



IXM WEB Integration with Genetec Security Center

Installation Instructions

V2.0



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1. Introduction

Purpose


This document outlines the process of configuring the software integration between Genetec Security Center (GSC) and Invixium's IXM WEB.

Summary of key features related to this IXM WEB and GSC Integration

- Setting Web-based SDK
- 'Sync All' feature to resynchronize the database from GSC to IXM WEB
- 'IXM WEB AddOn' facility for Biometric Enrollment from GSC
- Multiple Card Support upto 10 cards (default card formats of GSC)
- RIO Integration for wireless connection

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 Genetec Security Center 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 Security Center by using Genetec Web-based SDK.

Acronyms


Acronym	Description
ACPCS	Access Control Panel Configuration Software
GSC	Genetec Security Center
IXM	Invixium

Field Mappings

The following are the GSC fields that are mapped to IXM WEB:



GSC Field	IXM Field	Notes
First name	First Name	
Last name	Last Name	
Status	Suspend User	
Activation	Start Date	
Expiration	End Date	
Card Number	Prox ID/Smart Card ID	Prox ID is given priority during export
Facility Code	Facility Code	
Email Address	Email	
Bypass antipassback rules	Anti-passback	

 Note: Multiple Cards - GSC can have multiple cards per user, and IXM WEB supports a maximum of 10 cards per user. IXM Link selects the available valid cards.

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
Genetec Security Center	v5.10.3
Invixium IXM WEB	2.2.252.0
Operating Systems	Windows 10 (Build 1709+) Professional Version Windows Server 2016 Standard Windows Server 2019 Supported but not recommended: (legacy)

	Windows 8.1 Windows Server 2012 R2 Windows Server 2012
Microsoft .NET Framework	.NET Framework 4.7.2
Database Engine	SQL Server 2016+ Supported but not recommended: (legacy) SQL server 2014 Express Edition (Default Installation)
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 10-15 devices registered with 500 employees or fewer. For large enterprise installation server requirements, contact support@invixium.com.

Compatibility Matrix for IXM WEB & Security Center Integration

IXM WEB version	GSC version	Compatible
IXM WEB 2.2.57.0	v5.9.1	Yes
IXM WEB 2.2.57.0	v5.10.3	Yes
IXM WEB 2.2.224.0	v.5.9.1	Yes
IXM WEB 2.2.224.0	v5.10.3	Yes
IXM WEB 2.2.252.0	v5.10.3	Yes

Table 1: Compatibility Matrix for IXM WEB & Genetec Integration

3. Checklist

Item List	Interface
Create Web-based SDK	Genetec
IXM WEB Activation ID	Invixium
SQL Instance on SQL Server 2016+	Invixium
Install IXM WEB Application	Invixium
IXM WEB and IXM Link Activation	Invixium
Configure IXM Link to Genetec	Invixium
Configure Invixium Reader	Invixium
Face or Finger Enrollment	Invixium

4. Task List Summary

Task	IXM WEB Application Task List using IXM WEB	Genetec Security Center Task List using GSC
1	Activate IXM WEB and IXM Link for GSC	Create Web-based SDK
2	Configure IXM Link for GSC	First time enrollment configuration
3	Register IXM Devices and configure settings as per the requirement	Enroll cardholder biometric (Face, fingerprint, finger vein)
4	Configure Weigand or OSDP or RIO settings in device for integration with Genetec Synergies appliance	Configuring door for RIO integration
5	Assign a specific Device Group to the device	Monitor Events and Generate Report

Table 2: Task List Summary

5. Prerequisites for GSC and IXM WEB Integration

Setting up Web-based SDK

Procedure

STEP 1

Navigate to **System** → **Roles** → Click **Web-based SDK**

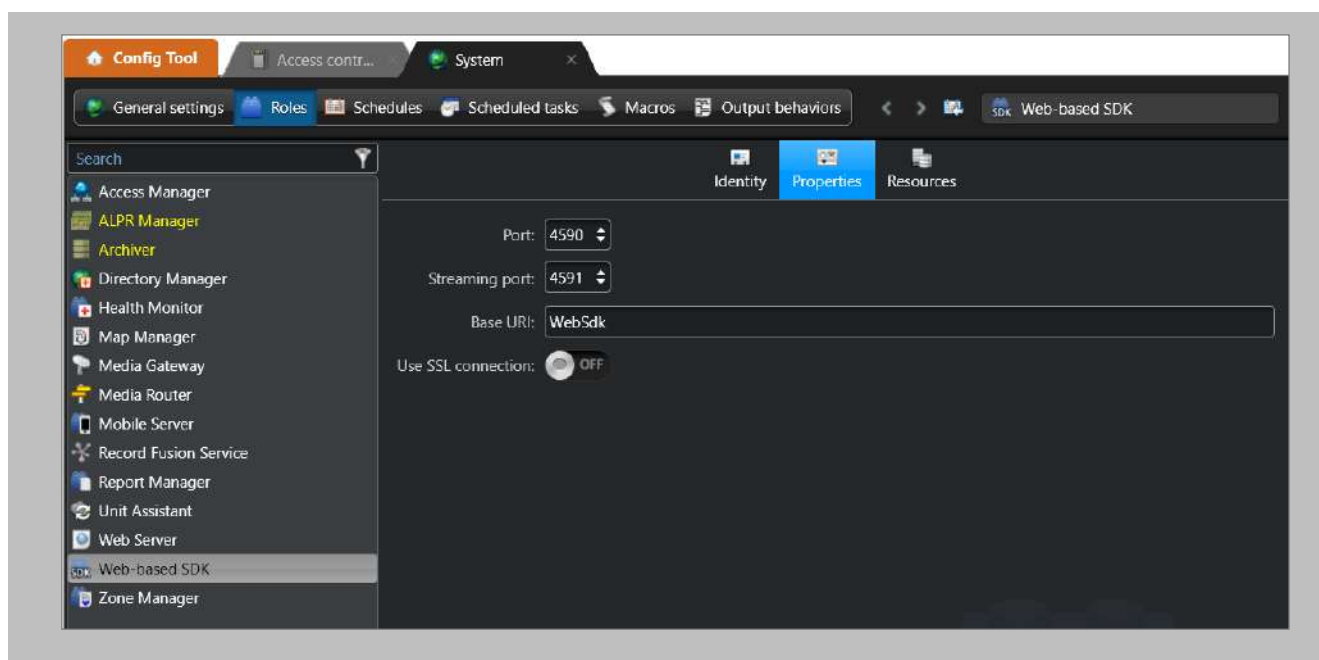


Figure 1: GSC – Setting up Web-Based SDK

6. Prerequisites for Installing Invixium IXM WEB Software

Acquiring 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/>.

IXM WEB Download and Activation

Fill out the details below to receive an email with steps to download, install and activate IXM WEB.

Who are you?

Distributor
 Access Control Panel Manufacturer
 Installer/Integrator
 End User

Customer Details

Please provide details of the End-User who has purchased Invixium biometric solutions and where they will be installed. The Activation License for IXM WEB will be issued in their name and will provide them access to future upgrades and support

<input type="text" value="First Name*"/>	<input type="text" value="Last Name*"/>	<input type="text" value="Company Email*"/>
<input type="text" value="Company Name*"/>	<input type="text" value="Select Country*"/>	<input type="text" value="Phone Number*"/>

Installer Details

Please provide details of the person and/or company responsible for installing IXM WEB at the aforementioned customer's facility. The license key will be emailed to the customer email ID as well as the email ID provided below.

<input type="text" value="First Name*"/>	<input type="text" value="Last Name*"/>	<input type="text" value="Company Email*"/>
<input type="text" value="Company Name*"/>	<input type="text" value="Phone Number*"/>	
<input type="text" value="Street Address 1"/>	<input type="text" value="Street Address 2"/>	<input type="text" value="City*"/>
<input type="text" value="State*"/>	<input type="text" value="Select Country*"/>	<input type="text" value="Postal Code*"/>

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 email that includes instructions on how to download and install IXM WEB along with your Activation ID.

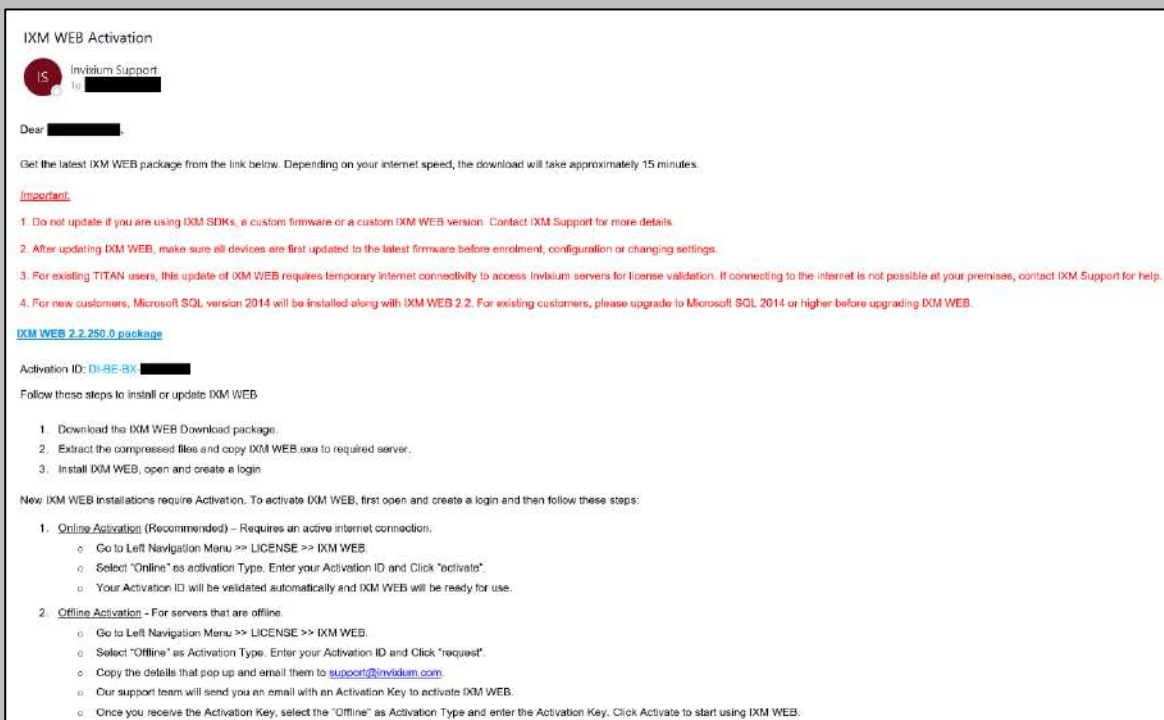



Figure 2: Sample Email After Submitting Online Request Form



Setting Up SQL instance

 Note: The following section describes the setup of a pre-created instance of SQL 2016+. Creating a new instance can be done with the use of SQL Installer within the Security Center installation media kit.

Procedure

STEP 1

Make sure to **Create** a new SQL instance on the server.

STEP 2

Set the instance name as IXM WEB (default) or Invixium.

STEP 3

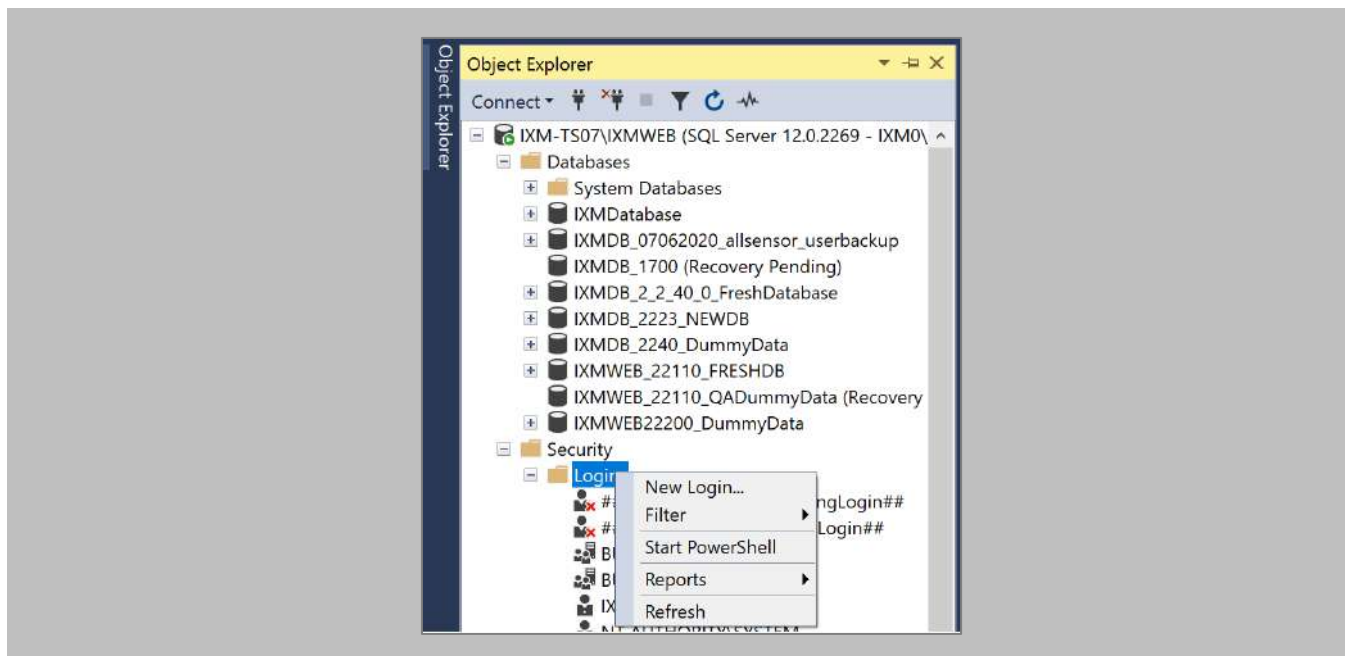
Select mixed mode: SQL Authentication and Windows Authentication for secure logins. Leave everything else as default.


STEP 4

Install **SQL Management Studio** on the server.

STEP 5

Log into the new instance and create a new user.



 Note: Make sure to uncheck both 'Enforce password expiration' and 'User must change password at next login'.

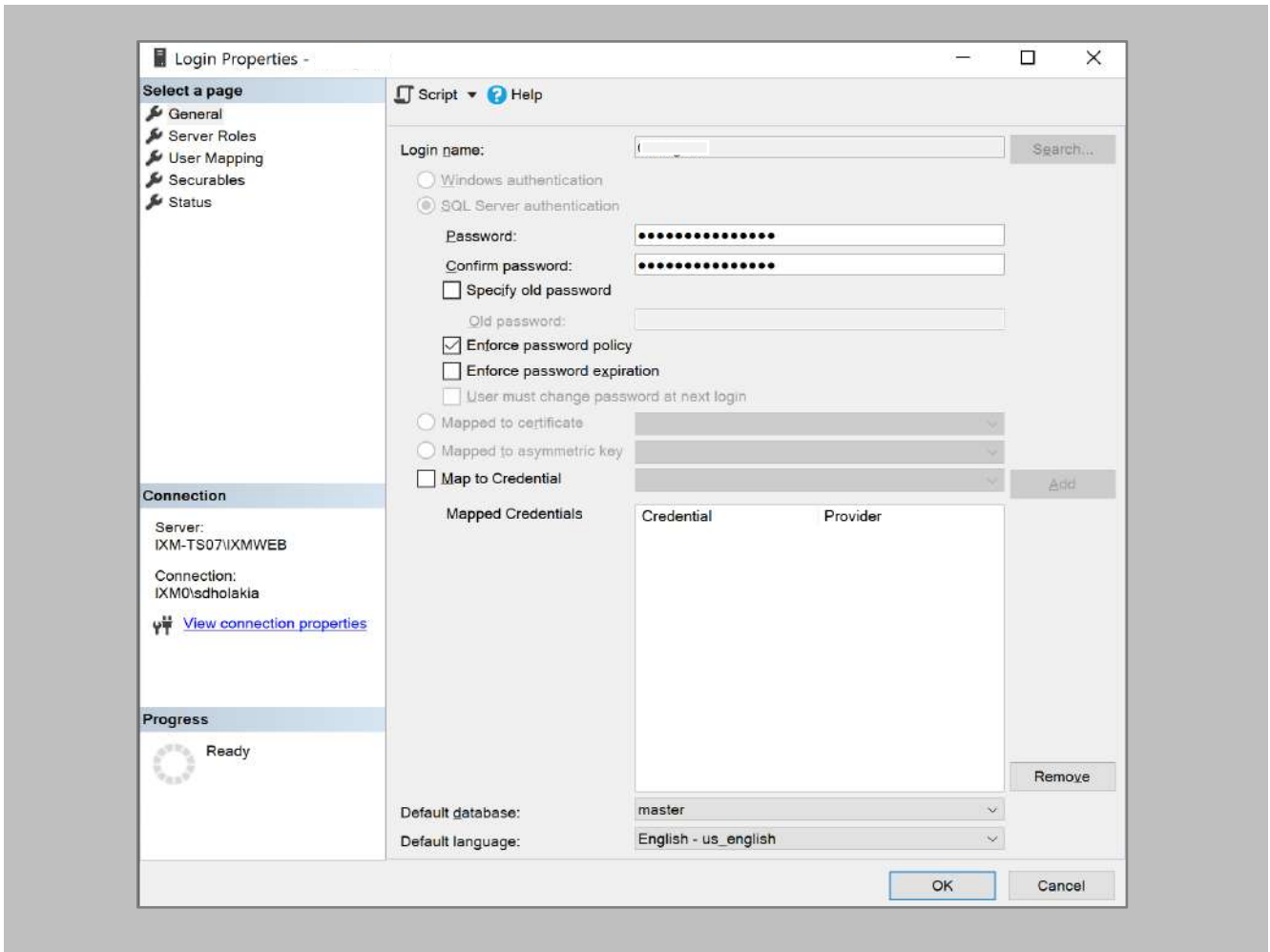


Figure 4: SQL Login Properties

STEP 7

Add this user under **Server Roles, dbcreator, and sysadmin.**

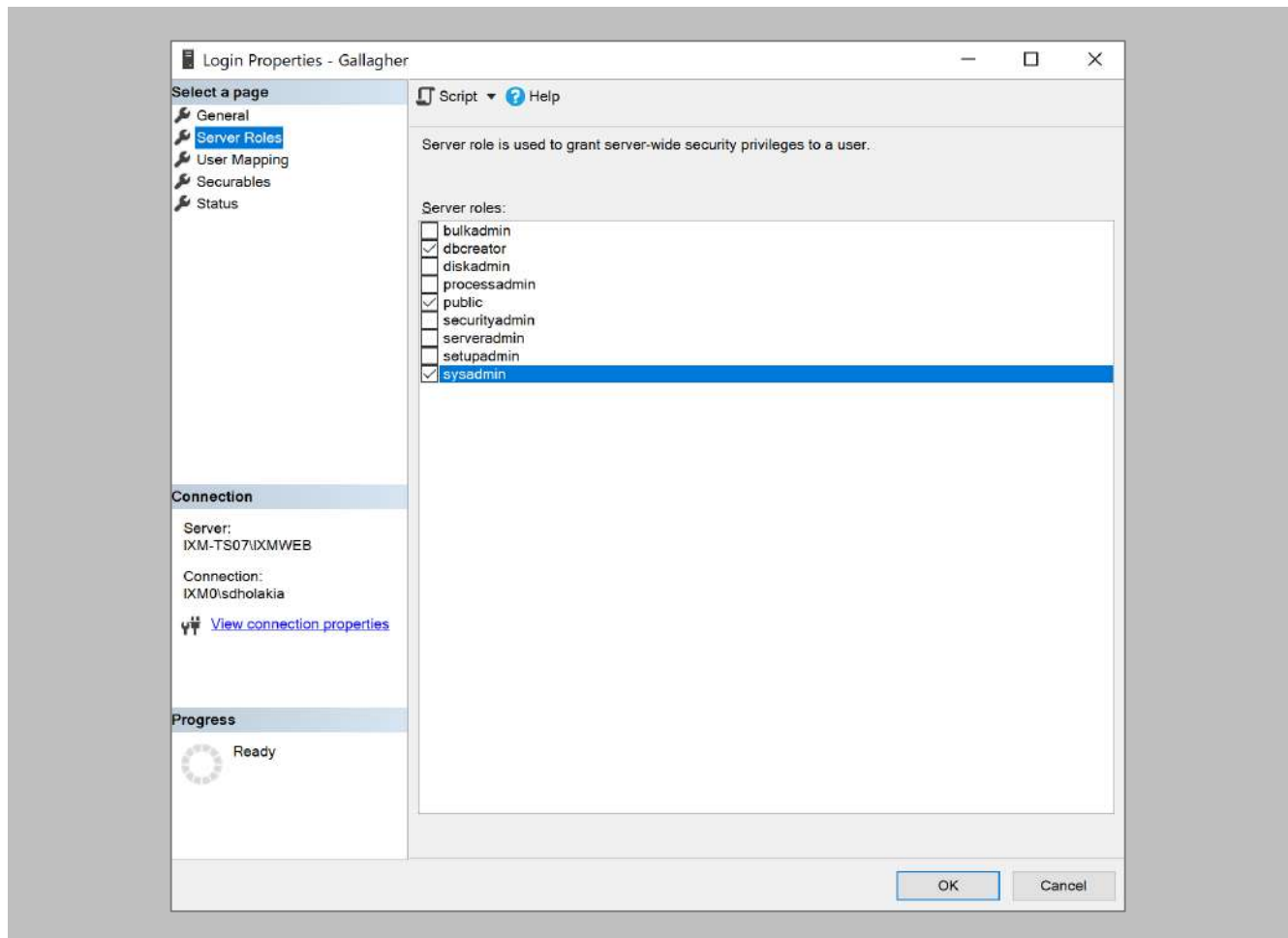


Figure 5: SQL Server Roles

RESULT

These privileges will be used later in the installation process to create the database.



Minor Checklist and Considerations

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

Other Minor Checklist	
Windows Updates	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 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
GSC Web SDK Port	4590 (default)

Table 4: Port Information

7. Installing IXM WEB

Software Install

Procedure

STEP 1

Run the IXM WEB installer (Run as administrator).

Select **Advanced**.

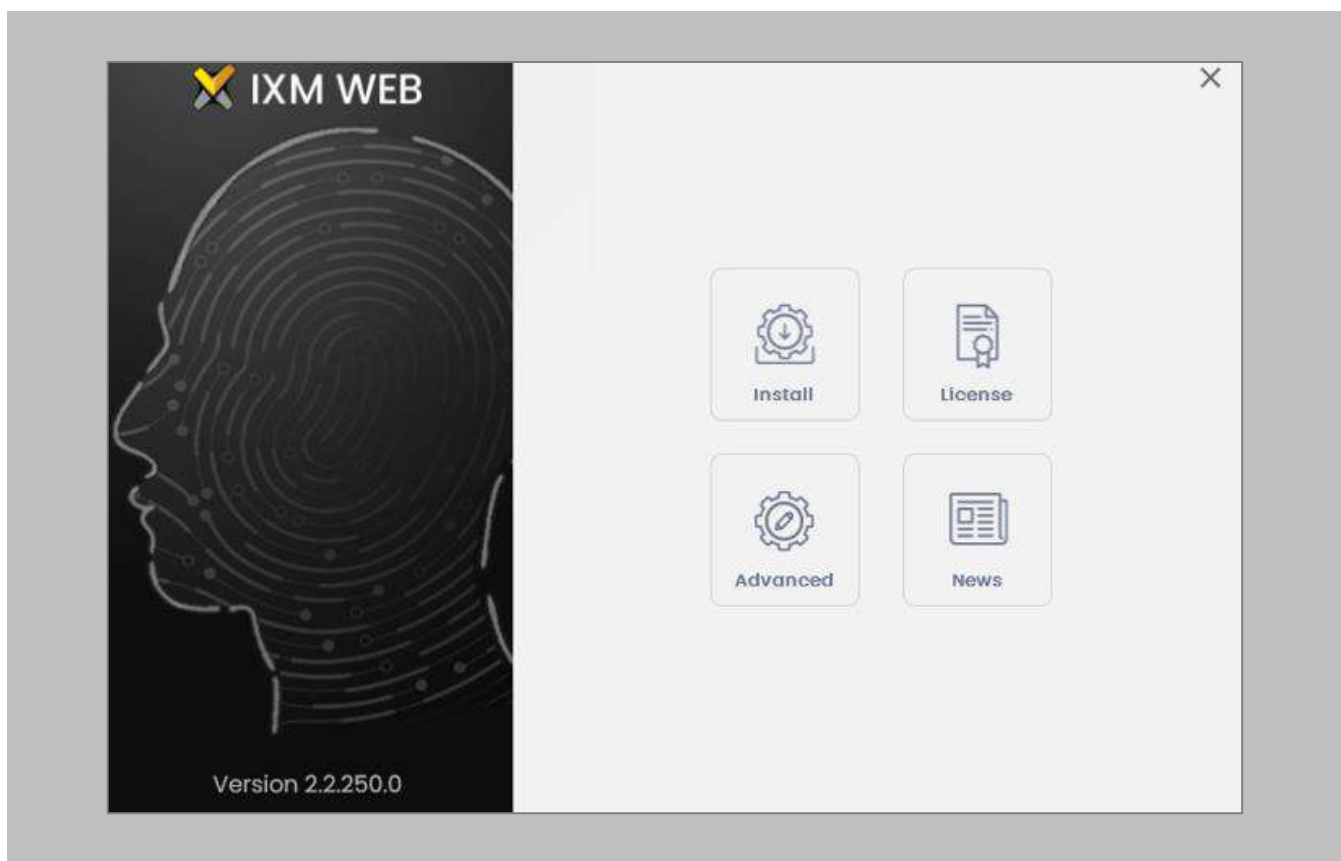


Figure 6: IXM WEB Installer

STEP 2

Deselect **Install SQL Server** and select **Install**.

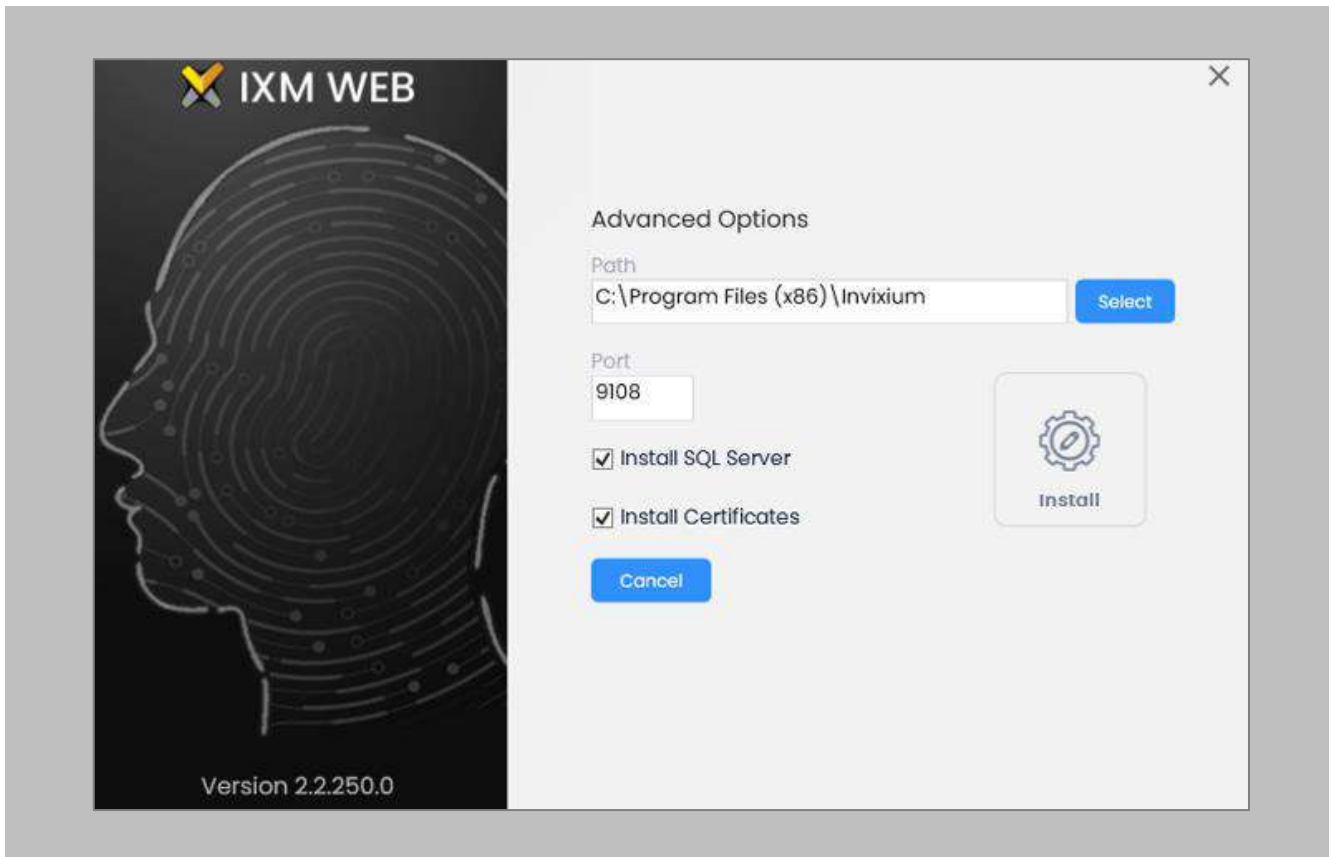


Figure 7: Advanced Options in IXM WEB Installer

STEP 3

During the installation, you may see this message, click **Install**.

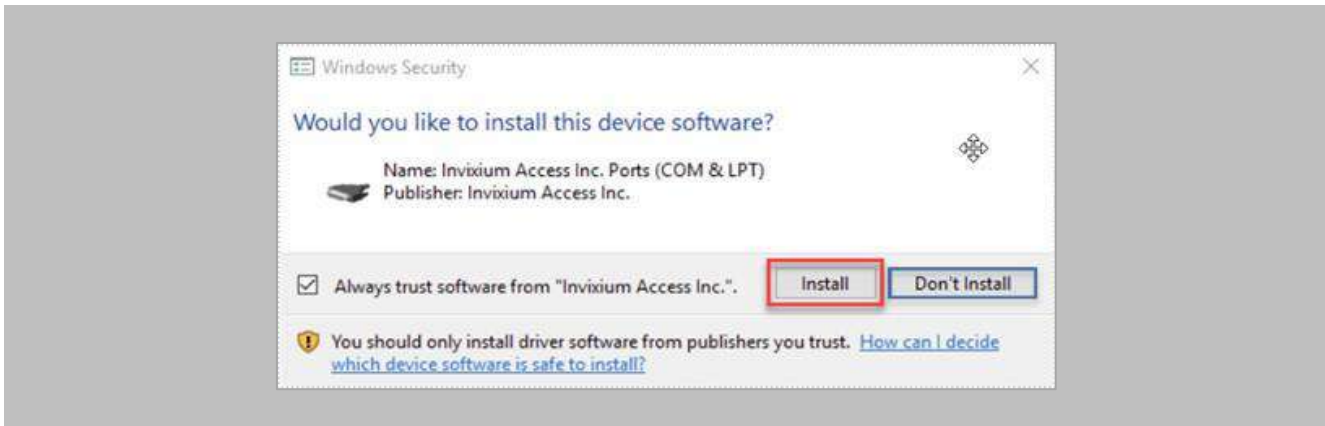


Figure 8: Inixium Fingerprint Driver Installation Message

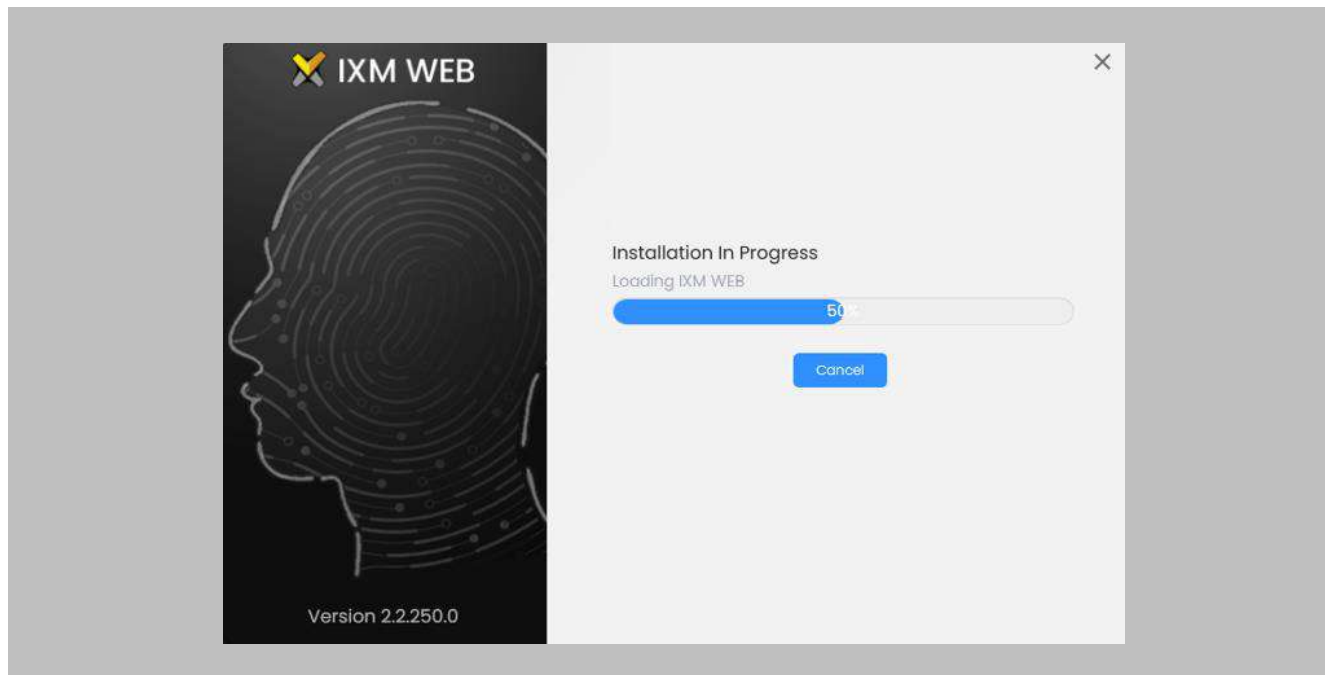


Figure 9: IXM WEB Installation Progress

STEP 4

After the installation completes, you should see the following screen:

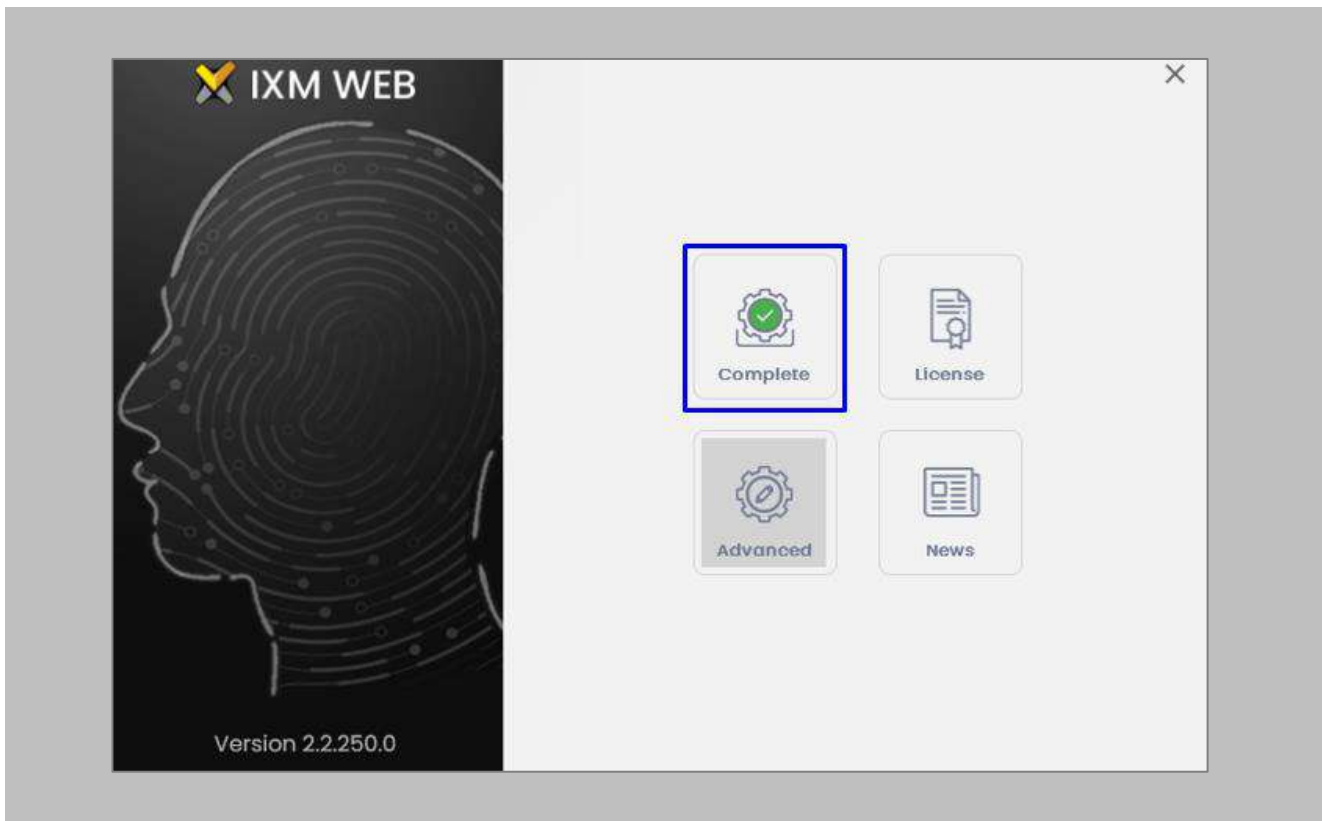


Figure 10: IXM WEB Installation Completed

STEP 5

Double click on the new **desktop shortcut** to open IXM WEB.

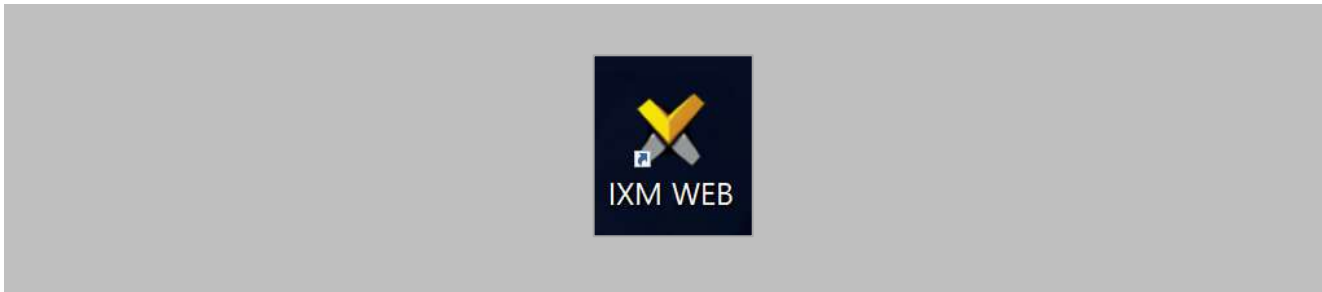


Figure 11: IXM WEB Icon - Desktop Shortcut

IXM WEB will open in your default browser (initial opening may take a few minutes).

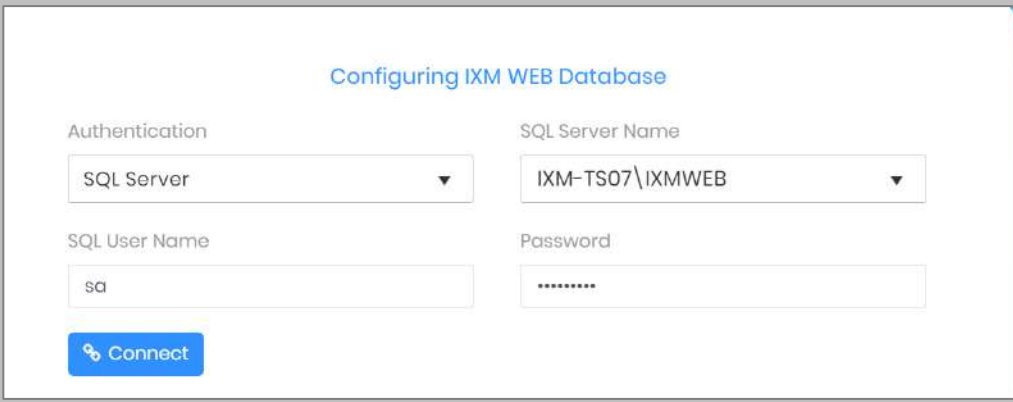
A screenshot of the 'Configuring IXM WEB Database' web interface. The title is in blue. Below it are four input fields: 'Authentication' (a dropdown menu with 'SQL Server' selected), 'SQL Server Name' (a dropdown menu with 'IXM-TS07\IXMWEB' selected), 'SQL User Name' (a text box with 'sa' entered), and 'Password' (a text box with '*****' entered). A blue 'Connect' button with a refresh icon is located at the bottom left of the form.

