ESL Management System

User Manual

DALIAN GOOD DISPLAY CO.,LTD.

Version History

Version	Date	Summarize	Author	Approval
1.0	2025-02-19		Hui Zhang	Boris Jen

1　Summary

1.1 System Architecture

The system B/S architecture can be divided into a database, front-end web application

>   The database is the data storage container that stores system and user information (this system uses MySql as the storage database);
>   The front-end web application is based on the web browser client application;

1.2 Business Architecture

The management system deployed in the cloud server provides system administrators and business personnel with system operation status, daily operation, and data queries.

The system is divided into 5 modules as below:

【Dashboard】：　Navigation Bar and Overview
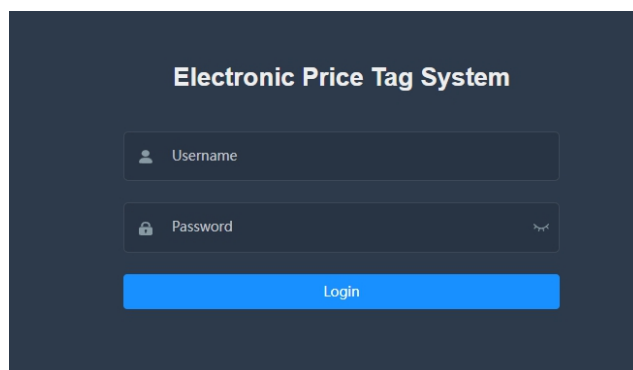【Service Management】：Store Management, AP Management, Tag Management and Product Management.
【Log】：　System Log, Tag Log, Operation Log and Data Log
【Template Management】：ESL templates;
【Settings】：　User management, parameter setting

2　System Login

Open the browser, enter the URL www.gdesl.com to open the login interface, and enter the background account and password (Your sales representative will provide you with your account and initial password, which you can change later yourself), it is recommended that the first time you log in the shortcut will be sent to the desktop.
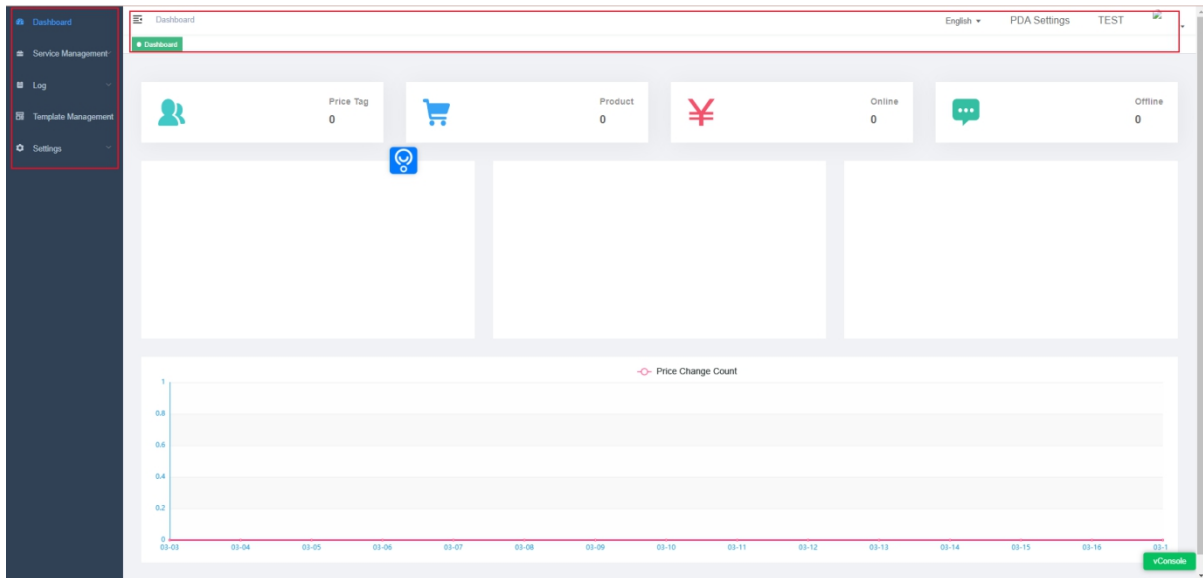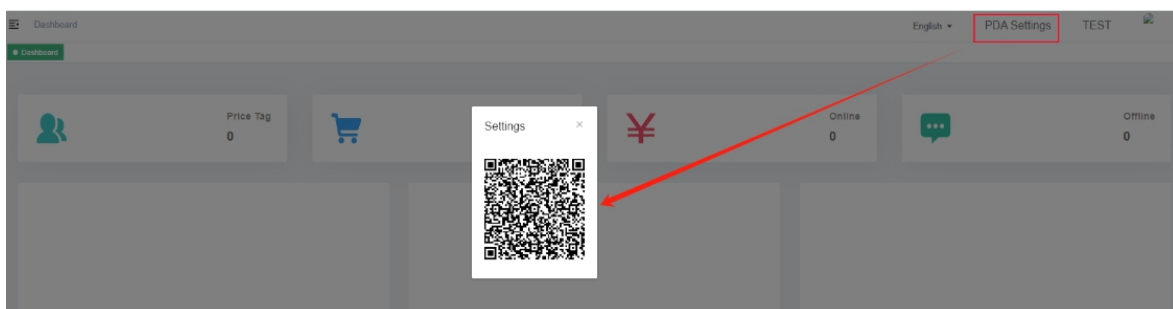
3 Dashboard

