Web guidance

Remote Monitoring

Ver 1.0

This manual describes how to set up and to use Remote Monitoring.

2. Specification

2.1 Specifications/Operating Environment/Restrictions

Specification

Portal screen (browser)	Basic functions	1. Camera list: Up to 40 cameras (If there are more than 13 cameras or if you are using iPhone, iPad, Android, the JPEG will be displayed. At that time, the images will be updated every 30 seconds.) 2. Download 3. Snapshot 4. Brightness control 5. Audio Communication: Support AAC-LC 6. 200 shared users * There is no limit on the number of registered recorder units. * If you change the brightness of the camera, the brightness of the recorded video is rendered with the changed brightness.
	Record Playback	1. Number of cameras displayed on one screen: 1-4 images 2. Number of simultaneous connections to one camera Up to 2 3. Date/Time Search 4. Timeline * Audio (Audio output is available only in Chrome) * If the number of concurrent connections is exceeded, an error message is displayed.
	Image compression method	H.264/H.265

Specification *(continued)*

	Image size	Depends on recorder and camera settings Maximum resolution up to 8 megapixel resolution. * For images larger than Full HD(1920×1080), skipping is performed. * If the image resolution is larger than Full HD(1920×1080), it may not be displayed or may be displayed at lower resolutions depending on the networking environment. Check whether the network environment connecting the camera, recorder and the PC/mobile app are suitable by using "Network check" function.
	Frame rate	In the camera list screen, frame rate is automatically changed according to the number of cameras. Max. frame rates up to 30fps.

Specification *(continued)*

	Event notification	Dependent on the camera and recorder model. For details, see the user document of camera and recorder. 1. Detecting events from the camera Operation detection (VMD), sound detection, disturbance detection, contact (external input terminal) alarm, command alarm, SD memory card (remaining capacity notification, full capacity, etc.), auto-tracking alarm, human sensor alarm, etc. 2. Sensor information from the recorder Remaining space warning (HDD), falsification detection, max. number of records reached, HDD fetch warning, RAID recovery (start/complete), power failure (detection/recovery), video loss (occurrence, recovery), camerafailure (occurrence, recovery), etc. Notification/Search/Confirm Notification to the registered e-mail address or confirmation on the portal screen is possible. * Event history is saved for one month. * The thumbnail images at the time of the event are saved for 2 weeks (the duration of the recorded video depends on the recorder settings). * Up to the latest 1000 events are displayed. * The number of events displayed in the alarm notification is the last 10 events. * One of the JPEG resolutions must be set to a resolution of 640 x 640 in order to obtain a thumbnail when an alarm occurs when use 360 degree camera.
	Remote maintenance	1. Status of equipment information and communication connections 2. Connection History 3. Restart 4. Firmware Update * Firmware update is supported only for recorder. * Camera does not support remote firmware update

Operating Environment

Camera and recorder network environment	Network	Internet line with a global IP addressing * In environments such as corporate networks and multi-stage router configurations, access may be restricted or video drawing may be delayed. * IPv6 is not supported.
	Bandwidth	The bandwidth required varies depending on the usage method. If you are using a portal site, we recommend using an always-on optical line with a bandwidth of at least 1.0Mbps per camera (for Full HD resolution).
	Network requirements	The connection requirements for Remote Monitoring are as follows. * Must be able to connect to the Internet. * HTTPS 443 port must be open. * UDP 1024-65535 port must be open. * Assign a fixed IP address for camera equipment. In addition, individual support may be required for proxy connections, etc. Due to the specifications, depending on the network environment, the connection to Remote Monitoring service may be disconnected if the connection exceeds 5 minutes.

Operating Environment *(continued)*

Browsing terminal	Browsing in the Browser	1. OS:Windows®10 or later, Android 10 or later, iPadOS/iOS15 or later 2. Browser ・Microsoft Edge® ・Google Chrome™ ＊ Safari for iPadOS/iOS 3. Memory For smooth video rendering, it is recommended that there is at least 8GB free memory. ＊ This is the recommended memory for smooth video rendering in PC. ＊ If the image rendering on your smartphone or tablet does not look smooth, check the trouble shooting. 4. CPU Intel® Core i5-7500 or more, Intel® Core i7-7700 or more Core i7 Recommendations: When using a Fisheye camera other than 5M. And for resolutions higher than 5M, video or audio delay may occur(3-5 secs). If the video or audio delay is large, turn off the dewarp and display it.
	Browsing in the Mobile	You can check the video using the i-PRO Mobile APP.

＊ Please prepare the environment to connect to the Internet (a separate provider contract, modem router, and other devices are required). It is recommended to use always-connected optical lines. There is no limitation to the provider.

＊ If the video is not rendered smoothly, check 7. Trouble shooting.

＊ Microsoft, Windows, Microsoft Edge is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

＊ Google Chrome, Android is a trademark of Google LLC.

＊ Refer to the following URL about mobile application (i-PRO Mobile APP).

i-PRO Mobile APP for Android

i-PRO Mobile APP for iOS

2.2 Supported camera information

Supported cameras are as follows. Please refer to the manual of target NU series recorder.
Products (i-pro.com)

2.3 Restrictions about the recorder

When the recorder is registered in Remote Monitoring, the following restrictions will be applied.

- Only “1-screen live sequence” and “Switch by alarm terminal input” are available for operation mode of the sub monitor.
- The signal format of HDMI output will be fixed to 1080p.
- No thumbnail will be displayed on the timeline of the main monitor.

* Time (seconds) differs depending on the refresh interval setting of the camera (0.2 – 5 seconds). In the recorder, the refresh interval setting of the camera is set to 1 second at the camera registration. Refer to the operating instructions of the camera for information about the refresh interval setting.

3. Introduction Guide

3.1 Introduction

3.1.1 STEP1 Create a new account

Your account will be newly registered.

The service is tied to this account, so it is very important.

Describes the rough flow.

※ Refer to 5.1.1 Register a new user for details.

1. You can accept "no-reply@verificationemail.com" and "no-reply@rms.i-pro.com" mail.
2. Create a new account from the remote monitoring website https://rms.i-pro.com/.
3. You will receive a temporary registration email.
4. Registering from e-mail.

This account and password will continue to be used as "Administrator Information".

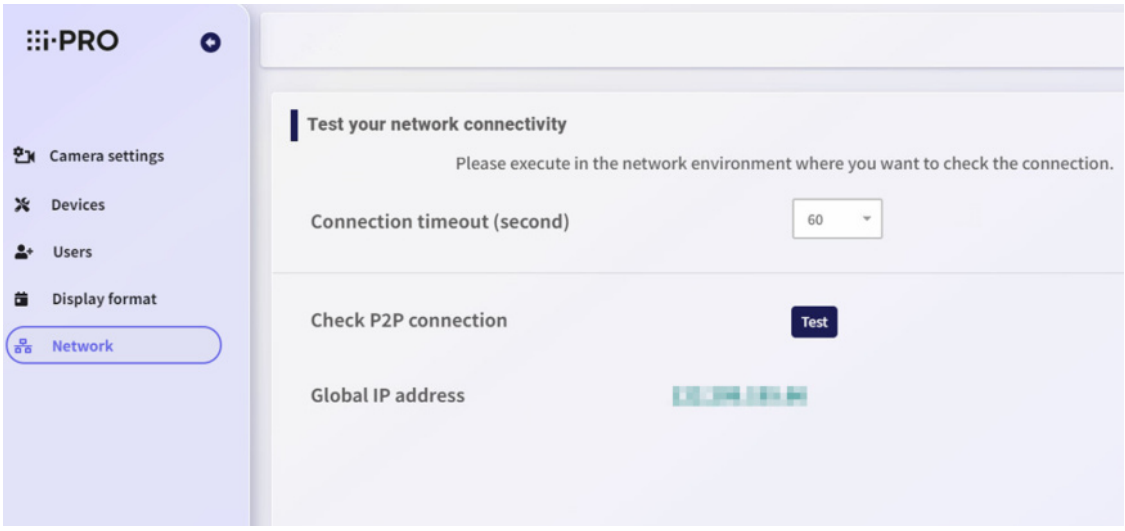
Errors and alarms are also notified to this e-mail address.

3.1.2 STEP2 Check network environment

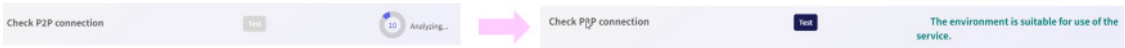
You can check the network environment where the device is installed.

1. In your browser, visit the login site (https://rms.i-pro.com) and log in.
2. Click the Setting button.
3. Click the Network button.

   → The network environment check screen appears on the portal screen, and the global IP of the current environment is displayed.



4. Click the [Test] button.
   → The "Checking" message is displayed. After a while, the check result of the network environment is displayed next to the [Test] button.



The displayed check results are as follows.

(a) Environments suitable for using services

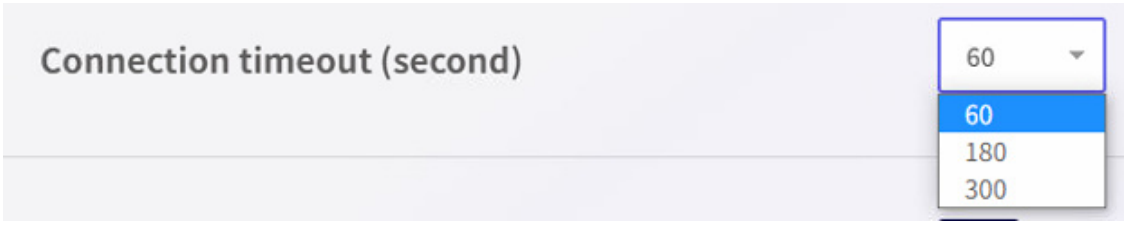
Allows you to connect to the device in the current network environment.

(b) This environment is not suitable for using services.

When the device is used in the current network environment, the video is not displayed.

(c) Cannot connect

Cannot connect to the device in the current network environment.
If there is a possibility of a timeout during connection confirmation, set the connection check timeout period at the top of the screen longer and check again.

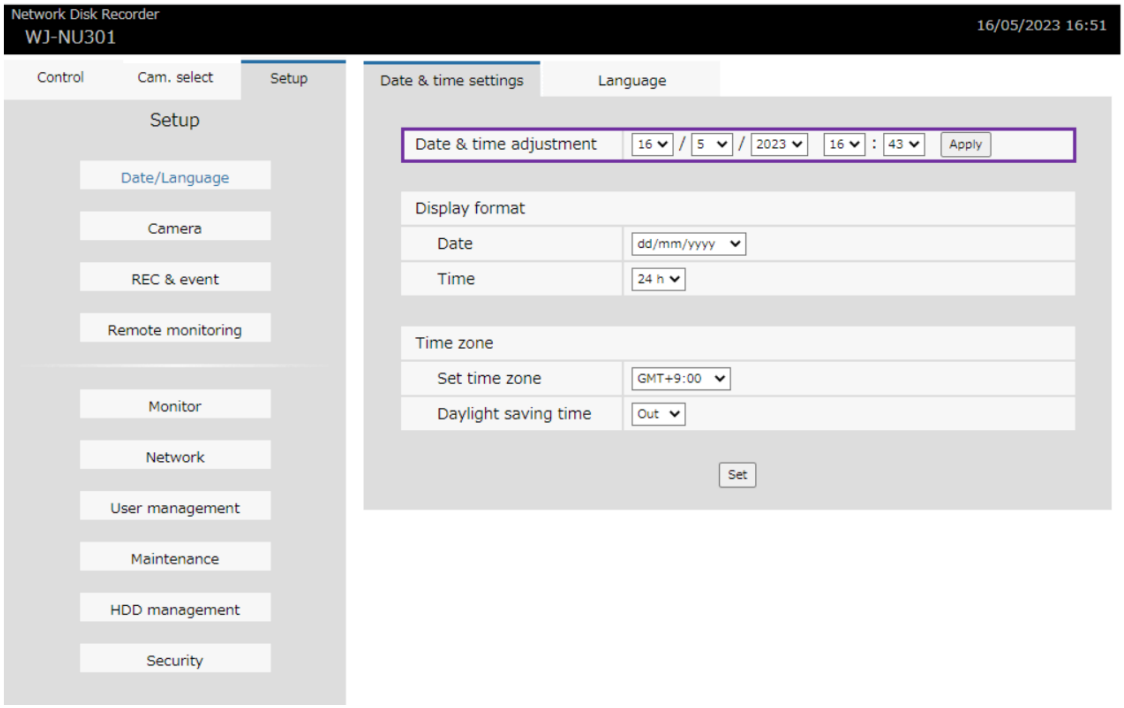


3.1.3 STEP3 Recorder settings

3.1.3.1 Setting procedure from Recorder Browser

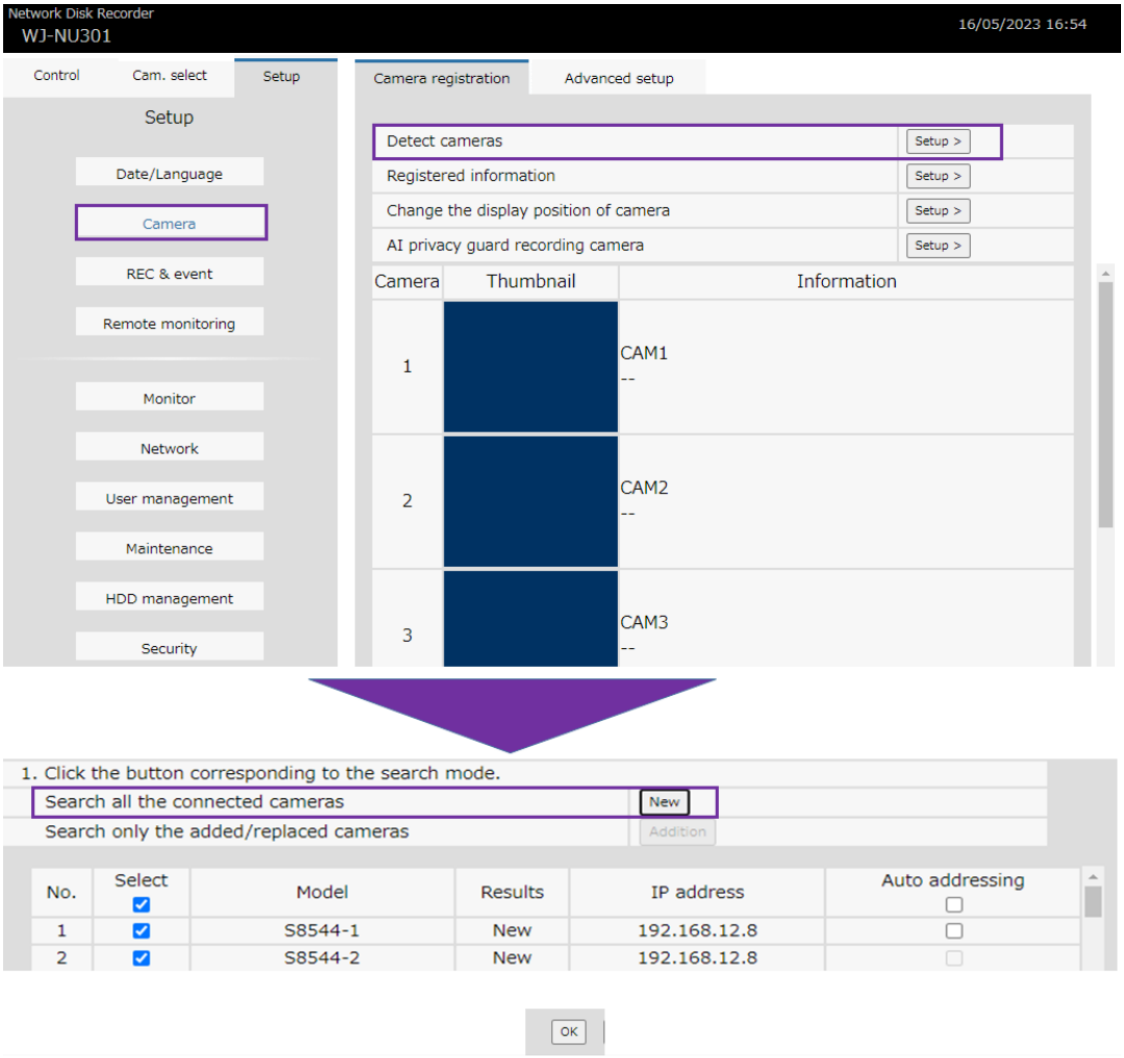
1. Register the camera to the recorder.

・ Date/Language > Set time by Date & time adjustment



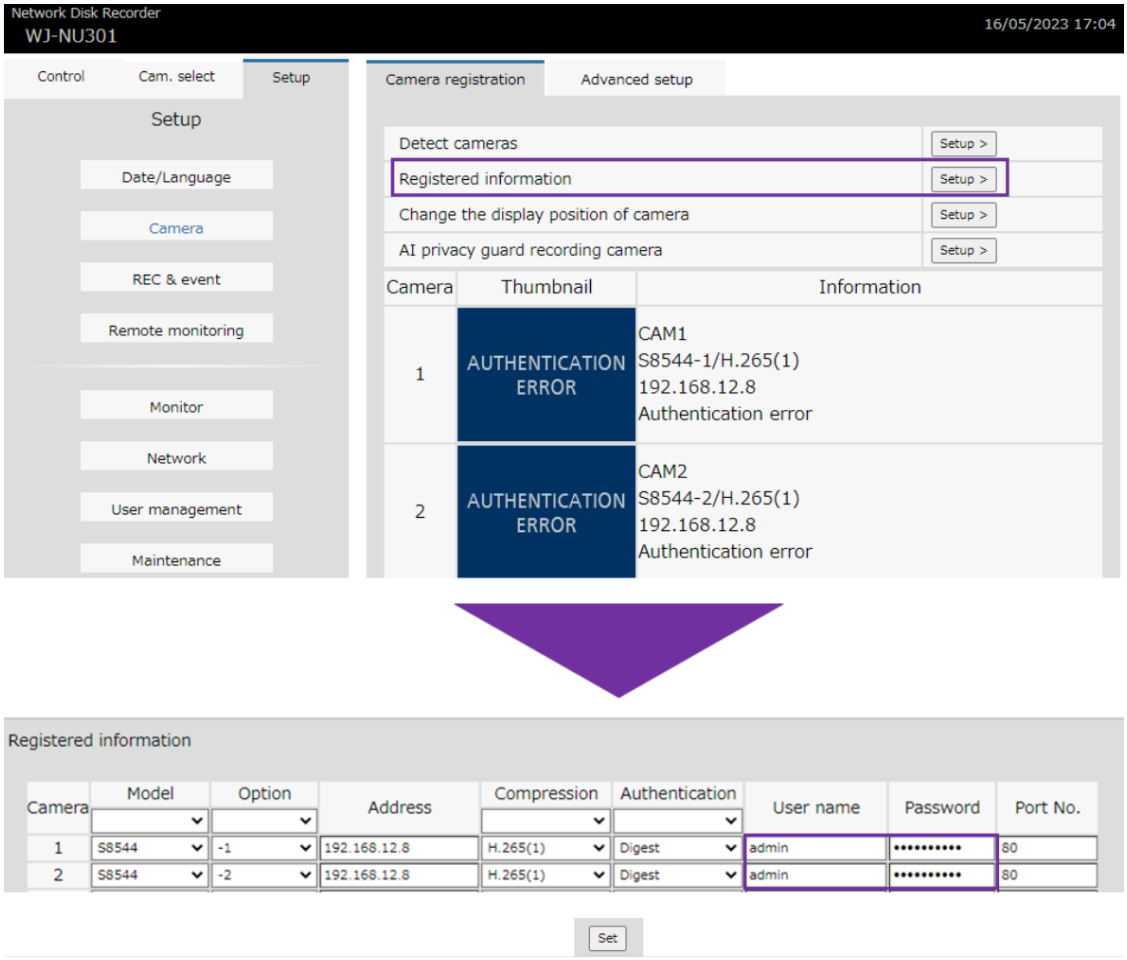
・ Camera > Camera registration tab > Detect cameras > Setup

When the camera is detected by clicking [New] button.



・ Click Camera > Camera registration tab > Registered information.

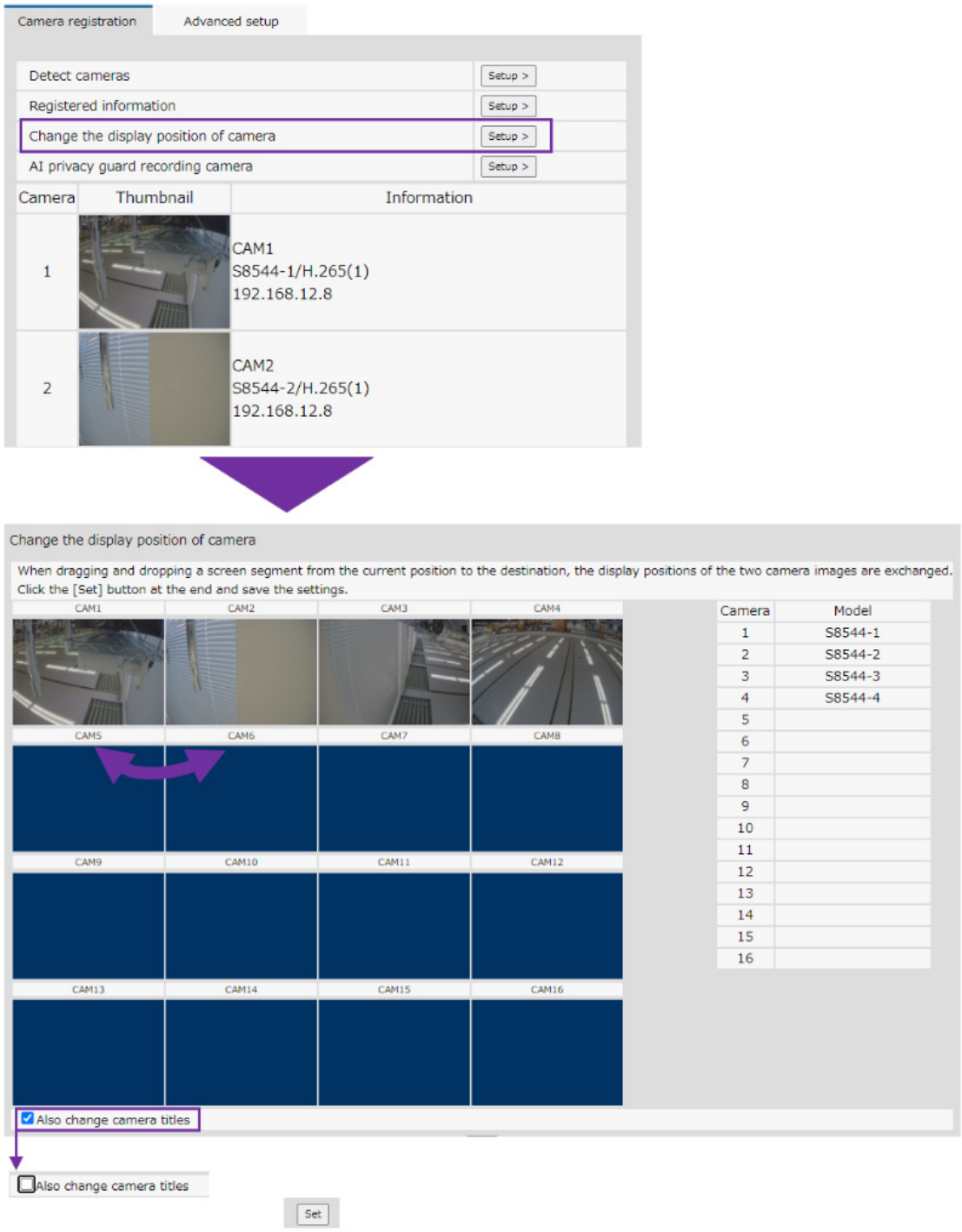
Enter the "User name" and "Password" set for the camera from the popup screen and save settings.



・ Camera > Camera registration tab > Change the display position of camera > Setup

Uncheck "Also change camera titles" from the popup screen.

If necessary, change the camera position to the desired position and click the [Set] button.

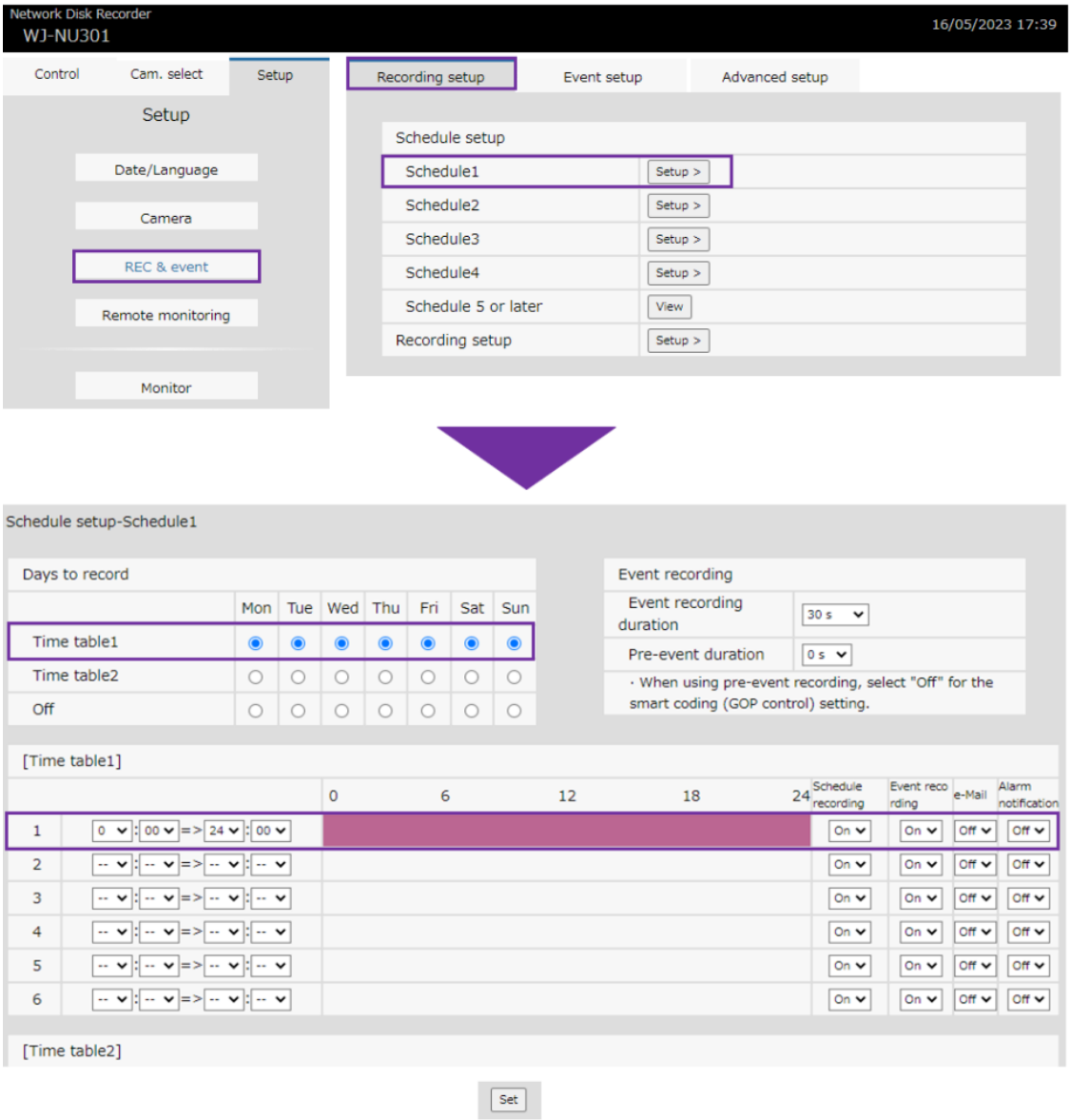


The camera registration is complete.

