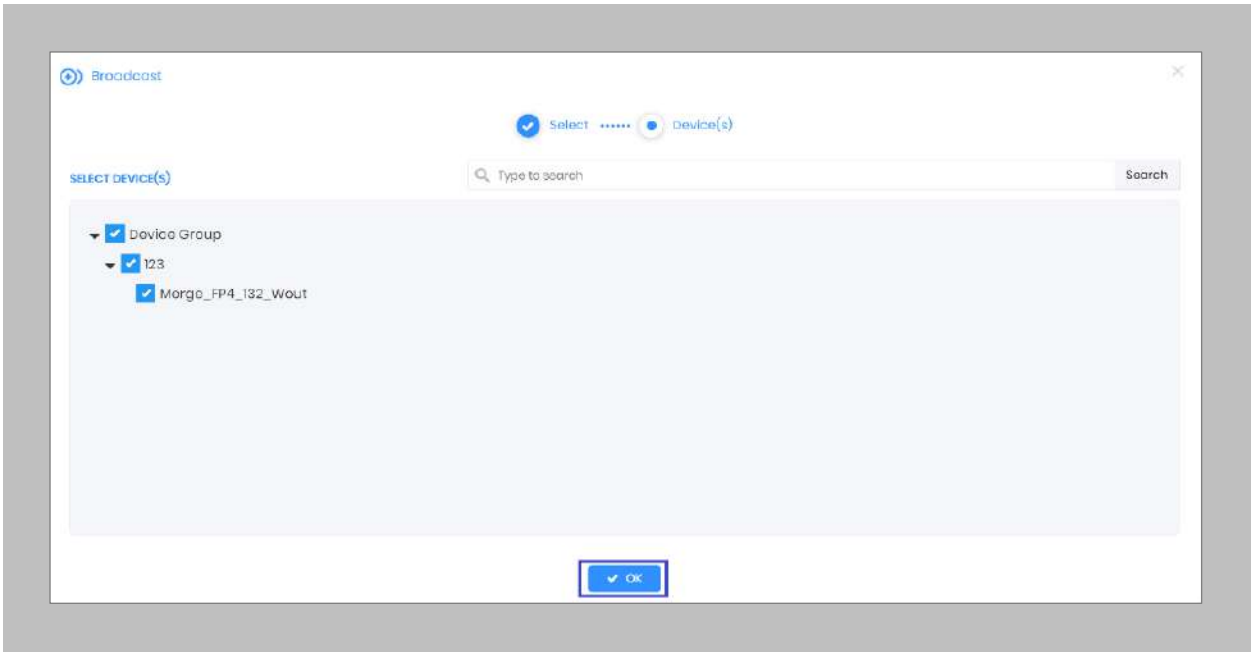


Figure 51: IXM WEB - Broadcast to Devices

Note: Popup will display devices of the same category only.

Configuring for OSDP connection

STEP 1

From **Home**, click the **Devices** tab. Select the required **Device** and navigate to **Access Control**. Click **OSDP**.

By default, the OSDP configuration is turned **OFF**. Enable OSDP by toggling the switch to **ON**.

