

# FeXGuard

## Web Portal - Administrator Manual

### Setup and Operation Guide

Version 1.54

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# 1. Introduction

This manual provides step-by-step instructions for configuring and managing the FeXGuard Web Portal backend. It covers organization setup, user account management, fire extinguisher configuration, and event handling.

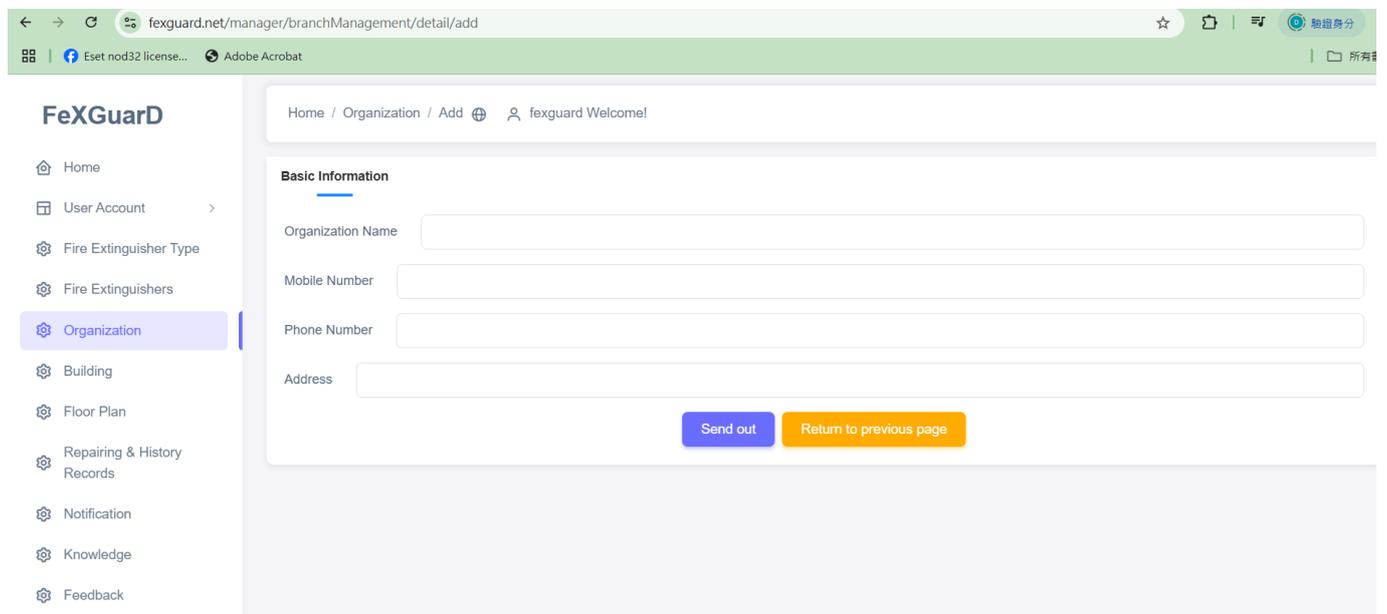
## 2. Setup Procedures

### 2.1 Set up Organizations

Configure the organization details to establish the management structure.

- Navigate to the "**Organization**" section.
- Enter the organization name, address, and contact details.

**Figure 1: Organization Setup Screen**



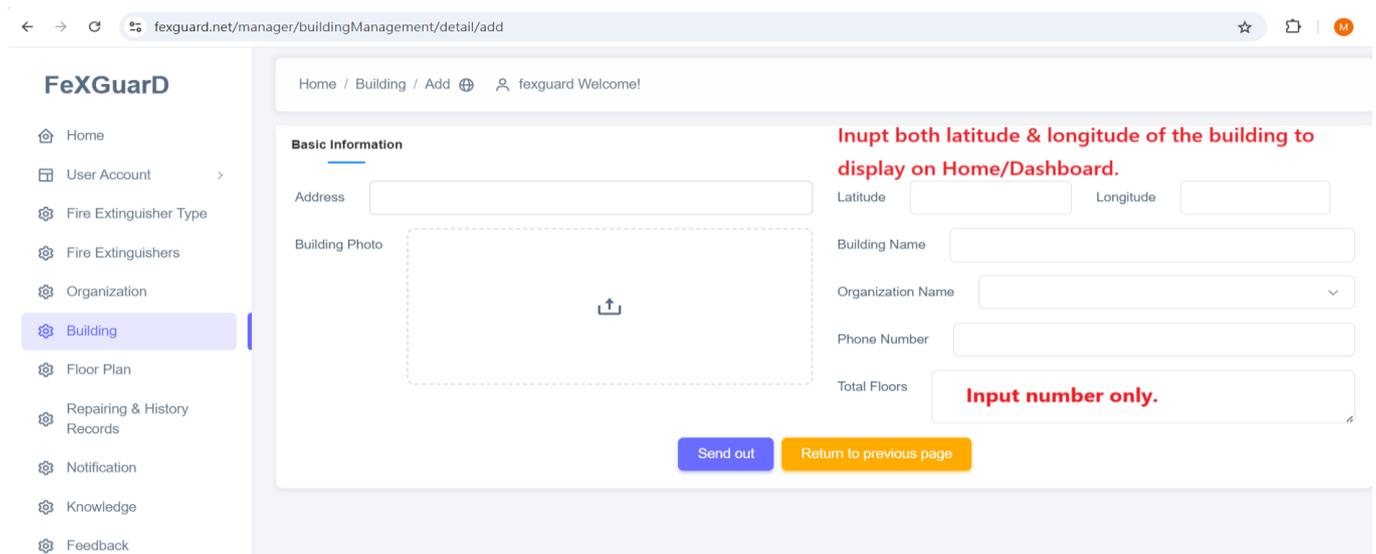
This screen allows you to input organization details.

### 2.2 Set up Buildings

Define building information to organize fire extinguisher placement.

- Go to the "**Building**" section.
- Input building name, address, and number of floors.

**Figure 2: Building Setup Screen**



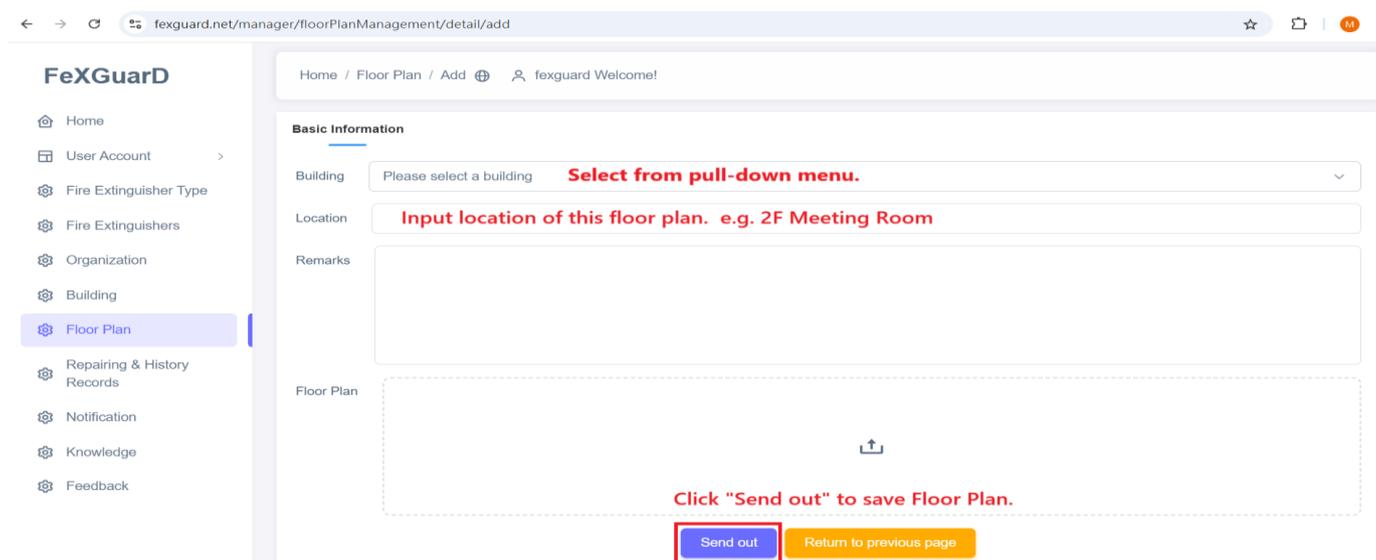
This screen is used to define building details.

## 2.3 Set up Floor Plans

Upload or create floor plans to map out areas for fire extinguisher placement.

- Access the "**Floor Plan**" section.
- Click "Floor Plan" to select a JPG file from your browser to upload. After uploading, click "**Edit**" and click "**Enlarge floor plan**" again to view all fire extinguisher locations.

**Figure 3: Floor Plan Setup Screen**



This page allows uploading floor plans and displays the number and locations of all fire extinguishers on the current floor plan. For details, refer to the next page:

### Viewing All Fire Extinguisher Locations on the Floor Plan

- Navigate to "**Floor Plan**", expand to the "**Edit**" section.
- Click "**Enlarge floor plan**" to view all fire extinguisher locations.