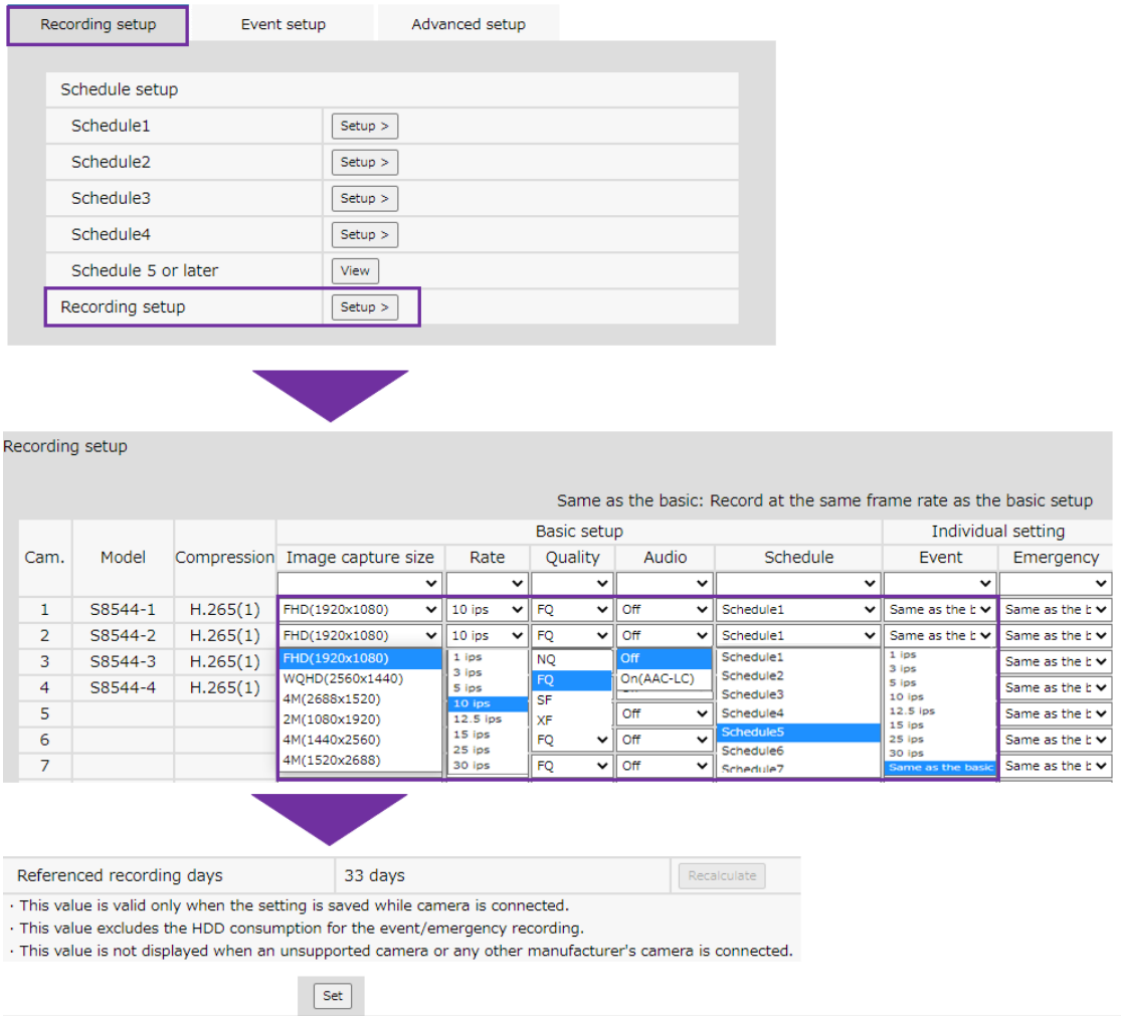
2. Set the recording

- Set a schedule when you want to extend the recording period by only recording events at night or on holidays. You can increase the table as needed. The following is a sample of 24h sequential recording (defaults):

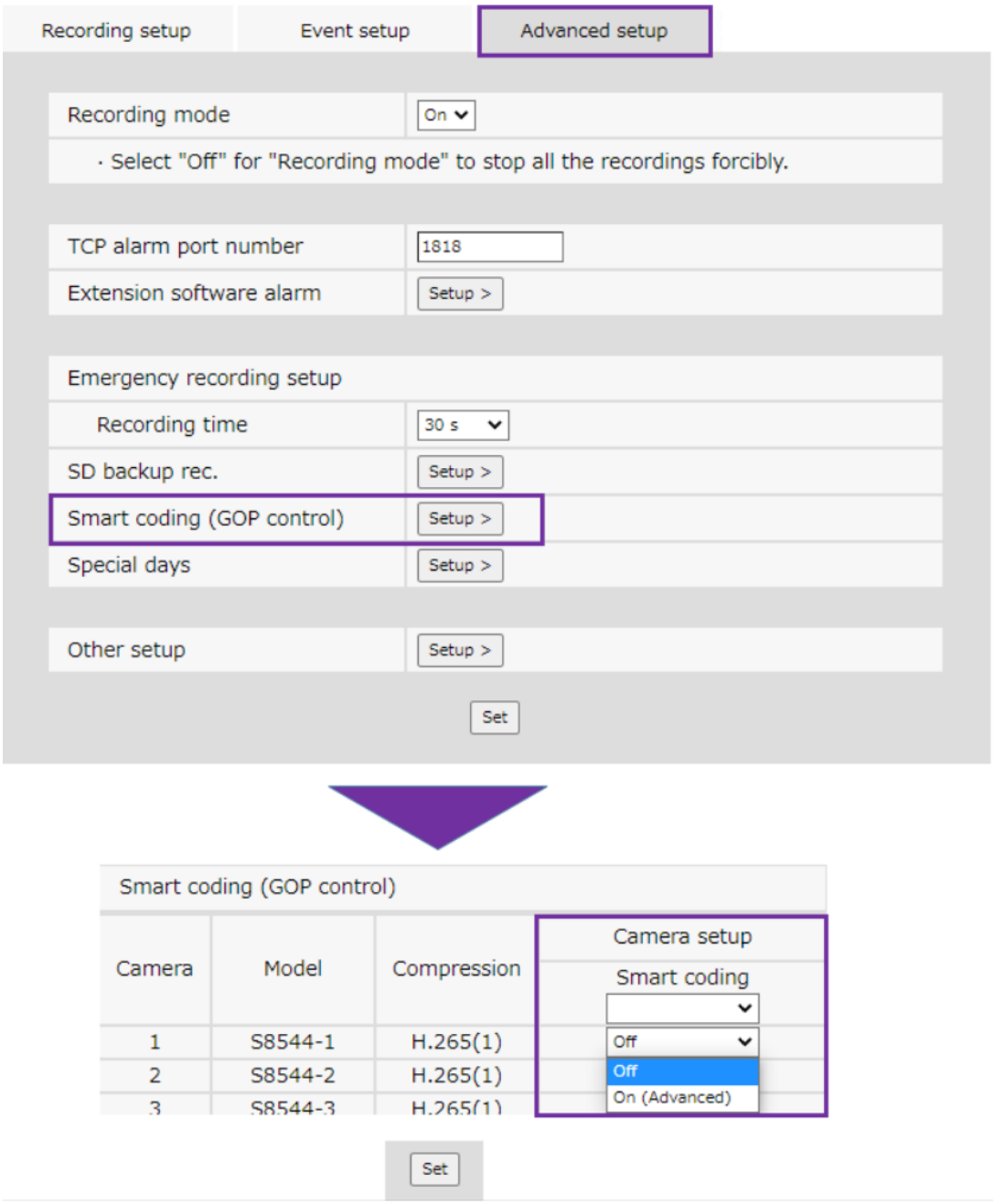
- REC & event > Recording setup > Schedule1, click [Setup] button>. Click [Set] button after making the following settings as necessary from the popup screen.
- REC & event > Recording setup > Recording setup, click [Setup] button.



Confirm the estimated recording period after setting the following as necessary from the popup screen and save the setting.



- If you want to extend the recording period further, consider smart coding.
- REC & event > Advanced setup tab > Smart Coding (GOP Control) [Setup]
  Select On(Advanced) and save settings



Recording settings are now complete.

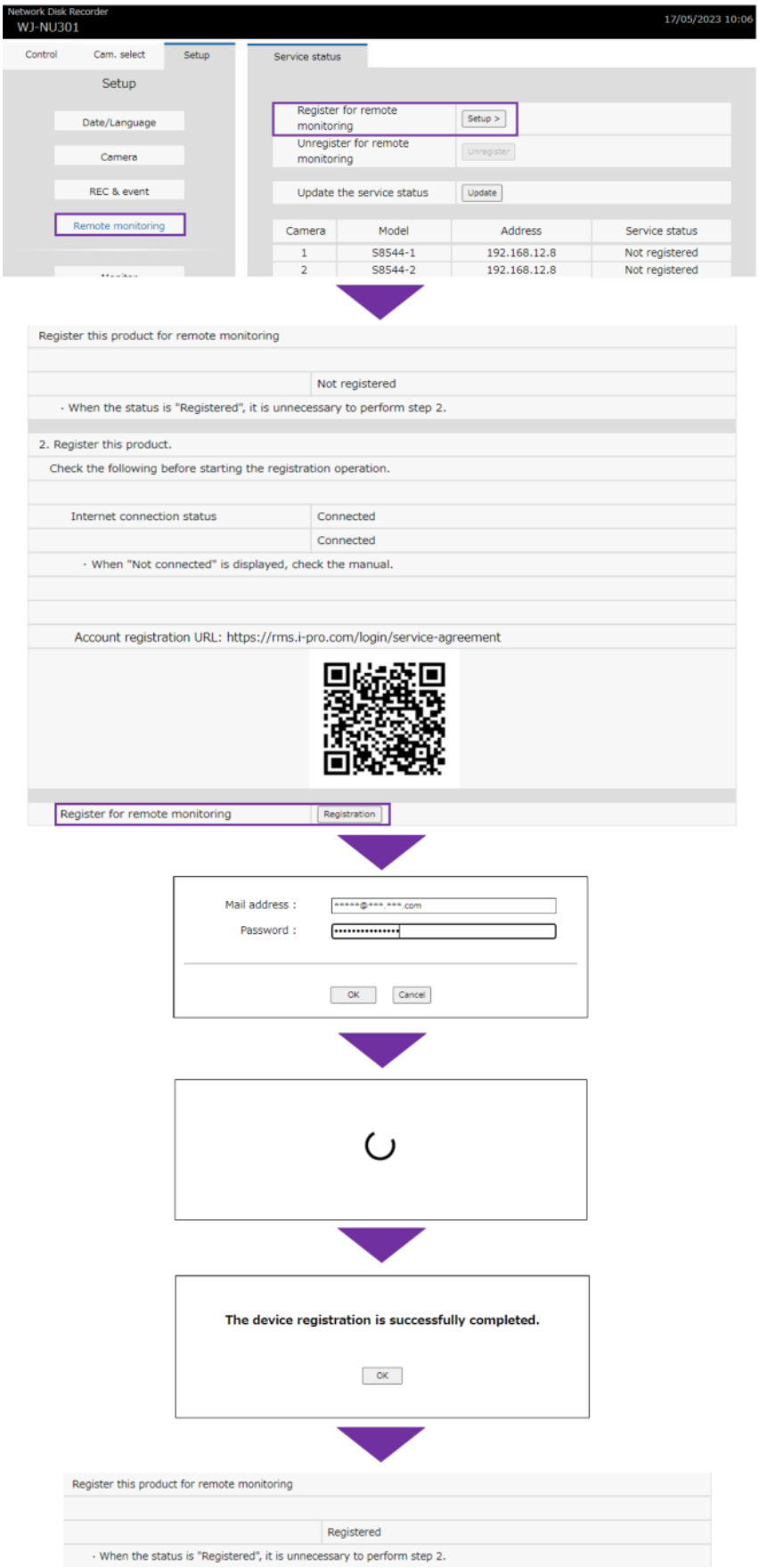
3. Registers for Remote Monitoring service

・ Enter the email address and password used when registering the account, and then click the [OK] button.

The registration is completed in about one minute, and the message ″The device registration is successfully completed″ is displayed.

If ″The user ID or password does not match″ is displayed, check the user and password again.

If the Error window appears, contact your dealer.


Network Disk Recorder
WJ-NU301
17/05/2023 10:06
Control
Cam. select
Setup
Service status
Setup
Date/Language
Camera
REC & event
Remote monitoring
Register for remote monitoring
Setup >
Unregister for remote monitoring
Unregister
Update the service status
Update
Camera
Model
Address
Service status
1
S8544-1
192.168.12.8
Not registered
2
S8544-2
192.168.12.8
Not registered
Register this product for remote monitoring
Not registered
· When the status is "Registered", it is unnecessary to perform step 2.
2. Register this product.
Check the following before starting the registration operation.
Internet connection status
Connected
Connected
· When "Not connected" is displayed, check the manual.
Account registration URL: https://rms.i-pro.com/login/service-agreement
Register for remote monitoring
Registration
Mail address :
Password :
OK
Cancel
The device registration is successfully completed.
OK
Register this product for remote monitoring
Registered
· When the status is "Registered", it is unnecessary to perform step 2.

Registration for Remote Monitoring service are now complete.

3.1.4 STEP4 Check live and recorded images

Check that the live and recorded images of the installed camera are visible.

This can be confirmed by the procedure in 5. User portal screen operation of this manual.

3.1.5 STEP5 i-PRO Mobible APP Settings

3.1.5.1 Smartphone application installation

Install the i-PRO Mobile APP on your mobile.

Install the iPhone from the App Store and the Android from the Google Play.

※ More than the corresponding OS:iOS 11.0, more than the Android 7.0

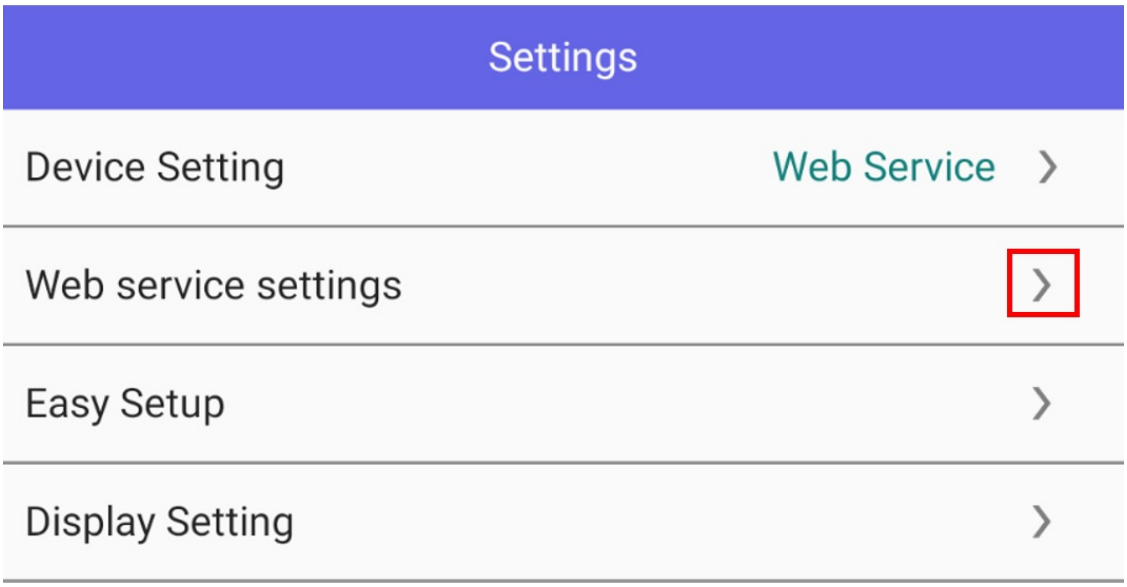
iOS

Android

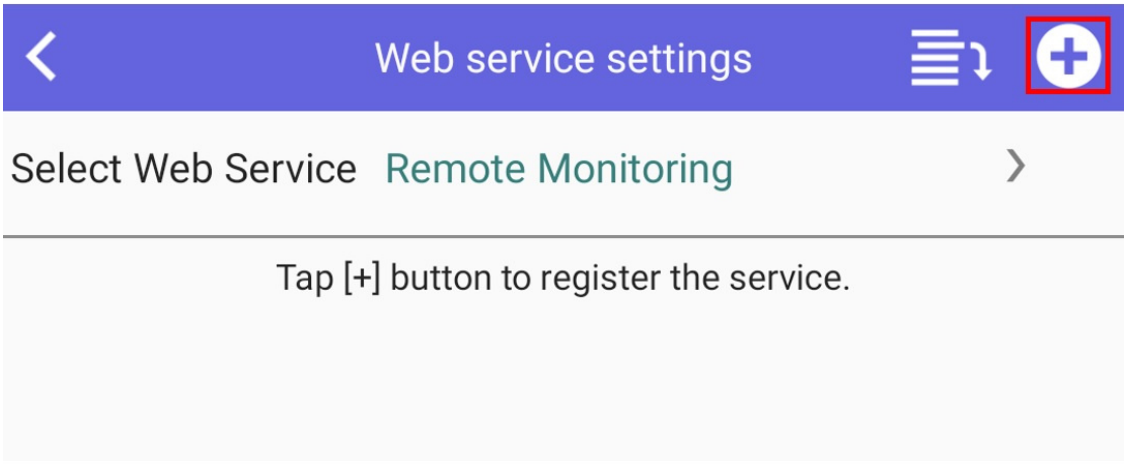
3.1.5.2 Registering WEB Services for i-PRO Mobile APP

On your phone, launch the i-PRO Mobile APP (below).

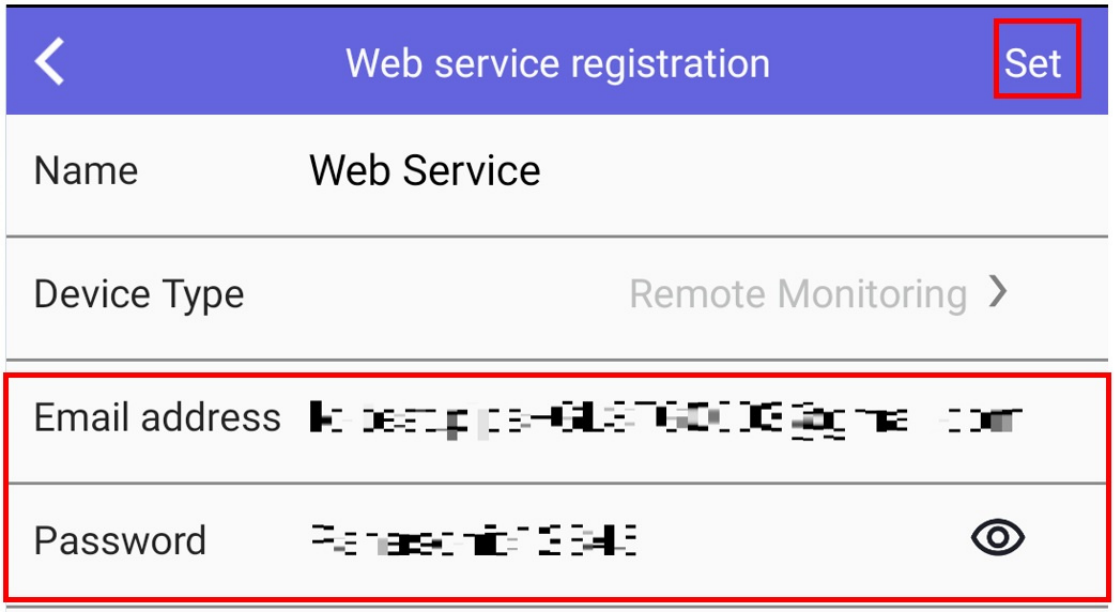
When the i-PRO Mobile APP starts up, select "Web Service Setting" from the setting menu.



In the Web service settings window, touch "+" in the upper-right corner to open the Web service registration window.

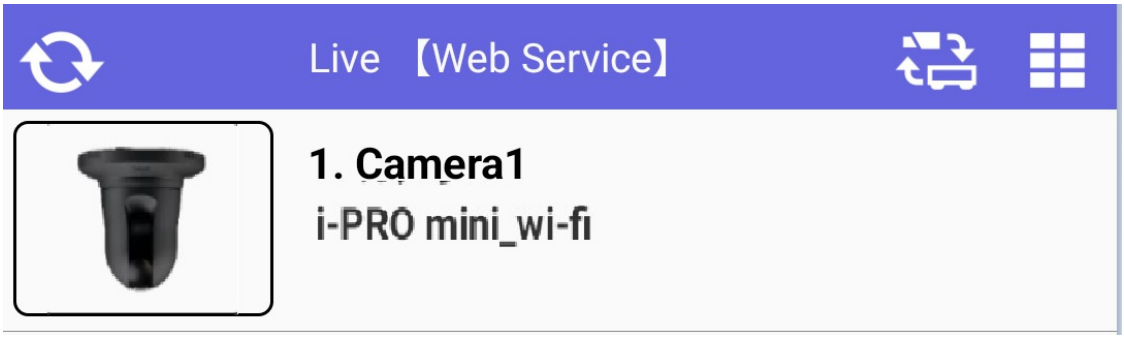


Enter the name, account (e-mail address registered when the account was created), and password in the Web service registration window. When the message "Registered is completed" appears, tap "OK".

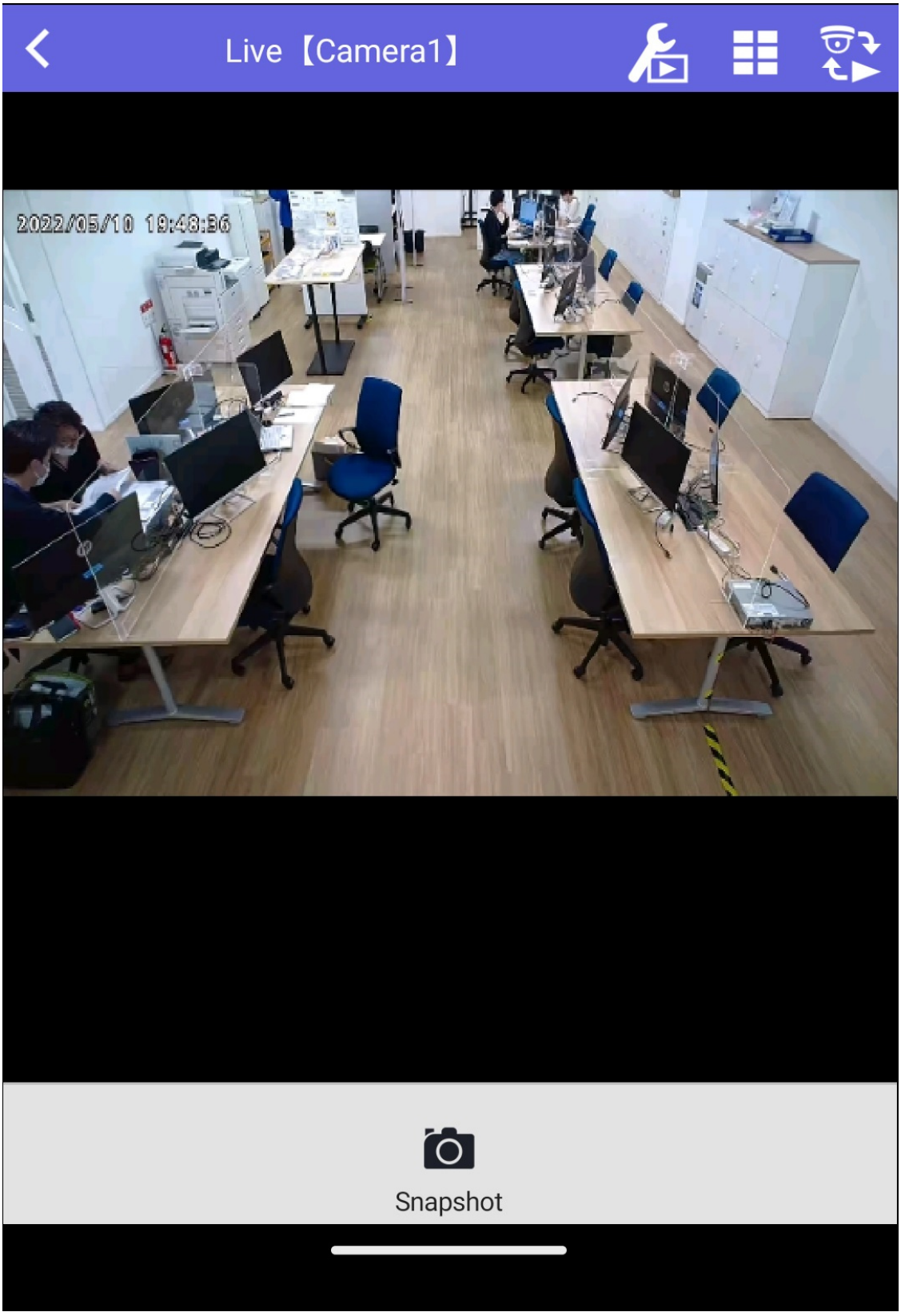


3.1.5.3 Checking the image on the camera/recorder

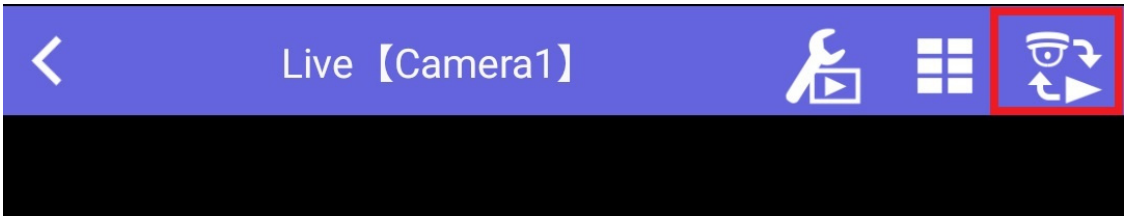
In the Smartphone application (i-PRO Mobile APP), select the registered name ("Web Service" in the example above). Each installed camera is listed as a still image.



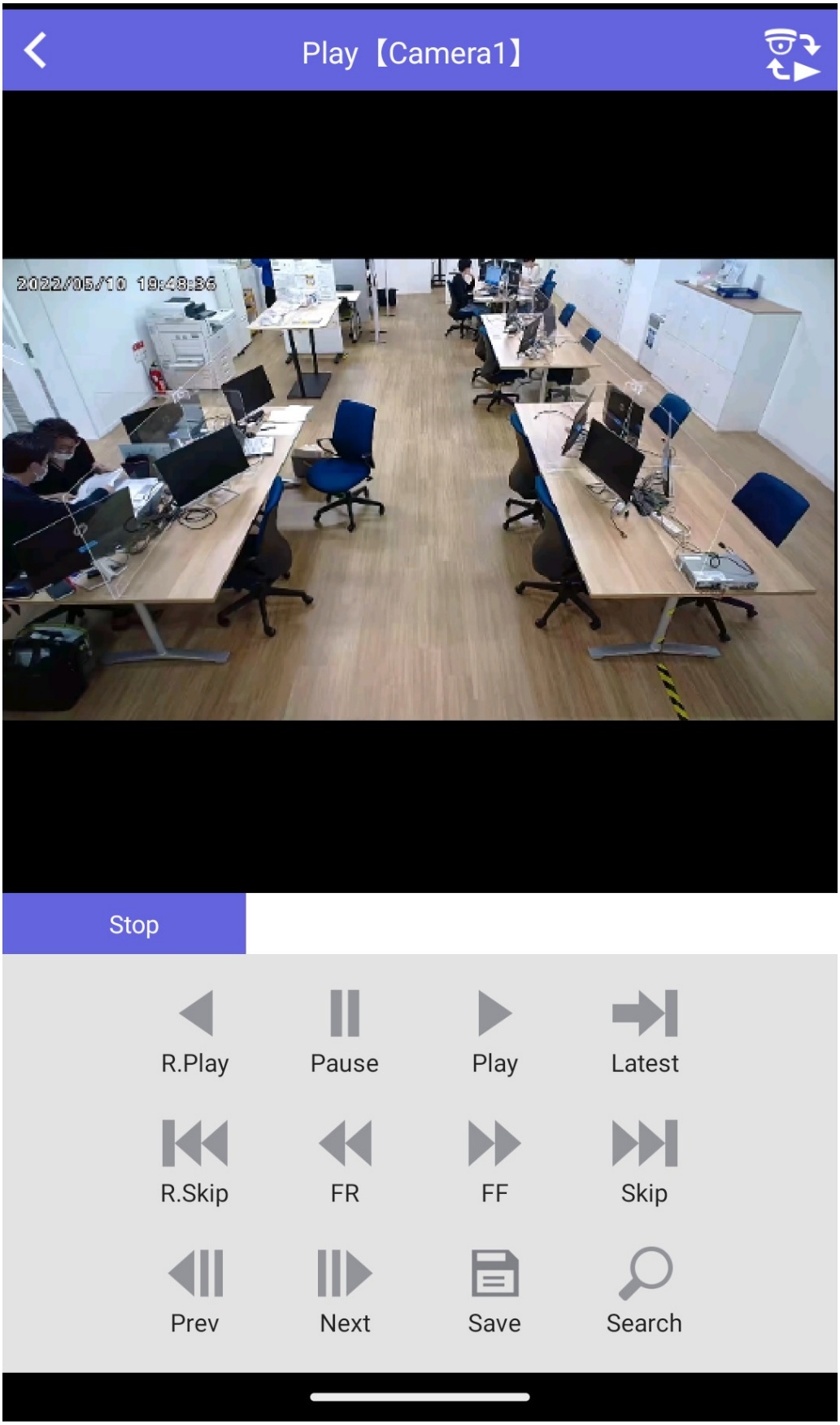
Tap the camera to display the live image of the selected camera.



Tap the Live/Play button at the top right of the screen to switch to playback mode.



In the playback screen, you can perform various playback operations such as high-speed playback, reverse playback, and skip.

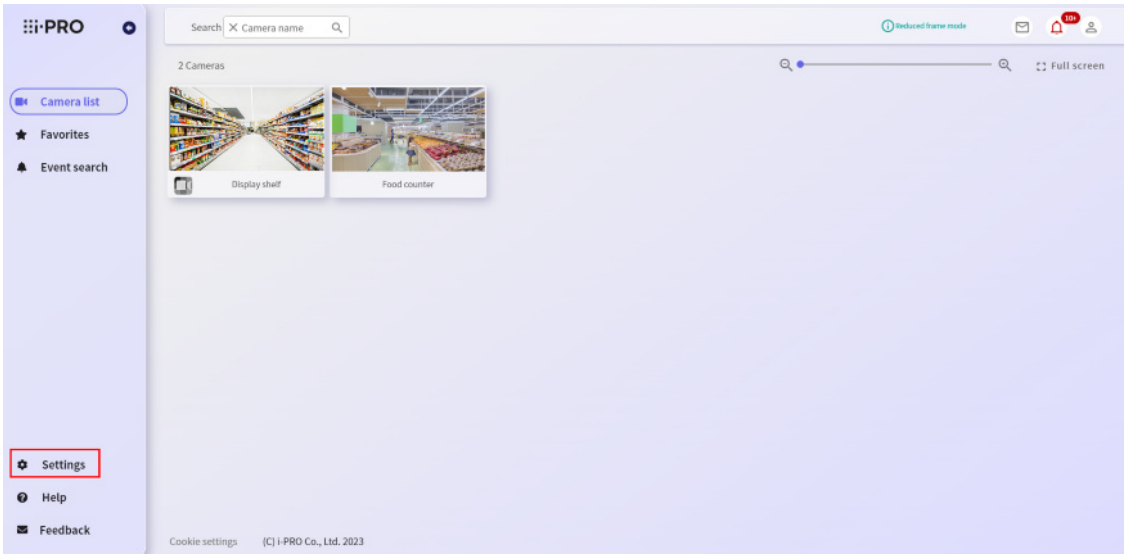

Play【Camera1】
2022/05/10 19:48:36
Stop
R.Play
Pause
Play
Latest
R.Skip
FR
FF
Skip
Prev
Next
Save
Search

4. Setting

4.1 Camera settings

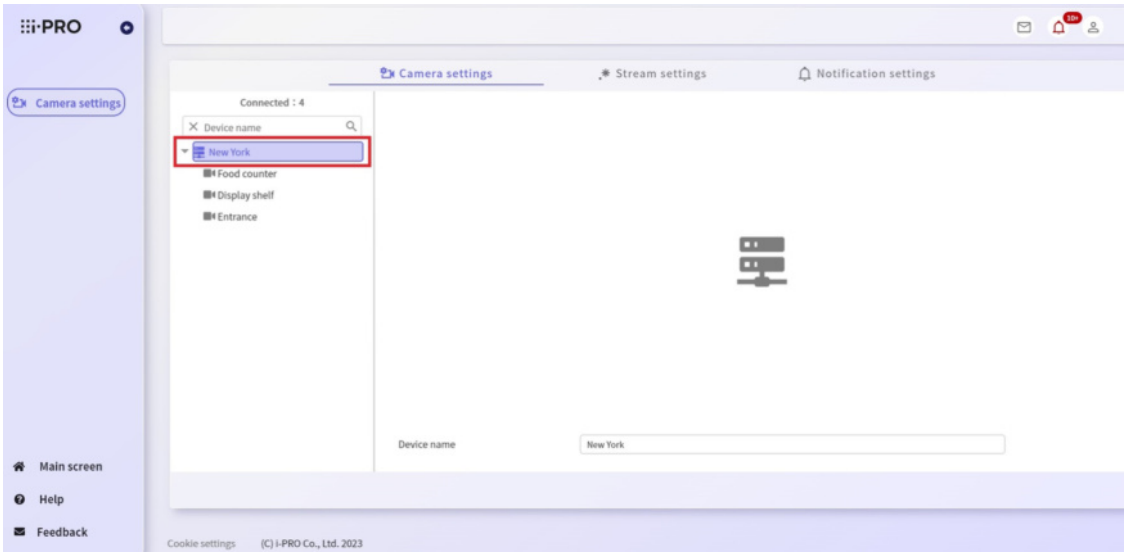
4.1.1 Set the name of the camera and recorder.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.



