User Guide

MOBOTIX MOVE Central Management Software

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BeyondHumanVision

MOBOTIX MOVE

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Table of Contents

Table of Contents **2**

Before You Start **5**
Support 6
MOBOTIX Support 6
MOBOTIX eCampus 6
MOBOTIX Community 6
Safety Notes 6
Legal Notes 7

Overview **9**

System Requirement **11**
CMS Software Installation 12
CMS Start Up 12
Log In / Log Out 12
Client Side Access Restrictions 13
Live View 13
Playback / Export 14
Add Device 15
Record 16
Setup 16
Log 18

Live View **19**
Live View Window 21
Display Mode 23
View Layout Setup 24
E-Map Setup 27
Snapshot 30
Audio (Talk/Listen) On/Off 31
Digital Zoom 31
Event Icons 32
Image Adjustment Icons 32
Camera PTZ Control 32
PTZ Control Icons 32
Set Preset Points 33
Call Preset Points 34
Set Dome Camera Tour Path 34

Run Dome Camera Tour Path 34
Sequence Settings 35
Cruise Settings 35
Auto Pan Settings 36
Home Settings 37
Angle Settings 37
PTZ Settings 37
Privacy Mask Settings 38
Camera Image Setup 39
Camera Video Format 39
Camera Motion Detection Setup 39
Camera Audio Detection Setup 41
Camera Schedule Setup 41
Camera Video Analysis Setup 42
Face Detection 43
Behaviour Settings 44
Camera Fisheye Dewarp Setup 44
Camera Mask Setup 49
Camera Text Overlay Setup 50
Camera Alarm Setup 50
Camera IR/Exposure Setup 51
Camera System Setup 52
Camera Information 52

General CMS Configuration 53
Language Setup 54
General Setup 54
System 57
Joysticks 57
System Monitor 59
Event Setup 60

Network Setup 63
User Management Setup 64
PoE Management Setup 66

Add Device (IP Devices Connection) **69**
Add Device Window 69
IP Devices Connection 72

Record Setup **75**
Record Schedule Setup 75
Record Configuration Setup 78

Playback/Export **81**
Playback Control Bar 82
Data Erase/Protect/Bookmark 83
Search / Playback / Export Videos 86
Search and Playback Videos by Time / By Multiple HD 86
Export Videos by Time 87
Search / Playback / Export Event Videos 89
Search and Playback Event Videos 89
Export Event Videos 90
Search / View / Export Event Snapshots 90
Search and View Event Snapshots 91
Export Snapshots 92

Log **93**
Search Log Data 94
Export Log Data 94

List of figures **95**

1

Before You Start

This section contains the following information:

Support **6**

MOBOTIX Support 6

MOBOTIX eCampus 6

MOBOTIX Community 6

Safety Notes **6**

Legal Notes **7**

Support

MOBOTIX Support

If you need technical support, please contact your MOBOTIX dealer. If your dealer cannot help you, he will contact the support channel to get an answer for you as quickly as possible.

If you have internet access, you can open the MOBOTIX help desk to find additional information and software updates.

Please visit **www.mobotix.com > Support > Help Desk**.

MOBOTIX eCampus

The MOBOTIX eCampus is a complete e-learning platform. It lets you decide when and where you want to view and process your training seminar content. Simply open the site in your browser and select the desired training seminar.

Please visit **www.mobotix.com/ecampus-mobotix**.

MOBOTIX Community

The MOBOTIX community is another valuable source of information. MOBOTIX staff and other users are sharing their information, and so can you.

Please visit **community.mobotix.com**.

Safety Notes

- This camera must be installed by qualified personnel and the installation should conform to all local codes.

- This product must not be used in locations exposed to the dangers of explosion.
- Do not use this product in a dusty environment.
- Protect this product from moisture or water entering the housing.
- Install this product as outlined in this document. A faulty installation can damage the product!
- Do not replace batteries of the camera. If a battery is replaced by an incorrect type, the battery can explode.
- This equipment is not suitable for use in locations where children are likely to be present.
- External power supplies must comply with the Limited Power Source (LPS) requirements and share the same power specifications with the camera.
- When using a Class I adapter, the power cord shall be connected to a socket-outlet with proper ground connection.
- To comply with the requirements of EN 50130-4 regarding the power supply of alarm systems for 24/7 operation, it is highly recommended to use an uninterruptible power supply (UPS) for backing up the power supply of this product.

Legal Notes

Legal Aspects of Video and Sound Recording

You must comply with all data protection regulations for video and sound monitoring when using MOBOTIX AG products. Depending on national laws and the installation location of the cameras, the recording of video and sound data may be subject to special documentation or it may be prohibited. All users of MOBOTIX products are therefore required to familiarize themselves with all applicable regulations and to comply with these laws. MOBOTIX AG is not liable for any illegal use of its products.

Declaration of Conformity

The products of MOBOTIX AG are certified according to the applicable regulations of the EC and other countries. You can find the declarations of conformity for the products of MOBOTIX AG on www.mobotix.com under **Support > Download Center > Marketing & Documentation > Certificates & Declarations of Conformity**.

RoHS Declaration

The products of MOBOTIX AG are in full compliance with European Unions Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS Directive 2011/65/EC) as far as they are subject to these regulations (for the RoHS Declaration of MOBOTIX, please see www.mobotix.com, **Support >**

Download Center > Marketing & Documentation > Brochures & Guides > Certificates).

Disposal

Electrical and electronic products contain many valuable materials. For this reason, we recommend that you dispose of MOBOTIX products at the end of their service life in accordance with all legal requirements and regulations (or deposit these products at a municipal collection center). MOBOTIX products must not be disposed of in household waste! If the product contains a battery, please dispose of the battery separately (the corresponding product manuals contain specific directions if the product contains a battery).

Disclaimer

MOBOTIX AG does not assume any responsibility for damages, which are the result of improper use or failure to comply to the manuals or the applicable rules and regulations. Our General Terms and Conditions apply. You can download the current version of the **General Terms and Conditions** from our website at www.-mobotix.com by clicking on the corresponding link at the bottom of every page.

FCC Disclaimer

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Overview

Centralized Management Software (CMS) is a professional centralized monitoring system designed for all range of applications and projects. With CMS, accessing and monitoring multiple surveillance tools such as NVRs, Encoders and IP Cameras are just a few clicks away. The feature-packed intelligent surveillance offers the professional users with complete and enhanced surveillance experiences.

2

System Requirement

The following lists the recommended computer system for installing CMS software.

Items	Description
CPU	Minimum: Intel CPU Core i3-4150 3.5 GHz
	Recommended: Intel CPU Core i7-4770S 3.9 GHz
RAM Memory	Minimum: 2x4 GB
	Recommended: 2x8 GB
Graphics	Minimum: Intel HD Graphics 4400
	Recommended: Intel HD Graphics 530 or above (Support 4K Video Output)
HDD	Minimum: 1 TB or above
	Recommended: 2 TB or above
Operating Systems	Microsoft® Windows® 8.1 (x64)
	Microsoft® Windows® 10 (x64) (Recommended)
Ethernet	Gigabit LAN
IP Camera Input	Max recommended: 128 CH live view with 32 CH recording

NOTE! If the graphics is other than Intel graphics, an error may occur while running CMS. Thus, it is strongly recommended to activate Software Decode function to ensure CMS can run smoothly. Go to **Setup** > **General**, and enable **Software decode** to activate the software decode function.

CMS Software Installation

Follow the steps below to install CMS to the local computer.

1. Check the PC system to see if the PC meets the CMS system requirements.
2. Double click on CMS_Setup.exe.
3. The CMS installation setup wizard window will appear. Follow the installation wizard to install the CMS.
4. Select the destination folder and CMS shortcuts.
5. Select the components to be installed. It is recommended to select **Disable IIS Service (Recommended)** to ensure that CMS can run smoothly.

   NOTE! If users wish to load the default settings of CMS, enable **Default Setting**. Otherwise, do not enable this item.

6. When CMS installation is completed, click **Finish** to exit. Refer to section System Requirement for more about CMS system requirements.

CMS Start Up

To start up CMS, click **Start** > **Programs** > **CMS**. Alternatively, double-click on the shortcut icon on the desktop or go to “\CMS\EXE\” and double-click on CMS icon.

Log In / Log Out

Once the CMS starts up, the CMS main window will show up, and the preset logged-in user account will be “Guest”.

1. To log in the CMS system as the administrator, click the account Guest at the top right of the window and select Log out . A login window will pop up.

2. Select the administrator account “Admin” and enter the preset password “123456”.
3. Then click Confirm to login CMS as the administrator.
4. To log out a user account, click on the username and select Log out .

NOTE! It is strongly suggested to change the preset password to prevent unauthorized access.

Client Side Access Restrictions

There are three ways to access the MOVE NVR via software client:

- Direct connection via monitor and keyboard
- Remotely via web browser

  NOTE! Recommended browsers are Mozilla Firefox or Google Chrome.

- Remotely via MOVE CMS

Depending on the access variant used, different menu items and functions are available:

Live View

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
View Management	✓	✓	✓
Camera Image Setup	✓	✓	✓
Camera Video Format	✓	✓	✓

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
Camera IR/Exposure Setup	✓	✓	✓
Camera PTZ Control	✓	✓ (Camera Zoom/Focus Control)	✓
Camera Motion Setup	✓	✓	✓
Camera Alarm Setup	✓	✓	✓
Camera Audio Detection Setup	✓	✓	✓
Camera Video Analysis Setup	✓	✓	✓
Camera Schedule Setup	✓	✓	✓
Camera Text Overlay Setup	✓	✓	✓
Camera Mask Setup	✓	✓	✓
Camera Fisheye Setup	✓	✓	✓
Camera Thermal Setup	✓	✓	✓
Camera System Setup	✓	✓	✓
Camera Information	✓	✓	✓

Playback / Export

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
Local Playback By Time	✓	✓	✓
Local Playback By Multiple HD	✓	X	X
Local Playback By Event	✓	✓	✓
Video Analysis By Event	✓	✓	✓
Edge Archiver By Channel	✓	X	X
Snapshot	✓	X	X
Snapshot by Event	✓	✓	✓
Playback Information	✓	X	✓
Remote NVR Playback By Time	X	X	✓
Remote NVR Playback By Event	X	X	✓

Add Device

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
Camera Lock	✓	✓	✓
Show Picture	✓	X	✓
Site Name	✓	✓	✓
Type	✓	✓	✓
IP Address	✓	✓	✓
MAC Address	✓ (under detail view)	✓	✓
Protocol	✓	✓	✓
Streaming Port	✓	✓	✓
Port	✓ (under detail view)	✓	✓
Username	✓	✓	✓
Password	✓	✓	✓
Model	X	✓	✓
Main Streaming	✓ (under detail view)	✓	✓
Sub Streaming	✓ (under detail view)	✓	✓
Firmware Config	✓	✓	✓
Refresh	✓	✓	✓
Auto Add	✓	X	✓
Auto Detect	✓	X	✓
Re-scan Device	✓	✓	✓
Device Filter	✓	✓	✓

Record

Function	Subfunction	Direct connection	Remotely via web browser	Remotely via MOVE CMS
Recording Schedule Selection	Show Picture	✓	X	✓
	Recording Site	✓	✓	✓
	Type	✓	✓	✓
	IP Address	✓	✓	✓
	Schedule Template	✓	✓	✓
	Retrieve Edge Recording	✓	✓	✓
Recording Template Configuration	Default	✓	✓	X
	Record	✓	✓	X
	No Record (Special configuration for passing ONVIF on NVR side)	✓	✓	✓
Record Setup	C:	X	X	✓
	D:	X	X	✓
	Circular Recording	✓	✓	✓
	Data Life Time	✓	✓	✓
Alarm Behavior Configuration	Post-Alarm Recording	✓	✓	✓
	Pre-Alarm Recording	✓	✓	✓
Edge Configuration	Edge Archiver Interval	✓	✓	✓

Setup

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
Language	✓	✓	✓
General	✓	✓	✓
System	✓	✓	✓
Date/Time	✓	✓	X

Function		Direct connection	Remotely via web browser	Remotely via MOVE CMS
	Joysticks	✓	X	✓
	System Monitor	✓	✓	✓
	Event Management	✓	✓	✓
Network		✓	✓	✓
	Ethernet	✓	✓	X
	Email	✓	✓	✓
	DDNS	✓	✓	X
	HTTPS	✓	✓	X
	STUN/TURN	✓	✓	X
Storage		✓	✓	✓
	Local Storage	✓	✓	X
	Cloud Storage	✓	X	X
	NAS	✓	X	X
User Management		✓	✓	✓
Display		✓	X	X
PoE/ IP Port Management		✓	✓	X
	PoE Management	✓	✓	X
	Advanced	✓	X	X
	DHCP Server	✓	X	X
Video Analysis		✓	✓	✓
	Face Recognition	✓	✓	✓
	License Plate Recognition	✓	✓	✓
About		✓	✓	✓

Log

Function	Direct connection	Remotely via web browser	Remotely via MOVE CMS
User Operation Log	✓	✓	✓
IP Camera Event	✓	✓	✓
VA Detected Event	✓	✓	✓
NVR System Event	✓	✓	✓

3

Live View

The CMS Live View Window shows up after starting up. The following section describes each item in the Live View.

This section contains the following information:

Live View Window **21**

Display Mode **23**

View Layout Setup **24**

E-Map Setup **27**

Snapshot **30**

Audio (Talk/Listen) On/Off **31**

Digital Zoom **31**

Event Icons **32**

Image Adjustment Icons **32**

Camera PTZ Control **32**

PTZ Control Icons 32

Set Preset Points 33

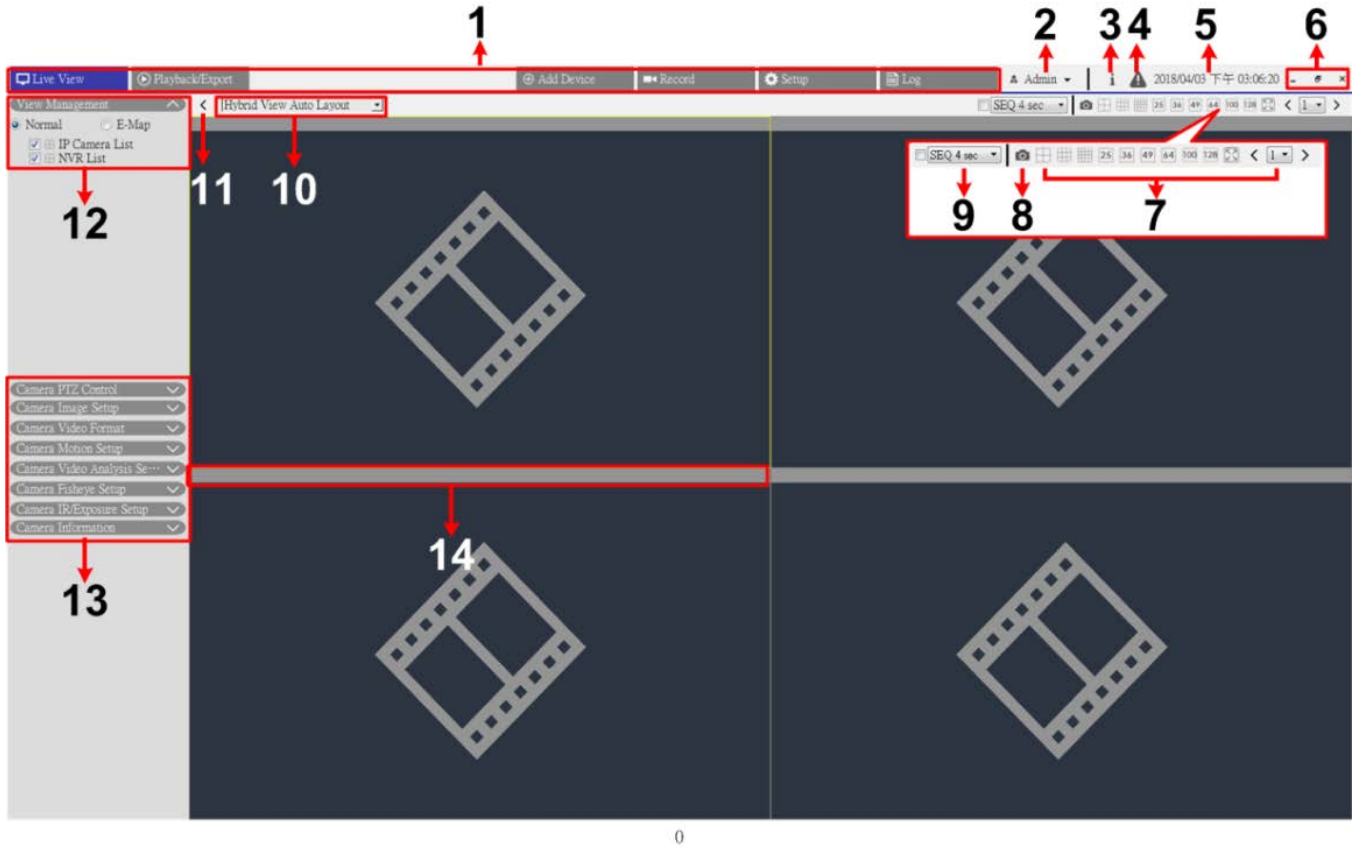
Call Preset Points 34

Set Dome Camera Tour Path 34

Run Dome Camera Tour Path 34

Sequence Settings 35
Cruise Settings 35
Auto Pan Settings 36
Home Settings 37
Angle Settings 37
PTZ Settings 37
Privacy Mask Settings 38
Camera Image Setup **39**
Camera Video Format **39**
Camera Motion Detection Setup **39**
Camera Audio Detection Setup **41**
Camera Schedule Setup **41**
Camera Video Analysis Setup **42**
Face Detection 43
Behaviour Settings 44
Camera Fisheye Dewarp Setup **44**
Camera Mask Setup **49**
Camera Text Overlay Setup **50**
Camera Alarm Setup **50**
Camera IR/Exposure Setup **51**
Camera System Setup **52**
Camera Information **52**

Live View Window



0

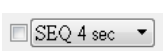
Fig. 1: Live view window

No.	Item	Description
1	Function Tabs	Function tabs include **Live View**, **Playback/Export**, **Add Device**, **Record Setup**, **Setup** and **Log**.
2	Login/Logout	Log into the CMS system with an authorized user account or log out with the currently logged-in account.
3	System Info	Click ℹ to display the CMS System Info Pane. Basic CMS information can be checked here, e.g. CMS software version, CPU status, RAM (memory) usage, etc. Click the icon again to hide the pane.
4	Instant Notification	Click ⚠ to display notification center. ■ System: When either read/write speed is slow, or CPU temperature is high, warning messages will be displayed here. ■ Device: When an IP camera event is triggered, the alert messages will be listed here.

No.	Item	Description
5	Date/Time	This shows the current date/time information.
6	Window Basics	To minimize, maximize and close the CMS software.
7	Display Mode	Display modes include 4-window, 9-window, 16-window, 25-window, 36-window, 49-window, 64-window, 100-window, 128-window, full-view and sequence display (No. 9).
8	Snapshot	Click to capture the current viewing in Live View or Playback/Export tab.
9	Sequence Display	This function is used to sequence the live view videos from the connected IP cameras to avoid manual backtracking. Select the sequence dwell time and check the box to enable sequence display.
10	View Layout Setup	You can choose or design their desired display layout by selecting **Hybrid View Auto Layout** or **Hybrid View Custom Layout**. ■ Hybrid View Auto Layout: The CMS automatically adjusts the layout to the suitable layout format when new IP devices are added to the CMS. ■ Hybrid View Custom Layout: You can self-define the display layout using this function. The CMS provides users at most 4 display layouts to setup. The following section will further describe how to setup a display layout.
11	Hide Function Panes	Click ‹ or › to hide or show the View Management Pane and Camera Setup Pane.
12	View Management	■ Normal Mode: Here lists all camera sites that are currently connected. CMS categorizes IP devices into Three groups, **IP Camera List**, **NVR List** and **Encoder List**. Check either box to display its corresponding sites. Check all boxes to gather and display all camera sites. ■ IP 192.168.8.109 [R]: [R] suggests CMS is currently recording streaming from this site. A recording icon Ⓡ will also be displayed at the bottom-left of the channel grid. ■ E-Map Function Mode: You can import the layout of the monitoring areas and place the location of the cameras on the map. Go to section E-Map Setup for further description. ■ Displayed List/Undisplayed List Mode (Custom Layout Only): In this mode, you can decide which channels of the connected IP devices to show/hide for each custom layout. **Displayed List** shows the currently displayed IP devices, and **Undisplayed List** shows the hidden ones.

No.	Item	Description
13	Camera Setup Panes	Several main settings of the IP cameras can be configured via CMS, and its basic information can also be viewed. Each setup pane will be further described in later sections.
14	Camera Title Bar	Camera title bar is above each channel grid. You can check the connection status of the IP camera by its color. ■ Gray: When the CMS is (1) started for the first time, or (2) currently not connecting any IP cameras, the title bar is in gray, indicating no IP camera is connected to the channel grid. ■ Green: The green title bar suggests the CMS is connecting the IP camera. ■ Blue: The blue title bar indicates the connection between the CMS and the IP camera is in good condition. ■ Red: The red title bar indicates there is connection failure between the CMS and the IP camera.

Display Mode

1. Click any display icon to view the connected camera images in multiple-window modes. The available display modes are:
   - (4-window)
   - (9-window)
   - (16-window)
   - (25-window)
   - (36-window)
   - (49-window)
   - (64-window)
   - (100-window)
   - (128-window)
   - (full-view)
   -  (sequence display).

2. Click on any icon to view the selected display mode.

   - Click 1 and select a page number to view previous or next cameras in the view group.
   - To view a certain channel in single channel mode, double-click on the channel grid.
   - Double-click again to exit single channel mode.

Sequence Display

Select the sequence dwell time from the drop-down menu and check the box to enable sequence display.

If **Enable Event Full Screen View** is enabled and an event is triggered when running sequence display, CMS will resume sequence until event full screen ends.

Full-view Mode

1. Click to view the display window in full-view.

In full-view mode, move the mouse cursor to the top-center of the monitor, and a float function bar will appear as below.

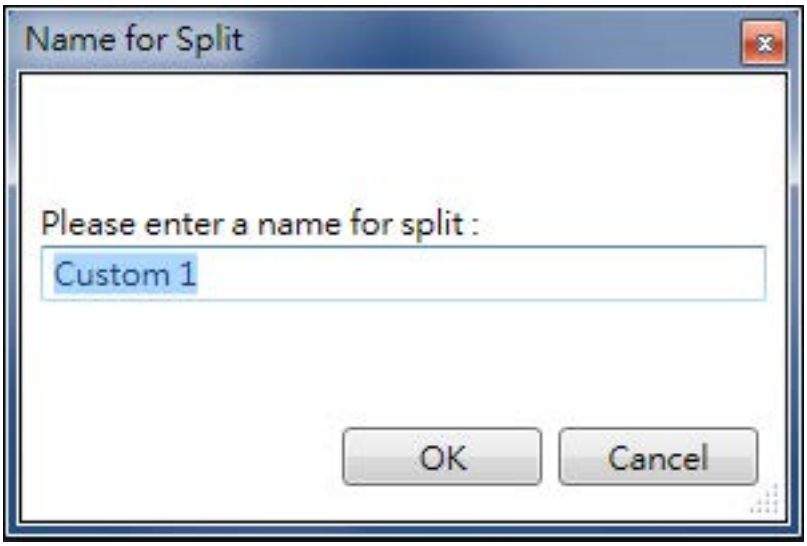
2. Click to attach the function bar. You can capture the current viewing image by clicking on .
3. To exit full-view mode, click .

View Layout Setup

You can setup their preferred CMS display layout. Select **Hybrid View Custom Layout** and its setting items will be shown as below.

Fig. 2: Add / Rename / Delete a Display Layout

1. Click **Add**. A new layout will be added to the layout list.
2. Right click the layout name and select **Edit name** from the drop-down menu. A setting window pops up.



3. Set the layout name and click **OK** to save and apply the setting.
4. Right click the layout name and select **Remove** from the drop-down menu. The layout will be removed from the layout list.

Edit a Display Layout

Follow the steps below to setup a display layout.

