

FeXGuard

Web Portal - Administrator Manual

Setup and Operation Guide

Version 1.1020

October 2025



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1. Introduction

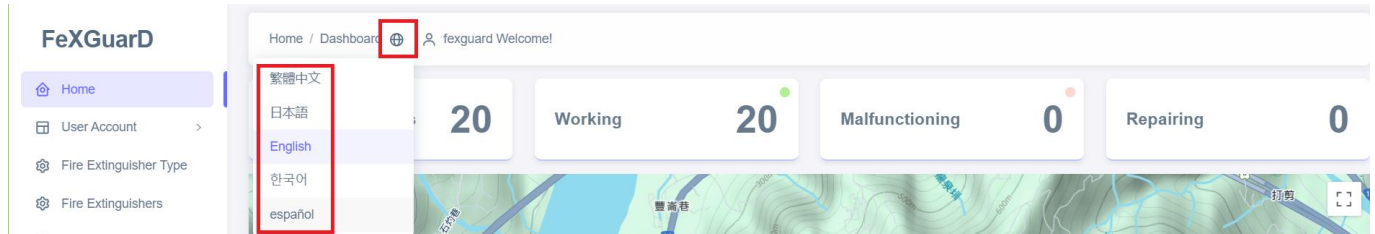
This manual provides step-by-step instructions for configuring and managing the FeXGuard Web Portal backend. It covers organization setup, user account management, fire extinguisher configuration, and event handling.

2. Setup Procedures

2.0 Language Change

Click on the “Global” icon to change the desired language (Chinese, Japanese, Korean, English and español).

Figure 0: Language Change Screen

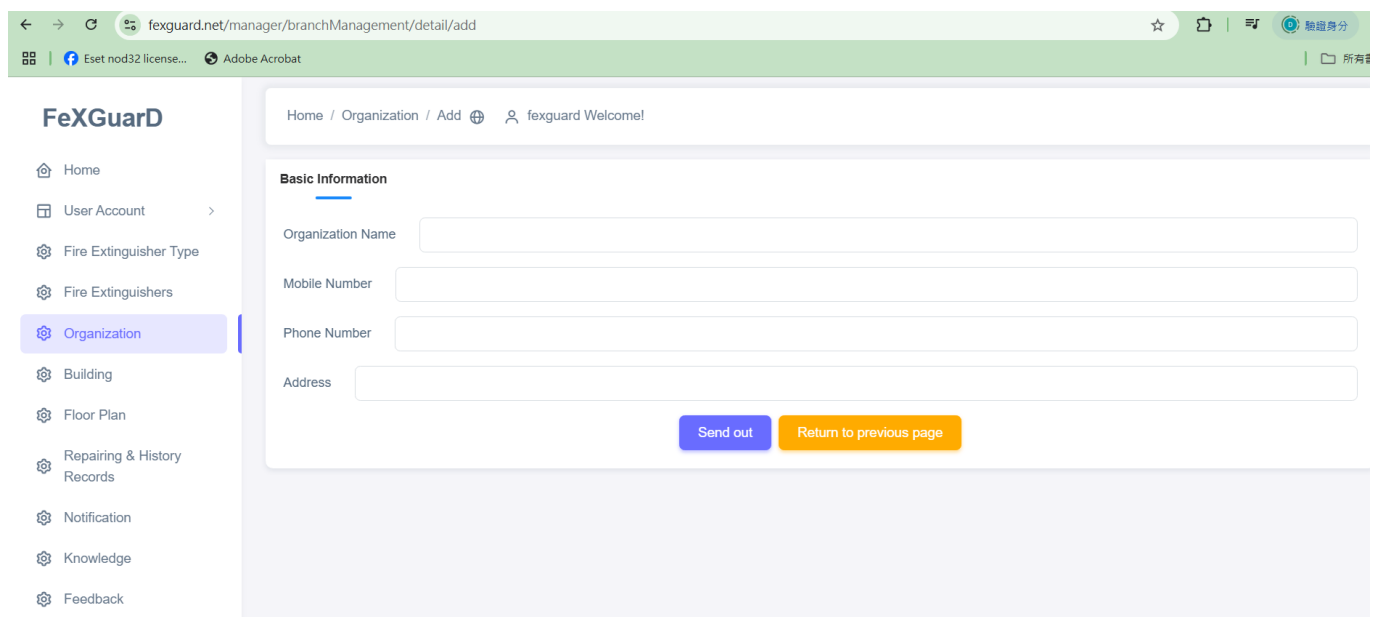


2.1 Set up Organizations

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

Home / Building / Add fexguard Welcome!

FeXGuard

Home

User Account >

Fire Extinguisher Type

Fire Extinguishers

Organization

Building

Floor Plan

Repairing & History Records

Notification

Knowledge

Feedback

Basic Information

Address

Building Photo

Latitude Longitude

Building Name

Organization Name

Phone Number

Total Floors **Input number only.**

Input both latitude & longitude of the building to display on Home/Dashboard.

Send out **Return to previous page**

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

Home / Floor Plan / Add fexguard Welcome!

FeXGuard

Home

User Account >

Fire Extinguisher Type

Fire Extinguishers

Organization

Building

Floor Plan

Repairing & History Records

Notification

Knowledge

Feedback

Basic Information

Building **Select from pull-down menu.**

Location **Input location of this floor plan. e.g. 2F Meeting Room**

Remarks

Floor Plan

Click "Send out" to save Floor Plan.

Send out **Return to previous page**

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

FeXGuard

Home

User Account

Personnel

Job Title

Fire Extinguisher Type

Fire Extinguishers

Organization

Building

Floor Plan

Repairing & History Records

Notification

Knowledge

Feedback

Home / User Account / Job Title / Add

fxguard Welcome!

Basic Information

Organization Name

Please select an organization

Select from pull-down menu.

Job Title

Input job title of your company. e.g. electrical engineer

Send out

Return to previous page

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.

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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

The screenshot shows the 'Fire Extinguisher Type' setup screen. The left sidebar contains the FeXGuard logo and a navigation menu with items: Home, User Account, Fire Extinguisher Type (highlighted), Fire Extinguishers, Organization, Building, Floor Plan, Repairing & History Records, Notification, Knowledge, and Feedback. The main content area has a breadcrumb trail: Home / Fire Extinguisher Type / Add. Below this is a 'Basic Information' section with the following fields: 'Type' with a red prompt 'Input name desired. e.g. Powder Extinguisher', 'Photo' with a dashed box and an upload icon and a red prompt 'Upload extinguisher photo.', and 'Sort Number' with a red prompt 'Input Sort Number. e.g. 1'. At the bottom right are two buttons: 'Send out' (blue) and 'Return to previous page' (yellow).