3. All devices registered to the service are displayed on the left side of the screen.

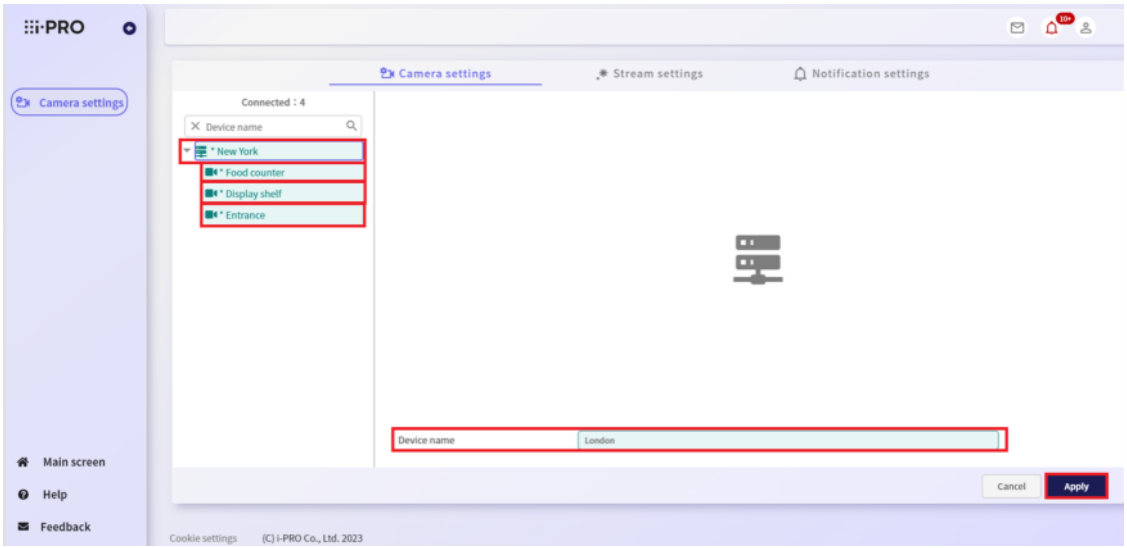
When changing the camera name, the list of cameras is displayed by clicking on the recorder.



4. Change the text box of the device name to the camera or recorder name to be set, and click the [Apply] button to apply it.

* Multiple device names can be changed at once.
* The display of the device being changed is shown as below.

* After the device is registered, the device name is displayed as follows.
  For recorder: Only serial number is displayed.
  For cameras via recorder: CAM + 3-digit camera number
* Camera names can be up to 20 characters.



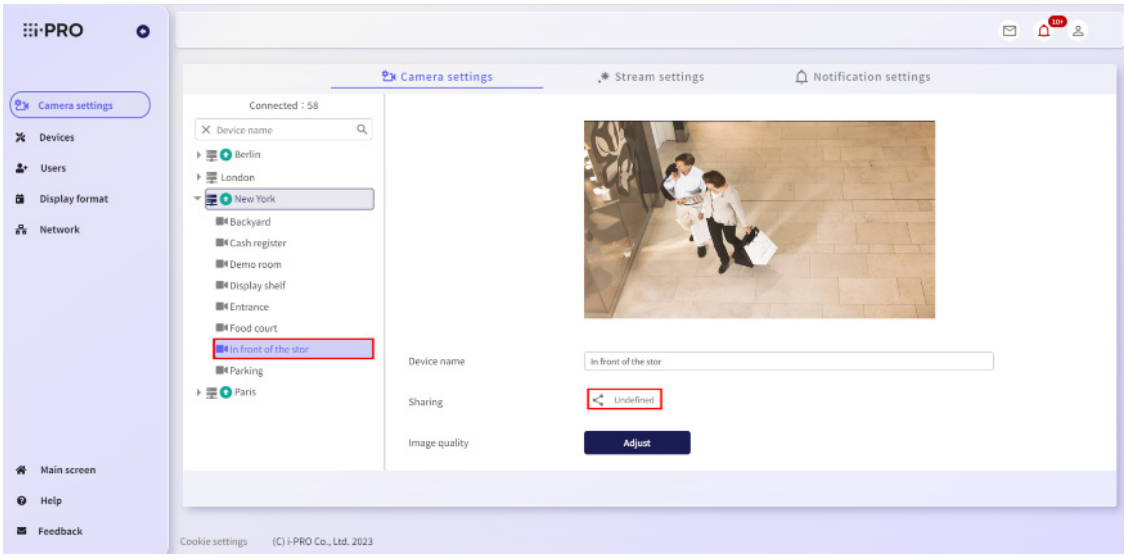
4.1.2 Set up shared users

Up to 10 people can share camera images.

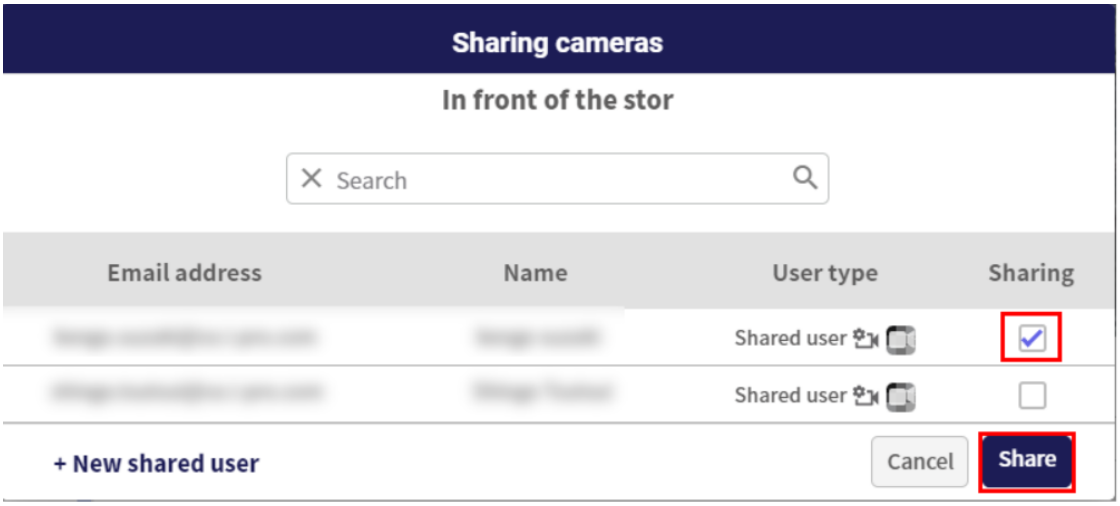
The e-mail will be sent to the person who is registered as a shared user, so please complete the registration procedure.

4.1.2.1 To share a single camera

1. Click the [Settings] button in the browser.
2. Select the camera you want to share from the device tree on the right, and click the [Sharing] button.



3. The Share Settings screen is displayed.

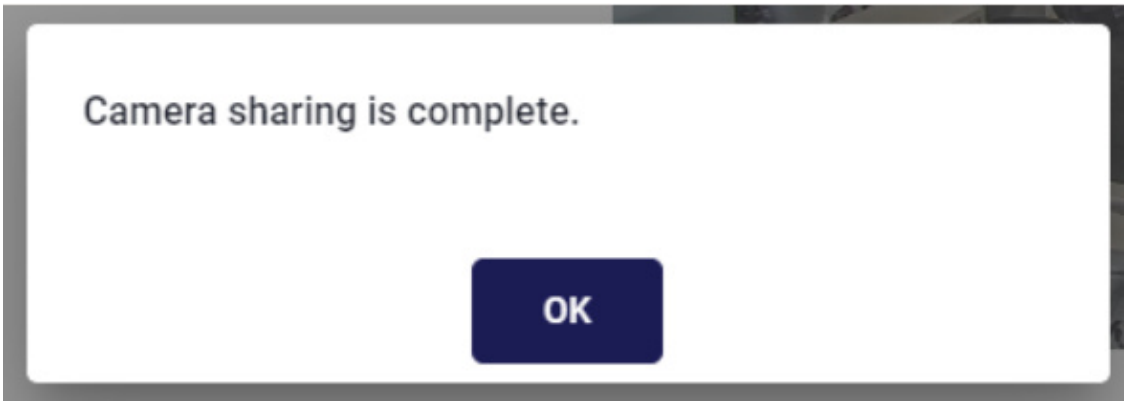


Select the [Sharing] check box of the user you want to share and click the [Share] button.

* For shared users with device setting privileges, the camera setting icon is displayed in the user type field.

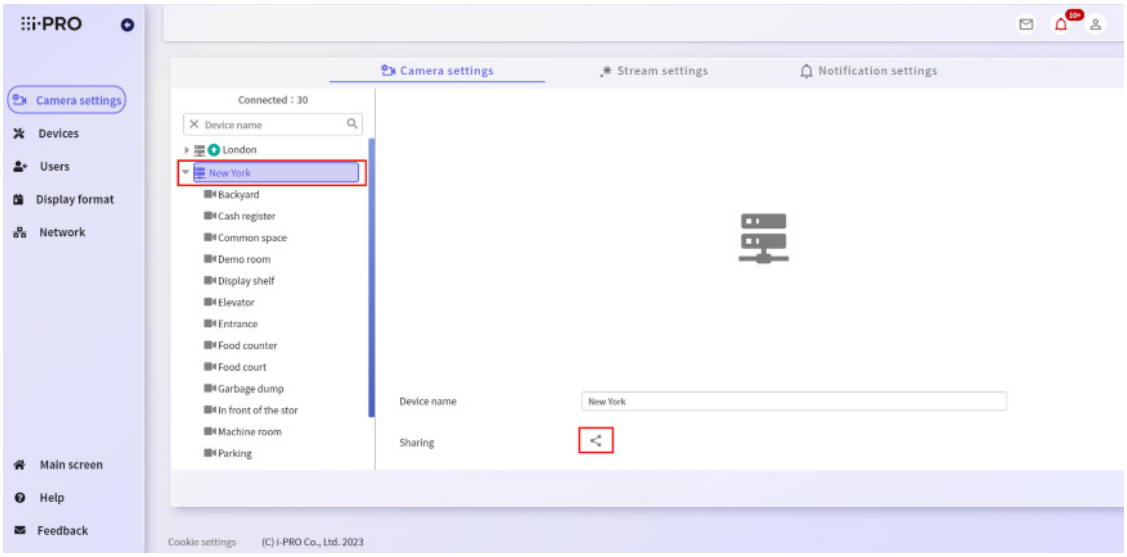
* For shared users with AI Privacy Guard settings, the Privacy Guard icon is displayed in the User type field.

4. The message "Camera sharing is complete" is displayed, then the settings are completed.

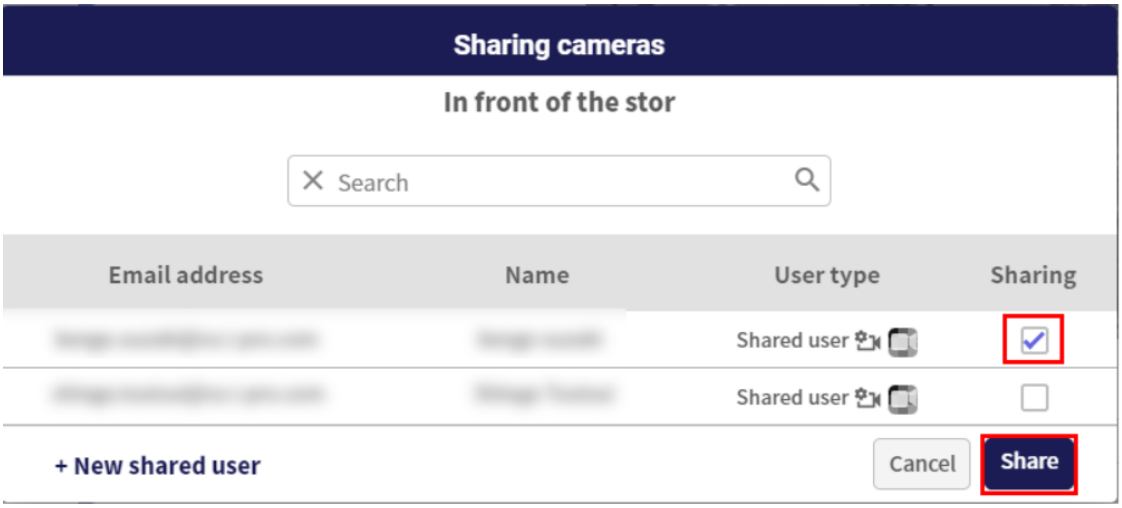


4.1.2.2 To share all cameras linked to a recorder

1. Click the [Settings] button in the browser.
2. Select the recorder you want to share from the device tree on the right, and click the [Sharing] button (the list of share destinations is not displayed).



3. The Share Settings screen is displayed.



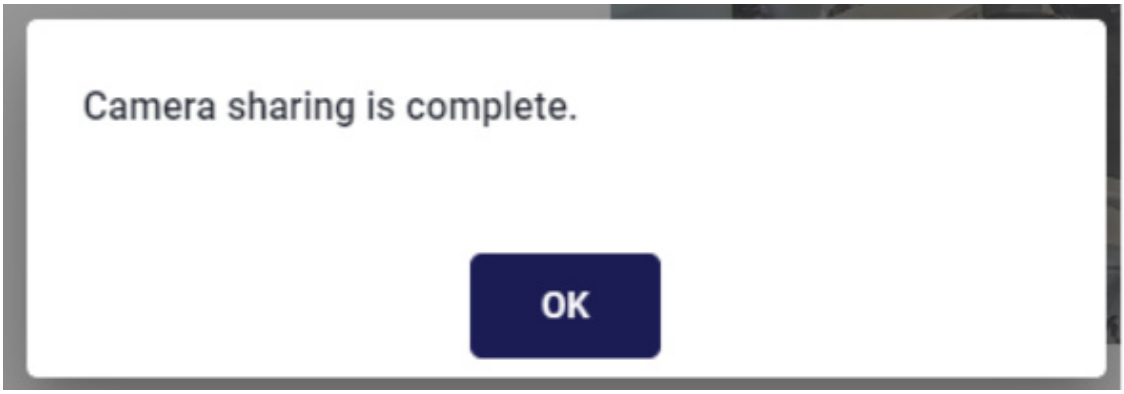
If some cameras are shared, the [Sharing] check box is checked. Select the [Sharing] check box of the user you want to share and click the [Share] button.

Only some cameras cannot be shared on the shared settings screen of the recorder. When sharing a single camera, read 4.1.2.1 To share a single camera in the previous section.

* For shared users with device setting privileges, the camera setting icon is displayed in the user type field.

* For shared users with AI Privacy Guard set, the Privacy Guard icon is displayed in the User type field.

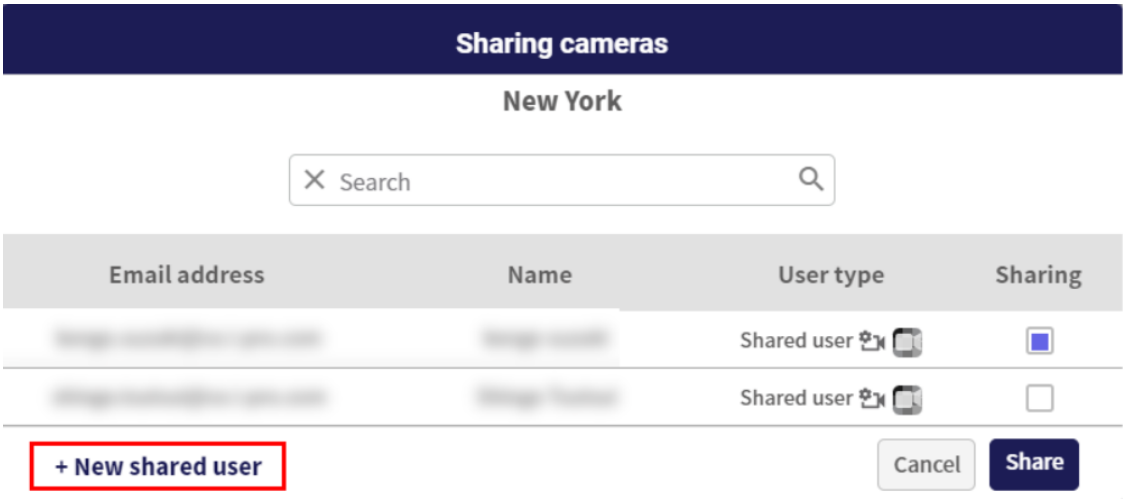
4. The message "Camera sharing is complete" is displayed, and the settings are completed.



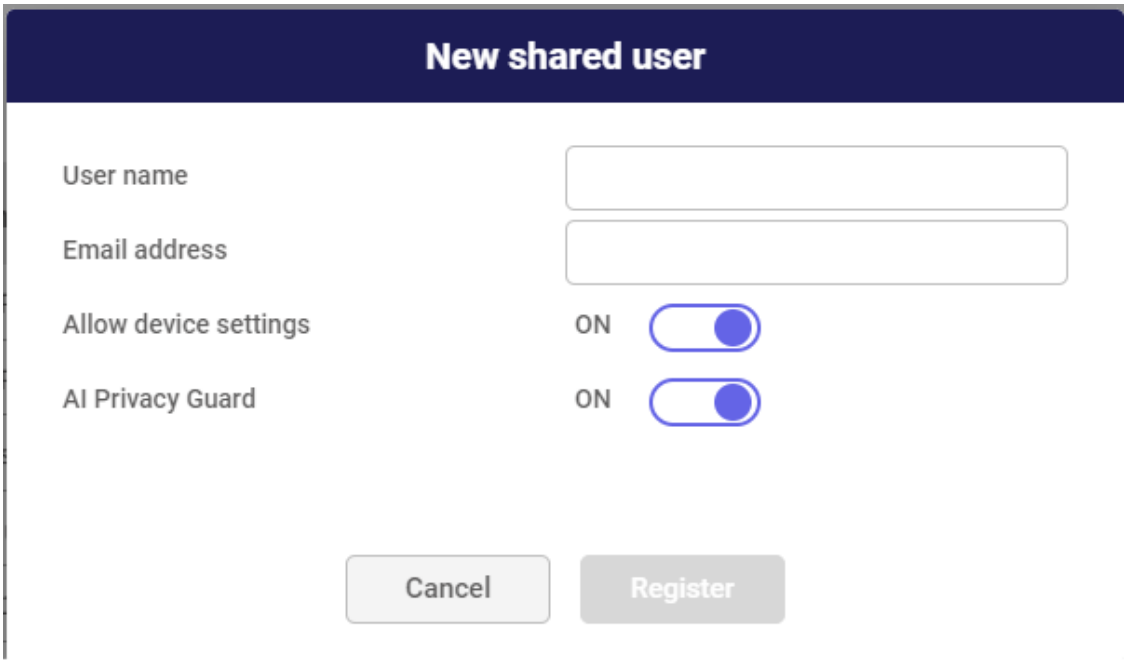
4.1.2.3 To create a shared user

You can create a shared user on both the recorder and camera sharing settings screens.

1. Click the [+ New shared user] button on the share setting screen.



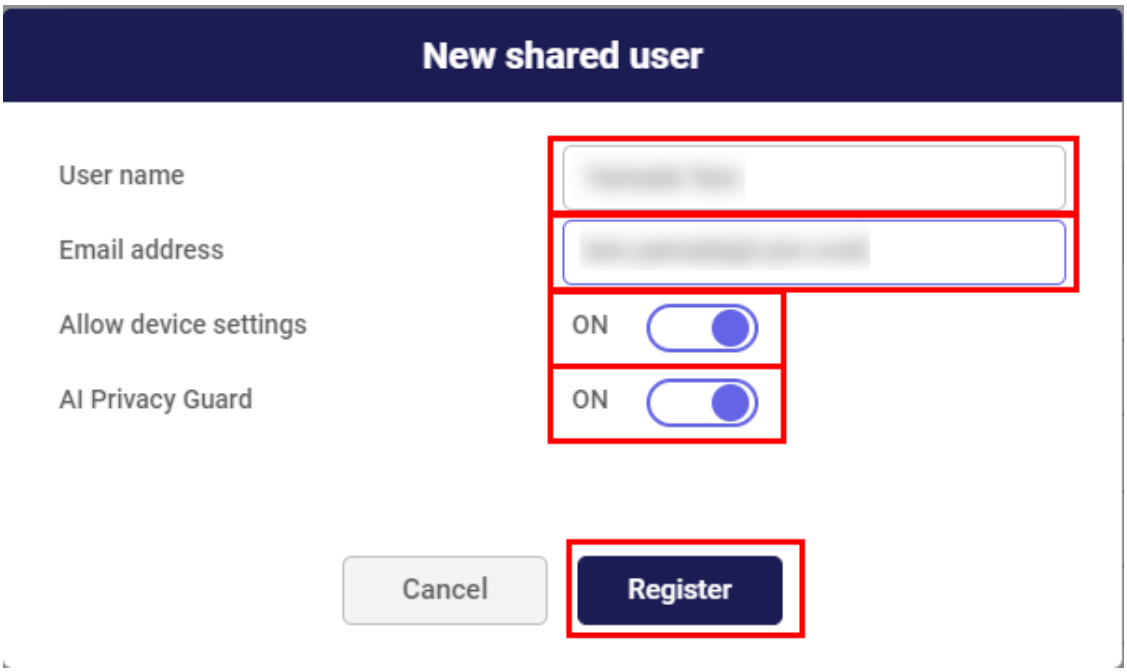
The New shared user screen is displayed.



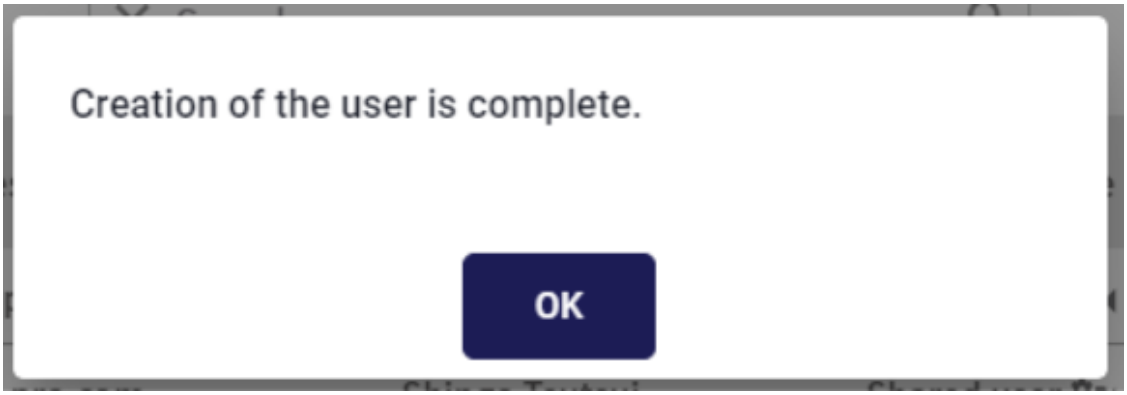
2. Enter the name and e-mail address, set the device setting permission and AI privacy guard, and then click the [Register] button.

* If you turn ON the Device Settings privilege, shared users can configure the settings for the assigned cameras. Refer to 4.1.3 Make changes to the camera's settings

* When AI Privacy Guard is turned ON, shared users can view only camera images with AI Privacy Guard applied, and when OFF, they can view only camera images without Privacy Guard applied.



The User Creation Complete dialog is displayed.



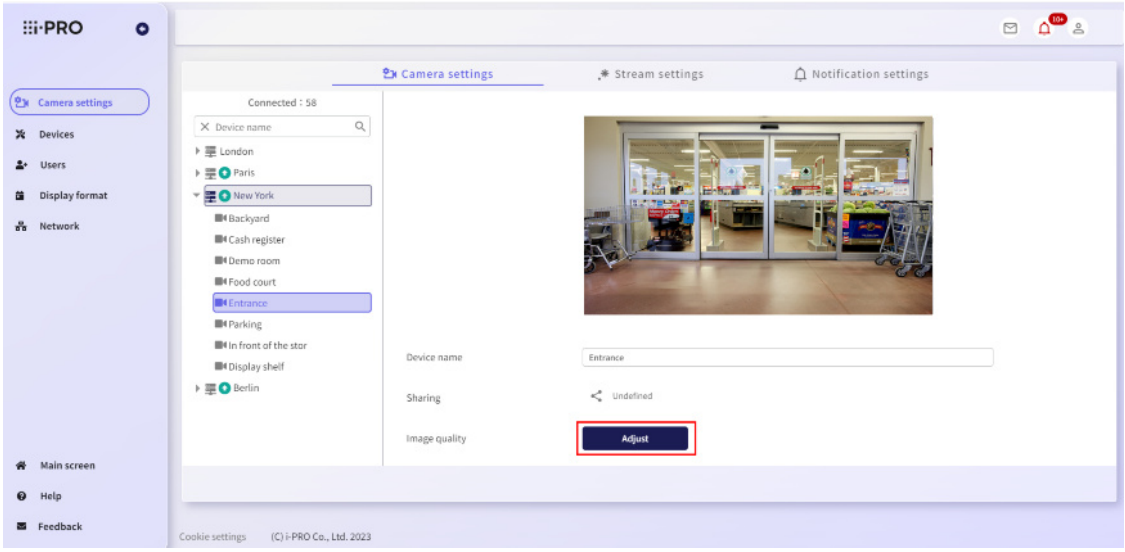
4.1.3 Make changes to the camera's settings

For cameras via a recorder, you can adjust the image quality.

1. Click the [Settings] button in the browser.

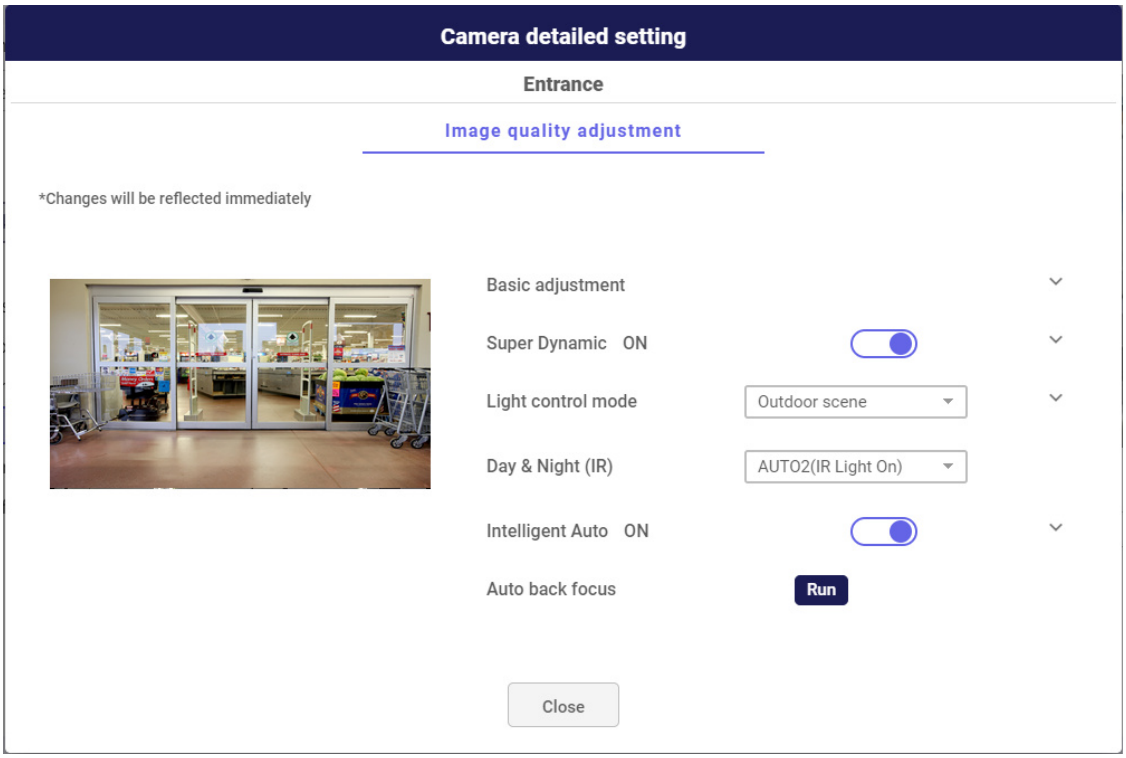
2. Click the [Adjust] button of the camera whose settings you want to change.

The [Adjust] button can be clicked when the camera image is displayed.



The camera setting screen is displayed.

* The screen image varies depending on the model of camera.



You can change the camera settings from the menus.