3.1 Navigation Bar

The left-hand navigation bar is used to access various management pages, while the top navigation bar is used for PDA settings as well as selecting the corresponding test store.


3.1.1 PDA Settings

Scan the QR code using the PDA for configuration.

TIPs: In ESL management, PDAs enable real-time price/promotion updates, inventory tracking, error detection, and wireless synchronization across labels. They automate tasks, support audits, ensure backend system integration, and enhance mobility, reducing labor costs, improving pricing accuracy, and boosting operational agility in retail environments.
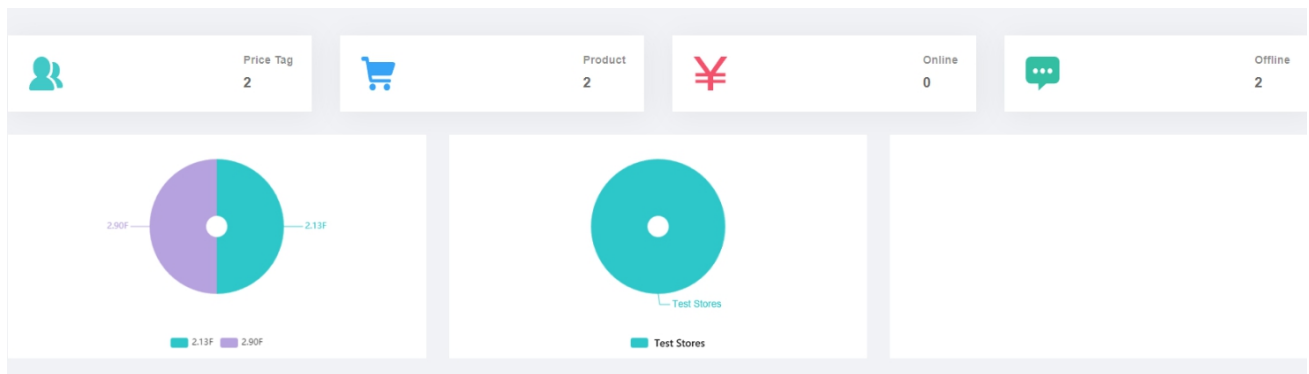
3.1.2 Select Store
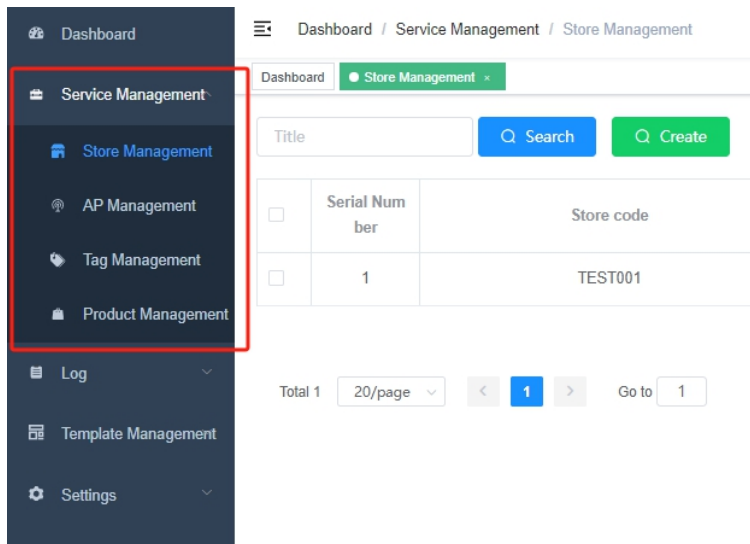
Select the store(s) to be operated.
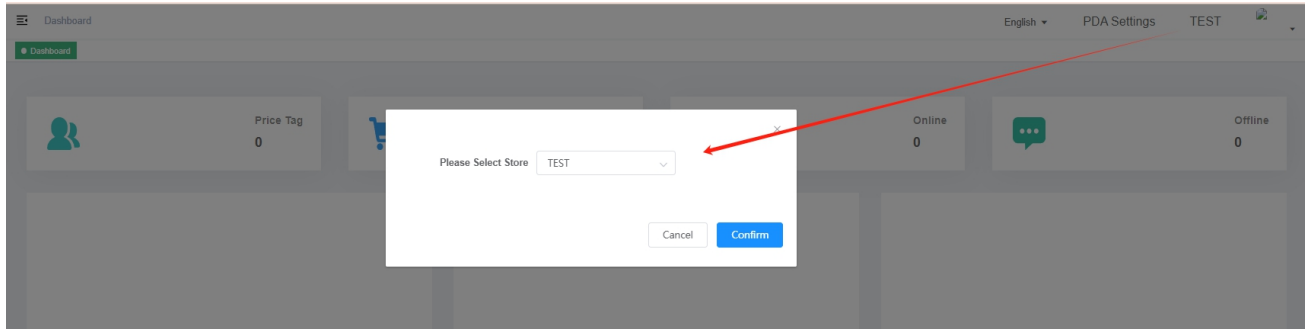
3.2 Overview