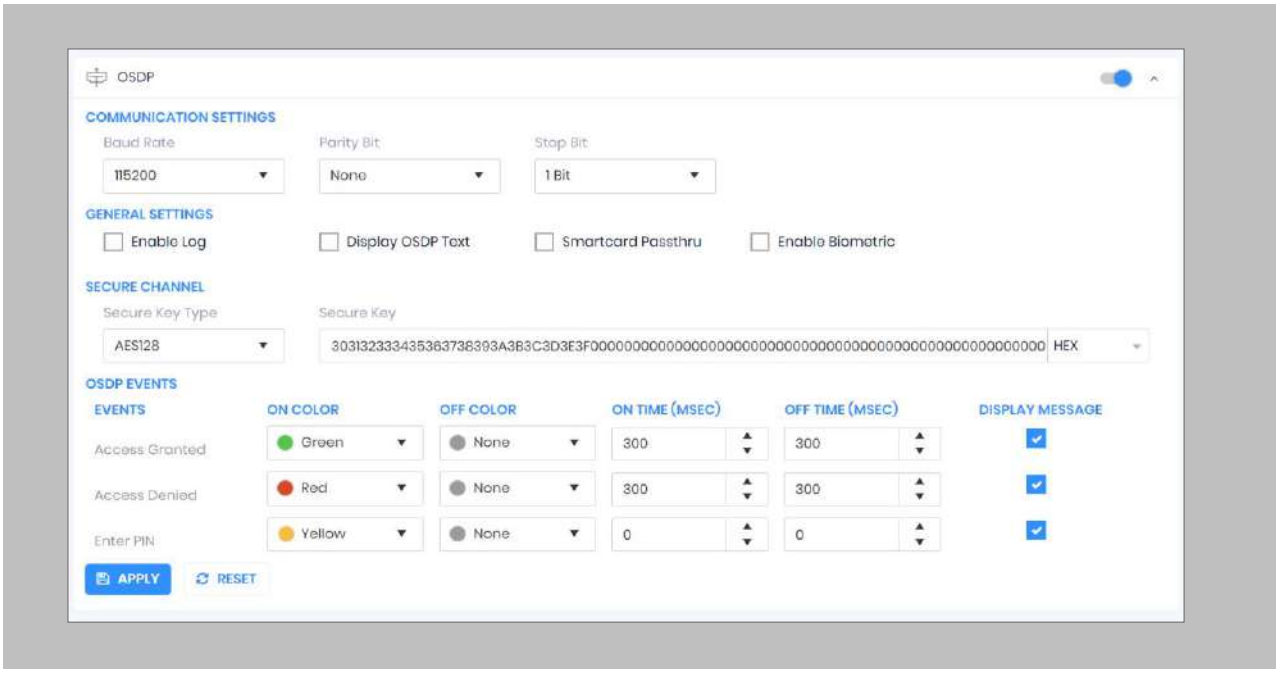


Figure 52: IXM WEB - OSDP Settings

STEP 2

Provide **values** for the configuration settings below:

Baud Rate	The baud rate of the serial communication. The value must be the same as the Access Control Panel's value.
Parity Bit	The parity bit of the serial communication. The value must be the same as the Access Control Panel's value.
Stop Bit	The stop bit of the serial communication. The value must be the same as the Access Control Panel's value.
Enable Log	This logs OSDP events for support and debugging purposes. Invixium recommends disabling this feature unless needed.
SmartCard Passthru	When presenting a smart card, the device passes the smart card CSN (Card Serial Number) to the Access Control Panel without taking any other action.
Enable Biometric	Enables biometric template verification.
Secure Channel	The secure key is provided by your Access Control Panel most of the time. However, provisions for manual entry can be added as TEXT or HEX.
Event	The OSDP static events for panel feedback and capture pin are: Access Granted Access Denied Enter Pin
On Color/Off Color	The LED color configuration is based on panel events. The value must be the same as the Access Control Panel's value. Options are: • Red • Green • Yellow • Blue

Table 5: IXM WEB - OSDP Configuration Options

Note: Mismatches between the unit and Access Control Panel LED configuration will cause unrecognized events.

Display OSDP Text	Enables to display OSDP Text.
Display Message	Notification on the device's screen. If enabled: Displays both the unit hardcoded notification and the Access Control Panel notification. IXM notification - Access Granted or Access Denied. Access Control Panel notification – Valid or Invalid. If disable: Displays only the Access Control Panel notification.

Table 6: IXM WEB - OSDP Text Options

STEP 3

Click **Apply** to save the settings.

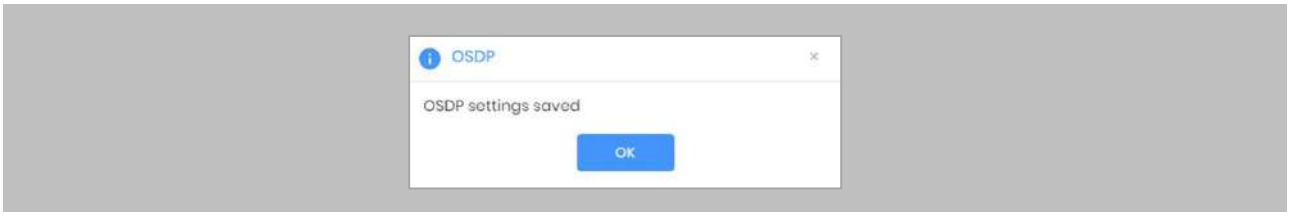


Figure 53: IXM WEB - Save OSDP Settings

Wiring and Termination

Procedure

Earth Ground

For protection against ESD, Invixium recommends the use of a ground connection between each Invixium device to a high-quality earth ground on site.

STEP 1

Connect the **green** and **yellow** earth wire from the wired back cover.

STEP 2

Connect the **open end** of the earth ground wire provided in the install kit box to the **building earth ground**.

STEP 3

Screw the **lug end** of the earth ground.

