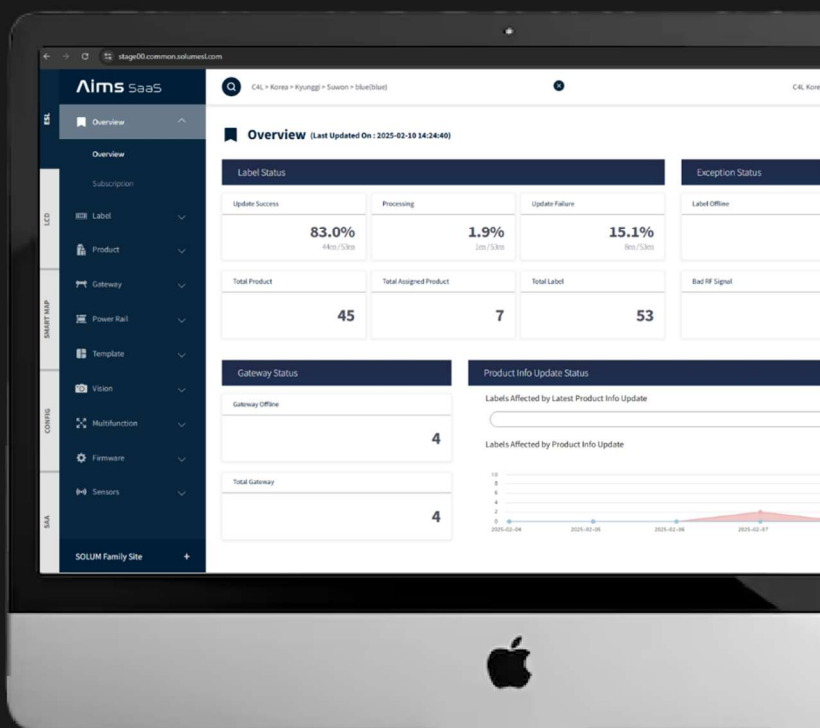
SOLUM

Aims SaaS

Dashboard User manual

For SMB Customers

Purpose-built with the end user in mind.



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V1.1	28-02-25	Added Waste prevention, Store-Based Template, Article schedule allowed days, and Article Image Push. Updated On Demand Alive and Label OTA
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1. Before You Begin

This manual is intended for any users properly authorized by their company to administer or monitor the SOLUM AIMS SaaS Dashboard. Its goal is to give a broad overview of its main functions and instructions on how to set it up and administer it. Every effort has been made to ensure that this document accurately represents the functionality of the AIMS SaaS Dashboard.

1.1 How to Use This Manual

- For first-time users: Begin with the "**Login**" section
- For specific features: Use the **Table of Contents** to locate relevant information

1.2 Typographic Conventions

To effectively use this manual, please familiarize yourself with the following typographic conventions:

- **Bold Typeface**: The application's names, windows, menu items, fields, tabs, buttons, options, and icons are shown in **bold**.
- **Blue Text**: Links are displayed in **blue** for easy identification.
- **Note**: Important information is introduced with the word **"Note"** to highlight key details.

1.3 Required Knowledge and Skills

Before using this manual, it is assumed that you:

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1. **Understand Basic Graphical User Interface (GUI) Concepts**:
    - Navigate between applications and within application components.
    - Recognize and interact with common GUI elements like buttons, tabs, and menus.
2. **Perform Basic Actions**:
    - Select options, click, and double-click as required by the application.

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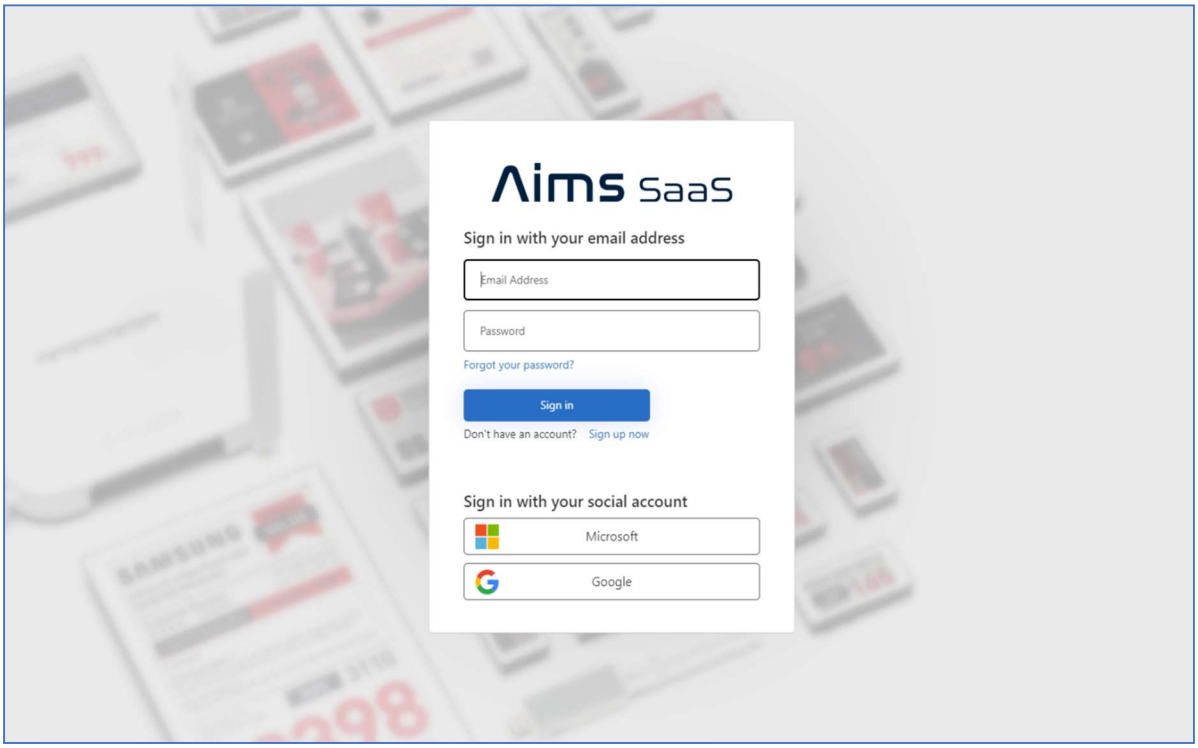
2. Log into the Application

For first-time users, your username and temporary password will be sent to your registered email address. If you do not receive these login credentials, please contact the **Solum Help Desk** for assistance.

2.1 Sign In

1. Open the login page**.** **https://stage00.common.solumesl.com/**
2. Enter your registered email address in the **Email** field.
3. Enter the temporary password provided in the **Password** field.
4. Click the **Sign In** button to access your account.



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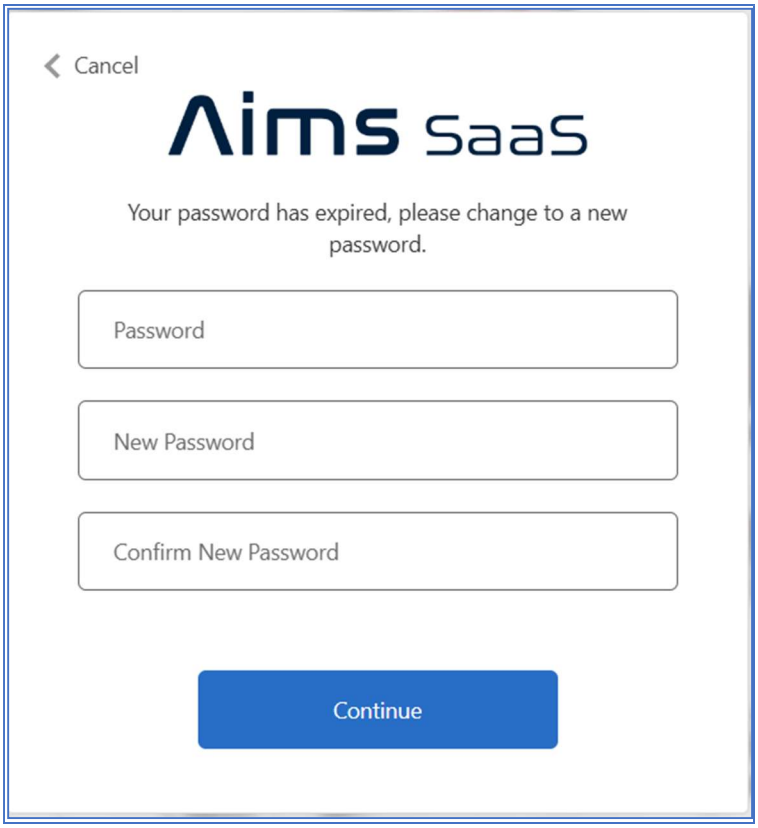
On the next screen, follow these steps to create a new password for your account:

1. Enter your **Current password** in the first field.
2. Enter your **New password** in the **New Password** field.
3. Re-enter your **new password** in the **Confirm Password** field to verify it.
4. Click **Continue** to save your new password and proceed.



Once your password is successfully changed, you will be redirected to the **SaaS Dashboard Overview** page.

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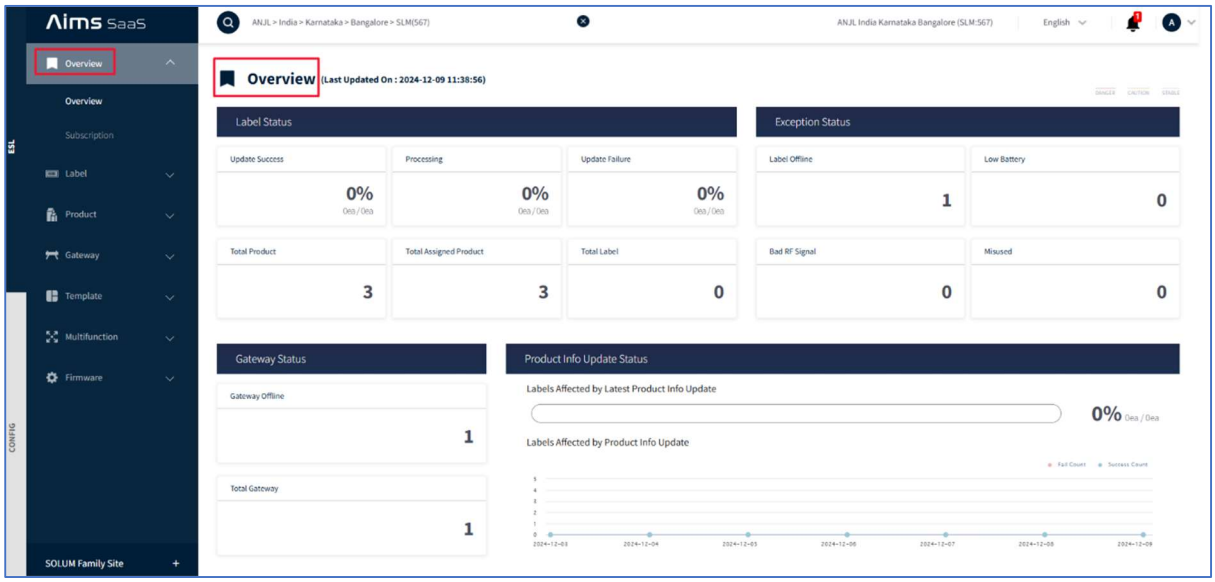
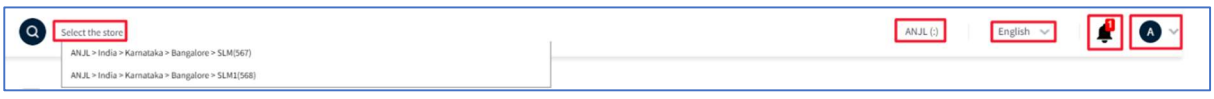
3. AIMS SaaS Dashboard Overview

After signing in to the AIMS SaaS dashboard, the user will land on the **Overview** page. This section displays the overall status of labels, gateways, and products connected to the selected store. For newly signed-up users, all status fields will initially display as "0%."



3.1 Dashboard Header

The header is always visible at the top of the Dashboard page. It shows the current store or area in view and allows users to switch between stores or areas at any time. The header also includes options for language selection and logging out.



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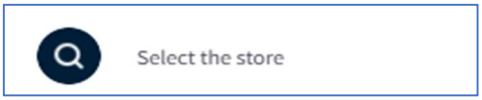
3.1.1 Selecting Your Store/Area for SaaS

1. Click the Magnifier Icon on the Dashboard Header

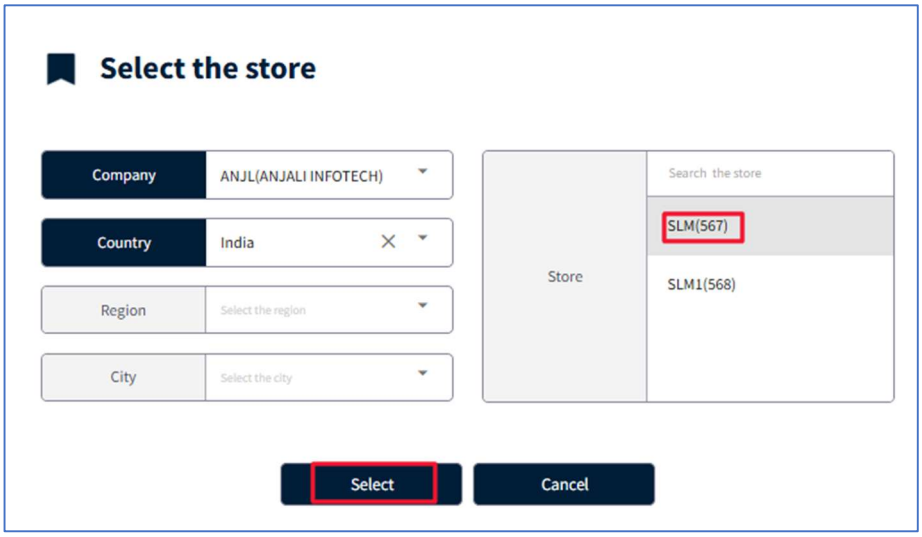


2. Your Company Name will be selected automatically.

3. Select from the Area (Country, Region, City) drop-down list to filter the store list.

4. Store List will only populate stores that the user is mapped to.

5. Choose the store from the list populated on the right side of the window and click **Select.**



Note: *The company selection option is only available for users registered as System Integrators (SIP/SMB partners*).

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Once an area or store is selected, this information will be displayed in the header below.

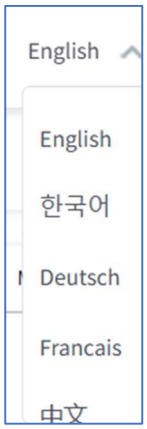
No Area/Store Selected

Area selected (Country, Region, City)

Store selected

3.1.2 Selecting Your Preferred Dashboard Language

Click the language drop-down list and select from the options to display the Dashboard in different languages. Support languages are English, Korean, Chinese, French, German, Italian, Japanese, Portuguese, and Spanish.



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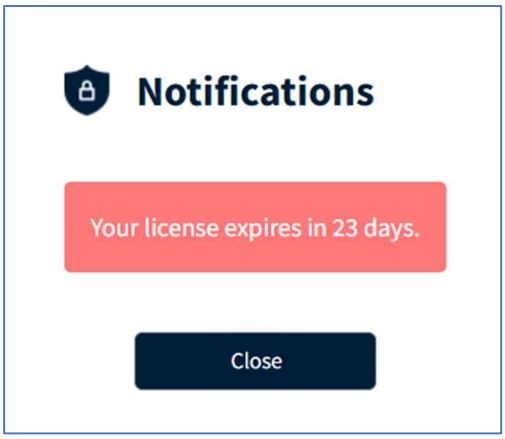
3.1.3 Managing Your Notifications

Click the bell icon on the Dashboard header to see important notifications related to your account.



3.1.4 Log Out from Your Account

1. Click the user login icon located on the top right of the dashboard.

2. The new window will display user information, Log out option, and Privacy Policy.

3. Click **Log Out** to sign out from your SaaS Account.

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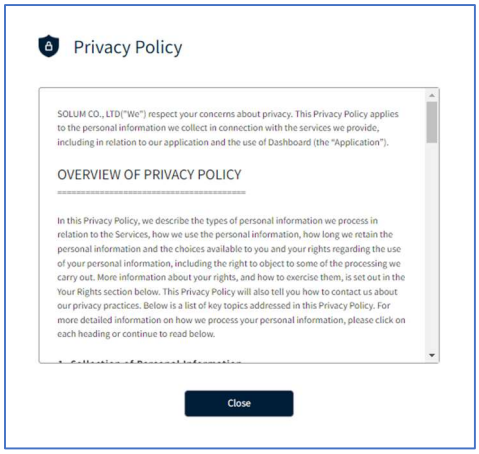
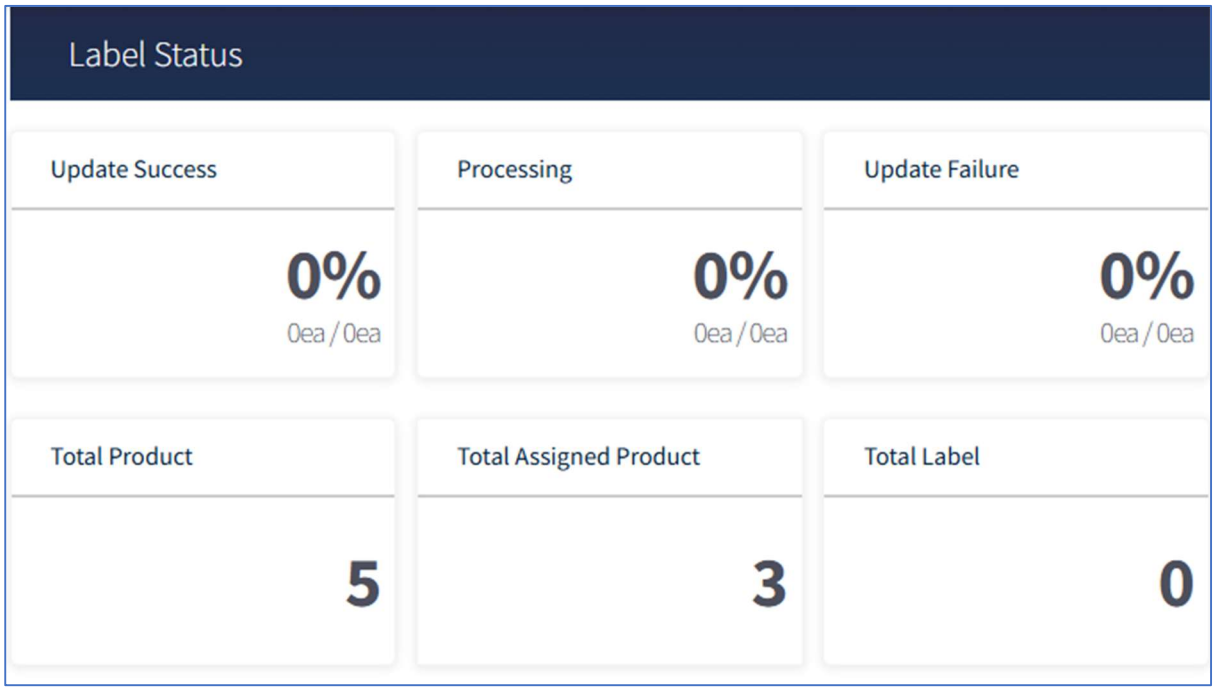
4. Click **Privacy Policy**, which will pop up the complete information Solum collects in connection with the services we provide.



3.1.5 Label Status Overview

The Label Status section helps monitor the updated status of ESLs. Most boxes are actionable, redirecting users to a detailed page when clicked.



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- **Update Success**: Displays the total count and percentage of labels successfully updated.
- **Processing**: Shows the total count and percentage of labels currently being updated.
- **Update Failure**: Labels are considered "failed" if they have been in processing for over 2 hours.
- **Total Product**: Indicates the total number of products (articles) loaded into the store.
- **Total Assigned Product**: This shows the total count of products assigned to a tag. If a product is assigned to multiple labels, it counts as one Assigned Product.
- **Total Label**: Reflects the total count of labels assigned to products or associated with a Gateway.

Note: *If you are not on the store's Overview page, a store selection pop-up will appear before accessing detailed pages.*

3.1.6 Label Exception Status

The Exception Status section highlights issues that could impact label updates.

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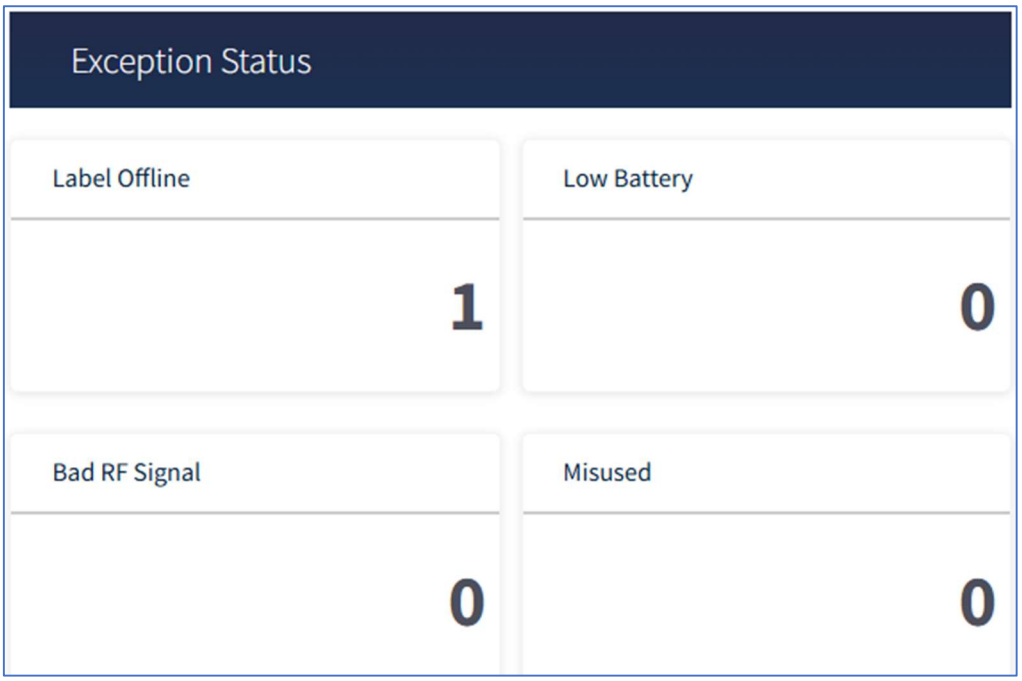

- **Label Offline**: Labels are considered offline if the server hasn't received a signal (heartbeat) within the default 24-hour timeframe.
- **Low Battery**: Indicates labels with less than 30% battery life.
- **Bad RF Signal**: Labels with signal strength below -85dBm.
- **Misused Labels**: Labels used in inappropriate environments (e.g., ambient labels in freezers).

3.1.7 Gateway Status

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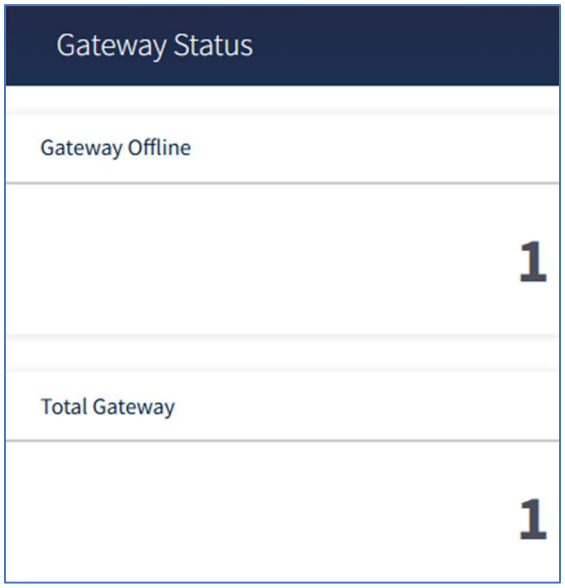
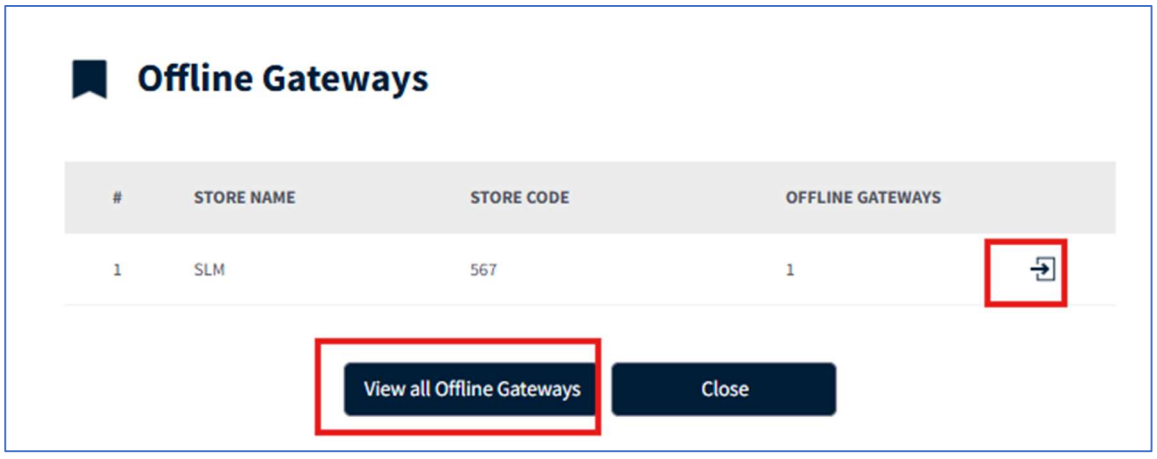


Gateway Offline: Clicking this opens an Offline Gateways pop-up listing all offline Gateways and their respective stores.



Use the **redirect button** **to** navigate to the store's Gateway Page.

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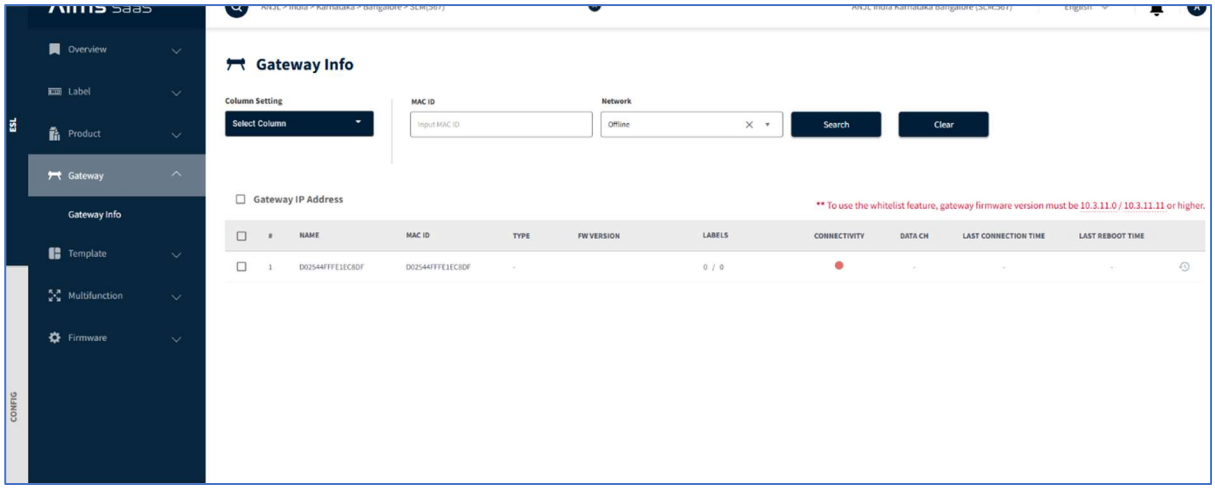
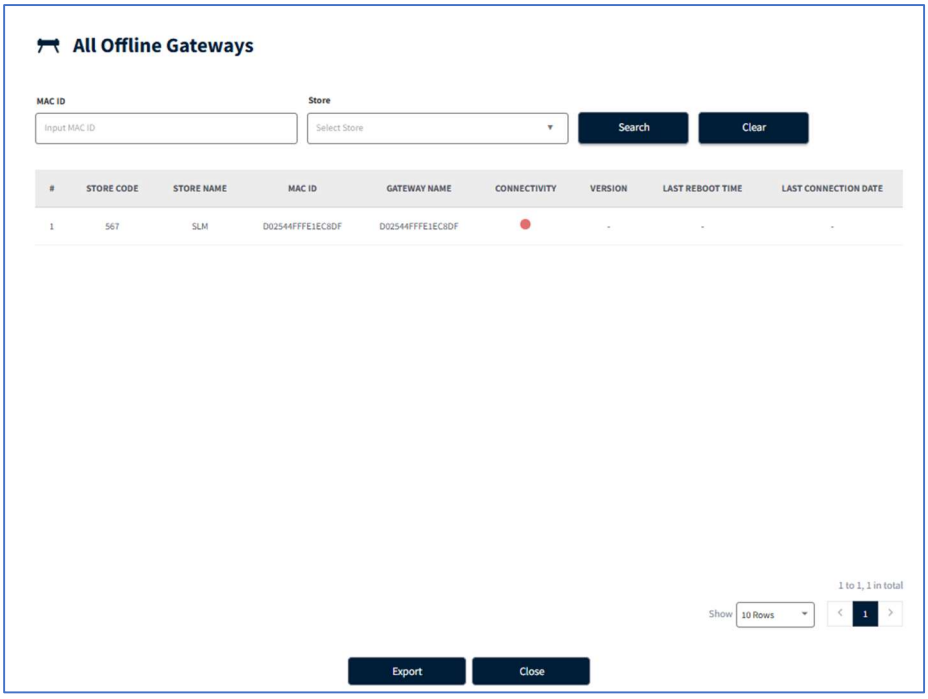


If you click View **all offline Gateways**. It will Redirect to a New Page. Displays all offline Gateways across the company. Provide the gateway Mac ID or store to search the gateways.



Export the data by clicking the **Export** button and providing a valid email address.

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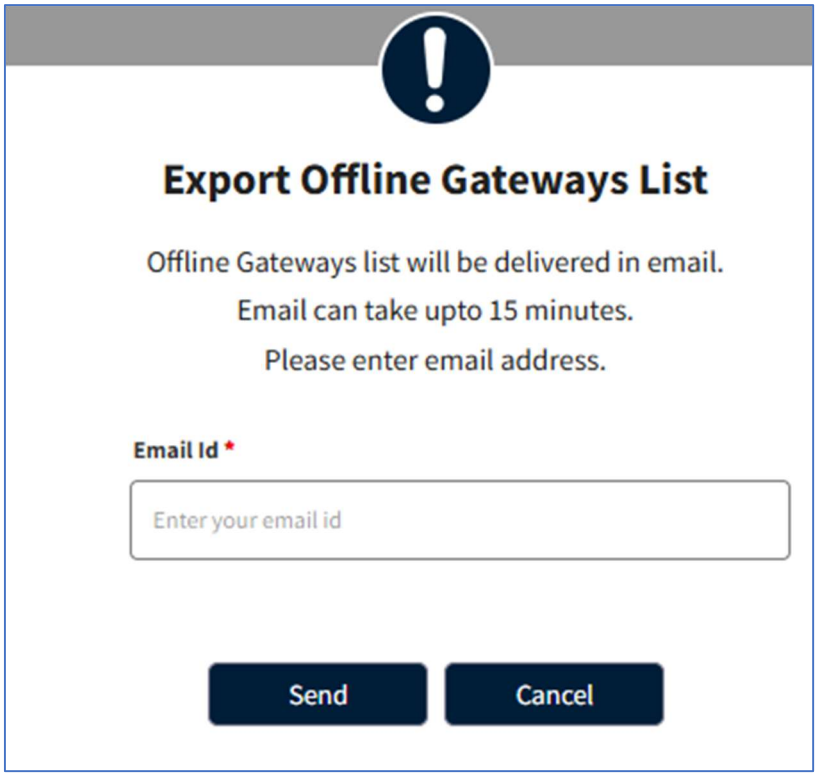

Total Gateway: Clicking **Total Gateway** will redirect you to the store's Gateway Page.

3.1.8 Product Info Update Status

Displays a 7-day graph of update statuses triggered by product updates.

1. View the graph to monitor product update success or failure over 7 days.

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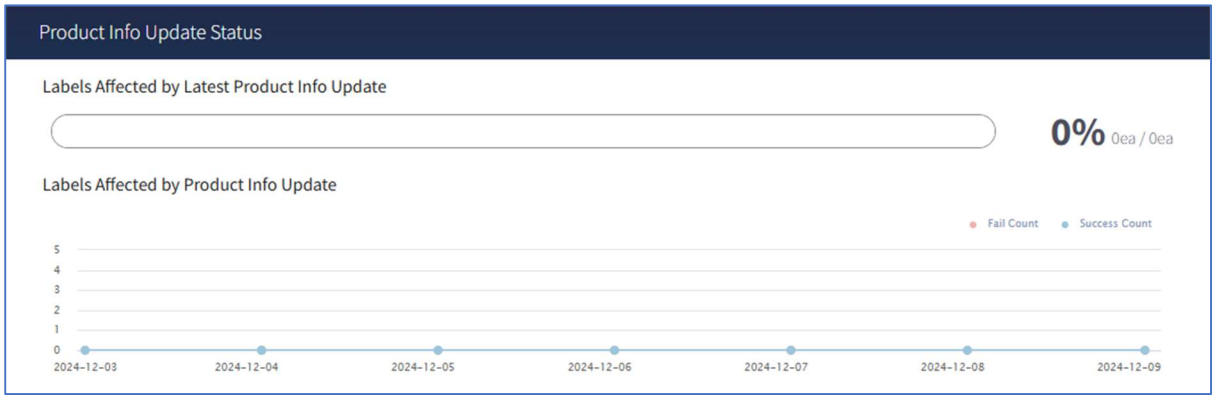
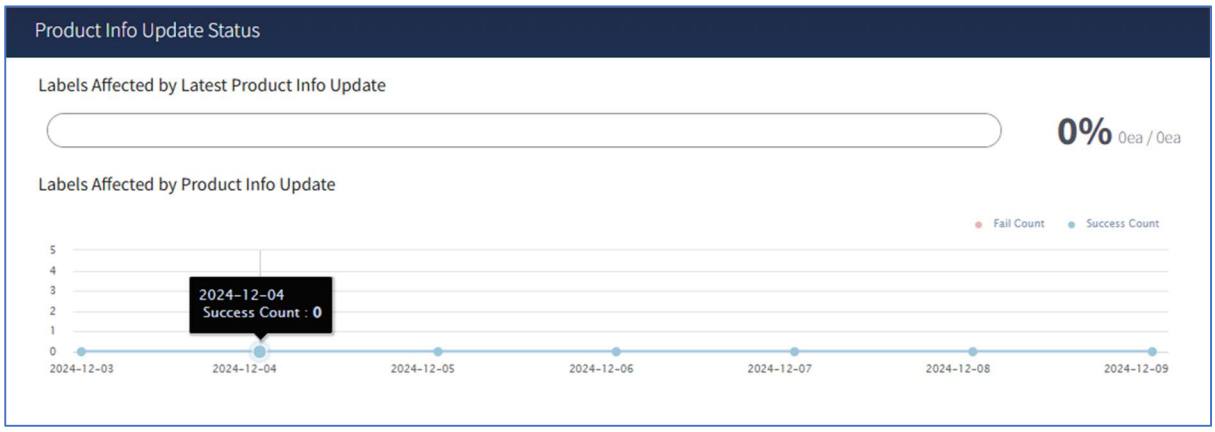


2. Hover over the graph to see the total success or failure count for any specific day.



3.2 AIMS SaaS Dashboard Subscription Details

1. Navigate to the **Subscription** tab on the overview page.

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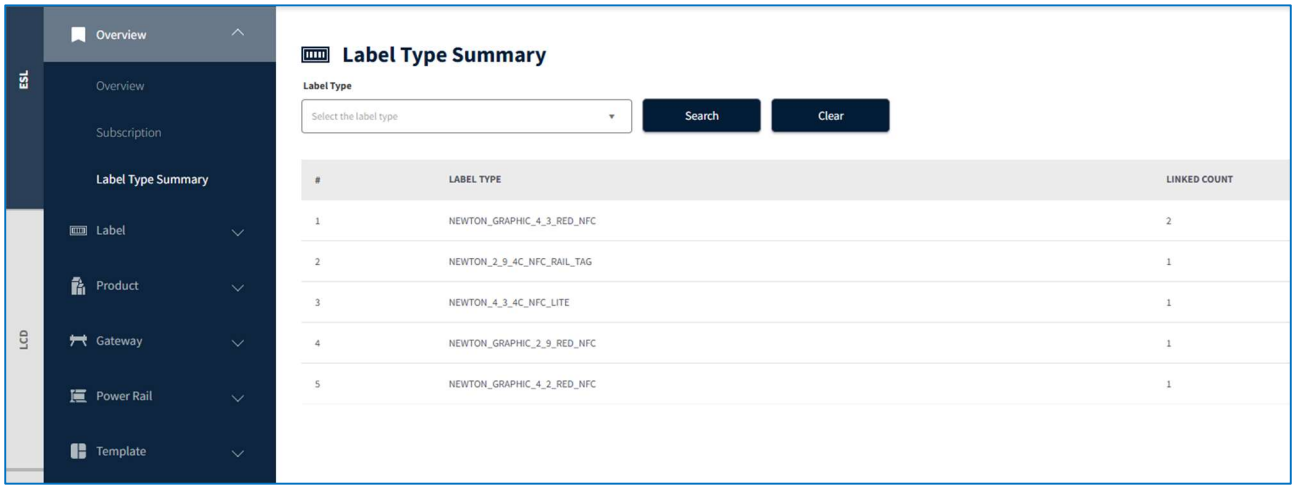
2. The new window will display your account's current status, including:

- Company Code
- Company Name
- License Expiry Date
- Max Images for the label
- Stores
- Products
- Gateways
- Labels
- Time Zone

3.3 Label Type Summary

The selected store user can view the summary of labels linked based on the label type***. It's accessible only by Customer Admin.***



User can search the label type by selecting the label type from the list and click on search.

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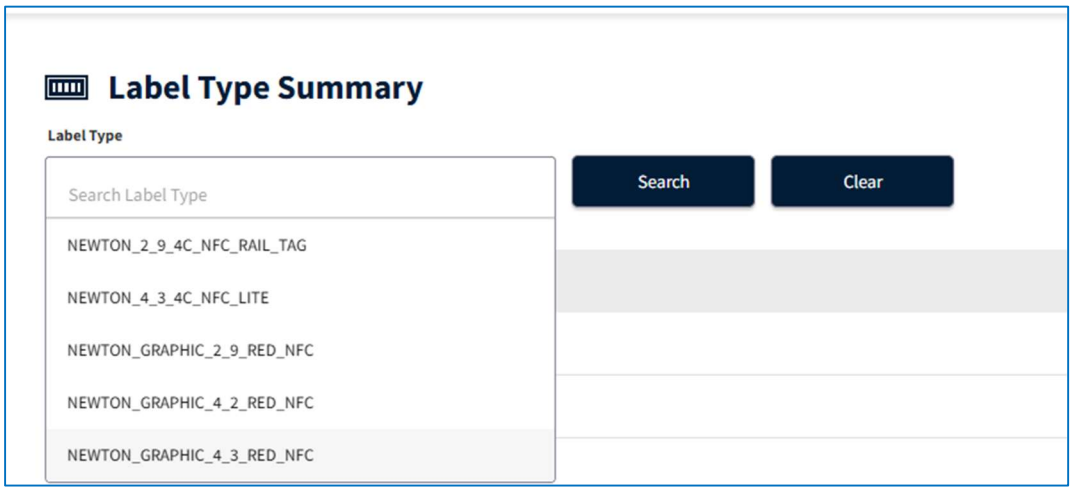

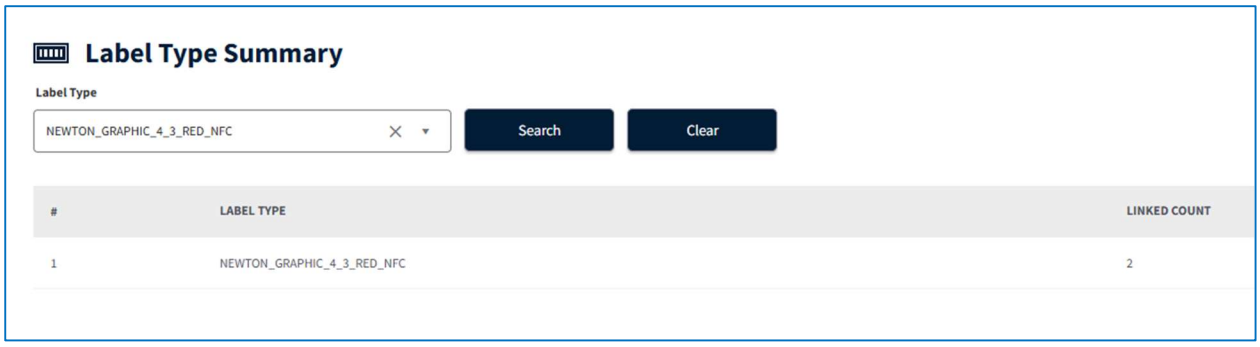

Click on **clear** button clear the search results.

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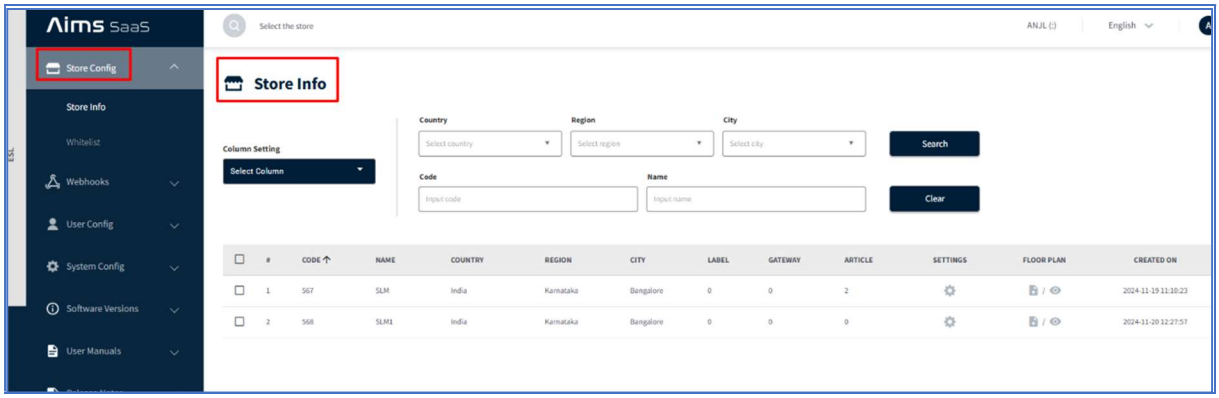
4. Store Configuration

4.1 Access to Your Store Info

This section displays information about all the stores and their details.



Customizing Store Details Display

You can customize the columns displayed in the table by following these steps:

1. Navigate to **Column Settings** and click **Select Column**.
2. In the list of column titles, tick the checkboxes for the titles you want to display in the table.
3. The table will update automatically to show the selected columns.

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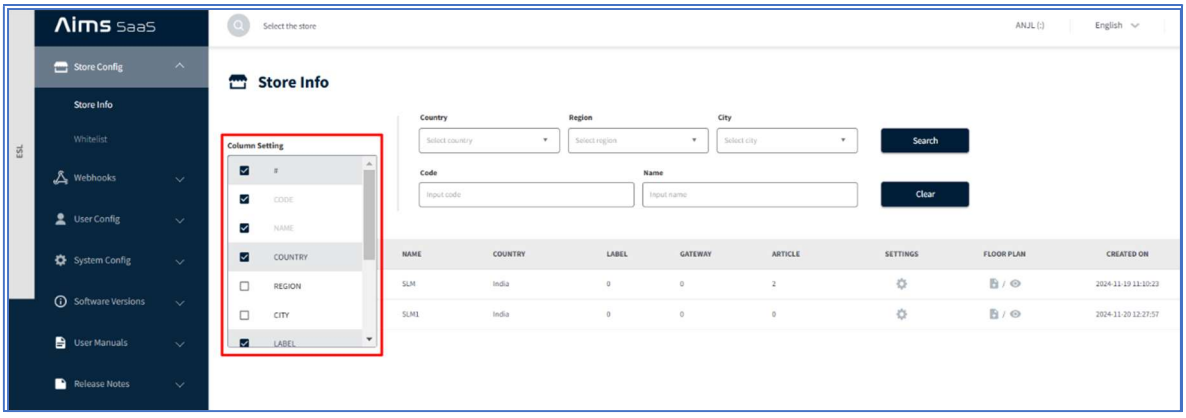
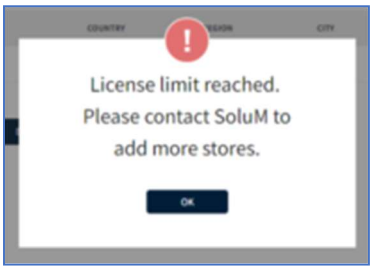


4.2 Create a New Store

1. Navigate to the **Config** section in the SaaS Dashboard and Click **Store Config**.
2. To create a new store, click the **Add** button on the page's bottom.

Note: *If the AIMS SaaS subscription has been maxed out, the user will be prompted with the message and will not be allowed to add stores.*



After checking for a valid subscription, a pop-up will prompt the user to input the required store information.

3. In the new window that opens, fill in the required details about the store, such as name, location, and other relevant information.
4. Click **Save** to add the new store to the system.

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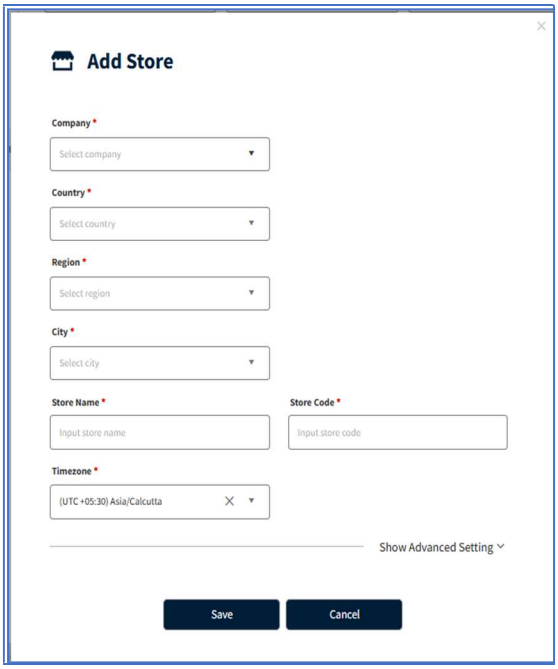

Add Store- Field Definition

Field	Definition
Company	Company Name (Preselected)
Country	Store Area information.
Region	
City	
Store Name	Store Name Description
Store Code	Unique ID for the Store.
Time zone	Store's local time zone information.

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Note:

- *The value in the Time Zone drop-down will be auto-selected based on the user's current location.*
- *Store code field only accepts Alphabet, numeric, and alphanumeric values.*
- *A minimum length of **2 characters** and a **maximum of 30** characters are allowed for store code.*
- *Use of special characters in Store Code is not allowed.*

4.3 Area Group Management

This feature allows users to assign multiple countries, regions, or cities to a store by managing them in **Area Group Management**.

Steps to Add a Country to a Store

1. Navigate to the **Config** tab and Click **System Config**.
2. Select **Area Group Management** from the options.
3. Choose the **Company Name** from the dropdown or list.
4. To add another country to the store:
   - Go to the **Country** section.
   - Click the **Add** button.

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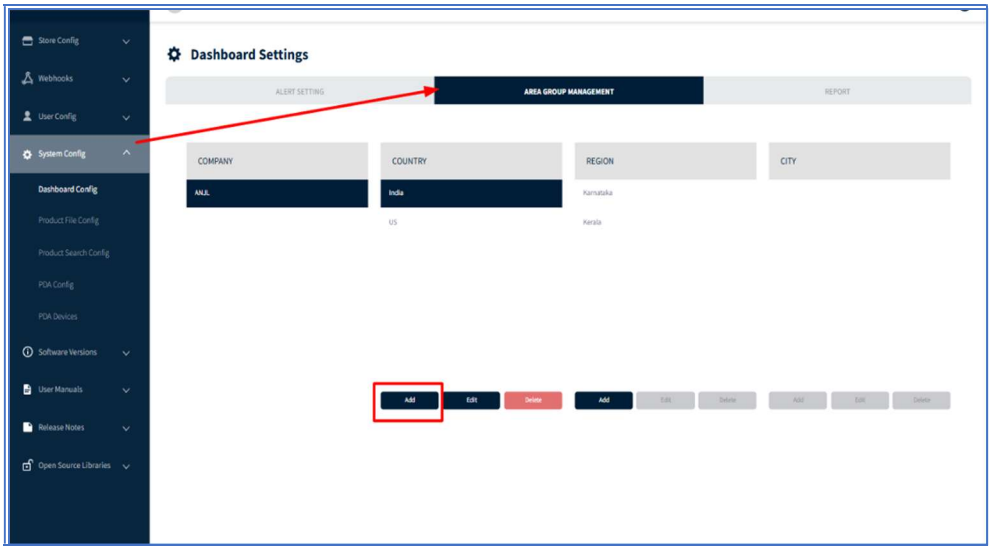
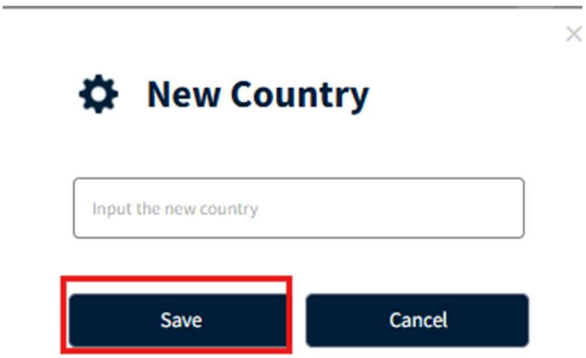


- Provide the country name and click **Save**.



Similarly, to add another **region** or **city**:

1. Navigate to the corresponding **Region** or **City** tab.
2. Click the **Add** button under the respective tab.
3. Provide the required details as prompted.
4. Click **Save** to confirm and apply the changes.

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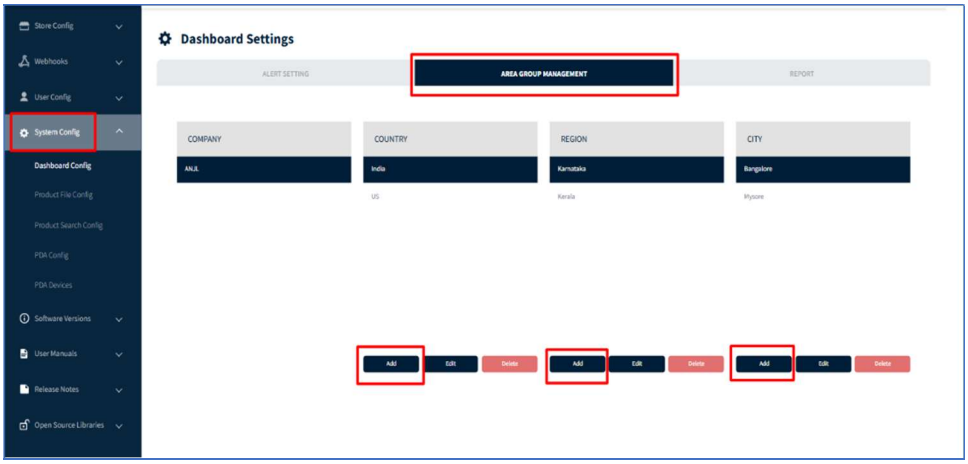
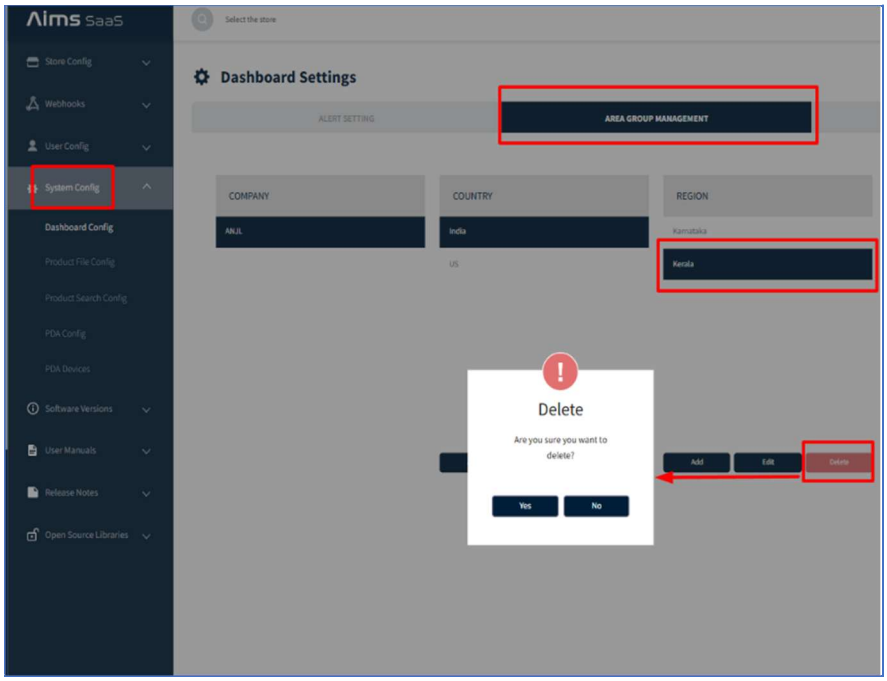


Users can edit or delete the Country/Region/City they have created by selecting that and clicking **Edit** or **Delete** in the Area Group Management**.**



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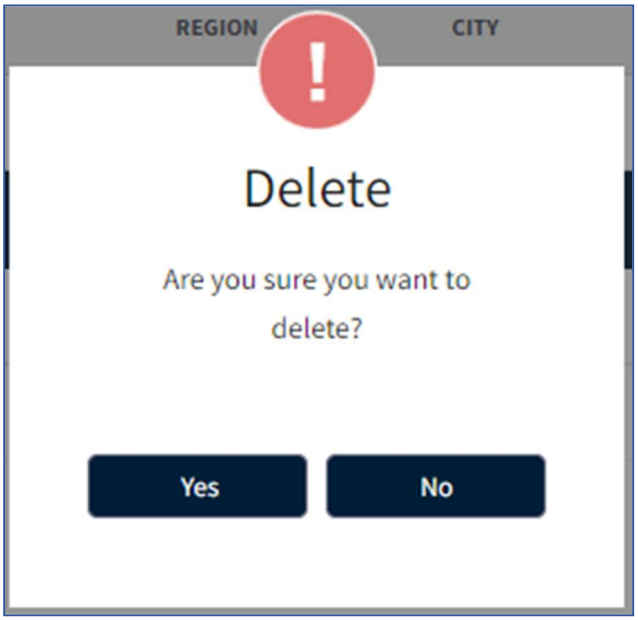
***Note**: It is recommended to keep values at default in the advanced settings as some settings enable operations that may decrease battery life. Refer to **Appendix A** for more details about advanced settings.*

4.4 Delete Your Store

If the store is no longer operational, the user can delete it from the Dashboard.

1. Select the check box of the store from the list and click Delete.
2. A new window will prompt be asking to confirm store deletion. Click **Yes.**



3. Click **Yes.** Deleting the store will remove all the information related to that store (Articles/Products, Labels, Gateways, Settings).

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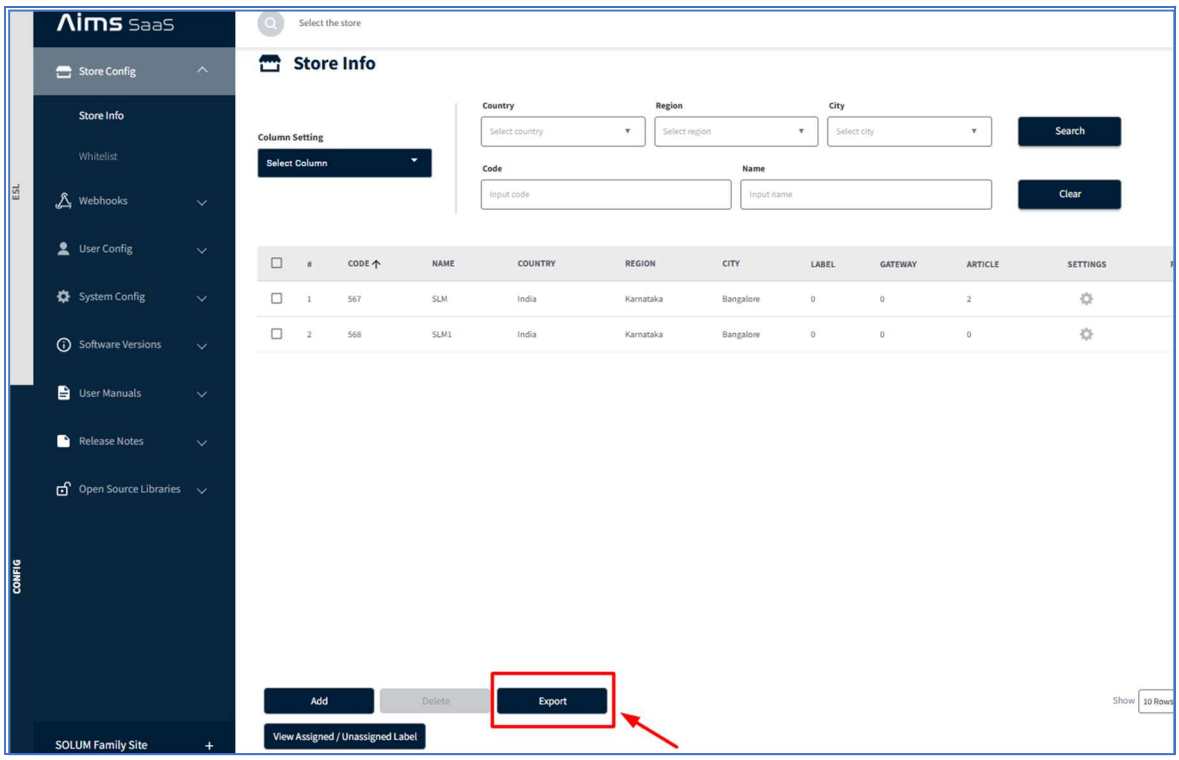
4.5 Export Your Store Details

You can export the table of created stores as an Excel file. If a filter is applied, only the filtered list will be exported, not the full list.

Steps to Export Stores:

1. In the **Store Config** window, select the stores you want to export by ticking the corresponding checkboxes.
2. Scroll to the bottom of the page and click **Export**.
3. The selected store details will be downloaded as an Excel file to your system.



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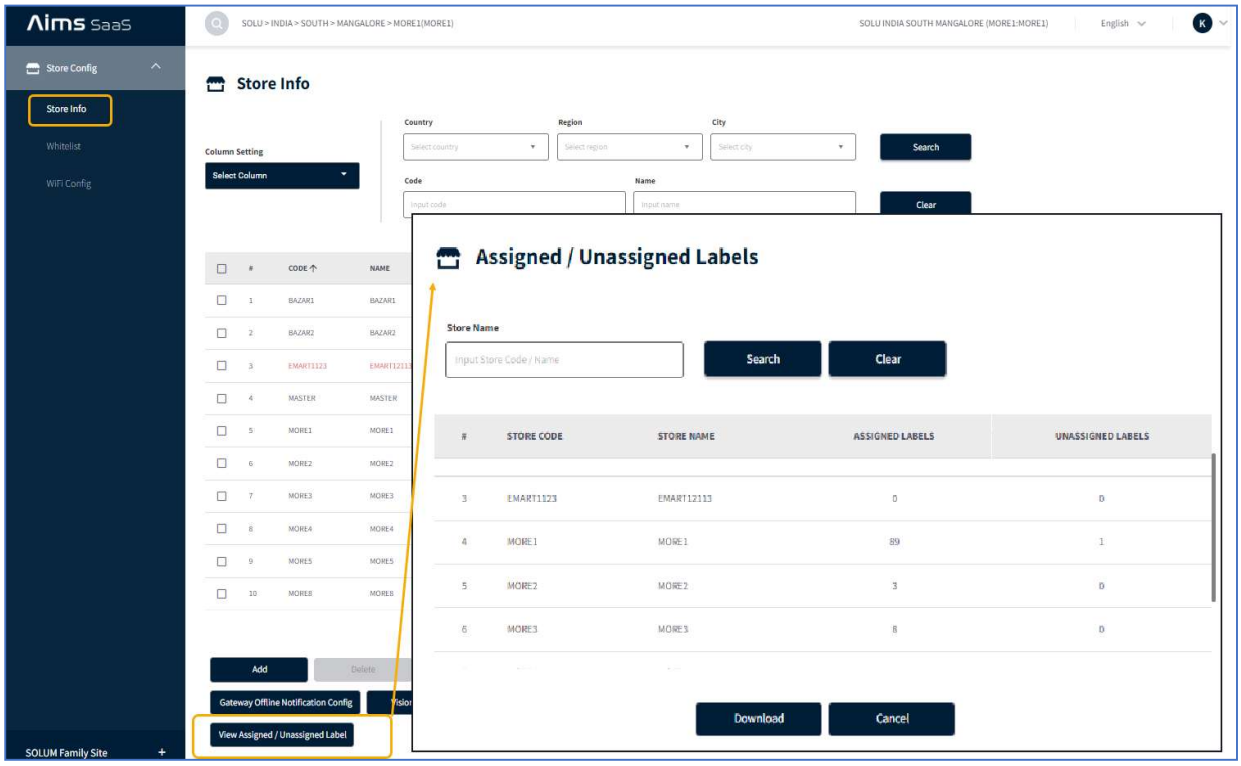
4.6 View Assigned/ Unassigned Labels in Your Store

1. In the store configuration, Click the **View Assigned/Unassigned Label** to view the details of the assigned and unassigned label counts for each store.
2. Users can download the list by clicking on the **“Download”** button at the bottom.



4.7 Enabling Whitelist for Your Store

Enabling a whitelist ensures that only authorized labels can connect to a particular gateway, avoiding incorrect connections to neighboring stores. This

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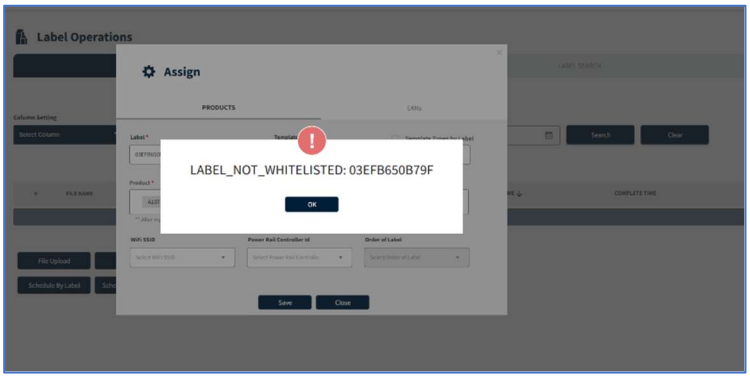
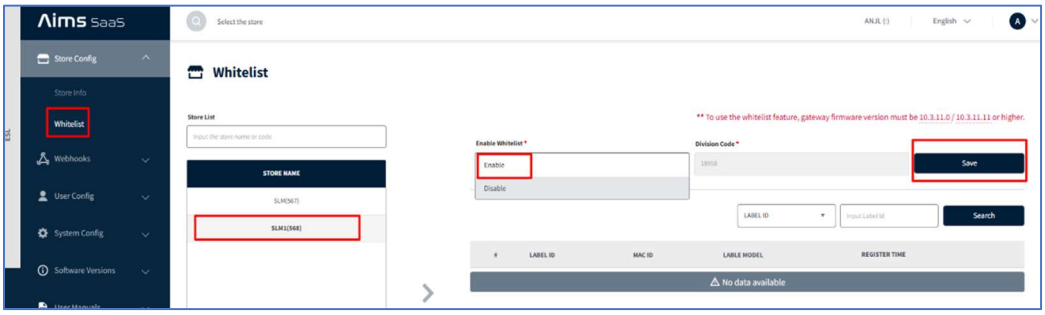
setting is enabled to ensure proper label connections. If the whitelist is not enabled, a pop-up will appear whenever a user tries to assign a label.



To enable whitelist for the store,

1. Go to **Store Config** and click **Whitelist.**

2. Select the store that needs to be whitelisted, click **Enable** from the drop-down menu in the **Enable Whitelist** menu, and tap **Save.**



1. Tap **OK** in the new window that shows **Success** as a notification.
2. Click **Add** from the menus that appeared at the bottom after enabling the whitelist.