Provides a visual overview of Electronic Shelf Label (ESL) data in stores, including:

Product quantity distribution,
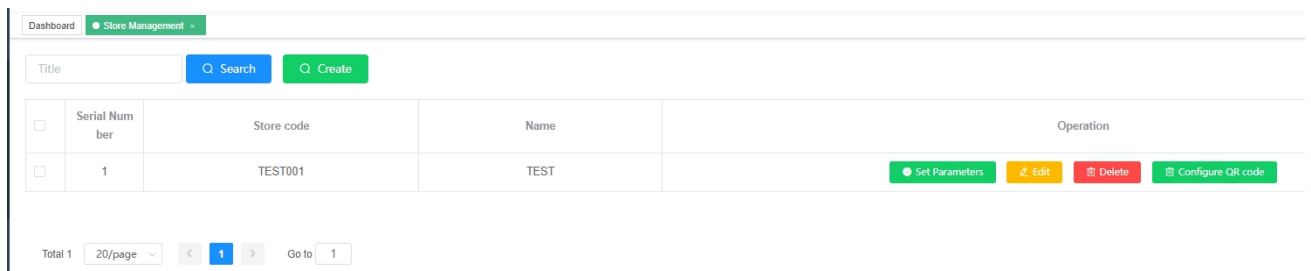
ESL quantity distribution,

Frequency of price changes.

4   Service Management

Service Mangement includes Stroe Management, AP Management, Tag Management and Product Management.


4.1 Store Management

Store Mangement includes Create Store, Edit Store, Delete Store, Search Store, Set Parameters and Configure QR code.


4.1.1 Create Store

Click the Create to create a new store, enter the store name and store code

Note: After creating a store and registering the AP to the specified store, the AP will be recognized online and the corresponding store product data will be imported automatically; you can view the information of the used AP in the store on the AP management page.
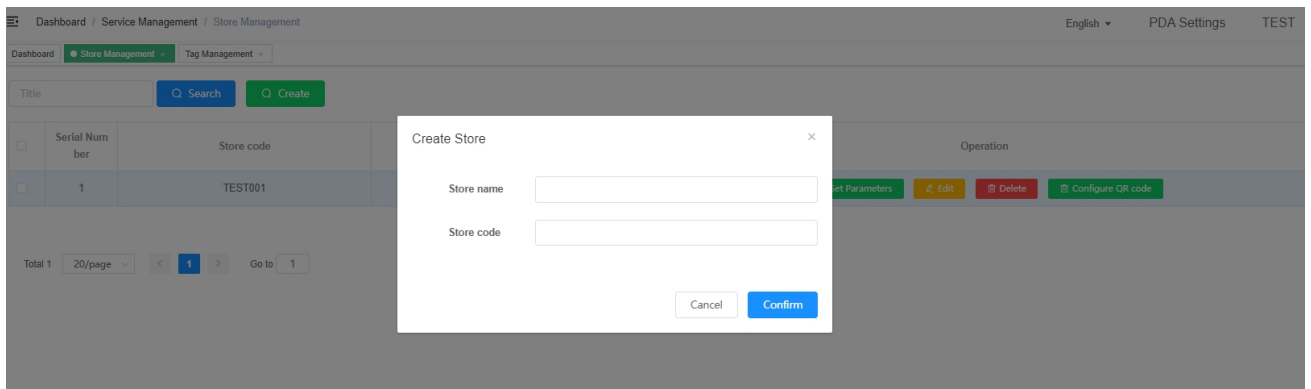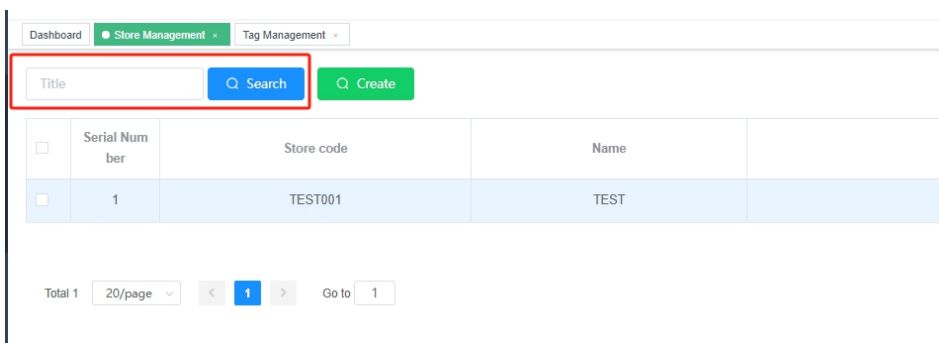
4.1.2 Edit Store