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. **Note: Extinguisher ID needs to be EXACTLY the same as DevEUI.**
- Click "Sent out" to complete setup and return to the fire extinguisher list (refer to **Figure 9**)

Figure 8: Fire Extinguisher Setup Screen

The screenshot shows the 'Fire Extinguisher Setup' screen. The left sidebar is identical to Figure 7, with 'Fire Extinguishers' highlighted. The main content area has a breadcrumb trail: Home / Fire Extinguishers / Add. Below this is a 'Basic Information' section with the following fields: 'Extinguisher ID' with a red prompt 'Input DevEUI from device sticker on case.', 'Building' with a dropdown menu and a red prompt 'Please select a building Select from pull-down menu.', 'Fire Extinguisher Type' with a dropdown menu and a red prompt 'Please select a type Select from pull-down menu.', 'Floor' with a red prompt 'Input floor of this extinguisher in number. e.g. 1', 'Extinguisher Name' with a red prompt 'Name extinguisher as desired.', 'Location' with a red prompt 'Location of this extinguisher. e.g. Kitchen', 'Unit' with a dropdown menu and a red prompt 'Please select an unit Select from pull-down menu.', 'Status' with a dropdown menu and a value of 'Working', 'Placement Date' with a red prompt 'Click to choose correct date.', 'Manufacturing Date' with a red prompt 'Click to choose correct date.', 'Expiration Date' with a red prompt 'Click to choose correct date.', 'Recent Maintenance' with a red prompt 'Click to choose correct date.', 'Maintenance Person' with a dropdown menu and a red prompt 'Please select a maintenance person Select fro pull-down menu.', and 'Next Maintenance Date' with a red prompt 'Click to choose correct date.'. At the bottom are two buttons: 'Send out' (blue) and 'Return to previous page' (yellow).

Figure 9: Fire Extinguishers (Fire Extinguisher List)

FeXGuard

Home

User Account

Fire Extinguisher Type

Fire Extinguishers

Organization

Building

Floor Plan

Repairing & History Records

Notification

Knowledge

Feedback

Home / Fire Extinguishers

Please enter the fire extinguisher ID, building name, or organization name

Q Search

EXTINGUISHER ID	EXTINGUISHER NAME	ACCOUNT NAME	ACCOUNT NAME	ORGANIZATION NAME	BUILDING NAME	FLOOR	RECENT MAINTENANCE DATE
ff2500000002af0a	2AF0A-AU915_1-ADR	fexguard	fexguard	雙葉太平廠	雙葉太平廠	1	2025-09-25
ff2500000002afd1	2AFD1-AU915_1-DR1UP5	fexguard	fexguard	雙葉太平廠	雙葉太平廠	1	2025-09-25
ff2500000002afb5	2AFB5-US915_1-DR1UP6	fexguard	fexguard	雙葉高雄辦事處	雙葉高雄辦事處	1	2025-09-18
ff2500000002afc6	2AFC6-EU868-ADR	fexguard	fexguard	雙葉高雄辦事處	雙葉高雄辦事處	1	2025-09-16
ff2500000002af92	2AF92-US915_1-ADR	fexguard	fexguard	雙葉台北辦事處	雙葉台北辦事處	2	2025-09-15
ff2500000002af03	2AF03-EU868-DR1UP1	fexguard	fexguard	雙葉台北辦事處	雙葉台北辦事處	2	2025-09-15
ff2500000002af9b	2AF9B-250	fexguard	fexguard	雙葉大里廠	雙葉大里廠	1	2025-09-09
ff2500000002af5e	2AF5E-260	fexguard	fexguard	雙葉太平廠	雙葉太平廠	1	
ff2500000002aff2	2AFF2-260	fexguard	fexguard	雙葉太平廠	雙葉太平廠	1	2025-05-05
ff2500000002af15	2AF15-260-High	fexguard	fexguard	雙葉大里廠	雙葉大里廠	1	

Extinguisher ID, Building Name, and Organization Name can be searched in the search dialog box above. **This NEW function shows:**

- 1) Whether a specific Extinguisher exists.
- 2) List all Extinguishers under a specific Building.
- 3) List all Extinguishers under a specific Organization.
- 4) New Fire Extinguisher UI: **Account Name, User Name, Recent Maintenance Date, Next Maintenance Date** added.

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)