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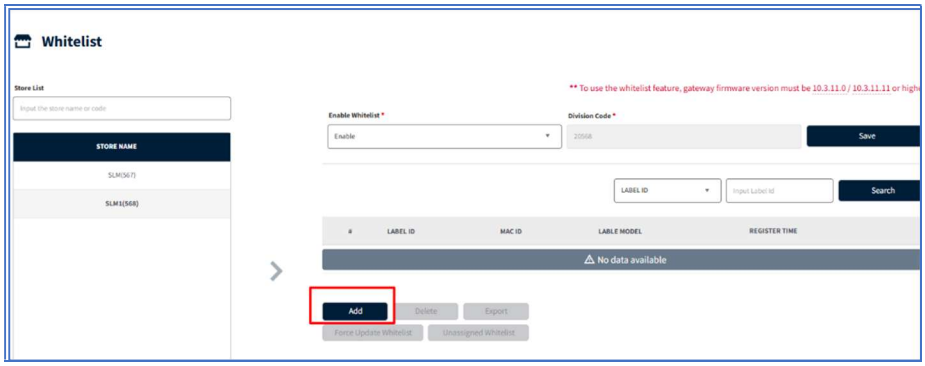
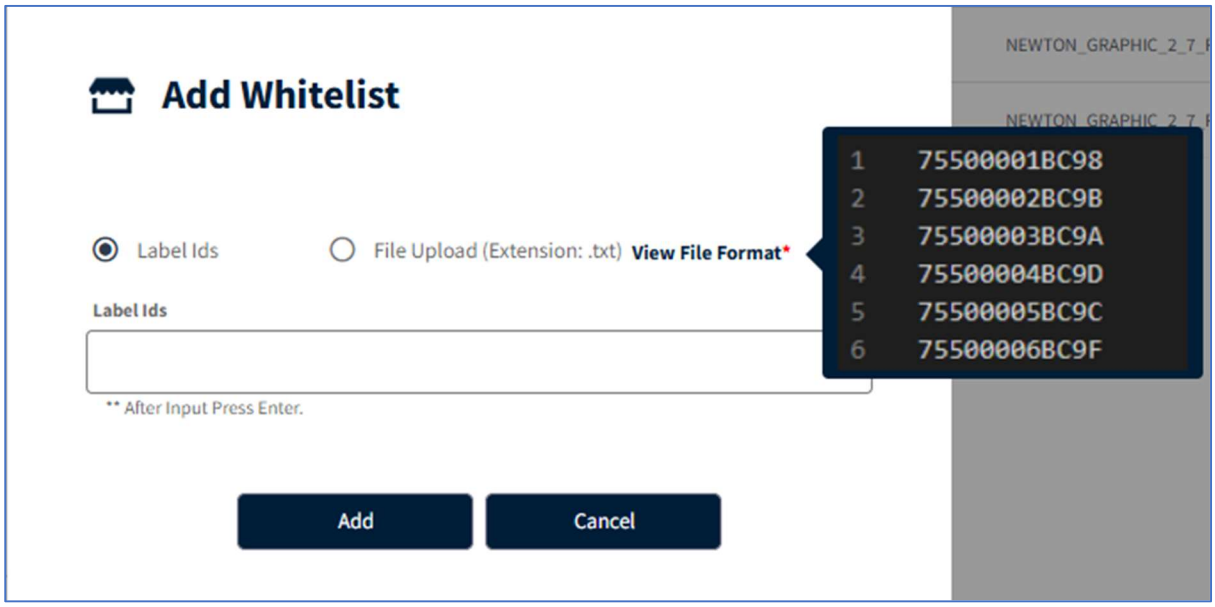


3. Input the label IDs one by one or upload a single .txt file with all the Label IDs and click **Add.** (Hover over the **View File Format** to see the document structure.)



Note: *To enable a whitelist for the store, the gateway firmware must be version 10.3.11.0 or higher.*

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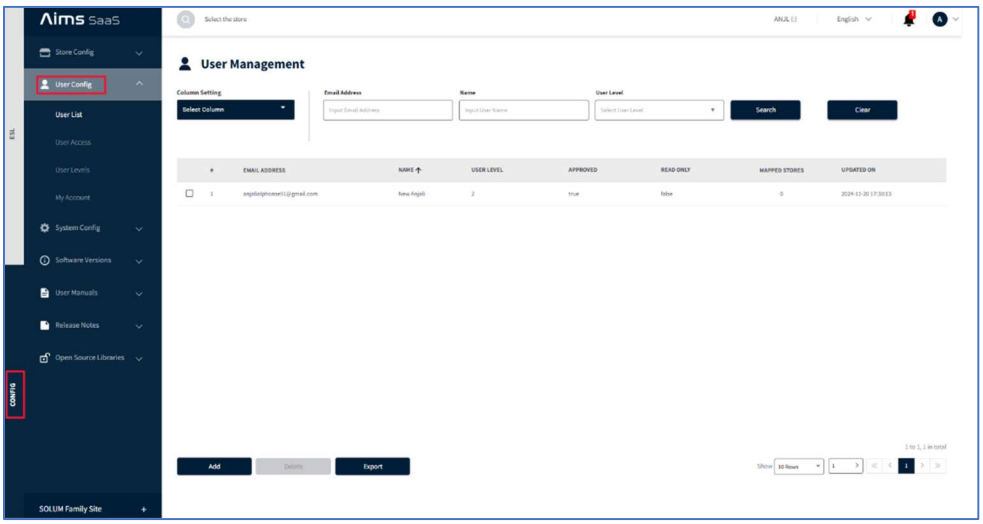
4.7.1 Whitelist Pending Auto Assign

The whitelist pending auto-assign feature prevents the pop-up from appearing every time a user assigns a label. However, users must manually add the label to the whitelist from the Store Config tab.

5. User Config

The user ID and password provided by Solum grant Level 1 Admin privileges to access the SaaS dashboard. This Admin can create additional users for their company, assign roles, and define access permissions based on those roles. The **User Config** section is where the admin manages these permissions. This page provides an overview of all users, assigns store access to each user, defines user roles, and displays details of the signed-in user's account.

1. Navigate to the **Config** Tab in the dashboard.
2. Click **User Config**



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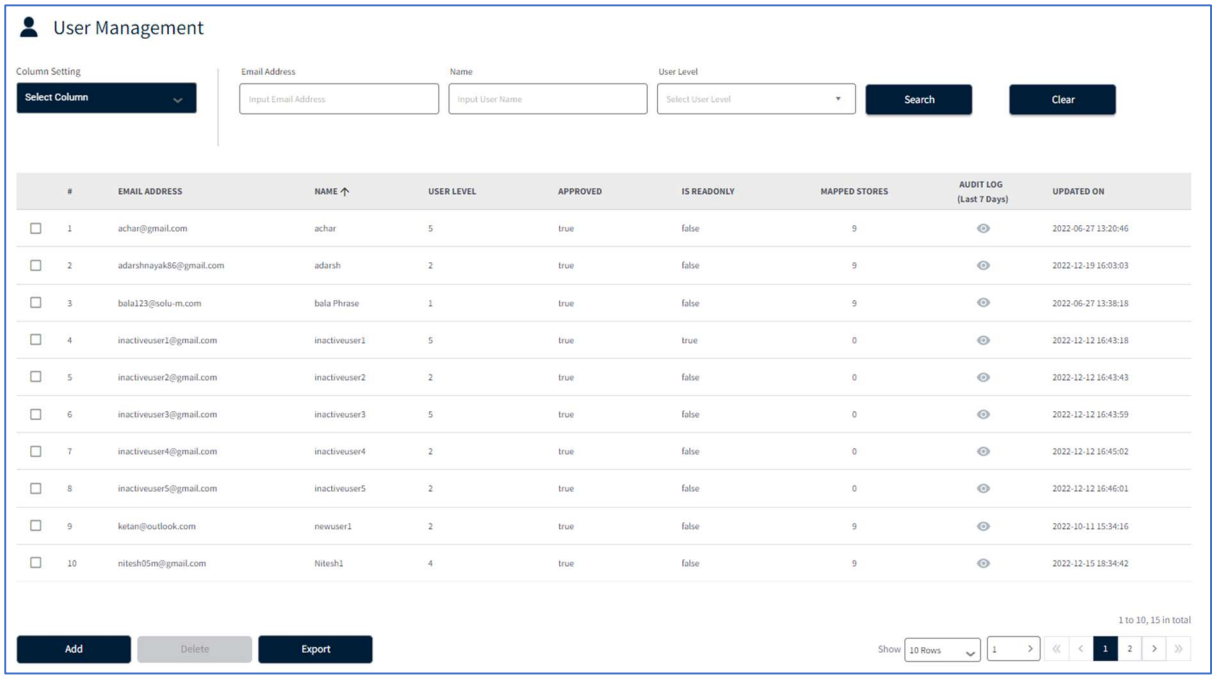
Note: *Admin approval can be done by either a SOLUM Admin or a customer-designated Level 1 Admin. Please note that customer admin accounts are limited. For additional admin accounts, contact SOLUM.*

5.1 Access to Your User Details

This page displays details of all users within your company. When someone registers for the AIMS SaaS Dashboard, their information will appear here, and an admin must approve their access.

View User Details

The list shows all registered users along with their account properties. This includes details like Name, User Level, and Approval Status.



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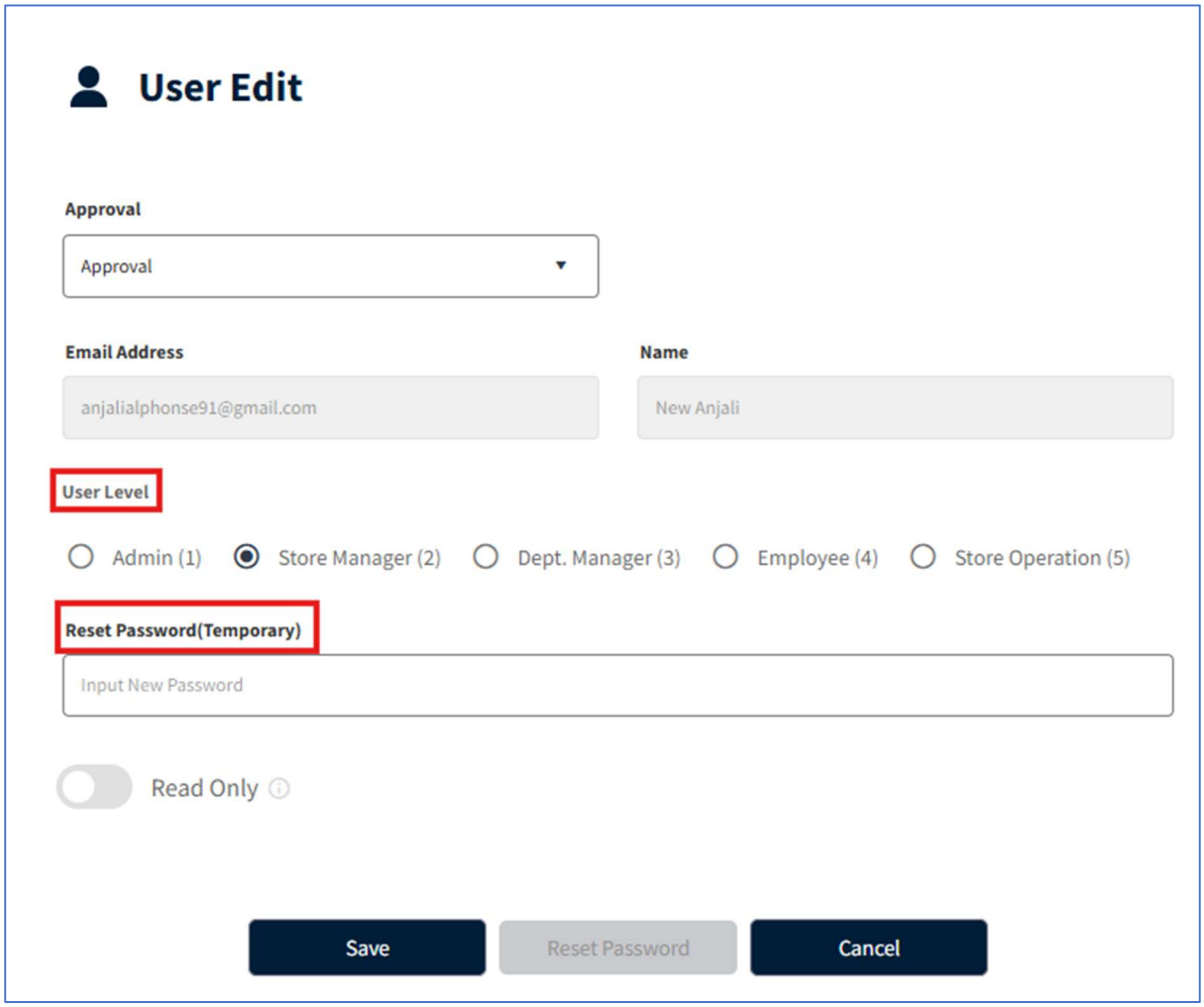
Update User Settings

Click on a user's entry in the list to view or update their account settings. This feature allows you to easily manage user permissions and roles.



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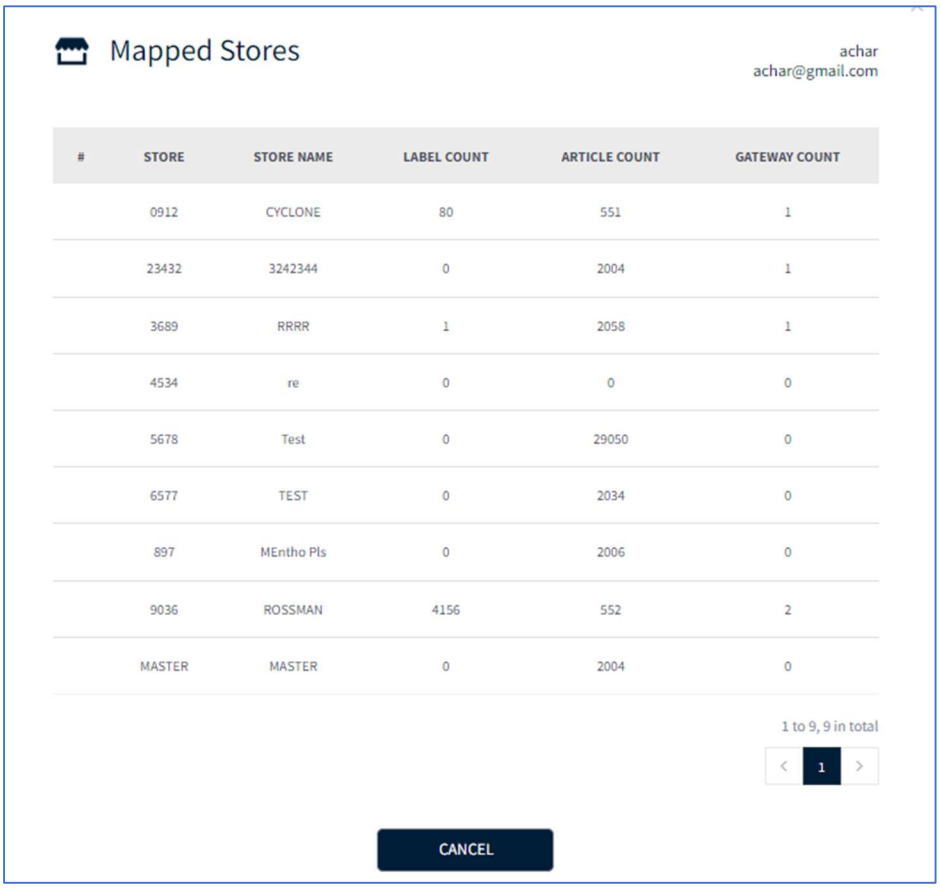
Mapped Stores

- The **Mapped Stores** section in the user list table shows the number of stores linked to a specific account.
- Click on the displayed number
- A new pop-up showing the list of mapped stores along with their details.



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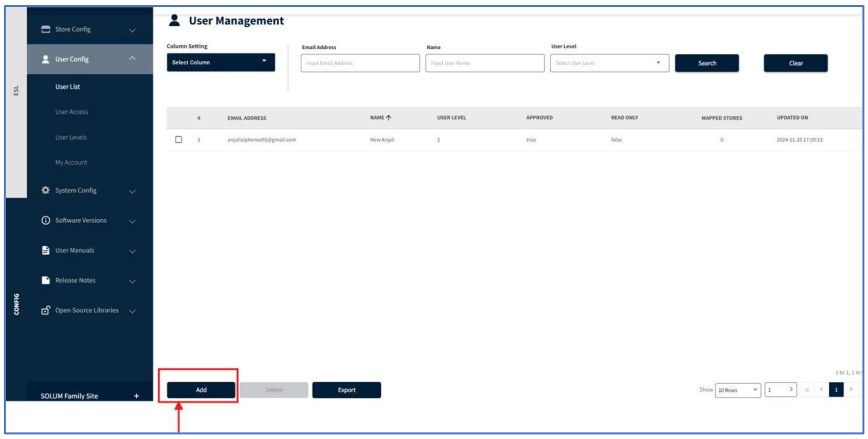
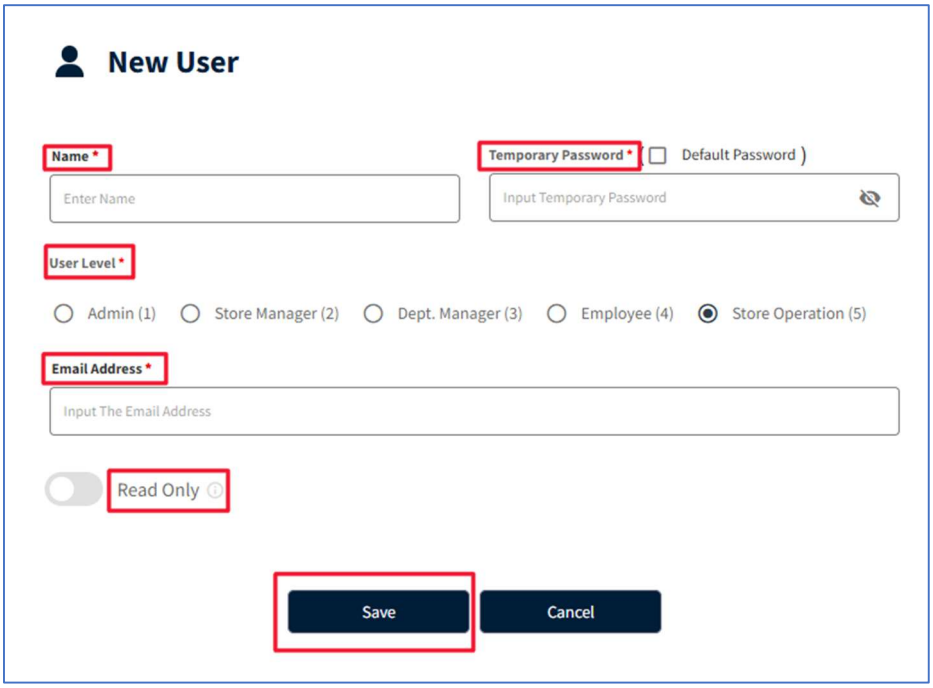
5.1.1 Add a New User in a Few Steps

1. Locate and click the "Add" button at the bottom left of the user list window.



3. A **New User** window will pop up.



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3. Fill in the required information:

- Name
- Temporary Password
- Email ID

4. Select the appropriate **user level** based on their responsibilities.

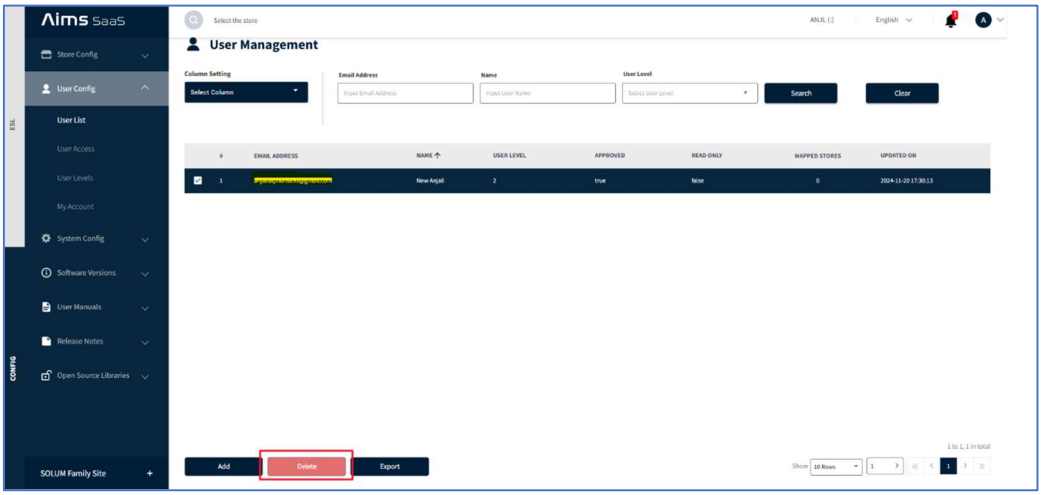
5. If the user should only have view access for APIs, enable the **Read-Only** option.

6. Click **Save.**

5.1.2 Delete a User Account

1. Select the user account you want to delete.

2. Click Delete on the bottom left of the user list window.



Note:** Only Users with Levels 1 and 2 Can Delete Accounts by Selecting the Checkbox and Clicking **Delete.

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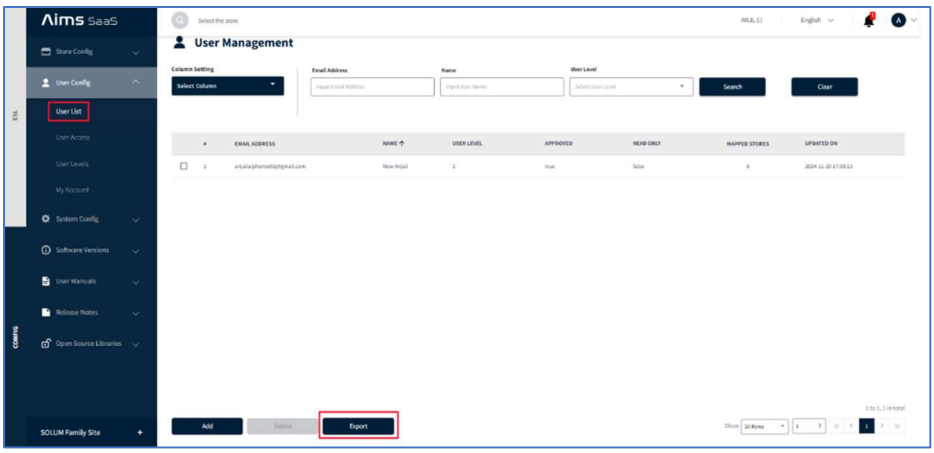
5.1.3 Export User Account Details

1. Click the '**Export**' button at the bottom of the User List page.

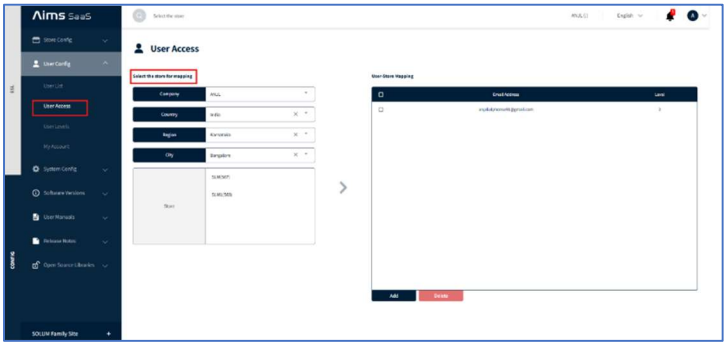
2. The system will download an Excel file containing details of user accounts to your local machine.



5.2 Assign and Manage User Access to Store

After users are created, they must be mapped to stores. Without mapping, users won't have visibility of any stores. Navigate to the **User Access** tab.

1. Filter users by Area. (Select Country, City, and Region)



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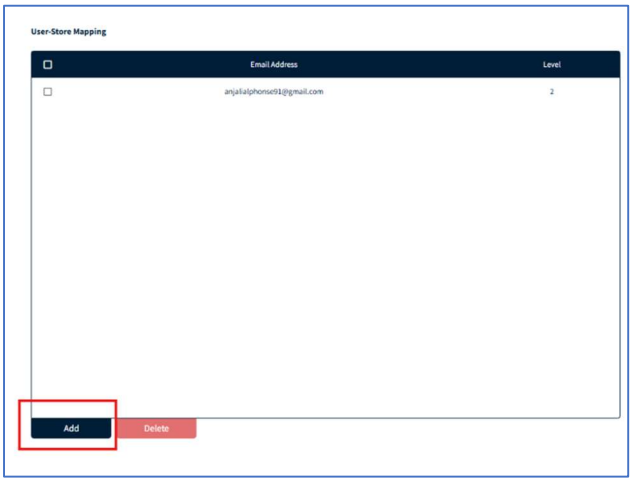
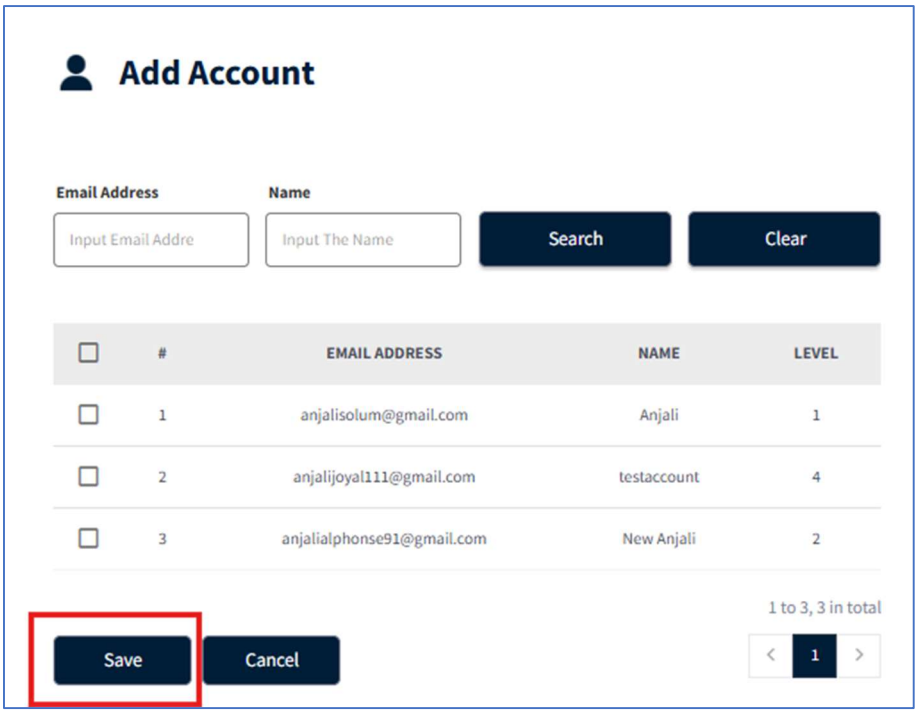
3. Click '**Add**' to assign users to stores within the filtered region.



4. Select the user you want to map to the selected store and click **Save**.



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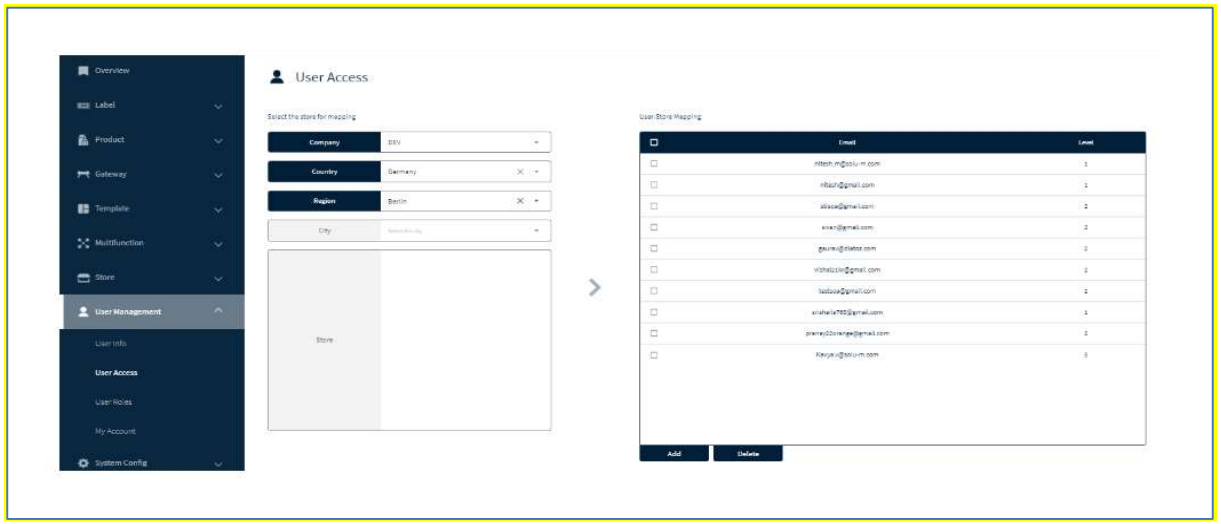
5. Mapped users will appear in the User-Store Mapping list.



6. To un-map users, select the user(s) and click **Delete**

> ***Note:*** *Users assigned to a specific country will have access to all stores within that country, while users assigned to a particular store will have access restricted to that store only. When a store is selected, the corresponding Country, Region, and City will be automatically filtered and selected based on the chosen store. Admin-level users, however, will have company-wide access, including all areas and stores.*

5.3 Defining User Levels and Permissions

Customer Admin can define user levels to suit their needs. There are 5 predefined levels, with **Level 1** being Admin (highest access) and **Level 5** being

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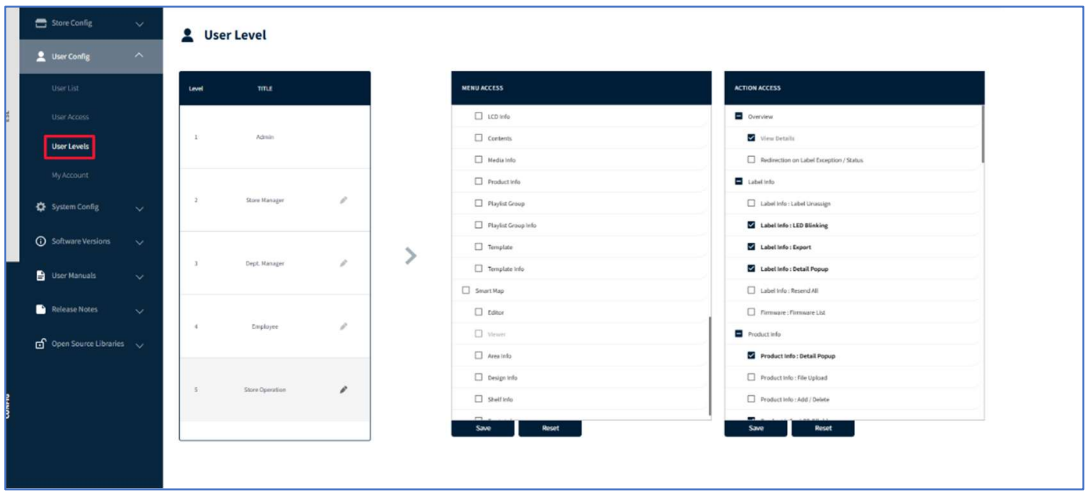
the lowest access level. You can rename any level to a more user-friendly title, except **Admin (Level 1)**, which remains fixed.

1. Navigate to **User Levels** from the **User Config** section.



5.3.1 Steps to Configure User Levels:

1. **Choose the level you want to configure.**

2. Assign Access:

- **Menu Access**: Check the boxes to grant access to specific pages.
- **Action Access**: Check the boxes to grant operational permissions within those pages.
- Click Save after choosing user levels and Access.

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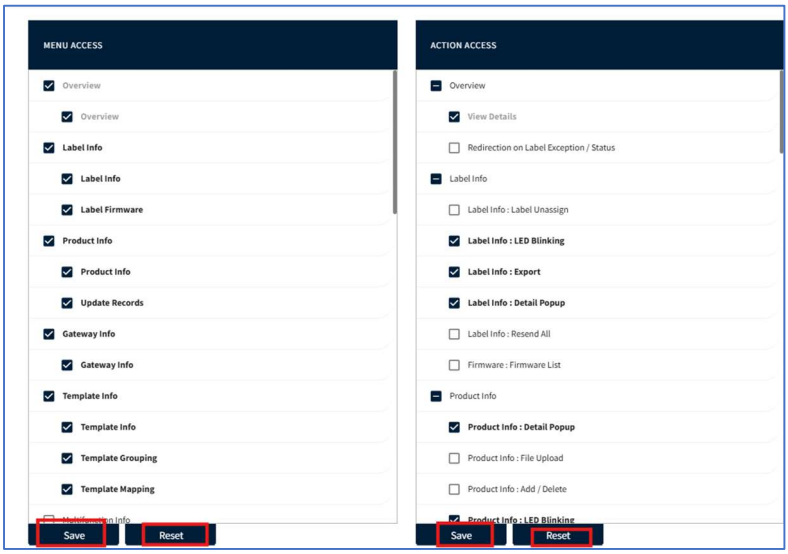

Notes: *Certain levels cannot be granted higher-level access. For example,* ***Level 5 users*** *(lowest level) cannot access critical pages like the* ***User Config*** *page. Such options will appear greyed out and unavailable for selection.*

5.4 Your Account Details and Password Management.

Under **My Account**, users can view their account details, including their name and email address.

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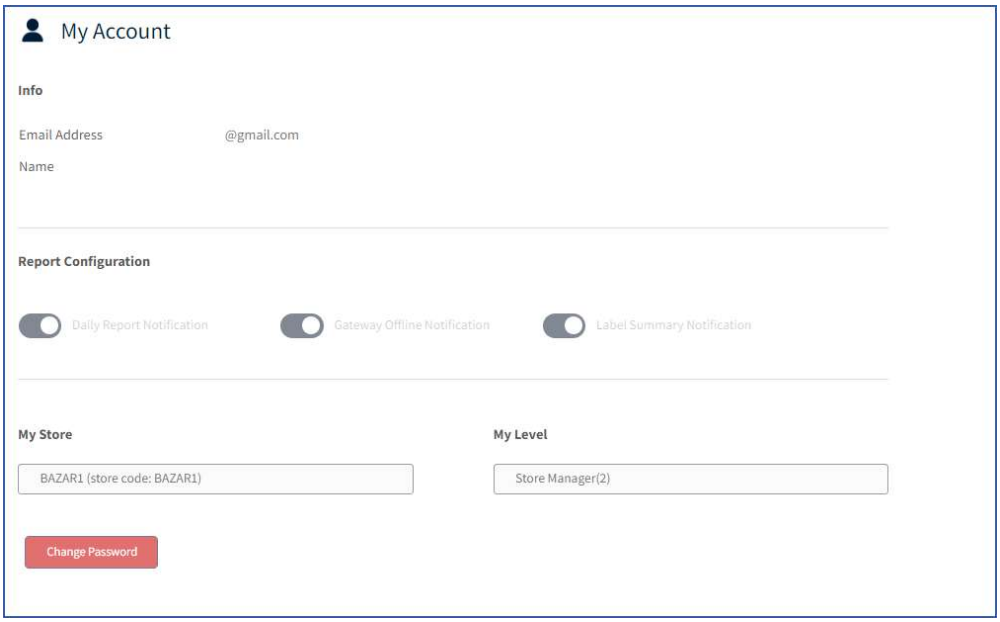

5.4.1 Access to Report Configuration

Level 1 Users:

When all reports are enabled at the customer level by a Super Admin, Admin, or SI Partner, **Level 1 users** can view all the reports configured for them in **My Account**.

> ***Note:*** *Level 1 users cannot enable or disable these configurations directly through My Account.*

Level 2 and Below Users:

For these users, only select reports will be visible when granted access at the customer level:

- **Daily Report Notifications**
- **Gateway Offline Notifications**
- **Label Summary Notifications**

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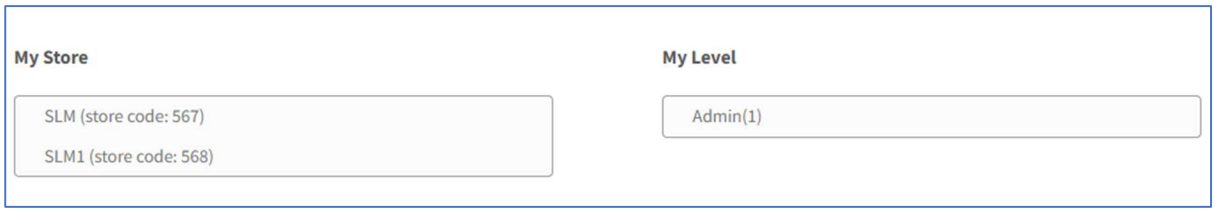
Restricted reports such as **Software Update Notifications**, **License Reminder Notifications**, and **Customer Overview Notifications** will not be displayed under **My Account**.

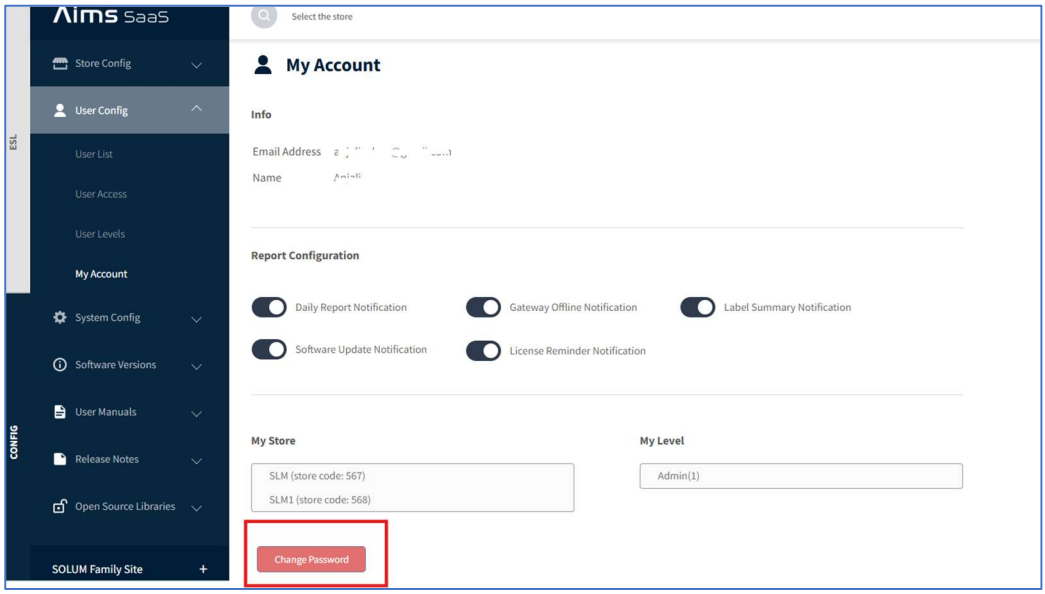
5.4.2 Mapped Store and Level Info

Users can check the mapped store(s) and the user level from My Account.



5.4.3 How to Change Your Account Password.

1. Click the **Change Password** Button from the My Account page.



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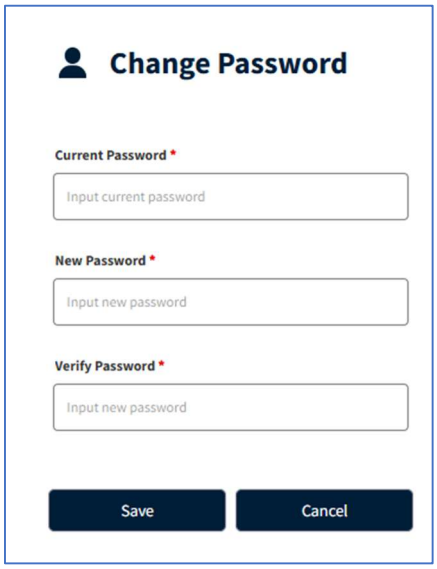
2. Provide your old password and new password and click **Save.**



6. Manage Your Products

The **Product** section in the AIMS SaaS Dashboard helps you manage product information across stores. You can view, update, add, delete, or export product details, making it easy to keep store information up-to-date.

How to Access

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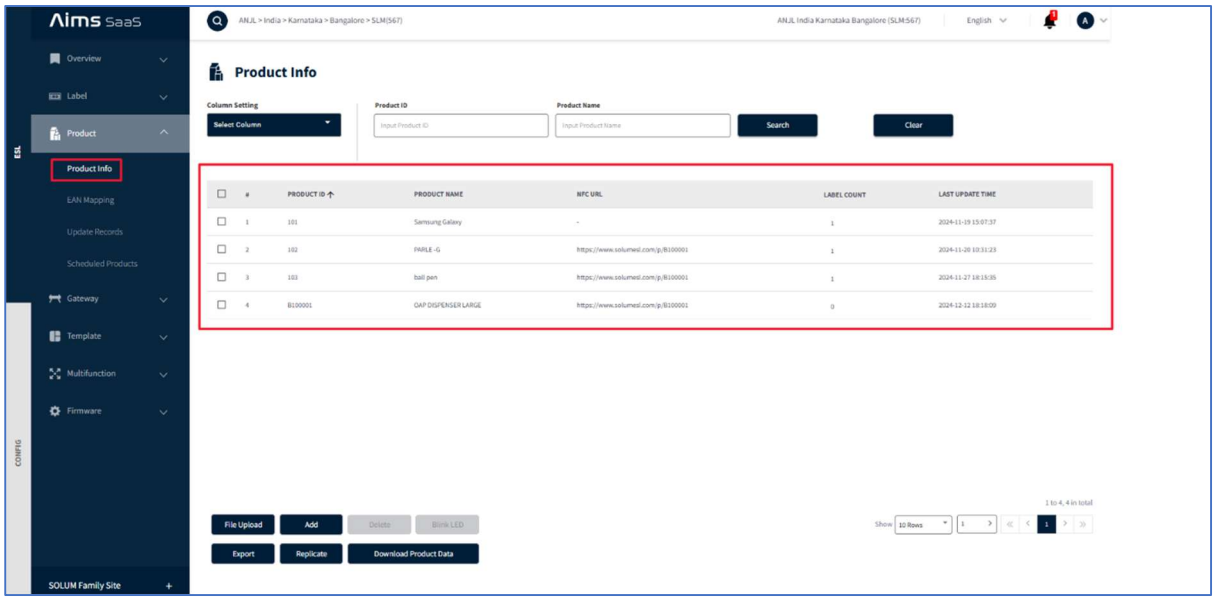
1. Navigate to the **ESL tab** on the dashboard.
2. Click **Product** to open the Product Info page.



***Note**: If you haven't selected a store, the system will prompt you to choose one.*

6.1 Access to Product Info

The Product Info page shows all products added to your store. It allows you to easily customize what you see, search for products, and manage them.

6.1.1 Customize Product List Table

- Click **Column Settings** to choose the details displayed in the table.
- Check the boxes to show specific details or uncheck to hide them.

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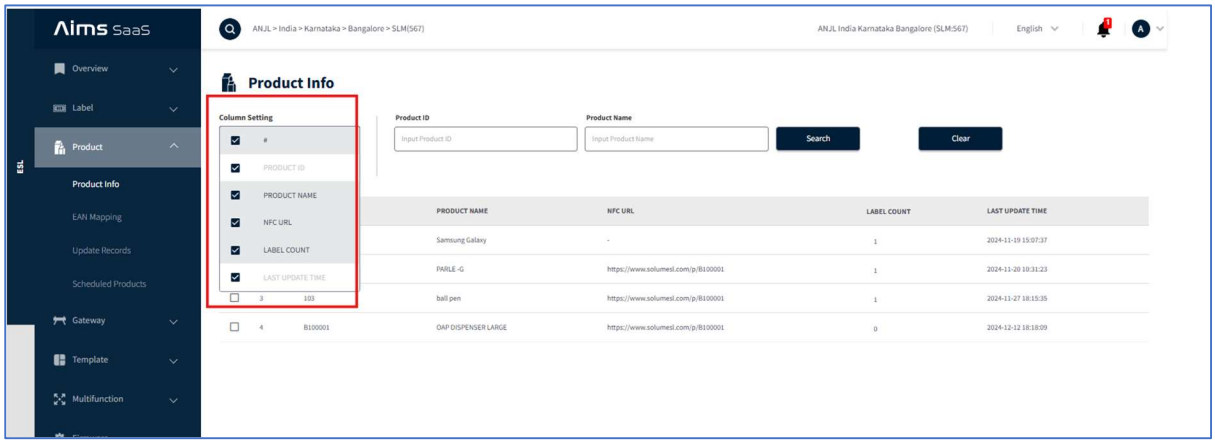
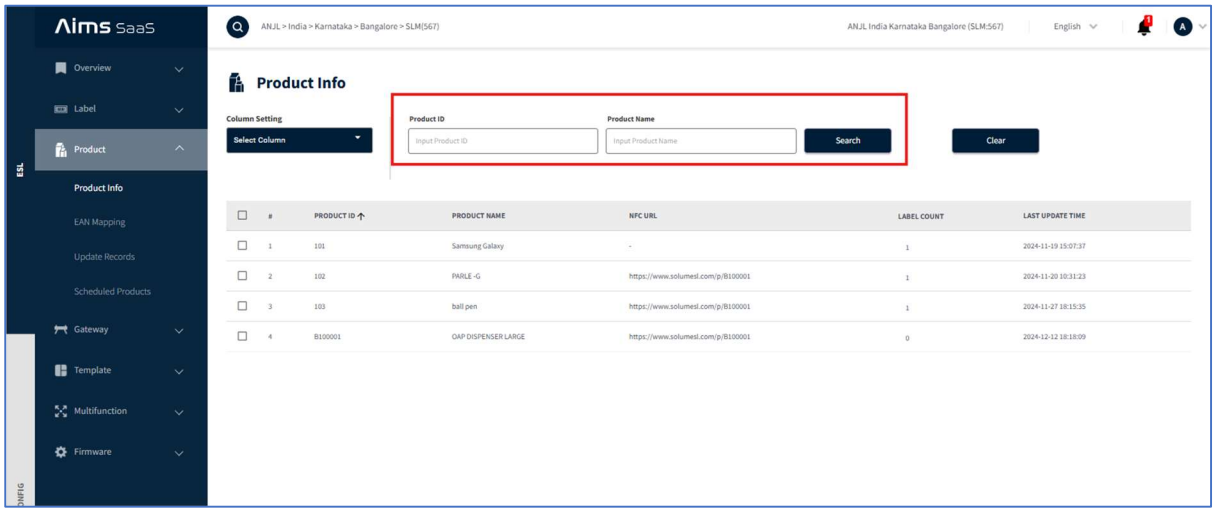


6.1.2 Search for Products

- Use the search fields to find a product by its **Product ID** or **Product Name**.
- Click **Search** to see the results.



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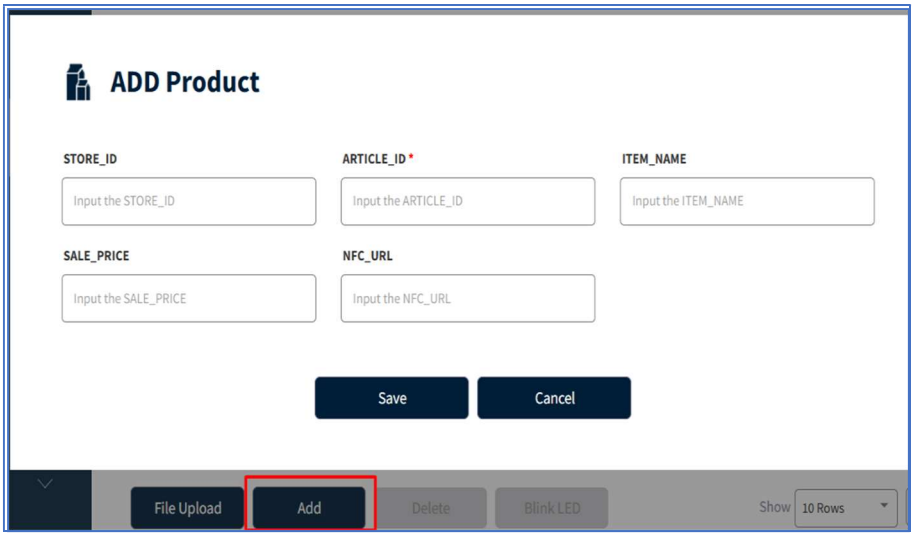
6.2 Adding New Products

Users can add products to the store in three ways:

1. Manually using the Add option
2. Uploading a file
3. Using an API

6.2.1 Adding Products One by One

1. Scroll to the bottom of the **Product Info** page.
2. Click the **Add** button.
3. A window will appear to input product details.
4. Fill in the required fields (marked as mandatory) and click **Save**. If any mandatory field is left blank, an error message will appear.



While adding new products, certain fields are set as default and cannot be edited or deleted. These default fields include:

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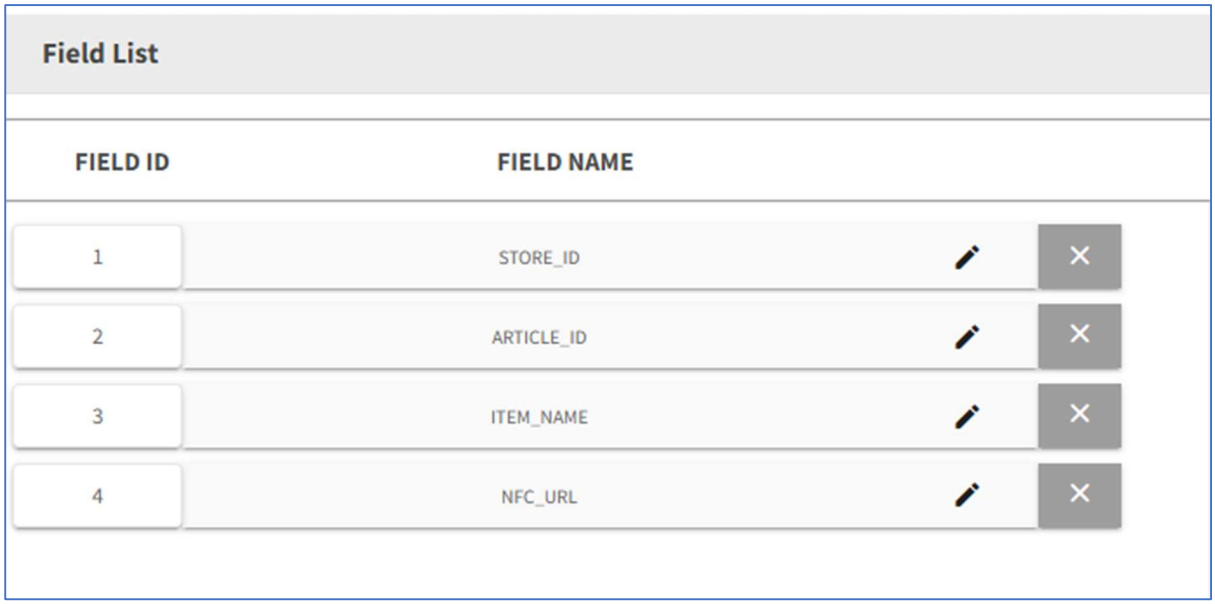

***Note**: If users want to customize the fields displayed on the **Add Product** page (e.g., adding or removing fields), they can do so by navigating to **Config** > **System Config** > **Product File Config**. This section allows users to configure which fields are available for input when adding products. For step-by-step instructions, refer to Appendix B.*

6.2.2 Creating Product Files for Uploading

Before creating your product file for bulk upload, ensure it aligns with the **Product File Configuration** settings in the **System Config** tab. Check the following details:

1. **File Extensions**: Verify the allowed file extensions for uploads.
2. **Delimiter**: Confirm the delimiter used for separating fields in the file.

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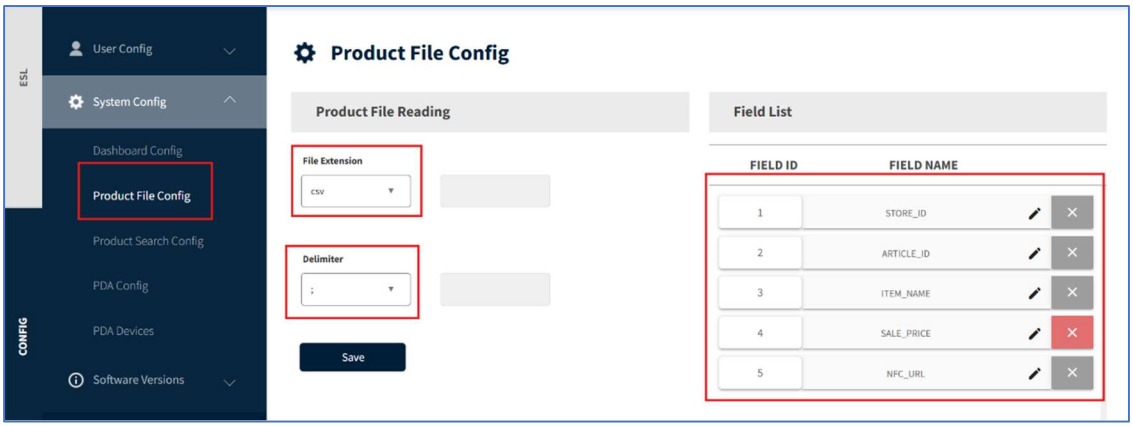
3. **Field List**: Review the required fields and their order, as configured in the system.



Based on the previous image the product file is configured with the,

1. File Format: .csv
2. Delimiter: Use **;** as the delimiter.
3. Fields/Columns:
    - StoreID
    - Article ID
    - Item Name
    - Sale Price
    - NFC URL

Steps to Create the Product File:

1. Open a text editor (e.g., Notepad).
2. Create a new file or sheet.
3. Input the field names for all products, in this format:
   StoreID;ArticleID;ItemName;SalePrice;NFC URL

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4. Save the file with a **.csv** extension.

Example:

For a product named "iPhone 13":

- Store ID: 567
- Article ID: 101
- Item Name: iPhone 13
- Sale Price: 59999
- NFC URL: www.apple.com

The corresponding entry in the CSV file should be:

567;101;iPhone13;59999;www.apple.com

Note: *Users are required to enter values for each field in the following format:*

StoreID;ArticleID;ItemName;SalePrice;NFC URL

if there is no data to be entered then just type delimiter.

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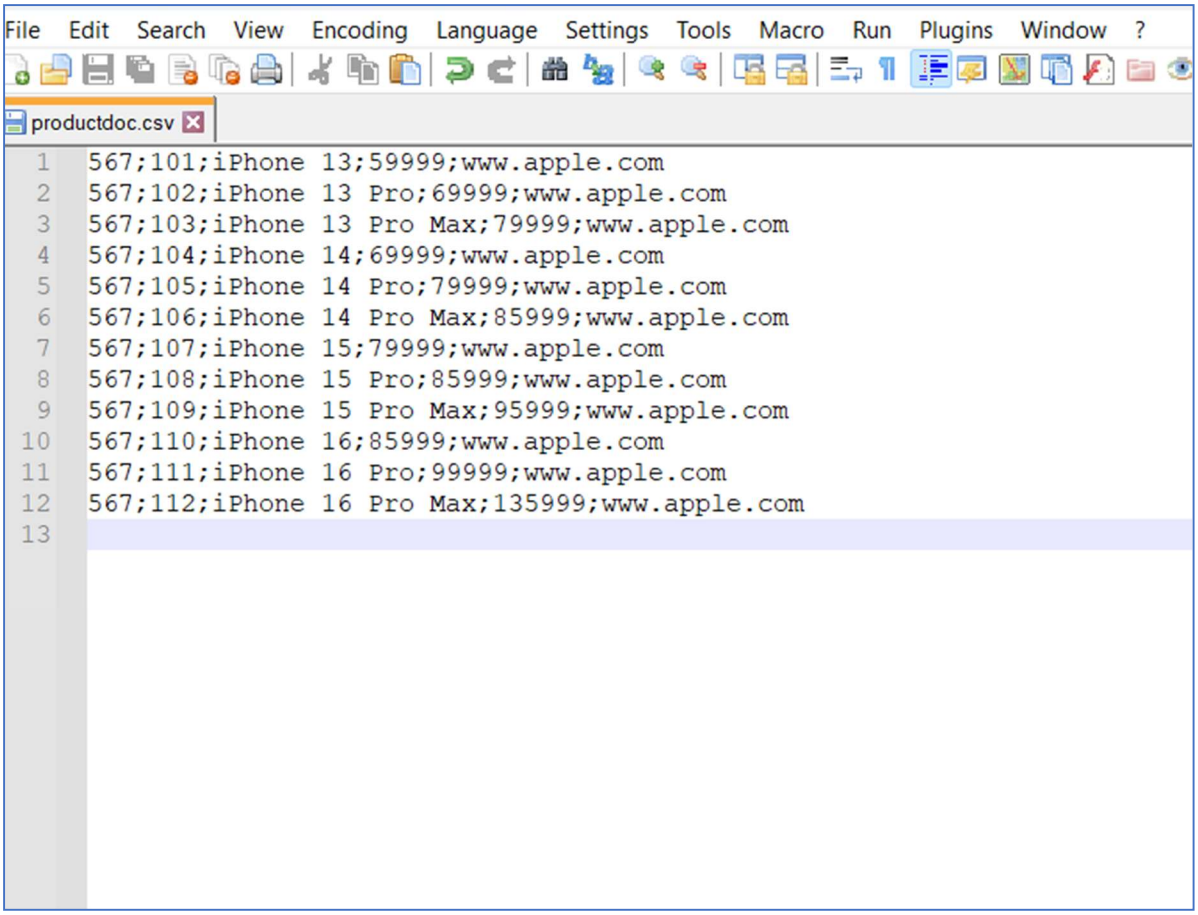
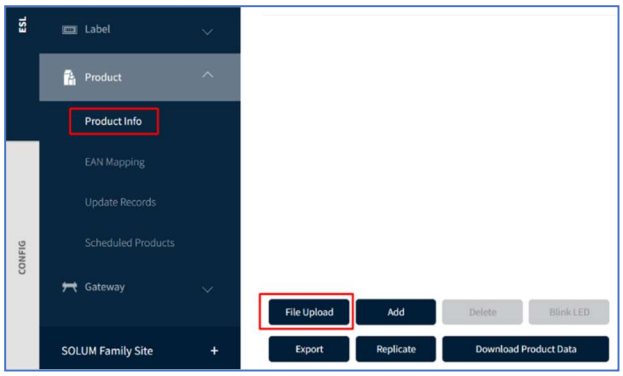


6.2.3 Bulk Upload Products with a Single File

1. Scroll down on the **Product info** page and click **File Upload.**



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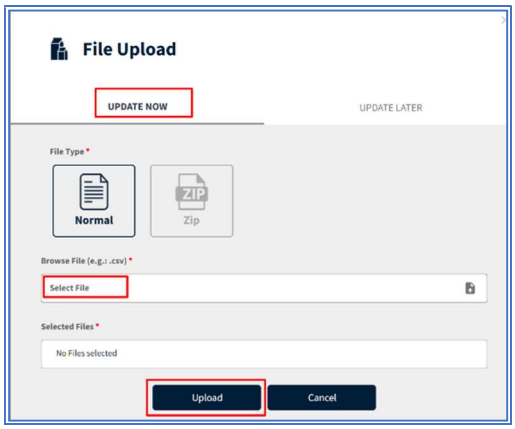
2. Go to the **Update Now** tab in the new window opened.



4. Select file type **Normal** and browse the file of your product list. Click Upload. (Select Normal or Zip. Normally, normal should be used, unless otherwise specified by SOLUM to use zip. The file extension must match the extension selected from the Product File Config Page. Extension information can also be found on the window.

***Note**: This document can be configured based on the fields, file extensions, and delimiter in the product file config section. For a better understanding, refer to Appendix B*

6.2.4 Schedule your product File Uploading

1. Navigate to the **File Upload** section in your **Product** window.

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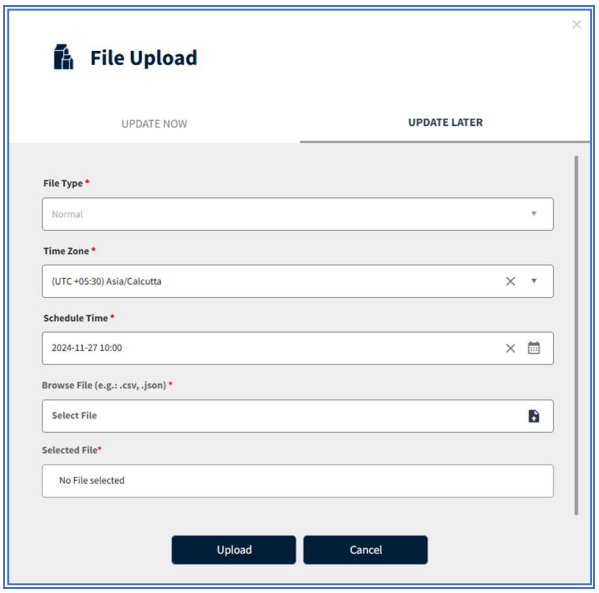
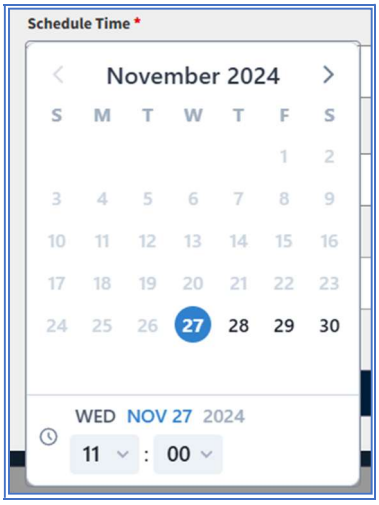
2. Locate and select the **Update Later** tab.



3. The file type will automatically be set to **Normal** (no action needed).
4. From the **Time Zone** dropdown, select your local time zone to ensure the schedule aligns with your location.
5. Use the **Schedule Time** options to select the desired **date and time** for your product file upload.



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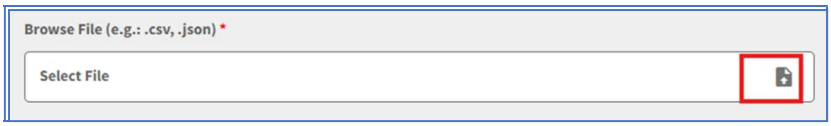
Note:

Article Schedule Allowed Days: *When a user uploads a product file, the dashboard allows them to schedule the upload within the next 30 days (by default) from the current date. The Admin can modify this scheduling*

6. Upload Your Product File:
    - Click the **Browse** button to locate your created product file (in .csv format).



    - Select the file and click **Open**.
    - Confirm that the filename appears in the **Selected File** field.
7. Start the Upload:
    - Click the **Upload** button to schedule the file for processing at your chosen date and time.

6.2.5 Adding product through API

Access the API Documentation:

1. From the **Solum Family Site** button at the bottom left of the dashboard, click **API Docs**.

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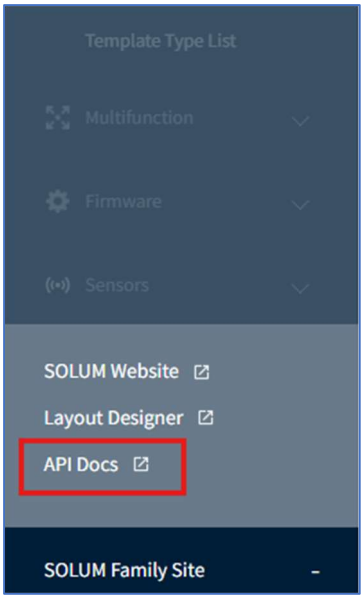
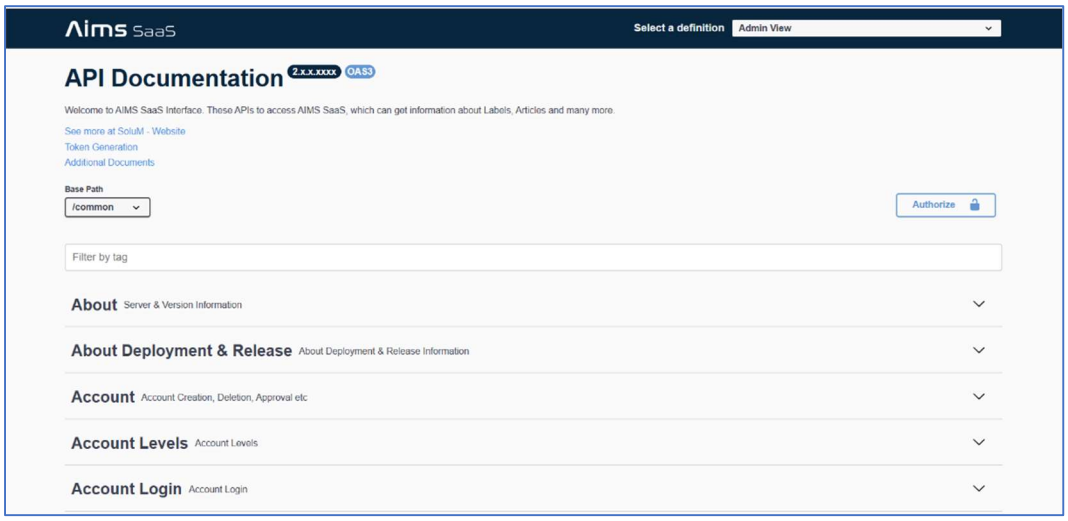


2. A new page will open with access to the API documentation



3. Click **Token Generation** to create a key for user authorization

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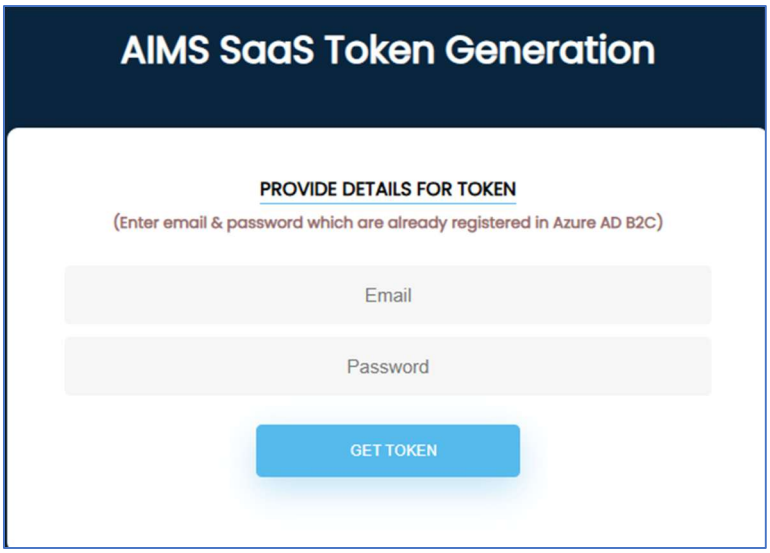
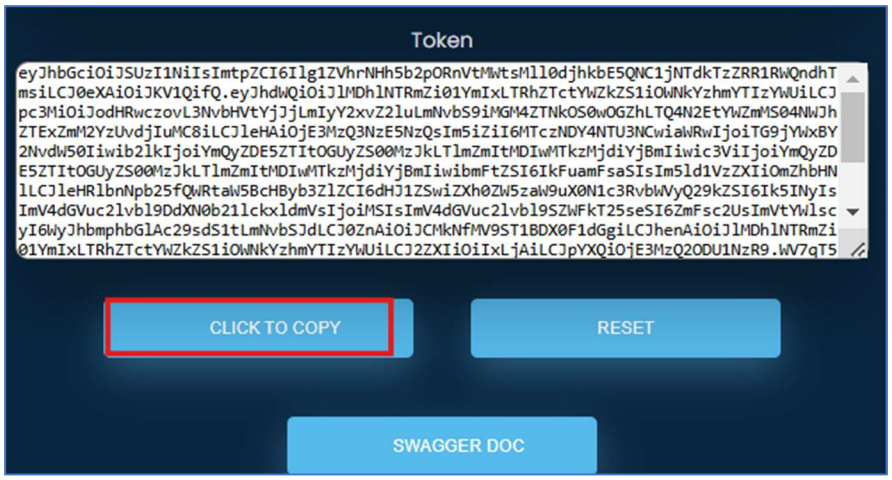
4. Provide your SaaS dashboard Username and Password and click **Get Token.**



5. Copy the generated token.



6. Go back to the API Documentation page and click **Authorize**.

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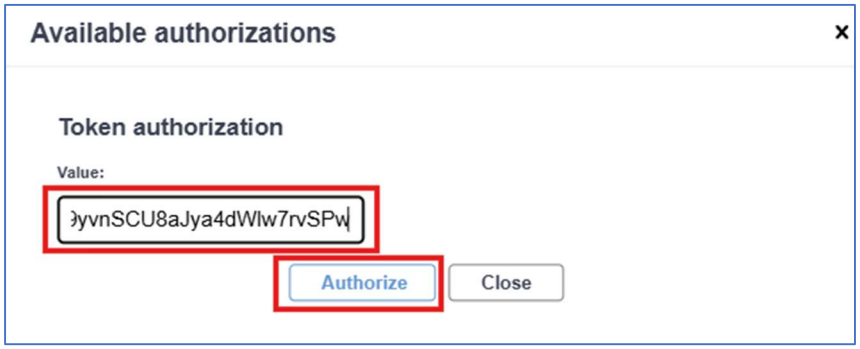
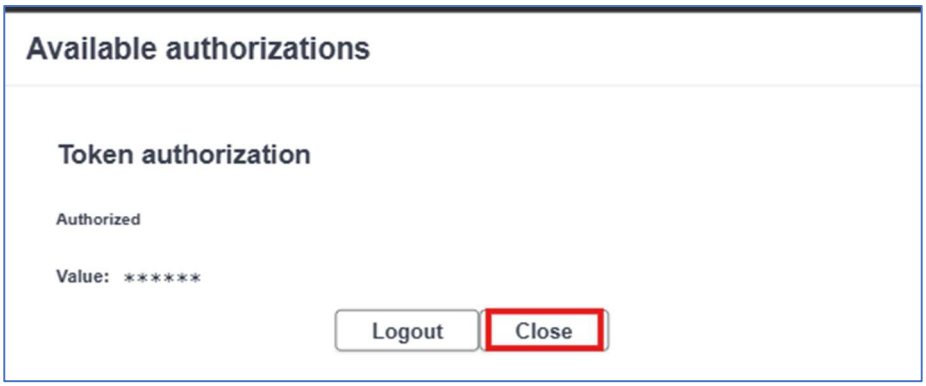
7. Paste the copied token into the value box and click **Authorize**.