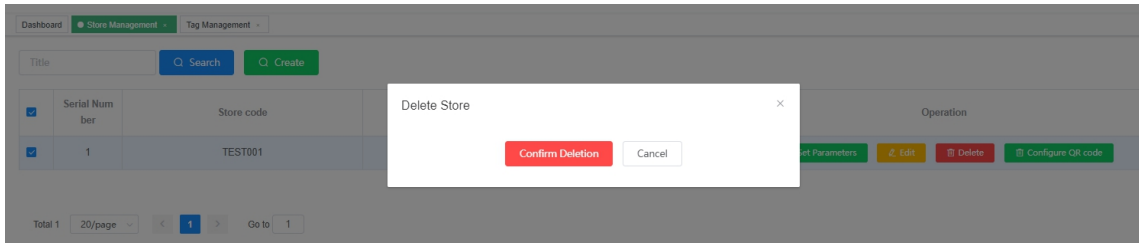Click the Edit button, you can edit the store name and shore code.
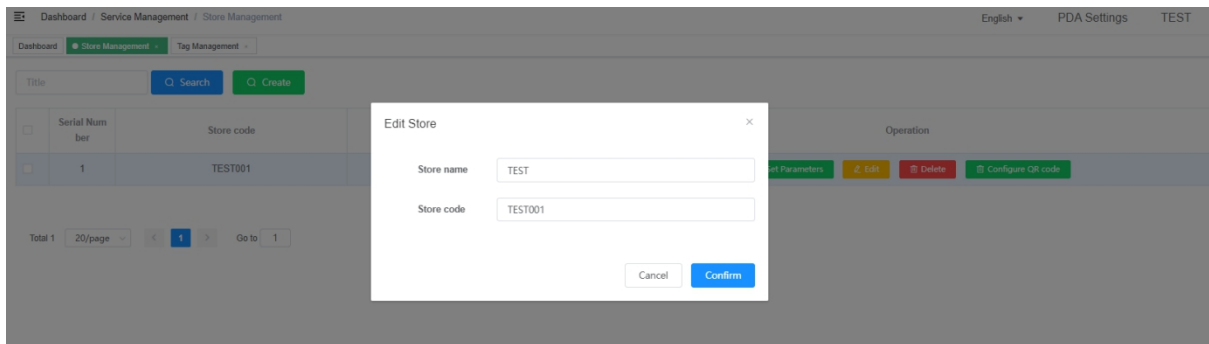
4.1.3 Search Store

You can quickly find the store information you are looking for by store name and store code.
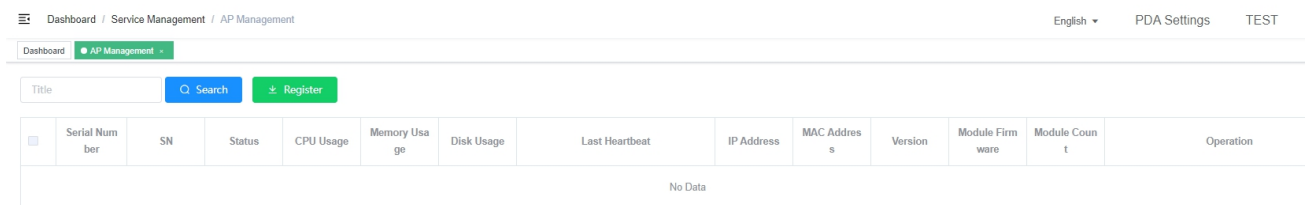
4.1.4 Delete Store