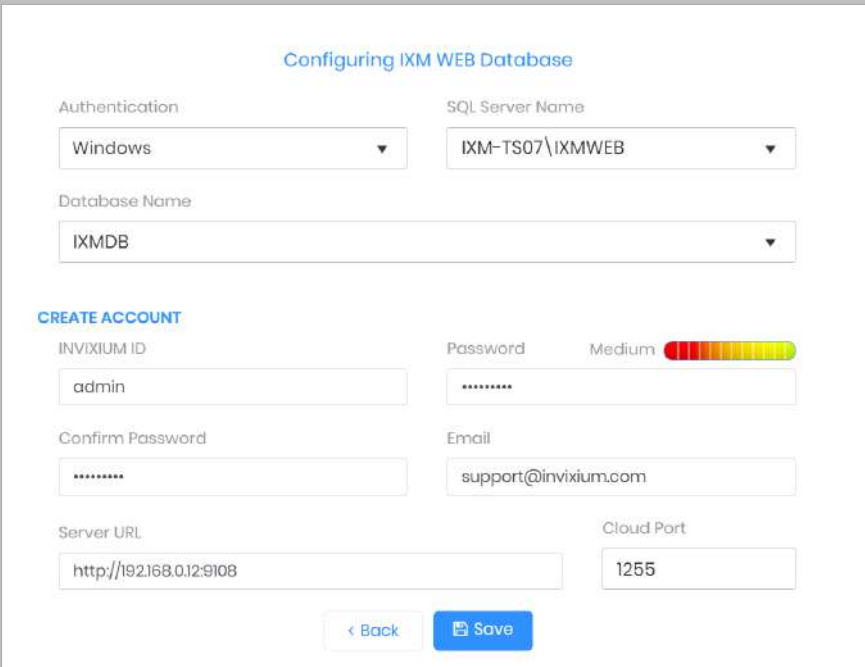
Figure 12: IXM WEB Database Configuration

STEP 6

Select the **SQL Server** authentication and the **Server Name** from the drop-down options. If it does not appear, enter it manually.

STEP 7

Enter the user credentials created above and leave **IXMDB** as the database name.



The screenshot displays the 'Configuring IXM WEB Database' interface. It includes the following fields and options:

- Authentication:** Windows
- SQL Server Name:** IXM-TS07\IXMWEB
- Database Name:** IXMDB
- CREATE ACCOUNT:**
 - INVIXIUM ID:** admin
 - Password:** [Redacted] (Strength: Medium)
 - Confirm Password:** [Redacted]
 - Email:** support@invixium.com
 - Server URL:** http://192.168.0.12:9108
 - Cloud Port:** 1255

Navigation buttons: < Back, Save

Figure 13: IXM WEB Administrator User Configuration

Now comes the step to create the user account for Invixium to access the database itself.

STEP 8

Create a **user account** (this is different from the identity used to connect to the SQL instance at the top of the page). The status bar will indicate the strength of the chosen password.

STEP 9

Change **http://localhost:9108** to **http://[IP address of server]:9108**

For example:

If the IP address of the server is 192.168.1.100, then specify the Server URL as the following:

http://192.168.1.100:9108

STEP 10

Click **Save**. The software will now create the database and continue setup. This could take several minutes.

STEP 11

When IXM WEB is finished installing, you should be prompted with the following screen:

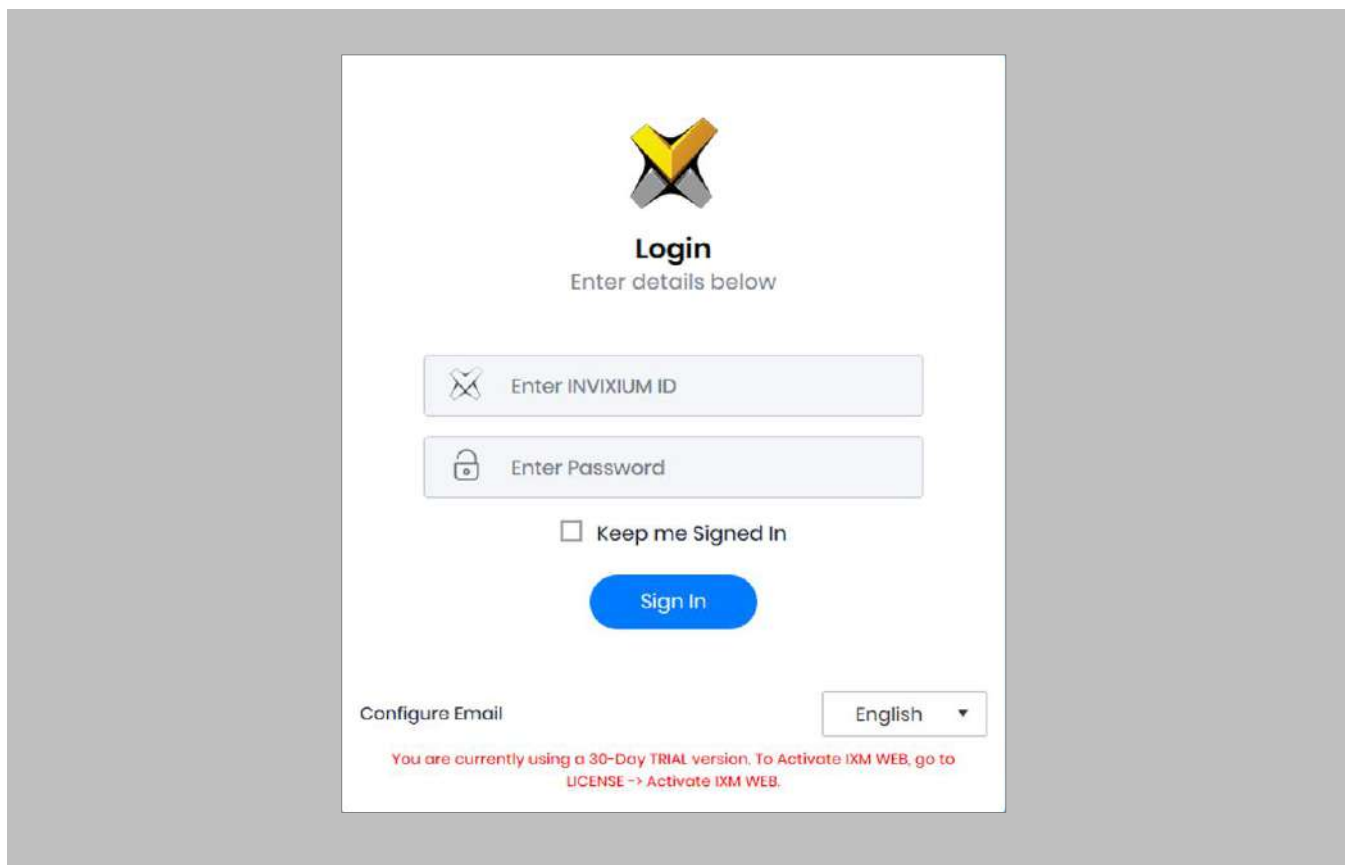



Figure 14: IXM WEB Login Page



 Note: During an upgrade of IXM WEB from any previous release to 2.2.252.0, an internet connection is required for license validation. As this new version includes a face algorithm update, it will automatically convert templates without the need for re-enrollment of faces.

8. 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. In addition, having email settings configured also 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**.

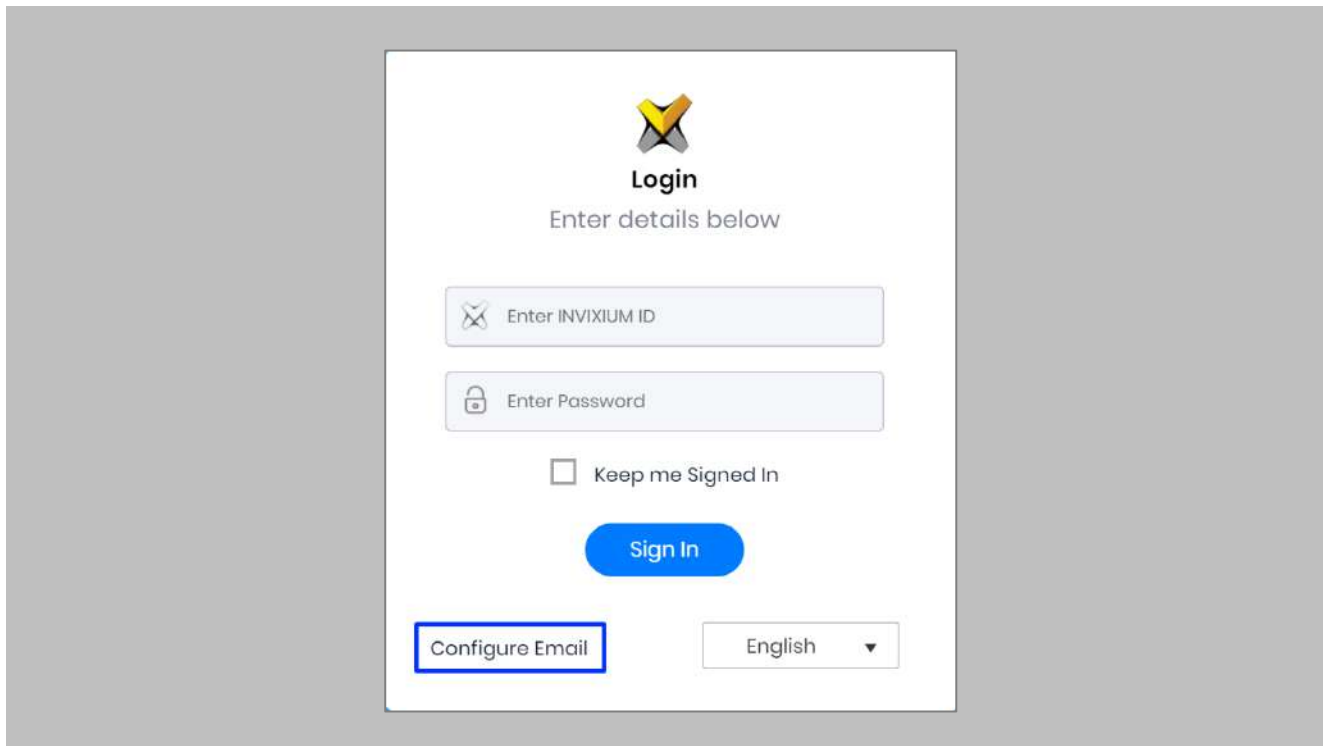


Figure 15: Configure Email

STEP 2

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

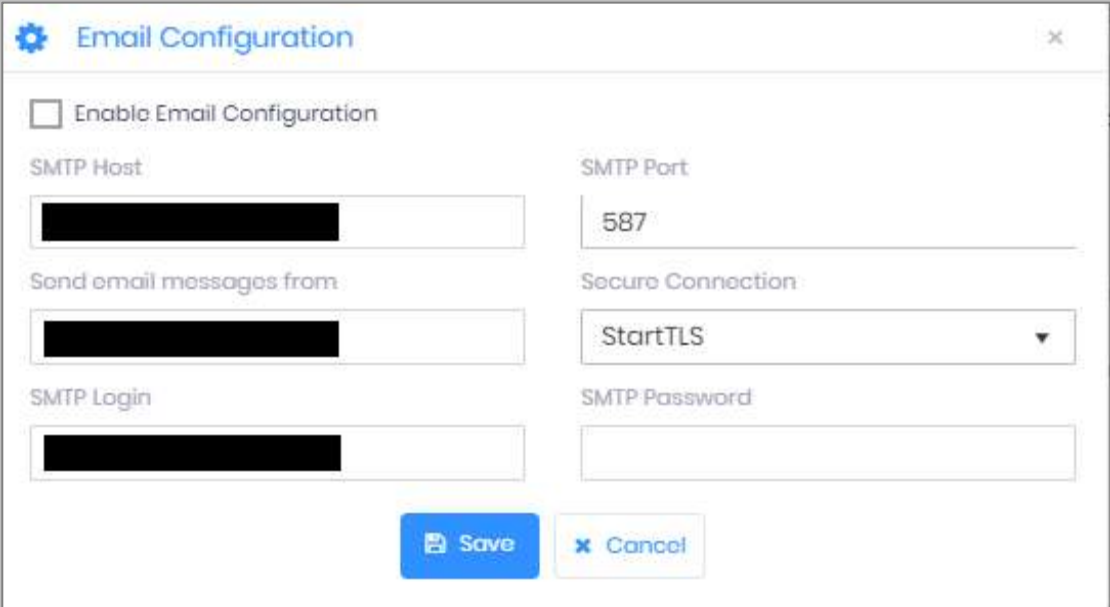



Figure 16: IXM WEB - SMTP Settings

 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.

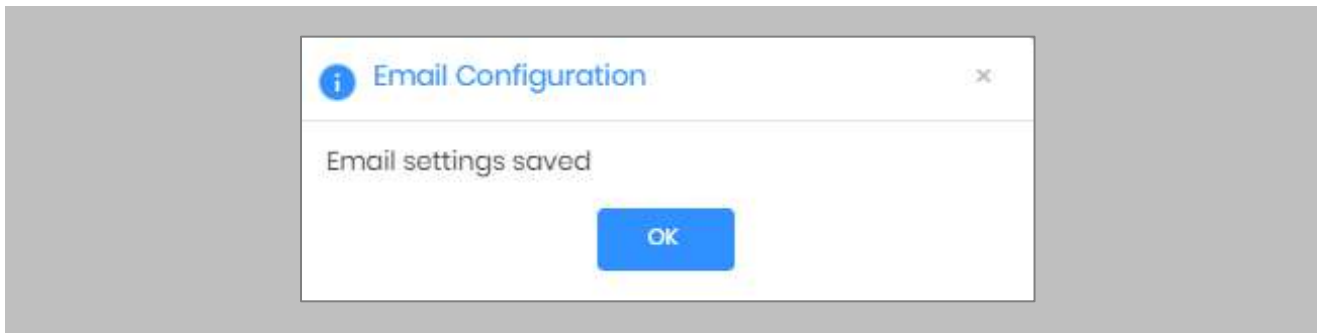


Figure 17: IXM WEB - Save Email Settings

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.

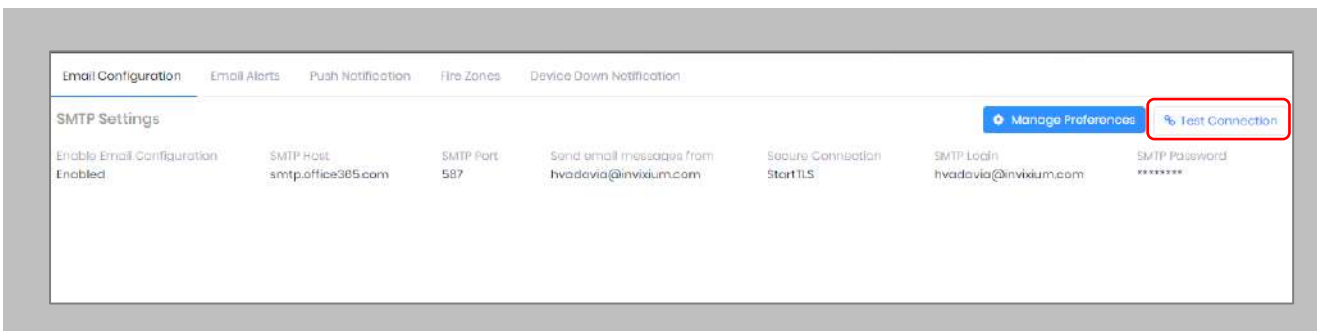


Figure 18: IXM WEB - Test Connection

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

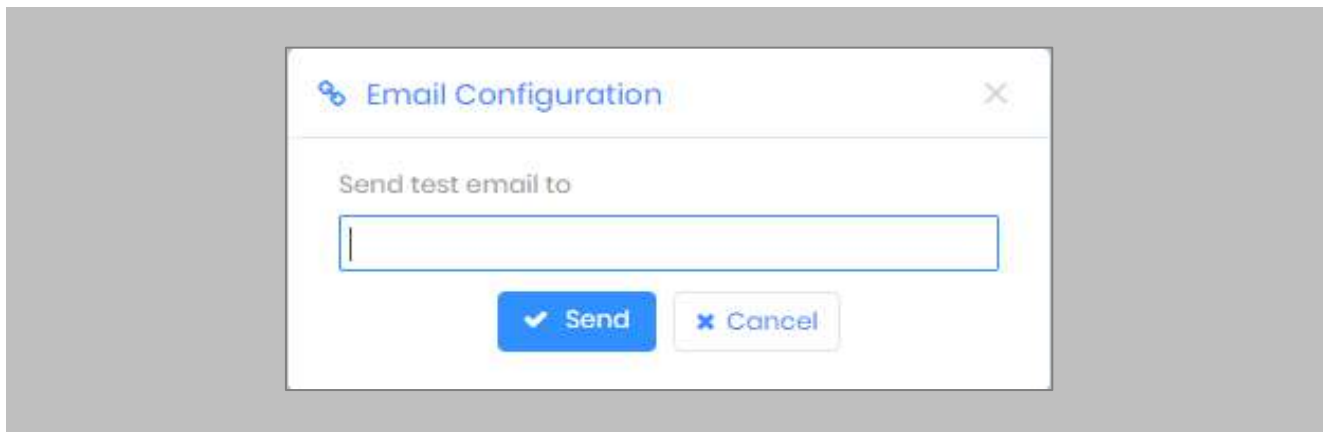


Figure 19: IXM WEB - Enter Email ID

STEP 4

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

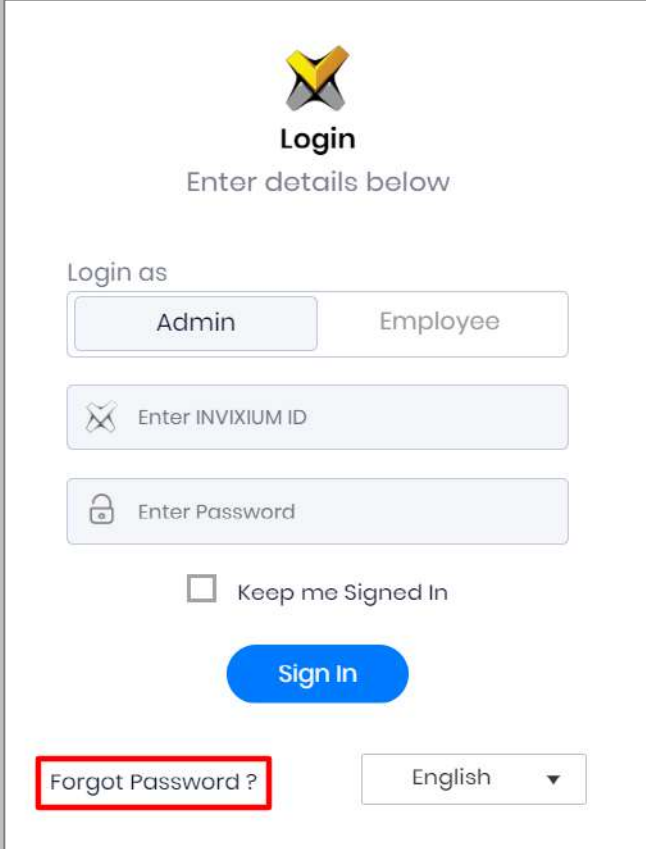


Figure 20: IXM WEB - Forgot Password

9. Software and Module Activation

IXM WEB Activation

Procedure

STEP 1

Log into IXM WEB.

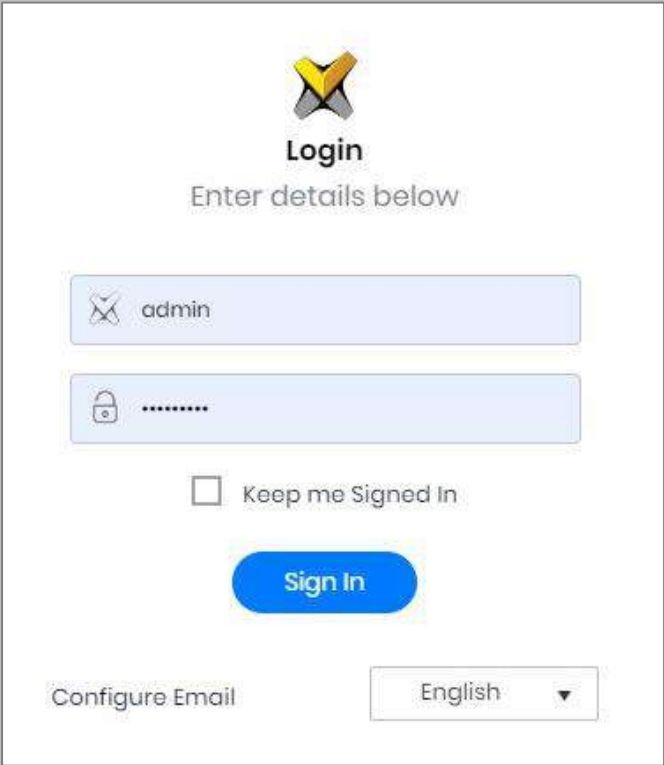


Figure 21: IXM WEB - Enter Login Credentials

STEP 2

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

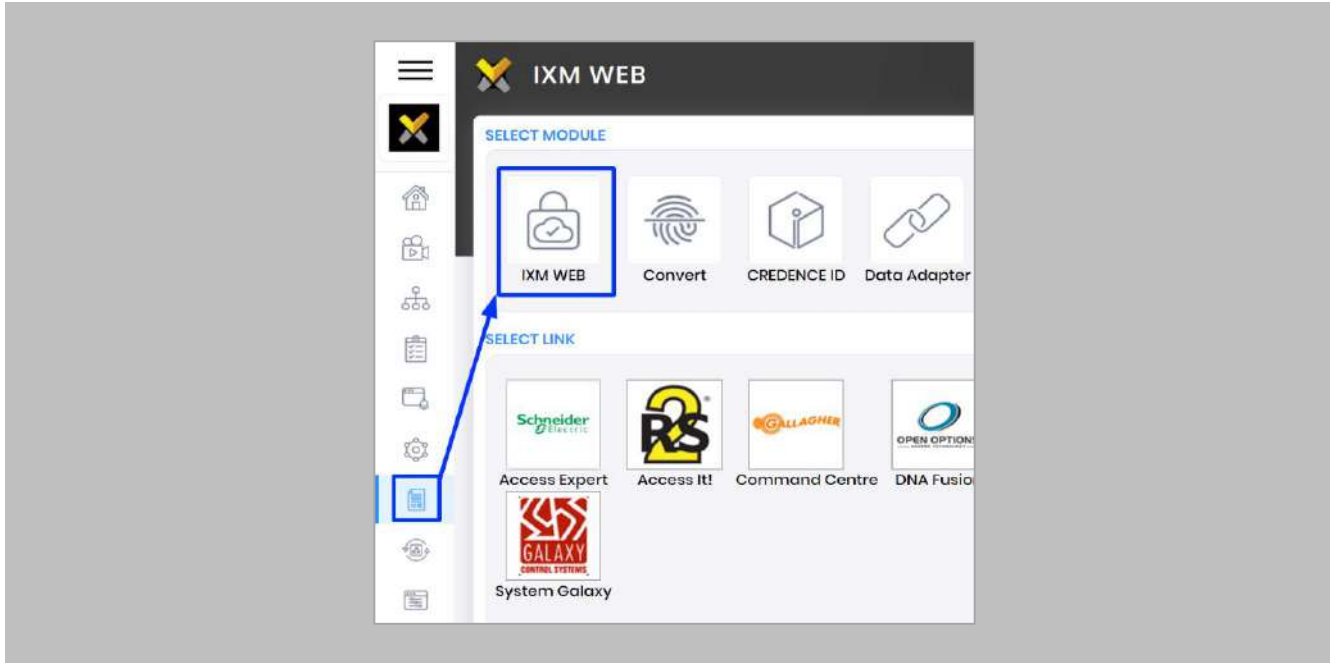



Figure 22: IXM WEB - License Setup

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**.

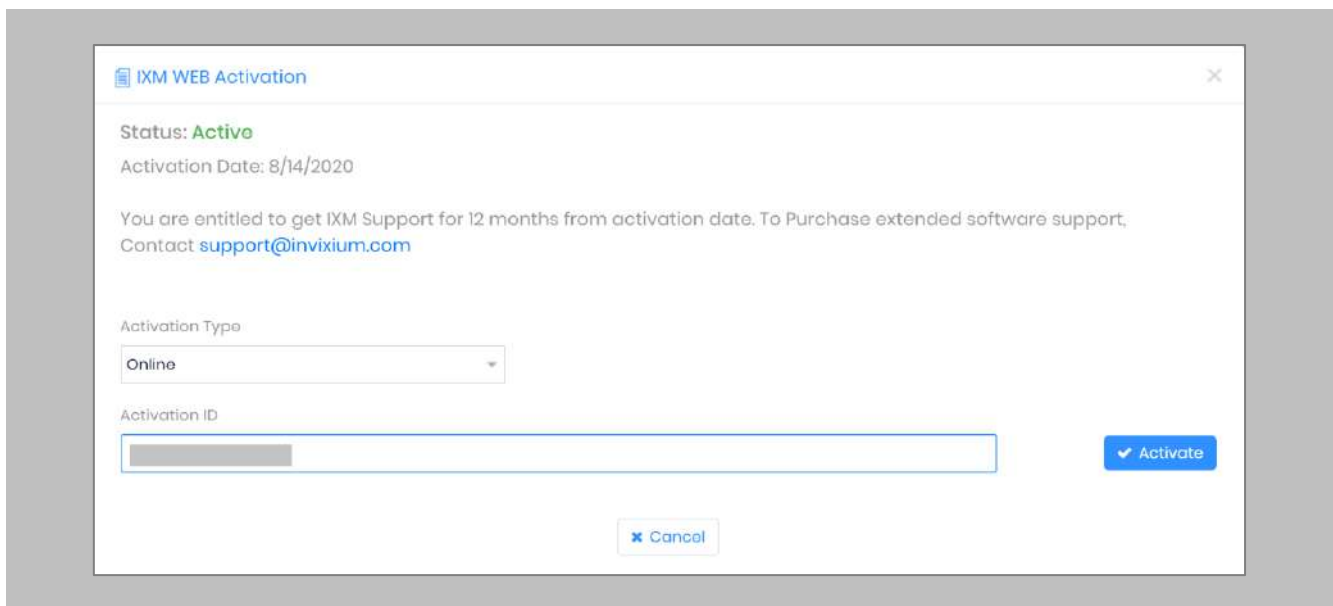


Figure 23: IXM WEB - Online Activation

Security Center Module Activation

The option to request a Genetec Security Center License is available under the **License** tab.

STEP 1

Request a **License**.

STEP 2

From **Home**, expand the **Left Navigation Pane**, Go to the **License** tab. Click on Security **Center (Genetec)**.

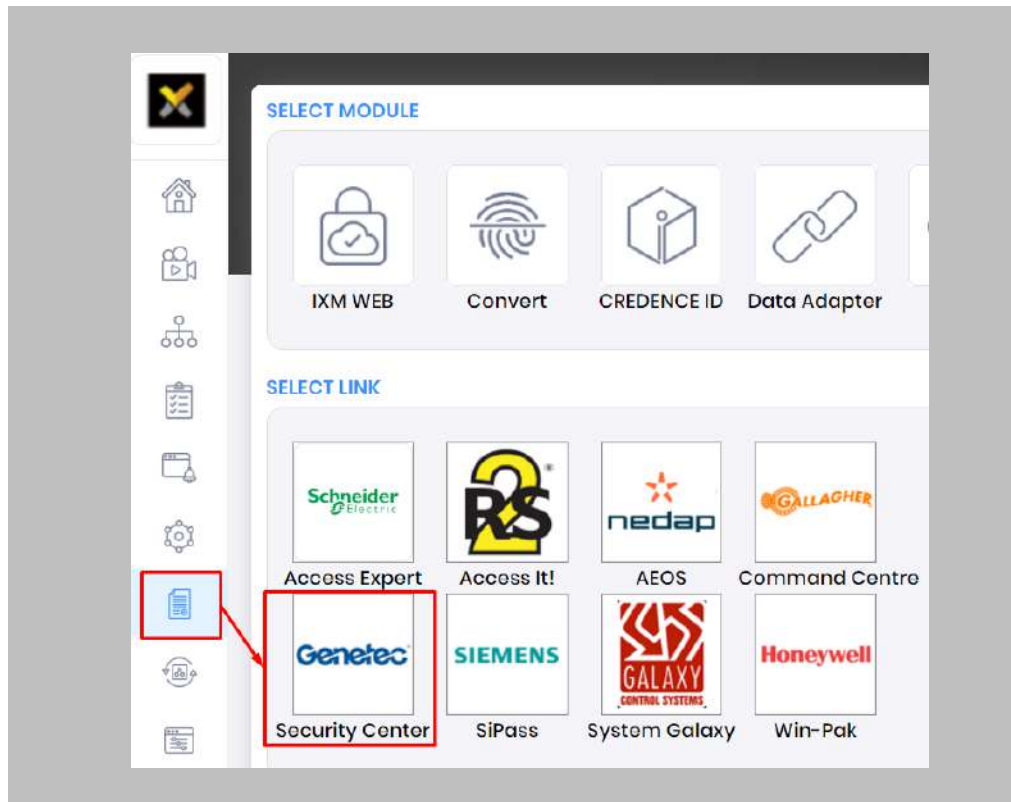


Figure 24: IXM WEB - Genetec Link Activation

STEP 3

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

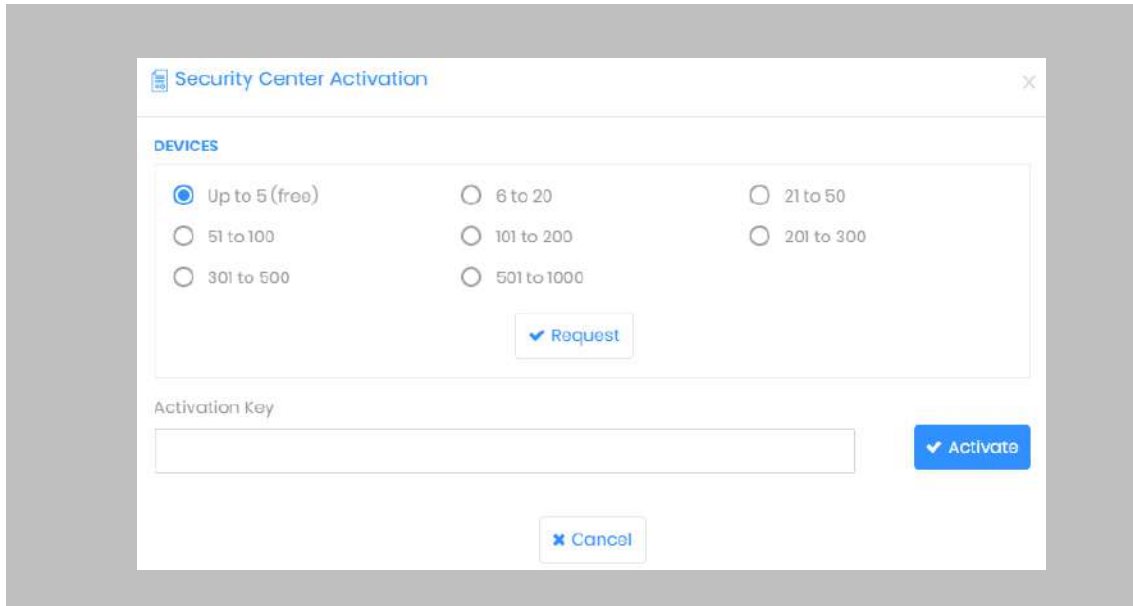



Figure 25: IXM WEB - Device Selection for Genetec License Request

 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.

Request

Date Requested	06/21/2022
Time	4:19 PM
License Request	1 Devices
Machine Key	
Module	Genetec
Version	2.2.250.0

Send above details to support@invixium.com

Figure 26: IXM WEB - Genetec License Request

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 containing a license key for the Genetec Security Center Activation.

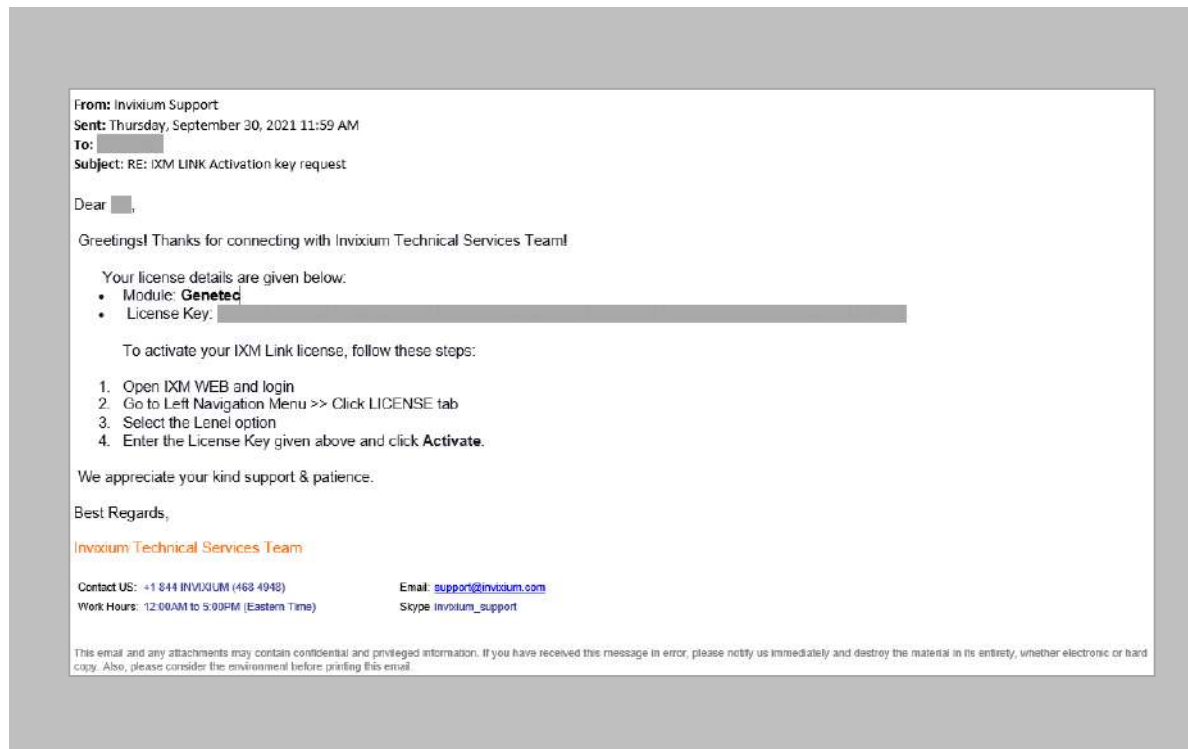


Figure 27: Genetec License Key Email

STEP 5

Copy and **paste** the license key into the Activation Key area in the IXM WEB Security Center Activation, and then select **Activate**.

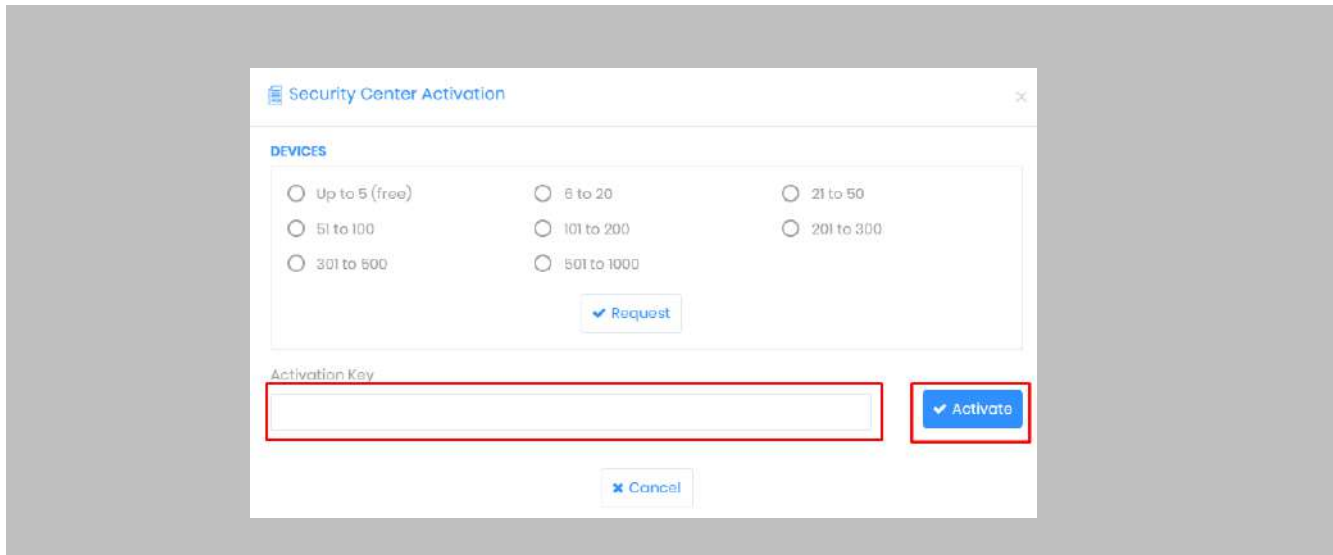


Figure 28: IXM WEB - Activate Genetec Link License

RESULT

IXM WEB is now licensed for use with Security Center and configuration can begin.

10. Configuring IXM Link for Genetec

Procedure

STEP 1

From the **Left Navigation Pane** → **Link** → click the blue **Security Center (Genetec)** icon.

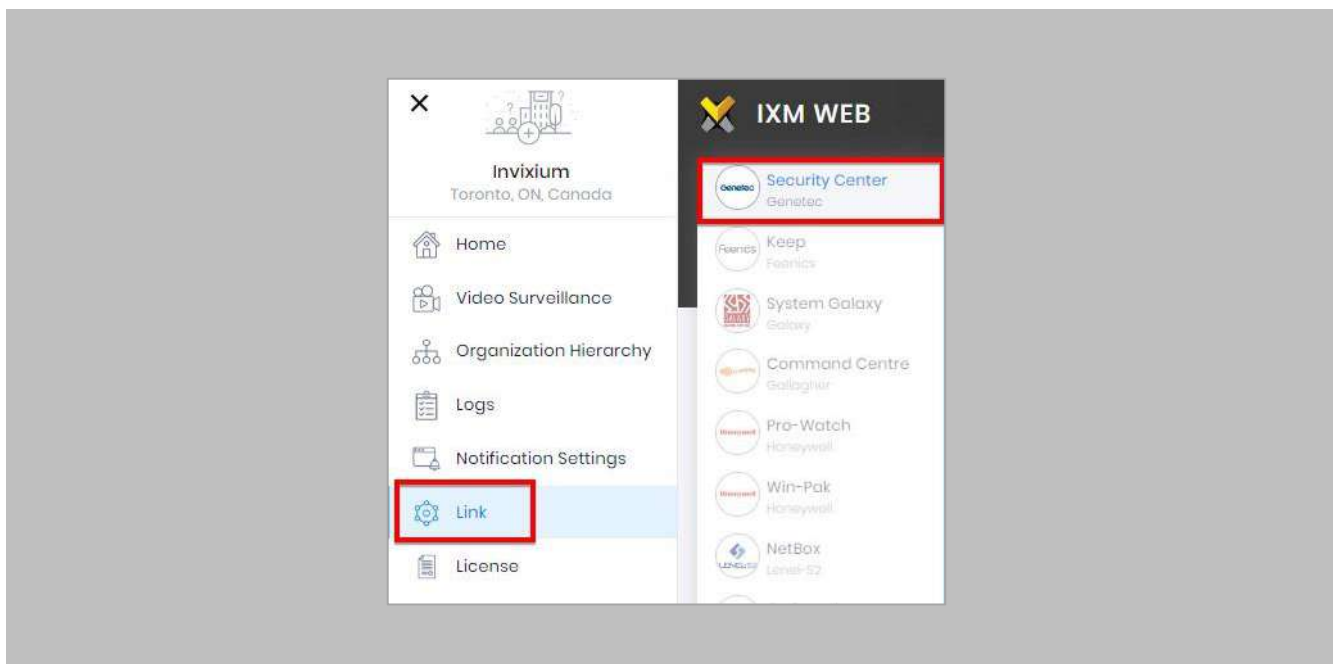


Figure 29: IXM WEB - Link Menu

STEP 2

Toggle the **Status** switch to enable.