8. After authorization, a new window will open. Close this window to return to the API documentation.



9. In the API documentation, find and select **Articles** from the list.

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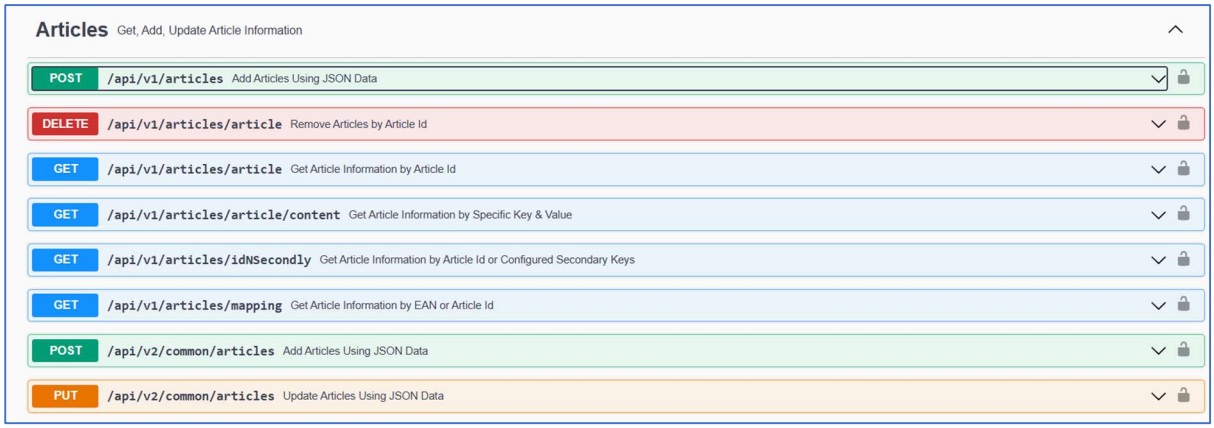
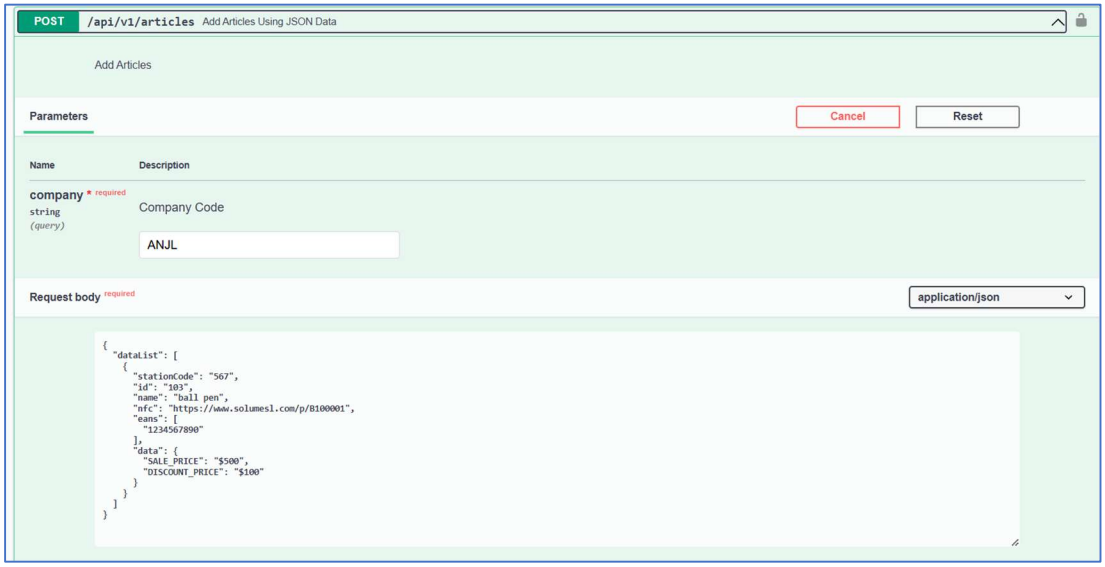


10. Click the **POST** method to add new products.



11. In the **company code** field, enter your company code.

12. In the **station code** field within the request body, input the **store ID** (e.g., "StationCode": "567").

13. Fill in the remaining fields in the **JSON file** with the required data for the product.

14. Click the **Execute** button to send the request to the API.

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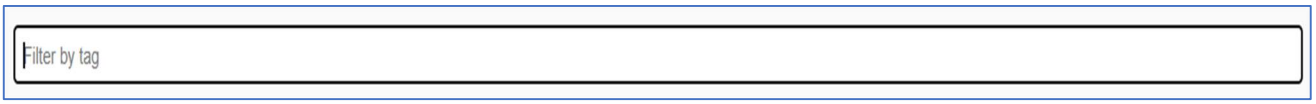
15. Scroll down to view the response.

16. If the response code is **200** and the description shows as **Success**, the product has been successfully created for your store.

Note: *The search/filter option at the top is case-sensitive. Ensure you enter the text exactly as it appears in the list.*



6.3 Delete Your Product

1. **Select the Products to Delete**: (If no products are selected, the **Delete** button will remain greyed out and inactive.)
    - Locate the product(s) you wish to delete in the list.
    - Click the checkbox next to the product name(s) to select them.
2. **Delete the Selected Products**:
    - Once products are selected, the **Delete** button will become active.
    - Click the **Delete** button to remove the selected product(s).

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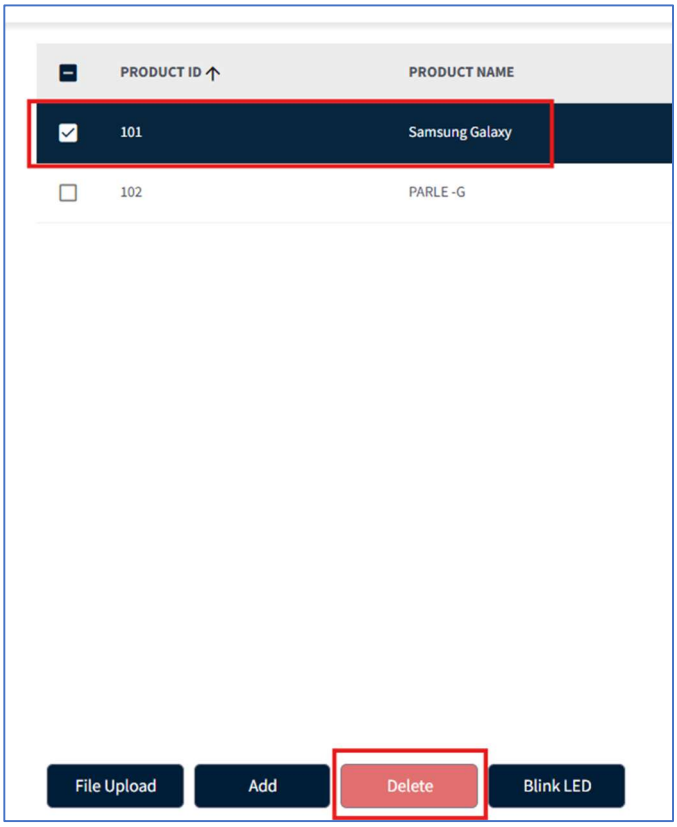

Note: *If a product assigned to a label is deleted, the label will be automatically unassigned. The same rule applies to labels linked to multiple products—deleting any product will automatically unassign it from the label.*

3. A new window will appear, confirming that your product deletion was successful.

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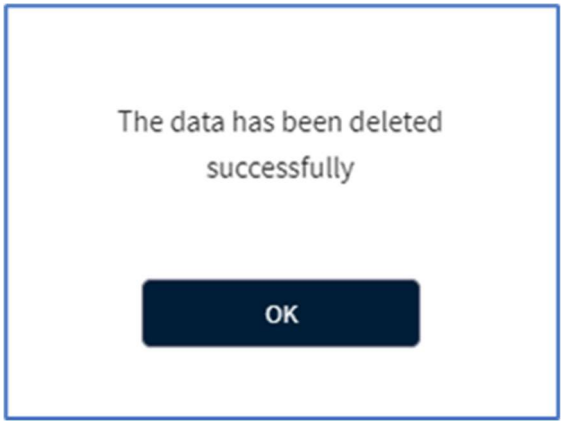

6.4 Blink LED by Product

1. From the product list, select at least one product.
2. The **Blink LED** button will become active only after a product is selected.
4. Click the **Blink LED** button to initiate the LED blinking setup.

Configure LED Settings:

A popup window will appear with the following options:

- **Pattern**: Select the blinking pattern from the dropdown menu. (Patterns can be created in the Multifunction section. Refer to Custom LED Patterns for more details)
- **Duration**: Specify how long the LED should blink.
- **Colour**: Choose the desired colour for the LED.

5. After selecting your preferences, click **Save**.

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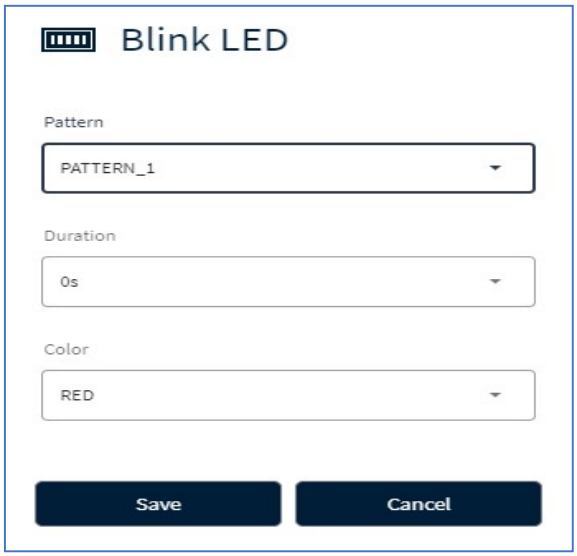

Note: *If* ***products*** *are not assigned to any label and perform BLINK LED function then a pop-up will be displayed as* ***Articles not linked to labels.***

6.5 Export Your Product List

1. Locate and click the **Export** button on the **Product Info** page.
2. Enter the email address where you want the download link to be sent and click **Send.**
3. It may take up to **30 minutes** for the system to generate the file and send the email.

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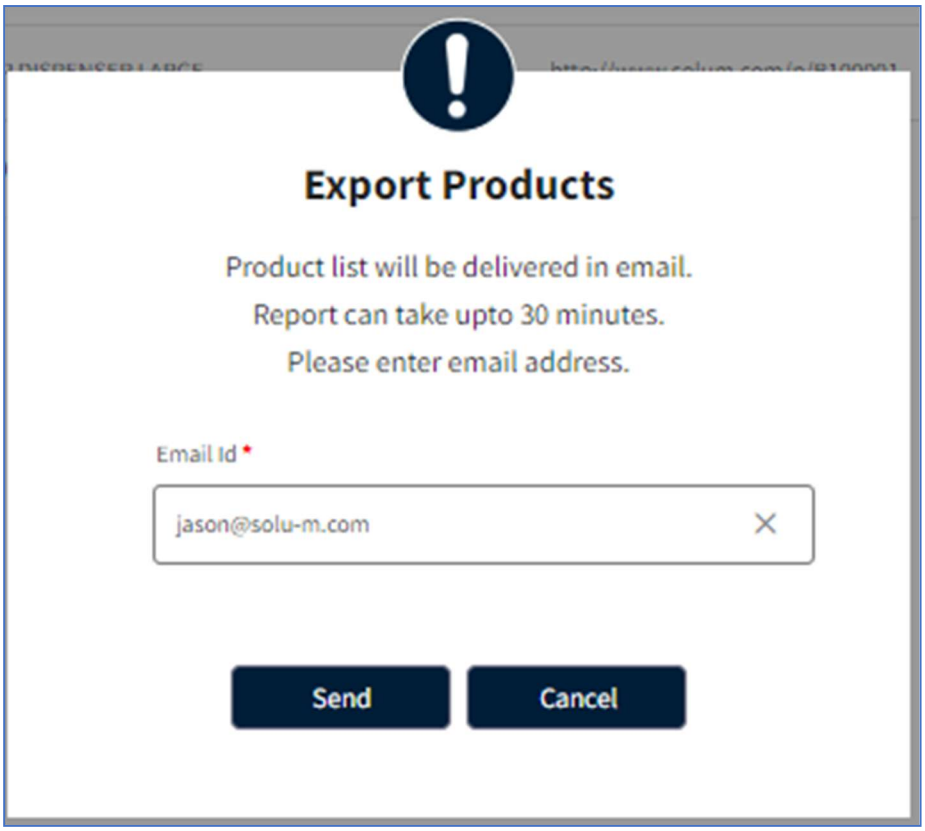
4. Open the email and click the download link to access the Excel file containing the product list.



***Note**: The download link is valid for **72 hours**, so download the file promptly to avoid reinitiating the process. If you have applied any filters to the product list, the export will include only the filtered items, not the full product list.*

6.6 Replicate Your Products for Different Store

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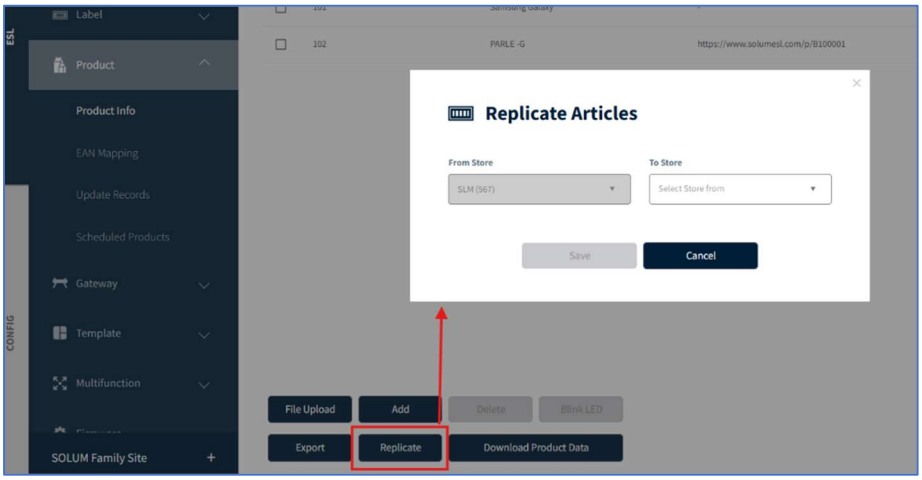
1. Click the **Replicate** button at the bottom of the Products section.



1. The **From Store** field will automatically display the current store (default). This field is not editable.

2. In the **To Store** field, choose the destination store from the dropdown menu. This is where the products will be replicated.

3. Replication Process:
   - The system will compare products between the two stores.
   - Products that already exist in the To Store will be skipped.
   - Only products that do not exist in the To Store will be replicated.

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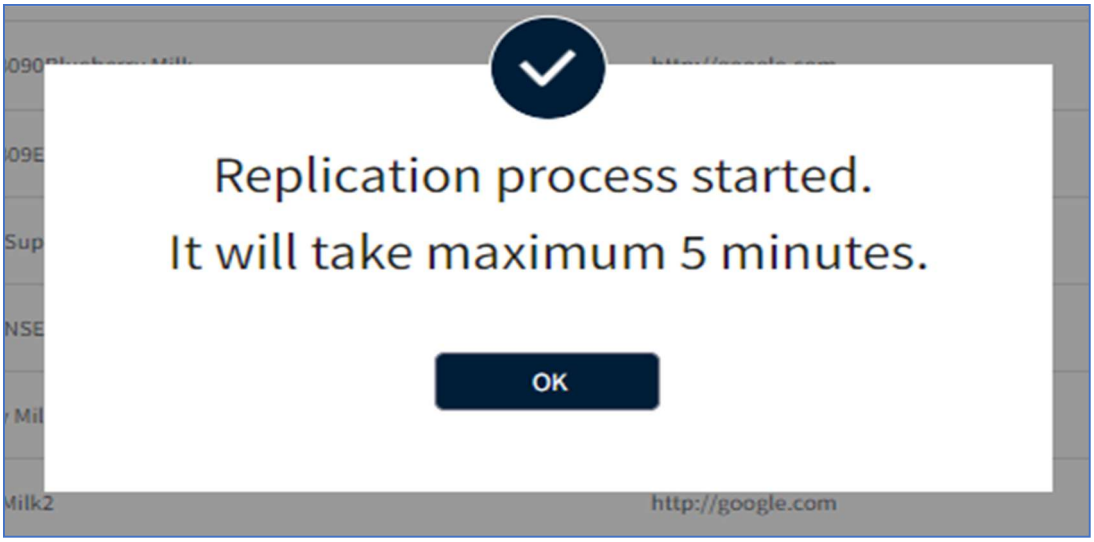
4. Click Save and the process will begin, which can take up to five minutes.



6.7 Download Your Product Data List

Using this user can export the Product data list to the provided email. An email will be delivered with the file download link.

1. Go to **Download Product Data** in Aims Saas Dashboard.

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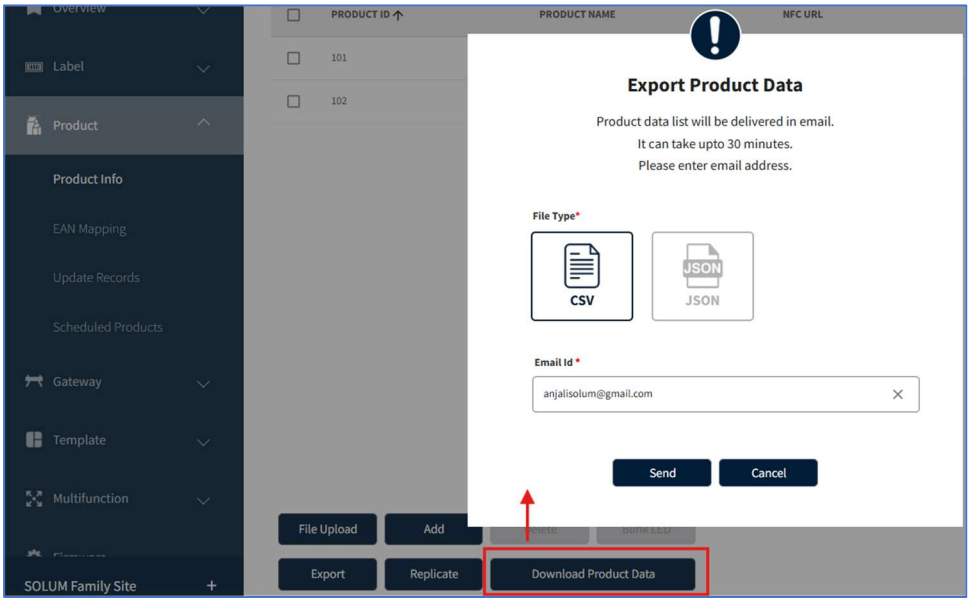

2. **File Type** will be displayed based on the customer's product file configuration. JSON format will be constant by default.

3. Provide the **Email ID** in the next field and click **Send**.

Note:

- *The **product file** is available for **download for 10 days** from the date it is uploaded.*
- *The **file storage duration** depends on the **admin's configuration.***

6.8 EAN Mapping

EAN Mapping is the feature to link different IDs to the main article ID of the product loaded to the Server. This page will list all EAN-mapped values and allow the user to add/delete EANs.

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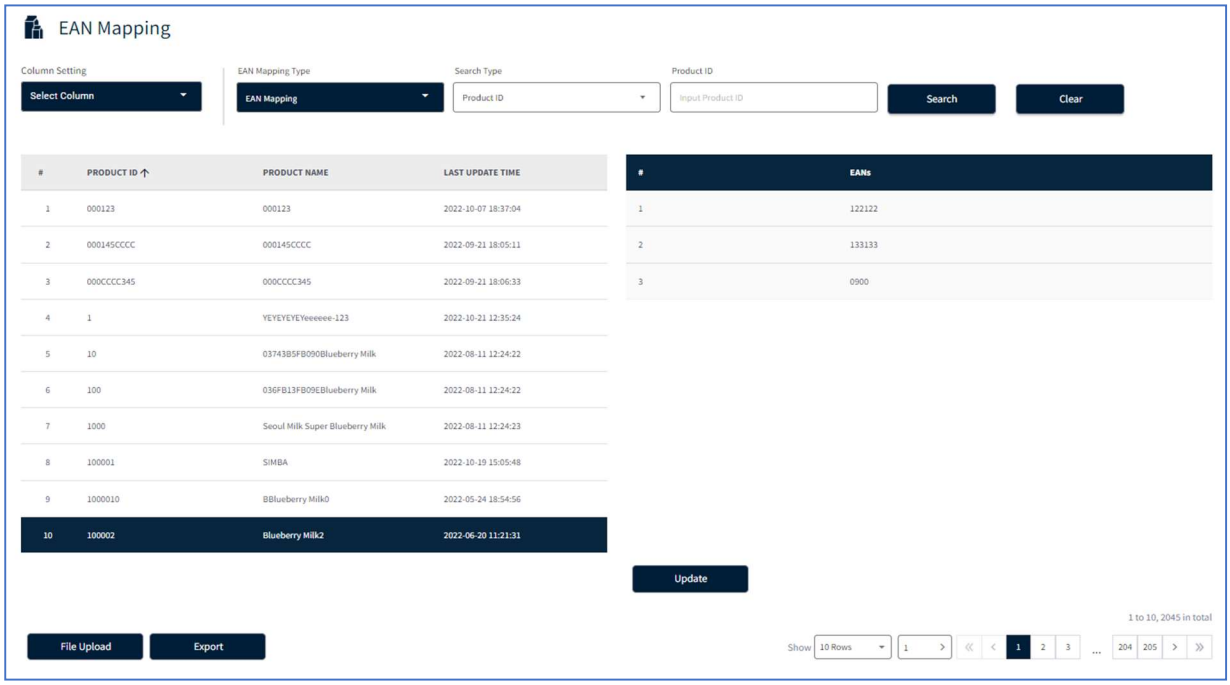
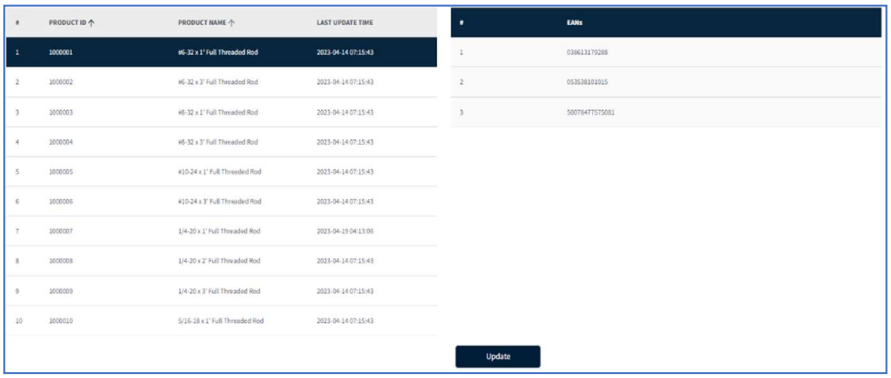


6.8.1 Access to EAN Mapping List

1. All products loaded to the store are displayed on the left-side list.
2. Click a product to highlight it.
3. Any EANs mapped to the selected product will appear in the EAN list on the right.
4. If no EANs are mapped, the list will remain empty.



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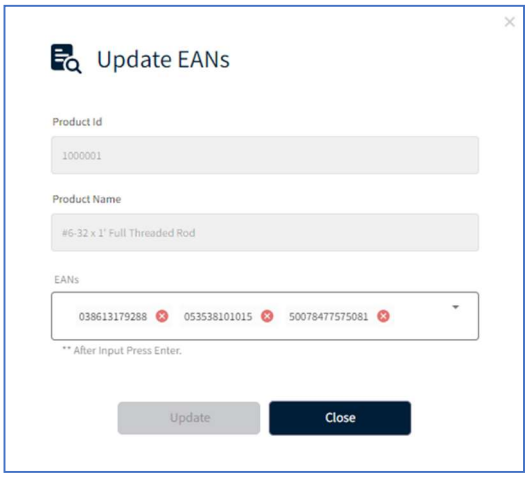
6.8.2 Modify Your EAN mappings

1. Click the **Update** button to open a new window where you can modify EAN mappings.
2. Enter the EAN ID in the input field.
3. Press **Enter** after typing each EAN to add it to the list.



4. To delete a mapped EAN, click the **RED (X)** next to the EAN in the list.
5. After adding or removing EANs, click the **Update** button to save your changes.

6.8.3 Access to EAN Update History

1. Locate the **EAN Mapping Type** dropdown menu.
2. Select **EAN Update History** to display the updated history of EAN mappings.
3. Adjust **Column Settings** to customize the fields displayed in the list.
4. Apply filters to narrow down specific data in the displayed history.

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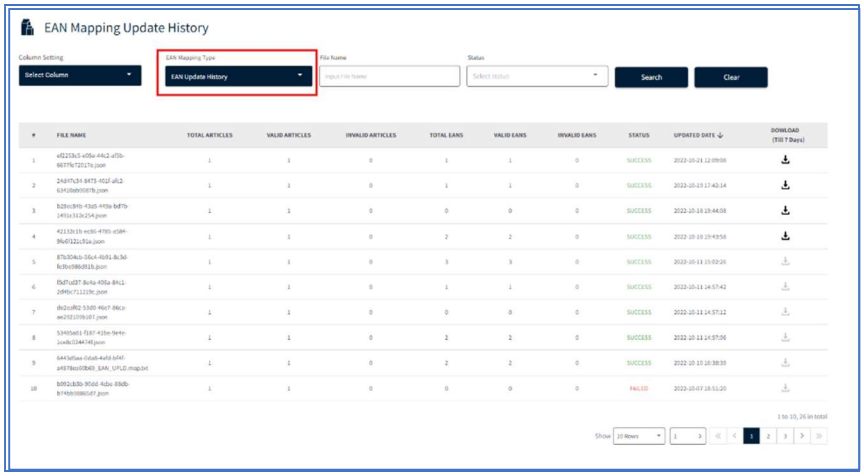

5. Click the **UPDATED DATE** column header to sort the history by date (ascending or descending).
6. Click the **Download** button to save the data as a **JSON file** to your local machine.

6.9 Additional EAN Mapping Functions

6.9.1 Adding EAN through File Upload

1. Go to the **File Upload** tab on the EAN mapping.

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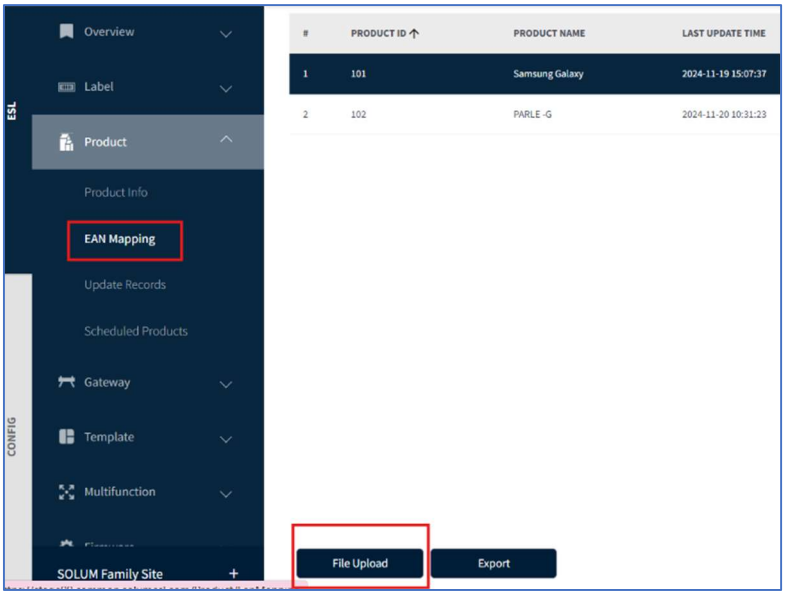
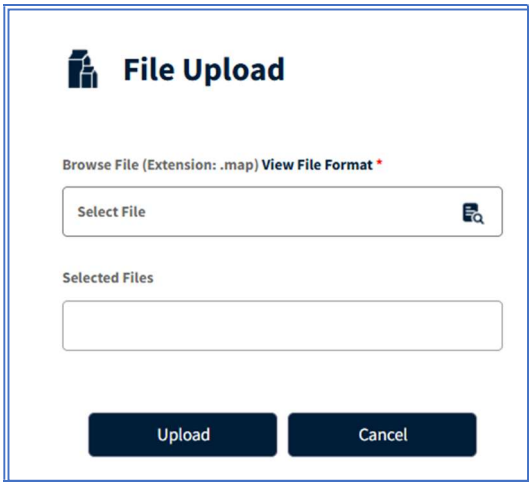


2. In the newly opened window, browse your local files and choose the appropriate **.map** file for upload. Ensure the file matches the required format before proceeding.



3. Follow the specific data format required for the upload.
4. To view the format details, hover your mouse over the **'View File Format'** text.

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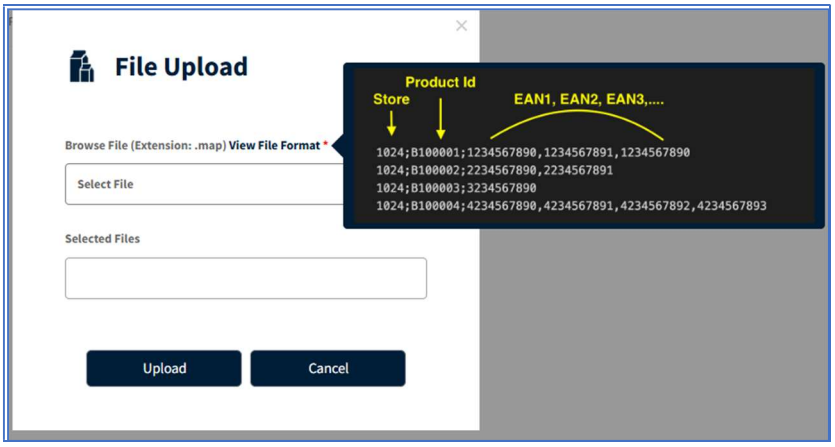
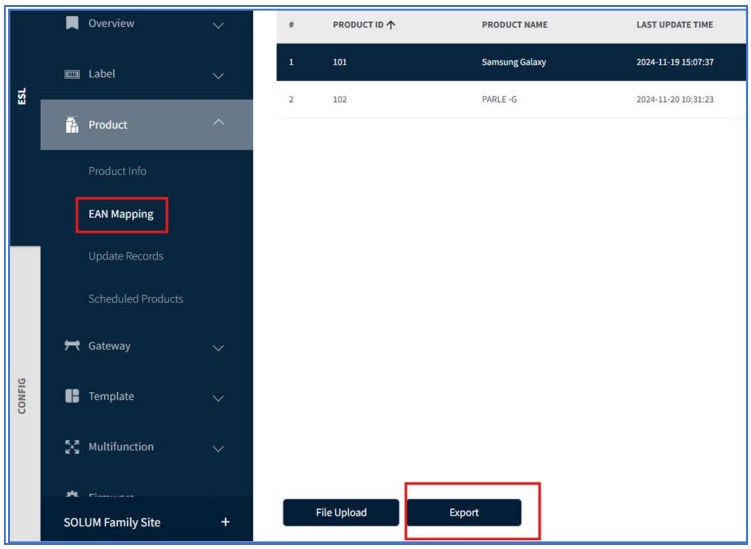


5. After selecting the correct file, click the **Upload** button to begin the process. Ensure the file is accurate and properly formatted before uploading.

6.9.2 Export EANs List

1. Locate and click the **Export** button in the EAN mapping section.



2. Enter the email address where the download link should be sent.

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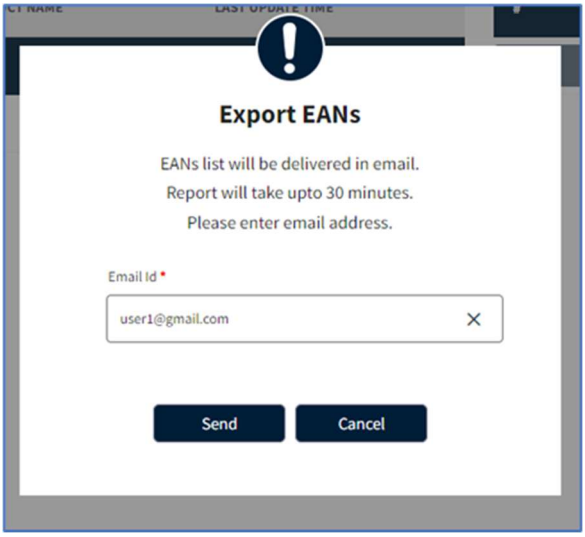
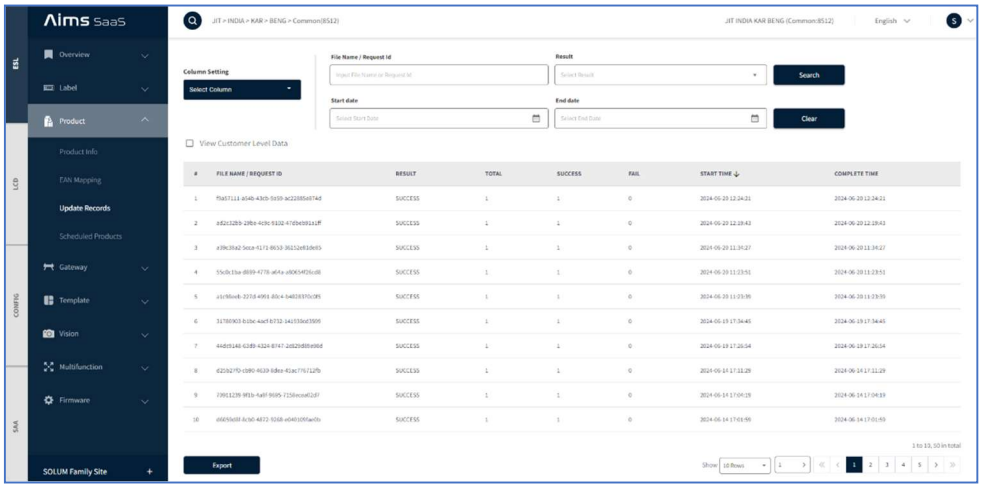


3. The system will send a link to your email to download the file as a **ZIP archive**.
4. Open the email and click the provided link to download the ZIP file containing the full EAN mapping list.

6.10 Track Product Update Records

Product updates can be tracked from this page.



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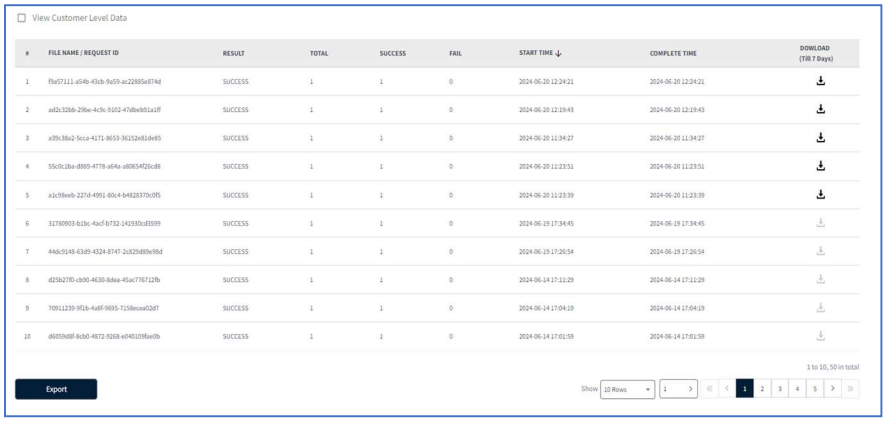
6.10.1 Update Product Records List

The list can be sorted by **FILE NAME / REQUEST ID** or **START TIME**.



View Customer Level Data (Check box)

1. When accessing the **Update Records** page, the data will automatically display records for the selected store by default.
2. If you want to view updated records across all stores for the customer:
   - Locate the **View Customer Level Data** checkbox.
   - **Check the box** to switch the data view to reflect company-level (all stores) updated records.

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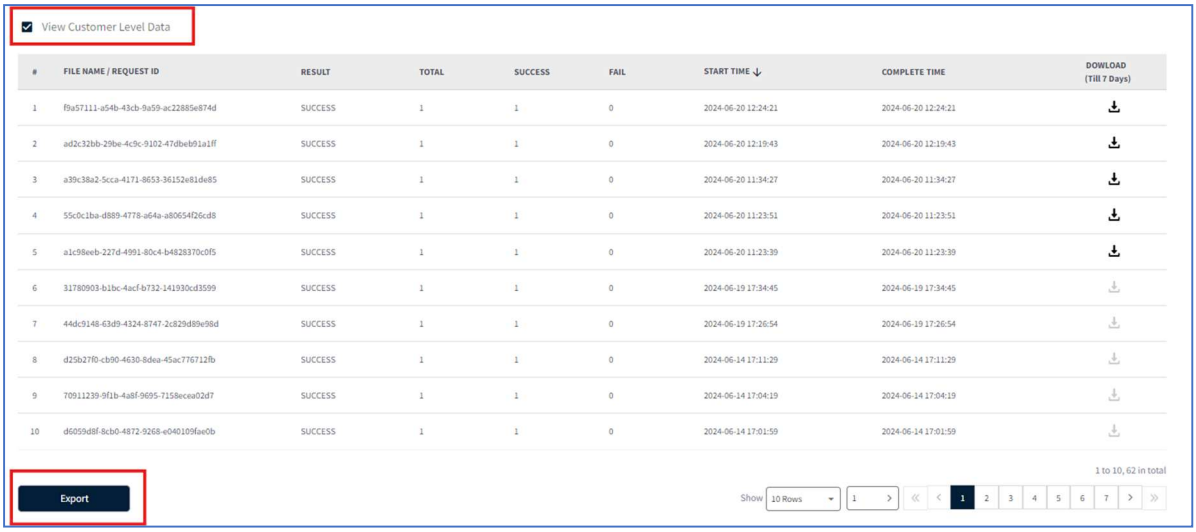
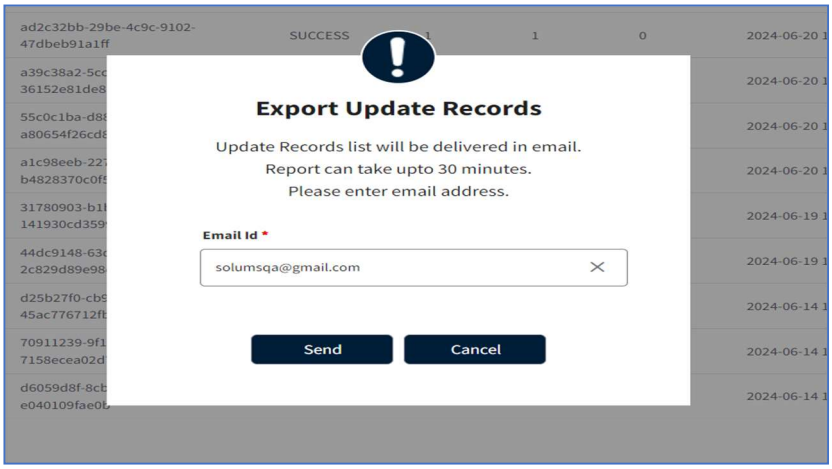


6.10.2 Export Product Update Records

1. To export updated records, Click the export button to provide a valid Email ID, and Click the send button.



Note: *Customers can request to store uploaded data for a defined period of time. This allows the user to be able to download the file for any reason. This feature is by default disabled and must be requested to SOLUM for admin to enable.*

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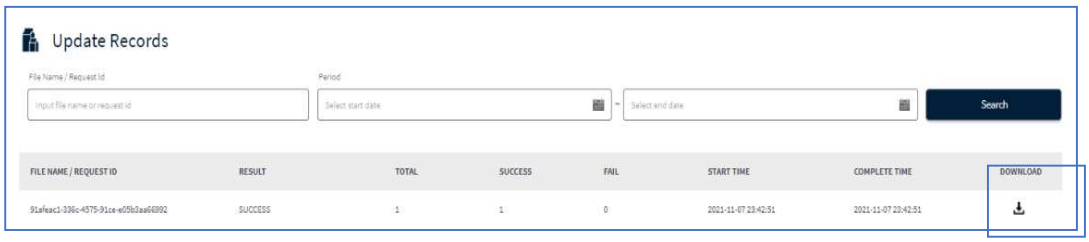
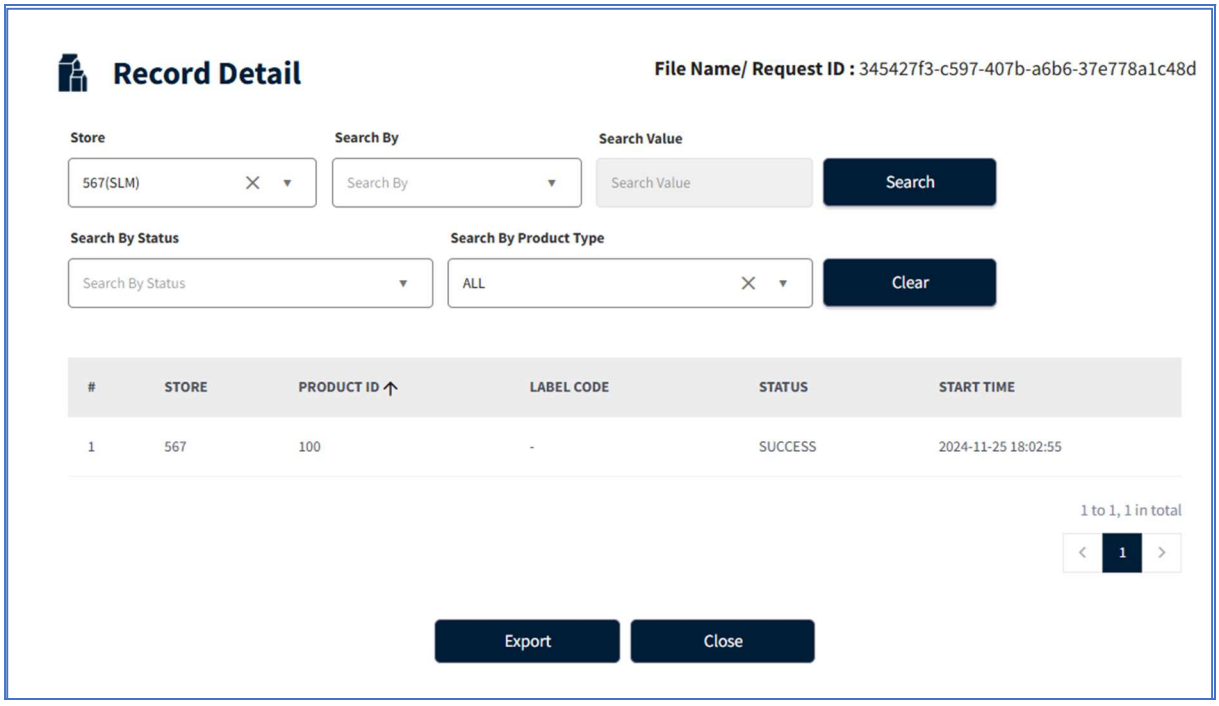


6.10.3 View Update Record Details

Clicking a **File Name** in the Update Records will open a **Record Detail** window. A short list is provided for columns like PRODUCT ID, LABEL CODE, STATUS, and START TIME.



Search options are provided to filter the results.

1. Search by store.

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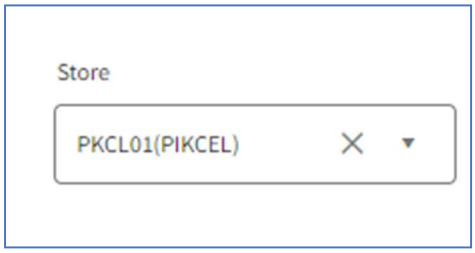
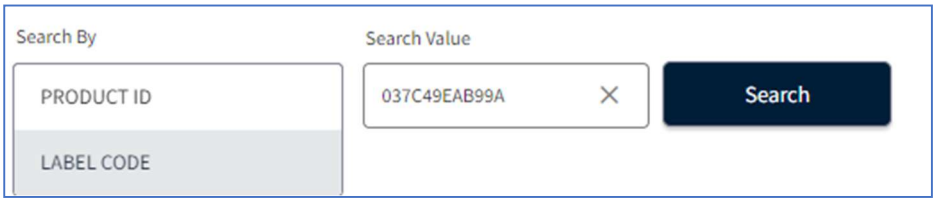


2. Search By- Product ID and Label code:

- In the search by field select Product ID and Label Code.
- In the **Search Value** field, input a valid value that matches your selected criterion.
- Click the **Search** button to filter and display the results based on your input



3. Search By Status:

- Select any status type from the dropdown and click the search button to filter results.

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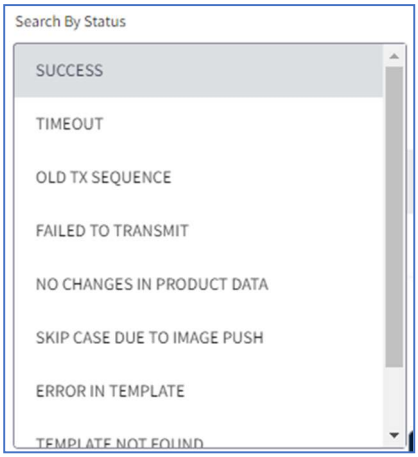
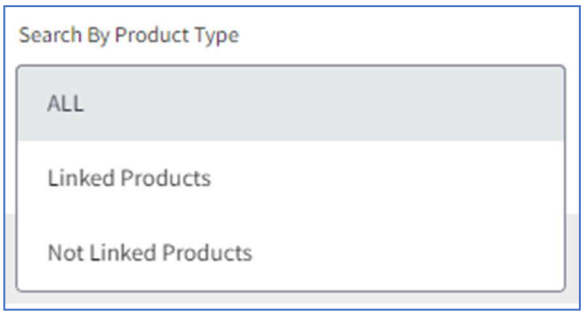


4. Search By Product Type:

- By default, ALL will be selected user can Click the drop-down select the Linked or Unlinked option, and click the search button to filter results.



5. Export Update Record Details

1. Click the **Export** button.
1. An **Export Record Detail** pop-up will appear.
2. By default, the logged-in user's email address will be pre-filled in the email field.
3. If needed, input a different email address where you want the record details to be sent.

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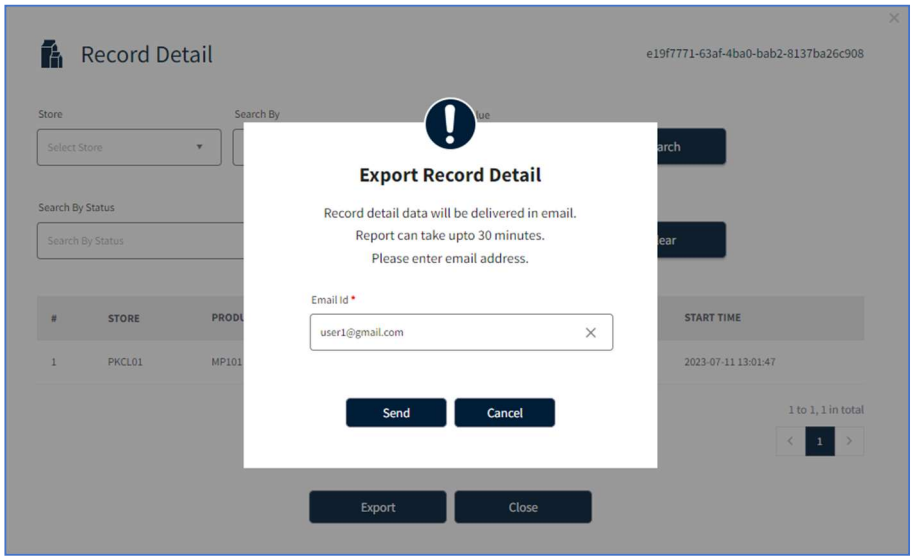
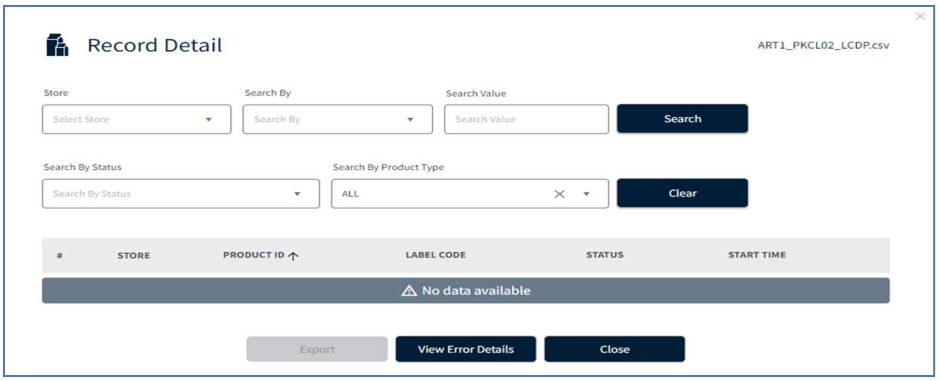
4. Click the **Send** button to email the record details to the specified address.



If there are any failed product updates, the update window will display an additional **View Error Details** button.



1. Click the **View Error Details** button to open a list of all products that failed to update, along with the error details.
2. Use the **Error Text** and **Error Data** fields to search and filter the list of failed products based on specific error messages or data values.

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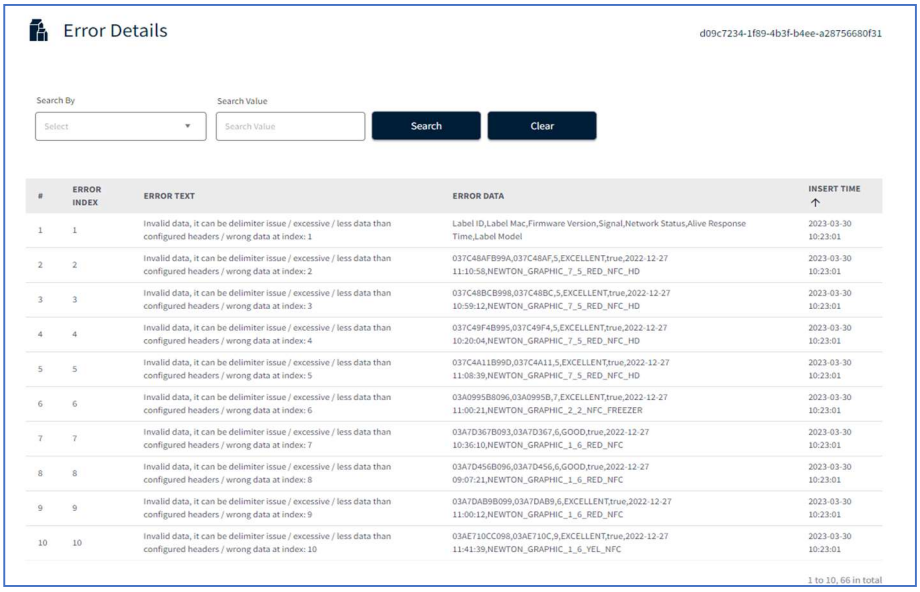
3. Input the respective values in the search fields to narrow down the results.
4. Review the filtered error details to identify the issues and take appropriate actions to resolve them.



6.11 Edit Scheduled Products

This section explains how to manage scheduled product updates (files uploaded as "Update Later").

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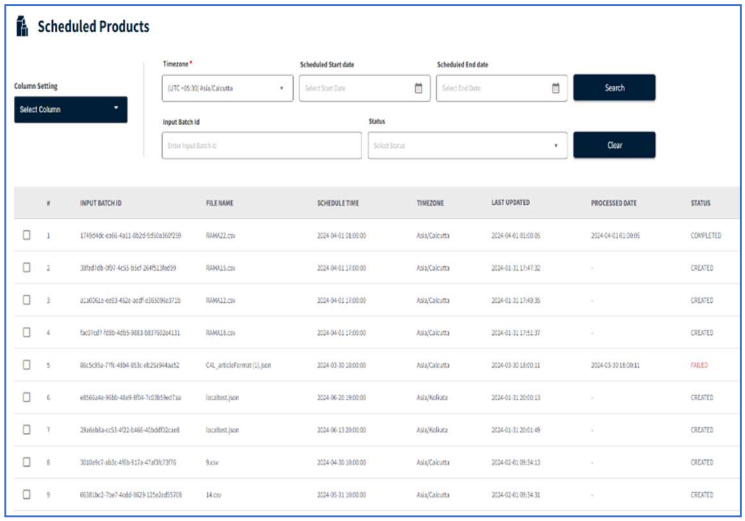
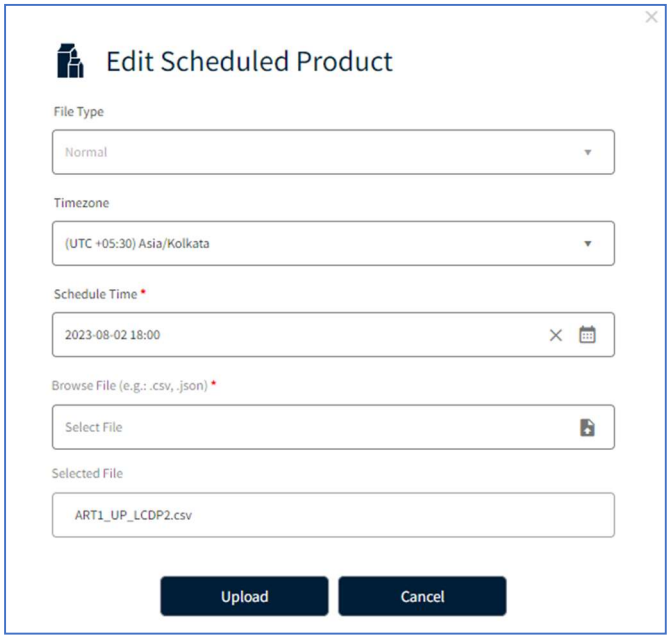


1. Find the product update you want to edit and **click the file name**.
2. Clicking the file name will open a window where you can edit the schedule of the selected update.



3. The settings available in this window will be the same as those described in the **Update Later** section.

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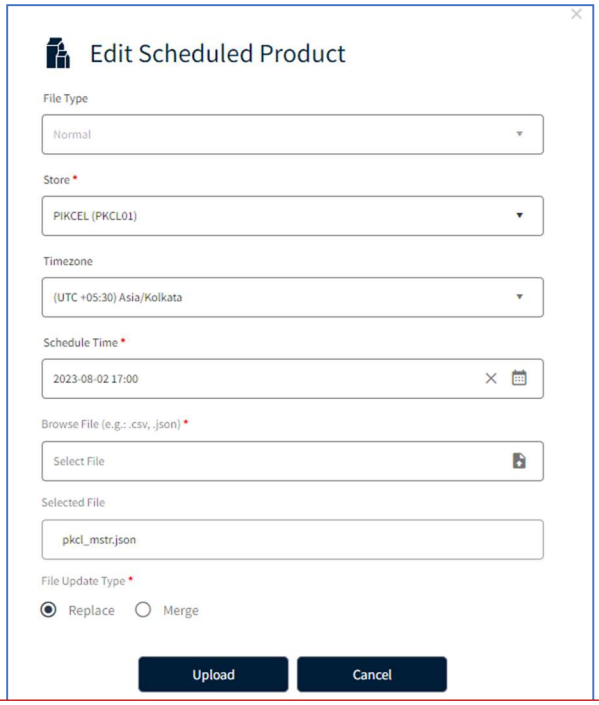
4. If the selected file is a **.dat** or **.csv** file, you will be able to upload and modify the schedule settings.
5. You can change the **date**, **time**, or other relevant settings for the update. After making the necessary changes, click **Upload** to apply the updated schedule.
6. If the selected result is JSON file upload, then the **Select store** option will also be displayed as shown below along with other options.



Note:

1. *Edit schedule product changes should be made within the scheduled period time otherwise, it will take default scheduled product data.*
2. *If the selected store is **MASTER**, then the **ENABLE MASTER ARTICLE UPLOAD** checkbox will be displayed in the edit schedule product pop-up.*

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6.12 Article as an Image Push

Article as an Image Push is a type of article update where the user uploads images instead of traditional article data. To utilize this feature, users must upload the images to the Azure platform. Solum provides secure access to its Azure Container, ensuring authentication and authorization for data protection. Users can upload their images to this container, and from here they can push images to labels. When adding a new product, users only need to enter the Product ID if the image push feature is enabled. Users must ensure that the uploaded images align with the resolution and color specifications of the selected label.

6.12.1 Creating Solum Azure Storage for Customer

Solum will create the Azure container with the name format **{customer code}-article-image.**

Example: If a customer's code in the SaaS system is registered as "TAE," the container name will be tae-article-image.

To enable the customer to upload images, solum will provide shared credentials, these will grant the customer the necessary permissions to upload images to the container.

6.12.2 Hash (#) Path and Image Naming Convention

While uploading images to the Azure container, the user must ensure that the images are correctly uploaded and associated with products. Kindly stick to the following path and image naming conventions based on the level of product update:

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Note: *Images must be uploaded with the appropriate resolution. Use the specified path format to organize images based on the order of Area Group Management (country, region, city, and store).*

Path Formats:

1. **Product Update by Country:**

- Path Format: ***{country}/{article-id}.jpg***
- Example: For an article with ID 12345 in the DE, the path would be ***DE/12345.jpg.***

2. **Product Update by Region:**

- Path Format: ***{country}/{region}/{article-id}.jpg***
- Example: For an article with ID 12345 in the Hessen region of the DE, the path would be ***DE/Hessen/12345.jpg***.

3. **Product Update by City:**

- Path Format: ***{country}/{region}/{city}/{article-id}.jpg***
- Example: For an article with ID 12345 in Eschborn, Hessen, DE, the path would be ***DE/Hessen/Eschborn/12345.jpg.***

4. **Product Update by Store:**

- Path Format: ***{country}/{region}/{city}/{store}/{article-id}.jpg***
- Example: For an article with ID 12345 in SK001, located in Eschborn, Hessen, DE, the path would be ***DE/Hessen/Eschborn/SK001/12345.jpg.***

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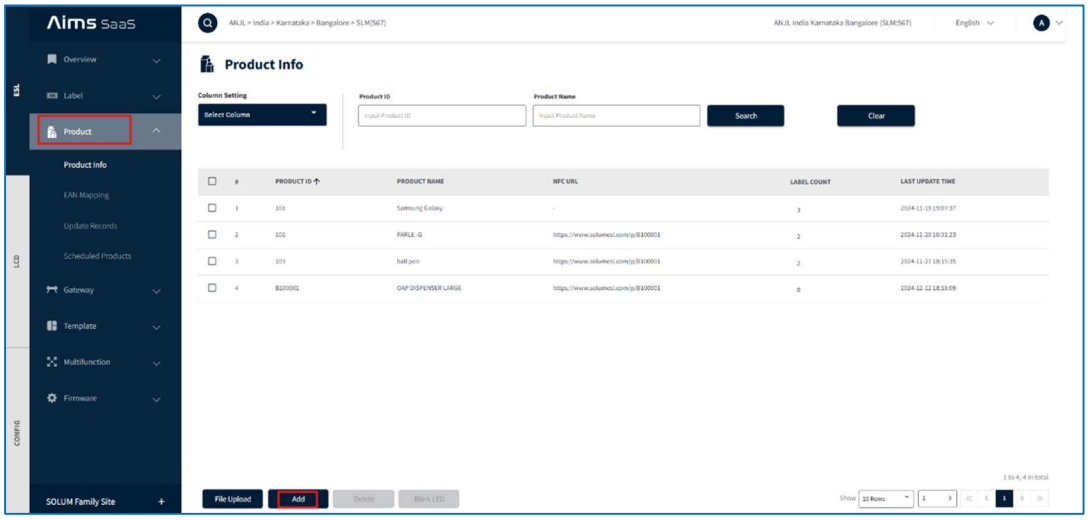
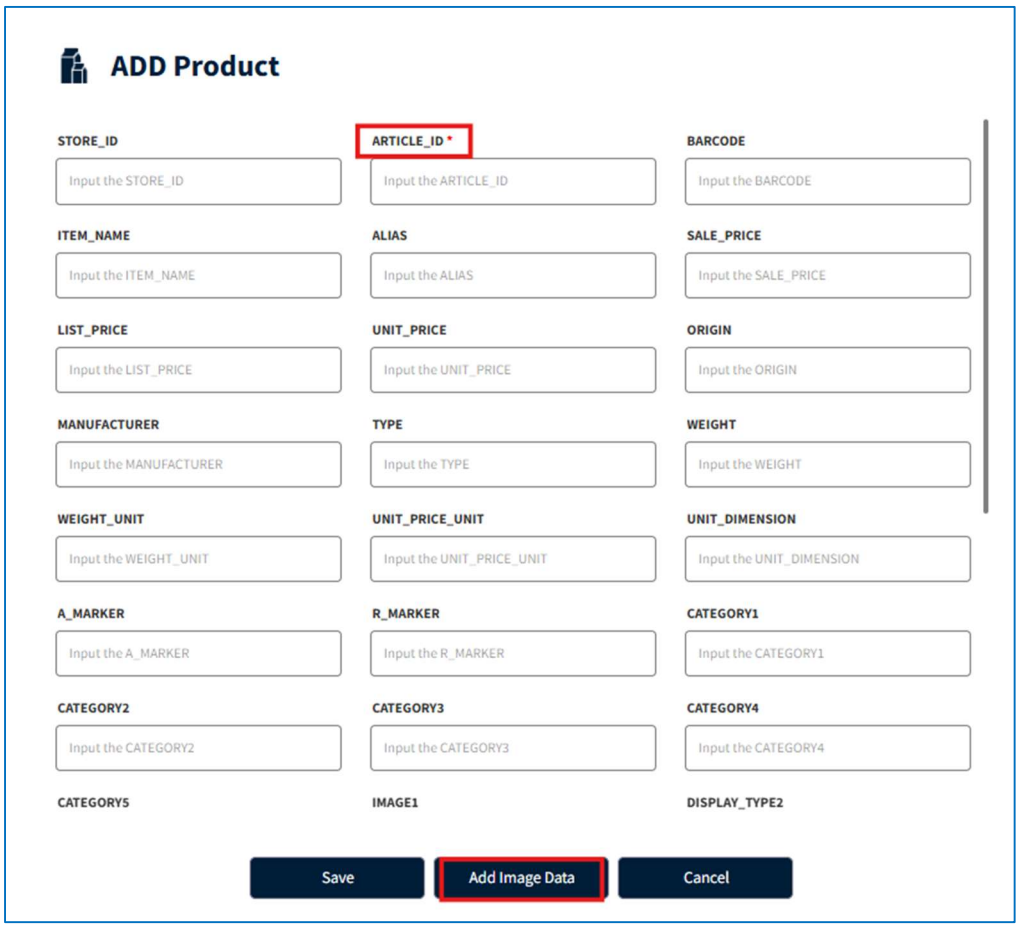
6.12.3 Article Image Push Through SaaS Dashboard

1. Go to **Product** and click **Add**



2. Provide the **Article Id** and click **Add Image Data.**



3.Click **Add** in the newly opened window

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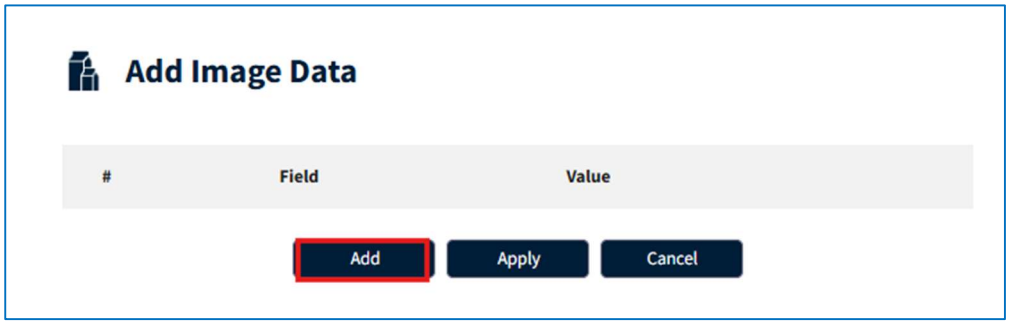


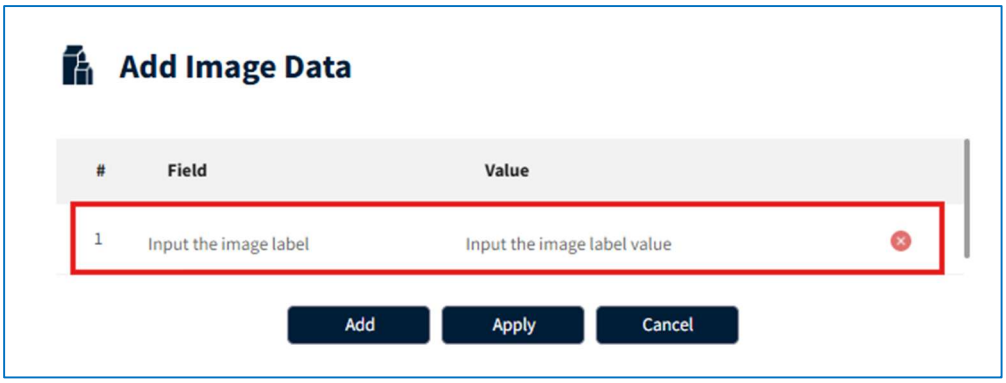
4. Input the image Label.