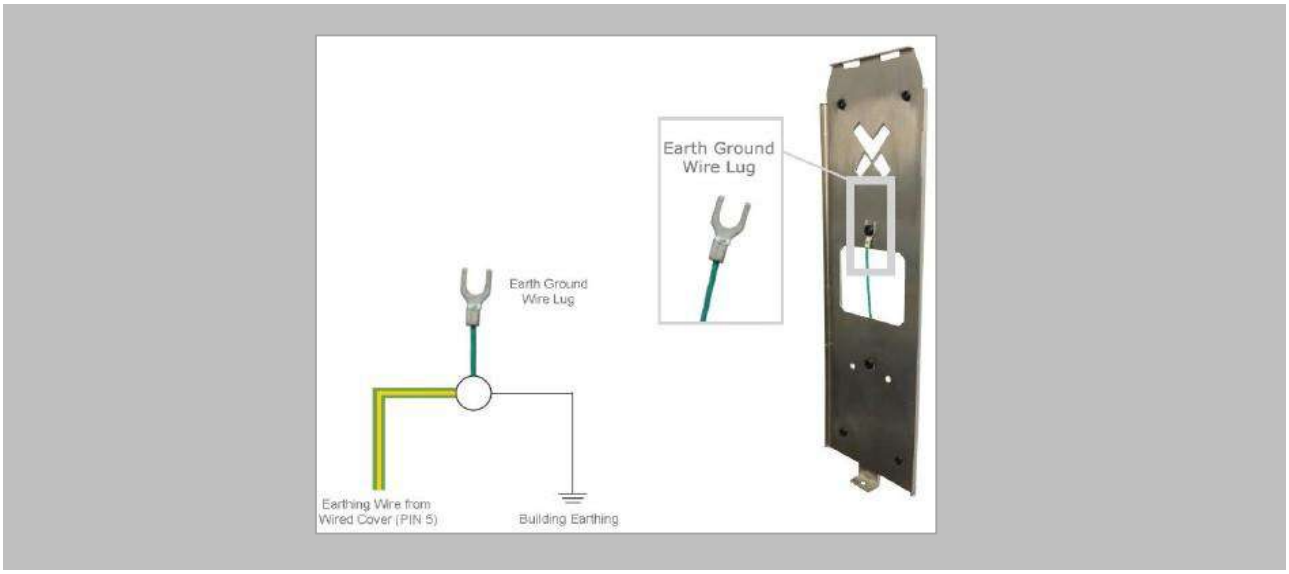


Figure 54: Earth Ground Wiring

Wiring

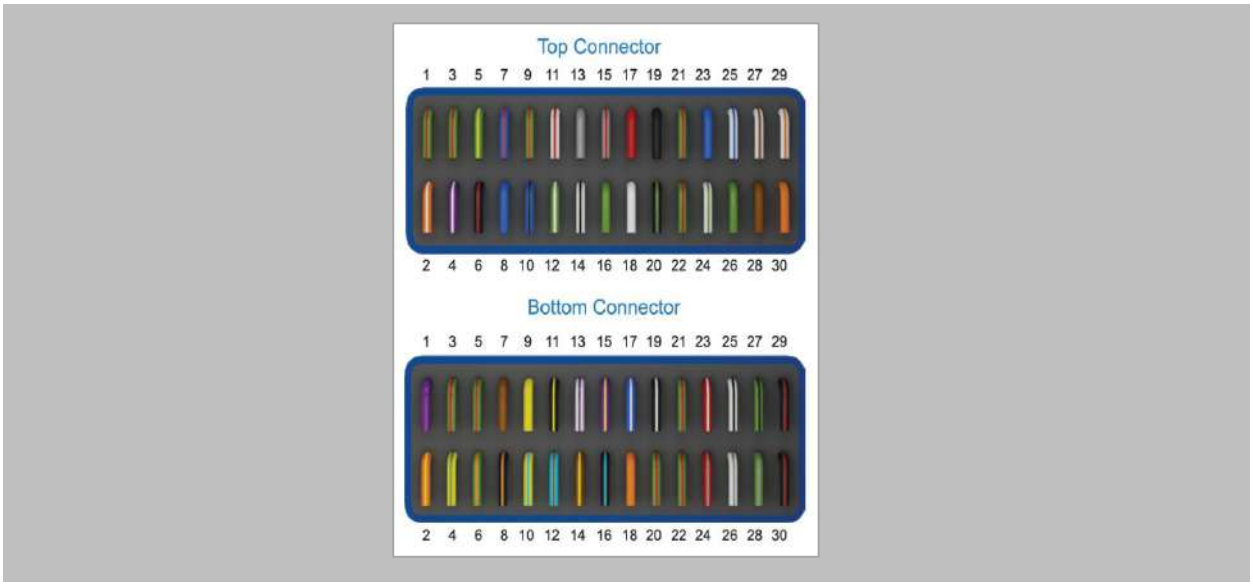


Figure 55: IXM TITAN – Top & Bottom Connector Wiring

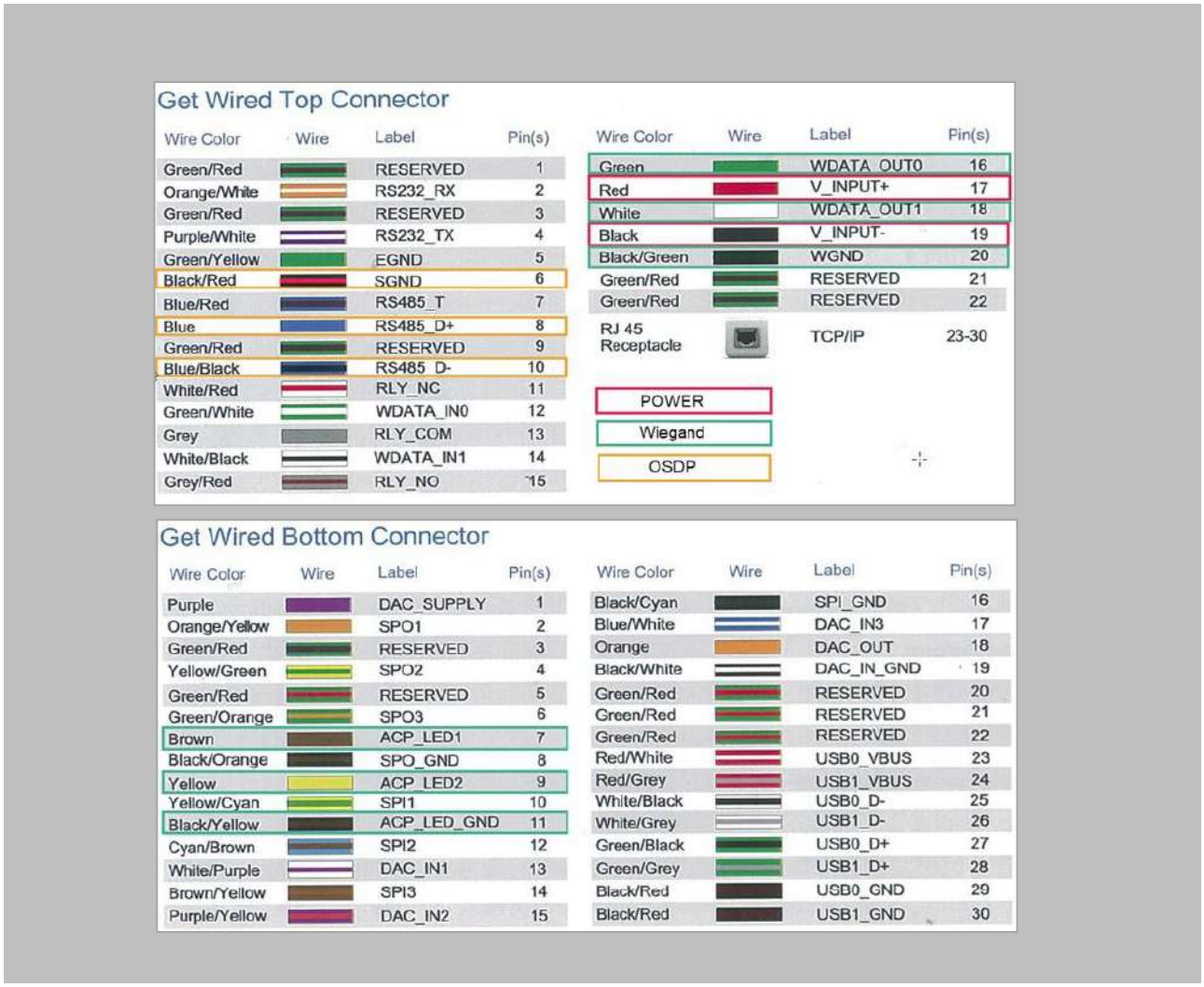


Figure 56: Power, Wiegand & OSDP Wires

All Invixium devices support Wiegand and OSDP.

Invixium devices can be integrated with Honeywell WIN-PAK panels on:

1. Wiegand (one-way communication)
2. Wiegand with panel feedback (two-way communication)
3. OSDP (two-way communication)