Figure 4: Viewing All Fire Extinguisher Locations (Edit → Enlarge floor plan)

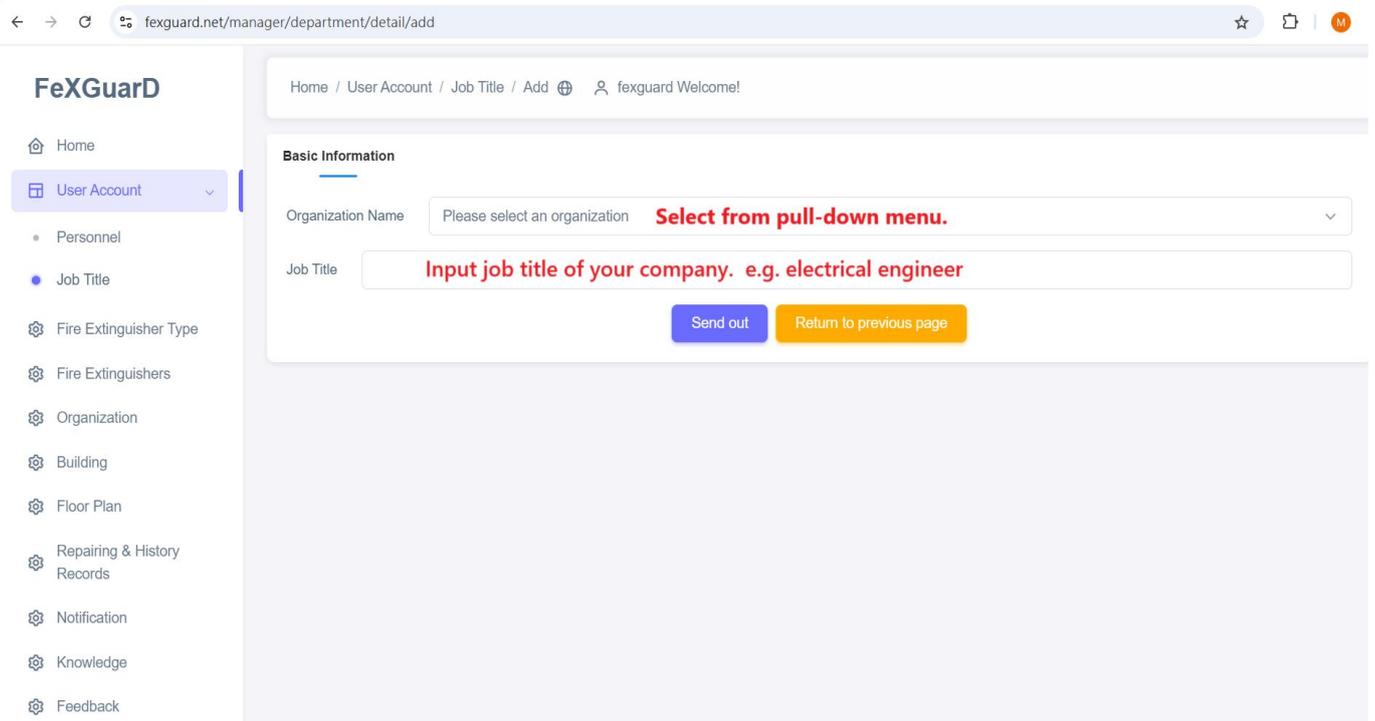


## 2.4 Set up Job Titles under User Account

Assign job titles to user sub-accounts to define roles and permissions.

- Navigate to the "**User Account**" → "**Job Title**" section.
- Add job titles such as "Manager," "Engineer," or "Management".

**Figure 5: Job Title Setup Screen**



This screen allows you to assign job titles.

## 2.5 Set up Sub-Accounts

Create sub-accounts for Visitors, Maintenance Personnel, and General Users to define permissions and access the FeXGuard App.

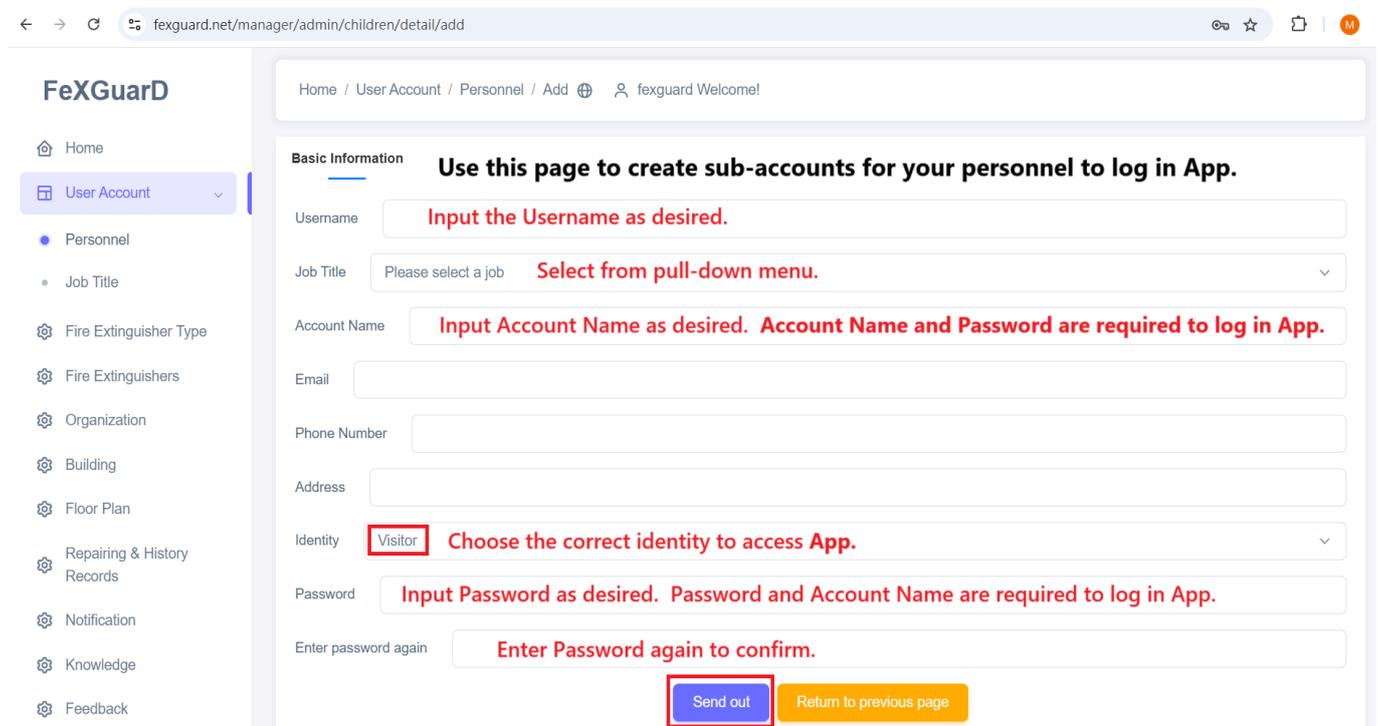
- Navigate to the "**User Account**" → "**Personnel**" section.
- Add sub-accounts with proper permission such as "Maintenance Personnel," "Visitor," or "General User".

### Account Permissions:

Account Type	App Login	Execute Repairs	View Events
Maintenance Personnel	Yes	Yes	Yes
Visitors	Yes	No	Yes
General Users	Yes	No	Yes

**Note:** Only Maintenance Personnel can execute repairs or maintenance operations in the App.

**Figure 6: Sub-Account Setup Screen**



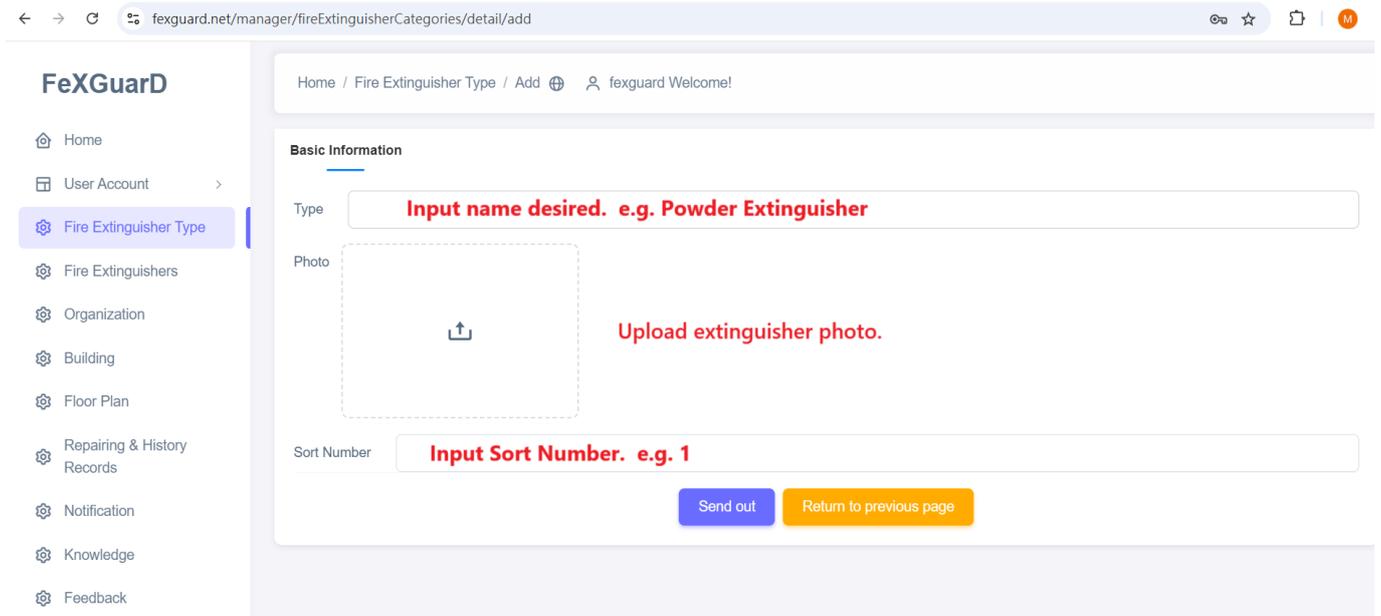
This screen is used to add or modify sub-accounts.