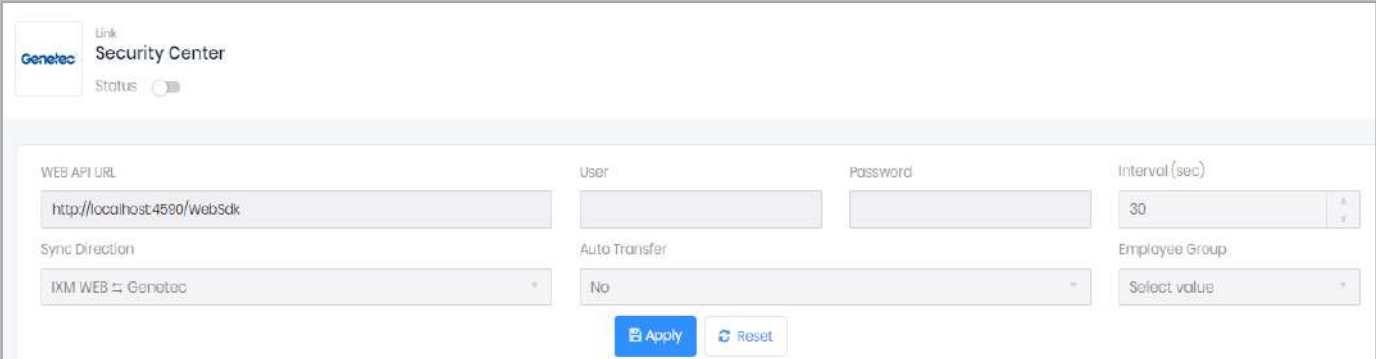


Figure 30: IXM WEB - Enable Genetec Link Module

Web API URL:

Enter the GSC WEB API URL. For example: <https://localhost:4590/WebSdk>

User:

Enter the name of the authorized user to connect to the Web SDK of Genetec Security Center.

Password:

Enter the Password of the authorized user to connect to the WEB SDK of Genetec Security Center

Interval (Sec):

Enter the duration of interval for data transfer between Genetec and IXM WEB. The system will automatically try to establish connection after every specified interval of time and sync users.

Sync Direction:

Click on the field to select the direction of data transfer. Data can be transferred in following three ways :

- IXM WEB ← Genetec

Choosing this option will transfer data in one direction only, ie, from Genetec to IXM WEB. Genetec is considered as the master data in this case and any changes made in IXM WEB data will be overwritten during transfer.

Note:

This is the recommended option.

- IXM WEB → Genetec

Choosing this option will transfer data in one direction only, ie, from IXM WEB to Genetec. IXM WEB is considered as the master data in this case and any changes made in Genetec data will be overwritten during transfer.

- IXM WEB ↔ Genetec

Choosing this option will transfer data in both the directions, ie, from Genetec to IXM WEB first followed by IXM WEB to Genetec.

Auto Transfer:

This option provides facility to add employee into Employee Groups in IXM WEB. For example, if there is an Employee Group called 'Default Group' in IXM WEB, then all the employees from Genetec will be added directly to the 'Default Group'.

Click on either 'Yes' or 'No'.

Yes: Selection of User Group is mandatory to use Auto Transfer. Users will be transferred to IXM Devices based on Sync Group configuration for selected Employee Group.

No: Users will not be transferred to the IXM Devices.

Employee Group:

- This option will be enabled only when 'Auto Transfer' is set as 'Yes'. Otherwise it will remain disabled.

A list of existing Employee Groups created in IXM WEB is displayed. Click on the Employee Group to which employees should be transferred automatically.

Click **Apply**. The transfer of data between Genetec and IXM WEB is possible only after successful connection.

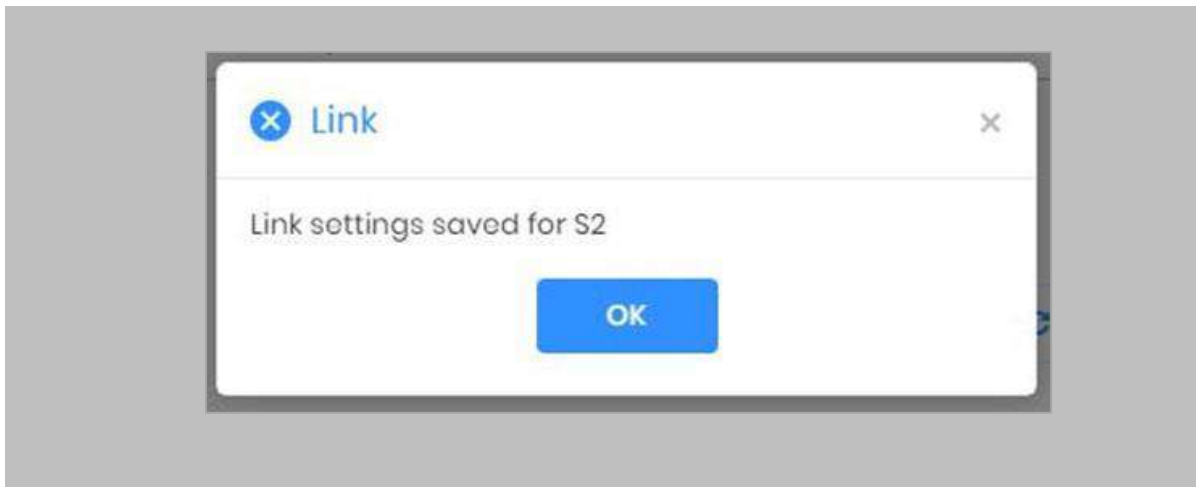


Figure 31: IXM WEB – Link Settings Saved

In case of unsuccessful connection, please refer to the *Troubleshooting* section.

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

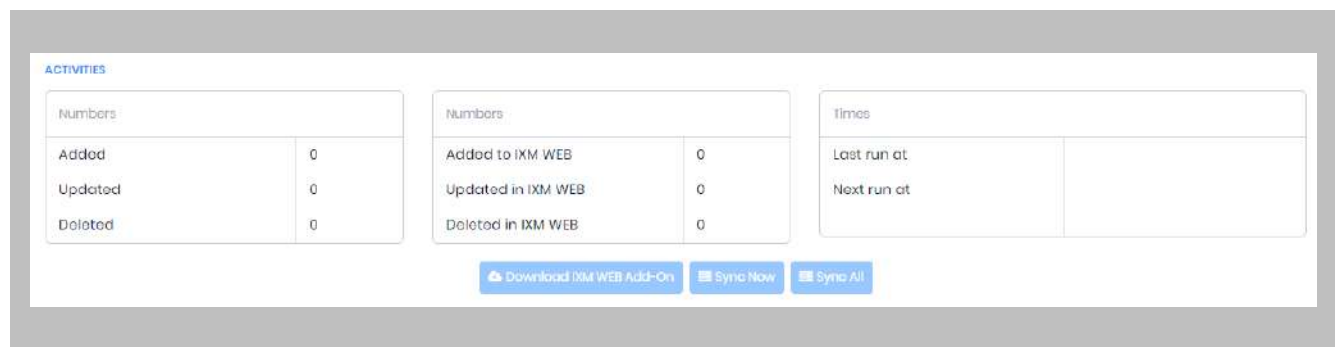


Figure 32: IXM WEB - Sync Activities



Numbers

The first two columns display the number of records added, updated and deleted in Genetec and IXM WEB respectively after each data transfer.

Times

The last column displays the time when the data was transferred last.

It also shows the time when the data will be transferred next. It is calculated as per the specified Interval.

STEP 3

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”.

STEP 4

The **Sync All** feature allows resynchronization of database from GSC to IXM WEB. This will re-import missing cardholders or updated cardholders from GSC to IXM WEB. Also, it will delete IXM WEB employee records according to cardholders available in GSC.

- The **Sync All** button will be visible only when the sync direction is selected as Genetec to IXM WEB (One-way sync).

RESULT

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

STEP 5

The **Download IXM WEB Add-On** feature allows to download and set up installation on each machine where Config Tool is available for enrollment of biometric templates from LINK view.

11. Installing IXM WEB Add-On

[Download IXM WEB Add-On exe](#)

Procedure

STEP 1

Log into IXM WEB.

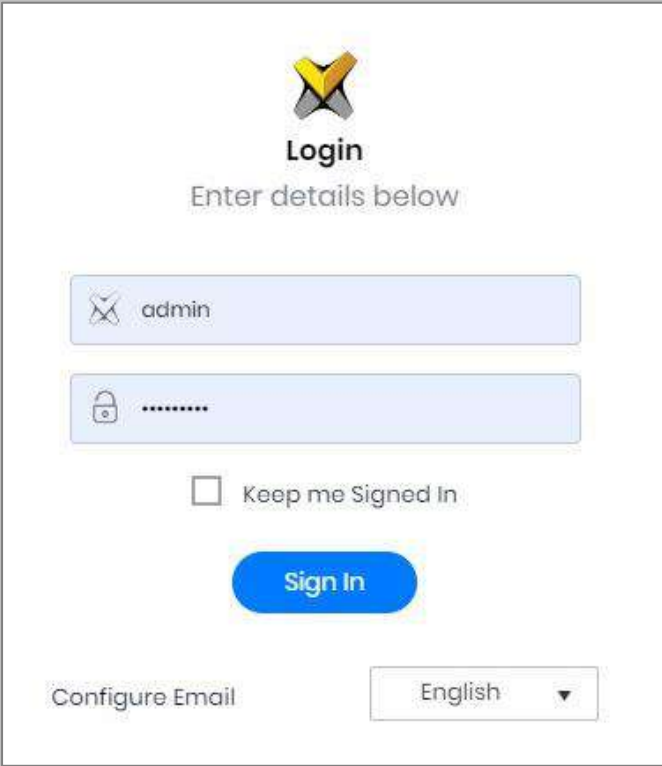


Figure 33: IXM WEB - Enter Login Credentials

STEP 2

From **Home**, expand the **Left Navigation Pane**, Go to the **Link** tab. Click on **Security Center (Genetec)**.

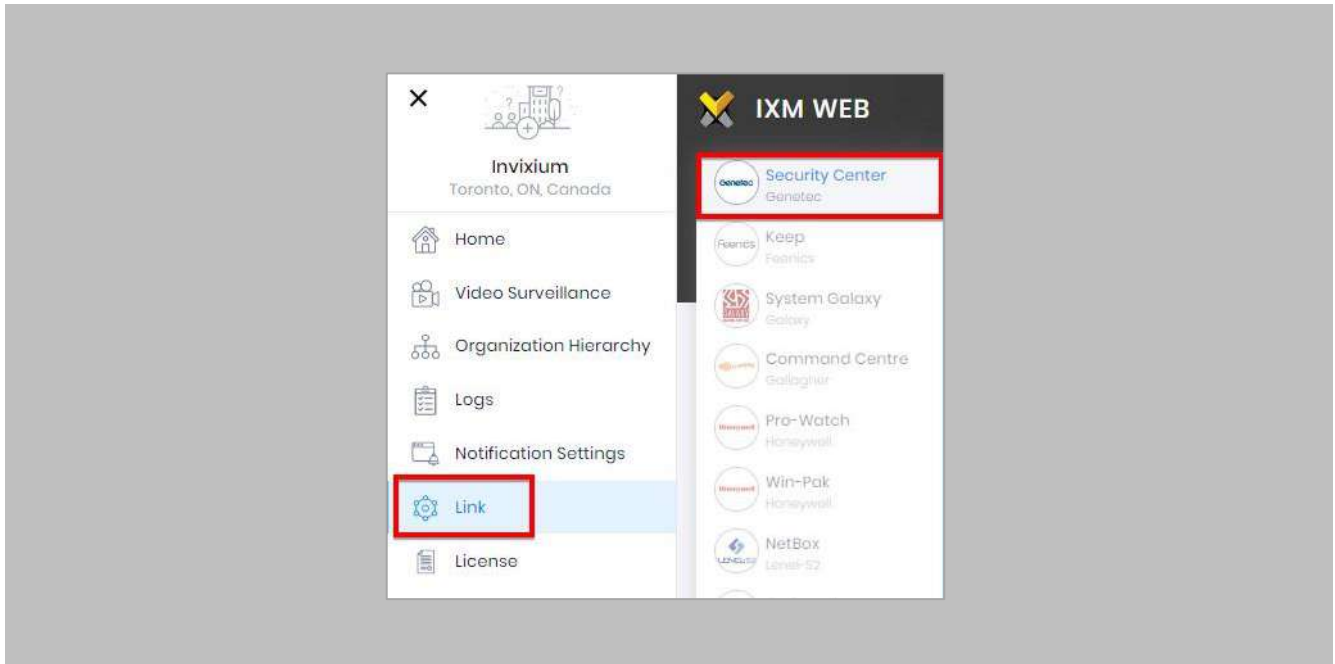


Figure 34: IXM WEB – Link Menu

STEP 3

Click [Download IXM WEB Add-On](#) to download the executable file.

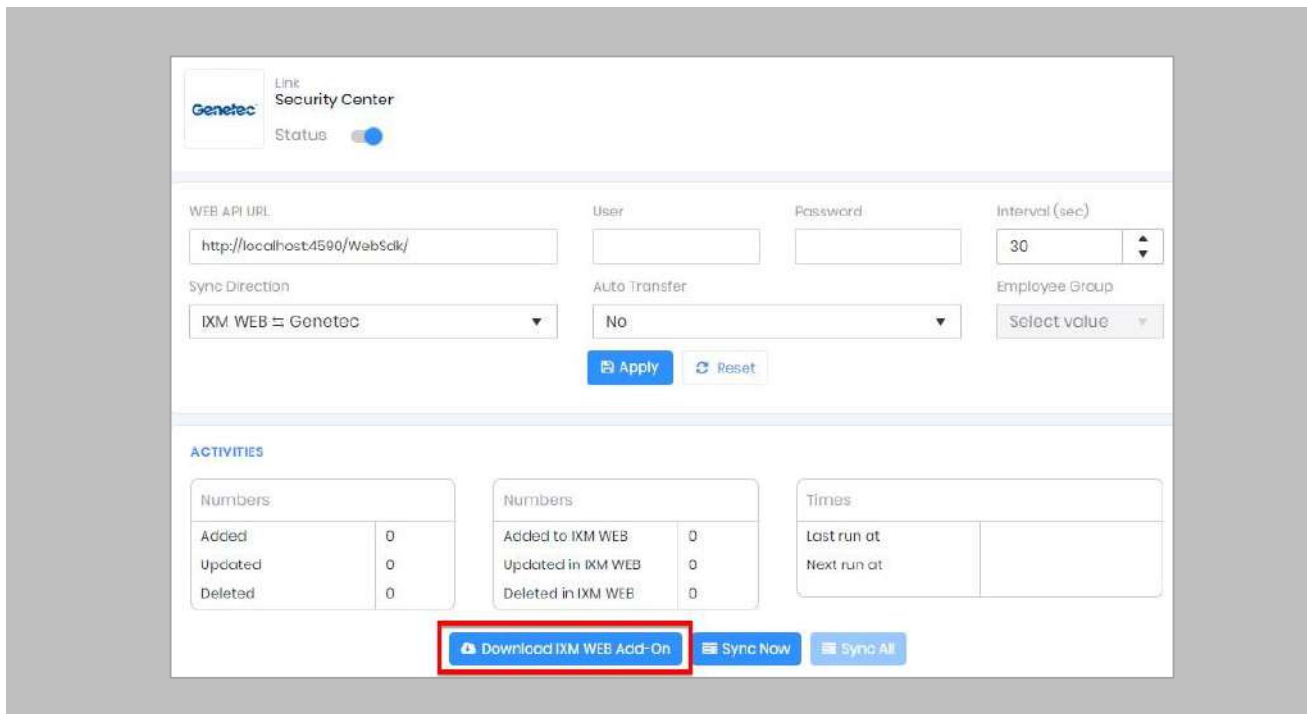



Figure 35: IXM WEB – Download IXM WEB Add-On

 Note: The executable file should be downloaded on the same path as that of Genetec server.

Install IXM WEB Add-On

Procedure

STEP 1

Double click on the downloaded IXM WEB Add-On file in its path to start the Setup Wizard.

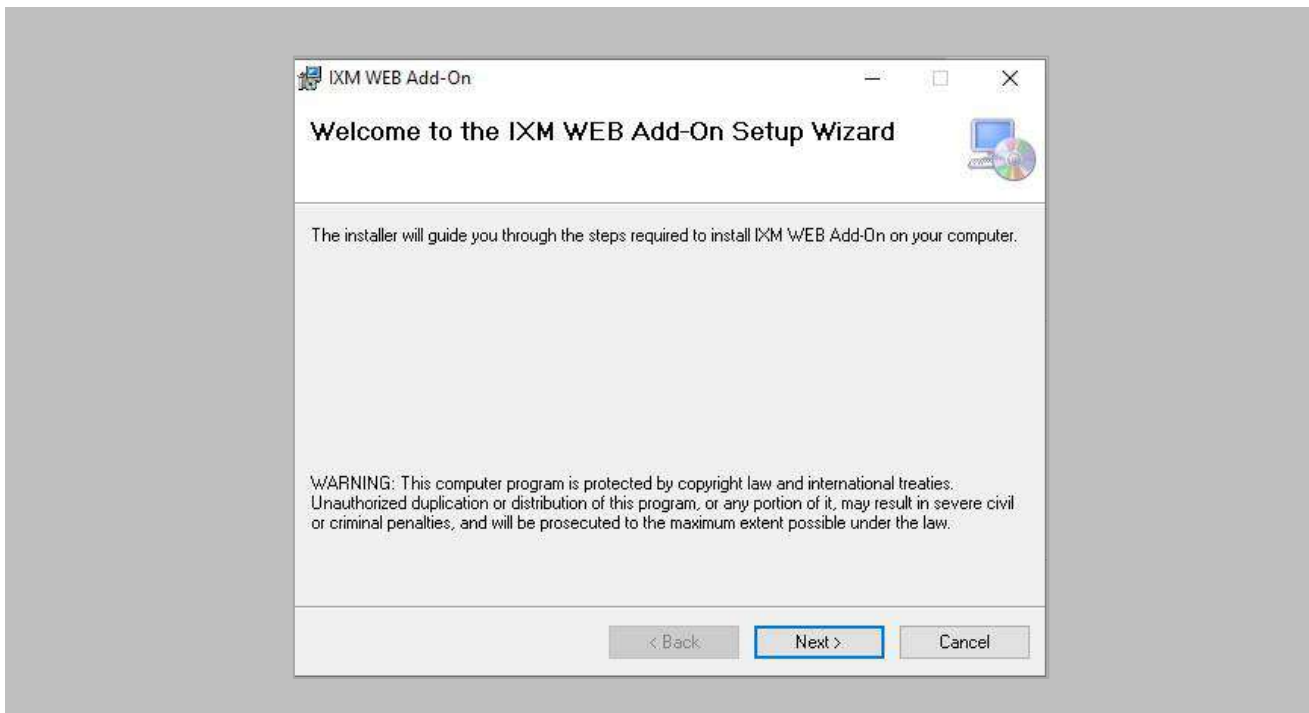


Figure 36: IXM WEB – Add-On Setup Wizard

Click **Next**.

STEP 2

The installer will install IXM WEB Add-On to the default folder. To install to a different folder, enter the path or click 'Browse'.

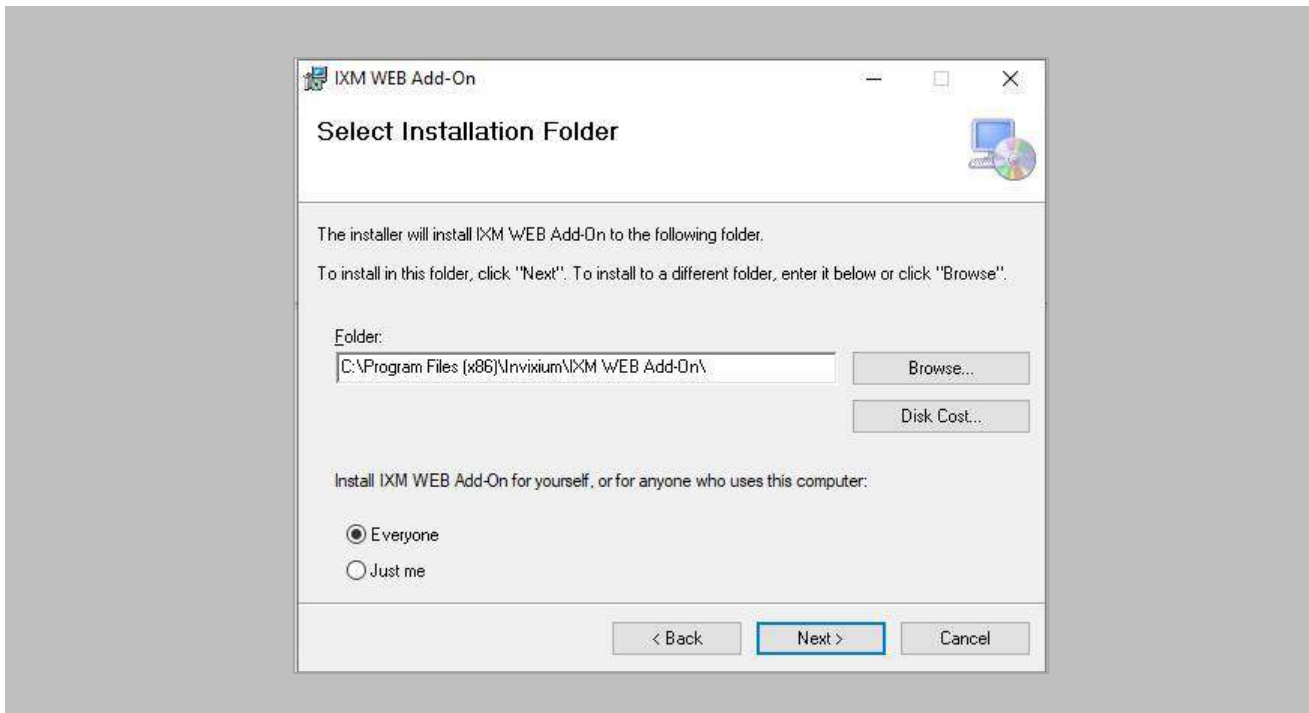


Figure 37: IXM WEB – Select Installation Folder

Click **Next**.

STEP 3

The installer is ready to install IXM WEB Add-On on the given path.

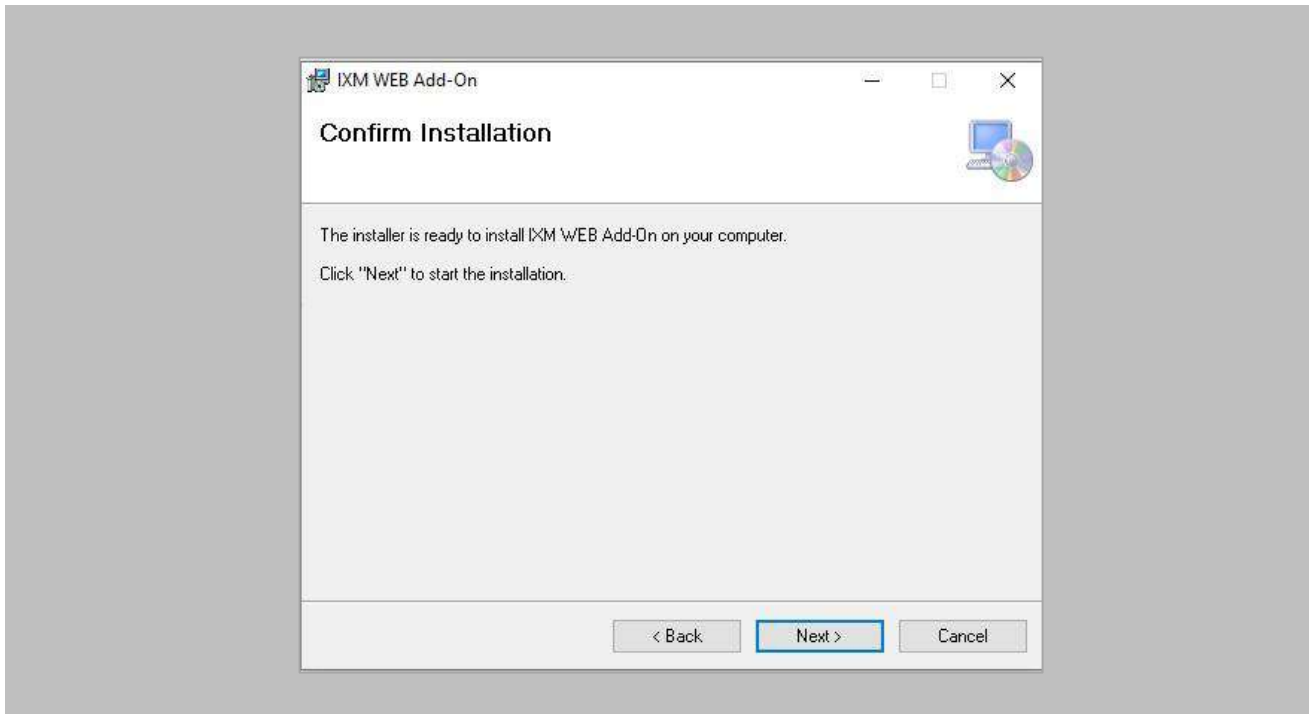


Figure 38: IXM WEB – Confirm Installation

Click **Next**.

STEP 4

Installation of IXM WEB Add-On is complete.

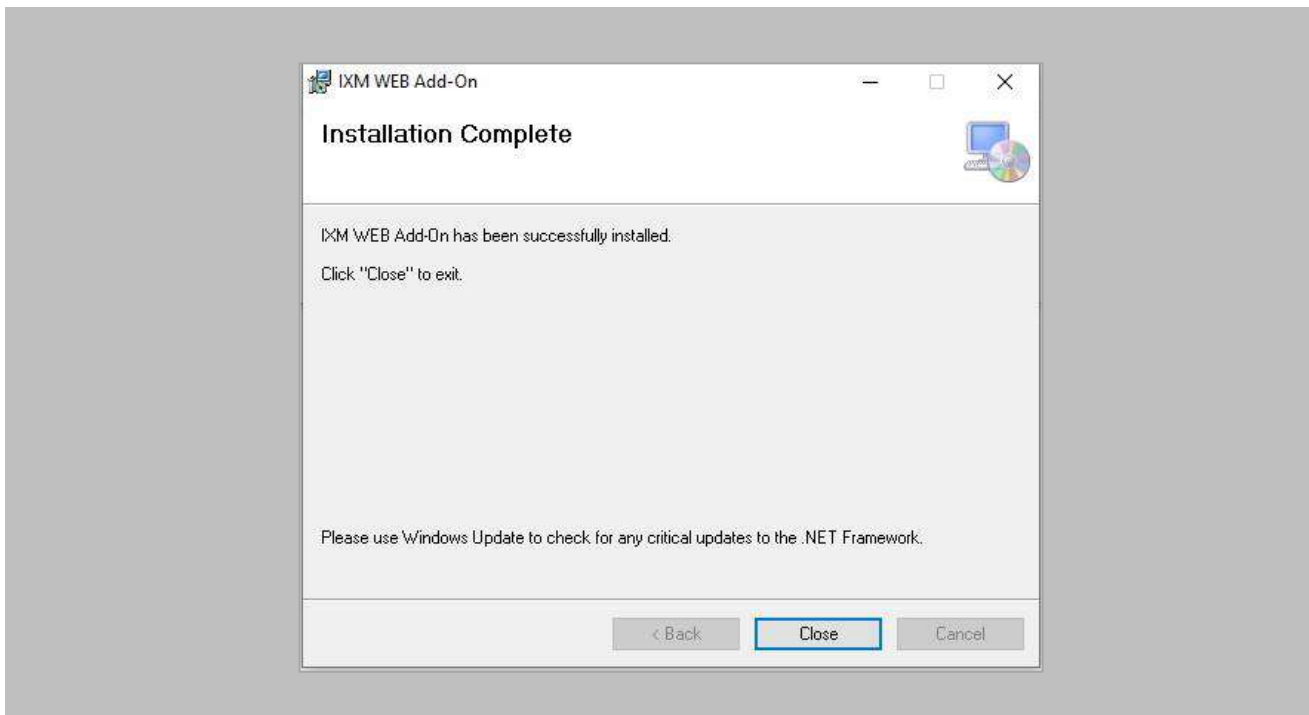


Figure 39: IXM WEB – Add-On Installation Complete

Click **Close**.

12. Create System User(s) for Biometric Enrollment

Creating System User(s) for Biometric Enrollment

Procedure

STEP 1

Log into IXM WEB.

On the home page, expand the **Left Navigation Pane** → **System**. The application will redirect to the System Users window.

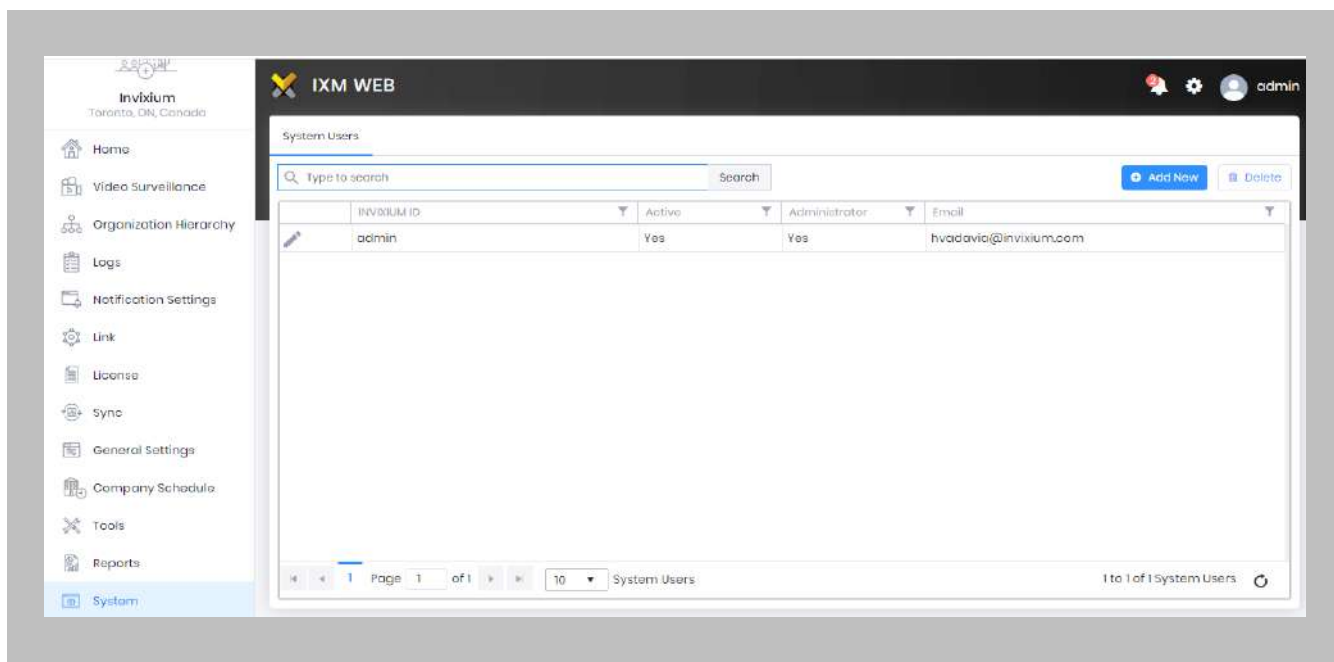


Figure 40: IXM WEB - Create System User

STEP 2

Click [Add New](#).

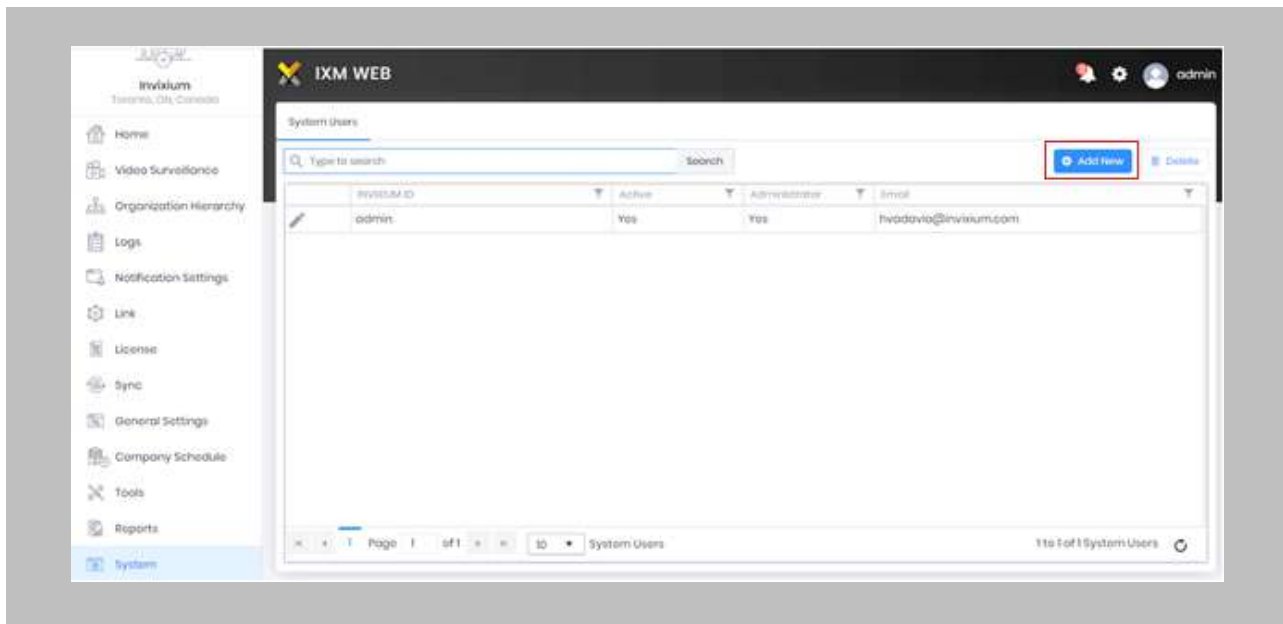


Figure 41: IXM WEB - Add New System User

Creating a system user requires the following details:

- Login type
 - i. Local employee
 - ii. Domain employee
- Invixium ID (User ID) (For domain employee login types, the User ID is automatically filled from AD)
- Password creation (For domain employee login types, password creation is not required)
- Email address
- Status
- Permission for modules

STEP 3

Select **Login Type (Local or Domain Employee)** from the dropdown list.

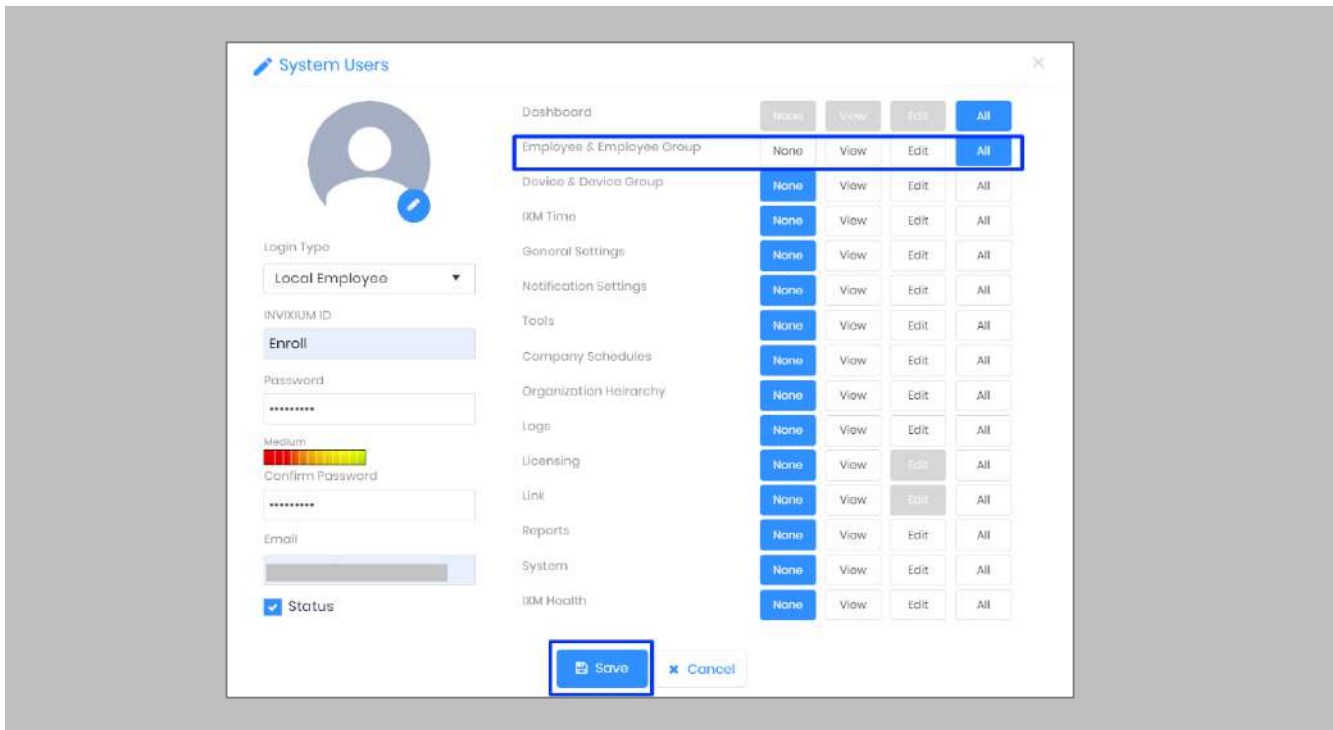


Figure 42: IXM WEB - New System User

STEP 4

Add an email address.

Apply for permission as “All” for **Employee & Employee Group** module.

Click **Save**.

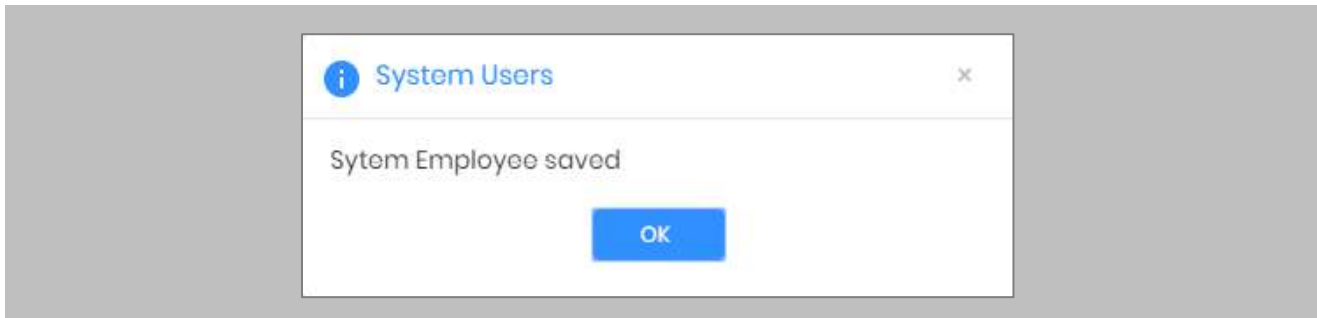


Figure 43: IXM WEB - Save System User

13. Add and Configure Invixium Readers

Adding an Invixium Reader in IXM WEB

Procedure

STEP 1

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

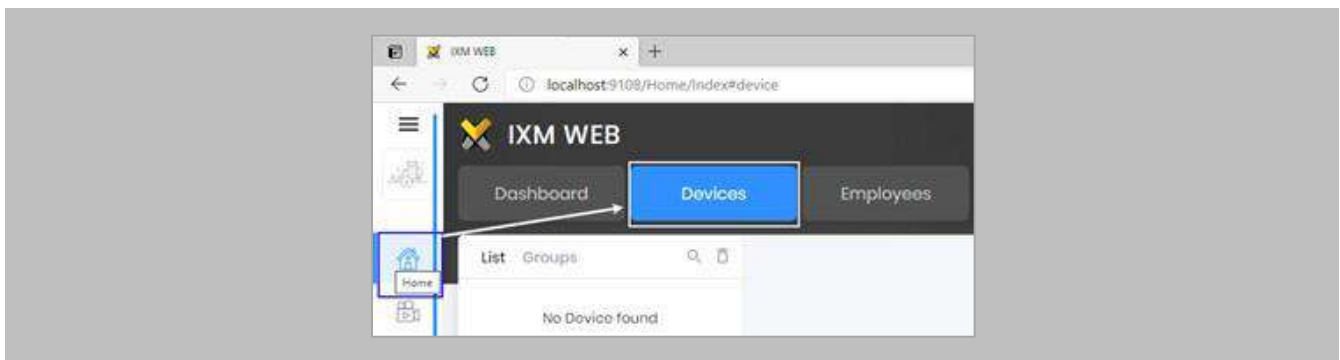


Figure 44: IXM WEB - Devices Tab

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.