Wiegand Connection

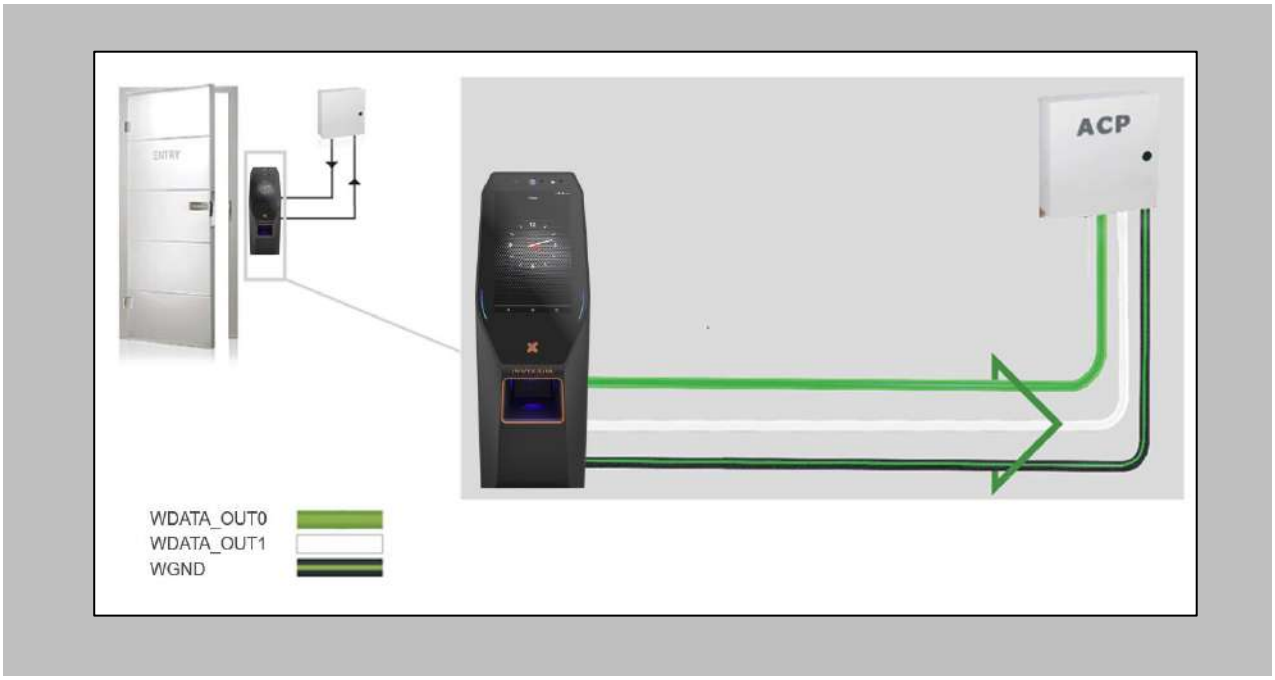


Figure 57: IXM TITAN - Wiegand

Wiegand Connection with Panel Feedback

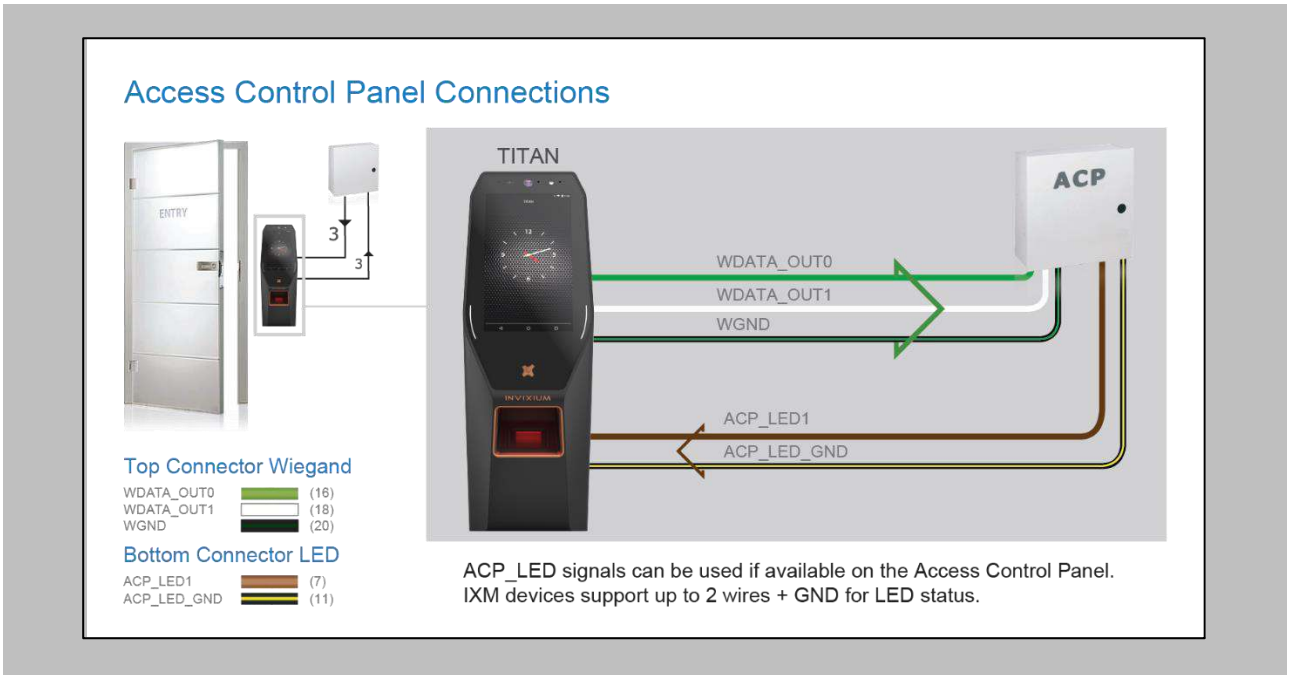


Figure 58: IXM TITAN – Panel Feedback

OSDP Connections

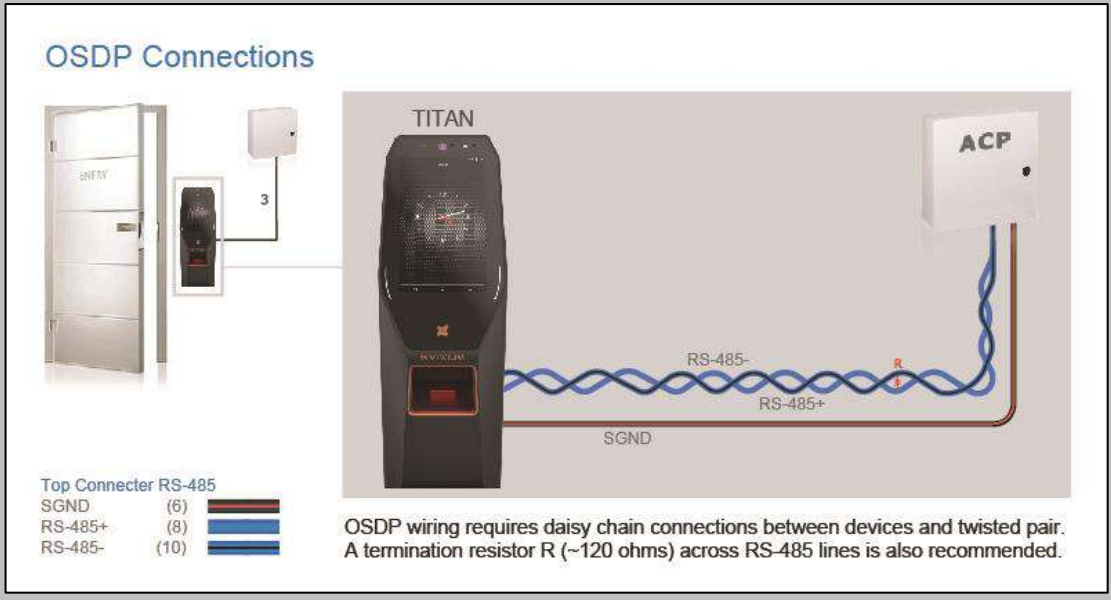


Figure 59: IXM TITAN – OSDP Connections

14. Troubleshooting

Reader Offline from IXM WEB Dashboard

