

Appendix C – User Manual for Asset Information Management Platform (AIMP)

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1. Introduction

EMSD manages over 20 systems (level 1) and over 200 sub-systems (level 2). EMSD currently uses an ERP system based on SAP namely CCS to manage all asset attributes through pre-defined spreadsheet template sets. EMSD also manages asset BIM model information in Revit and its data exchange with other asset management applications (BIM-AM) such as Archibus and Planon.

Asset Information Management Platform (AIMP) is a web-based system for EMSD to manage asset information and relationship. It utilises spreadsheet / COBie / COBieLite to exchange information with other system like CCS, Revit, Archibus, and Planon.

1.1 Purpose

This document provides information on how to use the Asset Information Management Platform (AIMP).

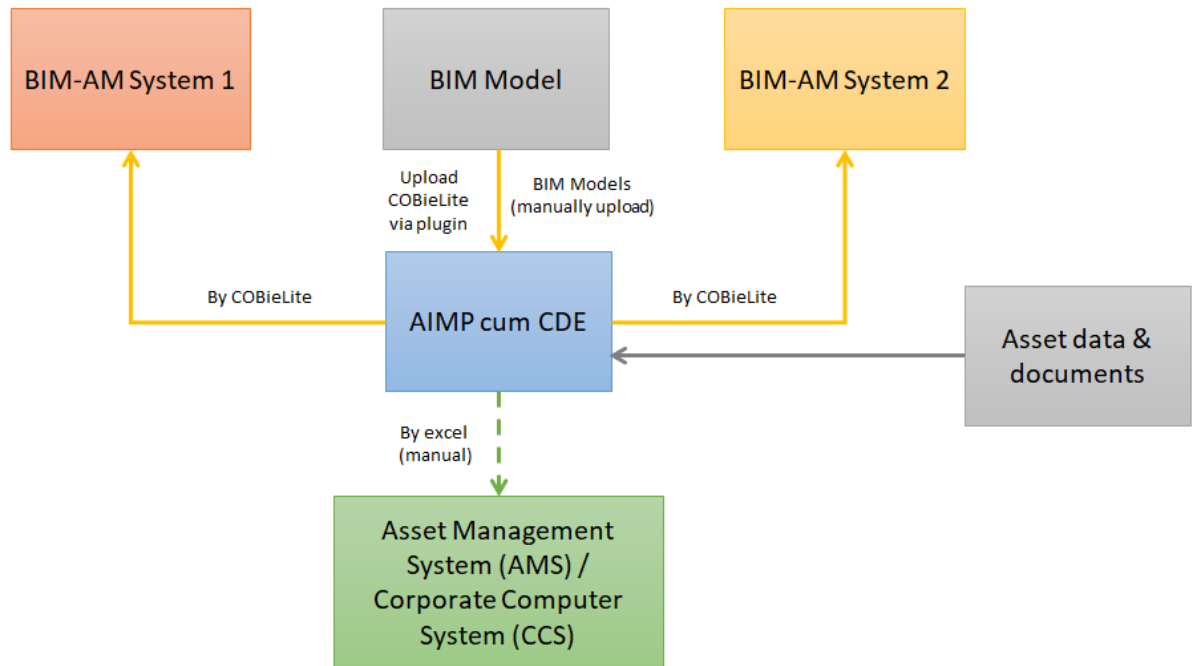
1.2 Terminologies

Terminology	Description
Level 1 Asset	<ul style="list-style-type: none">• System level (e.g. LVSB)• Common and specific attributes of system
Level 2 Asset	<ul style="list-style-type: none">• Equipment level of a system (e.g. Switchgear of LVSB)• Have equipment level common and specific attributes
Equipment/Asset Type	<ul style="list-style-type: none">• Represent an abstract asset• Different meaning with BIM asset type• Both BIM asset type data and BIM asset component data are store in AIMP instance level
Asset Instance	<ul style="list-style-type: none">• Represent a physical asset in a particular function location• Different meaning with BIM asset component• Both BIM asset type data and BIM asset component data store in• AIMP instance level
Asset Code	<ul style="list-style-type: none">• Unique identifier of an asset instance in EMSD• AIMP identifier
Equipment No.	<ul style="list-style-type: none">• A unique identifier of an asset instance in CCS which is assigned by CCS for new asset

Terminology	Description
Functional Location	<ul style="list-style-type: none"> Physical location identifier, each level 1/2 asset instance has one and only one functional location User can be assigned with more than 1 functional location to manage his responsible assets Example: Room 3, 4/F, Block A in a building
System Topology	<ul style="list-style-type: none"> Graphical presentation of asset instance relationships (i.e. parent-child, associated, and grouped)
BIM	<ul style="list-style-type: none"> Building Information Modelling Industrial modelling standard of building information EMSD uses Autodesk Revit to manage BIM model
COBie	<ul style="list-style-type: none"> Construction-Operations Building information exchange International standard for the exchange of information regarding facility assets in spreadsheet format
COBieLite	<ul style="list-style-type: none"> XML format of COBie files
Autodesk Revit	<ul style="list-style-type: none"> BIM modelling tool under Autodesk brand Plug-in in Revit to import/export COBieLite files With native export to COBie files via Autodesk Plug-in (i.e. COBie Extension for Revit)
Archibus	<ul style="list-style-type: none"> One of the BIM-AM Systems Support bi-directional data exchange with Revit It supports multiple format such as COBie/COBieLite
Planon	<ul style="list-style-type: none"> One of the BIM-AM Systems Support bi-directional data exchange with Revit It supports multiple format such as COBieLite
CCS	<ul style="list-style-type: none"> SAP-based Asset Management System Use asset template spreadsheets to communicate with third party applications

1.3 System Integration

The relationships between EMSD's BIM-AM systems are illustrated as follows:



1.4 Function List

Specific access rights to different AIMP functions are assigned to different roles.

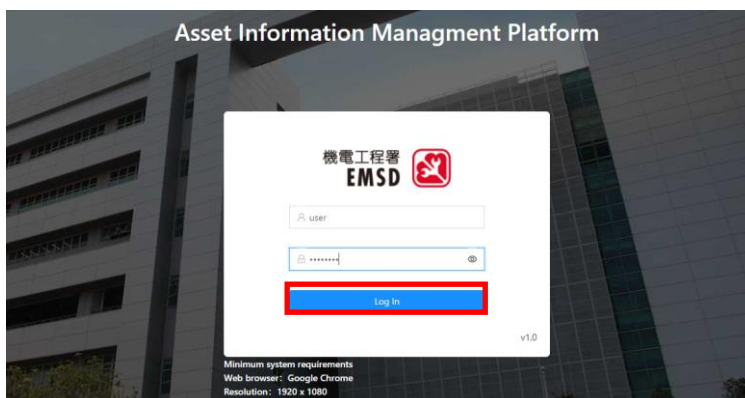
No.	Function	Description
1	Basic Functions	<ul style="list-style-type: none"> Login / Logout Change password Switch function location.
2	Asset List	<ul style="list-style-type: none"> List and display asset instance by level 1 and level 2 Search asset Add/Edit/Delete asset Add/Remove asset relationship (topology) Present relationship information in graphical format Add/Remove asset document Add/Remove asset photo Display attribute definition Download CCS asset template
3	Importing	<ul style="list-style-type: none"> CCS COBie COBieLite (asset code)

No.	Function	Description
		<ul style="list-style-type: none"> • COBieLite (GUID) • Relationship • Relationship (Clear Current) • Asset Tag & Zone Tag
4	Exporting	<ul style="list-style-type: none"> • Attributes Definition • CCS • COBieLite (asset code) • COBieLite (GUID) • COBieLite (asset code and GUID only) • COBieLite (Revit) • Revit Checkset File • Unuse Asset Code • Unuse Zone Tag • Unuse Asset Tag
5	File Management	<ul style="list-style-type: none"> • Add shared document in equipment-wise • Add/Remove sub folder • Add/Remove/Rename/Search/Download file

2. Function Details

2.1 Basic Functions

2.1.1 Logging In



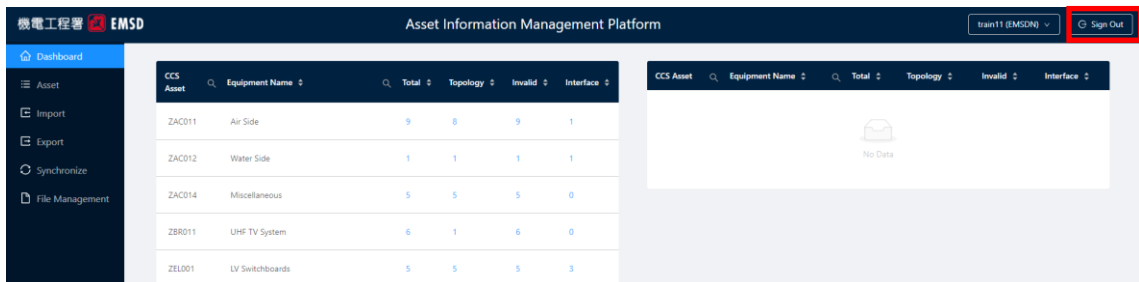
1. Open the web browser.
2. Input <https://utils.bim.emsd.gov.hk/aimp/index> in the address bar.
3. Input your username and password (provided by EMSD). Then click “Log In”.