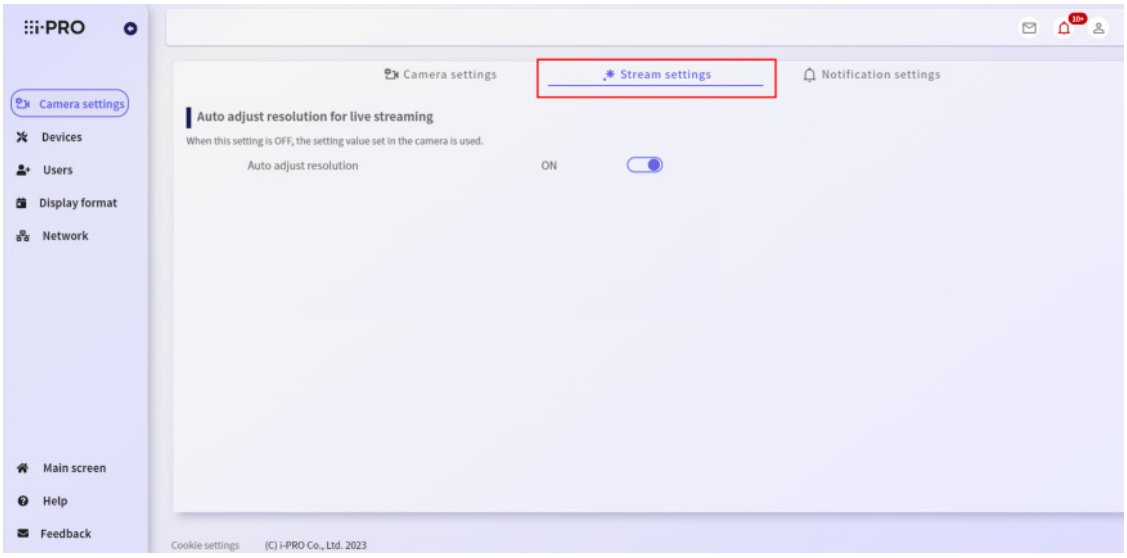
Image quality basic adjustment	*Brightness *Maximum gain *Sharpness Level *Digital Noise Reduction
Super dynamic	*Super dynamic ON/OFF *Level *Backlight/High Light Compensation *Backlight compensation level *High Light Compensation level
Light control mode	*Light control mode *Maximum shutter *Light intensity adjustment speed
Switching between day and night	*Switching between day and night (IR)
Intelligent Auto	*ON/OFF of Intelligent Auto *Face priority level (Brightness) *Motion priority level (shutter time)
Auto Back Focus	*ON/OFF of auto back focus

The items that can be set depends on the model of camera.

4.1.4 Changing camera stream settings

For cameras registered directly to the service, you can set the stream for drawing and set the skipping display.

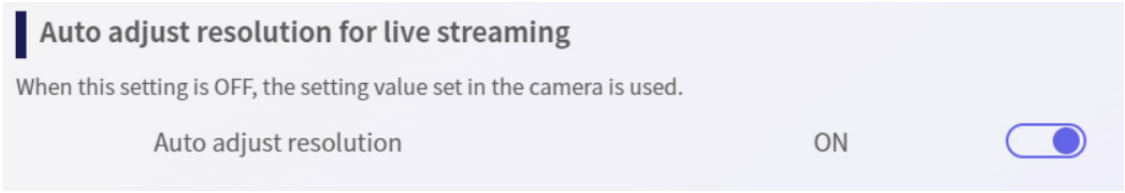
1. Click the [Settings] button in the browser.
2. Click the [Stream settings] tab.



The Drawing Stream Settings screen is displayed.

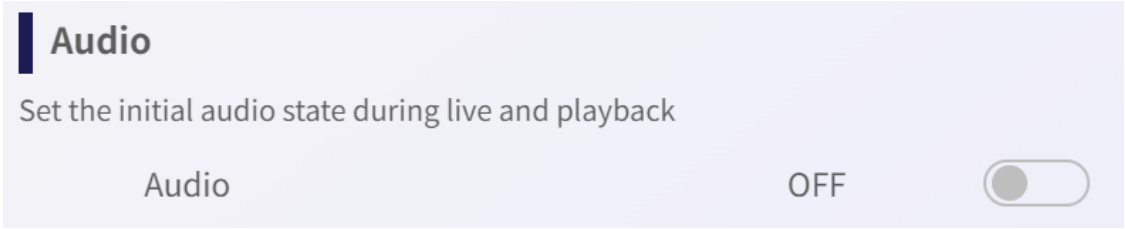
3. Make various settings.

4.1.5 Automatic resolution adjustment during live display



You can set whether to automatically adjust the resolution to suit your environment while displaying live images.
When set to OFF, live streaming images will be displayed at the resolution set for the camera.

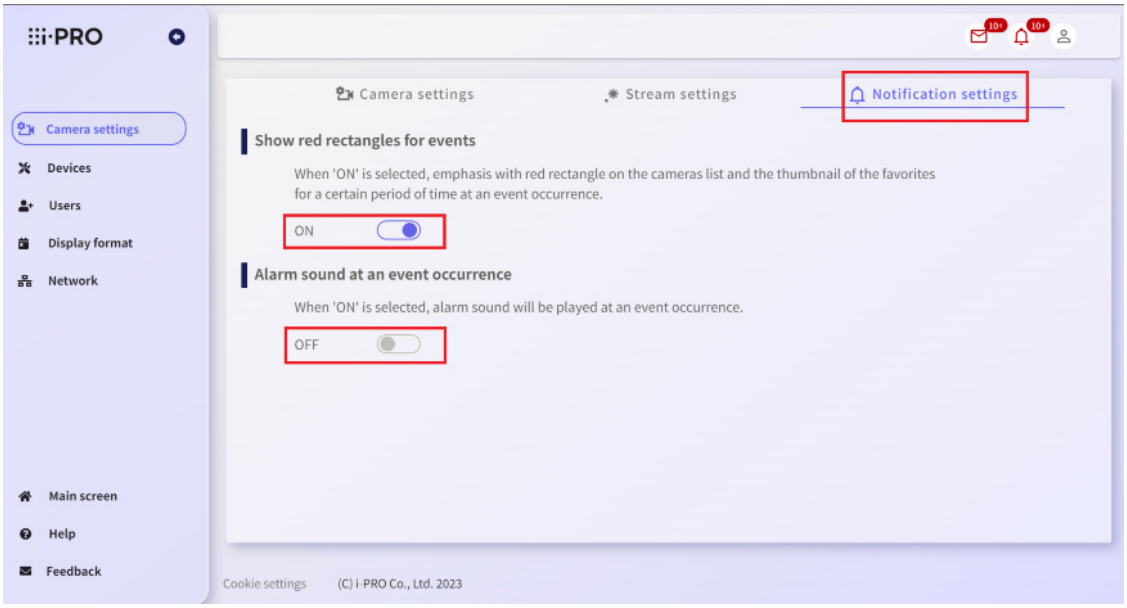
4.1.6 Change audio setting



You can set whether to turn the audio on or off during live streaming and playback.
When turned on, audio will be output along with the video if the camera supports audio. If you turn it off, it will be muted, but when you unmute it, the audio will be output.

4.1.7 Changing event notification settings

1. Click the [Settings] button in the browser.
2. Click the [Notification settins] tab.



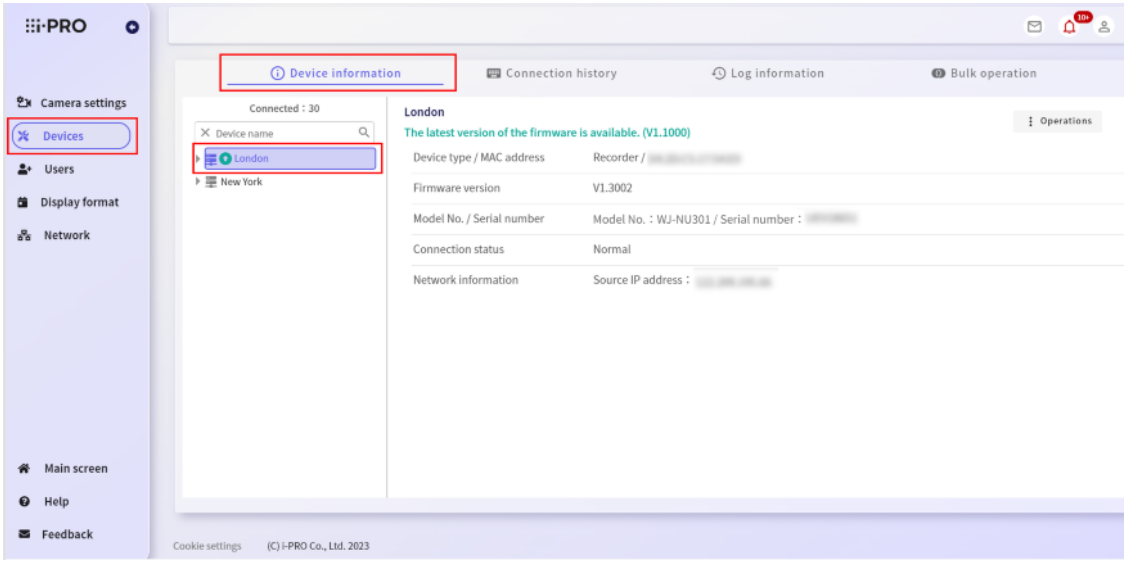
3. If you turn ON "Show red rectangles for events", emphasis with red rectangle on the cameras list and the thumbnail of the favorites for a certain period of time at an event occurrence. When "Alarm sound at an event occurrence" is turned ON, an alarm tone sounds when an event occurs.

* The default setting for "Show red rectangles for events" is ON. Set to OFF if the red rectangle does not need to be displayed.
* The default setting for "Alarm sound at an event occurrence" is OFF. Set to ON when an alarm sound is required.
* Event notification settings are set for each terminal. Note that even if you switch to another device with the same account, the event notification setting will also change.
* Alarm sound can only be heard in the Windows and Android browsers.

4.2 Device management

4.2.1 Checking device information

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Devices] button.
4. Click the [Device information] tab.
5. In the device tree on the left side of the screen, you can check the details by clicking on the name of the device you want to check.



For cameras connected to the recorder, "–" is displayed for MAC Address, Firmware version, and Network information.

* The Device Tree shows the status of the device as an icon. The status displayed is as follows.

Normal

When a communication error occurs

Firmware updatable

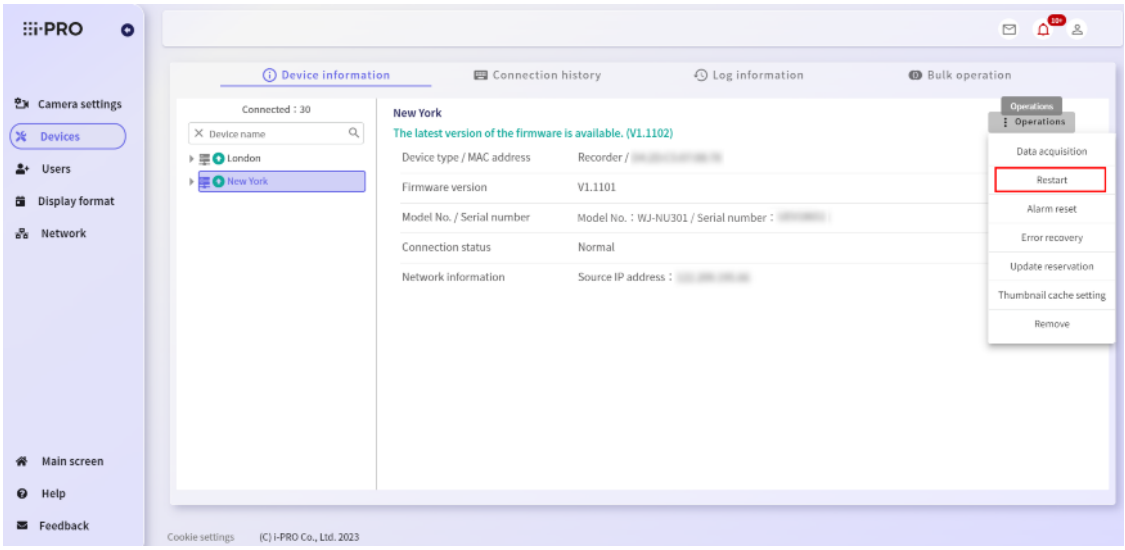
Firmware update reserved

When firmware update fails

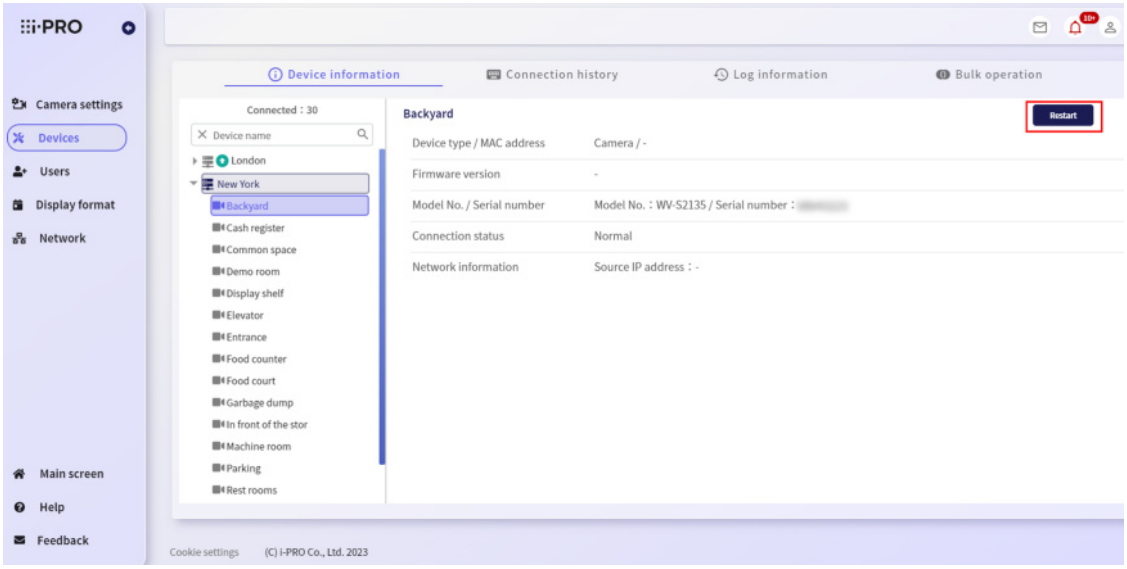
4.2.2 Execute restart instruction of the registered device.

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Device Information] tab.

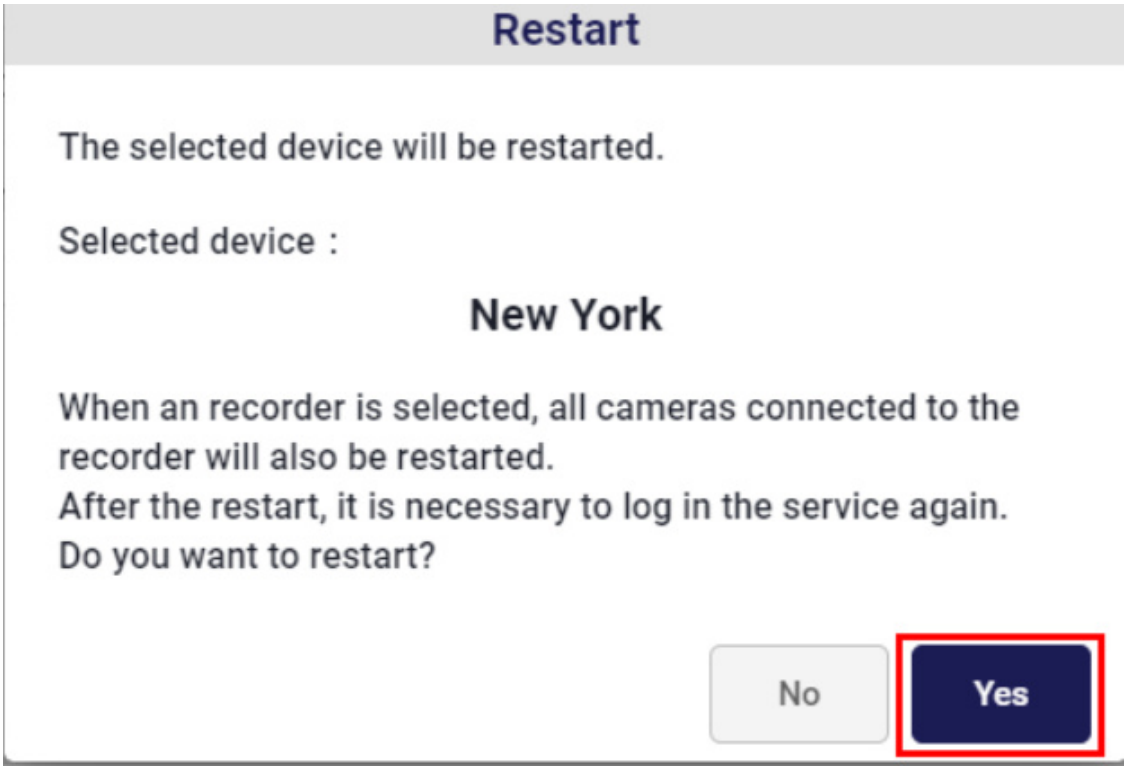
・For recorder, click the [Operations] button and select [Restart] from the menu.



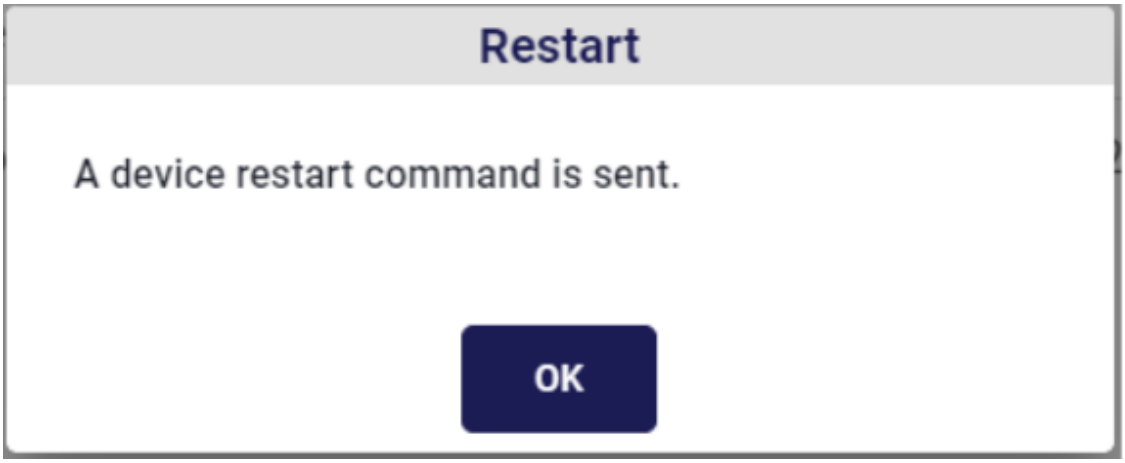
・For a camera via recorder, click the [Restart] button.



4. A confirmation screen is displayed. Click [Yes] to send the restart instruction.



5. The screen confirming that "A device restart command is sent" is displayed.



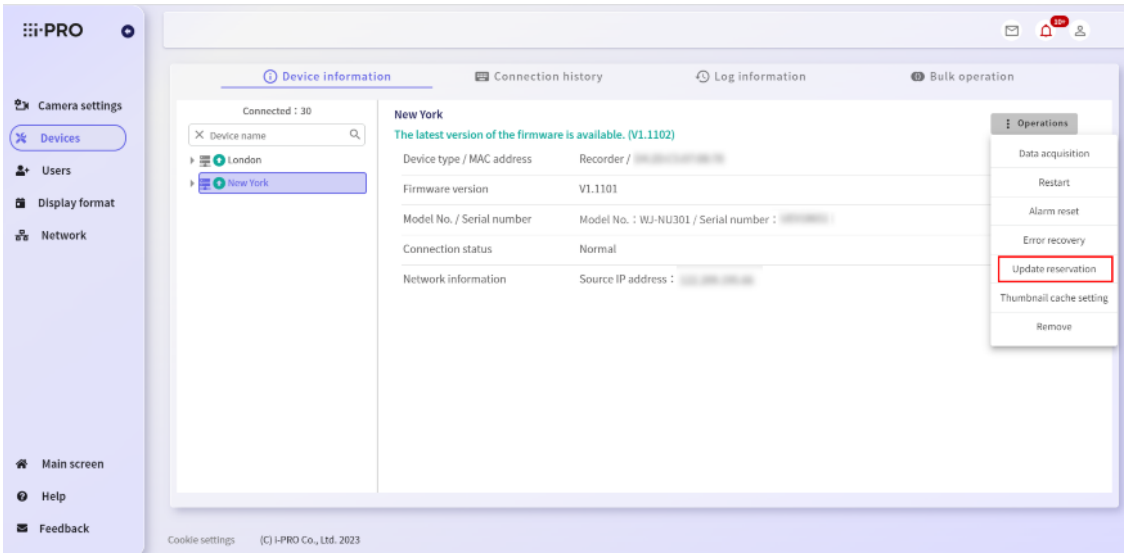
When restarting the device, log out of the portal screen and log in again.

4.2.3 Reserve or change the reservation for the firmware update

Only the recorders that can be updated are displayed with the [Update reservation] button. The camera does not support the firmware update.

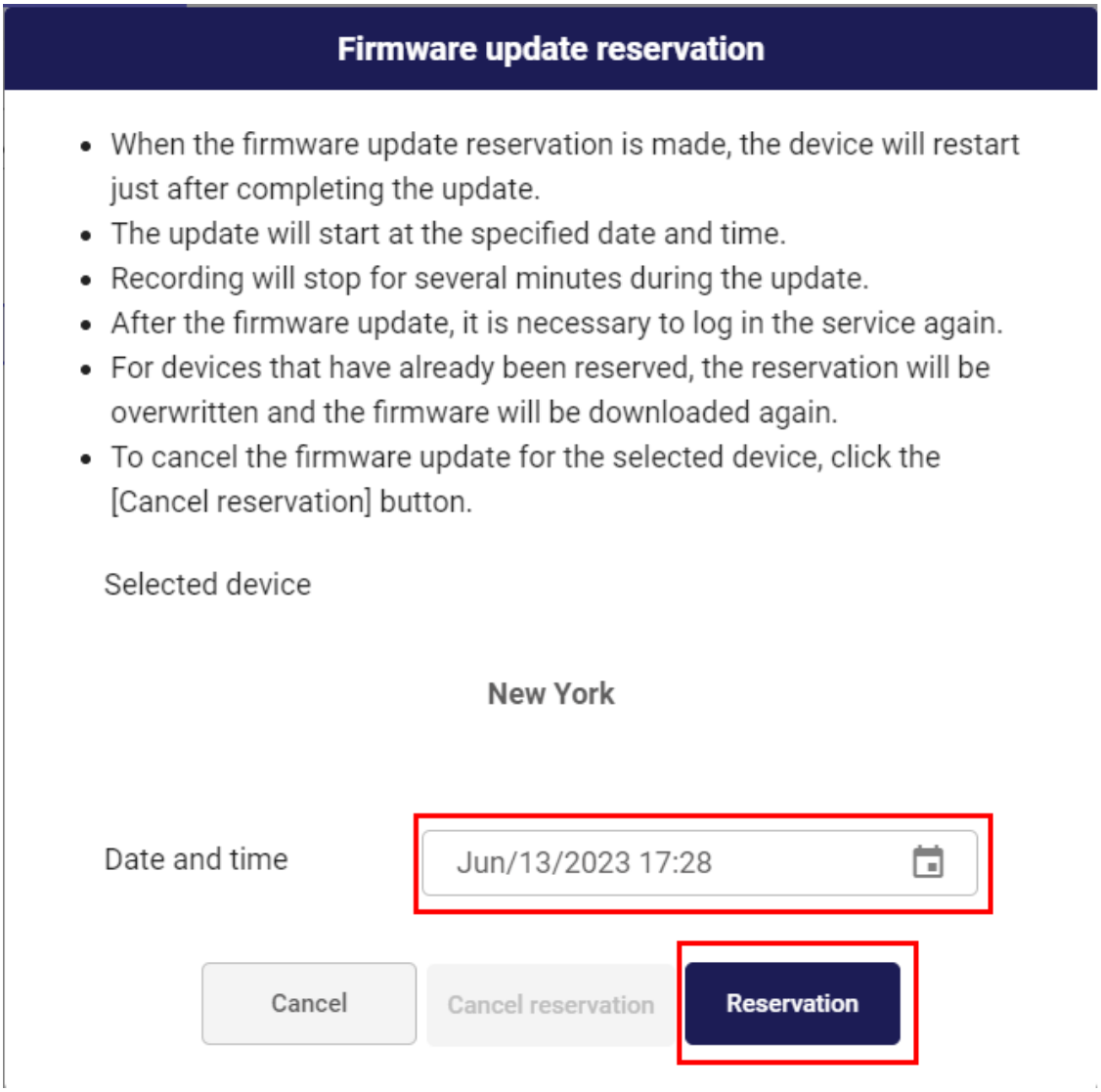
When collectively updating the firmware of multiple devices, refer to 4.2.10 Reserving firmware updates for recorders in bulk

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Device Information] tab, click the [Operations] button of the target device, and select [Update reservation] from the menu.

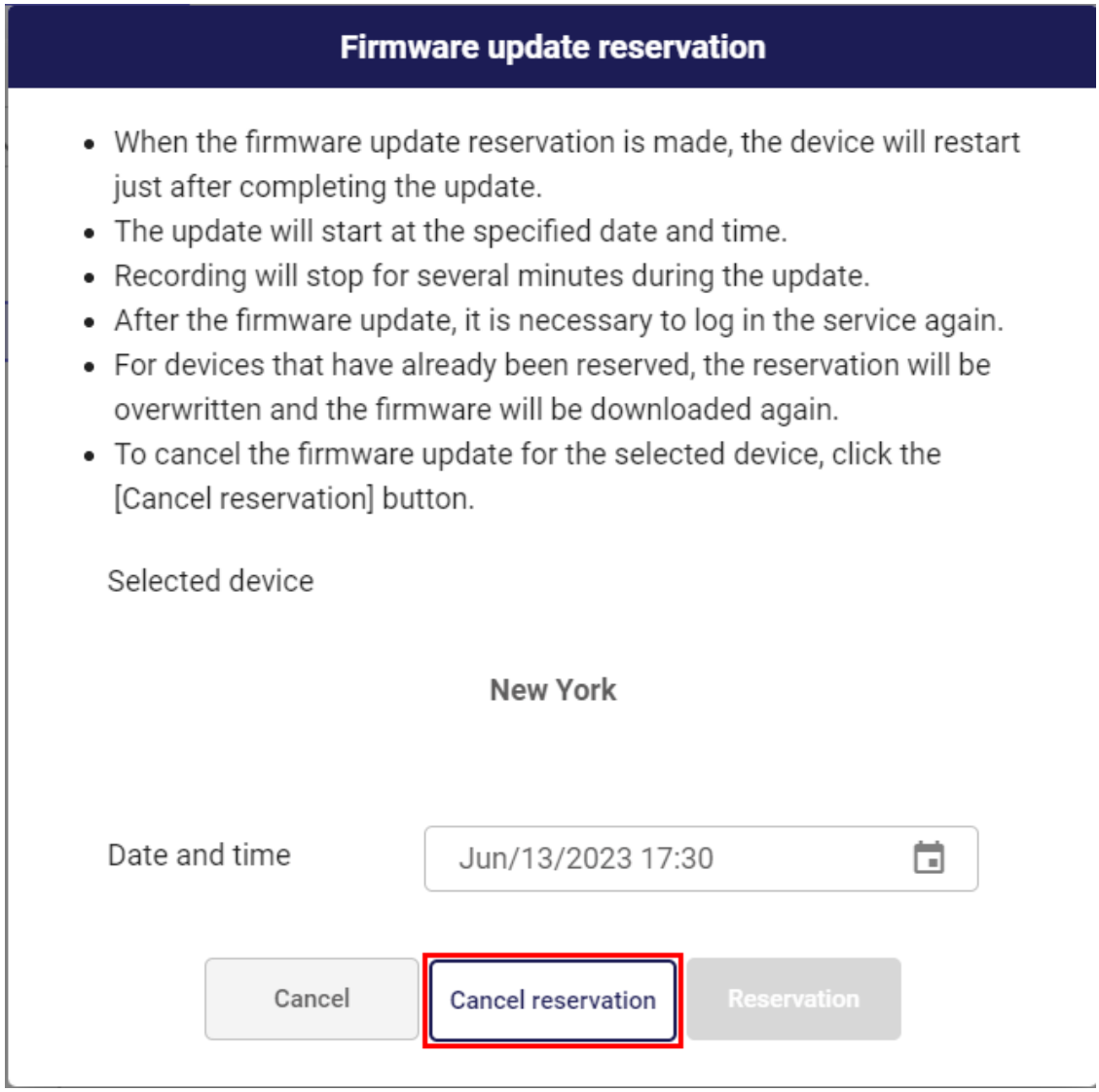


4. The Firmware update reservation screen is displayed.

・To reserve a firmware update or change the reserved date and time, enter the date and time, and then click the [Reservation] button.

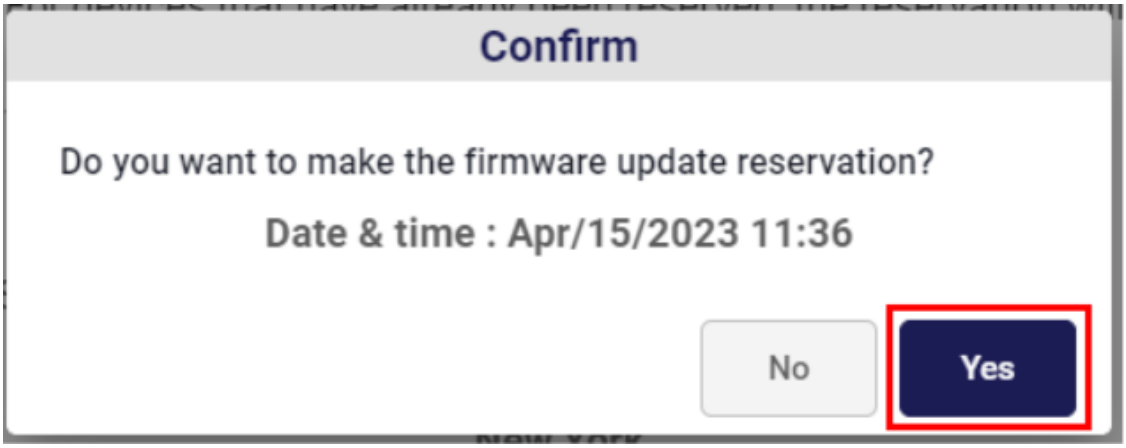


・ To cancel the firmware update schedule, click the [Cancel reservation] button.



Recorder cannot be operated during firmware download.