FeXGuard

Home

User Account

Fire Extinguisher Type

Fire Extinguishers

Organization

Building

Floor Plan

Repairing & History Records

Notification

Knowledge

Feedback

Home / Fire Extinguishers / Edit

Basic Information

Serial Number274

BuildingFTB Dali Plant

Extinguisher IDff2500000002af15

Floor1

Fire Extinguisher TypeDry Powder Fire Extinguisher

Location辦公室

Extinguisher Name2AF15-260-High

StatusWorking

UnitUnit

Placement Date2025/04/21

Others

Manufacturing Date2025/04/21

Floor Plan1F-FTB Branch

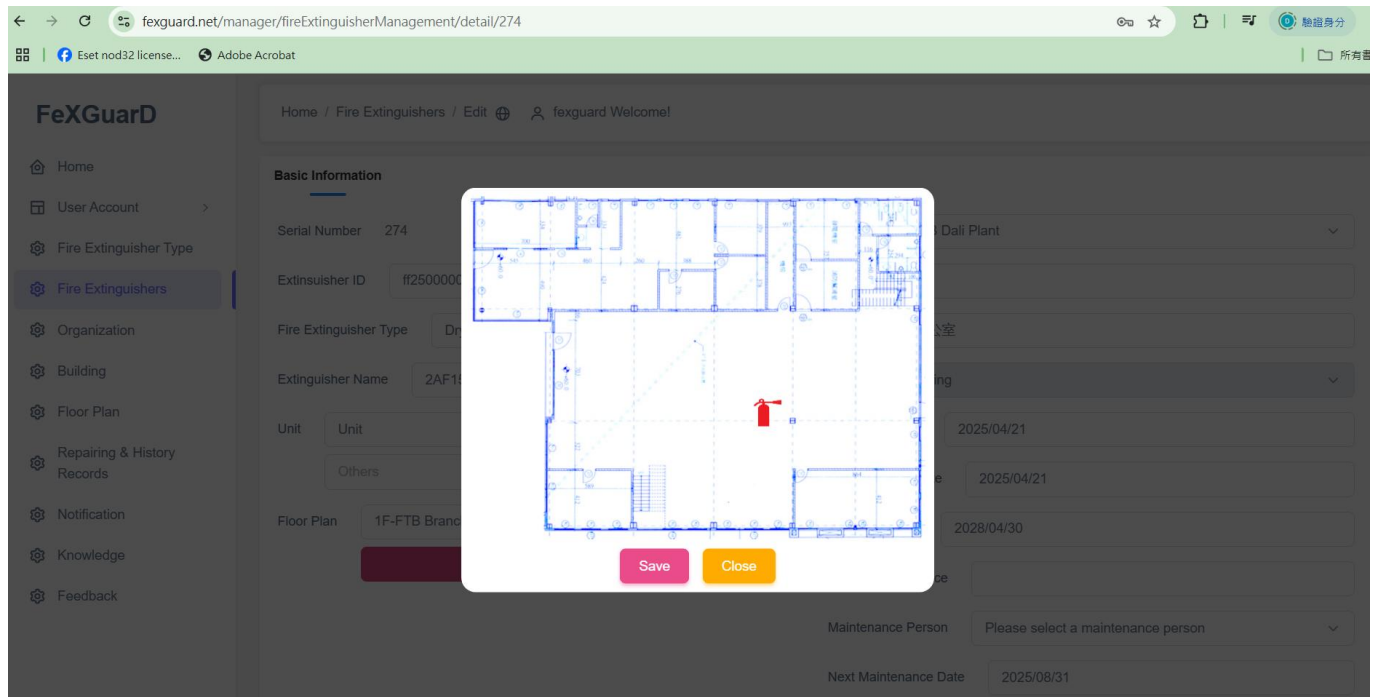
Expiration Date2028/04/30

Recent Maintenance

Maintenance PersonPlease select a maintenance person

Next Maintenance Date2025/08/31

Edit floor plan

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

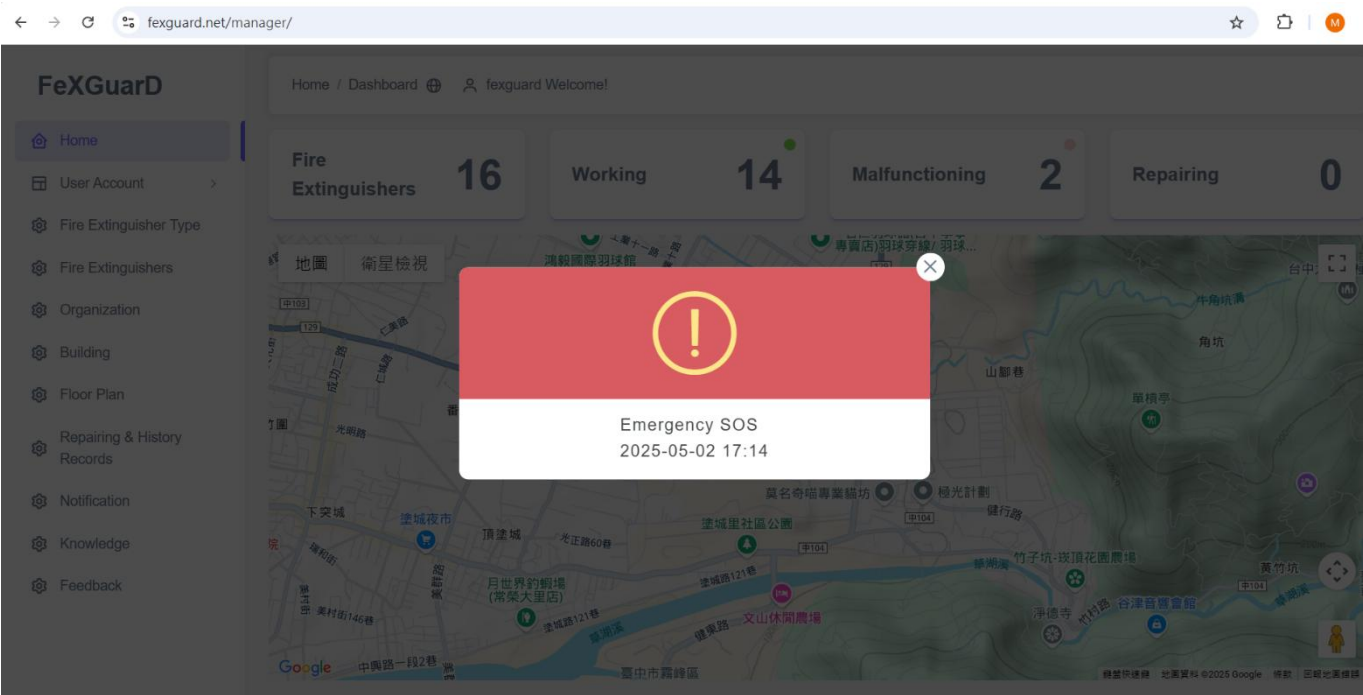
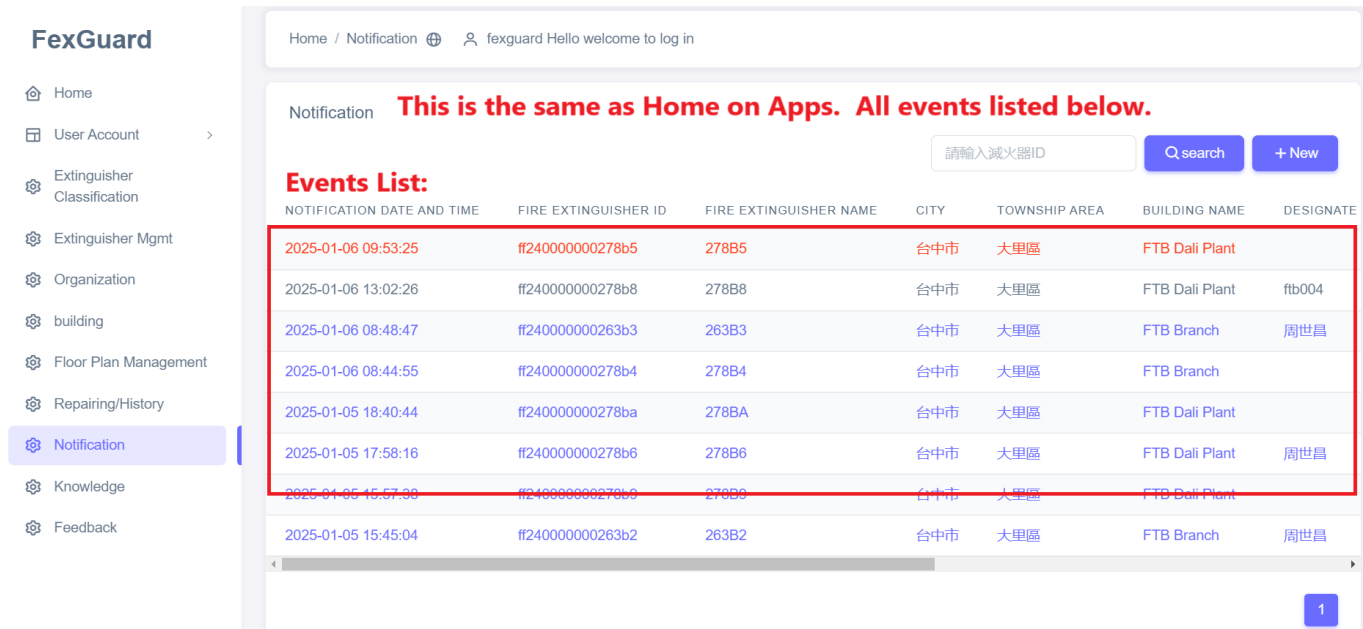


Figure 13: Notification (Events List) – the same as Home on App



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

The screenshot shows the FeXGuard web application interface. On the left is a sidebar with navigation links: Home, User Account, Fire Extinguisher Type, Fire Extinguishers, Organization, Building, Floor Plan, Repairing & History Records, Notification, Knowledge, and Feedback. The main content area is titled 'Basic Information' and displays details for a notification with ID 'ff2500000002aeea'. The details include: Notification Date and Time (2025-05-04 05:00:10), Building Name (FTB Branch), Floor (1), Placement Date (2025-04-18), Extinguisher Name (2AEEA-260), and Detailed Address (台中市 大里區 仁化工一路100號). The 'Designated Person' field is highlighted with a red box and contains the text 'Please select a maintenance person' with a dropdown arrow. Below this, the 'Status' is listed as 'Emergency SOS'. A floor plan image is shown with an 'Enlarge floor plan' button below it.