The minimum requirement to access AIMP are as follows:

- Web browser: latest version of Google Chrome
- Monitor resolution: 1920 x 1080

2.1.2 Logging Out



Click “Sign Out” to logout the system.

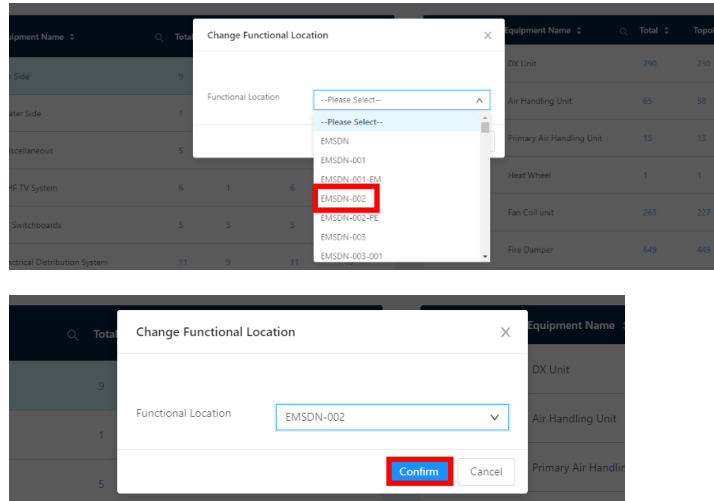
2.1.3 Changing Functional Location

Assets are stored by functional locations. A number of functions in AIMP are based on function location such as data import/export.

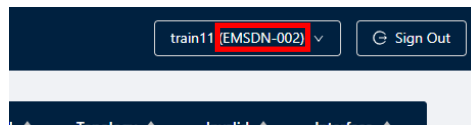


1. Click <Username> (<Function Location>).
2. Click “Change Functional Location” from the dropdown list.

3. “Change Functional Location” dialog box appears. Pick the functional location from the dropdown list and then click “Confirm”. System is then reloaded and “Selected Function Location” dashboard appears.



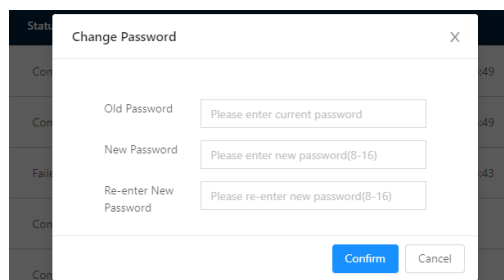
The newly selected Functional Location appears on the top right corner (next to Username).



2.1.4 Changing Passwords



1. Click <Username> (<Function Location>).
2. Click “Change Password” from the dropdown list.



3. “Change Password” dialog box appears. Fill in Current Password, New Password and

Confirm Password, then click “Save”.

2.1.5 Homepage (Dashboard)

1. On the homepage (dashboard), LEVEL1 equipment and corresponding LEVEL2 equipment summary are displayed in the specified Function Location.
2. User can display LEVEL2 equipment summary (on the right) by select corresponding LEVEL1 equipment row (on the left).

Column Name	Description
CCS Asset	Asset template ID in CCS
Equipment Name	Equipment Name
Total	Total number of assets of the equipment type
Topology	Total number of assets which have relationship (topology)
Invalid	Total number of assets which pass the validation
Interface	Total number of assets which have interface

3. User can manage asset records in “Asset List” by click on blue color number in LEVEL1 and LEVEL2 equipment row. Corresponding asset page for selected equipment appears.

The screenshot shows the 'Asset Information Management Platform' interface. On the left is a sidebar with navigation options: Dashboard, Asset, Import, Export, Synchronize, and File Management. The 'Asset' menu is selected. The main area displays a table of assets with columns: Functional Location, Equipment Description, Asset Code, Acquisition Value, Asset Relationship, Asset Tag No., and Authorization Group. A search bar at the top left allows searching by asset template (minimum 5 characters). Below the search bar, a list of asset templates is shown, including (ZEL002) Electrical Distribution System, (EL0205) Power Quality Monitoring, (EL0213) Busbar Trunking / Main Distribution, (EL0219) RCBO, (EL0226) Fuse switch & Switch fuse, (EL0227) Isolating switch, (EL0241) Distribution Board, (EL0249) MCCB, (ZEL011) Generator, (EL1101) Diesel Engine, (EL1102) Alternator, (EL1104) Undervolt Relay, (EL1105) Fuel Tank, (EL1106) Fuel Pump, (EL1107) Battery Charger, (EL1108) Battery, (ZFS014) Portable Equipment, (ZFS1401) Portable fire extinguisher, (ZFS1601) Exit sign & Directional sign, (ZAC012) Water Side, and (AC1201) Chiller. The table below shows several rows of asset data with checkboxes for selection and status indicators (red X, green checkmark).

4) User can sort  and search  in LEVEL1 and LEVEL2 tables.

The screenshot shows the 'Asset Information Management Platform' interface with a table of assets. The table has columns: CCS Asset, Equipment Name, Total, Topology, Invalid, and Interface. The table is filtered to show assets with 'AC1' in the Equipment Name. The data rows are:

CCS Asset	Equipment Name	Total	Topology	Invalid	Interface
ZAC011	Air Side	9	8	9	1
ZAC012	Water Side	1	1	1	1

2.2 Asset List

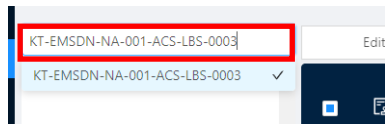
User can Add / Edit / Delete Assets of the underlying system and equipment and their associated relation (topology), photo and documents in the following five sections on this page.

The screenshot shows the 'Asset Information Management Platform' interface with five sections highlighted:

- Section A:** A sidebar menu on the left with a red arrow pointing to the 'Asset' menu.
- Section B:** A top navigation bar with tabs: Edit, System Topology, Documentation, Photo, Clear Relationship, and Remove.
- Section C:** A table of assets with columns: Functional Location, Equipment Description, Asset Code, Acquisition Value, Asset Relationship, Asset Tag No., and Authorization Group. The table is filtered to show assets with 'Burglar-ACS' in the Equipment Description.
- Section D:** A table of assets with columns: Functional Location, Equipment Description, Asset Code, Acquisition Value, Asset Relationship, Asset Tag No., and Authorization Group. The table is filtered to show assets with 'Burglar-ACS' in the Equipment Description.
- Section E:** A table of assets with columns: Functional Location, Equipment Description, Asset Code, Acquisition Value, Asset Relationship, Asset Tag No., and Authorization Group. The table is filtered to show assets with 'Burglar-ACS' in the Equipment Description.

Section A

1. Display by equipment name (e.g Chiller) with asset template ID (e.g AC1201).
2. The red folder icon indicates LEVEL1 equipment type, and the blue folder icon indicates LEVEL2 equipment type.
3. Select a specific equipment type, and Section D appears.
4. Input asset code in the box and press “ENTER” button to search. At least 5 characters are required.