## 2.6 Set up Fire Extinguisher Types

Define the types of fire extinguishers used in the system.

- Access the "**Fire Extinguisher Type**" section.
- Specify categories such as CO2, Foam, or Dry Powder.

Figure 7: Fire Extinguisher Type Setup Screen



## 2.7 Set up Fire Extinguishers

Register individual fire extinguishers in the backend.

- Go to the "**Fire Extinguishers**" section.
- Enter details such as fire extinguisher ID (refer to the DevEUI sticker on the LoRa module), type, and location.
- Click "Submit" to complete setup and return to the fire extinguisher list (refer to **Figure 9**)

Figure 8: Fire Extinguisher Setup Screen

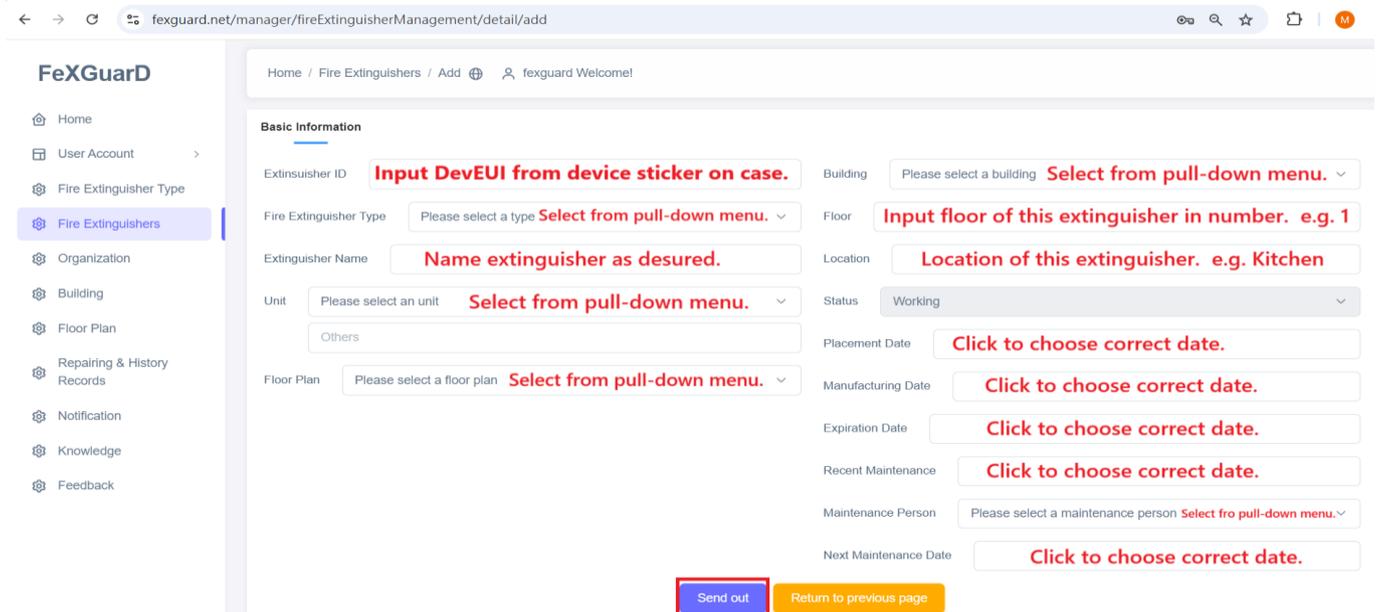
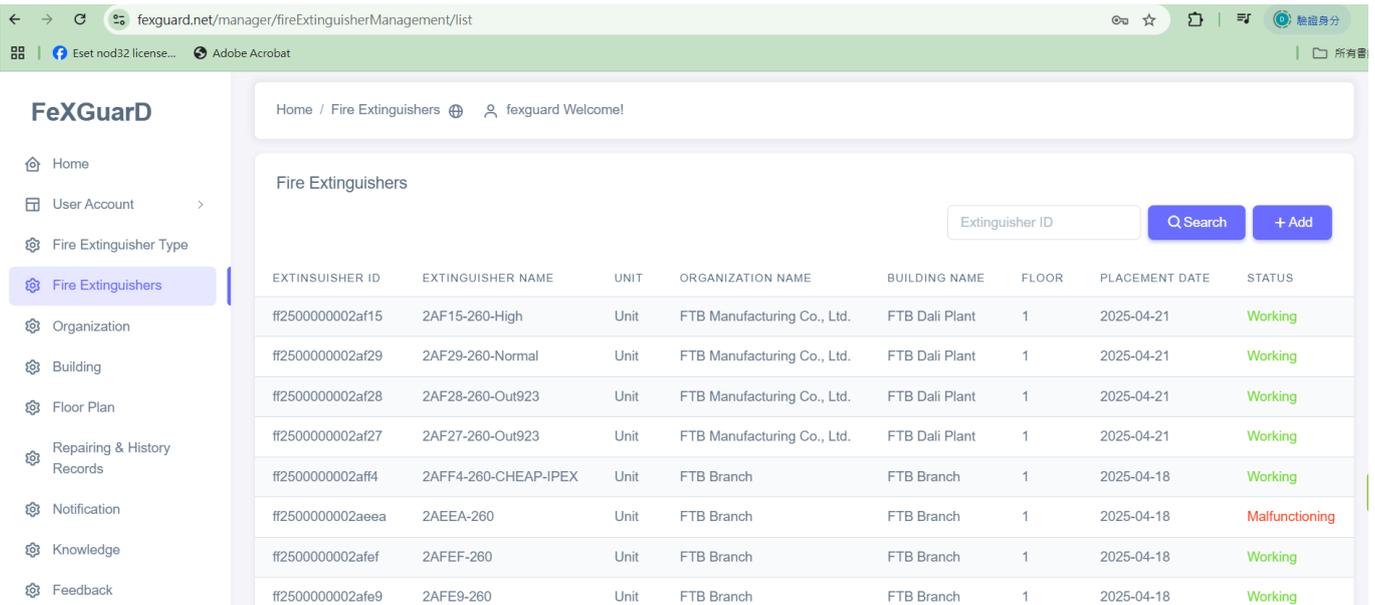


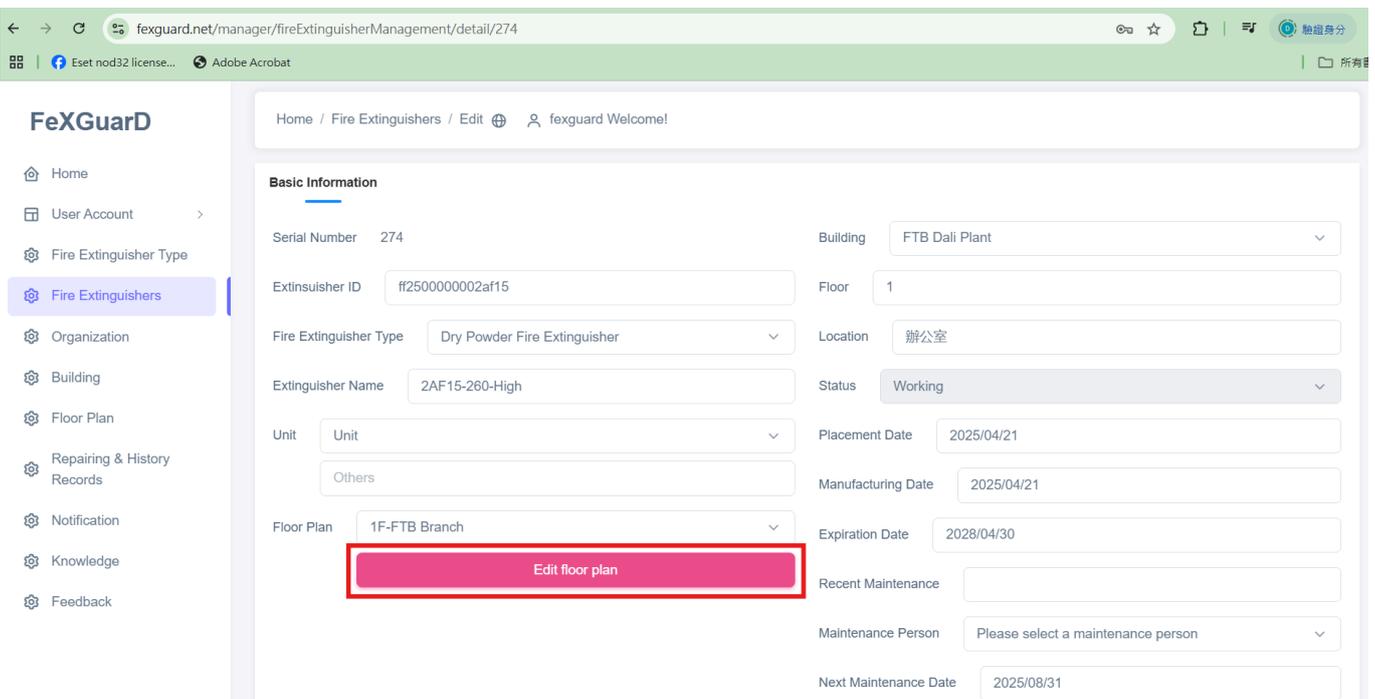
Figure 9: Fire Extinguishers (Fire Extinguisher List)