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 **ALL sub-accounts** at the same time upon "Sent out" clicked the first time. The notification list will display "**Malfunctioning**" in the status column (refer to **Figure 16**).
- To send the notification to a specific maintenance personnel's FeXGuard App for the second and following notifications, click on manual "**NOTIFICATION**" → "**Expand**" → "**Edit**". Click "Designated Person" and "Send out" again. The second and following notifications will be sent to the specific maintenance personnel's FeXGuard App.

Figure 15: Notification (Add)

Home / Notification / Add

Basic Information

Fire Extinguisher Please select an extinguisher

Building Please select an extinguisher

Floor Please select an extinguisher

Detailed Address Please select an extinguisher

Send out Return to previous page

Figure 16: Manual Event Status Column (Malfunctioning)

Notification

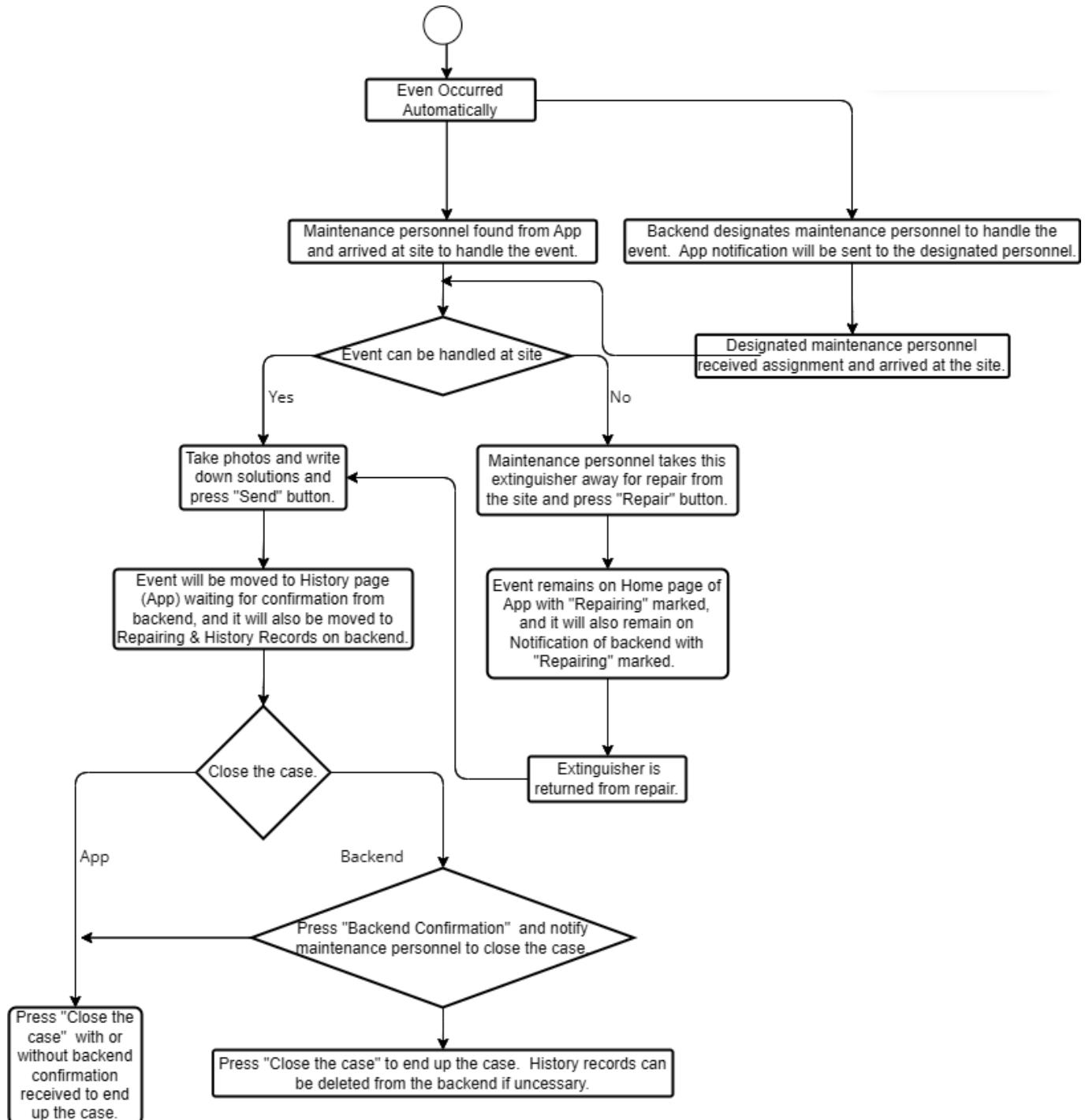
Extinguisher ID Q Search + Add 全部删除

EXTINGUISHER NAME	BUILDING NAME	DESIGNATED PERSON	FLOOR	PLACEMENT DATE	STATUS	REPAIRING	FUNCTION
EA-260	FTB Branch		1	2025-04-18	Emergency SOS	None	: Expand
66-260	FTB Branch		1	2025-04-17	Malfunctioning	None	: Expand
7D-260	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
97-260	FTB Branch		1	2025-04-18	Maintenance Date (少了Date)	None	: Expand
27-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
28-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
29-260-Normal	FTB Dali Plant		1	2025-04-21	Expiration Date	None	: Expand
55-260	FTB Branch		1	2025-04-17	Low Pressure	None	: Expand
F4-260-CHEAP-IPEX	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
15-260-High	FTB Dali Plant		1	2025-04-21	High Pressure	None	: Expand