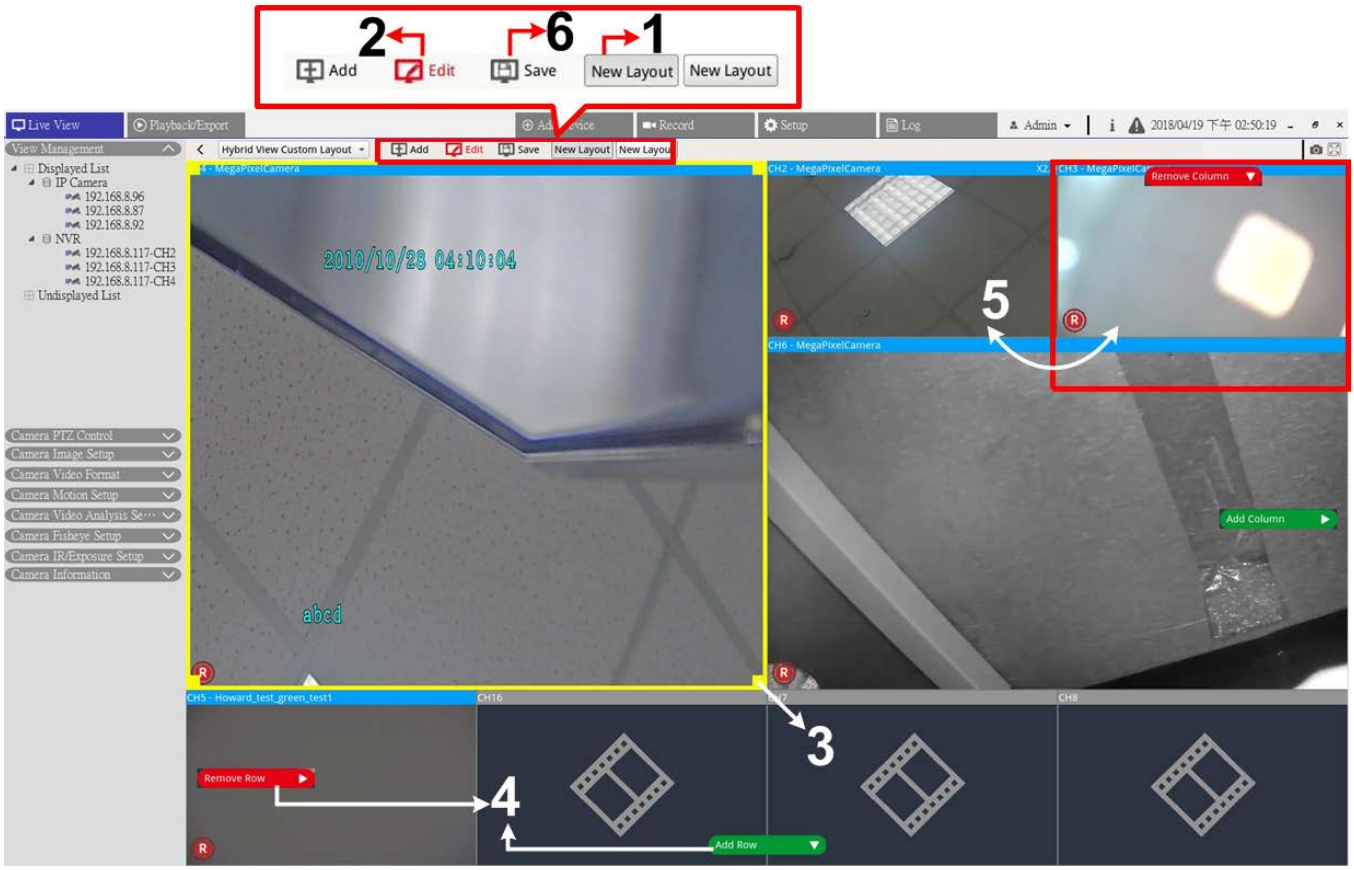


Fig. 3: Edit a Display Layout

1. Select a layout from the layout list.
2. Click Edit to enter its layout setup mode.
3. To resize a channel grid, first click on a channel grid. Click and drag any corner of the yellow frame to draw a grid layout. When finishing the drawing, release the mouse.
4. To add more channel grids, click **Add Column** or **Add Row**. Alternatively, click **Remove Column** or **Remove Row** to remove the added columns or rows.
5. Two different channels can be swapped. Click and drag any channel from its original grid to the desired grid and drop the channel.
6. Click **Save** to save and apply the setting.

Manage the Displayed/Undisplayed Channels of a Layout

Follow the steps below to set the displayed/undisplayed channels.

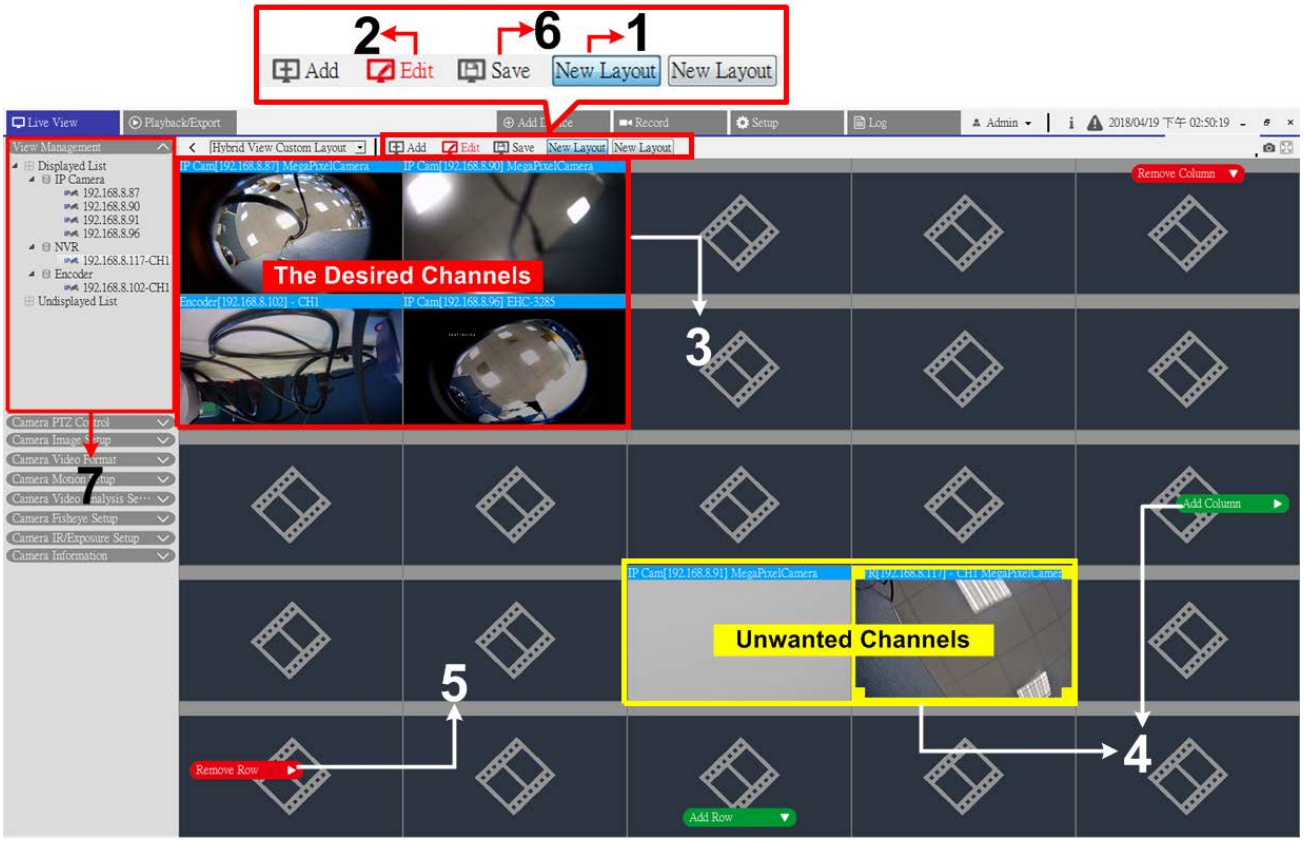


Fig. 4: Manage the Displayed/Undisplayed Channels of a Layout

1. Select a layout from the layout list.
2. Click **Edit** to enter its layout setup mode.
3. Choose the desired channels to display for the layout; then gather the channels at the upper-left corner of the layout.

4. Move the unwanted channels away from the desired channels. If needed, click **Add Column** or **Add Row** to make space for the unwanted channels.
5. Click **Remove Column** or **Remove Row** to take out the redundant channel grids. The unwanted channels will automatically turn undisplayed.
6. Click **Save** to save and apply the setting.
7. See View Management pane. Make sure “Displayed List” includes the to-be-shown IP devices, and so does the “Undisplayed List”.

E-Map Setup

E-map allows users to illustrate the positions of cameras on a self-selected image.

1. In the View Management Pane, select **E-Map** to display the E-Map setting pane. Follow the instruction to setup the E-map.

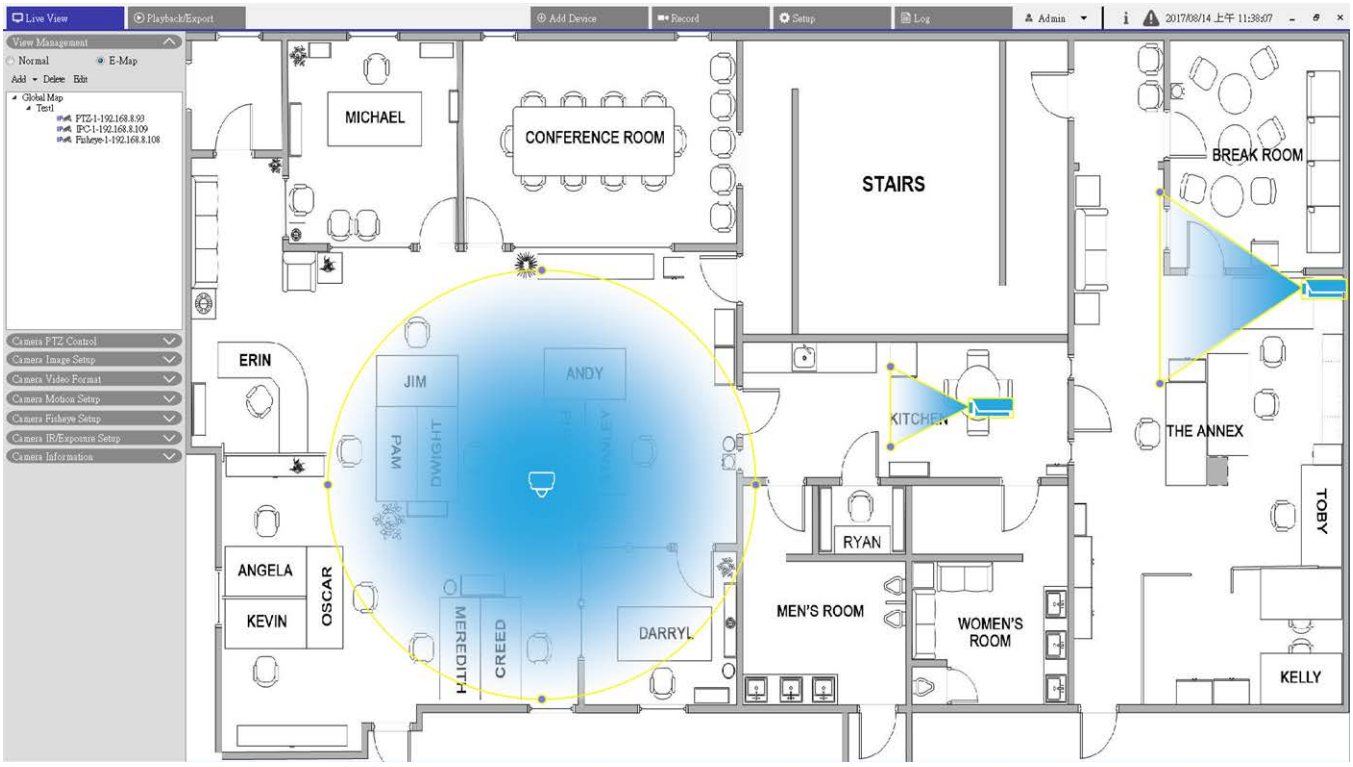


Fig. 5: Add Maps

1. Select **Global Map** > **Add** > **Add Map**. Alternatively, right-click **Global Map** > **Add Map**.
2. Click and select a file folder.
3. Select a map file and click **OK**.

4. Set the map a name and click **Apply**. The map will be added to the map list.
5. Click and drag the Google Map location icon to the desired location and then drop it.

Update Maps

1. Select any Map from the E-map menu, and click **Edit**. The map edit window will appear.
2. Modify the name of the map, or update maps by uploading new maps.
3. Click **Apply** to save the settings.

Implement Google Map Function

You can add maps with geographic location in Google Map.

1. Click and drag the Google Map to the desired location. Use + or − to zoom in or out the Google Map to search the location.
2. Click and drag the pegman to the desired location.
3. Drop the pegman on the map and the screen will zoom down to Street View.
4. Add a new map to the desired location/area. Once the map is added, the Google Map location icon will be shown on the map.
5. Move the mouse cursor to and you can preview the map.
6. Double click to display the map.
7. To re-locate the map, click and drag to the desired location and drop it.

Add Cameras

Follow the steps to add cameras to the map.

1. Select a map from the map menu.
2. Step 2. Click **Add** > **Add Camera**. Alternatively, right click the map name and select **Add Camera**.
3. Select a camera from the Camera drop-down list.
4. Enter the name of the camera.
5. Select the camera type, IP Cam or Fisheye.
6. Click **Apply**. The camera will be added to the map.

Edit Cameras

You can revise the names of the added cameras or replace cameras.

1. Select any camera on the E-map menu, and click **Edit**. Alternatively, right-click any camera in the map list and select **Edit**. The Camera Setup window will appear.

2. Reset the camera name or change the camera.
3. Click **Apply** to save the settings.

NOTE!
Changing cameras will not influence the original position of the camera icons on the map.

Change the Camera Location on the Map

After cameras are added to the map, use the following instruction to assign the camera a location on the map as the exact location of the camera.

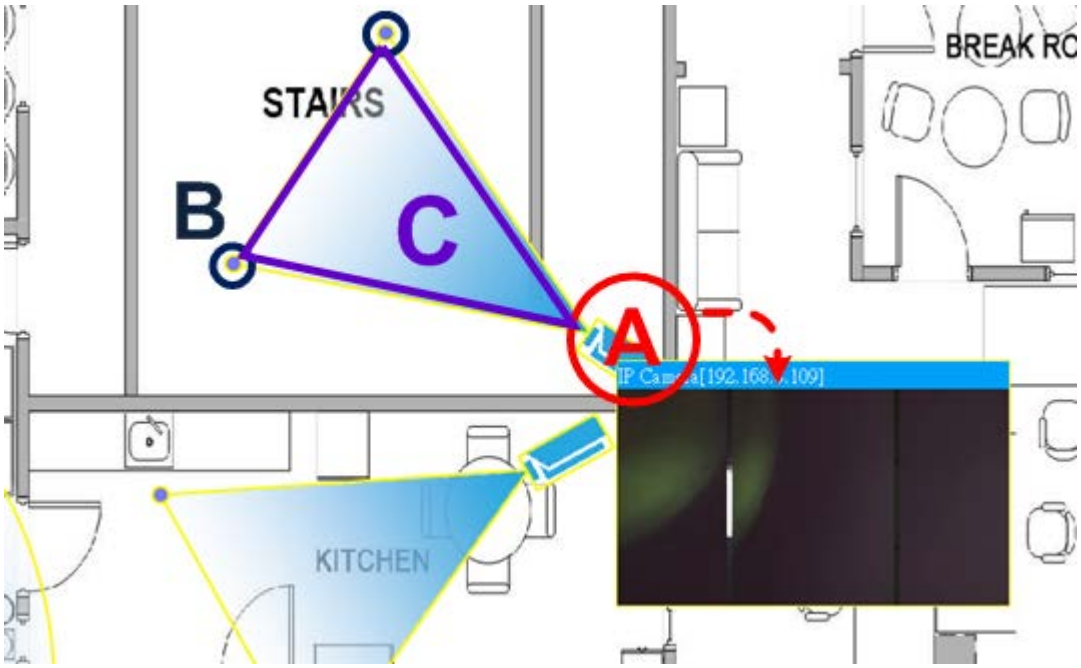


Fig. 6: Change the Camera Location on the Map

Icon	Description	Icon	Description
	IP Camera / PTZ Camera		Fisheye Camera

Item	Action	Description
A	Display Camera Live View	Double click the camera icon to display the live view of the camera. Double click again to hide the preview.
	Re-locate the Camera Icon	Click and drag the icon to the desired location.
B	Adjust Camera Field of View	Click, hold and drag either point to adjust the camera's field of view.
C	Adjust the Camera Direction	At the camera fields of view (triangle), click, hold and drag to rotate the direction of the camera icon.

NOTE!
When users resize the CMS window, the position of the camera icons on the map will change.

Delete Cameras

1. Select any camera on the E-map menu, and click **Delete** to remove the camera from the map.

Delete Maps

1. Select any map on the E-map menu, and click **Delete**. Alternatively, right click on any map from the map list and select **Delete**. The selected map will be removed from the list.

Snapshot

CMS allows users to capture the current viewing image in Normal Viewing Mode or in Playback/Export tab. The snapshot resolution fixed at 1080p.

1. Click at the top-right of the monitor, and the current viewing will be captured. The pop-up Snapshot Preview is displayed.

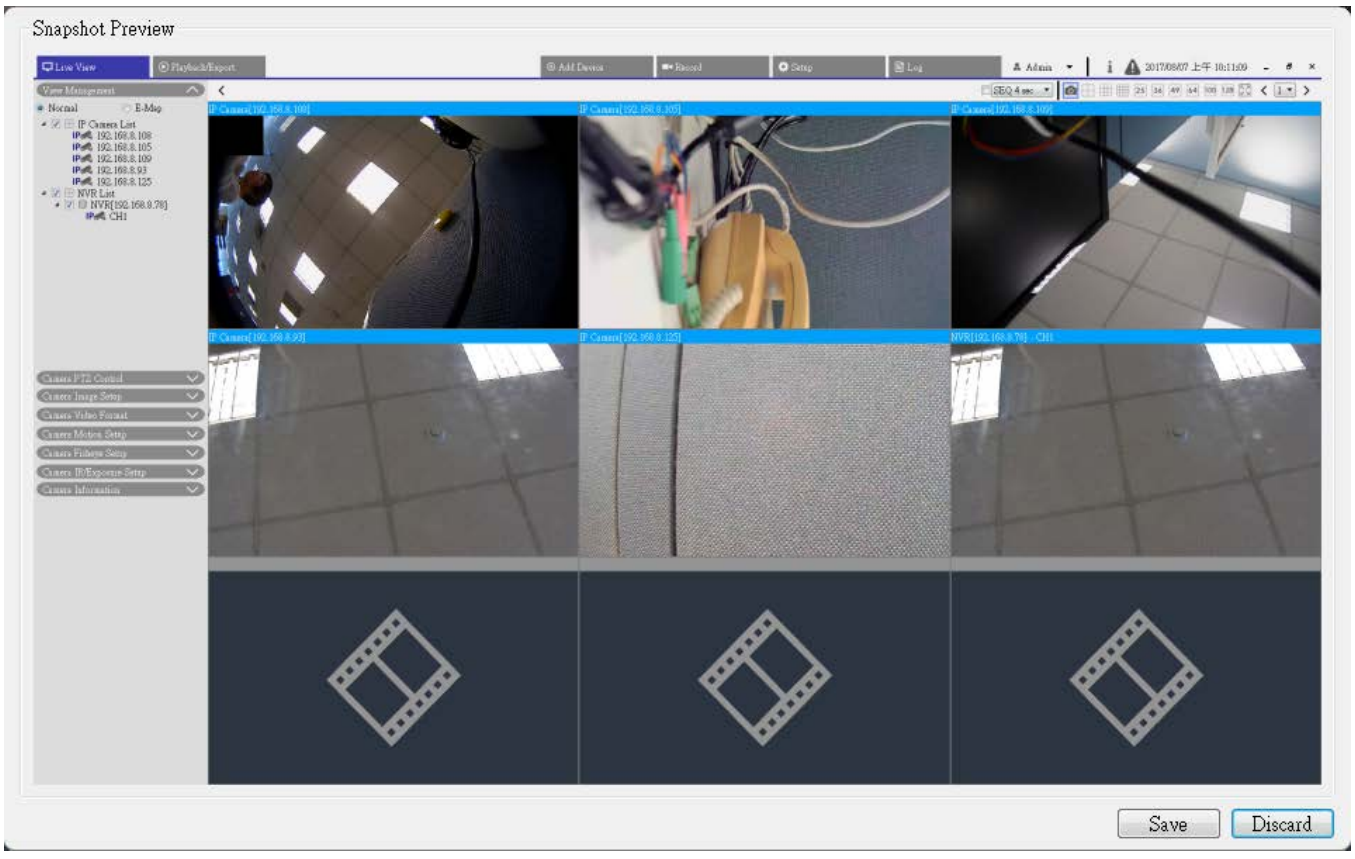


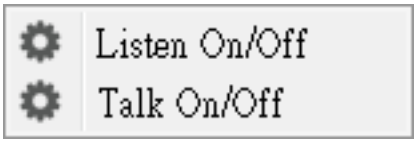
Fig. 7: Snapshot Preview

2. Click **Save** and select a destination folder from the pop-up Save File dialog.
3. Click **Save** to save the captured image, click **Discard** to cancel the operation.

Audio (Talk/Listen) On/Off

Audio (Talk/Listen) function is used to switch on/off the audio of the selected IP camera channel.

1. Move the mouse cursor to any channel grid and click the Audio icon to display the drop-down menu as below.



2. Select **Listen On/Off** to enable CMS to receive audio from the camera. A speaker icon is displayed be at the bottom-left of the channel grid as a reminder.
3. Select again to disable the “Listen” function.
4. Select **Talk On/Off** to enable CMS audio transmission to the camera.
5. Select again to disable the “Talk” function.

NOTE! The Audio function can only be enabled a channel at a time.

Digital Zoom

You can view the camera zoom-in images via digital zoom function.

1. Move the mouse cursor to any channel grid and scroll up/down the mouse wheel to zoom in/out. The zoom-in magnification will be displayed on the top-left corner of the grid. The maximum magnification is 10x.
2. Click and drag the mouse to view the desired viewing.

Event Icons

When an alarm or event occurs, the icon corresponding to the event type will show up at the bottom-left of the channel grid.

Icon	Description
	Motion Detection
	Alarm Input Triggered
	VA Event Detection

Image Adjustment Icons

Move the mouse cursor to any channel grid to display and use image adjustment icon located at the bottom-right of channel grid.

Icon	Description
	Rotate the View 90°
	Fill up the Channel Grid
	Return to Original Aspect Ratio

Camera PTZ Control

CMS supports PTZ control function. In Live View, select a camera channel that equips pan/tilt/zoom function and expand the Camera PTZ Control Pane on the left of the monitor.

PTZ Control Icons

Preset points and camera tour can be set here.

Icon	Description	Icon	Description	Icon	Description
	Focus Far Click on it to focus the lens of selected camera at a farther point.		Focus Near Click on it to focus the lens of selected camera at a nearer point		Iris Close Click on it to shrink the Iris on the selected camera.
	Iris Open Click on it to open the Iris on the selected camera		Zoom Out Click on it to zoom out the lens of selected camera. This function is to shrink the current image and a larger viewing area can be displayed.		Zoom In Click on it to zoom in the lens of selected camera. This function is to enlarge a certain area. To implement continuous focus/iris/zoom adjustment, hold the icon.
	Set Tour This function is to setup at most 8 tour paths of the camera.		Go Tour Execute the tour path for viewing.		Set Preset This function is to setup certain position as a preset point.
	Go Preset Go to the pre-determined preset positions for viewing.		Auto Focus The focus of the selected camera will be automatically adjusted.		Delete Preset

1. Click on PTZ control icons to zoom out/in, focus, iris open/close, and pant/tilt control the PTZ.

Direction Control Panel

The pan/tilt speed depends on the distance between the control button and the Direction Control Panel. The farther the control button is dragged from the center of the panel, the faster the pan/tilt speed is, and vice versa.

1. Click and drag the control button (in the center of the panel) to pan/tilt the lens of the selected camera.

Set Preset Points

CMS allows users to set preset positions. The amount of preset points depends on the camera manufacturer. Follow the steps to set preset points.