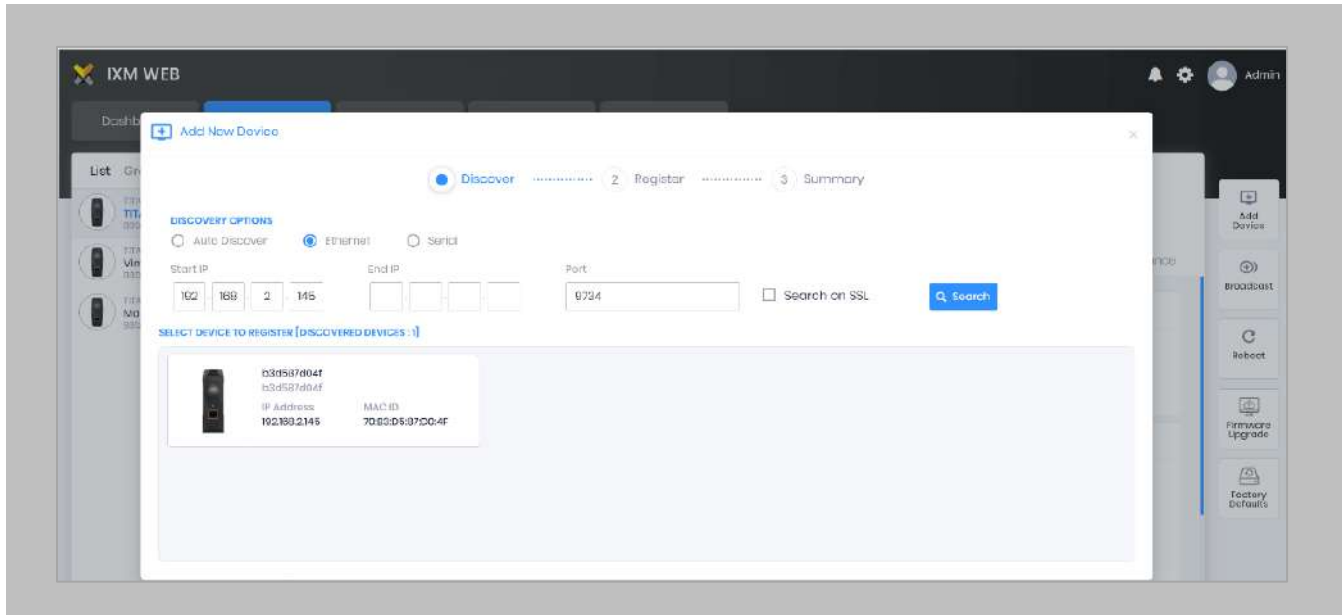
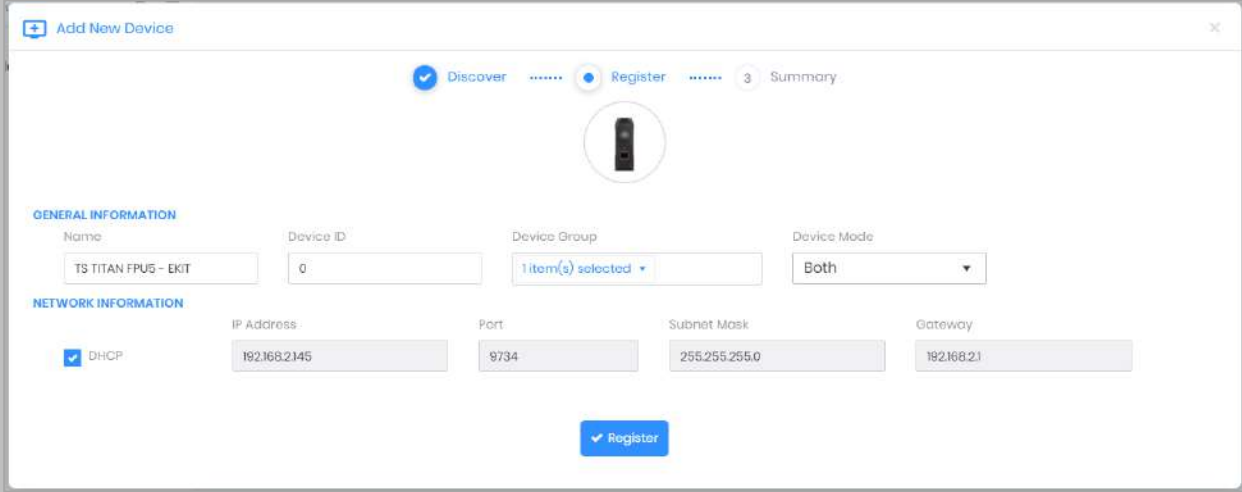


Figure 45: IXM WEB - Search Device Using IP Address

STEP 3

Once the device is found, click on it. Add the required fields and select **Register**.



The screenshot shows the 'Add New Device' window in the IXM WEB interface. At the top, there is a progress bar with three steps: 'Discover' (checked), 'Register' (active), and 'Summary' (3). Below the progress bar is a circular icon of a device. The main form is divided into two sections: 'GENERAL INFORMATION' and 'NETWORK INFORMATION'. In the 'GENERAL INFORMATION' section, there are four fields: 'Name' (TS TITAN FPU5 - EKIT), 'Device ID' (0), 'Device Group' (1 item(s) selected), and 'Device Mode' (Both). In the 'NETWORK INFORMATION' section, there is a checked 'DHCP' checkbox, and four input fields: 'IP Address' (192.168.2.145), 'Port' (9734), 'Subnet Mask' (255.255.255.0), and 'Gateway' (192.168.2.1). A blue 'Register' button is located at the bottom center of the form.

Figure 46: IXM WEB - Register Device

STEP 4

Name the **device** exactly as the name of the door it will be used for.

Device Mode: select accordingly.

Device Group: select the Access Group to which the reader will be assigned.

STEP 5

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

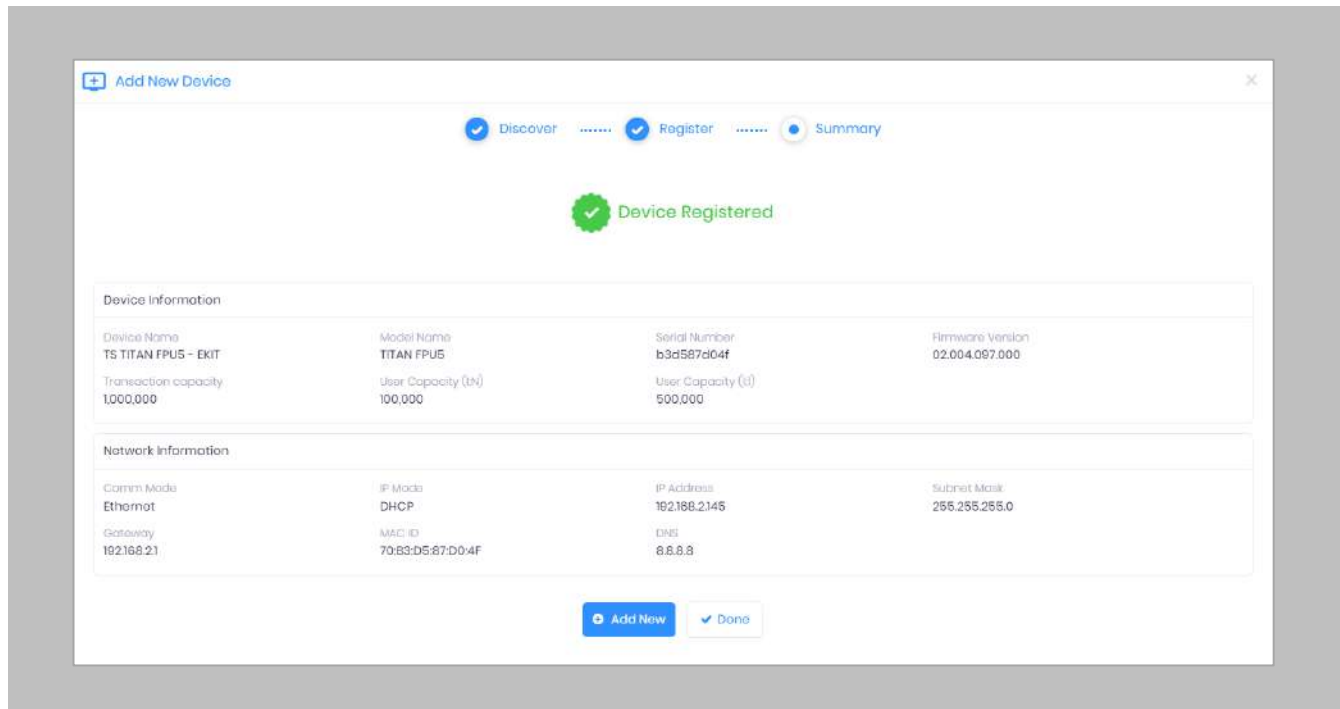


Figure 47: IXM WEB - Device Registration Complete

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

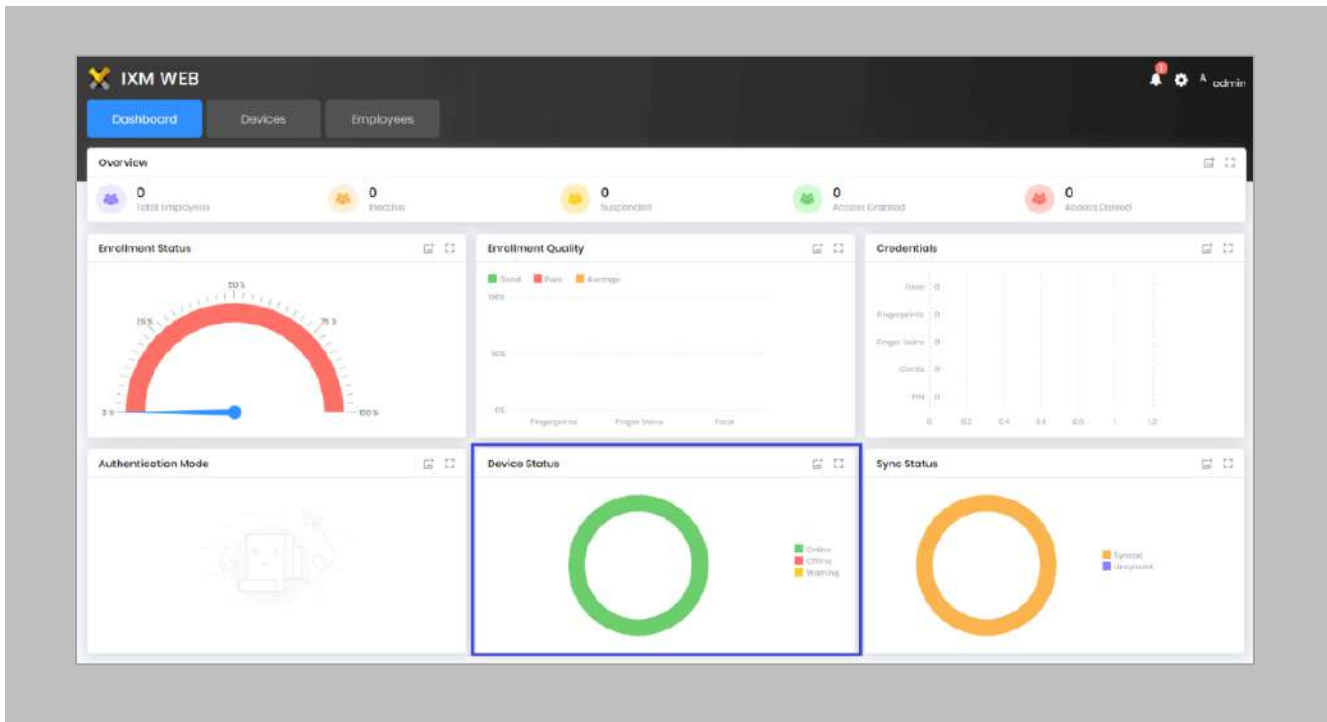


Figure 48: IXM WEB - Dashboard, Device Status

14. 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**.

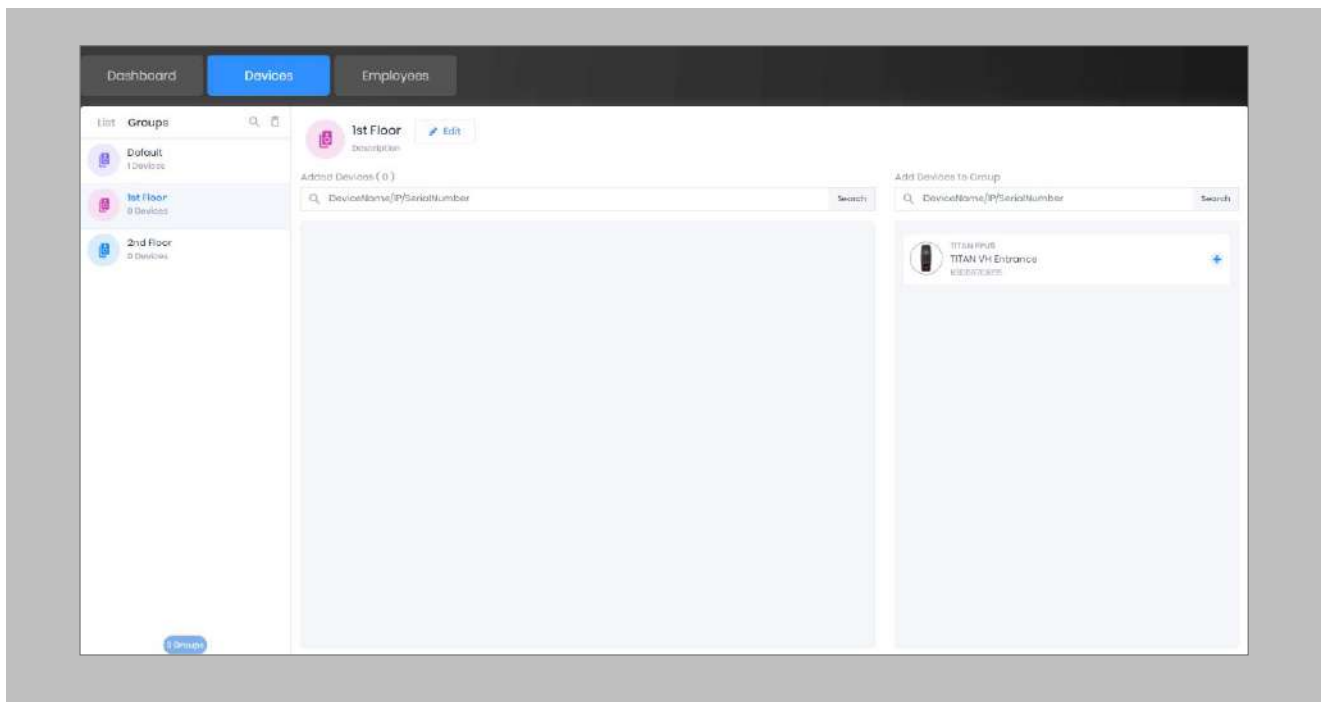



Figure 49: IXM WEB - Assign Device Group

Configuring Wiegand to Assign Invixium Readers

 Note: This is based on 17/23 bits for facility code/card number format allowing facility codes up to 65535 and card numbers from 1 to 8,388,607.

STEP 1

From Home >> Expand the Left Navigation Pane >> Navigate to the **General Settings** tab >> Click the **Wiegand** app to open the Wiegand Format settings.

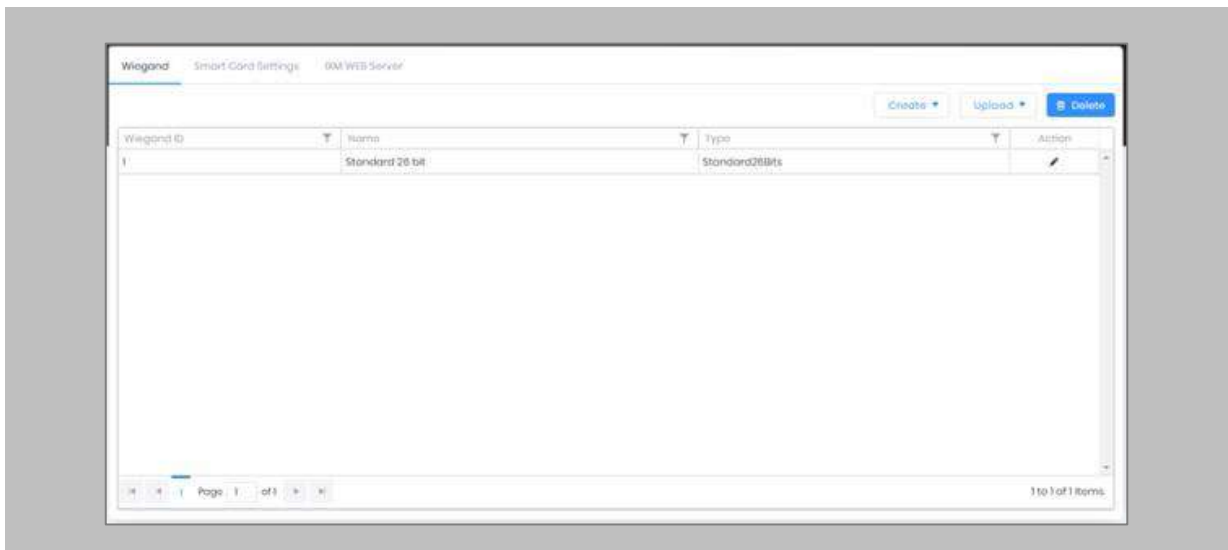


Figure 50: IXM WEB - Create Wiegand Format

STEP 2

Hover mouse over **Create** and select the **Custom** option from the dropdown menu.

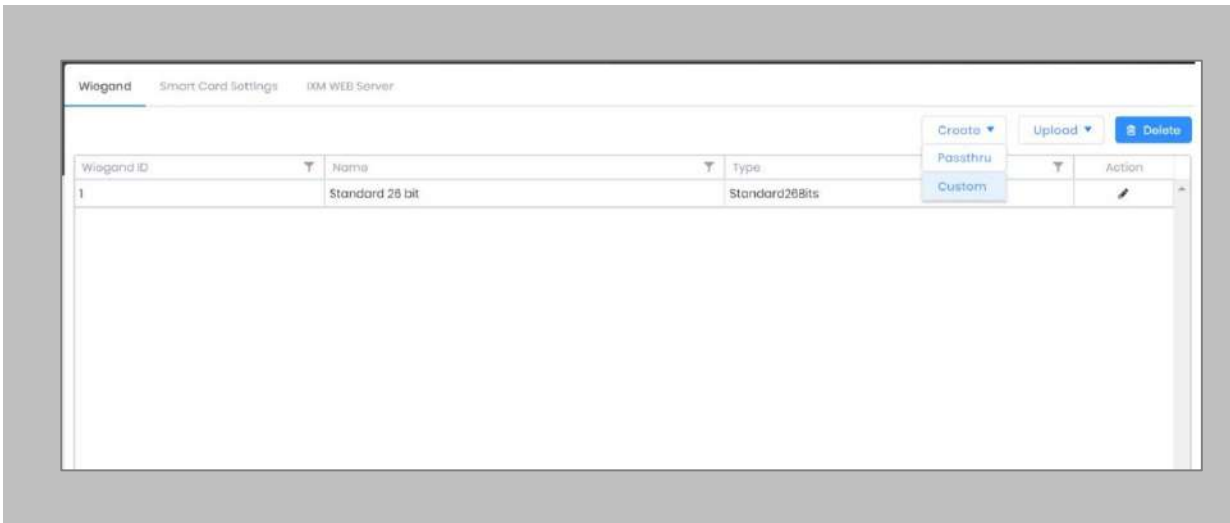


Figure 51: IXM WEB - Create Custom Wiegand Format

STEP 3

Enter **Name** of the custom Wiegand and assign **Bits**. Lets say we name the Wiegand as '32-BIT CSN' and define Total Bits as 32 bits where all the 32 bits are ID bits.

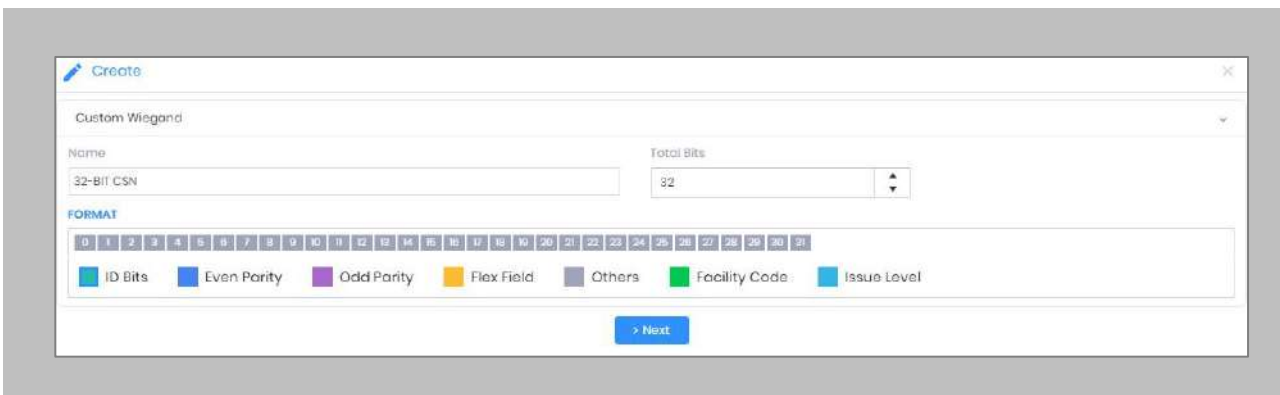


Figure 52: IXM WEB - Custom Wiegand Format

STEP 4

Click **Next** and **Save**. Wiegand Format created message will be displayed.

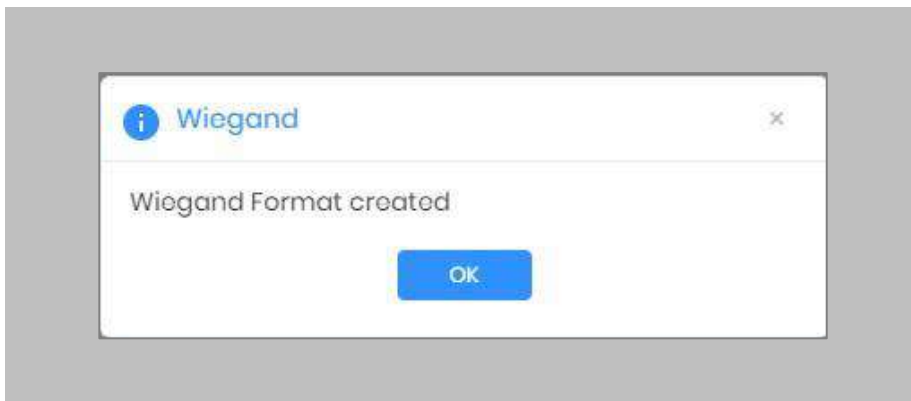


Figure 53: IXM WEB – Custom Wiegand Format Created

STEP 5

Click on **Upload** and select the device group (applies to all readers). Click **OK**.

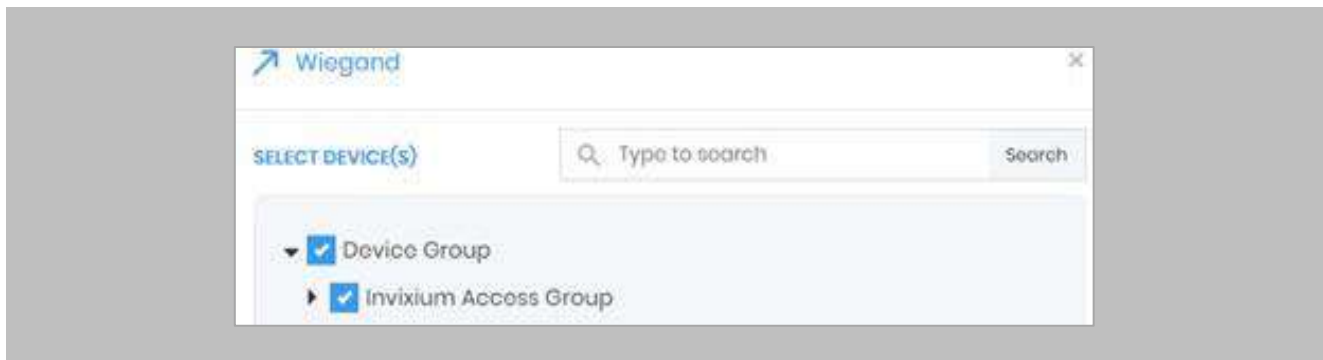


Figure 54: IXM WEB - Upload Wiegand Format

Assign Wiegand to Invisium Readers

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

The created Wiegand will be used to define which output format will be sent to GSC.

STEP 1

From [Home](#) > click the [Devices](#) tab. Select any device.

STEP 2

Navigate to the [Access Control](#) tab.

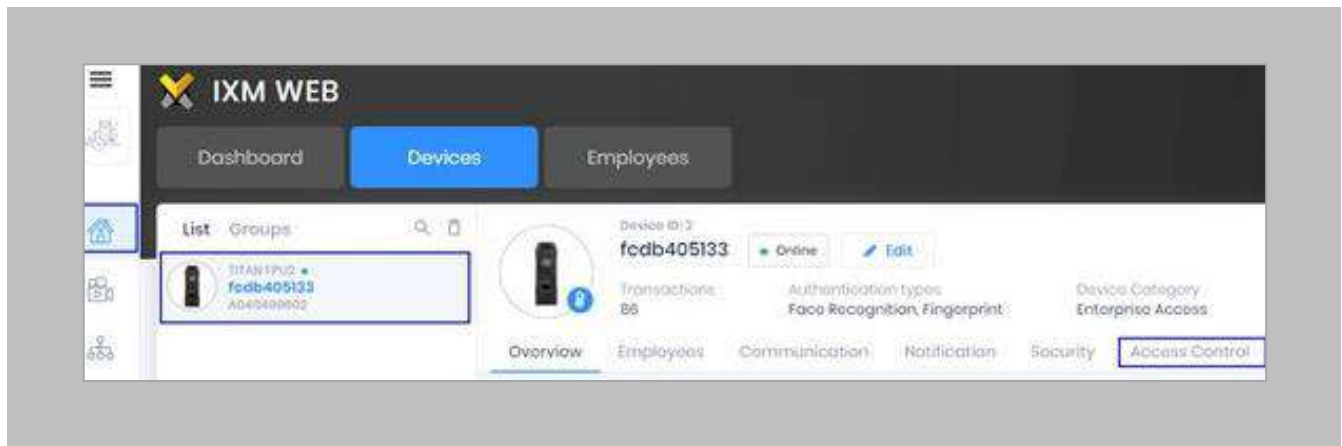


Figure 55: IXM WEB - Navigate to Access Control Tab

STEP 3

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

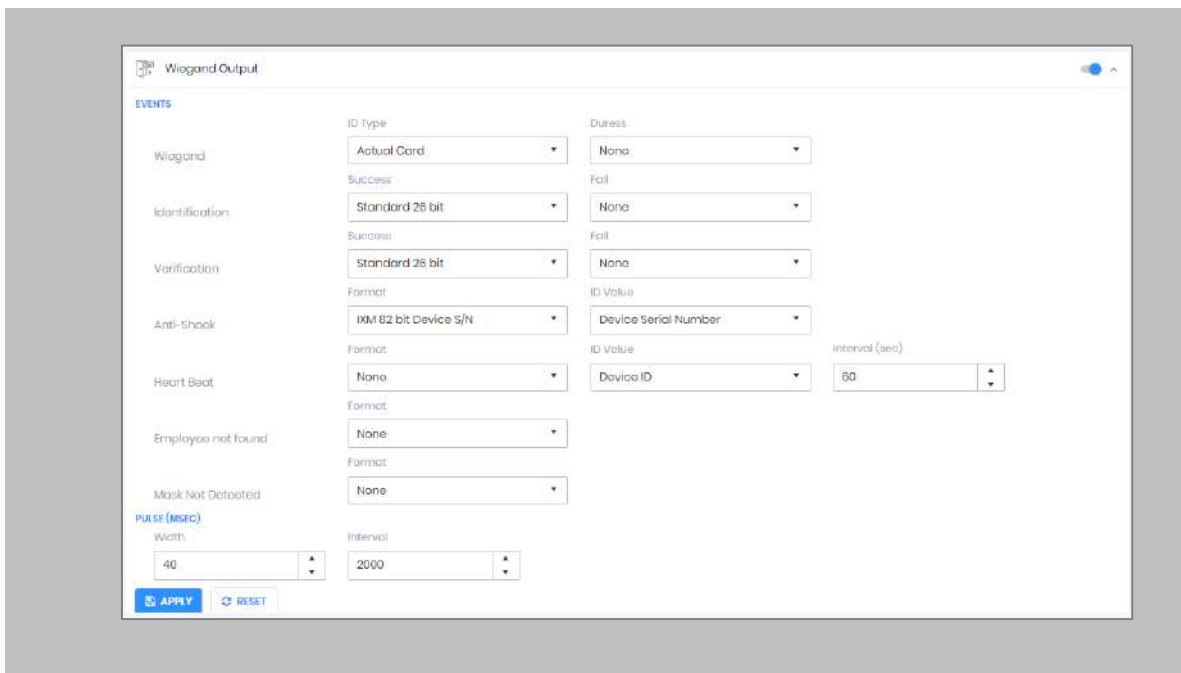


Figure 56: IXM WEB - Wiegand Output

ID types for Wiegand output are as follows:

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

Set ID Type of output Wiegand to Employee ID/Default/Actual Card. By default, Employee ID is selected in Wiegand Event.

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

Employee ID: This is auto generated ID by IXM WEB for an imported cardholder in Genetec.

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 the default.

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

STEP 4

Select desired format for Identification, Verification, Employees not found, Thermal Authentication and Mask not Detected for the selected Card.

STEP 5

Click **Apply**.

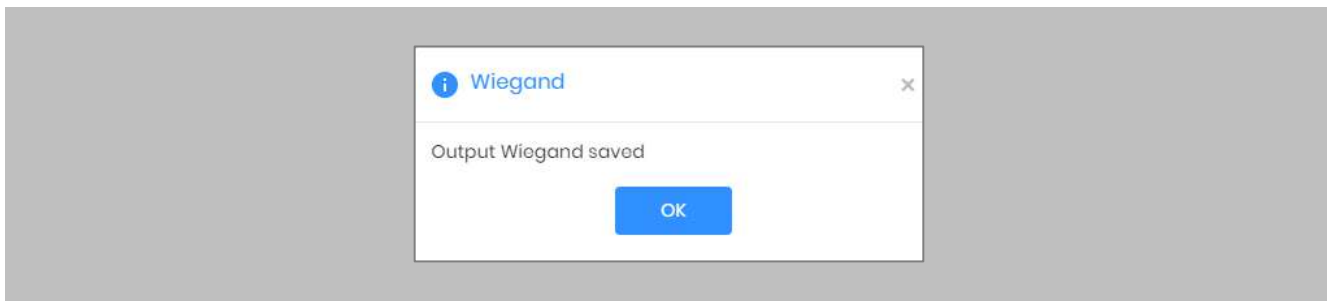


Figure 57: IXM WEB - Save Output Wiegand

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 Appendix C 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 Genetec Controller.
- To make this Wiegand output work on Genetec, you will need to make sure the Wiegand format is available in Genetec for use on the controllers talking to the Invixium reader (by Wiegand or OSDP or RIO).

Configuring Panel Feedback with Genetec

Procedure

STEP 1

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

STEP 2

Connect the **LED** of the Genetec Panel with **ACP_LED1** of the 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**.

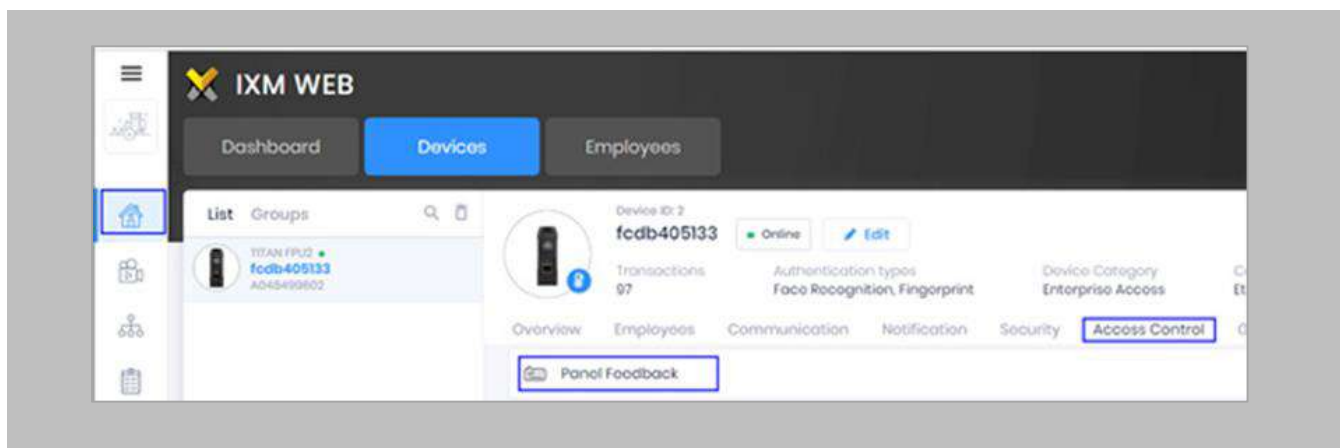


Figure 58: IXM WEB - Panel Feedback

STEP 4

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

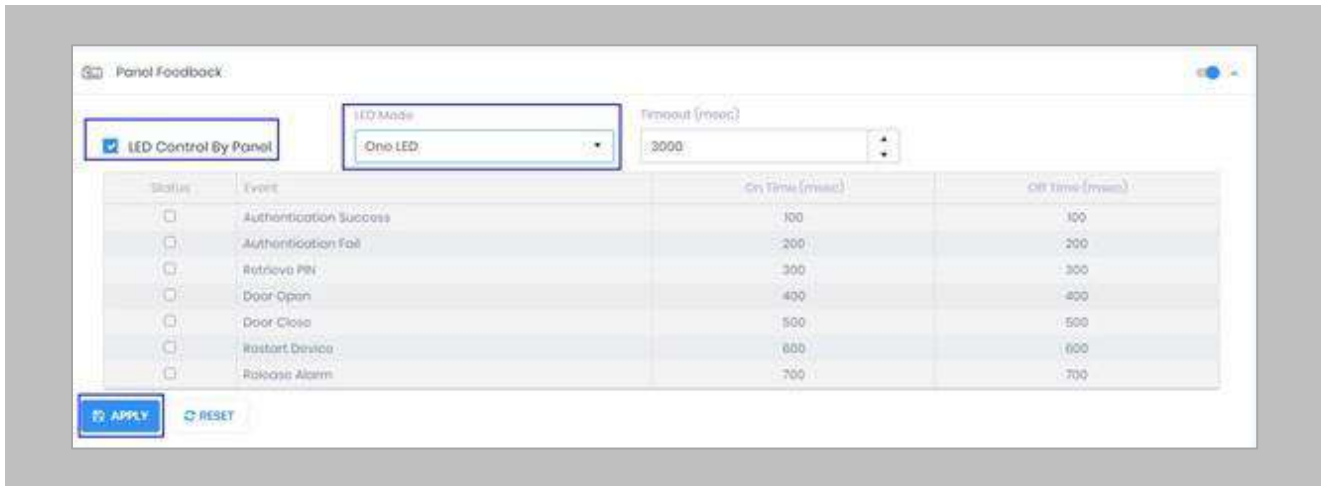


Figure 59: IXM WEB - Configuring Panel Feedback in IXM WEB

STEP 5

Click **Apply**.

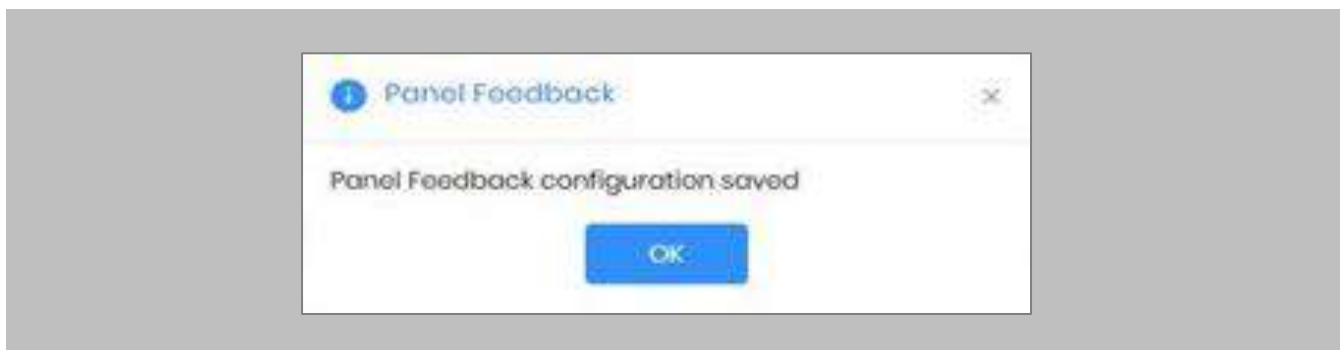


Figure 60: IXM WEB - Save Panel Feedback

Configuring Thermal Settings



Note: confirm your device is capable of temperature screening first.

Procedure

STEP 1

Click the **Devices** tab → Select **Device** → Select **Thermal Settings** → **Thermal Authentication Settings** to view default settings.

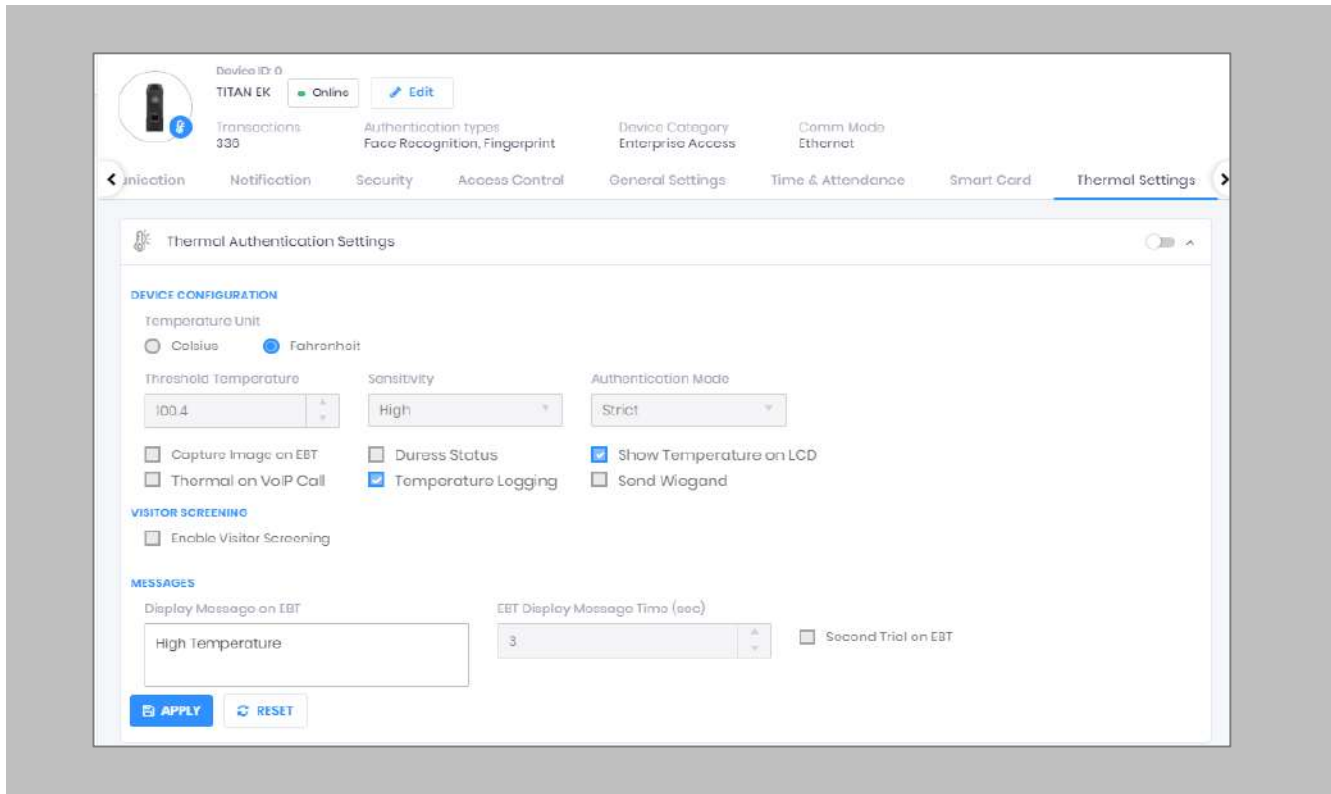


Figure 61: IXM WEB - Thermal Settings

STEP 2

The list of settings along with their functions are:



-
- **Temperature Unit:** IXM WEB supports Celsius and Fahrenheit temperature units. By default, the selected option will be Fahrenheit.
 - **Threshold Temperature:** Users can set a threshold temperature. Elevated Body Temperature (EBT) workflows will trigger when any user whose temperature is above the threshold value. The default threshold temperature is 100.4 degrees Fahrenheit.
 - **Sensitivity:** Users can set Thermal Sensitivity to low or high.
 - **Authentication Mode:** The user will have two options for the Mode of authentication Soft / Strict, this mode of authentication is used to control the access of the user if fever is detected. The default mode of authentication is Strict.
 - **Soft:** Access will be granted to the End-user even after the fever is detected.
 - **Strict:** Access will be denied if the fever is detected.
 - **Send Wiegand:** This setting will be visible only if the user selects the “Strict” Authentication Mode. Enabling this setting will generate Wiegand whenever “High Face Temperature” is detected in the authentication process.
 - **Capture Image on EBT:** Enable this setting to capture the image of the user if EBT is detected. By default, this setting will remain disabled. The same image will be used for sending email notifications from IXM WEB.
 - **Duress Status:** Enabling this setting will allow access to the user even after detecting EBT if the user authenticates using their pre-programmed duress finger. The default setting is disabled.
 - **Show Temperature on LCD:** By enabling this setting, TITAN will display the screened temperature upon authentication. By default, this setting is disabled.
 - **Display Message on EBT:** Users can set a message to display after detecting EBT. Users can set a message up to a maximum of 50 characters.
 - **EBT Display Message Time (sec):** Users can configure the length of time that the EBT message stays on the screen. The default time is 3 seconds.

