



# **Operating Instructions**

## **i-PRO Active Guard Plug-in for WV-ASM300**



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# 1. Introduction

## 1.1. Features

### 1.1.A. Terms in use

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This product is designed to search/verify a specified face from database that stores face information and thumbnail images created based on faces captured by network cameras and display statistical information by operation using a client terminal or system compatible with this product. This product by itself is not designed for crime prevention. Our company accepts no responsibility for the following under any circumstances.

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(7) ANY PROBLEM, DAMAGE OR COMPLAINT CAUSED BY THE OPERATION BY A MALICIOUS THIRD PARTY.

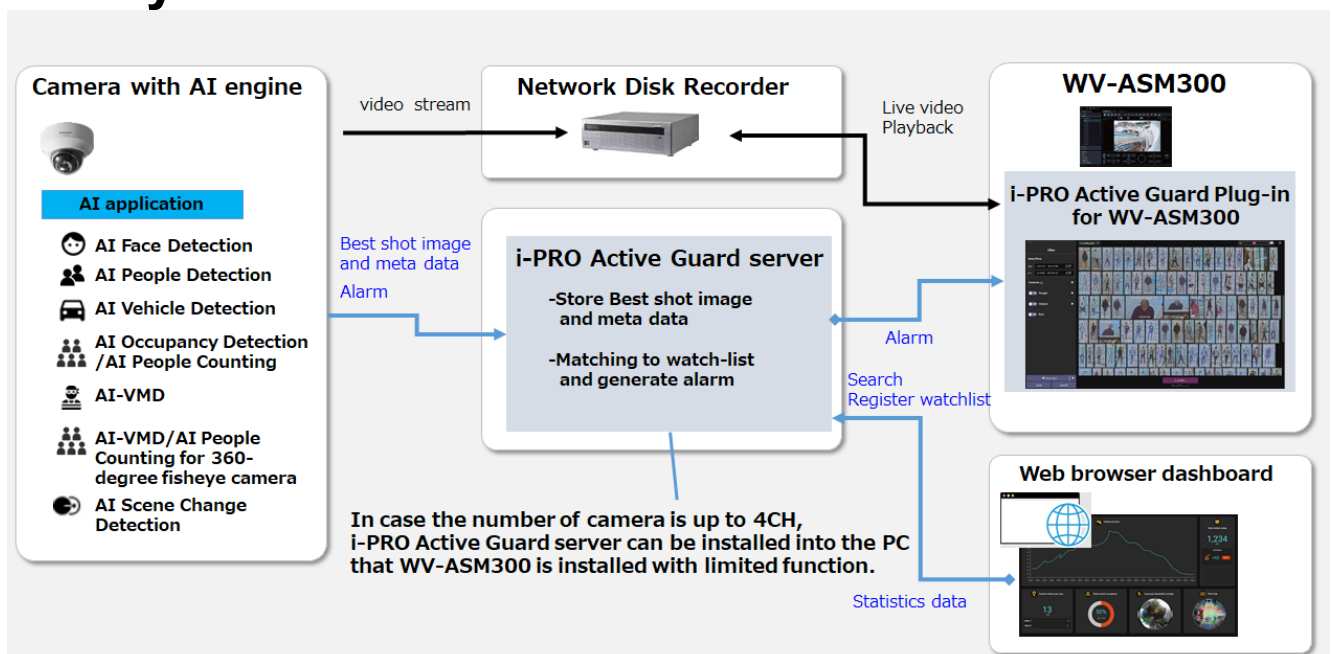
## 1.2. Preface

Setup is required before using the plug-in. Please refer to i-PRO Active Guard Setup Instructions for ASM300.

This operating manual is for dashboard function of i-PRO Active Guard Plug-in.

Regarding the operation of dashboard of i-PRO Active Guard server, please refer to i-PRO Active Guard server dashboard Operating Instructions.

## 1.3. System overview



AI application or AI function on cameras transmit video stream to Network disk recorder and transmit Best shot images and meta data to i-PRO Active Guard server.

i-PRO Active Guard server stores those data and also generate alarm when face or people is matched to watchlist.

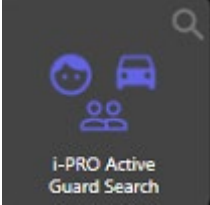
i-PRO Active Guard Plug-in for WV-ASM300 (hereinafter referred to as "Plug-in") which is the plug-in software for WV-ASM300 can search best shot images, register watchlist, show live video, recorded video, and alarm.

By visualizing statistics data from AI application on the web browser, it can also be used for business intelligence.

# 2. i-PRO Active Guard Plug-in

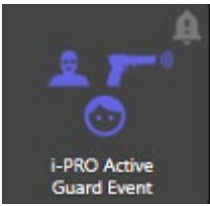
## 2.1. Startup and terminate Plug-in

Plug-in has two functions as below.



### i-PRO Active Guard Search

By using various features, enables to search bestshots of objects such as people, face and vehicle that AI camera recognize.




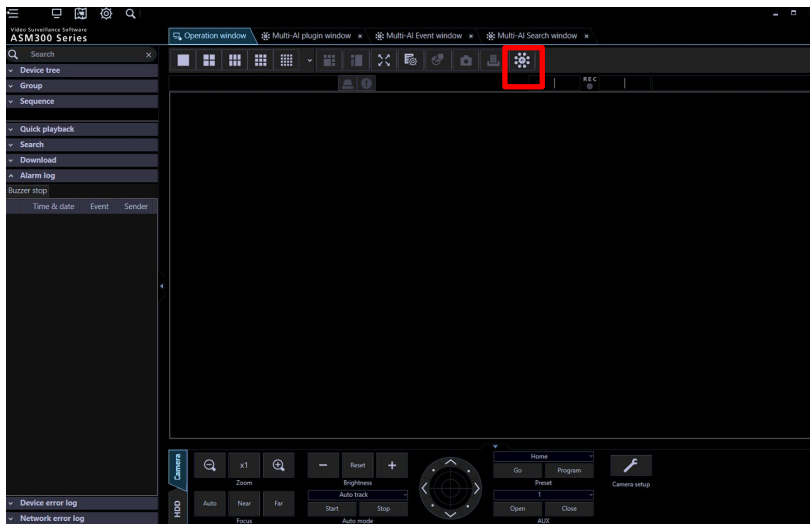
### i-PRO Active Guard Event

Enable to monitor live events that AI cameras recognize. Detected past events can be searched.

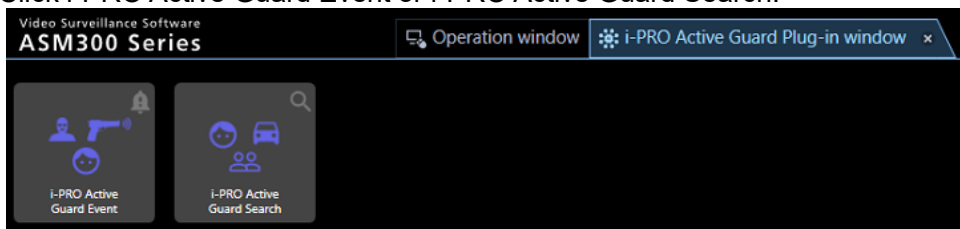
### 2.1.1. Start-up plug-in

Installation and license registration of Plug-in need to be completed in advance. To open plug-in, start-up WV-ASM300 and log in first.

Click  from Operation window.

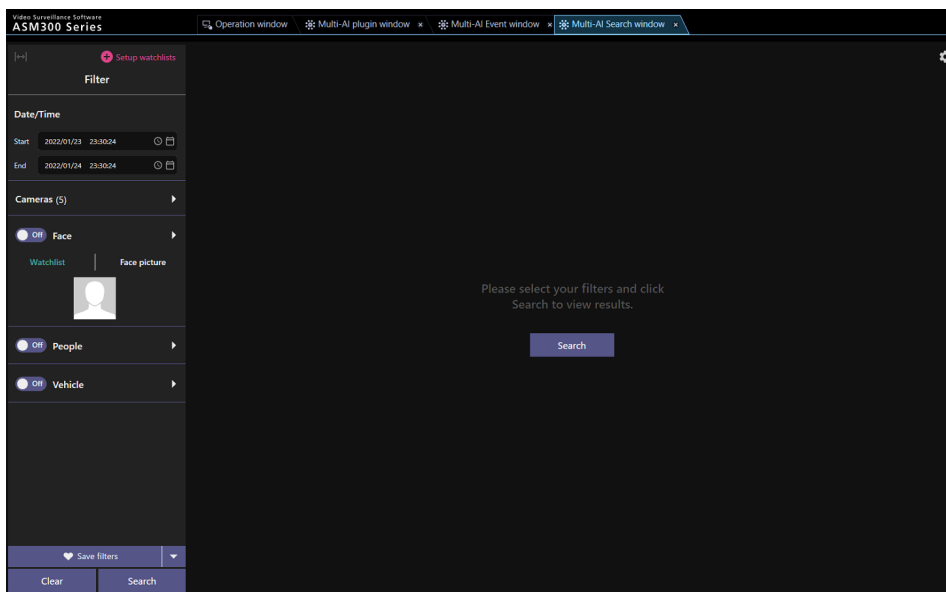


Click i-PRO Active Guard Event or i-PRO Active Guard Search.



## 2.1.2. Terminate plug-in

To terminate i-PRO Active Guard Search or i-PRO Active Guard Event, just close the tab.



## 2.2. i-PRO Active Guard Search

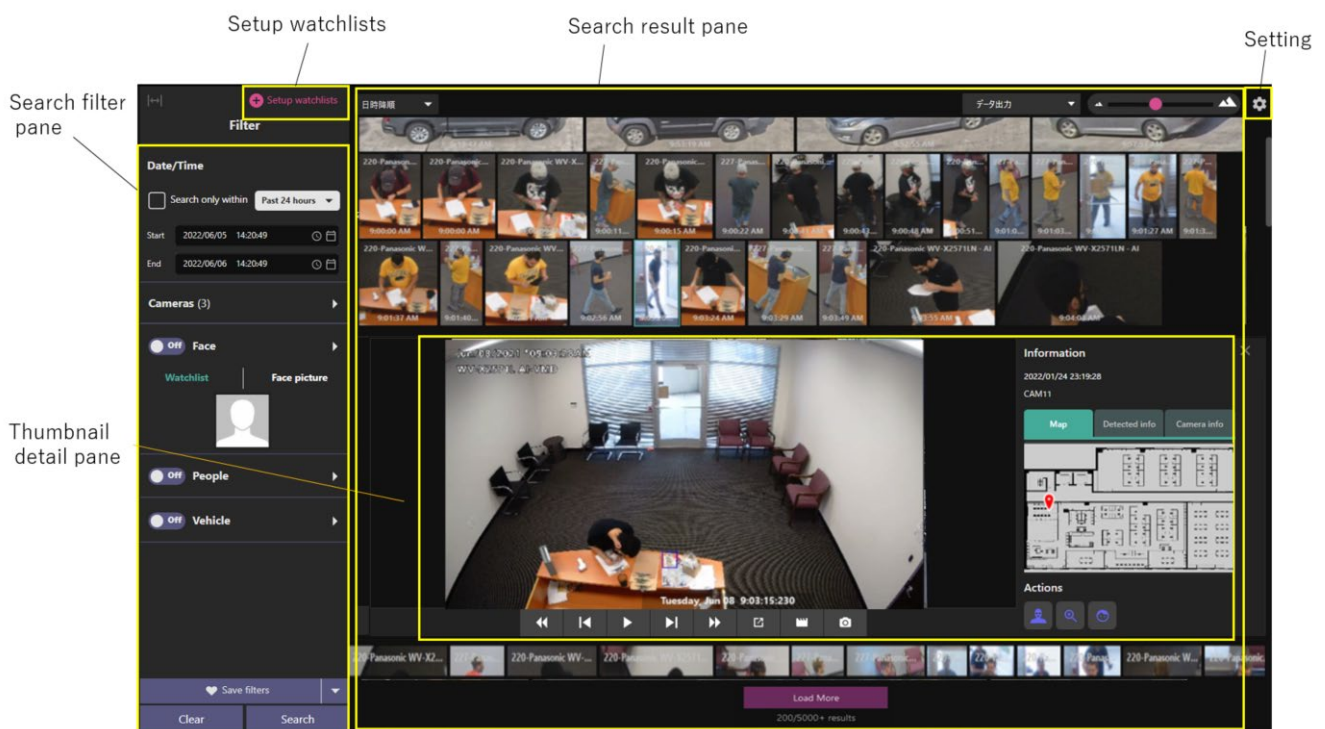
Using i-PRO Active Guard search, you can quickly find thumbnails of AI Camera detected objects including person, vehicle, and face.

### 2.2.1. UI Component

i-PRO Active Guard Search has three main parts such as search filter pane, search result pane and thumbnail detail pane, also has watchlists menu and other settings.

#### 2.2.1.1. Overview

In this section, it describes the elements that compose the recording search.



Search filter pane	Date/Time filter	Start time and end time for search objects. [Search only within](Past 24 hours/Past week/Past month) can be also selected.
	Cameras filter	Specify AI Cameras for search objects.
	People filter	Specify personal features such as gender, age, hair color, etc.
	Vehicle filter	Specify vehicle features such as type, color, etc.
	Face filter	Show face thumbnails.
	Save filters	Save filter settings with name up to 12.
	Clear	Clear filter settings.
Search result pane	Search	Start thumbnail search.
	Sort	Sort search results by descending, ascending, similarity and analysis score.

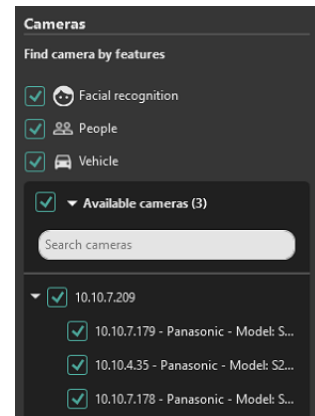
	Display mode	List or Timeline can be changed for face search result.
	Export result	Export search result as HTML
	Zoom in/out	Zoom in and out thumbnail results area.
	Detected thumbnail	Click and open thumbnail detail pane. Right click and save the thumbnail as picture or video clip.
	Results count	Show the thumbnail search results count.
Thumbnail detail pane	Thumbnail detail pane	Video control, information such as camera location, analysis score and camera information. Refer to “2.2.1.3” for detail.
Set up watchlists	Face watchlist	Setup face watchlist.
	People watchlist	Setup people watchlist.
	Vehicle watchlist	Setup vehicle watchlist.
Settings	Preferences	Setup some environments for playback, event monitor etc.

## 2.2.1.2. About search filters

In this section, it describes search filters that can narrow the search results down.