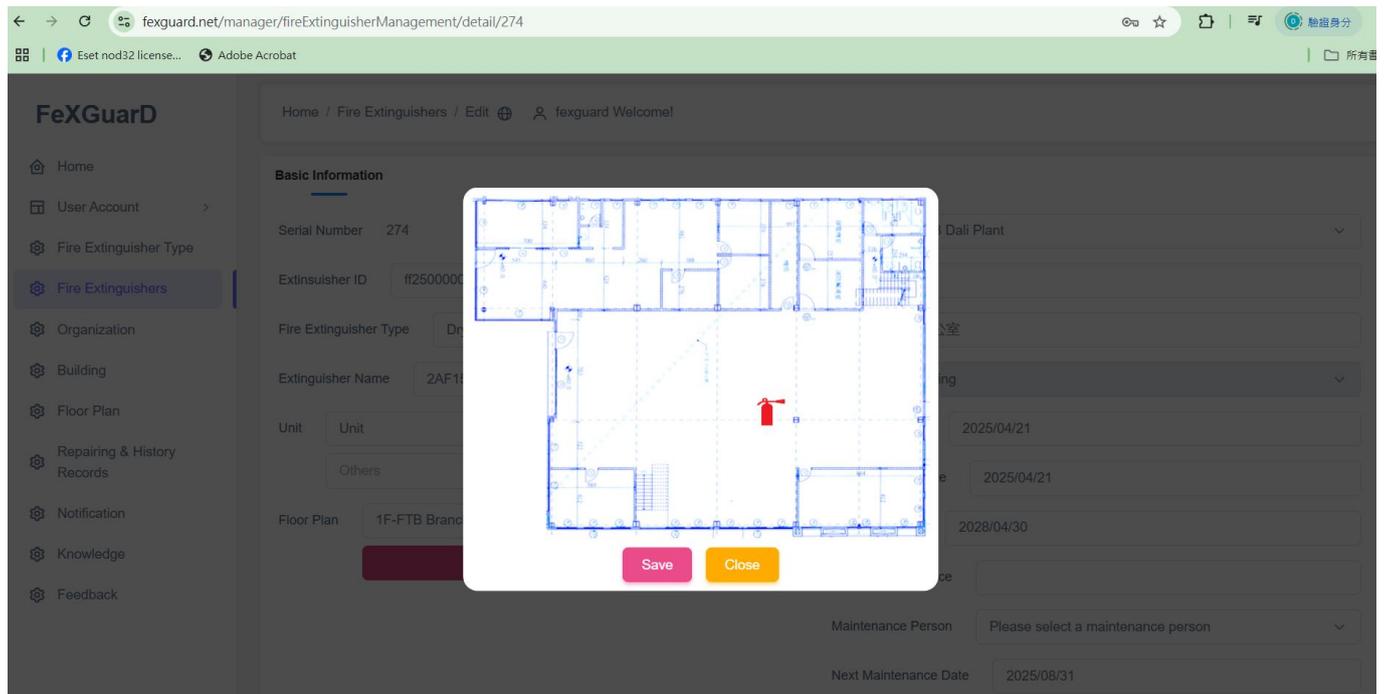
### 2.7.1 Positioning Fire Extinguishers on Floor Plans

- Navigate to the "Fire Extinguisher" → Expand → Edit → Edit floor plan (refer to Figure 10).
- Click the desired placement location with the mouse and click "Save" (refer to Figure 11).

Figure 10: Editing Floor Plan (Placing Fire Extinguisher Locations)



**Figure 11: Placing Fire Extinguisher Locations**



## 2.8 Notifications (Automatic Events)

Manage notifications for fire extinguisher events (automatic notifications).

- Events are triggered by conditions such as low pressure, high pressure, SOS, FEX removal, low battery, high temperature, maintenance date alarms, extinguisher expiration alarms, or offline alarms. The backend will display a notification screen (refer to **Figure 12**).
- Priority of Events: **RED (SOS, High/Low Pressures)** → **BLUE** → **BLACK** events. Check **Figure 13** for priority on the list.
- After the backend assigns maintenance personnel, notifications will be sent to the maintenance personnel's FeXGuard application. Simultaneously, the application will display real-time notifications when events are triggered, allowing maintenance personnel to proactively respond on-site.

Figure 12: Event Notification Screen

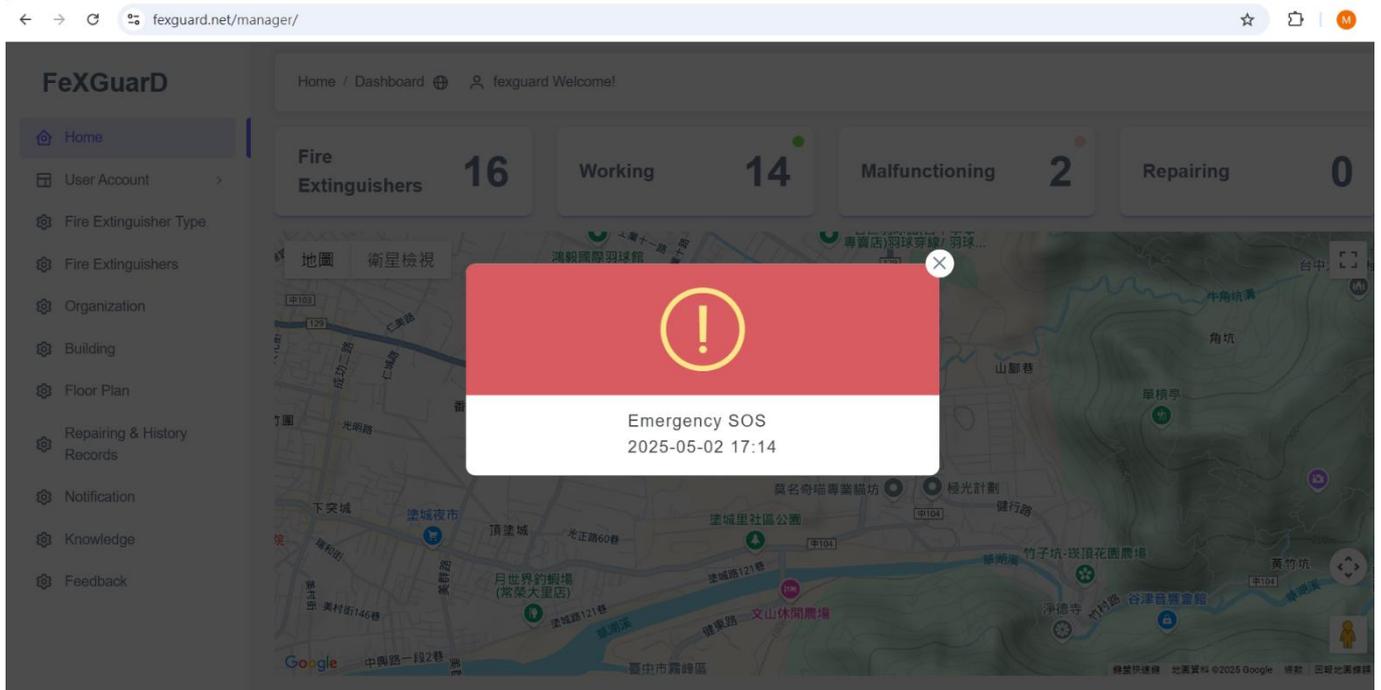
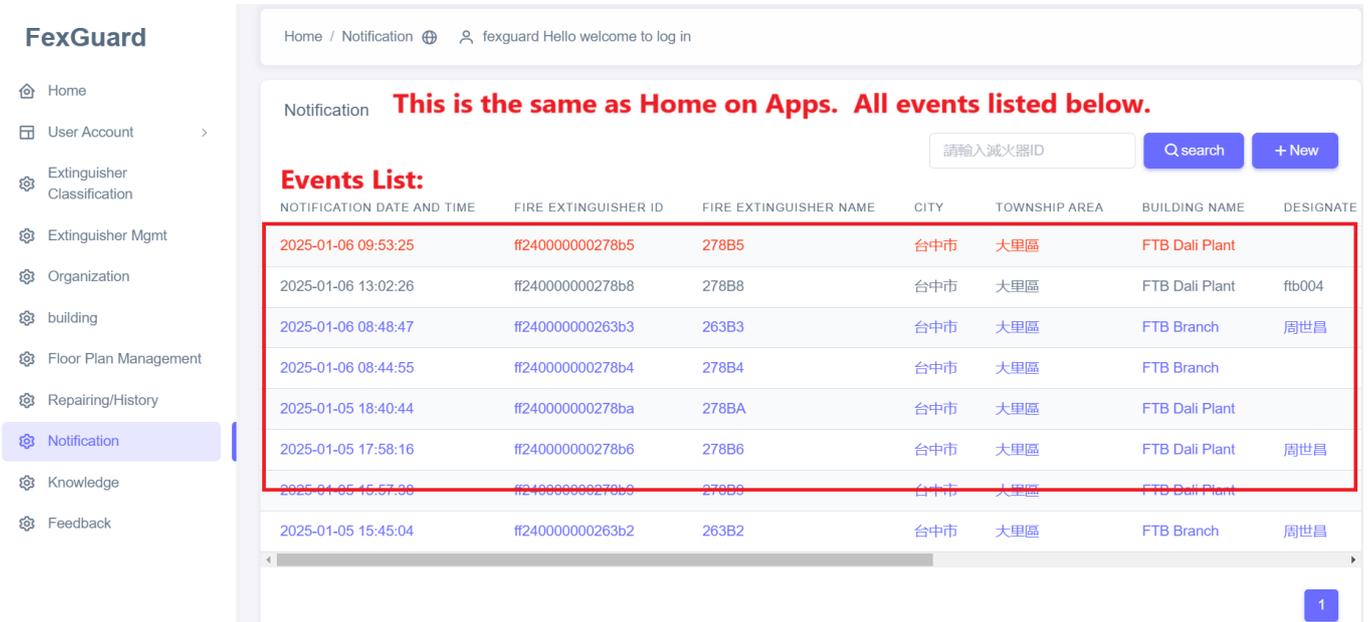