Example:

Field: image_360x184_1

Value: The image file path

(e.g.,DE/Hessen/Eschborn/SK001/articleid0001.png)



5. Click Add again and Input the Hash value (Unique Image ID)

Example:

Field: image_360x184_1_hash

Value: da39a3ee5e6b4b0d3255bfef95601890afd80701

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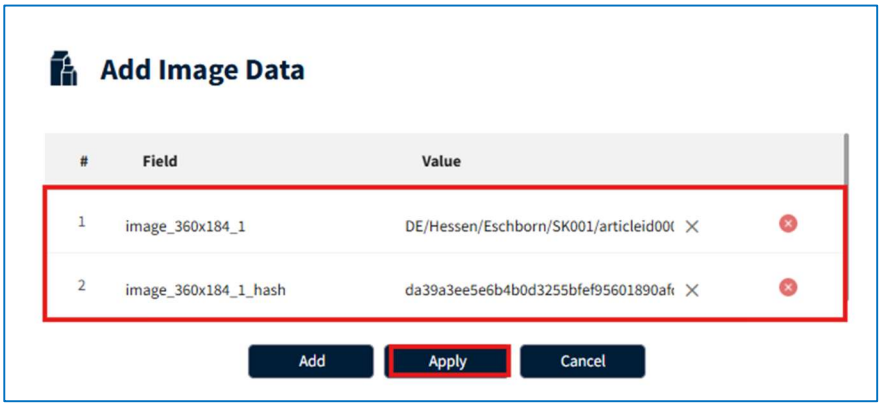
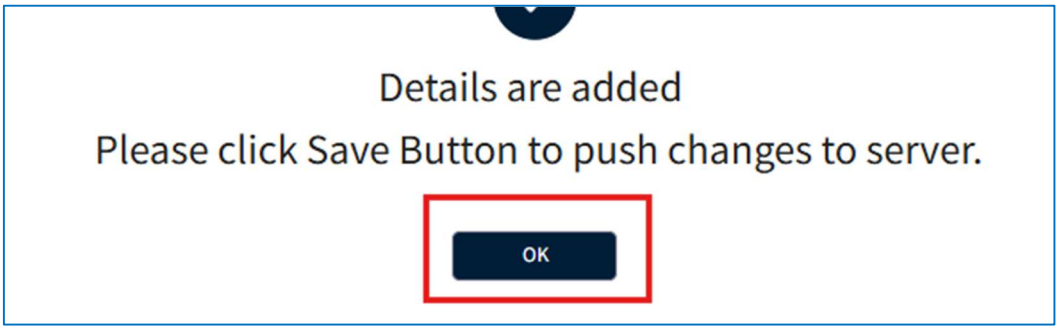
6. Once both fields are filled, click **Apply**.



7. Click **OK** in the window displaying "Details are added" to confirm and proceed.
.



8. Click **Save** on the **Add Product** page. If you haven't entered the **Article ID** earlier, you will be prompted to provide it.

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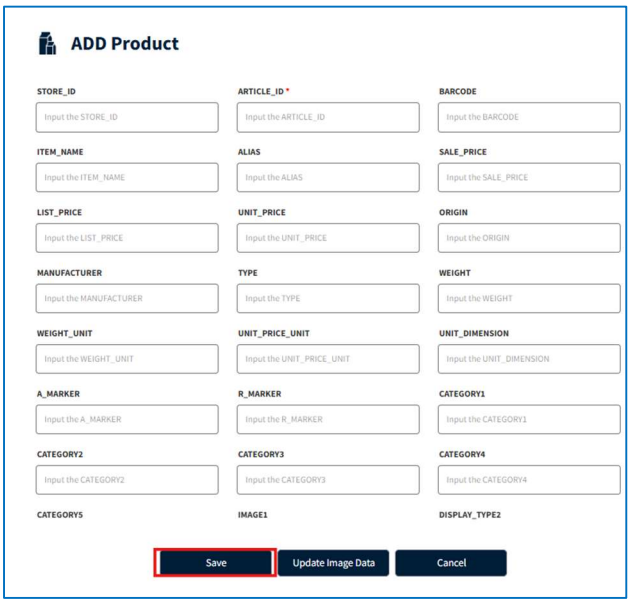

9. If all the details are correct, a success pop-up will appear. Click **OK** to confirm and close the pop-up window.

Understanding Image Label Format

The image label follows this structure: **image_DisplayWidthxDisplayHeight_1**

Image	Fixed word for all images
DisplayWidth	Width of the image.
DisplayHeight	Height of the image.
1	Page number (used if multiple images exist).
_hash	Represents the hash code field.
Image Path	Location where the image is stored

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The hashcode is a unique identifier for each image. It helps the system in these ways:

- **New Upload:** If a new image is added with a hashcode, the system saves it as a new image.
- **No Hashcode Sent:** If an image is uploaded without a hashcode, the system assumes it is a new image every time.
- **Updating an Image:** If an image already exists and the hashcode changes, the system updates the existing image instead of creating a duplicate.

Note: *The system picks the image from the article image data based on the linked resolution of the label. Image generation fails if the article data does not contain the resolution linked to the label. Template mapping does not apply to the Article Image push feature.*

7. Template

Templates are used to combine product information and create the image displayed on each label. Each label size requires a specific template to ensure

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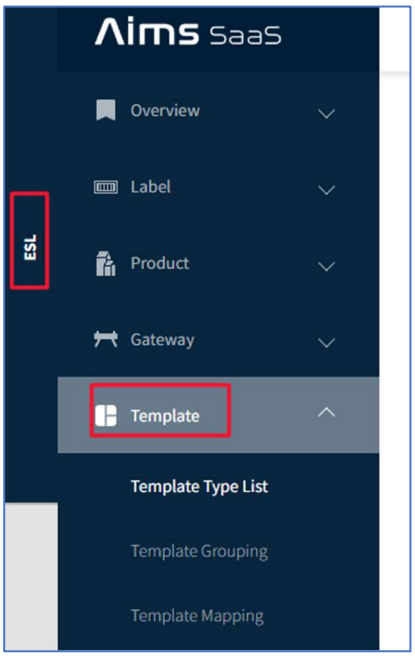
the correct resolution. After creating a template using the AIMS Layout Designer, you must upload it to the SaaS dashboard. The **Template section** in the dashboard allows you to assign the templates you've created with the Layout Designer to your ESL.

7.1 Template Type

1. Login to AIMS Saas Dashboard
2. Navigate to the **ESL** tab and click **Template.**



7.1.1 Assigning a Template Type for Your ESL

1. Scroll down to the bottom of the Template Type list window and click **New.**

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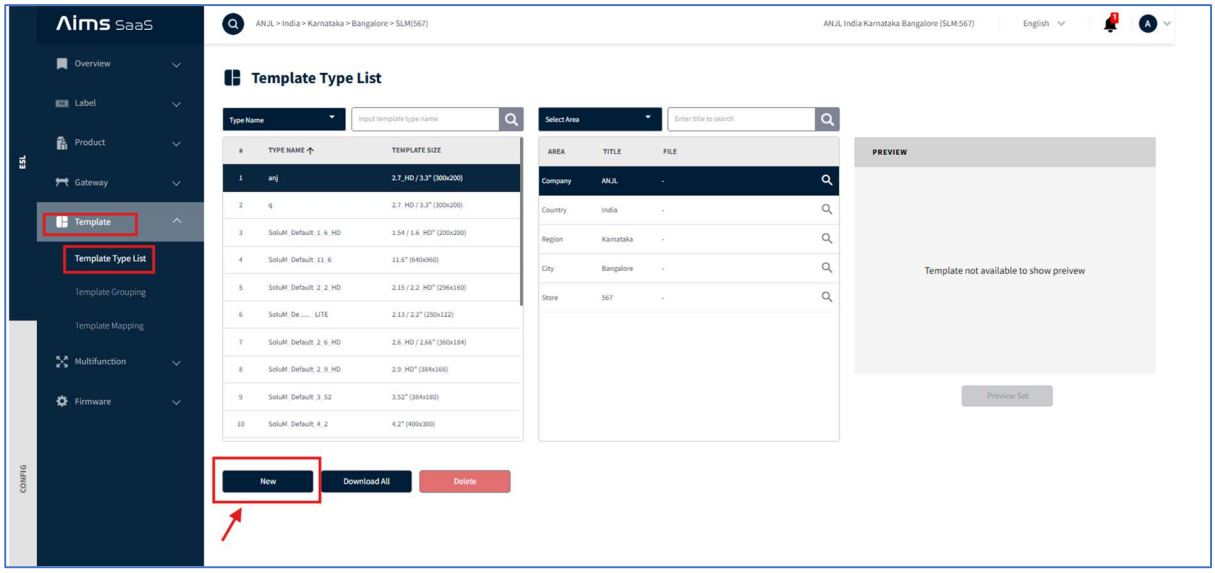
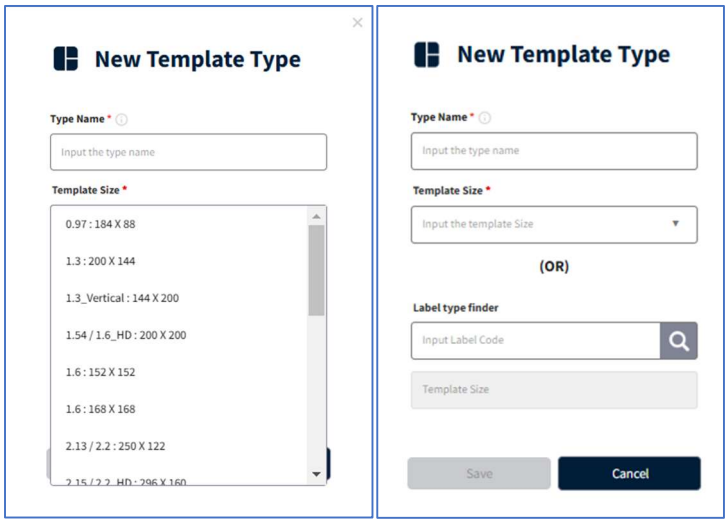


2. Give a **Name** and choose **Template Size**. (Make sure the size selected must match the size of the template uploading.) or provide the Label code and corresponding Template Size and click **Save.**



3. Tap **OK** on the confirmation message pop-up on the screen.

4. Click on the saved template from the Template Type List.

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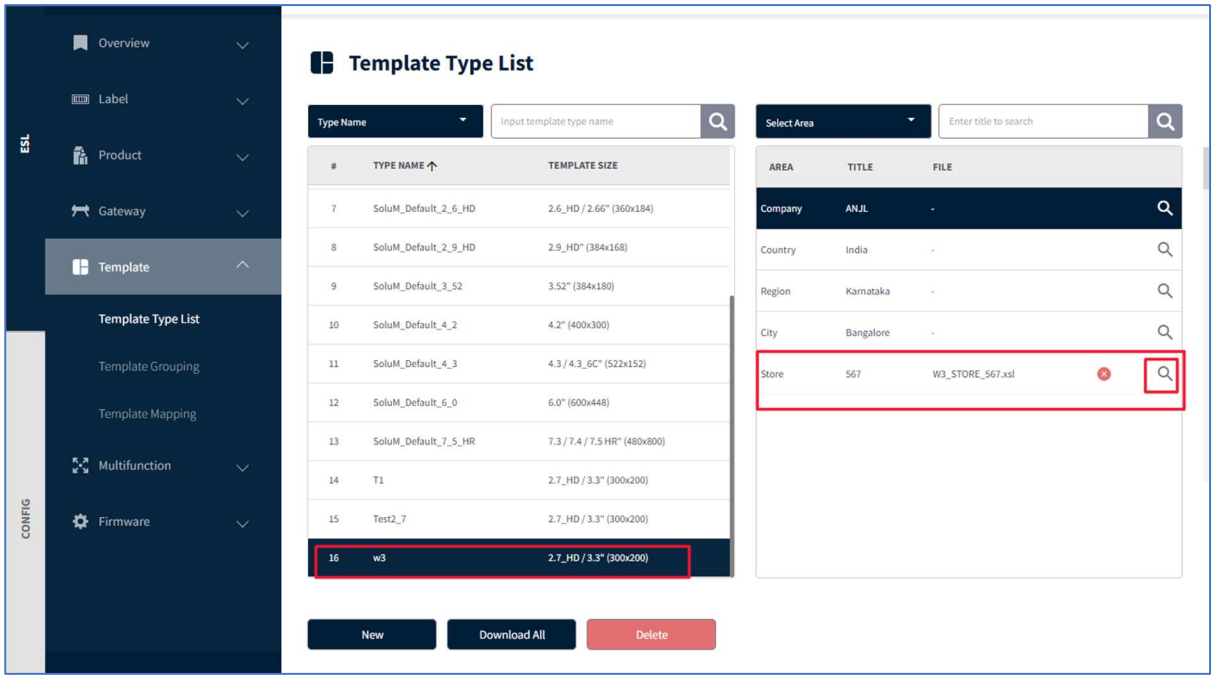

5. Choose the level at which you want to apply the template:
    - Company Level
    - Country Level
    - Store Level
6. Click the corresponding **Magnifying Glass** icon for your chosen level to proceed.
7. A new **Template Details** window will pop up.

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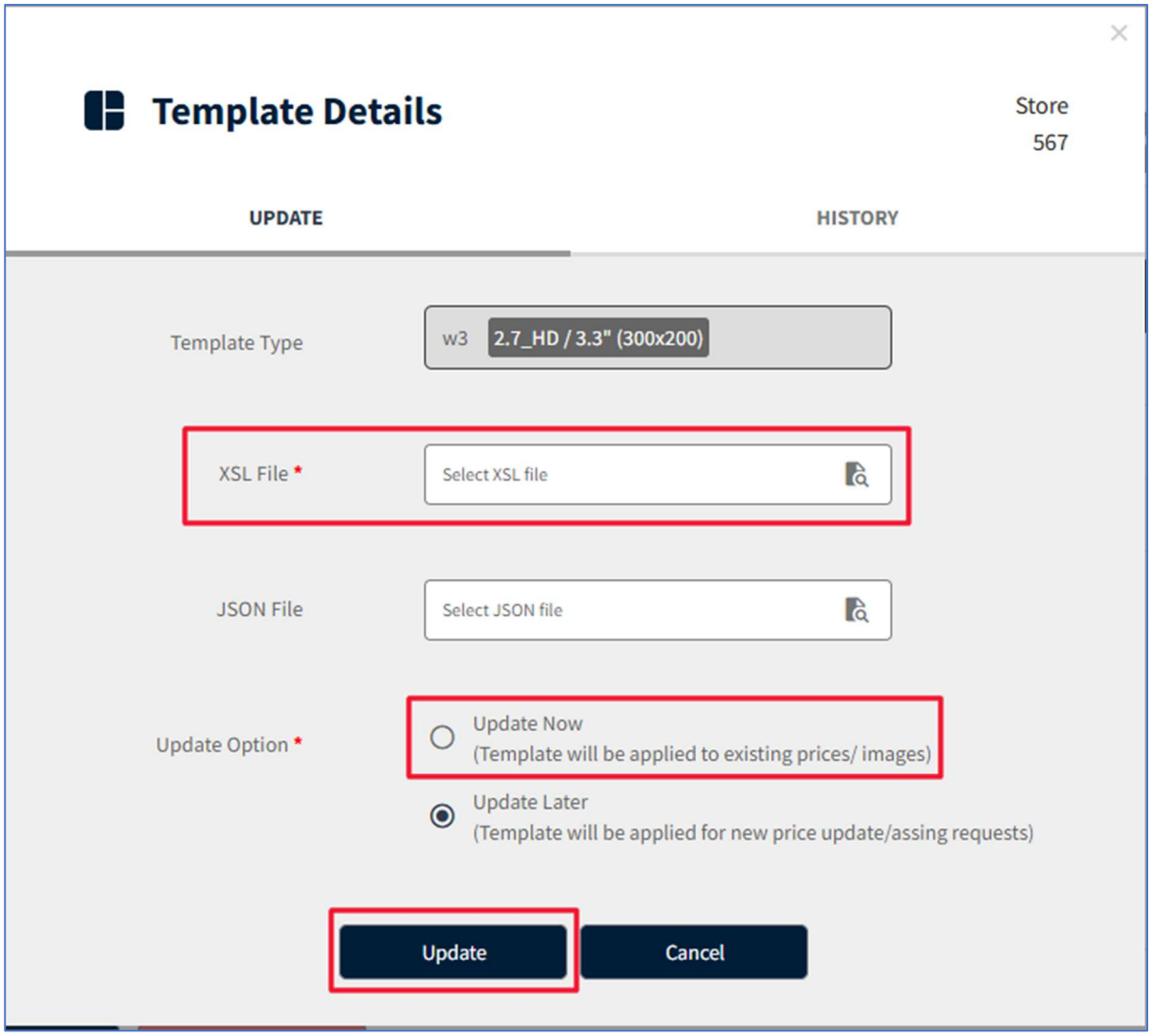

8. Select the**.XSL** file (The layout you designed and saved) from your computer.
9. Select **Update Now** and Click **Update**.

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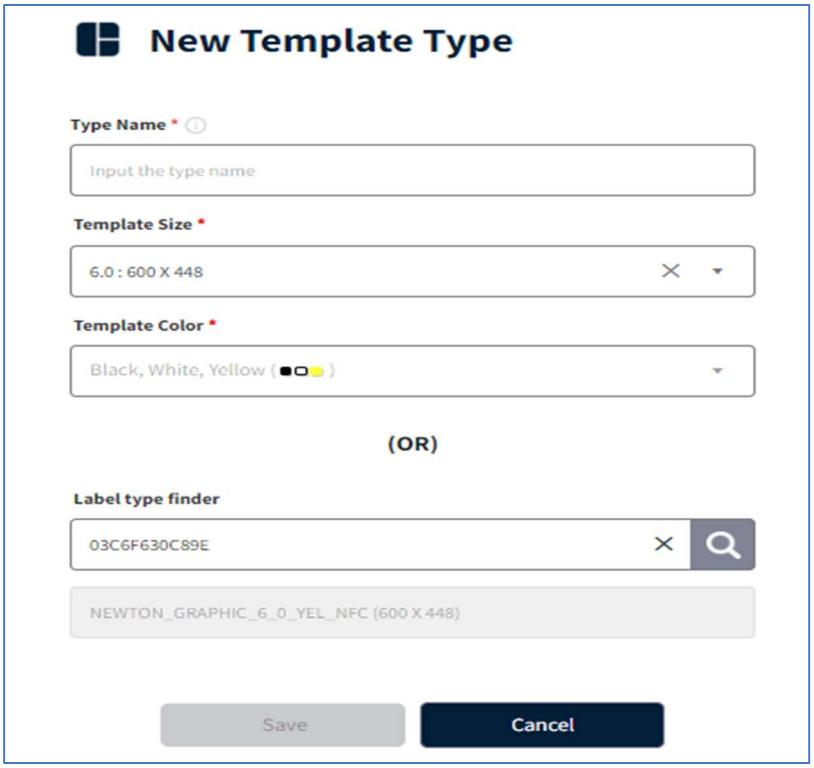
7.1.1.1 New Template Type

1. Add a New Template Type

- Go to the Template Type section.
- Click on **“New”** to create a new Template Type.
- Enter a **unique name** and **label resolution**.
- If you don’t know the resolution:
  - Use the **Label Type Finder** by entering the label code.
  - The resolution will auto-fill.

Note: Once a name is saved, it **cannot be edited**. User must **delete and recreate** it if needed.



2. Avoid Reserved Words

When naming template:

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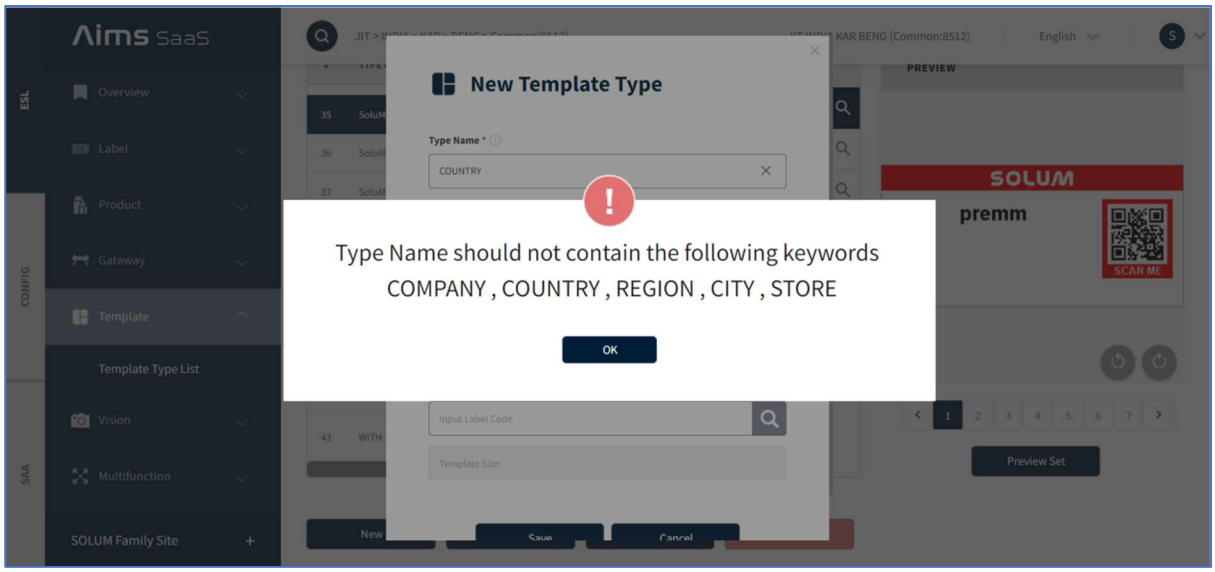
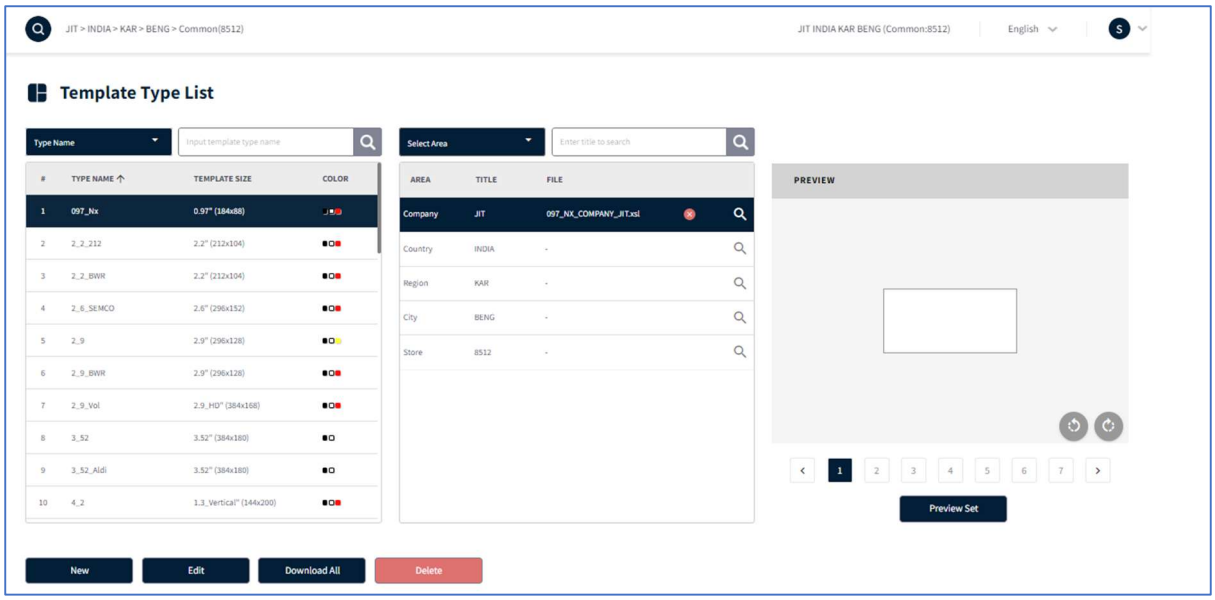
- **Do NOT use these reserved keywords**:
    - COMPANY, COUNTRY, REGION, CITY, STORE

If a user uses them, a **pop-up warning** will appear.



3. After Adding the Template Type

- Your new Template Type will appear in the **Template Type list**.



- When selected, an **Area List** will appear, showing areas linked to that template.

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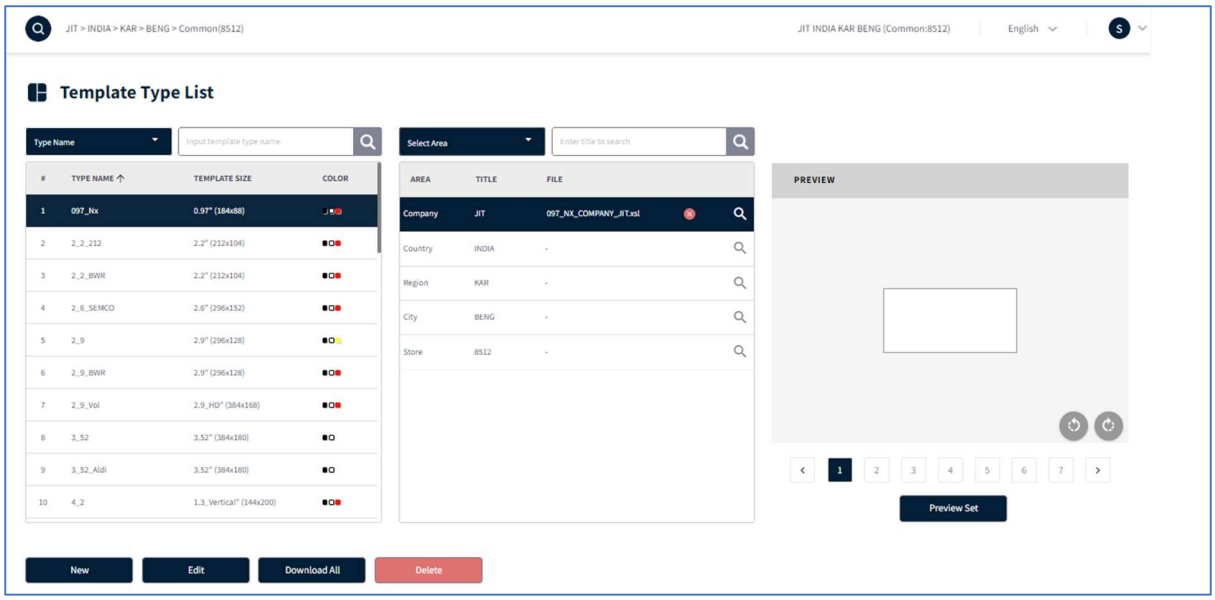
Example Use Case:

- Template name: REGULAR
- If the store is in the USA: English layout
- If in Canada: French layout

The backend uses this logic to show correct design per region.

Tip: For most users, a Company-level template works for all stores.



4. Upload Template Files

- From the Area List, click the **magnifying glass icon**.
- A new window opens to **upload files**:
  - **XSL file** (Required)
  - **JSON file** (Recommended)

These files are created in **SOLUM Layout Designer**.

You can later:

- Download the JSON
- Reload it into the designer for editing

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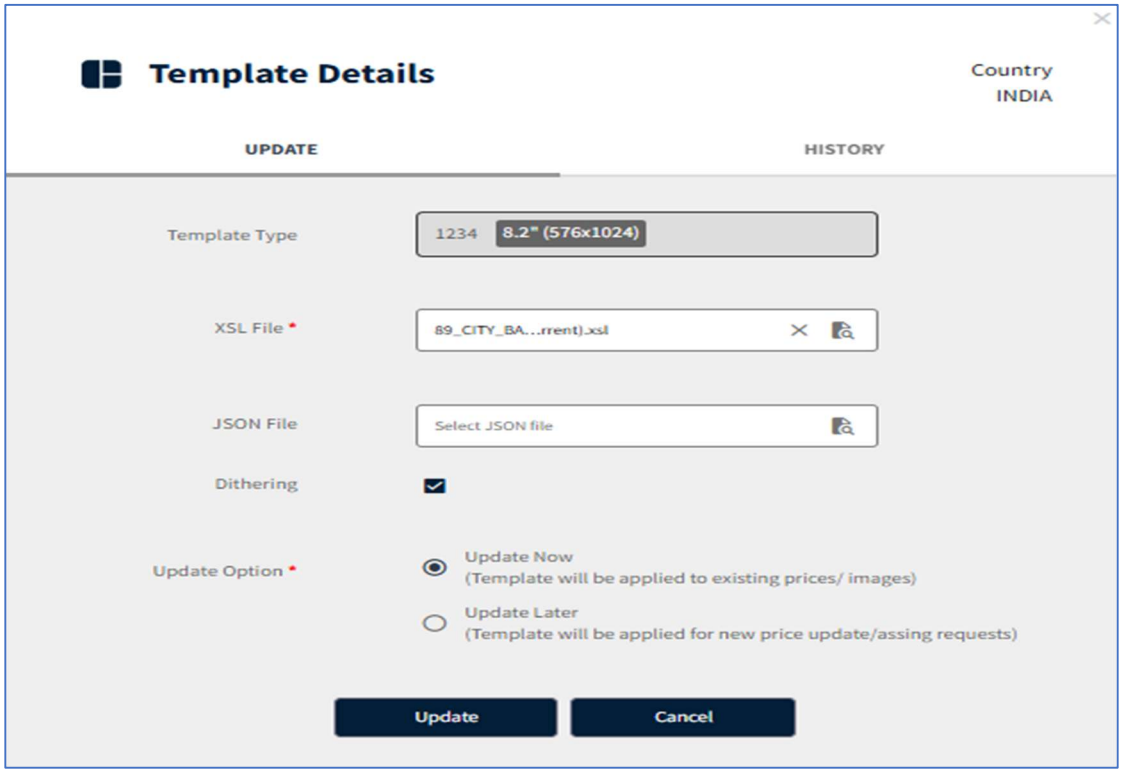

5. Choose Update Option

Option 1: Update Now

- Applies the template **immediately**.
- Server:
    - Generates new label images
    - Sends updates to all labels using the template

You will see a **pop-up** with:

- Number of affected labels
- Number of images to be created
- Info if “Update Later” is selected

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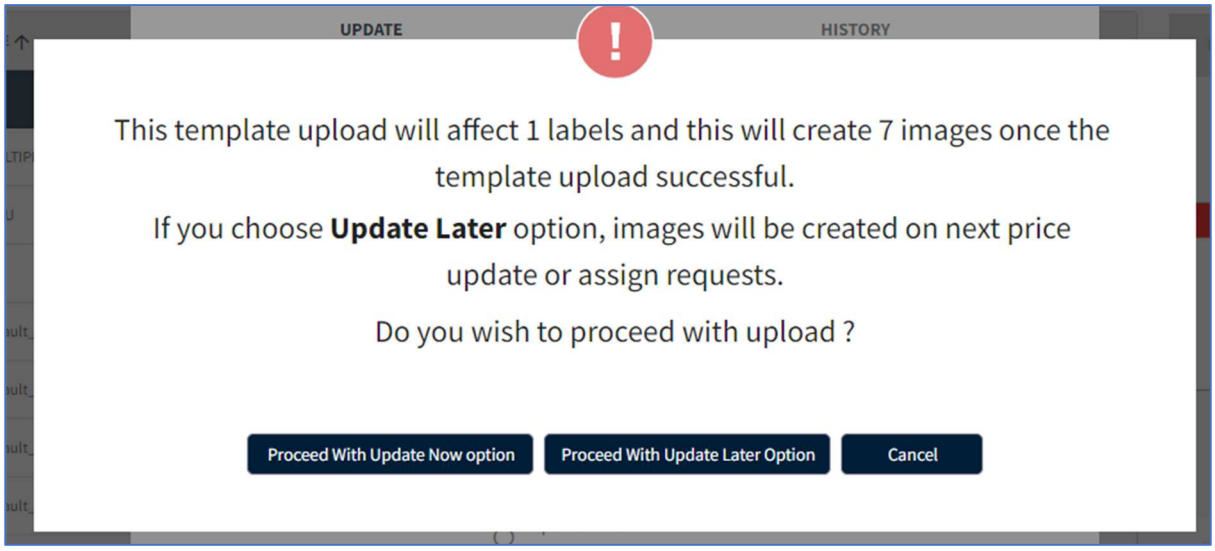
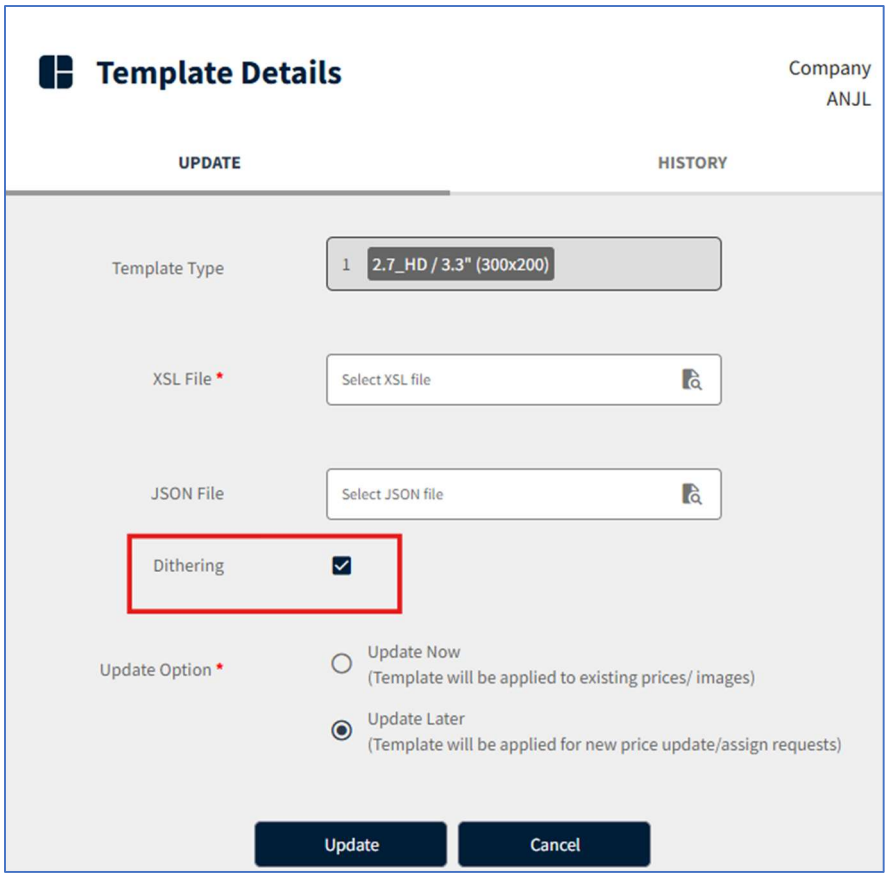


Dithering:

- If this check box is enabled, **images** inside the template are dithered.
- **Text and shapes are not affected.**



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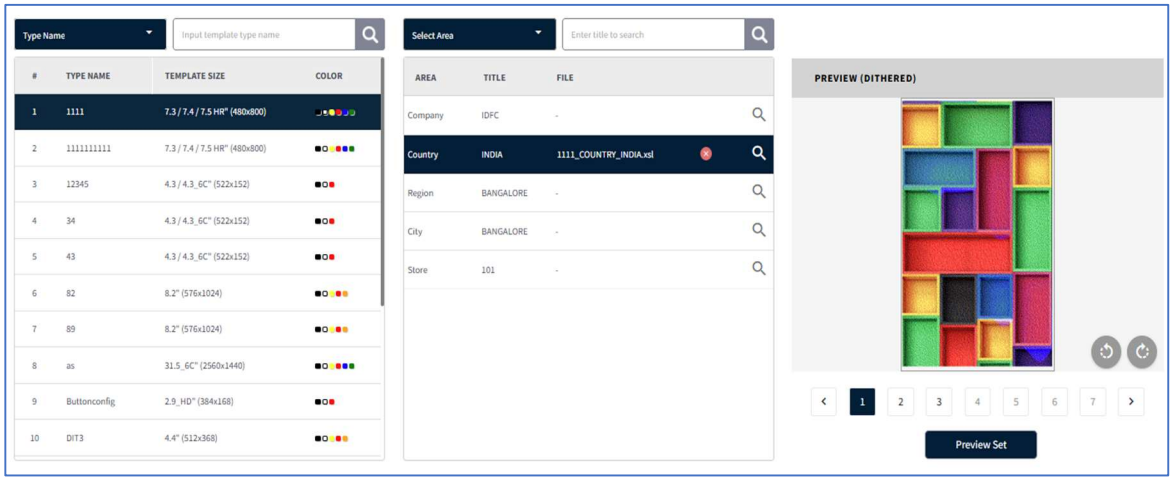

Click Proceed to:

- Click **Update Now** Option.
- It will Apply changes to all linked labels

Or choose Cancel to stop the update.

Option 2: Update Later

- Saves the new template.
- Changes apply **only when**:
    - Products are updated
    - New labels are added

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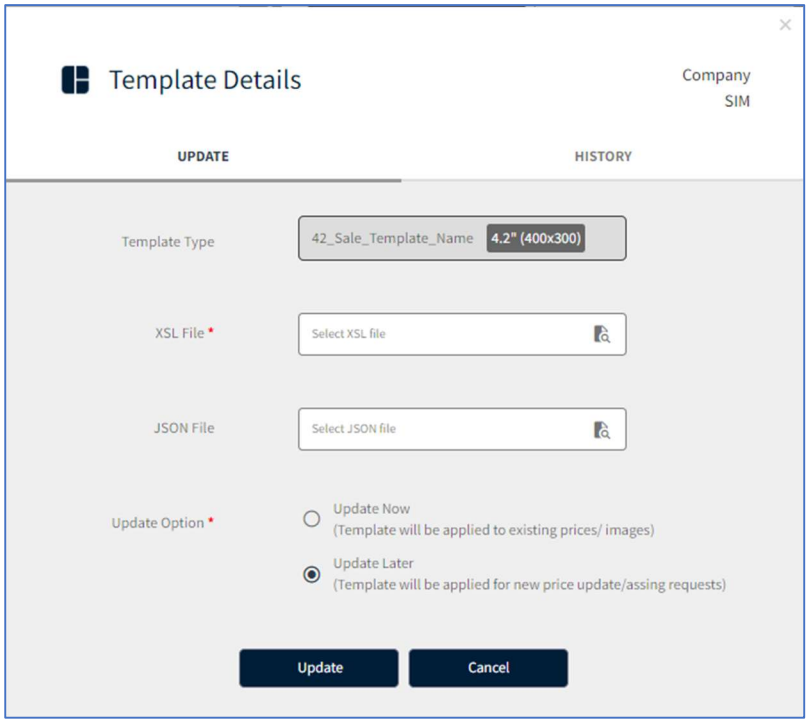

6. View Update History

- Go to the **HISTORY** tab.
- See all past uploads.
- You can also **download**:
    - XSL file
    - JSON file (one at a time)

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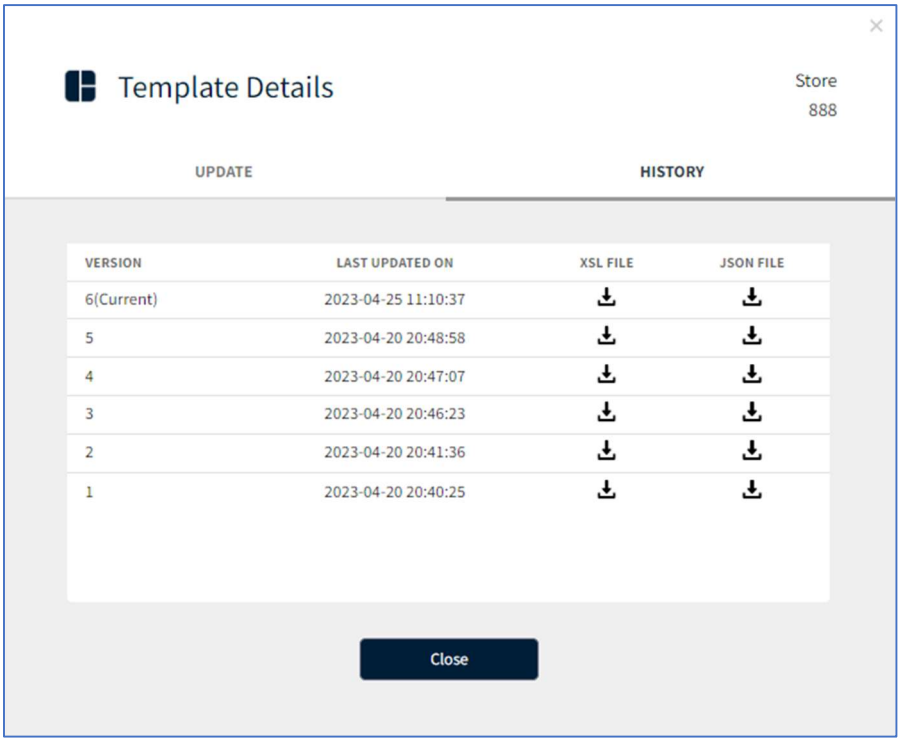
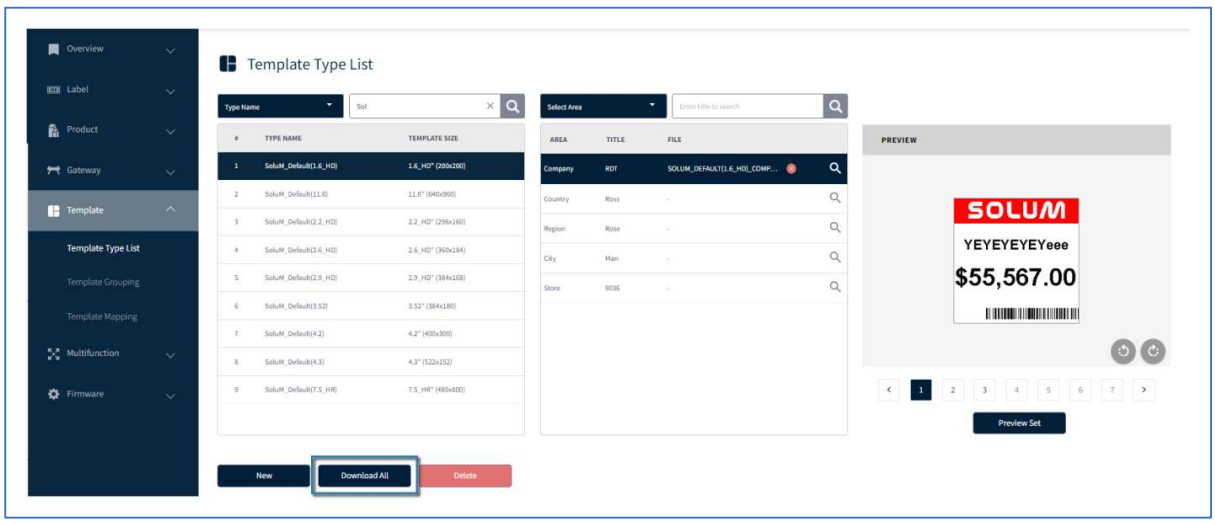


7. Download All Templates

- Click **“Download All”** to get all current XSL files as a zip.
- **Note:** JSON files must be downloaded individually.



8. Preview a Template

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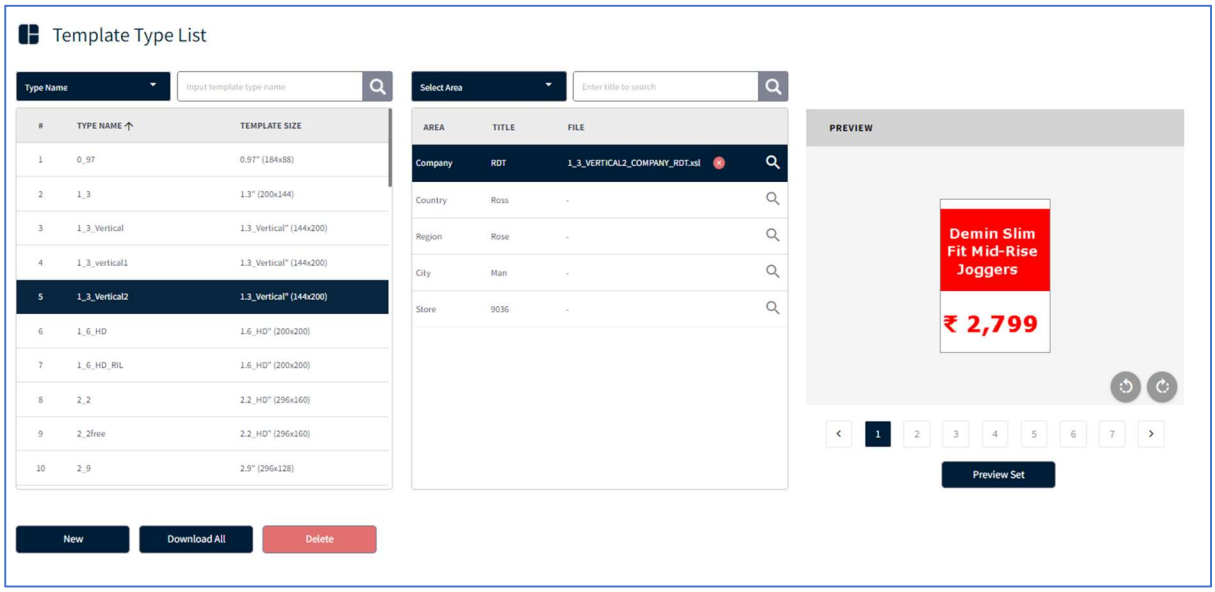
- Select a template from the Area.
- A preview image will show using a selected product.

To set a product for preview:

- Click **Preview Set**
- Choose:
    - Store
    - Enter **Product ID**
    - Select the product from the list
- The product will be saved for future previews



7.1.2 Delete Your Template Type

1. **Select** the template type you want to delete.
2. Scroll down to the Template Type List window and click **Delete.**

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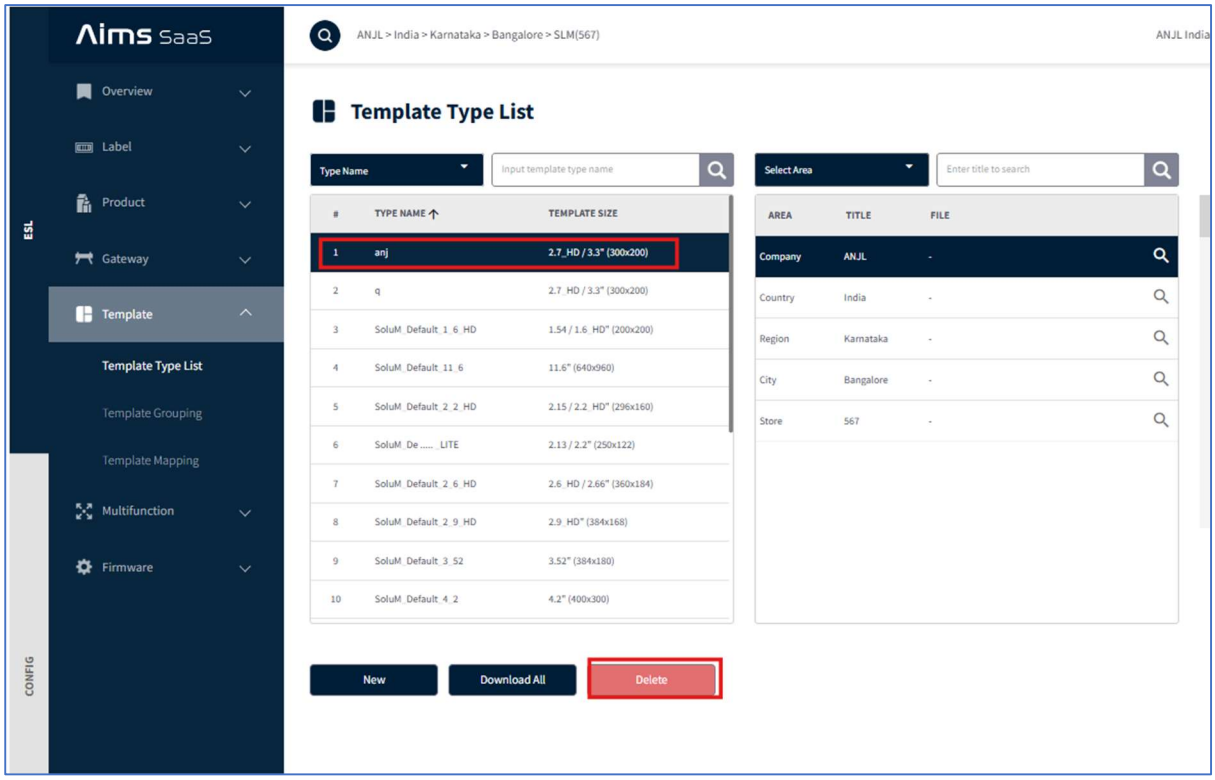
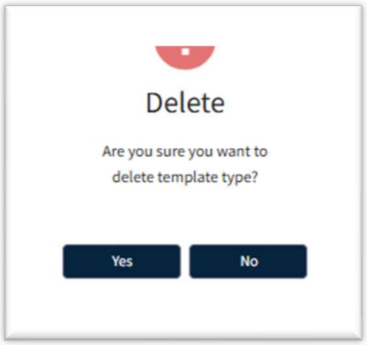


3. Click **Yes** on the new pop-up window to confirm your deletion.



7.1.3 Store-Based Template

The **Store-Based Template** feature allows store owners to control the visibility of templates.

- **Enabled**: The template will be visible only to users from the specific store that created it.

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- **Disabled**: The template will be accessible to all users, regardless of their city, region, or country.

This setting ensures that store-specific templates remain private for that particular store. If the setting is disabled, all templates can be visible across multiple stores in a different city, region, or country.

> ***Note:*** *It should be enabled from the admin side. The admin can enable or disable this feature based on user requirements.*

7.2 Template Grouping

This menu is accessible only when **Template Mapping** is enabled. (You must request this feature from the **SOLUM Admin**.) If the **Colour Combination** feature is enabled for your account, Template grouping can be done in two ways:

- Templates with the same size but different colour codes.
- Templates with different sizes.

If the **Colour Combination** feature is disabled, template grouping can only be done with templates of different sizes.

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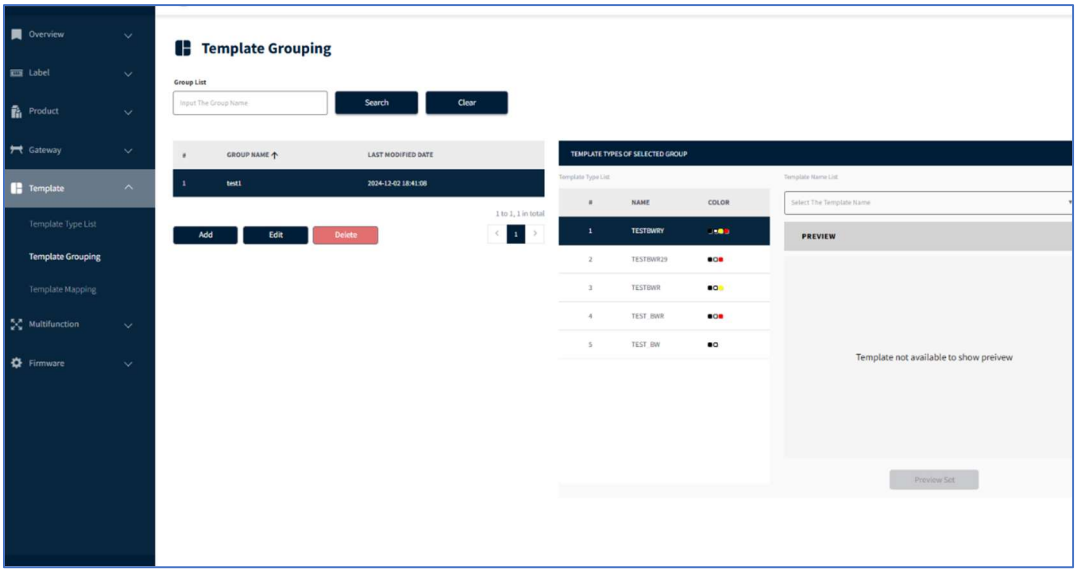

7.2.1 Create a Template Group

- Click on **Add** to open a new window.
- Enter a **Group Name** in the provided field.
- Tick the check boxes of the desired Template(s) from the list.
- Move the selected templates to the Group List by clicking the **RED ADD** button in the centre of the window.
- Click **Save**.

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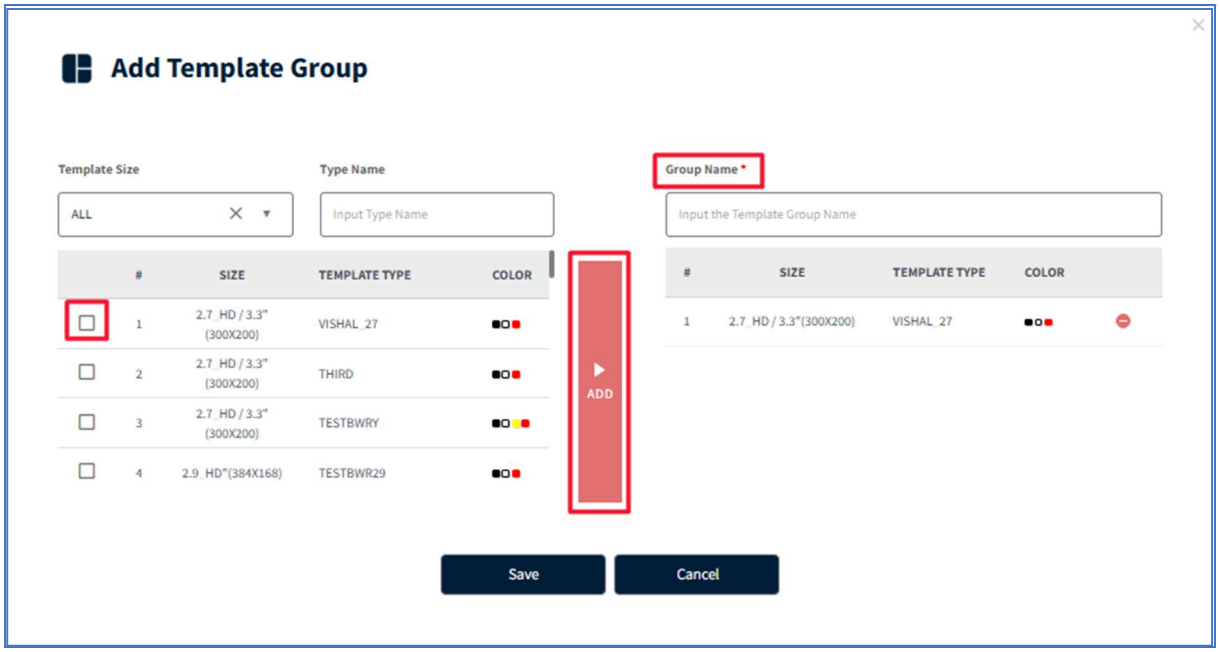

7.2.2 Edit Template Group

- To edit a template group, select the desired **Template Group** and click **Edit**.
- A window similar to the **Add Template Group** window will appear with partial updates already applied.
- You can:
  - **Add more templates** to the group.
  - **Delete templates** by clicking the **RED (-) Minus** button next to the template in the list.
  - Click **Save** to complete the editing process.

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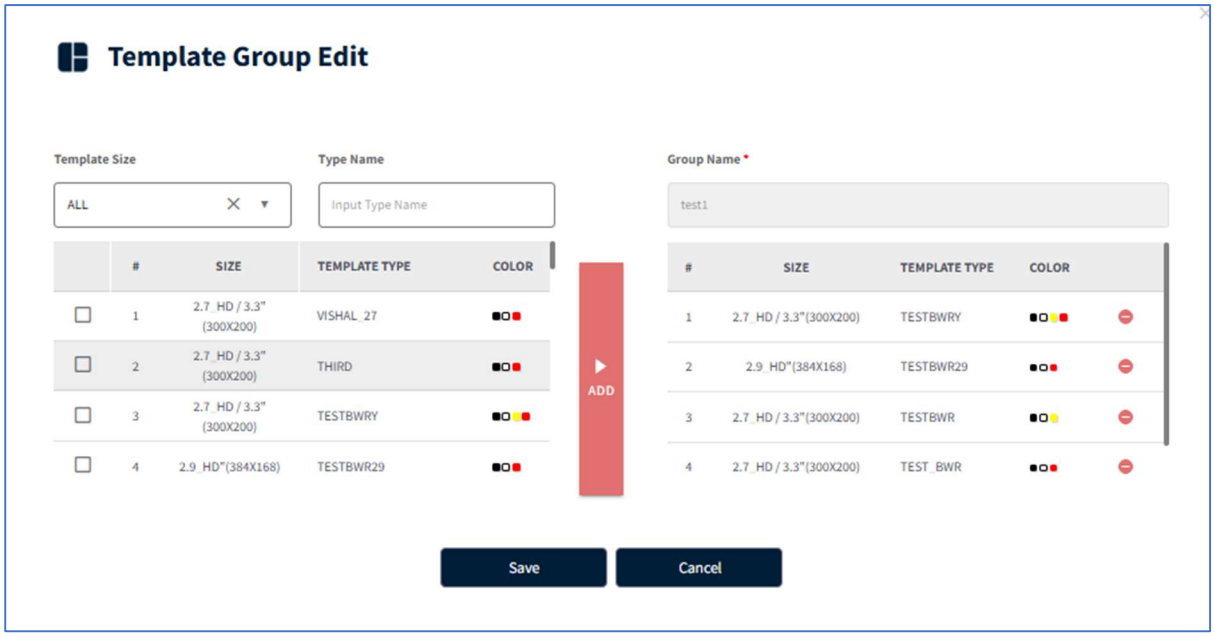
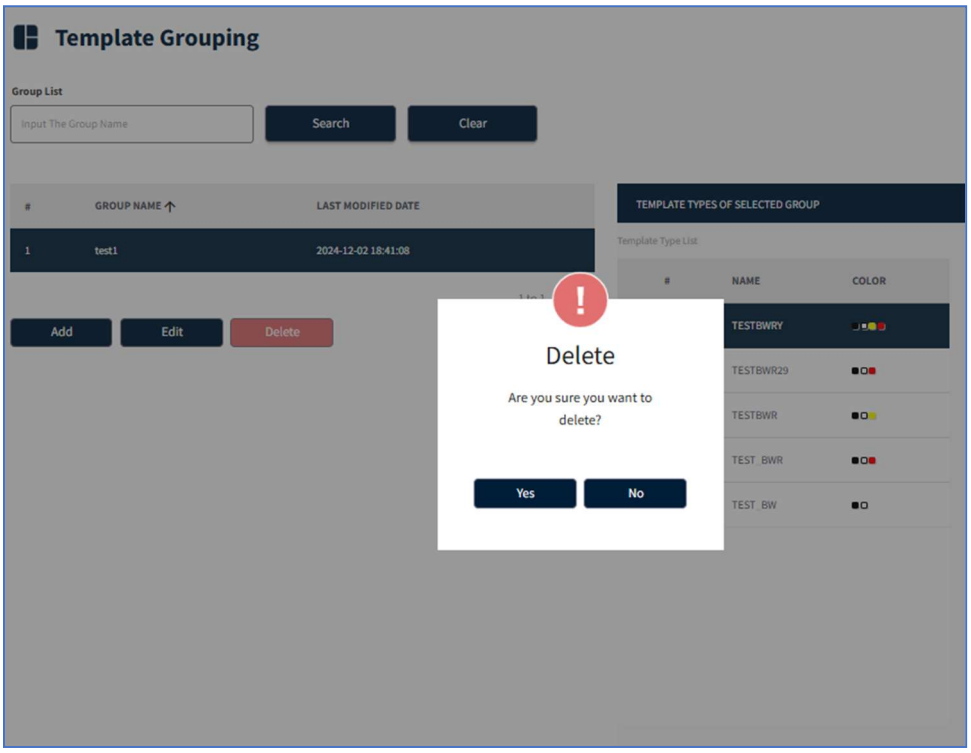


7.2.3 Delete Template Group

To delete a template group, highlight the desired group line and click **Delete**.

A confirmation pop-up will appear. Click **Yes** to confirm the deletion.



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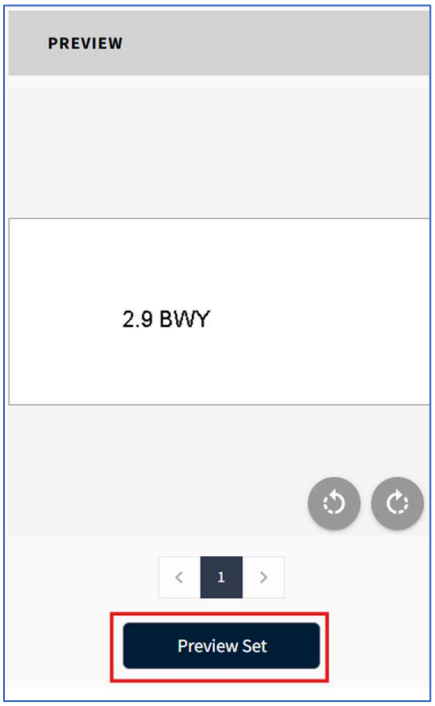
7.2.4 Preview Template

- To preview a template, select a **Template Group** and then select a **Template Type** from the group list.
- To preview a different product on the template:
- Click **Preview Set**.
- Select a different product.

If you save a different article from the preview, it will update the main screen and allow changes to other templates selected for previewing.



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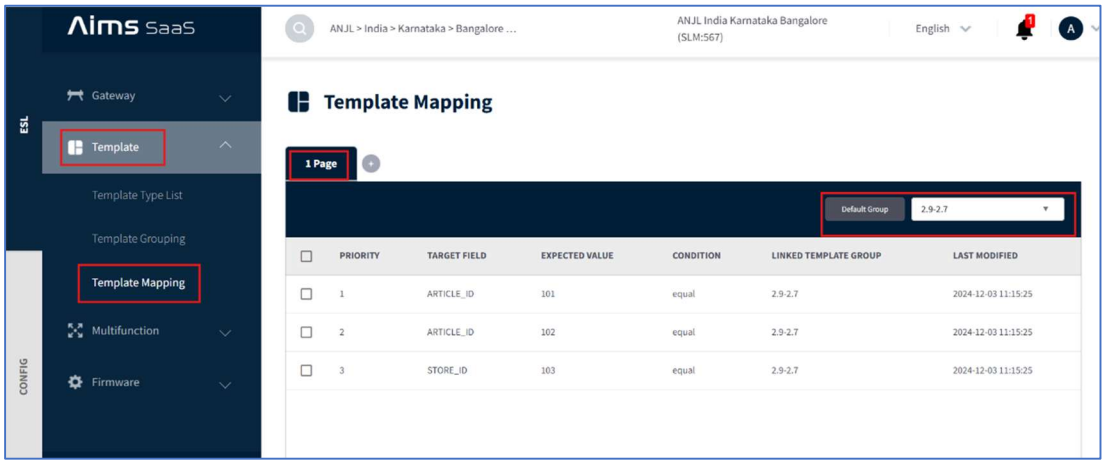
7.3 Template Mapping

This menu works only when **Template Mapping** is enabled, which you can request from the **SOLUM admin**. Template Mapping connects your product/Article data field to the Template Group created earlier. To use template mapping:

- Make sure at least one label page is set up.
- Set a default **Template Group**.
- Avoid duplicate conditions.



- Click the (+) Plus button to create a label page.
- Enable at least one page for Template Mapping to work**.**

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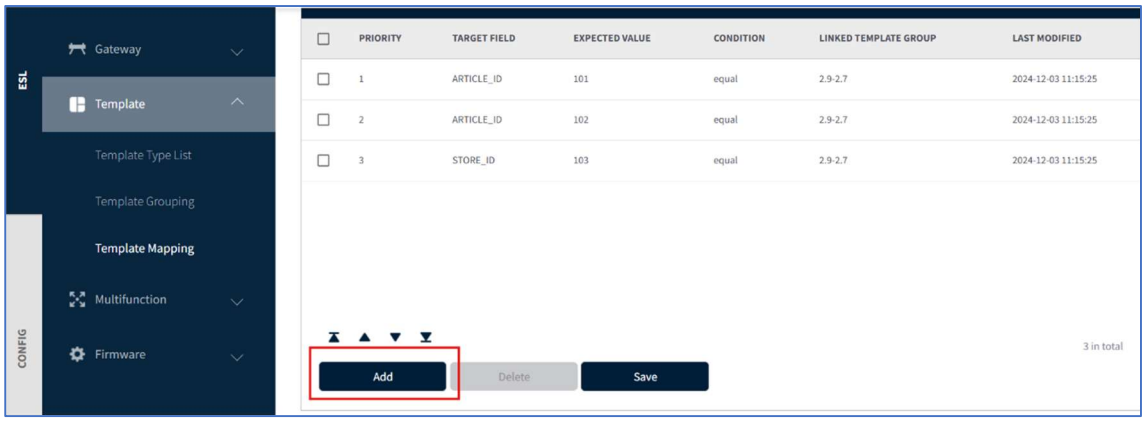
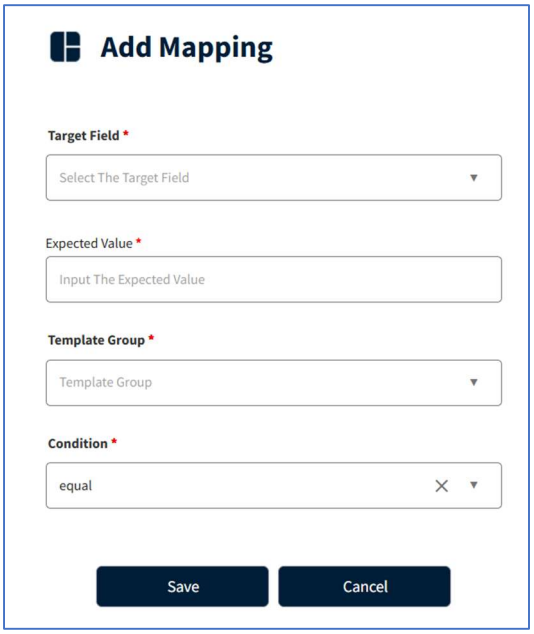
7.3.1 Add Template Mapping

1. Click **Add** to open the Template Mapping window**.**



10. Enter the following details:



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Target Field: The product field you want to check.