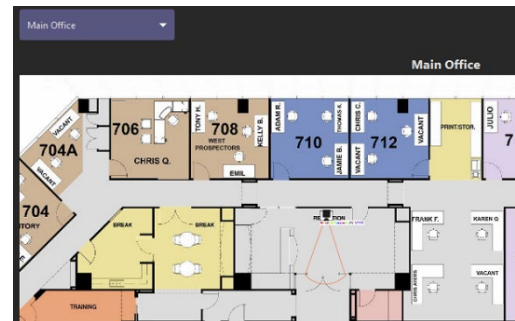
### A. Camera filter

Select the cameras to be searched from the available camera list. Using Find camera by features, you can select only cameras which have specific AI capabilities.



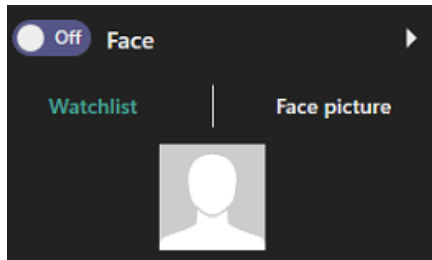
Cameras also can be selected from map. Select target map then select camera icons or encircle cameras by dragging your mouse. The map is optional, setup on WV-ASM300 setting is required on prior to using this function.

When you register or change the map on WV-ASM300, terminate plug-in and start again.



## B. Face filter

With the Face filter enabled, only the thumbnails are shown which AI Camera with face detection app detected.

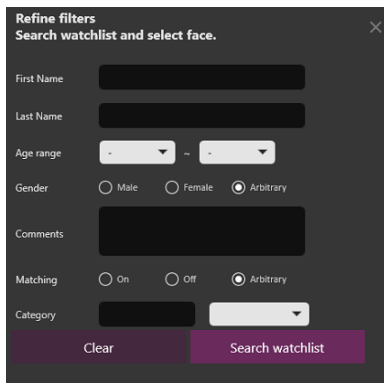


Also using filter panel, you can apply the search condition.

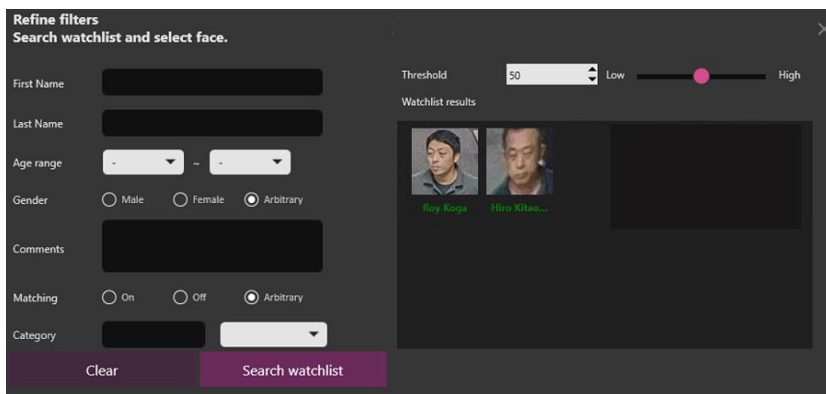
### Watchlist

Select face from watchlist and search similar face.

Click [Search watchlist] with search conditions.

A screenshot of a 'Refine filters' panel with the title 'Search watchlist and select face.'. It contains several input fields: 'First Name', 'Last Name', 'Age range' (with dropdown menus and a tilde separator), 'Gender' (with radio buttons for Male, Female, and Arbitrary), 'Comments' (with a text area), 'Matching' (with radio buttons for On, Off, and Arbitrary), and 'Category' (with a dropdown menu). At the bottom, there are two buttons: 'Clear' and 'Search watchlist'.

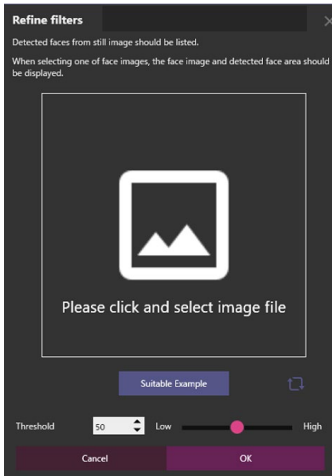
Select face from search result.

A screenshot of the 'Refine filters' panel, similar to the previous one, but with additional elements. A 'Threshold' slider is visible, set to 50, with 'Low' and 'High' labels. Below the filter fields, there is a 'Watchlist results' section showing two face thumbnails. The first thumbnail is labeled 'Rey Koga' and the second is labeled 'Hiro Kitao...'. The 'Search watchlist' button is highlighted in purple.

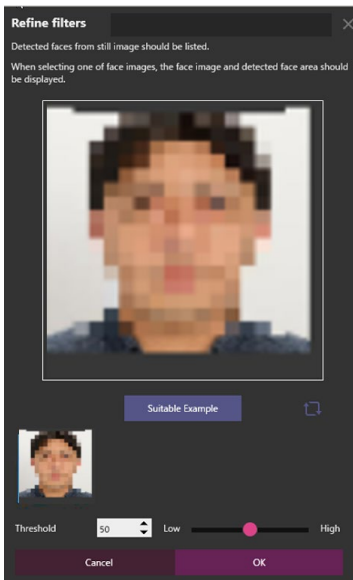
## Face picture

Upload image file that includes face and search similar faces.

Click icon and select image file.

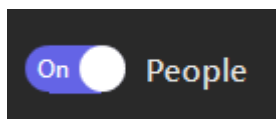


When face is detected from the image, select face and click OK.

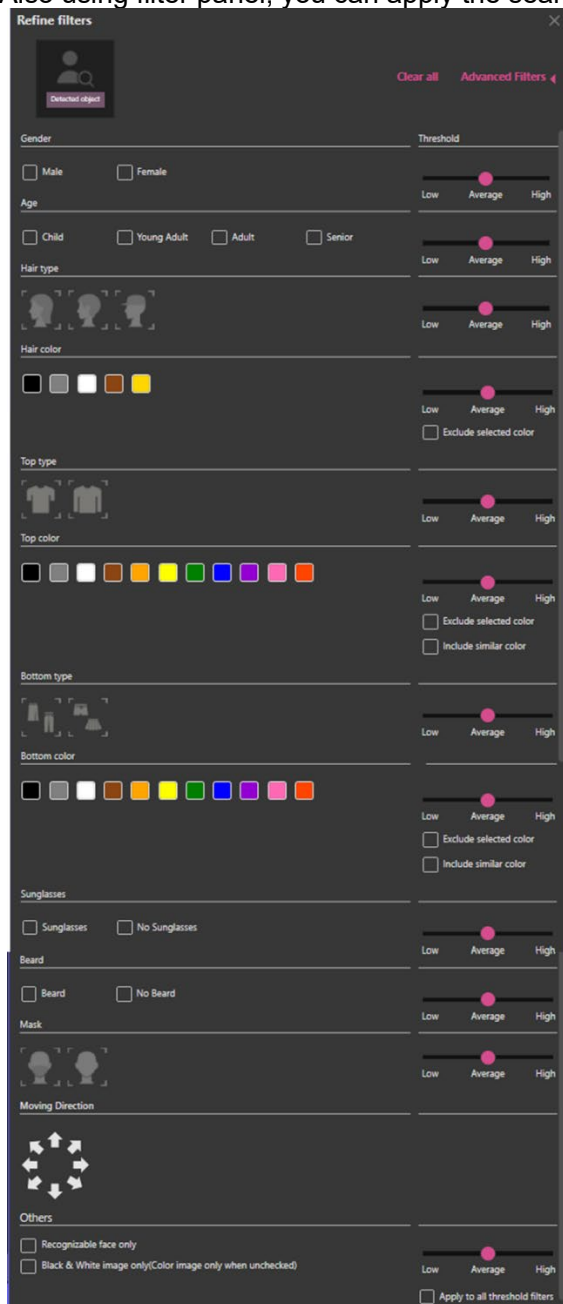


### C. People filter

With the People filter enabled, only the thumbnails are shown which AI Camera with people detection app detected.



Also using filter panel, you can apply the search condition.

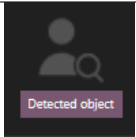


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**Features and controls**

**Description**

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Uploading people picture  
If picture is uploaded, features are automatically detected.

<b>Gender</b>	Male, Female
<b>Age</b>	Child (0~10), Young Adult (11~20), Adult (21~60), Senior (61+)
<b>Hair type</b>	Long-hair, Short-hair, Hat
<b>Hair color</b>	Black, Gray, White, Brown, Gold
<b>Top type</b>	Short-sleeves, Long-sleeves
<b>Top color</b>	Black, Gray, White, Brown, Orange, Yellow, Green, Blue, Purple, Pink, Red
<b>Bottom type</b>	Long, Short
<b>Bottom color</b>	Black, Gray, White, Brown, Orange, Yellow, Green, Blue, Purple, Pink, Red
<b>Sunglasses</b>	Sun Glasses, No Glasses
<b>Beard</b>	Beard, No Beard
<b>Mask</b>	Mask, No Mask
<b>Moving Direction</b>	Up, Up right, Right, Down right, Down, Down left, Left, Up left
<b>Others</b>	Recognizable face only can show person thumbnails with clarify face. Black & White image only(Color image only when unchecked) Note) Black & white images may show in the search results even if only Color images only is specified.
<b>Threshold</b>	There are Low, Average and High.
<b>Exclude searched color</b>	If this selected, the color will exclude from search results.
<b>Include similar color</b>	If this selected, the color similar to the specified color will be automatically selected.

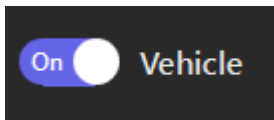
Note)

If the specified color does not appear in the search results, it may be displayed in the search results by selecting and searching for the following similar colors together.

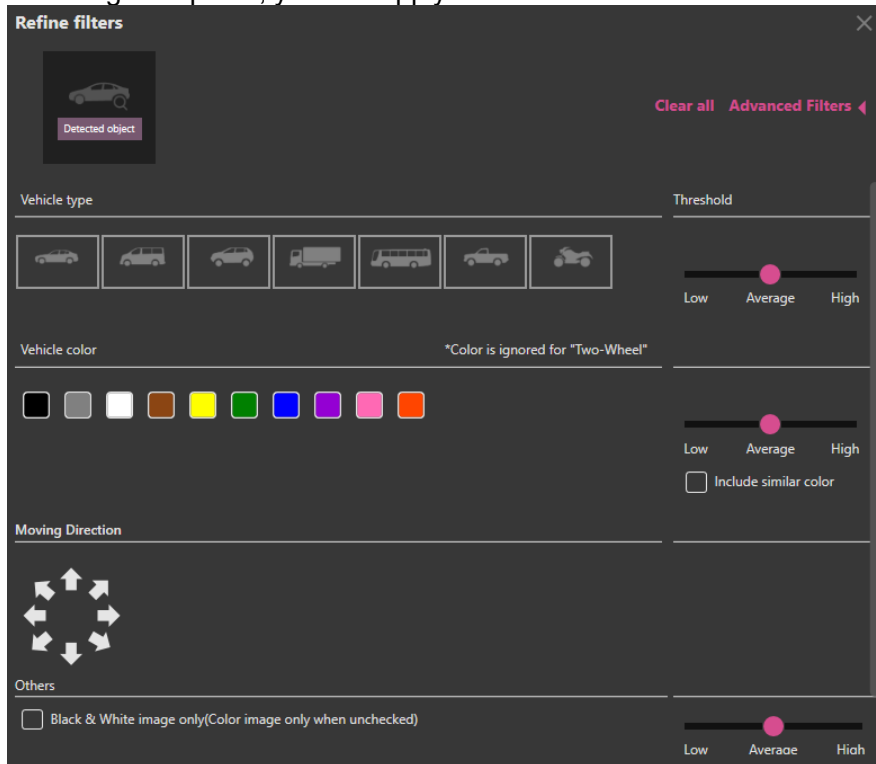
<b>Color to be searched</b>	<b>Similar color (The order is similar from the left)</b>
<b>Black</b>	Gray
<b>Brown</b>	White, Yellow, Orange
<b>White</b>	Gray, Blue, Brown, Yellow, Orange
<b>Gray</b>	Black, White, Blue
<b>Green</b>	Blue, Black, Yellow
<b>Red</b>	Orange, Pink
<b>Blue</b>	Green, Black, Purple
<b>Yellow</b>	Green, White, Brown, Orange
<b>Orange</b>	Red, Brown, Yellow
<b>Purple</b>	Pink, Blue, Black
<b>Pink</b>	Red, Purple

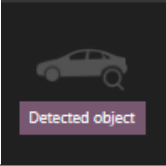
#### D. Vehicle filter

With the Vehicle filter enabled, only the thumbnails are shown which AI Camera with vehicle detection app detected.



Also using filter panel, you can apply the search condition.



Features and controls	Description
	Uploading vehicle picture If picture is uploaded, features are automatically detected.
<b>Type</b>	Truck, Bus, SUV, Van, Sedan, Pickup Truck, Two-Wheel
<b>Color</b>	Black, Brown, White, Gray, Red, Blue, Yellow, Green, Purple, Pink
<b>Moving Direction</b>	Up, Up right, Right, Down right, Down, Down left, Left, Up left
<b>Others</b>	Black & White image only(Color image only when unchecked) Note) Black & white images may show in the search results even if only Color images only is specified.
<b>Threshold</b>	There are Low, Average and High.
<b>Include similar color</b>	If this selected, the color similar to the specified color will be automatically selected.

Note)

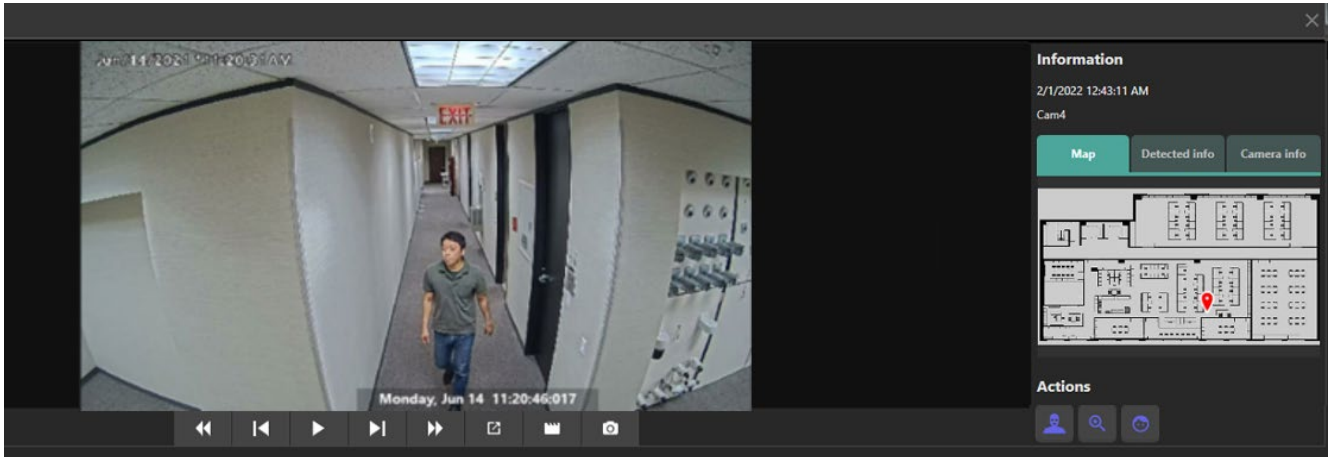
If the specified color does not appear in the search results, it may be displayed in the search results by selecting and searching for the following similar colors together.