5. A confirmation screen is displayed. Click [Yes] to schedule the firmware update.

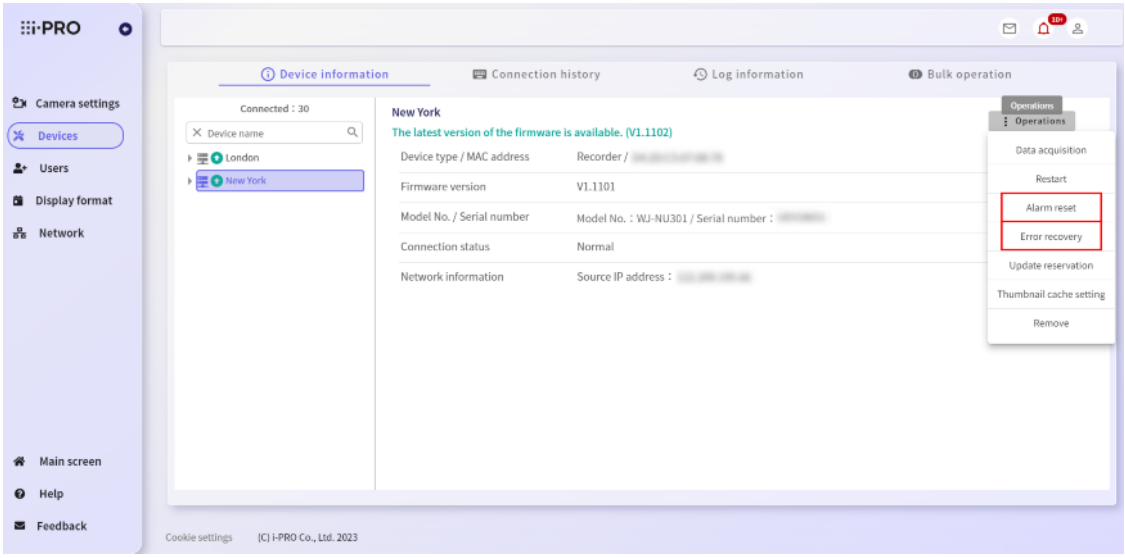


* You cannot change the reservation if the recorder have already started the update.
* After updating the recorder firmware, log out of the portal screen and log in again.

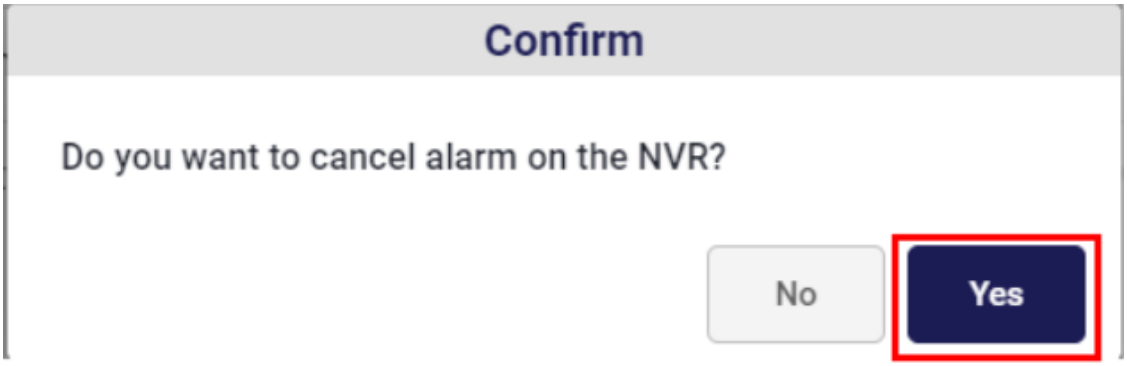
4.2.4 Reset recorder alarm and errors

Alarms and error operations of the recorder can be cleared.

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Device information] tab, click the [Operations] button of the target device, and select [Alarm reset] or [Error recovery] from the menu. Click the button of the target device.



4. Click [Yes] in the confirmation dialog box.

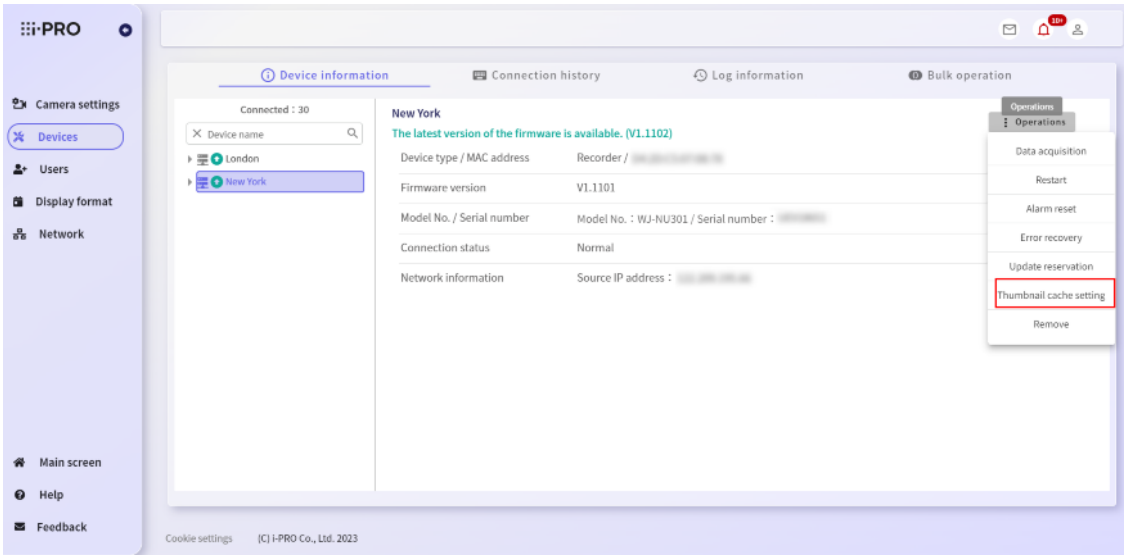


→ The alarm or error of the target recorder is reset.

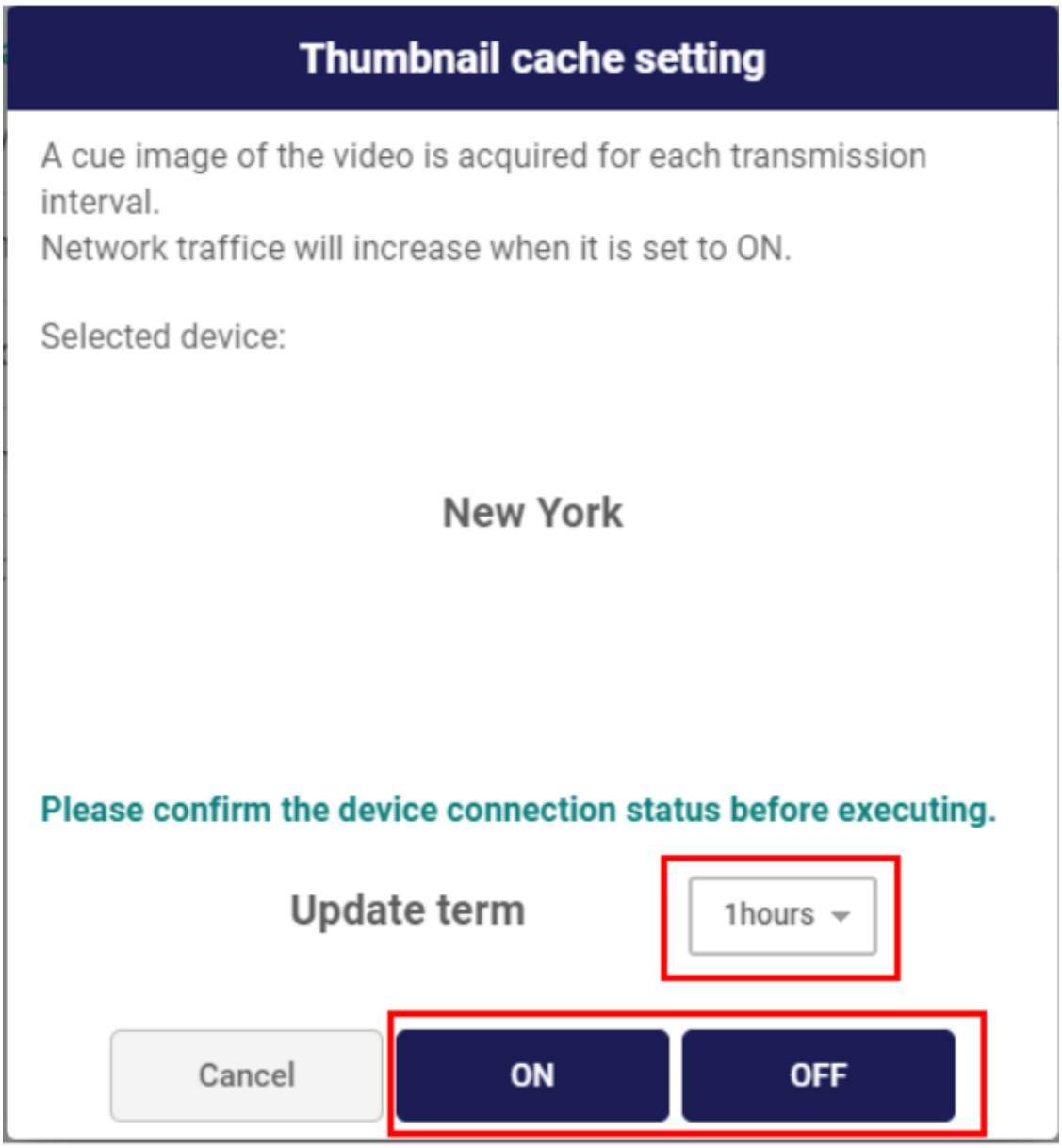
4.2.5 Setting thumbnail cache

Send thumbnail transmission instruction command to recorder. Depending on the connection status of the recorder, settings will be failed.

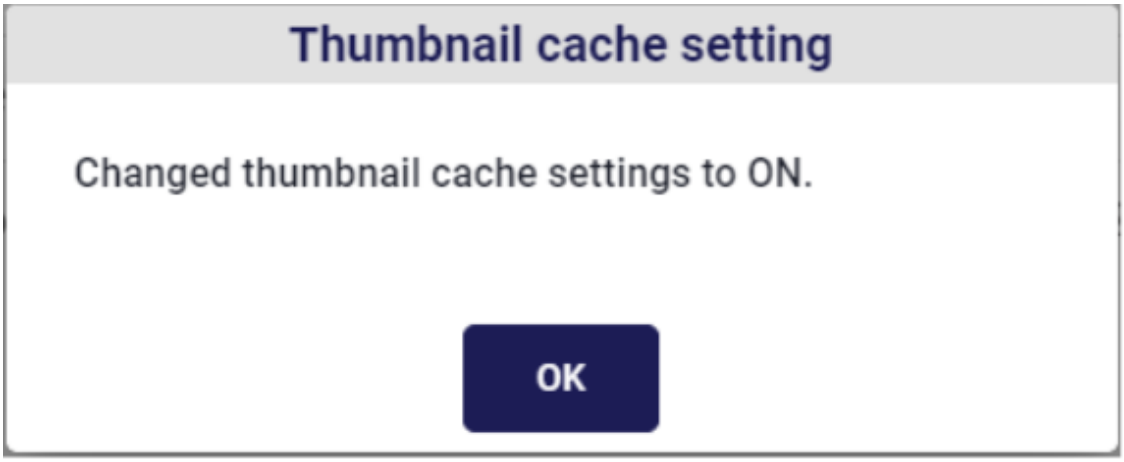
1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Operations] button and select [Thumbnail cache setting] from the menu.

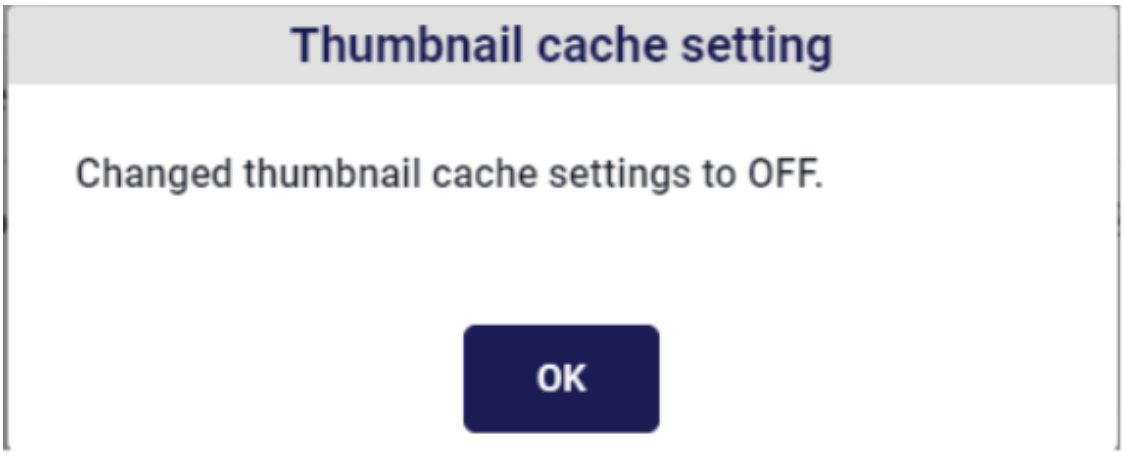


4. To send a thumbnail, select the sending interval, and then click [ON]. If you want to stop sending thumbnail, click [OFF].



5. Click [OK] in the confirmation dialogs.





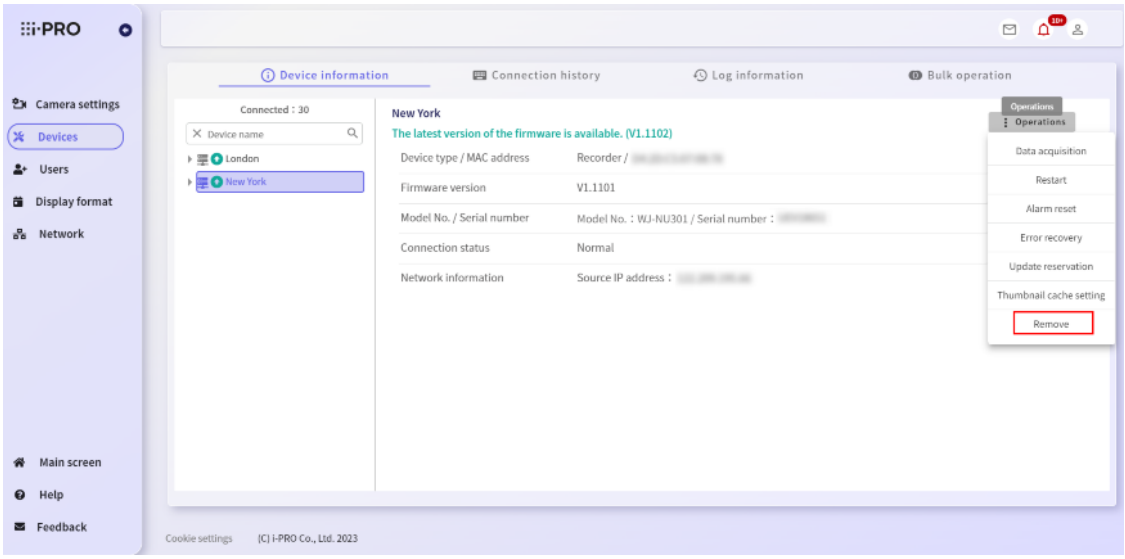
When Thumbnail cache setting is set to OFF, the thumbnail images that have been transmitted in the past are used to display the cue of the video.

4.2.6 Delete the device

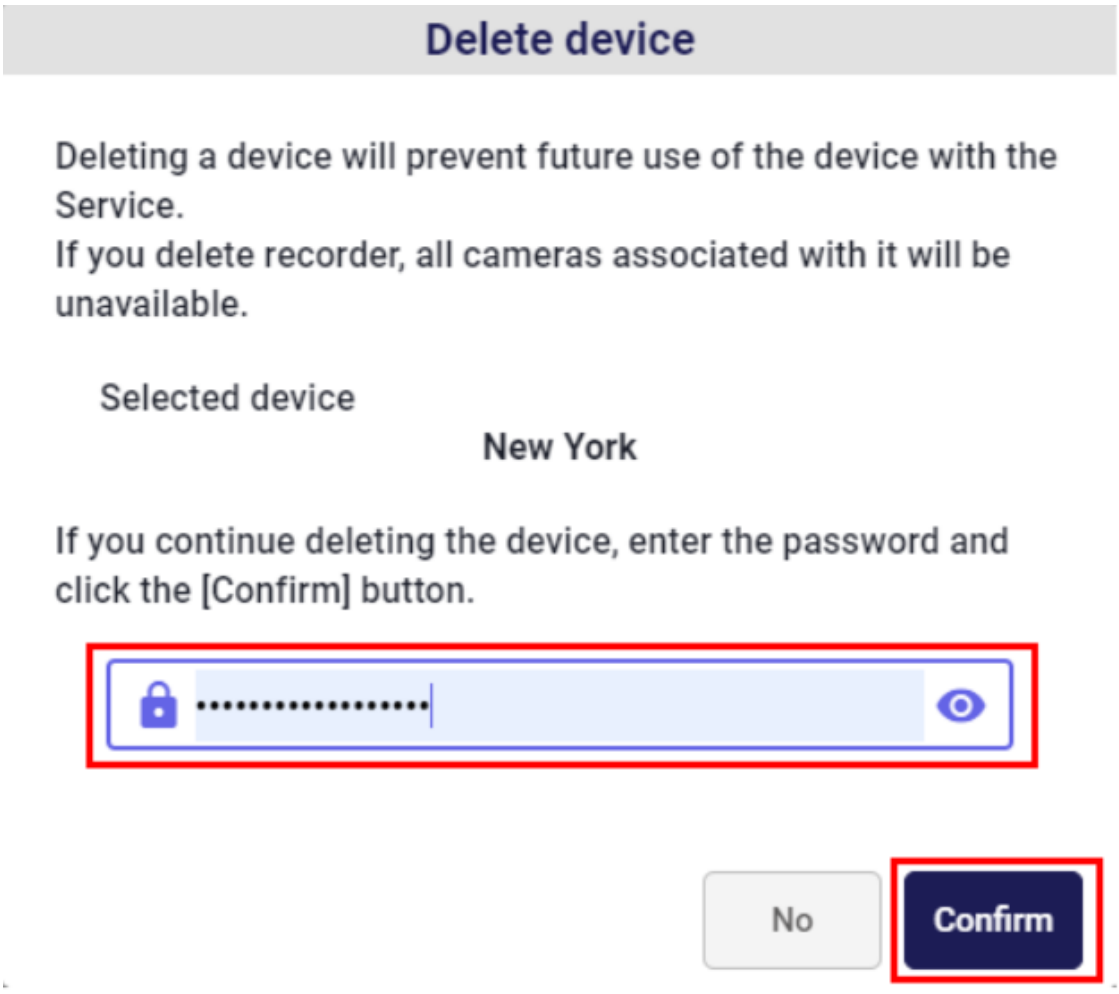
To delete the camera linked to the recorder, delete the recorder itself.

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.

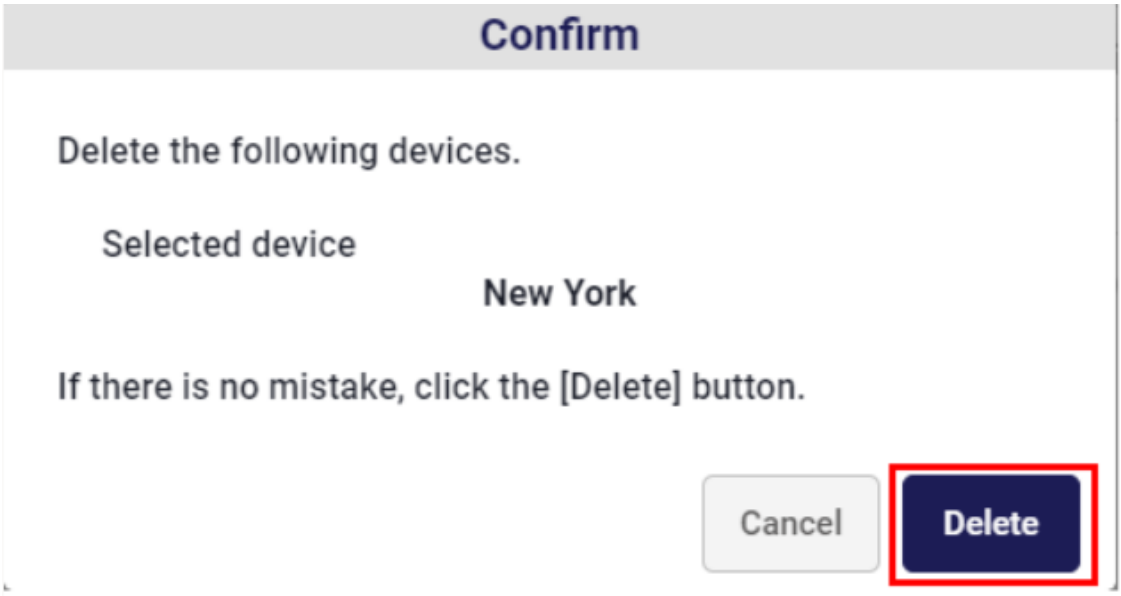
・ For a recorder, click the [Operations] button and select [Remove] from the menu.



3. The device deletion screen is displayed, enter the password, and then click [Confirm].

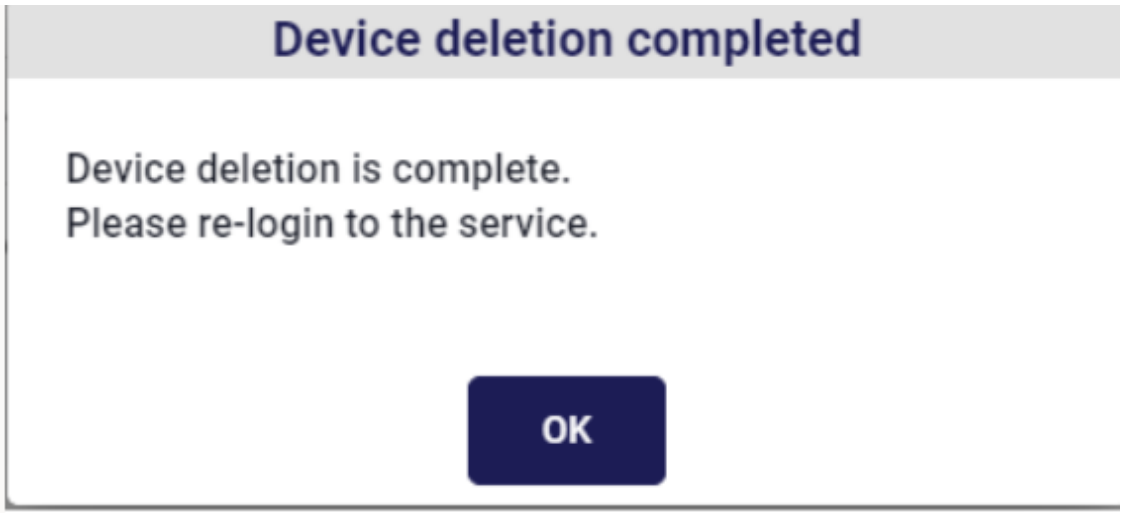


4. A confirmation screen is displayed. Click [Delete] to delete the device.



Deleting a device prevents the service from using the device.
Make sure that the target device is correct before deleting.

5. The Device deletion completed dialog is displayed.

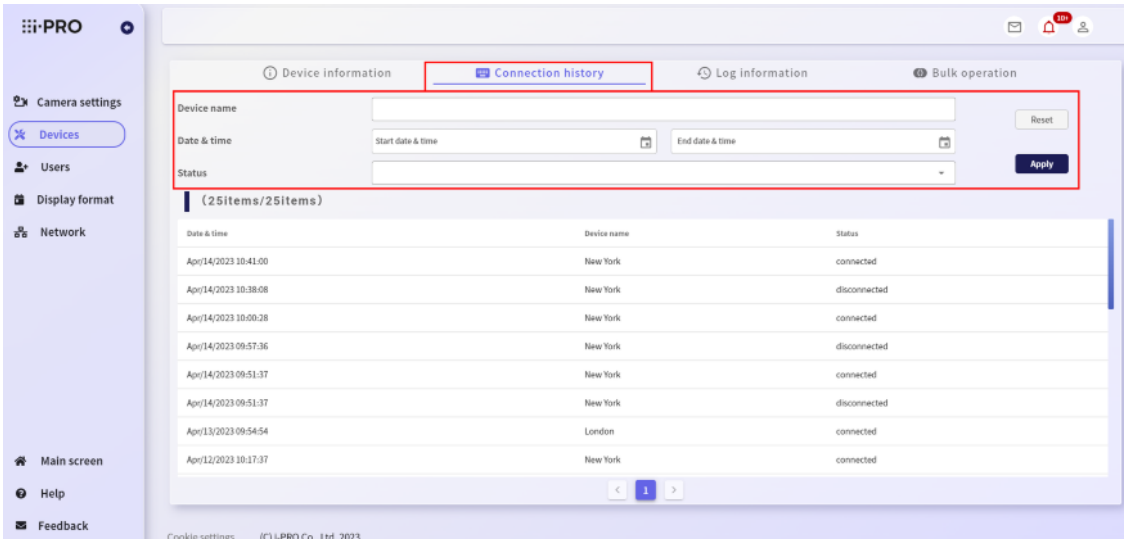


Clicking [OK] takes you to the service login page. After entering the login screen, log in to the service again.

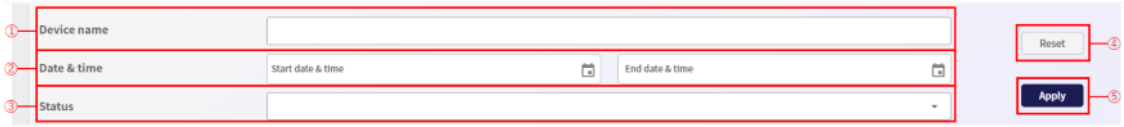
After deleting the device, be sure to log out of the portal screen and log in again.

4.2.7 Check the connection history

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Connection history] tab. The connection history is displayed every 50 items on one page.



You can narrow down the connection history by device name, date and time, and status.



[Device name]

A fuzzy search can be performed by the name of the registered device.

[Date & time]

By clicking the icon in the date and time input field, you can select the date and time of the history period to be searched.

[Status]

You can select the status to search for from "connected" or "disconnected".

[Reset]

You can reset the input conditions and search results to the default settings.

[Apply]

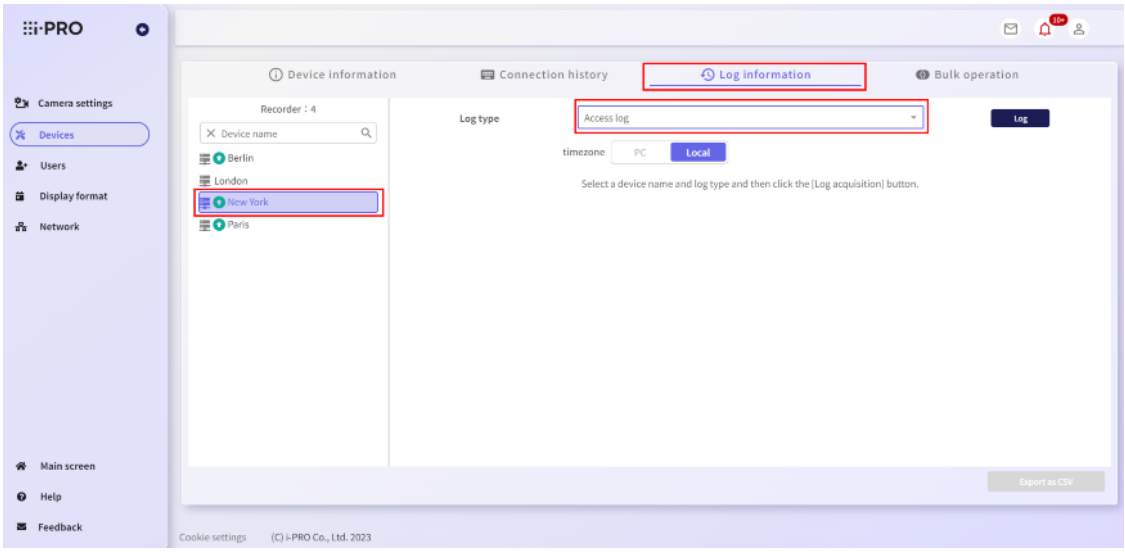
You can narrow down the history by clicking the search button with the condition entered.

4.2.8 Acquire the log of the registered device

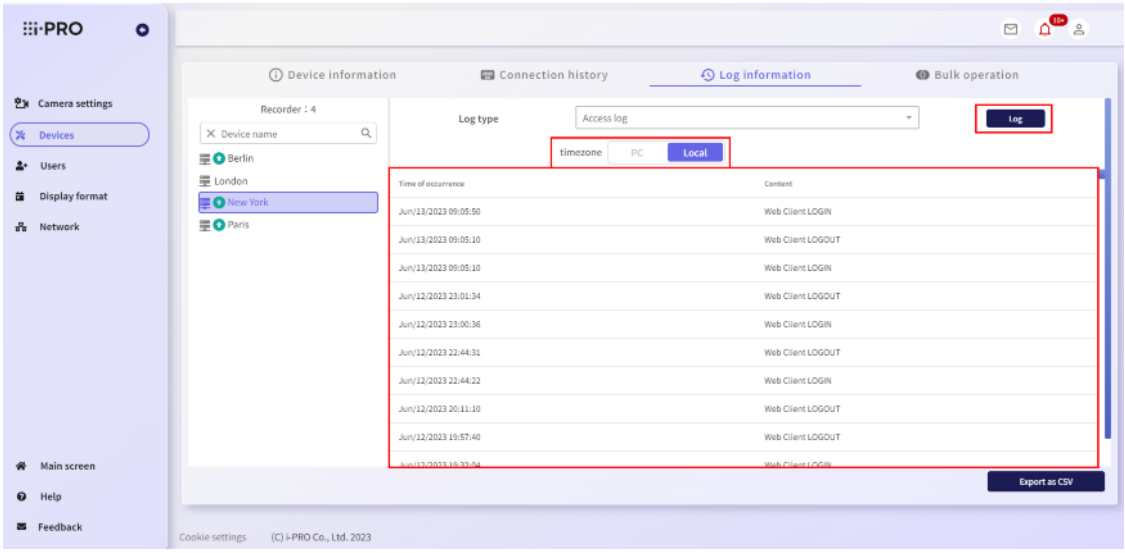
The types of logs that can be acquired and the maximum number of logs that can be acquired are shown below.