1. Click on a camera channel that provides a preset point function.
2. Select a preset number from the preset list.

3. Use the Direction Control Panel to pan/tilt the camera to the desired position.
4. Click ✓ to save the position. When the indicator of the selected position turns green this preset point has been set.
5. To delete a preset point, select the point from the list and click 🗑, the setting of the preset point will be cleared.

Call Preset Points

Follow the steps to call preset points.

1. Click on a camera channel that equips pan/tilt/zoom function.
2. Select a preset point number from the Preset Point List.
3. Click GO to call the preset point. The selected camera will automatically move to the preset position.

Set Dome Camera Tour Path

CMS allows users to set Tour Path. Follow the steps to set tour paths.

1. Click on a camera channel that equips pan/tilt/zoom function.
2. Select a tour path number from the Tour Path list.
3. Click ® to start recording the tour path.
4. Set a tour path using the Direction Control Panel to pan/tilt the camera.
5. Click ® to save the position. When the indicator of the selected position turns green this tour path position has been set..

Run Dome Camera Tour Path

Follow the steps to run the camera tour path.

1. Click on a camera channel that a camera tour path is already set.
2. Select a Tour Path number from the Tour Path List.
3. Click ↻ to start touring as recorded.
4. To end the camera tour, click on Direction Control Panel.

Sequence Settings

The camera supports a total of 8 Sequence Lines; each Sequence Line consists of up to 64 Preset Points. Please refer to the instructions below to program a Sequence Line.

NOTE! Before setting this function, users must pre-define at least two Preset Points.

Sequence Line

Click and select the number of Sequence Line to be set from the drop-down list in the top of the Sequence setting menu.

Sequential Preset Points Setting

Setup each Preset Point of the programmed Sequence Line in order. Select a Preset Point from the **Name** list for the specified number of Preset Point and enter both Dwell Time (0 to 127) and Speed (0 to 14) into the corresponding fields.

When finishing the sequential Preset Points setting, click **Apply** to save the setting.

Sequence Run

Select the specified Sequence Line from the drop-down list, click , and then the camera will start moving forward each scene sequentially as programmed.

To view the camera executing a Sequence Line in full screen mode, please move the cursor onto the live view pane, right-click and left-click to select “Full screen”. Then you can view the camera navigation in full screen.

To stop running the Sequence Line, simply move the cursor to the live view pane and move the camera in any direction.

Cruise Settings

The camera supports up to 8 Cruise Paths. Refer to the steps below to setup a Cruise Path.

1. Select a path number from the drop-down list.
2. Move the cursor to the live view pane, and move the camera to a desired view (PTZ controls) as the start point of a Cruise Path.
3. Click to start recording the Cruise Path.
4. Set a Cruise Path using the Direction Control Panel to pan/tilt the camera.
5. Click to save the position. turns green , suggesting this path has been set.
6. Click **Apply** to save the setting.

Cruise Run

Select the specified Cruise Path from the drop-down list, click , and then the camera will start touring around as recorded.

To view the camera touring in full screen mode, please move the cursor onto the live view pane, right-click and left-click to select “Full screen”. Then you can view the camera navigation in full screen.

To stop running a Cruise Path, simply move the cursor to the live view pane and move the camera in any direction.

Auto Pan Settings

The camera supports 4 Auto Pan Paths. Follow the steps to setup an Auto Pan Path.

1. Select a path number from the drop-down list.
2. Click and select the speed ratio from the **Speed** drop-down list; the speed ratio ranges from 0 (low) to 3 (fast).
3. Choose to run the Auto Pan Path in right / left direction from the **Direction** drop-down list.
4. Move the cursor to the live view pane, and move the camera to a desired view as the Start Point of an Auto Pan Path.
5. Move the camera to another desired position as the end point of the Auto Pan Path.
6. Click to save the position. turns green , suggesting this path has been set.

   NOTE! The zoom ratio of an Auto Pan’s Start Point remains the same throughout the path.
7. When finishing the auto pan setting, click **Apply** to save the setting.

Auto Pan Run

Select the specified Auto Pan Path from the drop-down list, click the < > button, and then the camera will start moving horizontally as recorded.

To view the camera panning in full screen mode, please move the cursor onto the live view pane, right-click and left-click to select “Full screen”. Then you can view the camera navigation in full screen.

To stop running an Auto Pan Path, simply move the cursor to the live view pane and move the camera in any direction.

Home Settings

Users are able to set an operation mode to ensure constant monitoring. If the camera idles for a period of time, the selected function will be activated automatically. The Home function allows constant and accurate monitoring to avoid the camera idling or missing events.

Switch

Select **On** or **Off** to activate or disable the Home function.

Time

The time here represents the duration of camera idle time previous to running a Preset Point / Cruise Line / Auto Pan Path / Sequence Line. When the Home function is activated, the camera will start to count down when it idles, and then execute the predefined action as time expires. The time period ranges from 1 min. to 128 min.; specify it in the field.

Type & Line

Select a Home action type (Preset Point / Cruise Line / Auto Pan Path / Sequence Line) and specify the number of Preset Point / Cruise Line / Auto Pan Path / Sequence Line from the drop-down **Type** and **Line** lists.

Click **Apply** to save the Home setting.

Angle Settings

The camera's tilt angle is adjustable from minimum −10° to maximum +100°.

Enter the desired minimum and maximum tilt angle into the corresponding fields respectively.

Click **Apply** to save the angle setting.

PTZ Settings

Flip

You can track an object continuously when it passes under the camera with setting Flip to Mechanical (M.E.) mode.

NOTE! The Flip setting is manual-controlled only. If a Preset Position or a point for other function (e.g. Sequence) is set in the position that can only be reached through FLIP motion, when the Flip function is turned off, the position cannot be reached anymore.

NOTE! To make the camera tilt between a specific range, such as -10° to +100°, please go to the **Angle Setting** to set the tilt angle range. Otherwise, the camera will tilt 90° as the default setting.

M.E. Mode

M.E. is a standard mechanical operation. As the camera tilts to the maximum angle, it will pan 180°, and then continue tilting to keep tracking objects.

Speed by Zoom

This function allows the camera to adjust the pan/tilt speed automatically by the internal algorithm when the zoom ratio is changed. The rotating speed will become slower as the zoom ratio gets larger.

Click **Apply** to save the setting.

Auto Calibration (Servo Feedback)

Integrating Servo Feedback technology, the camera would calibrate and precisely return to the previous position without stalling when the deviation of dome pivot is detected.

Select **On** and click **Apply** to save the setting.

Privacy Mask Settings

The Privacy Mask function aims to avoid any intrusive monitoring. When setting a mask, it is suggested to set it at least twice bigger (height and width) than the masked object. The camera will assume the center of the selected view as the starting point. Therefore, keep the target object / region nearly positioned in the center of the scene.

Color

Select a color from the **Color** drop-down list for the specified Privacy Mask. Click **Set** to apply the setting.

Mask Number (1~20): Specify the number of the programmed Privacy Mask in the entry field.

Zoom Factor

Normally, a privacy mask goes repositioned and resized to cover the masked area whenever the camera is panned/tilted/zoomed. Zoom Factor allows users to hide the mask when zoom ratio is set lower than the original ratio.

For example, when the privacy mask is set at a certain zoom ratio (e.g. 5x), the privacy mask will be resized when the camera is zoomed in (e.g. from 5x to 20x); however, when the camera zooms out (e.g. from 5x to 2x), the privacy mask will be hidden.

Select **On** or **Off** to activate or disable the Zoom Factor function.

Camera Image Setup

You can configure the image settings of the selected IP camera. The image settings include image adjustment, noise reduction, white balance, etc.

1. Click the desired IP camera channel to start the setting. When adjusting image configuration, check the channel grid for the change of image setting.
2. After setting, click **Apply** to save the setting.
3. If necessary, click **Refresh** to renew the setting.

NOTE! Some setting items may be unavailable for certain IP camera models. Those setting items will be grayed out and cannot be accessed.

Camera Video Format

You can configure the settings of video format. The setting items vary according to the types of IP cameras, "MOBOTIX MOVE-H.265", “MOBOTIX MOVE-H.264” and ONVIF.

The video format settings include video resolution, video rotation, bit rate setup, etc. However, if the live streaming comes from the connected NVR or Encoder, this setup pane will be unavailable.

1. After setting, click **Apply**. Otherwise, the setting will not be saved.
2. If necessary, click **Refresh** to renew the setting.

NOTE! Some setting items may not be available for certain IP camera models. Those setting items will be grayed out and cannot be accessed.

Camera Motion Detection Setup

You can set up the configuration of motion detection. Motion detection settings include sampling, detection level, sensitivity, time interval and motion detection areas.

- Click on any IP camera channel and select **Camera Motion Setup** to enter the motion setup mode. The following describes each item.

  NOTE! Note that this function is not available for IP cameras connected via NVRs or Encoders.

NOTE! Users must ensure the motion detection function of CMS is enabled under the Event setting menu. Refer to section Event Setup under System Setup for further instruction.

Motion Intensity

Motion intensity shows the status of motion activity.

Motion Index

CMS supports each IP camera 4 sets of motion detection settings. Select from the drop-down menu next to **Motion**. In each motion index, you can set at most 10 sets of motion detection windows.

Sampling

This item is used to examine the differences between two frames. You can configure the interval of sampling pixel. For instance, if users set the interval as 5. IP camera system will take one sampling pixel from every 5 pixels of each row and each column in detection area. The alarm will be triggered when differences are detected.

Detection Level

You can configure detection level for each sampling pixel. Detection level is how much the camera can accept the differences between two sampling pixels. The smaller the value is, the lower the detection level.

Sensitivity

This item is used to set the detection sensitivity. A greater value indicates higher sensitive motion detection.

Time Interval

This item is used to adjust the time interval between each detection motion.

Set up Detection Region

Under motion setup mode, a red frame (detection window) will be displayed on the channel grid. Note that the amount of motion detection regions may vary from different IP camera models. Refer to the following to setup motion detection windows.

1. Click **Edit** to resize the detection window.
2. Check the box **Enable Brush**, left click and drag the mouse cursor to draw the preferred detection region.
3. Click **Apply** to save the setting to the selected IP camera channel.
4. To remove an added motion detection window un-check the box **Enable Brush** to erase the drawn detection region, left click and drag the mouse cursor on the colored grids.
5. Click **Apply** to save the setting to the selected IP camera channel.
6. If necessary, click **Refresh** to renew the setting.

Set up Motion Detection Windows

Refer to the following to setup motion detection windows.

1. To change the location of the motion detection window, click on the center of the detection window and move it to the desired location.
2. To resize the detection window, click and drag the edge of the red frame.
3. To add a new detection window, right click on the channel grid and select **Add New Window** from the drop-down list.
4. Click **Apply** to save the setting to the selected IP camera channel.

Remove a Motion Detection Window

1. Select a desired detection window, and right-click on the channel grid.
2. Select **Remove Selected Window** from the drop-down list. The selected detection window will be removed. Alternatively, select **Remove All Window** to remove all detection windows.
3. Click **Apply** to save the setting to the selected IP camera channel.
4. If necessary, click **Refresh** to renew the setting.

Camera Audio Detection Setup

Audio Detection function allows the camera to detect audio when audio volume in the detected area reaches / exceeds the determined sensitivity threshold value.

NOTE! Audio Detection function is only available for models equipped with Audio I/O function.

In Audio Detection Setting, the default setting for the Audio Detection function is **Off**. Enable the function by selecting **On**.

Users could adjust various parameters of Audio Detection in this section.

Detection level [1-100]: The item is to set detection level for each sampling volume; the smaller the value, the more sensitive it is. The default level is 10.

Time interval (sec) [0-7200]: The value is the interval between each detected audio. The default interval is 10.

After settings click < >. Otherwise, the setting will not be saved. If necessary, click < > to renew the setting.

Camera Schedule Setup

This function allows users to setup schedules for features including: **Alarm Switch**, **Motion Detection** and **Network Failure Detection**. The function supports up to 10 sets of time frames in the time frame list.

1. Select a time frame from the time frame list.
2. Check the weekday boxes below to choose the specific weekdays.
3. Select a time mode, Day, Night or Time. Under Time mode, specify the start time (hour:minute) and the time duration (hour:minute) to activate the schedule triggered features. The setting range for the time duration is from 00:00 to 168:59.
4. Click on **Save** to save the setup. Alternatively, click on **Delete** to delete a chosen time frame.

Time Mode

Day: The camera profile will be loaded when IR cut filter is on.

Night: The camera profile will be loaded when IR cut filter is off.

Time: This indicates the start time and the time duration for the schedule.

NOTE! You MUST select **By schedule** under each feature setting page to enable the schedule function.

Camera Video Analysis Setup

The CMS allows users to connect and setup IP cameras implemented with Video Analytics function.

The following describes how to set video analytics function. For further information, refer to Video Analytics Manual.

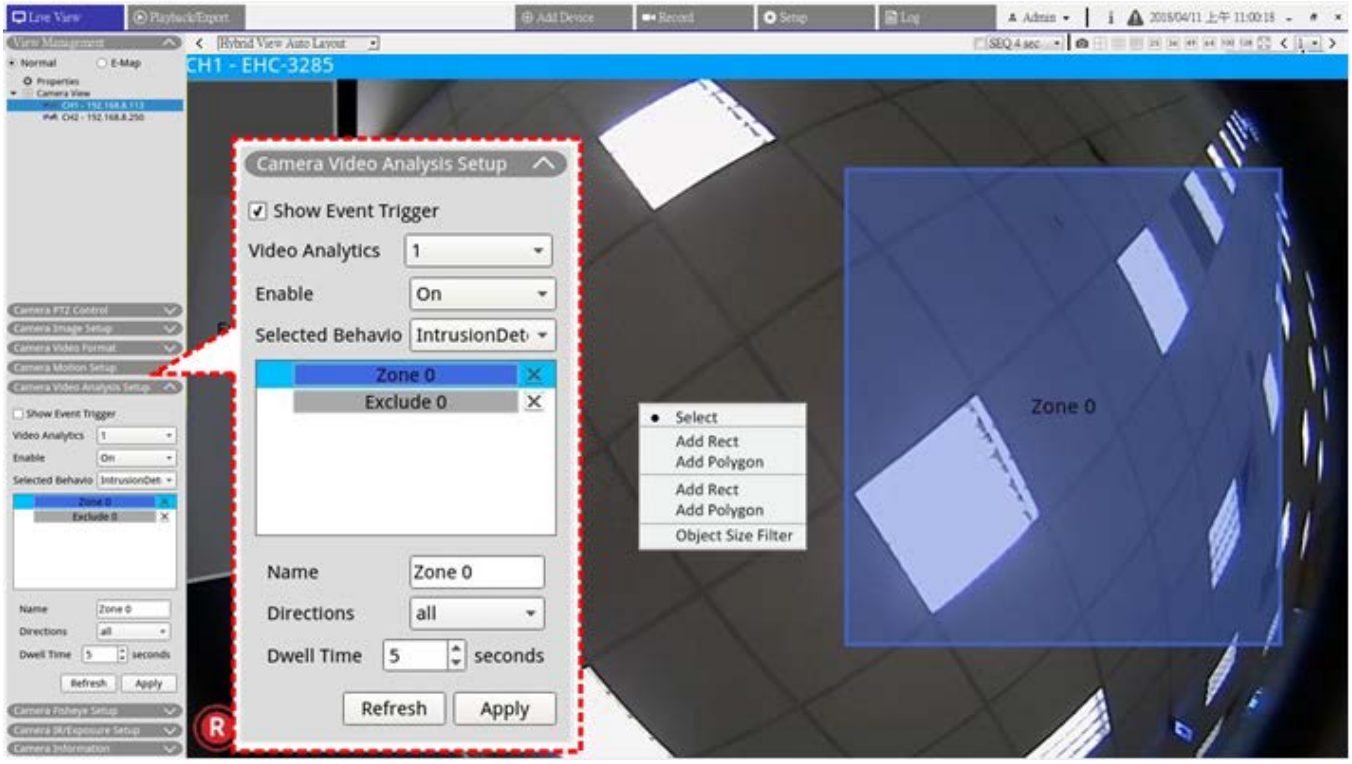


Fig. 8: Camera video analysis setup

User Guide

You can setup and implement two sets of video analytics simultaneously. Select <1> or <2> from the Video Analytics drop-down menu.

1. Select **On** from the Enable drop-down menu for activation.
2. Select a video analytics from the Selected Behavior drop-down menu. The options are **Abandoned Object**, **Intrusion Detection**, **Camera Sabotage**, **Wrong Direction**, **Loitering Detection**, **Object Counting**, **Object Removal** and **Stopped Vehicle**.
3. Complete the behavior settings. The setting items vary based on the analytics behavior being configured.

Zone Setting

Certain video analytics behaviors require zone settings. Zone settings allow users to monitor and check if there is intrusion, object misplaces/removed from certain areas.

1. On the channel grid, right click to display the setting menu. Setting menu will lists all zone setting items.
2. Complete all setting items and click **Apply**.
3. Name the detection zone.
4. Set the direction of motion the camera should track. Alarms will only be triggered when the camera detects motion in the specified direction.
5. Set the number of objects to trigger the alarm. When the number of the counted objects reaches to the setting number, the alarm will be triggered.
6. Dwell time: Set the amount of time that an alarm continues when the alarm is triggered. Dwell time ranges from 1 to 1000 seconds.
7. Delay before alarm: Define the amount of time that the defined behavior lasts before an alarm is triggered. The time range is 20 to 1800 seconds.
8. Reset counter on alarm: Check or un-check to reset or keep object counting.
9. When finished, click **Apply** to save and apply the setting.
10. Go to **Setup** > **System** > **Event Management** to complete the VA event notification setting. Refer to section Event Management under System Setup for details.

Face Detection

“Face Detection” applies to target marketing efforts on demographic segmentation. This function identifies the gender of the visitors, their temperature and approximate age range by detecting and analyzing their faces. The information shown by this function can be used for targeted merchandising and campaign evaluation.

Behaviour Settings

Certain video analytics behaviors require zone settings. Zone settings allow users to monitor and check if there is intrusion, object misplaces/removed from certain areas. Note that Behavior setting items vary based on the analytics behavior being configured.

Zone Setting

On the channel grid, right click to display the setting menu. Setting menu will lists all zone setting items.

Name: Name the detection zone.

Directions: Set the direction of motion the camera should track. Alarms will only be triggered when the camera detects motion in the specified direction.

Alarm at: Set the amount of objects to trigger the alarm. When the number of the counted objects reaches to the setting number, the alarm will be triggered.

Dwell Time: Set the amount of time that an alarm continues when the alarm is triggered. Dwell time ranges from 1 to 1000 seconds.

Delay before alarm: Define the amount of time that the defined behavior lasts before an alarm is triggered. The time range is 20 to 1800 seconds.

Sensitivity: This item is used to set the detection sensitivity. A greater value indicates higher sensitive motion detection.

Reset counter on alarm: Check or un-check to reset or keep object counting.

1. When finished, click < > to save and apply the setting.
2. Go to **Setup/System/Event Management** to complete the VA event notification setting. Refer to section Event Management under System Setup for further details.

Camera Fisheye Dewarp Setup

CMS is equipped with fisheye camera dewarping function, providing users to view the monitoring locations in fine details. Two dewarping types are provided (Front and Back) according to whether the fisheye camera equips dewarping function or not. Double click on the fisheye camera channel grid to display it in single channel mode and then click **Camera Fisheye Setup** to display the setting items.

Fisheye Dewarping Type

- Front: This dewarping type is especially for fisheye camera already equipped with dewarping function.
- Back: The second dewarping type <back> is designed for fisheye camera that is not equipped with dewarping function and CMS will dewarp the fisheye source images and provides several dewarping modes for users to choose.

1. Select **Front** or **Back** and choose the installation method under **Installation** according to the camera mounting method.
2. Click **Apply**. The fisheye camera will correct its source images.
3. Move the mouse cursor to the bottom-right corner of the channel grid and click PANO to display the Fisheye Image Adjustment list. The dewarping modes include **Normal View**, **PTZ View**, <360 View>, **Quad View**, **OPR View** and <1O3R View>.
4. Select a preferred mode and CMS will automatically dewarp the fisheye source images. The following describes each dewarping mode listed in the Fisheye Image Adjustment list.

   NOTE! <back> dewarping type can be applied to both fisheye models equipped with or without dewarping function.

5. If necessary, click **Refresh** to renew the setting.

Normal View

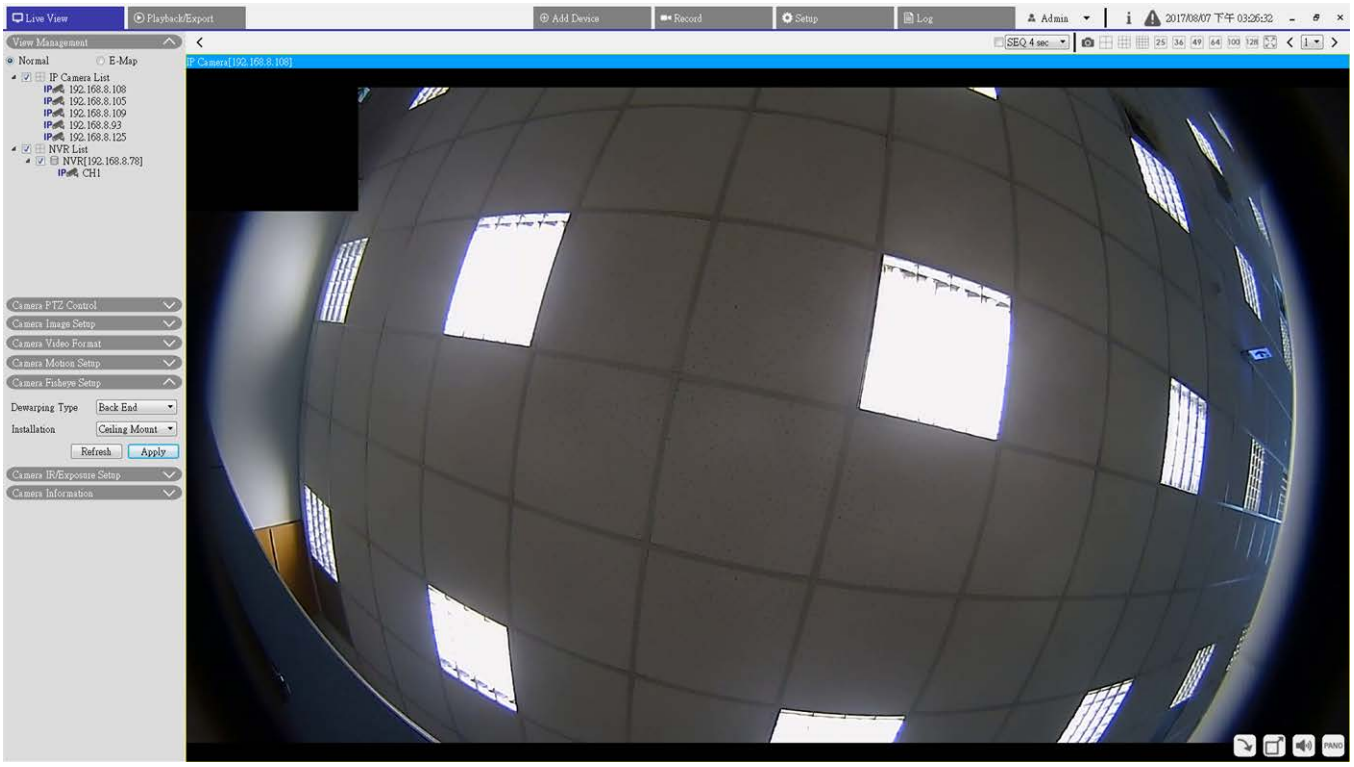


Fig. 9: Camera fisheye dewarp setup normal view

1. Select to view the live videos without dewarping.
2. Virtually pan or tilt the camera by clicking and dragging the mouse to any direction in **PTZ View**, <360 Panoramic> and **Quad View**,.

