



# **Operating Instructions**

## **i-PRO Active Guard Plug-in for Video Insight**



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# 1. INTRODUCTION

## 1.1. FEATURES

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

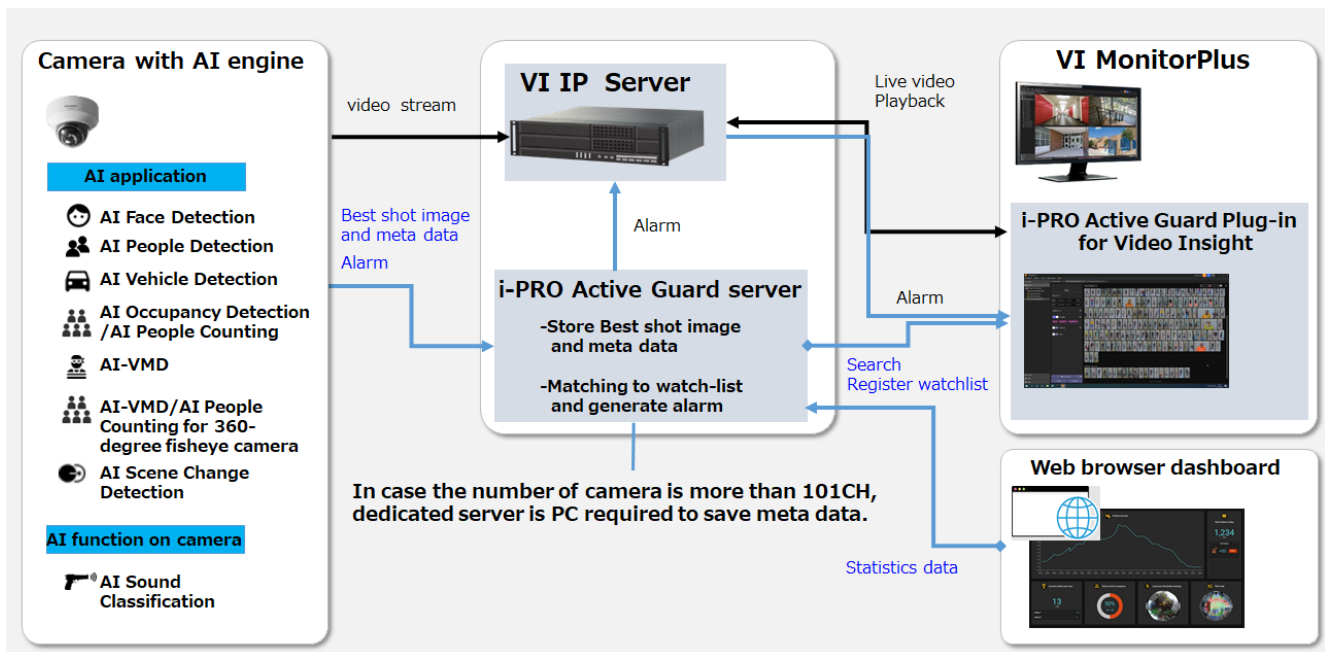
## 1.2. PREFACE

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

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 VI IP server and transmit Best shot images and meta data to i-PRO Active Guard server.

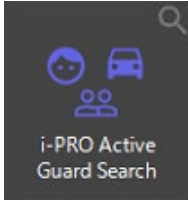
i-PRO Active Guard server stores those data and also generate alarm when face or people is matched to watchlist.

i-PRO Active Guard Plug-in (hereinafter referred to as "Plug-in") which is the plug-in software for VI MonitorPlus 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

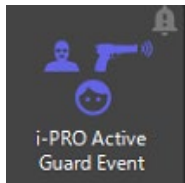
## 2.1. STARTUP AND TERMINATE PLUG-IN

Plug-in has two functions as below.



### i-PRO Active Guard Search

By using various features, enables to search Best shots 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.

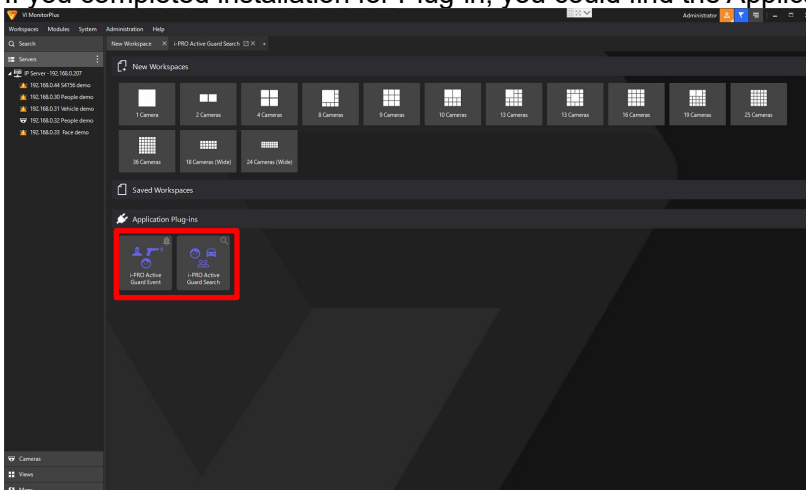
### 2.1.1. Start-up plug-in

To open plug-in, start-up VI MonitorPlus and log in first.

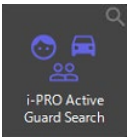
For more detail about VI MonitorPlus, refer to the VI MonitorPlus user manual.



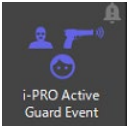
If you completed installation for Plug-in, you could find the Application Plug-ins as below.



To start-up i-PRO Active Guard Search, click the plug-in icon.

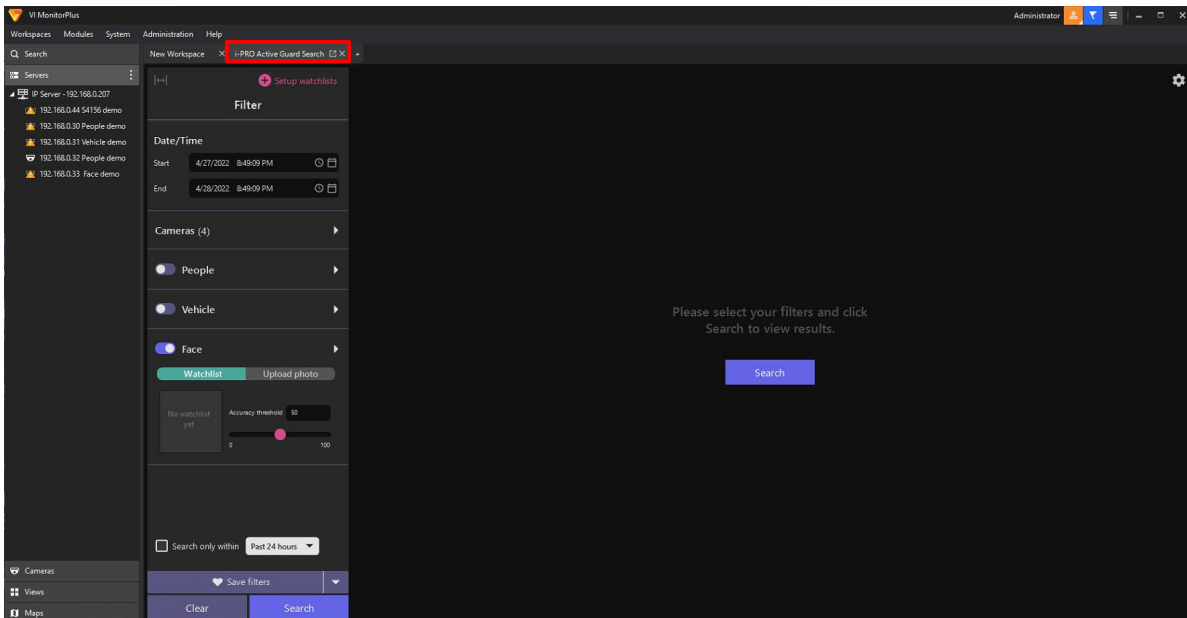


To start-up i-PRO Active Guard Event, click the plug-in icon.



## 2.1.2. Terminate plug-in

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



## 2.2. SEARCH DETECTED OBJECTS

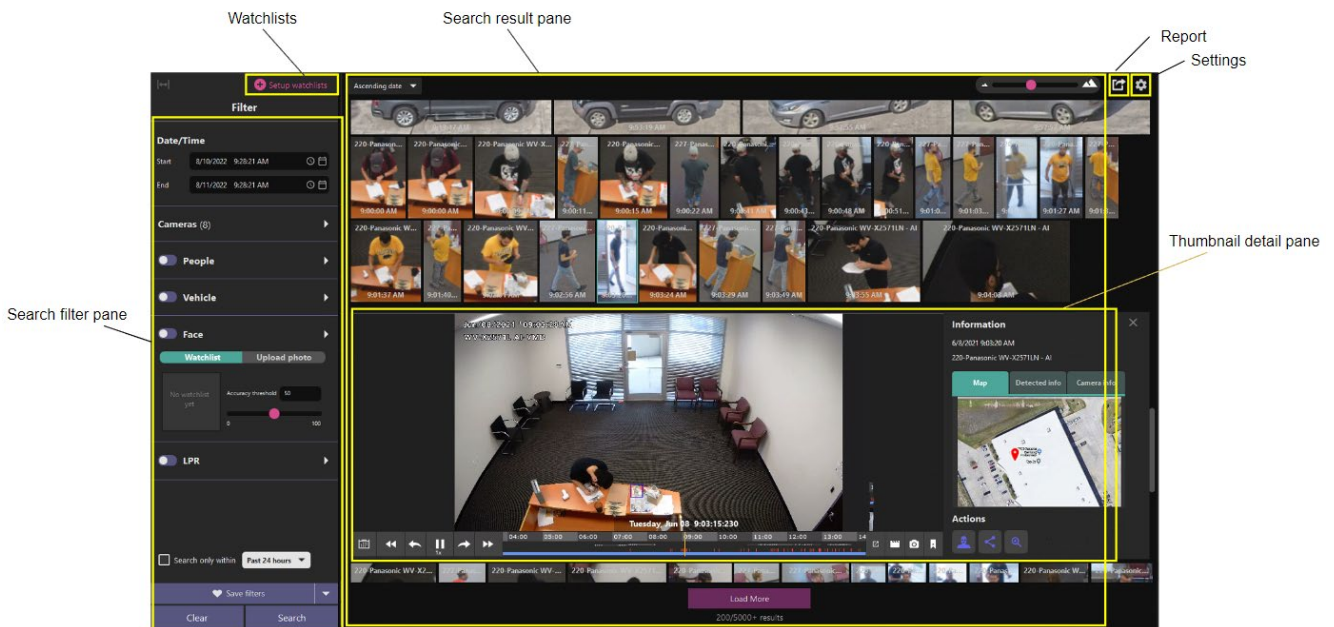
Using i-PRO Active Guard Search, you can quickly find thumbnails of AI Camera detected objects including person, vehicle, and face.

### 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.

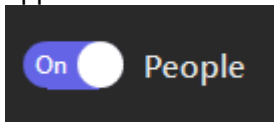


Search filter pane	Date/Time filter	Start time and end time for search objects.
	Cameras filter	Specify AI Cameras for search objects.
	People filter	Specify personal features such as gender, age, hair color, etc.
	Vehicle filter	Specify vehicle features such as type, color, etc.
	Face filter	Specify face image from watchlist or upload photo.
	LPR filter	Specify license plate features such as group name, owner's name, and license plate
	Search only within	Check and select from Past 24 hours/Past week/Past month. When checked, Date/Time filter are ignored.
	Save filters	Save filter settings with name up to 12.
	Clear	Clear filter settings.
	Search	Start thumbnail search.
Search	Sort	Sort search results by descending, ascending and analysis score.



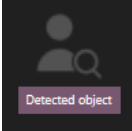
## B. People filter

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.



<b>Features and controls</b>	<b>Description</b>
	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>Bag</b>	Bag, No Bag
<b>Bag color</b>	Black, White, Brown, Orange, Yellow, Green, Blue, Purple, Pink, Red
<b>Shoes color</b>	Black, White, Brown, Yellow, Green, Blue, Red
<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.

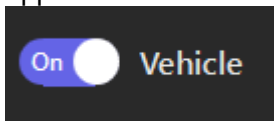
Note)

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.