Color to be searched	Similar color (The order is similar from the left)
----------------------	--

<b>Black</b>	Gray
<b>Brown</b>	Gray, White
<b>White</b>	Gray, Blue, Brown, Yellow
<b>Gray</b>	Black, White, Blue
<b>Green</b>	Blue, Black, Yellow
<b>Red</b>	Pink
<b>Blue</b>	Green, Black, Purple
<b>Yellow</b>	Green, White, Brown
<b>Purple</b>	Pink, Blue, Black
<b>Pink</b>	Red, Purple

## 2.2.1.3. About thumbnail detail pane

Selecting one of thumbnail search results, you can take various actions such as playback video, check analysis result and register the thumbnail to watchlist and so on. The additional information about playback controls, please refer to 2.4 PLAYBACK VIDEO CONTROL.



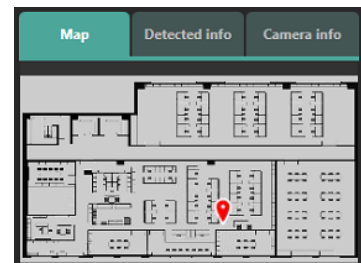
- Information

You can see more detail information such as detected place, the analysis information, and camera information.

A. Map

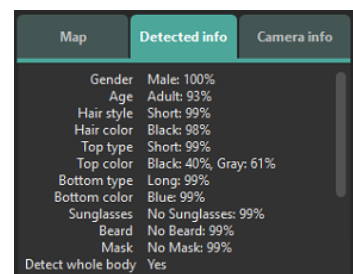
The camera which sent the thumbnail is displayed with map. You can see the camera location on map.

When you register or change the map on WV-ASM300, terminate plug-in and start again.



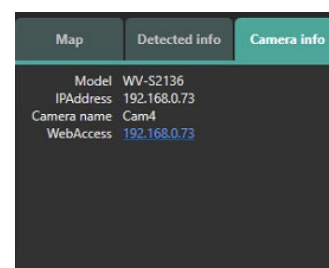
B. Detected info

Analysis score information for each feature is displayed.



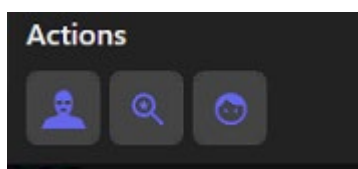
## C. Camera info

Camera information is displayed.



### ● Action buttons

This allows user quick operation such as search for similar characteristics by one click, register watchlists, and sharing other devices.



#### A. Search for similar characteristics

Quick search is provided to allow for an instant search to detect high score features, which is available for person or vehicle thumbnails.

#### **Search for exactly similar characteristics (less false result)**

Selectable when face in people image is recognized.

Search for similar images by searching for cameras that AI People detection is installed.

#### **Search for exactly similar characteristics (less missing result)**

In case of people, selectable when whole body in people image is recognized.

Search for similar images by searching for cameras that AI People detection is installed.

This is also applied for vehicle image.

Search for similar images by searching for cameras that AI Vehicle detection is installed.

#### **Search for similar face**

Selectable when face in people image is recognized.

This is also applied for face image.

Search for similar images by searching for cameras that AI Face detection is installed.

If you want to go back to previous search results, use Latest search condition in Saved filters.

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#### **Note:**

- Similar Search is not applied the Latest search condition in Saved filters.
-

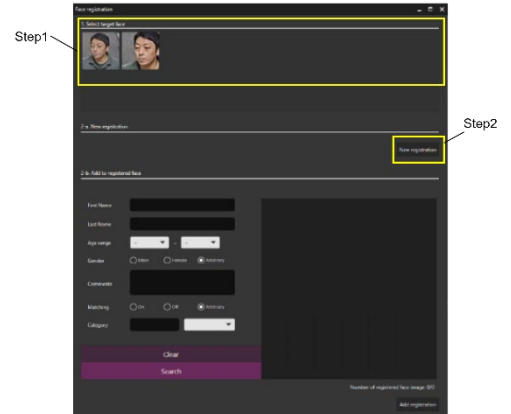


B. Save facial features to face watchlist

Register face image to watchlist. There are options either register detected face newly or add detected face to existing registered face.

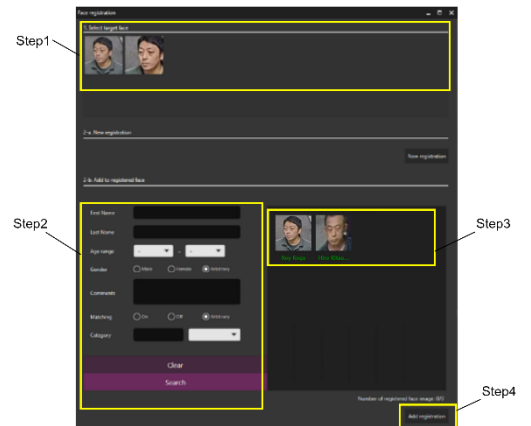
**In case of register as new face:**

- Step1. Select one of detected faces.
- Step2. Click [New registration] button.
- Step3. Please follow to 2.5.1. Face Watchlist (Step2)



**In case of adding to existing registered face:**

- Step 1. Select one of detected faces.
- Step 2. Search existing registered faces by using filters. If not specify any filters, all registered faces are displayed.
- Step 3. Select one of searched faces.
- Step 4. Click Add registration button.
- Step 5. Please follow to 2.5.1. Face Watchlist (Step2)



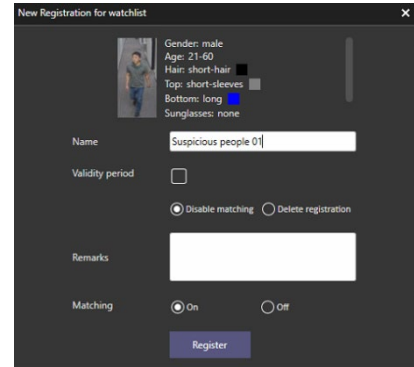
**Note:**

- Face can be registered up to 1,000.



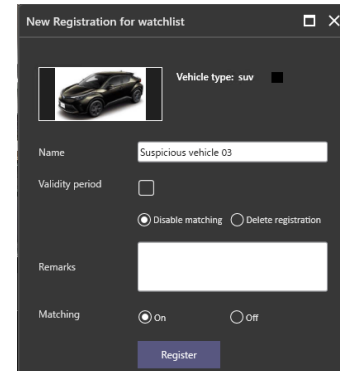
C. Save people's characteristics to Registered Person detection

Register personal features to watchlist. High score items are registered.  
Some basic information can be entered from here.







D. Save vehicle's characteristics to Registered Vehicle detection

Register vehicle features to watchlist. High score items are registered.  
Some basic information can be entered from here.

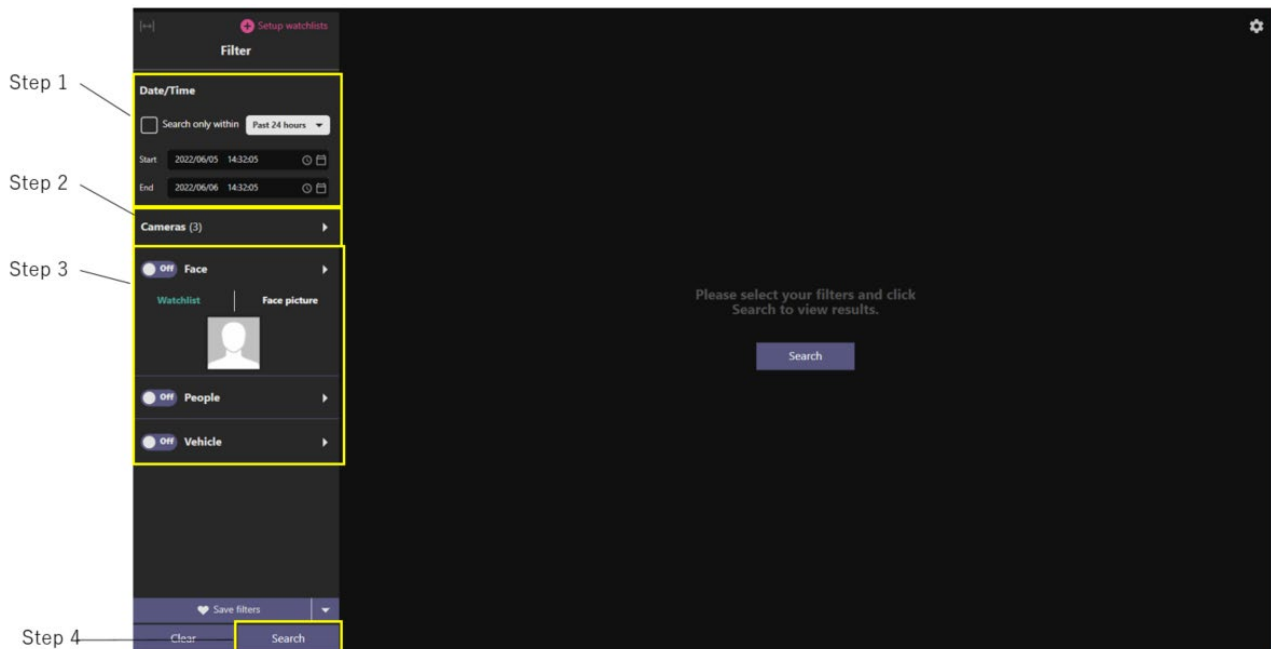


Action buttons can be utilized depending on type of objects.

	Search for similar characteristics 	Save facial features to Registered facial detection 	Save person's characteristics to Registered Person detection 	Save vehicle's characteristics to Registered vehicle detection 
Face filter	No	Yes	No	No
People filter	Yes	Yes	Yes	No
Vehicle filter	Yes	No	No	Yes

## 2.2.2. Thumbnail search

The following steps provide basic operation for using the thumbnail search. The search filter can find objects that you want to find out from a lot of recorded thumbnails. Then you can take next action such as playback the video, save the picture, and register to watchlist, etc.



### Step 1

Specify the start time and end time or select [Search only within] for search objects.

### Step 2

Select AI Cameras. Select the Available Cameras option to search for a specific camera by name.

### Step 3

Set up search filters. If no filters are selected, all objects detected by AI Cameras will be displayed.

### Step 4

Click "Search".

## 2.3. i-PRO Active Guard Event

Using i-PRO Active Guard Event, you can watch what events occurred in the real time and also can find past events whatever you want to search.

### 2.3.1. UI Component

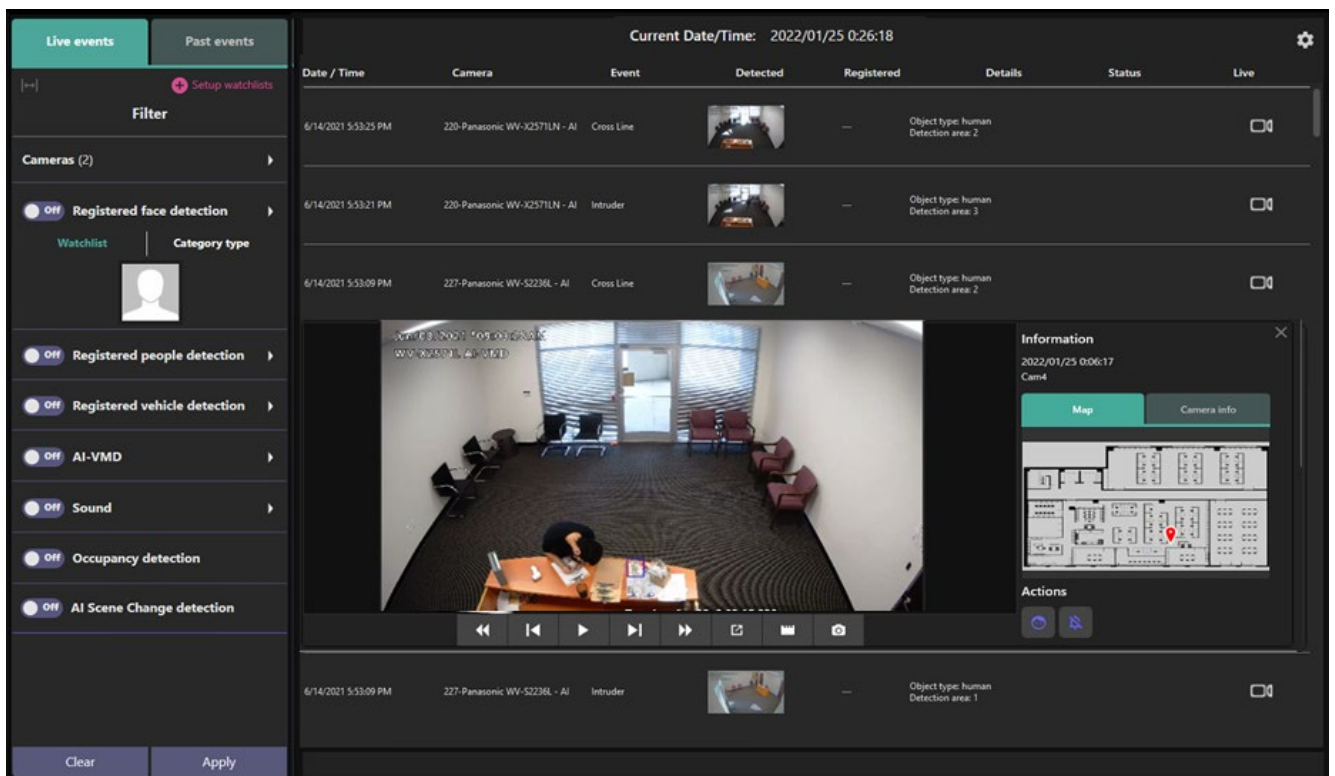
i-PRO Active Guard Event has two tabs that are Live events tab and Past events tab.