Find the store column that needs to be deleted, and click the Delete button to delete the store, the deletion operation requires a second confirmation from the user.
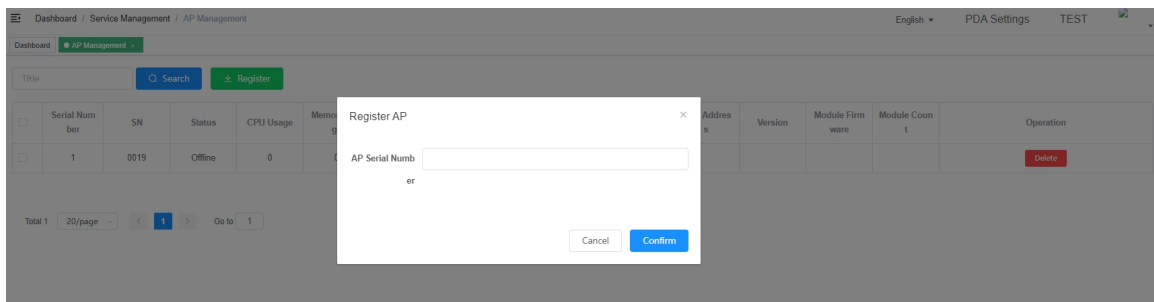

4.2 AP Management

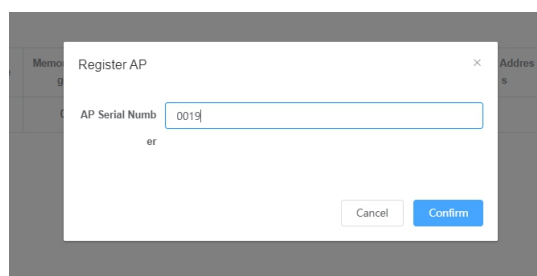AP management includes Register AP, Search AP and Delete AP.

4.2.1 Register AP

Click the Register to pop up the following window.

FAQ: Where is AP Serial Number?

Answer: Check the bottom of the AP (as shown in the image below), locate the number 0019 within the red box, enter 0019 in the AP serial number field, and click Confirm.

Connect the AP to the power supply and connect the network cable to the port of the router. The AP status is displayed online and registration is complete.

4.2.2 Delete AP

Find the AP column that needs to be deleted, and click the Delete button to delete the AP.

4.3 Tag Management

Tag Management includes Add price tag, Delete price tag, Bind price tag, Unbind price tag, Refresh price tag, Full Store Refresh and Refresh Page.
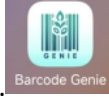
4.3.1 Add price tag

Click on Add button to enter the price tag IDs .

FAQ: How do I get a Price Tag ID?

Answer: The Price Tag ID is located on the side of each tag. If you have a PDA, you can scan the barcode with the PDA to add thePrice Tag ID. If you do not ha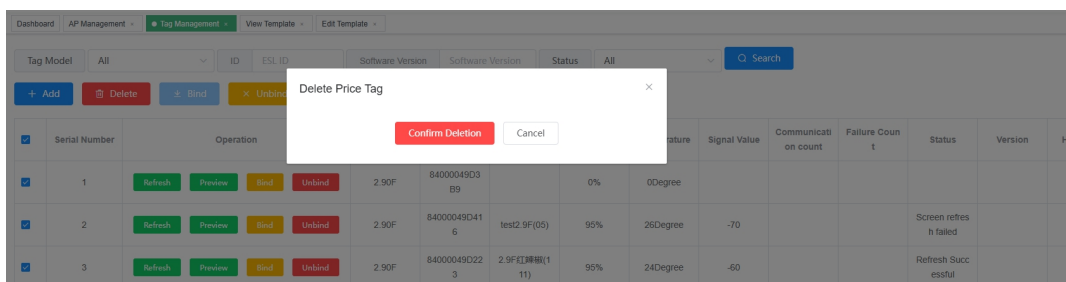ve a PDA, you can search for the "Barcode Genie" app in your mobile app store. After installation, scan the side of the Price tag, as shown below, you will get the Price tag ID.

4.3.2 Delete price tag

You can tick the price tags that need to be deleted below the list of electronic price tags and click the Delete button to delete the price tags in batches.

4.3.3 Bind and Unbind price tag

To change the binding relationship between a price tag and a product, you must first unbind the existing relationship before establishing a new one.

4.3.4 Refresh price tag

Refresh the selected price tag.

4.3.5 Full Store Refresh

Refresh all price tags throughout the entire store.

4.3.6 Refresh page

Refresh the price tags on the current page.

4.4 Product Management

Product Management includes Add Product, Edit Product, Delete Product and Search Product.

4.4.1 Add Product

Click the Add button to add new product, these products display their prices and features through price tags. Therefore, each product is bound to a price tag on one hand and linked to a template on the other.