- Expected Value: The value to match in the Target Field.
- Template Group: The group to apply if the condition is true.
- Condition: The type of logic to check:
    - Equals: Matches exactly. *(e.g., apple = apple → Pass)*
    - Prefix: Checks if the value starts with the expected text. *(e.g., apple fruit starts with apple → Pass)*
    - Postfix: Checks if the value ends with the expected text. *(e.g., apple fruit ends with fruit → Pass)*
    - Includes: Checks if the value contains the expected text. *(e.g., apple fruit contains app → Pass)*

11. Click **Save** to confirm.

7.3.2 Template Mapping with JS Snippet

If the **JS Function** is enabled for a customer, then in the **Add Mapping** pop-up one more field will display as **Target JS Function**.

Note: *This is customer specific feature contact* ***Solum Admin*** *for the access*

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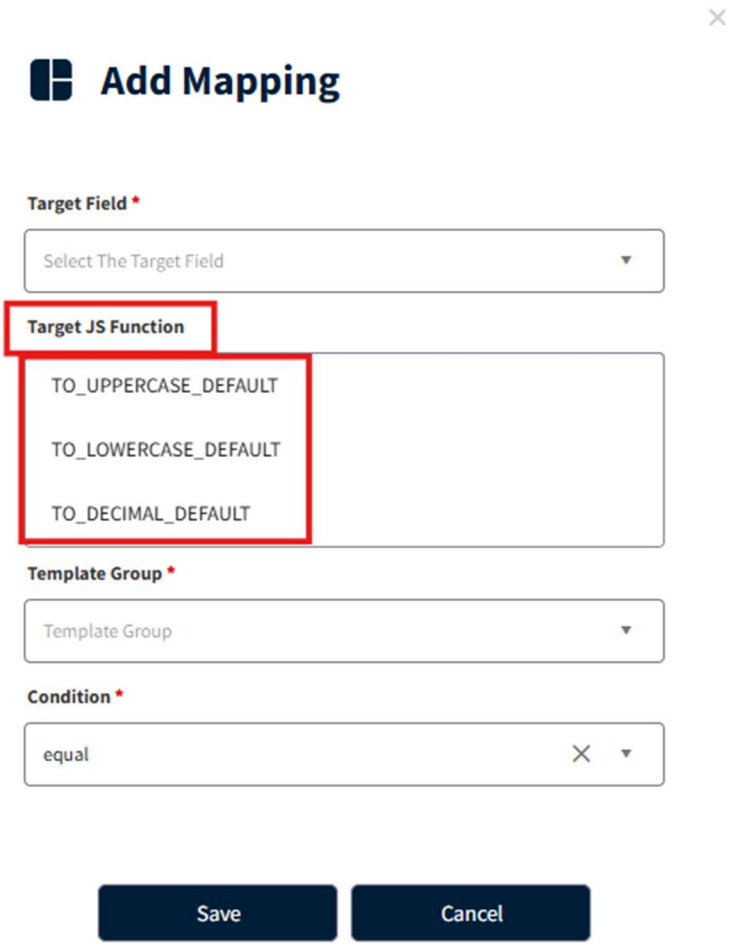
- Target JS Function dropdown list will display available JS functions for the customer.



- This field will convert the selected product key value as per the logic and the converted value will be compared with the inputted expected value.
- If the Template Mapping condition is satisfied, based on configuration template will be selected.

- For any condition if **Target JS function** is included then configured function will be listed under **Target JS function** column as shown below.

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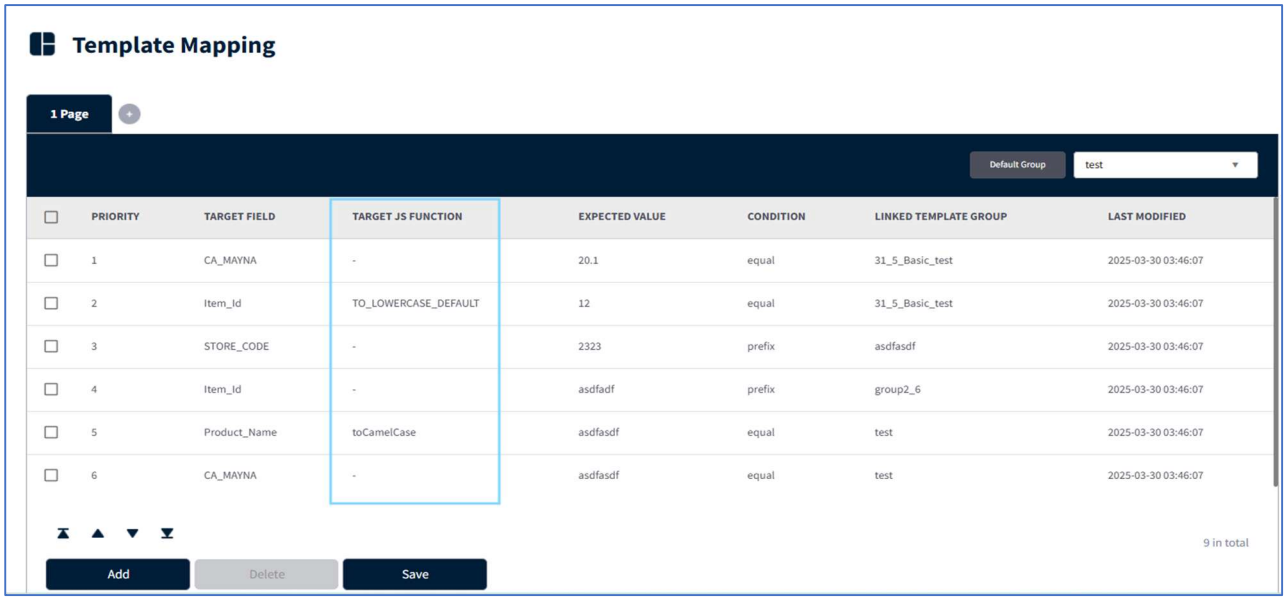
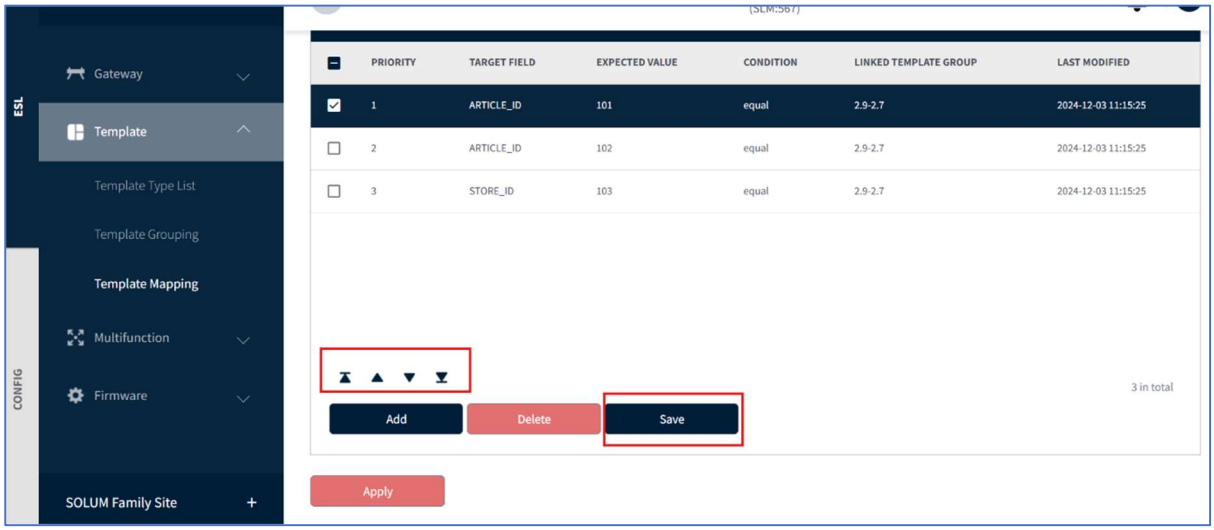


- Click on **save** button will save the configuration.

7.3.3 Manage Your Template Mappings

- All saved mappings appear in the Template Mapping List.
- Use the Move Arrows to reorder mappings as per the priority.
- Always click Save after making changes.



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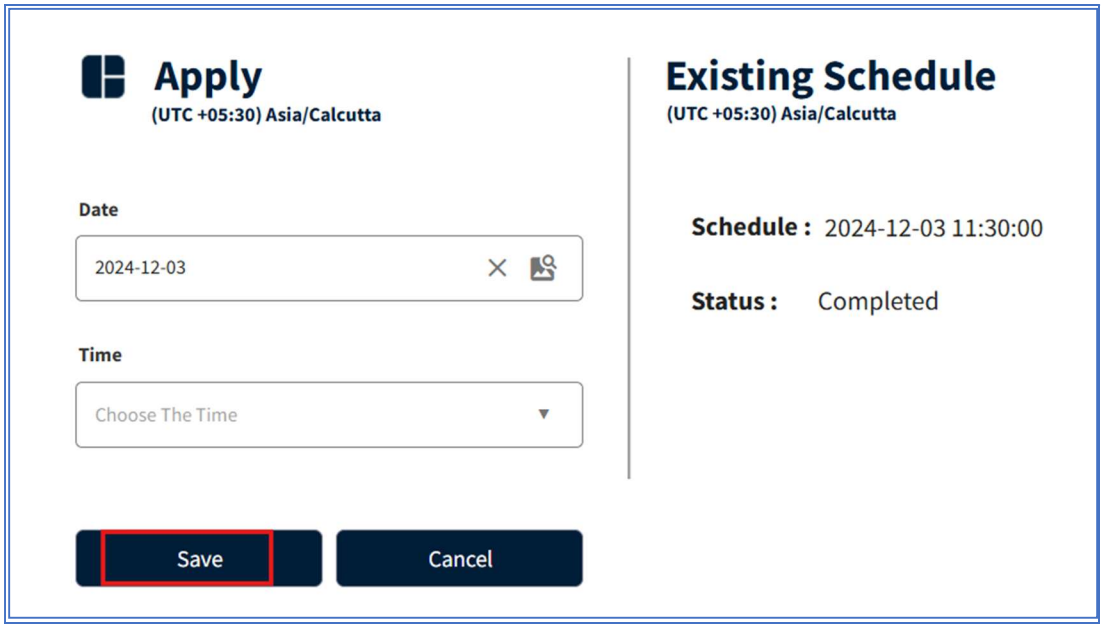
7.3.4 Apply Template Mapping

- New changes to the mapping aren't applied automatically.
- Click Apply to open the scheduling window.
- Set a Date and Time for when the changes should take effect.



7.3.5 Configuring Template Mapping for Multiple Pages

By default, template mapping is applied to **Page 1** only. If multiple pages are configured for an ESL, template mapping needs to be added for each page.

- Click the **+** icon next to the page number.

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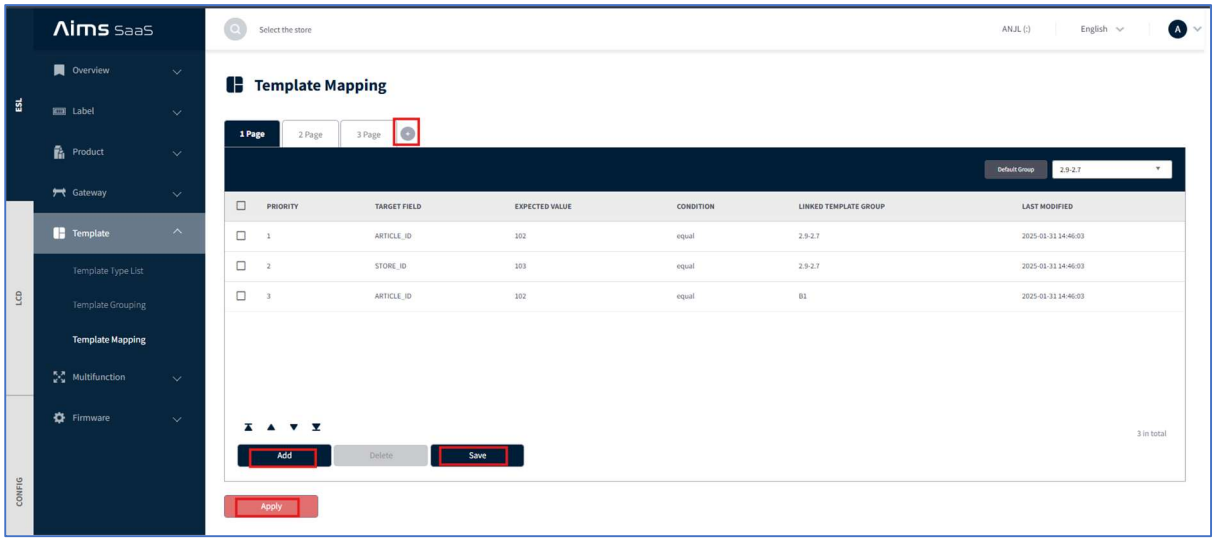
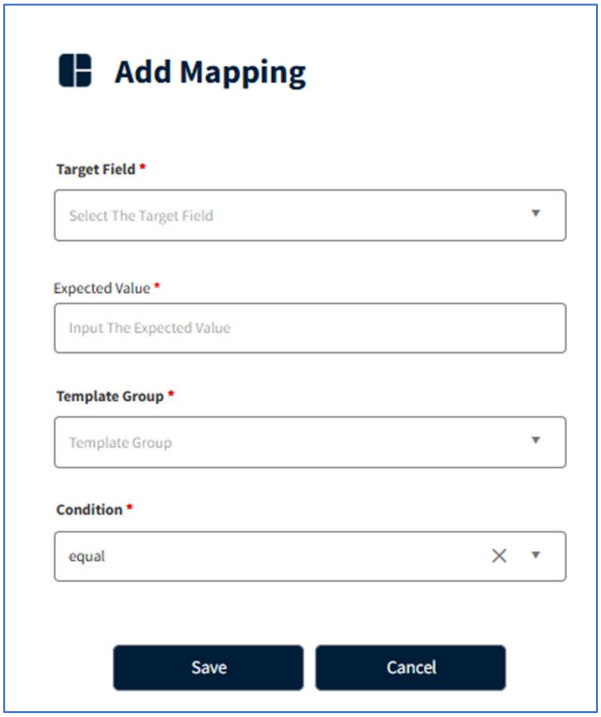


- Click **Add** to apply template mapping for that page.
- Provide the required details in the Next window opened.



- Click Save.

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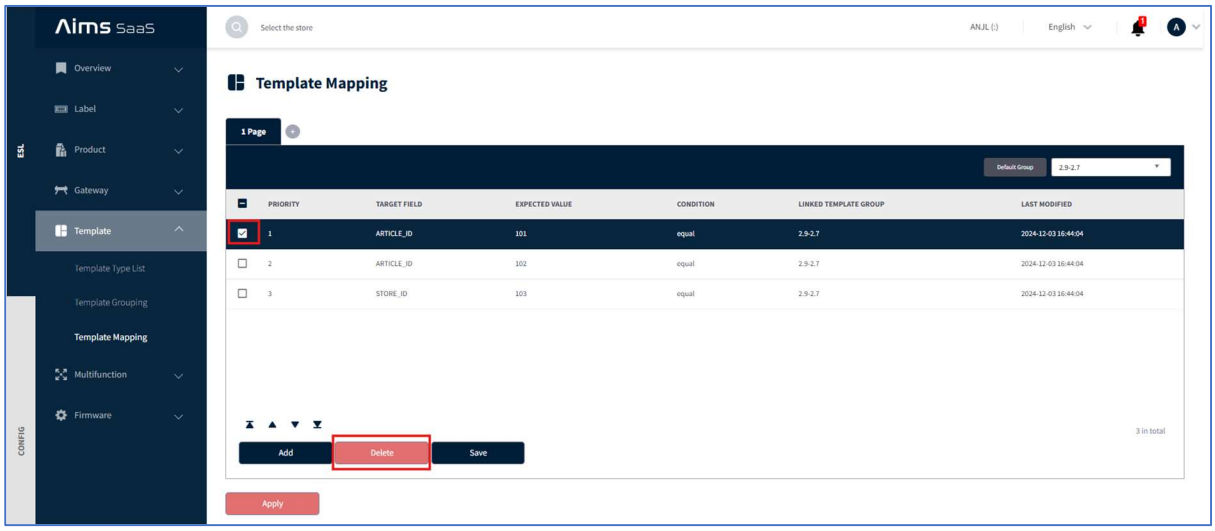
- Click Apply to open the scheduling window. Set a date and time when these changes have to be applied.
- If multiple pages are required, repeat the above steps for each page.

Note: *If the condition is not met, the default template group will be used. If the default group also does not meet the condition, the system will check the template type and select a template with the same label size. If the matching template is configured, it will be displayed on the label.*

7.3.6 Delete Template Mapping

- Select a mapping from the list and click **Delete** to remove it.



- It will open up a new window asking for confirmation, Click **Yes.**

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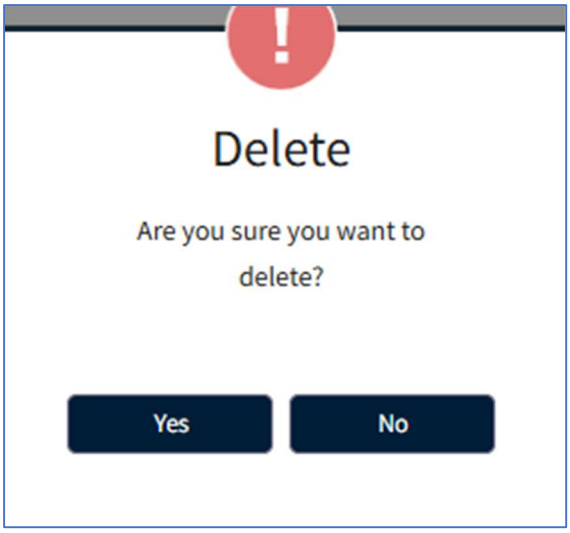
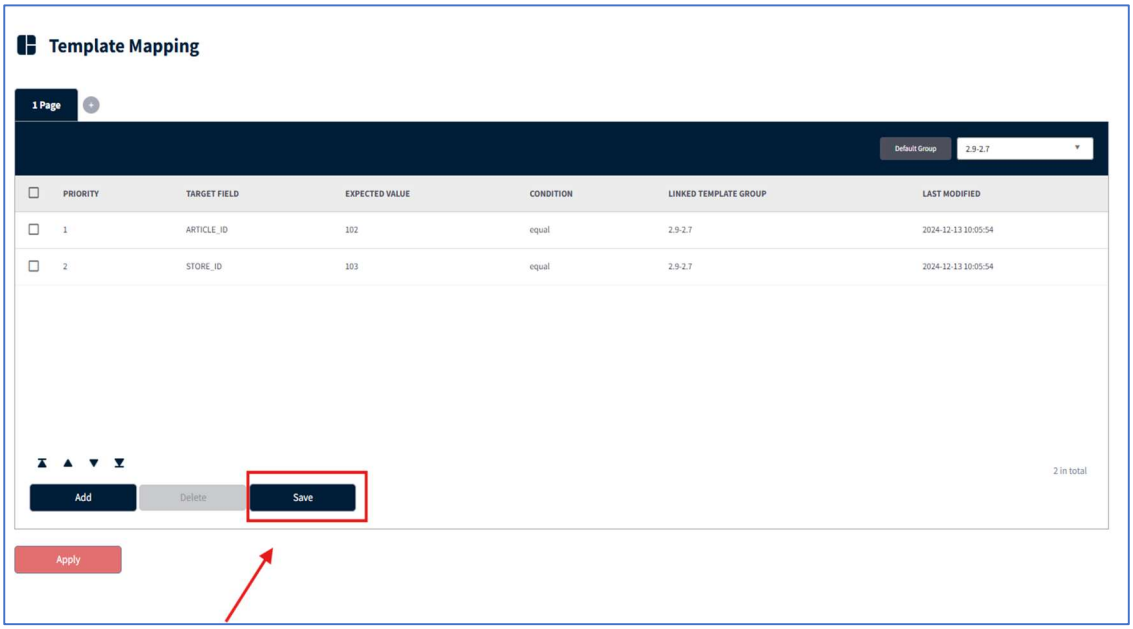


- Always click **Save** after making any changes to avoid losing your work.



***Note**: Applying mappings checks every label in the system. Schedule this during low-activity times, and double-check your conditions to avoid duplicates.*

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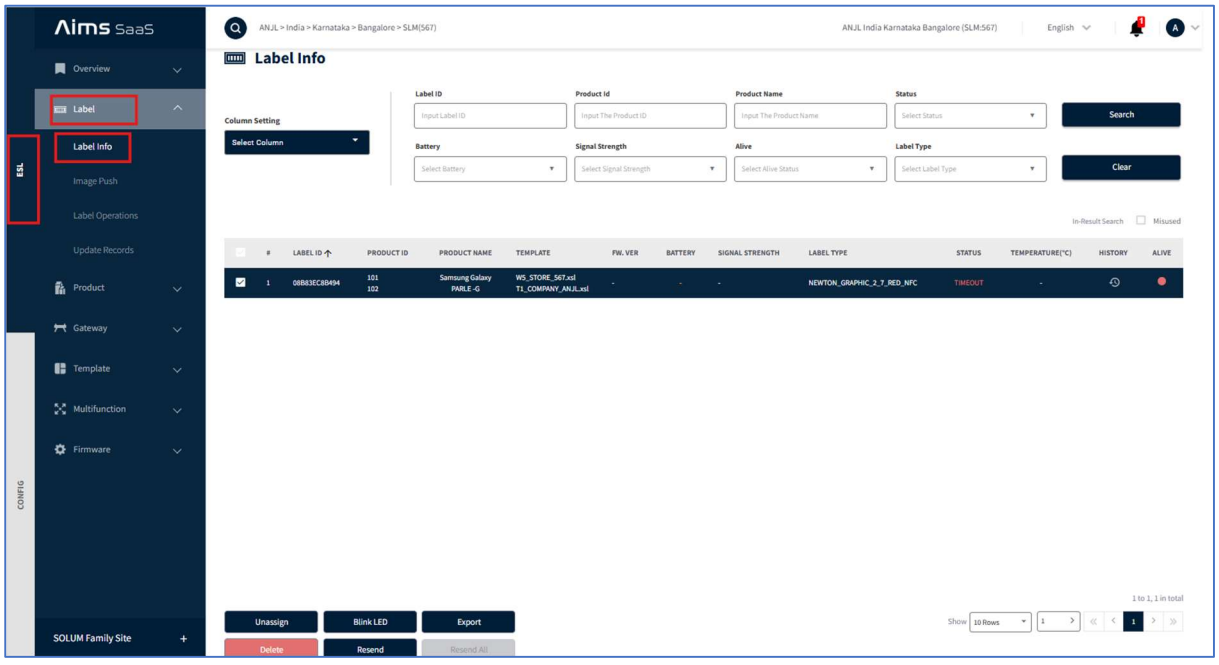
8. Managing Your Labels

The Label section displays detailed information about labels assigned to the company and its stores. It also provides tools to update and configure label properties efficiently.

1. Navigate to the **ESL** section in the **SaaS dashboard**
2. Select **Label** and click on **Label Info.**



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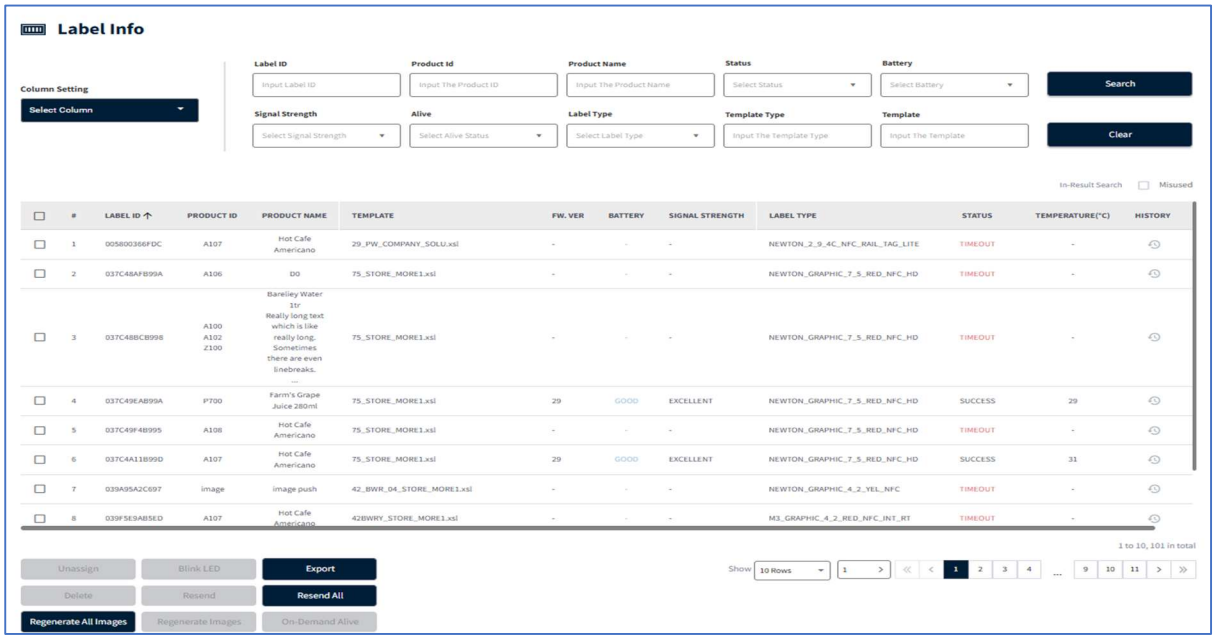
8.1 Access to Your Label Info

The Label Info page focuses on the detailed information for each label. From the bottom right side of the page, you can decide row counts and page skips.



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8.1.1 Label List Table

Column name	Description
Label ID	A unique 12-digit alphanumeric value identifies the label. Necessary for assigning products to labels.
Product ID	A unique identifier is assigned by the customer to link a product with a label.
Product Name	The name or description of the product is linked to the label.
Template	The template name is assigned to the label. Multiple templates will be listed if used on different pages.
Firmware	Shows the firmware version currently installed on the label.
Battery	Indicates the battery status of the label: **GOOD** (adequate power) or **BAD** (low power).
Signal Strength	Wireless signal strength (in dBm) between the label and the gateway.
Label Type	Describes the label model, size, display colour, and features.
Template Type	Template Type refers to the template name created based on specifications such as label resolution and label color. Templates will be uploaded at

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	the store level, company level, or other levels only when template types are created.
Status	Displays the current update status of the label.
Temperature (℃)	Shows the label's current temperature in degrees Celsius.
History	Provides a detailed log of all label operations, including batch ID, status, and timestamps.
Alive	Indicates whether the label is active and functioning. If the label is receiving a heartbeat signal, it shows as **Alive**; if not, it is marked as **Offline**. Status value: ONLINE ● / OFFLINE ●

8.1.2 Label Details

Click the **Label ID** in the table to find additional details about that label. A Label Details pop-up will display with additional information.

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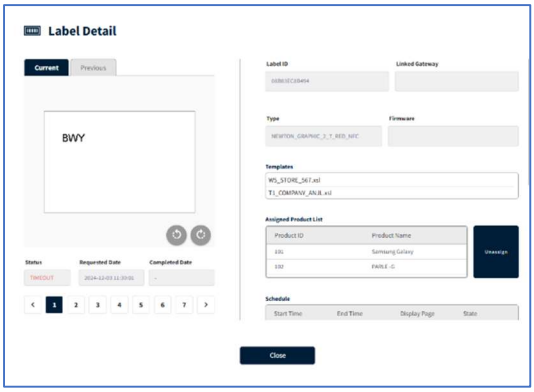

1. Current Tab

Displays the image currently shown on the label when in **SUCCESS** status, or the image the label is in the process of displaying when in **PROCESSING** or **TIMEOUT** status.

2. Previous Tab

Shows the last image generated for the label. The image can be rotated in 90-degree increments for better viewing.

3. Status

Indicates the current update status of the label. Possible values:

- **SUCCESS**
- **PROCESSING**
- **TIMEOUT**

4. Requested Date

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The timestamp indicates when the ESL (Electronic Shelf Label) generated the image and sent it to the Gateway (GW) for the label update.

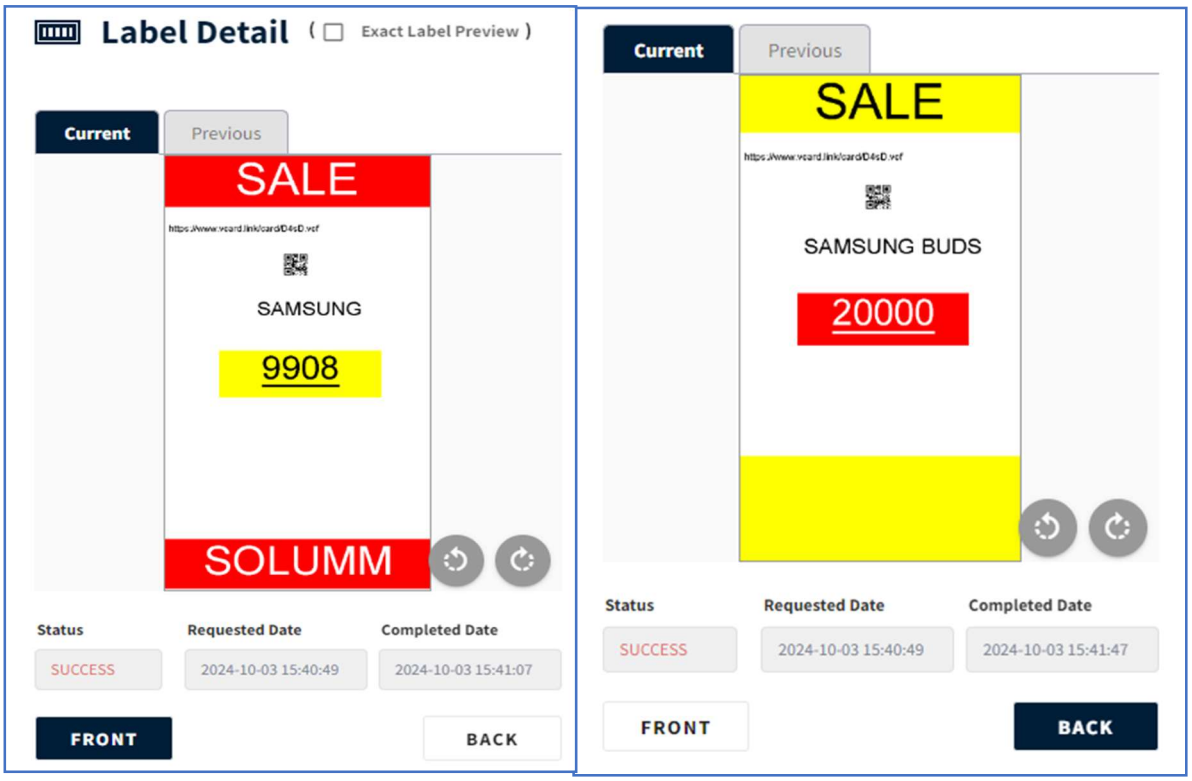
5. Completed Date

The timestamp indicates when the label sent a confirmation that the update was completed.

6. Pages

If the label uses multiple pages, they can be viewed in the preview image by selecting the desired page from the page selection.

12. **Dual-sided Label Preview Image**



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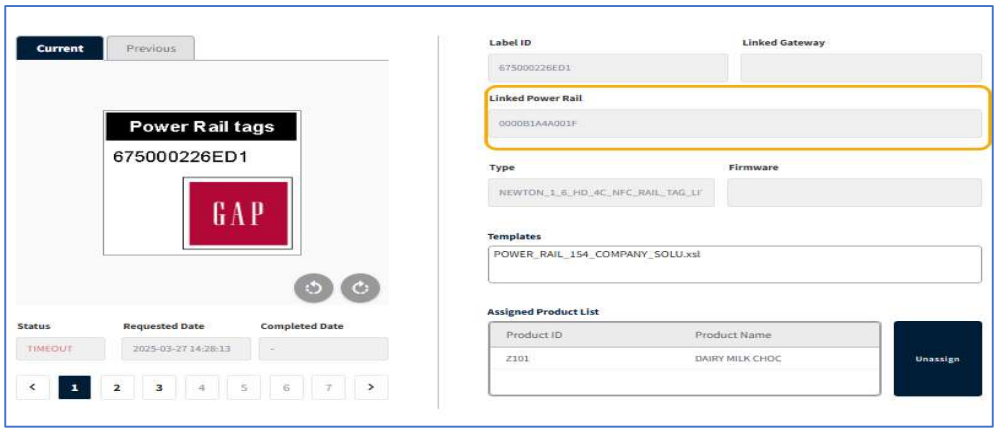
Dual-sided labels have two pages:

- The **Front** page (first page of the template)
- The **Back** page (second page of the template)

  These pages can be viewed in the preview image by selecting **FRONT** and **BACK**.

Enable the **Exact Label Preview** checkbox to compare the label preview on the dashboard with the actual label. This ensures the preview reflects the label accurately.



On the right side of the window, you can find general details such as:

- **Label ID**
- **Gateway Linked**
- **Type of ESL**
- **Firmware Version**
- **Linked Power Rail**

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Templates

The name of the template assigned to the label will be shown. If multiple templates are used across different pages, all template names will be listed. The template name will be empty if the **Image Push** operation is used.

Linked Gateway

Gateway MAC ID that is associated with the label.

Linked Power rail

This field will only be displayed if any power rails tags are connected.. When power rail tags are connected to power rails, the corresponding connected power rail controller ID will be shown.

Assigned Product Details

Displays the **Product ID** and **Product Name** assigned to the label. If multiple products are linked to the label, all product details will be listed.

Unassign

Click the **Unassign** button to begin the unassign process for the label.

Schedule

Any scheduled data for the label will be listed, including:

- **Start Time**
- **End Time**
- **Display Page**

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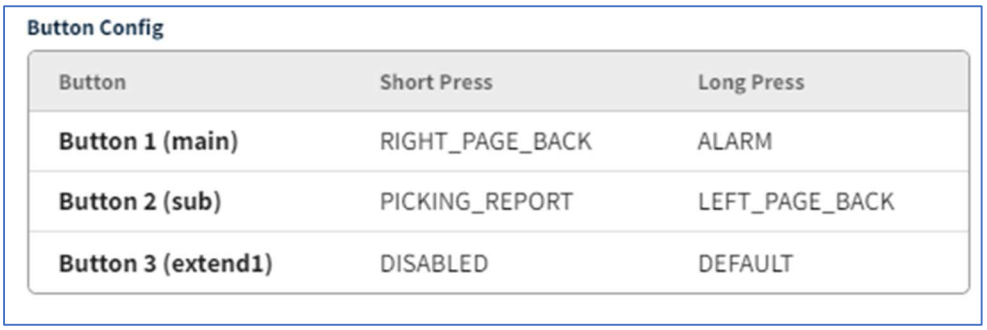
- **State**

You can check the schedule details and the delivery status for each schedule.

Button Configuration

This section displays the current button configuration associated with the label.



Button Config

Button	Short Press	Long Press
Button 1 (main)	RIGHT_PAGE_BACK	ALARM
Button 2 (sub)	PICKING_REPORT	LEFT_PAGE_BACK
Button 3 (extend1)	DISABLED	DEFAULT

8.1.3 Label Search

Users can locate a specific label by entering details in the **Search** section.

Provide any of the following information:

- **Label ID**
- **Product ID**
- **Product Name**
- **Label Status**
- **Signal Strength**
- **Alive Status**
- **Label Type**

After entering the required information, click **Search** to view the results.

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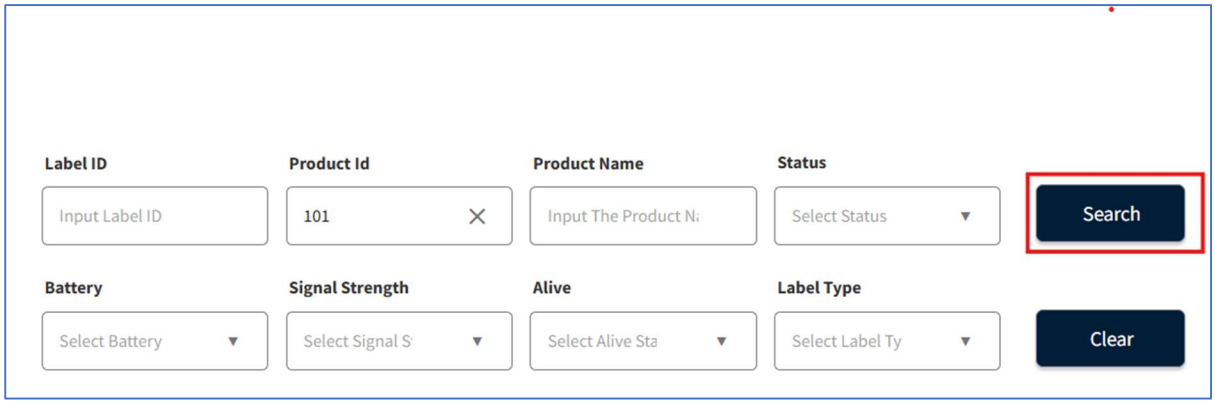
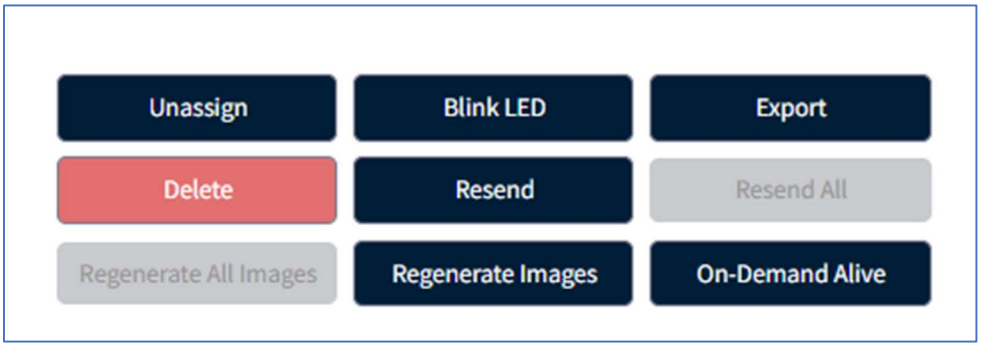


8.1.4 Additional Label Functions

When a specific label is selected (by ticking the checkbox), several action buttons at the bottom of the **Label Info** page will be enabled.



1. Unassign

Select the label(s) from the list and click **Unassign** to start the unassign process. The operation requires label confirmation that the image has been cleared and

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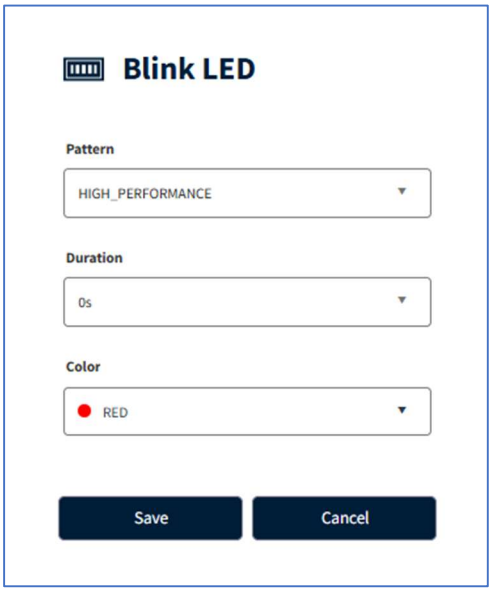
reverted to the default page. If the label is out of range, the status will change from **Processing** to **Delete** (without timing out).

2. Blink LED

Click the **Blink LED** button and enter the required information. You can decide the duration of the LED blinking for pattern details, refer to the **Multifunction Page**.



Multi-Colour LED

You can blink the label LED in different colours in a sequence for a specified duration.

Steps:

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1. Click the **Multi-Colour LED** radio button.
2. Select the required duration and pattern type from the dropdown.
3. Click **Save**.
4. Repeat for different colours and durations.

***Note**:*

- *To perform this function, Multi-colour LED functionality must be enabled for the customer.*
- *The label version must be greater than 29.*
- *The gateway version must be >= N10.3.7.0.*

3. Export

Export the table data as an Excel file to your email.

- Enter your email address to receive a download link.

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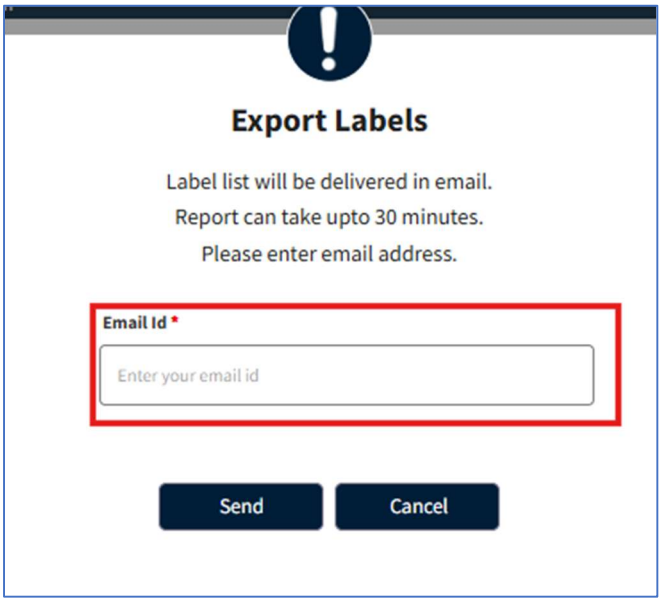
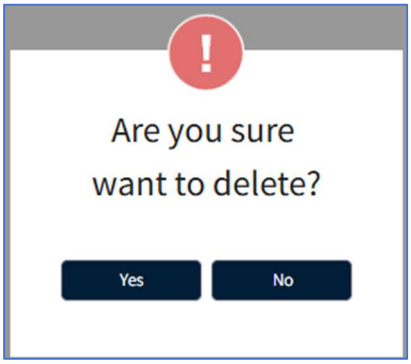
- If the list is filtered, only the filtered data will be exported, not the entire list.



4. Delete

Deleting a label removes its data without notifying the label. A pop-up will appear asking for confirmation when you click delete.



5. Resend

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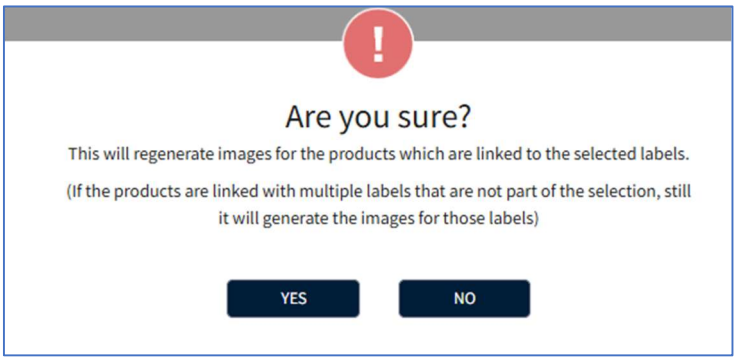
Resend the image to the selected labels. This can be used to re-initiate the update process or apply new configurations.

6. Resend All

It will resend the image to all labels with a **TIMEOUT** status for the store. This feature requires admin privileges and must be enabled for lower-level users.

7. Regenerate Images

When selecting a result, click **Regenerate Images**. This will regenerate images for the selected label as well as other labels linked to the same product.



- Click **Yes** to complete the operation.
- Click **No** to abort.

8. On-Demand Alive

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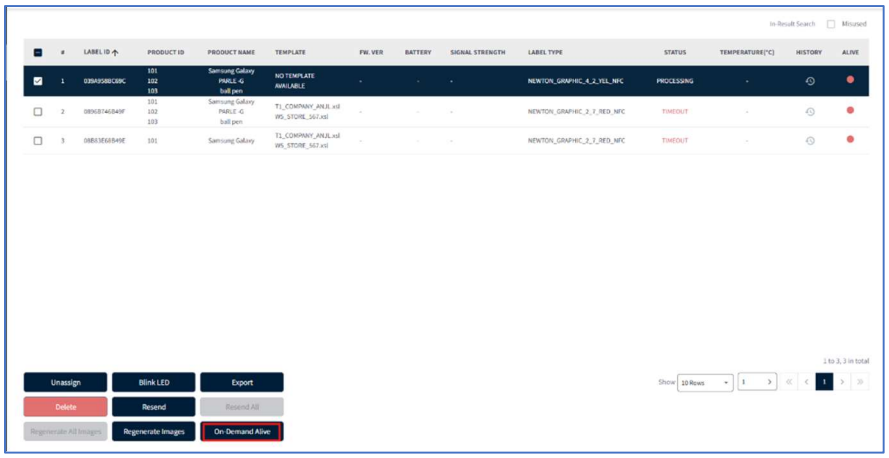
Assigned labels automatically send an alive report status to the gateway every six (6) hours. If a label goes offline due to a low RF signal, low battery, or other issues, and no alive report is received for a certain period, the user can take action. Use the On-Demand Alive option to send a Force Alive request to the gateway. If the gateway receives Page 1 status in response to the On-Demand Alive request, the label status will change to online.

Steps:

1. Select the required checkboxes for labels from the list and click the **On Demand Alive** button.
2. Click the **Alive Status** circle to open a new window displaying the **Labels Status Report History**.



3. In the pop-up window, click **Yes** to confirm.

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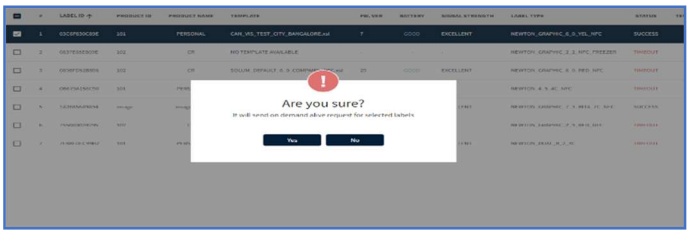
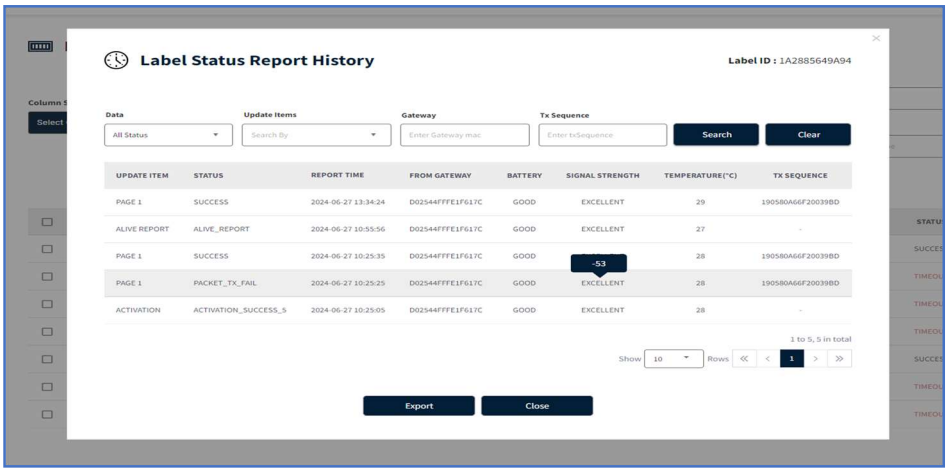


4. A success message will appear in a new window. Click Ok.
5. Click on the alive status circle corresponding to that particular label, it will open a new window showing the label status report history.



If the updated item displays as **PAGE 1**, it indicates that the **On Demand Alive** request was successful and the label is back online.

> ***Note:*** *Default alive status will be received as ALIVE REPORT and On-demand alive status will be received as PAGE 1. PAGE 1 serves only as an indicator of the On Demand Alive request status.*

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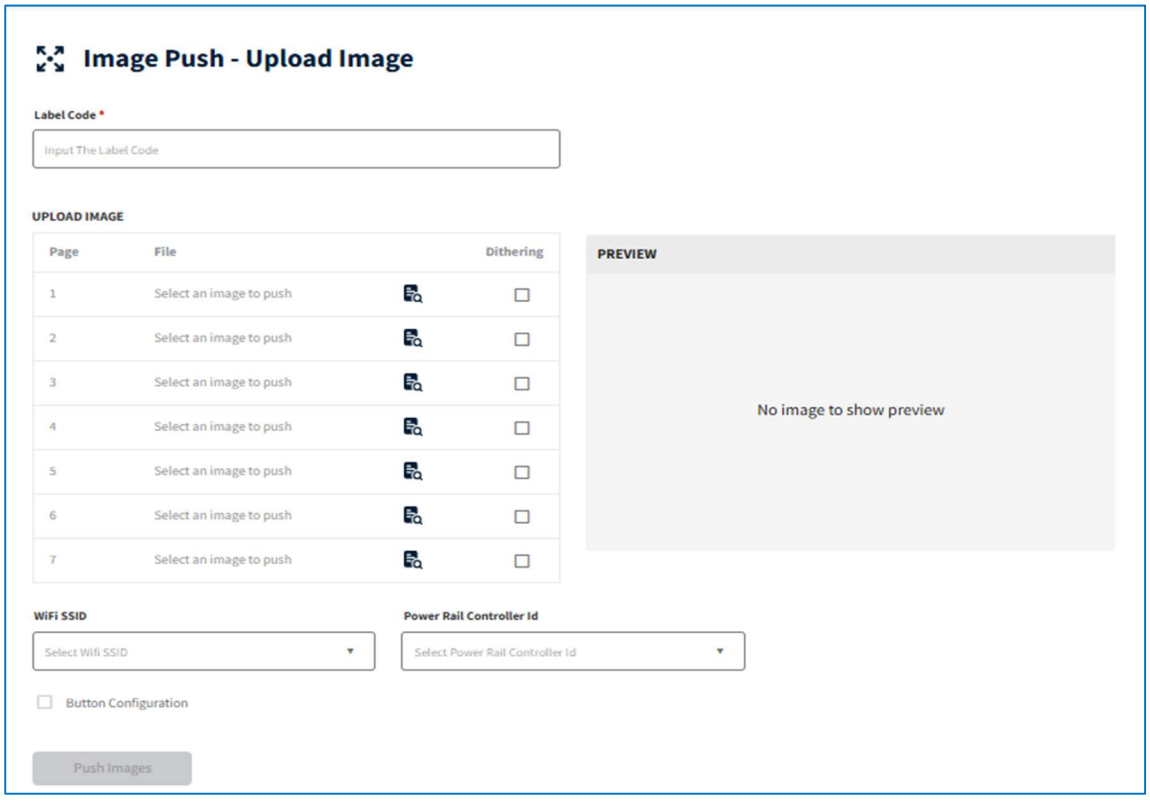
8.2 Image Push to a Label

The Image Push page lets users upload images to a label, similar to the Image Push in the Label Details pop-up. However, this page allows for easy upload of multiple images at once. It is typically used for testing or small-scale applications. For large volumes, Image Push should be integrated with the SOLUM AIMS SaaS API.

1. Click on **Image Push**.
2. Enter the **Label Code** where the image will be pushed.
3. Click the **Browse** button for each page.
4. Select an image **of the same size as the label** and click **Open**.
5. Repeat for all pages.
6. Click **Push Images** to complete the process.



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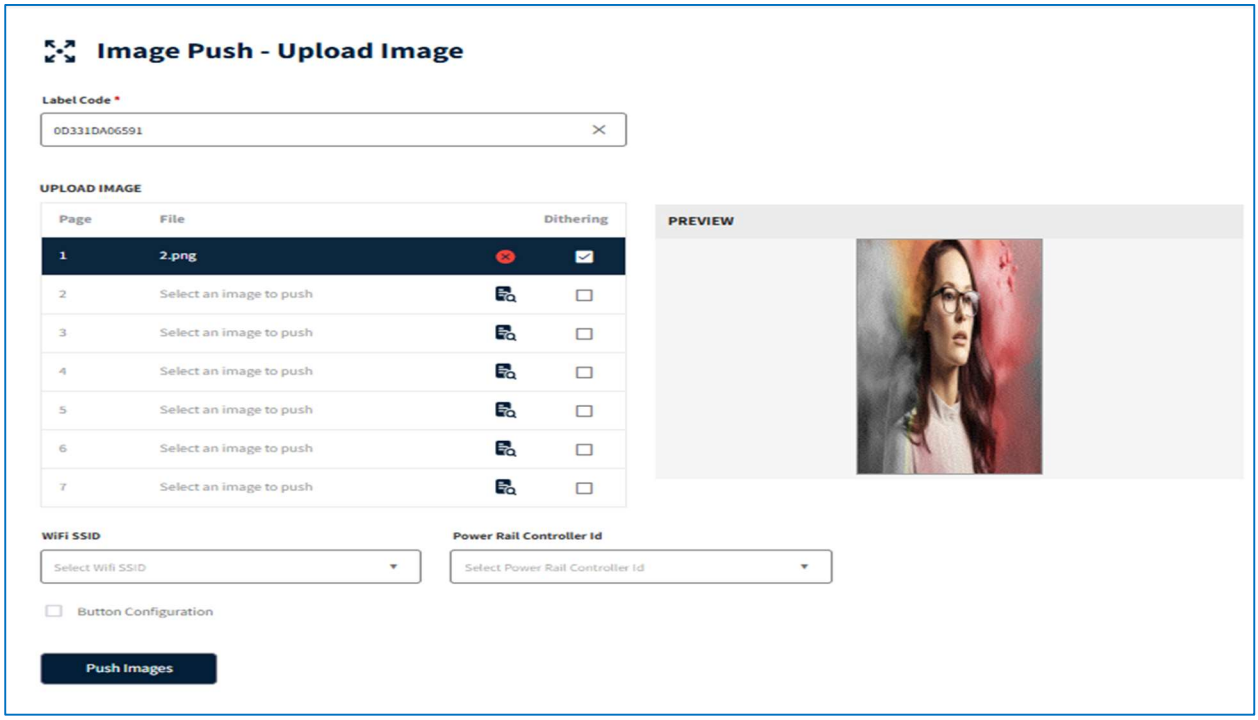
***Note**: If Image Push is enabled, it should be the last event on the label. Once the image is pushed to the template, no further product data updates will occur. Therefore, ensure all necessary product data updates are completed before initiating the image push.*



An image dithering option is provided here. Dithering is an image processing technique used to simulate color depth in images with a limited color palette. When a color falls outside the available palette, dithering approximates it by distributing colored pixels from within the existing palette. This ensures that the image is dithered based on the available layout colors mapped to the label type, maintaining consistency with the designated color scheme.

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WIFI SSID

While assigning Wi-Fi tags, the user must select the configured Wi-Fi SSID from the dropdown. For normal tags, selecting a Wi-Fi SSID is not required.

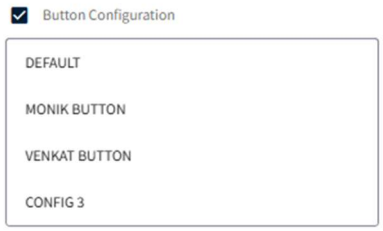
Power Rail Controller ID

When assigning Power Rail tags, select **the Power Rail Controller ID** from the dropdown *only* for **BLE Power Rails.** For standard Power Rail tags, there's no need to select a controller ID—the standard/normal controller will not appear in the dropdown or the link, and no rail ID selection is required.

> ***Note:*** *Since WIFI & POWER RAIL are custom features. Please refer the dedicated Manuals for more information.*

Button Configuration:

User can select label button configuration while performing image push. check the **Button Configuration** checkbox and choose required button configuration from the available list.



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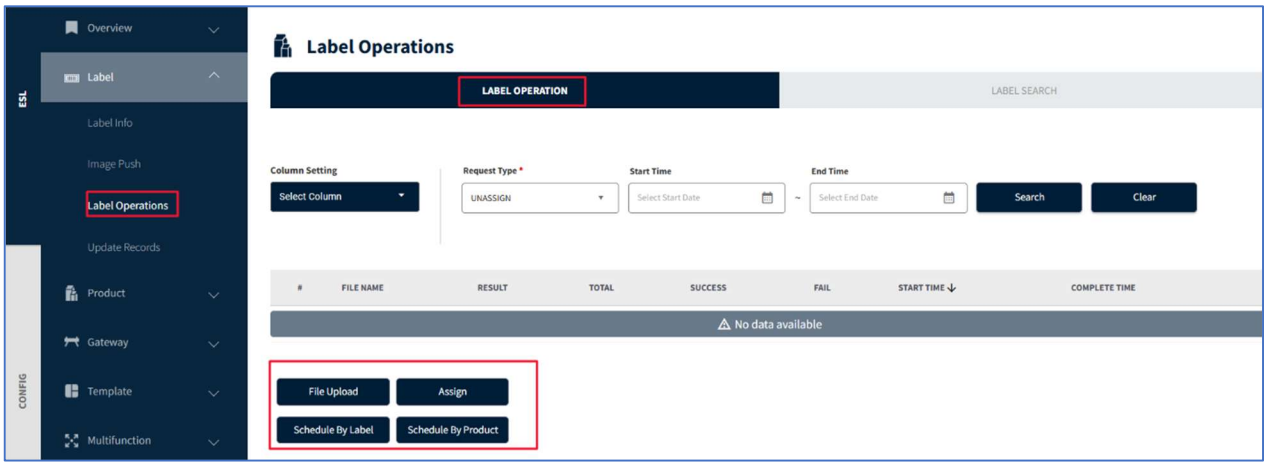
8.3 Label Operations

The **Label Operation** section handles key tasks like assigning templates to labels and viewing label specifications using the **Label Search** option. This page includes built-in features for specific use cases, such as:

- Assigning labels via file upload
- Assigning labels
- Scheduling by Label
- Scheduling by Product

These tools make managing labels efficient and user-friendly.



8.3.1. Label Operations Using File Upload

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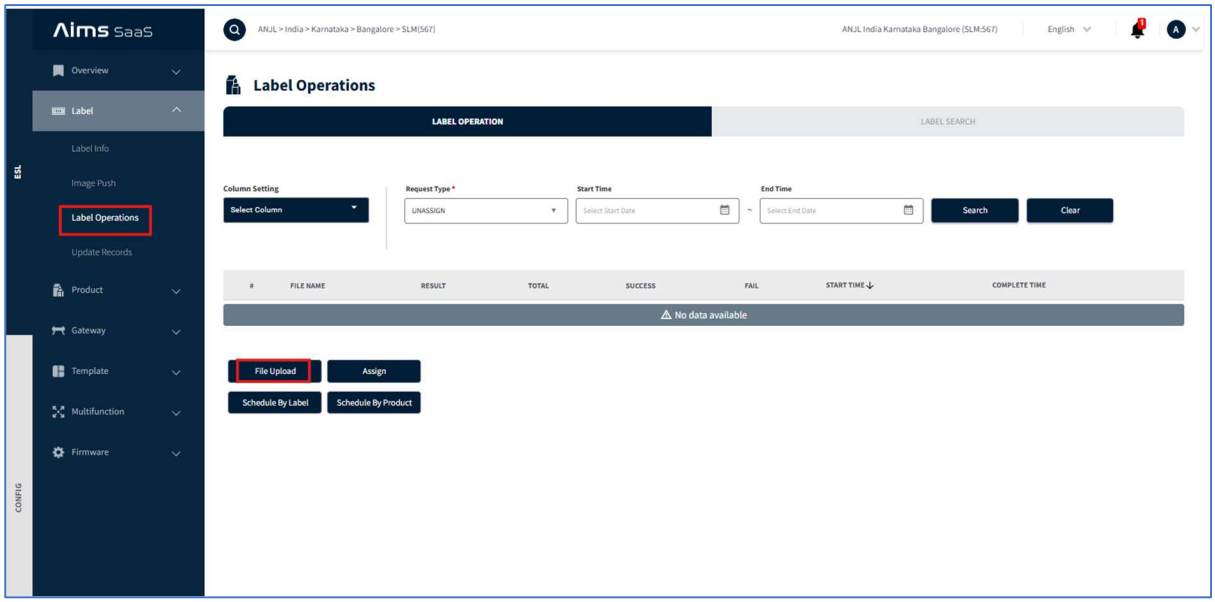
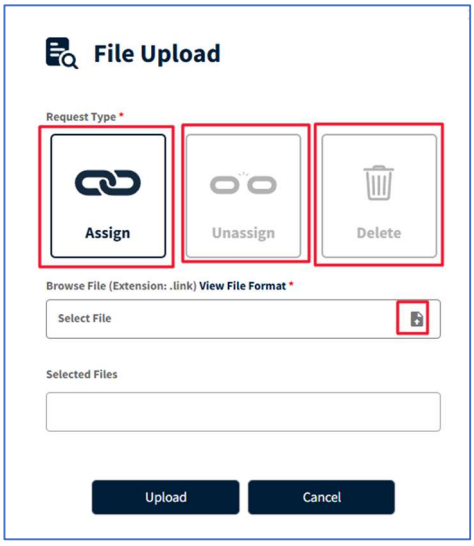


The **File Upload** operation allows users to perform bulk actions, including:

- **Assign**: Assign multiple labels.
- **Unassign**: Unassign multiple labels.
- **Delete**: Delete multiple labels.

This feature streamlines managing multiple labels efficiently



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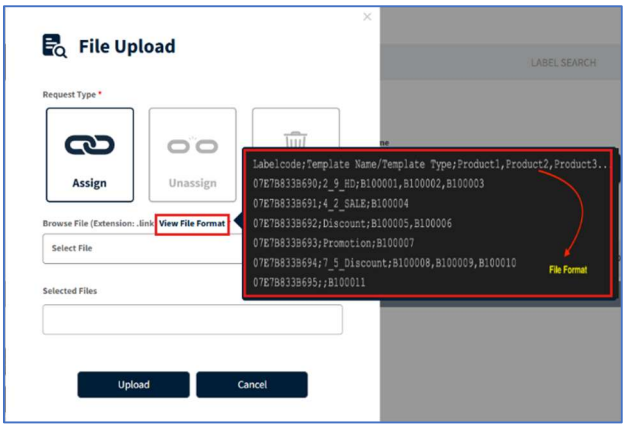
1. Assign Labels using File Upload

1. Select the request type as **Assign**
2. Click the browse button and upload the file.
3. Hover over the **View file format** to see the file type to be uploaded.
4. File Extension should be **.link**



5. The file must follow the format: **Label ID; Template Name; Article1, Article2, …**
6. Each label must be in its line.
7. Uploaded file name will show in the **Selected Files.**
8. Click **Upload.**

2. Unassign Labels using File Upload

1. Select Unassign and upload the file.
2. Hover over the **View File Format** to check file requirements.
3. Ensure the file meets the following criteria:
   - **File Extension: .unlink**

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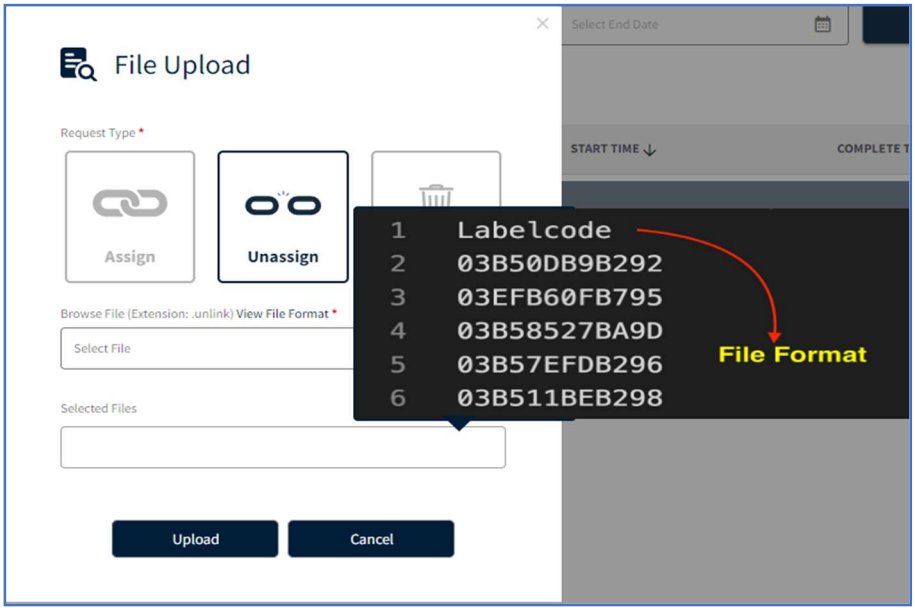
- **File Format: Label ID** (each label ID on a separate line).

4. Upload the file to proceed**.**



3. Delete Labels Using File Upload

1. Select **Delete** and upload the file.
2. Hover over **View File Format** to check file requirements.
3. Ensure the file meets the following criteria:
    - **File Extension**: **.del**
    - **File Format**: Label ID (each label ID on a separate line).
4. Upload the file to delete the labels.