-
- **Second Trial on EBT:** By enabling this setting, users will get a notification to retry after EBT detection. If this setting is enabled, Display Message for Second Trial, Second Trial Wait Time after EBT (mins), and Display Message Time After Second Trial (sec) fields will be visible.
 - **Display Message for Second Trial:** Users can set a message to display after the second trial if EBT is detected. This message can be a maximum of 50 characters.
 - **Second Trial Display Message Time (sec):** Users can configure the length of time that the second trial message stays on the screen. The default time is 3 seconds.
 - **Enable Visitor Screening:** Enable this setting to start screening temperatures for visitors. By default, this field remains disabled.
 - **Visitor Screening Message:** Users can set a message that will be displayed when a visitor is showing their face. Maximum 50 characters allowed.
 - **Visitor Screening Message on EBT:** Users can set a message that will be displayed when the visitor has an EBT. Maximum 50 characters allowed.
 - **Visitor Message Display Time (sec):** Users can configure the length of time that the visitor screening message stays on the screen. The default time is 3 seconds.
 - **Thermal on VoIP Call:** Enable this setting to start screening temperatures for a user when a VoIP call is going on. By default, this field remains disabled.
 - **Temperature Logging:** This setting keeps logging detected temperature in the Transaction Log. By default, this field remains enabled. Users can disable this feature using IXM WEB only. Enable/Disable this setting is not available in LCD.

STEP 3

Once all the settings have been configured, click **Apply**, then click **OK**.

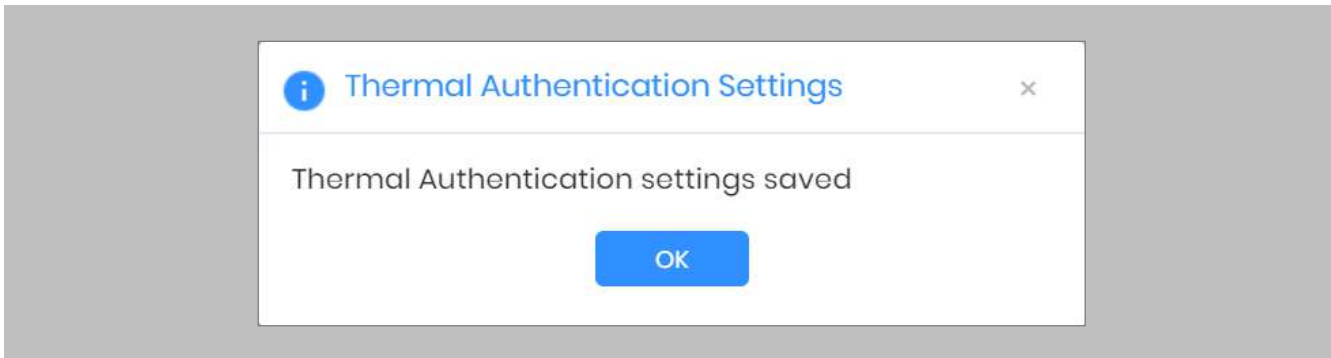


Figure 62: IXM WEB - Save Thermal Settings

Thermal Calibration

STEP 1

Click the **Devices** tab → Select **Device** → Select **Thermal Settings** → **Thermal Calibration** to view default settings.

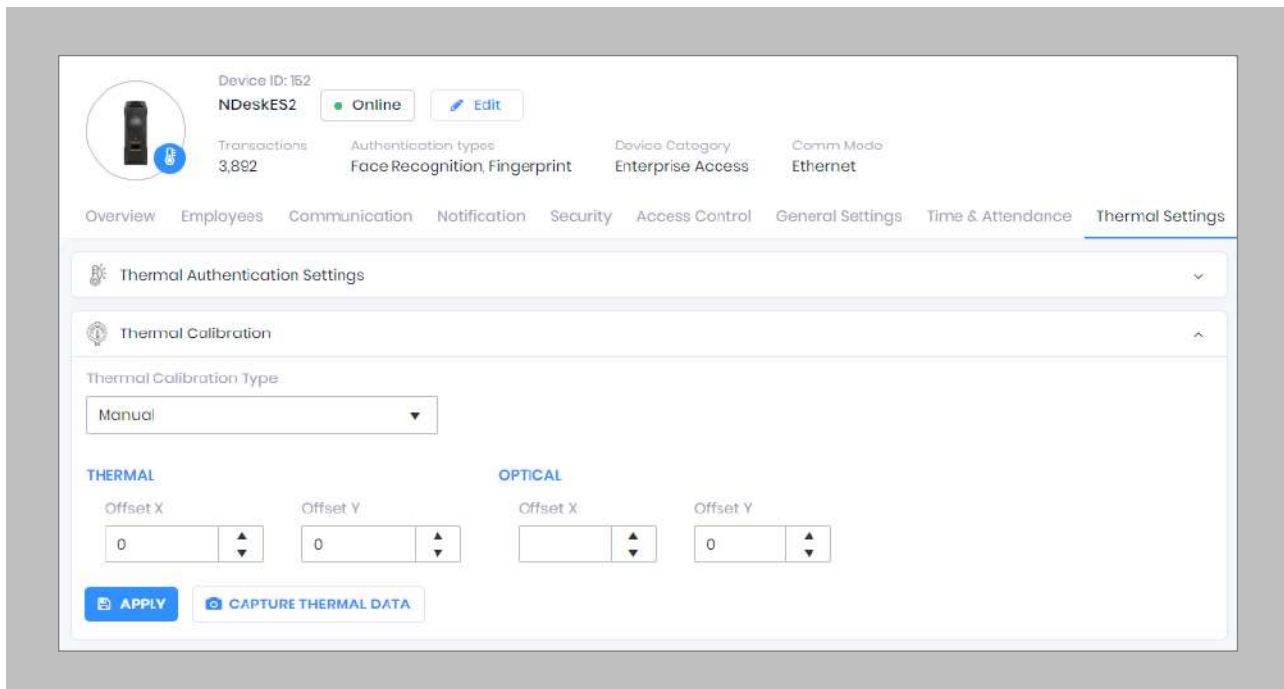


Figure 63: IXM WEB - Thermal Calibration Settings

STEP 2

The settings along with their functions are:

- **Thermal Calibration Type:**
 - Manual
 - Face
 - Black Body

Inxium supports only Manual Thermal Calibration and does not recommend the user to select any other option.

- **Offset X (Thermal Section):** Users can set the value for the offset X coordinate of the TIR camera.
- **Offset Y (Thermal Section):** Users can set the value for the offset Y coordinate of the TIR camera.
- **Offset X (Optical Section):** Users can set the value for the offset X coordinate of the TITAN camera.
- **Offset Y (Optical Section):** Users can set the value for the offset Y coordinate of the TITAN camera.

STEP 3

Once all the settings have been configured, click **Apply**, then click **OK**.

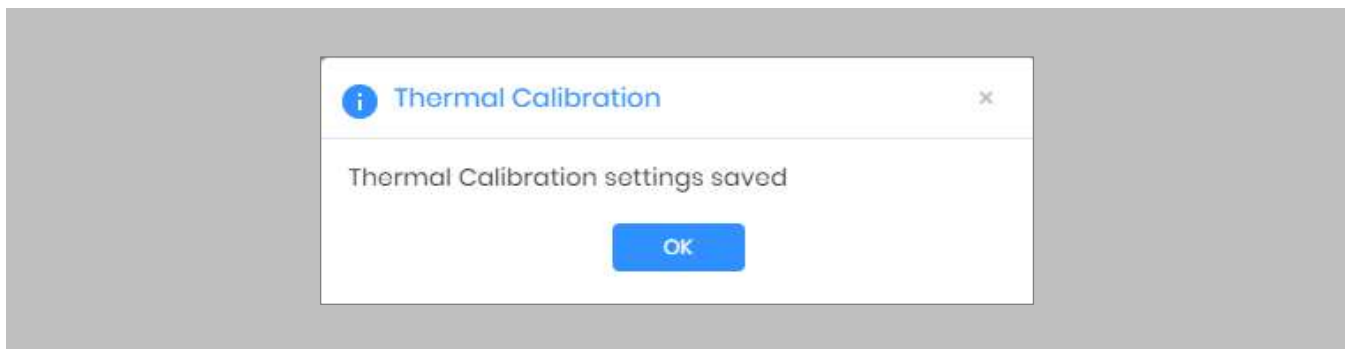


Figure 64: IXM WEB - Save Thermal Calibration Settings

To provide the Thermal Data to the Invixium Technical Services team using IXM WEB, the user needs to click [Capture Thermal Data](#). It will open the popup window and ask the user to show their face 3 times.



Figure 65: IXM WEB - Capture Thermal Data

STEP 4

Once the face is captured 3 times, it will ask the user to save the “.zip” file.

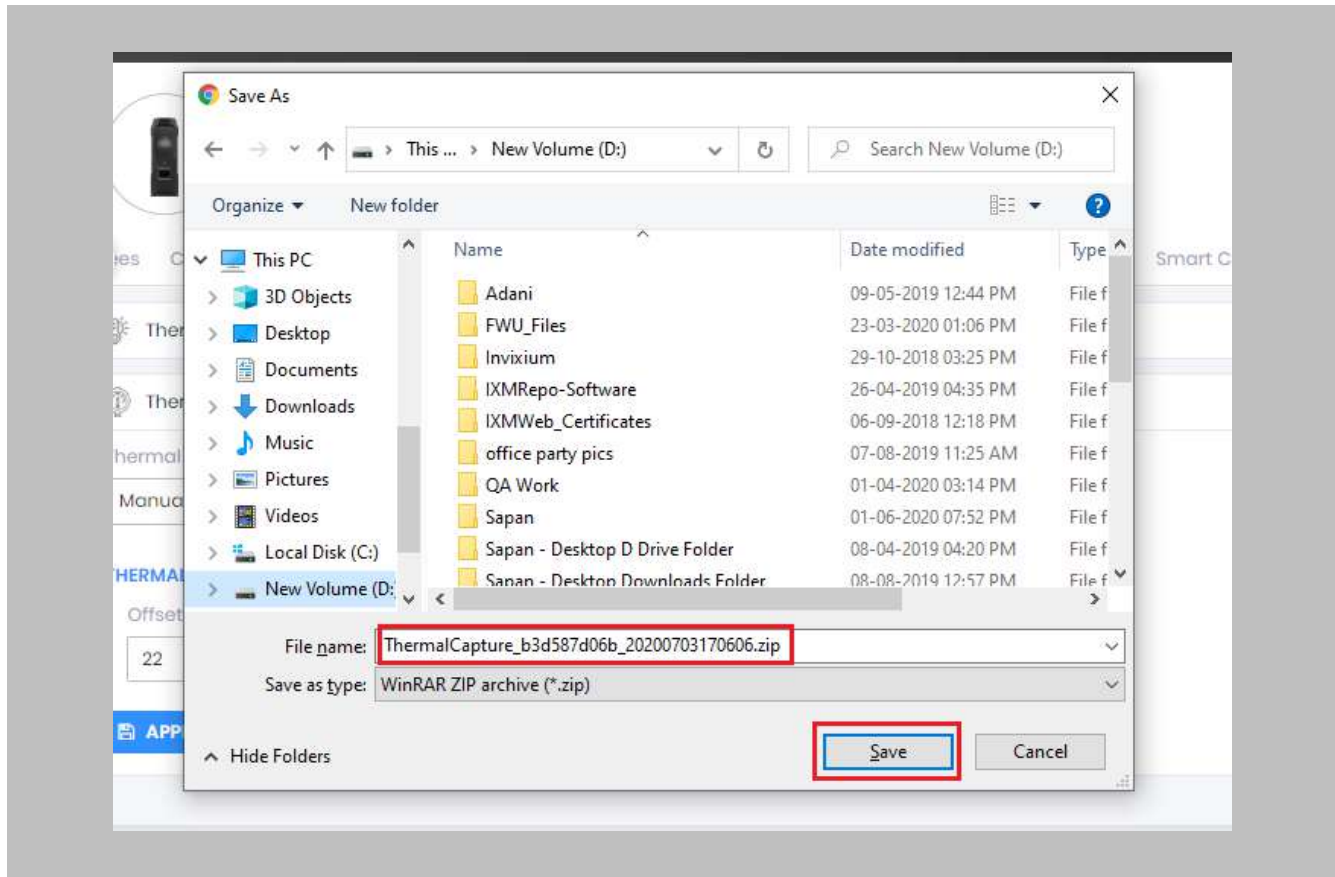



Figure 66: IXM WEB - Save Captured Thermal Data

STEP 5

Click **Save** to store the zip file, then send this file to support@invixium.com. Invixium's Technical Services team will process this file and respond to the user with calibrated values for “X” & “Y” coordinates for the TIR camera and TITAN camera.

 Note: TITAN and the Enhancement kit are factory calibrated when purchased as a bundle. If thermal offset and optical offset values are 0, they capture thermal data.

Test Calibration Options

To test Thermal Calibration, click **Test Calibration**.

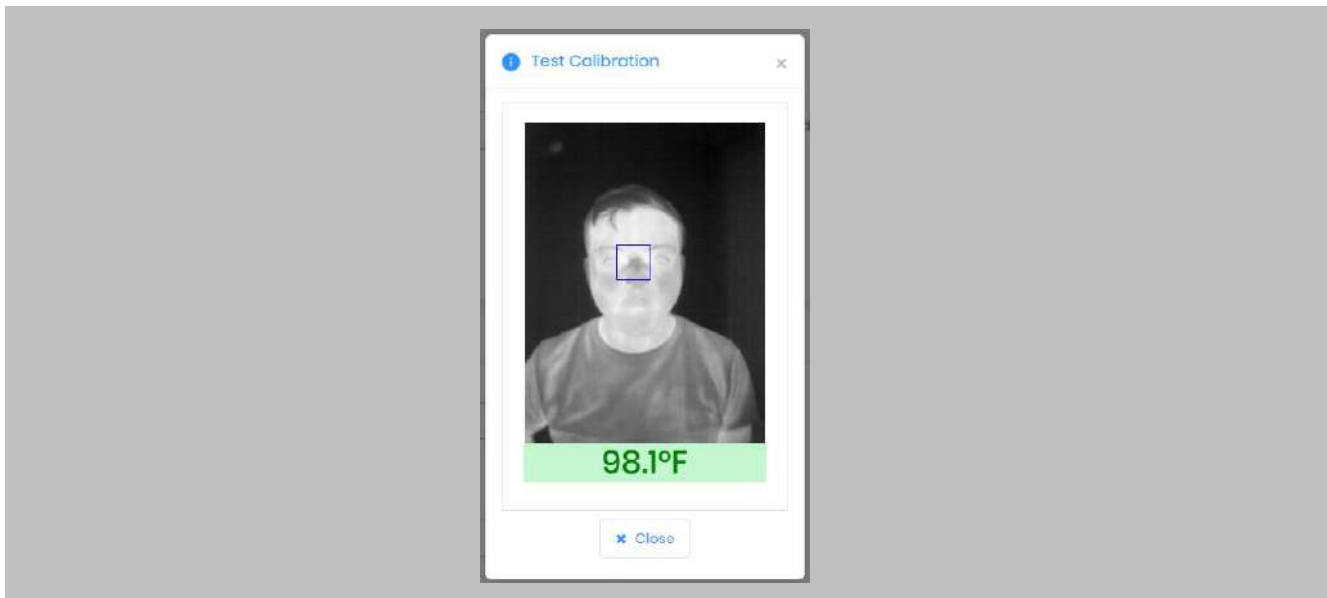



Figure 67: IXM WEB - Test Thermal Calibration

 Note: Square box position should be in the center and cover the tear duct area (Eye Inner Canthus).

Change Temperature Unit Settings

STEP 1

To change the Temperature Unit from Celsius to Fahrenheit and vice-versa, click **Tools** → **Options** → **Manage Preferences**.

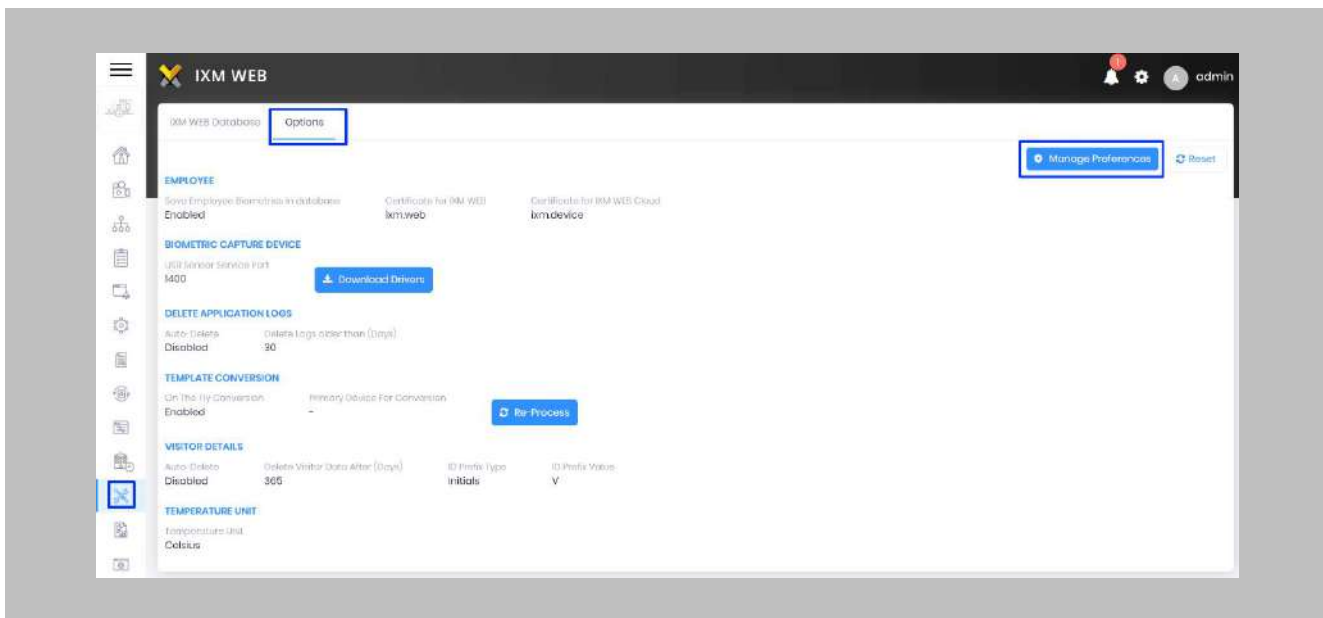


Figure 68: IXM WEB - Option to Change Temperature Unit

STEP 2

Click **Save**.

 Note: Temperature Test failure event in GSC Alarm Viewer will show the Temperature Value as per the Temperature Unit selection.

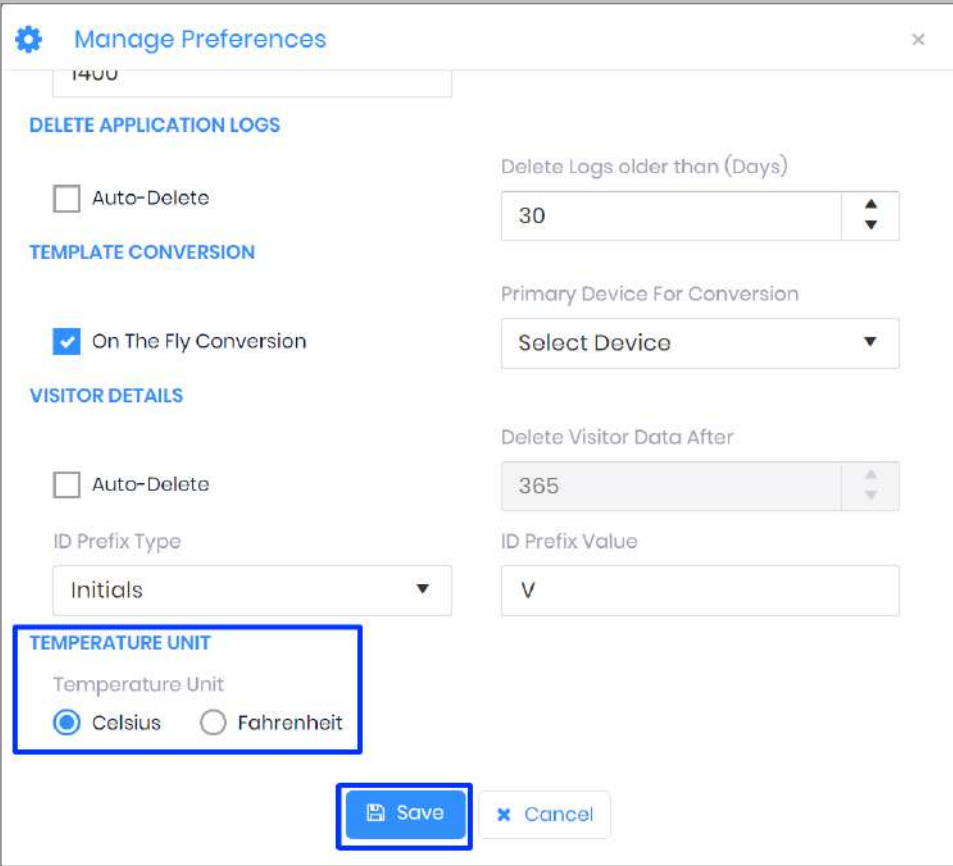


Figure 69: IXM WEB - Save Temperature Unit Setting

Configuring Mask Authentication Settings

STEP 1

Click the **Devices** tab → Select **Device** → Select **General Settings** → **Mask Authentication Settings** to view default settings.

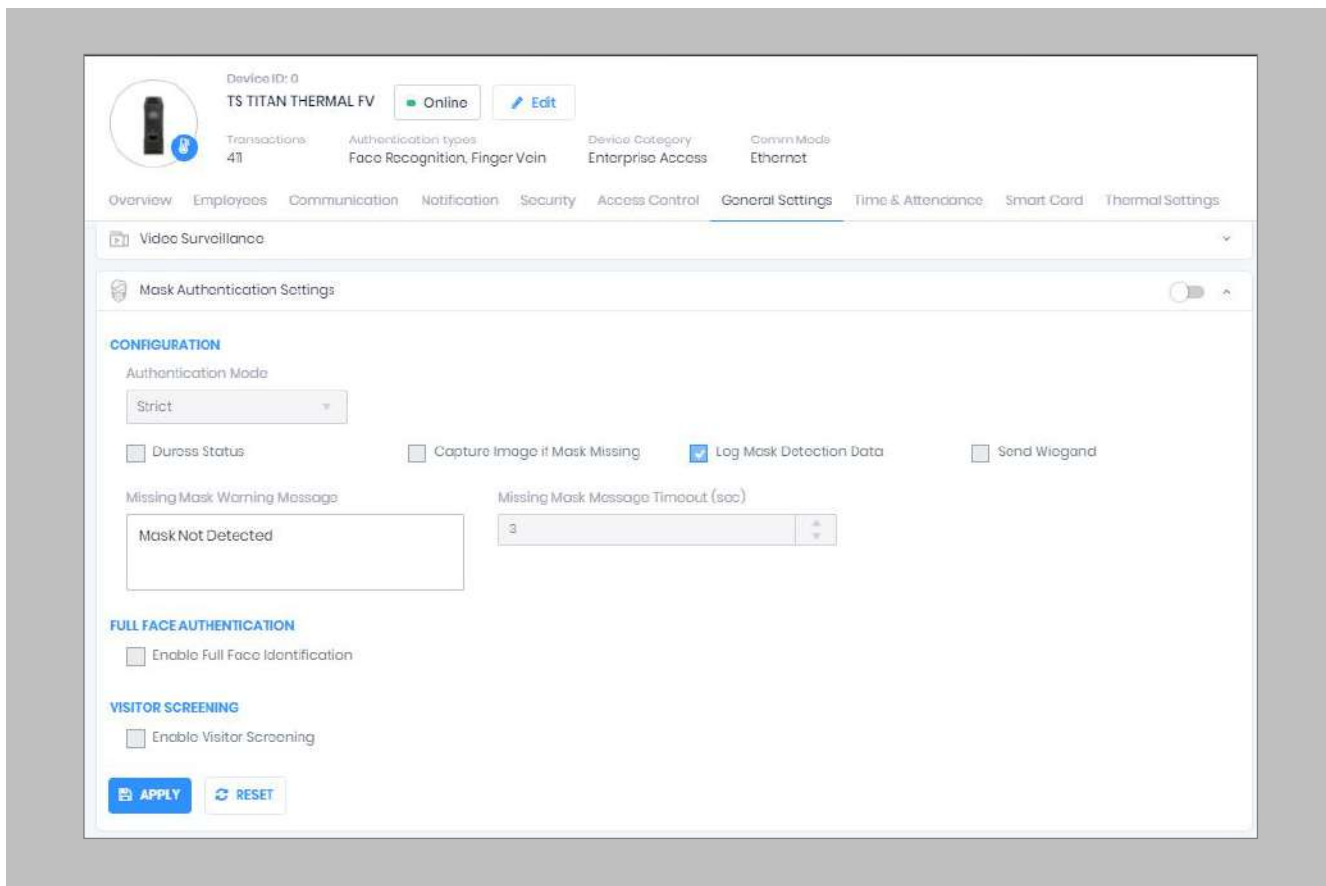


Figure 70: IXM WEB - Mask Authentication Settings

STEP 2

The list of settings is:

- **Authentication Mode:** There are two options for the mode of authentication used to control the access workflow if a mask is not detected. The default mode of authentication is strict.
 - **Soft: Access will be granted to the user even if a mask is not detected.**
 - **Strict: Access will be denied if a mask is not detected.**
- **Duress Status:** Enabling this setting would allow access to the user if a mask was not detected if the user authenticates using their pre-programmed duress finger. The default setting is **disabled**.
- **Capture Image if Mask Missing:** Enable this setting to capture an image of the user if a mask is not detected. By default, this setting is **disabled**. The same image will be used for sending email notifications from IXM WEB.
- **Log Mask Detection Data:** This setting tracks mask detection in the transaction log. By default, this setting is **enabled**. You can disable this feature using IXM WEB only, not on the device's LCD.
- **Send Wiegand:** This setting will be visible only in "Strict" authentication mode. Enabling this setting will generate Wiegand whenever a mask is not detected in the authentication process.
- **Missing Mask Warning Message:** Set a message to display after a mask is not detected. The message can be up to 50 characters.
- **Missing Mask Warning Message Timeout (sec):** Configure the length of time that the mask is not detected message stays on the screen. The default time is 3 seconds.
- **Enable Full Face Identification:** Invidia Perioocular algorithms can achieve accurate identification using only the eye and eyebrow regions of the face. Full face identification is used to get more accuracy in authentication and capture a user's face without a mask in the image log. By default, this setting is **disabled**.

- **Remove Mask Display Message:** Set a message to display after a mask is detected when Full Face Identification is enabled. Messages can be up to 50 characters.
- **Remove Mask Display Message Time (sec):** Configure the length of time that the mask is detected message stays on the screen. The default time is 3 seconds.
- **Enable Visitor Screening:** Enable this setting to start screening visitors for masks. By default, this field is **disabled**.
- **Visitor Screening Message:** Set a message that will be displayed when a visitor is showing their face. Messages can be up to 50 characters.
- **Visitor Mask Missing Warning Message:** Set a message that will be displayed when a visitor is screened without a mask. Messages can be up to 50 characters.
- **Visitor Message Display Time(sec):** Configure the length of time that the visitor screening message stays on the screen. The default time is 3 seconds.

STEP 3

Once all the settings have been configured, click **Apply**, then click **OK**.

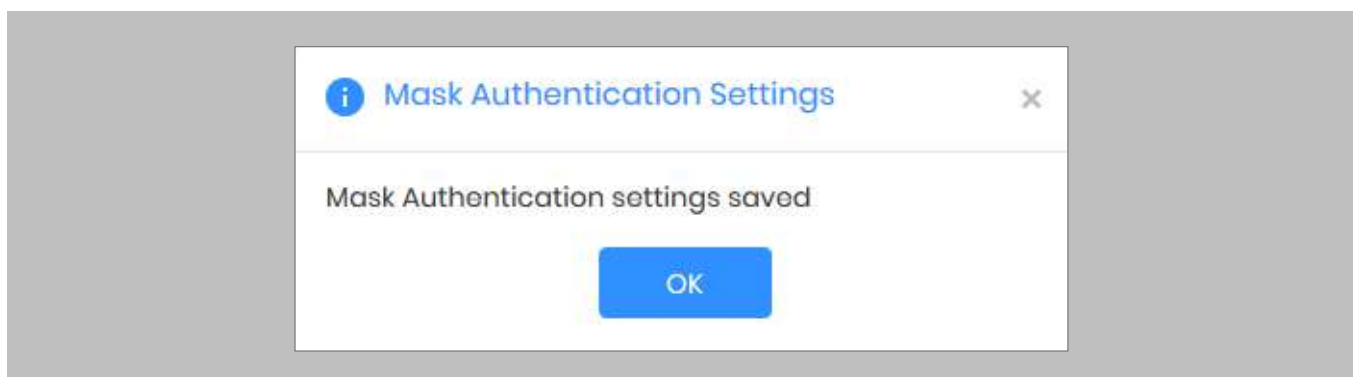


Figure 71: IXM WEB - Save Mask Settings

15. Enrollment using Genetec Config Tool

Procedure

STEP 1

Ensure that IXM WEB Add-On has been installed on the same path as that of Genetec server.

Refer [Installing IXM WEB Add-On](#) section.

Note: Enrollment can be done using Config Tool as well as Security Desk.

STEP 2

Restart the Config Tool once installation of IXM WEB Add-On is complete. You will see the icon of IXM WEB.

STEP 3

Click **IXM WEB** and Log into Config Tool using valid credentials.

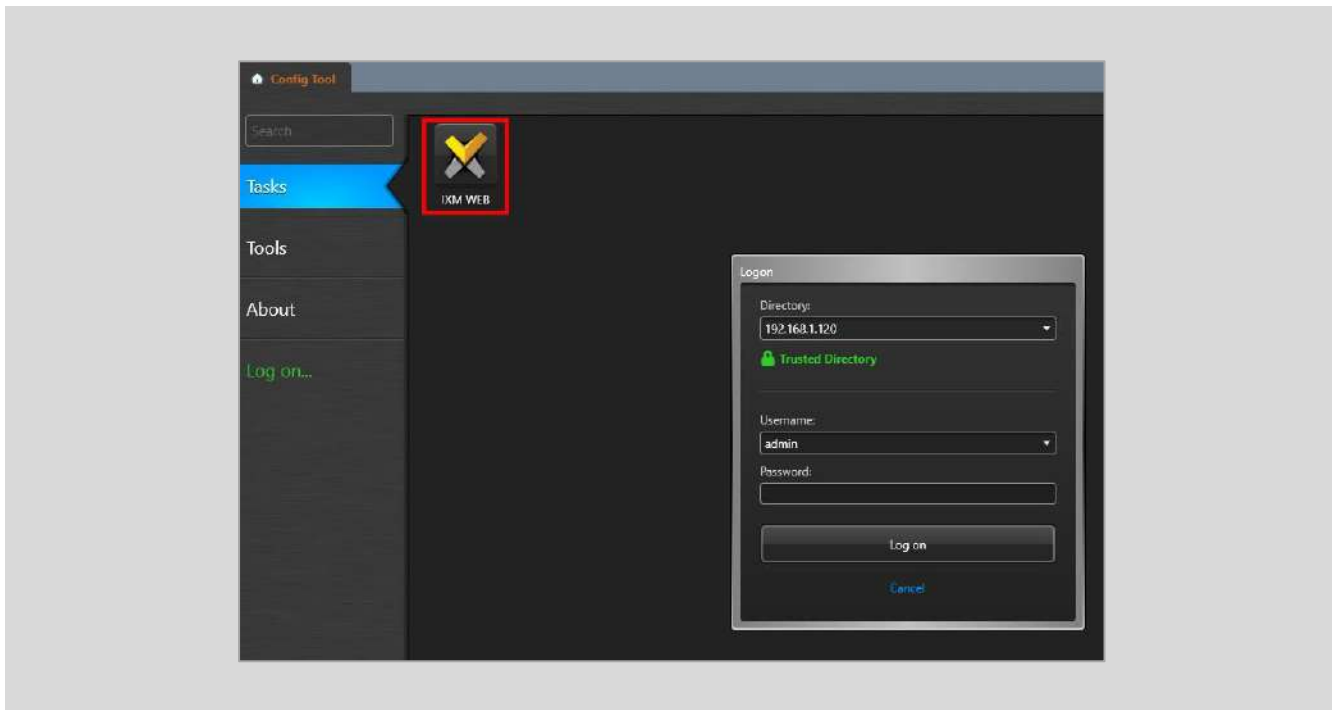


Figure 72: IXM WEB – Config Tool Logon

STEP 4

 Note: IXM WEB opens in a new window with a list of Genetec Cardholders.

Enter **IXM WEB URL**. Select the **Browser**.

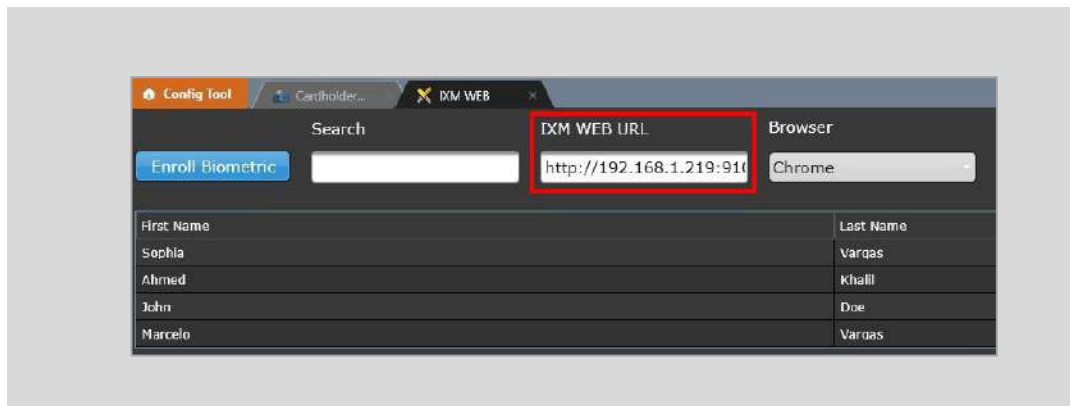


Figure 73: IXM WEB – Configure IXM WEB URL

Note:


The recommended browser is Chrome.

STEP 5

Select the desired Cardholder from the list. Click **Enroll Biometric**.

STEP 6

Enter credentials to log in to IXM WEB. Toggle “Keep Me Signed In” to stay signed in.

 Note: Log in to IXM WEB is required only once when you launch the enrollment viewer for the first time. For subsequent enrollment, this step will be skipped as you are already signed in.

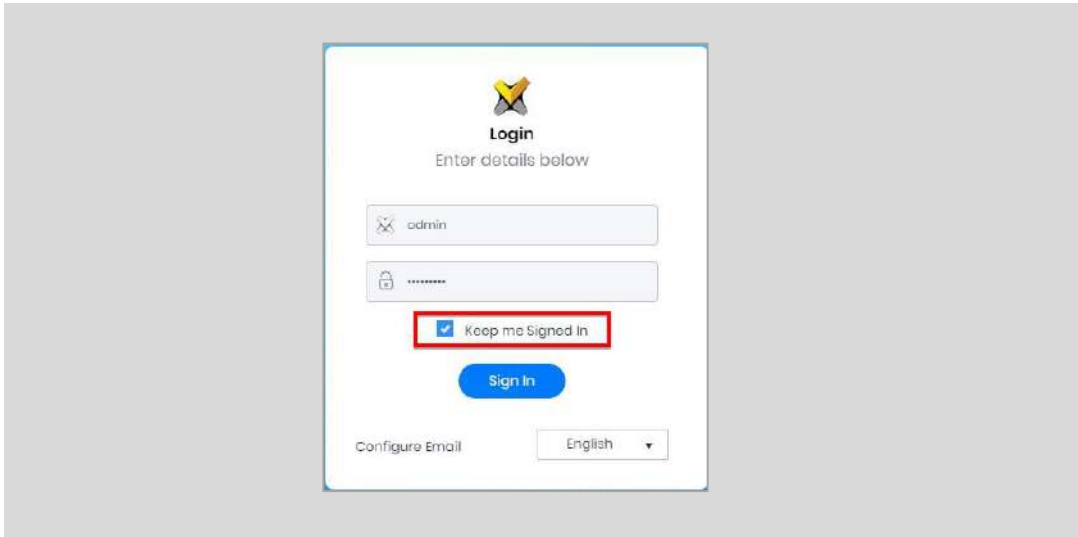


Figure 74: IXM WEB – First Time Log In

Once you are logged in, repeat STEP 5.

STEP 7

Perform Fingerprint and Face Enrollment.

Follow Invixium Enrollment guidelines for proper enrollment of faces, fingerprints, and finger veins.

Refer [Enrollment Best Practices](#) section.

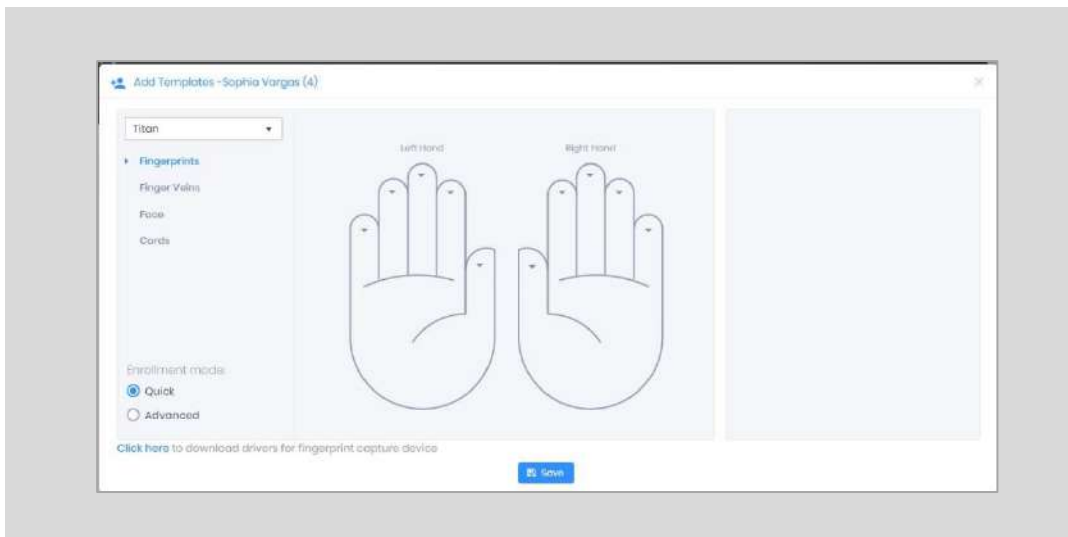


Figure 75: IXM WEB – Enrollment Viewer

16. 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.