Adding a product requires the following information:UPC(Universal Product Code), Template, Promotional price, Current price, Origin, Unit, Allocator, Specifications, Start time, End time, QR code, Quality inspector.
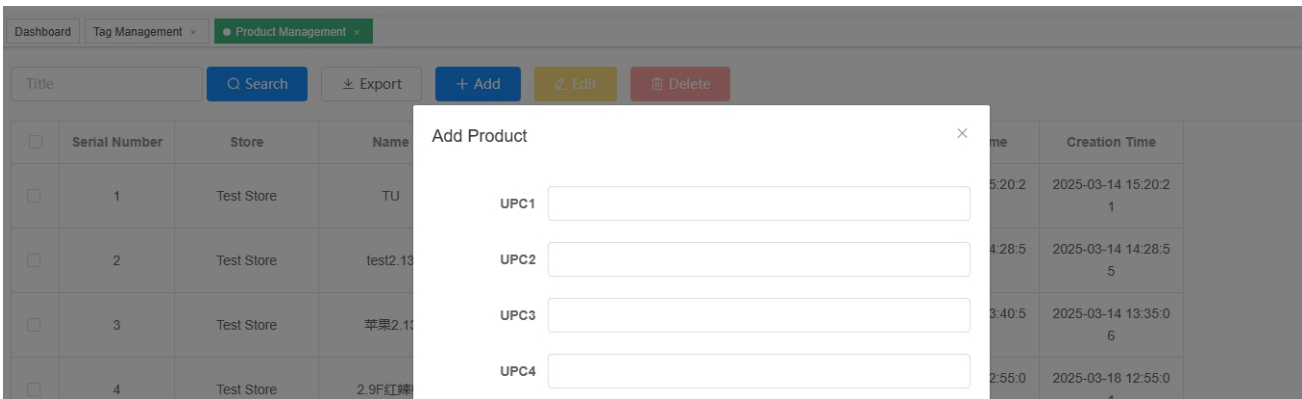
4.4.2 Edit Product

Product information can be modified by clicking the Edit button corresponding to the product, the related information cannot be modified.

4.4.3 Delete Product

Click the Delete button to delete the specified product.

4.4.4 Search Product

You can search for the desired product by entering keywords related to Store, Name, Code, UPC, or Template.

5　Log

5.1 System Log

Alerting and Error Logging for AP Offline Status with Timestamp

5.2 Tag Log,

Records operations and status changes related to Electronic Shelf Labels (ESL), such as price updates, tag binding/unbinding, communication errors, etc.

5.3 Operation Log

Tracks user or system actions, including logins, permission changes, configuration updates, data CRUD (Create/Read/Update/Delete) operations, etc.

5.4 Data Log

Stores raw data transactions or system events for auditing, debugging, or analytics (e.g., API request/response data, sensor data streams).

6　Template Management

6.1 ESL Template

6.1.1 Create Template

Click the Create Template button and the following window will pop up.

Store: Choose a store for this template.

Tag Model: Categorize tags by size and features.

The numerical part at the beginning represents the size, and the letters that follow have the following meanings:

S: N-Color, C: Color, L: Low Temperature, T: Three-Color, F: Four-Color, H: High Resolution.

Template Name: Name this template

Template Length: The horizontal dot count of the ESL display.

Template Width: The vertical dot count of the ESL display.

6.1.2 Send Font

Click 'Send Font' to upload the custom font.

6.1.3 Push Template

Deploy the created template to the AP.

6.1.4 Edit Template

Click on the Edit button to edit the content of this template.