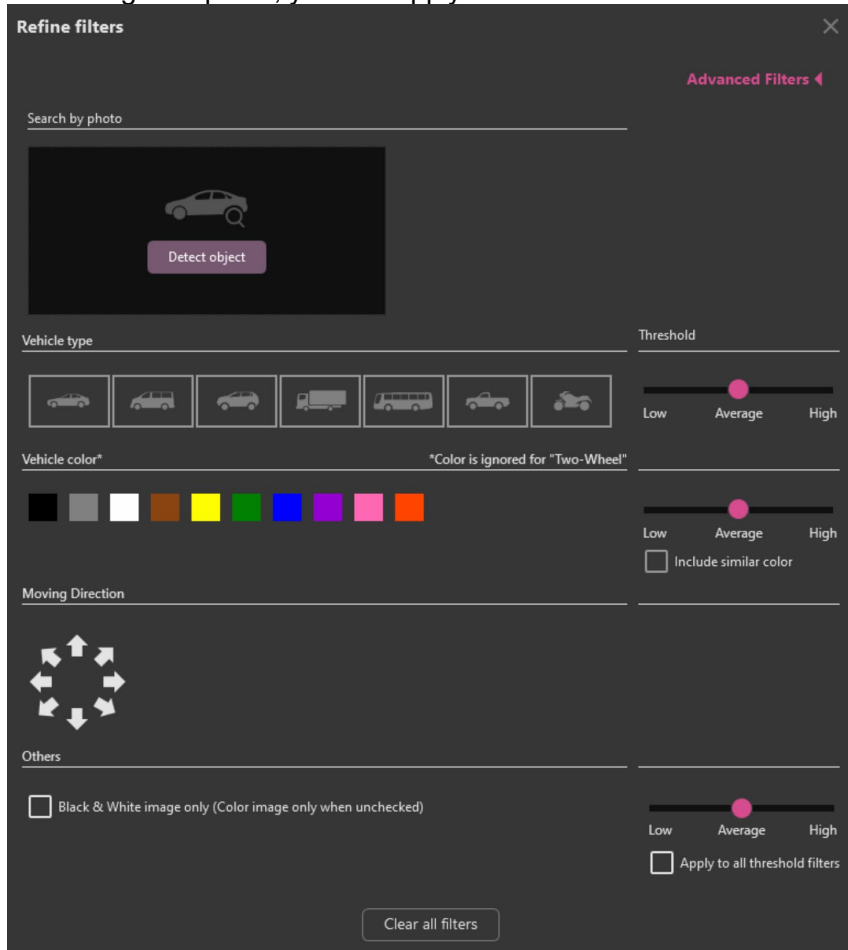
<b>Color to be searched</b>	<b>Similar color (The order is similar from the left)</b>
<b>Black</b>	Gray
<b>Brown</b>	White, Yellow, Orange
<b>White</b>	Gray, Blue, Brown, Yellow, Orange
<b>Gray</b>	Black, White, Blue
<b>Green</b>	Blue, Black, Yellow
<b>Red</b>	Orange, Pink
<b>Blue</b>	Green, Black, Purple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

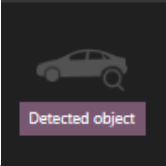
### C. Vehicle filter

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)

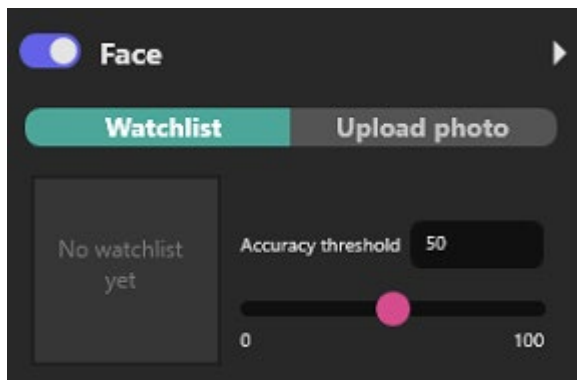
If the specified color does not appear in the search results, it may be displayed in the search results by selecting and searching for the following similar colors together.

<b>Color to be searched</b>	<b>Similar color (The order is similar from the left)</b>
<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

#### D. Face filter

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

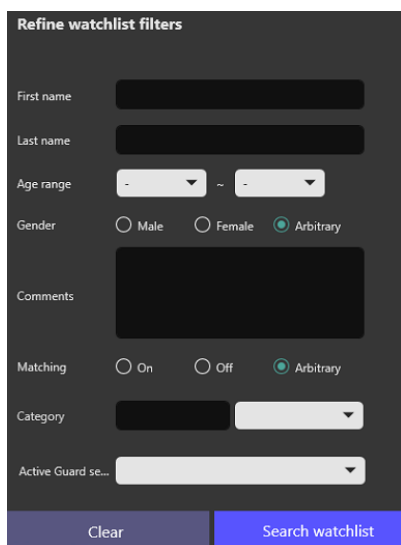
Also using filter panel, you can apply the search condition.



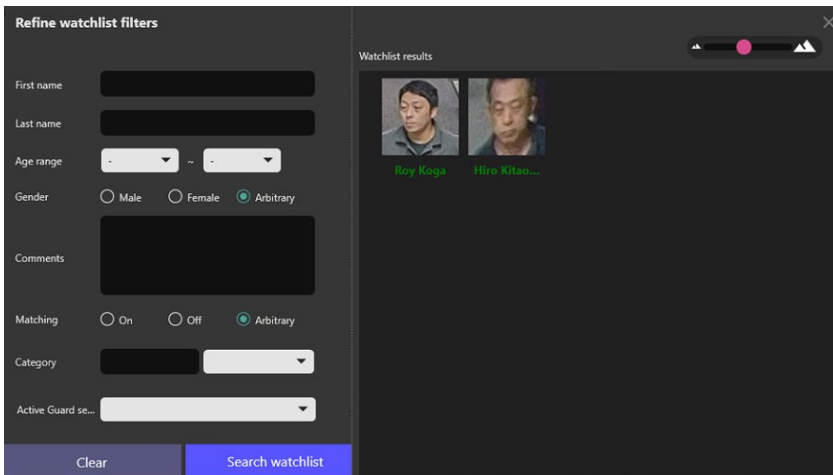
#### **Watchlist**

Select face from watchlist and search similar face.

Click [Search watchlist] with search conditions.

A screenshot of a 'Refine watchlist filters' panel. It contains several input fields and controls: 'First name' and 'Last name' are text input fields; 'Age range' consists of two dropdown menus separated by a tilde (~); 'Gender' has three radio buttons: 'Male', 'Female', and 'Arbitrary' (which is selected); 'Comments' is a large text area; 'Matching' has three radio buttons: 'On', 'Off', and 'Arbitrary' (which is selected); 'Category' is a dropdown menu; and 'Active Guard se...' is another dropdown menu. At the bottom, there are two buttons: 'Clear' and 'Search watchlist'.

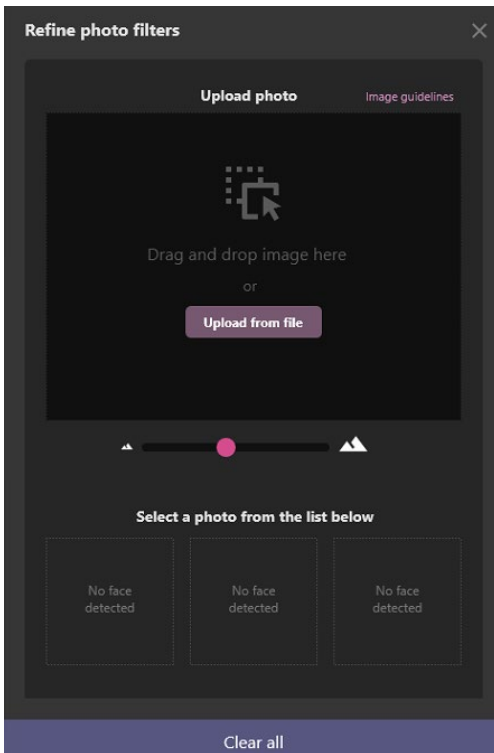
Select face from search result.



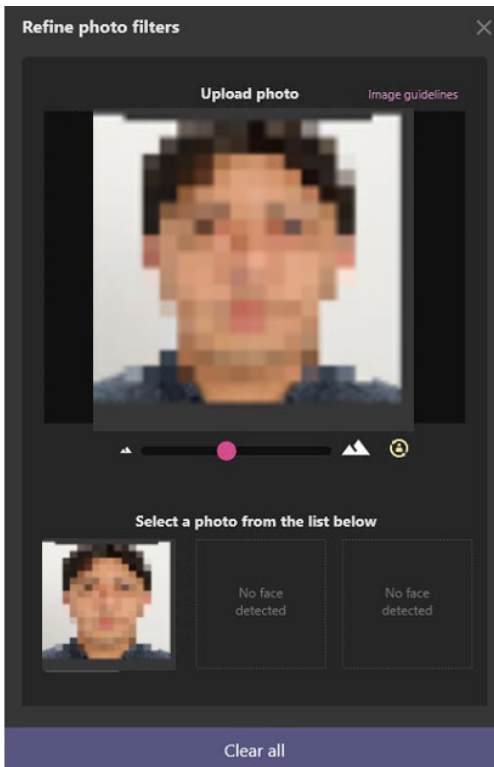
## **Upload photo**

Upload image file that includes face and search similar faces.

Click icon or drag and drop the image file.

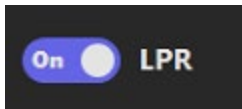


When face is detected from the image, select face and click OK.

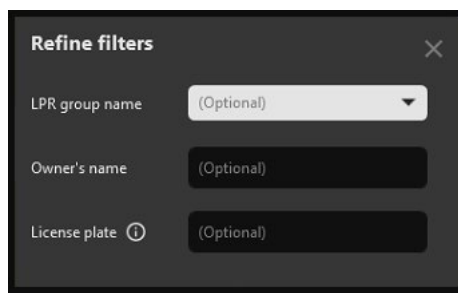


## E. LPR Filter

With the LPR filter enabled, only the thumbnails are shown which LPR detection app detected.

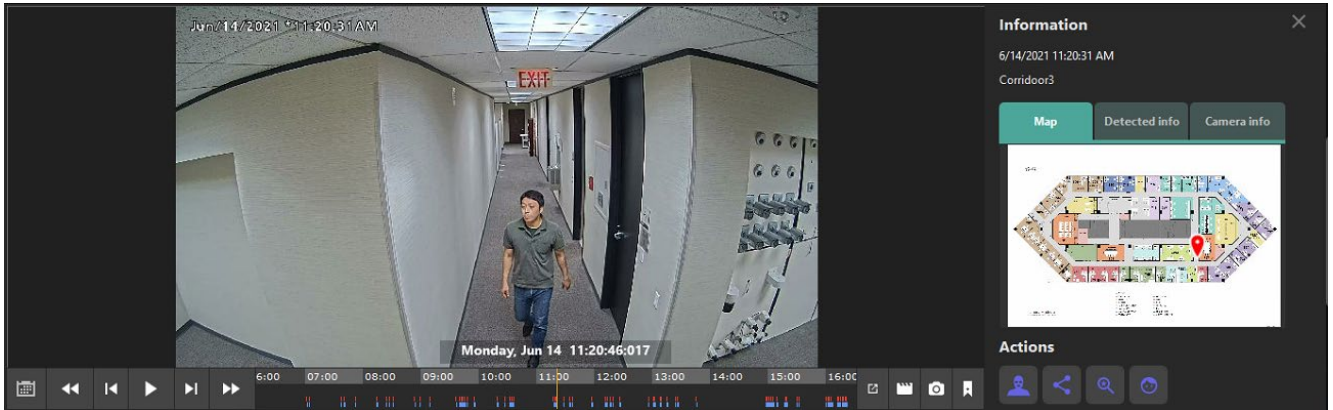


Also using filter panel, you can apply the search condition by LPR group name, Owner's name or License plate.