Note: Confirm Communication of IXM WEB server to Invixium reader.

Procedure

STEP 1

From **Home**, click the **Devices** tab.

STEP 2

Select any device.

STEP 3

Navigate to the **Communication** tab.

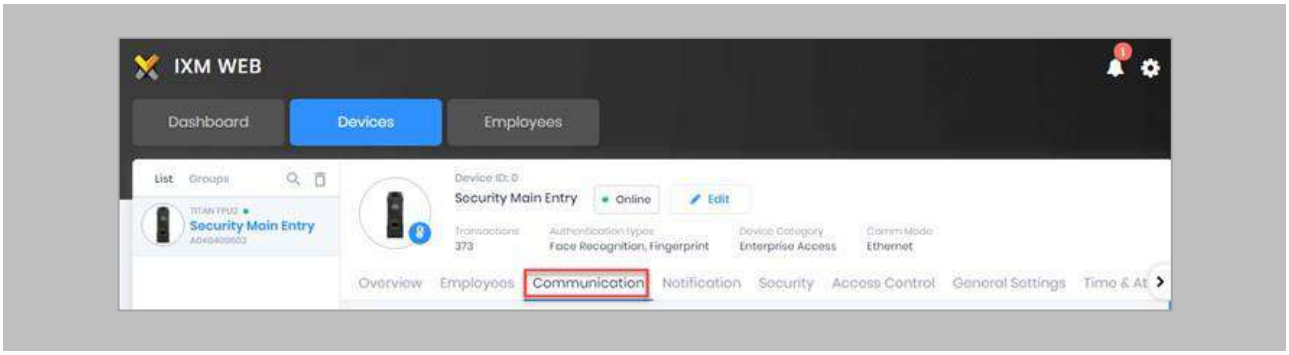


Figure 60: IXM WEB - Device Communication Settings

STEP 4

Scroll down and click on **IXM WEB Server**.