#### 2.3.1.1. Overview

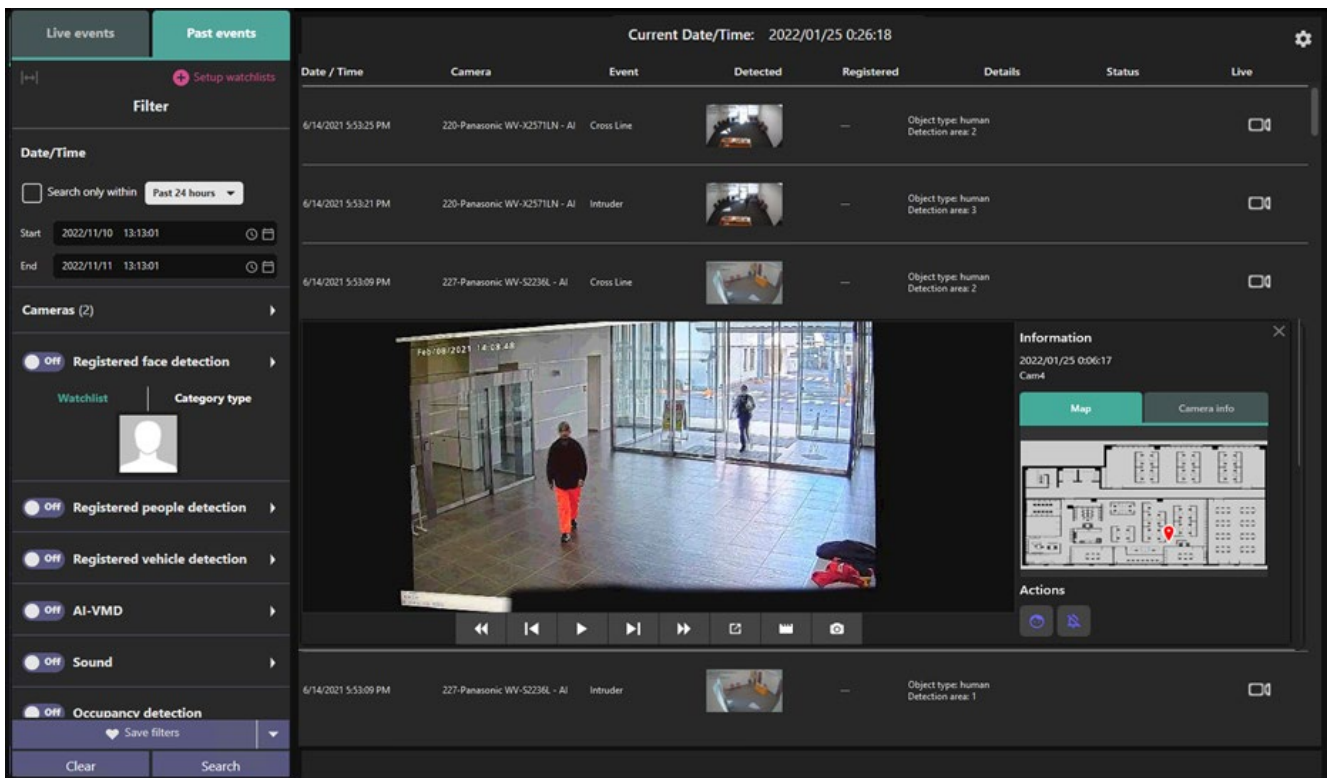
Live events tab and Past events tab are made from almost same UI components.

In this section, it describes the elements that compose the Live events tab and Past events tab.

Each tab is composed 4 main parts such as event filter pane, event list pane, event detail pane and settings.



Live events tab



Past events tab

Event filter pane	Switch tab (Live/Past events tab)	Switch views between monitoring events mode or search events in the past mode.
	Date/Time (Past events tab)	Start time and end time for search objects. This is used for only Past events tab. [Search only within](Past 24 hours/Past week/Past month) can be also selected.
	Camera (Live/Past events tab)	Specify AI Cameras displaying events.
	Registered Face detection (Live/Past events tab)	Show face matching events.
	Registered People detection (Live/Past events tab)	Show people features matching events.
	Registered Vehicle detection (Live/Past events tab)	Show vehicle features matching events.
	AI-VMD (Live/Past events tab)	Show AI VMD detection events.
	Sound (Live/Past events tab)	Show sound detection events.
	Occupancy detection (Live/Past events tab)	Show Occupancy detection events.
	AI Scene change detection (Live/Past events tab)	Show Scene change detection events.

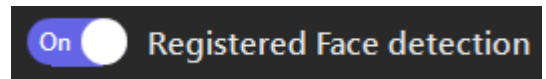
	Save filters (Past events tab)	Save filter settings with name up to 12.
	Clear	Clear filter settings.
	Apply	Activate filter settings.
Events list pane	<hr/> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• In Live events tab, while opening this view, the list is automatically updated if any event happens.</li> <li>• In Past events tab, the results of search from recorded events are listed.</li> </ul> <hr/>	
	Current Date/Time (Live events tab)	Current date and time which is setting on PC.
	Date/Time column (Live/Past events tab)	Detected date and time which is setup at camera.
	Camera column (Live/Past events tab)	Camera name.
	Event column (Live/Past events tab)	Event type.
	Detected column (Live/Past events tab)	Detected thumbnail which is captured by camera.
	Registered column (Live/Past events tab)	Face image which is registered in face watchlist or registered name which is registered in people watchlist.
	Similarity column	Detected score.
	Details column (Live/Past events tab)	Object type, detected area, etc. Displayed information depends on event type.
	Status column (Live/Past events tab)	Status for each event. New(Default)/Viewed/Dismissed Status can be changed by right click.
	Comments column (Live/Past events tab)	Any comment up to 64 character can be input.
	Live column (Live/Past events tab)	Open live camera window.
	Detected thumbnail (Live/Past events tab)	Click and open event detail pane. Right click and save the thumbnail as picture or video clip. *In case of Occupancy detection, thumbnail is not shown.
	Result count (Past events tab)	Show the events search results count.
	Load More (Past events tab)	Load next 100 events.
Event detail pane	Thumbnail detail pane (Live/Past events tab)	Video control pane, information such as camera location, analysis score and camera information.
Set up watchlists	Face watchlist (Live/Past events tab)	Setup face watchlist.
	People watchlist (Live/Past events tab)	Setup people watchlist.
Display mode	Display mode (Past events tab)	List or Timeline can be changed for Registered face detection search result.
Export result	Export result (Past events tab)	Export search result as HTML or CSV.
Settings	Preferences	Setup some environments about playback, event monitor etc.

## 2.3.1.2. About Event filter

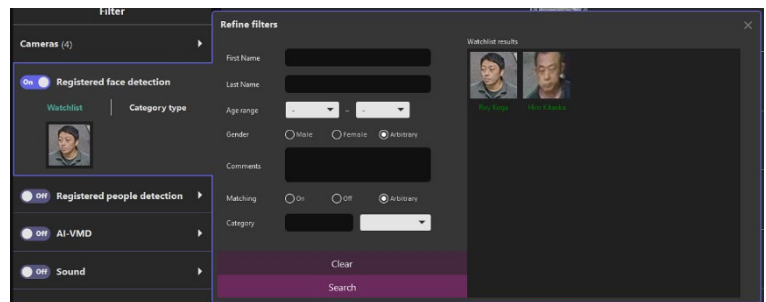
In this section, it describes about each events filter. For more information about the Camera filter, please refer to 2.2.1.2.

### A. Registered Face detection

Being this filter enabled, the matching faces with Face watchlist are shown.

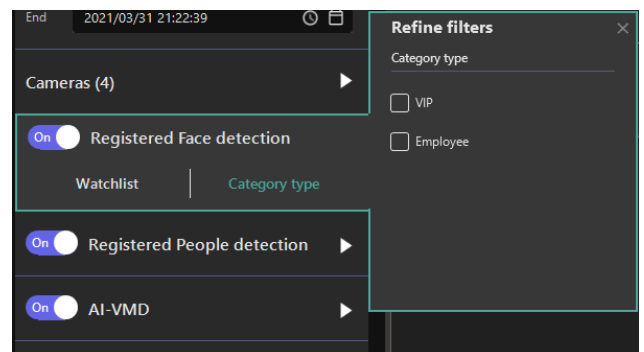


If you want to display a specific face, you can use Watchlist filter. Search registered faces by specifying search conditions then select one of results.



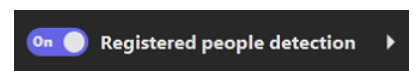
If you want to clear after setting, right click on the face image in the left panel then select Clear.

If you want to display specific categories, you can use Category type filter. The categories which are setup in Face watchlist are shown.

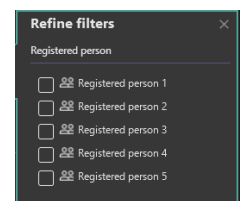


### B. Registered People detection

With this filter enabled, all the matching people with People watchlist are shown.

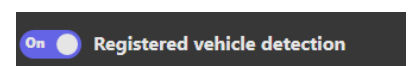


Also using filter panel, you can select specific registered items from people watchlist

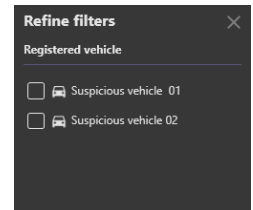


### C. Registered Vehicle detection

With this filter enabled, all the matching vehicle with people watchlist are shown.



Also using filter panel, you can select specific registered items from vehicle watchlist

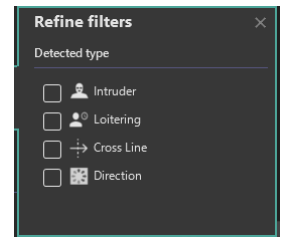


#### D. AI-VMD

With this filter enabled, all the detected AI-VMD events are shown.



Also using filter panel, you can select specific AI-VMD events to show.

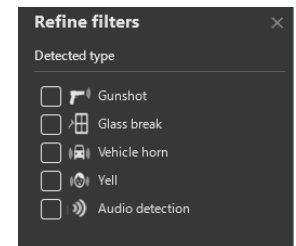


#### E. Sound

With this filter enabled, all the detected sound events are shown.

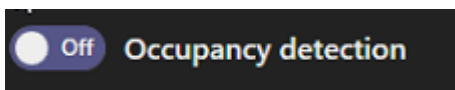


Also using filter panel, you can select specific sound events to show.



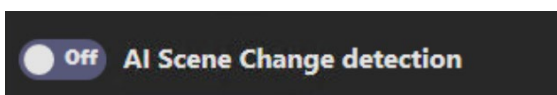
#### F. Occupancy detection

With this filter enabled, all the detected occupancy detection events are shown.



#### G. AI Scene change detection

With this filter enabled, all the detected scene change detection events are shown.





## 2.3.1.3. About event detail pane

By selecting one of the events from the list, you can take various actions such as playback video, open live camera, and register the thumbnail to watchlist and so on. Please refer to the section of 2.2.1.3. About thumbnail detail pane regarding of each function.

Details for playback control, please refer to 2.4. PLAYBACK VIDEO CONTROL.


Action buttons can be utilized depending on type of events.

	Save facial features to Registered facial detection 	Change alarm status 
Registered face detection filter	Yes	Yes
Other than Registered face detection filter	No	Yes

- A.  Save facial features to face watchlist

---

Refer to 2.2.1.3.

- B.  Change alarm status

### Change status to dismissed

change alarm status to dismissed. Alarm status can be used for filter.

### AUX close

### AUX open

sends AUX control command to camera that detects the event.

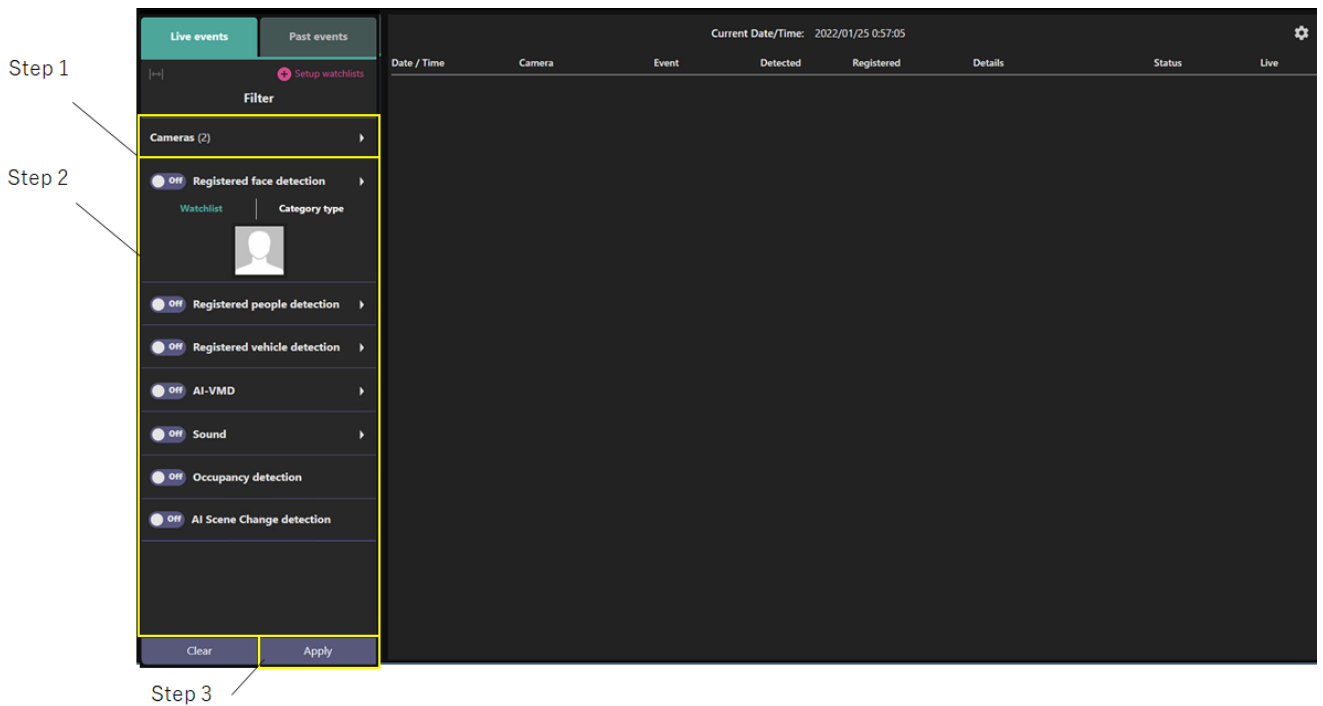
It needs to configure [AUX output] for [Terminal 3] on camera setting.

### Suspend camera's alarm status

sends alarm suspend command to camera that detects the event.

## 2.3.2. Monitor live events

The following steps provide basic operations for monitoring events basic operations for monitor events.



### Step 1

All cameras are selected as default. If you want to specify cameras, you can use camera filter.

### Step 2

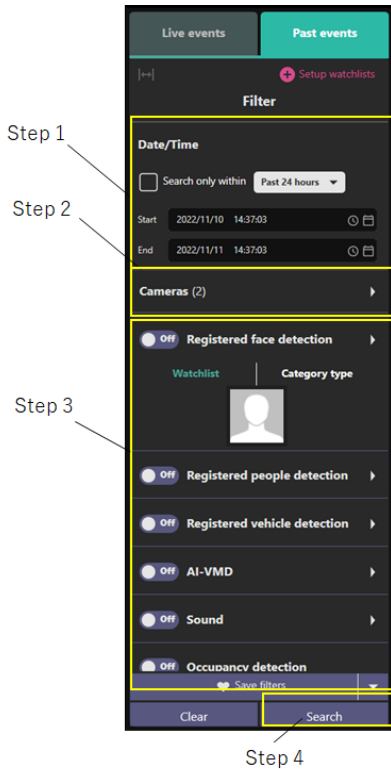
Set up event filters. You can specify type of event by using event filters. Not using any filters displays all detected events.