## 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.



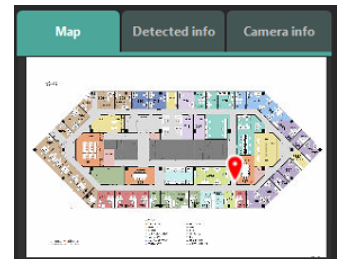
- **Information**

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

A. **Map**

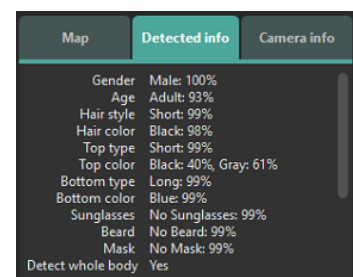
The camera which sent the thumbnail is displayed with map. You can see the camera location on map.

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



B. **Detected info**

Analysis score information for each feature is displayed.



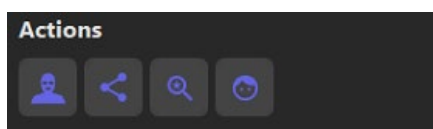
## C. Camera info

Camera information is displayed.

Map	Detected info	Camera info
		Manufacturer: Panasonic
		Model: Panasonic WV-S2236L
		IPAddress: 192.168.0.31
		Camera name: Corridor3
		Server: Dev Meeting
		CameraID: 157441743
		WebAccess: <a href="http://192.168.0.31">192.168.0.31</a>

### ● 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:**

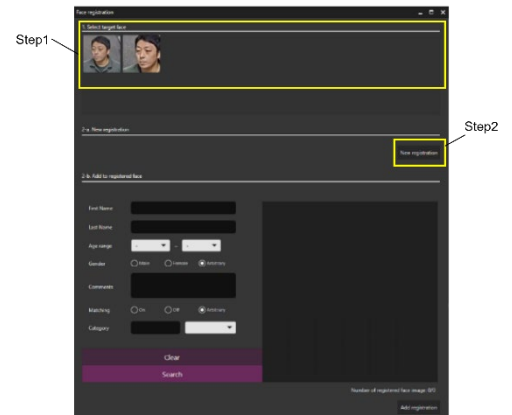
- Similar Search is not applied the Latest search condition in Saved filters.
-

B.  Save facial features to Registered facial detection

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

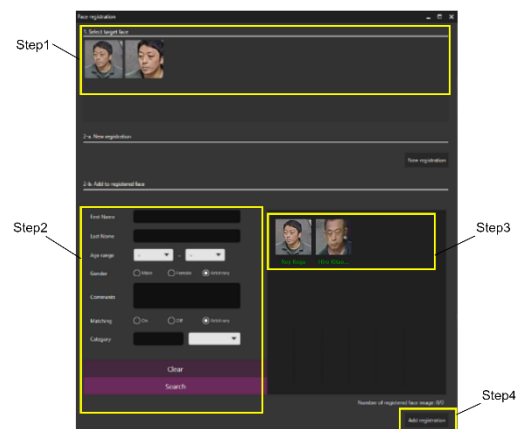
**In case of register as new face:**

- 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)*



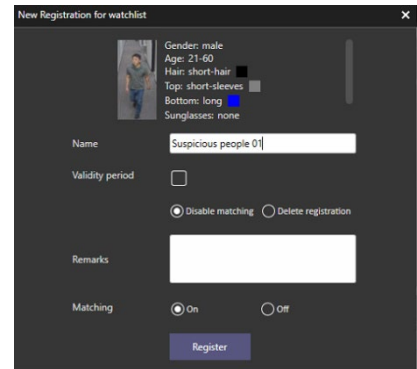
**Note:**


- Face can be registered up to 1,000.
- Recommended with of face for registration is more than 75 pixel. When the selected face is under the value, message is shown.

C.  Save person's characteristics to Registered Person detection

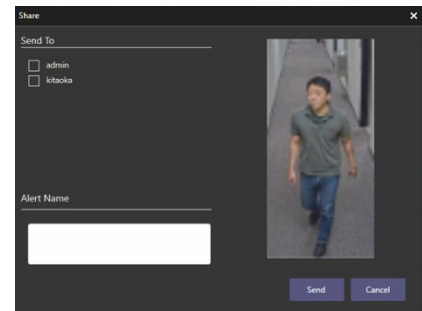
Register personal features to watchlist. High score items are registered.

Some basic information can be entered from here.




D.  Share information

Share thumbnail to registered smart devices. To send thumbnail to smart devices, select one of devices then click OK.



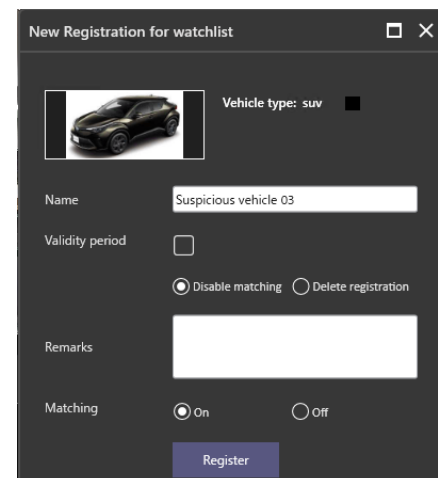
**Note:**

- To use this function, install VI Guard (Android/iOS application) to smart device.

E.  Save vehicle's characteristics to Registered Vehicle detection

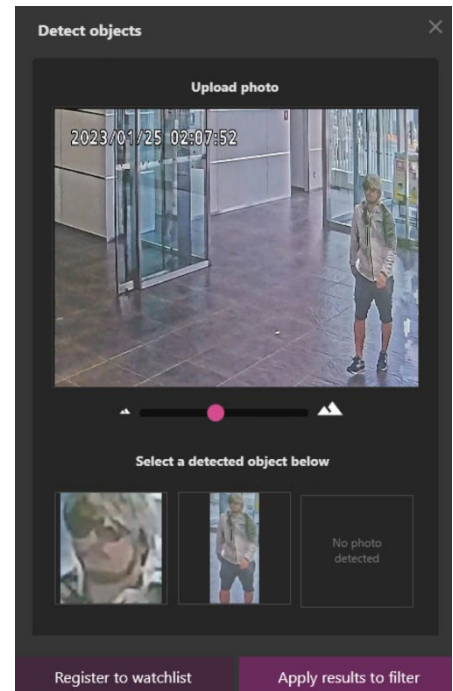
Register vehicle features to watchlist. High score items are registered.

Some basic information can be entered from here.









F.  Analysis

Detects faces, people, and vehicles from playback video. From the detected objects, you can register it to the watchlists or apply results to filter.

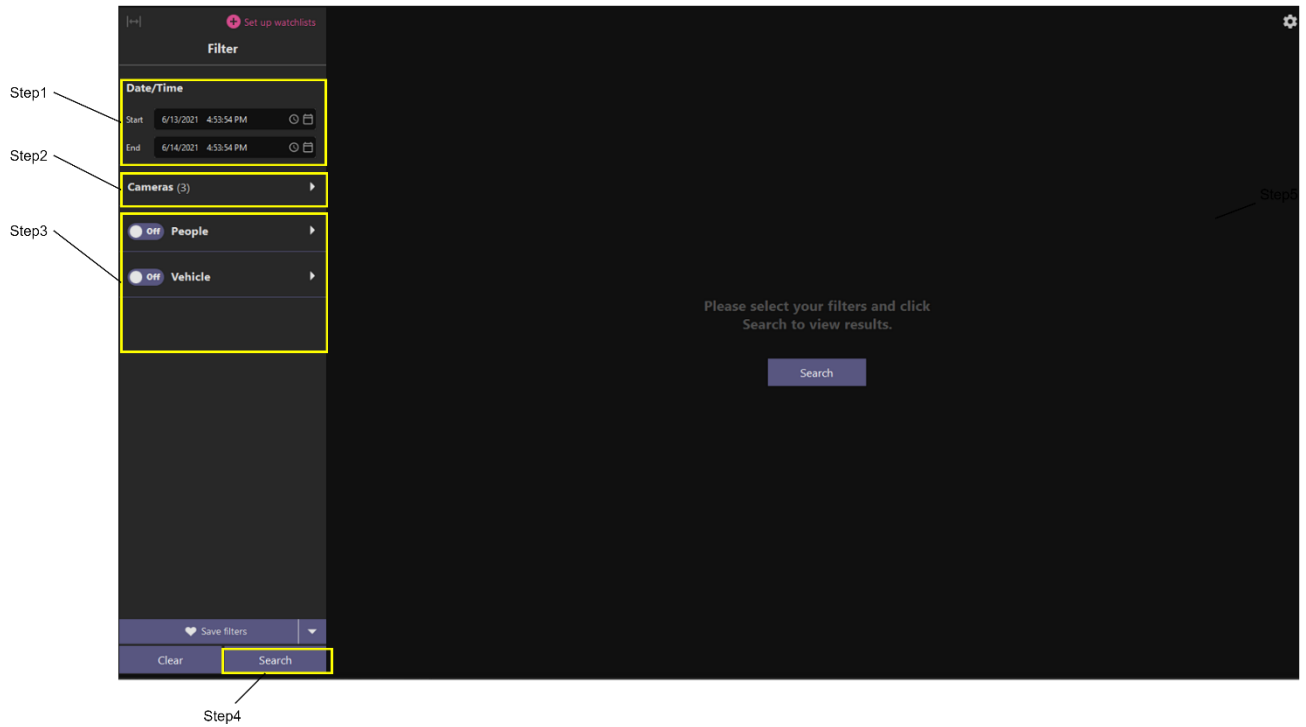


Action buttons can be utilized depending on type of objects.

	Search for similar characteristics 	Save facial features to Registered facial detection 	Save person's characteristics to Registered Person detection 	Share thumbnails to saved mobile phone number 	Save vehicle's characteristics to Registered vehicle detection 	Detecting objects from video 
Face filter	Yes	Yes	No	Yes	No	Yes
People filter	Yes	Yes	Yes	Yes	No	Yes
Vehicle filter	Yes	No	No	Yes	Yes	Yes
LPR filter	No	No	No	Yes	No	No

## 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 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. MONITOR VARIOUS EVENTS

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

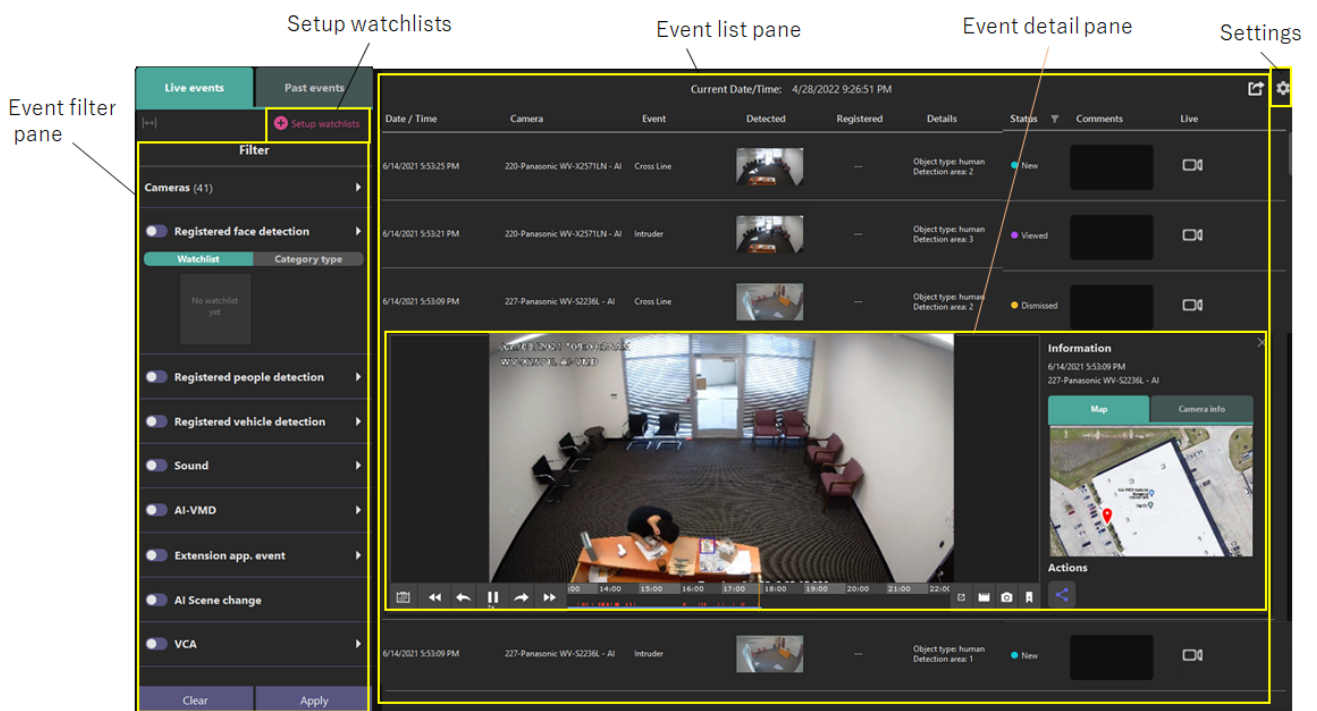
i-PRO Active Guard Event as two tabs that are Live events tab and Past events tab.