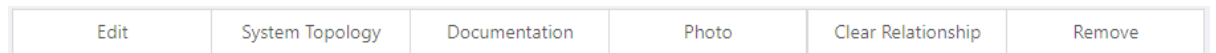


Section B

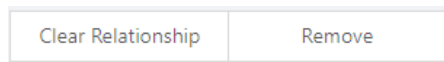
1. Action bar without any asset selection



2. Action bar with only one asset selection



3. Action bar with multiple assets selection

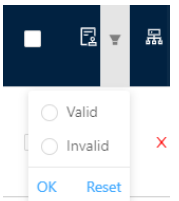
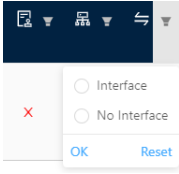


Action Name	Without Selection	Single Selection	Multiple Selection
Add	√		
Edit		√	
Remove		√	√
Clear Relationship		√	√
System Topology		√	
Documentation		√	
Photo		√	
Attribute Setting	√		



Section C

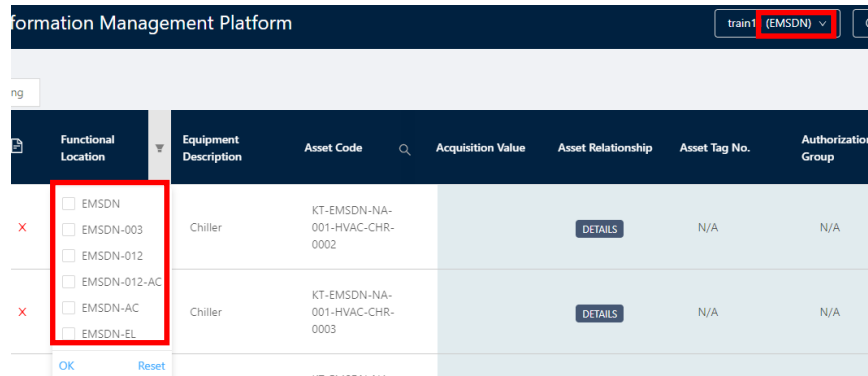
The functionalities are as follows:

Filter Name	Icon / Dropdown List	Description
Selection box		Available actions will be different for single/multiple selection
Validation		To filter asset with/without passing the validation
Topology		To filter asset with/without topology
Interface		To filter asset with/without interface
Document		To indicate asset with/without documents

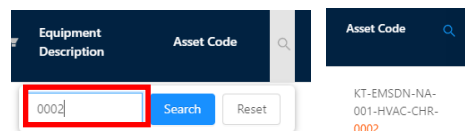


Section D

1. The first 3 columns are fixed. They are Functional Location, Equipment Description and Asset Code.
2. Functional Location. Can be filtered by dropdown box. Available options are sub functional location of current functional location shown in the top right corner of the page.



3. Equipment Description appears.
4. Asset Code can be filtered by input text.



5. The rest of the columns indicate the attribute name of the asset. White texts indicate common attributes. Light blue texts indicate equipment-specific attributes.

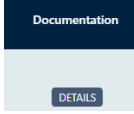
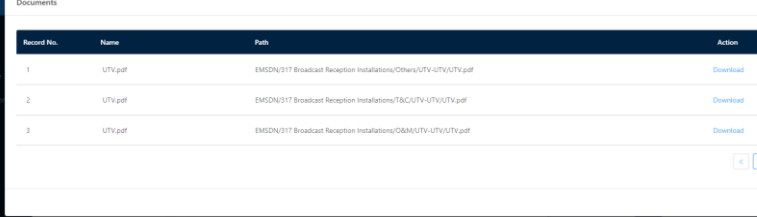
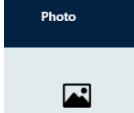

Documentation	Equipment Description (AMTF)	Equipment Location	Equipment No.
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Section E

1. Asset attribute values are shown in this section.
2. Three special attribute which will show a pop up with additional information.

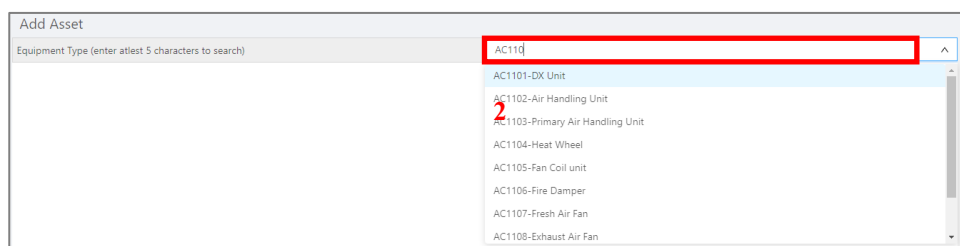
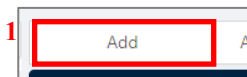
Attribute Name	Action	Pop up after click “DETAILS” button or photo icon
Asset Relationship		



Attribute Name	Action	Pop up after click “DETAILS” button or photo icon
Documentation		
Cover Photo		

2.2.1 Adding Assets

1. Click “Add” button.
2. Input asset template and select the target one from the dropdown list.
3. Fill the asset attribute values. Mandatory fields are marked with *.





4. If mandatory fields not all input, system will prompt



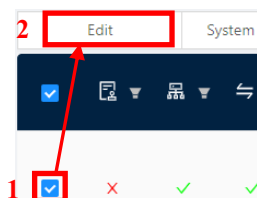
5. Field types are as follows:

Please input start-up date	Da	
Please input room or floor	An	
	Dr	
Please input rated power input	Nu	

6. Click “Save” button.

2.2.2 Editing Assets

1. Select the asset to be edited.
2. Click “Edit” button.
3. Fill the asset attribute values. Mandatory fields are marked with *.





Attributes Name	Attributes Value	Updated Date	Updated By
Acquisition Value	Please input Acquisition Value		
* Asset Code	KT-EMSDT- NA - GF -EMG-GEN- 9999	2021-11-20	train2
Asset Relationship	ASSO:KT-EMSDN-NA-000-LAS-REL-0010		
Asset Tag No.	Please input Asset Tag No.		
* Authorization Group			
* Catalog Profile			
Construction Type	Please input Construction Type		
Currency	Please input Currency		
Customer Warranty End	Please input Customer Warranty End		
Customer Warranty Start	Please input Customer Warranty Start		
* Division			
Documentation	DETAILS		
* Equipment Description	Please input Equipment Description		
Equipment No.	19999999	2021-11-20	train2
* Functional Location	EMSDT	2021-11-20	train2
Grouped Equipment ID	Please input Grouped Equipment ID		
Inventory No.	Please input Inventory No.		
* Main Work Centre			

4. If mandatory fields not all input, system will prompt



5. Field types are as follows:

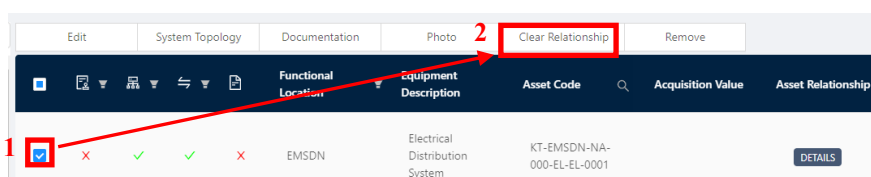
Please input Rated Power Input	Numeric	1/2
	Drop down	▼
Please input Room or Floor	Any text	
Please input Start-up Date	Date pick	📅

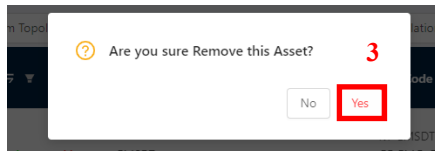
6. Click “Save” button.