Figure 13: Notification (Events List) – the same as Home on App

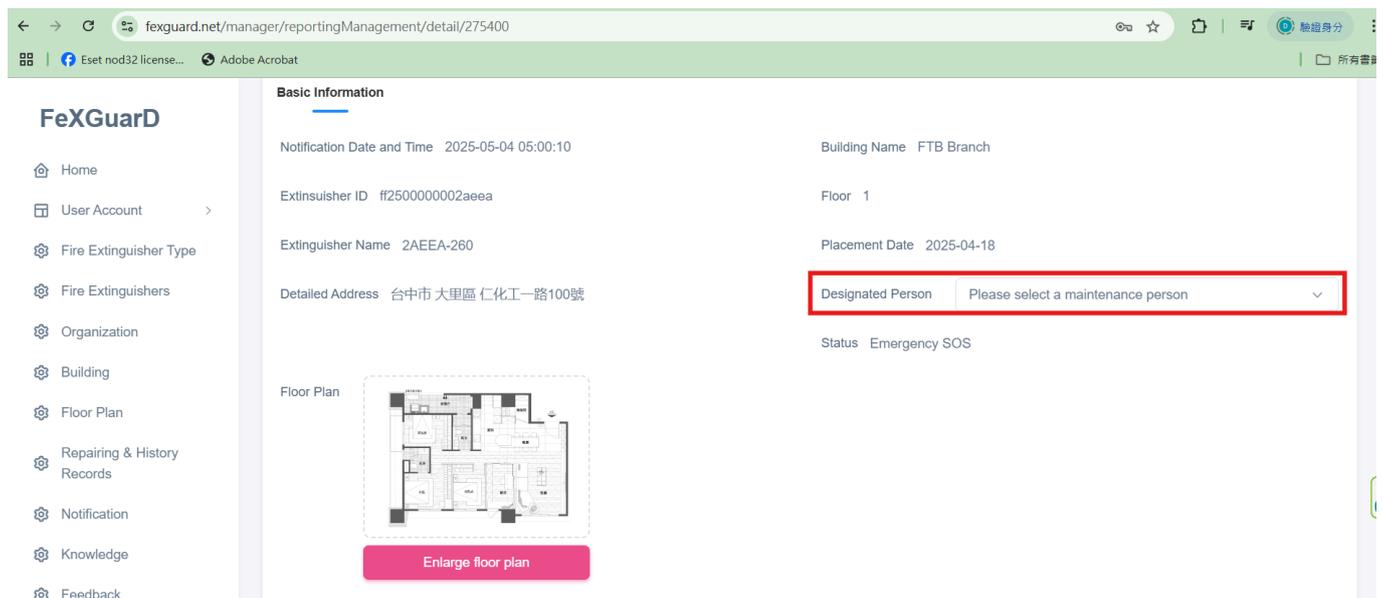


This screen displays the event notification list, allowing backend personnel to assign personnel for on-site handling, as detailed on **2.8.1 Editing Automatic Notifications (Assigning Personnel)** below:

## 2.8.1 Editing Automatic Notifications (Assigning Personnel)

- Click on "**NOTIFICATION**" → "**Expand**" → "**Edit**".
- Click "Designated Person" and submit. The notification will be sent to the maintenance personnel's FeXGuard application.

Figure 14: Assigning Personnel



## 2.8.2 Adding Manual Notifications (Manual Events)

- "**Notification**" → click "**Add**" (refer to **Figure 15**).
- Select "Fire Extinguisher" and "Send out". The manual event notification will be sent to the maintenance personnel's FeXGuard application. The notification list will display "**Malfunctioning**" in the status column (refer to **Figure 16**).

Figure 15: Notification (Add)

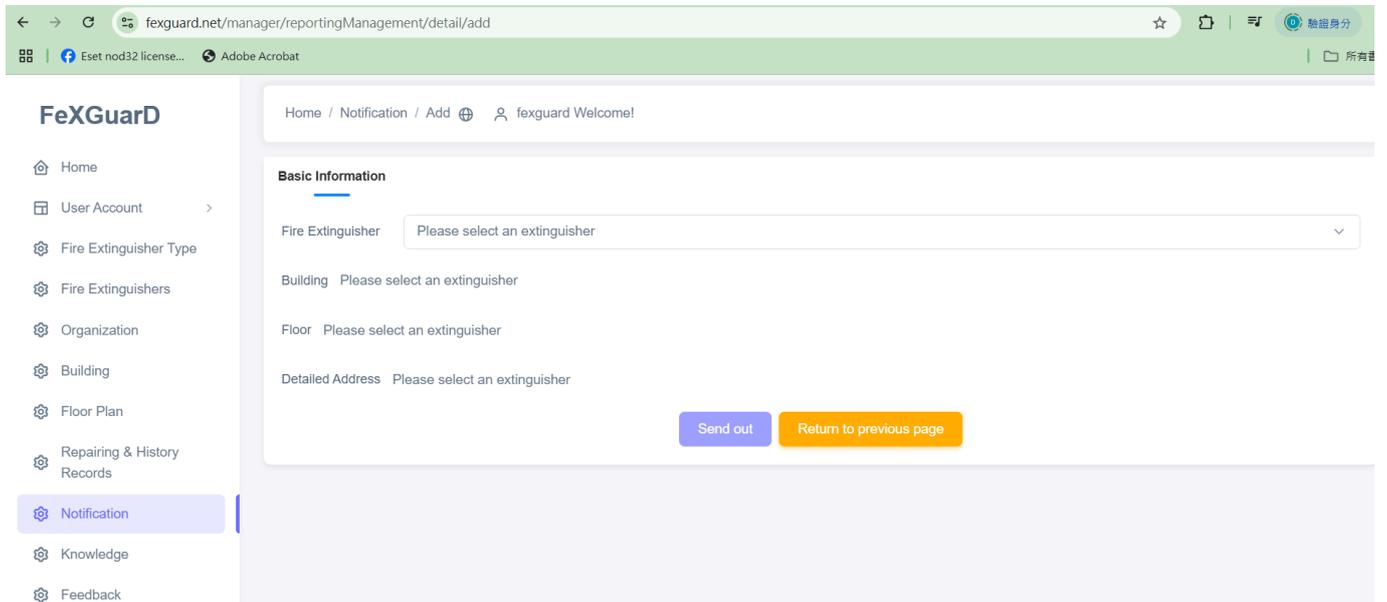
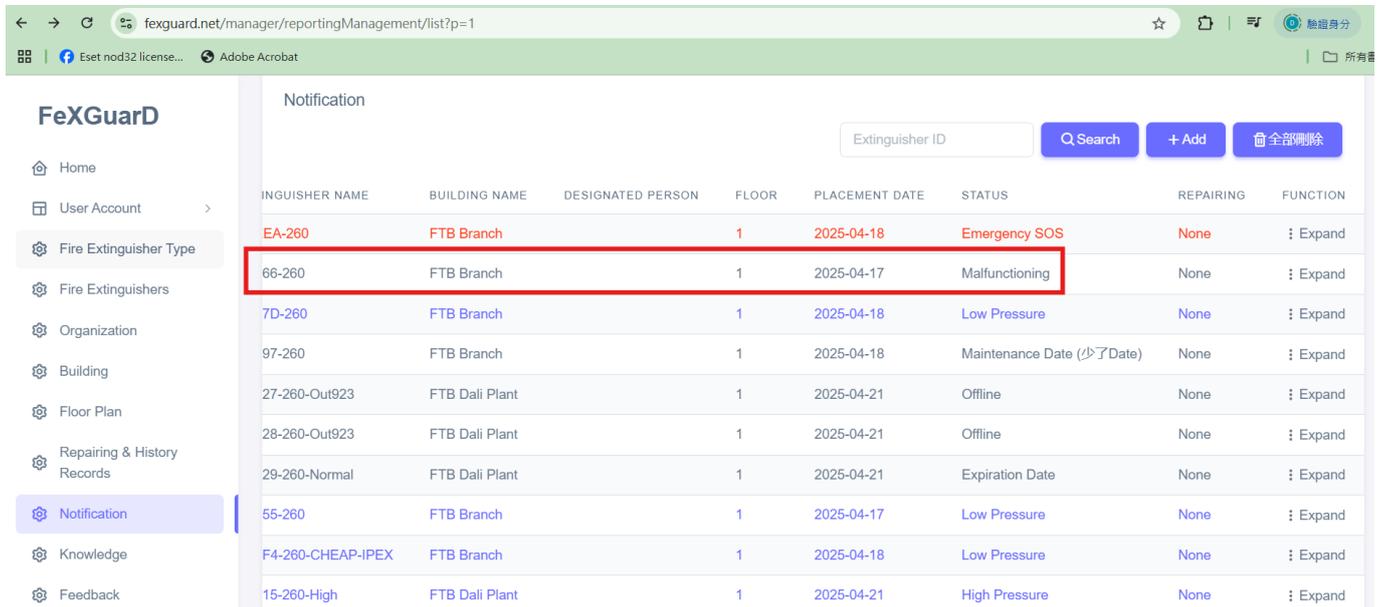