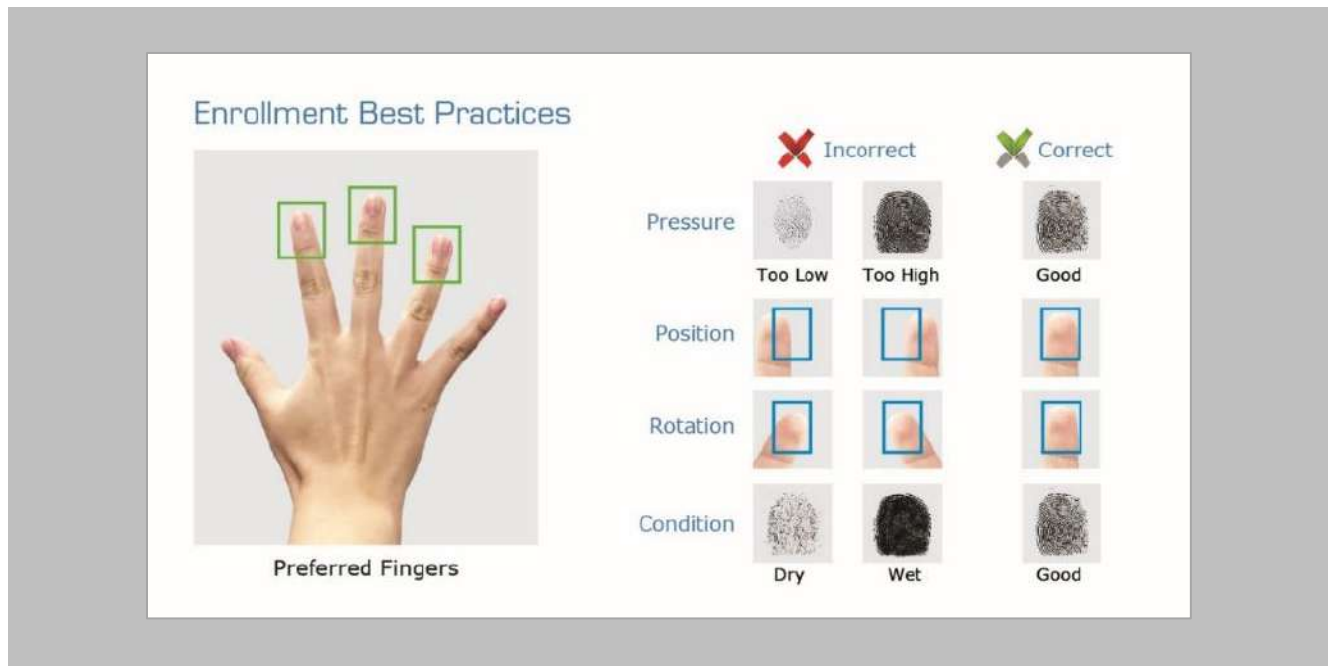


Figure 76: Fingerprint Enrollment Best Practices

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	Inxium 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 77: 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.

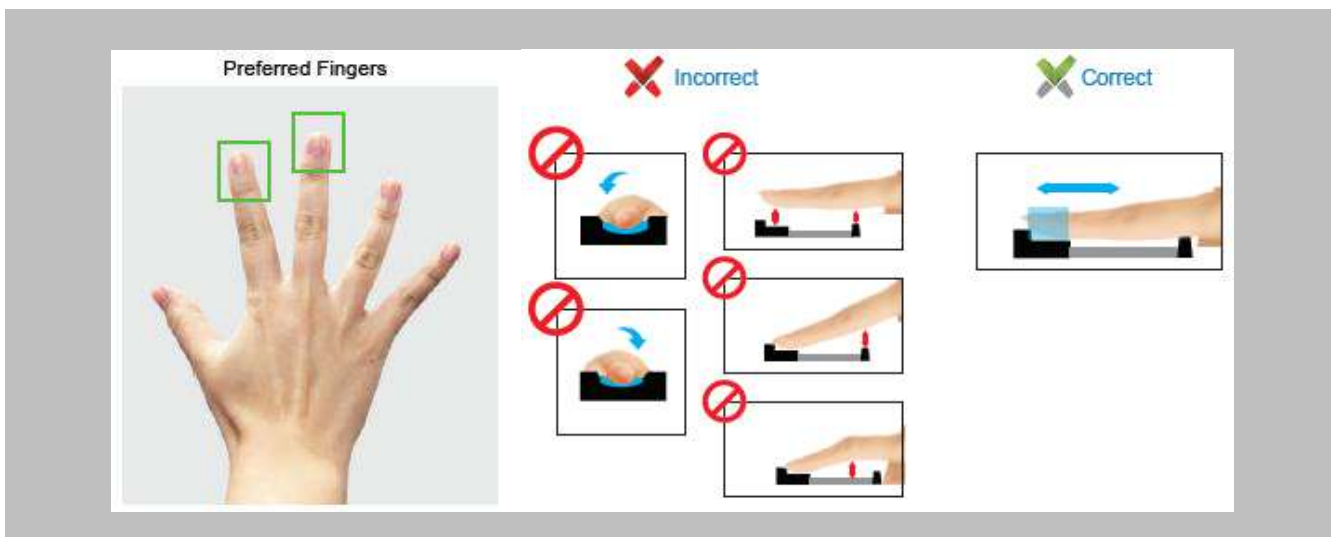


Figure 78: Finger Vein Enrollment Best Practices

Face Enrollment Best Practices

- Invixium recommends standing at 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.

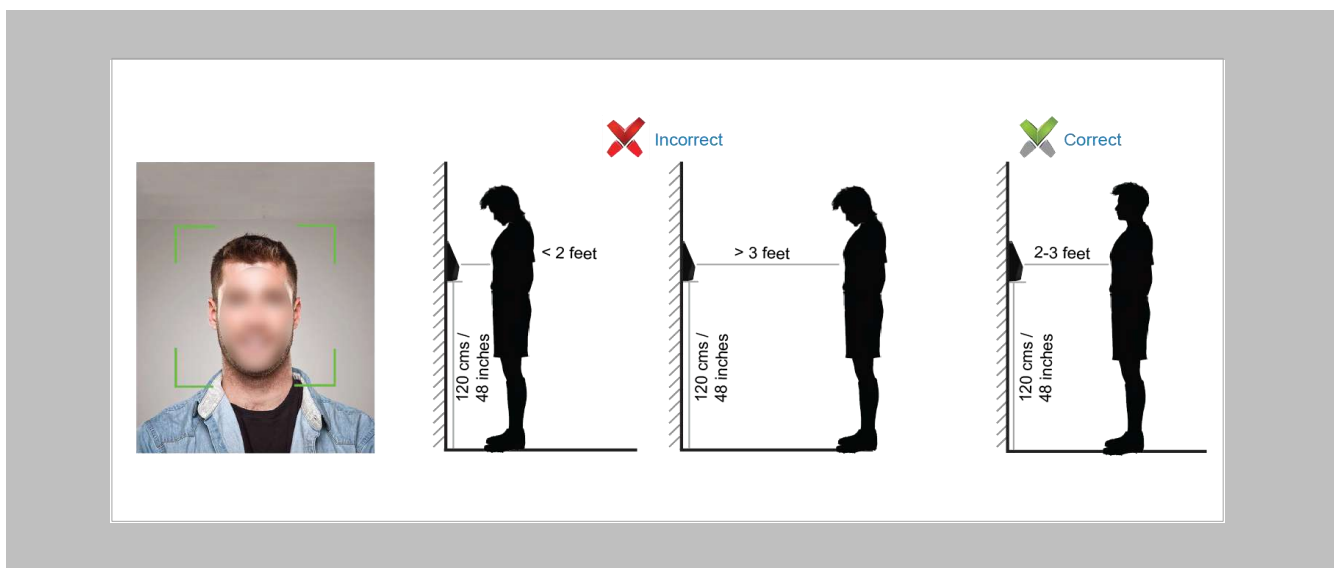


Figure 79: Face Enrollment Best Practices

17. Configuring RIO Settings

Configuring RIO in Config Tool of GSC

Procedure

STEP 1

Log into Config Tool using valid credentials.

STEP 2

Creating Roles and Units.

Navigate to **Access Control** → **Roles and Units**



Figure 80: Config Tool – Access Control

STEP 3

Create Access Manager.

Right click on server name → Click on **Add an entity** → Click on **Show all** → Click on **Access Manager**

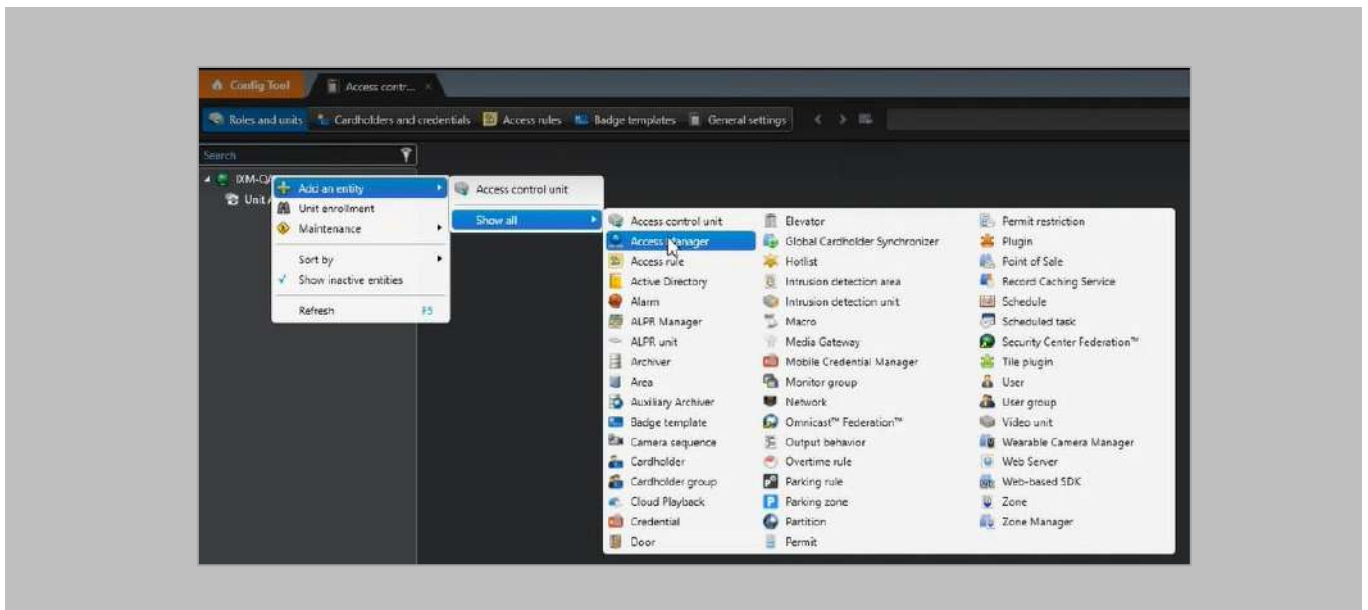


Figure 81: Config Tool – Access Manager

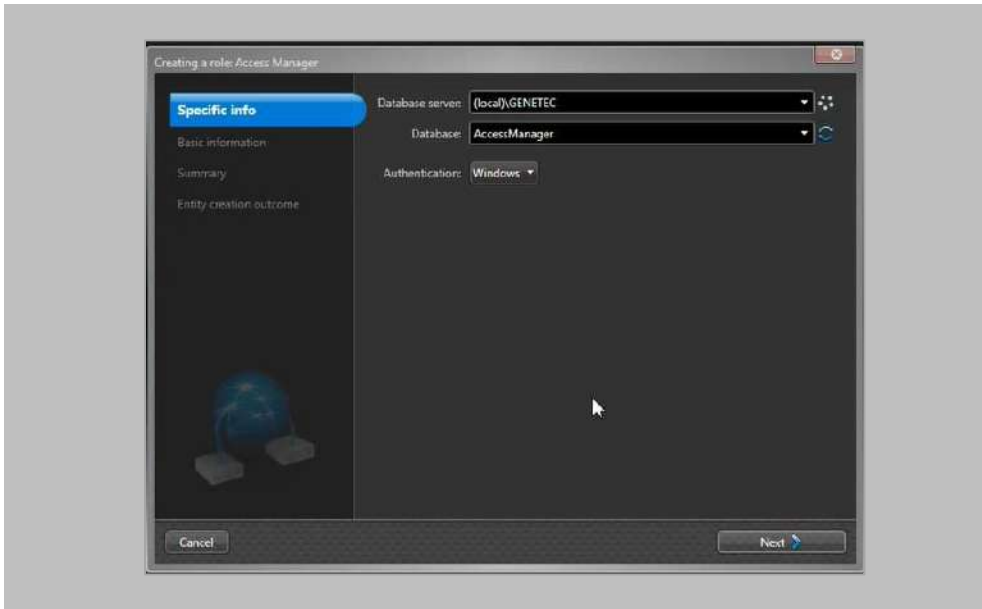
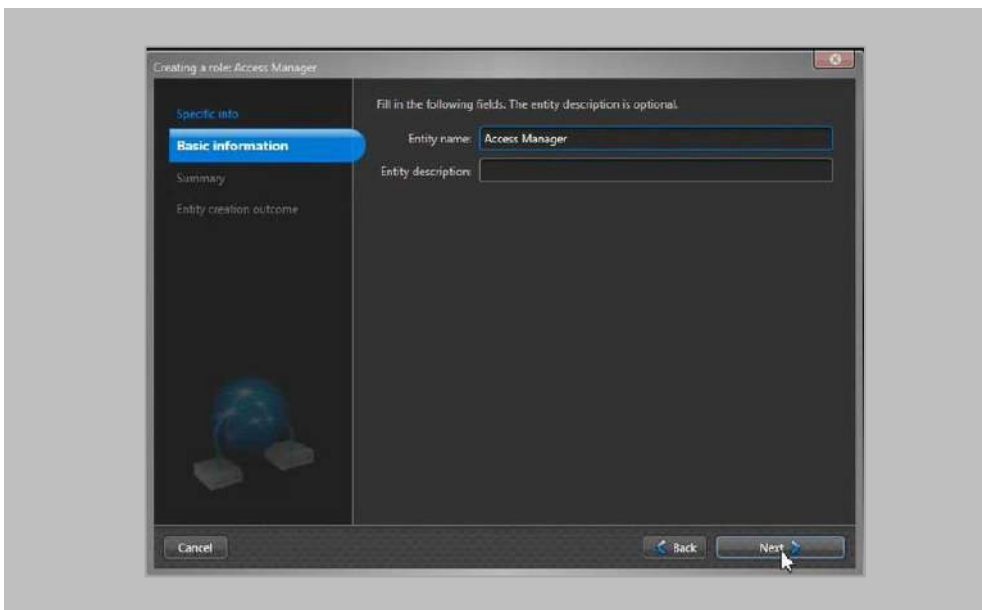
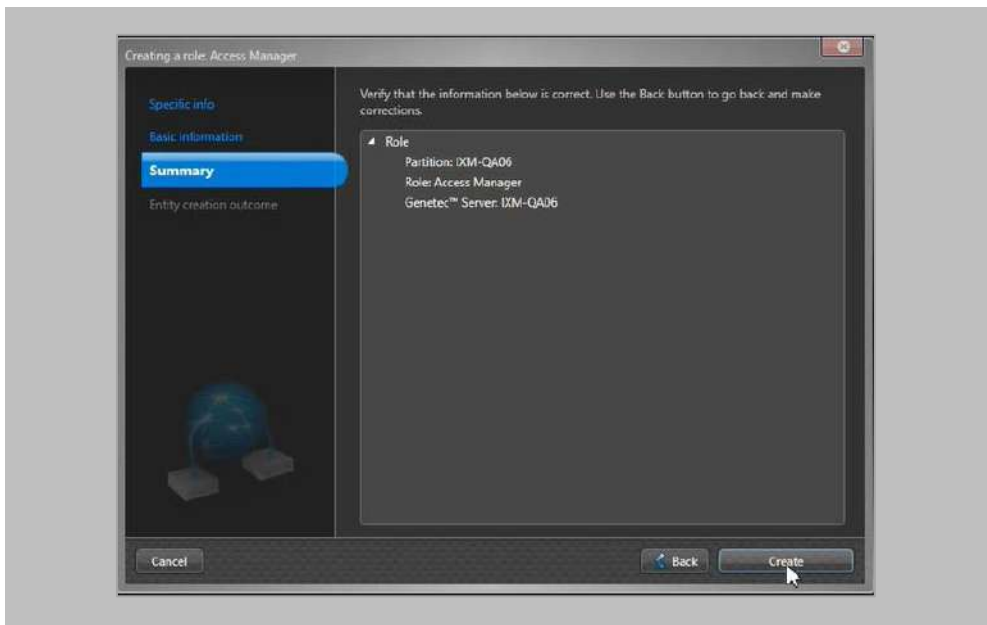


Figure 82: Config Tool – Add Access Manager

Click **Next**.





Click **Create**.

Access Manager is created.

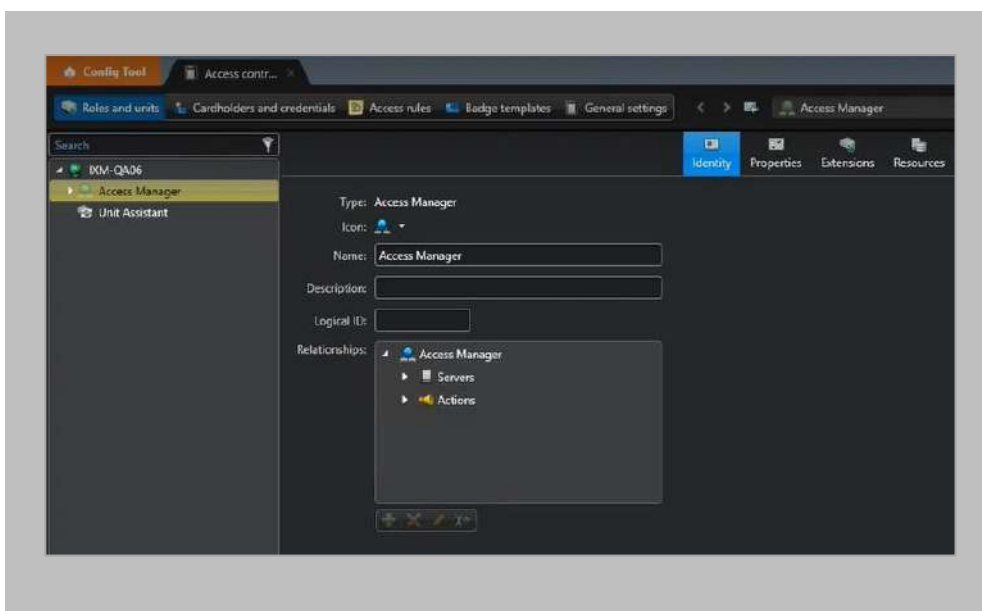


Figure 83: Config Tool – Access Manager created

 Note: You need to wait till the Access Manager becomes online.

STEP 4

Create Access Control Unit.

Right click on the **Access Manager** → **Add an entity** → **Access Control Unit**

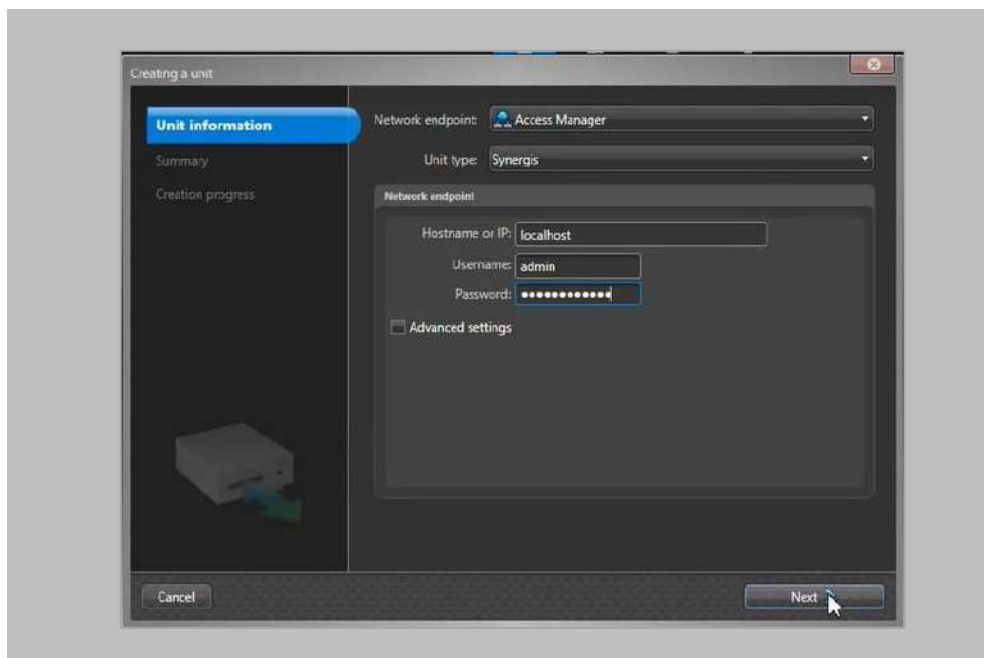


Figure 84: Config Tool – Add Access Control Unit

Hostname or IP

Enter the value of Hostname or IP. For example: “localhost”.

Username

Enter authorized User name to access Genetec server.

Password

Enter Password of authorized User to access Genetec server.

Click **Next** and **Create**.

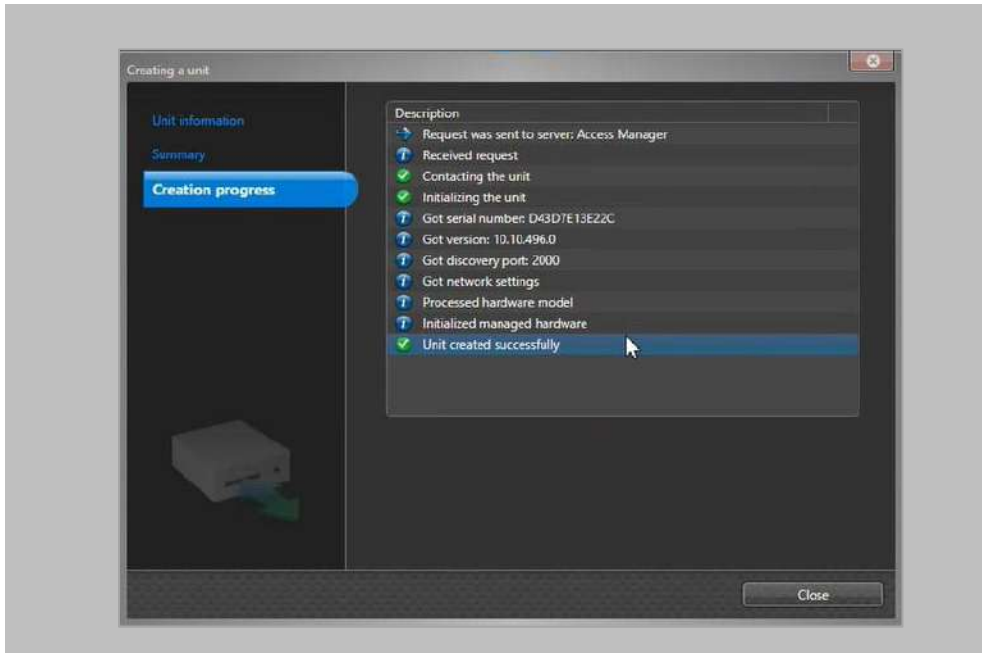


Figure 85: Config Tool – Creating Access Control Unit

Note: Description should show “Unit created successfully”.

Click **Close**.

Access Control Unit is added.

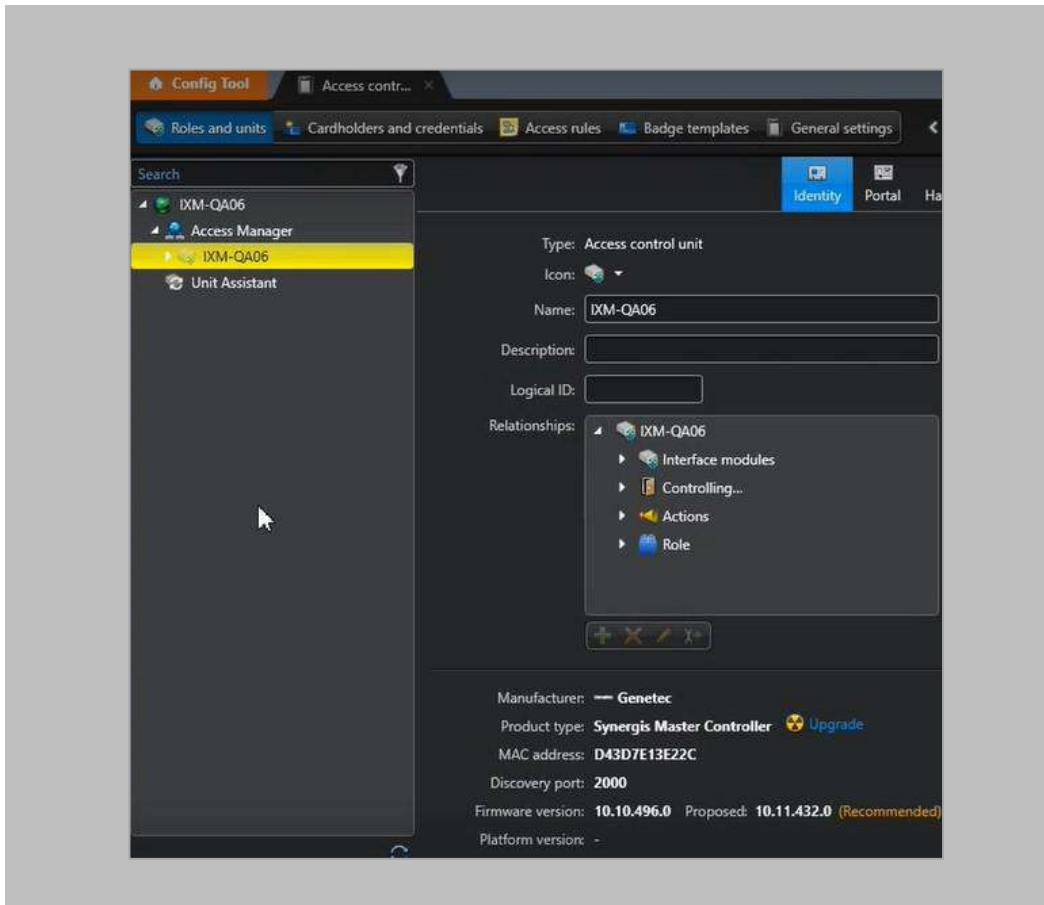


Figure 86: Config Tool – Access Control Unit created

Configuring RIO in IXM WEB

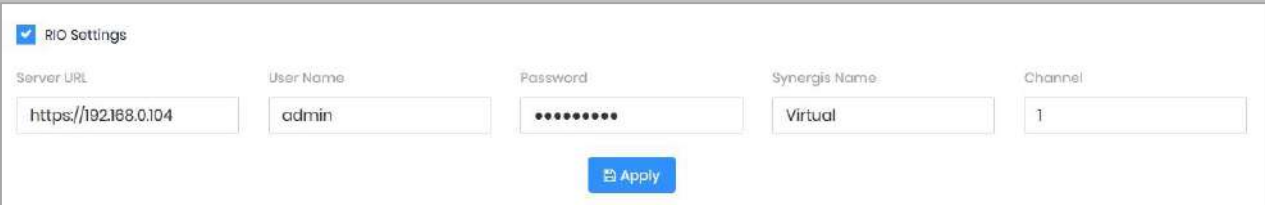
Procedure

STEP 1

Log into IXM WEB using valid credentials.

STEP 2

From the [Left Navigation Pane](#) → [Link](#) → click the blue [Security Center \(Genetec\)](#) icon.



RIO Settings

Server URL:

User Name:

Password:

Synergis Name:

Channel:

Figure 87: IXM WEB – RIO Settings

RIO Setting

Click on the check box to enable wireless connection to the Control Panel.

Server URL:

Enter Address of Synergis appliance.

User Name:

Enter User name to access Synergis appliance.

Password:

Enter Password to access Synergis appliance.

Synergis Name:

Enter Synergis Name to separate Synergis appliances for setups with multiple appliances.

Devices selected in the next step would be added to this channel on the Synergis appliance. A new channel will be created if required.

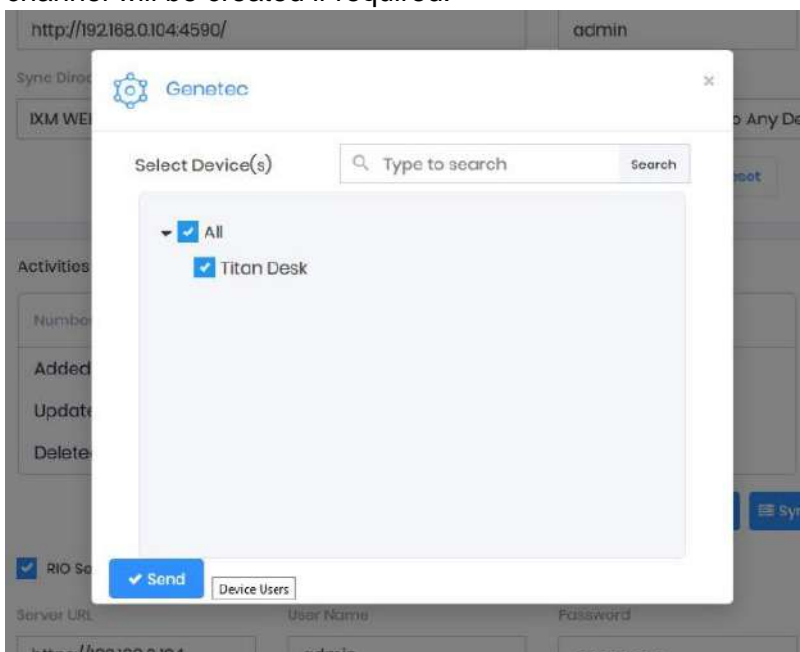


Figure 88: IXM WEB – Channel

Click on target services to select.

Click **Send**.

Note: Clicking **Send** will add each selected Invixium device as an interface on the Synergis appliance. The device name will be the name of the interface. Each interface will be given an input label, “**REX**”, an output label, “**Lock**”, and a reader label, “**Reader**”.

Configuring Invixium Device and Door in Config Tool

STEP 1

Go to Config Tool.

STEP 2

Navigate to **Access Manager** → Click on the created **Access Control Unit** → Click on **Peripherals** tab.

You should be able to see the name of Invixium device in the format:

Invixium – Product Type (Channel name – Invixium device name)

The State of the device should be "Online".

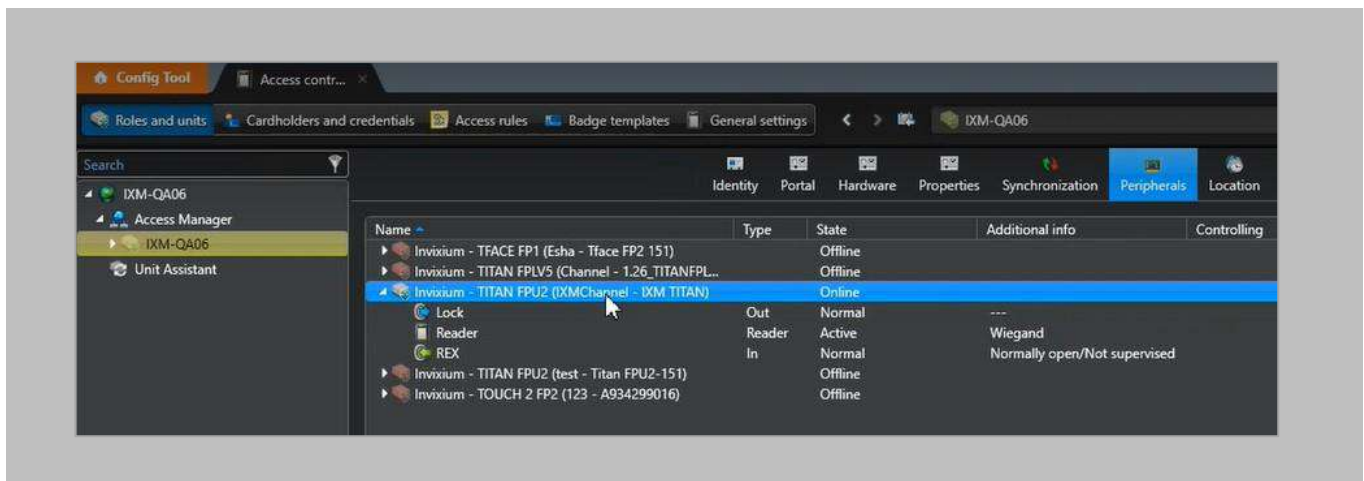


Figure 89: Config Tool – Peripherals

STEP 3

Create an Area or Door.

Navigate to **Area View** → Right Click on the **Server Name** → Click on **Add an entity** → Click on **Door**

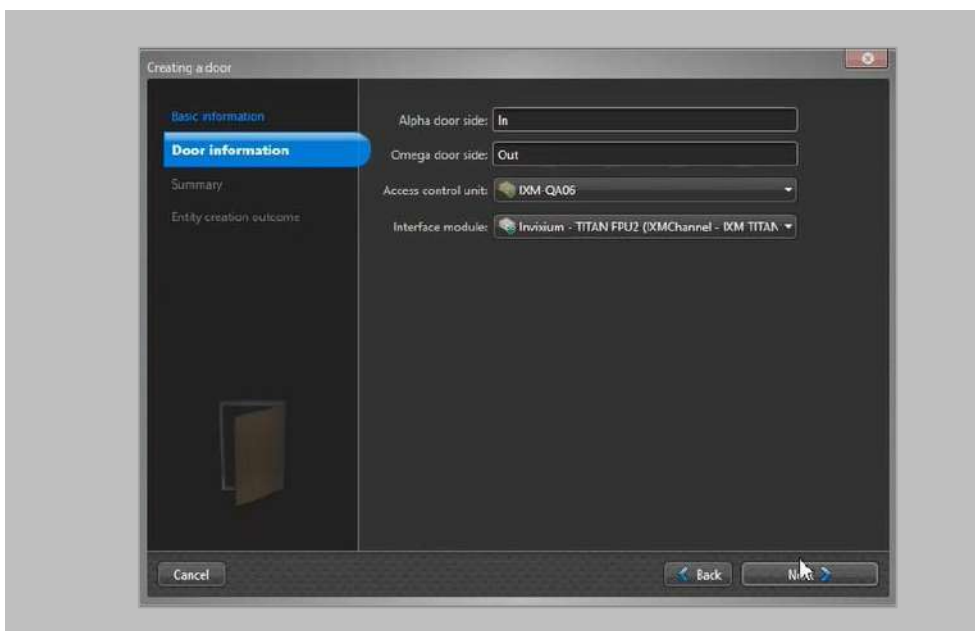
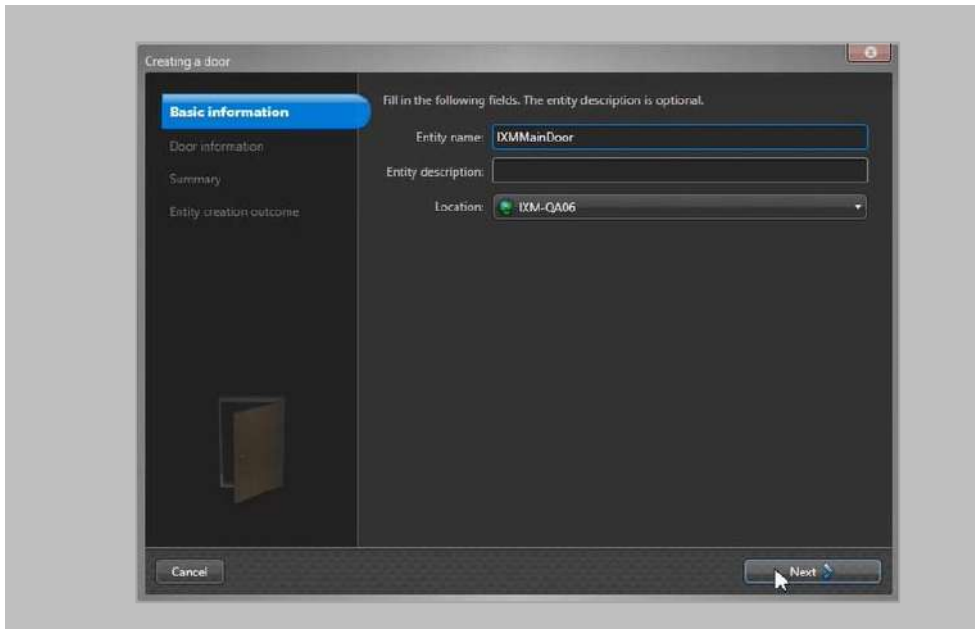


Figure 91: Config Tool – Door Information

Access control unit

Click to select the Access control unit you created from the list.

Interface module

Click to select the Invoxium device on which RIO settings were applied.

Click **Next** and **Create**.

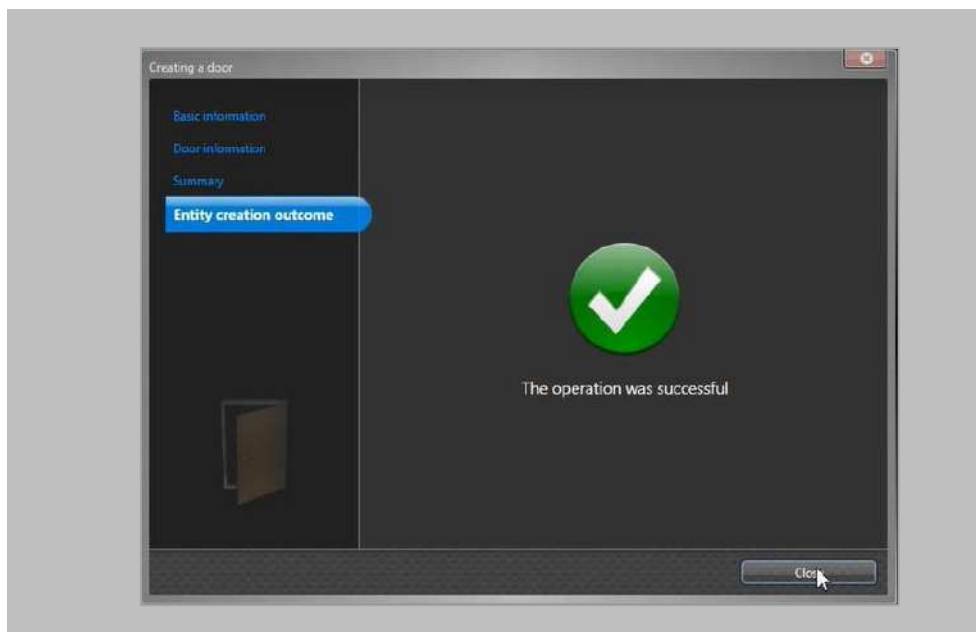


Figure 92: Config Tool – Door is created

Click **Close**.

STEP 4

Configure the Door.

Navigate to **Area View** → Click on the **Door** created by you → navigate to **Hardware** tab

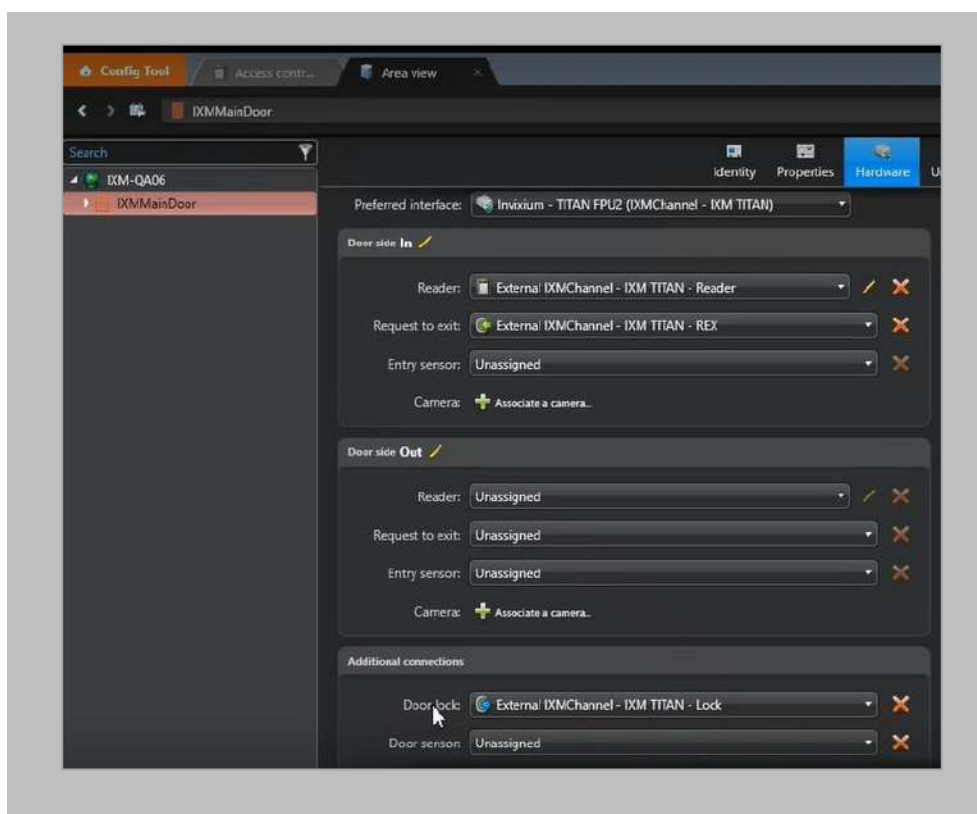


Figure 93: Config Tool – Configuring Door

Note: In case of single Reader, either Door Side In can be configured or Door Side Out and not both of them.