7. Click “Back” button to cancel the edit

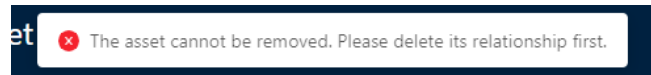
2.2.3 Deleting Assets

1. Select asset(s) to be deleted.
2. Click “Remove” button.
3. Click “Yes” button in the confirmation popup.



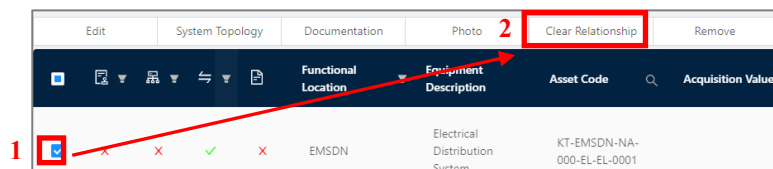


4. If the asset in LEVEL1 has relationship with other LEVEL2 assets, this error will be prompted:

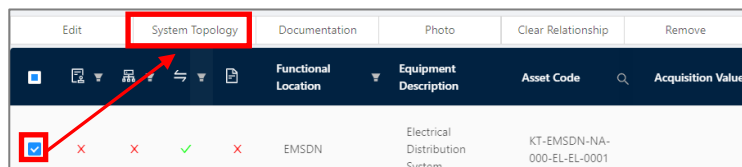


2.2.4 Clearing the Relationship

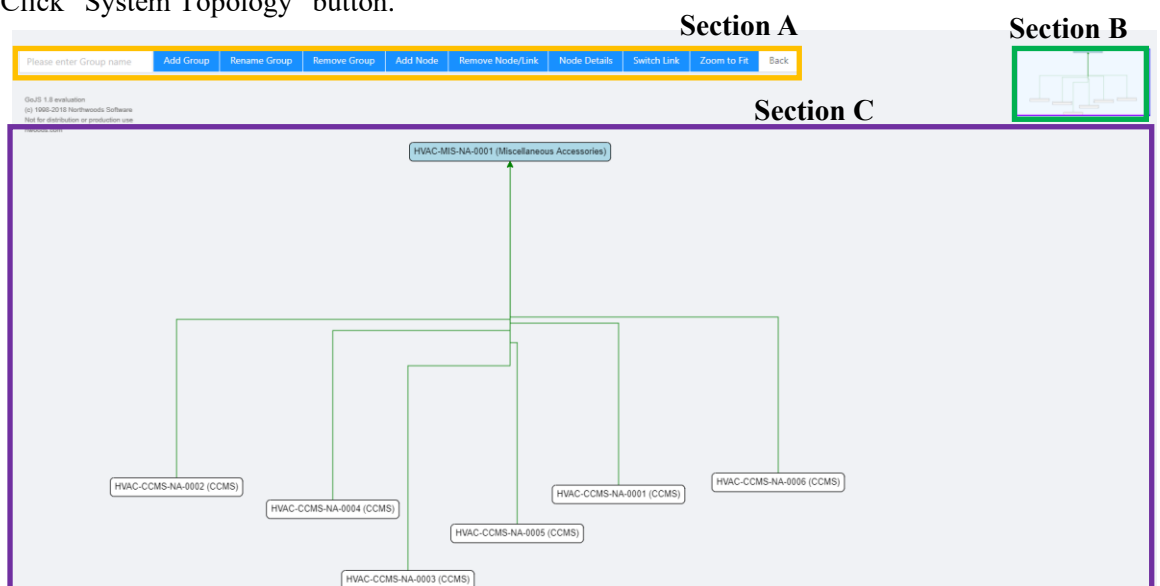
1. Select the asset for which the relationship needs to be cleared.
2. Click “Clear Relationship” button.



2.2.5 System Topology



1. Select the asset.
2. Click “System Topology” button.



Section A

The available actions are as follows:

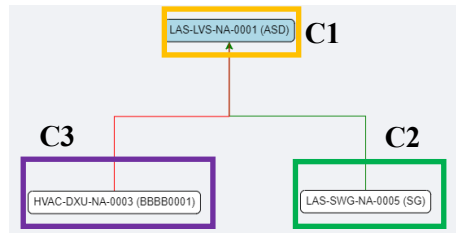
Action Name	Description
Add Group	Group two or more assets into one group
Rename Group	Rename group name
Remove Group	Remove group
Add Node	Add asset into this topology
Remove Node/Link	Remove asset/link from this topology
Node Details	Show and modify asset details
Switch Link	Switch link
Zoom to Fit	Show the topology fit in the screen
Back	Go back to asset list view

Section B

The topology overview indicates all nodes.

Section C

The topology view is as follows:

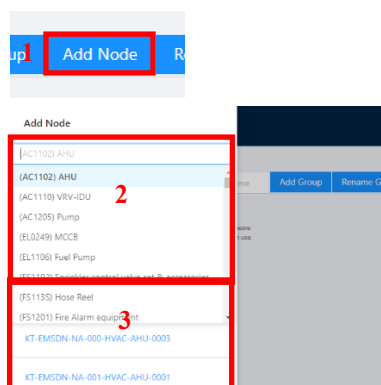


C1 is LEVEL1 assets.

C2 is LEVEL2 asset, which has parent-child relationship with C1, green arrows.

C3 is LEVEL2 asset, which has interface relationship (from other system) with C1 and red line.

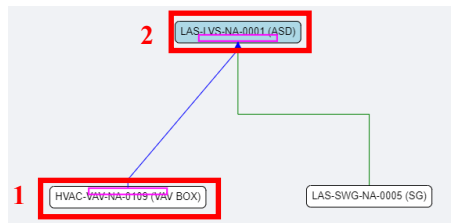
2.2.5.1 Adding Nodes





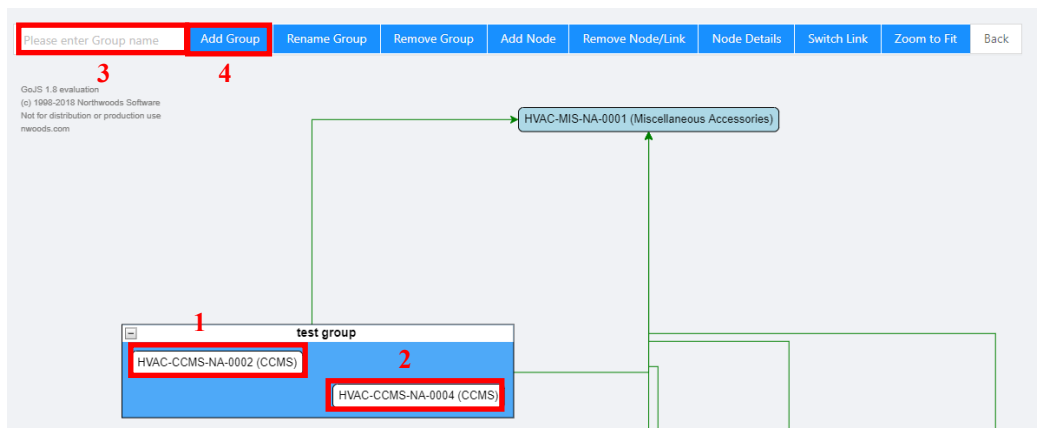
3. Click “Add Node” button.
4. Select the equipment type to be added from the dropdown list.
5. Pick the asset from the result list.

2.2.5.2 Adding Relationships



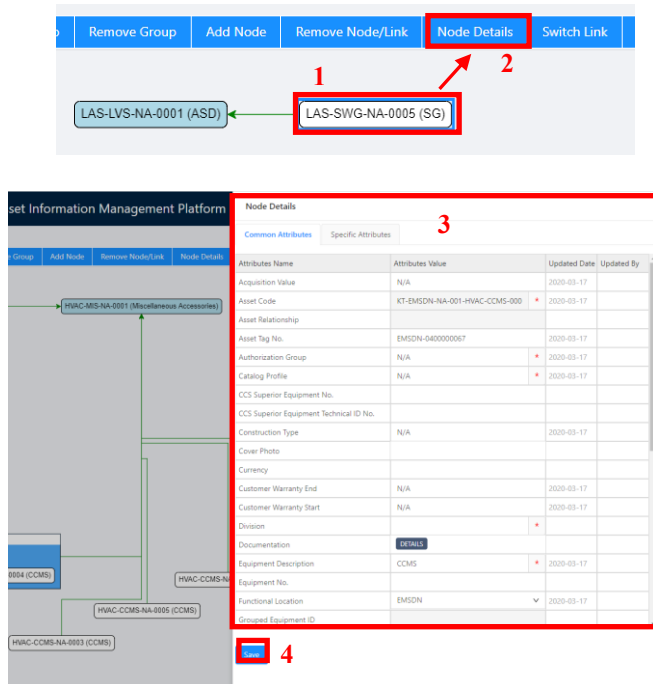
1. Click the top part of the node.
2. Drag to the bottom part of the target node.