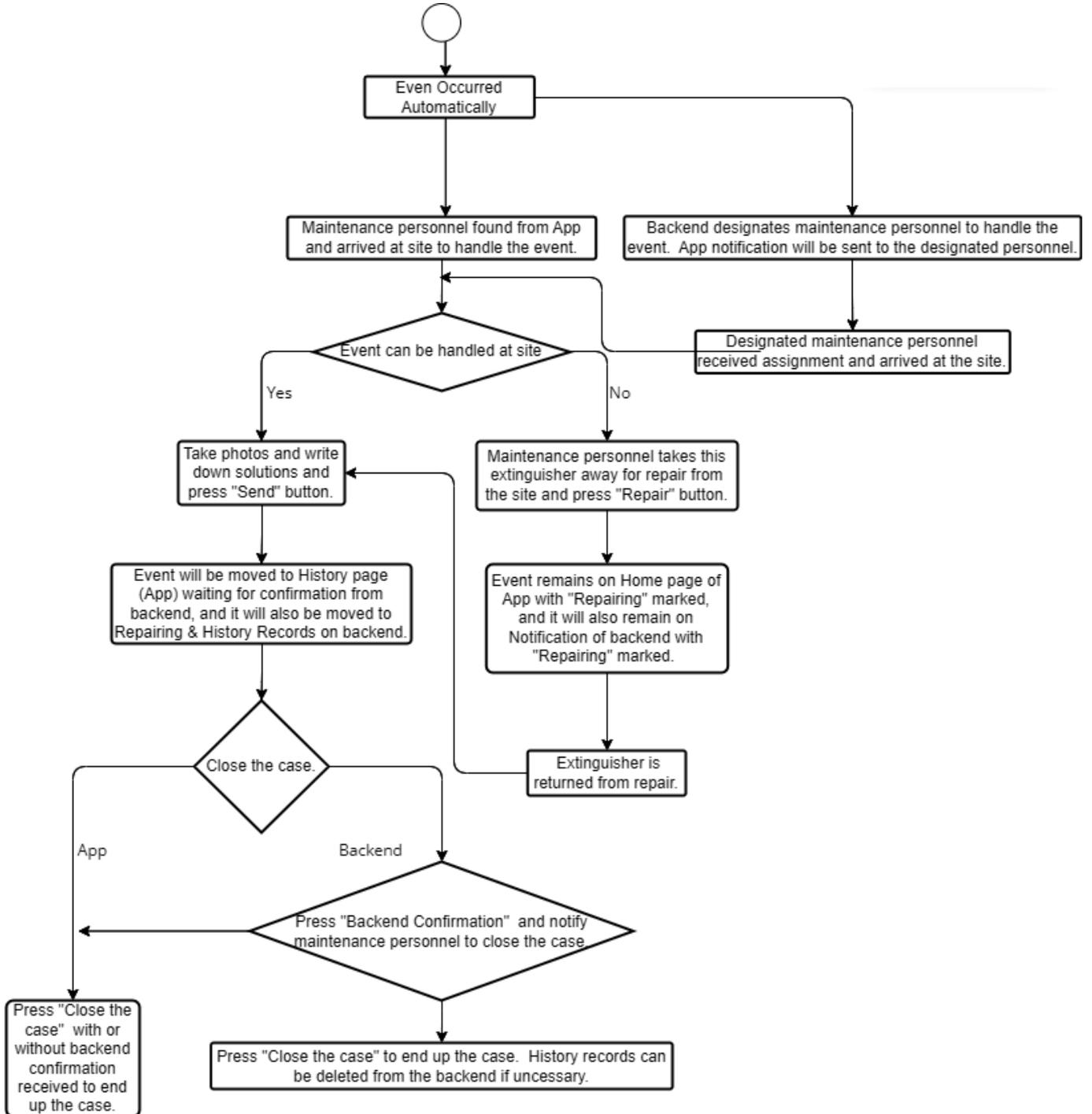
Figure 16: Manual Event Status Column (Malfunctioning)



Manually added events will display "**Malfunctioning**" in the status column of the notification list. To assign maintenance personnel for repairs, follow the process outlined in **2.8 Notifications (Automatic Events)**.

### 2.8.3 Event Flowchart

Figures 17: Event Flow Chart



## 2.9 Repairing & History Records

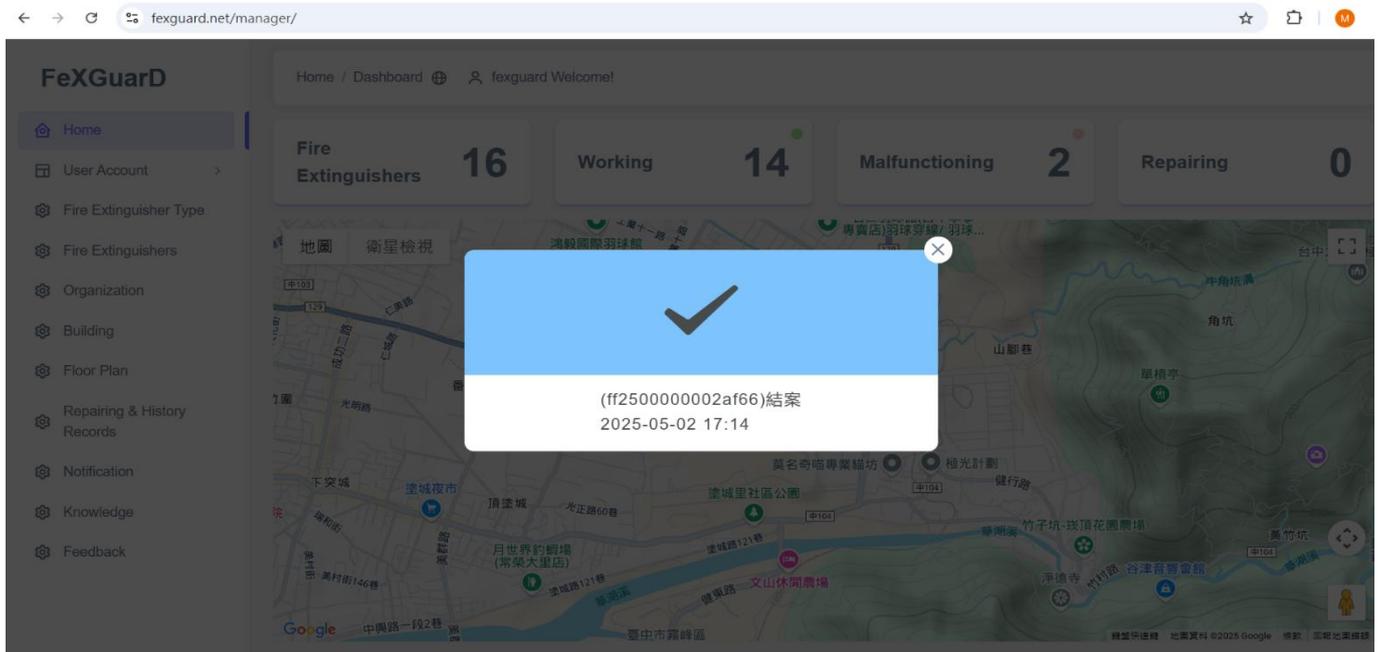
Track repairing activities and maintain event history records.

- Navigate to the "Repairing & History Records" to view the repairing list. Entries without highlighted text and marked as "Working" are historical records (closed cases). Entries with highlighted text and marked as "Malfunctioning" are pending backend confirmation and remain open. Backend personnel can directly close cases or confirm them, allowing maintenance personnel to close cases via the FeXGuard application. Refer to **Figure 18: Repairing List (Closed and Open Cases)** and **Figure 21: Backend Confirmation and Case Closure**.
- Maintenance personnel can close cases through the FeXGuard application. Refer to **Figure 19: Case Closure Notification Sent to Backend After Maintenance Personnel Closes Case via FeXGuard App**.