Reader

Click to select the Invixium device reader as External Reader.

Request to exit

Click to select the Invixium device as REX.

Door lock

Click to select the Invixium device for Door lock.

Click **Apply**.

STEP 5

Configure the Schedule.

Select **Door** which you have created → Click on **Access Rules** tab → Click on **+** icon → Click on **All open rule**

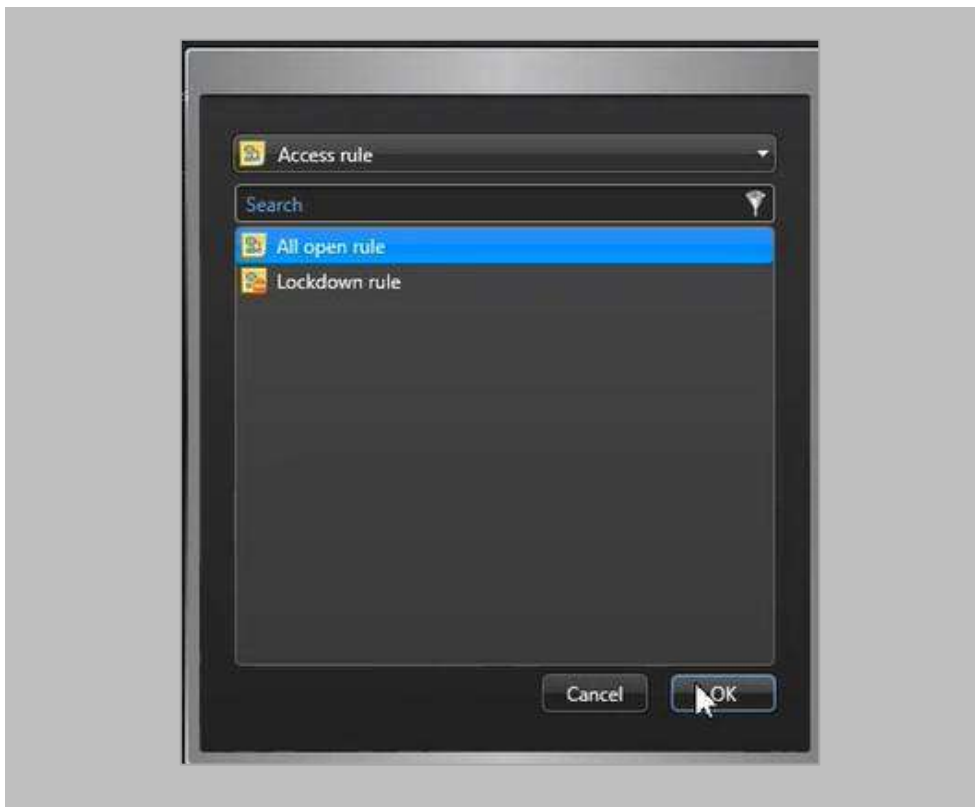


Figure 94: Config Tool – Access Rule

Click **OK** and **Apply**.

Monitoring Events and alarms

STEP 1

Log in to Security Desk of GSC and Navigate to **Monitoring** tab.

STEP 2

You will be able to see the Door that you have configured.

Note: The View Area is empty right now.

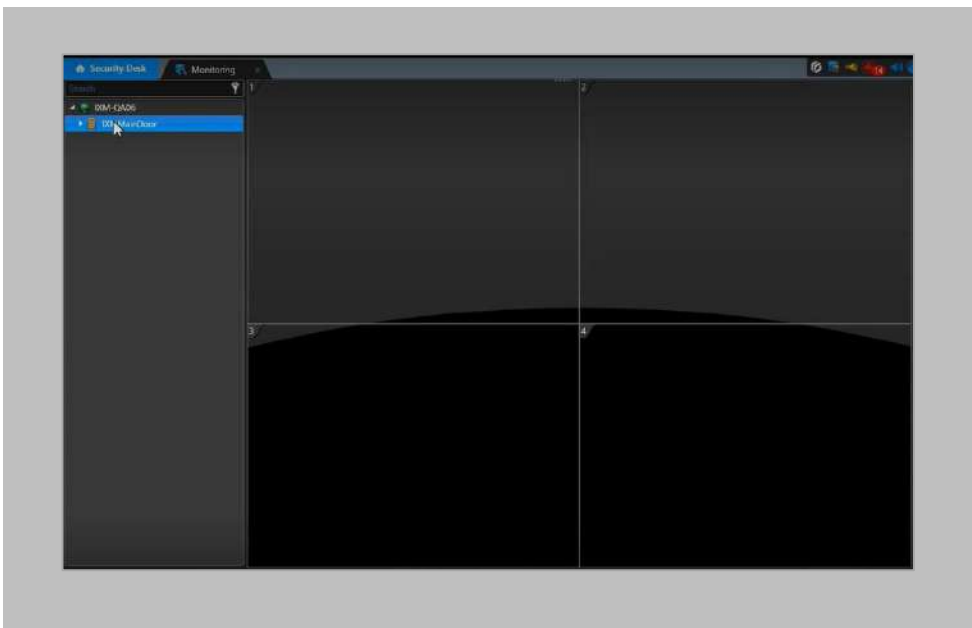


Figure 95: Security Desk – Monitoring

STEP 3

Drag and drop the Door to the View Area.

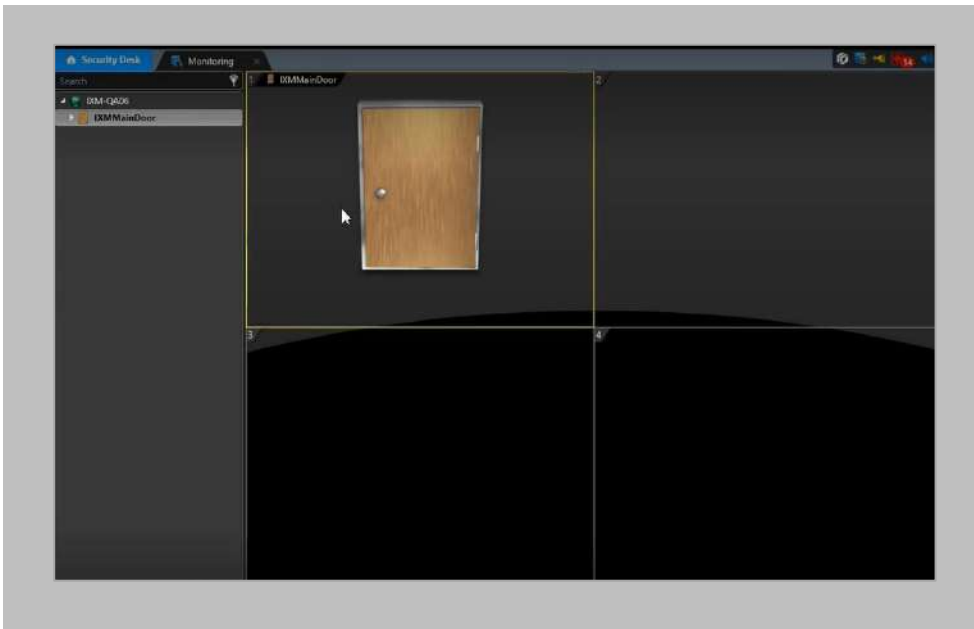


Figure 96: Security Desk – View Area

STEP 4

Perform authentication event on the device and verify the event on Genetec Desk.

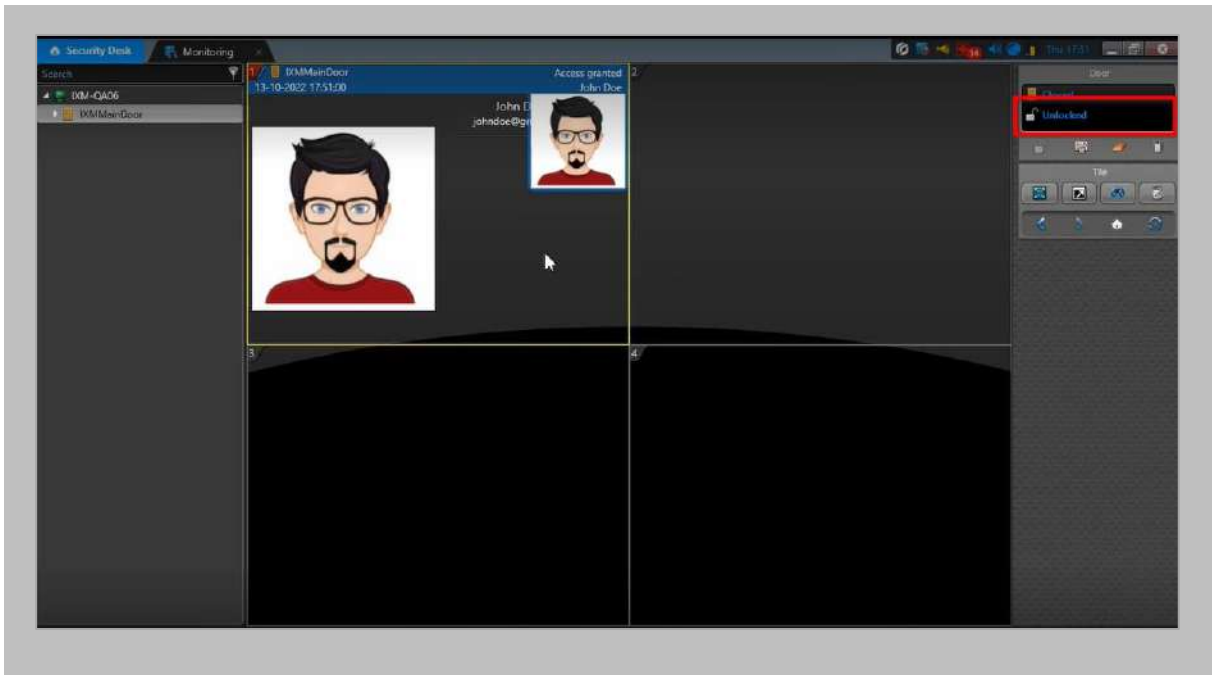


Figure 97: Security Desk – Access Granted

18. Appendix

Installing Invixium IXM WEB with Default Installation using SQL Server 2014



Note:

- By default, the IXM WEB installer will install SQL server 2014
- It is highly recommended to use SQL server 2016 or higher

If it is intended for IXM WEB to use a non-default SQL 2014 installed instance, please refer to Installing SQL Instance.

Procedure

STEP 1

Run the [installer.exe](#)

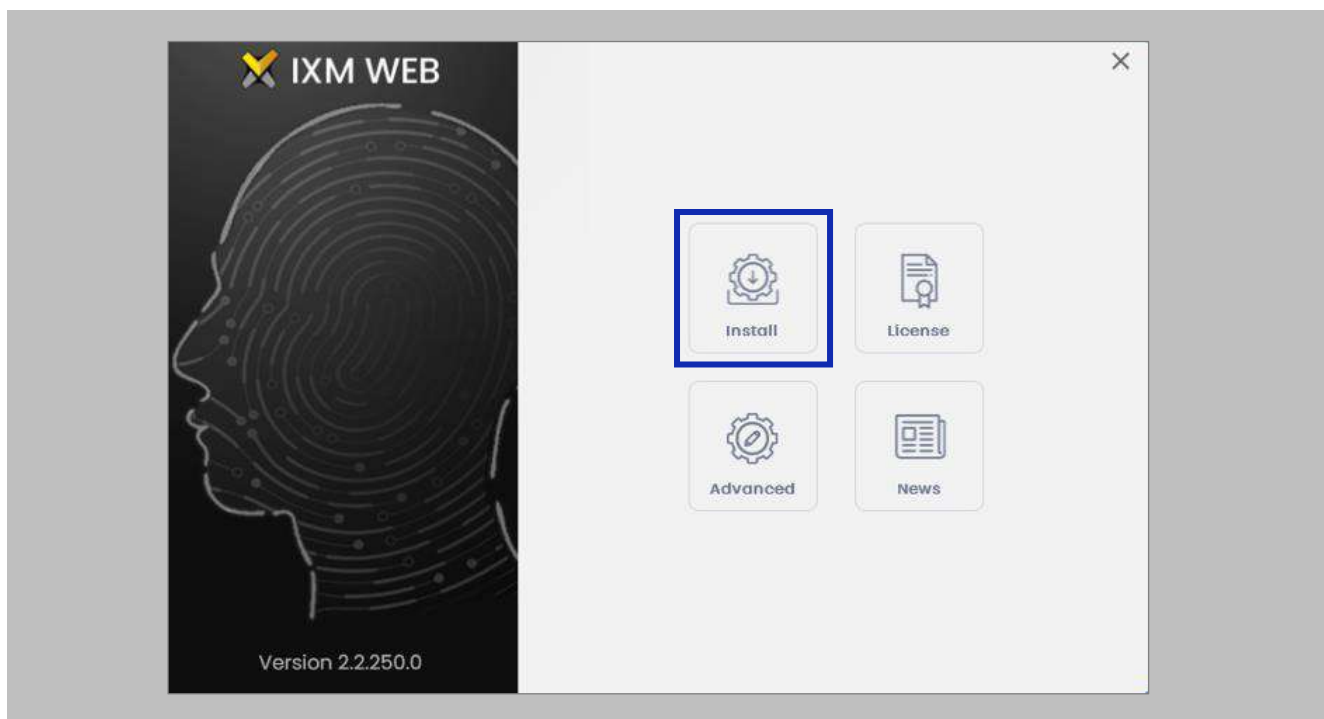


Figure 98: Install IXM WEB



Note: Installs SQL 2014 Express.

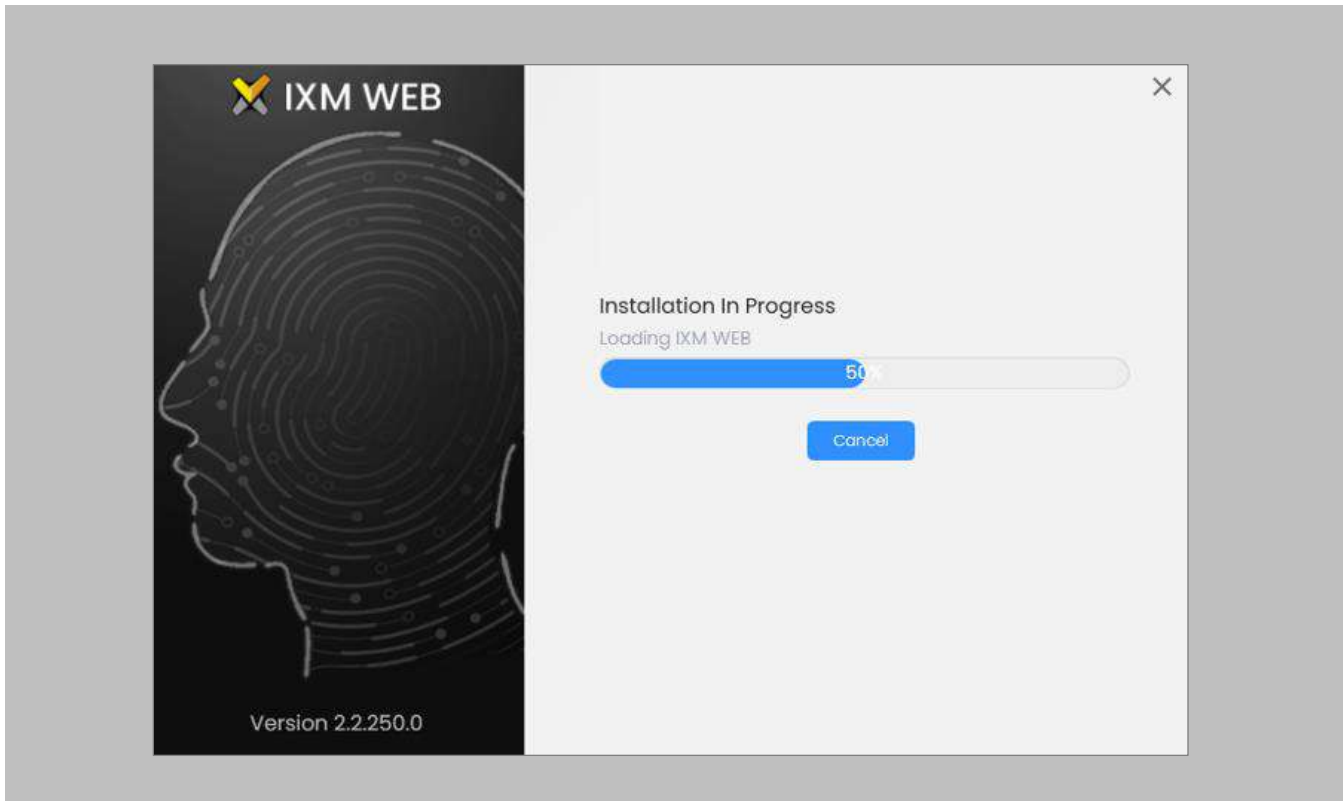


Figure 99: Loading SQL Express & Installation Progress

STEP 2

Once the installation is completed, check these services to make sure they are all running:

- Bonjour
- Invixium Device Discovery
- IXM WEB

STEP 3

Run **IXM WEB** by selecting it from the Windows Start menu or your desktop.

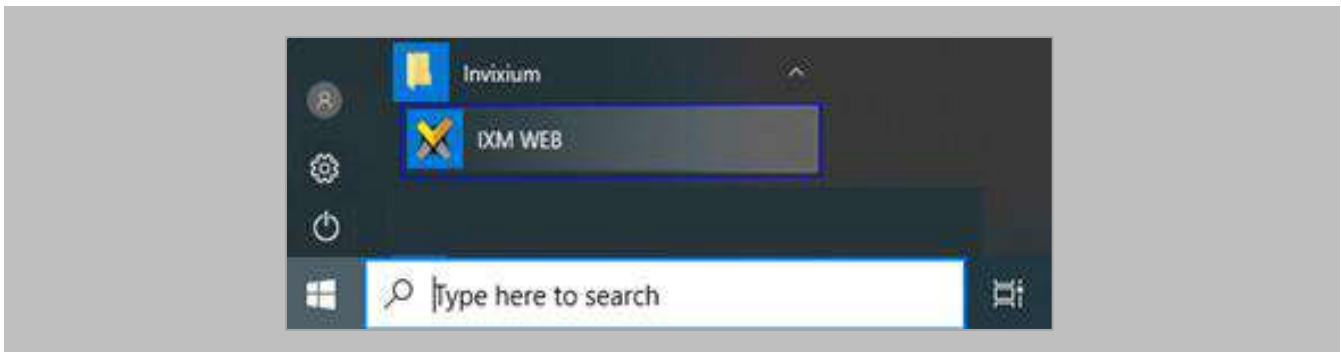


Figure 100: IXM WEB - Shortcut Icon on Desktop

STEP 4

Select **Windows Authentication** and the **SQL Server Name**, then click on **Connect**.

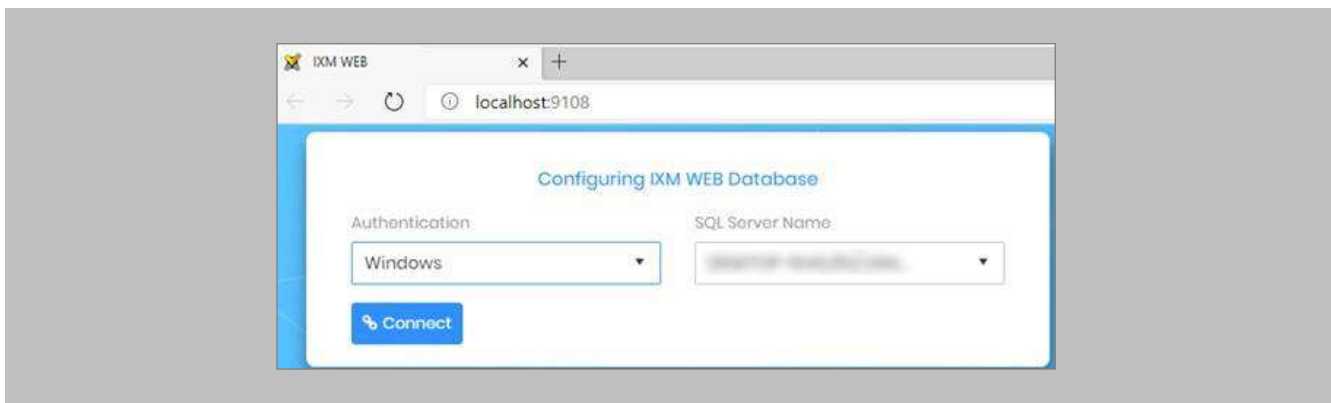


Figure 101: IXM WEB - Configuring IXM WEB Database

STEP 5

Select the **Database Name** and then click **Next**.

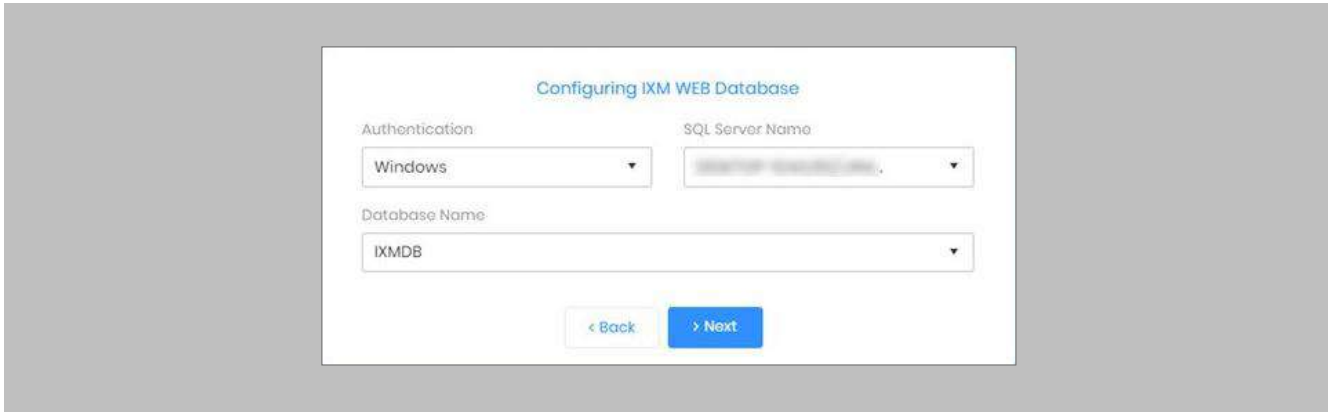


Figure 102: IXM WEB - Select Database Name

STEP 6

Fill in the fields under the **Create Account** section and then select **Save At Server URL**.

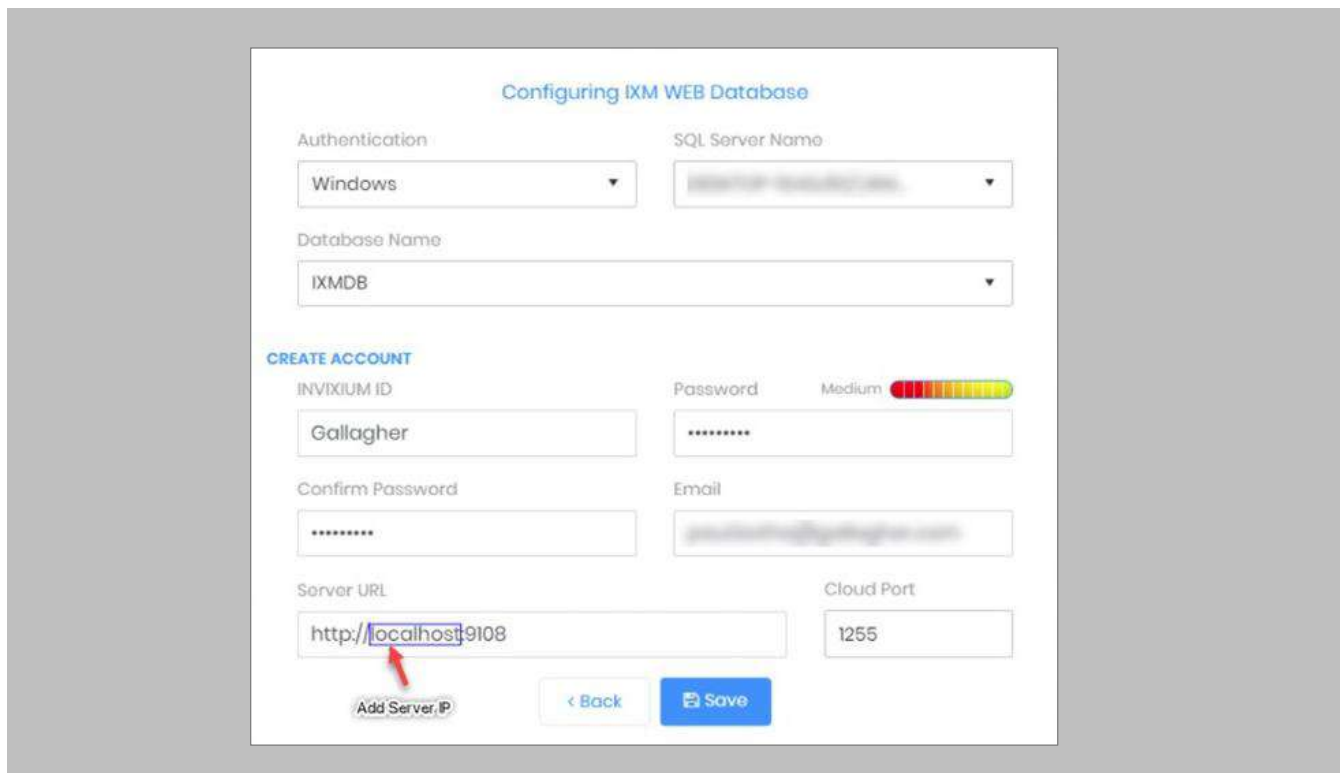


Figure 103: IXM WEB - Server URL format



STEP 7

Use the server machine's **IP Address** which will interface with the Invixium reader.

Pushing Configuration to Multiple Invoxium Readers

Procedure

STEP 1

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

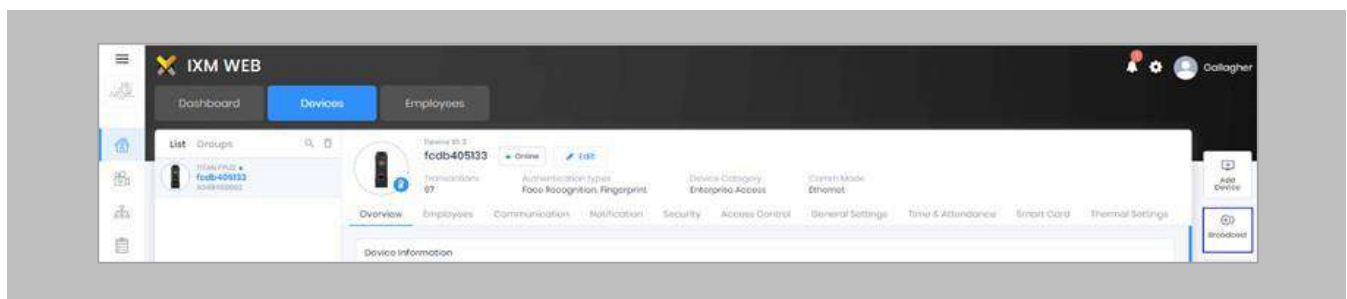


Figure 104: IXM WEB - Broadcast Option

STEP 2

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

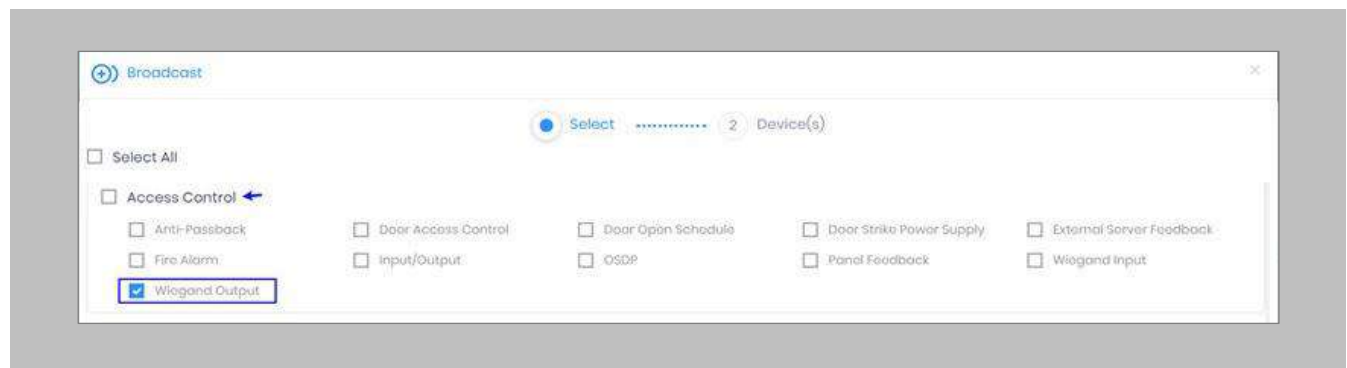


Figure 105: IXM WEB - Wiegand Output Selection in Broadcast

STEP 3

Click **Broadcast**.

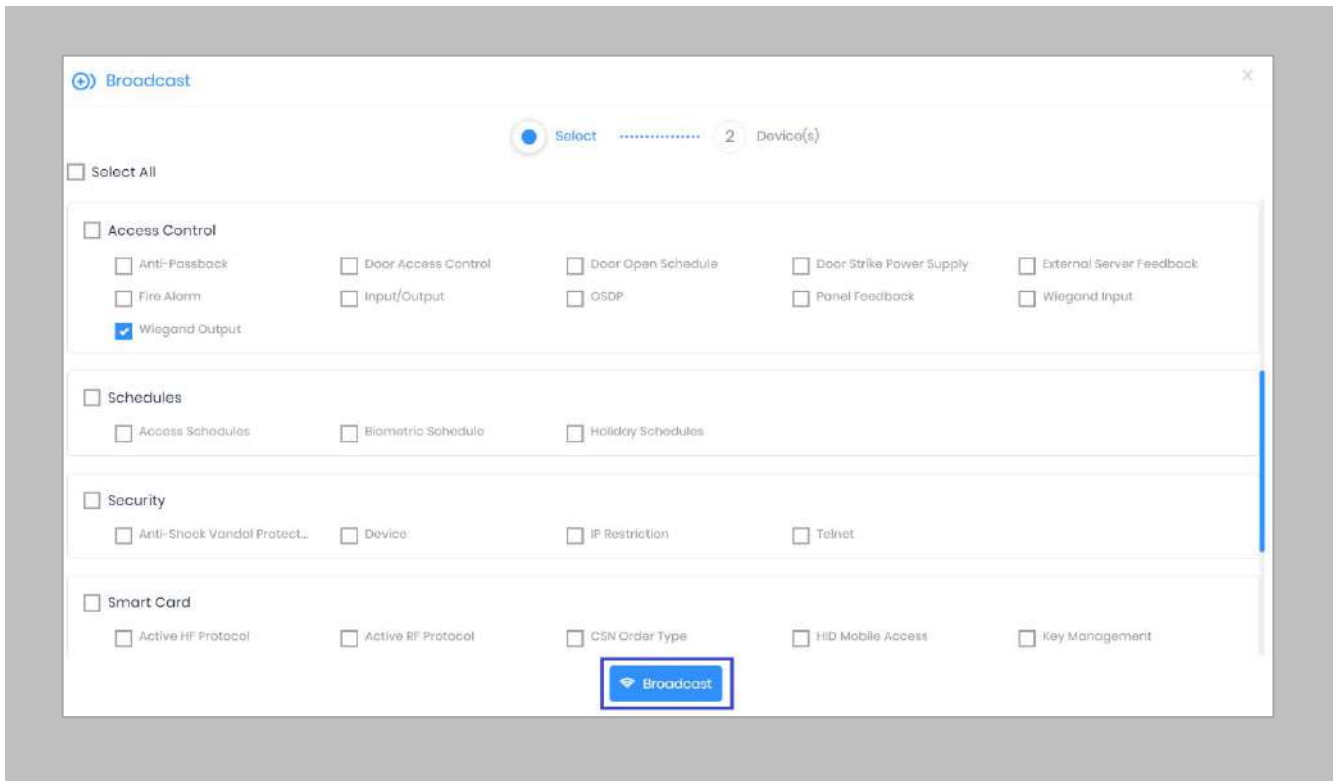


Figure 106: IXM WEB - Broadcast Wiegand Output Settings

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.

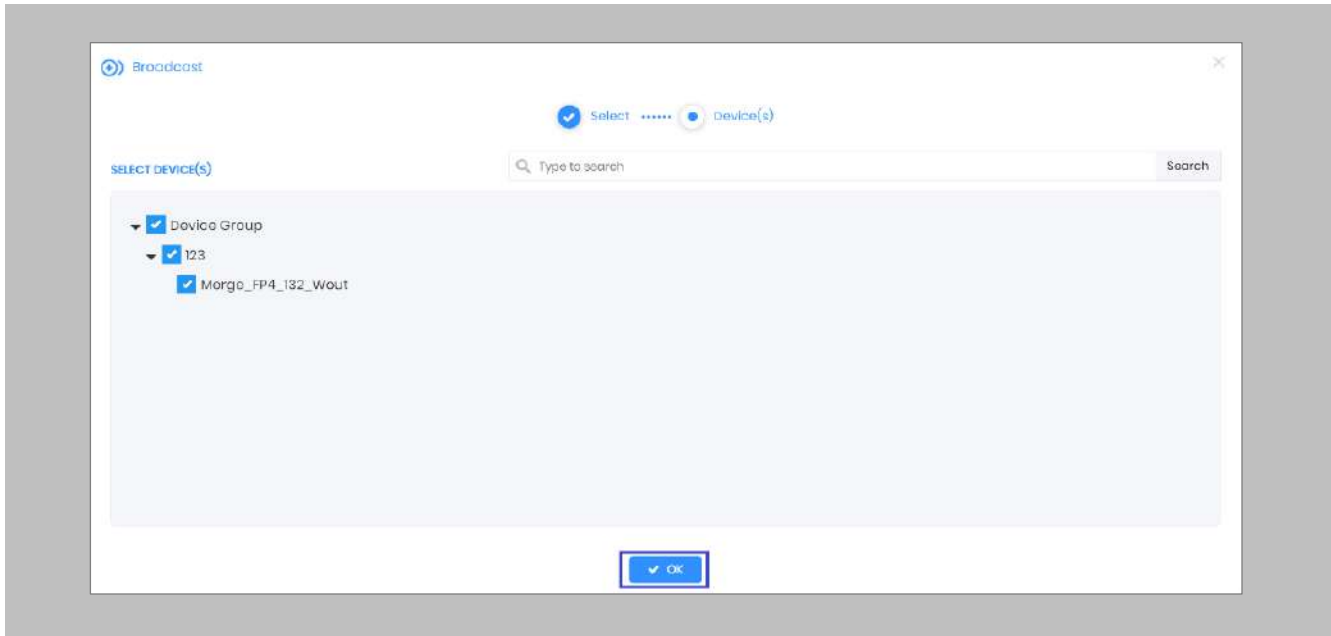



Figure 107: IXM WEB - Broadcast to Devices

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: <ul style="list-style-type: none"> • Red • Green • Yellow • Blue

Table 5: IXM WEB - OSDP Configuration Options

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

Display OSDP Text	Enables to display OSDP Text.
Display Message	<p>Notification on the device's screen.</p> <p>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.</p> <p>If disable: Displays only the Access Control Panel notification.</p>

Table 6: IXM WEB - OSDP Text Options

STEP 3

Click **Apply** to save the settings.

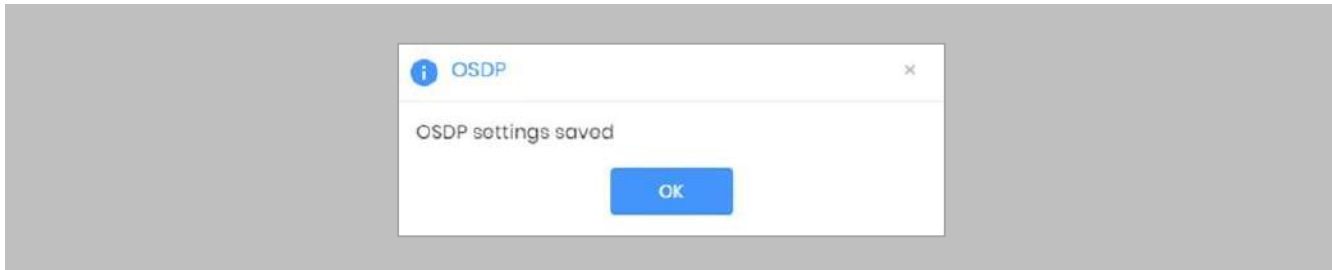


Figure 109: IXM WEB - Save OSDP Settings

STEP 4

Open the edit option on the reader and note the **Device ID**. This will be the address used in the configuration of the reader in the Security Center.

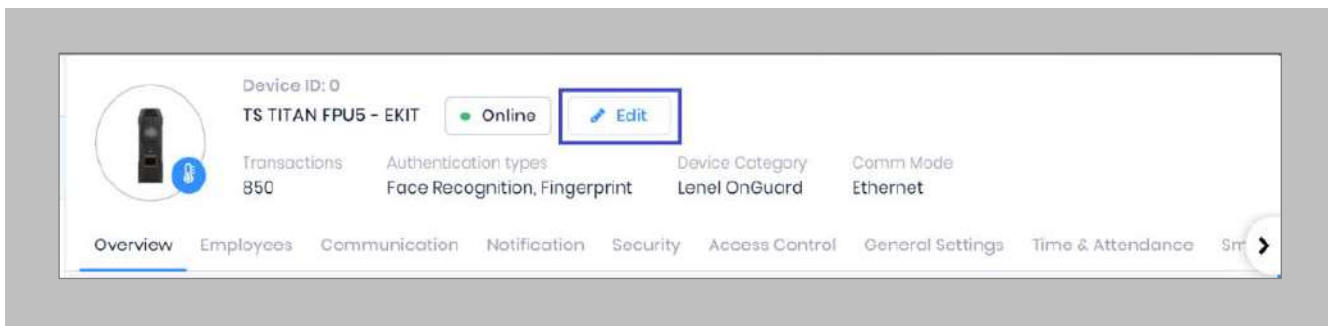


Figure 110: IXM WEB - Edit Device

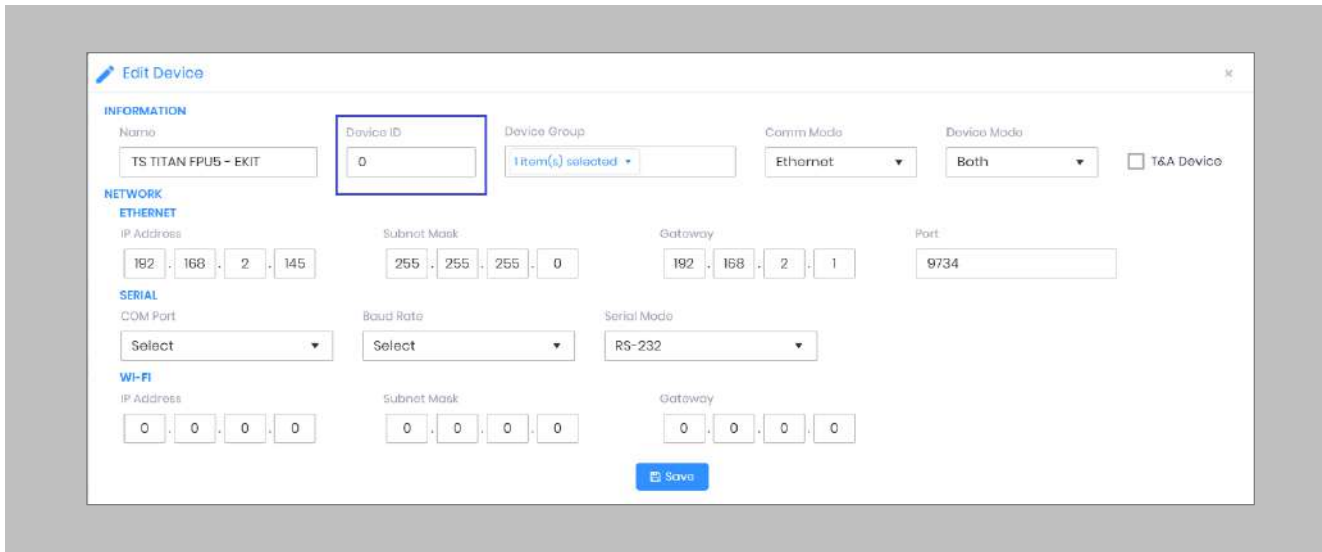


Figure 111: IXM WEB - Edit Device Options

STEP 5

Wiegand Input and output also need to be **configured** to allow OSDP communication to work. Create the same settings for Wiegand connections as you did previously.