Error Log	1000 entries
Access log	500 entries
Operation log	500 entries
Network log	100 entries

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Log information] tab, select the device you want to check in the equipment tree on the left side of the screen, and select the type of log from the right side of the screen.



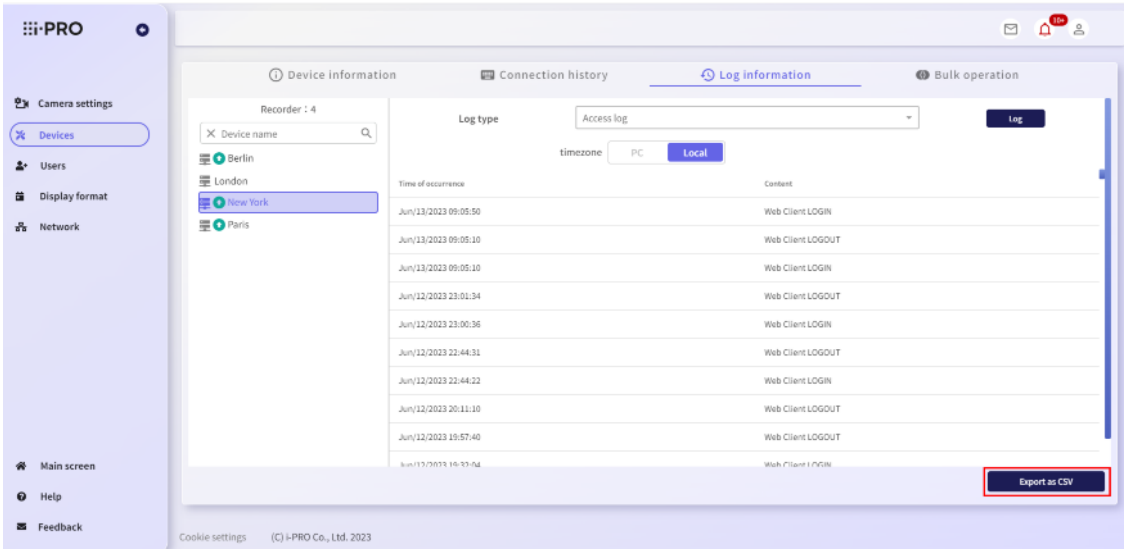
4. Click the [Log] button.



PC is selected for [timezone], the log time is output according to the timezone of the accessing device, and when Local is selected, the log time is output according to the timezone of the local device.

4.2.9 Exporting device logs to CSV

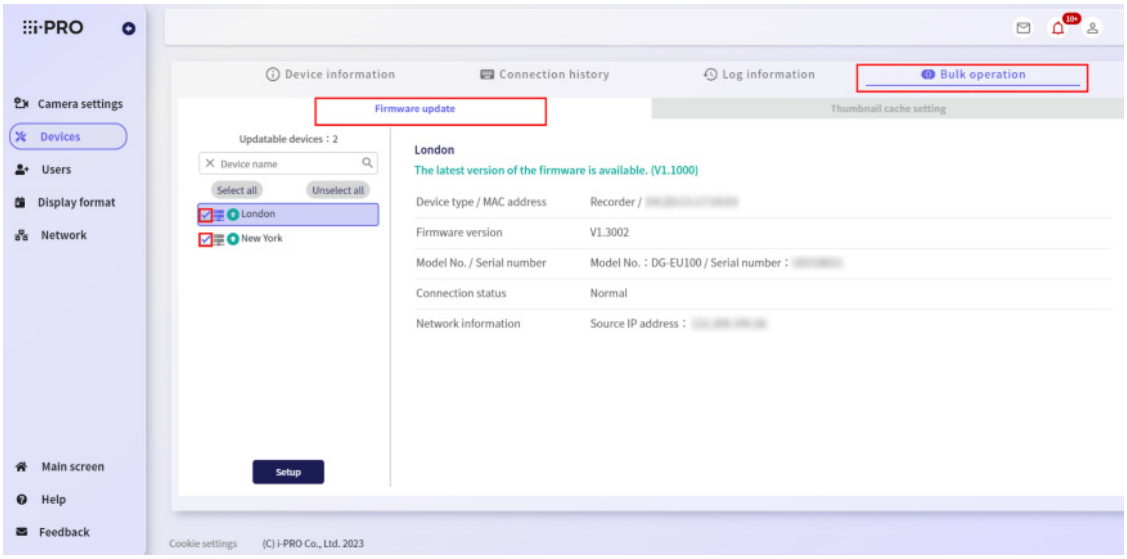
1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Log information] tab, select the device you want to check in the device tree on the left side of the screen, select the log type from the right side of the screen, and then click the [Log] button to display the log.
4. When the log is displayed, select [Export as CSV]. The displayed log is exported to CSV file.



4.2.10 Reserving firmware updates for recorders in bulk

Only the recorders that can be updated are displayed with the [Update reservation] button. The camera does not support the firmware update.

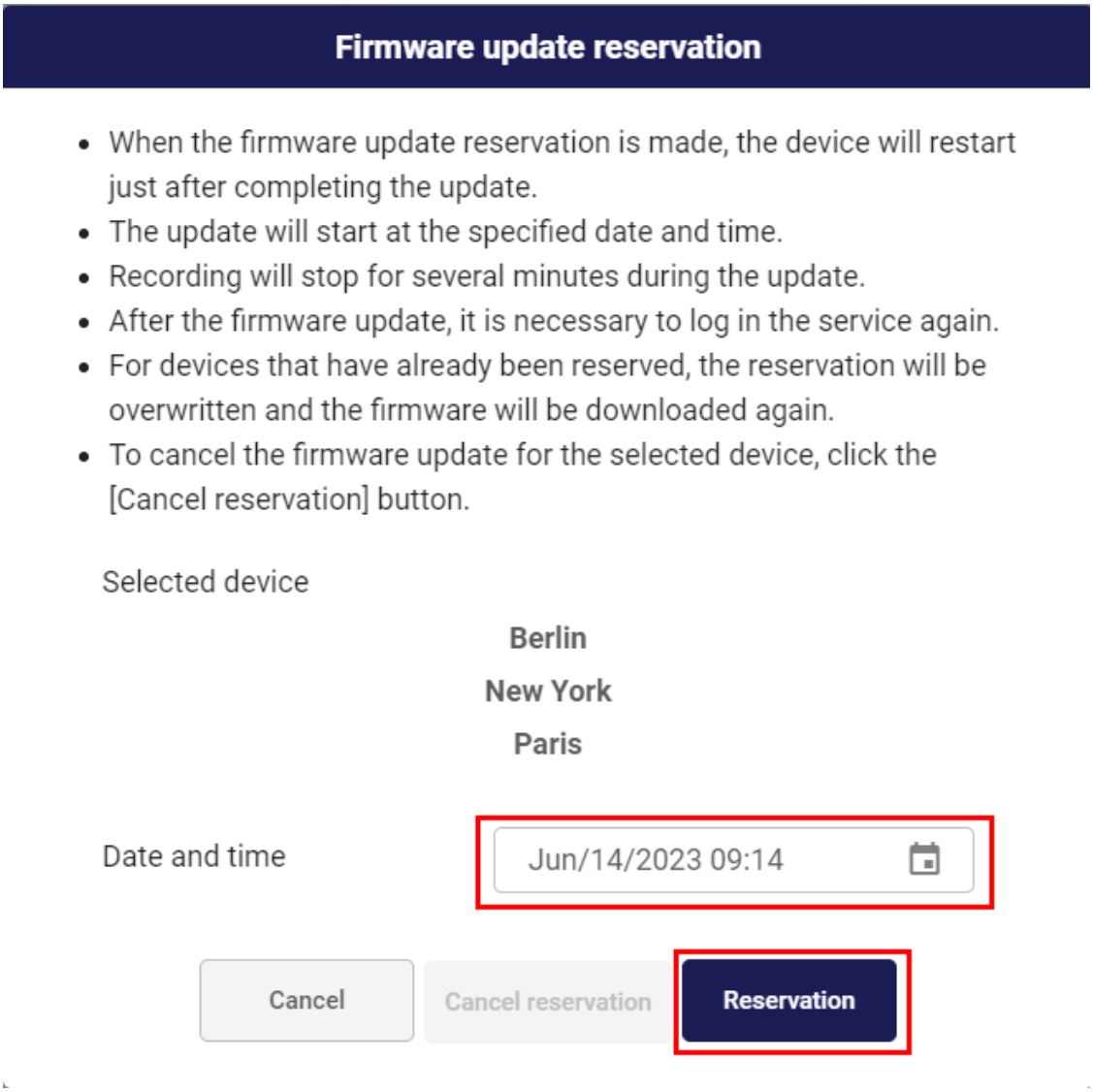
1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Bulk Operation] tab, check the [Firmware update] tab for the device for which firmware update is to be performed, and click the [Setup] button.



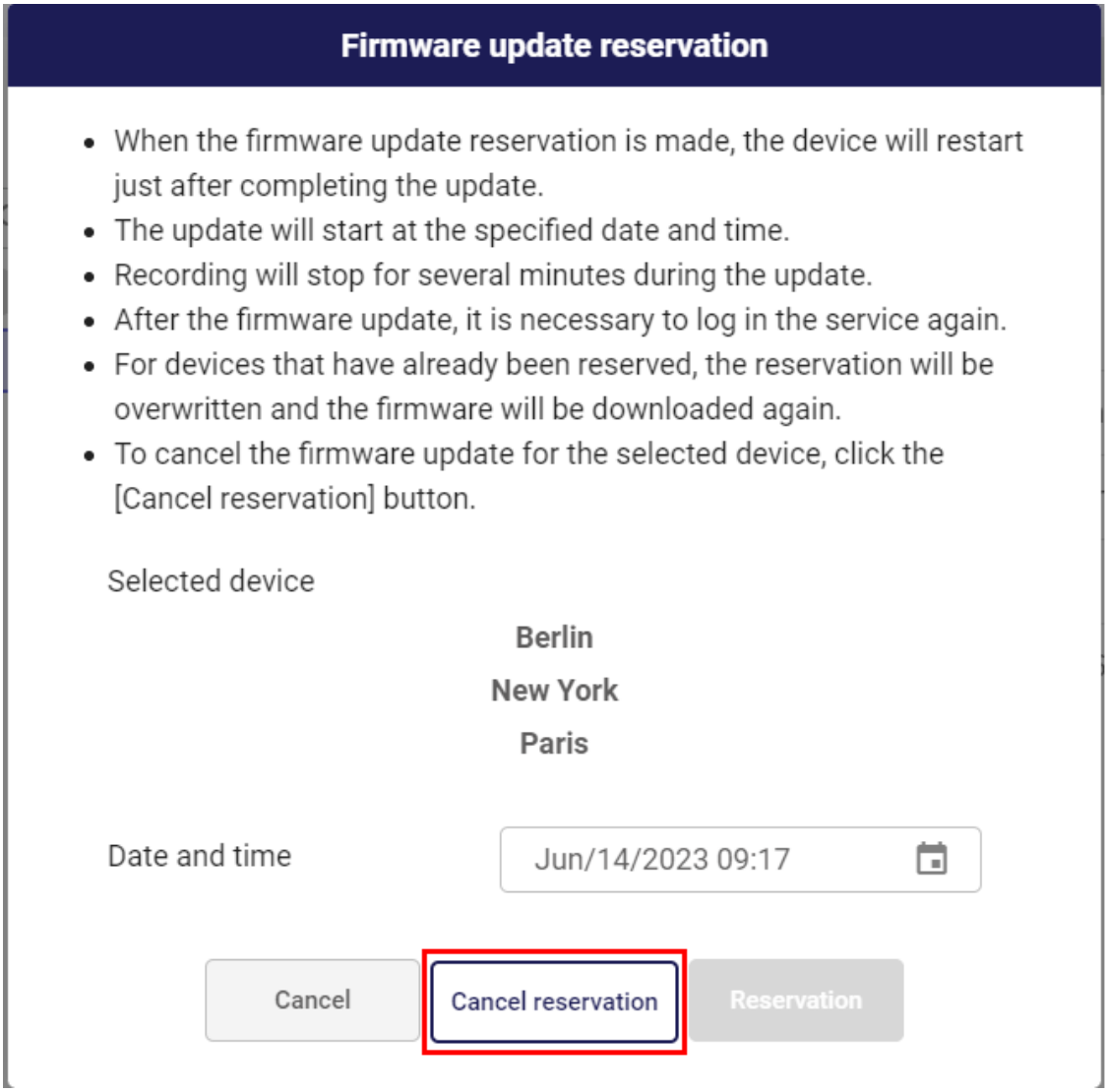
If the device being downloaded firmware is selected, you cannot click the [Setup] button. Select only devices that can be reserved for firmware update.

4. The Firmware update reservation screen is displayed.

・To reserve a firmware update or change the reserved schedule, enter the date and time, and then click the [Reservation] button.

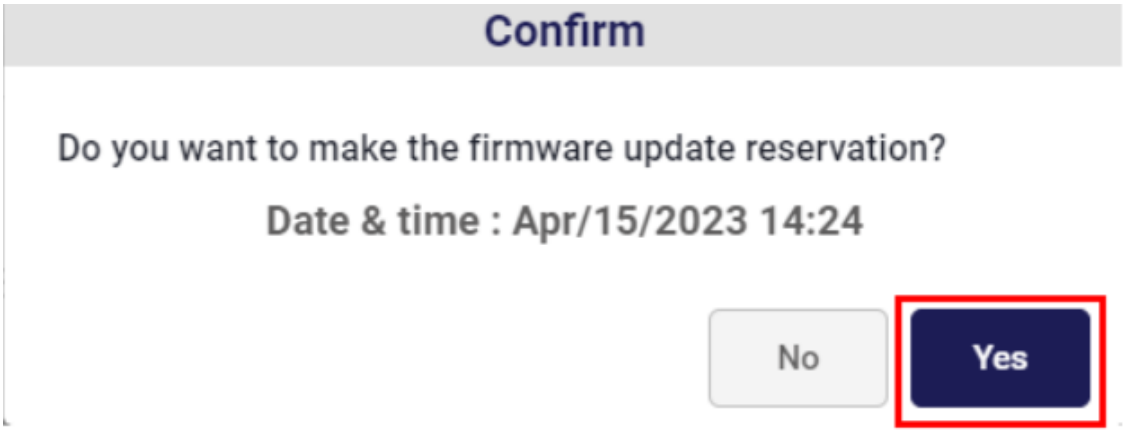


・To cancel the firmware update schedule, click the [Cancel reservation] button.



Recorder cannot be operated during firmware download.

A confirmation screen is displayed. Click [Yes] to schedule the firmware update.

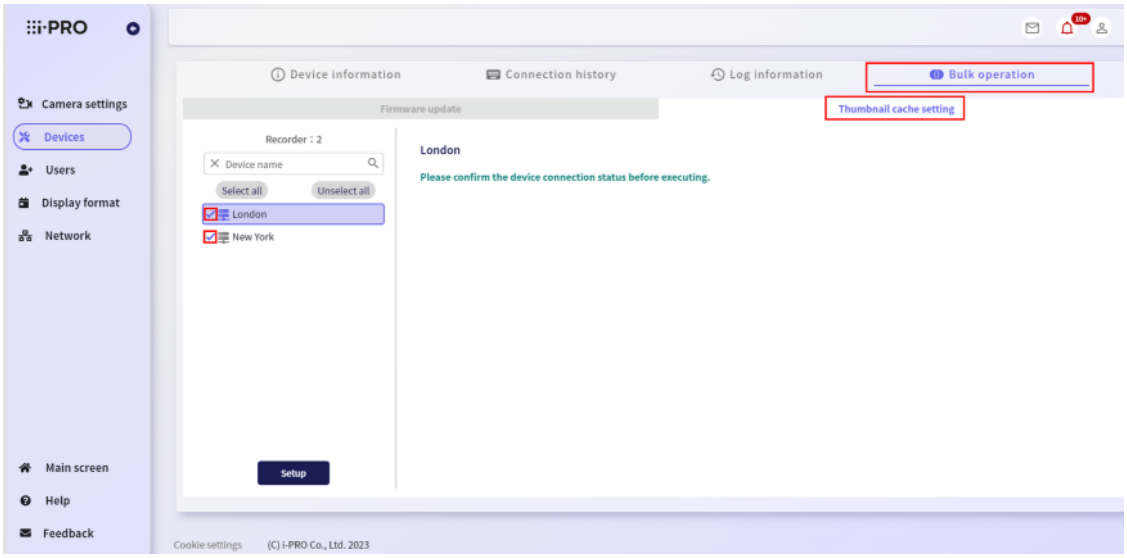


* You cannot change the reservation if the recorder have already started the update.
* After updating the firmware of the recorder, log out from the portal screen and log in again.

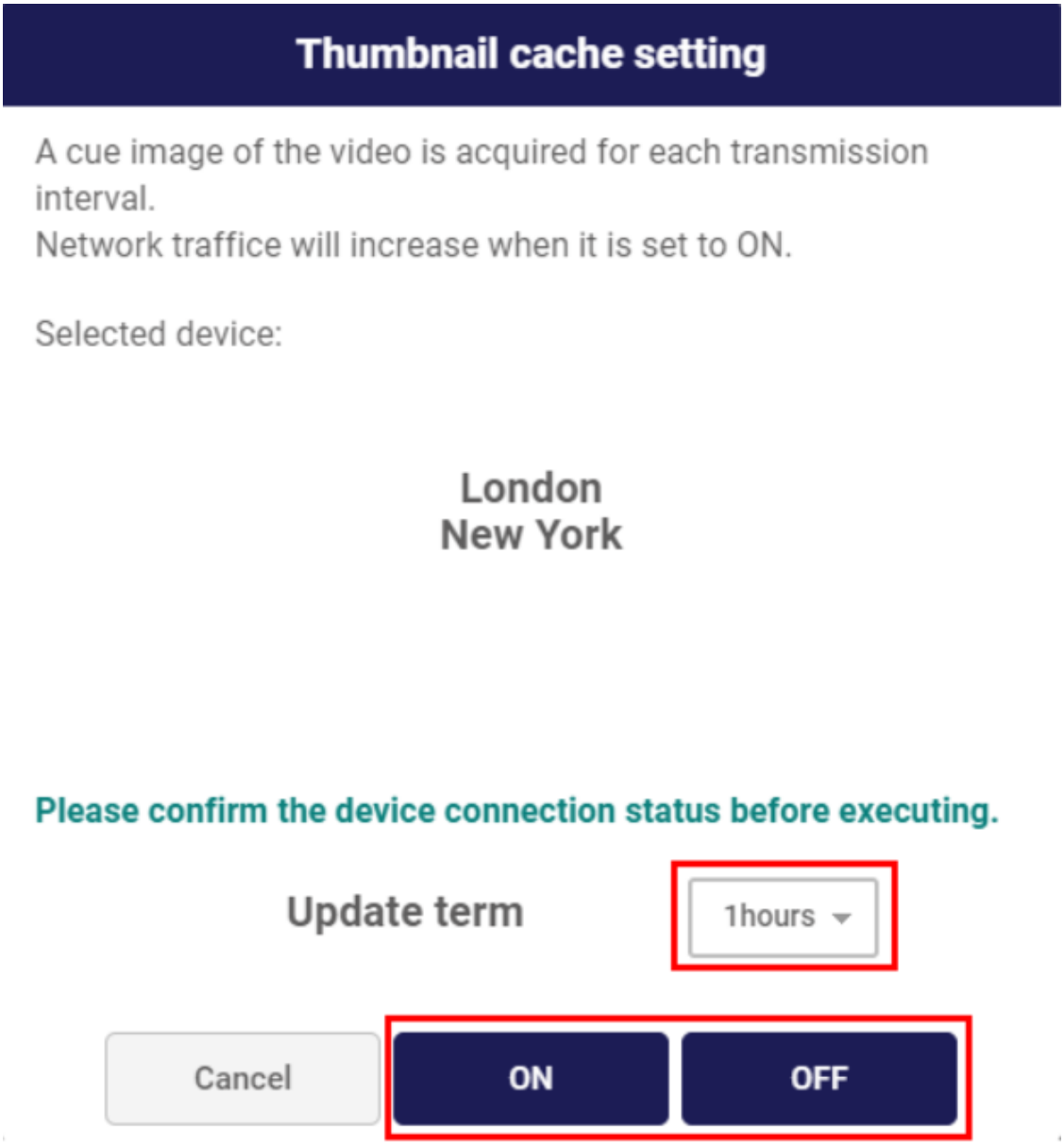
4.2.11 Setting thumbnail cache in bulk

Send thumbnail transmission instruction command to recorder. Depending on the connection status of the recorder, settings will be failed.

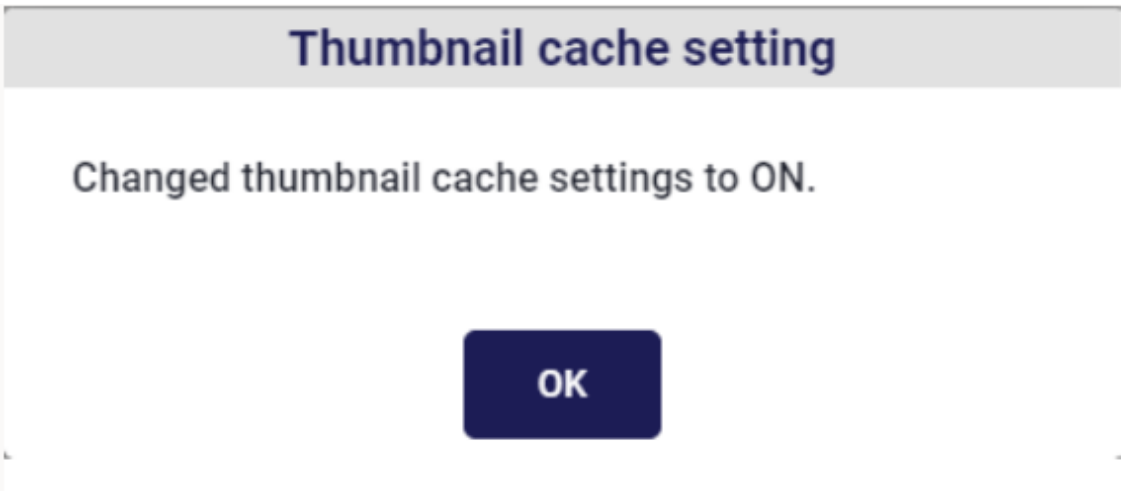
1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Bulk operation] tab, check the device to send thumbnails from the [Thumbnail cache setting] tab, and then click the [Setup] button.

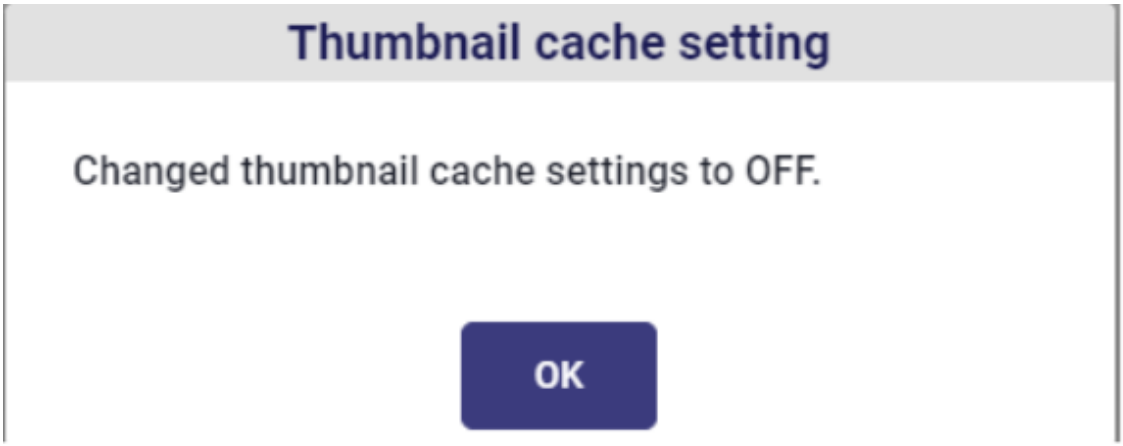


4. To send a thumbnail, select the sending interval, and then click [ON]. If you want to stop sending thumbnail, click [OFF].



5. Click [OK] in the confirmation dialogs.

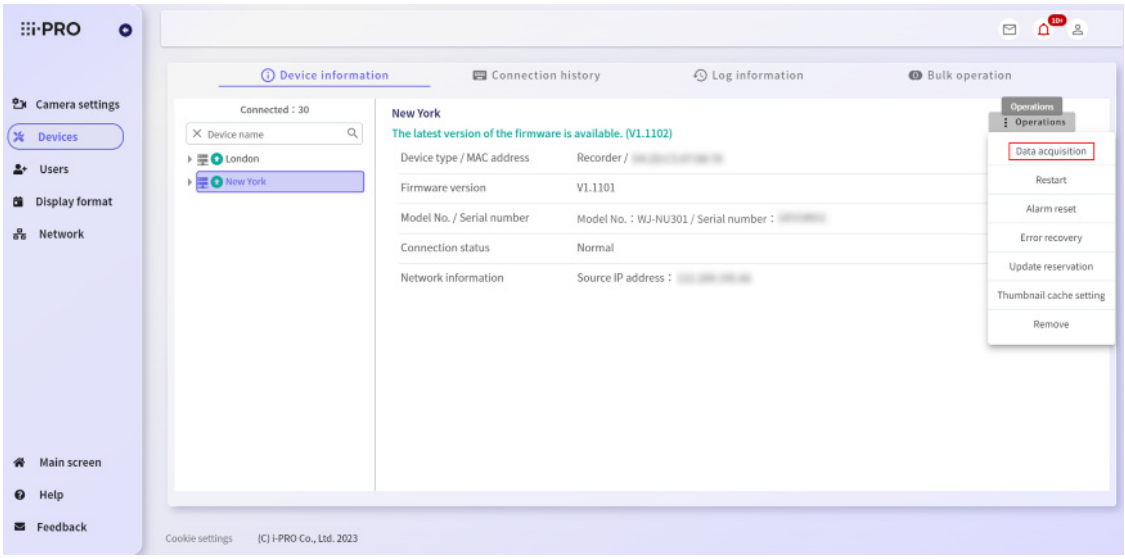




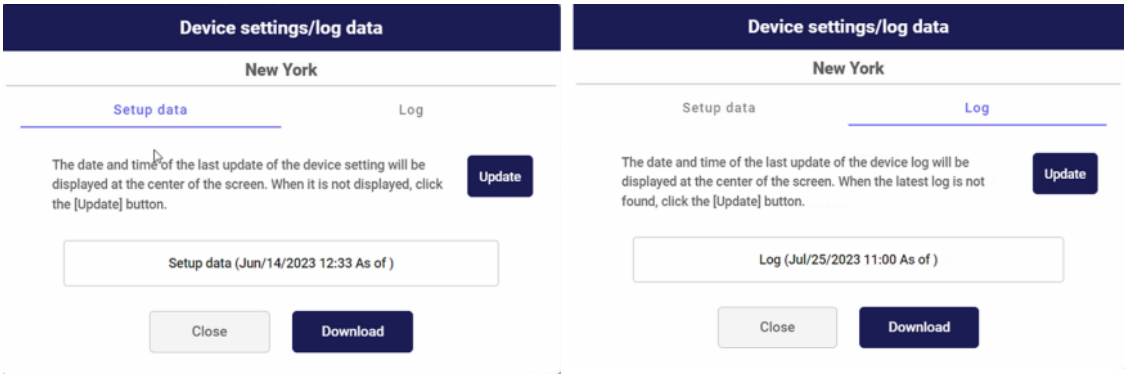
When Thumbnail cache setting is set to OFF, the thumbnail images that have been transmitted in the past are used to display the cue of the video.

4.2.12 Check recorder settings and log data

1. Click the [Settings] button in the browser.
2. Click the [Devices] button.
3. Click the [Device information] tab.
4. For recorder, click the [Operations] button and select [Data acquisition] menu.



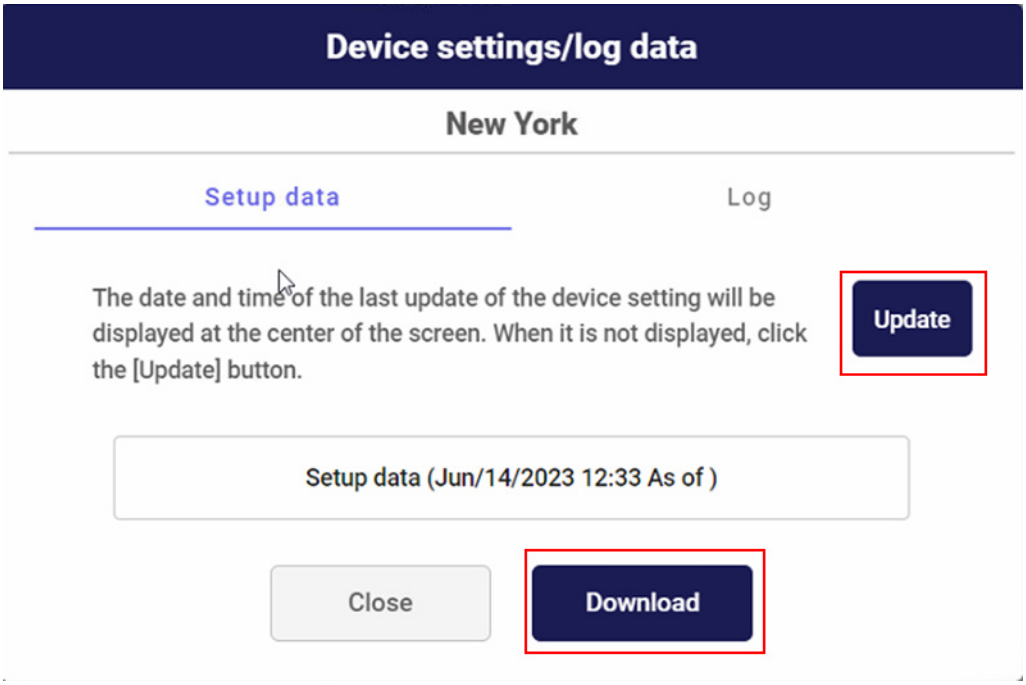
The device setting/log data acquisition screen is displayed.



The date and time the data was last updated is displayed in the center of the screen.
In the case of setup data, the last update date and time is when the device is first connected or when the device settings are updated.
In the case of logs, the timing when the log was acquired from the device will be the last update date and time.