Figure 18: Repairing List (Closed and Open Cases)

REPAIR DATE AND TIME	EXTINSUISHER ID	EXTINGUISHER NAME	UNIT	BUILDING NAME	FLOOR	CONFIRMATION	CURRENT STATUS	REF
2025-05-01 12:35:37	ff250000002af7d	2AF7D-260	Unit	FTB Branch	1	Unconfirmed	Malfunctioning	No
2025-05-01 12:35:17	ff250000002aeea	2AEAA-260	Unit	FTB Branch	1	Unconfirmed	Malfunctioning	No
2025-05-02 17:14:47	ff250000002af66	2AF66-260	Unit	FTB Branch	1	Confirmed	Working	Nor
2025-05-01 17:40:54	ff250000002af27	2AF27-260-Out923	Unit	FTB Dali Plant	1	Confirmed	Working	Nor
2025-05-01 12:39:07	ff250000002af4	2AFF4-260-CHEAP-IPEX	Unit	FTB Branch	1	Confirmed	Working	Nor
2025-05-01 12:35:47	ff250000002af55	2AF55-260	Unit	FTB Branch	1	Confirmed	Working	Nor
2025-05-01 11:33:56	ff250000002af17	2AF17-260	Unit	FTB Branch	1	Confirmed	Working	Nor

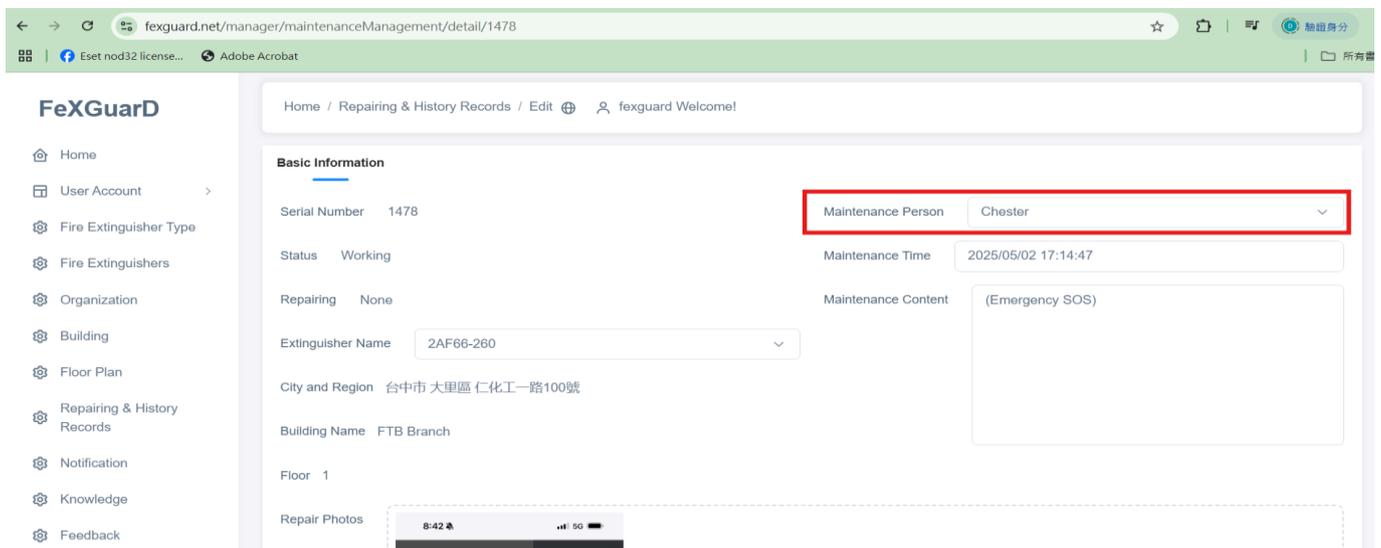
**Figure 19: Case Closure Notification Sent to Backend After Maintenance Personnel Closes Case via FeXGuard App**



### 2.9.1 Changing Maintenance Personnel

- Navigate to the "Repairing & History Records" → "Expand" → "Edit" and choose the correct maintenance person, and "Send out" (refer to **Figure 20: Changing Maintenance Person**). The maintenance person's app will also receive a notification of the change to ensure the correct person is recorded for historical accuracy.

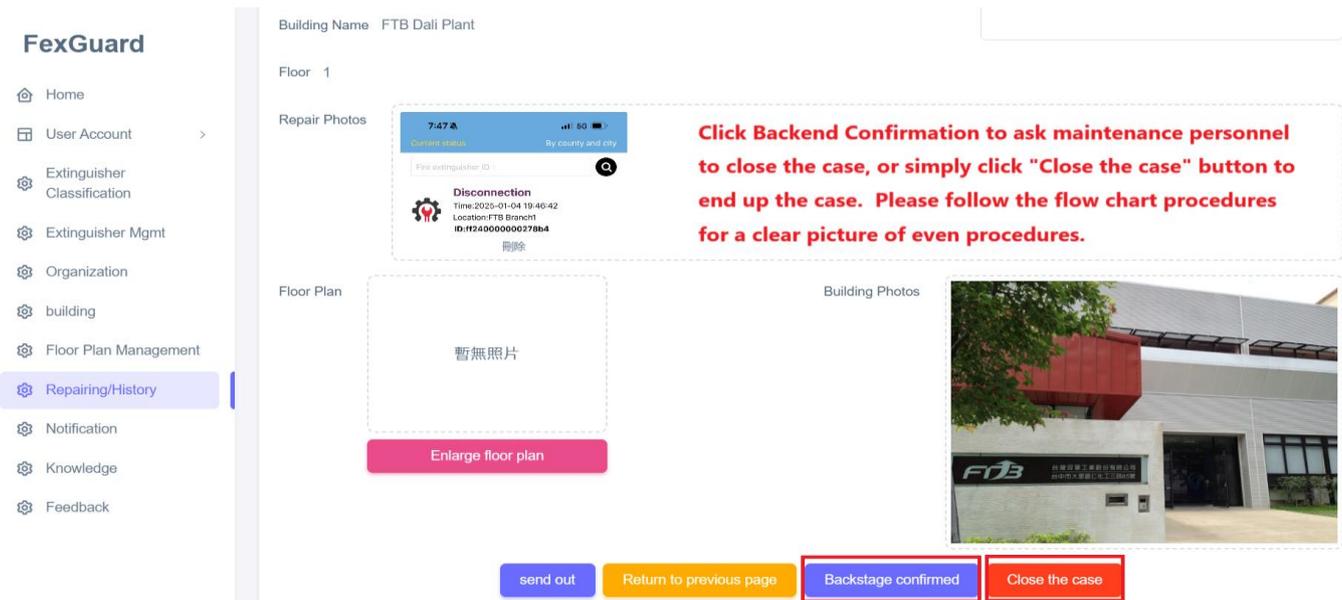
**Figure 20: Changing Maintenance Person**



### 2.9.2 Backend Confirmation and Case Closure

- For open cases, backend personnel can directly click "**Close the case**" or select "**Backend Confirmation**", allowing maintenance personnel to close the case via the FeXGuard application (refer to **Figure 21: Backend Confirmation and Case Closure**).

**Figure 21: Backend Confirmation and Case Closure**

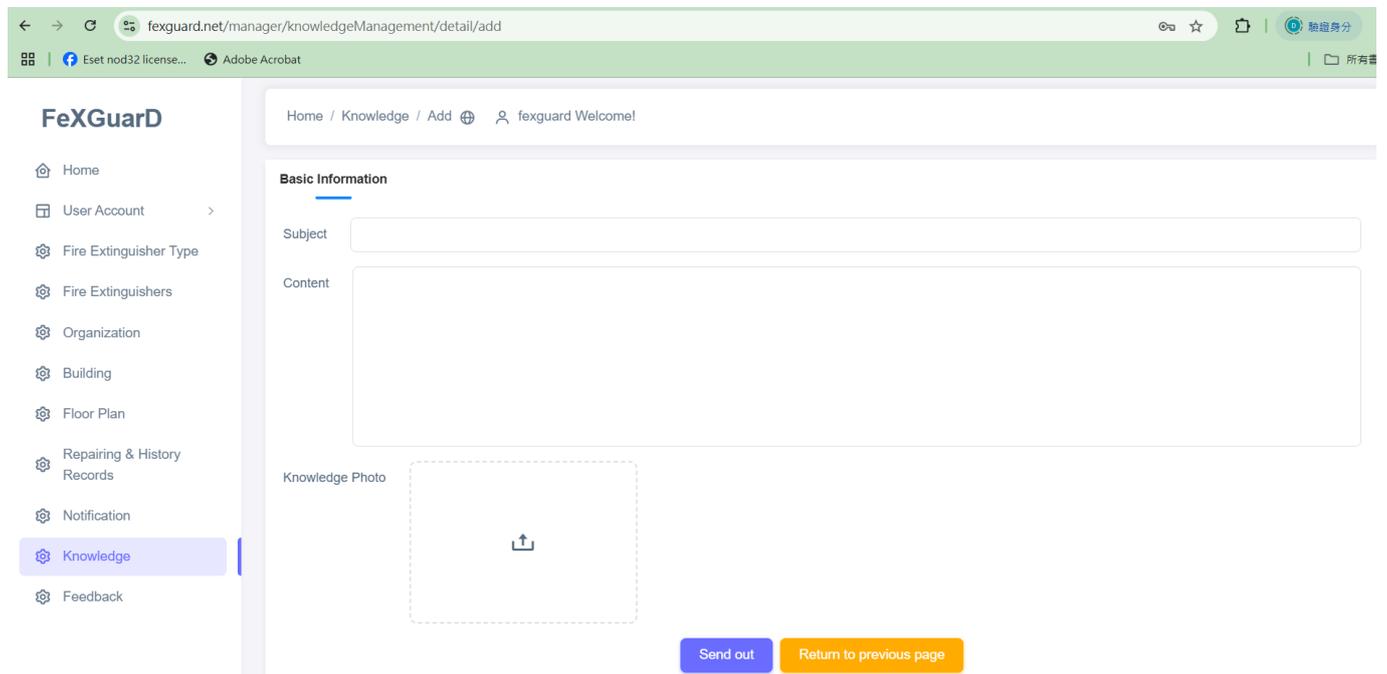


### 2.10 Knowledge

Manage fire extinguisher-related knowledge applications, allowing the addition, modification, or deletion of outdated knowledge and information. It can also serve as an internal bulletin board, ensuring all App users receive the latest notifications while preventing data leaks.

- Edit or add content in the "Knowledge" section.
- Use the "Delete" function to remove unnecessary outdated knowledge data.

**Figure 22: Knowledge Title Adding**



## 2.11 Feedback

A platform for App users to communicate with the backend. Users can directly submit feedback to the backend, which can add, modify, or delete outdated feedback messages, mark them as processed, or assign personnel to handle them. It can also serve as an internal message forwarding platform, ensuring all App users receive the latest notifications while preventing data leaks.