2.2.5.3 Adding Groups



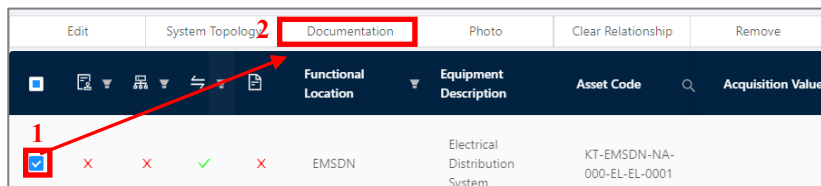
1. Click on one node.
2. Click another node (can be multiple).
3. Input group name.
4. Click “Add Group” button.

2.2.5.4 Viewing/modifying Node Details



1. Click one node.
2. Click “Node Details” button.
3. Asset details section appears on the right side.
4. Modify attribute values and click “Save” button.

2.2.6 Documentation



1. Select the asset.
2. Click “Documentation” button.



Section A

Name	Path	Action
LAS-BAT	EMSDT/302 LV Switchboards/Catalogues/LAS-BAT	

Section B

Filter files

File	Size	Last Modified
302 LV Switchboards		
Catalogues		
LAS-BAT		
O&M		
Others		
T&C		

Submit Back

Section A

The columns are as follows:

Field	Description
Name	If it is pre-defined folder, format is <System name>-<Equipment name> If it is non pre-defined folder, it will be free-text
Path	Full path
Action	Only non pre-defined folder (manually added) button can be deleted

Section B

Assigning document folder views.

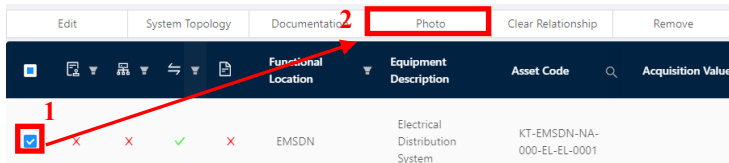
2.2.6.1 Add asset specific document folder

1

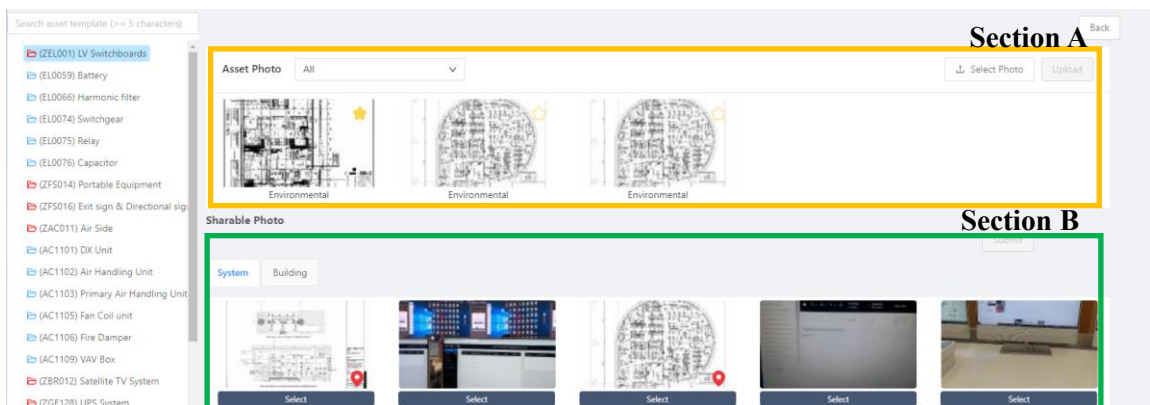
2 Submit Back

1. Select the folder
2. Click “Submit” button

2.2.7 Photo (Asset Images)



1. Select the asset
2. Click “Photo” button.



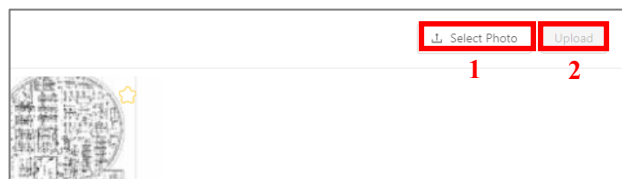
Section A

- Specific photo view

Section B

- Shared photo view

2.2.7.1 Adding Asset-specific Photos (Images)



1. Click “Select Photo” button to select the photo from user’s machine.
2. Click “Upload” button.

2.2.7.2 Asset-specific Photos (Image) Details



1. Click the top right corner star to view Environmental or Name plate/Equipment details.

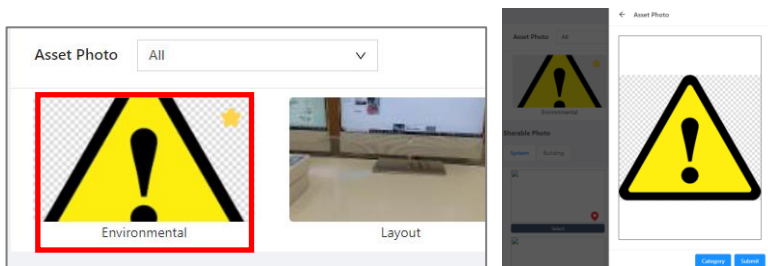


2.2.7.3 Filtering by Photo (Image) Types

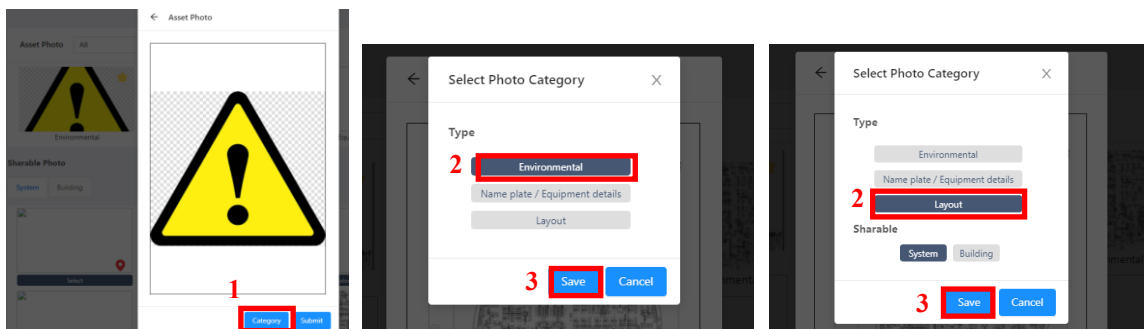
1. The pull-down menu next to “Asset Photo” allows filtering by photo (image) type:



2. Click the photo thumbnail to view the image.



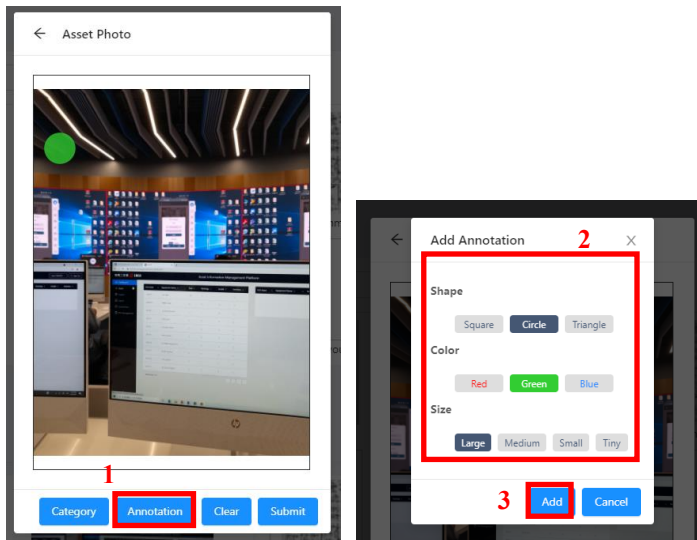
2.2.7.4 Changing Photo (Image) Categories



1. Click “Category” button.
2. Select the category type (if type is “Layout, user can select System or Building).
3. Click “Save” button.

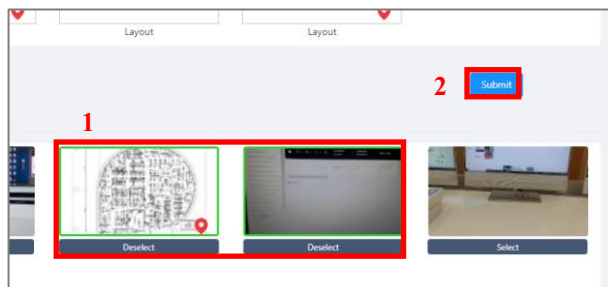


2.2.7.5 Adding Annotation (for Layout Only)



1. Click “Annotation” button.
2. Select the Shape, Color and Size.
3. Click “Save” button.

2.2.7.6 Assigning shared photo to the asset



1. Select the photo, can be multiple.
2. Click “Submit” button.

2.2.7.7 Attribute Settings (Downloading Asset Template File)



1. Click “Attribute Setting” button.
2. Click “Template Download” button.



- The sample template file is then downloaded for attribute settings.