You can directly use elements from the Element Box to create templates. The available elements include: Text, Price, Barcode, QR Code, Straight Line, Vertical Line and Image. You can freely adjust their position and size.
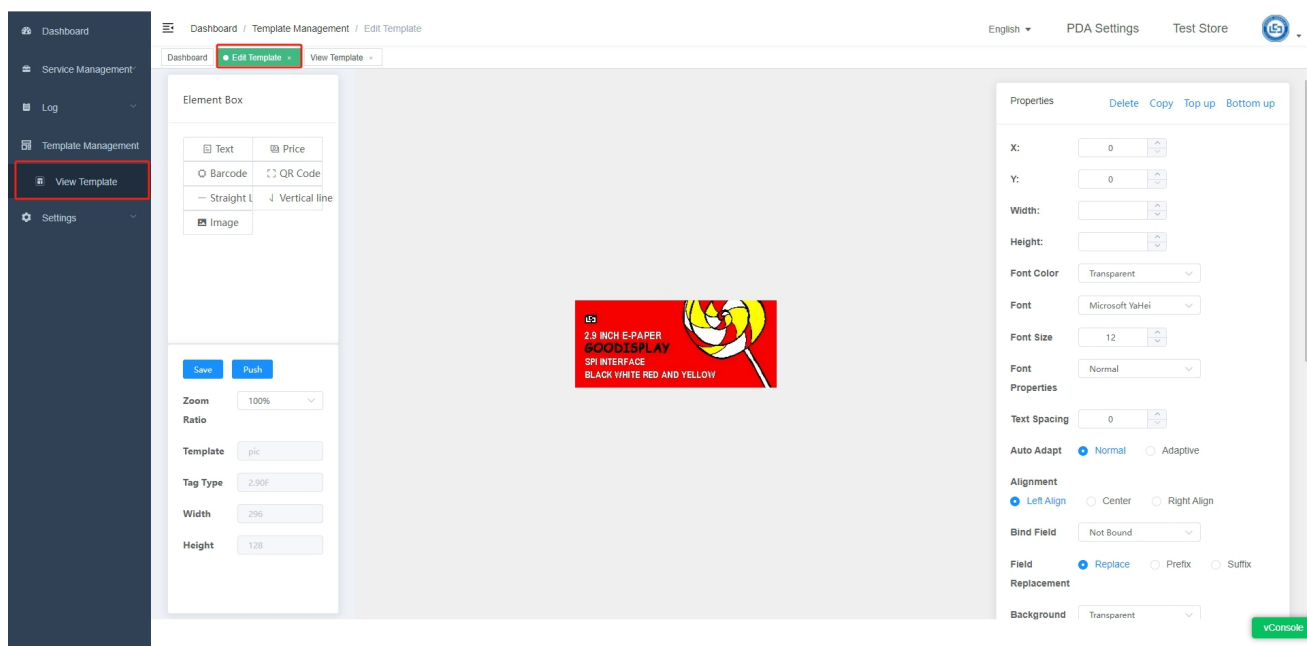
FAQ: Why can't the font size be adjusted during editing?

Answer: The system currently supports the following fonts: Zfull-GB, Impact, Arial, Courier, Lucida Console, Marlett, Tahoma, and Times New Roman. Font sizes can be adjusted when using any of these supported fonts.

6.1.5 Export Template

Click the Export button to download the JSON file for the specified template.

6.1.6 Copy Template

Click the Copy button to copy the specified template.
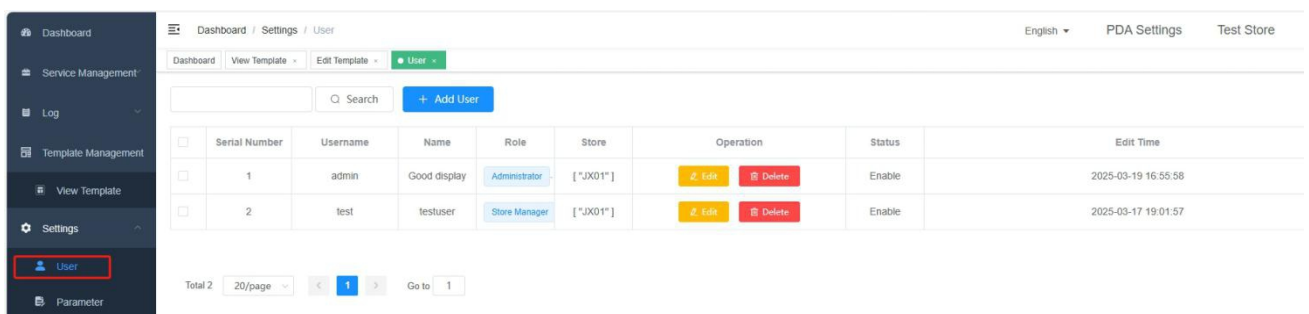
6.1.7 Delete Template

Click the Delete button to delete the specified template.

7   Setting

7.1 User Management

You can quickly retrieve the required user information based on user name, user status, and user role.
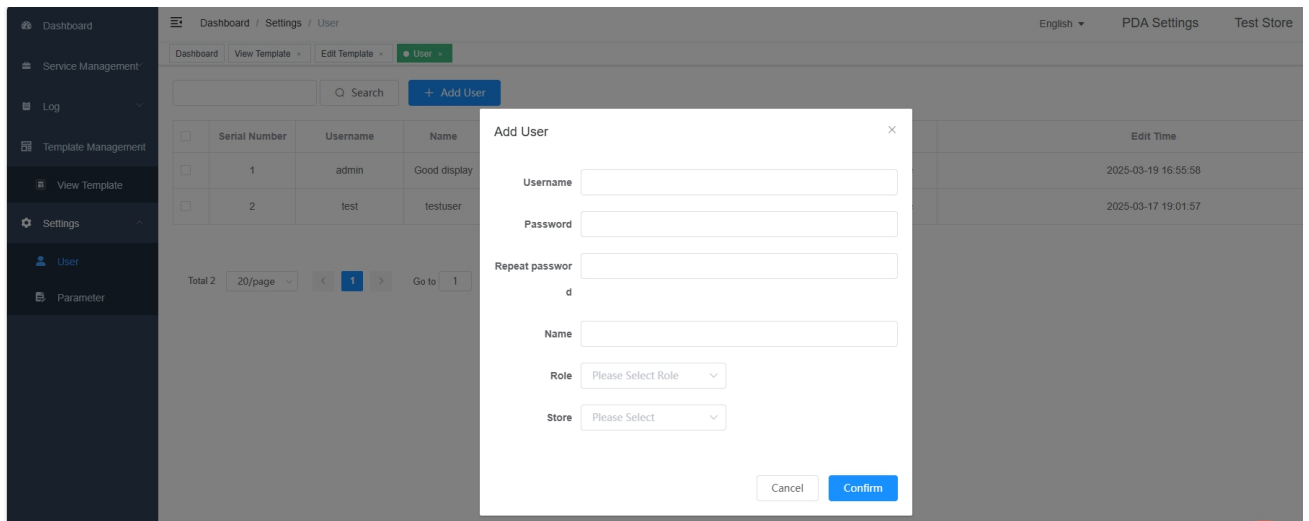