#### 2.3.1.1. Overview

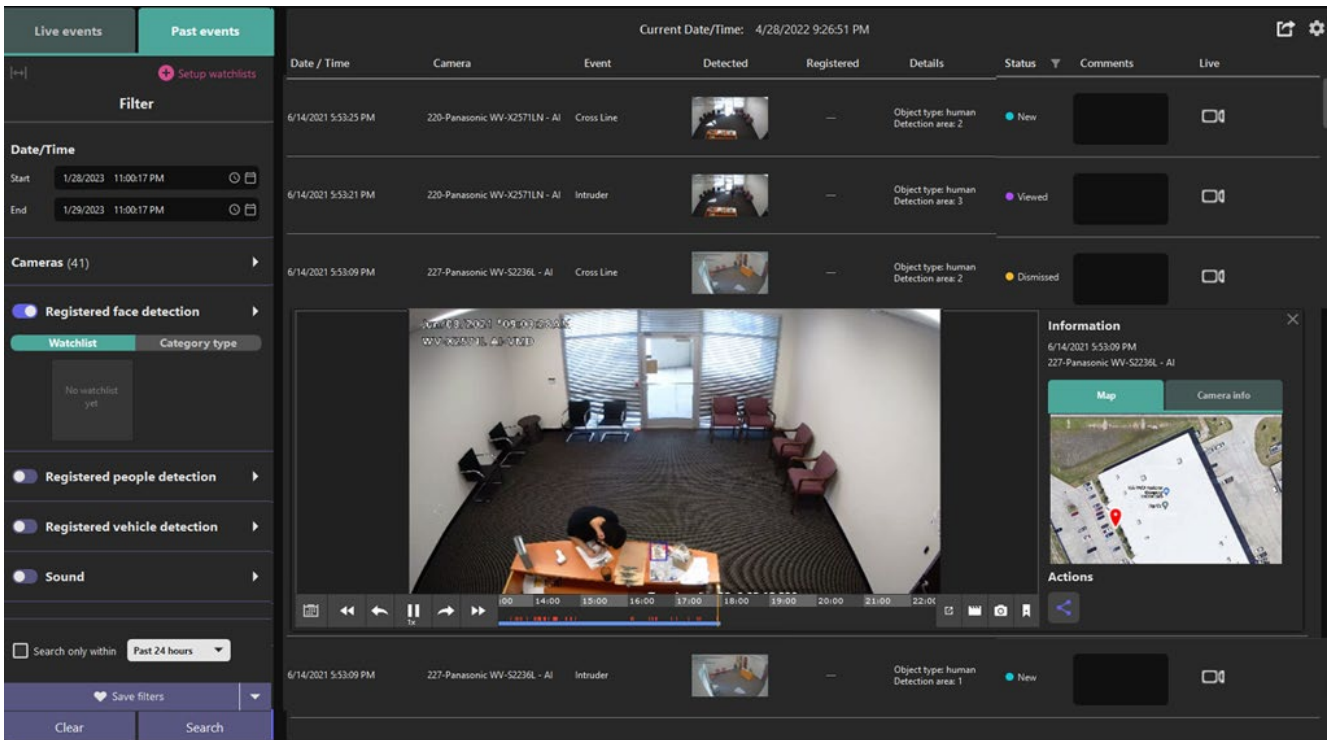
Live events tab and Past events tab are made from almost same UI components.

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.
	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 personal 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.
	VCA (Live/Past events tab)	Show Video Content Analytics (VCA) events.
	Access Control (Live/Past events tab)	Show access control door events.
	AI Scene change (Live/Past events tab)	Show AI Scene change detection events.
	Search only within (Past events tab)	Check and select from Past 24 hours/Past week/Past month. When checked, Date/Time filter are ignored.
	Save filters (Past events tab)	Save filter settings with name up to 12.

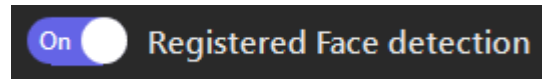
	Clear	Clear filter settings.
	Apply	Activate filter settings.
Events list pane	<b>Note:</b>	
		<ul style="list-style-type: none"> <li>In Live events tab, while opening this view, the list is automatically updated if any event happens.</li> <li>In Past events tab, the results of search from recorded events are listed.</li> </ul>
	Current Date/Time	Current date and time which is setting on PC. (Live events tab)
	Export	Export event list as CSV or HTML. (Live/Past events tab)
	Date/Time column	Detected date and time which is setup at camera. (Live/Past events tab)
	Camera column	Camera name. (Live/Past events tab)
	Event column	Event type. (Live/Past events tab)
	Detected column	Detected thumbnail which is captured by camera. (Live/Past events tab)
	Registered column	Face image which is registered in face watchlist or registered name which is registered in people watchlist. (Live/Past events tab)
	Similarity column	Detected score.
	Details column	Object type, detected area, detected score, etc. Displayed information depends on event type. (Live/Past events tab)
	Status column	Status for each event. New(Default)/Viewed/Dismissed (Live/Past events tab) Status can be changed by right click. You can select multiple events using “ctrl” or “shift”. Up to 50 events can be changed at the same time.
	Comments column	Any comment up to 64 character can be input. (Live/Past events tab)
	Live column	Open live camera window. (Live/Past events tab)
	Detected thumbnail	Click and open event detail pane. Right click and save the thumbnail as picture or video clip. (Live/Past events tab)
	Result count	Show the events search results count. (Past events tab)
	Load More	Load next 100 events. (Past events tab)
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	Setup face watchlist. (Live/Past events tab)
	People watchlist	Setup people watchlist. (Live/Past events tab)
	Vehicle watchlist	Setup vehicle watchlist. (Live/Past events tab)
Settings	Preferences	Setup some environments about playback, event monitor etc.

## 2.3.1.2. About Event filter

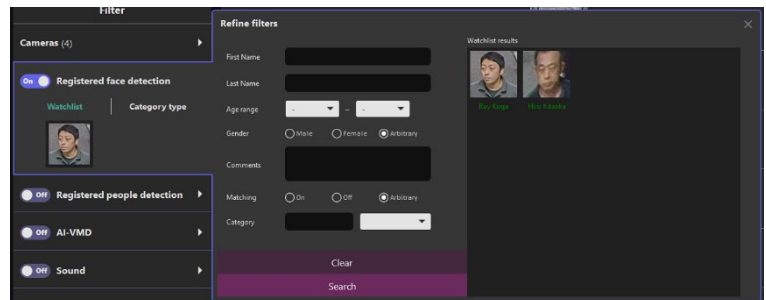
In this section, it describes about each events filter. For more information about the Camera filter, please refer to 2.2.1.2.

### A. Registered Face detection

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

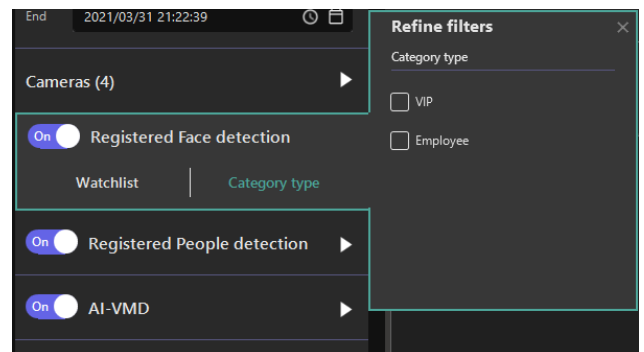


If you want to display a specific face, you can use Watchlist filter. Search registered faces by specifying each conditions then select one of results.



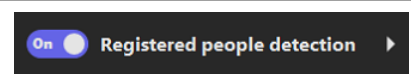
If you want to clear after setting, right click on the face image in the left panel then select Clear.

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

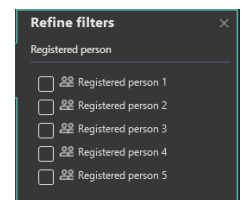


### B. Registered People detection

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

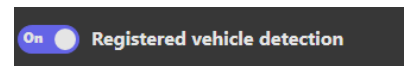


Also using filter panel, you can select specific registered items from people watchlist

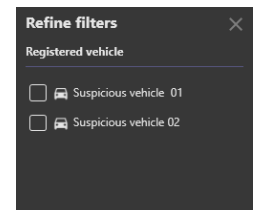


### C. Registered Vehicle detection

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



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

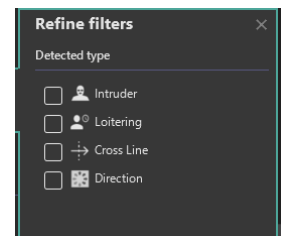


### D. AI-VMD

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.

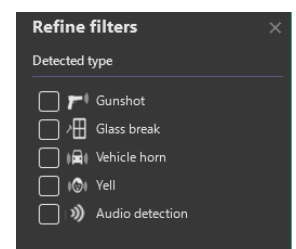


### E. Sound

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

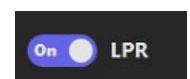


Also using filter panel, you can select specific sound events to show.

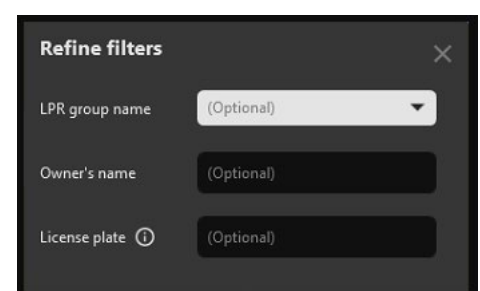


### F. LPR

With this filter enabled, all the LPR events are shown.

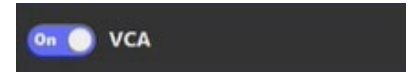


Also using filter panel, you can apply the search condition by LPR group name, Owner's name or License plate.

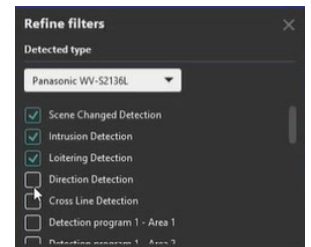


## G. VCA

With this filter enabled, all the VCA events are shown.

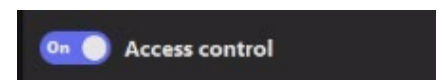


Also using the filter panel, you can select a specific camera, then the analytics available to that camera model.

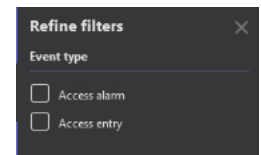


## H. Access Control

With this filter enabled, all door Access Control events are shown.

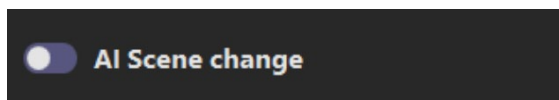


Also using the filter panel, you can select between Access alarms and door Access entry.



## I. AI Scene change

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.