### Step 3

Click Apply.

## 2.3.3. Search past events

The following steps provide basic operations for searching past events.



### Step 1

Specify the start time and end time or select [Search only within] for search objects.

### Step 2

Select AI Cameras. All AI Cameras are selected as default.

### Step 3

Set up search filters. If no filters are selected, all objects detected by AI Cameras will be displayed. Available search filters include:

- Registered face detection
- Registered people detection
- Registered vehicle detection
- AI-VMD
- Sound
- Occupancy detection
- **AI Scene Change detection**

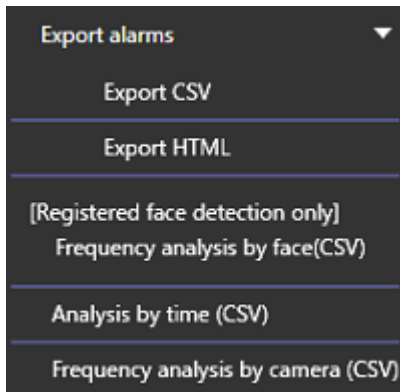
### Step 4

Click Search. Results are displayed as shown below.

Date / Time	Camera	Event	Detected
8/19/2021 9:22:21 AM	10.92.203.204 - Model: Panasonic WV-S2136L	Registered people detection	
8/19/2021 9:09:37 AM	10.92.203.205 - Model: Panasonic S2136L	Intruder	
8/19/2021 9:09:36 AM	10.92.203.202 - Model: Panasonic WV-S2136L	Intruder	
8/19/2021 9:09:31 AM	10.92.203.202 - Model: Panasonic WV-S2136L	Intruder	
8/19/2021 9:09:26 AM	10.92.203.202 - Model: Panasonic WV-S2136L	Intruder	
8/19/2021 9:05:54 AM	10.92.203.202 - Model: Panasonic WV-S2136L	Intruder	
8/19/2021 9:05:44 AM	10.92.203.202 - Model: Panasonic	Intruder	

## 2.3.4. Export search result of past events

Search results can be exported as HTML or CSV format



### **Export CSV**

output as CSV file.

### **Export HTML**

output as HTMLfile.

Following option can be used only when “Registered face detection” filter is selected.

### **Frequency analysis by face (CSV)**

Based on the alarm search results, the number of alarm occurrences and the total number of alarm occurrences per day for registered faces are output. Information about faces with 0 occurrences is not output.

### **Analysis by time (CSV)**

Based on the alarm search results, the number of alarm occurrences and the total number of alarm occurrences per hour for the registered face are output. Information about faces with 0 occurrences is not output

### **Frequency analysis by camera (CSV)**

Based on the alarm search results, the number of alarm occurrences and the total number of alarm occurrences for the camera per hour are output. Information about cameras with 0 occurrences is not output.

## 2.4. Playback video control

### 2.4.1. Playback operation

When viewing video on a thumbnail/event detail pane, the following a set of video controls appear. In order to play, the video must be recorded on the network disk recorder.



The video operation controls are described below.



Play or pause the video recording.



Fast playback or fast rewind the video recording.



In pause mode, forward and backward navigation through each frame on the timeline.



Open new window to playback video.



Export video as MP4 or n3r format from selected the thumbnail.



Take a snapshot

and save  
as file or  
clipboard.

Digital zoom is possible by moving the mouse wheel on the image.

---

**Note:**

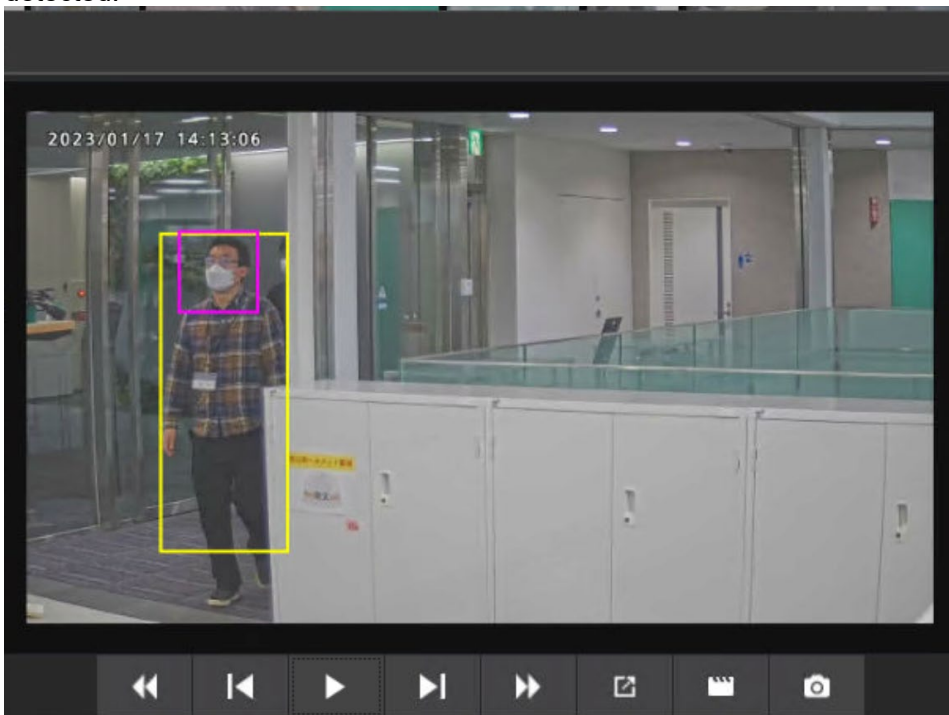
- If your PC supports hardware decoding, hardware decoding will be performed automatically. If hardware decoding is not supported and the resolution of the recorded video is larger than 9M (2992x2992), video display may be delayed or not displayed correctly. Please refer to the WV-ASM300 manual to how to check whether your PC supports hardware decoding.
  - When hard decoding is performed on H.264 recorded video, the phenomenon that the video turns green may occur. This phenomenon may occur due to the combination of PC hardware and driver software. If this occurs, close the playback screen and then try playback again.
- 

## 2.4.2. Search and Registration from Playback video

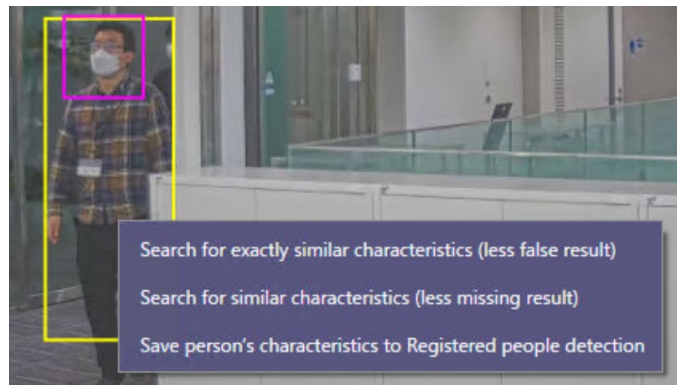
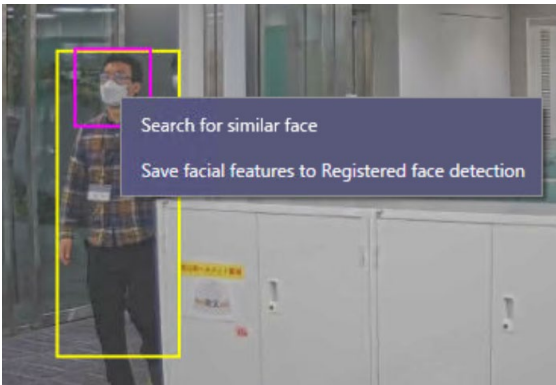
It is possible to search for similar faces, people, and vehicles from playback video and to register them in the watchlists.

**Step 1**

When you click pause/forward/reverse frame in the playing video, faces, people, and vehicles are detected.

**Step 2**

With a right click in the frame, you can search for similar images or register them in the similarity search or watchlists.



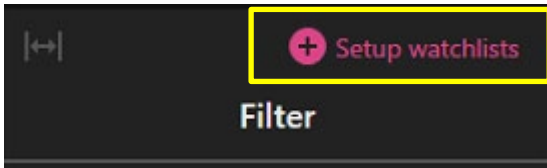
---

**Note:**

- It may not be detected depending on the video image.
-

## 2.5. Setup watchlists

Click [Setup watchlists] button for Face watchlist or People watchlist.



### 2.5.1. Face Watchlist

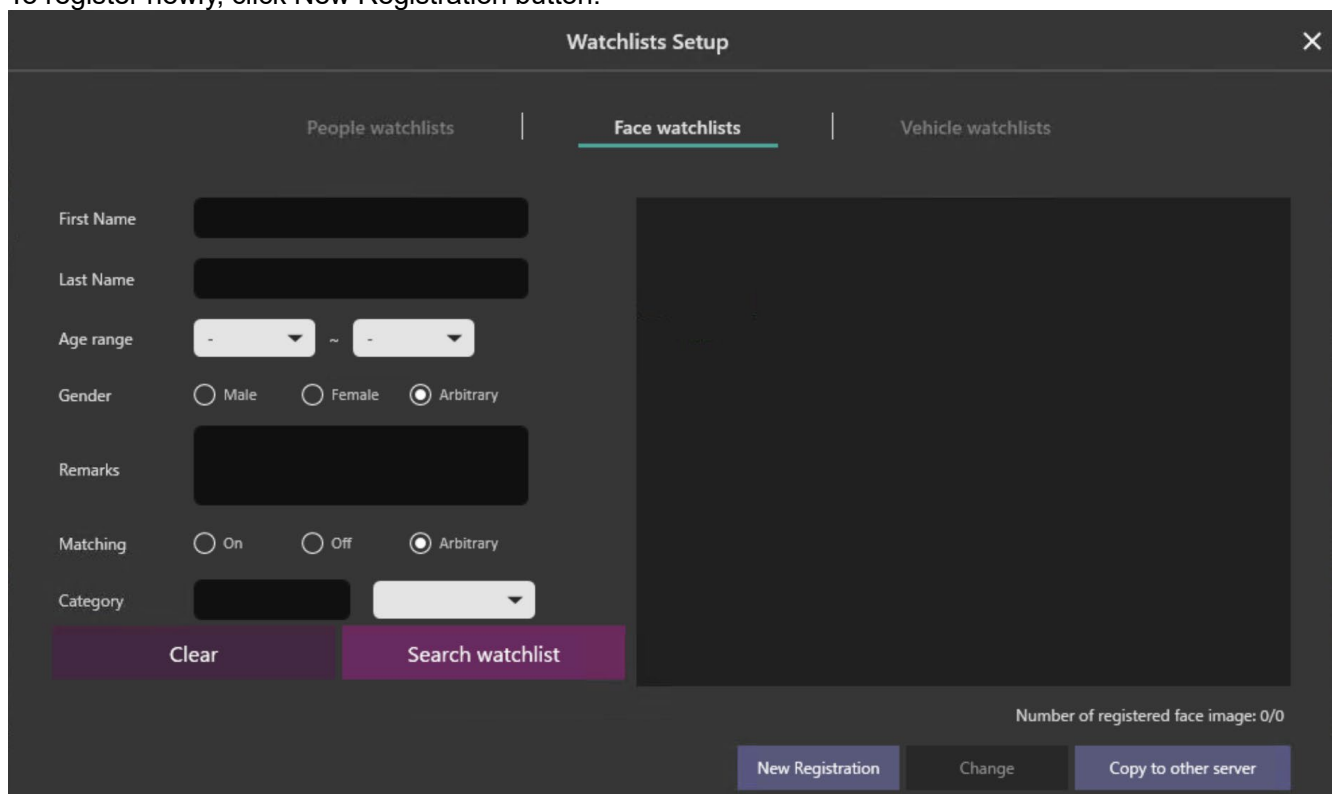
This section describes the operation of add, edit, and delete.

If you don't have a permission to access the watchlist or your camera configuration has no AI-Camera which installed face detection application, then this function is not available.

#### 2.5.1.1. New registration


##### Step 1

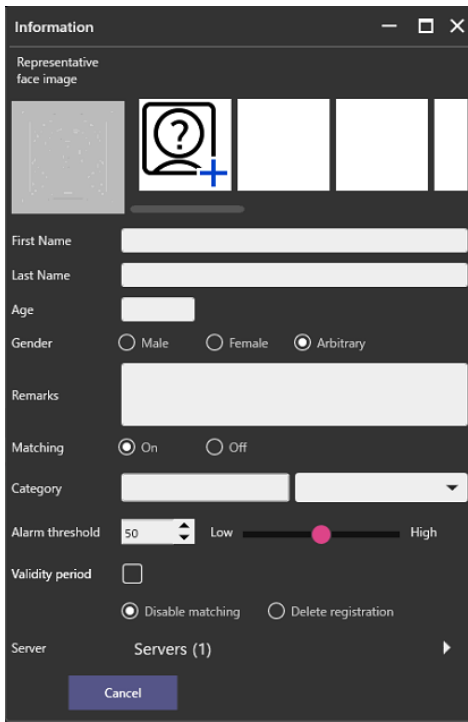
To register newly, click New Registration button.

A screenshot of a 'Watchlists Setup' dialog box. The dialog has a title bar with a close button (X) on the right. Below the title bar are three tabs: 'People watchlists', 'Face watchlists' (which is selected and underlined), and 'Vehicle watchlists'. The 'Face watchlists' tab contains several input fields: 'First Name' and 'Last Name' (text boxes), 'Age range' (two dropdown menus with a tilde separator), 'Gender' (radio buttons for 'Male', 'Female', and 'Arbitrary', with 'Arbitrary' selected), 'Remarks' (text box), 'Matching' (radio buttons for 'On', 'Off', and 'Arbitrary', with 'Arbitrary' selected), and 'Category' (text box and dropdown menu). At the bottom left of the form area are two buttons: 'Clear' and 'Search watchlist'. At the bottom right of the dialog, there is a status indicator 'Number of registered face image: 0/0' and three buttons: 'New Registration', 'Change', and 'Copy to other server'.

##### Step 2

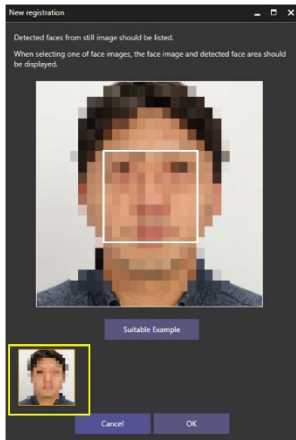
One face image must be registered at least.

Click  icon then select the file you want to use.