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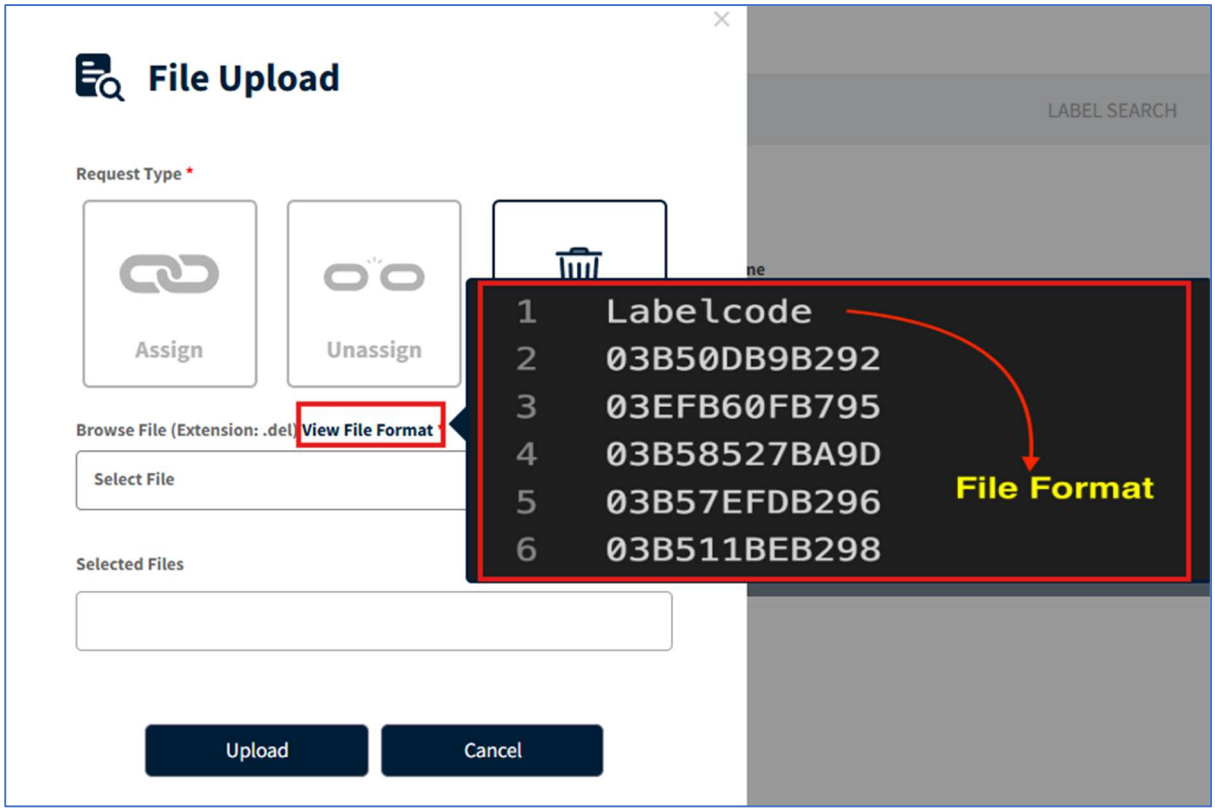
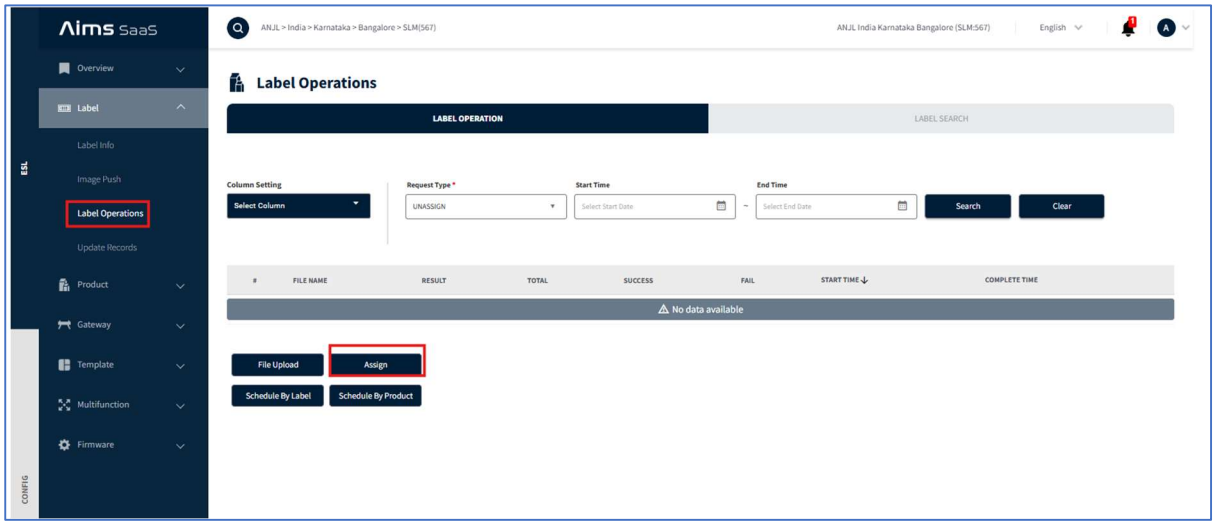


8.3.2 Assigning Labels



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1. Assign with Products

1. Choose the tab PRODUCTS (default).
2. Enter the Label Code
3. Select the Template Type (If **Template Mapping** is enabled, selecting a template will trigger an error pop-up. **Leave it blank**)

4. If **Template Types by Label** is enabled, only templates specific to that label type will appear.
5. Input the Product ID(s) (For multiple entries, type each product and press **Enter** after each one.)

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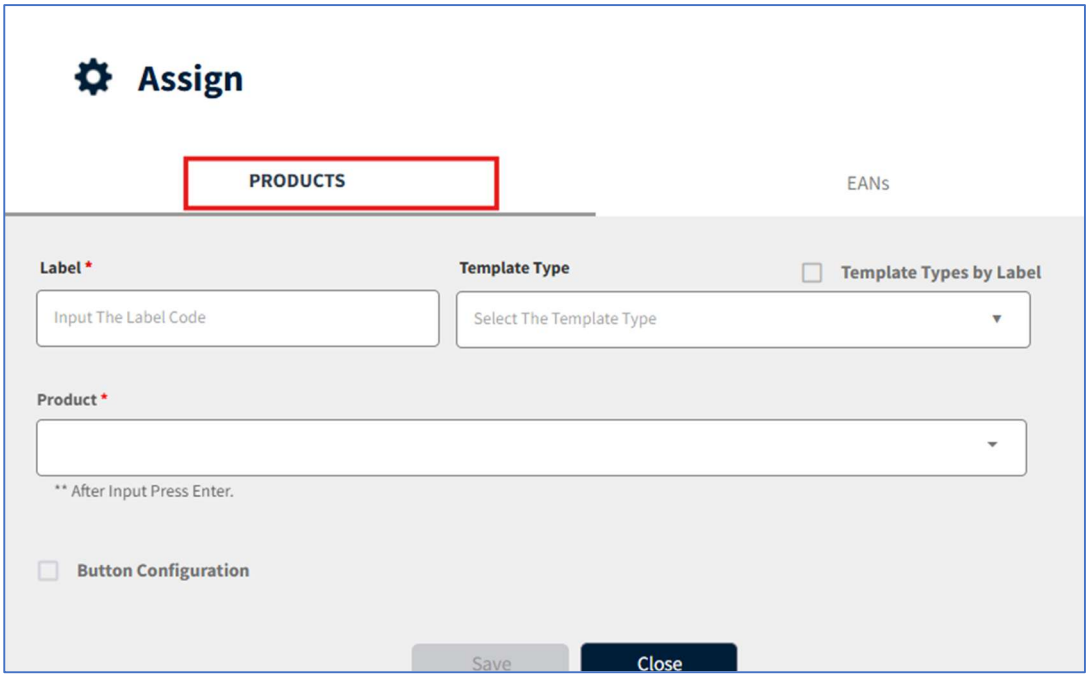

Note: *Based on the saved default button configuration, button actions will be applied to the labels on assign and price update of existing labels.*

2. Assign with EANs

Similarly, with EANs, users can assign labels. When using EANs, the label will be assigned to the corresponding product linked to the EAN.

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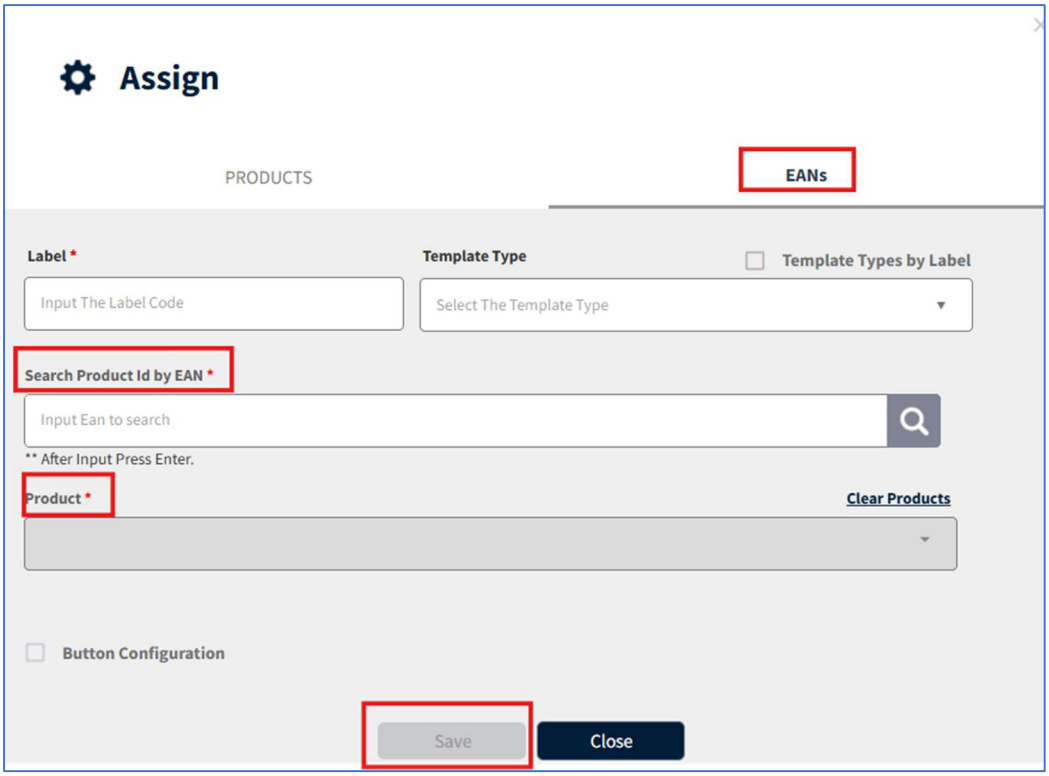

3. Assign without Products

Based on user preferences, this feature can be enabled from the Admin side (from the dashboard). Once activated, users can assign a label without creating a product beforehand. While assigning, the user only needs to provide a product ID. Upon submission, the system automatically creates the product.

8.3.3 Schedule by Label

Schedule by Label allows users to set schedules for labels, where actions like page flipping are assigned to labels at defined start and end times. This feature enables labels to automatically display the page based on the schedule.

Apply Page Flipping Schedule to a Label

1. Input the **Label ID**.
2. Select the **Page Number** from the dropdown list.

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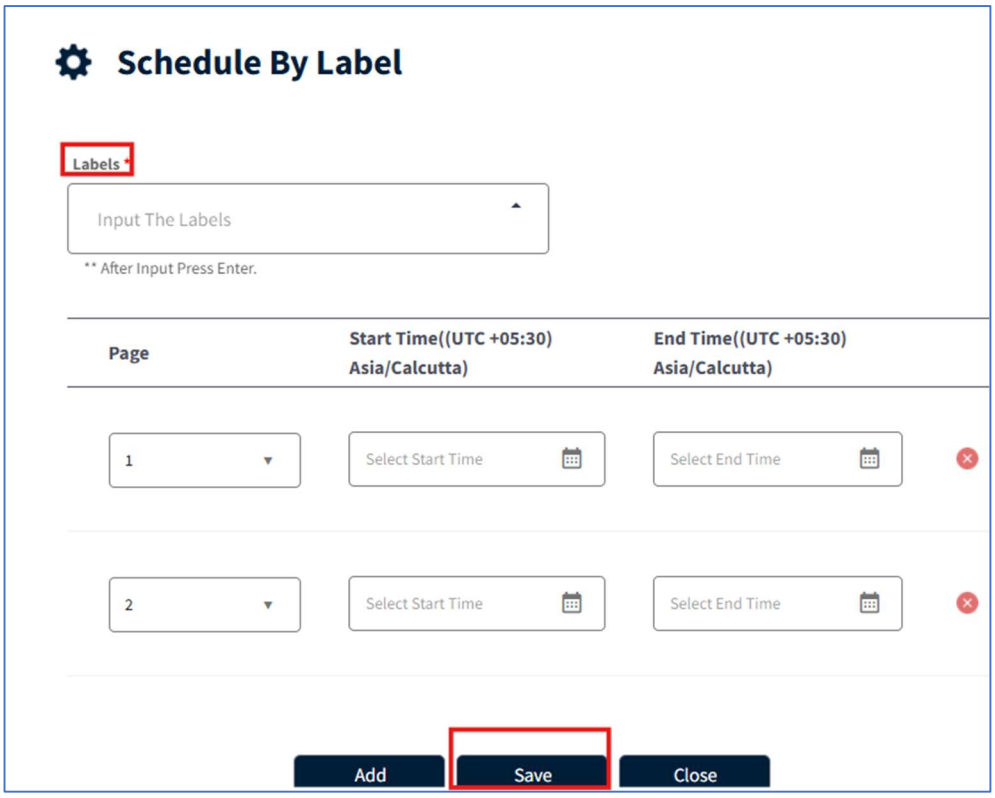
3. Define the **Start Time** and **End Time** for the schedule.
4. Click **Add** to add more schedules (up to a maximum of 20).
5. Click the **(X)** to delete any schedules if needed.
6. Click **Save** to apply the schedule.



Note: *Schedules should be sent at least 30 minutes before the scheduled start time. During the scheduled start and end times, the selected page will be* displayed.

8.3.4 Schedule by Product

Input Product ID and schedule page flipping.

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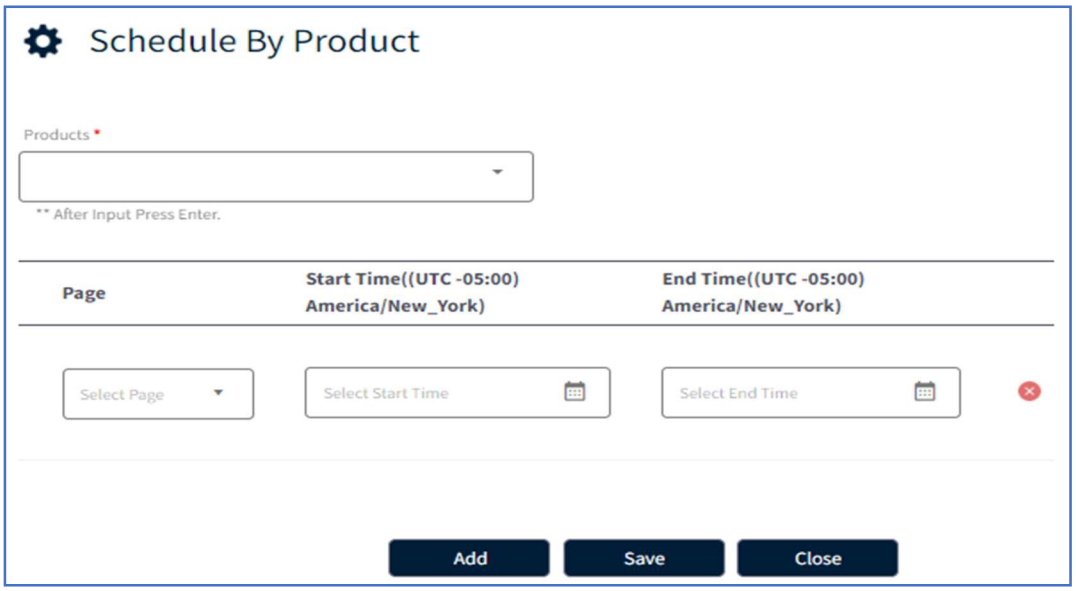
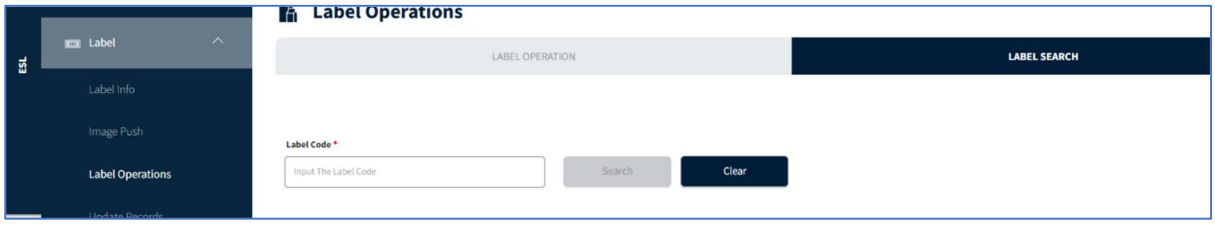


8.4 Label Search

To search for a particular label and to know specifications label search is used.

1. Click the **Label Search** tab from the Label Operation page.
2. Enter the **valid label code** and click the **Search** button.



3. The label information will be displayed, along with **Unassign** and **Delete** options if the label is assigned to any store.

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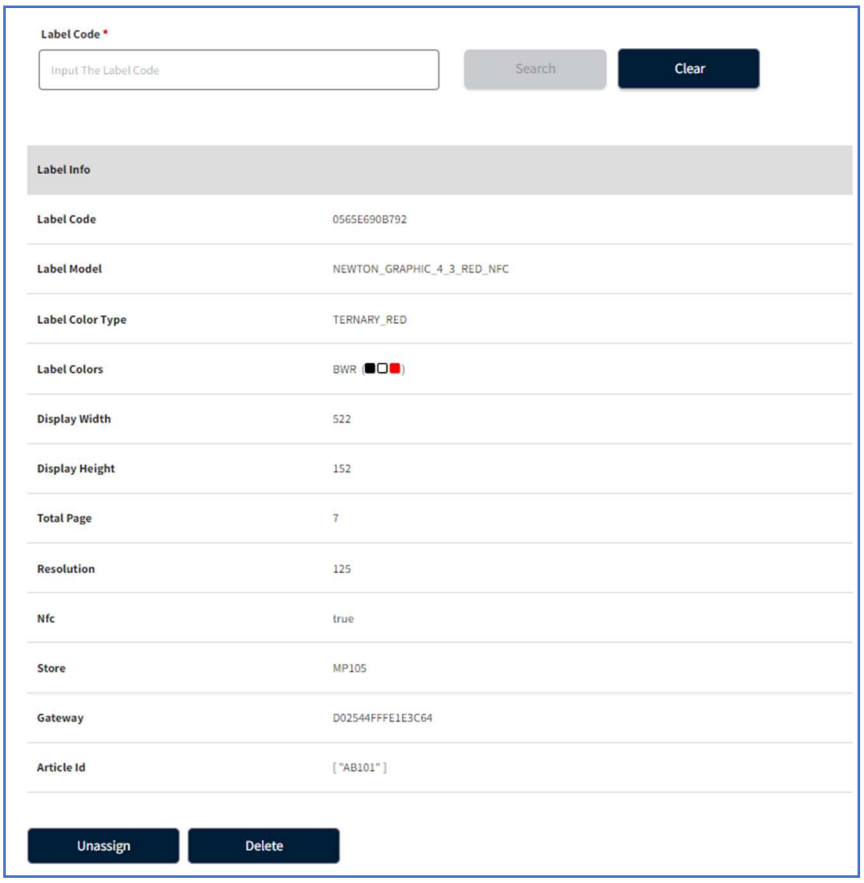
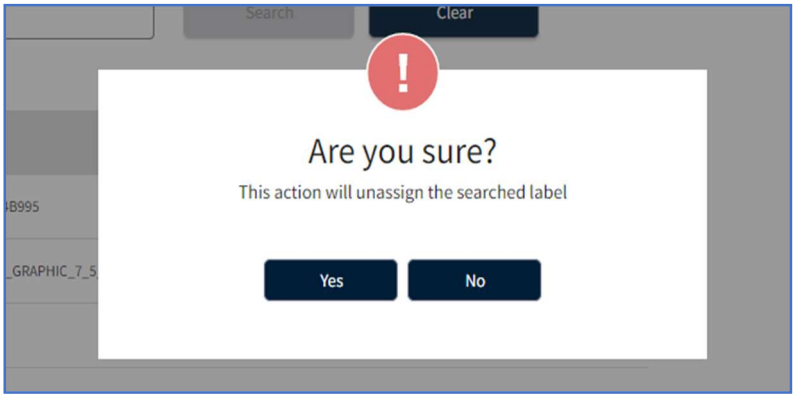


8.4.1 Unassign the Searched Label

1. Click the **Unassign** button.
2. An alert pop-up will appear.
3. Click **Yes** to complete the unassign operation or **no** to cancel.



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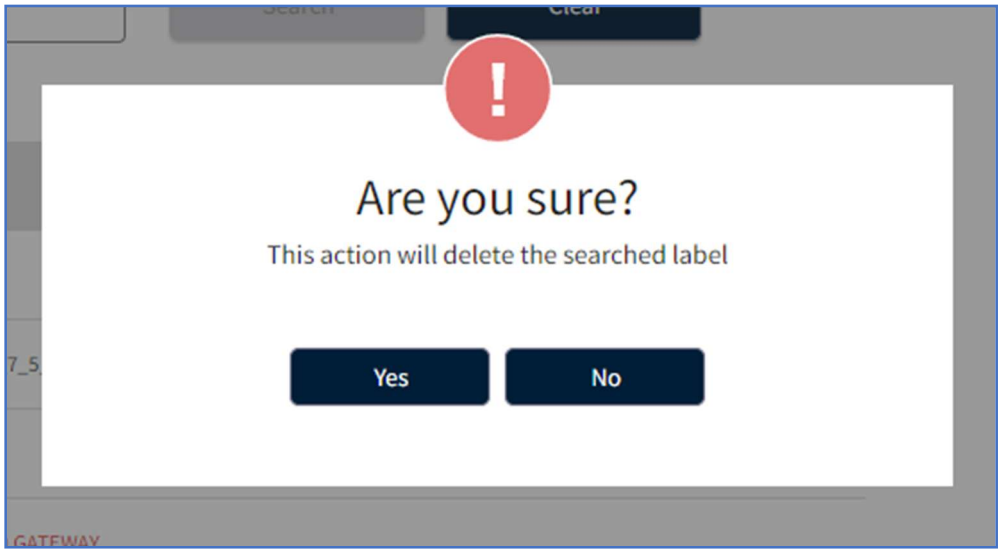
8.4.2 Delete the Searched Label

1. Click the **Delete** button.
2. An alert pop-up will appear.
3. Click **Yes** to complete the delete operation or **no** to cancel.



8.5 Update Records

Users can track label updates on this page, including tags assigned through operations like 'label assign' or via file uploads. Only assigned records will appear under 'Update Records.' Unassigned or deleted tag records will not be listed.

1. Click **Update Record** in the **Label** section.

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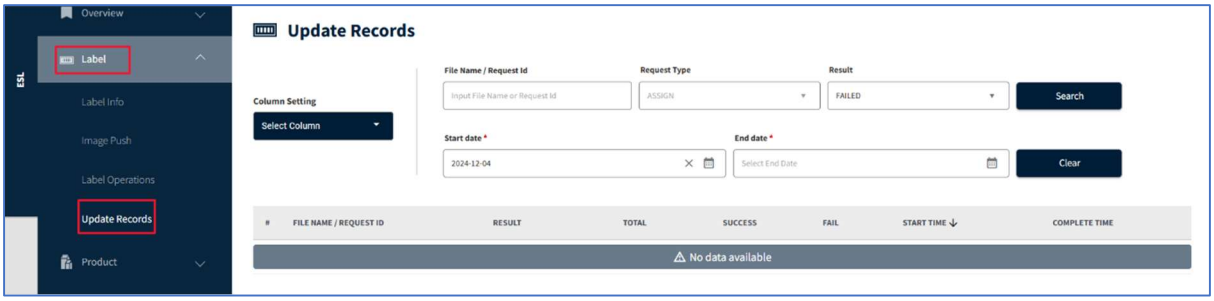


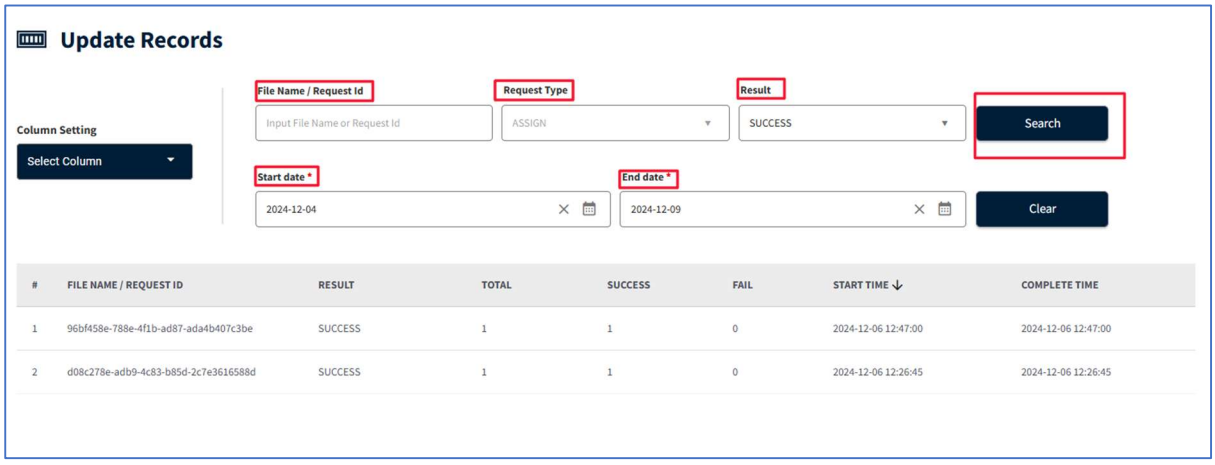
2. **Provide the file name** of the uploaded file (from Label Assigning) or the **request ID** when updated via the API.

3. The **Request Type** will be set to **Assign** by default.

4. Select the **Status** of the update in **Result.** Available values: **SUCCESS, PARTIAL SUCCESS, FAIL**.

5. Provide the **Start Date and End Date** for which you want the records. *(These fields are mandatory.)*

6. Click **Search**.



Note: *In the* ***Update Records*** *table,* ***Total*** *represents the total labels submitted for the update, while* ***Success*** *shows the count of labels successfully updated.* ***Fail*** *highlights the count of unsuccessful updates due to issues like missing fields, incorrect file extensions, or mismatched field counts.* ***Start Time*** *is the timestamp marking when the update began, and* ***Complete Time*** *notes when the update finished.*

8.5.1 Download the Update Records of Labels

Customers can request to store uploaded data for a specific period, enabling them to download the file if needed. This feature is disabled by default and requires a request to SOLUM for admin activation.

8.5.2 View Your Label Record Detail

1. Click on the **File name/Request ID** from the update Records table. A new window called **Record Detail** will open.
2. The pop-up window shows the **Batch ID at the top-right corner**.
3. Use the **Search** feature to filter results or the clear option to reset the search.
4. The table provides STORE, PRODUCT ID, LABEL CODE, STATUS, and START TIME details.

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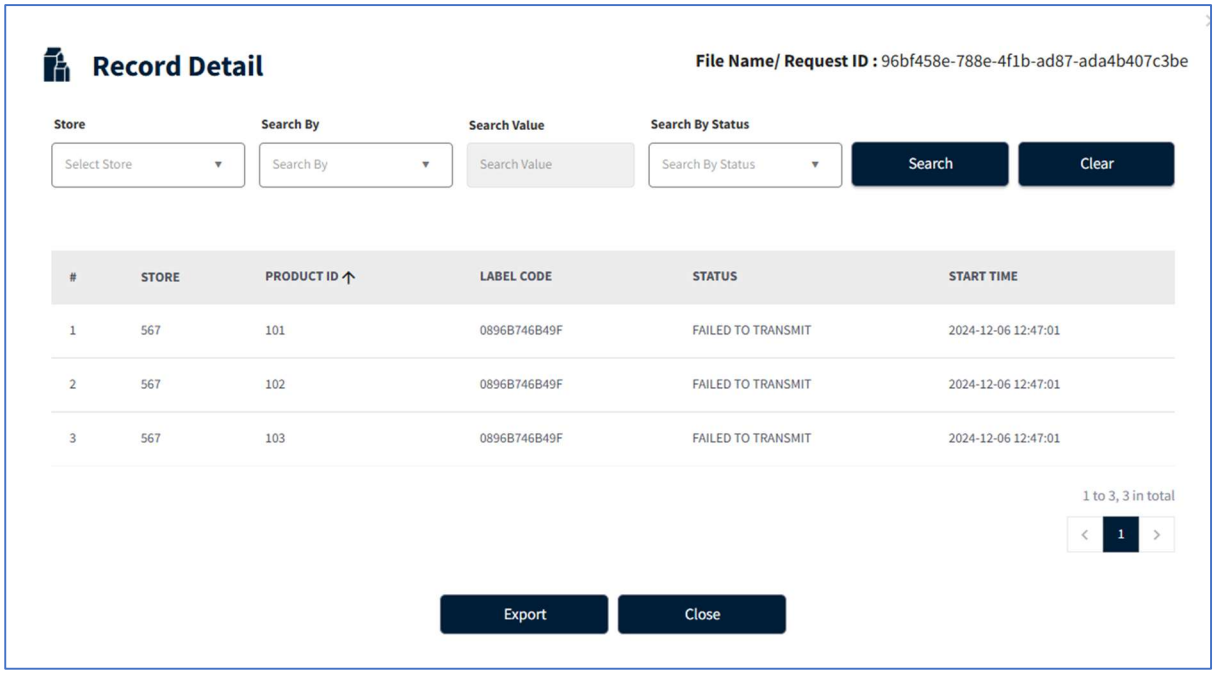

8.5.3 Export the Label Record Details

1. Click the **Export** button to open the **Export Record Details** pop-up.
2. The logged-in user's email is displayed by default.
3. Enter a different email address if needed.
4. Click the **Send** button to receive the record details via email.

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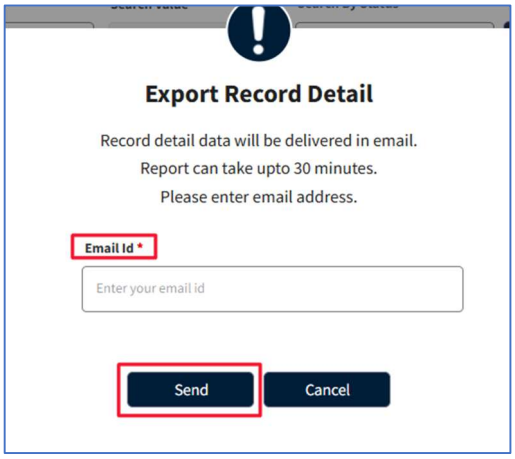

9. Multifunction of Labels

This page lists additional operations and settings that can be done utilizing the labels beyond displaying content.

1. Navigate to the **ESL tab** and click **Multifunction.**
2. Select **LED Configuration.**

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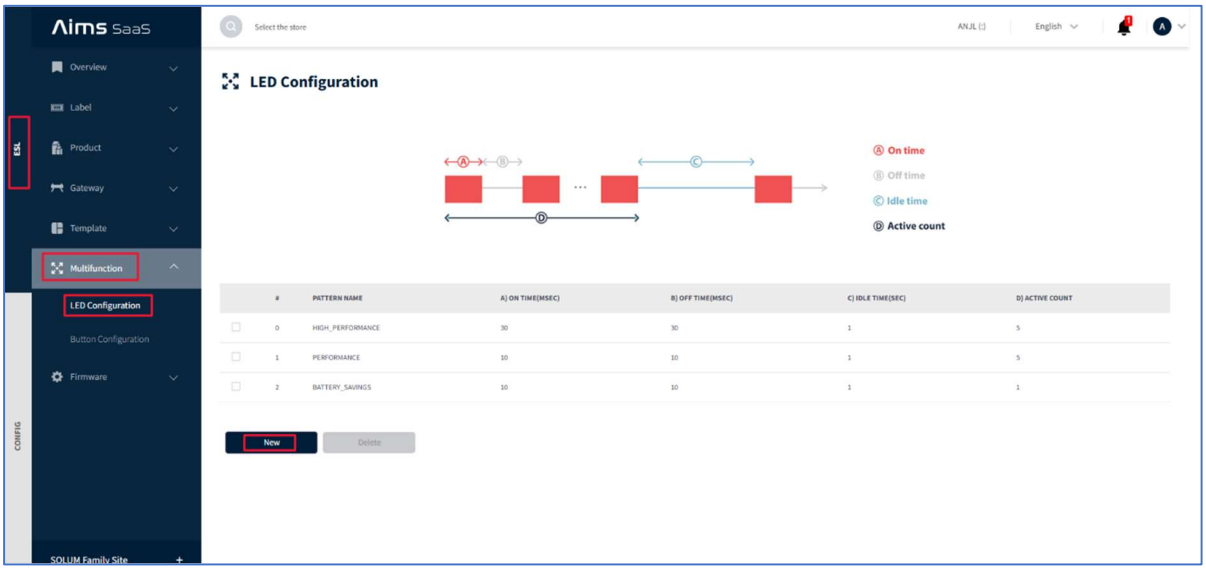

9.1 LED Configuration

The SOLUM Newton lineup (Newton, Newton Lite, Newton X, etc.) features labels with 7 built-in LED colours to assist customers and store associates in easily locating products or product locations. The LED can blink to draw attention, and the following details are required to set it up:

1. **Product or Label ID**
2. **LED Colour**: RED, GREEN, BLUE, MAGENTA, YELLOW, CYAN, or WHITE.
3. **Blink Duration**: How long the LED will blink.
4. **Blink Pattern**: The style or sequence of the blinking, which can be selected from predefined options available.

9.1.1 Custom LED Patterns

Users can create custom LED blinking patterns based on their needs. To do this:

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1. Click **New** at the bottom of the LED Configuration window.

2. When creating a custom LED pattern, users will need to provide the following details in the new window that opens:

- **Name**: Assign a unique name to the LED pattern for easy identification.
- **On Time**: Specify how long the LED remains lit during each blink (in seconds).
- **Off Time**: Specify how long the LED stays off between blinks (in seconds).
- **Idle Time**: Set the duration of inactivity (in seconds) before the blinking starts again.
- **Active Count**: Define the number of times the LED will blink in one cycle. After filling in these details, click **Save**.

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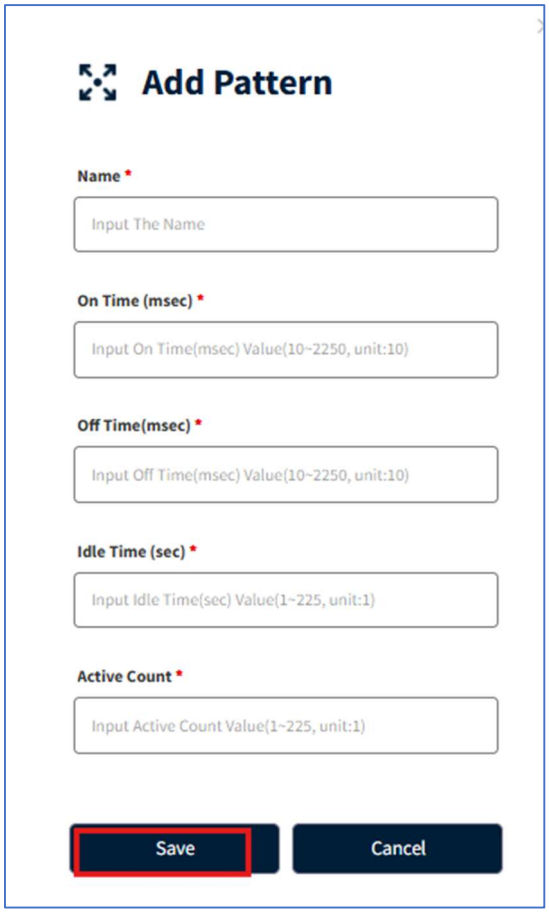
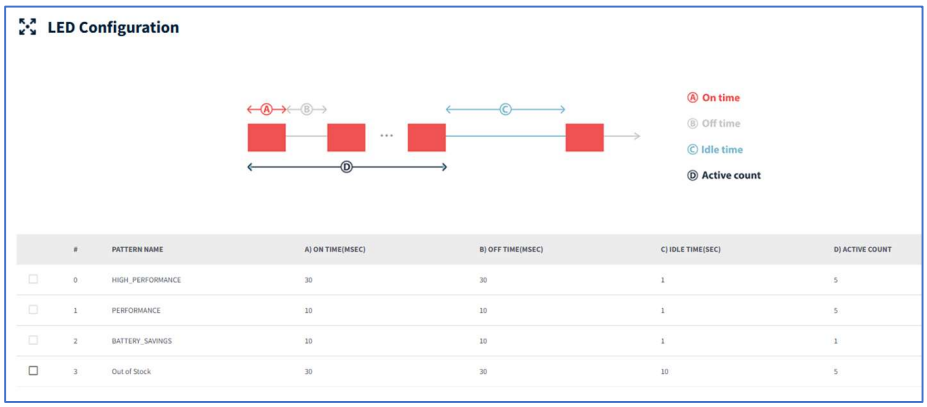


3. Once the custom LED pattern is saved, it will appear in the main LED configuration window, where you can easily view and select it for use.



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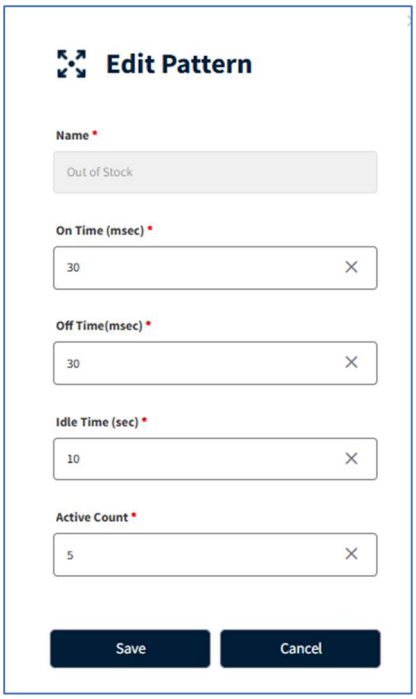
9.1.2 Edit Your ESL's LED Pattern

Clicking on a pattern from the list will open a new window where you can edit the LED pattern. Please note that the pattern name cannot be changed once it's created. If you want to change the name, you will need to delete the existing pattern and create a new one with the desired name.



9.1.3 Delete LED Pattern

1. Select the checkbox next to the manually added pattern(s) you want to delete.
2. Click **Delete**.

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Note: *Default patterns cannot be deleted from the Dashboard. The pattern with ID "0" –* ***HIGH PERFORMANCE*** *cannot be deleted from either the Dashboard or the API. Default Patterns 1 and 2 can be deleted via the API and re-added later if necessary.*

9.2 Button Configuration for ESLs

Only Level One (Customer Admin) users have access to the button configuration settings. Users can configure actions for both short and long-press buttons.

Button Action List

LED OFF:

This button is sent to stop/switch off blinking LED.

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Alarm:

Always green LED color will be blinked, Use for alert or out of stock or another customer-based requirement. If the link with the GW is disconnected, red LED color will be blinked.

Left Page Back:

page will be changed to lower number of page but after 10 seconds, it'll move back to the original page.

Right Page Back:

page will be changed to higher number of page but after 10 seconds, it'll move back to the original page.

Left Page:

page will be changed to lower number of page and gets locked. even there is an update with the current page is 1 or other value, the lock will not be release.

Right Page:

page will be changed to higher number of page and locked. even there is an update with the current page is 1 or other value, the lock is not release.

Sync Loss Alarm:

Initially, it's a different feature with Alarm. but now It's working same as Alarm.

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Picking Report:

When external app is linked like Wine or Tool etc.

This button is used while picking the object - user press the button while the LED is blinking. Ping status response will be delivered to the server.

If a user presses the button while there is no the LED blinking, alarm status response will be delivered to the server.

Changeable Left Page:

It's similar with left page. but the lock will be release when there is an update.

Changeable Right Page:

It's similar with Right page. but the lock will be release when there is an update.

Clear:

All the info. will be cleared on the tag side. so, barcode will be showed up.

9.2.1 Default Button Configuration

- A default button configuration is automatically added.

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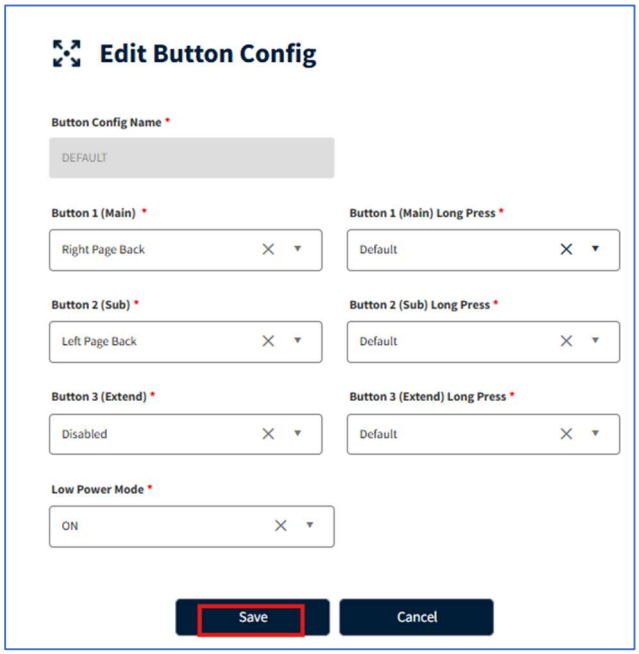
- Users with appropriate permissions (Level One users) can **edit** the default button configuration and save it.

Default Button Actions:

- **Button 1 long press (Default)**: Right page back
- **Button 2 long press (Default)**: Left page back
- **Button 3 long press (Default)**: Disabled

To **edit** the default button configuration,

1. Click on the default button configuration line.



2. Make desired changes and click **Save.**

Note:

- *Label reset and long press button actions are only available when low power mode is ON.*

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- *If low power mode is OFF, label reset cannot be performed, and long press buttons will be disabled.*
- *To add a long button, press configuration, the gateway firmware version must be 10.3.14.0 / 10.3.14.11 or higher, and the Label firmware must be 36 or higher.*

9.2.2 Custom Button Configuration

1. To create a new button configuration, click the **New** button in the button configuration window.

2. Fill in the fields with the desired information to configure the buttons according to your requirements and click **Save**.

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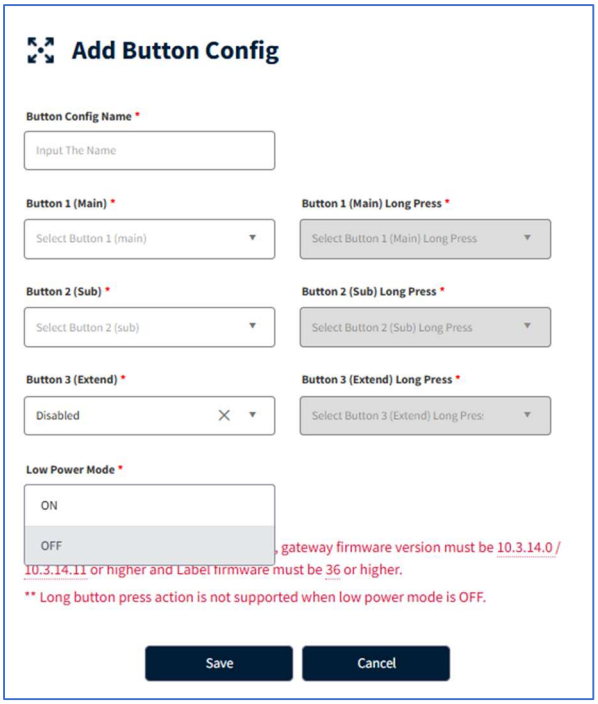

9.3 Out of Stock

This feature populates a list of out-of-stock products when a label assigned to the product has its button pressed by a user. This list can be reviewed, exported, or emailed. This feature can only be enabled by the SOLUM admin. Contact SOLUM to enable.

In preparation to use this feature, the label must have a button (Newton and not Newton Lite) and one of the buttons should configured to 'Alarm'. The button setting can be done from **Dashboard > ESL > Label > Label Config > Label Settings**

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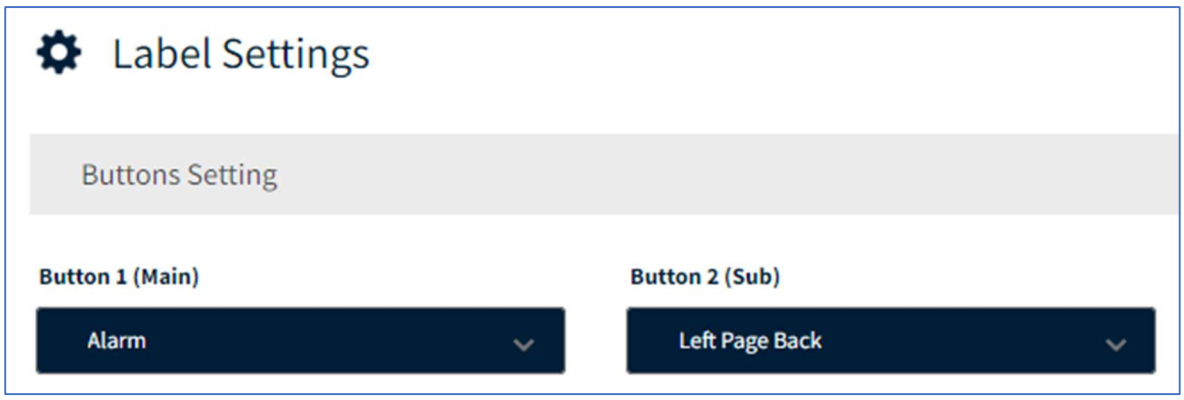
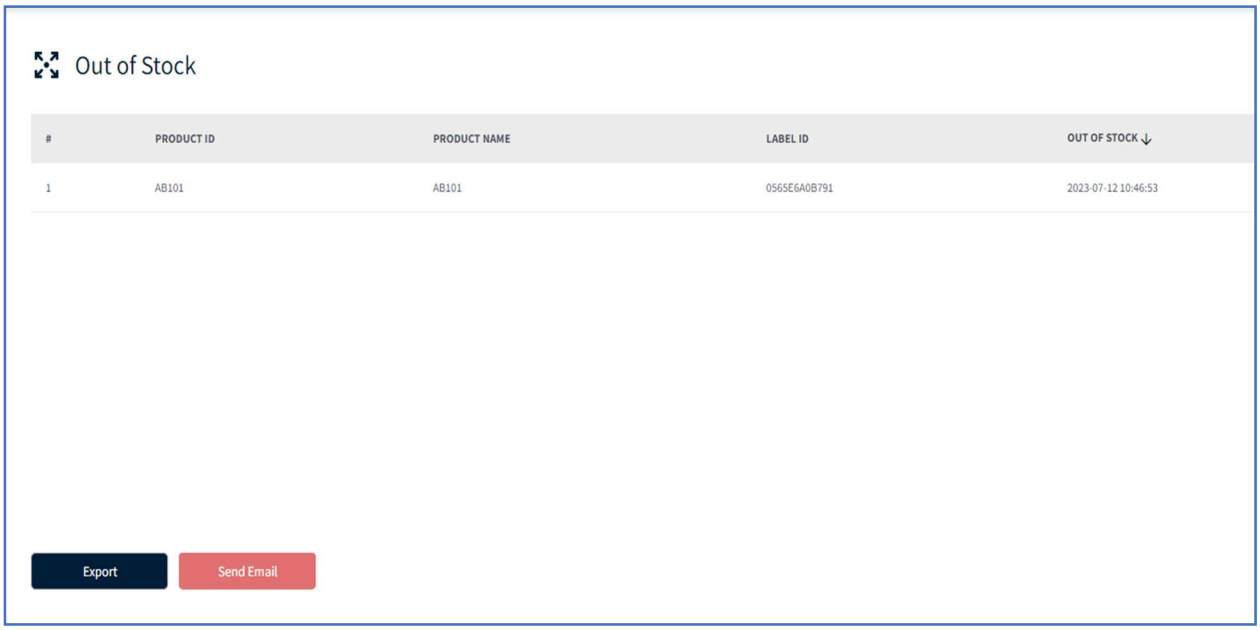


Upon the user pressing the Alarm button on the label, this page will start to populate with information.



EXPORT

Click export button to download list to the local machine.

SEND EMAIL

Click on Send Email button to open a list of users associated with the store. Check the checkbox of user(s) and click Send. Email will be sent to users with list attached.

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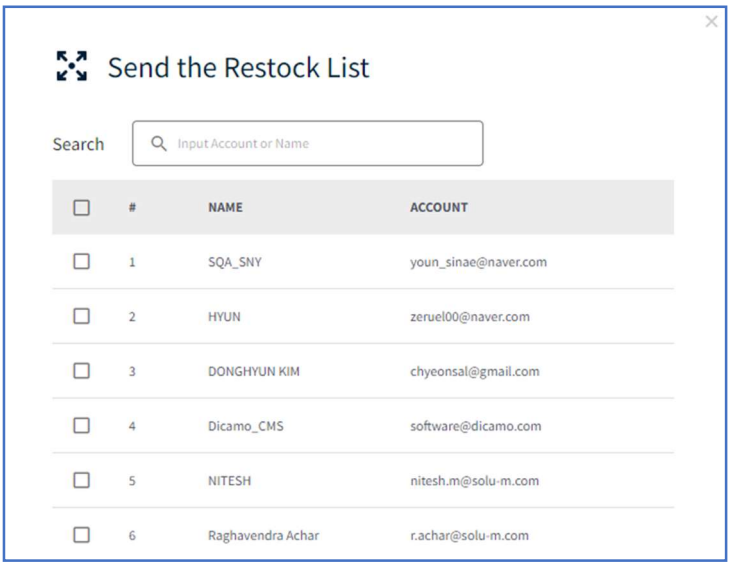

9.4 Waste Prevention

The **Waste Prevention** feature helps you reduce product waste by scheduling automatic discounts based on expiration dates. Follow the steps below to enable and use this feature effectively.

9.4.1 How Waste Prevention Works

- Products with expiration dates can have automatic promotions applied to them.
- Labels must use a **waste prevention template** that includes the product's expiry date.
- Users can set rules to adjust **discount rates** based on the product's remaining shelf life.
- Customize **LED blinking colors and timing** to alert staff and customers about products nearing expiration.

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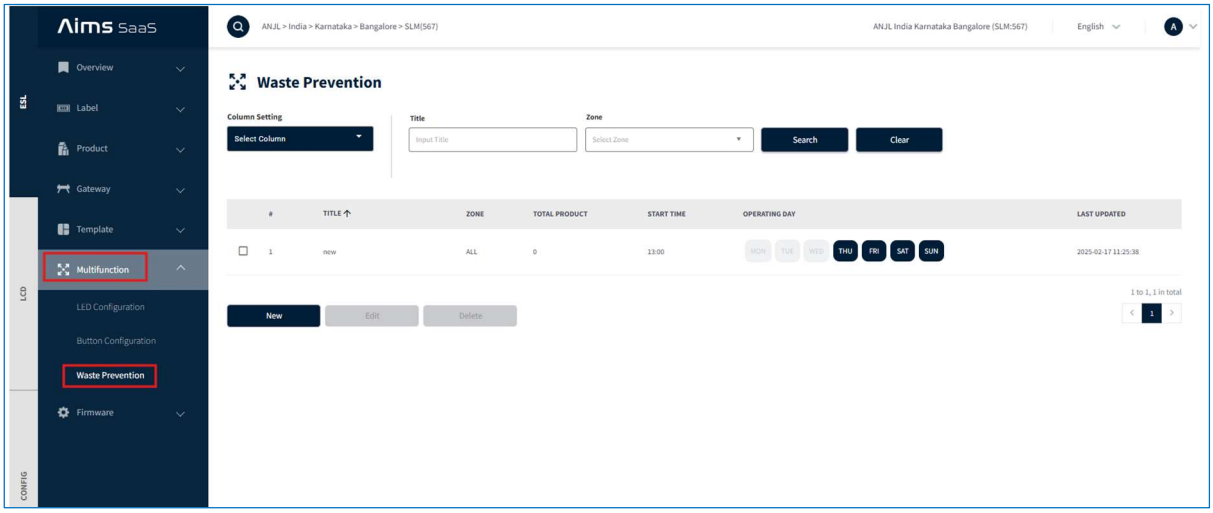
How to Enable Waste Prevention

To activate this feature, **contact Solum**.

How to Access the Waste Prevention Feature

1. Go to the **ESL** tab.
2. Click **Multifunction**.
3. Select **Waste Prevention**.



Setting Rules for Waste prevention

Creating a New Schedule

1. Click **New** to create a new schedule.

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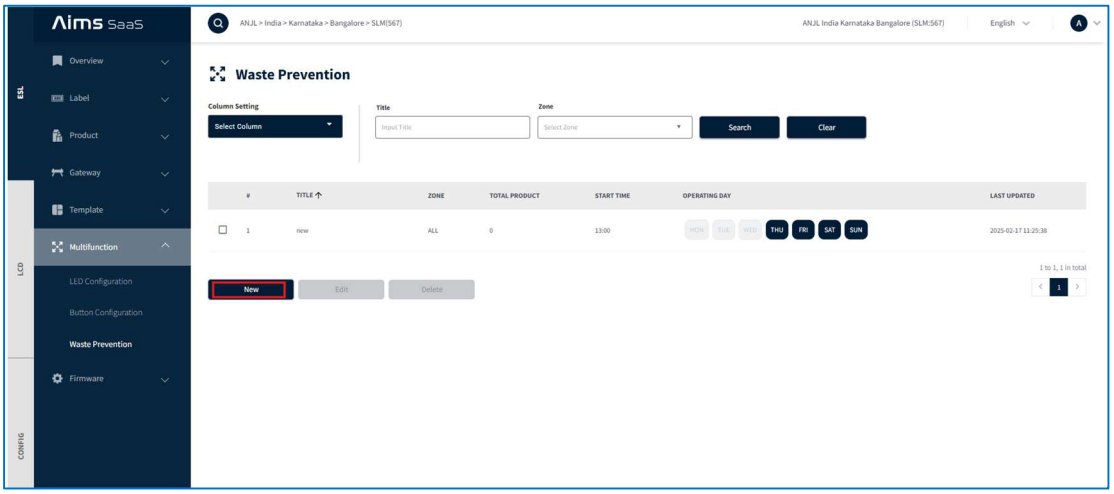
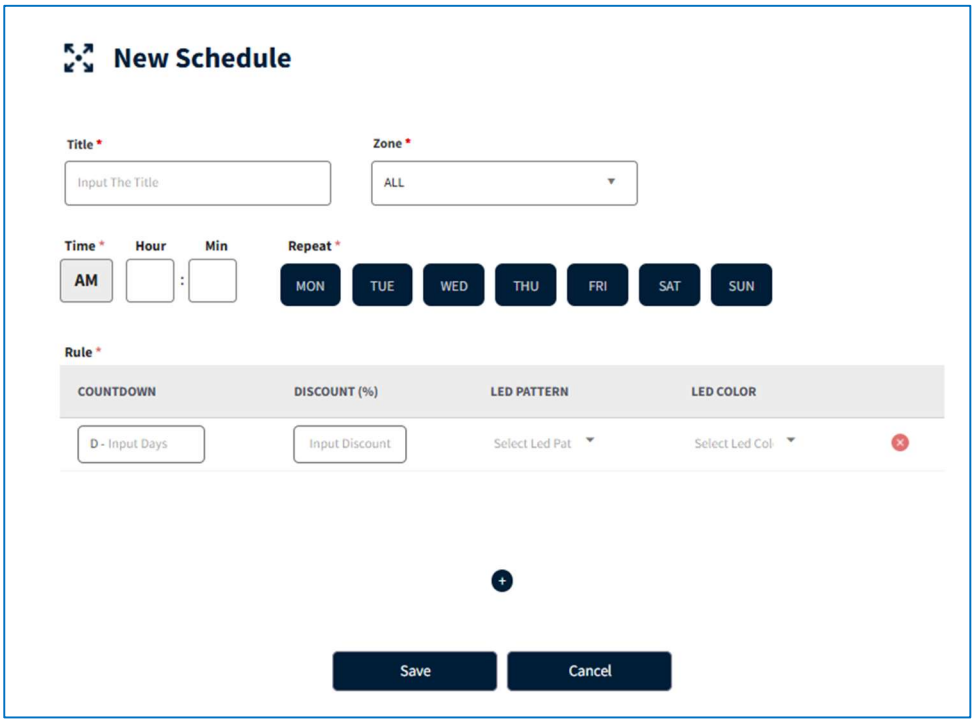


2. The **New Schedule** window will appear.



3. Enter the following details:
    - **Title**: Provide a descriptive title for the schedule.
    - **Blinking Time**: Set the duration for the LED to blink.
    - **Repeat Days**: Select the days on which the LED should blink.

Defining Rules for the Schedule

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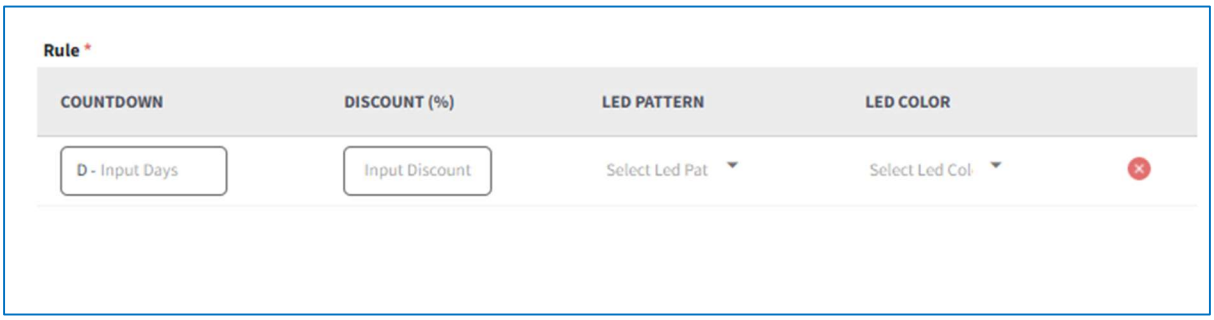
1. **Countdown (D-)**: Specify the number of days before the expiry date to apply the rule.
2. **Discount (%)**: Enter the percentage discount to be applied to the original price.
3. **LED Pattern**: Choose a pattern from the **LED Configuration** list.
4. **LED Color**: Select a color from the available options:
    - **Red**
    - **Green**
    - **Blue**
    - **Magenta**
    - **Yellow**
    - **Cyan**
    - **White**



5. Click + icon below to add multiple rules.

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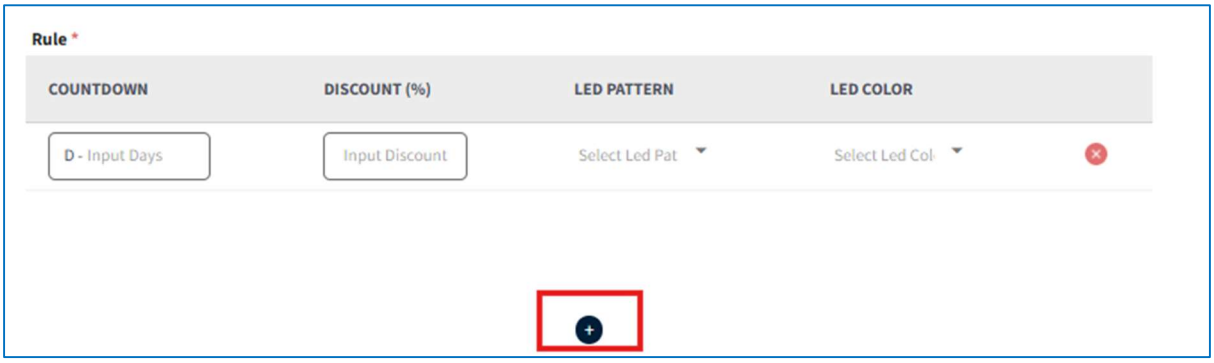
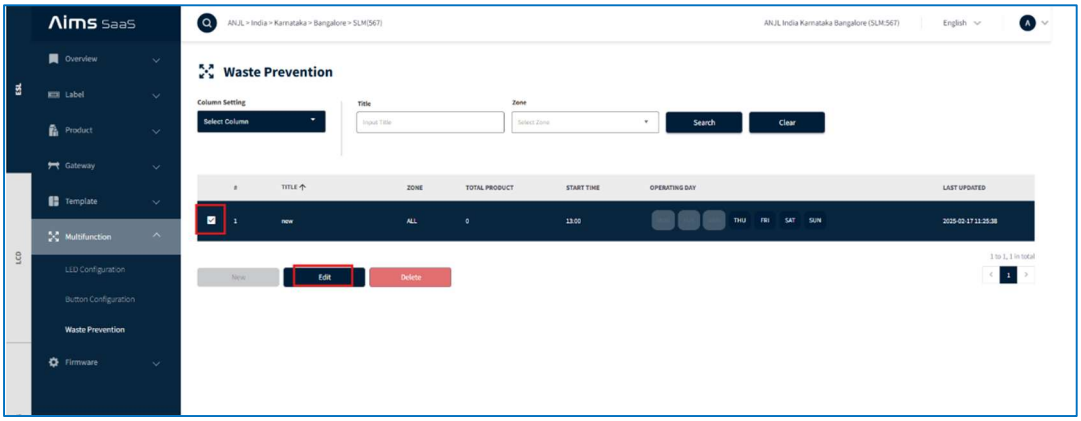


9.4.2 Edit Waste Prevention Schedule

1. Check the checkbox of a schedule and click **Edit.**



2. Users can edit all information provided except the **Title** of the schedule.
3. Click the **Red (X)** icon to remove any rules from the waste prevention schedule.

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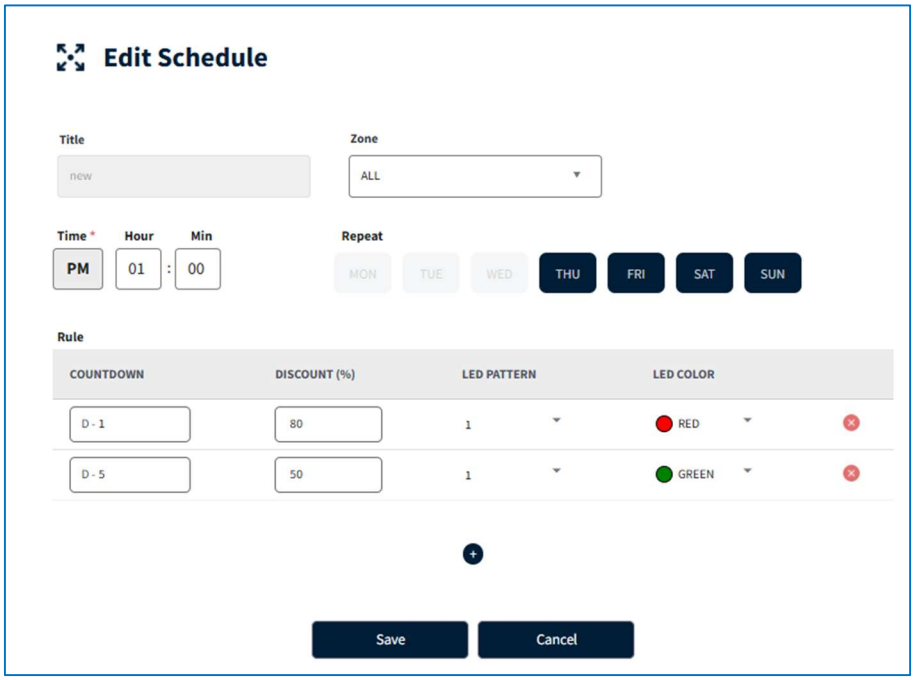
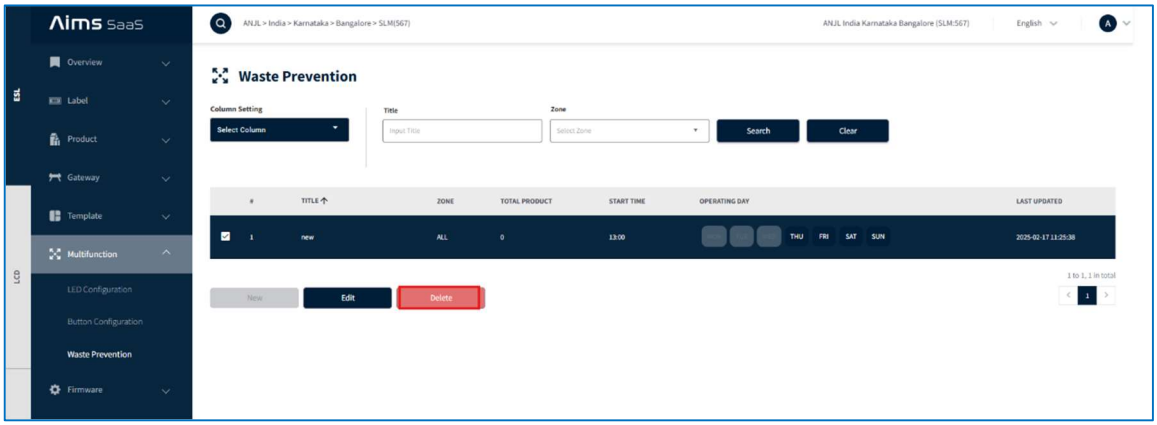


9.4.3 Delete Schedule (Waste Prevention)

To delete, check the checkbox of the schedule(s) and click Delete.



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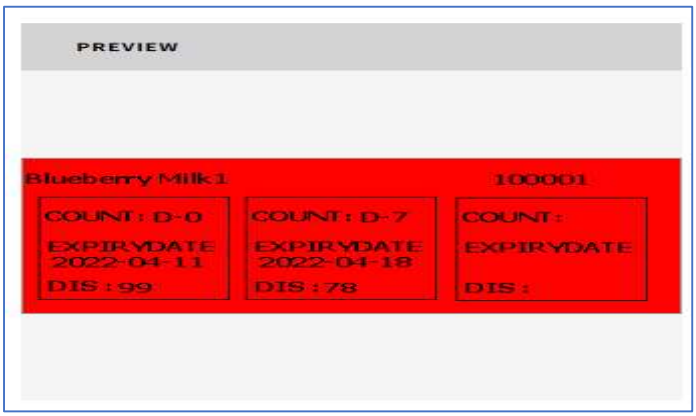
9.4.4 Waste Prevention Template

A predefined Waste Prevention Template should be defined to display the product information based on the waste prevention rules. Labels will be configured with this template as a second page.

An example template is shown below.



10. Firmware

The **Firmware** tab is accessible only to **Customer Admin**. Other user levels do not have access to this option. This section allows users to update the Gateway and Label firmware to the latest version. Users can find this section in ESL tab from the dashboard.