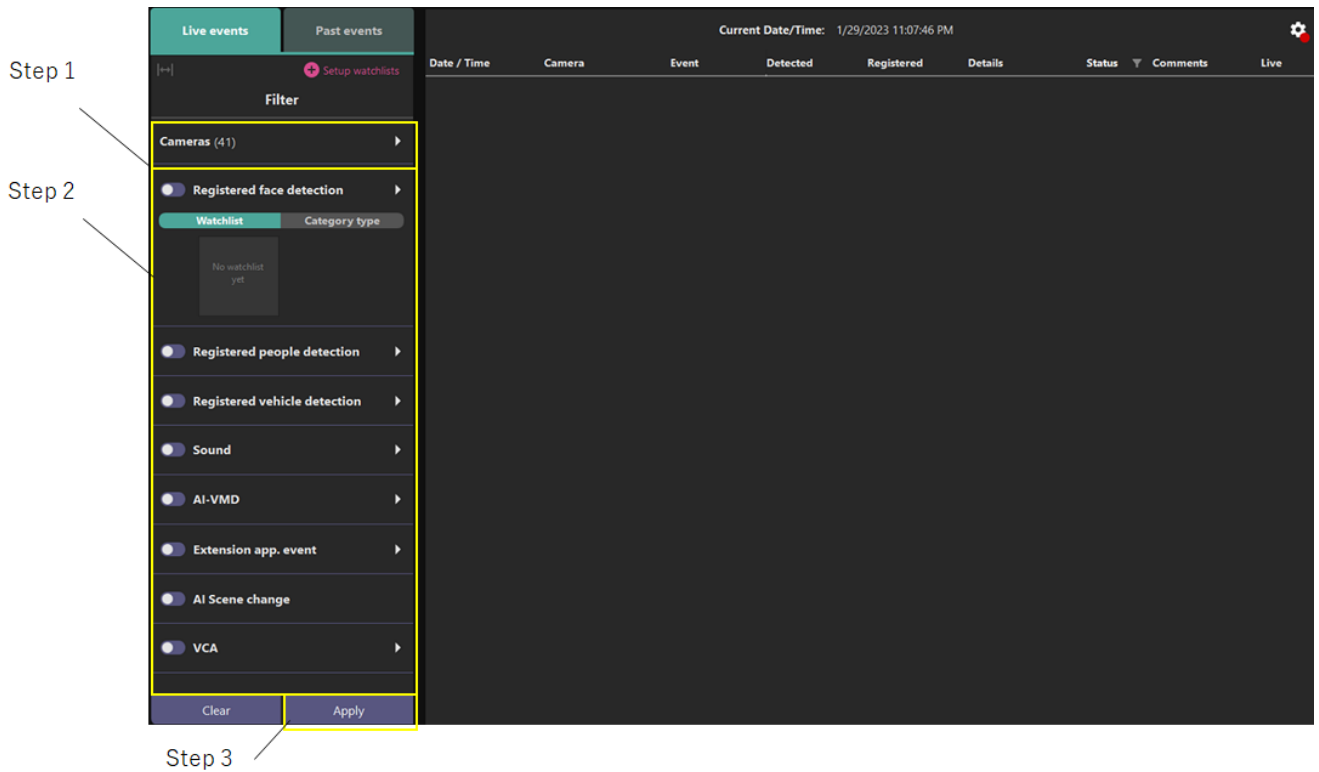
	Search for similar characteristics 	Save facial features to Registered facial detection 	Save person's characteristics to Registered Person detection 	Share thumbnails to saved mobile phone number 	Save vehicle's characteristics to Registered vehicle detection 
Registered face detection filter	Yes	Yes	No	Yes	No
Registered people detection filter	Yes	No	No	Yes	No
Registered vehicle detection filter	Yes	No	No	Yes	No
AI-VMD	No	No	No	Yes	No
Sound	No	No	No	Yes	No
LPR	No	No	No	Yes	No
VCA	No	No	No	Yes	No
Access Control	No	No	No	Yes	No
AI Scene change	No	No	No	Yes	No

Information pane can be utilized depending on type of events.

	Map	Detected score	Camera info
Registered face detection filter	Yes	Yes	Yes
Registered people detection filter	Yes	Yes	Yes
Registered vehicle detection filter	Yes	Yes	Yes
AI-VMD	Yes	No	Yes
Sound	Yes	No	Yes
LPR	Yes	No	Yes
VCA	Yes	No	Yes
Access Control	Yes	No	Yes
AI Scene change	Yes	No	Yes

## 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

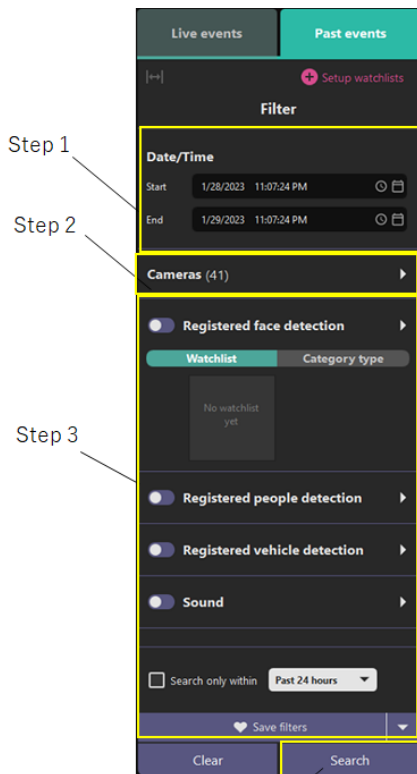
Set up event filters. You can specify type of event by using event filters.  
Not using any filters displays all detected events.

### 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.

### 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
- LPR
- VCA
- Access Control
- AI Scene change

### Step 4

Click Search. Results are displayed as shown below.

Step 4

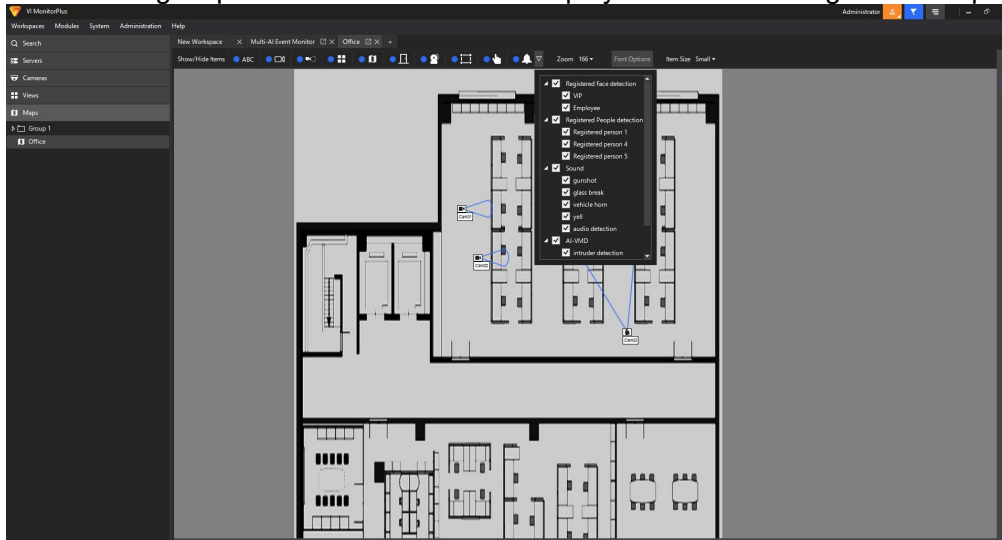
Date / Time	Camera	Event	Detected	Registered	Details	Status	Comments	Live
1/29/2023 11:05:31 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		
1/29/2023 11:03:19 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		
1/29/2023 11:01:50 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		
1/29/2023 11:01:05 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		
1/29/2023 11:00:54 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		
1/29/2023 11:00:16 PM	192.168.0.55 - Panasonic WV-S2136L	Loitering		—	Object type: Vehicle Detection area: 1 Detected score: N/A	New		
1/29/2023 10:58:14 PM	192.168.0.55 - Panasonic WV-S2136L	Cross Line		—	Object type: Vehicle Detection area: 2 Detected score: N/A	New		

Load More  
100 of 255 results

## 2.3.4. Overlay events on VMS map

Getting events can be overlay by using VI VMS Maps.

The following steps demonstration how to display events on the registered map.



### Step 1

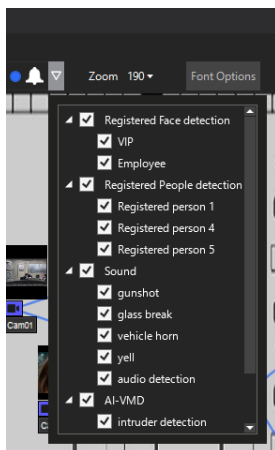
Navigate Maps and select registered map.

### Step 2

Click AI Alarm icon then enable AI Alarm.

### Step 3

Select events that you want to show.

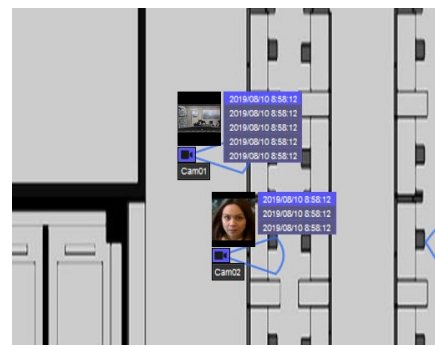


### Step 4

If any events happen, it appears like below.

Events are listed up to five per camera from the most recent.

Live window opens by double click a list.



## 2.4. PLAYBACK VIDEO CONTROL

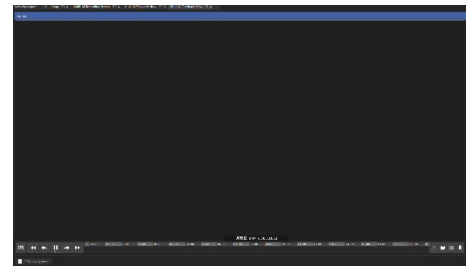
When viewing video on a thumbnail/event detail pane, the following a set of video controls appear.



The video operation controls are described below.

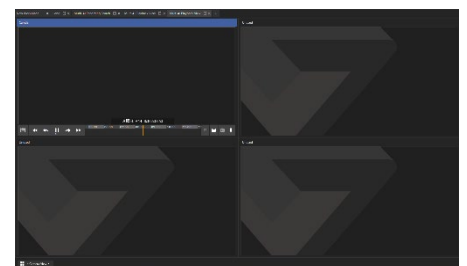
		In pause mode, forward and backward navigation through each frame on the timeline.
		Fast playback or fast rewind the video recording.
		Play or pause the video recording.
		In play mode, navigate previous and next motion events on the timeline.
		Open new workspace to playback video.
		Export video from selected the thumbnail.
		Take a snapshot and save as file or clipboard.
		Add video to bookmark or open bookmark manager.
		View in New Window

It displays 1 camera view and also can switch to 4 cameras view. To switch these views, select view mode from left at bottom menu.



In 4 cameras view mode, the left on the top view is fixed view as original. It can't be changed.

In the other views, you can drag and drop cameras from the cameras list on the left side panel. These views start video from the time of timestamp of original thumbnail.



## 2.5. SETTINGS

This section describes how to manage the watchlist and preferences.

To open these settings, click Set up watchlists button for Face watchlist or People watchlist, or click settings icon for Preferences.



### 2.5.1. Face Watchlist

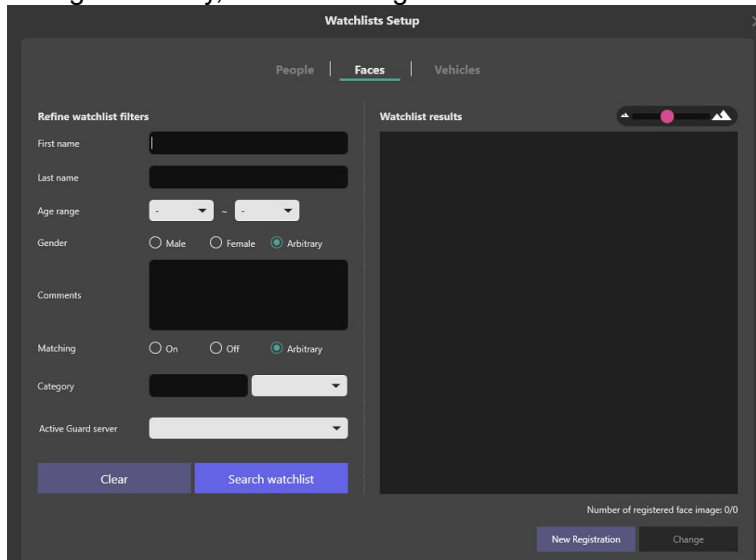
This section describes the operation of add, edit, and delete.

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.