7.1.1 Add User

You can add a system user by clicking the Add button and entering the user's basic information.

7.1.2 Edit user

You can edit the information of a user by clicking the Edit button corresponding to that user.
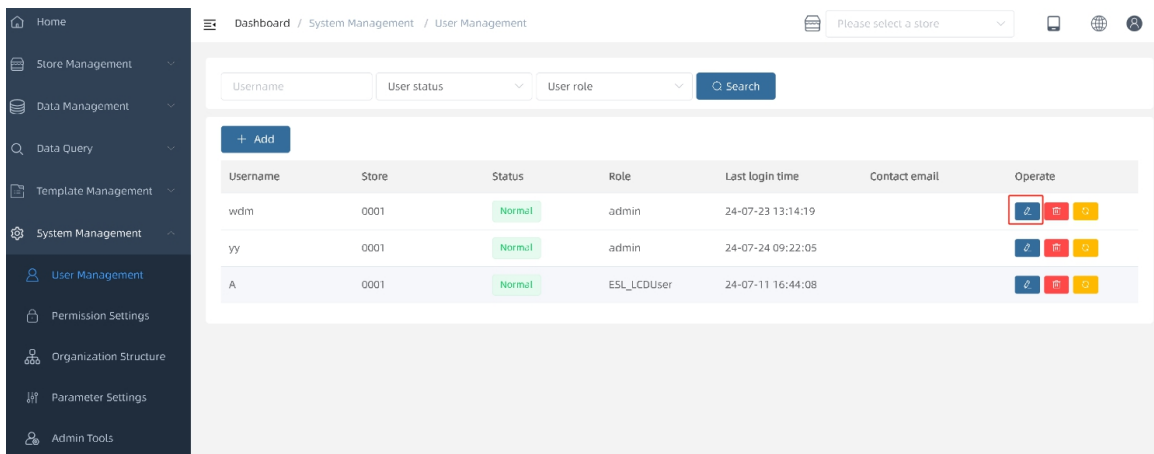
7.1.3 Delete user

You can delete the user information by clicking the Delete button corresponding to the user, and the user will not be able to log in to the system after the deletion.
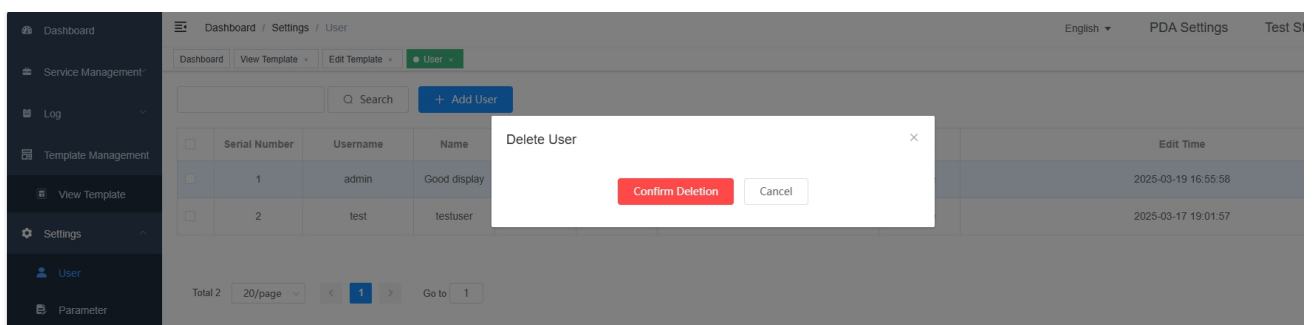
7.2 Parameter Setting

You can set the system basic configuration her, such as Interface Key, Field Mapping, Logo, Company Name and Description etc.