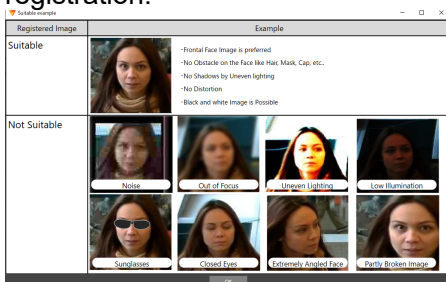


### Step 3

Then analyzing will begin and the detected faces are displayed. If there are some people on the file, all detected faces are displayed. Select a face (yellow area in below) then white frame will be displayed around the detected face.



By pressing the Suitable Example button, you can see a sample of face image quality suitable for registration.



Recommended width of face for registration is more than 75 pixel. When the selected face is under the value, message is shown.

## Step 4

Input other information then click Save. First Name or Last Name is required.



The screenshot shows a dark-themed 'Information' dialog box. At the top, it has a title bar with 'Information' and window control icons. Below the title bar, there's a section for 'Representative face image' with two small face images and a placeholder with a question mark and a plus sign. The main form contains the following fields and controls:

- First Name: Text input field
- Last Name: Text input field
- Age: Text input field
- Gender: Radio buttons for Male, Female, and Arbitrary (selected)
- Remarks: Text area
- Matching: Radio buttons for On (selected) and Off
- Category: Two dropdown menus
- Alarm threshold: A slider set to 50, with 'Low' and 'High' labels
- Validity period: A checkbox
- At the bottom: Radio buttons for 'Disable matching' (selected) and 'Delete registration', and a 'Cancel' button.

---

### Note:

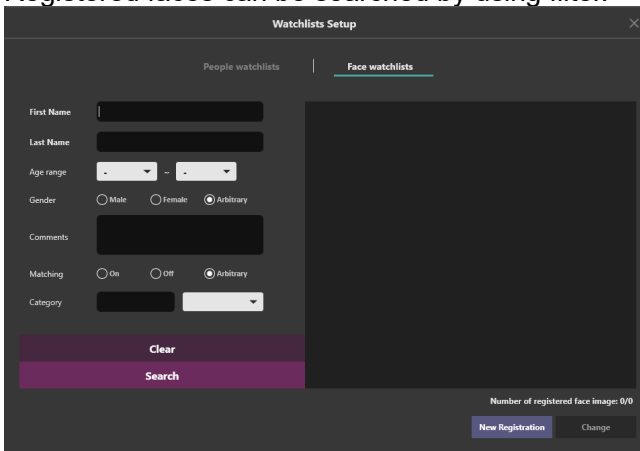
- Up to 1000 faces can be registered in total.
  - Up to 10 faces can be registered per a watchlist.
  - The Alarm threshold low means missing faces will be decreased but false alarm may be increase. High means false alarm will be decreased but missing faces may be increased. It can be set for individual person. Please adjust according to your environment and registered face image.
  - In Validity Period, two expiration dates can be set.  
Disable matching: After the expiration date, this person's face will not be detected.  
Delete registration: After the expiration date, we will delete the registration itself of this person.
-

## 2.5.1.2. Edit registration

### Step 1

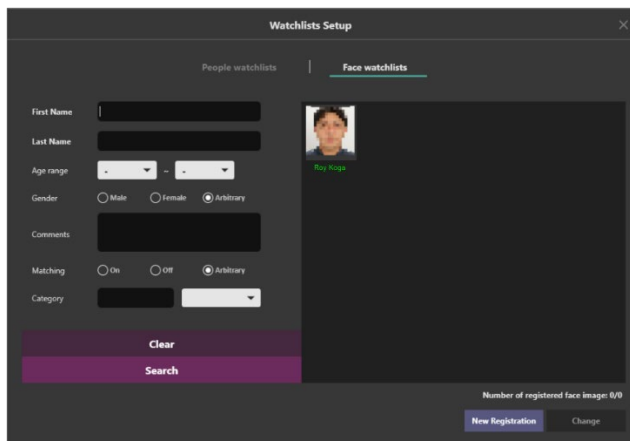
First, find registered face you want to edit the information.

Registered faces can be searched by using filter.



### Step 2

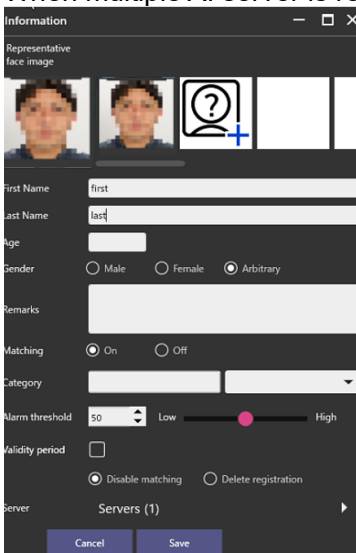
Select one of faces from search results, then click Change button.



### Step 3

Edit any information then click Save.

When multiple AI server is registered to Plug-in, select server to register from [Server].



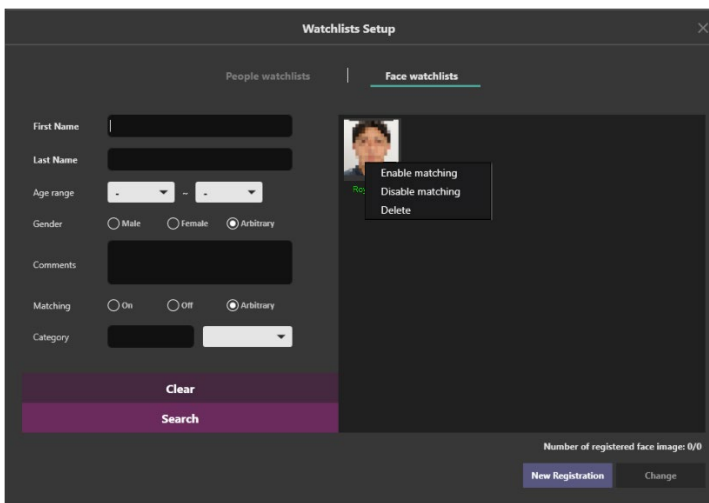
---

**Note:**

- Up to 1000 faces can be registered in total.
  - Up to 10 faces can be registered per a watchlist.
  - The Alarm threshold low means missing faces will be decreased but false alarm may be increase. High means false alarm will be decreased but missing faces may be increased. It can be set for individual person. Please adjust according to your environment and registered face image.
  - In Validity Period, two expiration dates can be set.  
Disable matching: After the expiration date, this person's face will not be detected.  
Delete registration: After the expiration date, we will delete the registration itself of this person.
- 

### 2.5.1.3. Delete registration

To delete registered face, right click registered face then click Delete.



---

**Note:**

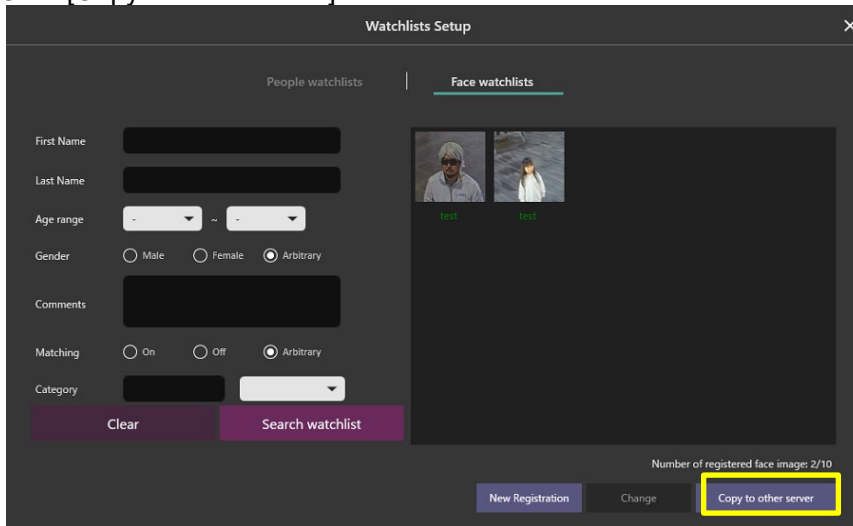
- To delete face watchlist from multiple i-PRO Active Guard server at the same time, select servers from Edit face registration (refer to 2.5.1.2) and click [Delete].
-

## 2.5.1.4. Copy watchlists to other server

All registered face watchlists in i-PRO Active Guard server can be copied to another sever. The copy source server and the copy destination server must be registered in Plug-in in advance.

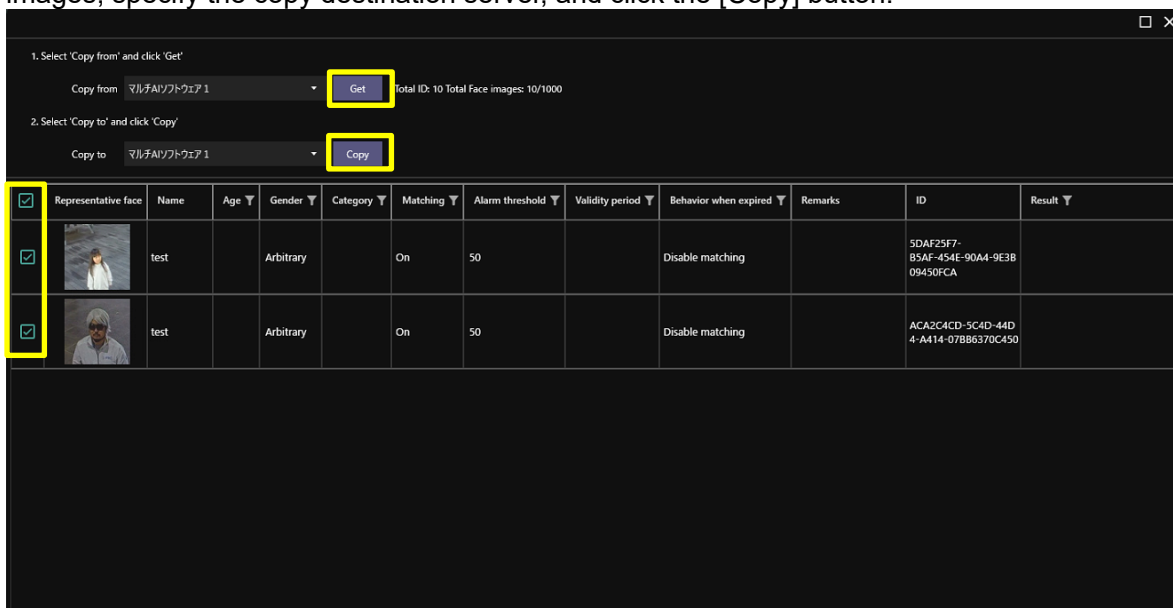
### Step 1

Click [Copy to other server]



### Step 2

Select Copy from and click [Get] button, select the face image you want to copy from the registered face images, specify the copy destination server, and click the [Copy] button.



### Step 3

When the copy is completed, the face image will be registered in the copy destination server.

Note:

If the upper limit of 1000 is already registered for the face image in the copy destination, copying will not be performed.

If the copy destination has the same ID, the face image will be skipped.

## 2.5.2. People Watchlist

This section describes the operation of add, edit, and delete.

If you don't have a permission to access the watchlist or your camera configuration has no AI-Camera which installed people detection application, then this function is not available.

### 2.5.2.1. New registration (To manually select attributes)

#### Step 1

To register a people's appearance to the watchlist, navigate to Set up watchlists button > People watchlists tab.

The screenshot shows the 'Watchlists Setup' window with the 'People watchlists' tab selected. The interface includes a 'Watchlist' list on the left with a '+' button. The main area contains the following fields and options:

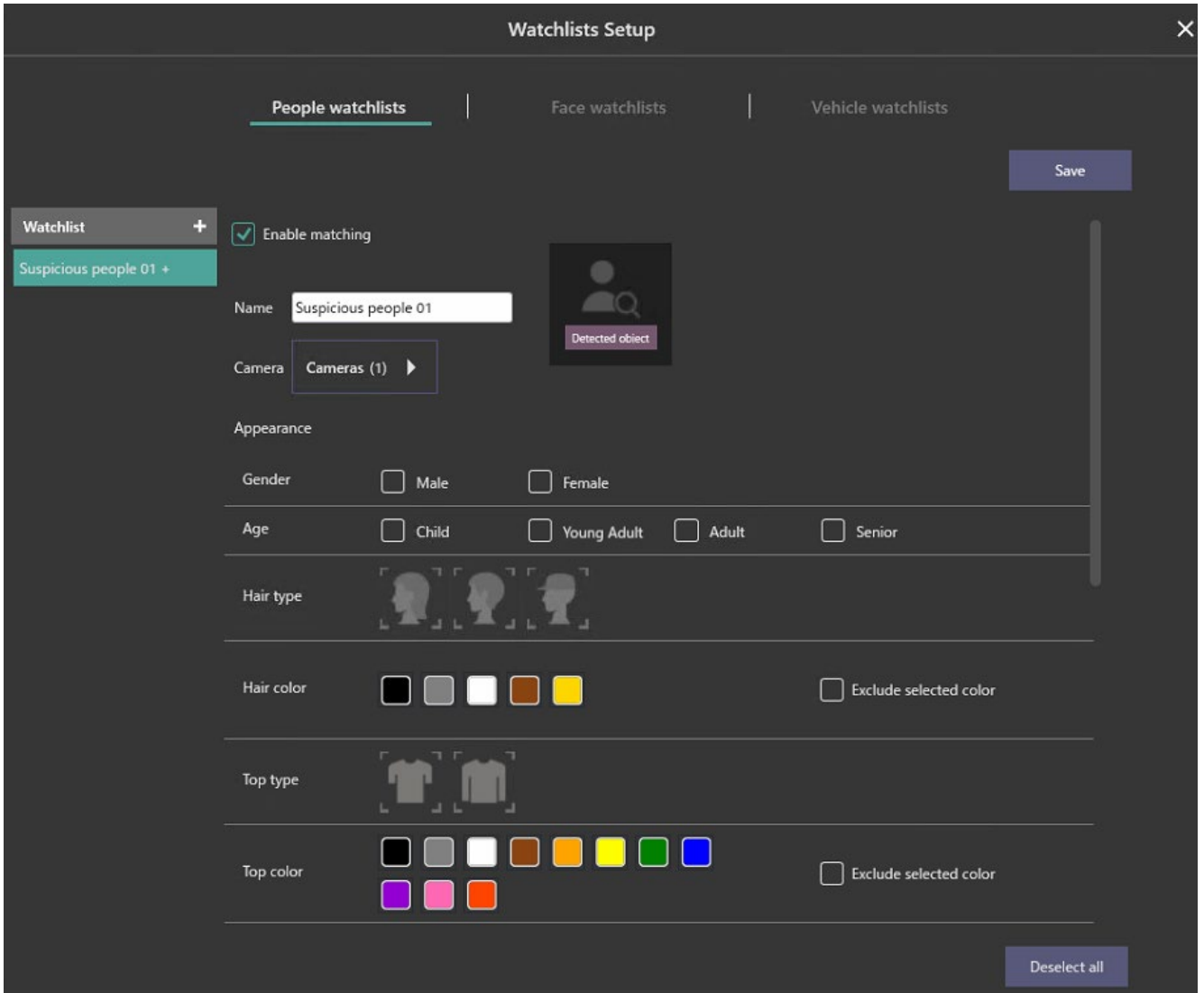
- Enable matching:**
- Name:** A text input field.
- Camera:** A dropdown menu showing 'Cameras (0)' with a right-pointing arrow.
- Detected object:** A placeholder image showing a person's head and shoulders with a magnifying glass icon and the text 'Detected object'.
- Appearance:**
  - Gender:**  Male  Female
  - Age:**  Child  Young Adult  Adult  Senior
  - Hair type:** Three silhouette icons representing different hair styles.
  - Hair color:** A row of color swatches (black, grey, white, brown, yellow) and an  Exclude selected color option.
  - Top type:** Two t-shirt icons representing different top styles.
  - Top color:** A row of color swatches (black, grey, white, brown, orange, yellow, green, blue, purple, pink, red) and an  Exclude selected color option.