2.3 Importing

Import operation compromises the first-come-first-served principal.

Section A


Available import operation type can be triggered are as follows:

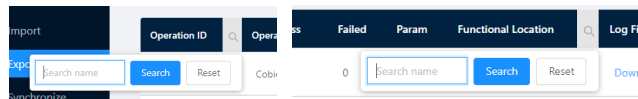
Type Name	Description
CCS	<div>CCS ▼ EMSDN ▼ ⬇ Select File Click to Import</div> <ul style="list-style-type: none"> - Import CCS spreadsheet with specific functional location
COBie	<div>COBie ▼ EMSDN ▼ ⬇ Select File Click to Import</div> <ul style="list-style-type: none"> - Import COBie with specific functional location
COBieLite (asset code)	<div>COBieLite (asset code) ▼ EMSDN ▼ ⬇ Select File Select Uploaded File Click to Import</div> <ul style="list-style-type: none"> - Import COBieLite with specific functional location - asset code will be stored as the Revit external ID
COBieLite (GUID)	<div>COBieLite (GUID) ▼ EMSDN ▼ ⬇ Select File Select Uploaded File Click to Import</div> <ul style="list-style-type: none"> - Import COBieLite with specific functional location - GUID will be stored as the Revit external ID
Relationship	<div>Relationship ▼ ⬇ Select File Click to Import</div> <ul style="list-style-type: none"> - Import asset relationship with predefined spreadsheet template
Relationship (Clear Current)	<div>Relationship (Clear Curr... ▼ ⬇ Select File Click to Import</div> <ul style="list-style-type: none"> - Import asset relationship with predefined spreadsheet template - Remove all existing asset relationship before import
Asset Tag & Zone Tag	<div>Asset Tag & Zone Tag ▼ ⬇ Select File Click to Import</div> <ul style="list-style-type: none"> - Import asset tag and zone tag with predefined spreadsheet template

Section B

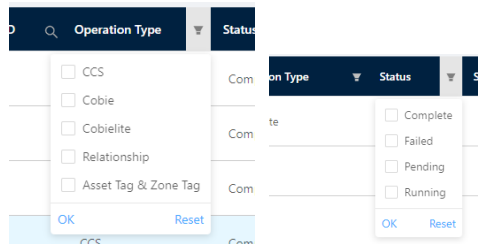
- Import operational history record is located on the header row



2. Rows can be searched by  Operation ID and by Functional Location.
3. Click “Reset” to clear search text and display full result list.



4. Rows can be filtered by  Operation Type and by Status.
5. Click “Reset” to clear search text and display full result list.



Section C

1. Display the import operation history with status and other information. The latest record is shown on the top of the list.
2. Column definitions are as follows:

Name	Description
Operation ID	Each import action is an operation task. Operational ID is the identifier of the operation task.
Operation Type	5 import operation type listed in section A
Status	Complete, Failed, Pending, Running
Start Time	Operation start time
End Time	Operation finish time
Success	Success count
Partial Success	Partial success count
Failed	Failed count
Param	N/A
Functional Location	Import operation for which functional location
Log File	Click “Download” to get the log file, which shows detail information for success and failure
Imported File	Click “Download” to get the imported file



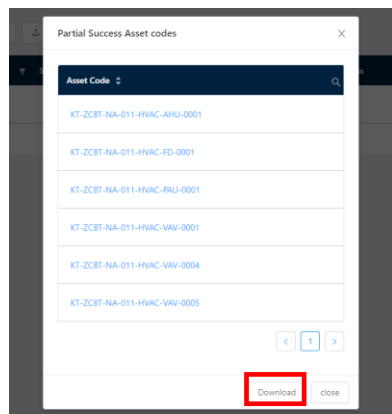
To view partial success details:

The screenshot shows the 'Partial Success' tab selected in the top navigation bar. A red box labeled '1' highlights the 'Partial Success' count. A red box labeled '2' highlights the 'Asset Code' list. A red box labeled '3' highlights the 'Asset Attributes' table.

Asset code not found	Invalid asset code	Template ID not found	Invalid attribute name	Update attribute success	Insert attribute success
0	0	0	18	0	2

Attribute Name	Attribute Value	Status
Asset		Invalid attribute name
AssemblyCode		Invalid attribute name
Comments		Invalid attribute name
EMSD.Common.Asset Code	KT-ZCBT-NA-011-HVAC-AHU-0001	Insert attribute success
EMSD.Common.Zone Tag No.	ZCB-801-000003	Insert attribute success

1. Click the Partial Success count.
2. A list of asset codes pops up.
3. Click the asset code. An attribute detail popup. Attribute validation result and a summary table appears.
4. The list of asset code can be downloaded in CSV format.



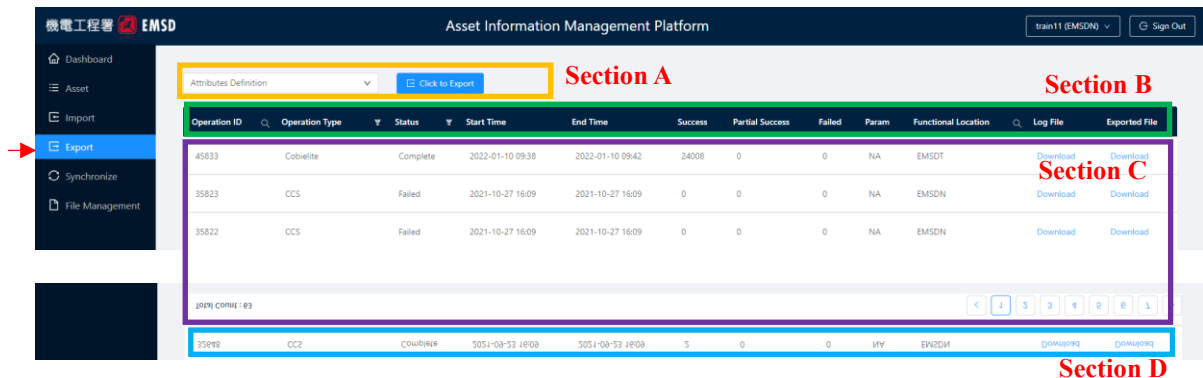
Section D

1. The total count is shown on the left.
2. Pagination (go to previous/next page) is shown on the right.



2.4 Exporting

Export operation compromises of the first-come-first-served principal.



Section A

a) Available export operation types can be triggered as follows:

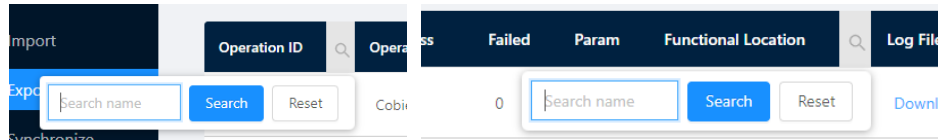
Type Name	Description
Attributes Definition	<div>Attributes Definition <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export with attribute name, type, max length, min length, mandatory for BIM-AM validation
CCS	<div>CCS <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export Spreadsheet in CCS template format - System and equipment is required to provide
COBieLite (asset code)	<div>COBieLite (asset code) <input type="checkbox"/> Apply Validation <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export COBieLite by filling Revit external ID with asset code - System will do validation if option “Apply Validation” is checked
COBieLite (GUID)	<div>COBieLite (GUID) <input type="checkbox"/> Apply Validation <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export COBieLite by filling Revit external ID with GUID - System will do validation if option “Apply Validation” is checked.
COBieLite (asset code and GUID only)	<div>COBieLite (asset code and GUID only) <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export COBieLite without attributes
COBieLite (Revit)	<div>COBieLite (Revit) <input type="checkbox"/> Apply Validation <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export COBieLite with uploaded template - System will do validation if option “Apply Validation” is checked.
Revit Checkset File	<div>Revit Checkset File <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export Revit checkset file
Unuse Asset Code	<div>Unuse Asset Code <input type="button" value="Click to Export"/></div> <ul style="list-style-type: none"> - Export list of unuse asset code