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

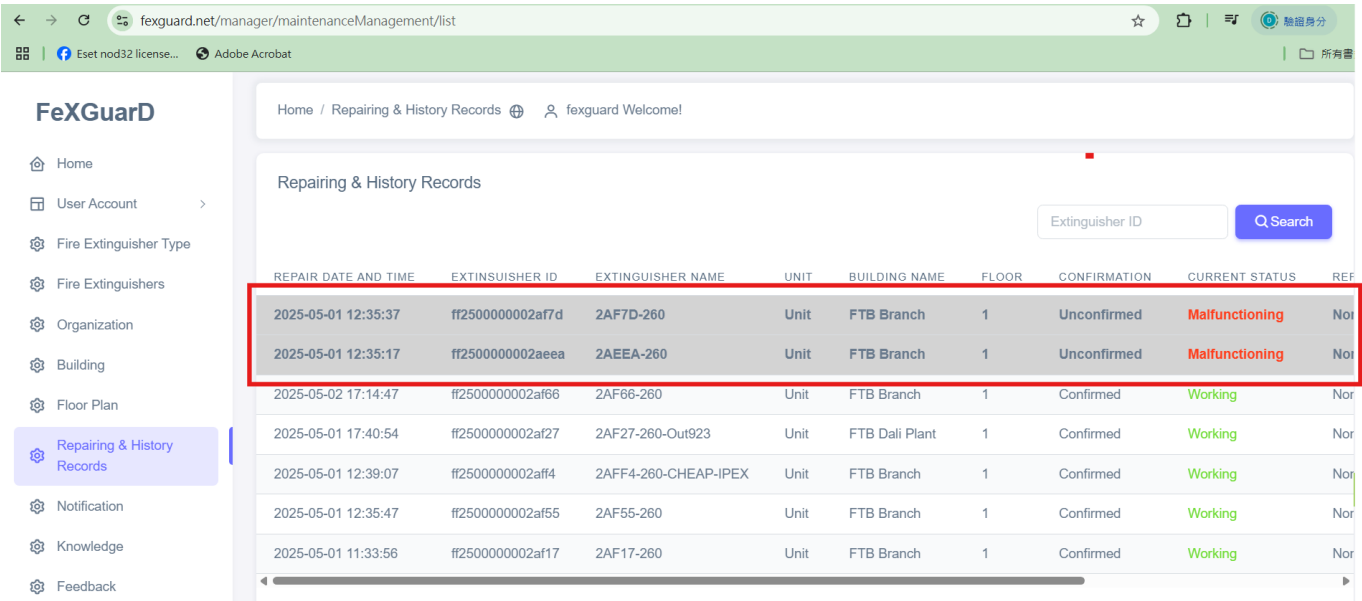


2.9 Repairing & History Records

Track repairing activities and maintain event history records.

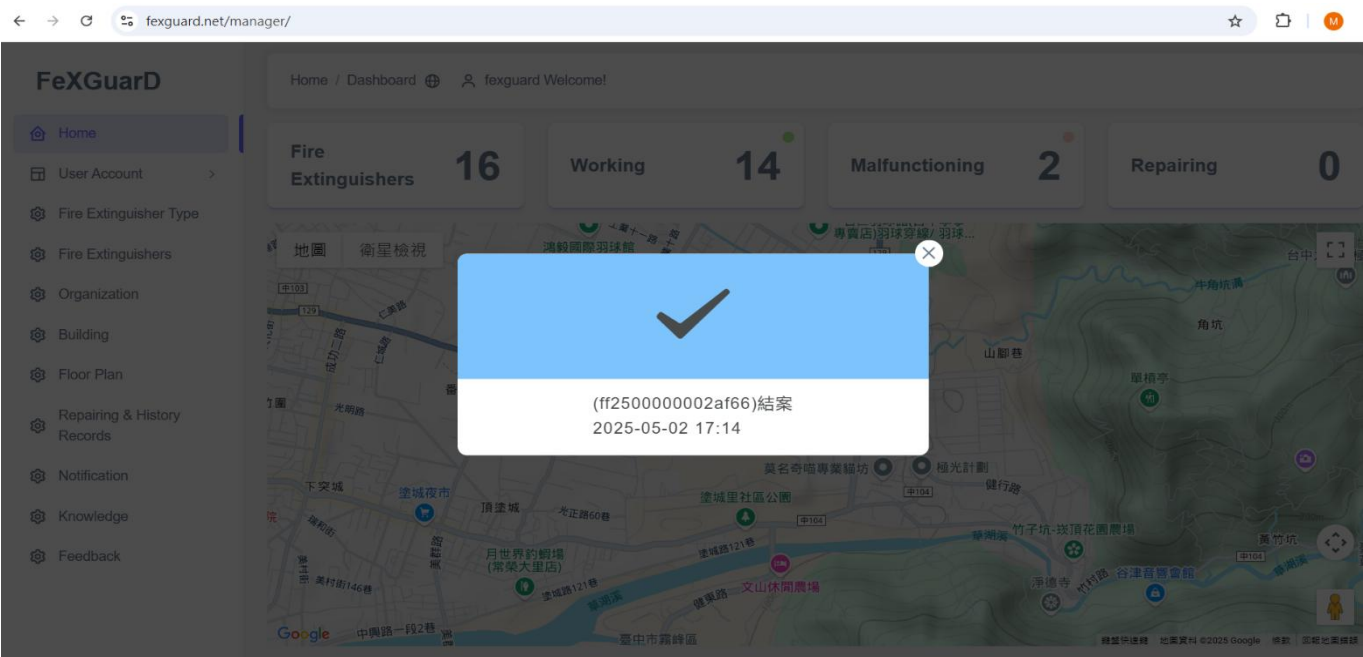
- Navigate to the "Repairing & History Records" to view the repairing list. Entries without highlighted text and marked as "Working" are historical records (closed cases). Entries with highlighted text and marked as "Malfunctioning" are pending backend confirmation and remain open. Backend personnel 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	ff2500000002af7d	2AF7D-260	Unit	FTB Branch	1	Unconfirmed	Malfunctioning	Not
2025-05-01 12:35:17	ff2500000002aeea	2AEEA-260	Unit	FTB Branch	1	Unconfirmed	Malfunctioning	Not
2025-05-02 17:14:47	ff2500000002af66	2AF66-260	Unit	FTB Branch	1	Confirmed	Working	Not
2025-05-01 17:40:54	ff2500000002af27	2AF27-260-Out923	Unit	FTB Dali Plant	1	Confirmed	Working	Not
2025-05-01 12:39:07	ff2500000002af4	2AFF4-260-CHEAP-IPEX	Unit	FTB Branch	1	Confirmed	Working	Not
2025-05-01 12:35:47	ff2500000002af55	2AF55-260	Unit	FTB Branch	1	Confirmed	Working	Not
2025-05-01 11:33:56	ff2500000002af17	2AF17-260	Unit	FTB Branch	1	Confirmed	Working	Not

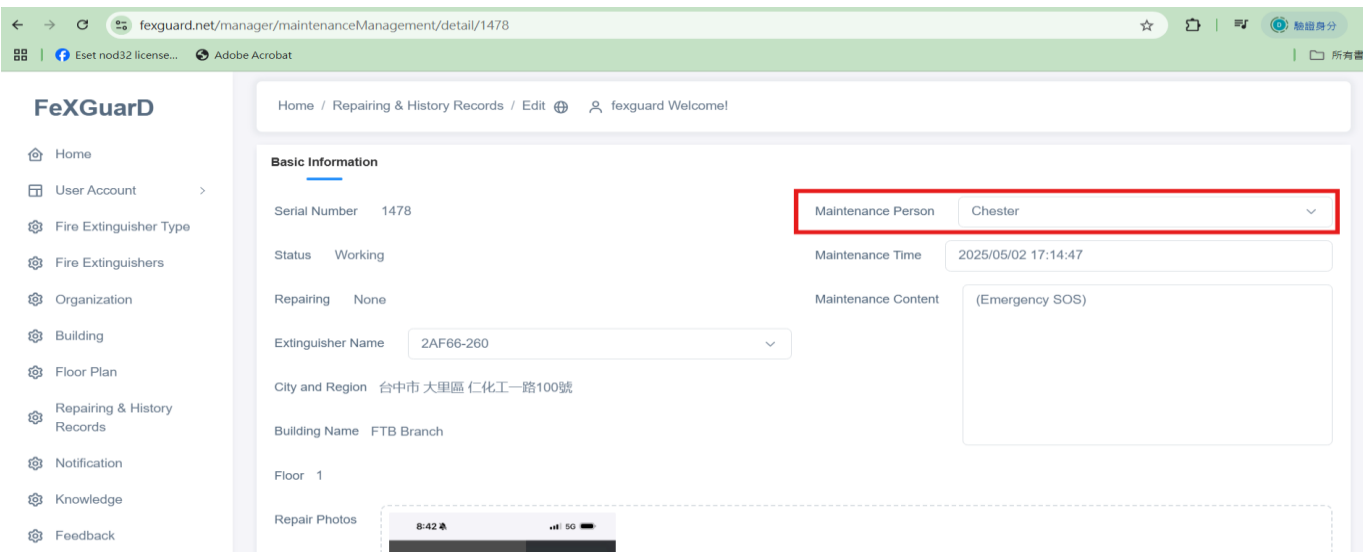
Figure 19: Case Closure Notification Sent to Backend After Maintenance Personnel Closes Case via FeXGuard App



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.