Buttons for 'Save' (top right) and 'Deselect all' (bottom right) are also visible.

#### Step 2

Registered items are listed on left side or upload the people picture.

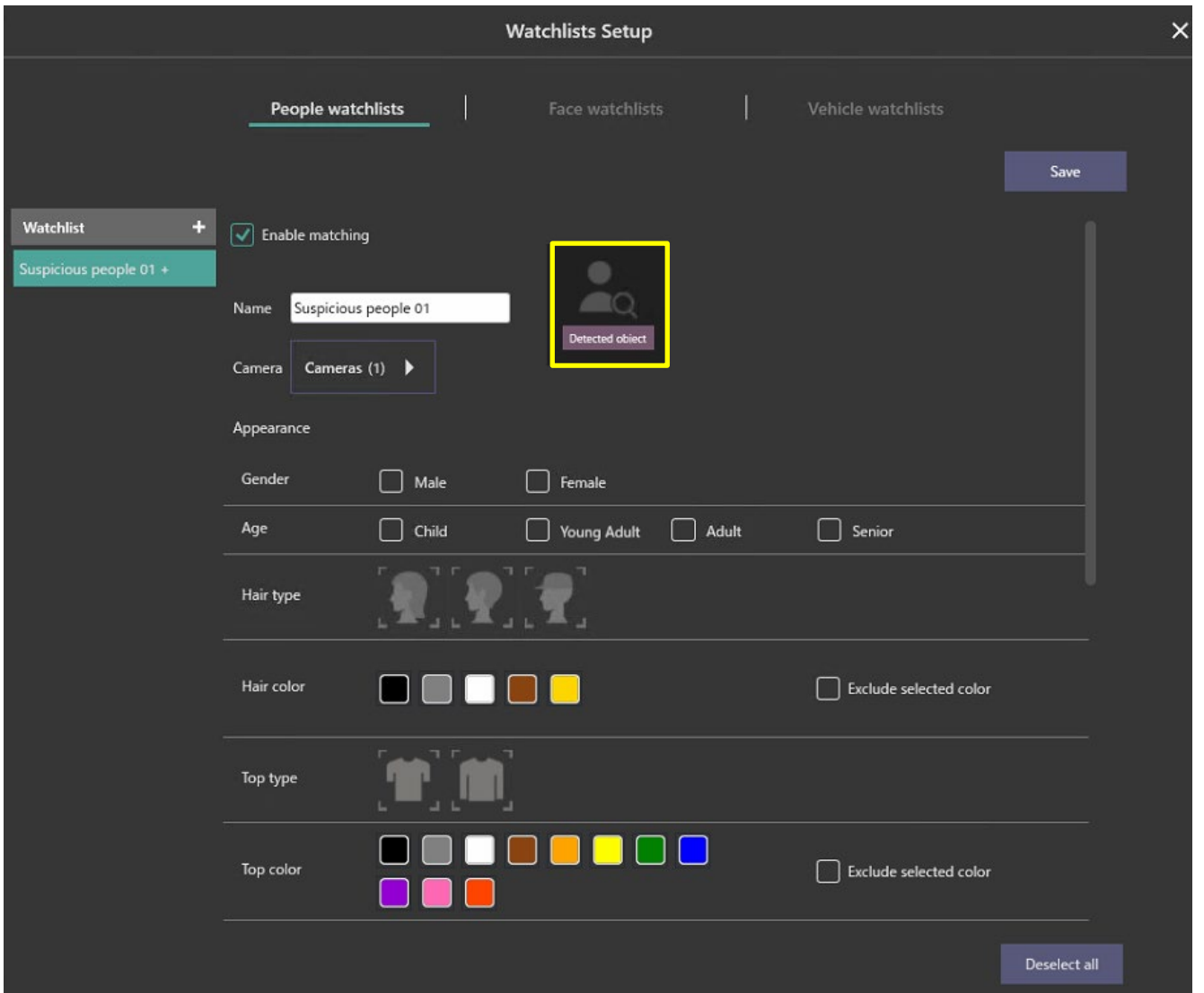
To add new item, click plus button then select appearance items.



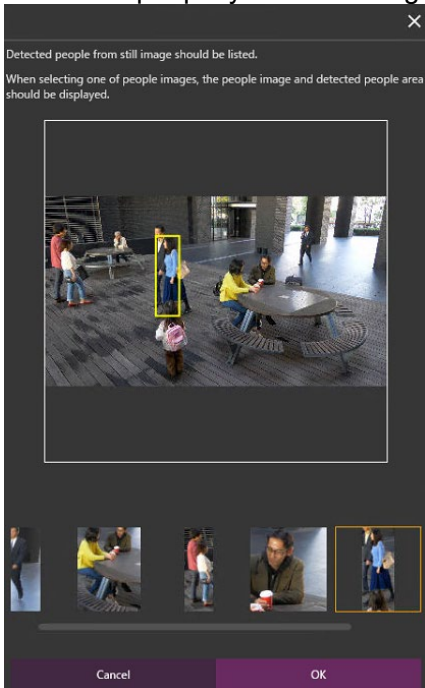
### 2.5.2.2. New registration (To select attributes from an image)

This procedure automatically selects and registers attributes from an image.

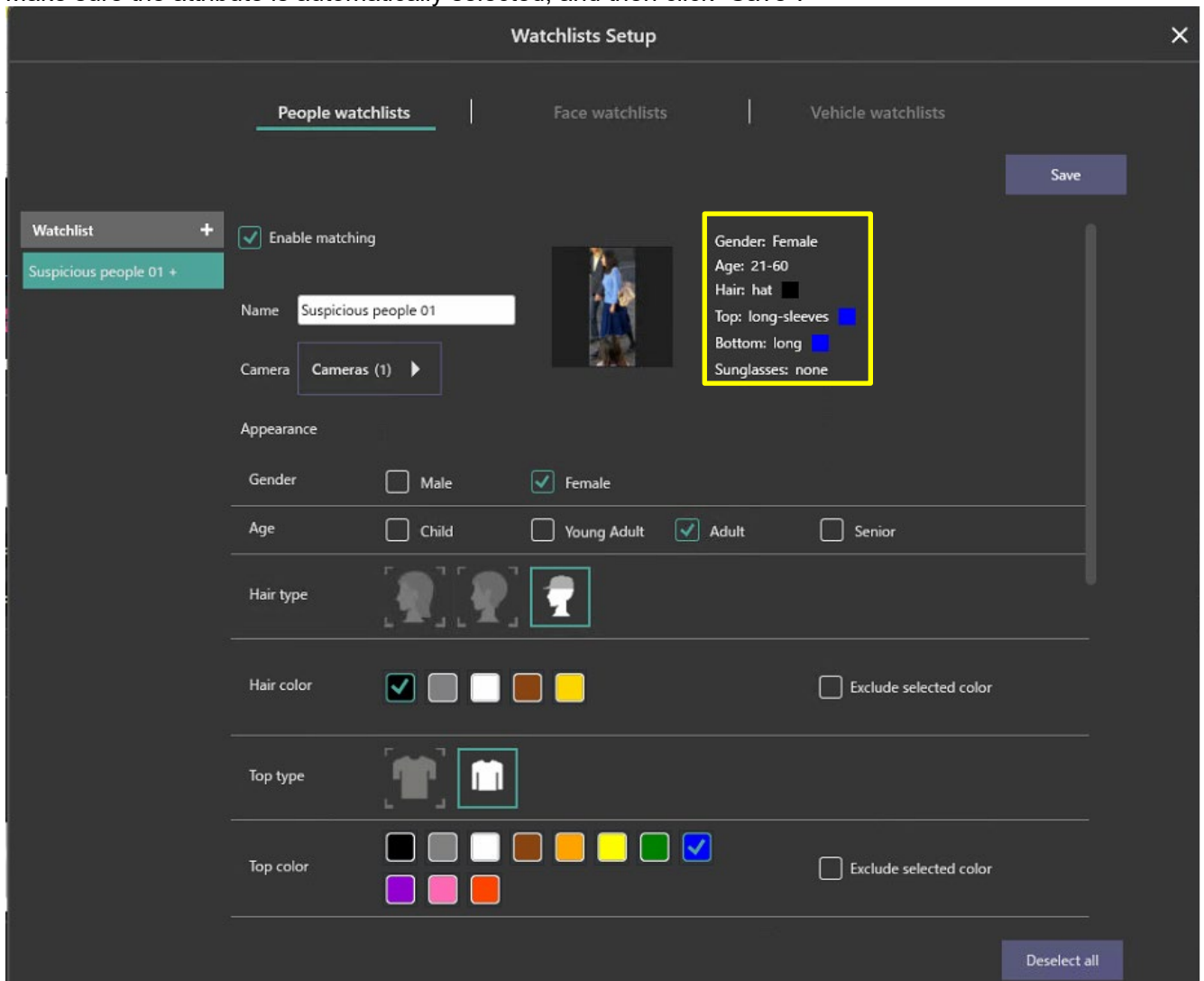
To select attributes from a people image, select the image to be registered from  icon.



Select the people you want to register from the detected list.



Make sure the attribute is automatically selected, and then click "Save".



**Note:**

- Up to 12 people watchlist can be registered.
- Only one item can be selected from each category. This is because many items register would affect false positives.
- In Validity Period, two expiration dates can be set.  
Disable matching: After the expiration date, this person's face will not be detected.  
Delete registration: After the expiration date, we will delete the registration itself of this person.
- It is impossible to register to multiple i-PRO Active Guard server at the same time.

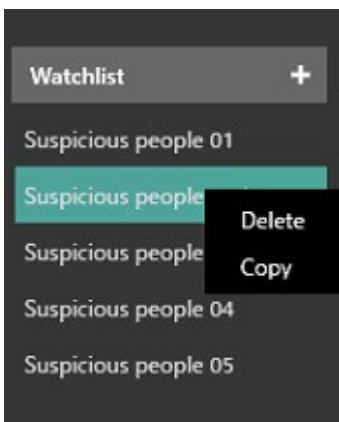
### 2.5.2.3. Edit registration

To edit a registered person appearance, select one of registered item then change selected appearance item.



## 2.5.2.4. Delete registration

To delete a registered person appearance, right click one of registered item.



## 2.5.3. Vehicle Watchlist

This section describes the operation of add, edit, and delete.

If you don't have a permission to access the watchlist or your camera configuration has no AI-Camera which installed vehicle detection application, then this function is not available.

### 2.5.3.1. New registration (To manually select attributes)

#### Step 1

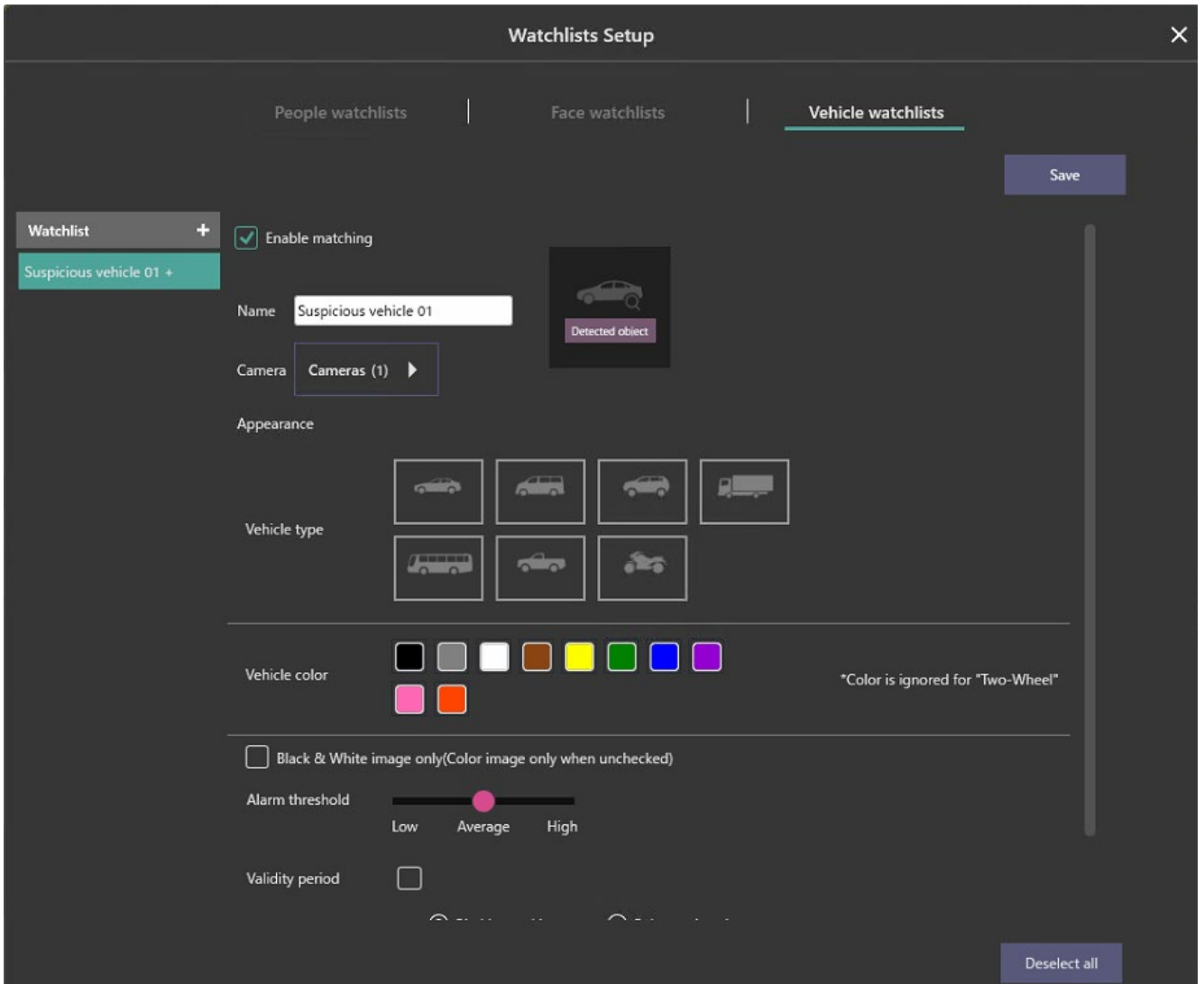
To register a vehicle's appearance to the watchlist, navigate to Set up watchlists button > vehicle watchlists tab.