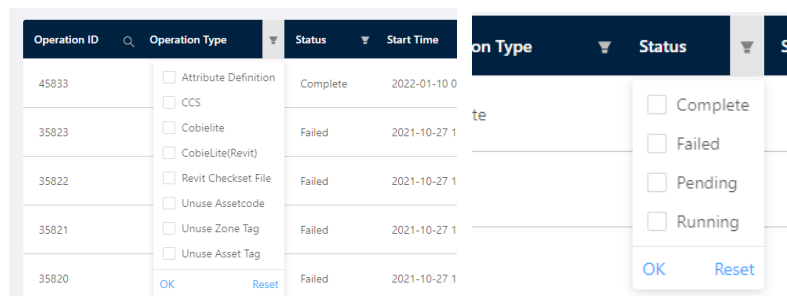
Type Name	Description
	- Asset code prefix is required to provide
Unuse Zone Tag	<div> <div>Unuse Zone Tag</div> <div>Enter Building Code</div> <div>Enter Building Level</div> <div>Click to Export</div> </div> <p>- Export list of unuse zone tag</p> <p>- Building code and building level are required to provide</p>
Unuse Asset Tag	<div> <div>Unuse Asset Tag</div> <div>Enter Building Code</div> <div>Audio Electronics Installation</div> <div>RFID Tag</div> <div>Click to Export</div> </div> <p>- Export list of unuse asset tag</p> <p>- Building code and system type are required to provide</p>

Section B

1. Export operational history record header row.
2. Rows can be searched by Operation ID and by Functional Location.
3. Click “Reset” to clear search text and display full result list.



4. Rows can be filtered by Operation Type and by Status.
5. Click “Reset” to clear search text and display full result list.



Section C

Display the export operation history with status and other information. The latest record will be put on the top of the list.

Column definition

Name	Description
Operation ID	Each export action is an operation task. Operational ID is the identifier of the operation task.
Operation Type	10 export operation type listed in section A
Status	Complete, Failed, Pending, Running
Start Time	Operation start time
End Time	Operation finish time



Name	Description
Success	Success count
Partial Success	Partial success count
Failed	Failed count
Param	For type includes unuse asset code, unuse zone tag and unuse asset tag
Functional Location	Export operation for which functional location
Log File	Click “Download” to get the log file, which shows detail information for success and failure
Exported File	Click “Download” to get the exported file

Section D

Left: Total count

Right: Pagination (go to previous/next page)

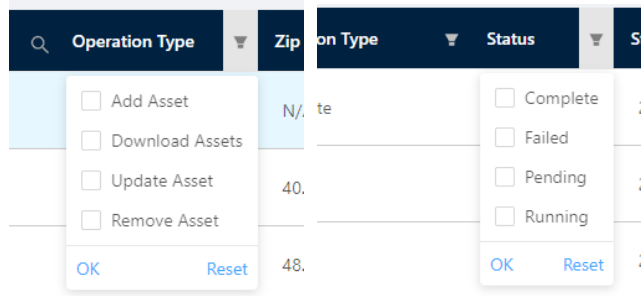
2.5 Synchronizing

Synchronize data from mobile app. Operation compromises the first-come-first-served principal.

Section A

- Synchronize operational history record header row
- Rows can be searched by Operation ID and by Functional Location.
- Click Rest to clear search text and display full result list

- Rows can be filtered by Operation Type and by Status
- Click Rest to clear search text and display full result list



- Available export operation type can be triggered from mobile app as below:

Type Name	Description
Add Asset	- Asset creation with attribute, photo
Download Assets	- For offline use. Download asset attribute, photo thumbnail
Update Asset	- Asset update attribute, photo
Remove Asset	- Asset removal

Section B

- Display the synchronize operation history with status and other information. The latest record will be put on the top of the list.
- Column definition

Name	Description
Operation ID	Each synchronize action is an operation task. Operational ID is the identifier of the operation task.
Operation Type	4 synchronize operation type listed in section A
Zip Size	Zip file size
Status	Complete, Failed, Pending, Running
Start Time	Operation start time
End Time	Operation finish time
Ack Time	Acknowledge time
Functional Location	Synchronize operation for which functional location
Log File	Click “Download” to get the log file, which shows detail information for success and failure
Imported/Exported File	Click “Download” to get the imported/exported file

Section C

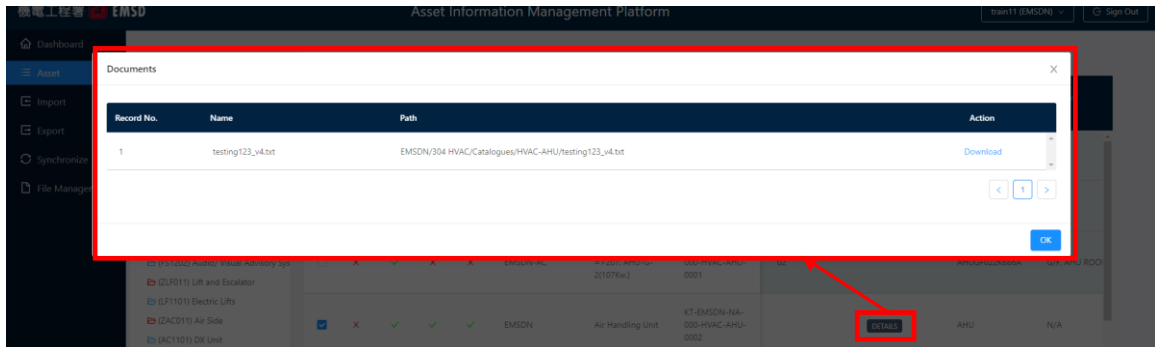
Left: Total count

Right: Pagination (go to previous/next page)

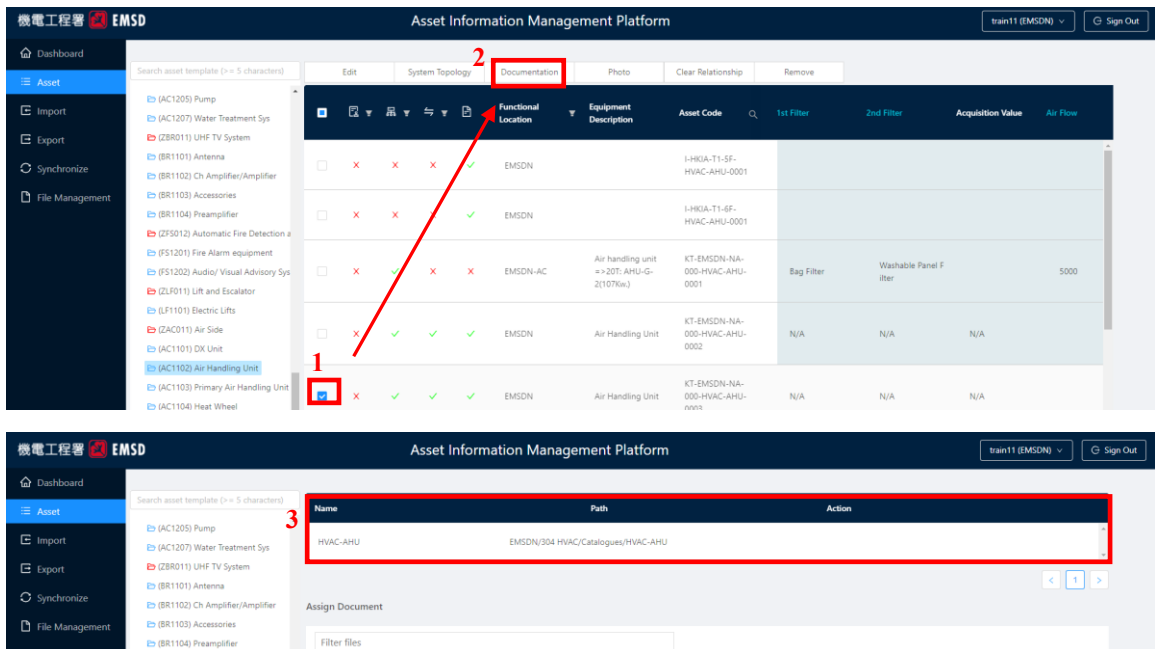


2.6 File Management

Shared asset document can be viewed in the asset list popup view after click “DETAILS” button



The same shared asset document can be viewed in the asset document page.