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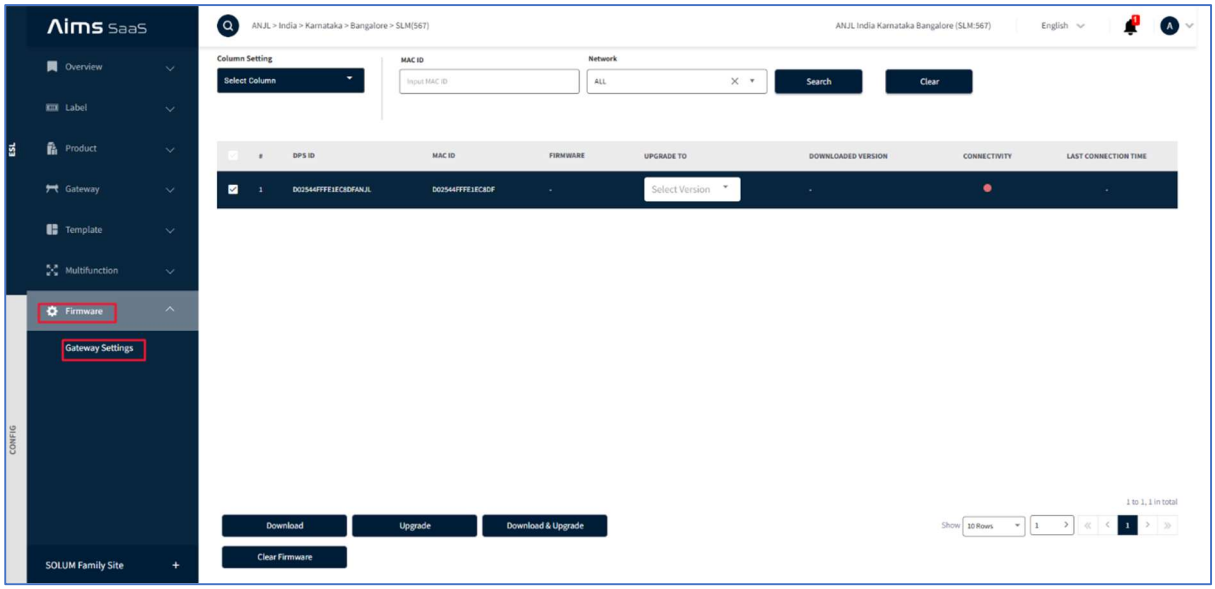

10.1 Gateway Firmware Settings

From the **Gateway Settings** page, users can:

- **Download** firmware to Gateways registered to a store.
- **Upgrade** Gateways to the latest firmware version.
- **Clear** downloaded firmware that has not yet been installed.

***Note**: These operations can only be performed on **online Gateways**. Offline Gateways will appear **greyed out** and cannot be modified.*

10.1.1 Upgrade Gateway Firmware

Due to Gateway security settings, Gateways with firmware version **N10.3.2.0** must first be upgraded to **N10.3.3.0** before moving to a higher version.

For example:

- If the current firmware is **N10.3.2.0**, first upgrade to **N10.3.3.0** and then to **N10.3.5.0, N10.3.x.x**

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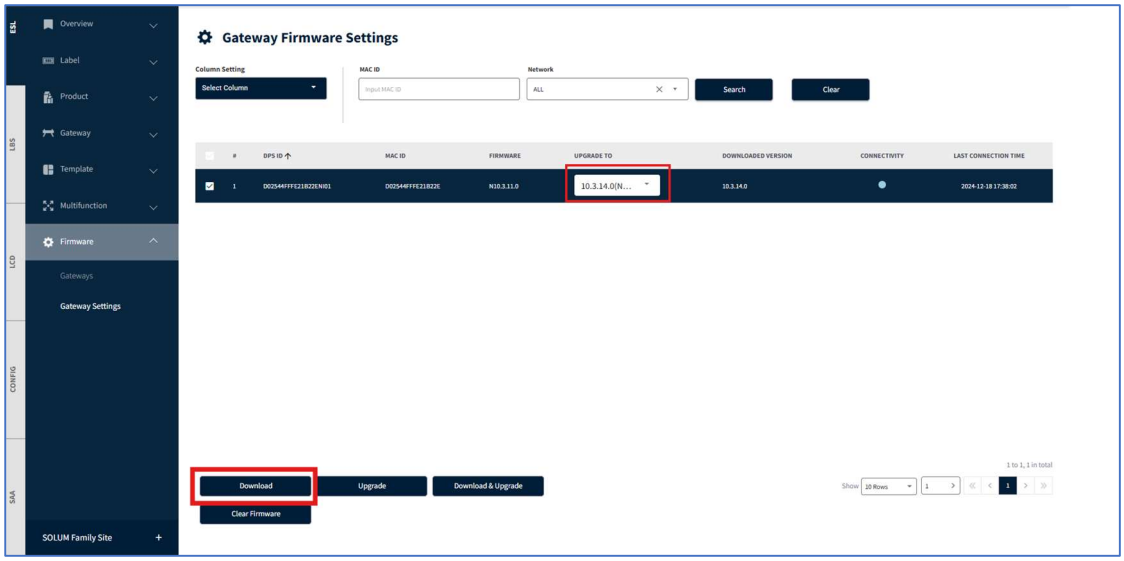
Steps to Upgrade:

- **Download in Advance**:
    1. Select the firmware version from the **UPGRADE TO** drop-down menu.
    2. Click **Download** for the Gateway(s).
    3. Once the download is complete, the version will appear in the **DOWNLOADED VERSION** column.



4. Select the Gateway(s) (tick the check box) and click **Upgrade** to start the upgrade process.

10.1.2 Download and Upgrade Simultaneously:

1. Select the Gateway(s).
2. Choose the firmware version from the **UPGRADE TO** drop-down menu.
3. Click **Download & Upgrade** to perform both actions in one step.

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After the upgrade, the **FIRMWARE** column and **LAST CONNECTION TIME** will be updated.

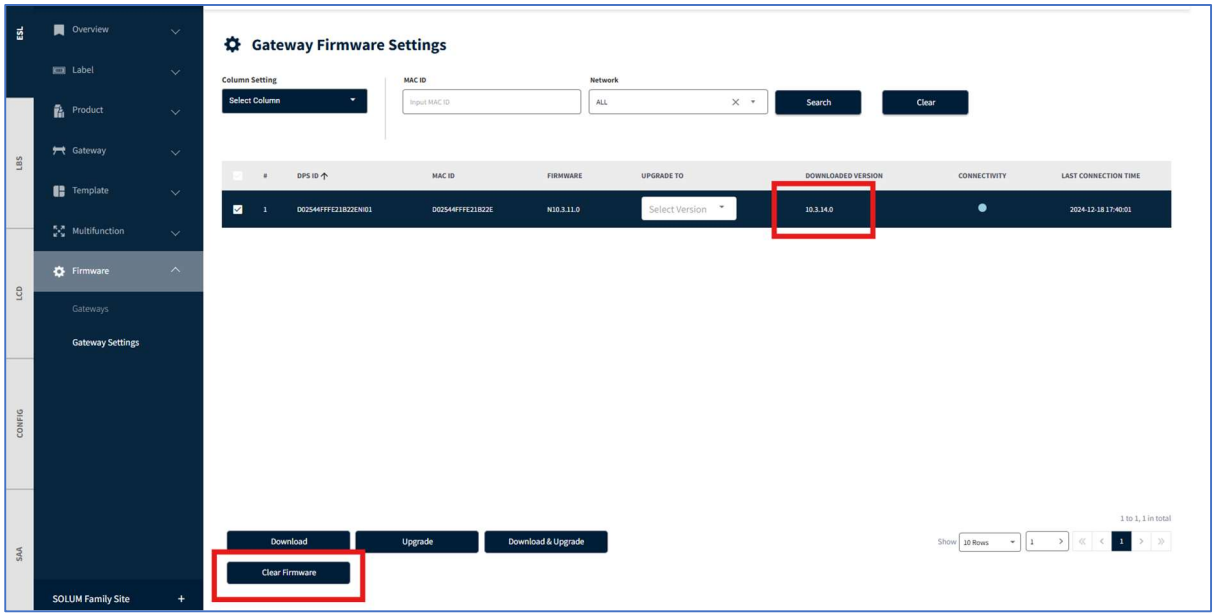
> ***Note**: The **UPGRADE TO** list is managed by the SOLUM admin. If the desired firmware version is not listed, contact SOLUM for assistance.*

10.1.3 Clear Gateway Firmware

To delete downloaded firmware files that have not yet been upgraded:

1. Select the Gateway(s).
2. Click **Clear Firmware**.

This will remove any uninstalled firmware from the Gateway(s).



10.2 Label OTA

The **Label OTA** feature allows users to update their label firmware. However, only **super admins** can perform this function.

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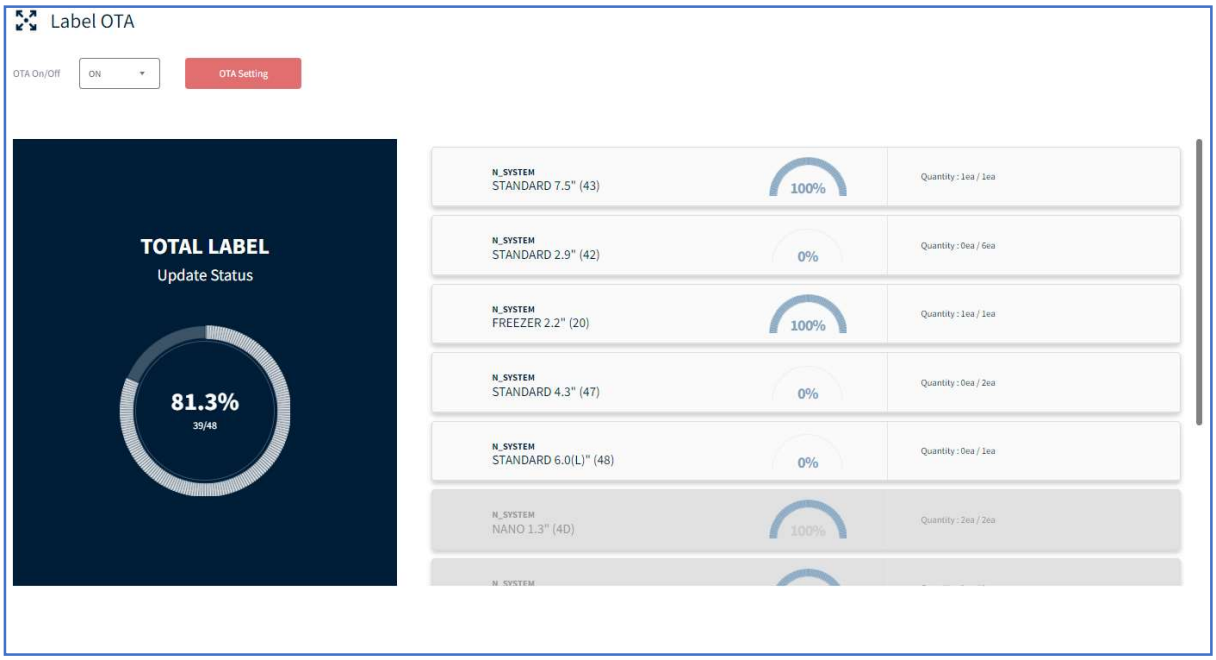
Enabling Label OTA

- The **admin must enable** this feature from the settings.(Contact solum for this Feature)
- Once enabled, go to the **ESL tab** on the dashboard.
- Under the **Firmware section**, you will find **Label OTA**.



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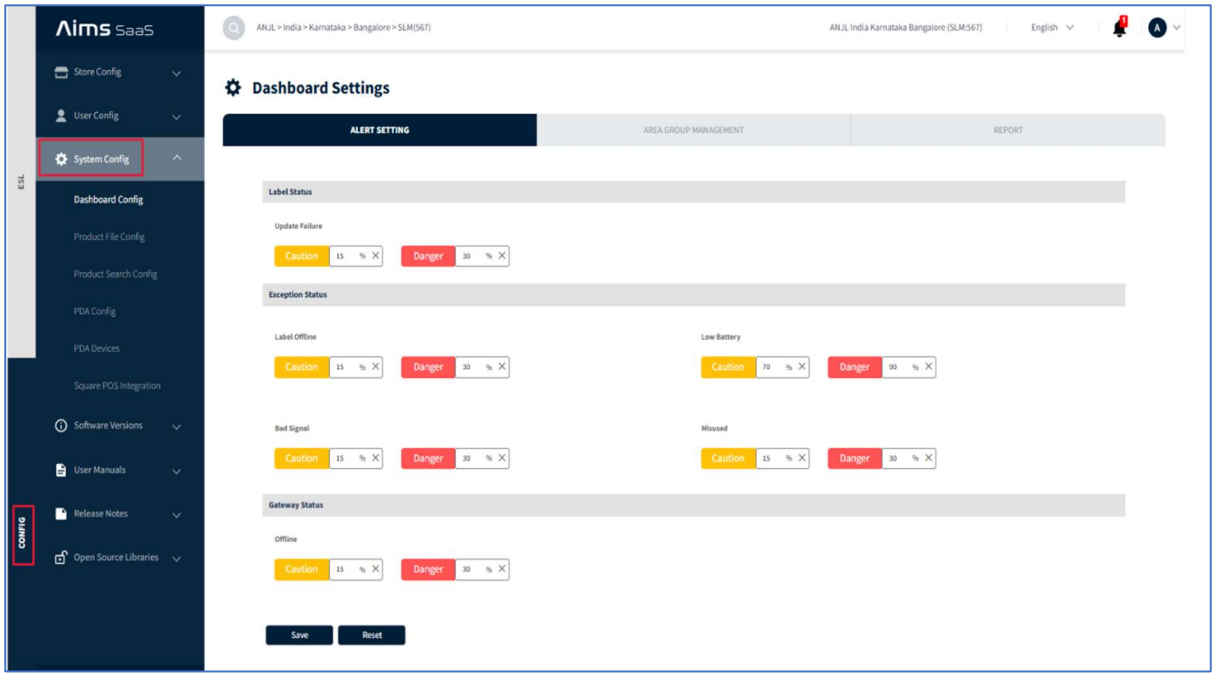
11. System Config

This section explains how to configure the system. You can use the **System Configuration** option to set up your dashboard, product file, or PDA. You can access this option by navigating to the **Config tab** and selecting **System Config.**



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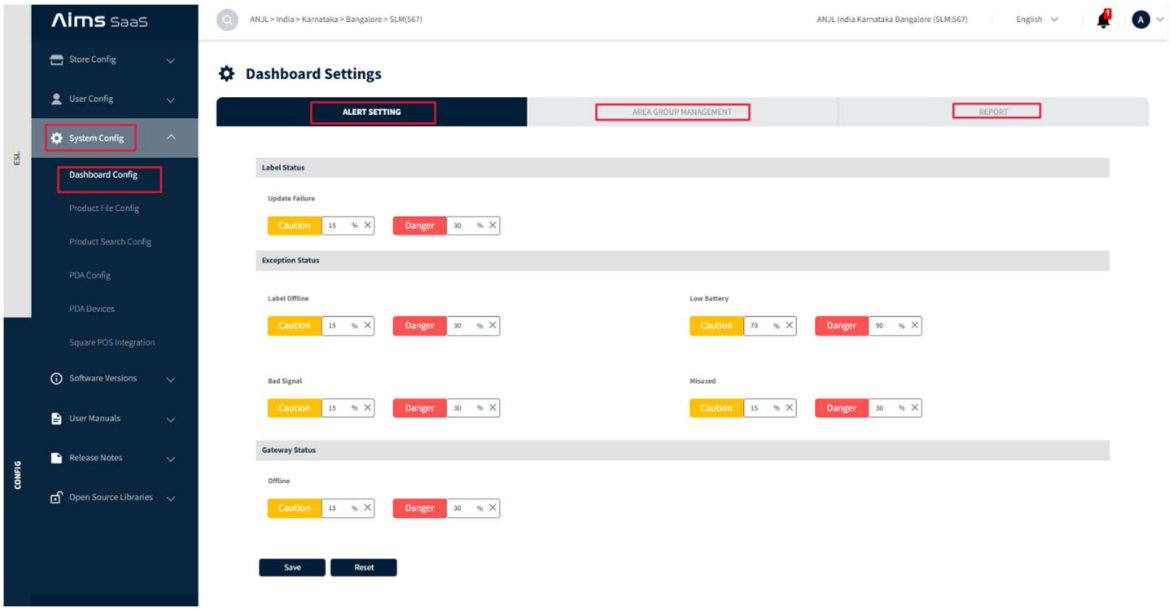
11.1 Dashboard Config

This page allows you to customize the settings for the Overview Page, enabling better management of the SaaS Dashboard. The **System Configuration** page opens directly to the **Dashboard Configuration** section, which includes three main tabs:

1. **Alert Settings**
2. **Area Group Management**
3. **Report**



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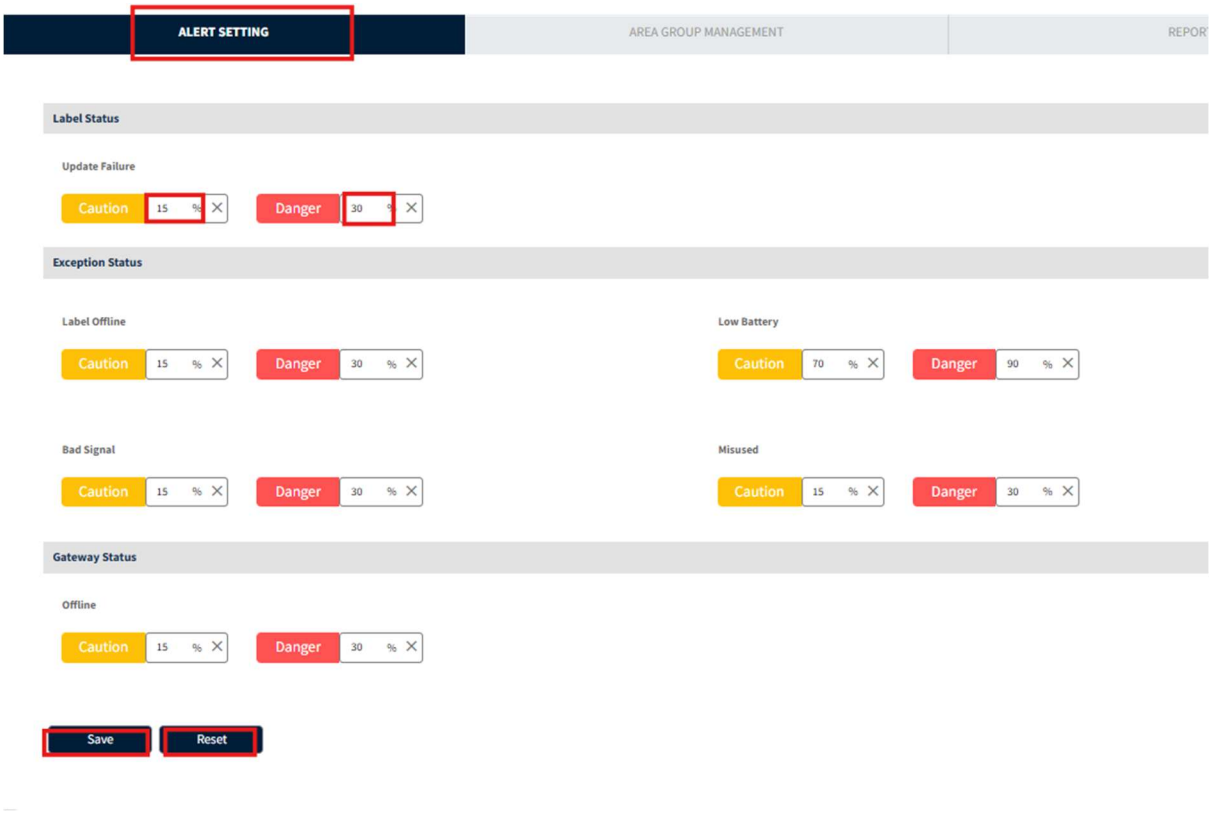
11.1.1 Alert Setting

The **Alert Settings** option lets you customize the colour display for the Overview Page at two levels: **Caution** and **Danger**, based on the overall percentage.

- Enter the percentage values for each level and click **Save** to apply the changes.
- To revert to the previous values, click **Reset**.



11.1.2 Area Group Management

The **Area Group Management** option allows you to organize stores by region, making it easier to manage users and templates across multiple store applications.

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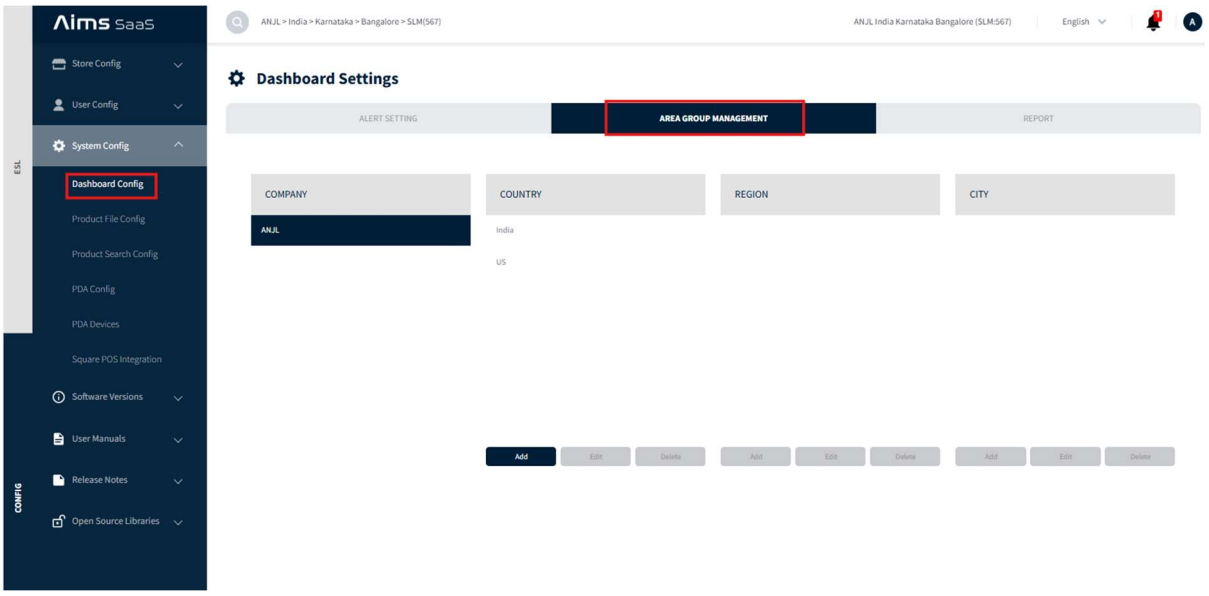
- Each lower-level group is linked directly to its upper level and will only be displayed when the corresponding upper level is selected.
- Duplicate values are not permitted.

Defining area groups is a mandatory step for registering stores within AIMS.

Refer to Area Group Management in the store config section for more details.



11.1.3 Sending Report to Users

Customers can choose how often they want their report sent to their email. Currently, only the daily cycle option is available. If you turn off this setting, you will not receive the report. Emails will be sent from SOLUM's SaaS admin account. After making any changes, click **Save**.

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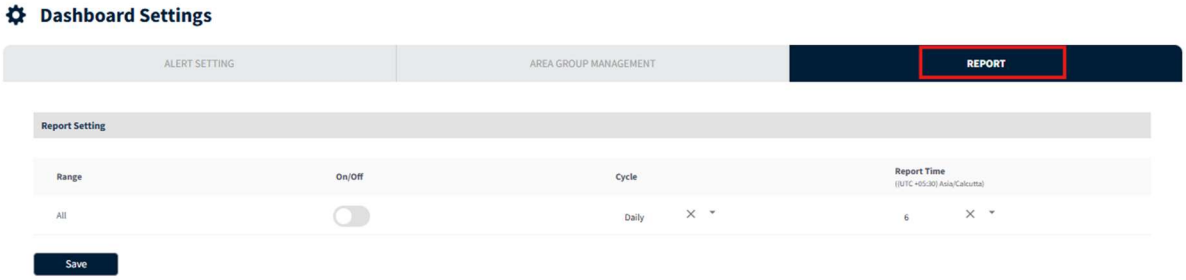
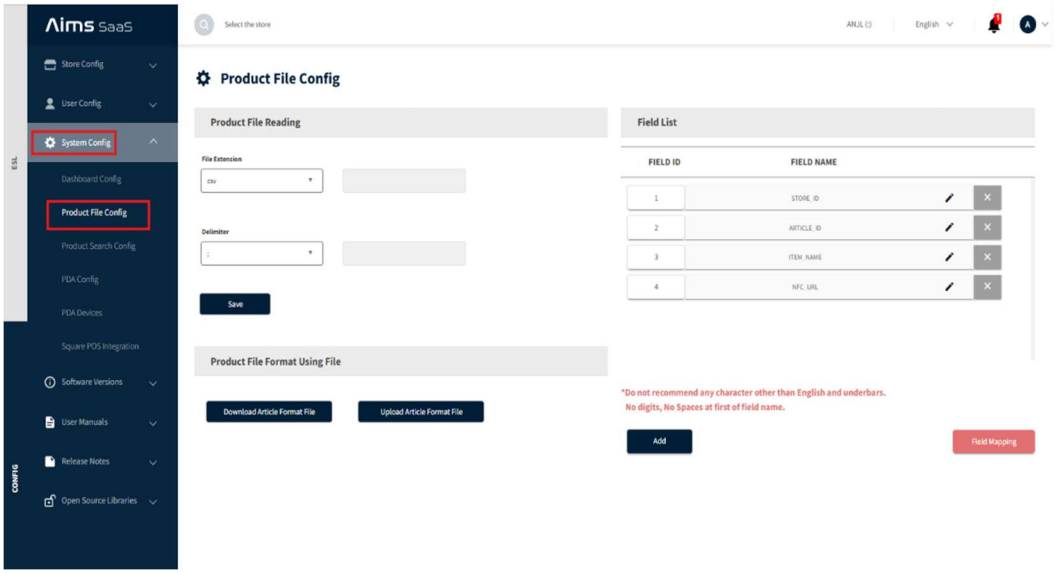


11.2 Product File Config

The **Product File Configuration** option allows you to set how the system reads and gets product information in AIMS.

- Access to this page is restricted to customer administrators.



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11.2.1 Product File Reading

This section enables users to select the file extension and delimiter for the product file. When uploading new products via a file, ensure the product file matches the extension and delimiter configured here.

Field	Possible Values	Description
File Extensions	.csv	
	.dat	
Delimiters	;	semi-colon
	|	pipe
	,	comma
	/	forward slash

11.2.2 Product File Field List

The **Field List** table defines the number of fields to be read and the corresponding field names where data will be stored. This information is used to display product details on the **Dashboard Product** page and is essential for the **SOLUM Layout Designer** to dynamically design and display information.

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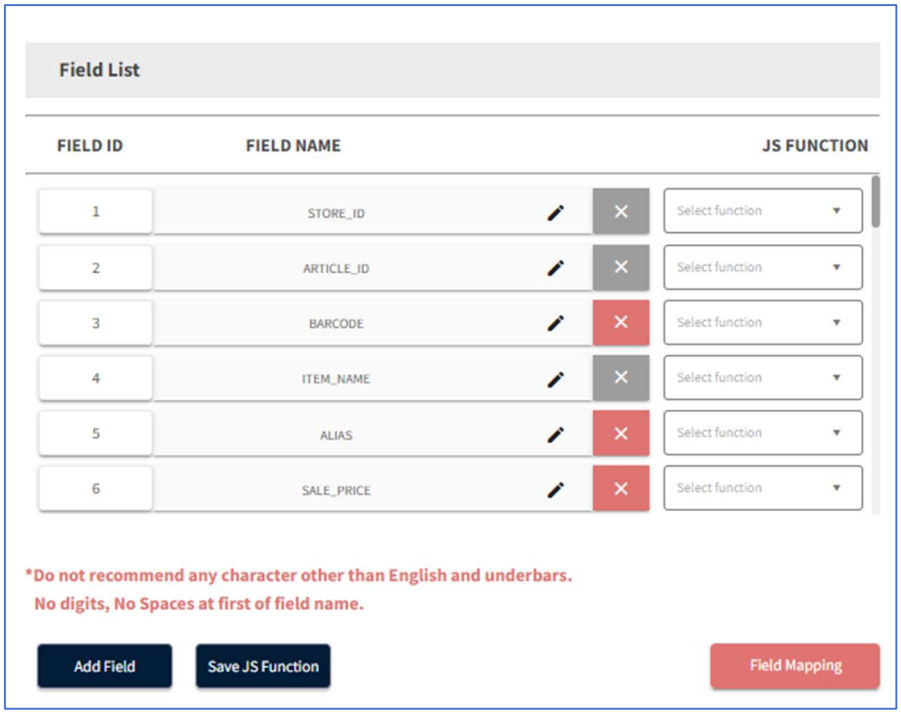

For more information on managing the field list, please refer to Appendix C.

11.2.3 JavaScript Snippets

This feature allows users to change the format of the product field using custom or low-code options. In the Dashboard, users can apply JavaScript code to transform the field as needed.

> ***Note**: This is a customer-oriented feature, please contact the SOLUM admin to enable it.*

After it is enabled by the Solum admin, users will see the **JavaScript Function** section available on the **Product File Config** page

- Some default JavaScript functions will be preloaded into the list of available functions.

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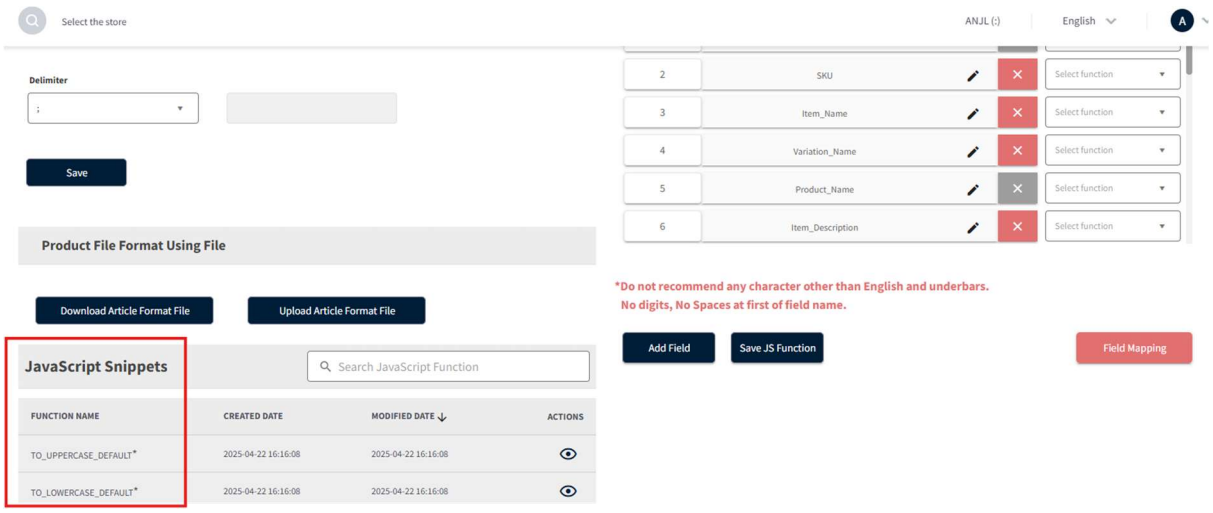
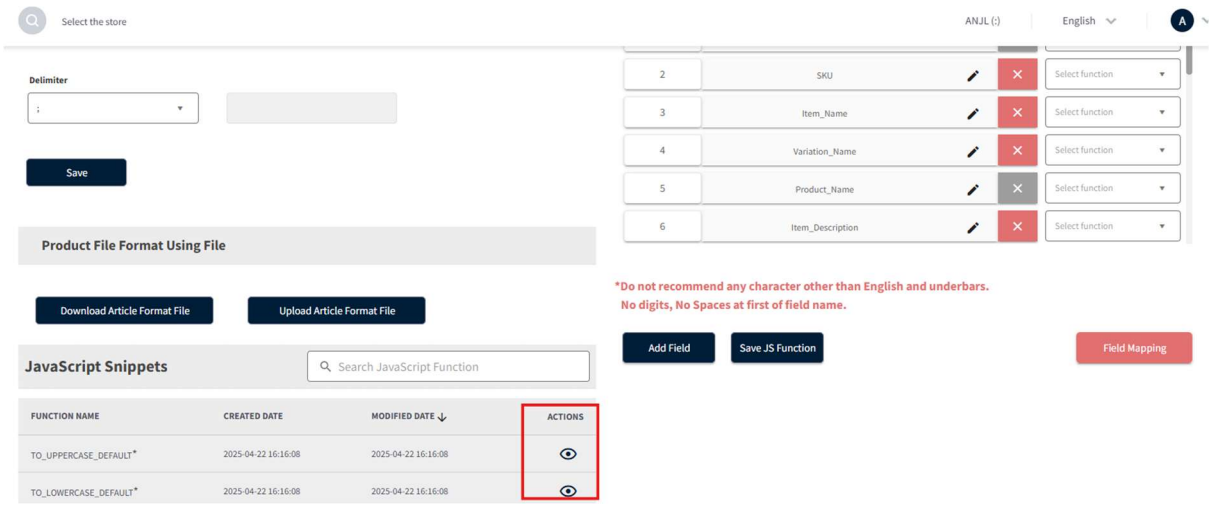


- Users can **only view** the JavaScript functions by clicking the **eye icon** under the Actions column.



Mapping a JavaScript Function

To map a JavaScript function to a product field:

1. From **Field list** click on the **dropdown** in the "**JS Function**" column.
2. Select the required **JavaScript** function from the list.

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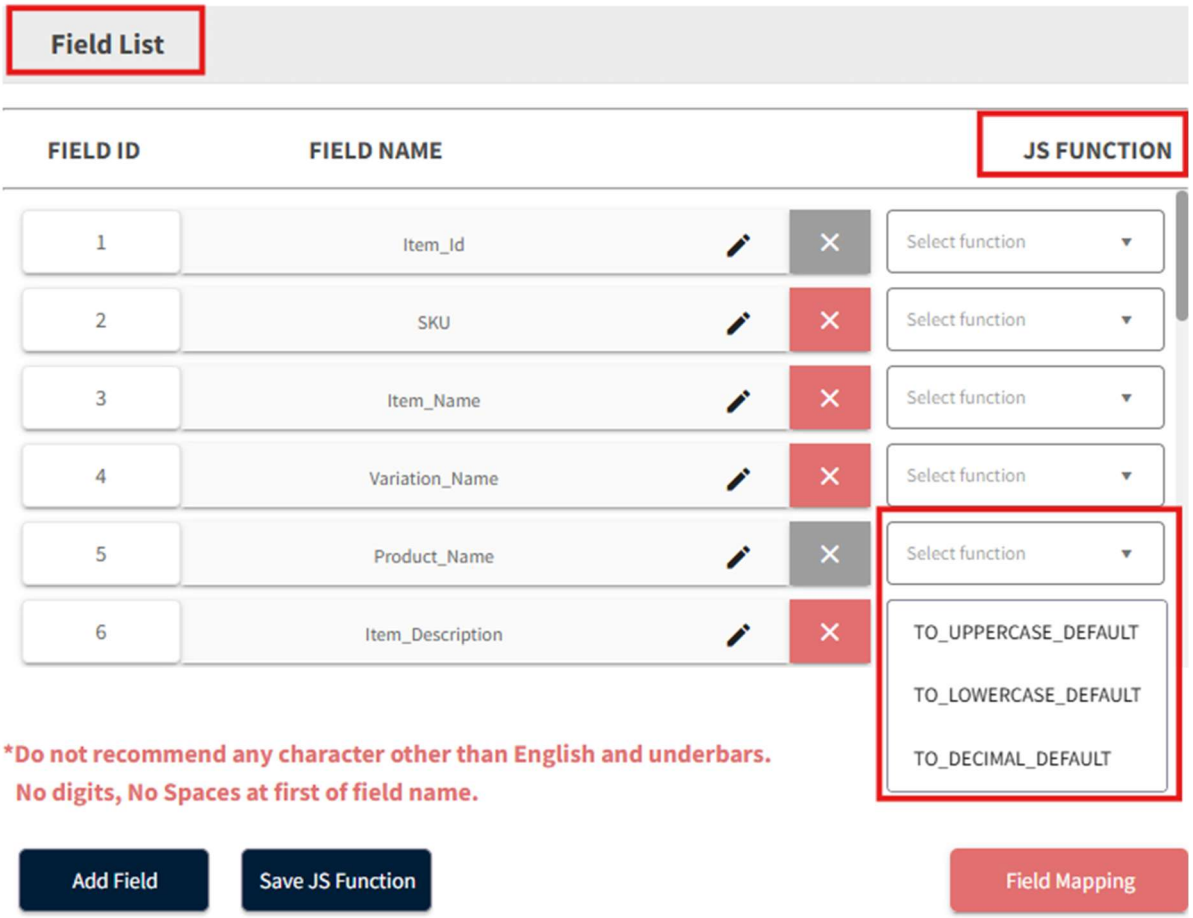
3. Click **Save** to apply the selected function to the product field.



This allows the selected function to transform the associated product data during processing.

Example: Using a JS Function to Transform Product Data

If user

1. Provided product data as "**cake" (In lowercase)**

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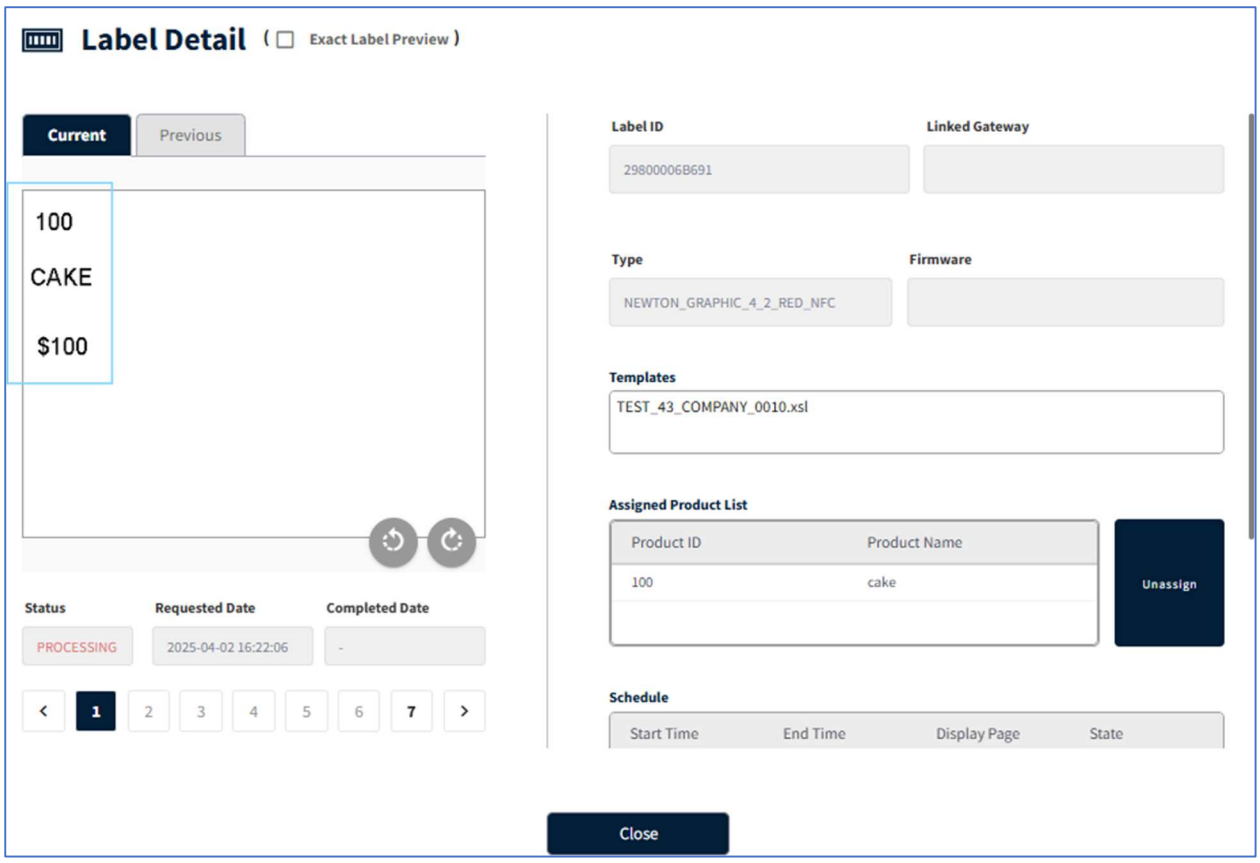
2. Selected JS function as “**TO_UPPERCASE_DEFAULT”**

the product data will be displayed as “CAKE”(In upper case). This is happened by applying a **JavaScript function** that converts Article name to **Uppercase** before saving or processing the data.



The JS Snippet function will also apply to the template preview. Based on the conditions defined in the JS Snippet, the corresponding preview will be displayed

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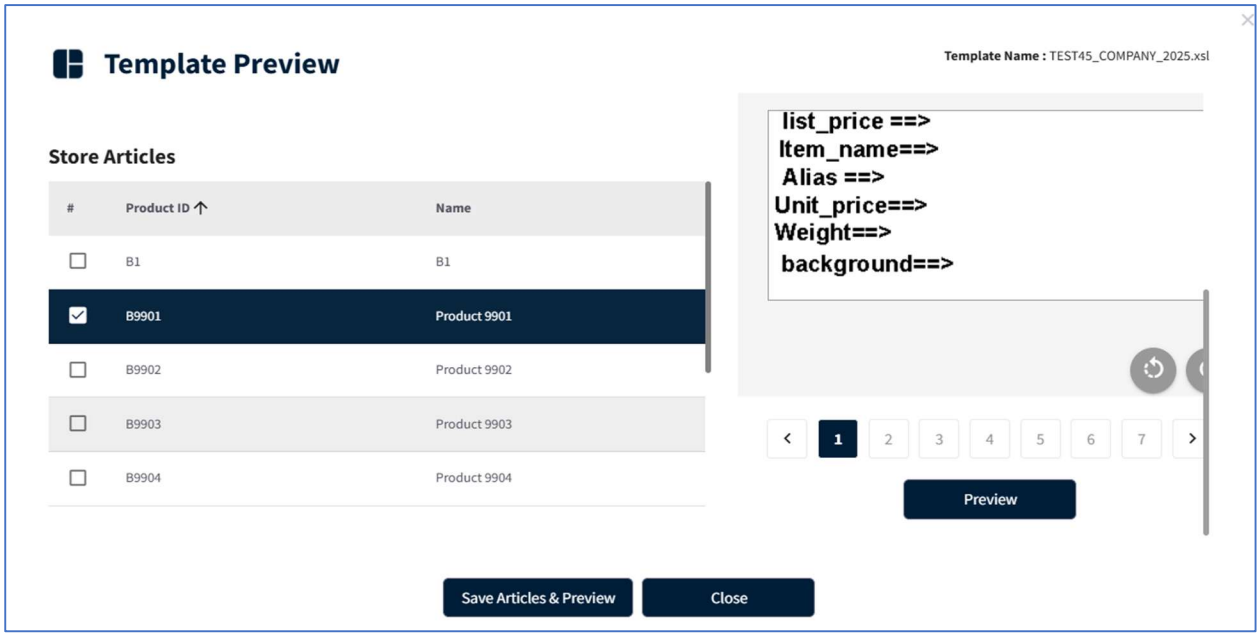

NOTE➔

- Using a JS Function while validating or saving the JavaScript function, at least one product data key must be mapped to ensure proper validation before saving the function.
- If a **JavaScript function is mapped** to any product data key, that function **cannot be deleted**.
- The JavaScript function can also be mapped using the Template Mapping feature please refer the template mapping section**.**

11.2.3 Field Mapping

Field mapping is needed to assign information to each field. The Customer Admin can choose which information should be linked to each field. Fields with a greyed-out 'X' box cannot be deleted because they are essential for proper

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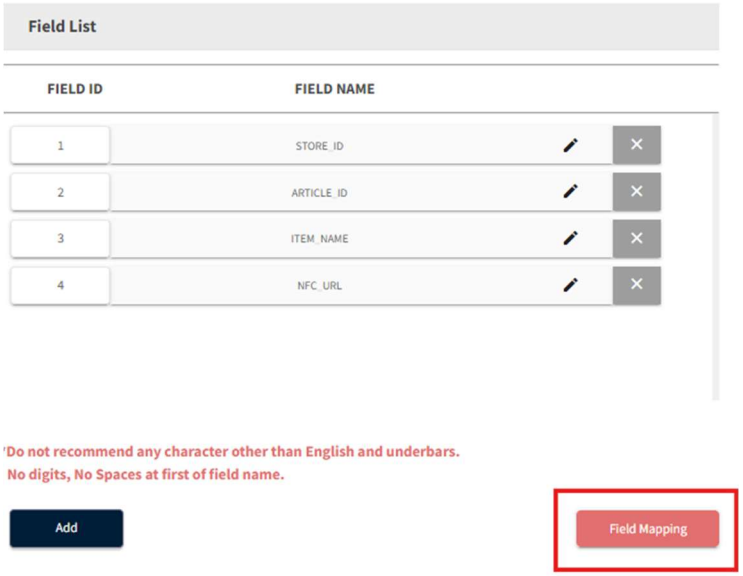
functionality. To continue, scroll down to the **Field List** window and click on **Field Mapping.**



1. Click the **magnifying glass** in the selected field column and select the information you want to map.
2. Click **Save.**

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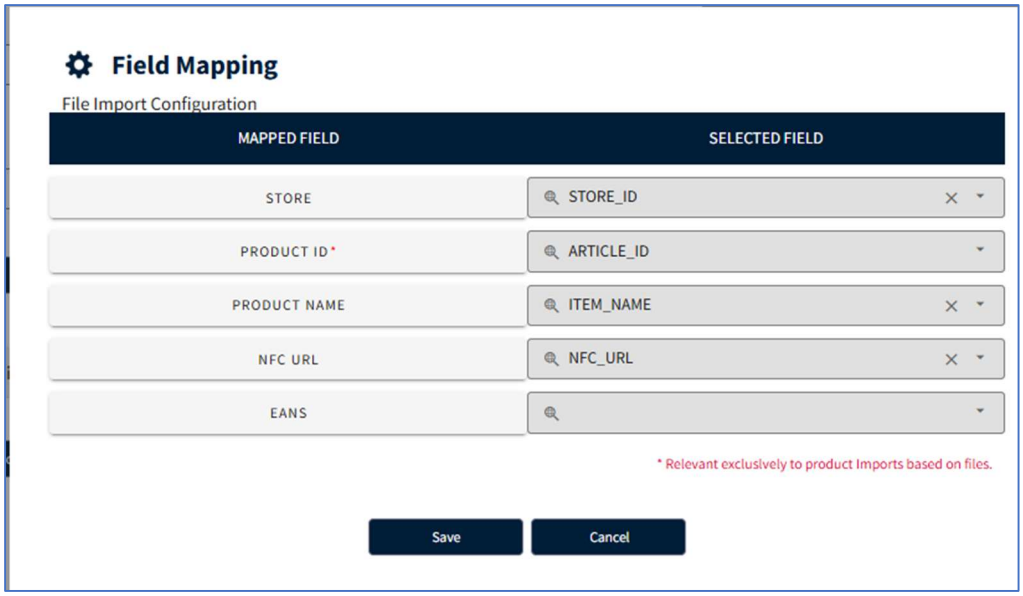

11.2.4 Product File Format Using File

You can also configure the product file using a file. To do this:

1. Scroll down to the **Product File Configuration** page.
2. Locate the **Product File Format Using the File** section.
3. Click **Download Article Format Using File** to get the file template.

4. A JSON file with your company code will be downloaded to your browser's designated download folder. **Recommendation:** Always save an original copy as a backup.