- **Add Registration**


#### Step 1

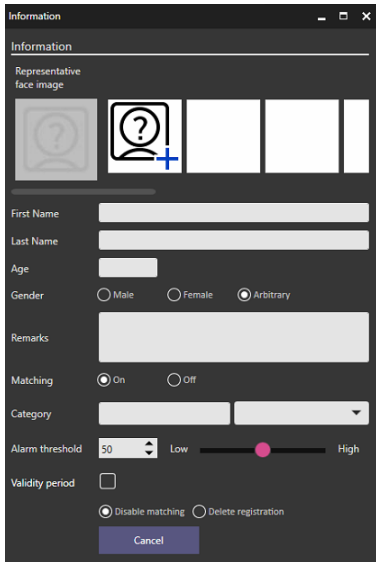
To register newly, click New Registration button.



#### Step 2

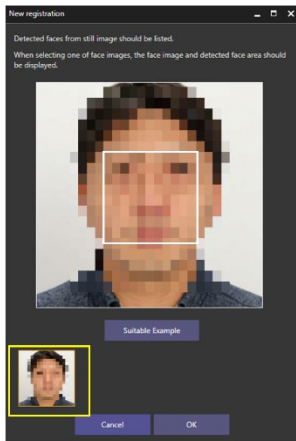
One face image must be registered at least.

Click  icon then select the file you want to use.

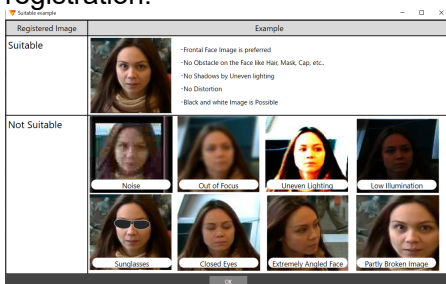


### Step 3

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.



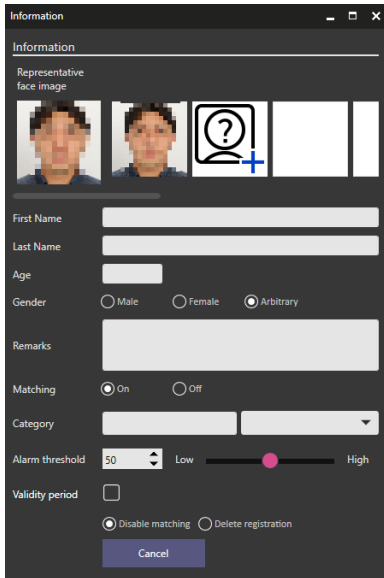
By pressing the Suitable Example button, you can see a sample of face image quality suitable for registration.



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.



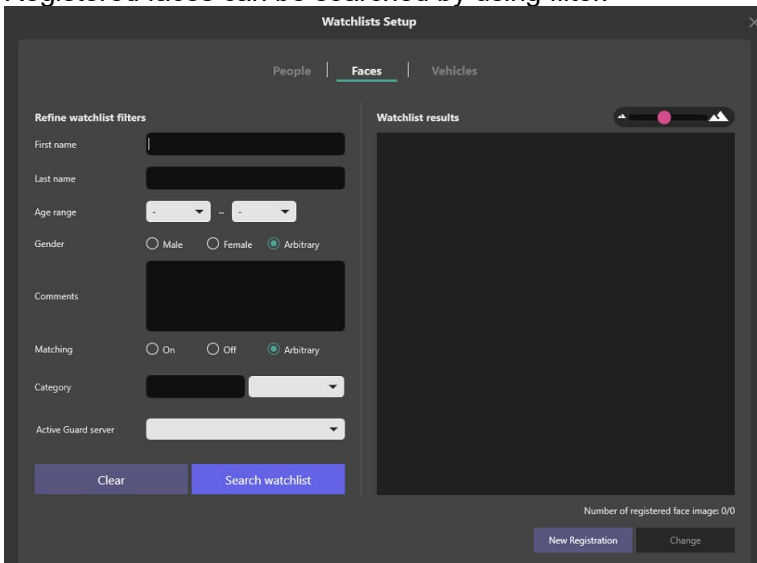
**Note:**

- The Matching enabled starts matching process.
- 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.

● **Edit Registration**

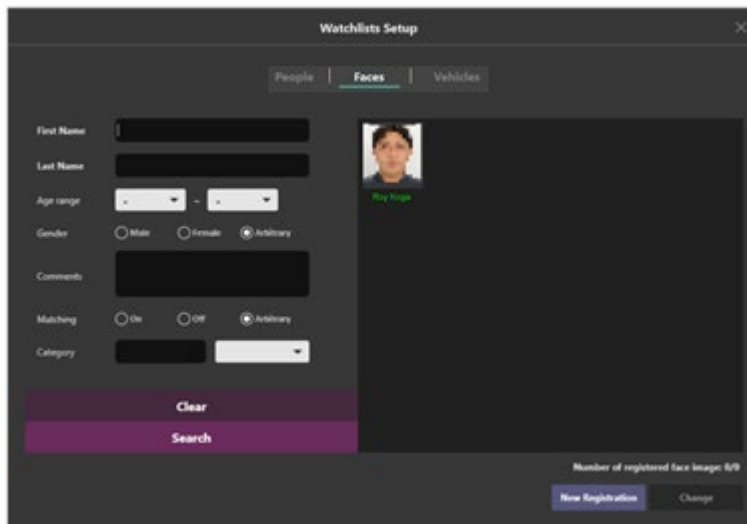
**Step 1**

First, find registered face you want to edit the information.  
 Registered faces can be searched by using filter.



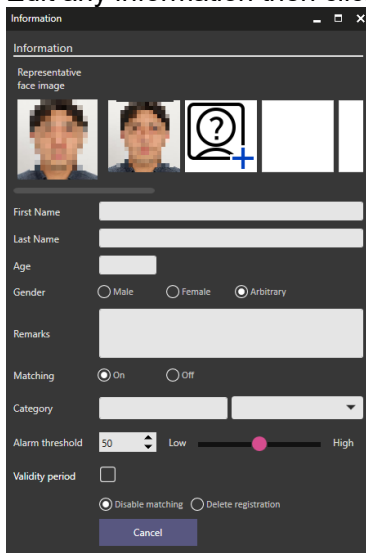
**Step 2**

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



### Step 3

Edit any information then click Save.



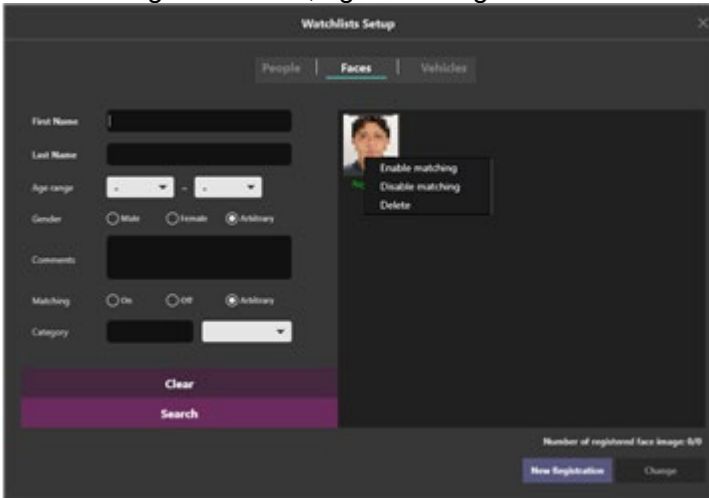
---

#### Note:

- The Matching enabled starts matching process.
  - 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.
-

- **Delete Registration**

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



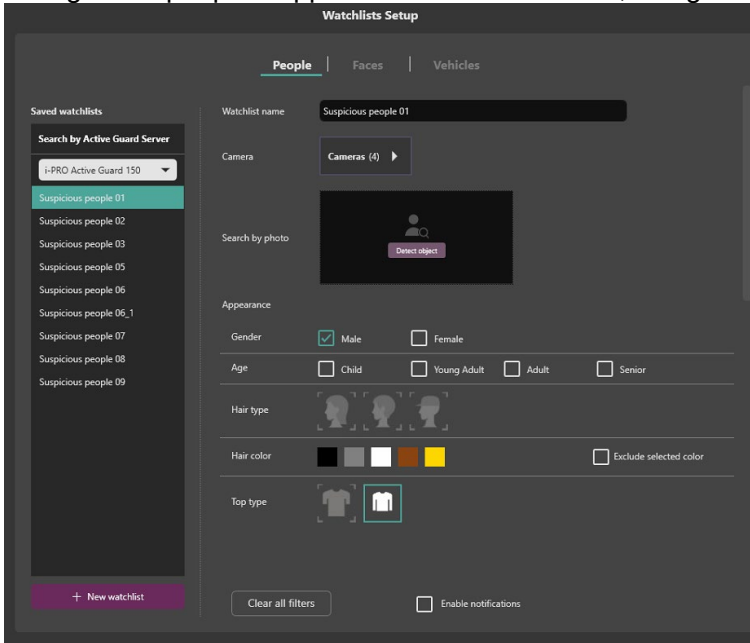
## 2.5.2. People Watchlist

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.

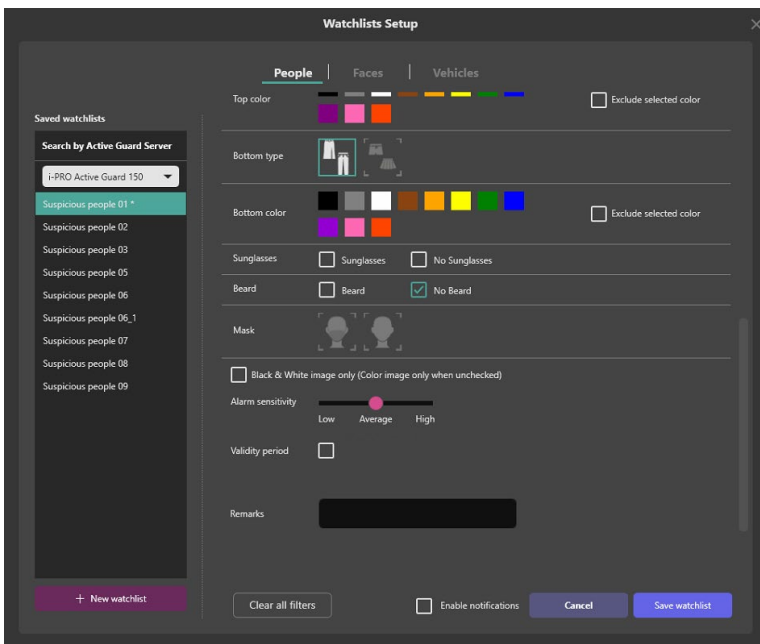
- **Add Registration(To manually select attributes)**