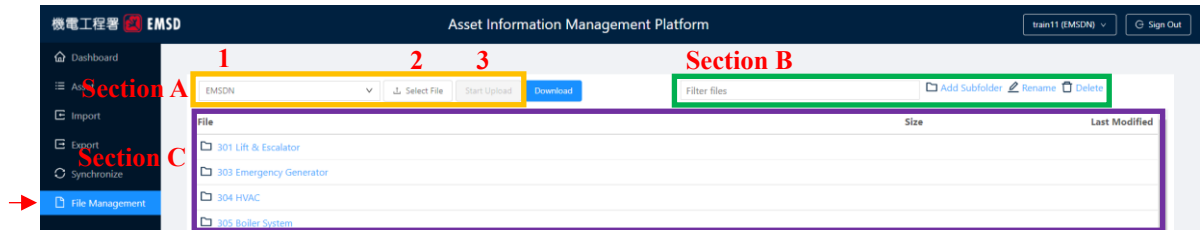
1. Choose the asset by clicking the checkbox.
2. Click “Documentation” button.
3. Asset document page shown. Shared document information shows in upper part.

The following functions of the shared asset document can be managed in this page.

- Adding Files
- Downloading Files
- Adding Folders
- Search for Files
- Renaming files
- Deleting files



The functions are located in three sections and described in details as follows.



Section A

2.6.1 Adding Individual Files

1. Choose the location the uploaded file to be stored
2. Choose the file from local drive
3. Click “Start Upload”

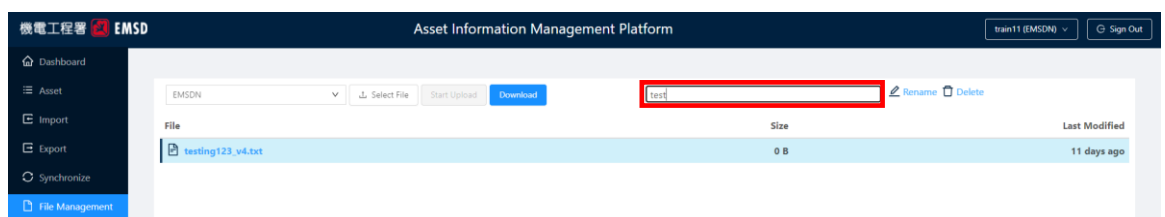
2.6.2 Adding Files with Predefined Folder Structures

1. Choose the location the uploaded file to be stored.
2. Choose the zip file from local drive (refer to Appendix I – Handover Package and Folder Structure)
3. Click “Start Upload”.
4. The system takes some time for processing after files are added.
5. File(s) will be assigned to the asset if matched:
 - System name (Level 1) e.g 301 Lift & Escalator
 - Predefined folder (Level 2) e.g Catalogues, O&M, Others, T&C
 - <system>-<equipment> (Level 3) e.g HVAC-AHU

Section B

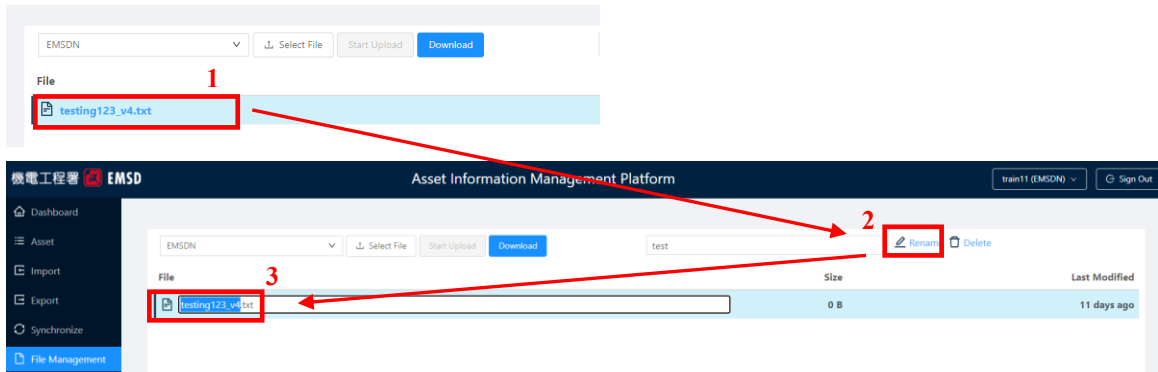
2.6.3 Searching for Files

1. Input search text and matched file appears.



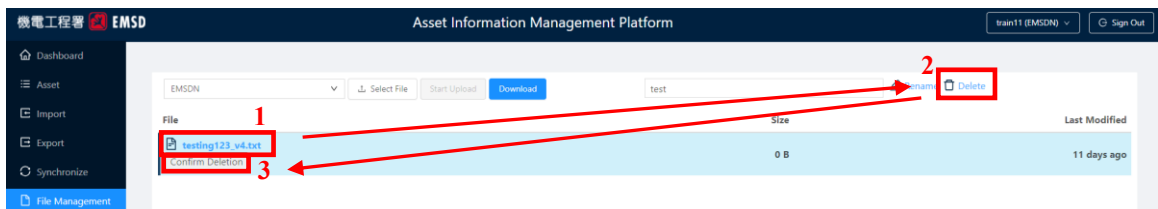


2.6.4 Modifying File Names



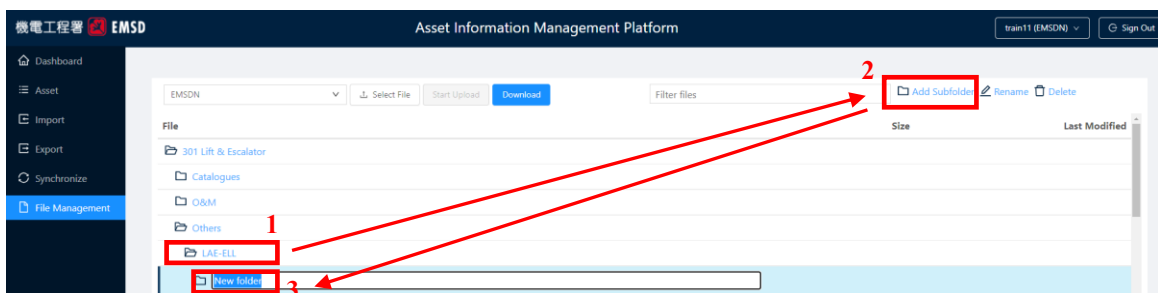
1. Highlight the file to be modified.
2. Click “Rename” button.
3. Input new file name and press “Enter” button.

2.6.5 Deleting Files



1. Highlight the file to be modified
2. Click “Delete” button
3. Input new file name and press “Enter” button

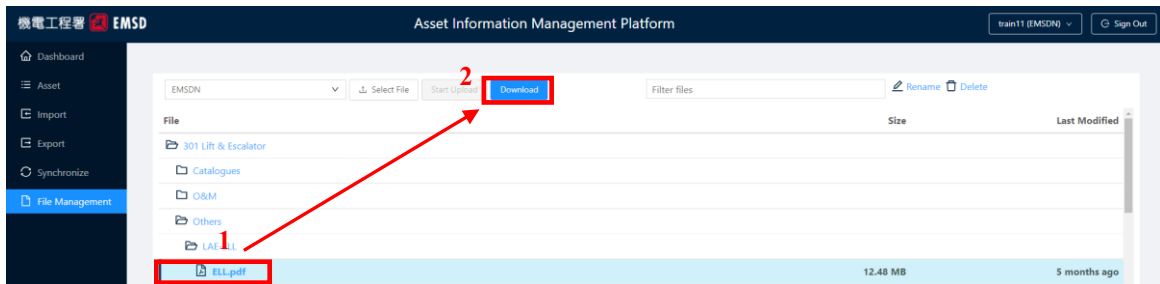
2.6.6 Adding Folders



1. Select the folder.
2. Click “Add Subfolder” button.
3. Input new sub folder name and press “Enter” button.



2.6.7 Download Files



1. Select the file.
2. Click “Download” button.

Section C

The file information fields are as follows:

Name	Description
File	File name
Size	File size
Last Modified	File last modified datetime

End of this Document