PTZ View

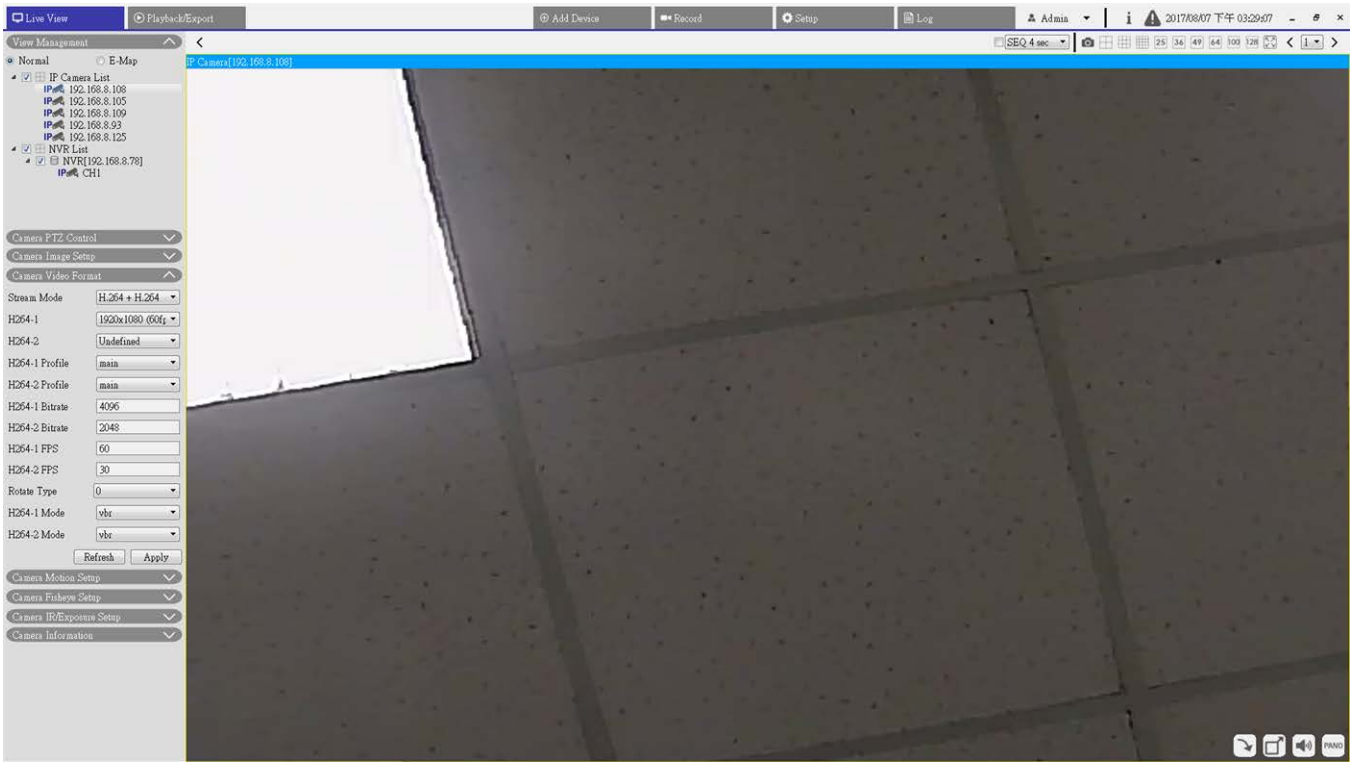


Fig. 10: Camera fisheye dewarp setup PTZ view

1. Select to view the dewarped live images.

360 View

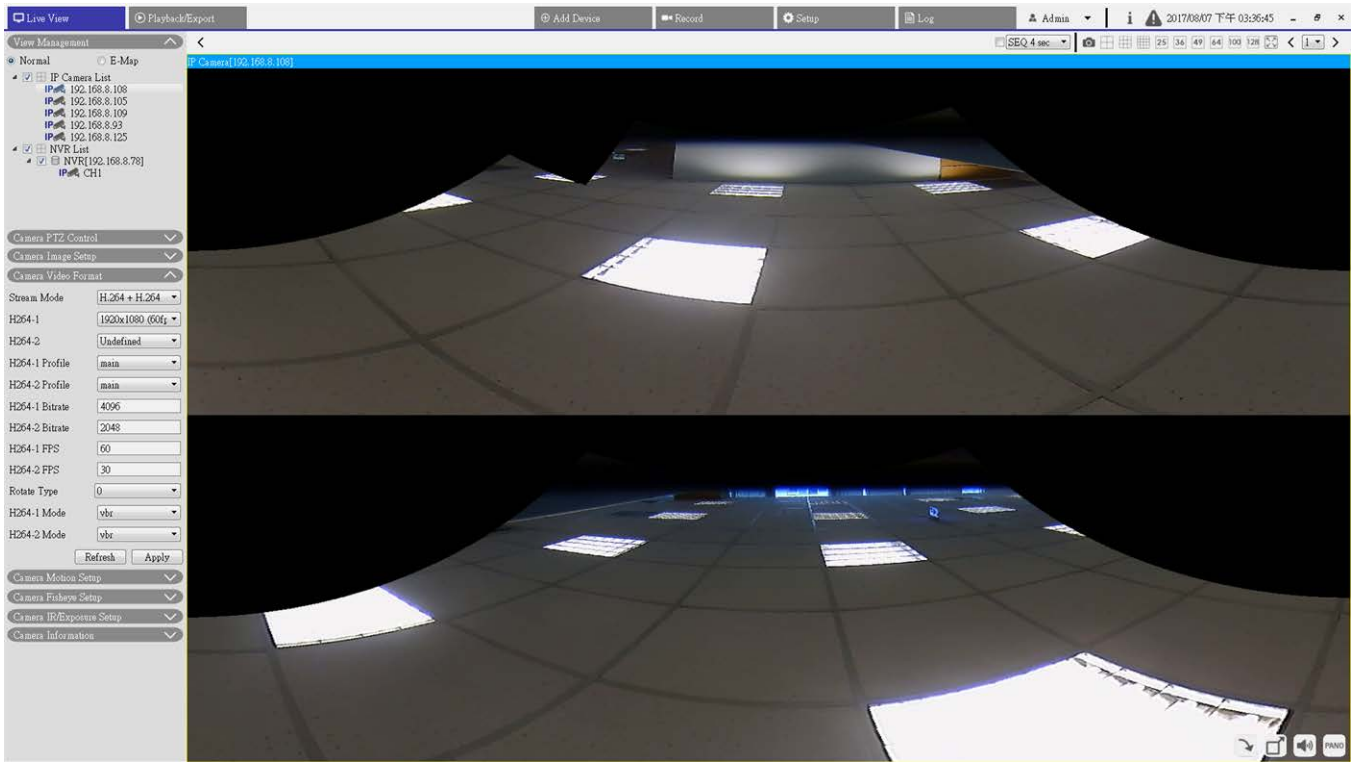


Fig. 11: Camera fisheye dewarp setup 360 view

1. Select to view the dewarped live images as two 180° views.

Quad View

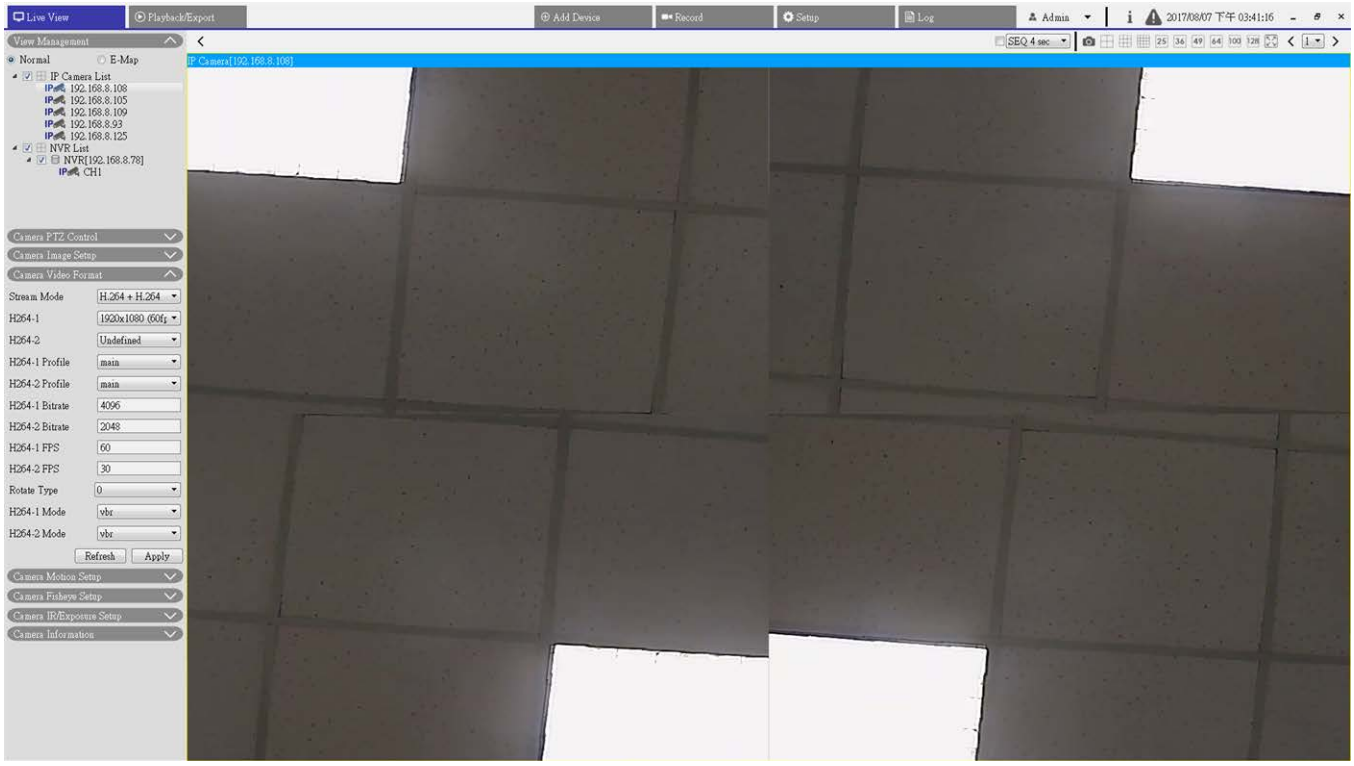


Fig. 12: Camera fisheye dewarp quad view

1. Select to view the dewarped live images as four PTZ views.

OPR (One Original View, One Panoramic View & One Regional View)

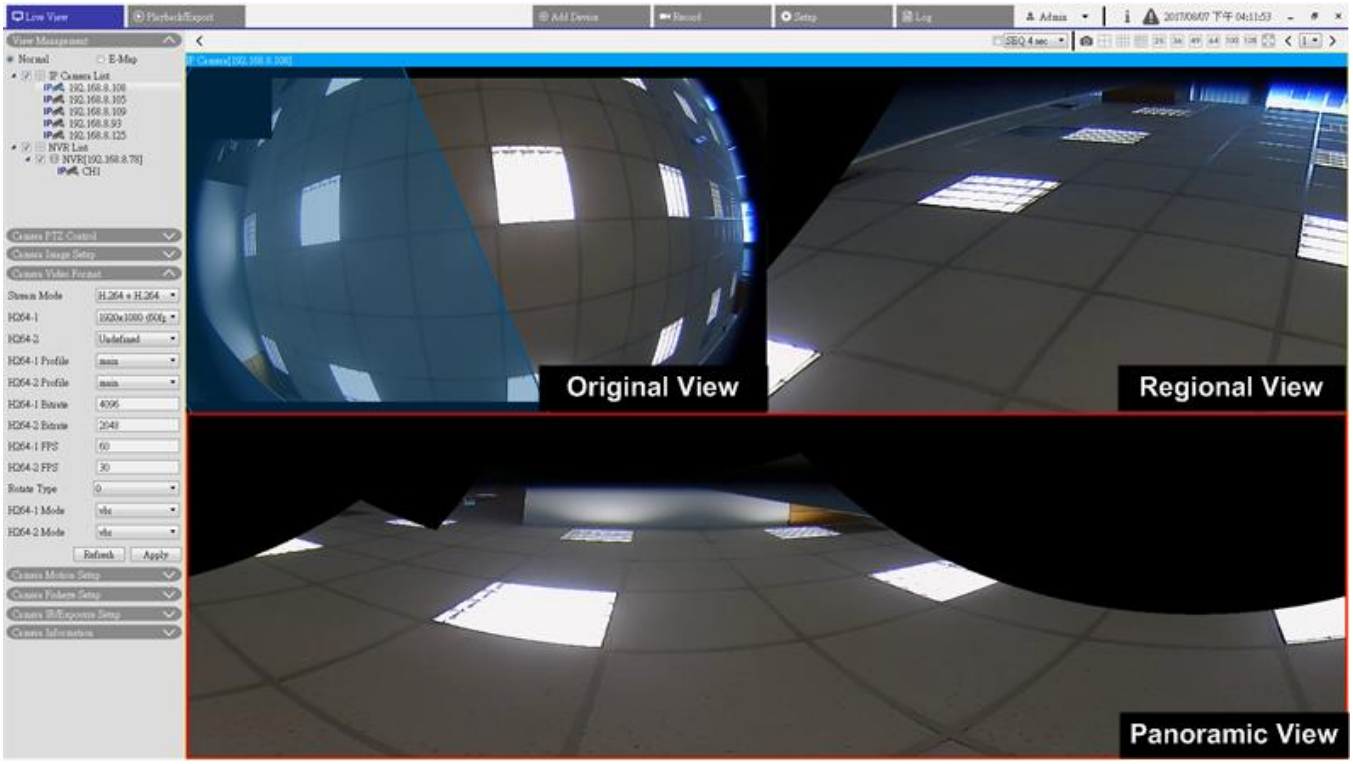


Fig. 13: Camera fisheye dewarp setup OPR view

OPR display mode allows users to check the dewarped live view in 180° display with a regional view. In the meantime, you can check the corresponding location of either viewing with the original view.

You can implement ePTZ function in both panoramic and regional view.

1. Click any viewing grid.
2. Click and drag the mouse cursor to change the location of the view. Alternatively, click on either viewing grid.
3. Click and drag the transparent blue frame on the original viewing grid.

1O3R (One Original View & Three Regional Views)

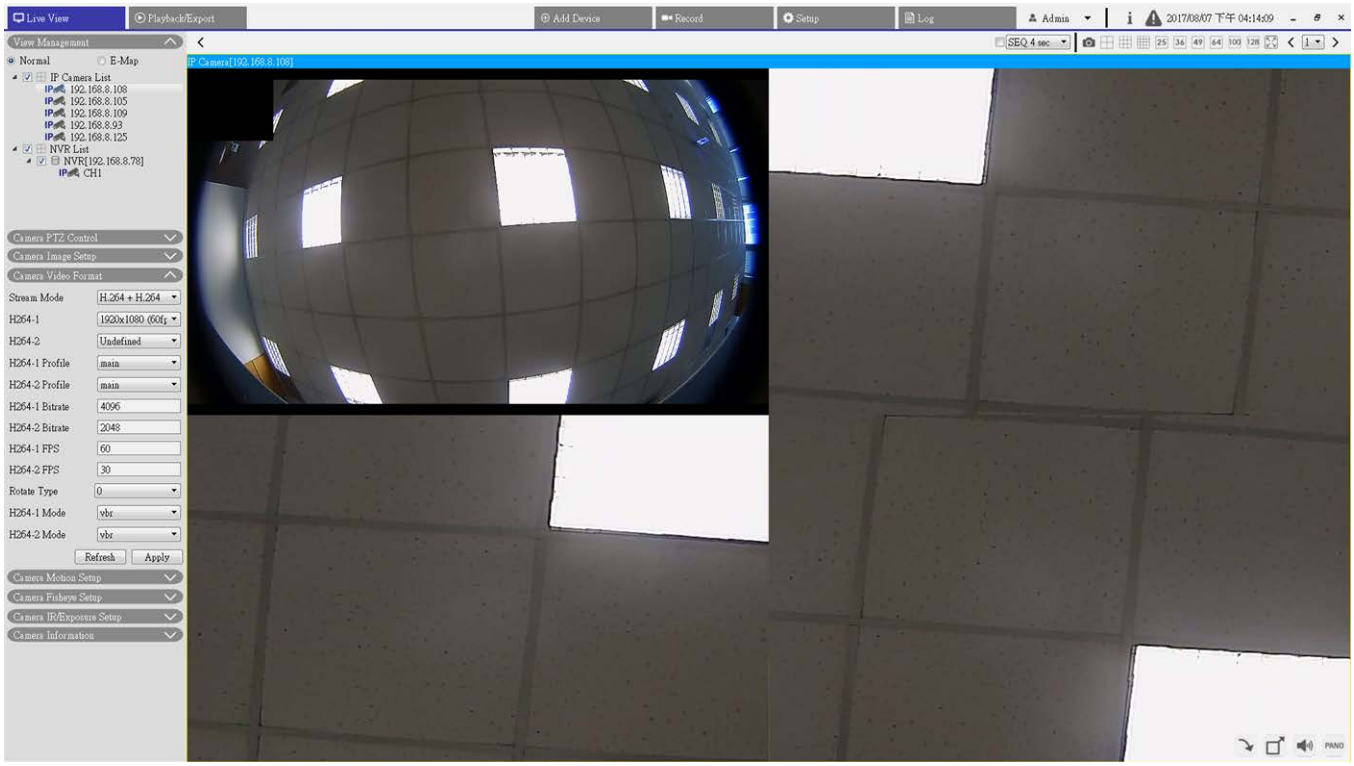


Fig. 14: 1O3R (One Original View & Three Regional Views

1O3R display mode allows users to access multiple areas of the camera.

You can implement ePTZ function in any regional view to check the monitoring areas.

1. Click any viewing grid.
2. Click and drag the mouse cursor to change the location of the regional view. Alternatively, click and drag the preview window on the original viewing grid.

Camera Mask Setup

Add a Mask

Check a Video Mask checkbox, and a red frame will come out in the Live Video pane. Use the mouse to drag and drop to adjust the mask's size and place it on the target zone. At most 5 video masks can be set.

NOTE! It is suggested to set the Video Mask slightly bigger than the object.

Cancel a Mask

Un-check the Video Mask checkbox meant to be deleted; the mask will disappear from the Live Video pane instantly.

Mask Color Setting

The selections of Mask color include black, white, yellow, red, green, blue, cyan, and magenta. Click on **Save** to confirm the setting.

After setting, users must click < >. Otherwise, the setting will not be saved. If necessary, click < > to renew the setting.

Camera Text Overlay Setup

You can select the items to display data including date & time / text string / subtitle on the live video pane.

Overlay Type: You can select at most three items out of four options including date & time / text string / subtitle to display on the live video pane.

Include Date & Time: Check the box to enable date & time display on the Live Video Pane and a Video Text Overlay Window will show up. Move the mouse cursor to the center of the window then click and drag the window to preferred display position. You can choose to display date, time, or date & time from the drop-down menu, and decide the string align position (left / right).

Include Text String: Check the box to enable text string display on the Live Video Pane and a Video Text Overlay Window will show up. Move the mouse cursor to the center of the window then click and drag the window to preferred display position. Type the text to display in the entry field and decide the string align position (left / right). The maximum length of the text string is 15 alphanumeric characters.

Include Subtitle: Check the box to enable subtitle display on the Live Video Pane and a Video Text Overlay Window will show up. Move the mouse cursor to the center of the window then click and drag the window to preferred display position. Type the text to display in the entry field and decide the string align position (left / right). You can set at most 5 subtitles, and the maximum length of each subtitle is 16 alphanumeric characters.

Text Overlay Setting: You can choose the Text Overlay Color (black, white, yellow, red, green, blue, cyan, or magenta) and Text Overlay Size (small, medium, or large) of the display date & time / text string / subtitle.

After setting, users must click < >. Otherwise, the setting will not be saved. If necessary, click < > to renew the setting.

Camera Alarm Setup

The camera supports one alarm input and one relay output for cooperation with alarm system to catch event images. Refer to alarm pin definition below to connect alarm devices to the camera if needed.

Alarm Switch: The default setting for the Alarm Switch function is **Off**. Enable the function by selecting **On**.

Alarm Type: Select an alarm type, **Normal close** or **Normal open**, that corresponds with the alarm application.

After setting, users must click < >. Otherwise, the setting will not be saved. If necessary, click < > to renew the setting.

Camera IR/Exposure Setup

Configure the IR function and exposure settings of the IP cameras here. However, if the live streaming comes from the connected Encoder, this setup pane will be unavailable.

Exposure Settings

Exposure is the amount of light received by the image sensor. It is determined by the width of lens diaphragm opening, shutter speed and other exposure parameters.

1. Select a suitable exposure mode for the selected camera from the Exposure Mode drop-down list. Note that options of exposure modes are provided variously according to different IP camera models.
2. Setup its relevant parameters, such as shutter speed and max gain. Please refer to the IP camera manuals for further information about setting the exposure parameters.
3. Click **Apply** to save the setting to the selected IP camera channel.
4. If necessary, click **Refresh** to renew the setting.

IR Function Setup

IR Function allows/prevents infrared (IR) light reaching the image sensor.

- IR Mode: Define. the action of the IR cut filter. Refer to the descriptions of each option below to select a suitable mode.
- Auto: Select this mode; the camera will decide when to remove the IR cut filter.
- Manual On: Use this mode when the environment light level is low. The IR cut filter will be removed to deliver clear images in black and white.
- Manual Off: Select this mode to use the IR cut filter. The IR cut filter can filter out the IR light and allows the camera to deliver high quality images in color.
- Smart: With Smart mode, the camera will decide when to remove the IR cut filter. The Smart mode mechanism can judge whether the main light source is from IR illumination. If the main light source is from IR illumination, the IR cut filter will be kept open (i.e. monochrome/night mode).

For cameras with built-in IR LED module, there are three additional IR function modes available Light Sensor / Light On / Light Off.

- Light Sensor: The Light Sensor detects if there is ambient light for day/night switching function. IR LED lights will be turned on/off by light sensor.
- Light On: In this mode, IR LED lights will always be on.
- Light Off: In this mode, IR LED lights will always be off.

IR Day / Night Threshold

IR Day/Night Threshold is used to set when the camera should switch from day mode to night mode or vice versa. The camera will sense the surrounding brightness, and the threshold value stands for the level of the light. Once the camera detects the light level reaches the set threshold, the camera will automatically switch to Day/Night Mode. The range of the level is from 0 to 10, (darker = 0; brighter = 10).

- IR Day Threshold: The higher the value, the earlier the camera switches to Day mode. The default value is 7.
- IR Night Threshold: The higher the value, the earlier the camera switches to Night mode. The default value is 3.

1. Click **Apply** to save the setting to the selected IP camera channel.

Camera System Setup

You can follow the instructions on this page to reset the camera to factory default settings if needed.

Reboot: Click < > and the camera system will restart without changing the current settings. Refresh the browser page after the camera system is restarted.

Partial Restore: Click < > to recall the factory default settings (excluding network settings). The camera system will restart in 30 seconds. Refresh the browser page after the camera system is restarted.

NOTE! The IP address will not be restored to default.

Camera Information

You can check the brief information of the connected IP cameras. Click on any IP camera channel from the display window or from View Management pane; the basic information of the IP camera, such as site name, IP address, device type, video format, will be listed in Camera Information pane.

4

General CMS Configuration

In the Setup function tab, you can setup the basic CMS settings, such as language, date/-time setup, network setup, user account management, etc.