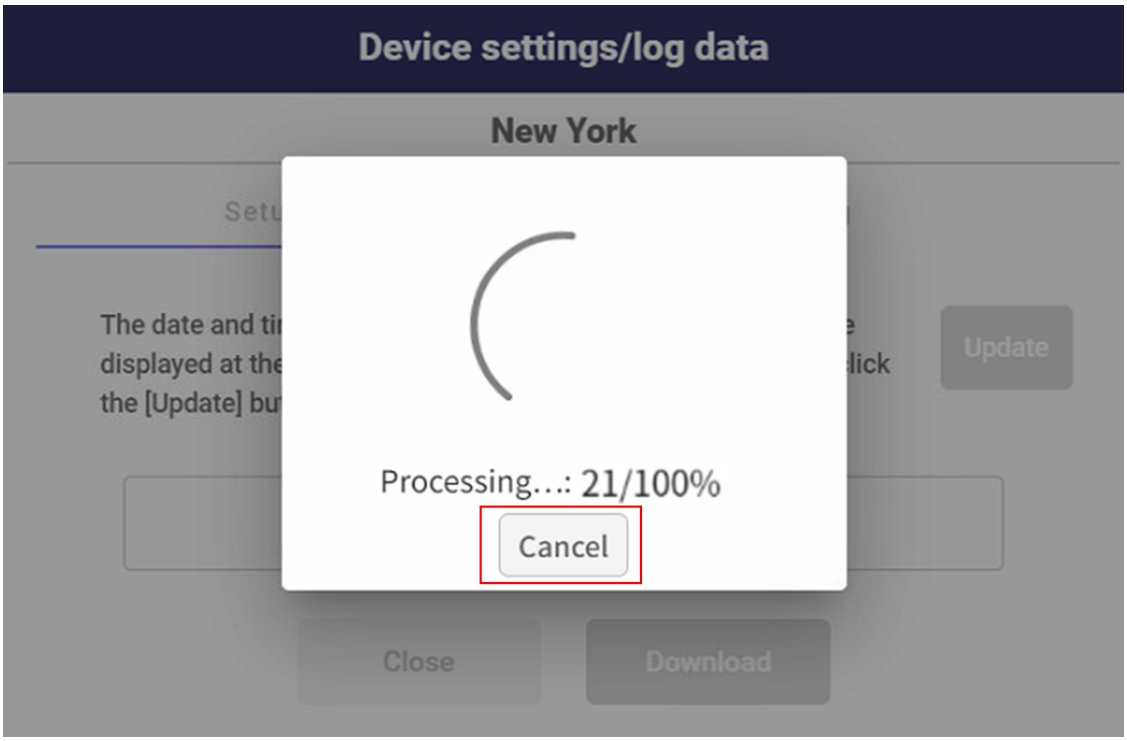
5. After confirming that the last update date in the center of the screen is correct, click the [Download] button.
   If the last update date and time displayed in the center is older, or if data acquisition fails, click the [Update] button to confirm that it is the latest update date and time.

If you click the [Update] button and the date and time display is not updated, wait a while and then click the [Update] button again.
If you can't get the latest data even if you click the [Update] button after a while, open the dialog again and check.



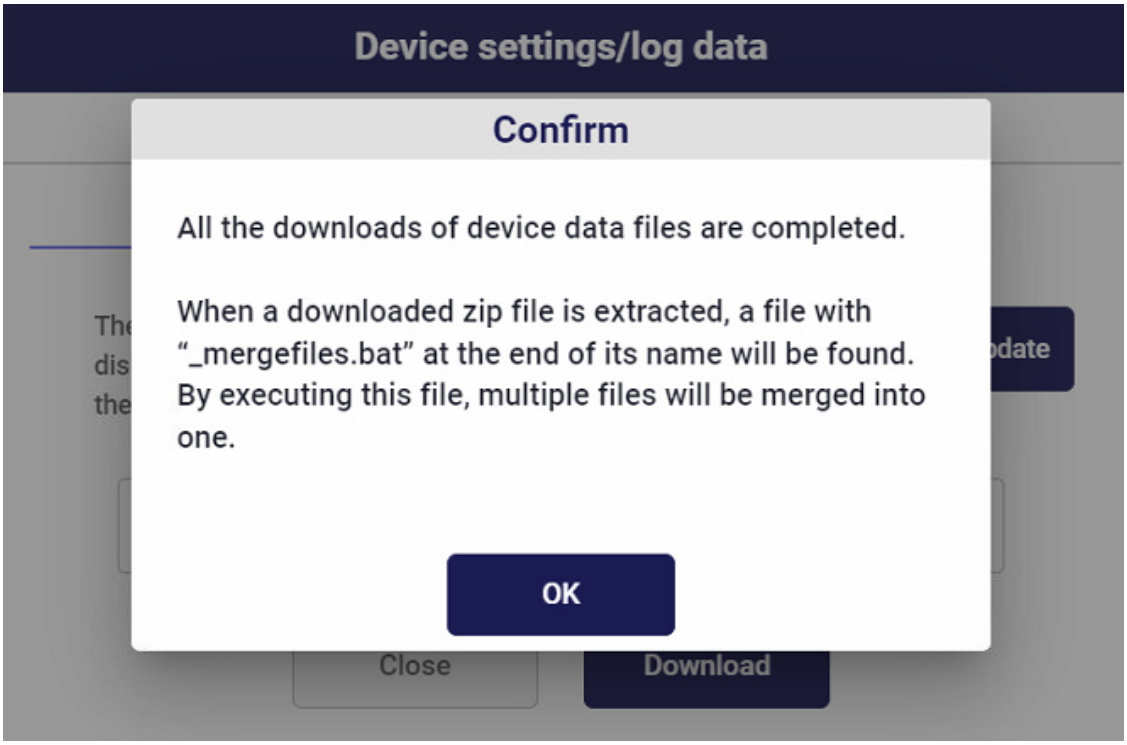
The zip file will be downloaded to the default folder set in your browser.

You cannot operate the screen while downloading. By clicking the [Cancel] button, you can cancel downloading.



6. A download completion dialog is displayed. By unzipping the downloaded zip file and double-clicking the bat file in the folder, you can combine multiple data into one file and

check it. A bin file is generated for configuration data, and a tar file is generated for logs.

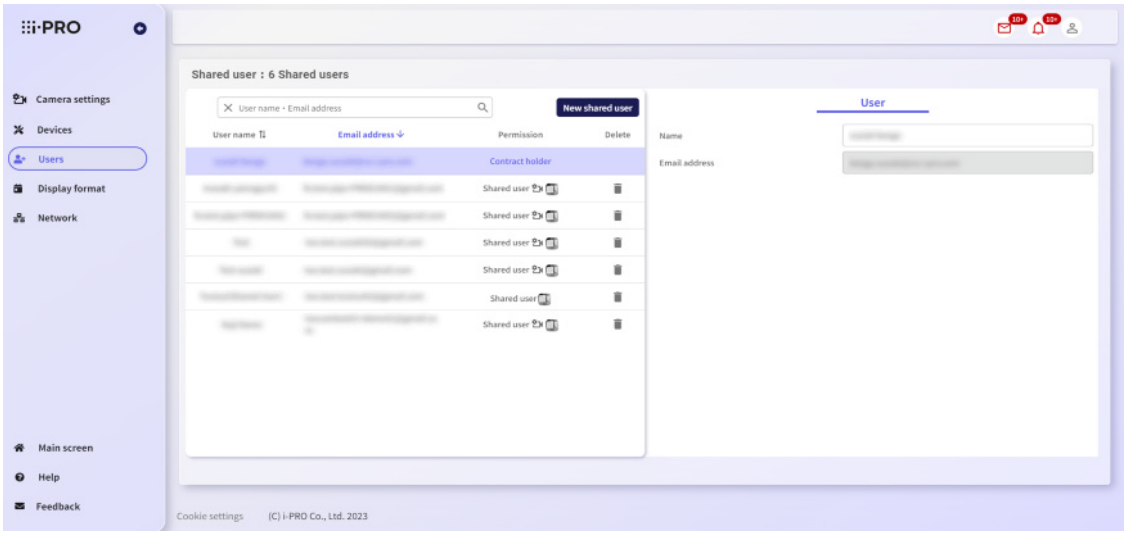


4.3 User management

4.3.1 Register a shared user

By registering a shared user, live images, recorded images, and communication status can be viewed on the portal screen by anyone other than the subscriber.
You can also select the cameras that can be viewed by each shared user.
You can create up to 200 shared users.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Users] button.

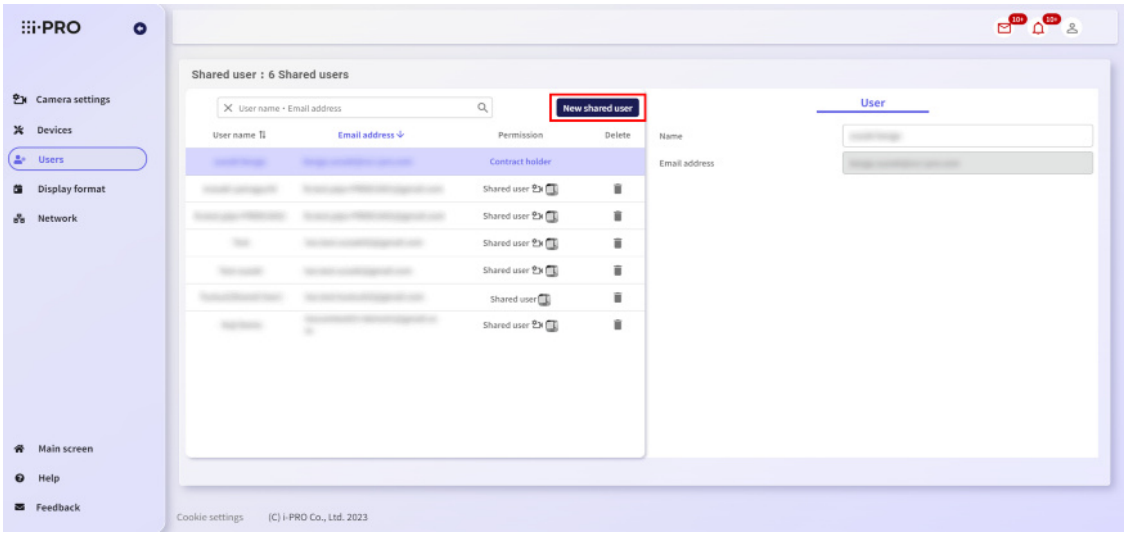


The User management screen is displayed.

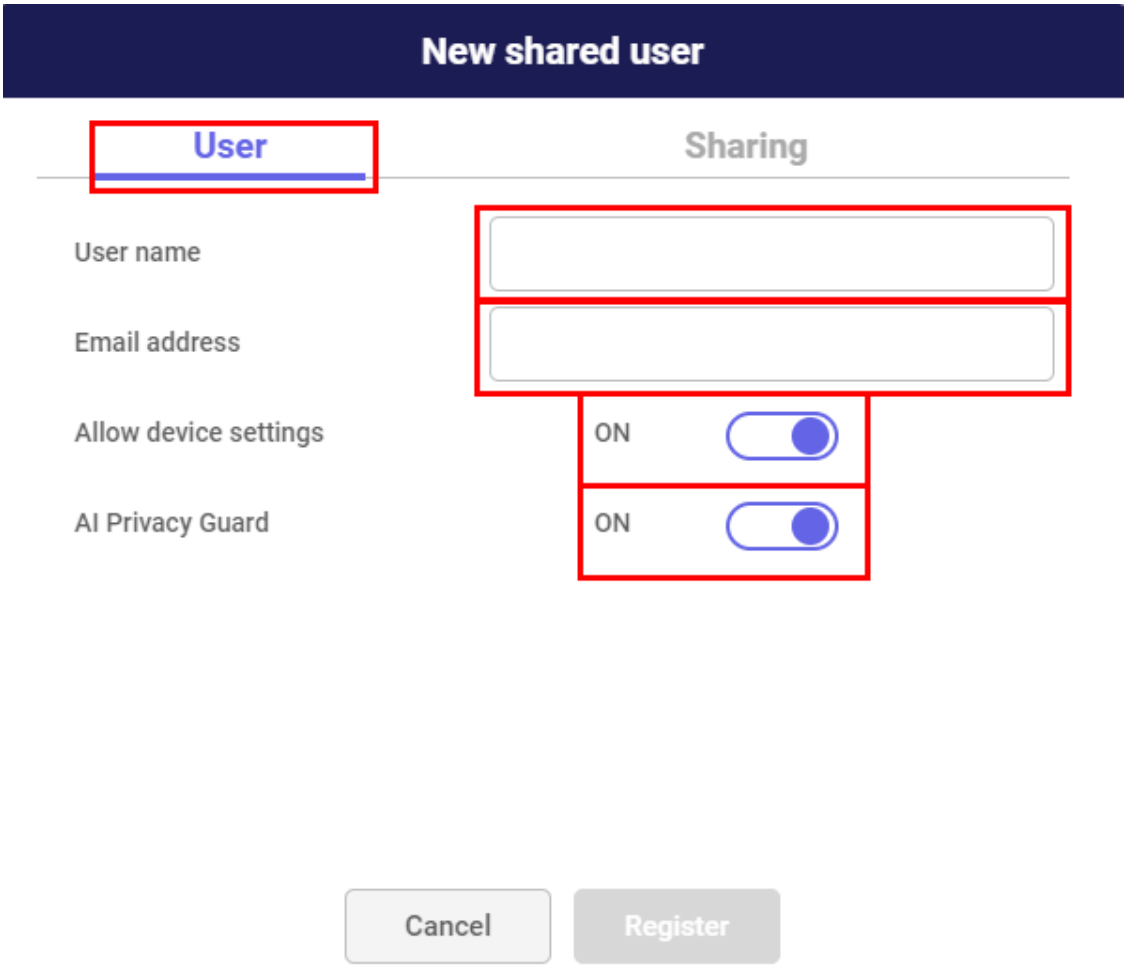
* For shared users with the device setting privilege, the camera setting icon is displayed in the Permission field.

* For shared users with AI Privacy Guard, the Privacy Guard icon is displayed in the Permission field.

4. Click the [New shared user] button.



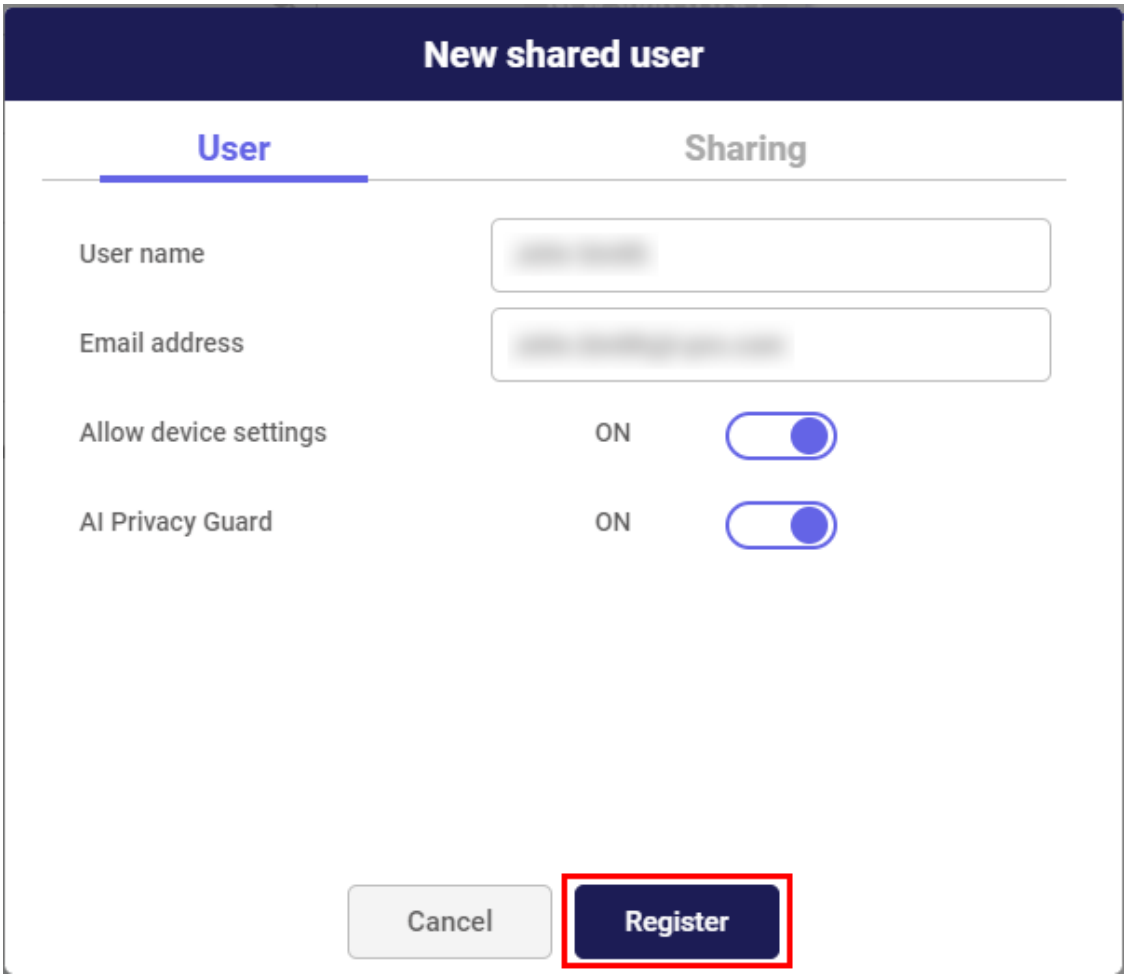
5. The New shared user screen is displayed. Enter the name and e-mail address of the shared user you want to add, and set the device setting permission.



In addition, the ON/OFF setting is enabled when using a recorder/camera that supports AI privacy guard. For ON, the privacy guard ON cameras can be shared by shared users, and for OFF, the privacy guard OFF cameras can be shared.
If necessary, configure the sharing settings. For details on sharing settings, refer to 4.3.3 Configuring camera settings for shared users.

If you turn ON the Device Settings privilege, shared users can configure the settings for the assigned cameras. For details on camera settings, refer to 4.1.3 Make changes to the camera's settings.

6. After making the necessary settings, click the [Register] button.
   If you do not want to register a shared user, click the [Cancel] button.



This completes the procedure to add a shared user.

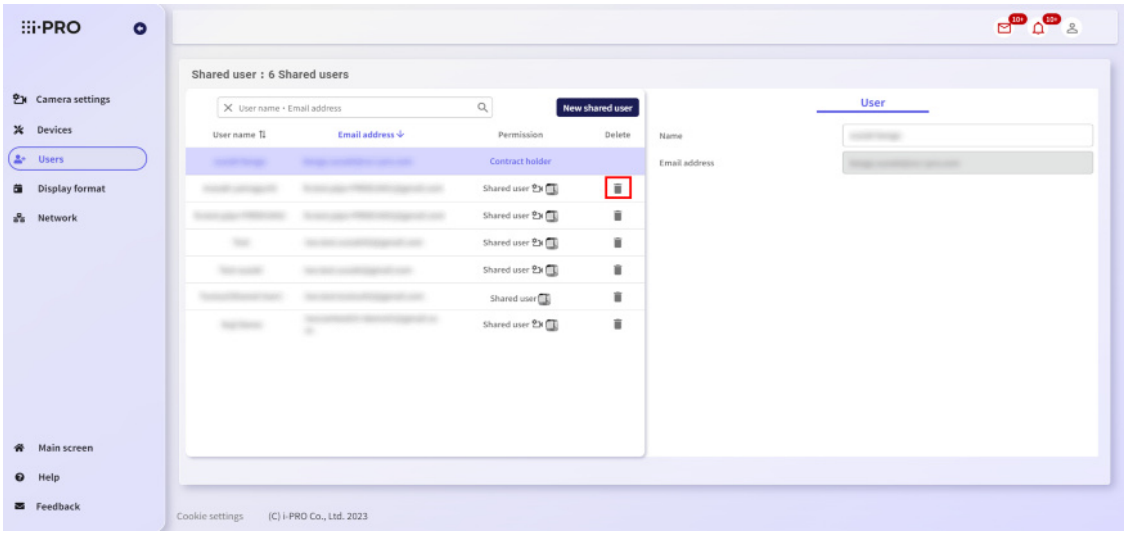
To correct the registered contents, select the shared user to be modified on the user management screen, make the necessary modifications, and click the [Apply] button.

To edit the e-mail address, refer to 5.2.5 Change the mail address.

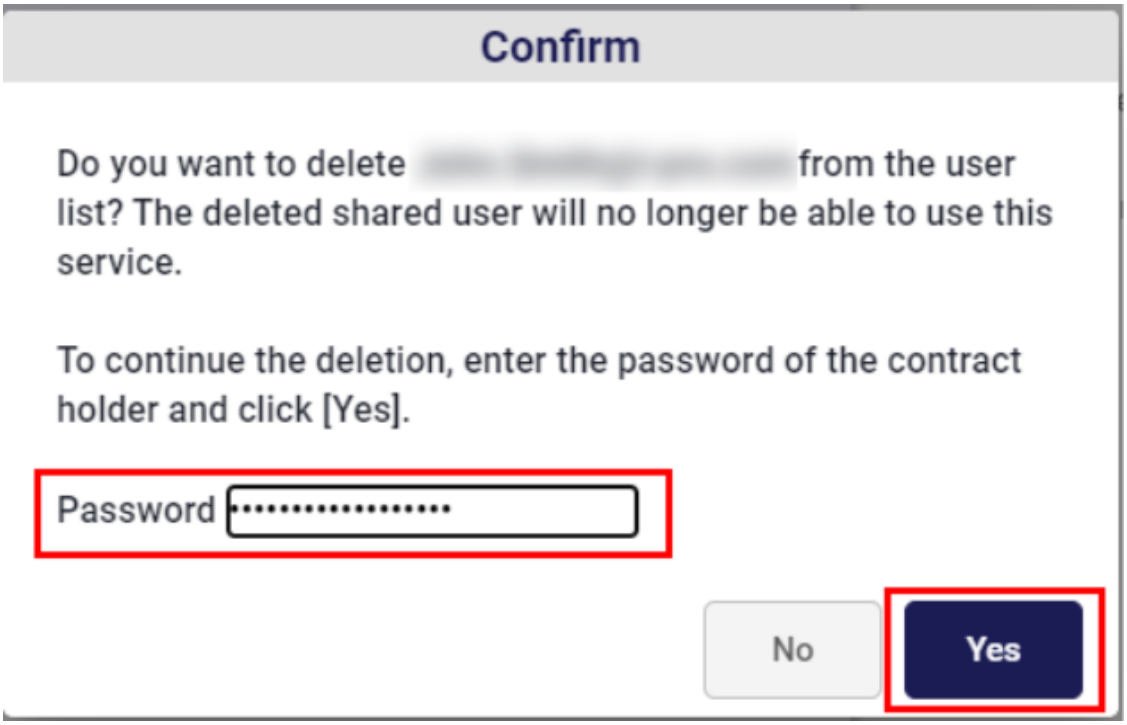
4.3.2 Delete a shared user

Delete the registered shared user.

1. Click the [Settings] button in the browser.
2. Click the [Users] button.
3. The User management screen is displayed. Click the [Delete] icon for the user you want to delete.



4. The message below is displayed. Confirm that the e-mail address is the one of the user to be deleted, enter the password of the customer, and click "Yes".
   If you do not want to delete the user, click the "No" button.



5. The user list screen appears. Make sure that the selected shared user is deleted from the user list.

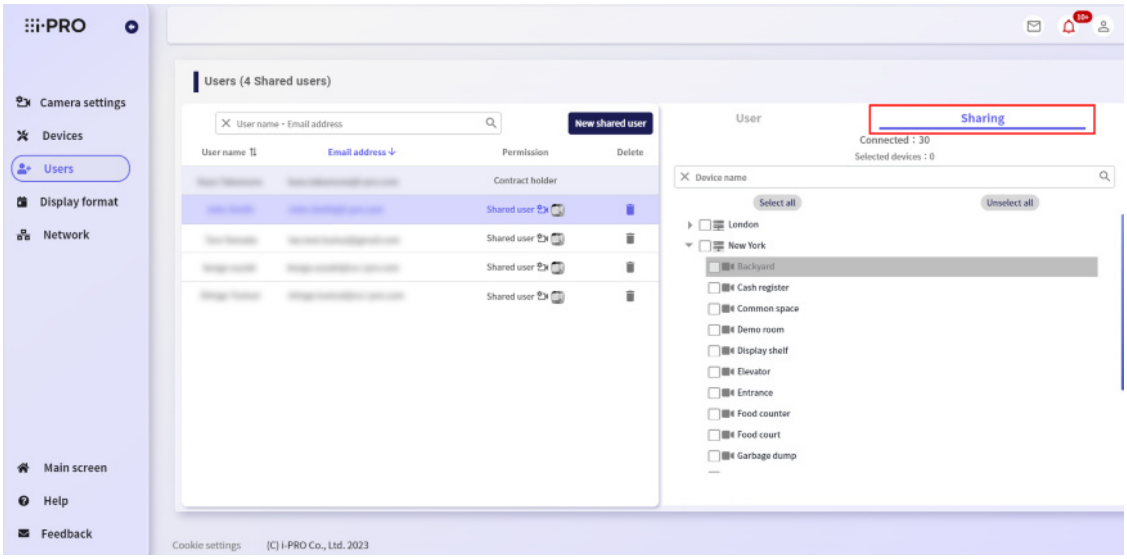
This completes user deletion.

4.3.3 Configuring camera settings for shared users

Configure settings for the cameras that can be used by registered shared users.

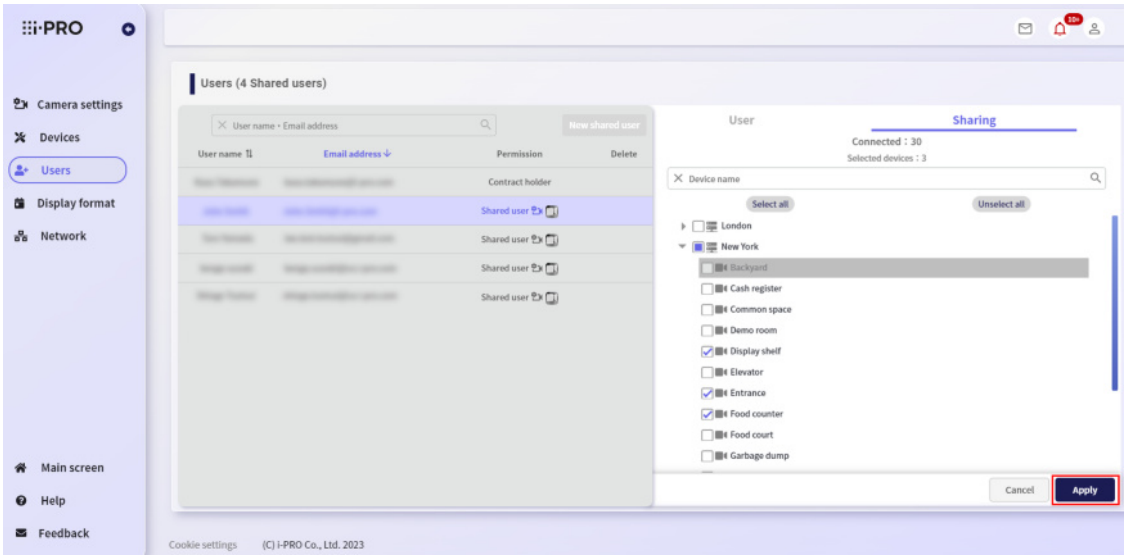
All cameras are unavailable when you register a shared user.

1. Click the [Settings] button in the browser.
2. Click the [Users] button.
3. The user management screen is displayed. Select the shared user for which the sharing settings are to be made, and click the [Sharing] tab.



The list of all registered recorder and cameras is displayed in the tree.

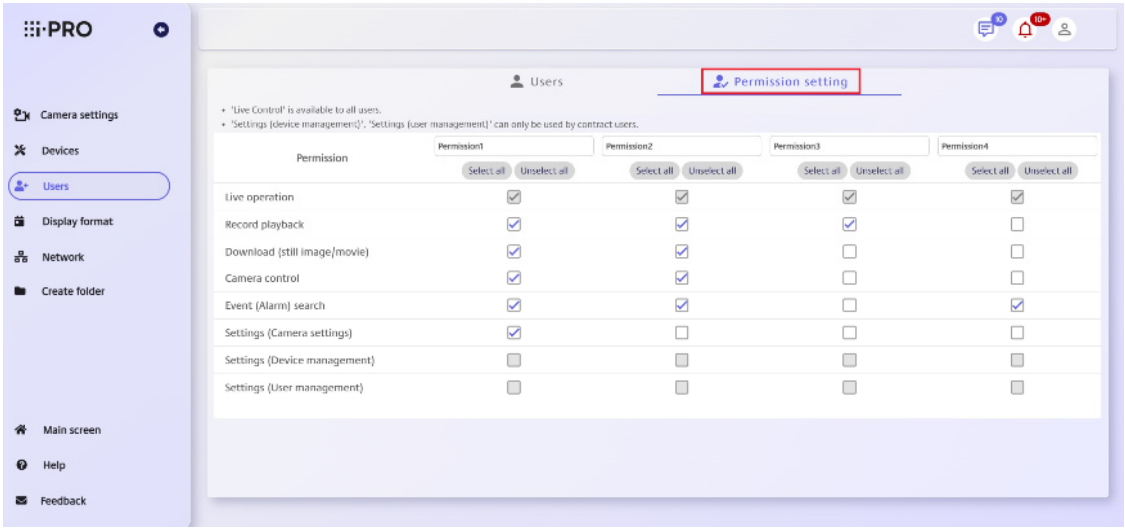
4. After selecting a camera that can be used by the shared user, click the [Apply] button.
   If you do not want to configure camera settings, click the [Cancel] button.