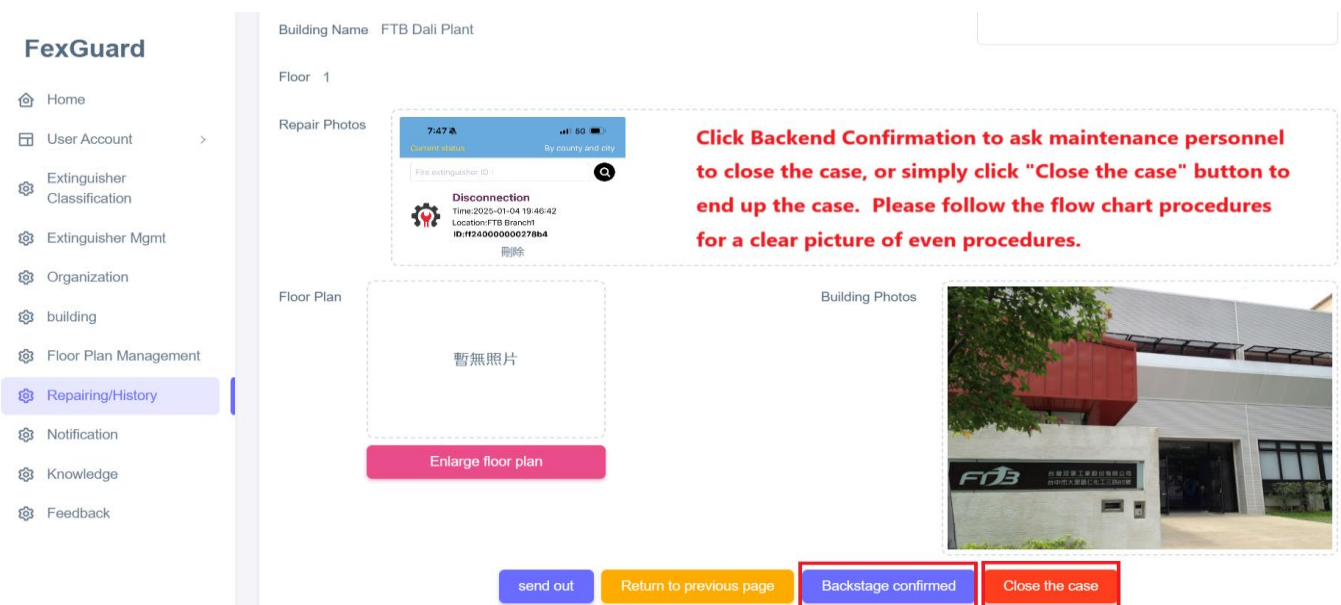
Figure 20: Changing Maintenance Person



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

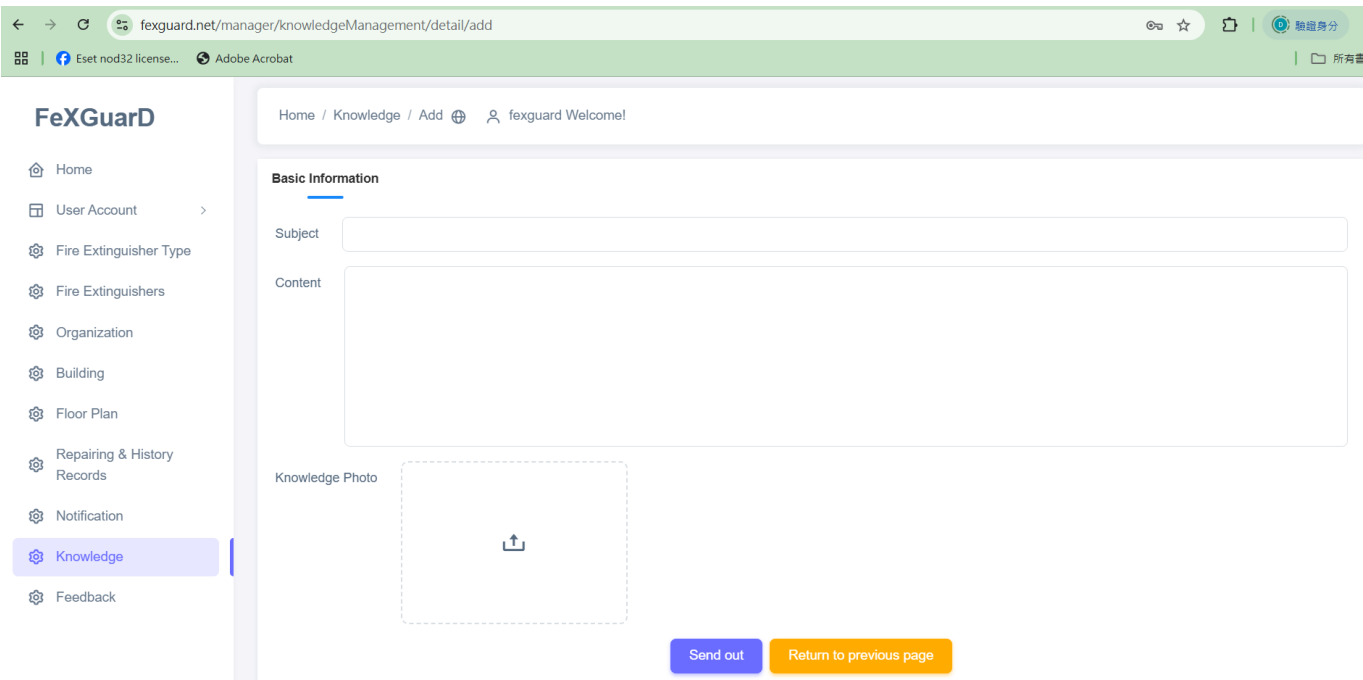


2.10 Knowledge

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

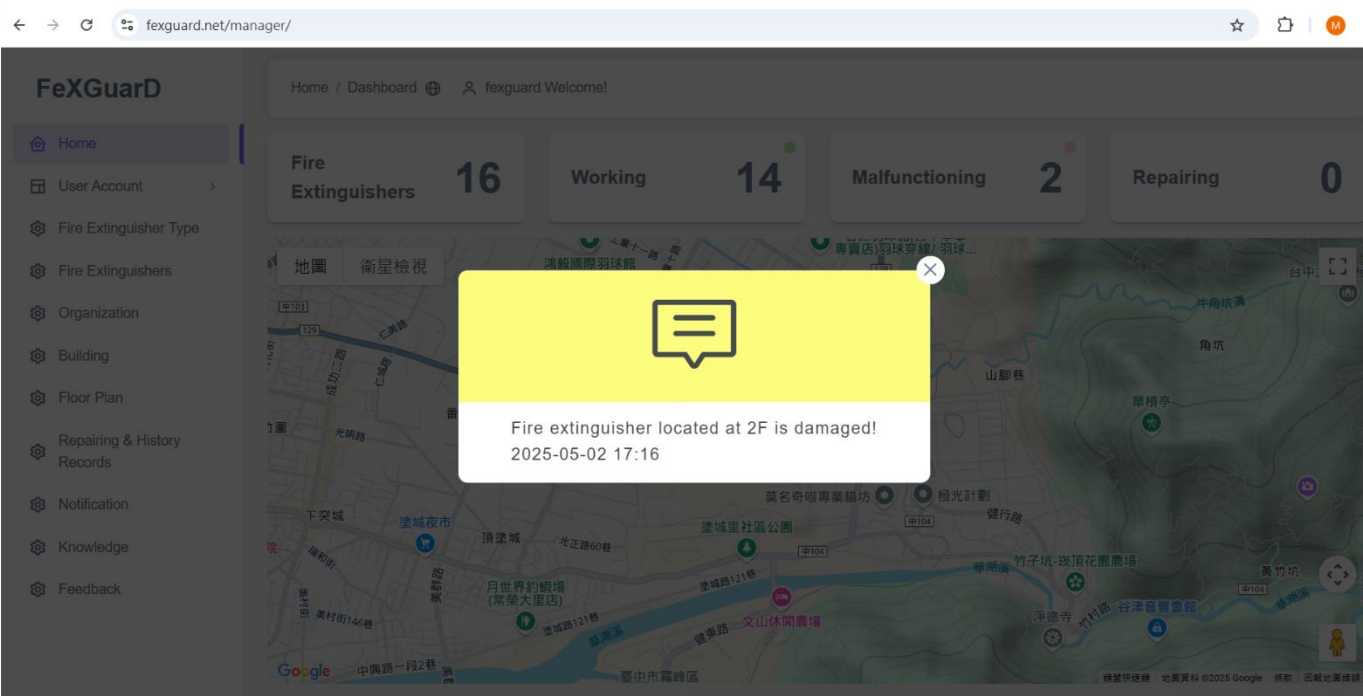