This section contains the following information:

Language Setup **54**

General Setup **54**

System **57**

Joysticks 57

System Monitor 59

Event Setup 60

Network Setup **63**

User Management Setup **64**

PoE Management Setup **66**

1. Click **Setup** to enter the general CMS configuration menus.

Language Setup

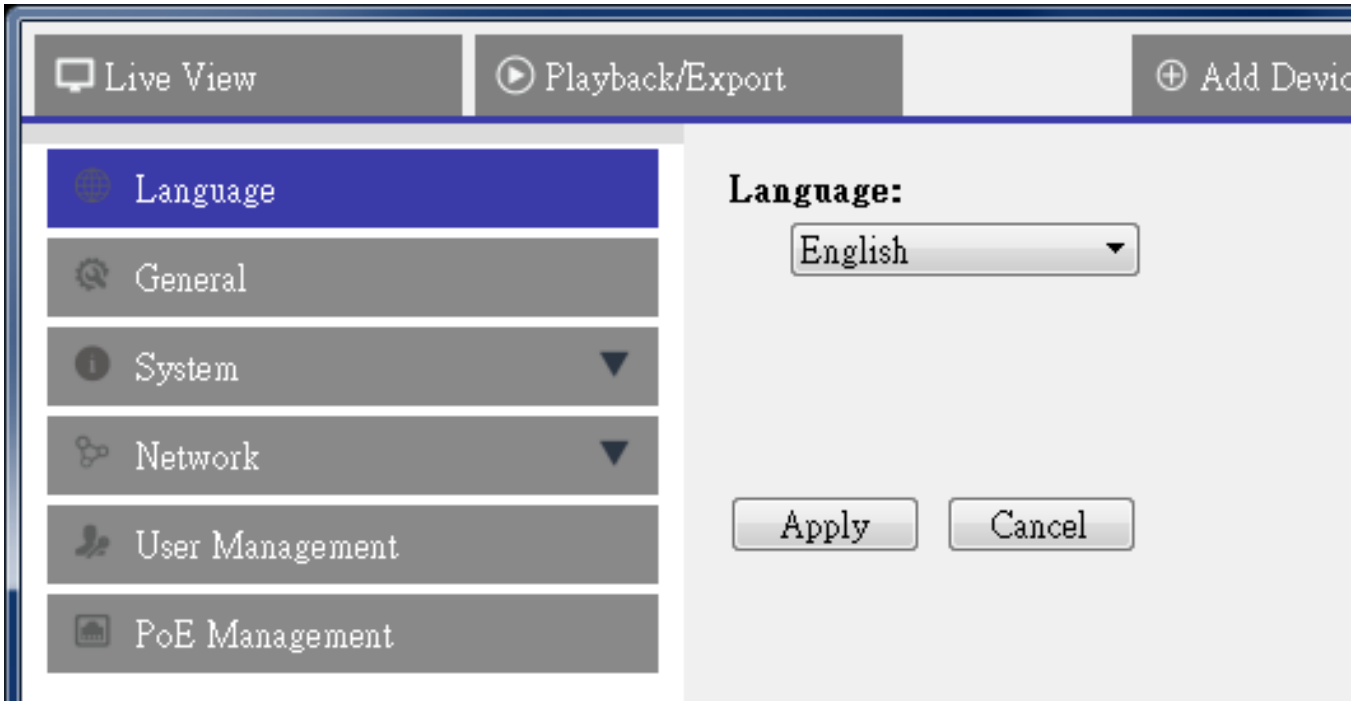


Fig. 15: Language setup

1. In the Setup function tab, select **Language** to enter the language setting menu.
2. Select the preferred language from the language drop-down list and CMS will automatically change the setting.

General Setup

Select **General** to enter the basic CMS setting menu.

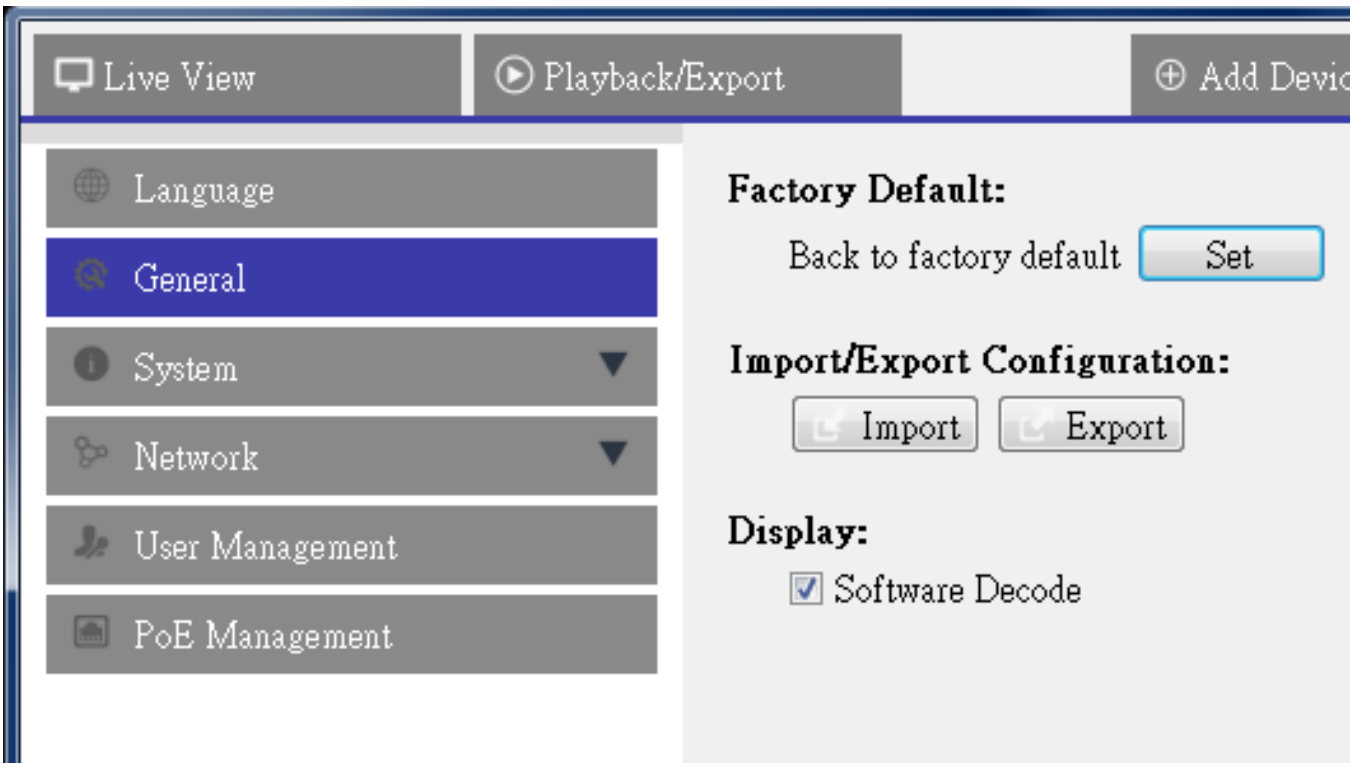


Fig. 16: General setup

Factory Default

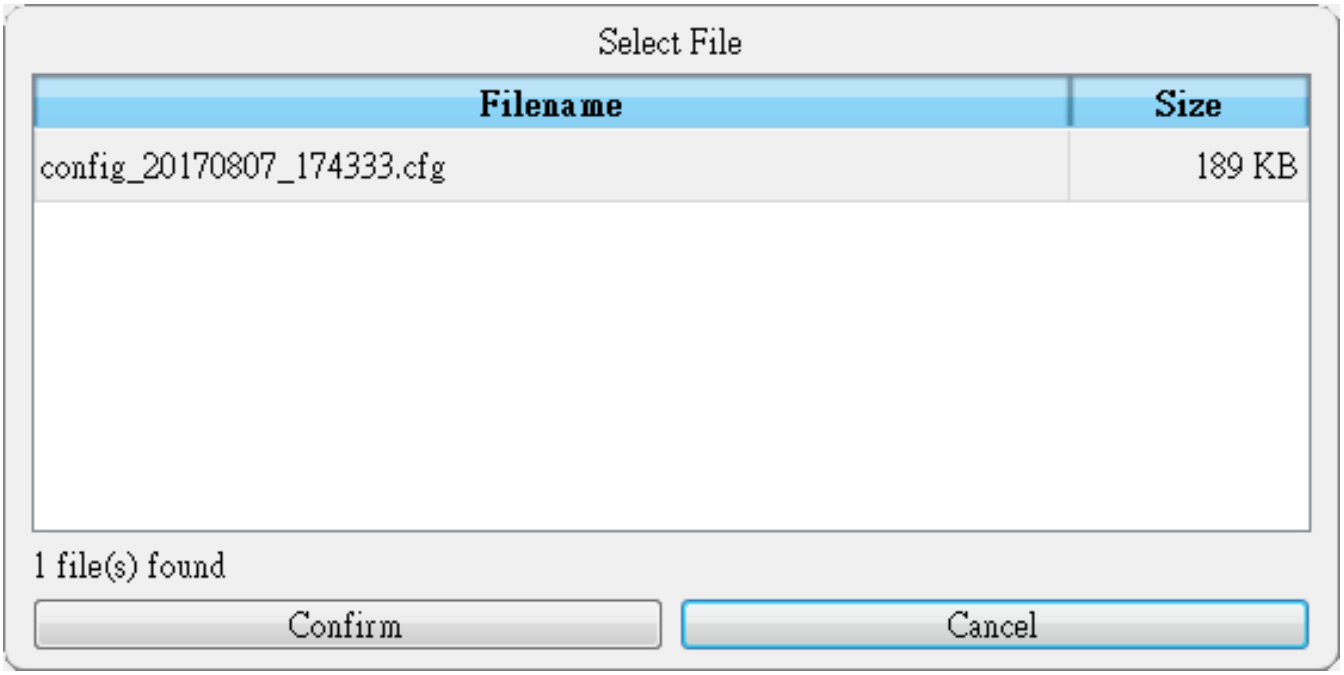
1. Click **Set** to load the default settings of CMS. CMS will close after the default setting is loaded.

Import/Export Configuration

Import Configuration

This item is used to load a CMS configuration file that was previously stored in an external drive.

1. Click **Import** and select the file to be imported.



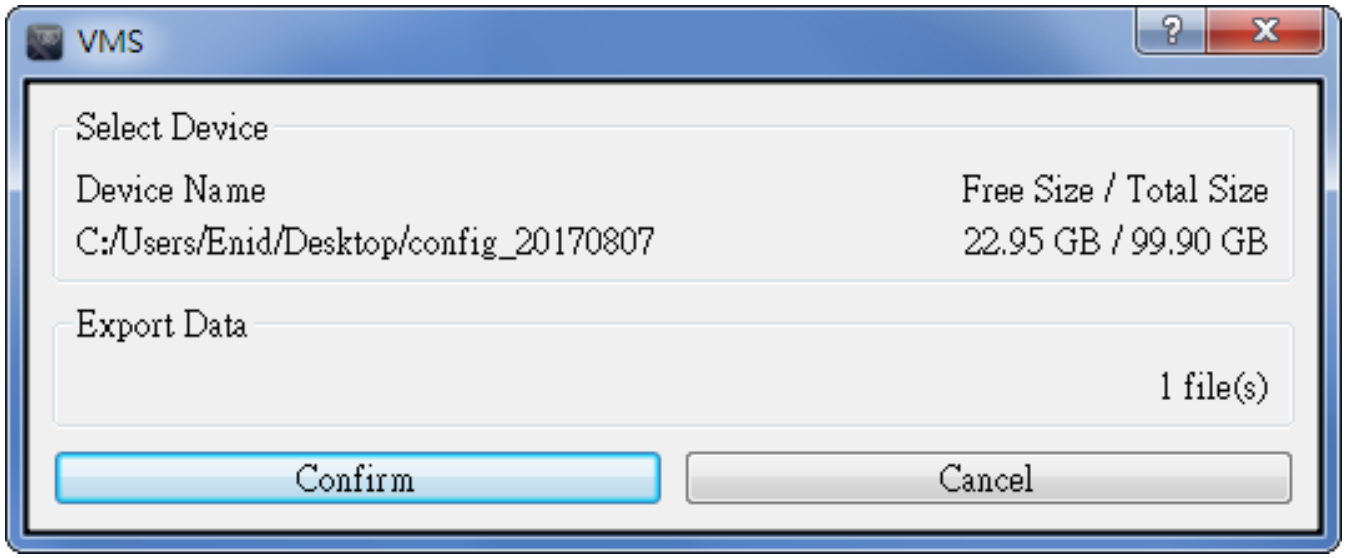
2. Click **Confirm** to start importing configuration. A warning dialog pops up, notifying users CMS system will be immediately closed.

Export Configuration

This item allows users to save and export the current CMS configuration. The exported file format will be *.zip.

NOTE!
It is recommended to export the configuration settings before upgrading the CMS system. In addition, it is suggested to backup the configuration routinely, in case for unexpected issues.

1. Click **Export** and a Save File dialog will pop up.
2. Designate a file destination and click **Choose**. An information dialog will be displayed as below.



3. Click **Confirm** to start exporting. When it is done, a message window will pop up.
4. Click **OK** to exit.
5. Click **Close** to close the information window.

Software decode

If the GPU of the PC is other than Intel graphics card, an error may occur while running CMS. Thus, it is strongly recommended to activate Software Decode to ensure CMS can run smoothly. Note that activating Software Decode function may increase the load on CPU when multiple IP devices are connected to CMS.

1. Enable **Software Decode**.

System

Under System menu, users are able to configure the NVR system settings, such as date/time, network, user account management, PoE management, etc. Refer to the following for further description of each function.

Joysticks

NOTE!
Use Xinput compatible joysticks to set the function.

The CMS allows users to control PTZ cameras or speed dome cameras using USB joystick. Follow the steps below to set the joystick setting. Joystick must be connected to the computer BEFORE the CMS starts up.

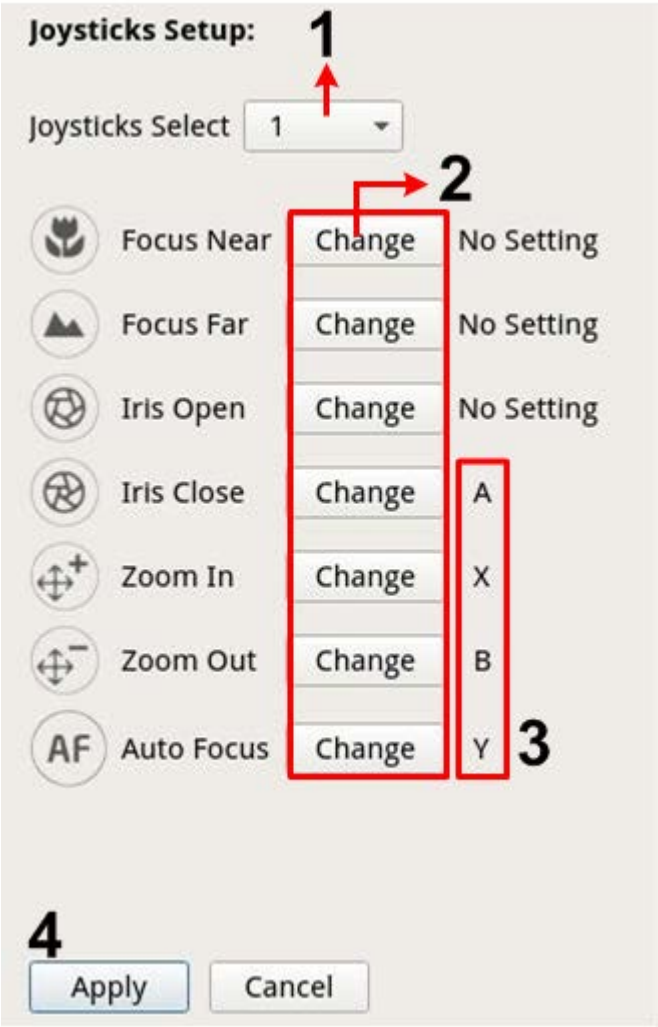


Fig. 17: Joystick setup

1. Select <1> from the Joysticks Select drop-down menu.
2. Click **Change** from any PTZ function.
3. Press any push-button of the joystick to assign the function.
4. Click **Apply** to save and activate the setting.
5. Return to **Live View** and select any PTZ/speed dome camera channel. Press any set push-button of the joystick to control the PTZ function. You can also right/left swing the joystick to pan the camera; up/down swing to tilt the camera.

Disable Joysticks

1. To disable joystick function, select **Unused** from the Joysticks.
2. Select drop-down menu and click **Apply** to save the setting.

System Monitor

Fig. 18: Event Setup

You can set whether to display full-screen of the event-triggered channel. Check/Un-check the box and click **Apply** to enable or disable this function.

System Event Action

This function allows users to setup the threshold for system examination, e.g. CPU temperature, fan speed, etc. If the system value is higher than the set threshold, the NVR will send out e-mail or alarms to give warning notice.

- CPU Temperature Warning
  If the CPU temperature is too high, it may cause system defects. Fill in the threshold value of the CPU temperature in the blank; the default value is 80°C. Check the “Send E-mail” box to receive warning messages when CPU temperature exceeds the threshold temperature.
- Fan Speed Warning
  If the fan speed is too high, it may cause system defects. Fill in the threshold value of the fan speed in the blank; the default value is 200RPM. Check the “Send E-mail” box to receive warning messages when fan speed exceeds the threshold speed.
- Hard Disk Warning
  The item allow users to receive warning notice if the hard disk has unexpected errors or the read/write speed is too slow. Check the “Send E-mail” box to receive warning messages when the hard disk meets unexpected errors.

Event Setup

You can set the event settings of each connected IP camera. Access the Event setting menu via **Setup** > **System** > **Event Management**.

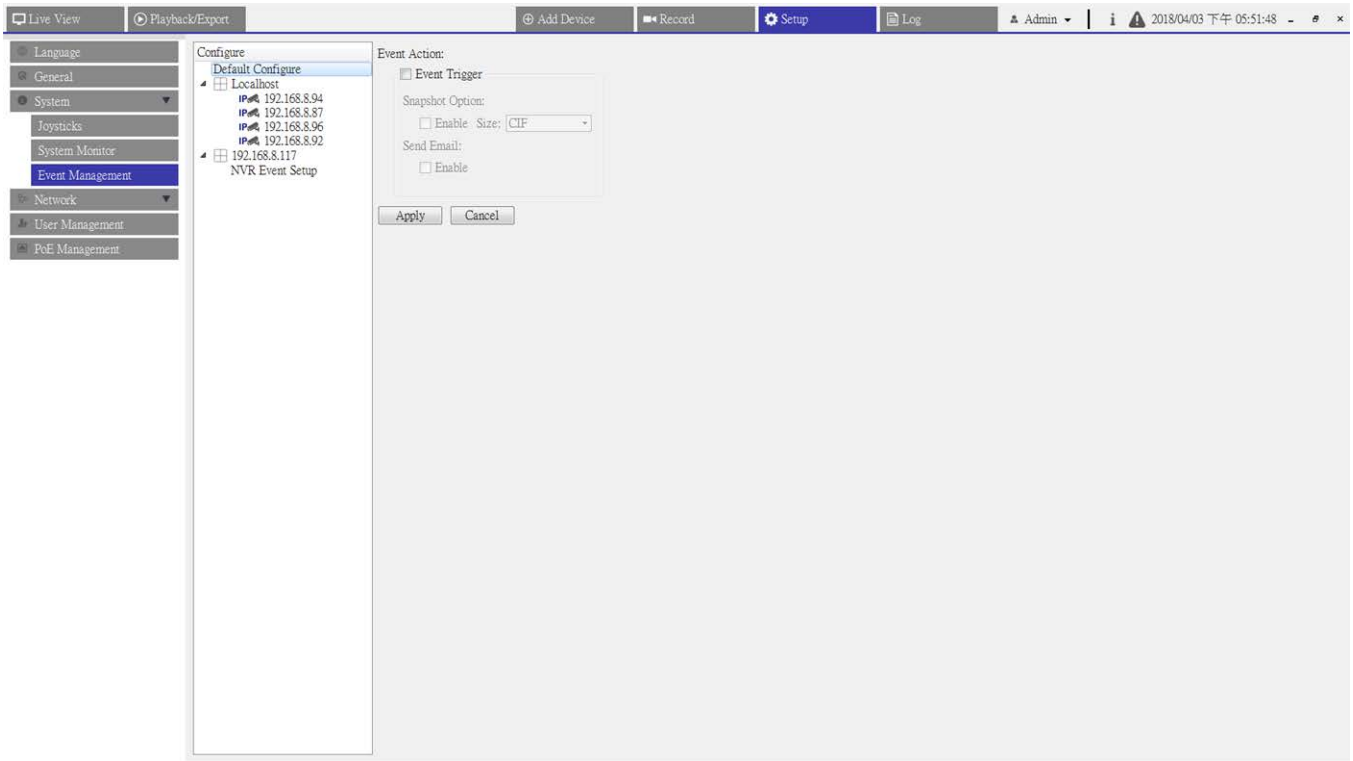


Fig. 19: Event setup

Default Configure

Default Configure allows users to setup the default event actions and apply to any camera site.

1. Check the Event Trigger box to enable event trigger.
2. Set the event actions.
3. Click **Apply** to save and apply the setting.
4. Select any site from Local Host and click **Default**. The site will apply the previously configured settings from Default Configure.

Event Action

Event Trigger

1. Check the box to turn on Event Trigger function.

Snapshot Options

This function is to snapshot the live event image once an event is triggered.

1. Check the box and select the snapshot resolution from the drop-down menu and click **Apply** to save the settings.
2. Go to **Playback/Export** > **Snapshot By Event** to view the captured event images.

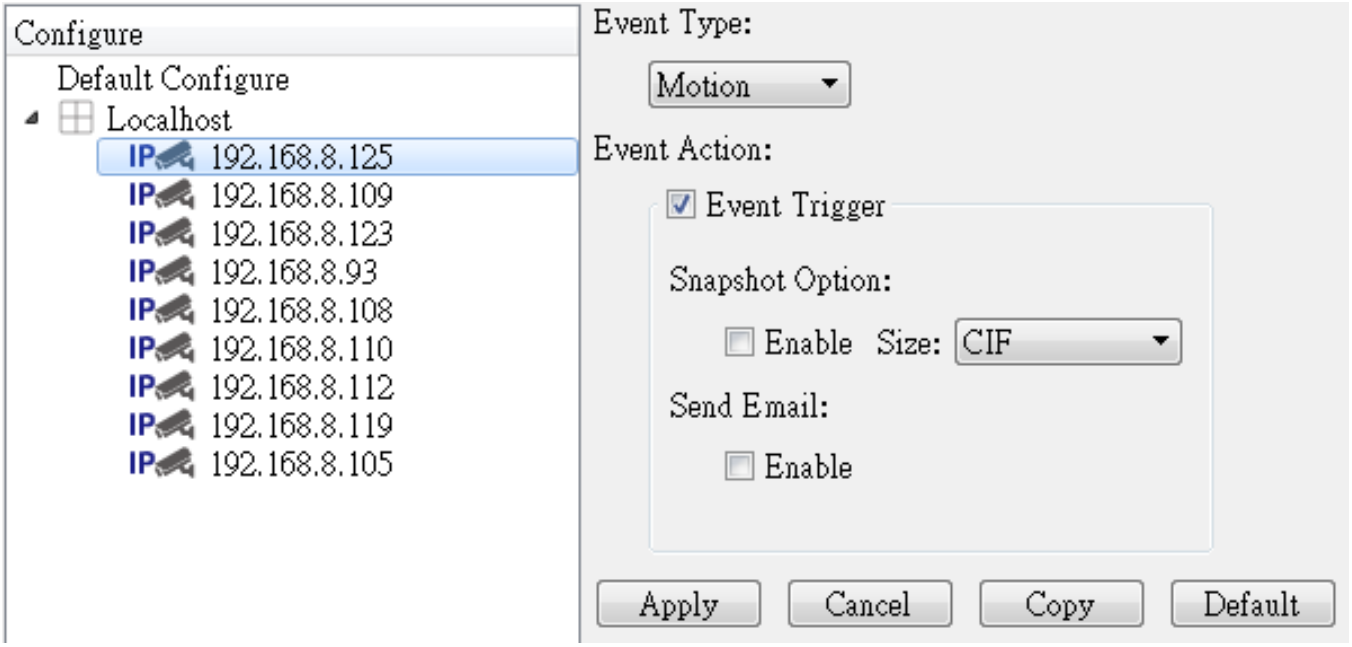
Send Email

When enabled, CMS sends event notification to the email address previously configured under **Network**.

1. Check the box and click **Apply** to save the settings.

Local Host

You can set event setting of each IP camera.



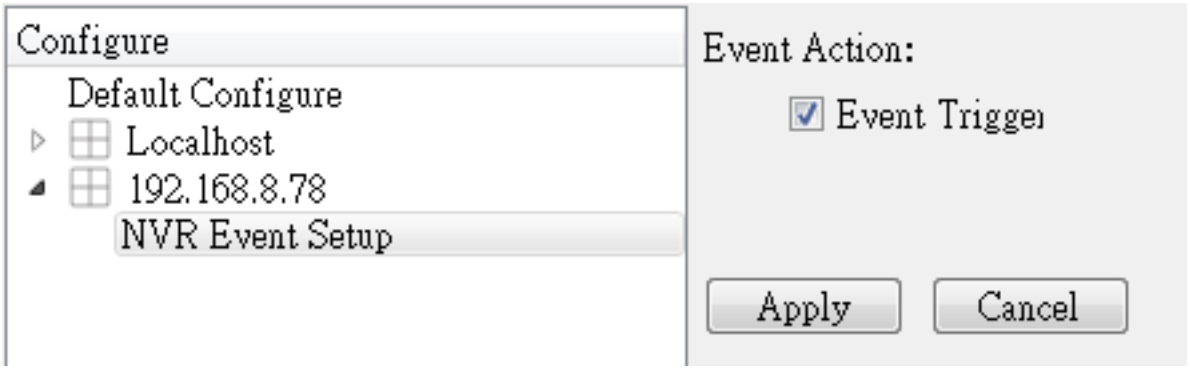
1. Select a camera site from **Local Host** list.
2. Check the Event Trigger box to enable event trigger.
3. Select the event type, “Motion”, “Video Loss”, “Video Analysis”, from the drop-down list.
4. Set the event actions.
5. Click **Apply** to save and apply the setting.