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



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

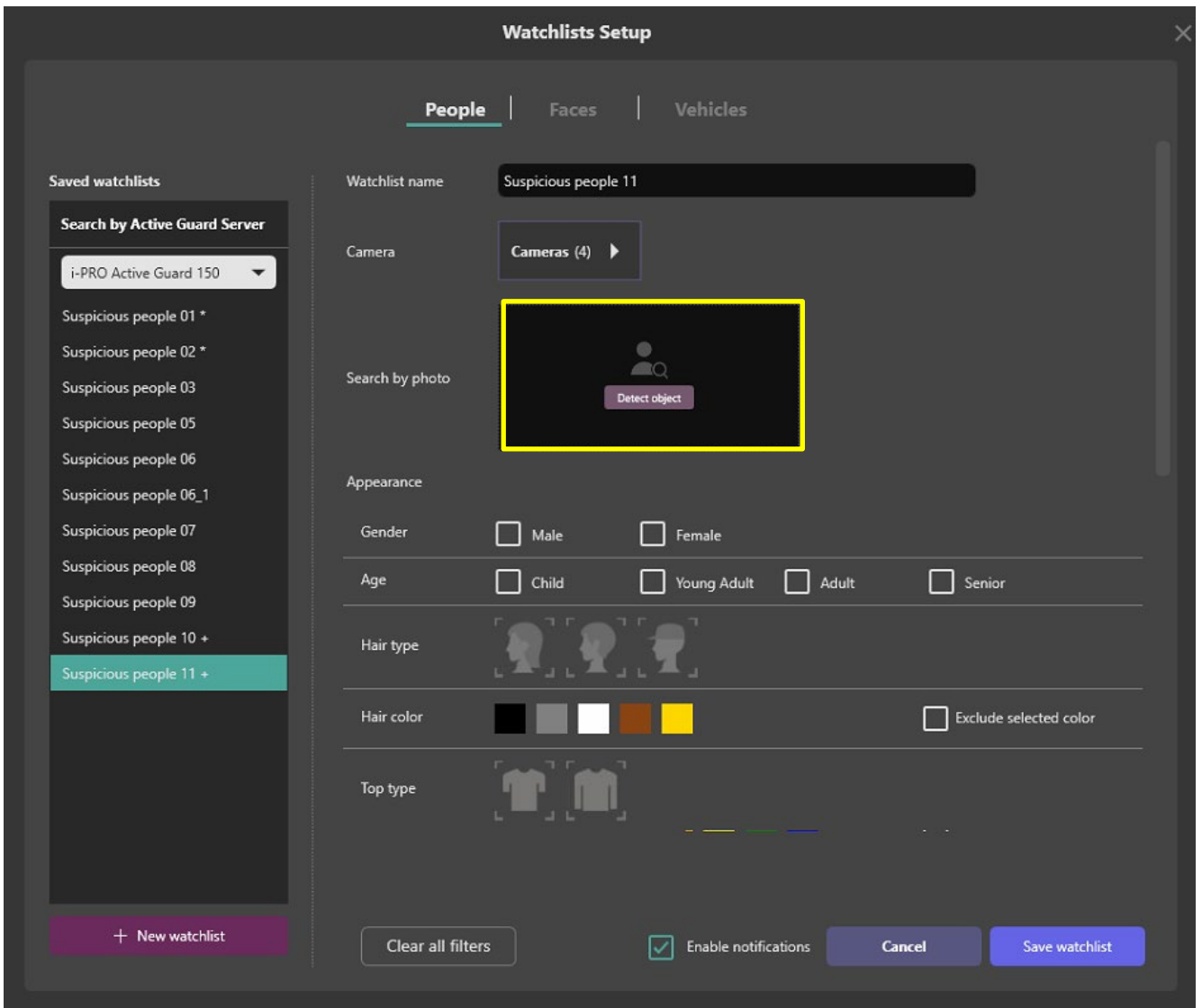
To add new item, click plus button then select appearance items.



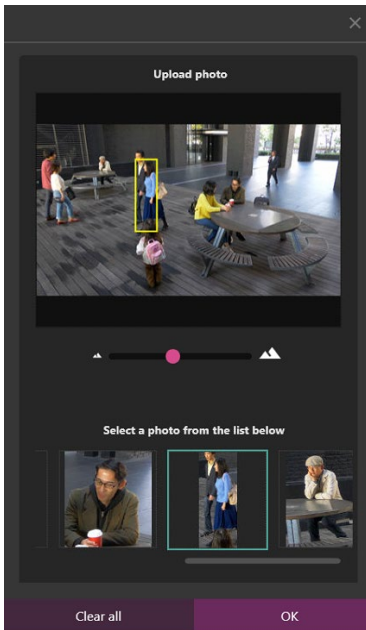
- **Add Registration(To select attributes from an image)**

This procedure automatically selects and registers attributes from an image.

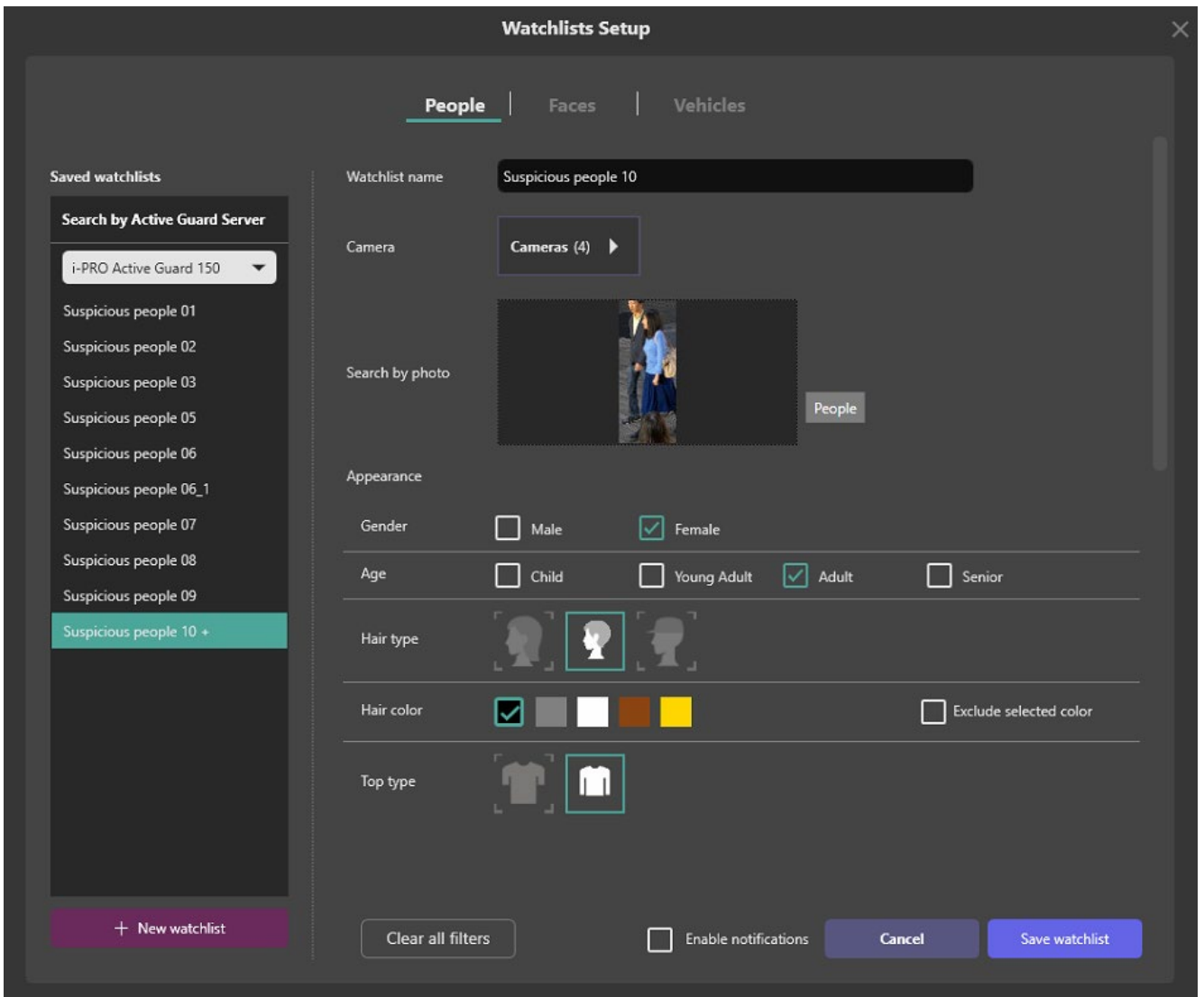
To select attributes from a people image, select the image to be registered from  icon.



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



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



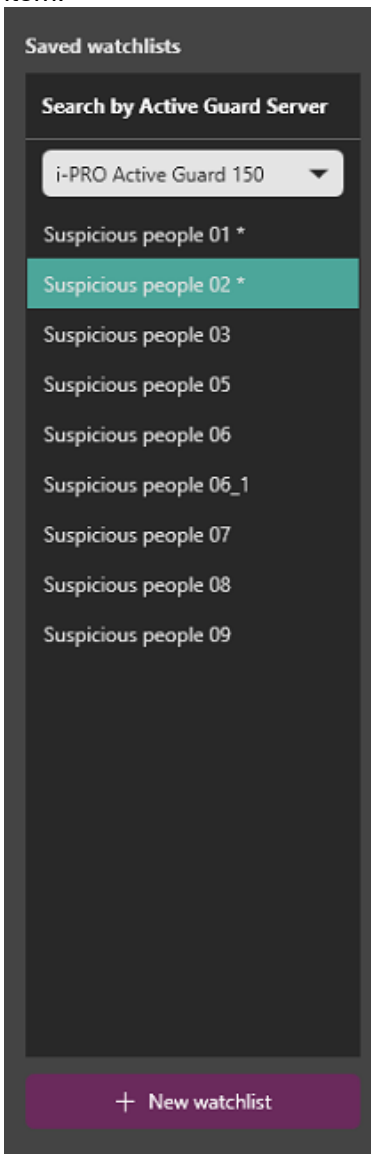
---

**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.
- 

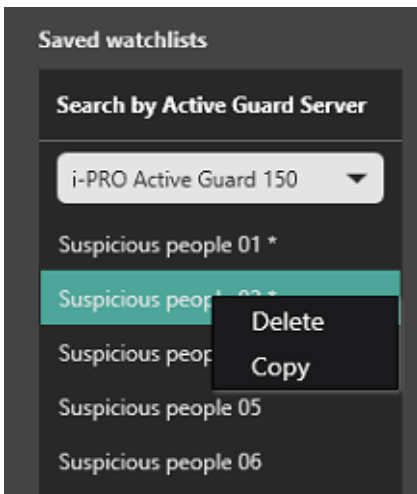
● **Edit Registration**

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



- **Delete Registration**

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



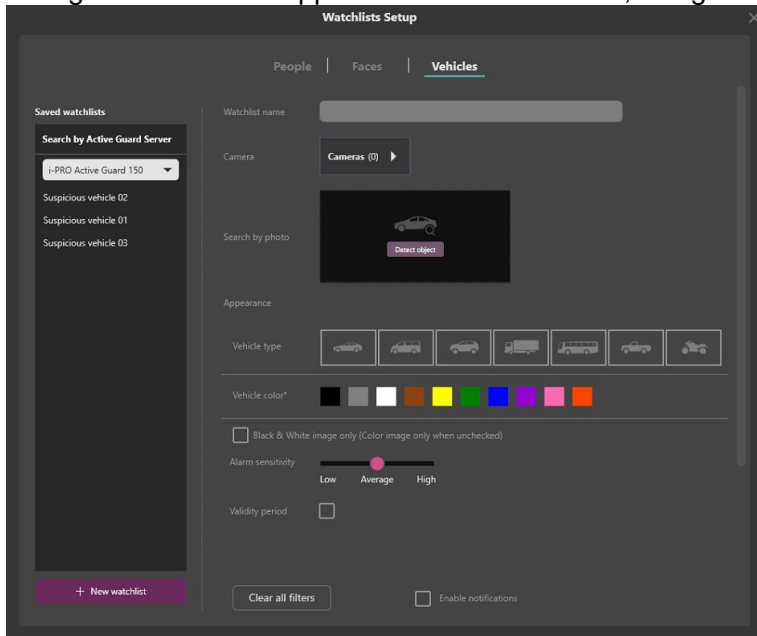
## 2.5.3. Vehicle Watchlist

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.