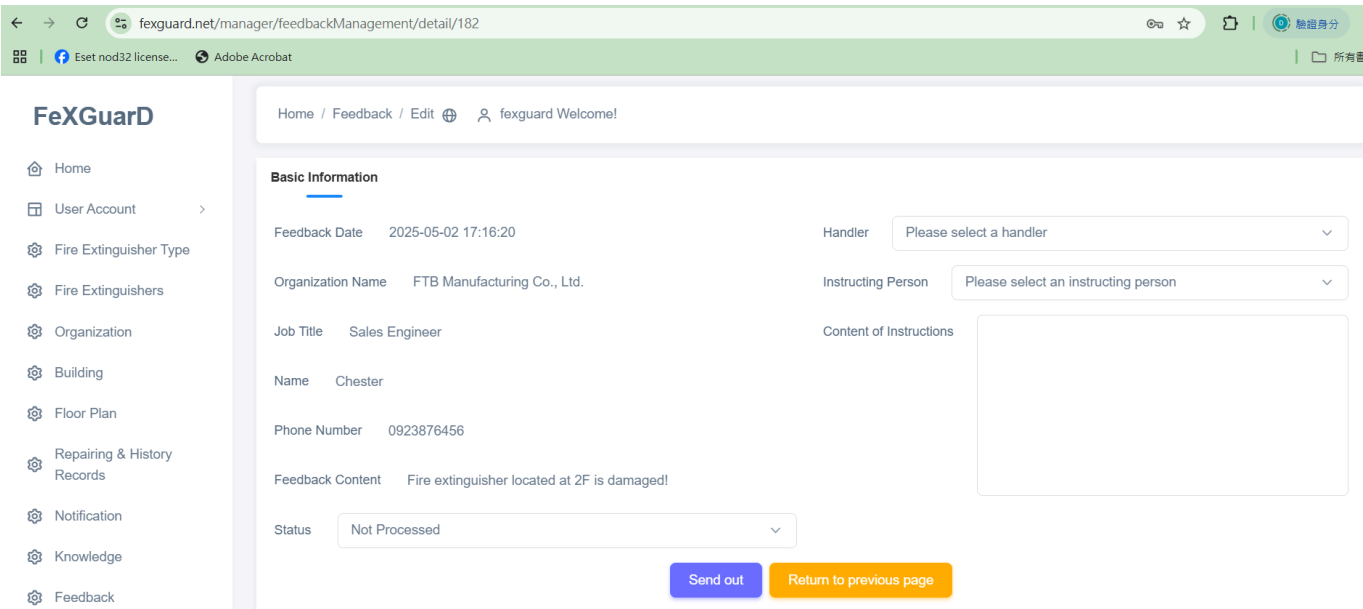


Figure 24: Edit & Reply to feedback from App users (Marking as Processed or not Rrocessed)

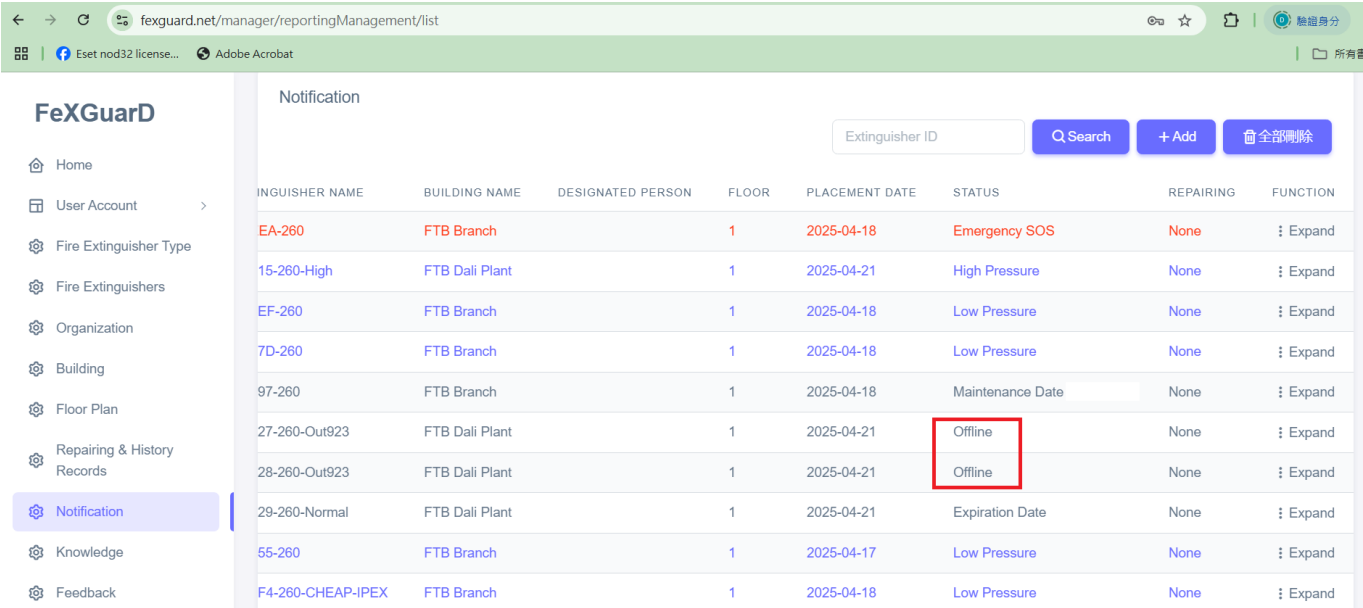


2.12 Troubleshooting

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.