STEP 6

Disable Panel feedback for any OSDP-connected reader to stop multiple access granted messages from being sent to Security Center.

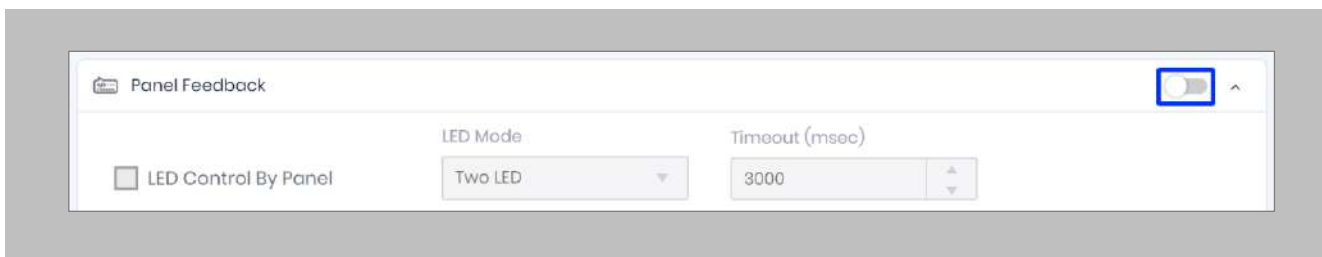


Figure 112: IXM WEB - Disable Panel Feedback

Wiring and Termination

Procedure

Earth Ground

For protection against ESD, Invixium recommends the use of a ground connection between each Invixium device to 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.

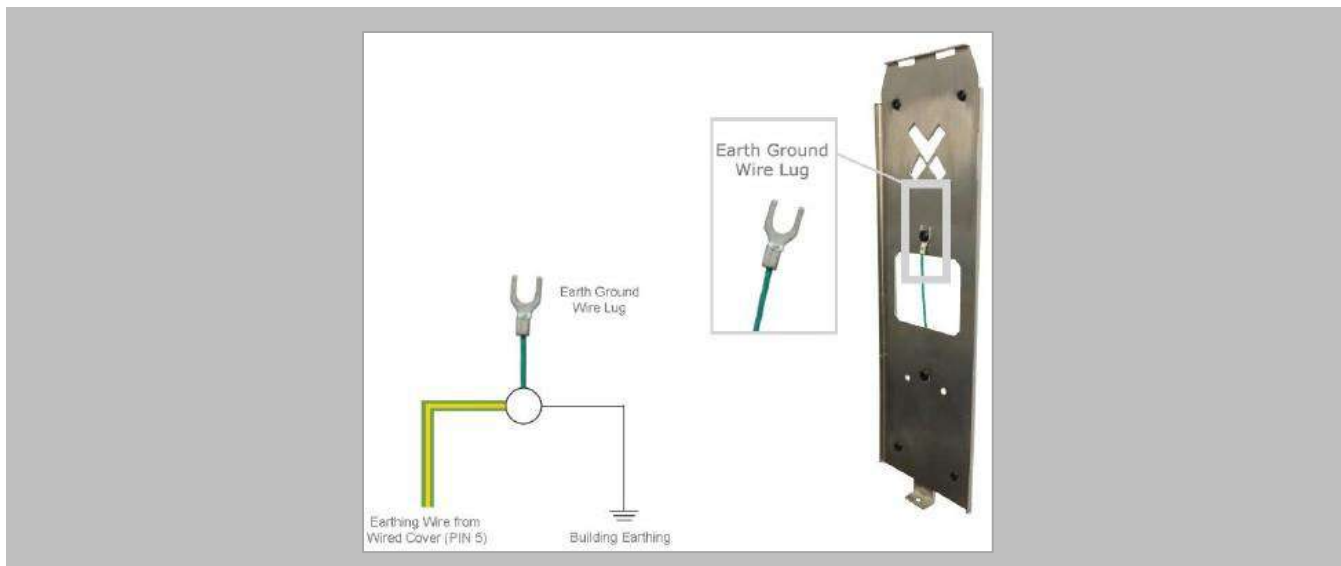


Figure 113: Earth Ground Wiring

Wiring

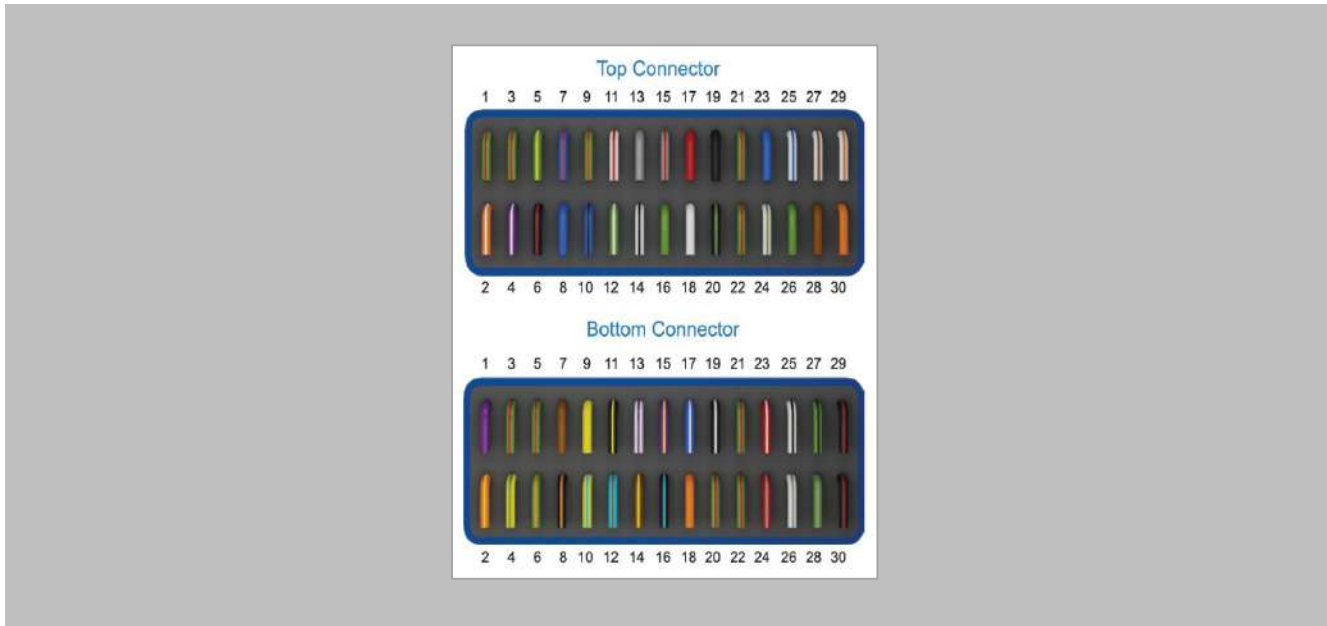


Figure 114: IXM TITAN – Top & Bottom Connector Wiring

Get Wired Top Connector

Wire Color	Wire	Label	Pin(s)	Wire Color	Wire	Label	Pin(s)
Green/Red		RESERVED	1	Green		WDATA_OUT0	16
Orange/White		RS232_RX	2	Red		V_INPUT+	17
Green/Red		RESERVED	3	White		WDATA_OUT1	18
Purple/White		RS232_TX	4	Black		V_INPUT-	19
Green/Yellow		EGND	5	Black/Green		WGND	20
Black/Red		SGND	6	Green/Red		RESERVED	21
Blue/Red		RS485_T	7	Green/Red		RESERVED	22
Blue		RS485_D+	8	RJ 45 Receptacle		TCP/IP	23-30
Green/Red		RESERVED	9	POWER			
Blue/Black		RS485 D-	10	Wiegand			
White/Red		RLY_NC	11	OSDP			
Green/White		WDATA_IN0	12				
Grey		RLY_COM	13				
White/Black		WDATA_IN1	14				
Grey/Red		RLY_NO	15				

Get Wired Bottom Connector

Wire Color	Wire	Label	Pin(s)	Wire Color	Wire	Label	Pin(s)
Purple		DAC_SUPPLY	1	Black/Cyan		SPI_GND	16
Orange/Yellow		SPO1	2	Blue/White		DAC_IN3	17
Green/Red		RESERVED	3	Orange		DAC_OUT	18
Yellow/Green		SPO2	4	Black/White		DAC_IN_GND	19
Green/Red		RESERVED	5	Green/Red		RESERVED	20
Green/Orange		SPO3	6	Green/Red		RESERVED	21
Brown		ACP_LED1	7	Green/Red		RESERVED	22
Black/Orange		SPO_GND	8	Red/White		USB0_YBUS	23
Yellow		ACP_LED2	9	Red/Grey		USB1_YBUS	24
Yellow/Cyan		SPI1	10	White/Black		USB0_D-	25
Black/Yellow		ACP_LED_GND	11	White/Grey		USB1_D-	26
Cyan/Brown		SPI2	12	Green/Black		USB0_D+	27
White/Purple		DAC_IN1	13	Green/Grey		USB1_D+	28
Brown/Yellow		SPI3	14	Black/Red		UGB0_GND	29
Purple/Yellow		DAC_IN2	15	Black/Red		USB1_GND	30

Figure 115: Power, Wiegand & OSDP Wires

All Invixium devices support Wiegand, OSDP and RIO protocol (wireless).

Invixium devices can be integrated with Genetec Controller on:

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

Wiegand Connection

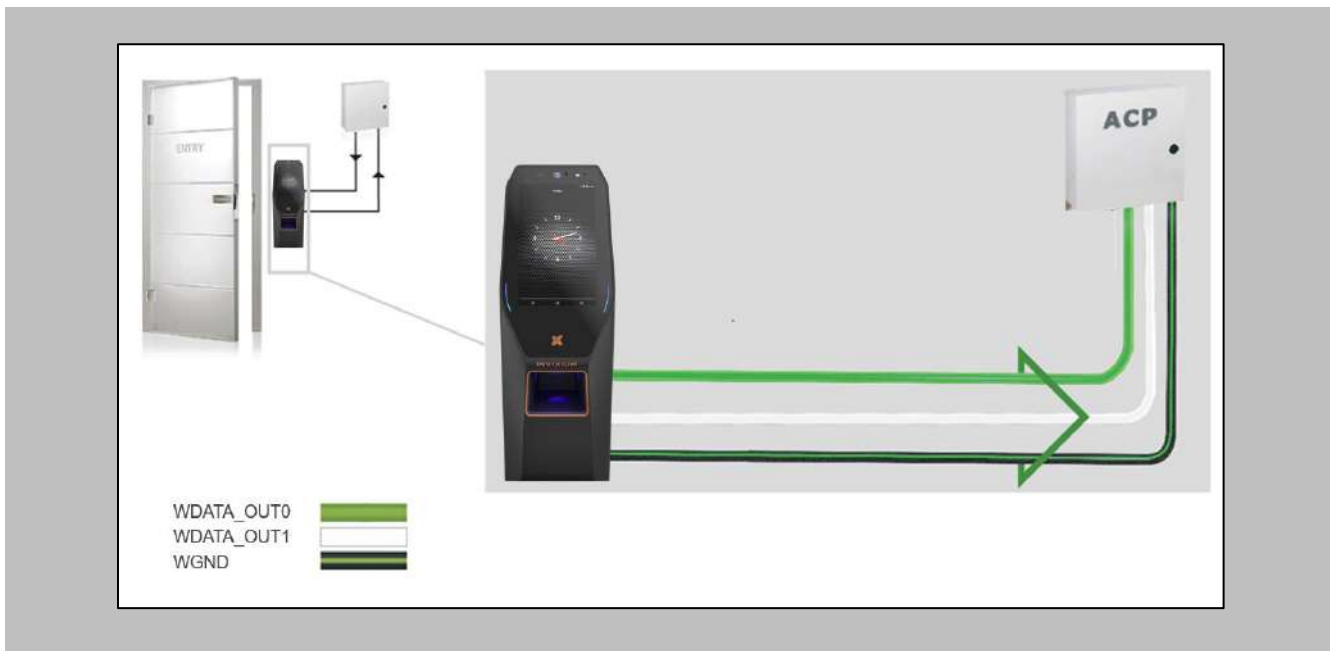


Figure 116: IXM TITAN - Wiegand

Wiegand Connection with Panel Feedback

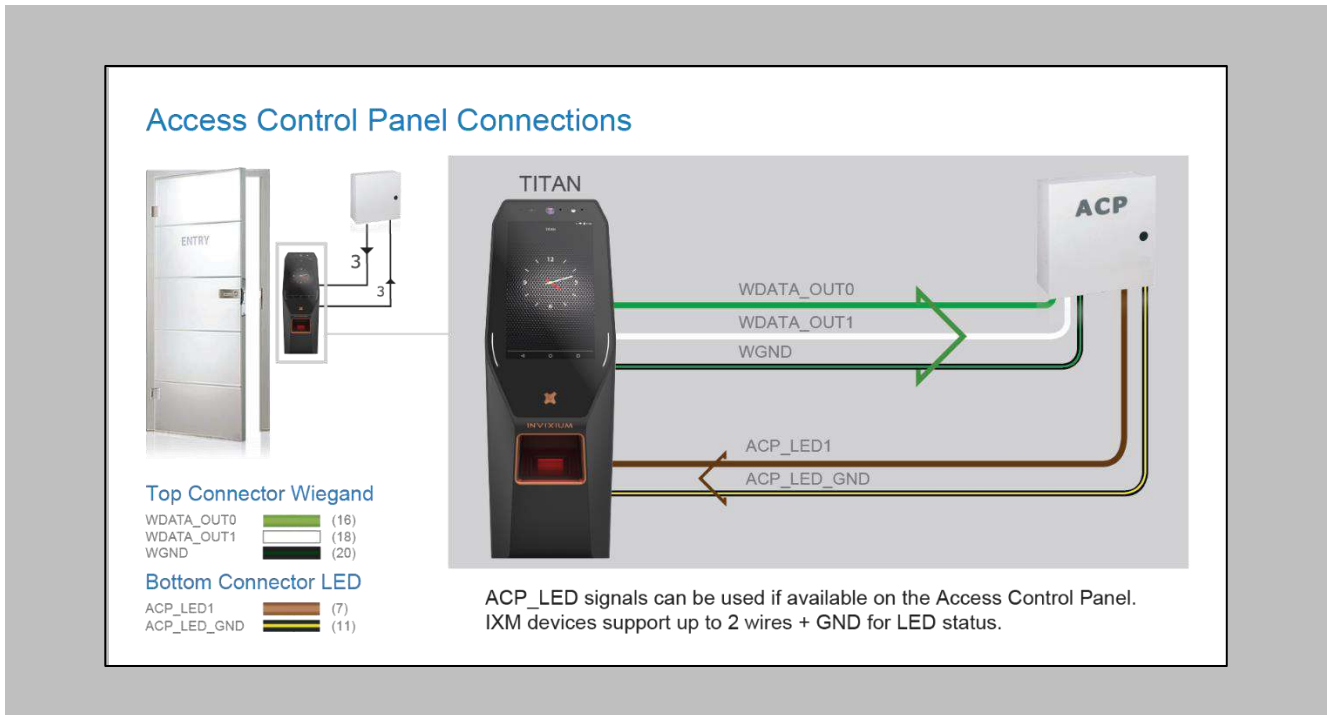


Figure 117: IXM TITAN - Panel Feedback

OSDP Connections

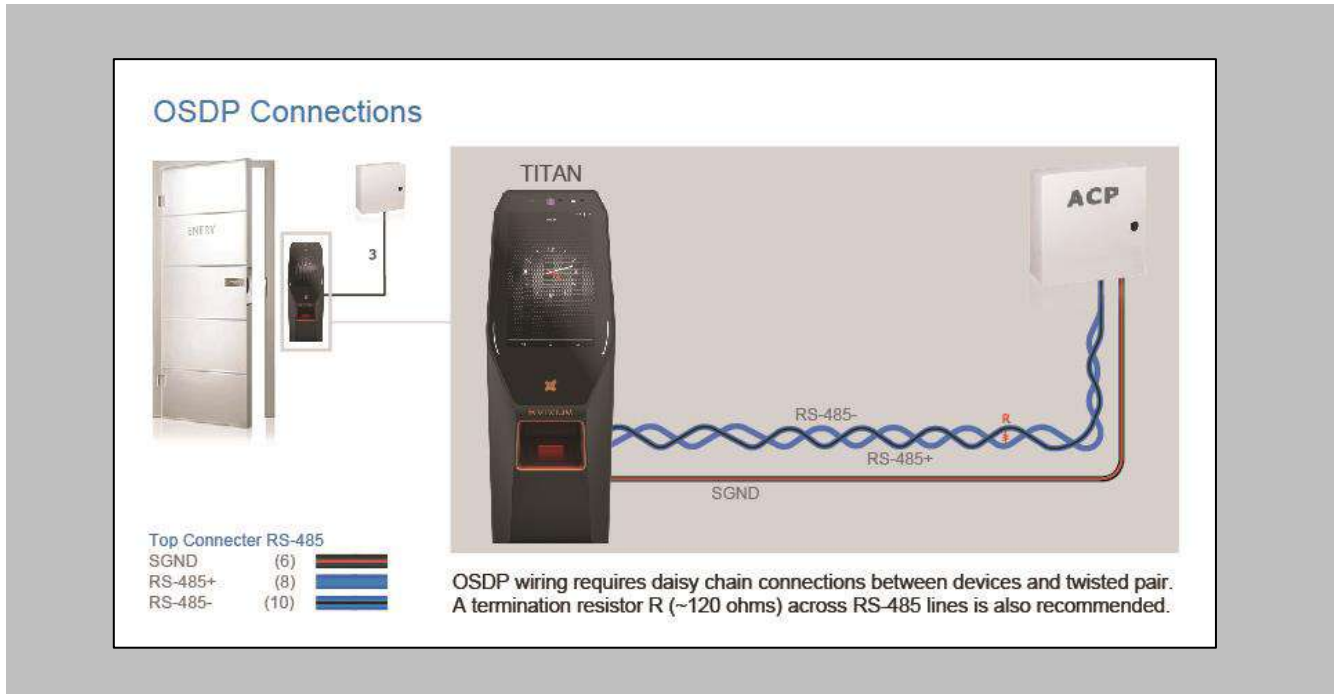



Figure 118: IXM TITAN - OSDP Connections

19. Troubleshooting

Reader Offline from the IXM WEB Dashboard

 Note: Confirm communication between the IXM WEB server and the Invoxium reader.

Procedure

STEP 1

From [Home](#), click the [Devices](#) tab.

STEP 2

[Select](#) any device.

STEP 3

Navigate to the [Communication](#) tab.

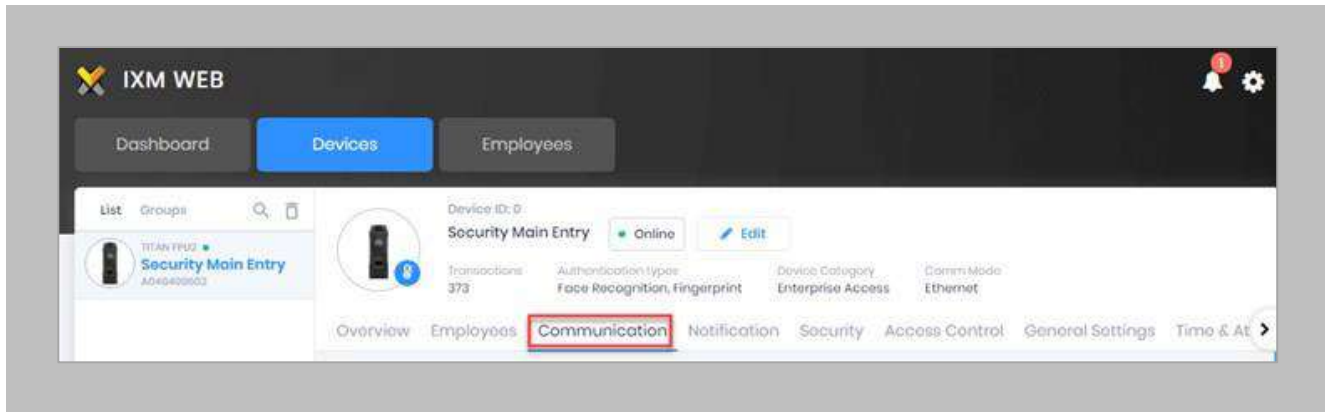


Figure 119: IXM WEB - Device Communication Settings

STEP 4

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

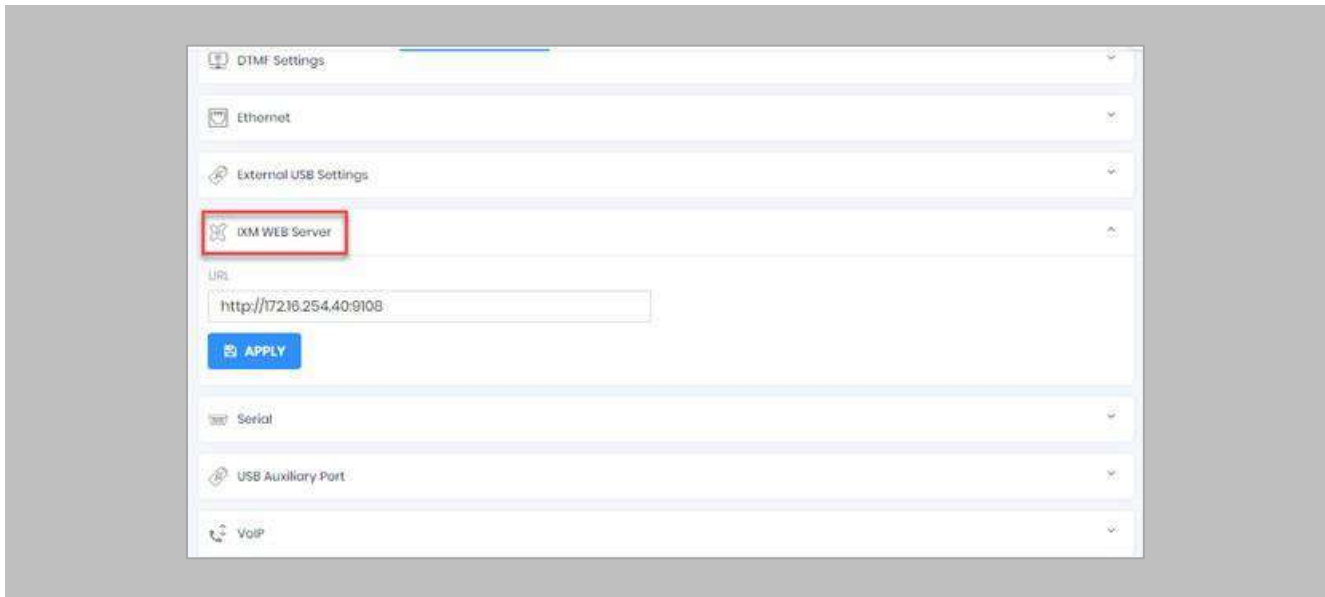


Figure 121: IXM WEB - Server URL Setting

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

STEP 5

Enter the **IP address** of the Invoxium 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.

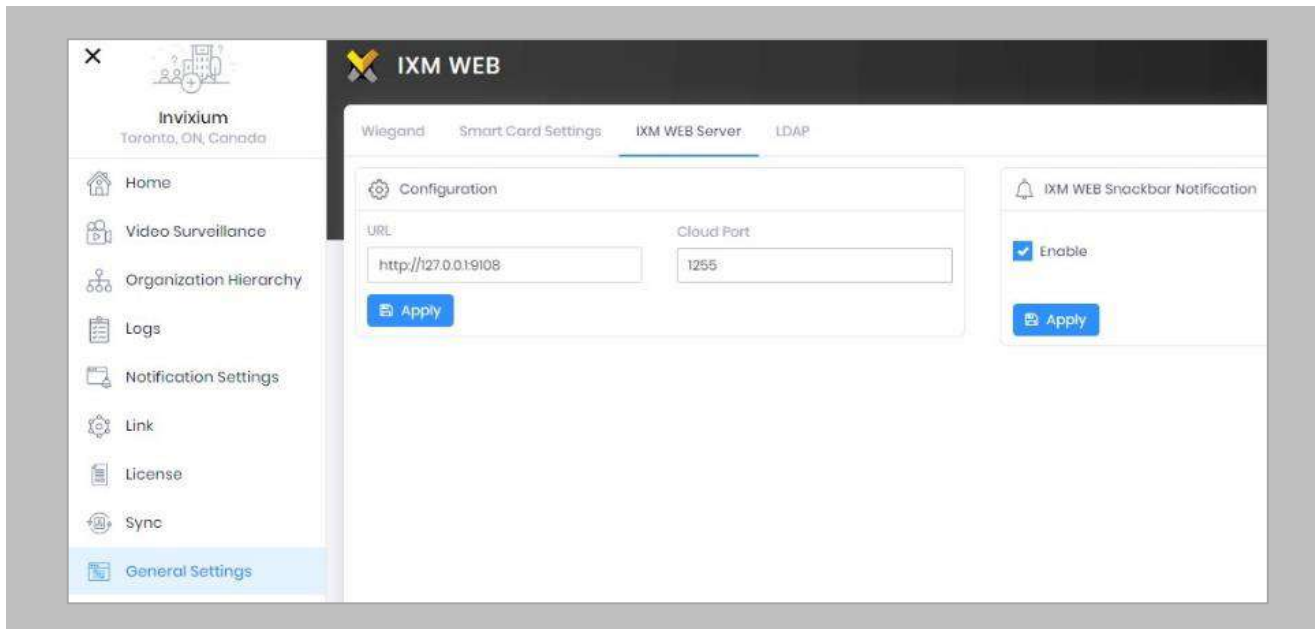


Figure 123: IXM WEB - Server URL Setting from General Settings

Elevated Body Temperature Denied Access but Granted Access in Security Center

Procedure

STEP 1

Ensure that **Thermal Authentication** is selected to none from **IXM WEB** → **Device** → **Access control settings** → **Wiegand Output**.

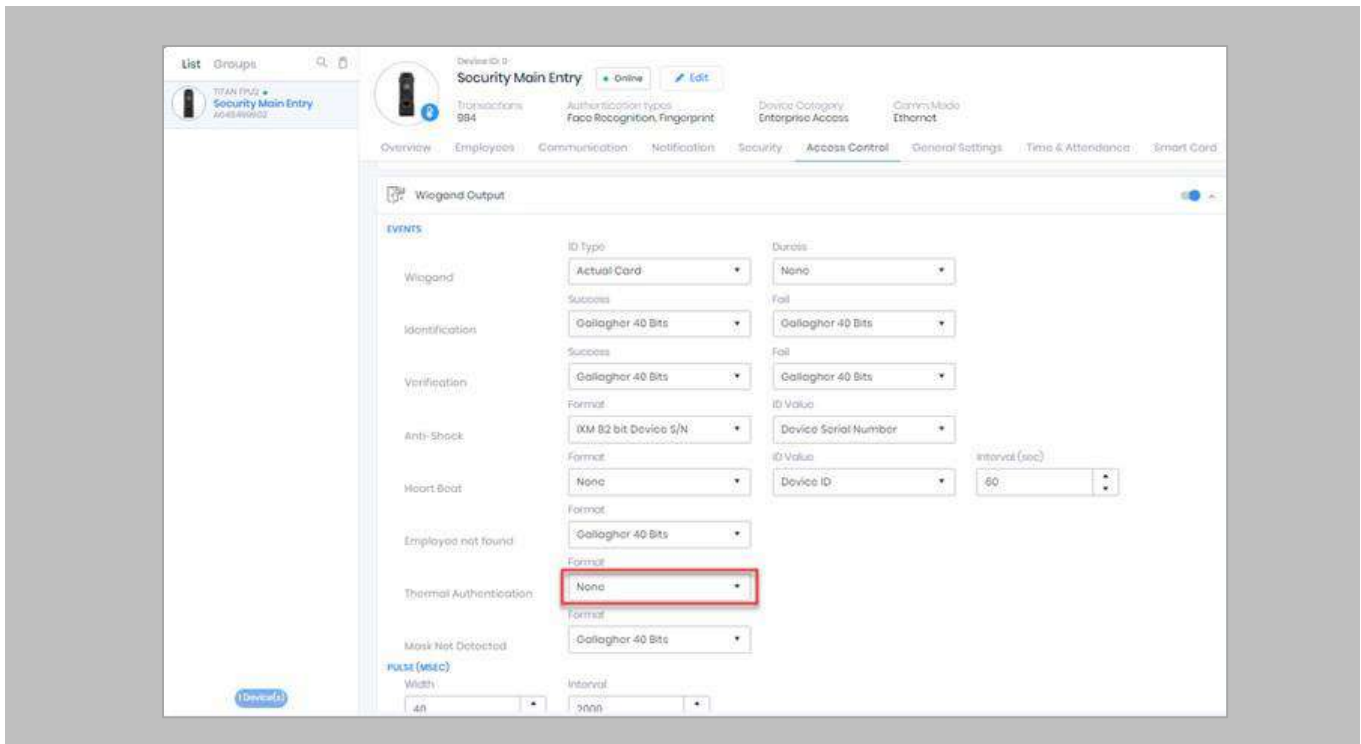


Figure 125: IXM WEB - Thermal Authentication Wiegand Output Event



Note: If Thermal Authentication events are configured for any format, it generates Wiegand output accordingly for a high-temperature event.

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.

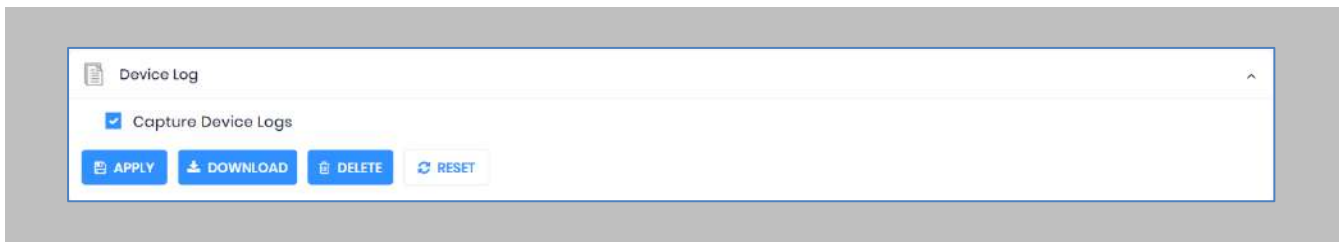


Figure 126: IXM WEB - Enable Device Logs

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

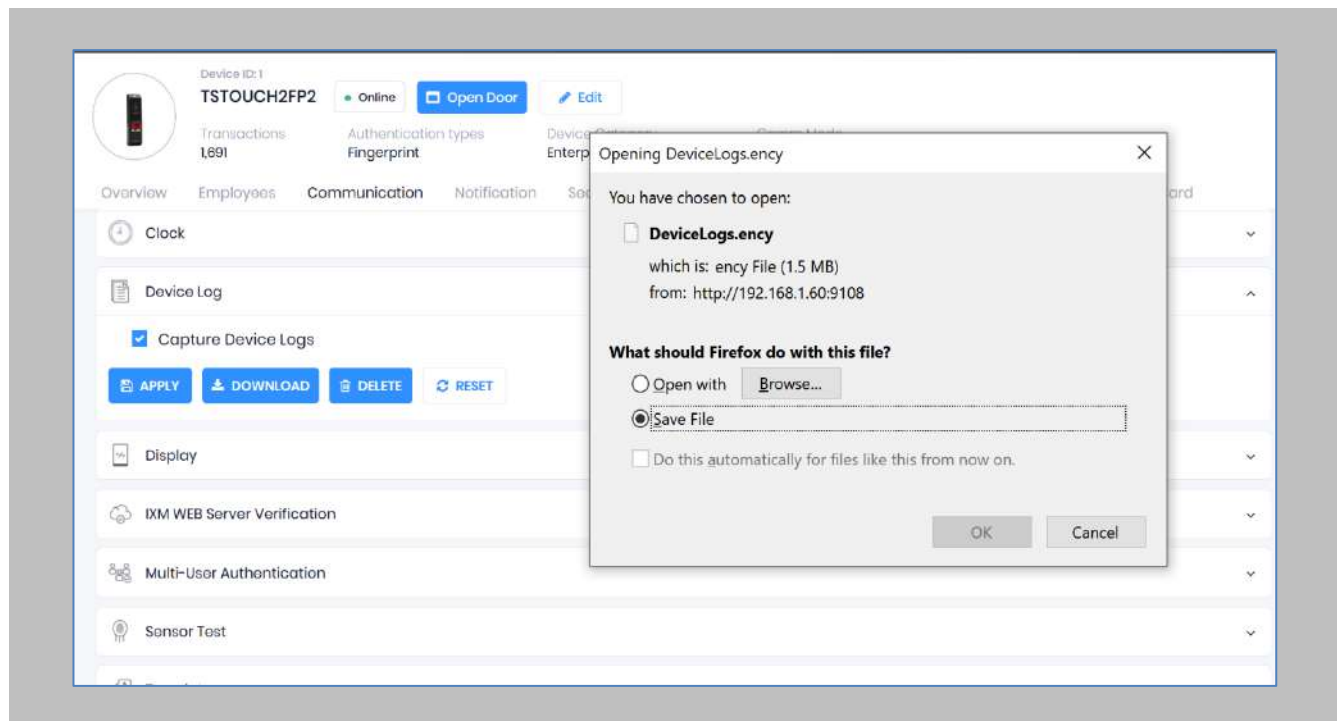




Figure 128: Save Device Log File

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. The 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

Unable to connect to the Genetec Server

Procedure

STEP 1

 Note: Confirm module activation

Navigate to **Licence**, and check **ACTIVATION HISTORY**. If not there, request a Licence.

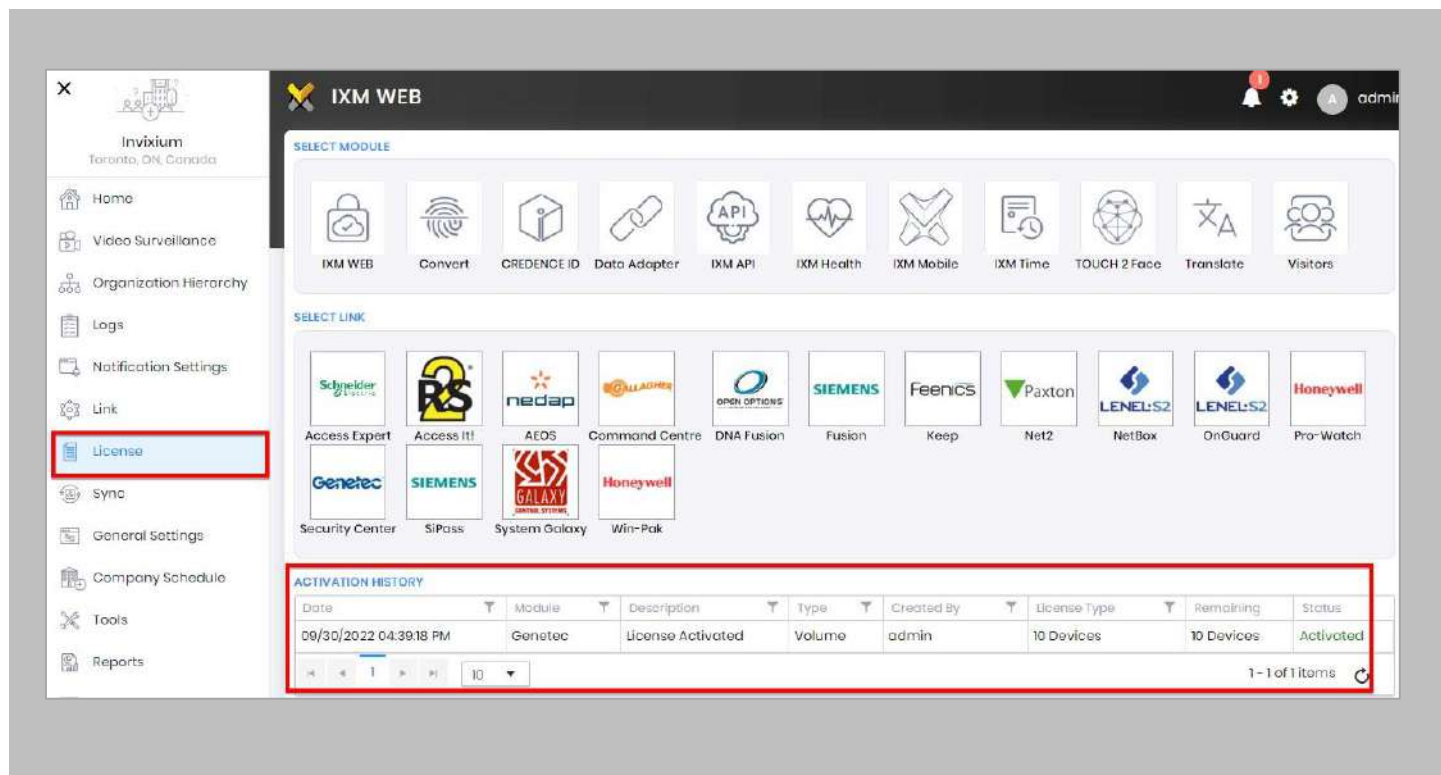


Figure 129: IXM WEB - Licence Module

STEP 2

 Note: Confirm WEB SDK is enabled.

From [Link](#), click the **Security Center** tab. Ensure the correct **WEB API URL** of the server is listed.

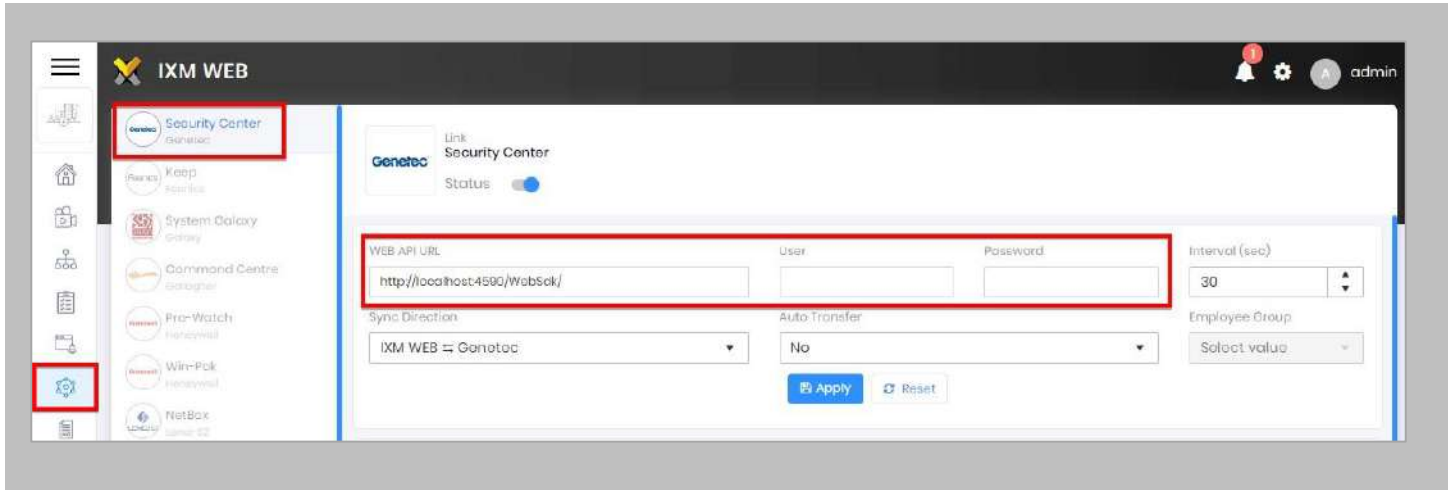



Figure 130: IXM WEB - Genetec Link Module

STEP 3

 Note: Confirm parameters entered to connect to the Genetec server.

Ensure the correct **User** who is authorized to connect to the WEB SDK of Genetec Security Center is listed here. If not, **correct** and **apply**.

Ensure the correct **Password** of the user who is authorized to connect to the WEB SDK of Genetec Security Center is listed here. If not, **correct** and **apply**.

 Note: If you are still facing problem with connection, please email logtxt.txt file to support@invixium.com.

This file is available at the following path:

Program Files (x86)\Invixium\IXM WEB\Log



20. Support

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

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