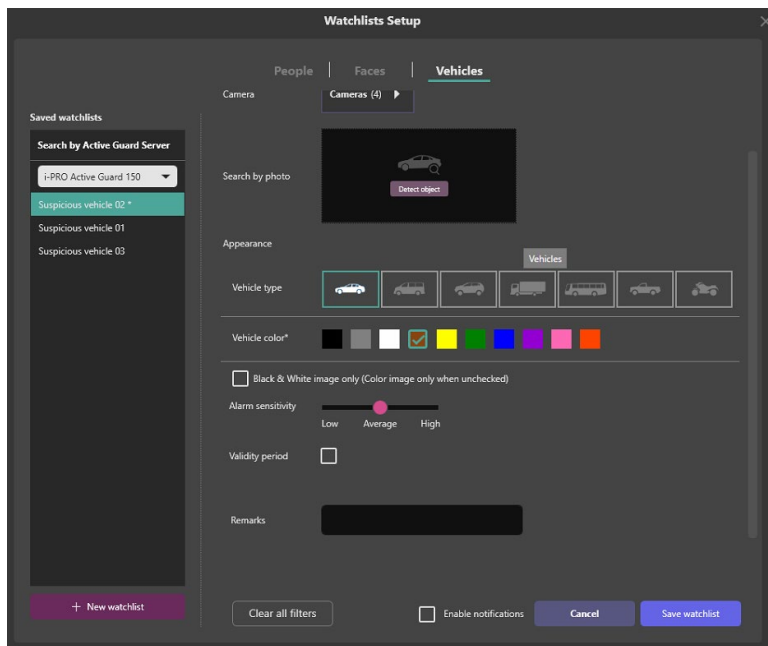
- **Add Registration(To manually select attributes)**

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



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

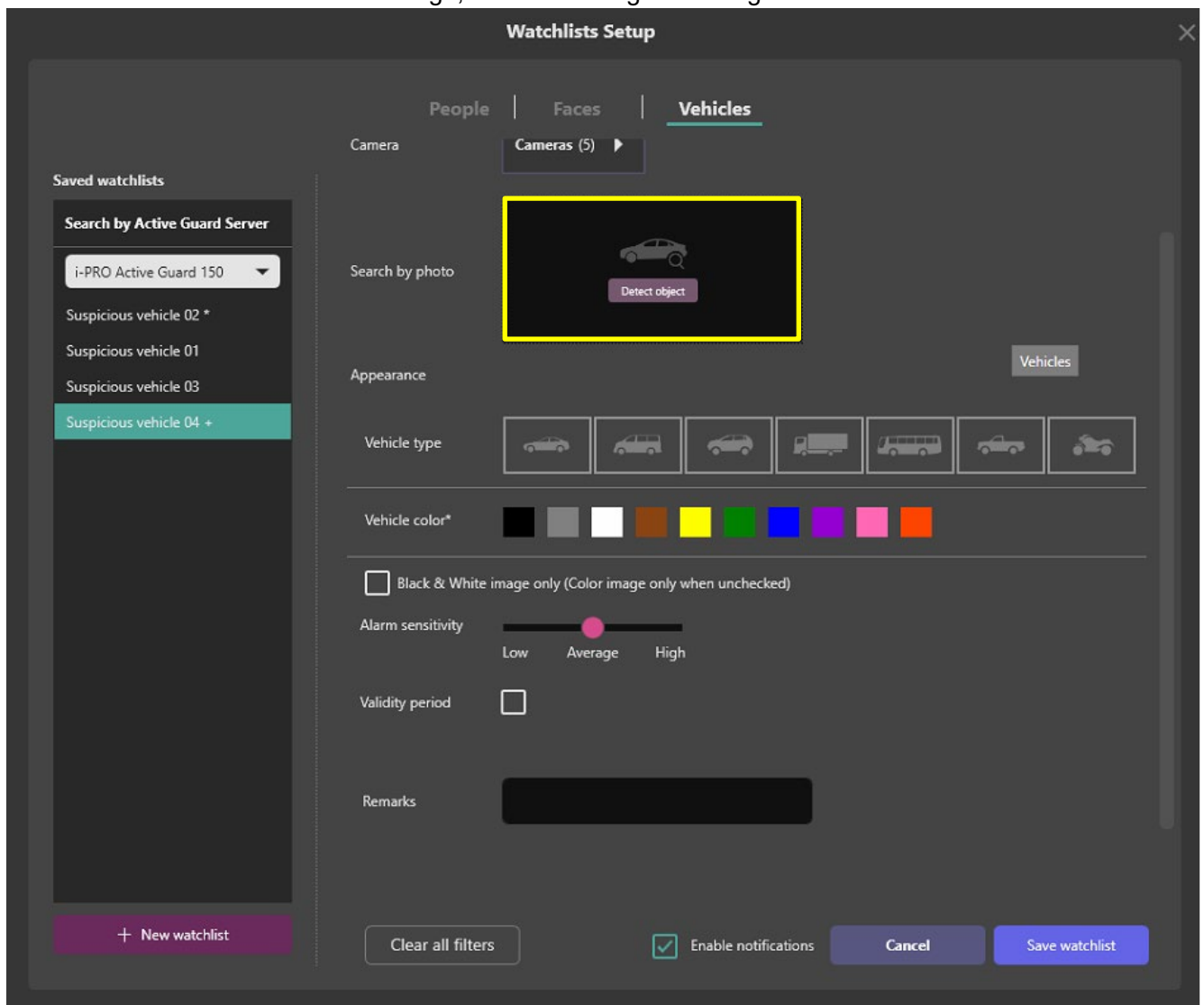
To add new item, click plus button then select appearance items.



- **Add 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.



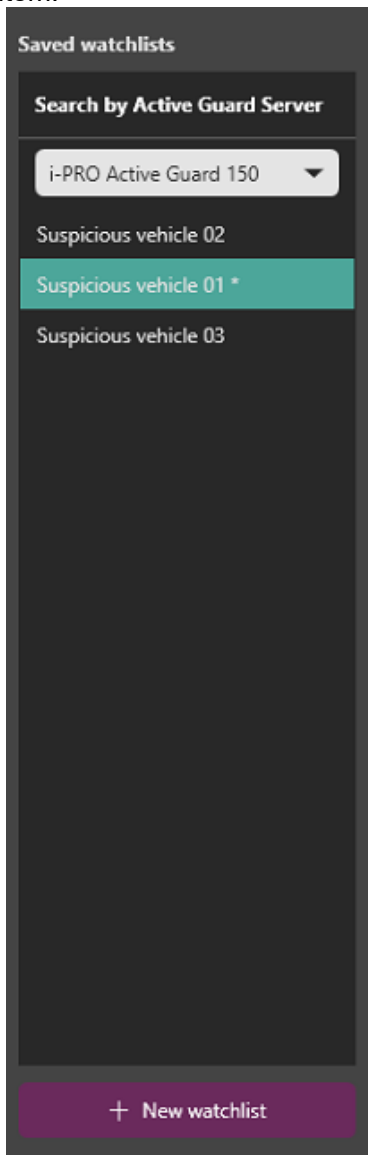
The following procedure is the same as when registering people watchlists, see 2.5.2.

**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 person's face 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.

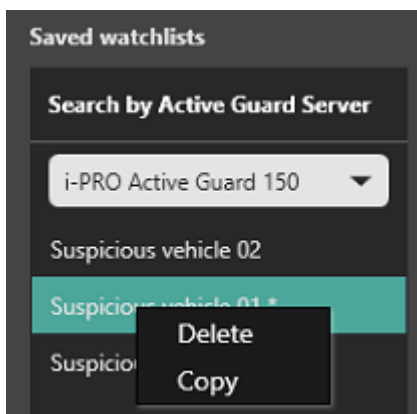
- **Edit Registration**

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



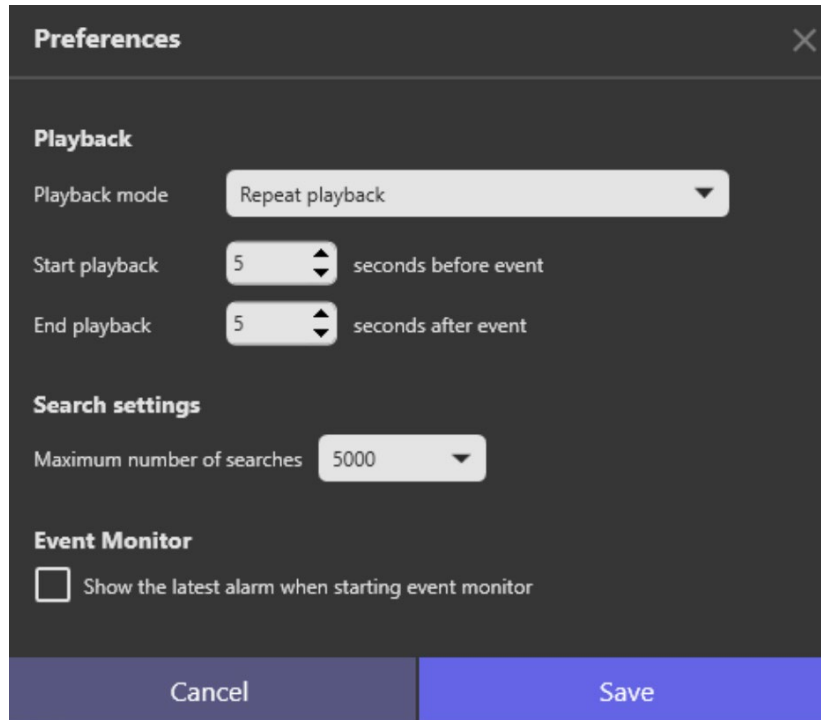
- **Delete Registration**

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



## 2.5.4. Preferences

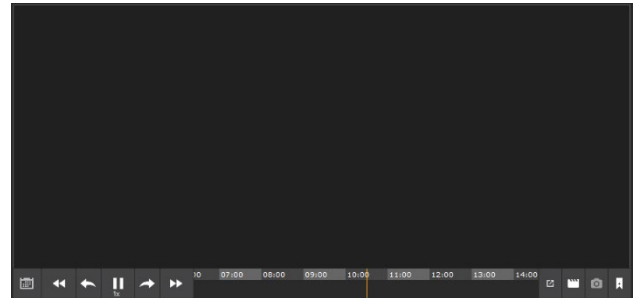
Preferences provides some option settings such as playback video mode and so on.



### A. Playback

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.

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

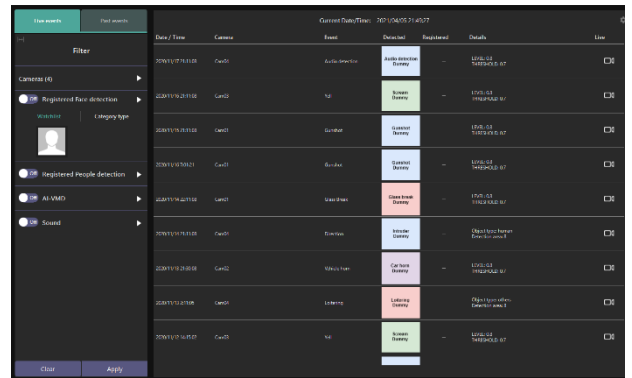


### B. Search setting

You can select maximum number of searches from 1000 to 5000.

### C. 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.

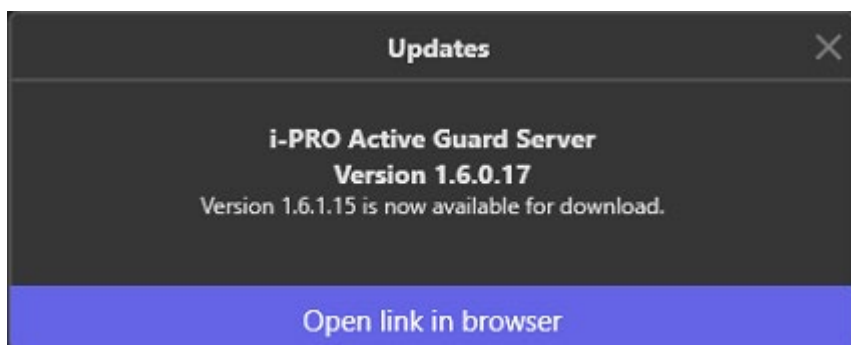
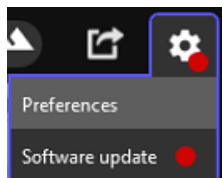


The screenshot displays the i-PRO Active Guard Event monitor interface. On the left, a 'Filter' sidebar is visible, showing options for 'Camera ID', 'Registered Face detection', 'Registered people detection', 'AI VMD', and 'Sound'. The main area shows a table of detected events with columns for Date/Time, Camera, Event, Detected, Registered, Details, and a 'Close' button. The 'Current Duty/Time' is shown as 2023/09/21 14:57:77.

Date/Time	Camera	Event	Detected	Registered	Details	Close
2023/09/21 14:10:08	Cam01	Active detection	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Face	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Unusual	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Abuse	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Open door	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Person	Missed detection	-	Object from Person Entry for Cam01	Close
2023/09/21 14:10:08	Cam01	Whistle	Missed detection	-	2023/09/21 14:10:08	Close
2023/09/21 14:10:08	Cam01	Language	Missed detection	-	Object from Language for Cam01	Close
2023/09/21 14:10:08	Cam01	Face	Missed detection	-	2023/09/21 14:10:08	Close

## 2.5.5. Software updates

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



---

**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".
Failed to register Face	If there are no margin around face image, it may increase encountering failure.
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.
False alarm of face matching.	Please adjust "Alarm threshold" according to your environment and registered face image.

## 4. Appendices

### 4.1. Specifications

Please refer to the following URL for details on specifications.

<https://bizpartner.panasonic.net/public/file/i-pro-ai-applications-spec-sheet-letter>

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[glog]

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