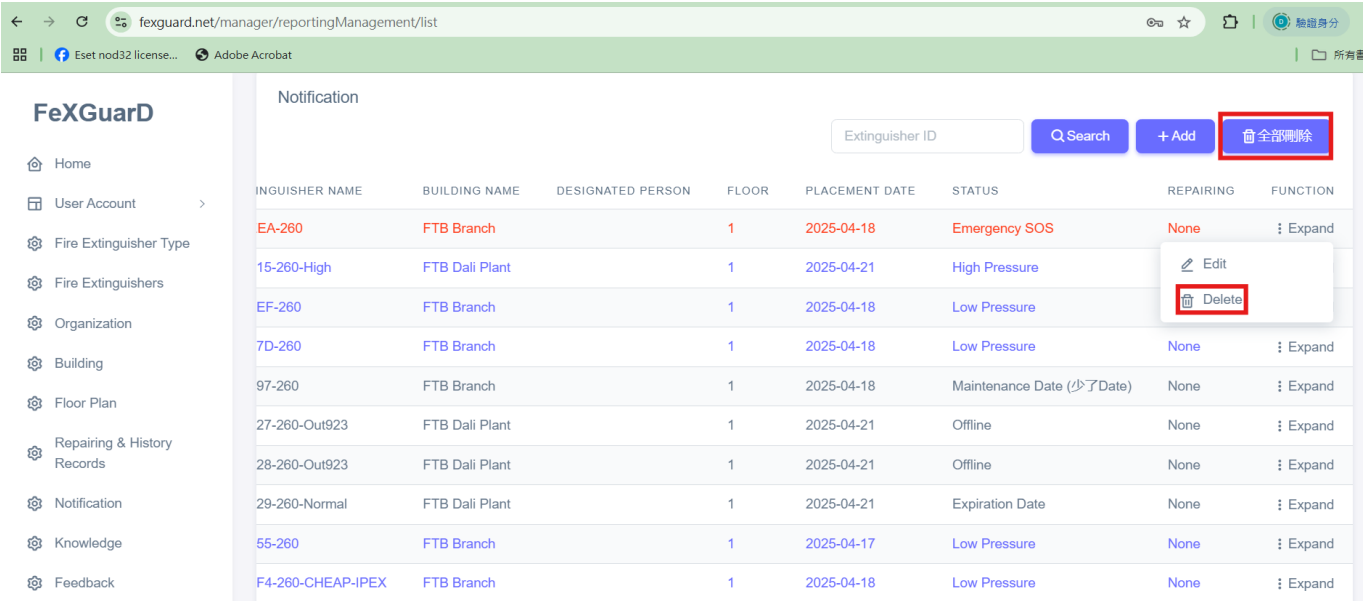
Figure 25: Notification – Connection Anomaly Notification



The screenshot shows the FeXGuard web interface. On the left is a sidebar with navigation links: Home, User Account, Fire Extinguisher Type, Fire Extinguishers, Organization, Building, Floor Plan, Repairing & History Records, Notification (selected), Knowledge, and Feedback. The main area is titled 'Notification' and contains a search bar for 'Extinguisher ID' and buttons for 'Q Search', '+ Add', and '全部删除'. Below this is a table with columns: EXTINGUISHER NAME, BUILDING NAME, DESIGNATED PERSON, FLOOR, PLACEMENT DATE, STATUS, REPAIRING, and FUNCTION. The table lists several fire extinguishers. Two rows have a status of 'Offline': '27-260-Out923' and '28-260-Out923'. These 'Offline' status cells are highlighted with a red box.

EXTINGUISHER NAME	BUILDING NAME	DESIGNATED PERSON	FLOOR	PLACEMENT DATE	STATUS	REPAIRING	FUNCTION
EA-260	FTB Branch		1	2025-04-18	Emergency SOS	None	: Expand
15-260-High	FTB Dali Plant		1	2025-04-21	High Pressure	None	: Expand
EF-260	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
7D-260	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
97-260	FTB Branch		1	2025-04-18	Maintenance Date	None	: Expand
27-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
28-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
29-260-Normal	FTB Dali Plant		1	2025-04-21	Expiration Date	None	: Expand
55-260	FTB Branch		1	2025-04-17	Low Pressure	None	: Expand
F4-260-CHEAP-IPEX	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand

Figure 26: Notification – Deleting Unnecessary Notifications



This screenshot is similar to Figure 25 but shows a context menu that appears when hovering over the 'Delete' button in the top right corner. The menu contains two options: 'Edit' and 'Delete'. The 'Delete' option is highlighted with a red box. The table of fire extinguishers is visible in the background, showing the same data as in Figure 25.

EXTINGUISHER NAME	BUILDING NAME	DESIGNATED PERSON	FLOOR	PLACEMENT DATE	STATUS	REPAIRING	FUNCTION
EA-260	FTB Branch		1	2025-04-18	Emergency SOS	None	: Expand
15-260-High	FTB Dali Plant		1	2025-04-21	High Pressure	None	: Expand
EF-260	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
7D-260	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand
97-260	FTB Branch		1	2025-04-18	Maintenance Date (少了Date)	None	: Expand
27-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
28-260-Out923	FTB Dali Plant		1	2025-04-21	Offline	None	: Expand
29-260-Normal	FTB Dali Plant		1	2025-04-21	Expiration Date	None	: Expand
55-260	FTB Branch		1	2025-04-17	Low Pressure	None	: Expand
F4-260-CHEAP-IPEX	FTB Branch		1	2025-04-18	Low Pressure	None	: Expand

2.13 Version Change Log

1) Version 1.0 – January 2025

2) Version 1.54 – May 2025

3) Version 1.1020 – October 2025

Details of Changes:

A) Add 2.0 Language Change

B) 2.7 Set up Fire Extinguishers: **Note: Extinguisher ID needs to be EXACTLY the same as DevEUI.**

Extinguisher ID, Building Name, and Organization Name can be searched in the search dialog box. **This NEW function shows:**

- 1) Whether a specific Extinguisher exists.
- 2) List all Extinguishers under a specific Building.
- 3) List all Extinguishers under a specific Organization.
- 4) New Fire Extinguisher UI: **Account Name, User Name, Recent Maintenance Date, Next Maintenance Date added.**