Alternatively, you can copy and apply the setting of a site to other sites.

1. Select any configured camera site from **Local Host**.
2. Click **Copy**.
3. Enable any camera sites from the pop-up window and then click **OK**.

NVR Event Setup

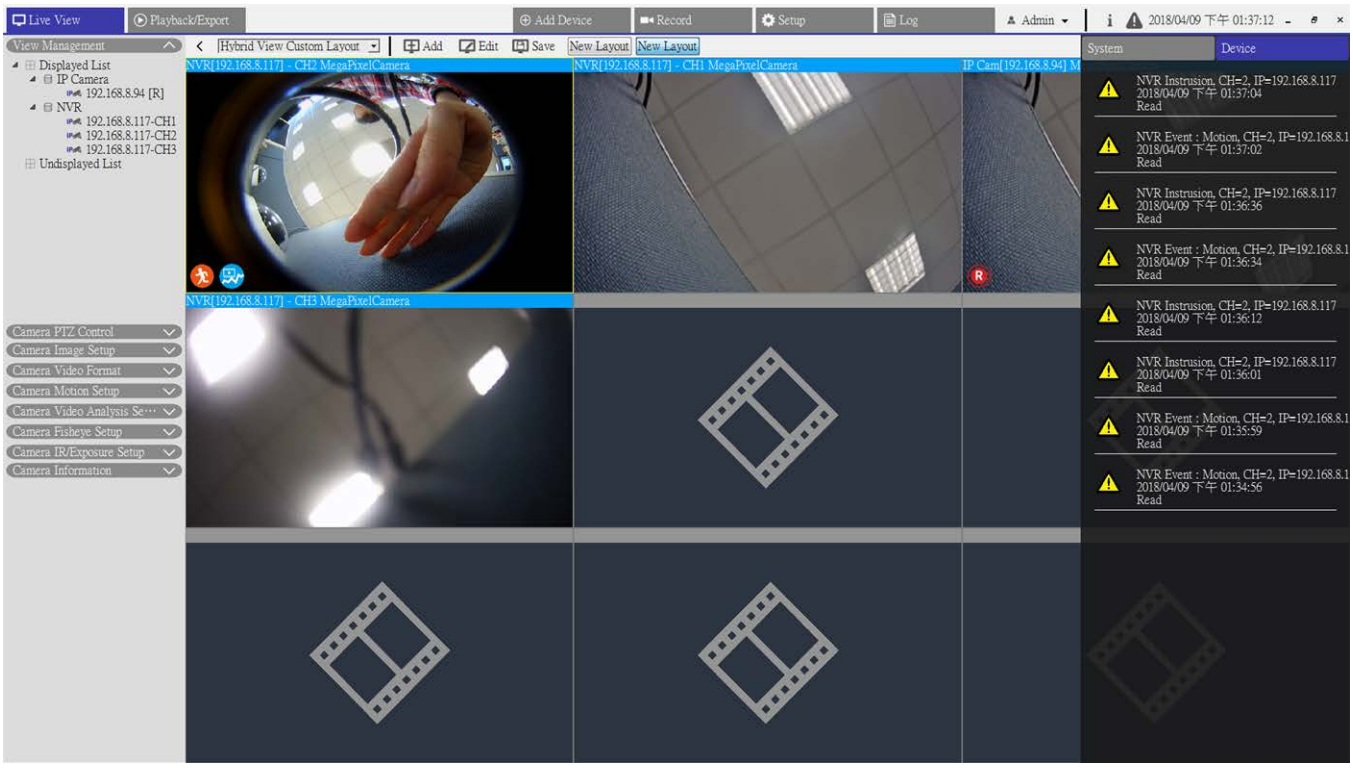
NVR Event Setup is to enables or disables the NVR event notification in CMS.



Follow the steps to setup event trigger for a NVR.

1. Select the IP of the NVR and check the Event Trigger box.
2. Step 2. Click **Apply** to save and apply the setting.

When a NVR event is triggered, the event icon will show up at the bottom-left of the corresponding channel grid, and the alert message will be displayed in the notification center ⚠ of CMS.



Network Setup

The Network menu is to specify the e-mail for receiving event/alarm notices.

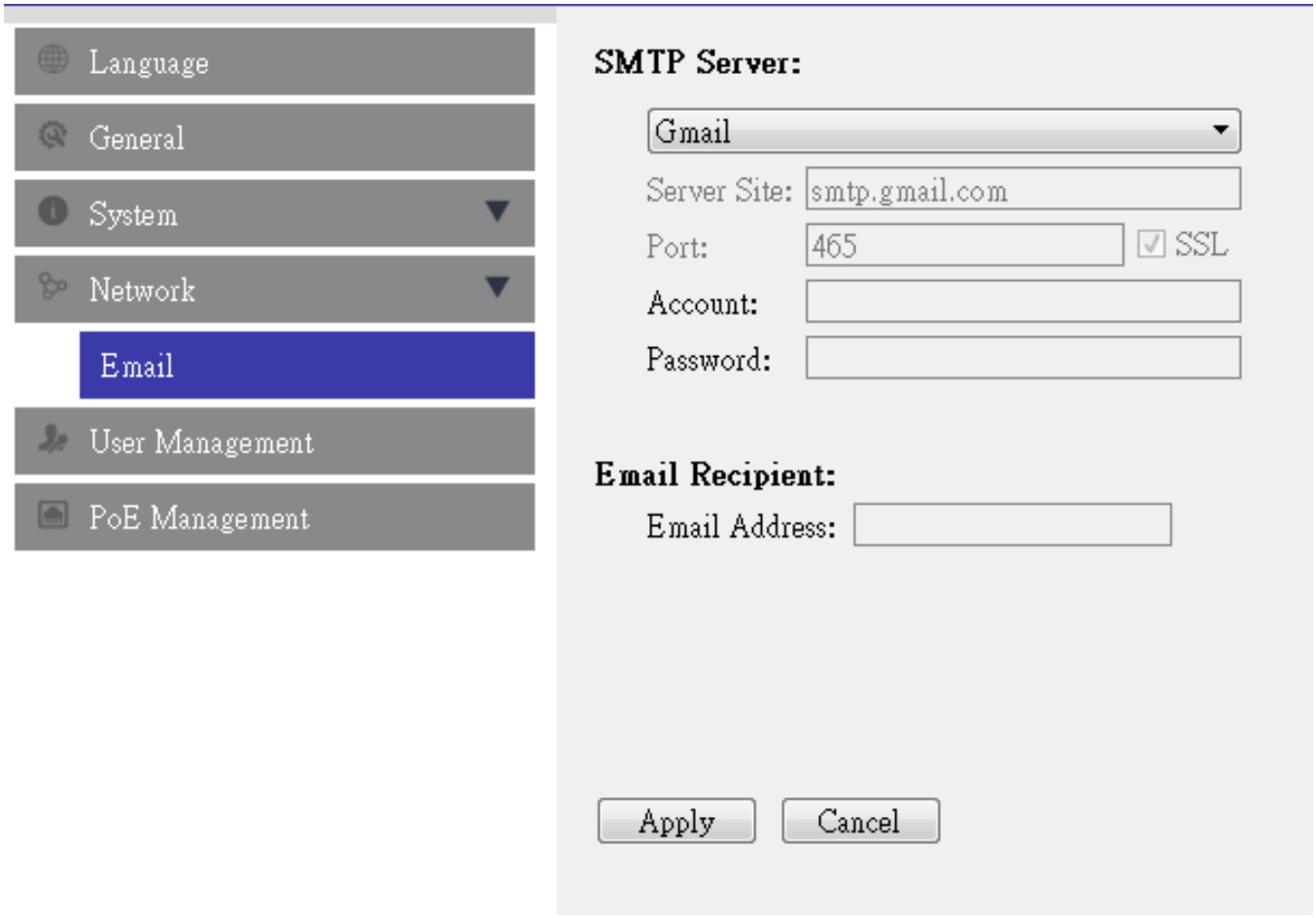


Fig. 20: Network setup

SMTP Server

1. Select which SMTP server to use. The provided options are Gmail, Yahoo Mail and Custom.

   - SMTP Server Site
     When Gmail or Yahoo Mail is selected as SMTP server, CMS will automatically retrieve the server site of either SMTP server.
     When Custom is selected, users must manually input the SMTP server site to the entry field.
   - Port
     This item is used to change SMTP port to another port.
   - Account
     Setup the SMTP user name by entering the e-mail account.
   - Password
     Enter the corresponding password of the e-mail account.

Email Recipient

1. Enter the email address where event or alarm notifications will be sent.
2. Click **Apply** to apply and save the settings.

User Management Setup

User Management is used to add, edit, and delete the CMS user accounts. The default administrator user name and password are Admin and 123456. Access the User Management setting menu via **Setup** > **User Management**.

Fig. 21: User management setup

Create a New User Account

1. Click **Add** and a setting window will show up.
2. Enter the desired user name and password to set a user account.
3. Click **Appy** to complete and save the setting.

Setup a User Account

1. Click on a user account and click **Edit**.
2. Edit the user name and password in the User Information window.
3. To change the password, click **Change**.
4. Click **OK** to save and apply the modified settings.

NOTE!
The preset “Admin” account and “Guest” account both cannot be removed. In addition, it is strongly recommended to modify the preset password of “Admin”.

Delete a User Account

1. To delete a user account, select the desired user account and click **Delete**.

Setup User Permissions (Authorities)

Set permissions to access the functions listed in the User Management setting menu. Click on the function item to allow or not allow the access from the selected user.

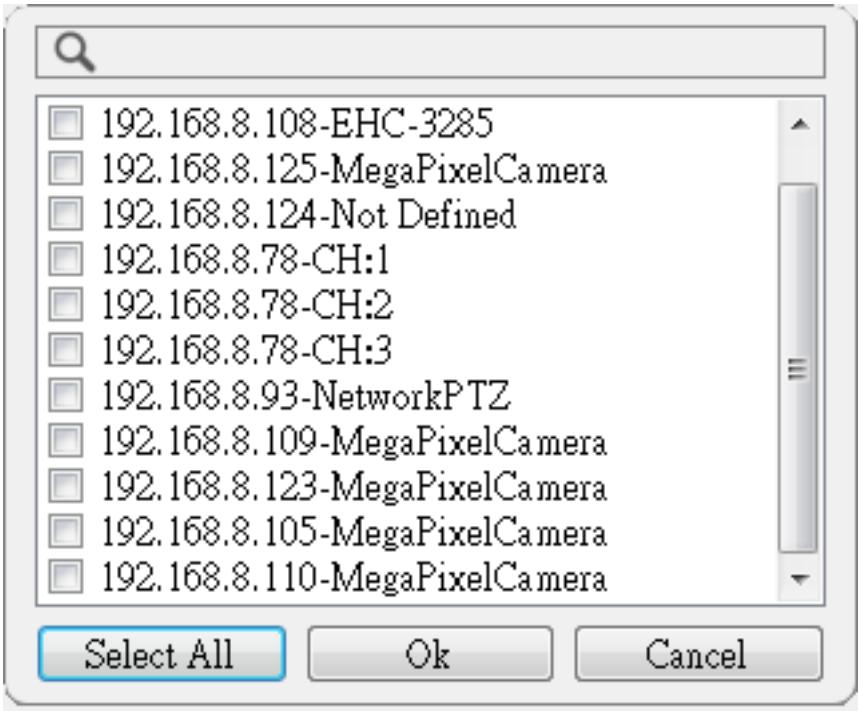
Icon	Definition	Icon	Definition
✔	Allow access	✘	Forbid access

- Device: To allow/forbid the selected user to access the Add Device function tab.
- PTZ: To allow/forbid the selected user to control the PTZ functions in Camera PTZ Control pane in Live View.
- Playback: To allow/forbid the selected user to access the Playback / Export function tab to playback/export the videos.
- Setup: To allow/forbid the selected user to enter Setup function tab and setup CMS-related configurations.

  NOTE! The preset account “Guest” can only view the live viewing.

- Covert IP Camera: To set which channels to be seen or hidden when certain user accounts log in.

1. Click (Covert Setting) corresponding to the desired user account to open the setting menu.

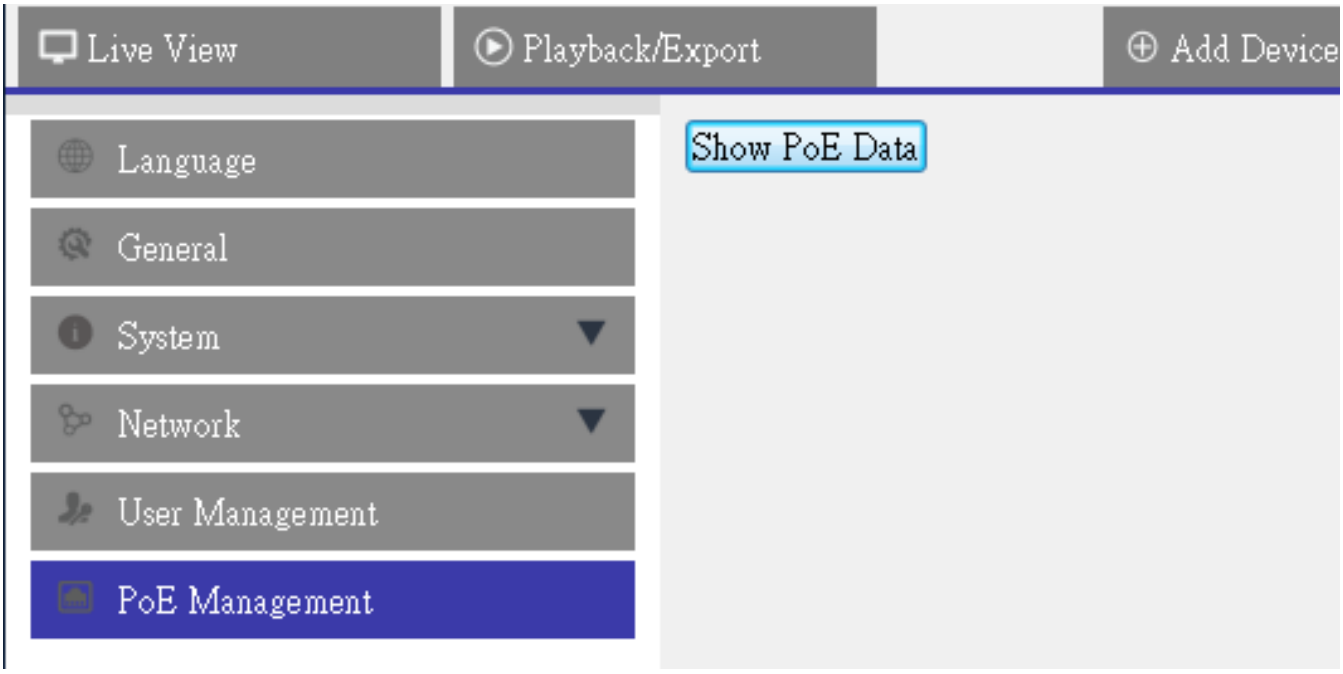


2. Enble or disable the channels to hide/allow the camera viewing.
3. Click **OK** to apply the setting. You can search camera channel using the search bar above.

PoE Management Setup

PoE Management allows users to check each PoE port’s status and manage PoE ports of the connected PoE switch.

1. Select **PoE Management** under Setup function tab to enter its setting menu.



2. Click **Show PoE Data.** The “PoE Switch Management” window is as below.

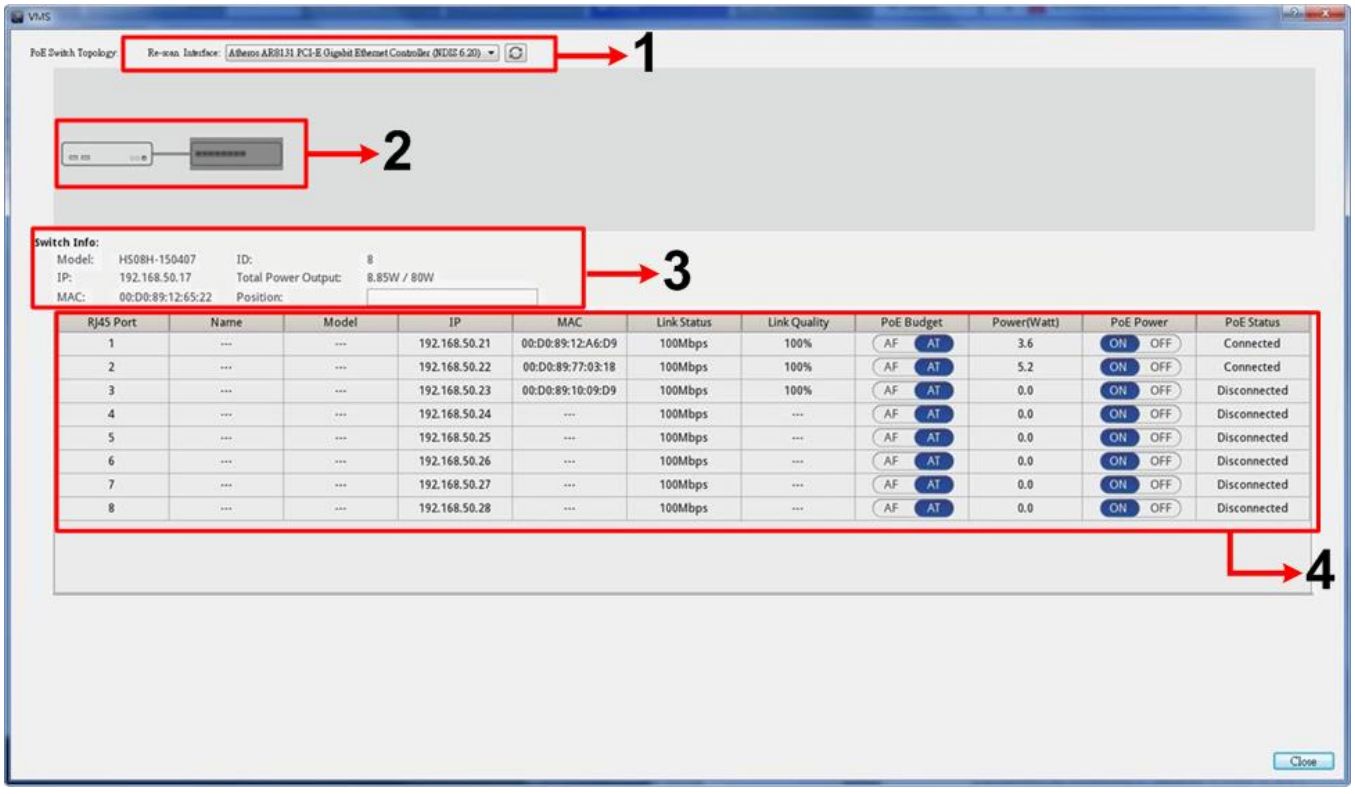


Fig. 22: PoE switch management setup

No.	Item	Description
1	Re-scan	Select an interface from the drop-down list and click , CMS will search and connect a PoE switch and its connected IP cameras. A warning message will pop out; click **OK** to proceed.
2	PoE Switch Topology	The number of the connected PoE switches displays here. The first icon (from left to right) represents the CMS and the second represents the connected PoE switch and so forth. Select the switch icon to display its related information under Device Info.
3	Device Info	Here lists the basic information of the switch, including model name, model IP, MAC, ID, and total power output of the switch. You can also input brief info of the switch's location to the "Position" column.
4	PoE Port Management	■ RJ45 Port: This item lists the number of PoE port. ■ Name: This item lists the name of the IP camera. ■ Model: Here shows the model name of the IP camera. ■ IP: Here lists the IP address of the IP camera, which is assigned by the connected PoE switch according to which PoE port the IP camera is connected to. ■ MAC: Here lists the MAC address of the IP camera. ■ Link Status: Check the network connection status of the connected IP camera here. ■ Link Quality: Check the network connection status of the connected IP camera here. ■ PoE Budget: Select **AF** to set PoE standard as IEEE 802.3af, or select **AT** to set PoE standard as IEEE 802.3at. ■ Power(Watt): Check the power consumption of the PoE port. ■ PoE Power: Select **ON** to enable PoE function of the selected port. Otherwise, select **OFF** to disable the PoE function of the selected port. ■ PoE Status: Check if the PoE port is connected with an IP camera.

5

Add Device (IP Devices Connection)

CMS can search and connect the IP devices via network. Refer to the following for further description of connecting an IP device to CMS.

This section contains the following information:

Add Device Window **69**

IP Devices Connection **72**

Add Device Window

The following introduces each function item in the Add Device setup menu.

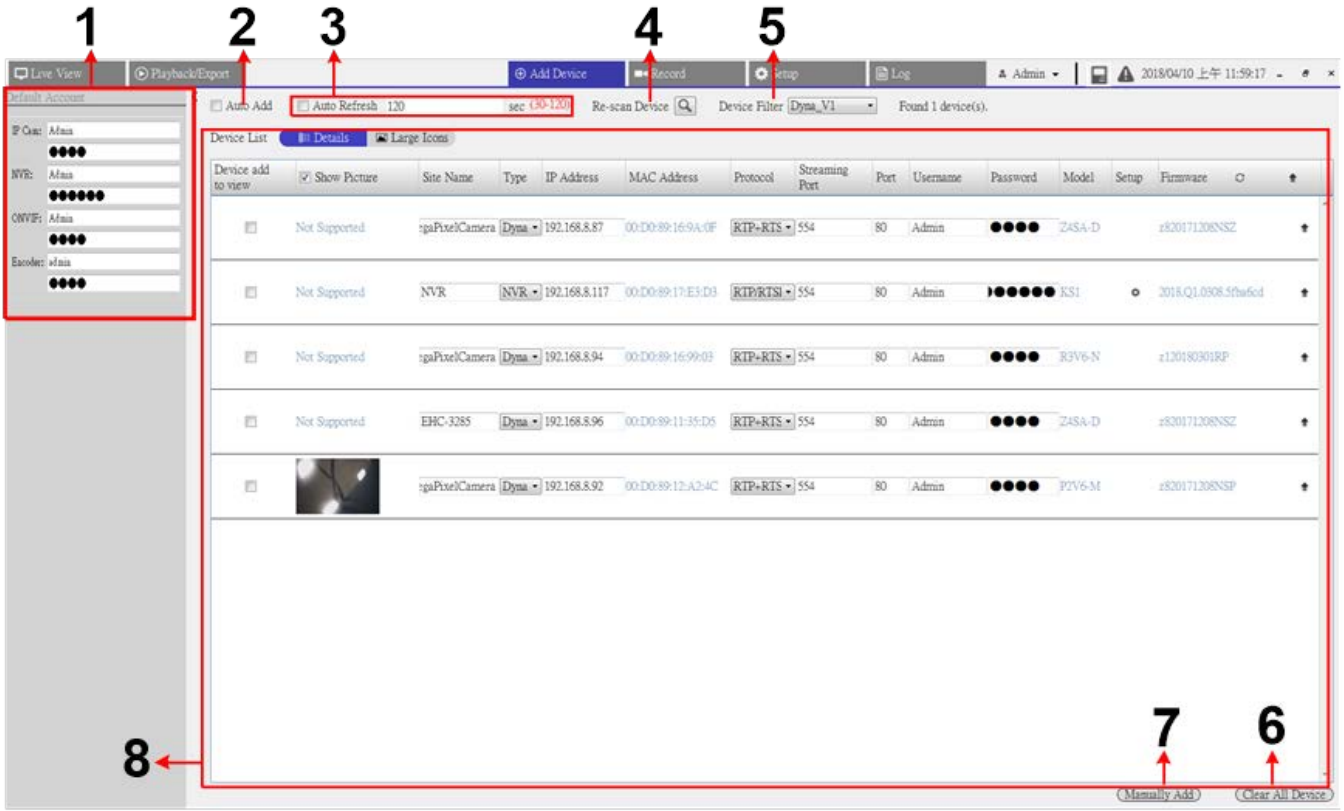


Fig. 23: Add device window

No.	Item	Description
1	Default Account Pane	When an IP device is connected to CMS, CMS will automatically apply the preset user name/password to the IP device according to its model type. You can modify the default user name and password for each model type of IP devices. The following table lists the preset account names/passwords of each type of IP devices. **IP device** / **Account Name** / **Password** IP Camera / Admin / 1234 NVR / Admin / 123456 ONVIF / Admin / 1234
2	Auto Add	CMS will automatically re-search and add the newly found IP cameras using this function. Enable the function; “Auto Refresh” will also be enabled. Check the “Auto Add” box to enable this function. Then, set the Auto Refresh time interval.
3	Auto Refresh	Check this box and the CMS system will automatically refresh the Device List by every N seconds. The time duration “N” ranges from 30 to 120 seconds.