The screenshot shows the 'Watchlists Setup' window with the 'Vehicle watchlists' tab selected. The interface includes a 'Watchlist' header with a plus sign and an 'Enable matching' checkbox. Below this are fields for 'Name' and 'Camera' (showing 'Cameras (0)'). The 'Appearance' section features a grid of vehicle icons for selection, including sedan, van, SUV, truck, bus, and motorcycle. A 'Vehicle color' section offers a palette of color swatches, with a note that color is ignored for two-wheeled vehicles. There is also a checkbox for 'Black & White image only' and a slider for 'Alarm threshold' set to 'Average'. A 'Validity period' checkbox is at the bottom, along with a 'Deselect all' button.

#### Step 2

Registered items are listed on left side or upload the vehicle picture.

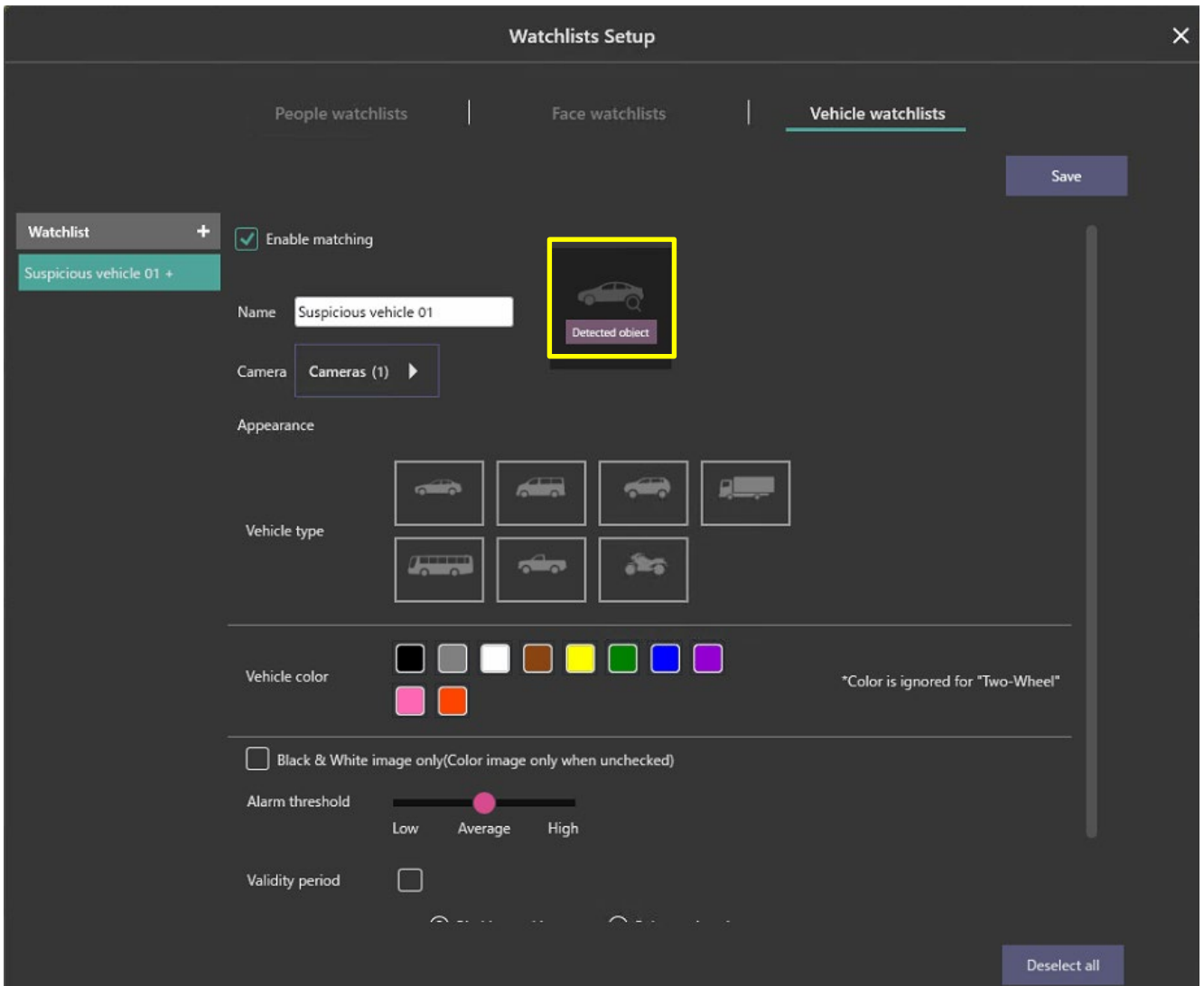
To add new item, click plus button then select appearance items.



### 2.5.3.2. New registration (To select attributes from an image)

This procedure automatically selects and registers attributes from an image.

To select attributes from a vehicle image, select the image to be registered from  icon.



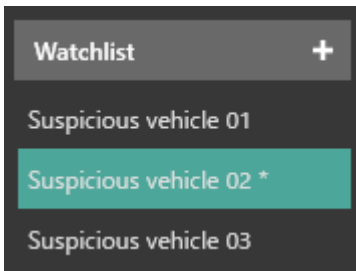
The following procedure is the same as when registering people watchlists, see 2.5.2.2.

**Note:**

- Up to 12 vehicle watchlist can be registered.
- Only one item can be selected from each category. This is because many items register would affect false positives.
- In Validity Period, two expiration dates can be set.  
 Disable matching: After the expiration date, this vehicle will not be detected.  
 Delete registration: After the expiration date, we will delete the registration itself of this vehicle.
- It is impossible to register to multiple i-PRO Active Guard server at the same time.

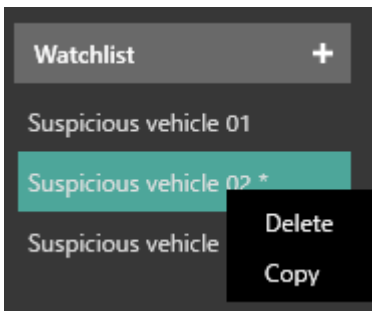
### 2.5.3.3. Edit registration

To edit a registered vehicle appearance, select one of registered item then change selected appearance item.



### 2.5.3.4. Delete registration

To delete a registered vehicle appearance, right click one of registered item.

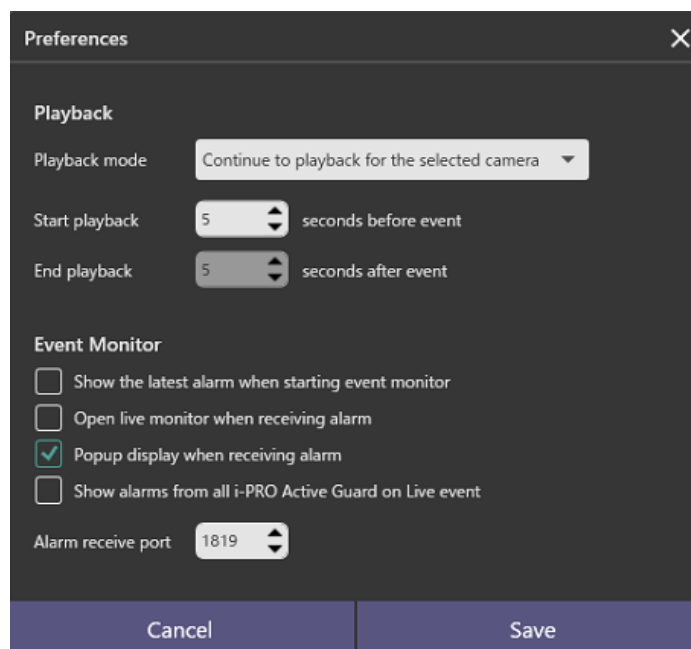


## 2.6. Preferences

Click Preference icon.



Preferences provides some option settings such as playback video mode and so on.



## 2.6.1. Playback setting

### **[Playback mode]**

You can select continue to playback mode or repeat playback mode.

When using repeat playback mode, it needs to set up Start playback and End playback.

Default: Continue to playback for the selected camera.

This setting is available both of i-PRO Active Guard Search and i-PRO Active Guard Event.

## 2.6.2. Event Monitor setting

### **[Show the latest alarm when starting event monitor]**

When you start-up i-PRO Active Guard Event, the latest detected events are loaded automatically to prevent from overlook important events.

Default: Continue to playback for the selected camera. 5 seconds before event for Start playback.

### **[Open live monitor when receiving alarm]**

When enabled, the live video which detects alarm is automatically displayed on the pop-up screen when the alarm is received.

Default: disable

### **[Popup display when receiving alarm]**

When enabled, alarm information is shown on the pop-up screen.

Default: enable

### **[Show alarms from all i-PRO Active Guard on Live events]**

When enabled, alarms from all i-PRO Active Guard servers will be displayed in [Live] when multiple i-PRO Active Guard servers are registered in Plug-in. You can only display the received event and the pop-up notification when the alarm is received.

You cannot use the filtering conditions, playback the recorded video, or display the live video.

To use these functions, select the target i-PRO Active Guard server software from [Past event].

Default : disable

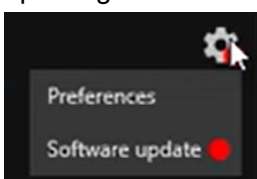
### **[Alarm receive port]**

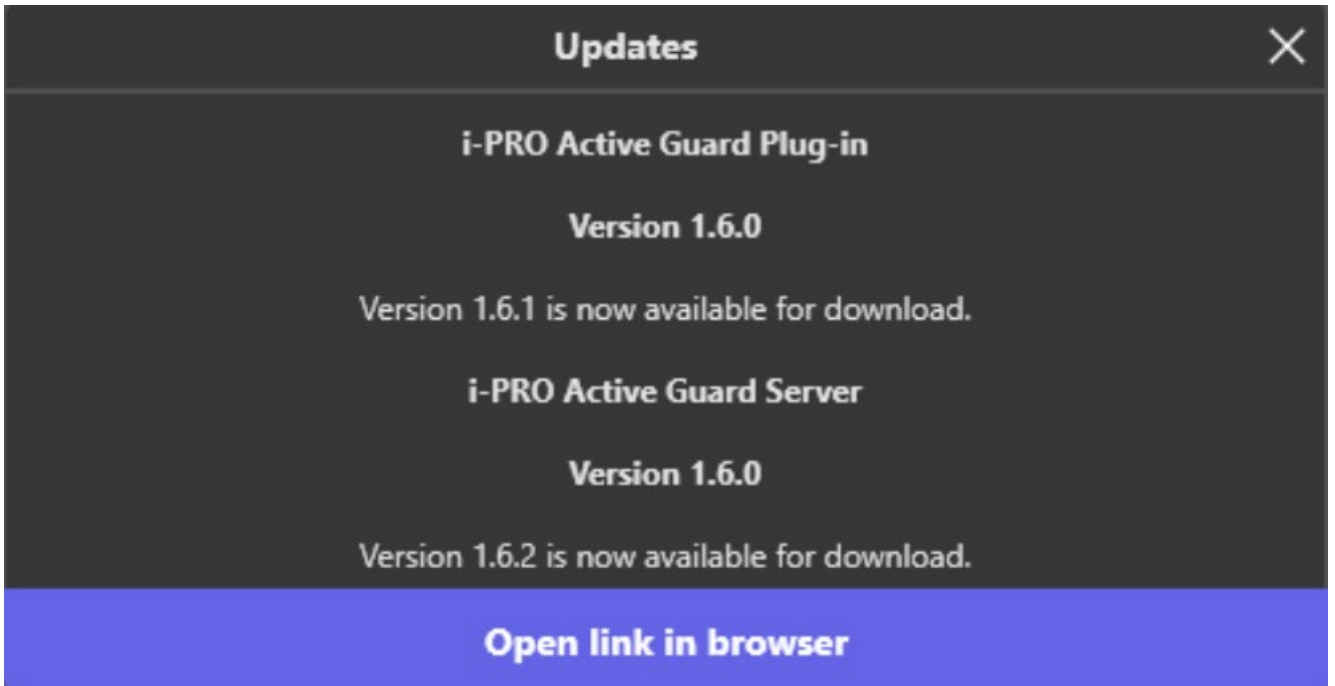
Configure port number that Plug-in receive alarm from i-PRO Active Guard server.

Default : 1819

## 2.6.3. Software updates

A notification and pop-up will appear as follows when the currently used Sever or Plug-in is available for updating.





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**Note:**

- [Software Update] will not appear in environments without an Internet connection.
-

### 3. Troubleshooting

Before asking for repairs, check the symptoms with the following table.

Contact your dealer if a problem cannot be solved even after checking and trying the solution in the table or a problem is not described below.

Symptom	Cause/solution
Face, People or Vehicle images cannot be searched (the number of search result is 0).	Check if schedule setting on camera side for extension software is on. Receiving status from each camera can be confirmed from i-PRO Active Guard configuration (see Setup instruction manual).
False detection (Not face, people or vehicle is searched)	To avoid false detection, configure mask area using iCT (i-PRO Configuration Tool).
Playback time is incorrect.	Check if PC time of i-PRO Active Guard server and VMS server are synchronized when i-PRO Active Guard server is installed to dedicated server. Also check if time zone setting of VMS server and VMS client are the same.
Detected thumbnail is not attached with alarm.	Detected image shows when 1920x1080 or smaller resolution is set for JPEG (2) on camera setting. When higher resolution is set or JPEG (2) is not available, detected image may not be shown.
Object type like human or vehicle is not shown on Details of Event monitor for AI-VMD alarm.	Check AI-VMD setting on camera side. "With detection object information (alarm frame information)" or "With detection object information (AI frame information)" should be configured for "Additional information type".
The camera name displayed in the camera information of the event detail pane is different from the name registered in the recorder.	If the same camera is registered in multiple recorders and both are registered in the i-PRO Active Guard server software, the same camera will be registered twice with another name. In that case, it may be displayed with the camera name registered in another recorder.
When access the Web setting page after a certain period of time, "A timeout has occurred." is displayed.	For security protection, if you do not operate for a while with the WEB setting page, a timeout will occur and you will not be able to change the settings. In such a case, close the web browser, access it again, and enter the authentication information.
"You do not have permission to download to xxx" is shown.	You cannot use the functions with the privileges of the current user logged in to WV-ASM300. For the authority setting of WV-ASM300 and the authority of Plug-in, refer to the setup instruction manual.
False alarm of face matching.	Please adjust "Alarm threshold" according to your environment and registered face image.

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[glog]

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