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```
{
  "delimeter": ";",
  "mappingInfo": {
    "store": "STORE_CODE",
    "articleId": "ITEM_ID",
    "articleName": "ITEM_NAME",
    "nfcUrl": "NFC_DATA"
  },
  "articleBasicInfo": [
    "store",
    "articleId",
    "articleName",
    "nfcUrl"
  ],
  "articleData": [
    "STORE_CODE",
    "ITEM_ID",
    "ITEM_NAME",
    "ITEM_DESCRIPTION",
    "BARCODE",
    "SKU",
    "LIST_PRICE",
    "SALE_PRICE",
    "CLEARANCE_PRICE",
    "UNIT_PRICE",
    "UNIT_PRICE_UNIT",
    "PACK_QUANTITY",
    "WEIGHT",
    "WEIGHT_UNIT",
    "DEPARTMENT",
    "AISLE_LOCATION",
    "COUNTRY_OF_ORIGIN",
    "MANUFACTURER",
    "ITEM_DIMENSIONS",
    "BRAND",
    "MODEL",
    "COLOR",
    "INVENTORY",
    "START_DATE",
    "END_DATE",
    "LANGUAGE",
    "CATEGORY_01",
    "CATEGORY_02",
    "CATEGORY_03",
    "MISC_01",
    "MISC_02",
    "MISC_03",
    "DISPLAY_PAGE_1",
    "DISPLAY_PAGE_2",
    "DISPLAY_PAGE_3",
    "DISPLAY_PAGE_4",
    "DISPLAY_PAGE_5",
    "DISPLAY_PAGE_6",
    "DISPLAY_PAGE_7",
    "NFC_DATA"
  ],
  "fileExtension": "csv"
}
```


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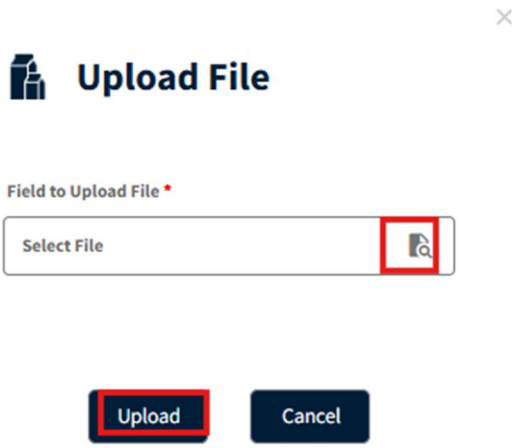
5. Edit the JSON file for the following:

- **Delimiter**
- **Mapping Information**
- **Article Data**
- **File Extension**

Note: Do not edit the **Article Basic Information** section.

6. After editing the JSON configuration file, save it and upload it by clicking the **Upload Article Format File** button.

7. Browse for the new JSON file in the window that opens and click **Upload**.



8. If the format is configured correctly, the **Product File Configuration** page will update automatically.

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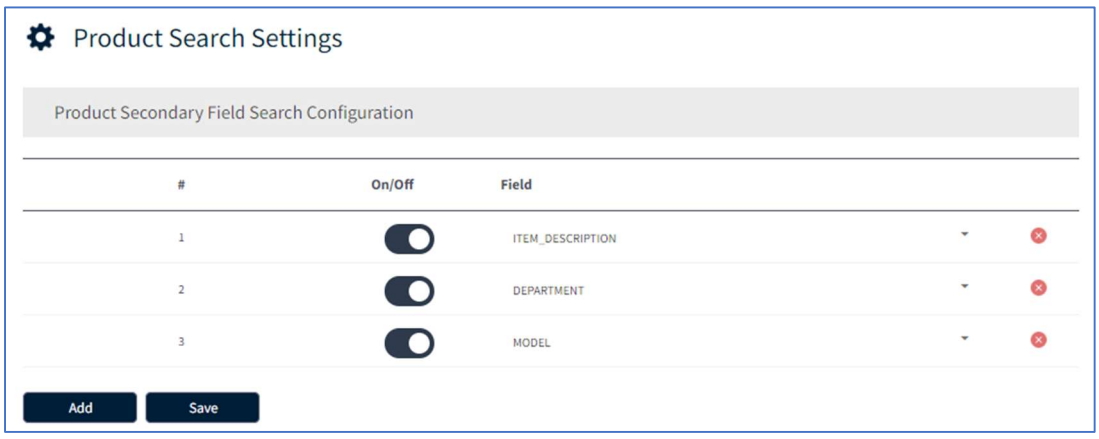
11.3 Product Search Config

This section allows you to define additional product fields for querying when searching for products through the API. By default, all products can be searched by **ID** and **Name**. The example image below shows how to add fields like **item description**, **department**, and **model** for more specific searches.

For instance, you can search for all products where **department = dairy** to get a list of all dairy products.

1. Click **Add** to create new fields.
2. Use the **on/Off** option to enable or disable the new field adding.
3. Select a new field from the drop-down list.
4. Click **Save** to apply the changes.



11.4 PDA Config

This page will have different options based on features requested by the user and enabled by SOLUM Admin. Customer admin can enable/disable what

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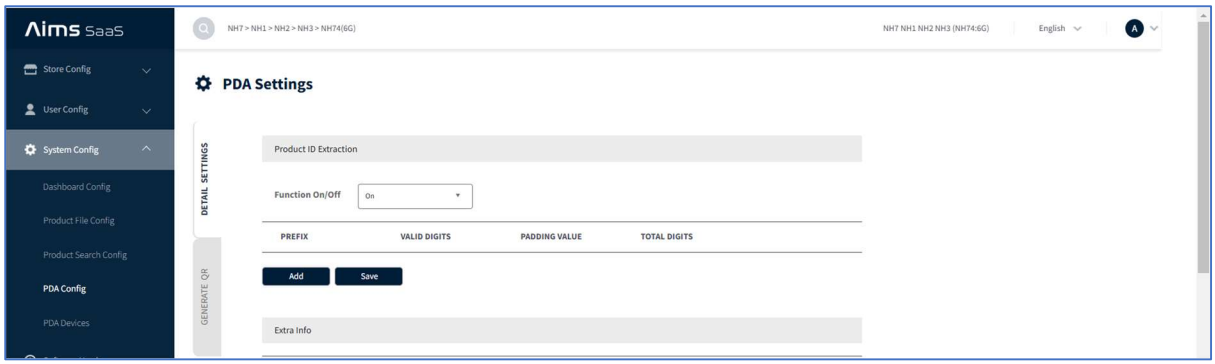
functions allow for all registered users when logged on to the AIMS Manager/PDA Devices.

Th section generally provides two options for users.

- **Detail Setting**
- **Generate QR**



11.4.1 Detail Setting

1. Product ID Extraction

The customer admin can enable or disable the function as needed. When enabled, the product ID will be extracted based on the specified prefix, valid digits, padding value, and total digits.

- To enable/disable the function choose it from **Function On/Off.**
- Click **Add** to create a new condition for Product ID extraction.

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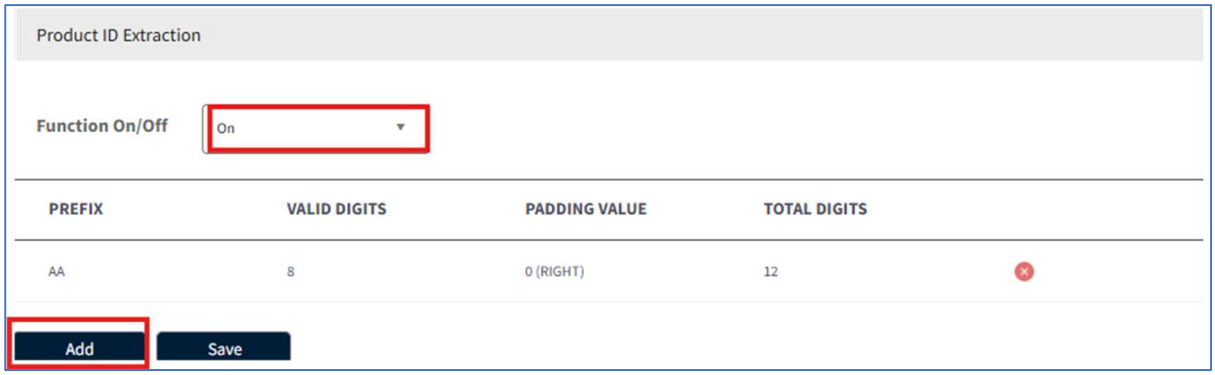

- **Prefix:** Starting values of the Article ID (AA).
- **Valid Digits:** The valid digits that are required after the prefix (8).
- **Padding Value:** Padding value is some digits added to match the total digits (0).
- **Total digits:** Total digits should be there in the Article ID/Product ID (12).
  Total digits = Prefix+ (Valid Digits-Prefix) +Padding Value
- **Example Article id:** AA1234560000

Based on the prefix, valid digit, padding value, and total digits the article ID should be accepted.

2. Extra info

The extra info section helps users define up to 5 fields to input dynamic text while assigning a label. For example, the article ID is the same for every fruit, and this feature allows the user to input the dynamic Country of Origin data to display while assigning.

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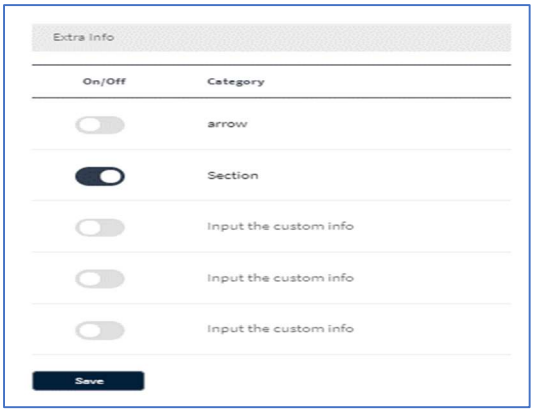
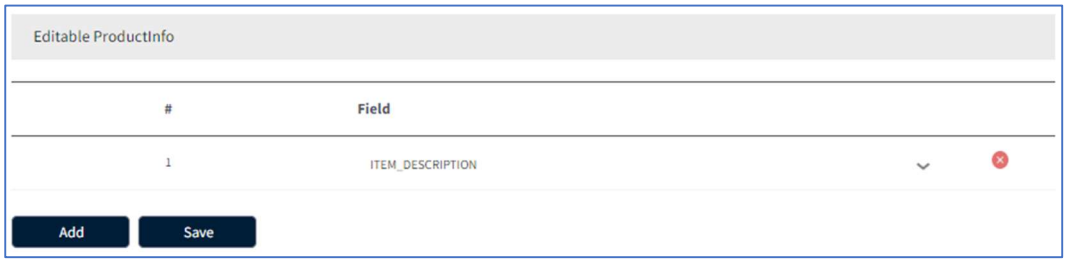


3. **Editable Product Info**

Define fields that a user can update the field content from the AIMS Manager.



11.4.2 Generate QR Code

A user with an AIMS Manager/PDA device can scan the QR code generated in this section to log in to their store on their device.

Steps to Generate a QR Code:

1. **Select the Store:** Choose the desired store name from the list.
2. **Enter Credentials:** Provide your SaaS dashboard User ID and Password.
3. **Generate the QR Code:** Click the **Generate QR** button to create the QR code.

Once generated, users can scan the QR code using the AIMS Manager to log in to that particular store.

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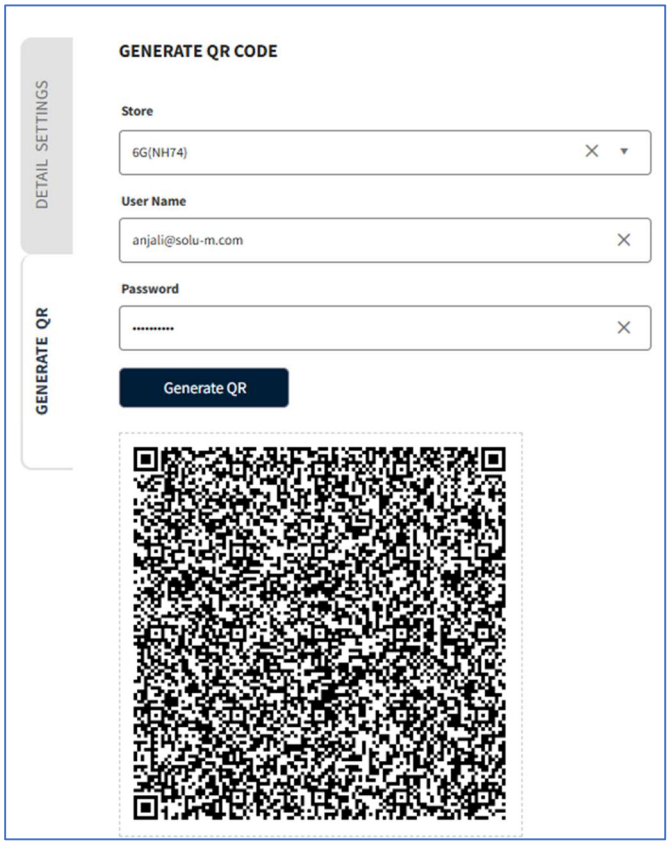
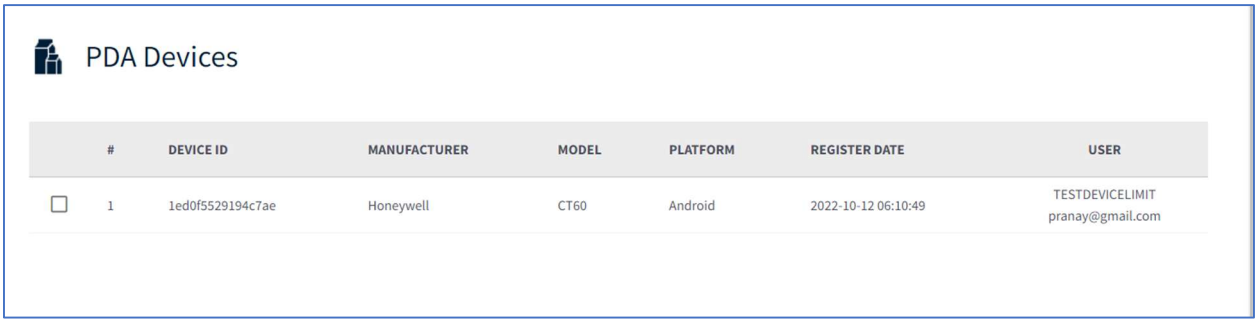


11.5 PDA Devices

This section lists all PDA devices that were at least once signed in by a registered user.



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Field	Information
DEVICE ID	The ID of the Device registered/login
MANUFACTURER	Device manufacturer.
MODEL	Device model information.
PLATFORM	Device OS (Android or iOS).
REGISTER DATE	Date of registration.
USER	User account information.

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12.Notification

Here user can view Gateway offline, Vision, EPD notifications. By default, it will display gateway offline notification tab.

Gateway Offline

- This page is intended to display the notification when gateways are offline for the selected company.
- Every 30 min interval there will be a notification if there are offline gateways within the stores of selected company.
- Customers should have gateway offline notification access to use this feature.

(*Contact SOLUM Admin to enable this Feature)*

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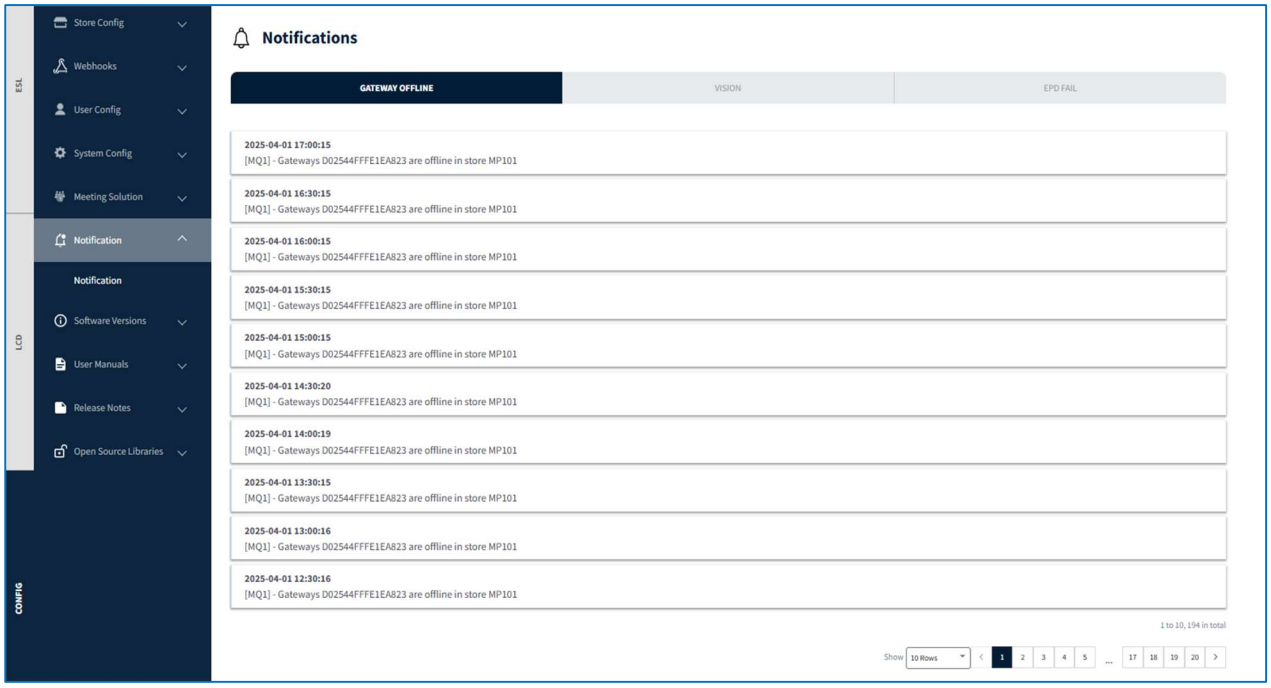

Vision

Yet to update.

EPD (Electronic Paper Display) ERROR

This feature is intended to view the notification whenever there is EPD error received from any of the assigned labels. **AIMS Manager device limit** should be enabled for the customer. (Contact SOLUM admin)

Steps:

1. Install AIMS Manager v1.0.55 in the mobile.
2. Login as customer user.
3. Allow the push notification when prompted.

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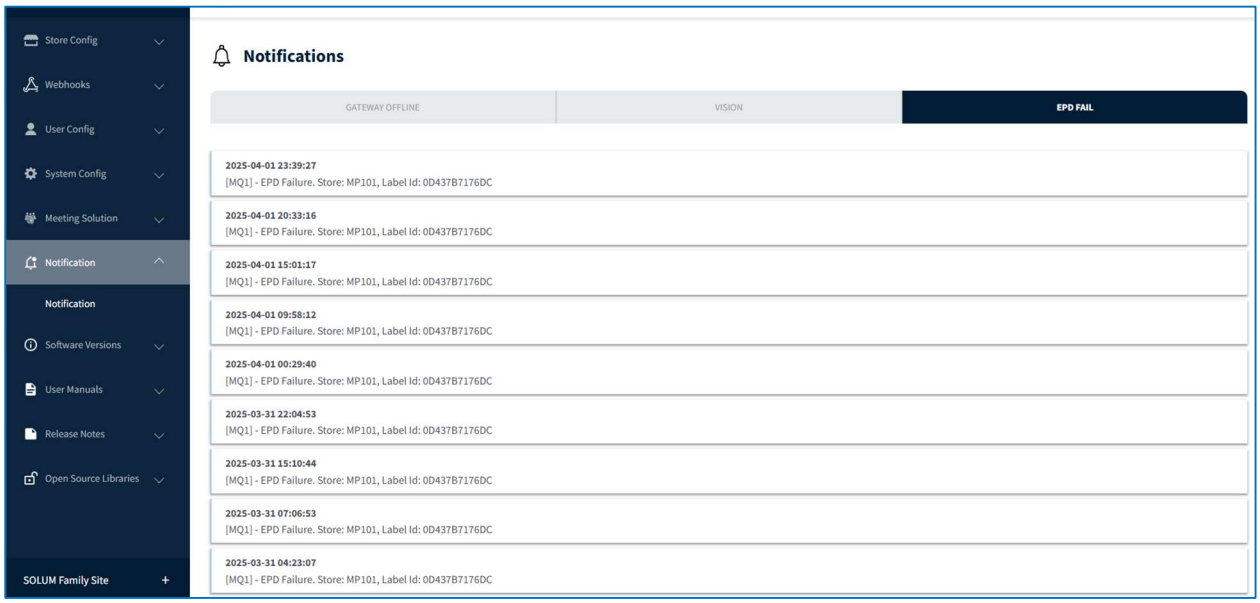
4. Perform the label assign operation for the label which are connected to gateway either from Dashboard, Aims Manager, Swagger.
5. If any of the assigned labels have fault in the display, then a notification will be displayed under EPD tab with label information as shown below.



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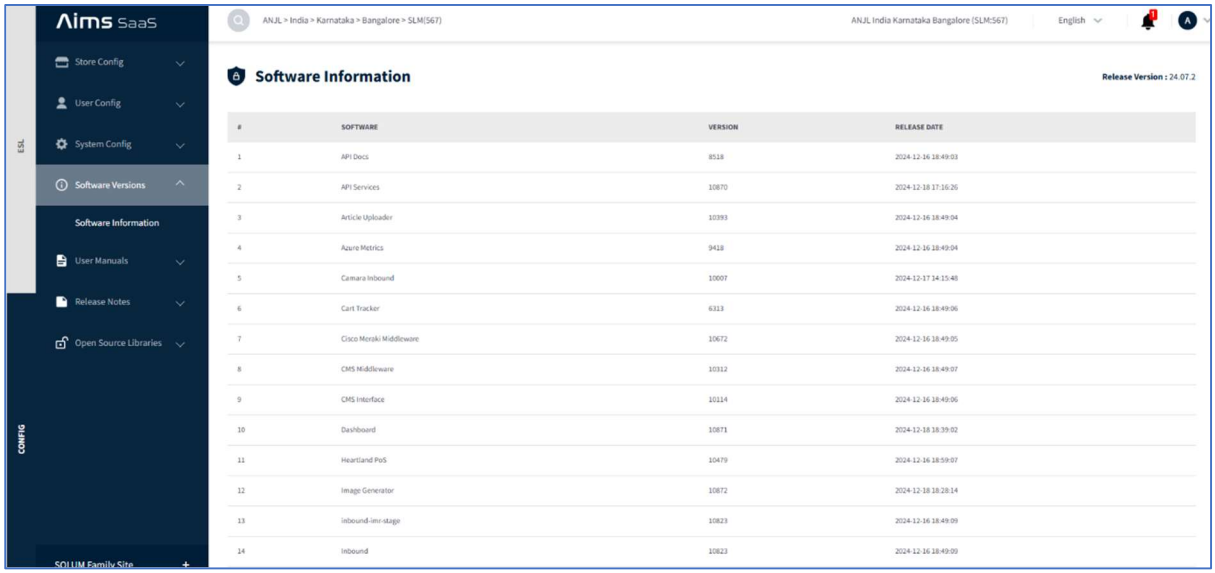
13. Software Versions

The **Software Versions** page displays the latest version and release date of the SaaS Dashboard module. This information is updated dynamically whenever new services are deployed.



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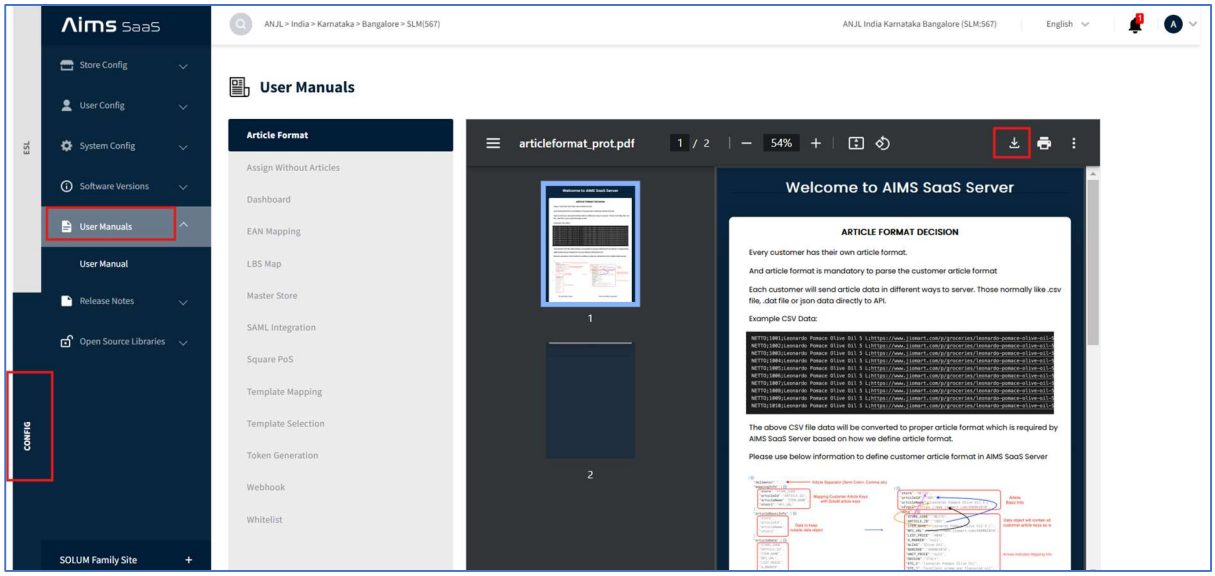
14. User Manuals

User manuals are available on this page for viewing and download. Click the **Download** button to save the manual to your local machine.



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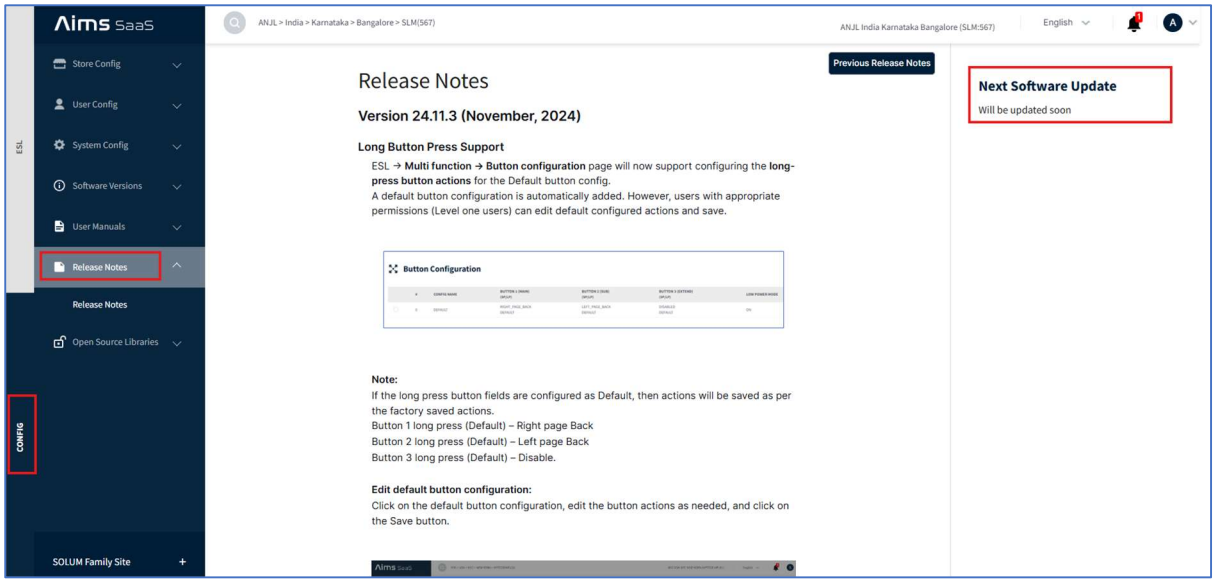
15. Release Notes

The **Release Notes** page provides details about release changes and updates. Additionally, the scheduled period for the next software upgrade is also displayed on this page.



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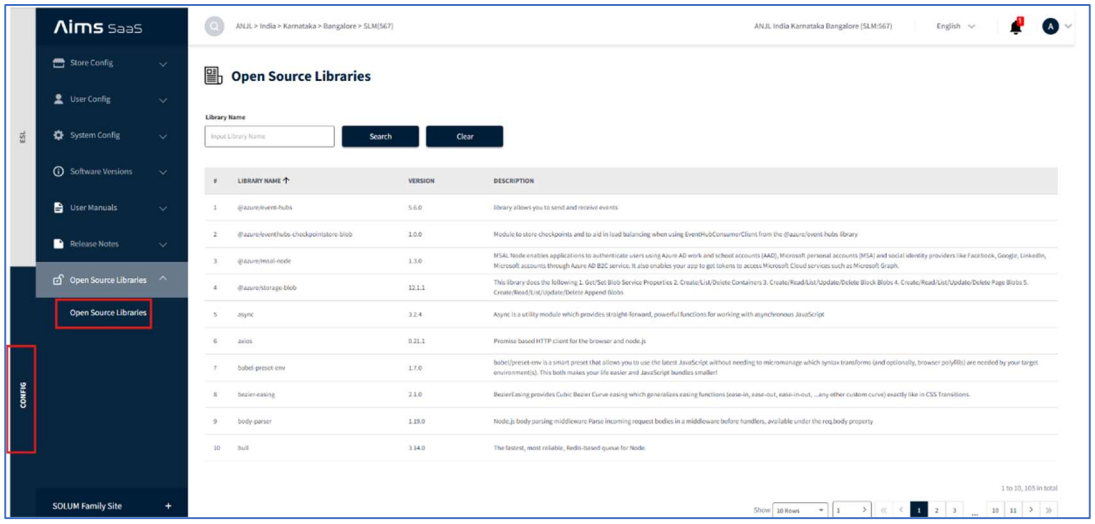
16. Open-Source Libraries

This page provides a list of open-source components used, along with their version information. You can search for specific libraries using the open search field.



17. SI Partner

Here SI Partner user can view **SIP License info, Customer summary and can manage or edit the customer details (allowed fields)** for mapped customers under the customer list.

> ***Note:*** *This menu will only be displayed for* ***SI Partner user's login****.*

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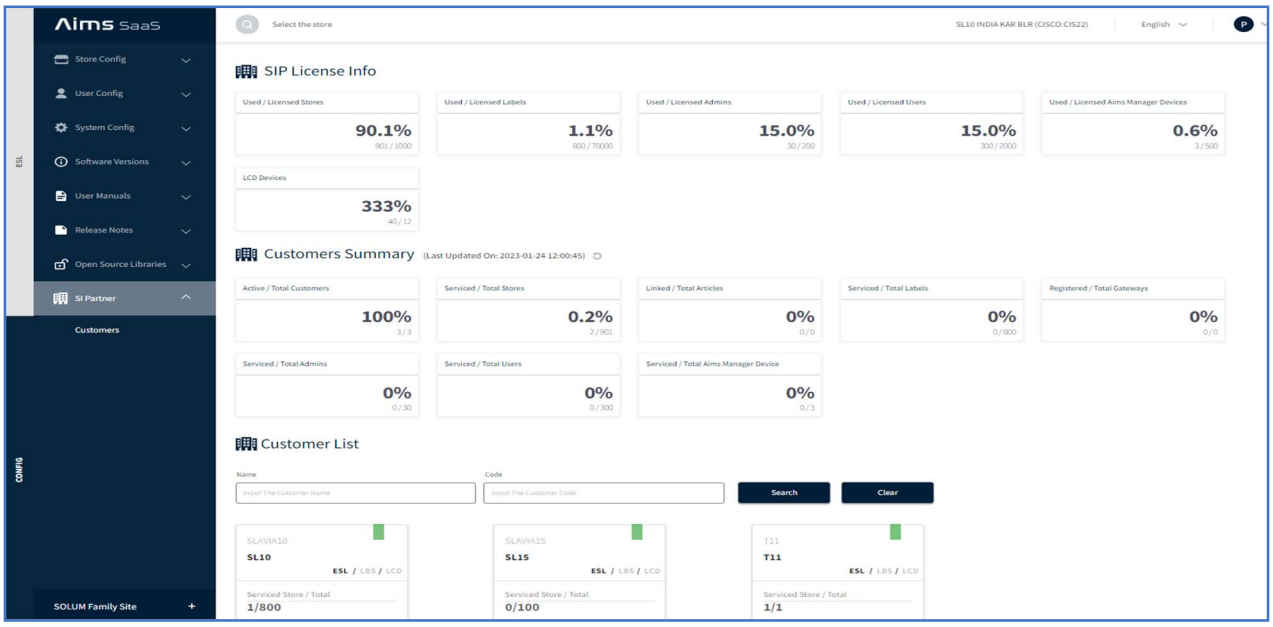
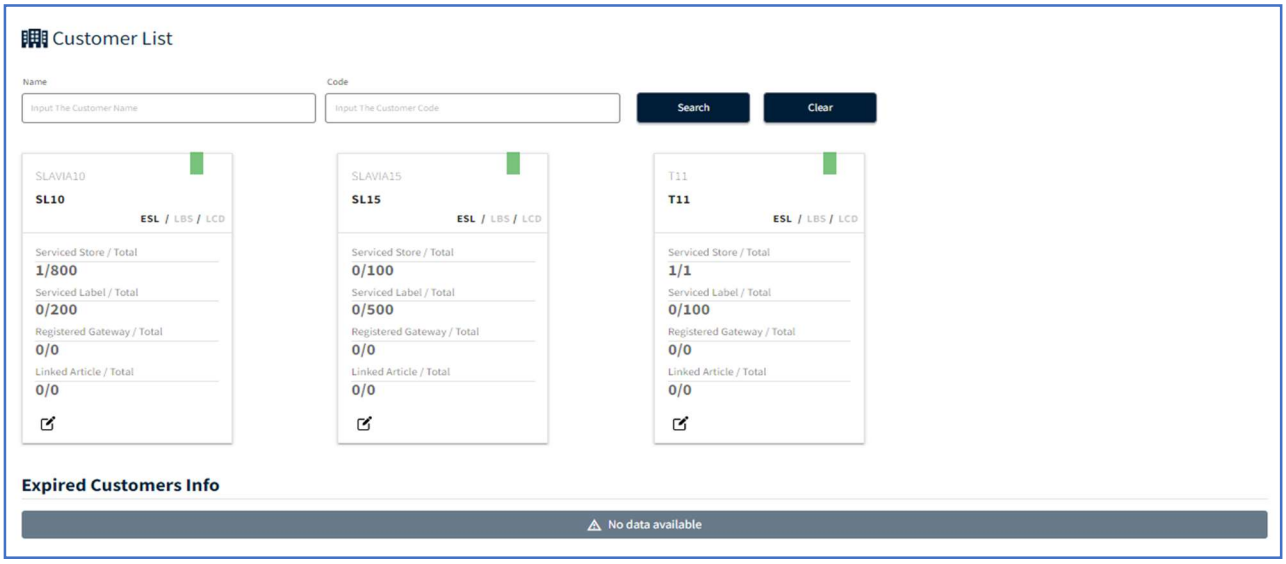


CUSTOMER LIST:

Here **customers** that are **mapped to SI Partner user** will be displayed and only **Master SI Partner user** can **manage or edit** the mapped customer detail allowed fields.



Click on any customer from the list it will open **Edit Customer Detail** pop up, here user can edit enabled fields and click on **Save** button to make changes.

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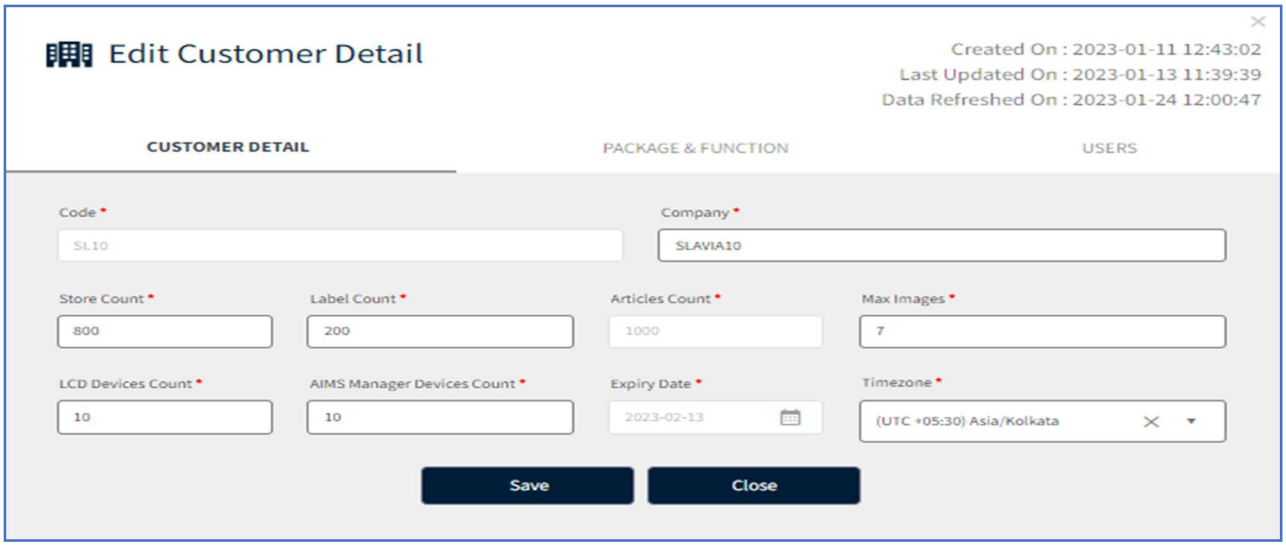
Note: *Count of the customer details should be matched with SI partners count limit including all the mapped customers or else it will display* ***limit reached*** *alert pop up.*



SI partner can edit following details- Company, Store count, Label count, Max images, LCD Devices count, AIMS Manager Device Count, Time zone, Administrators count, Normal users count.

18 Newton 7 Segment

The Newton 7-segment display is designed to support only segment-based visual elements, and it does not have the capability to render images. This type of display is limited to showing fixed elements, specifically Markers and Price information. Below is a list of supported markers and price details for the Newton 7-segment display.

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18.1 Markers

Markers are elements used to identify specific aspects of the displayed information, making it easier to understand. The Newton 7-segment display supports several predefined markers that accompany price details. Below are the supported markers:

Marker 1: **Dollar ($)**

Marker 2: **Cent (¢)**

Marker 3: **Each (ea.)**

Marker 4: **Pounds (lb.)**

Marker 5: **Ounce (oz.)**

These markers help clarify the context of the price being shown. However, the display remains limited to fixed elements and does not support images.

18.2 Price

The Newton 7-segment display is used to show numerical values, supporting a maximum range of **99.99**. This allows for up to two digits for the integer part and two digits for the decimal part.

Format: 2-digit integer, 2-digit decimal (e.g., 99.99)

Additional Info

The Newton 7-segment display automatically shows the appropriate price marker based on the value:

• **Marker 1 (Dollar $)**: Displayed if the price is greater than or equal to 1.

• **Marker 2 (Cent ¢)**: Displayed if the price is less than 1.

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Only one price marker (Dollar or Cent) will be displayed at a time, determined by the server based on user input.

The unit markers are based on user input, with only one unit displayed at a time:

- **Marker 3 (Each ea.)**
- **Marker 4 (Pounds lb.)**
- **Marker 5 (Ounce oz.)**

The display can support only one page at a time, showing the combination of a price and a unit.

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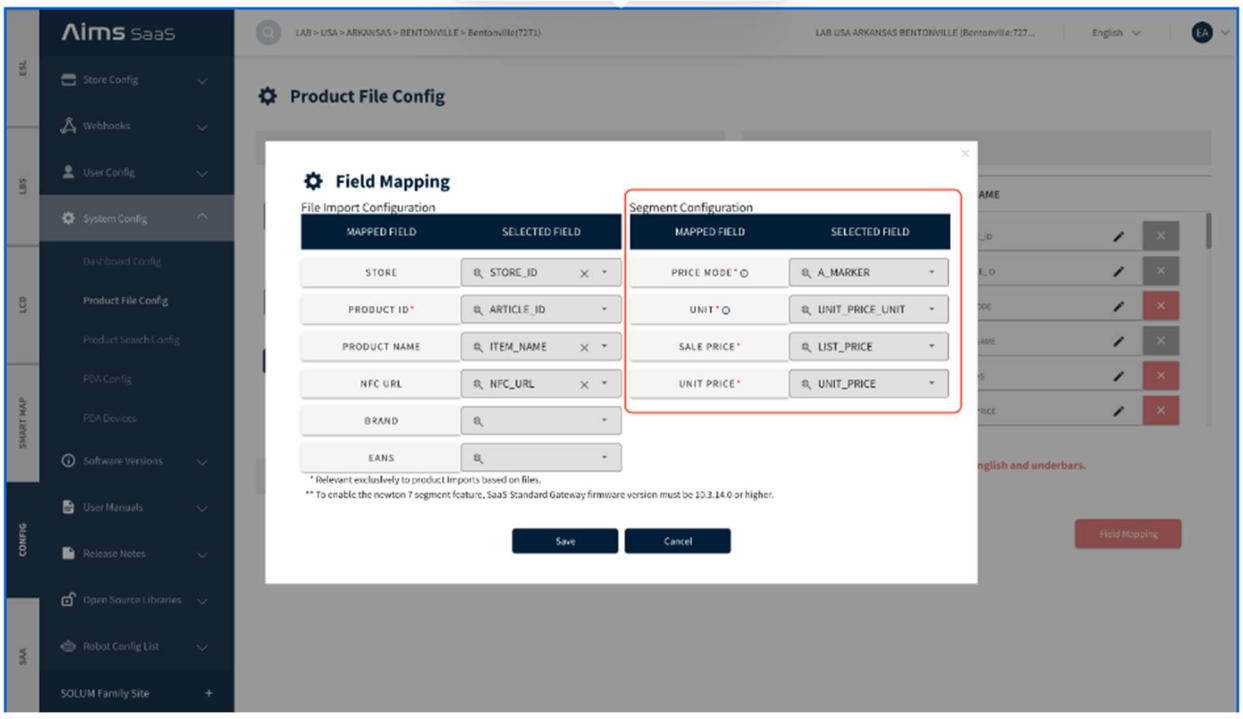
18.3 Product File Configuration

Once the Newton 7-segment feature is enabled for the customer, additional field mapping options will become available according to the following configuration.



In the configuration shown above, there are 4 additional keys that the user must specify in the product details:

1. **PRICE MODE**:

This key determines whether the **SALE PRICE** or **UNIT PRICE** will be displayed.

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Possible values for Price Mode:

0: Display SALE PRICE

1: Display UNIT PRICE

A dropdown on the right will allow the user to select the product data key where the price mode value is stored.

2. **UNIT**:

Defines the measurement unit for the product, such as ***pounds (lb.), each (ea.), or ounce (oz.).***

A dropdown on the right will allow the user to map the product data key where the unit value is located.

3. **SALE PRICE**:

This key holds the sale price of the product.

A dropdown on the right will allow the user to select the product data key where the sale price value is stored.

4. **UNIT PRICE**:

This key holds the ***unit price of the product.***

A dropdown on the right will allow the user to map the product data key where the unit price value is stored.

These fields ensure proper mapping of product data for the Newton 7-segment display, enabling accurate and dynamic content

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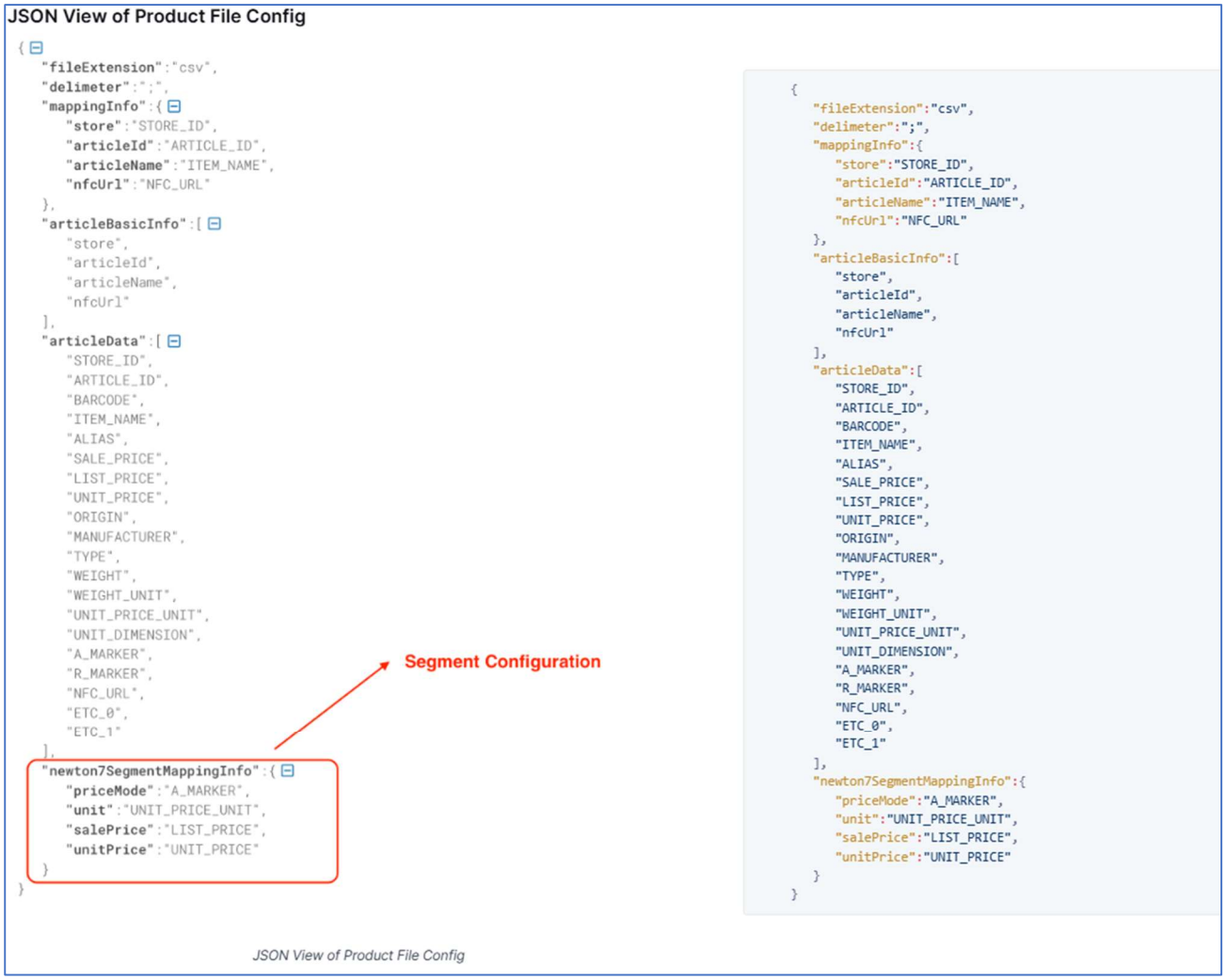

For the Newton 7-segment display, no image is generated on the server side. However, an image is generated for dashboard previews. To create this preview image, a fixed template named **7SEGMENT_TEMPLATE.xsl** is used. Please note that there is no preview available for this template directly within the dashboard itself.

Sample image preview on the dashboard can be seen like below.

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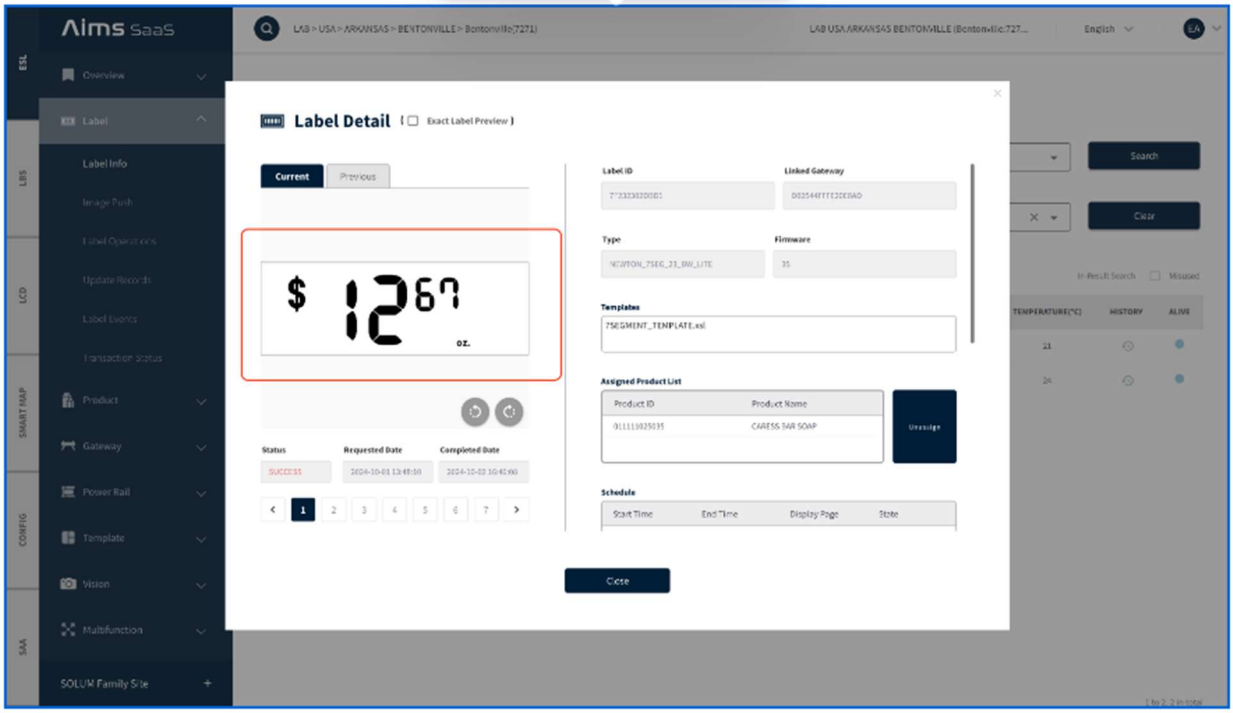

Newton 7 Segment Dashboard Preview

Newton 7 Segment with 2-digit integer and 2-digit decimal supports currently below tag attributes.

With NFC: **DBD, DB9**

Without NFC**: DBC, DBB**

18.4 Rules

- Price values on the Newton 7-segment display cannot exceed **Two digits** in either the integer or decimal part.
- The maximum price range is **99.99**.
- Negative values are not supported.
- Unit markers must end with a period (”.”)
    - **oz. (Ounce)**
    - **lb. (Pounds)**
    - **ea. (Each)**

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Note: *Proper segment configuration must be carefully aligned with the corresponding product fields to ensure accurate and consistent display of information*

18.5 Error Codes

The following error codes are specific to Newton 7-segment tags:

1. ***Error Code 13: NO SEGMENT CONFIG FOUND***

This error code is generated when a product is ***updated or a label is assigned without completing the segment product file configuration.***

2. ***Error Code 14: PRICE RANGE NOT SUPPORTED***

This error code is generated when ***the price exceeds two digits in either the integer or decimal part.***

These error codes help ensure proper configuration and adherence to the display requirements for the Newton 7-segment system.

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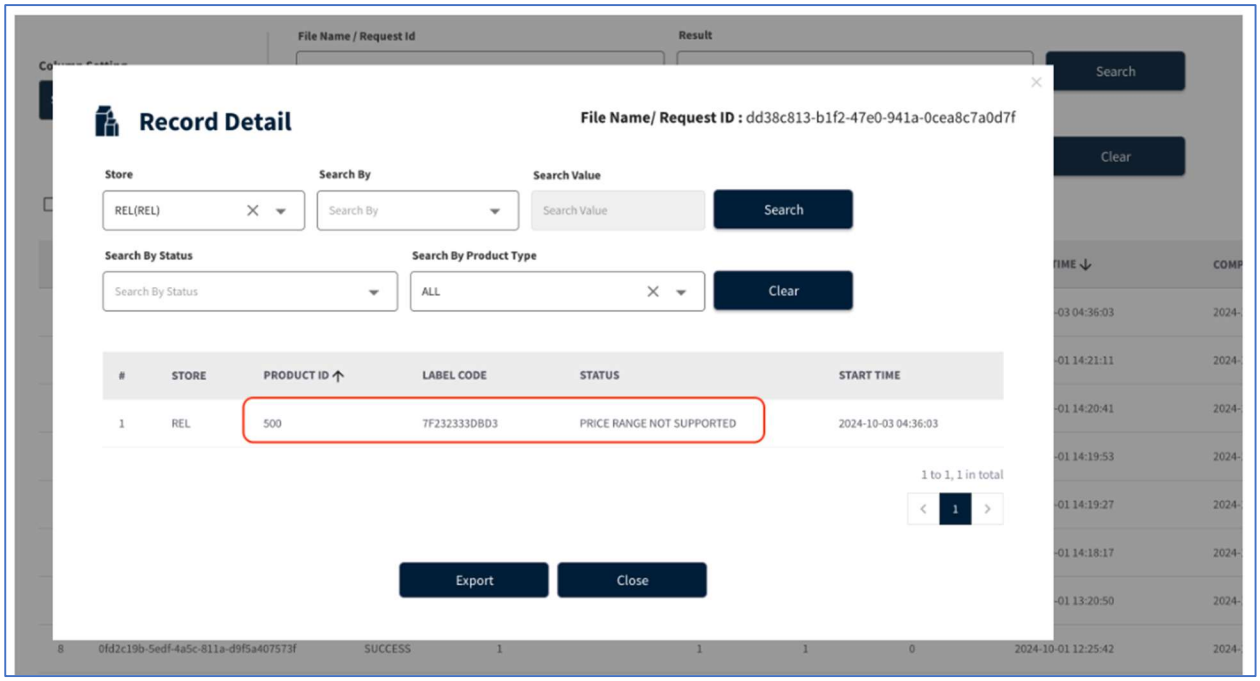

18.6 Price Display Formats

The various methods to display the price:

```
Price     =   Segment Display
-----------------------------
1.0       =   $ 1.00
1.2       =   $ 1.20
1         =   $ 1.00
1.00      =   $ 1.00
1.01      =   $ 1.01
1.10      =   $ 1.10
0.01      =   1 ¢
0.1       =   10 ¢
0.15      =   15 ¢
0         =   $ 0.00
```


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Important:

- ***Newton 7 Segment Tags support only ASSIGN & PRODUCT UPDATE operations.***
- ***Template & Template mapping-related operations are not applicable for Newton 7 Segment Tags.***

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19. Newton 36 Segment

The **Newton 36-segment** functionality is similar to the Newton 7-segment functionality mentioned above.

The only change is that the user must use the following:

- ***TAG: NEWTON_36SEG_23_BW_BLE_3***
- ***TYPE CODE: 3201***

Other than this, please follow the same procedure as 7 segment to assign the 36-segment label.

Once assigned, it will show the preview as displayed below

Important

1. ***Newton 36 Segment Tags support only ASSIGN & PRODUCT UPDATE operations.***
2. ***Template & Template mapping-related operations are not applicable for Newton 36 Segment Tags.***

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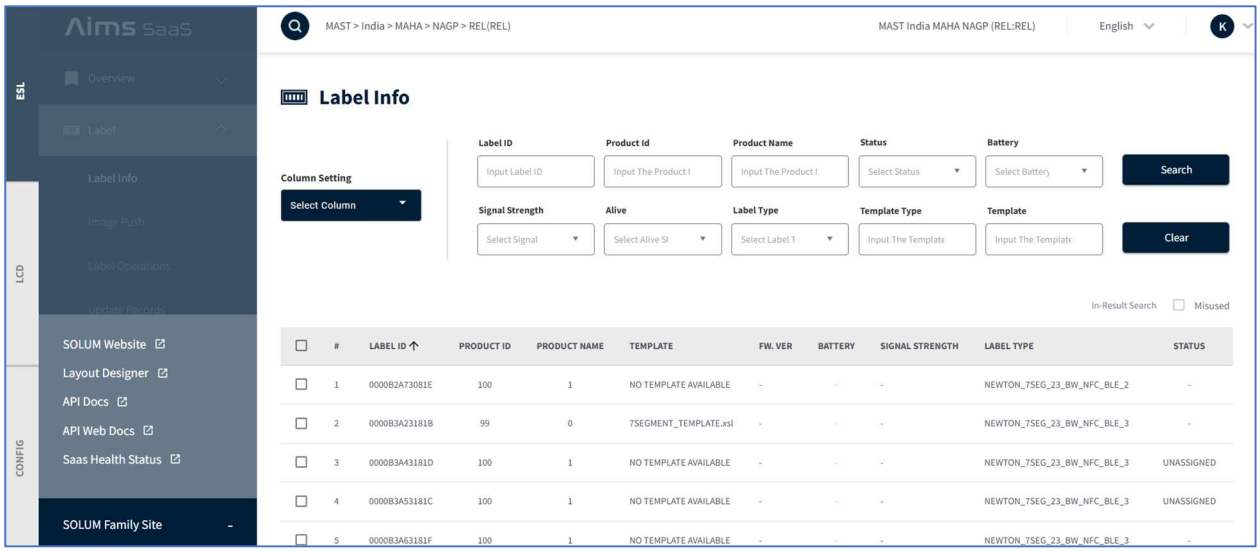
20.Solum Family Site

SOLUM Family Site links can be access from the bottom left of the Dashboard page. Click on **(+) icon** to pop-out the links.



20.1 SOLUM Website

Click on **SOLUM Website link** to be directed to company website: ***www.solumesl.com.*** The website will have the latest lineup and software services.

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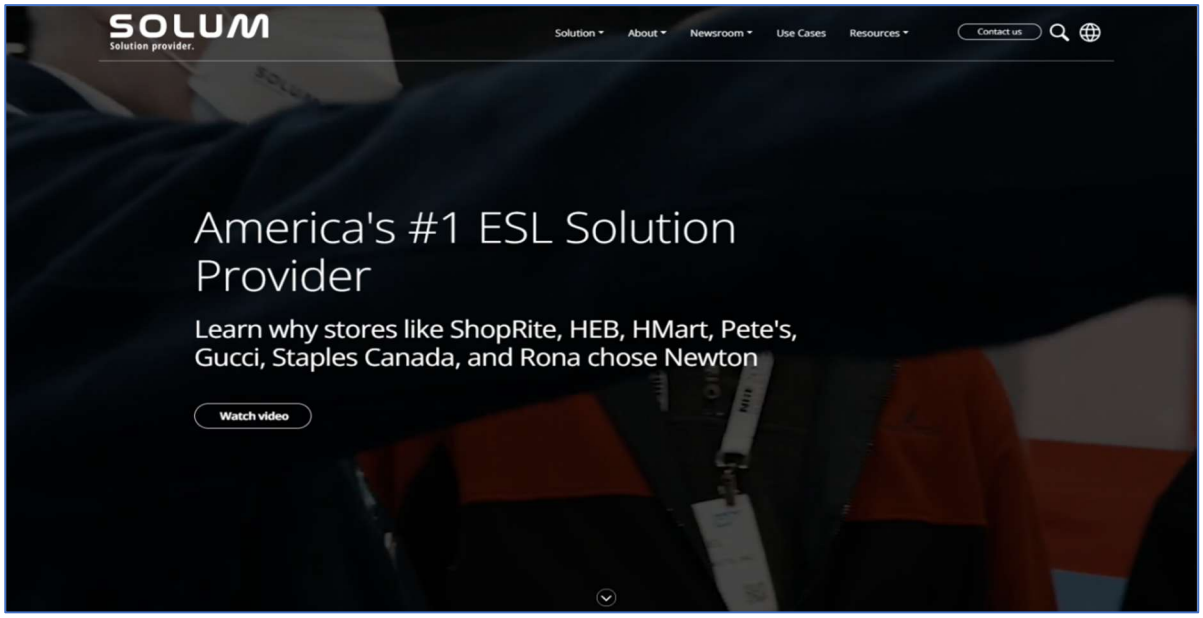

20.2 Layout Designer

Click on **Layout Designer**. This link will redirect to the Layout Designer application and their user can create the Layouts/Templates and these templates can be used in dashboard to display image on ESL tags. Refer Layout Designer manual for more details.

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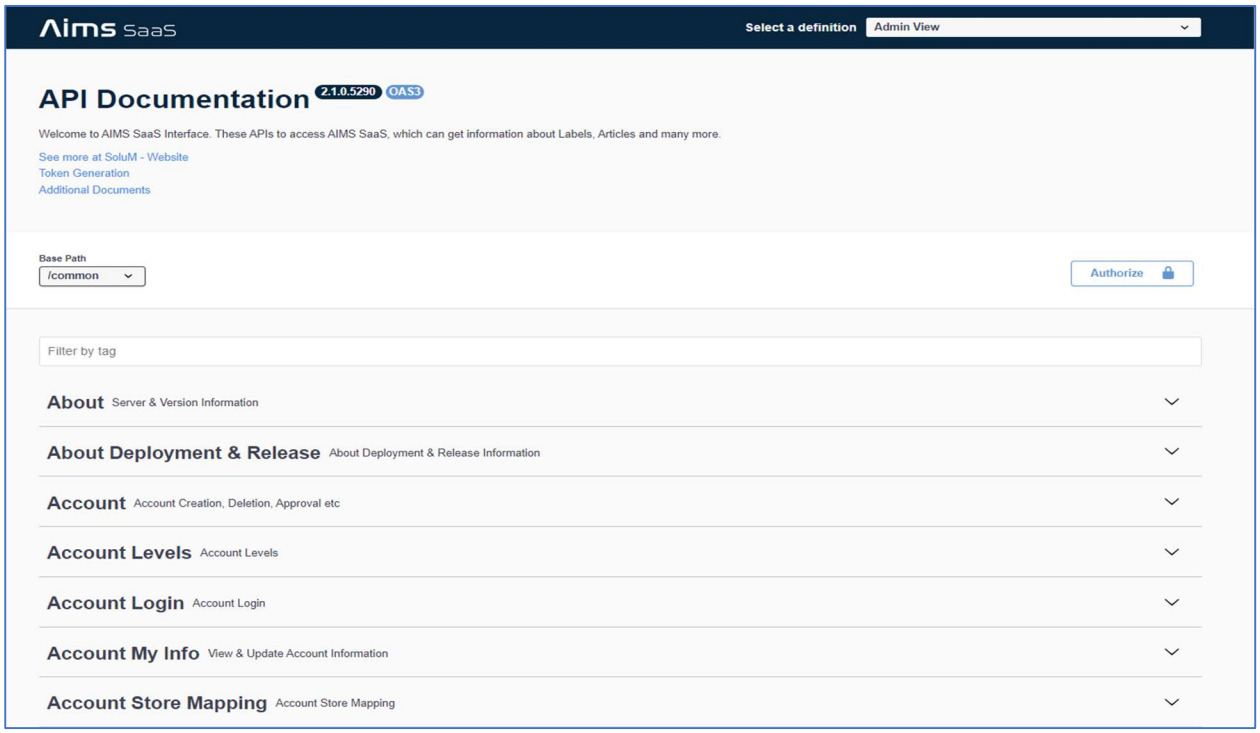
20.3 API Docs

Click on API Docs – This link will redirect to the swagger page.



20.4 API Web Docs

API Web Doc is used to understand how the API works. It shows which API we need to use, what method like GET or POST, what parameters we have to pass, and what response we will get.

Under **SOLUM Family Sites**, click on **API Web Docs**.

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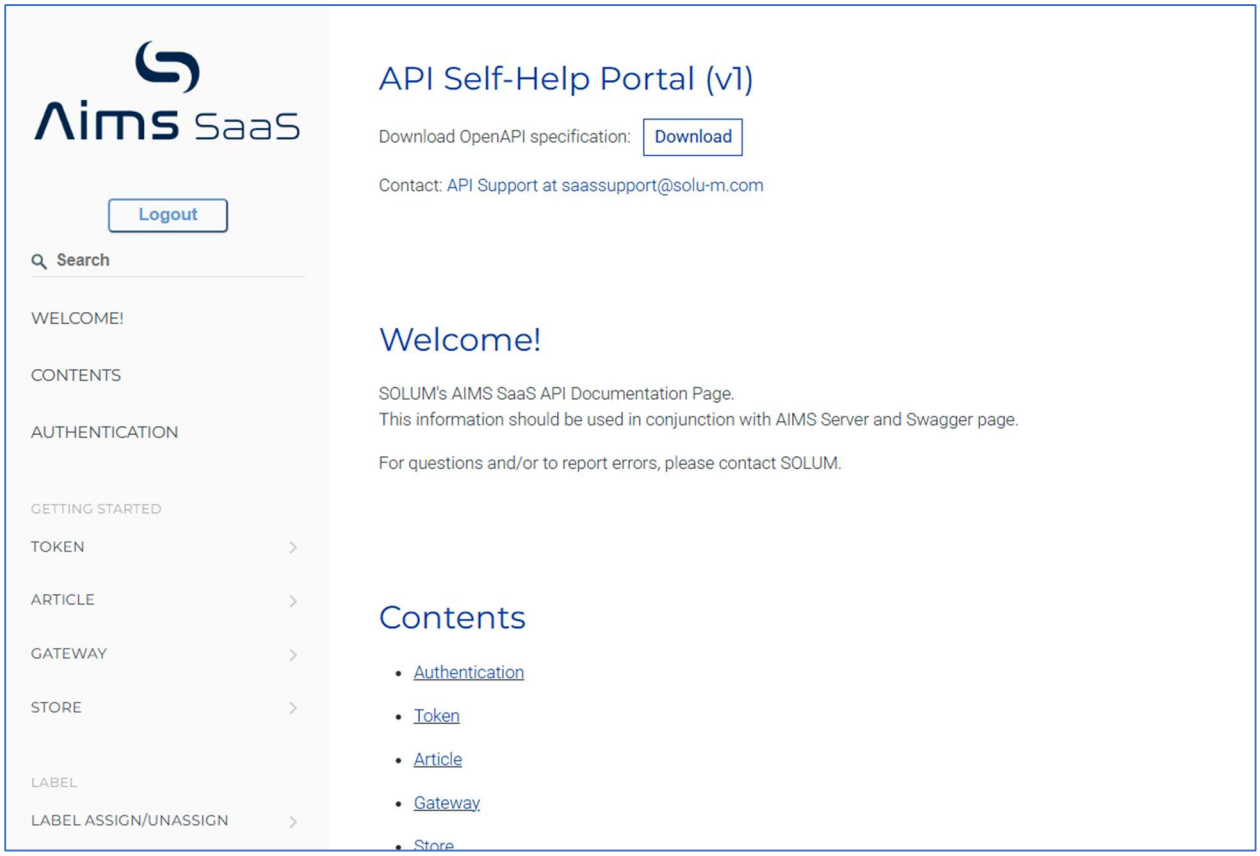

20.5 SaaS Health Status

Here user view the current status of SaaS platform, including both APIs and the graphical interface SOLUM Deployment Monitor.

Click on **SaaS Health Status** from family site, it will open a new tab as shown below.

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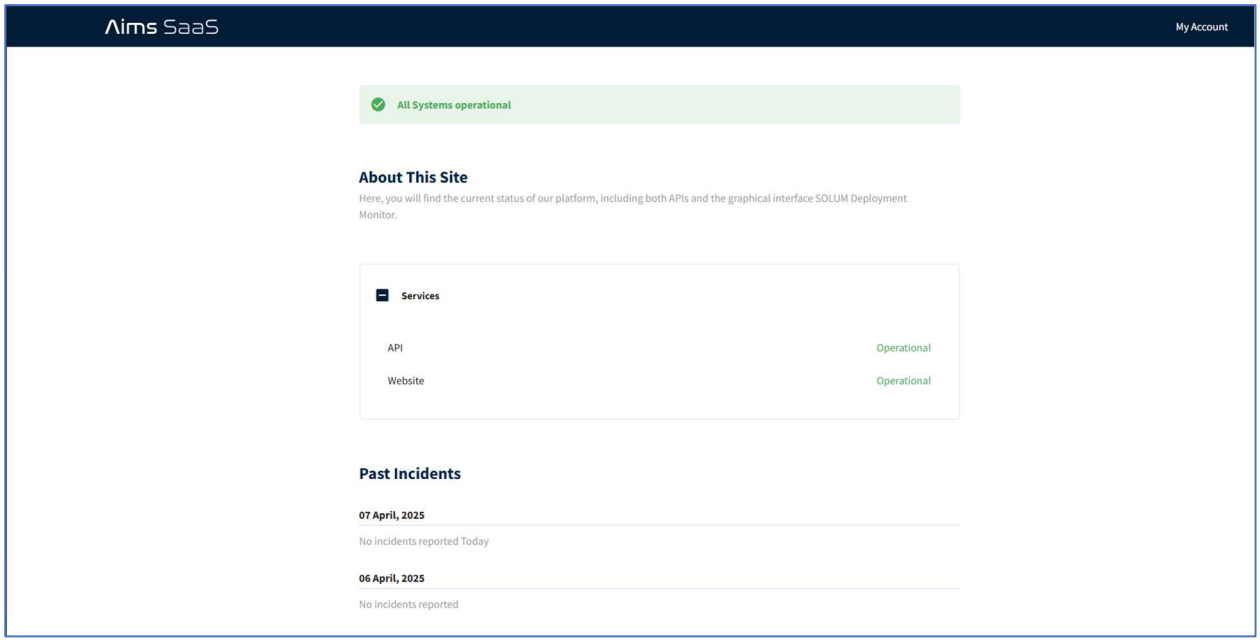

21. Appendix

Appendix A

Store Creation-Advance Settings

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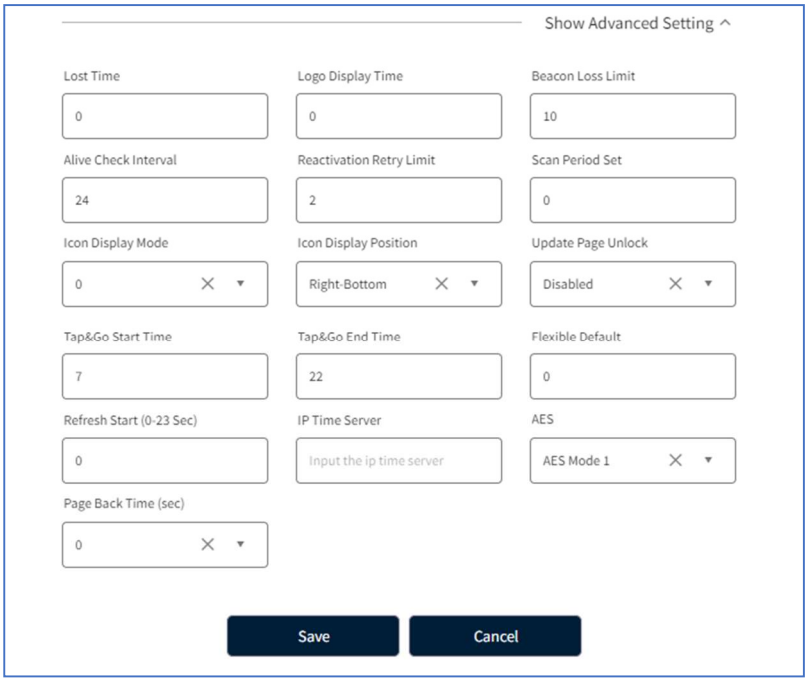

Advance Settings Field Definition

Lost Time

After receiving a successful image update, the ESL will display a disconnect icon if it loses connection to a gateway for longer than the Lost Time duration value.

Input Value: 0 ~ 31 (hours)

Default value: 0 (disabled)

Prerequisite: **Logo Display Time** must be set to 0

Logo Display Time

After receiving a successful image update, if the ESL loses connection to a GATEWAY for longer than the **Lost Display Time** duration value, the ESL will remove existing display content and revert back to the out-of-box default display.

Input Value: 0 ~ 255 (hours)

Default value: 0 (disabled)

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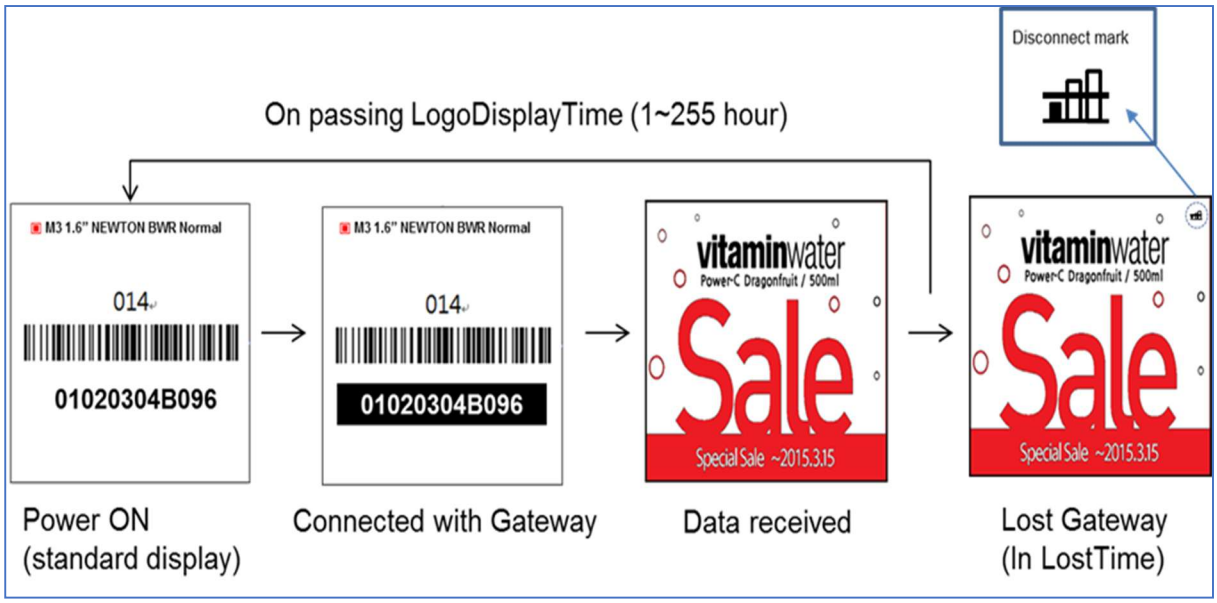
Refer to the image below for examples of **Lost Time** and **Lost Display Time**.



Beacon Loss Limit (Do not change without consulting SOLUM)

If the beacon signal is not delivered to the label consecutively as many as the number of the set value, the label assumes the signal from the gateways is lost and will scan for all Gateways.

Alive Check Interval

The system will assume the ESL is offline if it does not receive an Alive (heartbeat) for the duration (in hours) set as this value.

Reactivation Retry Limit (do not change without first consulting with SOLUM)

The retry count of the reactivation in case of ESL to GATEWAY activation failure.

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Scan Period Set (do not change without first consulting with SOLUM)

The predefined index for the scanning period.

Icon Display Mode

Options for visual icons display on ESLs. Refer to the images below.

Value	Icon Display Settings
0	Disable
1	Battery Low Level
2	Battery Full/Low Level
3	Calendar Week Number
4	Calendar Week Number & Battery Low Level
5	Calendar Week Number & Battery Full/Low Level
6	TBD

Icon Display Position

Location of Icon to display. Icons will display on top of the layout design so it is recommended to set the icon display location in an area without vital information. Refer to the images below.

Value	Icon Display Settings
0	Bottom Right
1	Top Right
2	Bottom Left
3	Top Left

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① Calendar weekly number (1~53 week)
② Battery Icon
③ Disconnection mark

Update Page Unlock

Setting to enable/disable automatic page flip to the main page with an update.

Enabled = If the ESL displays a sub-page and an update is sent to the ESL, the ESL will automatically flip to display the main page.

Disabled = If the ESL is displaying a sub-page and an update is sent to the ESL, the ESL will stay on the sub-page even if the update is done to the main page information.

Tap & Go Start Time / Tap & Go End Time (feature disabled for AIMS SaaS)

Setting Start and End time for Tap & Go feature functionality to avoid excess battery drain during off hours.

Flexible Default

The setting for locking page after page flip by button or beeper.

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0 or 1 = After flipping the page with the Newton button or beeper, the ESL will revert to the original page after the default 10 seconds or **Refresh Start** time if set.
2 = After flipping the page with the Newton button or beeper, the ESL will stay on the flipped page

Refresh Start

To avoid screen burn, Newton ESLs auto-refresh once a day. **Refresh Start** time is the local time in an hour when ESLs will refresh. Time should be set during closed hours to avoid flashing in front of customers.

IP Time Server

Time Server location the GATEWAY should check for time sync. If this value is empty, GATEWAY will use the AIMS SaaS default time server.

AES (do not change without first consulting with SOLUM)

Wireless security setting. Default: AES Mode 1.

Page Back Time

The time (in seconds) to flip back to the main page after a page flip is triggered via the Newton Button.

Appendix B

Adding fields to product info Table

- Locate and click on the **Config tab** from the main navigation menu.

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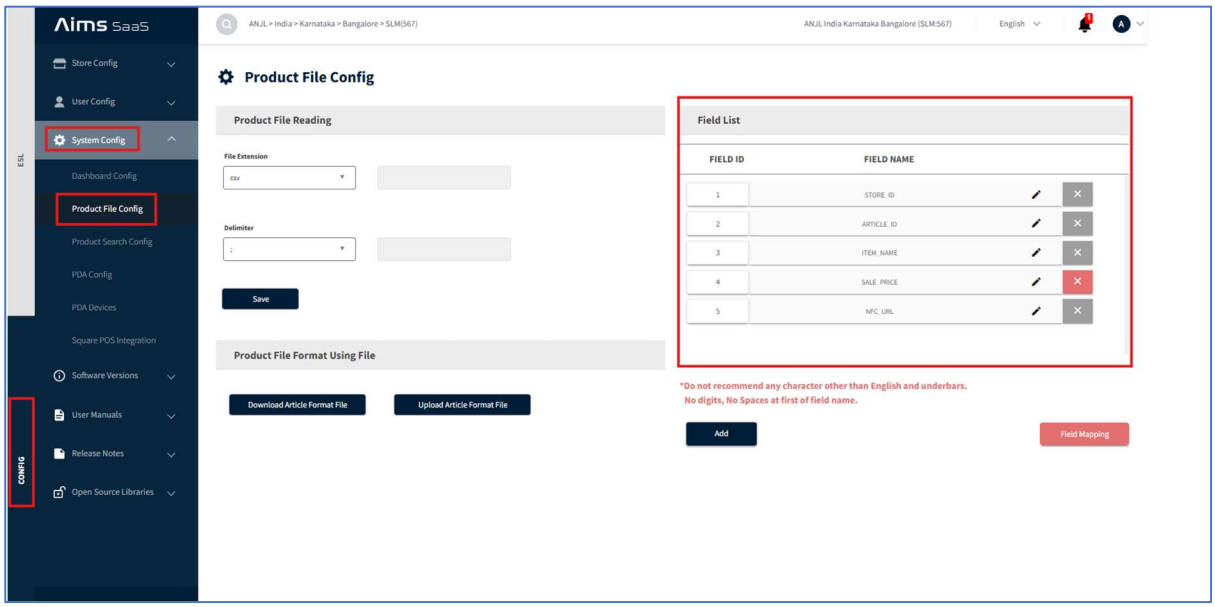
- In the Config tab, find and click on **System Config**
- Under System Config, click on **Product File Config** to access the product-related configuration settings.
- Navigate to the **Field List** table



Managing the Field List

The Field List table controls which fields are read and where the data is stored. This list is used to display product details on the Dashboard Product page and is essential for dynamic design and information display in the SOLUM Layout Designer.

- The Field List is prepopulated with 40 fields and corresponding field names as shown on the Dashboard.
- You can update the list to rename, add, or remove fields based on your requirements.
- Updates can be made directly from the Dashboard page or by editing a configuration file (recommended).

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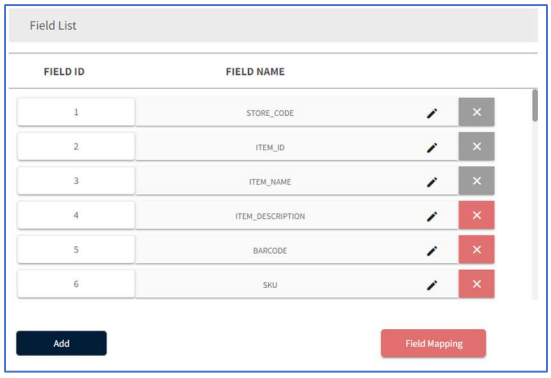
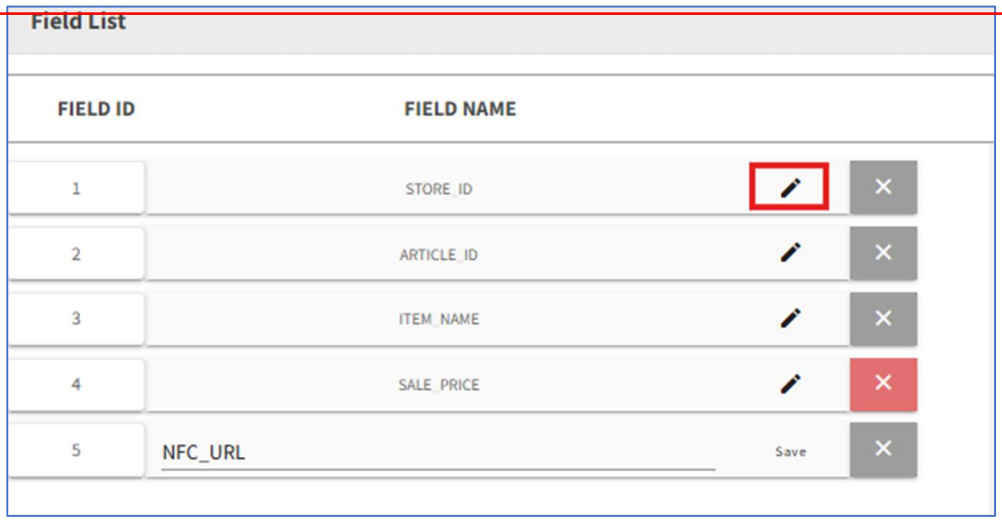


Steps to Manage the Field List:

1. Renaming a Field:

- To rename a field, click the edit pencil icon next to the field name you want to change.
- Enter the new field name.

***Note**: Field names must not start with a number and can only contain underscores (_) as a special character.*



2. Adding a New Field:

- To add a new field, click the ‘Add’ button located at the bottom left of the Field List.

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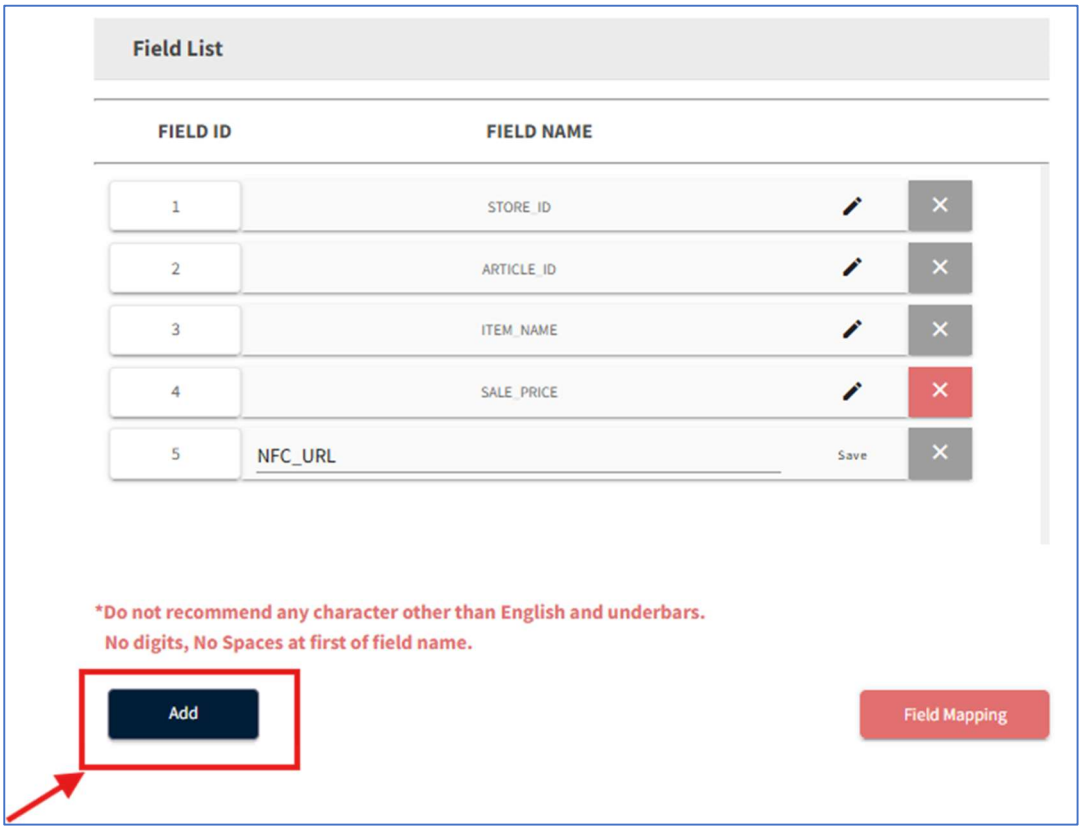
- A new blank field will be added. You can then assign a name to it by following the same guidelines as earlier.



3. Removing a Field:

- To delete a field, click the 'X' icon to the right of the field name you want to remove.
- Note: Fields that are greyed out cannot be deleted.

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4. Important Field Name Restrictions:

Field names cannot:

- Start with a number.
- Contain any special characters except for the underscore (_).

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Aims SaaS

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