<table>
<tr><th>No.</th><th>Item</th><th>Description</th></tr>
<tr><td>4</td><td>Re-scan Device</td><td>Click .
CMS will begin re-searching the IP cameras installed in the same LAN as CMS that meet the searching criteria in the Device List.</td></tr>
<tr><td>5</td><td>Device Filter</td><td>Device Filter is to select the type of the IP devices to be searched during device search.
Device Type — Definition
MOBOTIX MOVE-H.265 — H.265 IP cameras
MOBOTIX MOVE-H.264 — H.264 IP cameras
NVR — NVR
Onvif — Onvif IP cameras</td></tr>
<tr><td>6</td><td>Clear All Device</td><td>Click Clear All Device at the bottom-right corner of the monitor, and CMS will disconnect all connected IP devices.</td></tr>
<tr><td>7</td><td>Manually Add</td><td>You can manually add an IP device to CMS. The following further describes this function.</td></tr>
<tr><td>8</td><td>Device List</td><td>CMS will list the searched IP devices installed in the same LAN in the Device List. The following will further describe this function.</td></tr>
</table>

Manually Add IP Devices to CMS

Follow the steps to manually add a known IP device to CMS.

1. Click **Manually add**. A blank new device column will be added to the Device List.
2. Enter the essential information of the IP device to the corresponding fields, including **Site Name**, **Type**, **IP Address**, **Protocol**, **Streaming Port**, **User Name** and **Password**.
3. Check the “Device add to view” box. CMS will start connecting the IP device.
4. To delete the manually-added IP devices, just click on the delete icon corresponding to the IP device.

NOTE! An IP camera’s performance may be affected and degraded when it is repeatedly connected and added to CMS.

Device List

After device search, CMS will list the IP devices installed in the same LAN that meet the searching criteria in the Device List. You can view the brief settings of the found IP devices in Device List, such as MAC address, IP address, model type, username/password, etc.

1. To check the firmware version of the IP devices, click and the firmware version will be shown.

Switch views

Under Device List, Details and Large Icons are provided for users to switch views.

- Details: Select this view, and the information of the IP cameras will be listed in columns and you can check the preview of the IP camera.
- Large Icons: Select this view, and you can browse and check the brief information of IP cameras and its preview. Note that when the preview grid of an IP camera shows “Not Supported” or “No Snapshot”, this suggests the IP camera does not support this function.

IP Devices Connection

You can connect an IP device and retrieve its live streaming to CMS. IP devices include IP cameras, NVRs and Encoders. The following shows how to connect an IP device to CMS.

Add IP Cameras to CMS

Follow the steps below to search and add IP cameras to CMS.

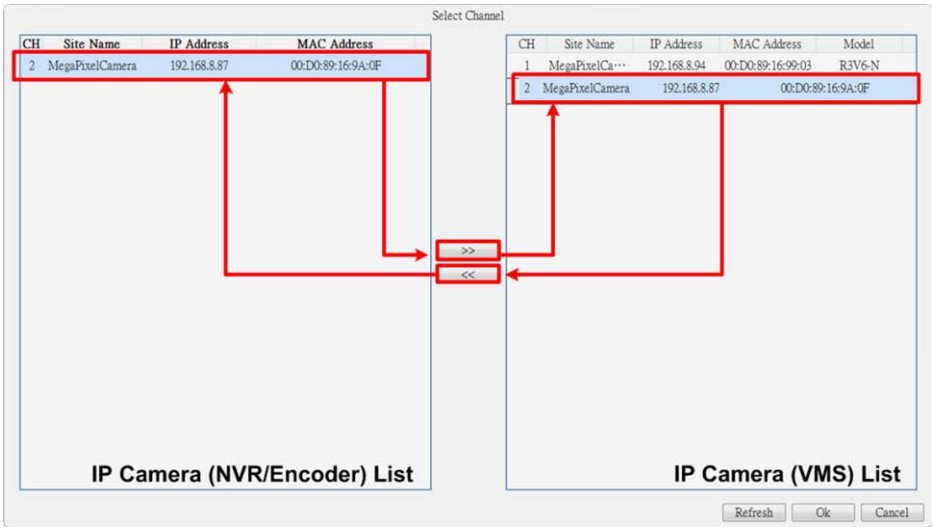
1. Select <MOBOTIX MOVE-H.265>, <MOBOTIX MOVE-H.264>, <ONVIF> from the Device Filter drop-down.
2. Click and CMS will start looking for the supported IP cameras installed in the same LAN and list them in the Device List.
3. Find a target IP camera from the Device List and check the “Device add to view” box to add the IP camera to CMS. CMS will automatically connect and retrieve the information of the IP camera.

Add NVR/Encoder to CMS

You can connect an NVR/Encoder and retrieve the live viewing.

1. Select **NVR** or **Encoder** from the Device Filter drop-down list. CMS will start to look for the supported NVRs/Encoders installed in the same LAN and list them in the Device List.
2. When selecting **Encoder**, manually reset the user name and password of Encoder(s) in Device List.

3. Click the Setup icon and a Select Channel menu will appear as below. All IP cameras from the NVR/Encoder are on the left list; the IP cameras added to CMS will be on the right list.



4. Select any IP camera from the left list, click >> and then **OK**. The IP camera will be added to CMS. CMS will retrieve the live viewing from the connected NVR/Encoder.
5. To cancel IP camera connection, select the IP camera from the right list, click << and then **OK**. CMS will stop retrieving streaming from the IP camera connected from the NVR/Encoder.

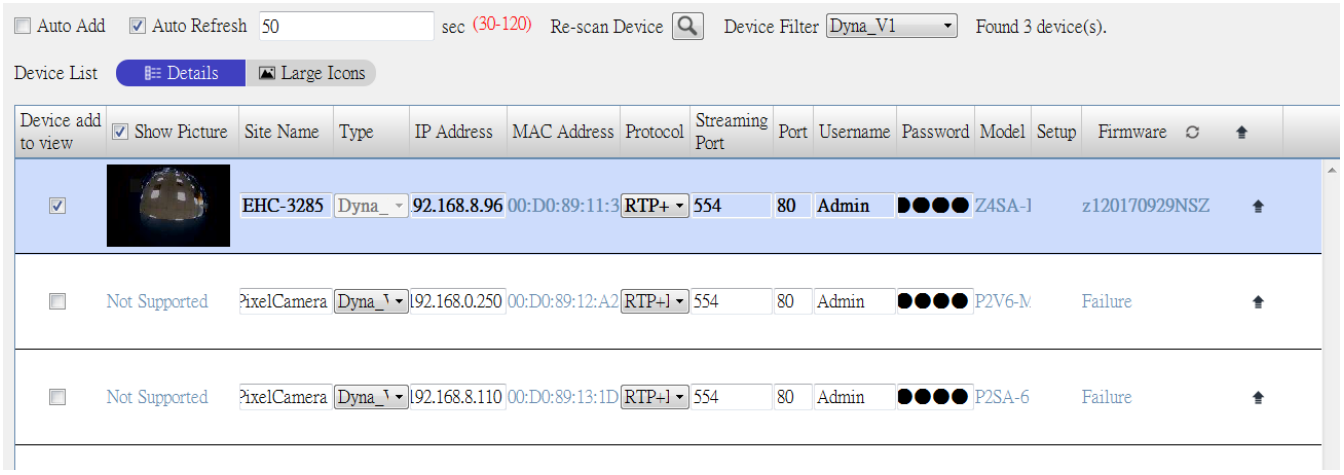
Disconnect an IP Device from CMS

1. Disable the "Device add to view" box of any device in the IP device list, the IP device will be disconnected. Alternatively, click **Clear All Device**, and CMS will disconnect all the connected IP devices in the Device List.

Upgrade Firmware for the Connected IP Devices

You can upgrade firmware for the connected IP devices via CMS. Follow the steps below.

1. Click the firmware upgrade icon of the device in the Device List. A "Select File" window will pop up.



2. Appoint a firmware file and click **Open**; then an upgrade status bar will be displayed on the page to show the upgrade process.
3. Click **OK** from the pop-up message window to return to the Add Device function tab.

Record Videos from the Connected IP Devices

After the IP devices are connected to CMS, you can decide to record videos from certain connected IP devices in Record Setup tab.

1. Go to **Record** > **Record Schedule**.
2. Under Recording Scheduling Selection, check the “R” box of the desired IP devices to activate CMS recording.
3. Assign a schedule template for the IP devices. CMS will begin recording the videos from the selected IP devices. For further details, refer to the next chapter, Record Setup.

NOTE! Users must make sure that the recording folder is setup in **Record Setup** > **Record Folder**.

6

Record Setup

Record Setup allows users to decide to record streaming from which connected IP devices, set recording schedules for each IP camera, etc. The following describes how to setup the recording schedule and event-related settings of each connected IP camera.

This section contains the following information:

Record Schedule Setup **75**

Record Configuration Setup **78**

NOTE!

Refer to the previous section for Event Setup.

Record Schedule Setup

You can setup recording templates and assign recording type for days in a week by hours for each recording templates here.

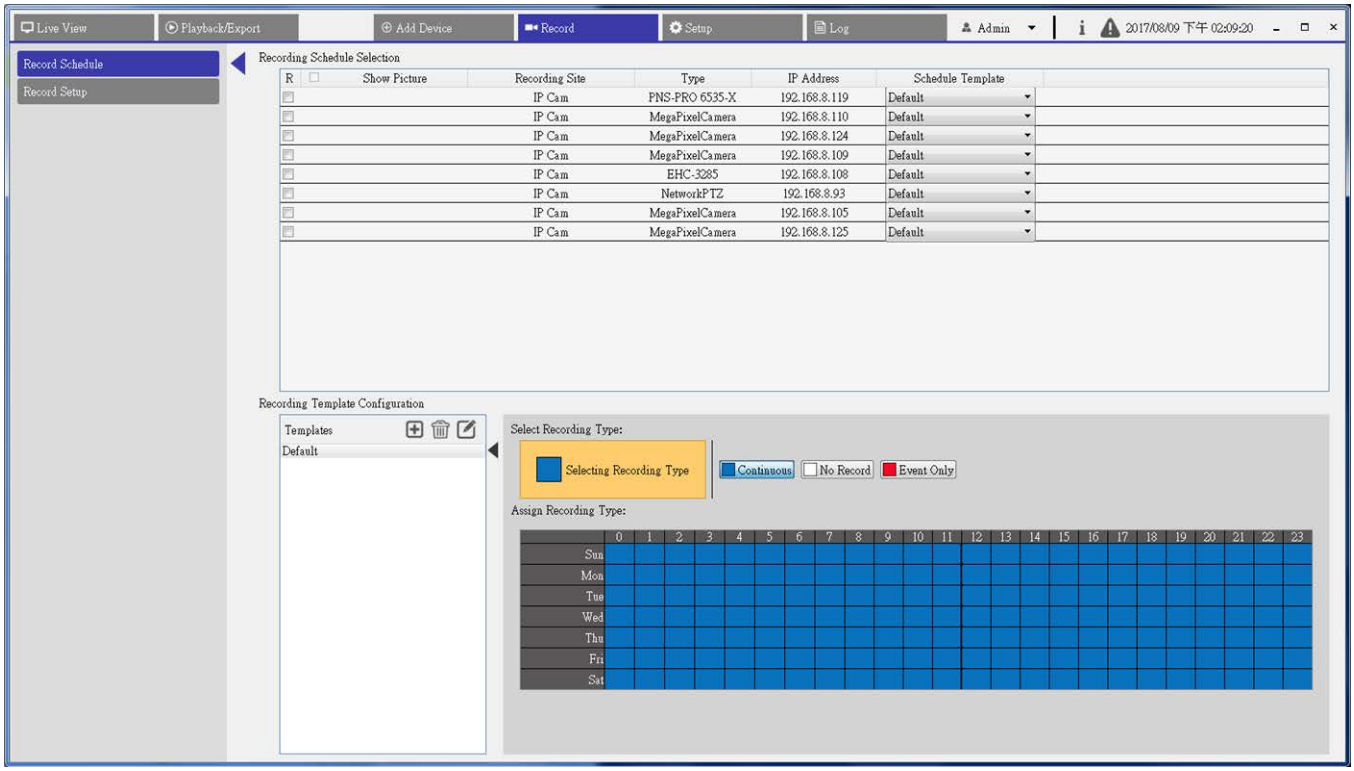


Fig. 24: Record schedule setup

Add / Remove / Rename a Recording Template

1. Click ⊞ in Recording Template Configuration pane. CMS will add a new template to the template list.
2. Select the added template and click ✎.
3. Enter the desired name in the name field to rename the name of the template.
4. Press **Enter** on the keyboard to apply the setting.
5. To delete a recording template, select a recording template and click 🗑. The selected recording template will be removed from the template list.

Recording Template Setup and Assignment

Follow the steps below to setup and assign a recording template.

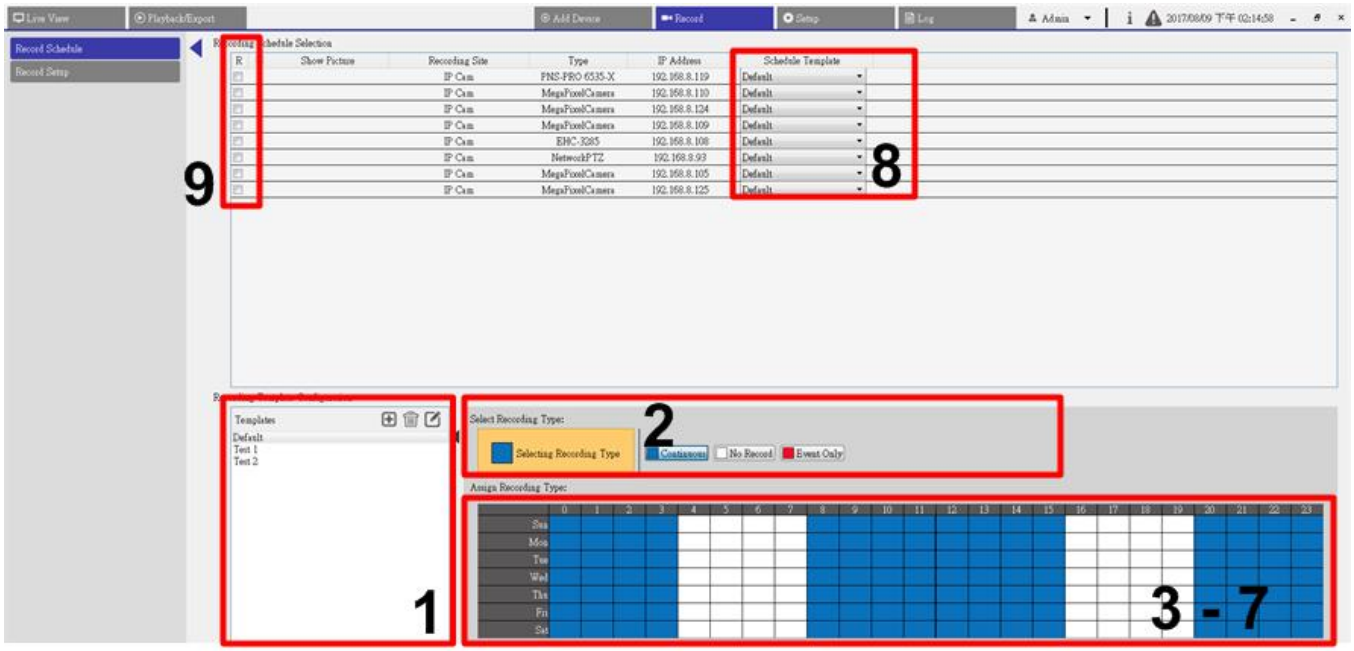


Fig. 25: Recording Template Setup and Assignment

1. Select a recording template from the template list.
2. Click on a desired recording type. Three recording types are provided, Continuous, No Record, and Event Only.
   - Continuous: To keep recording in the specified time segment.
   - No Record: Not record and save any video data in the specified time segment.
   - Event Only: Only record when there is an event occurring in the specified time segment, including the Post-Alarm videos.
3. Click at any grid of time to assign the selected recording type.
4. Click on any hour on the top to fill up the column.
5. Click on any day on the left to fill up the roll.
6. Click on the top-left empty grid to always record with the selected recording type.
7. Click and drag the mouse to fill up and assign the selected recording type.
8. Assign the template to an IP camera. Select a preferred template from the Schedule Template drop-down list.
9. Check the “R” box of the corresponding IP camera. CMS will start recording streaming received from the selected IP camera according to the applied template.

NOTE!
If the applied recording template is removed from the template list, CMS will automatically apply the default template to the site.

Record Configuration Setup

In Record Folder, you can assign the file destination of the recorded video, and setup whether to enable the circular recording and data life time functions of CMS and whether to record the pre-alarm/post-alarm video as a part of event videos when an alarm or event occurs.

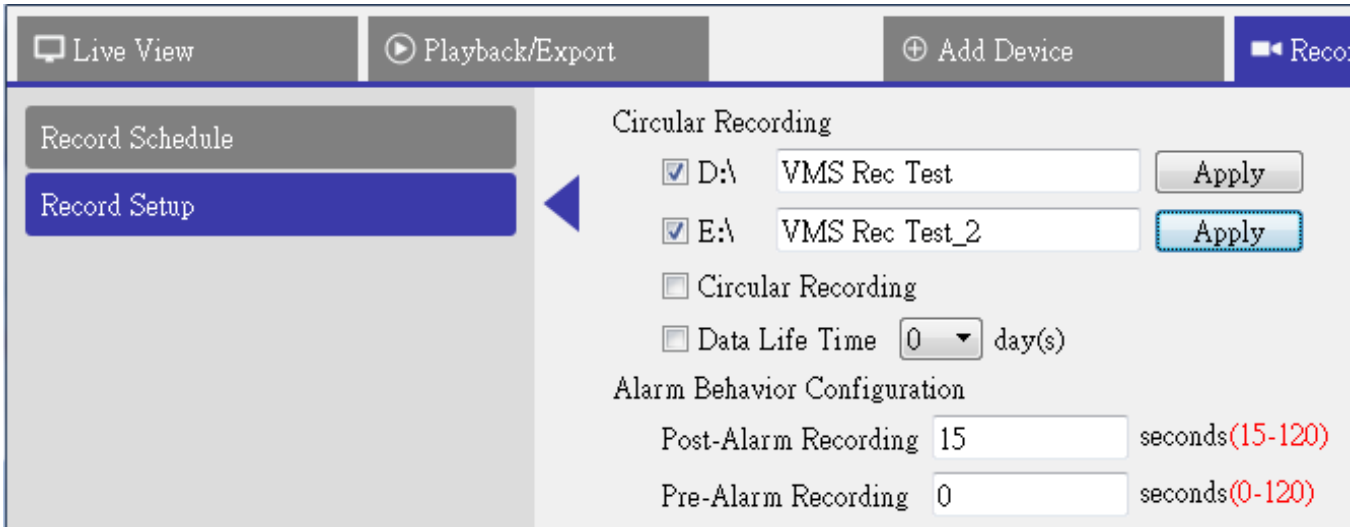


Fig. 26: Record configuration setup

Recording Folder

The number of the selectable folders equals to the number of HDDs the PC installed, excluding the HDDs with capacity less than 100GB.

1. Check the box and click on the file path column to select and set more destination folders.
2. Click **Apply** to complete the setting.

NOTE!
To change the file destination, make sure the designated folder is empty.

Circular Recording

Circular Recording allows CMS continuous recording. CMS will erase previous recorded data and replace it with new video data.

Data Life Time

Data Life Time function indicates the duration that the data is saved and recallable in the HDD. Only those data recorded within Data Life Time can be searched for playback. The video exceeds Data Life Time will be hidden and cannot be retrieved for playback.

1. To enable this function, check the “Data Life Time” box.
2. Select the preferred time from the drop-down menu. Otherwise, disable x or choose <0 day> from the drop-down menu to disable Data Life Time function.

NOTE!
To playback a video exceeding Data Life Time, please extend the duration until the recording data/time of the video is included.

Alarm Behavior Configuration

You can setup the pre-alarm/post-alarm video duration to be included to event videos.

1. Enter the desired seconds to the entry field. The time duration range of “Post-alarm Recording” is from 15 to 120 seconds, whereas “Pre-Alarm Recording” ranges from 0 to 120 seconds (0 second is to disable this function).

   NOTE! Normal video recording MUST be enabled to provide video data to the matching event video.

NOTE!
When the recording schedule is set to record event only and an event occurs, CMS only records the event and the post-alarm videos, PRE-ALARM VIDEOS WILL NOT BE RECORDED.

7

Playback/Export

You can select and playback/export the recorded videos in the Playback/Export function tab. Besides, you can view the snapshots and export the desired videos/snapshots in this function tab. On the top left side, you can select the preferred record group from the drop-down list for video playback/export functions.

This section contains the following information:

Playback Control Bar **82**

Data Erase/Protect/Bookmark **83**

Search / Playback / Export Videos **86**

Search and Playback Videos by Time / By Multiple HD 86

Export Videos by Time 87

Search / Playback / Export Event Videos **89**

Search and Playback Event Videos 89

Export Event Videos 90

Search / View / Export Event Snapshots **90**

Search and View Event Snapshots 91

Export Snapshots 92

Fig. 27: Playback / export

Playback Control Bar

Playback control bar is displayed at the bottom of the screen.

Fig. 28: Playback control bar

Item	Description
Playback Speed	Click and drag the slider control bar to select the speed of backward / forward, x1/4, x1/2, x1, x2 and x4.
Rewind	Click ◀ to reverse playing back the recorded videos.
Pause	Click ⏸ to pause the playback.
Play	Click ▶ to start playing back the recorded videos.
Clear Time Tag	Click ✕ Clear Tag to clear the set time tag on the time bar.

Item	Description
Start Export	Click Start Export to start the video exportation process.
Data Erase/Protect	You can remove, protect, and bookmark certain parts of the recorded videos via this function.
Help	Click to quick check how to use the time bar.

Data Erase/Protect/Bookmark

You can assign which data to be protected from deletion or overwriting, and set specific sections of the recorded data as bookmarks for necessary use. Alternatively, you can also delete certain recording data here.

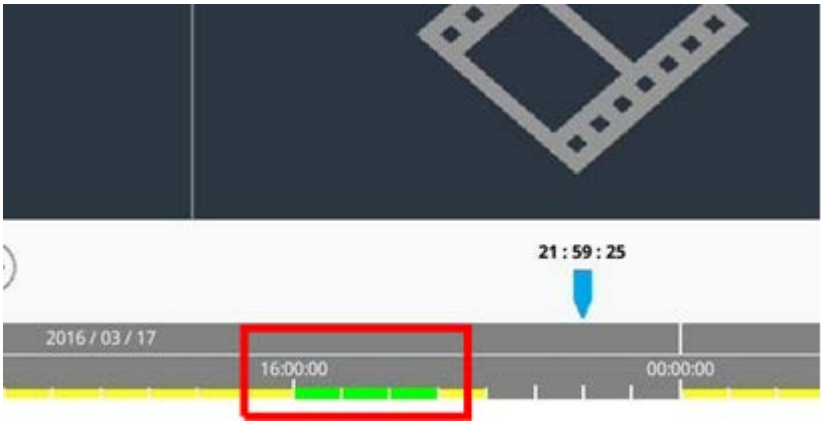
Set Data Protection

Follow the steps to set data protection.