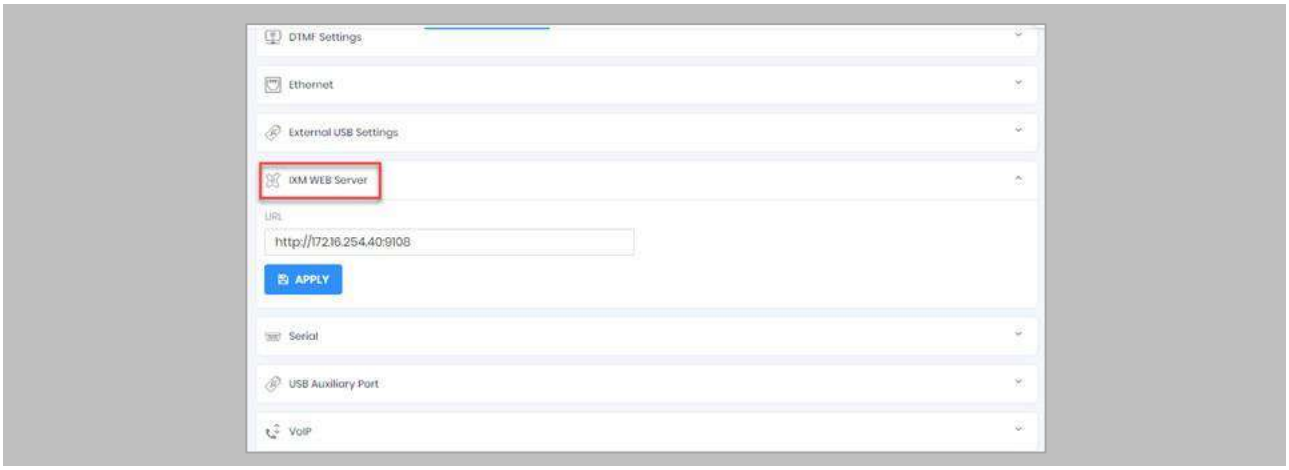


Figure 61: IXM WEB - Server URL Setting

Ensure the correct **IP address** of the server is listed here. If not, **correct** and **apply.**

STEP 5

Enter the **IP address** of the Invixium server followed by **port 9108.**

Format: **http://IP_IXMServer:9108**

STEP 6

Navigate to **General Settings** and make sure that the **URL** reflects the same setting.

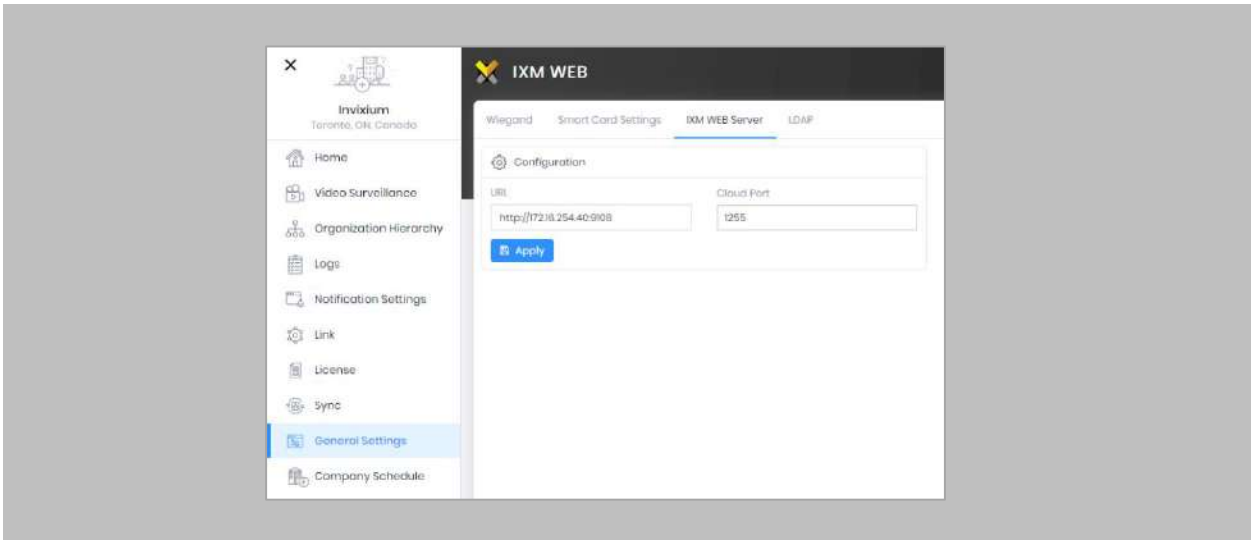


Figure 62: IXM WEB - Server URL Setting from General Settings

Logs in IXM WEB Application

Device Logs: Device Logs are used for debugging device-related issues.

From **Home** → Click the **Devices** Tab on the top → Select the required **Device** → Navigate to the **General Settings** tab for the device → Click on **Device Log** → **Enable** Capture Device Logs.