- "Feedback" → "Expand" → "Edit" to reply to current feedback submitted by App users.
- Use "Delete" to remove unnecessary feedback or message records.
- **Figure 23: A feedback notification sent from the FeXGuard App users to the backend.**
- **Figure 24: Edit (Reply) feedback sent from the FeXGuard App users.**

Figure 23: FeXGuard App User Feedback Notification Sent to Backend

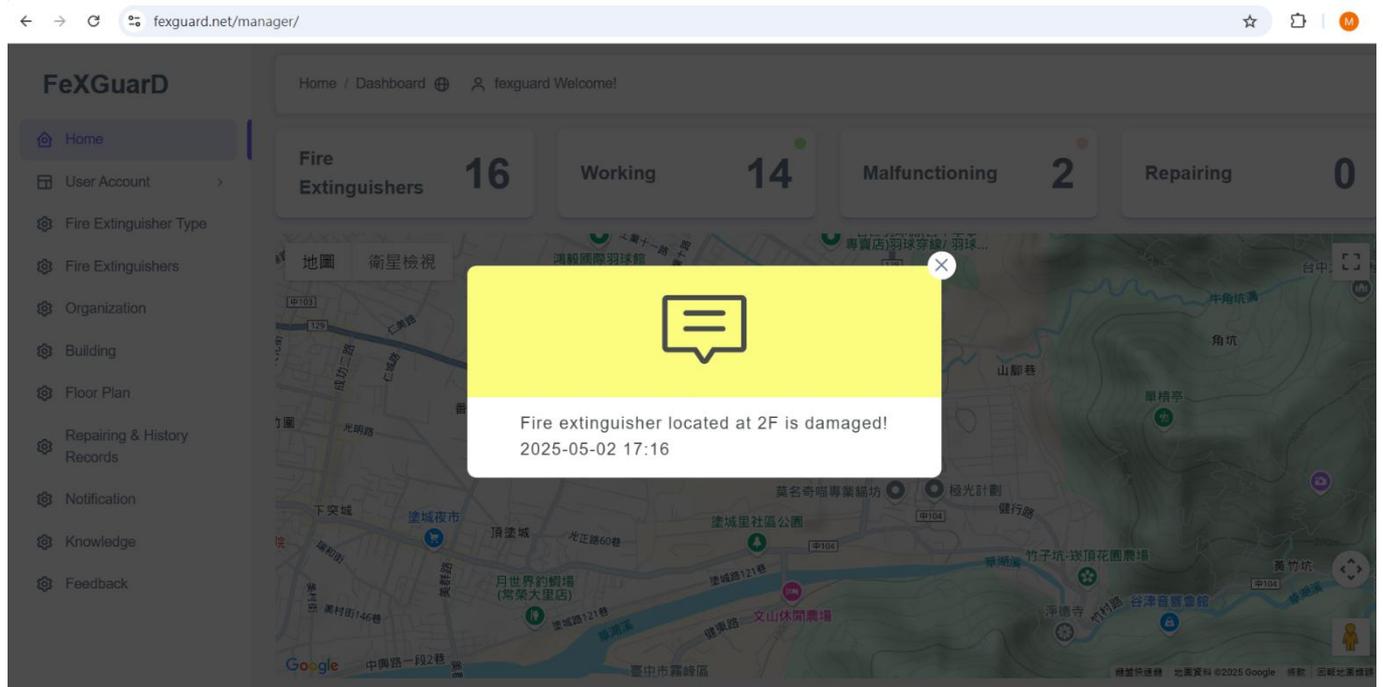
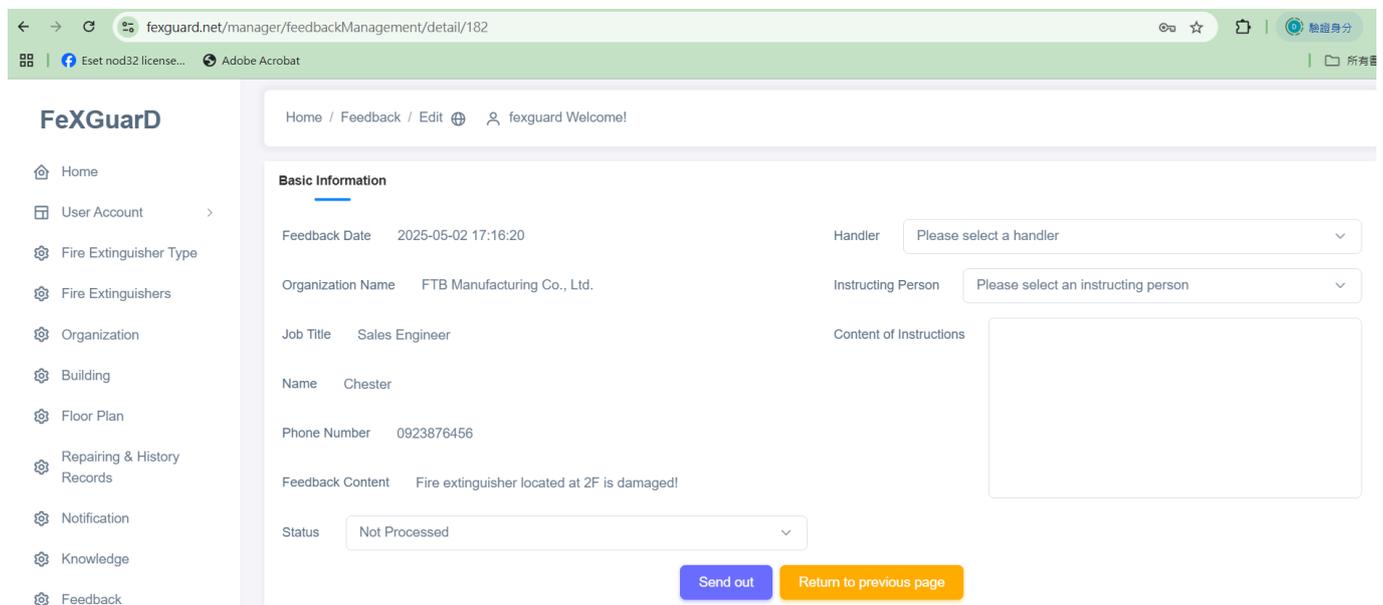


Figure 24: Edit & Reply to feedback from App users (Marking as Processed or not Rrocessed)



## 2.12 Troubleshooting

Address issues such as devices offline or connection anomalies.

- If a device remains offline for over 48 hours, the server will send alarms to the FeXGuard application and backend. At this time, maintenance personnel must be sent to the site to inspect the module, or the module must be sent out for repair immediately.
- Use the "Delete" to remove unnecessary notification records.

Figure 25: Notification – Connection Anomaly Notification

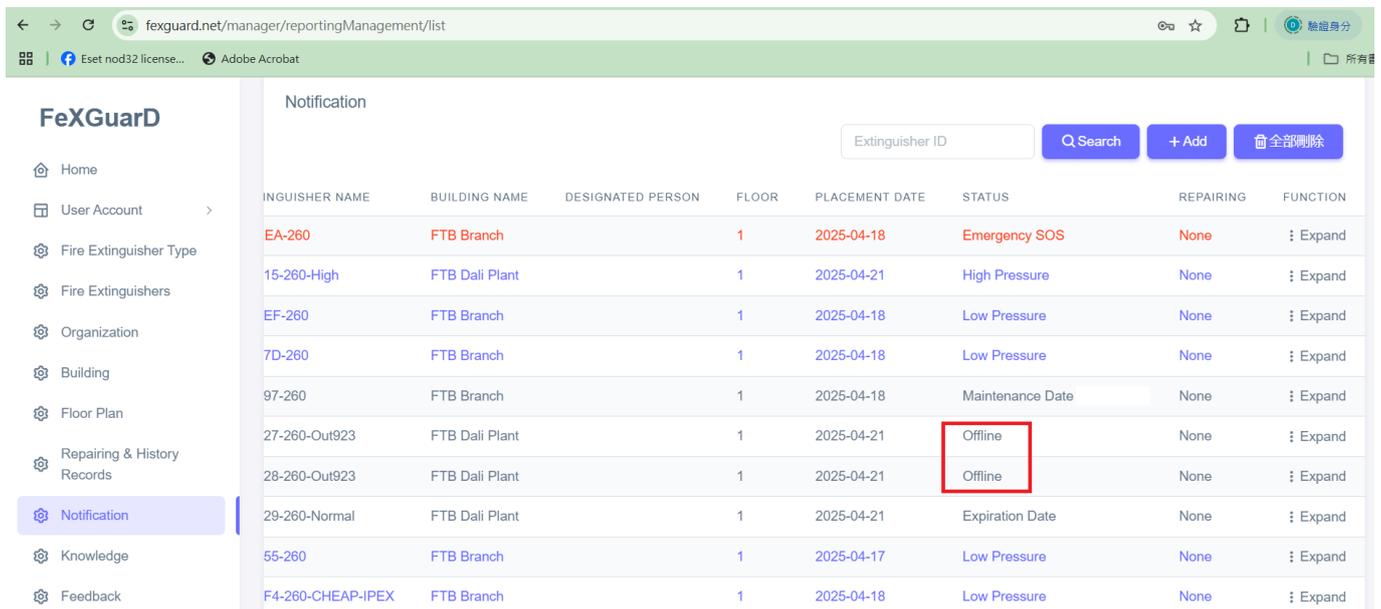


Figure 26: Notification – Deleting Unnecessary Notifications