Fig. 29: Set Data Protection

1. Select any underlined date from the calendar, which indicates the recording data are available. The yellow stripe in the time bar shows there are available recorded videos.
2. Click and drag the Time Interval icon and drop it to the time bar to select the desired time interval of recorded video.

3. Use the Time Range Adjustment icon to adjust the preferred time segment. Scroll up/down the mouse wheel to zoom in/out to adjust and select the exact desired time.
4. Click Data Erase/Protect and select Protection. A confirmation window pops up.
5. Click **OK** to continue the procedure. The Data Erase/Protect icon will turn light blue, indicating the data protection is being made. Once it is done, the icon returns to grey. The time segment of the protected data will show in green in the time bar as the following figure.



Cancel Data Protection

There are two ways to cancel data protection if needed.

Using Time Bar

1. Select and adjust the time segment of the protected data in the time bar using Time Interval icon and Time Range Adjustment icon .
2. Click Data Erase/Protect and select Cancel Protection .
3. A confirmation window pops up, click **OK** to proceed. The selected time segment will return to yellow, indicating this part of recording data is not protected and can be deleted/overwritten.

Using Protection List

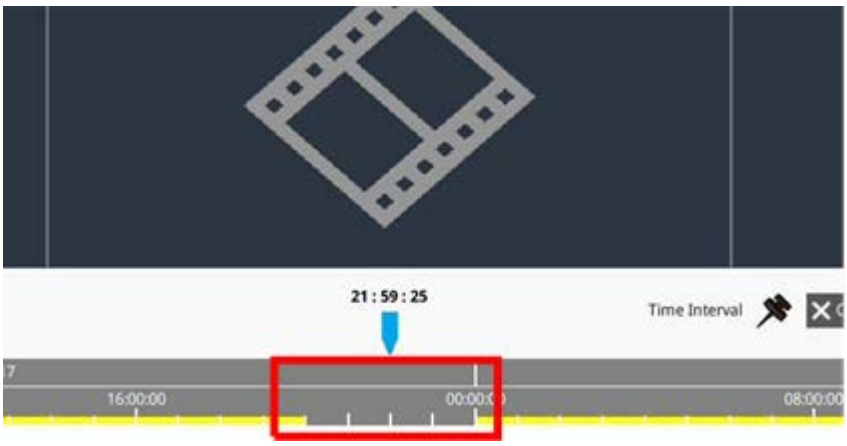
1. Click Data Erase/Protect and select Protection List. All protected information will be listed in the Protection List.
2. Click of the desired data item, and select **OK** from the pop-up confirmation window. The selected data will be removed.

Data Erasion

Follow the steps to remove the desired recording data from the NVR database.

1. Follow Steps 1 to 3 from Set Data Protection to set which part of the recorded videos to be deleted from the database.

2. Click Data Erase/Protect and select Erasion. A confirmation window pops up, click **OK** to proceed the data erasion. The selected data will be removed from the time bar as shown below.



Set Data Bookmarked

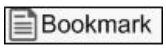
Follow the steps to bookmark a section of the recoded data.

1. Follow Steps 1 to 3 from Set Data Protection to set which part of the recorded videos to be bookmarked.
2. Click Data Erase/Protect and select Bookmark. The Bookmark list pops up as below.

3. Name the bookmark in “Describe”.
4. Click **Add**. A confirmation dialog pops up, click **OK** to proceed. Then, another confirmation dialog shows up, asking to protect the video or not.
5. Click **OK** to set it protected, or click **Cancel** to create a bookmark.

Play/Delete Bookmarks

1. Click

and select 

to display the Bookmark list.
2. To play the bookmarked video, click . The CMS will begin playing.
3. To delete a bookmark, click .
4. Click **OK** to delete the bookmark.

Search / Playback / Export Videos

You can search and playback the recorded videos by date/time. Refer to the following for further instruction.

Search and Playback Videos by Time / By Multiple HD

This section describes how to search and playback the recorded video. In **Local Playback By Multiple HD**, CMS also allows users to playback videos in 1080p, 4-window mode.

NOTE! Make sure the video resolution of the recorded data is 1080p or above.

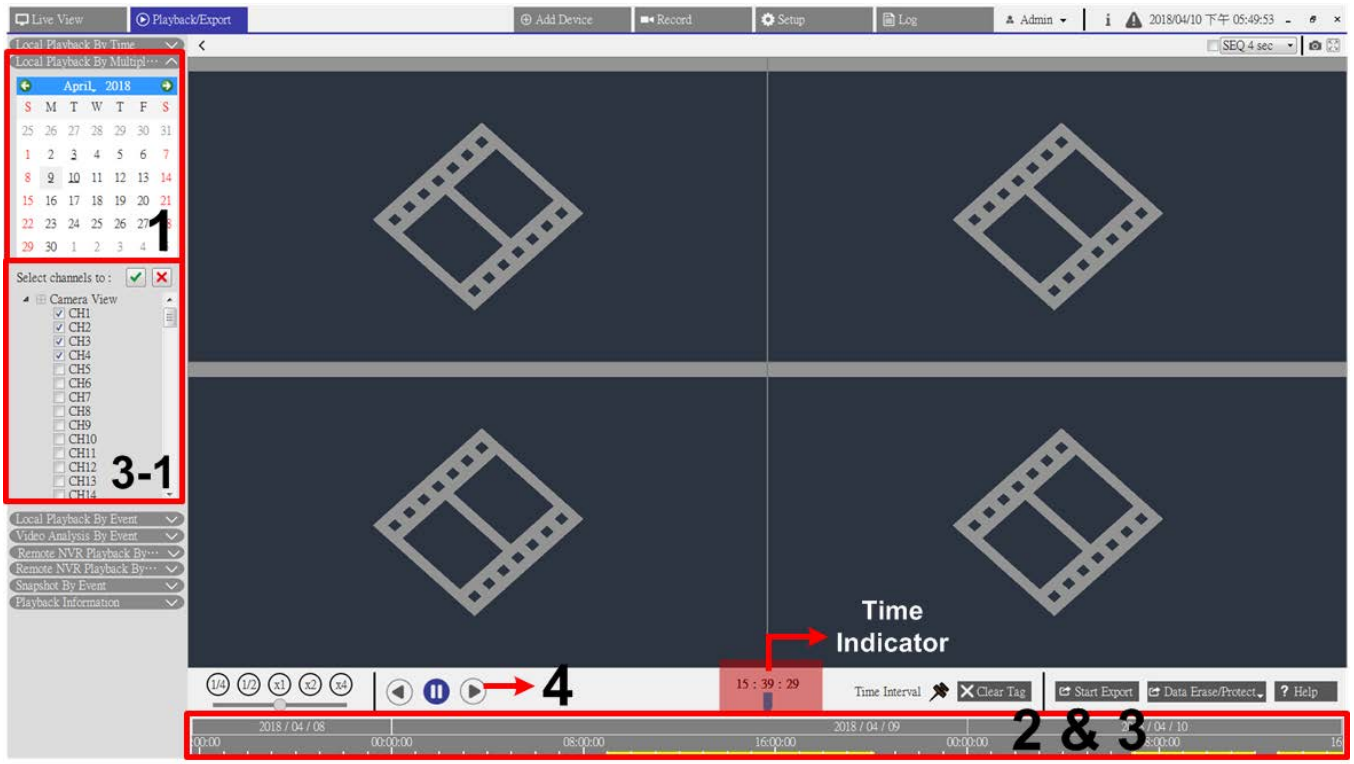


Fig. 30: Search and Playback Videos by Time / By Multiple HD

1. Select **Local Playback By Time**, **Remote NVR Playback**, or **Local Playback By Multiple HD**, and follow the steps to search and playback the desired videos.
2. Select any underlined date from the calendar, which indicates the recording data are available. The yellow stripe in the time bar shows there are recorded videos for users to playback.
3. Click and drag the time bar to select a preferred time from the time bar. The selected time will be displayed above the blue indicator.
4. Move the mouse cursor to the time bar; scroll up/down the mouse wheel to adjust the time scale to select the exact desired time.
5. When selecting **Local Playback By Multiple HD**, check any four channel boxes with the recorded data from <**Select channels to:**.
6. Click ▶ to start playing back the selected video.

Export Videos by Time

Follow the steps below to export the normal videos.

NOTE!
This function is not available for videos recorded on the remote NVR site.

Fig. 31: Export videos by time

1. Select a preferred shadow date from the calendar. The time bar will display the available recording data of each channel.
2. Click and drag the Time Interval icon and drop it to the time bar to select the desired time interval of the recorded video.
3. Click and drag the Time Range Adjustment icon to adjust the preferred time segment. Scroll up/down the mouse wheel to zoom in/out to adjust and select the exact time.
4. Click Start Export. A “Select File Path” window will pop up. Appoint a file path and click **Select Folder**. The Export window will be displayed.
5. Check the to-be-exported channel boxes.
6. Choose the video format for the to-be-exported video. The provided video formats include *.avi, *.raw, *.mp4, *.mkv and *.mov.
7. Check or un-check the “Audio Export” box to export videos with or without audio if the video is recorded with audio.
8. Click **Confirm** to start exporting the video.
9. Click **OK** from the pop-up message window after video exportation to return to the Playback / Export function tab.

Search / Playback / Export Event Videos

Aside from searching recorded videos through time, you can also search, playback and export event videos.

Search and Playback Event Videos

Users are able to search events by time, channel, or type. Follow these steps to search event video.

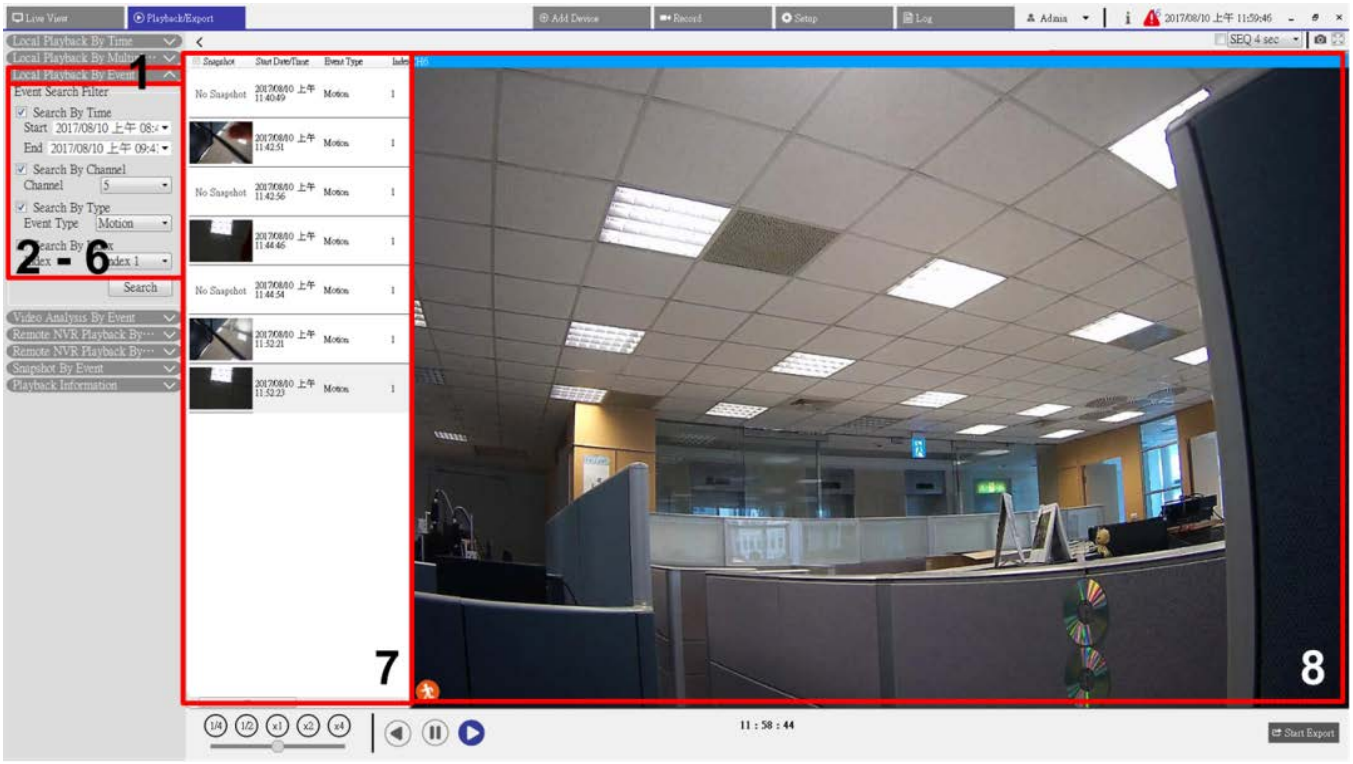


Fig. 32: Search and playback event videos

1. Click on the “Local Playback By Event” bar, “Video Analysis by Event” bar or “Remote NVR Playback By Event” bar to display the Event Search Filter.
2. In the Event Search Filter, check the “Search by Date / Time” box and specify the Start / End time for the time range of the event search.
3. Check the “Search by Channel” box to select the desired channels to the event search.
4. Check the “Search by Type” box and designate which event type to be included in the event search.
5. For users who select “Local Playback By Event” bar or “Remote NVR Playback By Event” bar, check the “Search By Index” box and select which motion index to be searched.
6. Click **Search** to list event videos that meet the searching criteria above. The Event List displays events by date/time, event type and triggered camera and is listed in chronological order.

7. Select any event from the Event List, and the viewing window on the right will start playing back the selected event.

Export Event Videos

Follow the steps below to export the event videos. This function is not available for videos recorded on the remote NVR site.

1. Select a desired event from the Event List.
2. Click

. A“Select File Path” window pops up.
3. Appoint a file path and click **Select Folder**. The Export window is displayed.
4. Choose the video format for the to-be-exported video. The provided video formats include *.avi, *.raw, *.mp4, *.mkv and *.mov.
5. Check or un-check the “Audio Export” box to export videos with or without audio if the video is recorded with audio.
6. Click **Confirm** to start exporting the video.
7. After video exportation, click **OK** from the pop-up message window to return to the Playback / Export function tab.

Search / View / Export Event Snapshots

The captured event snapshots are stored in CMS. You can search, check and export the captured snapshots in the Playback/Export function tab. The following introduces each item in **Snapshot By Event** and shows how to search event snapshots.

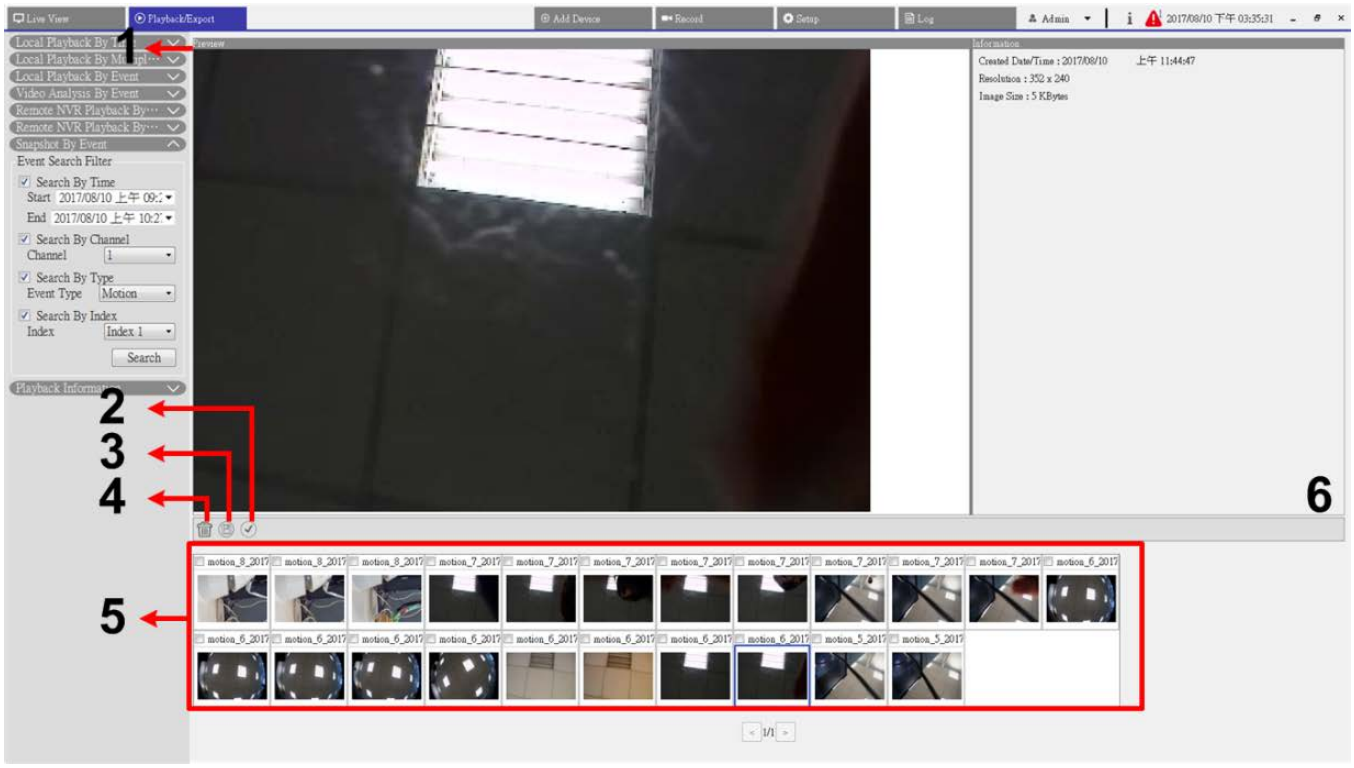


Fig. 33: Search, view, and export event snapshots

No.	Item	Icon	Description
1	Preview	-	Here displays the preview of the snapshot from the Snapshot List below.
2	Select All		Click to select all snapshots in the Snapshot List. Click the Export or Delete icons to export or delete all files.
3	Export		Select a snapshot file(s) and click to export the selected snapshot file(s).
4	Delete		Select a snapshot file(s) in the Snapshot List and click to delete the selected file(s) without notice.
5	Snapshot List	-	Here lists all the captured images. Click any thumbnail image to preview the selected and its related information in the Snapshot Information Pane.
6	Snapshot Information	-	Select any captured image from the Snapshot List, and its related information, including the captured date/time, image resolution and image size, is listed in this pane.

Search and View Event Snapshots

Users are able to search event snapshots by time, channel or type. Follow the steps to search event snapshots.

1. Click the Snapshots By Event bar to display the Event Search Filter.
2. In the Event Search Filter, check the “Search By Time” box and specify the Start / End time for the time range of the event search.
3. Check the “Search By Channel” box to select the desired channels to the event search.
4. Check the “Search By Type” box and designate which event type (Motion, Video Loss, or Alarm) to be included in the event search.
5. Check the “Search By Index” box and select which motion index to be searched.
6. Click **Search** to list event snapshots that meet the searching criteria above. The filtered event snapshots are displayed in the snapshot list.

Export Snapshots

Follow the steps to export event snapshots.

1. Select a snapshot file(s) and click .
2. Appoint a file path from the “Select File Path” window and click **Select Folder**. The Export window will be displayed.
3. Confirm the information on the Export window; click **Confirm** to start exporting.
4. Click **OK** from the pop-up message window to return to the Playback/Export function tab.

8

Log

Click **Log** to enter the Log menu. In Log function tab, you can check, view, search and export the log data. Refer to the followings for further description.

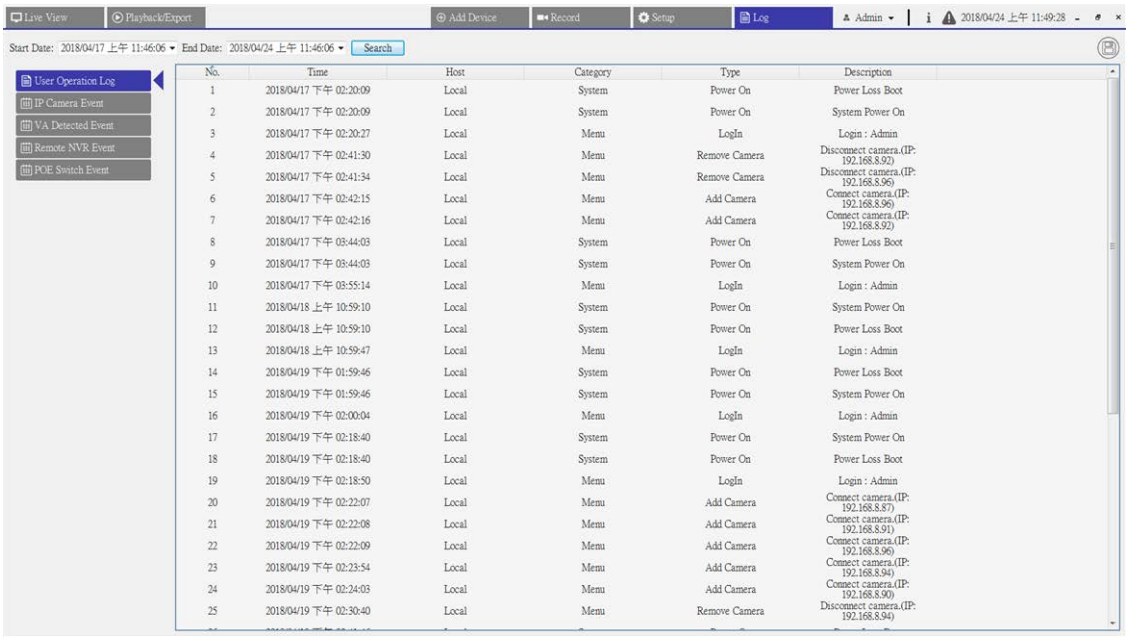


Fig. 34: Log

Search Log Data

CMS divides log data into these categories:

- User Operation Log
- IP Camera Event Log
- VA Detected Event Log
- Remote NVR System Event Log
- PoE Switch Event Log

Select the desired log category item on the left of the **Log** tab to enter its corresponding log menu. Refer to the following steps below to search and view the log data.

1. Set the time range of the log data search by assigning the Start Date and End Date on the top-left of the function tab.
2. When selecting “IP Camera Event” Log or “VA Detected Event” Log, enable the desired event types under **Option** Pane.
3. Click **Search**. CMS will start searching and then list all the recorded log data within the set time.
4. Click on each log category item on the left of the Log menu to view its corresponding log data found within the set time.

Export Log Data

Log data can be exported if necessary. The log data will be exported in *.txt file format.

1. In the desired log type menu, click the Backup Log icon at the top-right corner of the Log tab.
2. Appoint a file path from the “Select File Path” window and click **Select Folder**. The Export window will be displayed.
3. Check the information on the Export window; click **Confirm** to start exporting.
4. Click **OK** from the pop-up message window to return to the Log function tab.

List of figures

Fig. 1: Live view window 21
Fig. 2: Add / Rename / Delete a Display Layout 24
Fig. 3: Edit a Display Layout 26
Fig. 4: Manage the Displayed/Undisplayed Channels of a Layout 26
Fig. 5: Add Maps 27
Fig. 6: Change the Camera Location on the Map 29
Fig. 7: Snapshot Preview 31
Fig. 8: Camera video analysis setup 43
Fig. 9: Camera fisheye dewarp setup normal view 45
Fig. 10: Camera fisheye dewarp setup PTZ view 46
Fig. 11: Camera fisheye dewarp setup 360 view 47
Fig. 12: Camera fisheye dewarp quad view 48
Fig. 13: Camera fisheye dewarp setup OPR view 48
Fig. 14: 1O3R (One Original View & Three Regional Views 49
Fig. 15: Language setup 54
Fig. 16: General setup 55
Fig. 17: Joystick setup 58
Fig. 18: Event Setup 59
Fig. 19: Event setup 60
Fig. 20: Network setup 63
Fig. 21: User management setup 64
Fig. 22: PoE switch management setup 67
Fig. 23: Add device window 70
Fig. 24: Record schedule setup 76
Fig. 25: Recording Template Setup and Assignment 77
Fig. 26: Record configuration setup 78
Fig. 27: Playback / export 82
Fig. 28: Playback control bar 82
Fig. 29: Set Data Protection 83
Fig. 30: Search and Playback Videos by Time / By Multiple HD 87

Fig. 31: Export videos by time 88
Fig. 32: Search and playback event videos 89
Fig. 33: Search, view, and export event snapshots 91
Fig. 34: Log 93

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