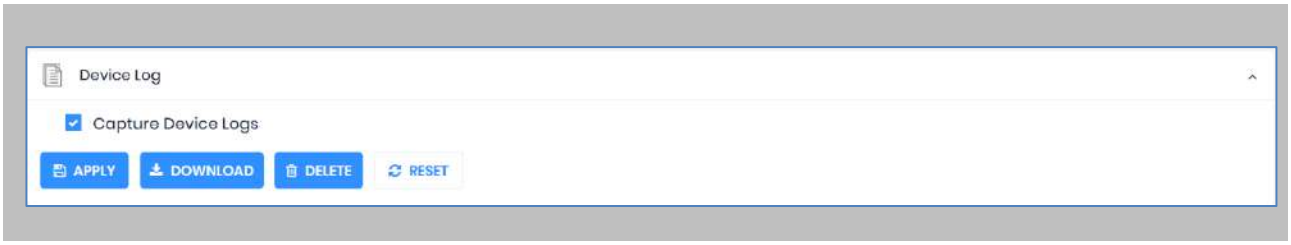


Figure 63: IXM WEB - Enable Device Logs

Click **Download** to initialize the process to download the device log file.

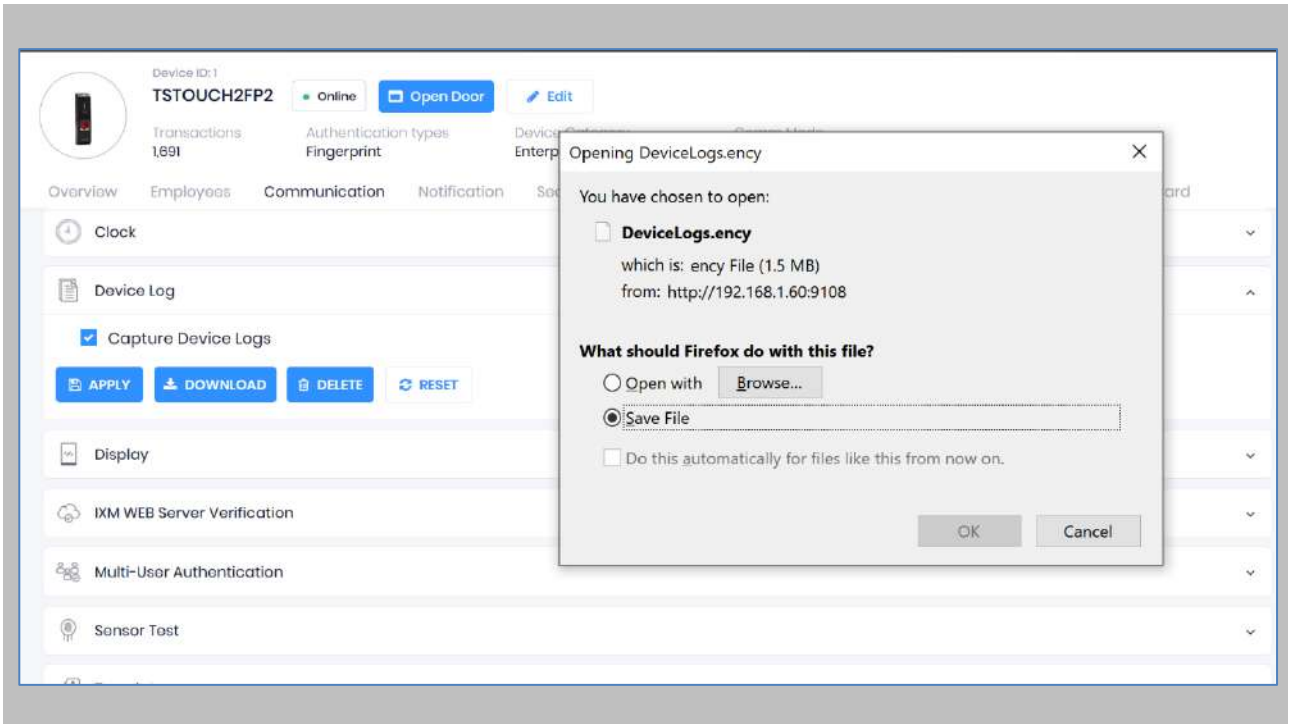


Figure 64: Save Device Log File

Select Save File and Click **OK** to store the device log file on your machine.

Transaction Logs (TLogs): Events or activities taking place on the IXM device.

- Transactions Logs can be viewed and exported from IXM WEB.
- Go to Logs in the Left Navigation pane in IXM WEB and click on Transaction Logs. A filter option is available in Transaction Logs columns.

Application Logs: Applications logs are available for any event, error, or information generated in IXM WEB.

- Applications Logs can be viewed and exported from IXM WEB.
- Go to Logs in the Left Navigation pane in IXM WEB and click on Application Logs. Filter option is available in the Application Logs columns.

Logs folder location on IXM WEB Server:

IXM WEB Logs	C:\Program Files (x86)\Invixium\IXM WEB\Log
IXM WEB Service Logs	C:\Program Files (x86)\Invixium\IXMWebService
IXM API Logs	C:\Program Files (x86)\Invixium\IXMAPI\Log

Table 7: Logs Folder Location

15. Support

For more information relating to this document, please contact support@invixium.com.

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