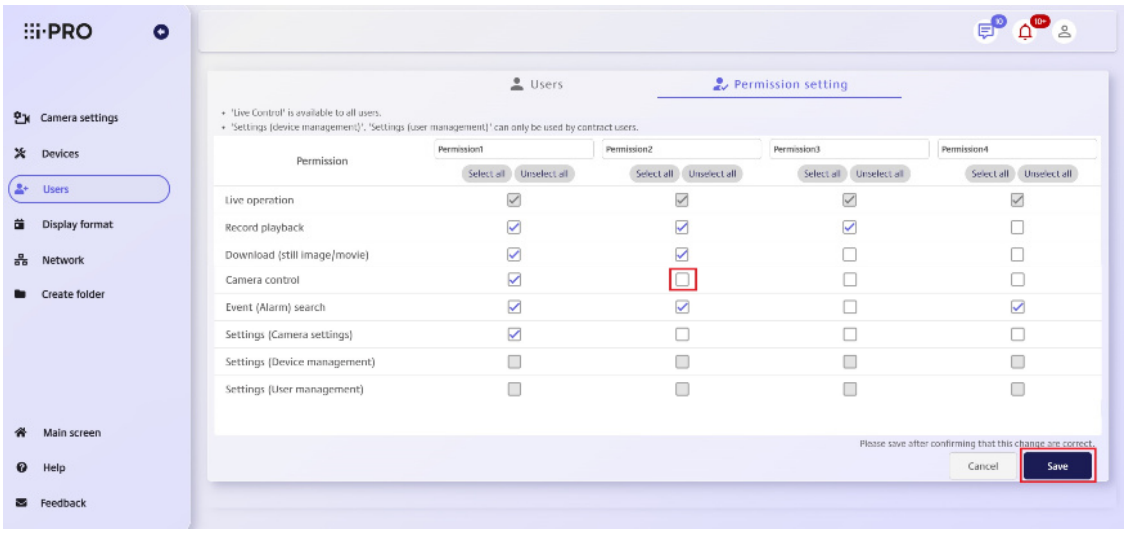
This completes the setup for a camera that can be used by shared users.

4.3.4 Set permissions

1. Click the [Settings] button in the browser.
2. Click the [Permission Settings] tab.



3. Click the checkbox of the permission you want to change, and click the [Save] button.

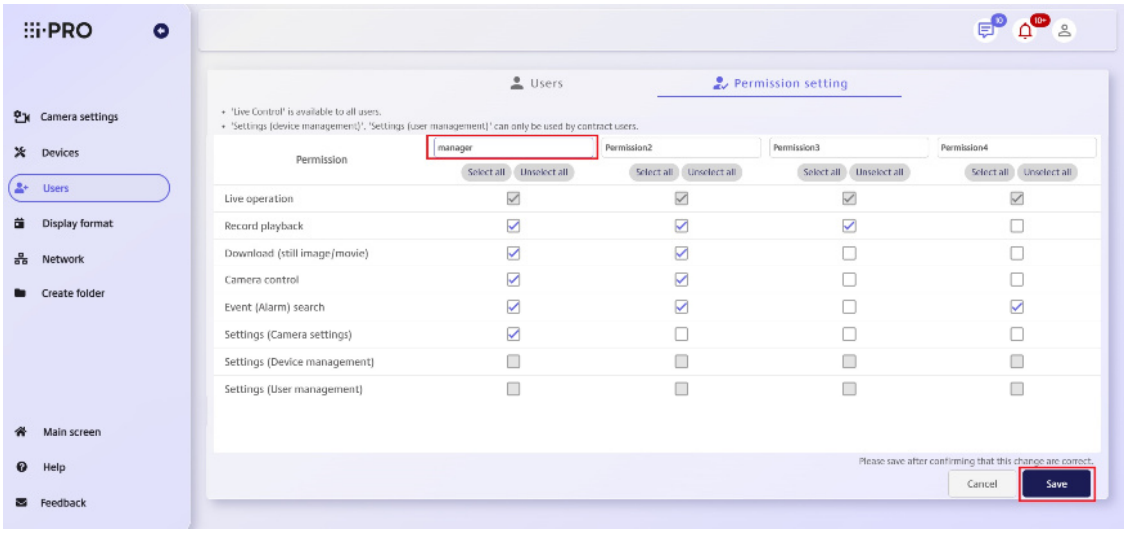


Please check that the permission settings are correct before saving.

Permission	explanation
Live operation	Live video can be displayed. Live video can be viewed by all users, so you cannot uncheck it.

Permission	explanation
Record playback	ecorded video. In addition, "Playback" is displayed in the menu, allowing you to play back multiple images recorded by the camera at the same time
Download (still image/movie)	You can download still images and videos.
Camera control	You can change focus and brightness. In addition, for PTZ cameras, you can operate pan-tilt-zoom, select presets, and register.
Event (Alarm) search	"Event Search" will be displayed in the menu and you can search for events.
Settings (Camera settings)	You can change the device name and adjust the image quality.
Settings (Device management)	You can obtain logs, schedule firmware updates, etc. (This privilege cannot be granted to shared users)
Settings (User management)	You can add or change shared users. (This privilege cannot be granted to shared users)

You can change the name of the authorization. If you want to change it, click on the name and edit it. Click the [Save] button to confirm your changes.

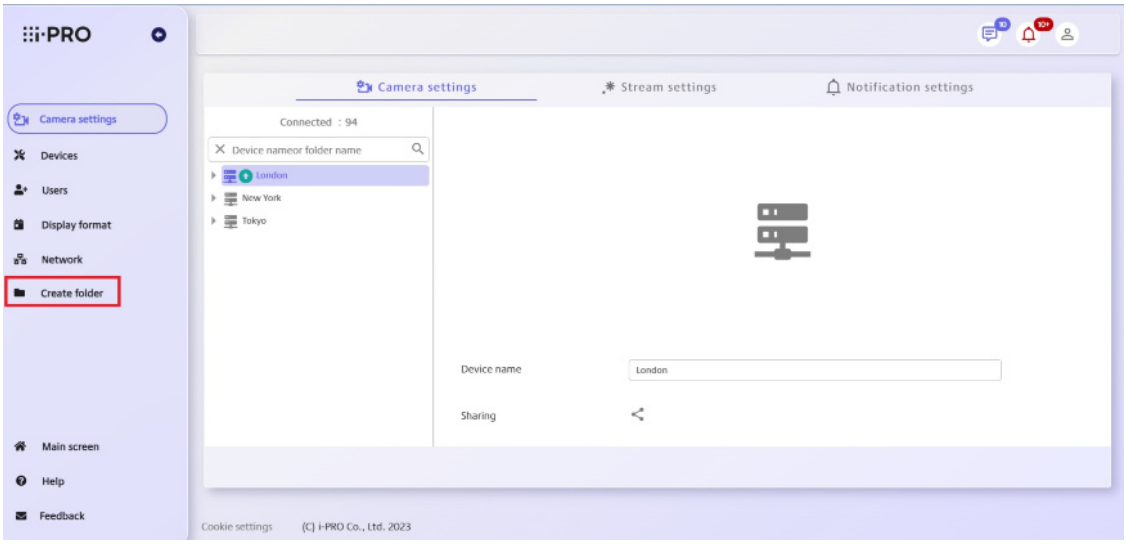


4.4 Folder settings

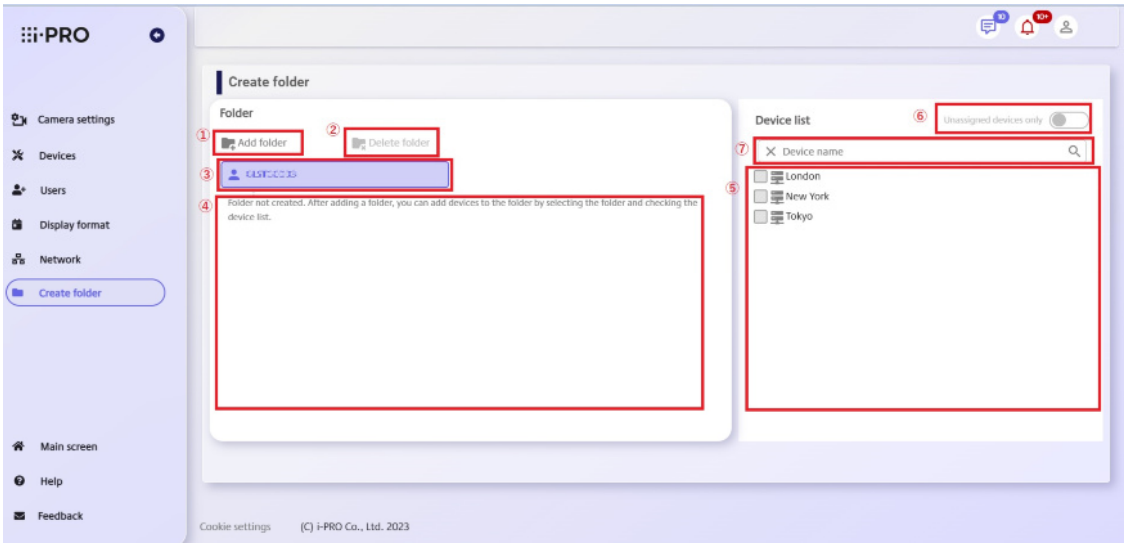
If you have registered devices in Remote Monitoring, by adding devices to a folder, you will be able to view the device list (device tree) for each folder on each screen.
Up to 100 folders can be linked to one folder. Additionally, folders can be created up to 3 levels deep.

4.4.1 Add folder

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.

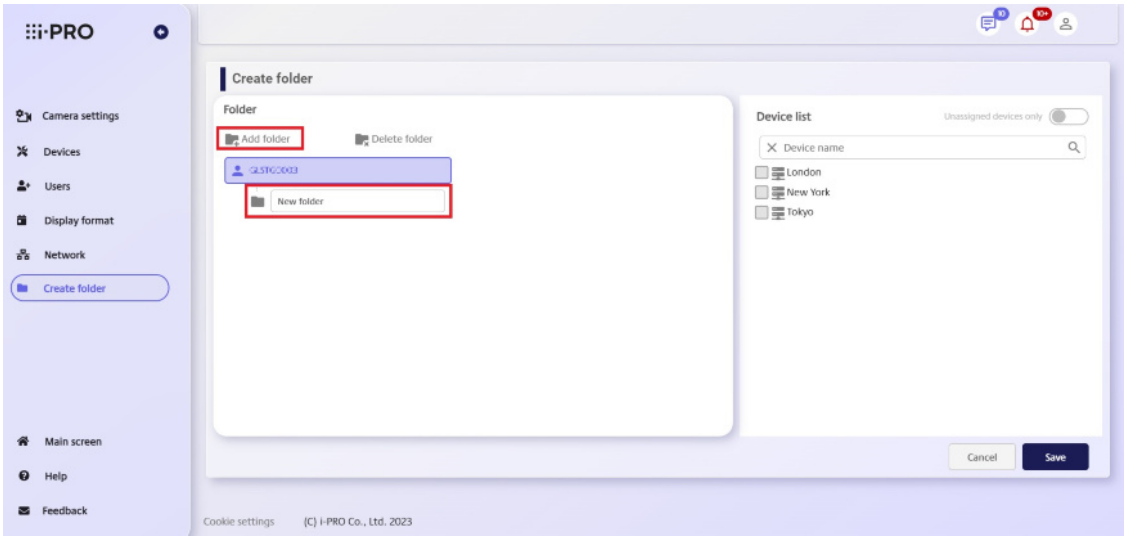


→The folder creation screen will be displayed.

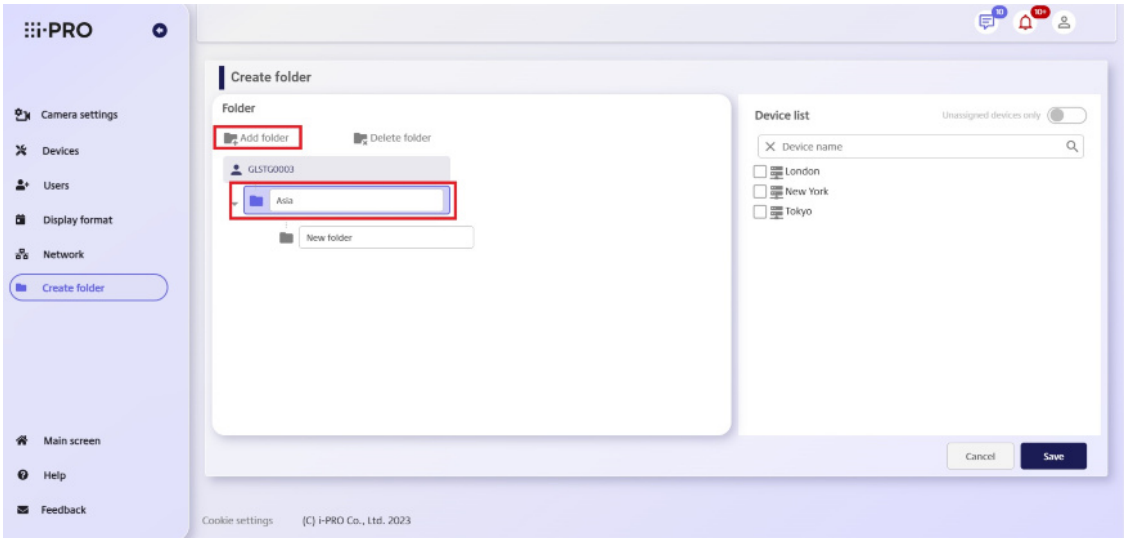


①Add folder button	Select and click a folder or account to add the folder to the folder tree.
②Delete folder button	You can delete a folder by selecting it and clicking it.
③Account	The name of the subscriber who is configuring the folder tree will be displayed.
④Folder tree	The folder tree being configured is displayed. If no folders are set, only the device tree without folders will be displayed on each screen.
⑤Device list	A list of edge storage or camera direct registered in Remote Monitoring will be displayed. If a folder is selected, you can check it and link the device to the folder.
⑥Unassigned device display switching button	Among the devices displayed in the device list, you can switch to display only devices that are not linked to a folder.
⑦Device search	Search and narrow down the displayed devices by device name to display them.

4. Click the [Add folder] button.

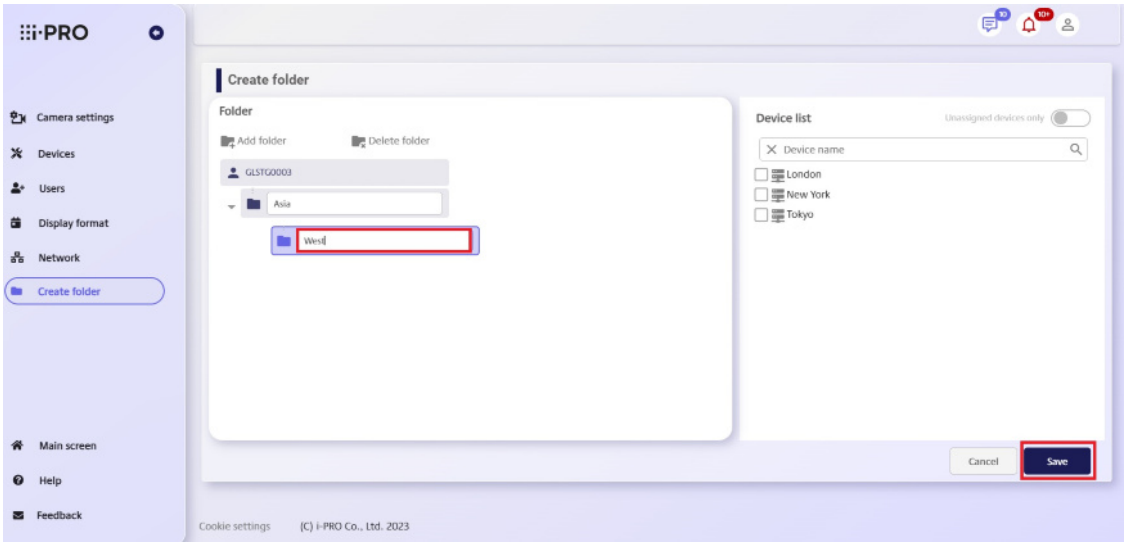


If you want to add a folder under a folder, select the folder you want to add and click the [Add Folder] button.



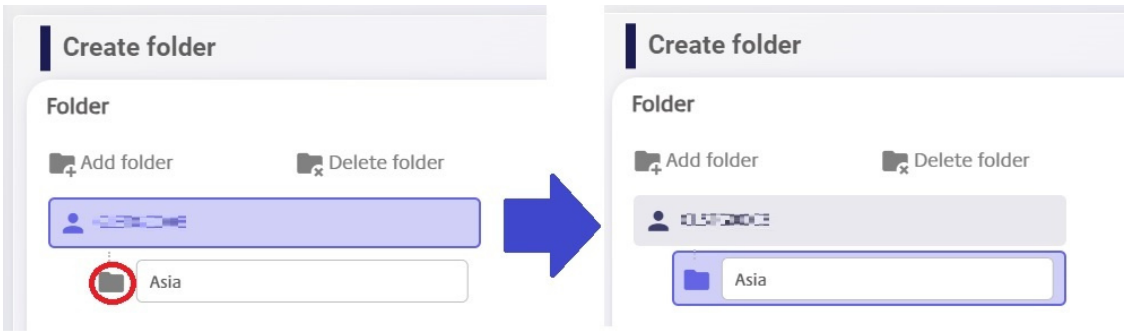
Up to 100 folders can be linked to one folder.
Folders can be created up to 3 levels deep.

5. Enter the name of the folder and click the [Save] button.

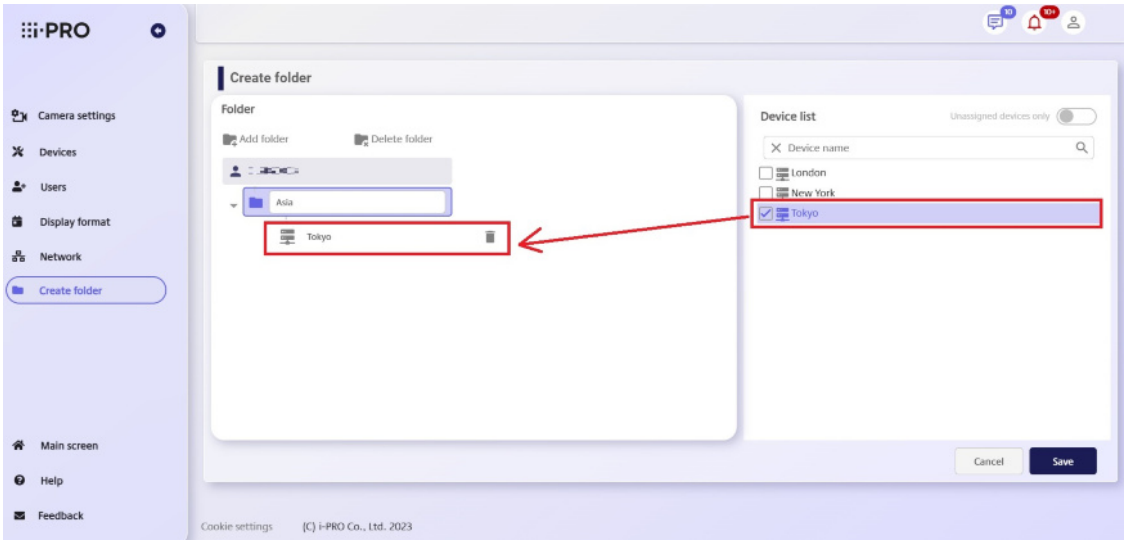


4.4.2 Link devices to folders

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. Click the folder icon of the folder to which you want to associate the device to select it.



5. Check the devices you want to associate with the folder from the device list.

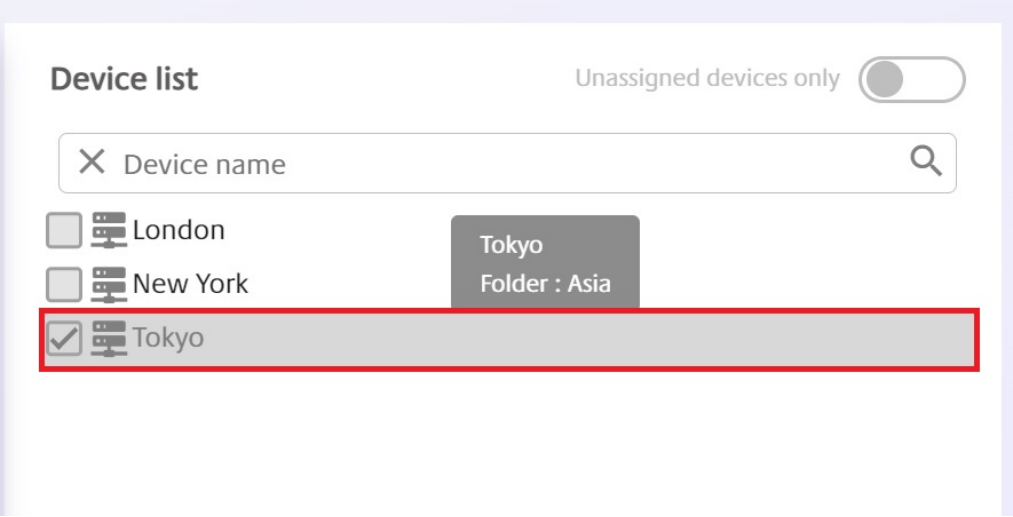


If an account is selected, devices cannot be added.

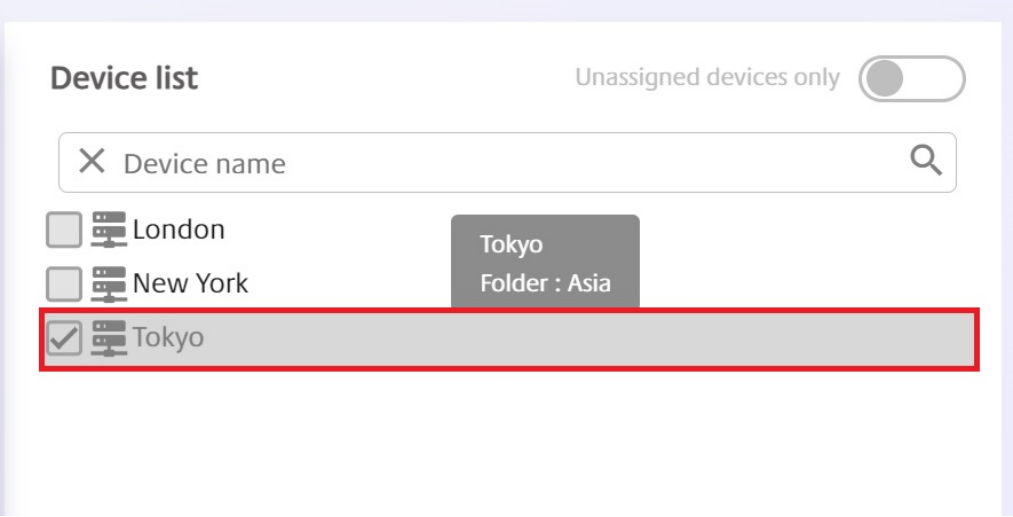
6. Click the [Save] button.

If there are unassigned devices, they will be displayed under the created folder on other screens.

If you want to check whether there are any unassigned devices, click the unassigned device display toggle button.

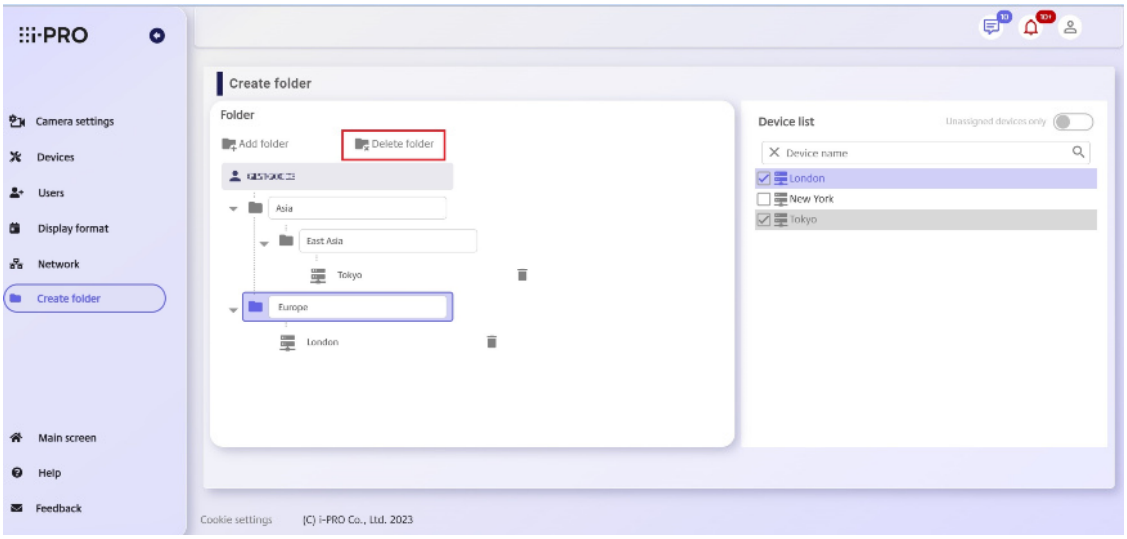


If you want to check which folder an assigned device is associated with, you can check the folder to which it is assigned by hovering over the device name.

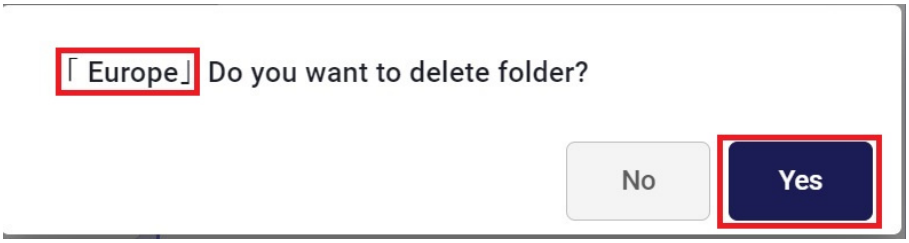


4.4.3 Delete a folder

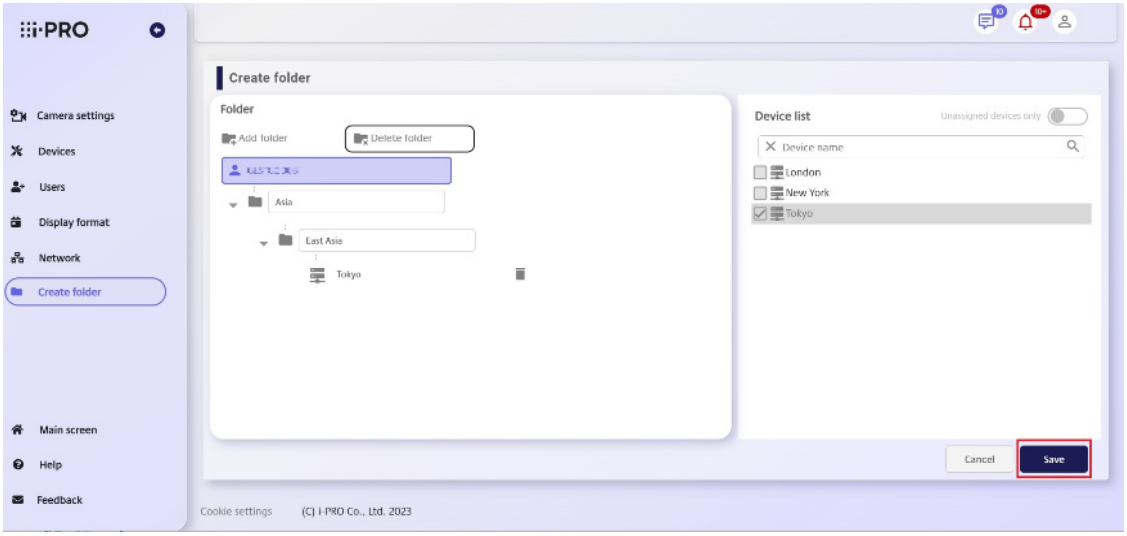
1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. Select the folder you want to delete and click the [Delete Folder] button.



5. Make sure that it is the name of the folder you want to delete, and click the [Yes] button. If you do not want to delete it, click the [No] button.



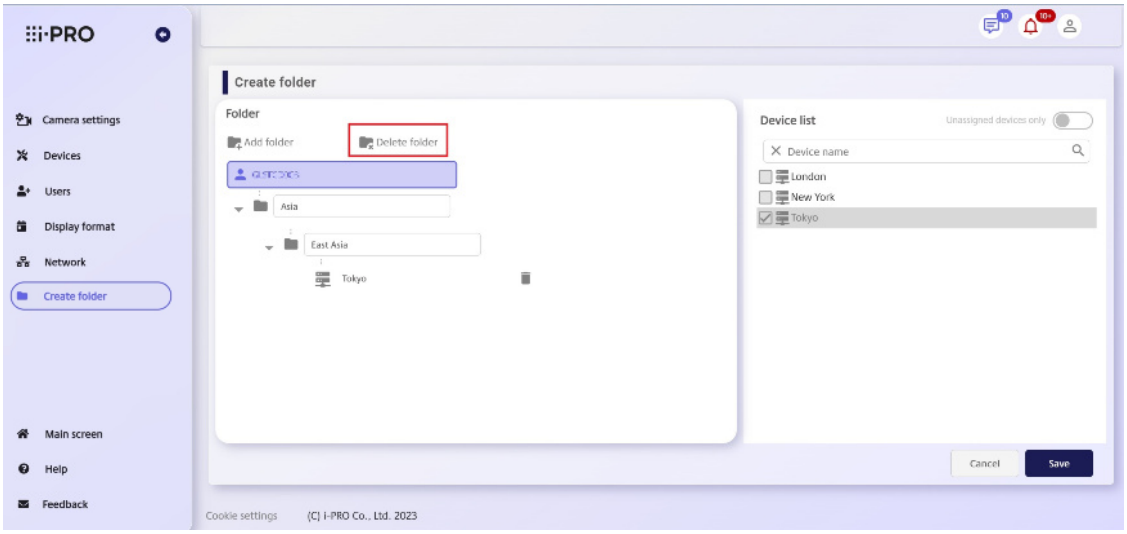
6. The folder is removed from the folder tree. To confirm deletion, click the [Save] button.



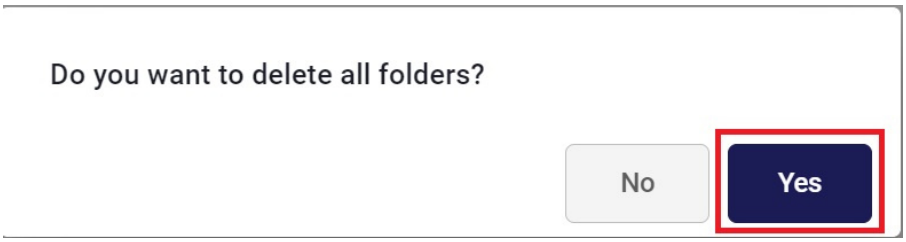
4.4.4 Delete all folders

1. Visit the login site (https://rms.i-pro.com) in your browser.

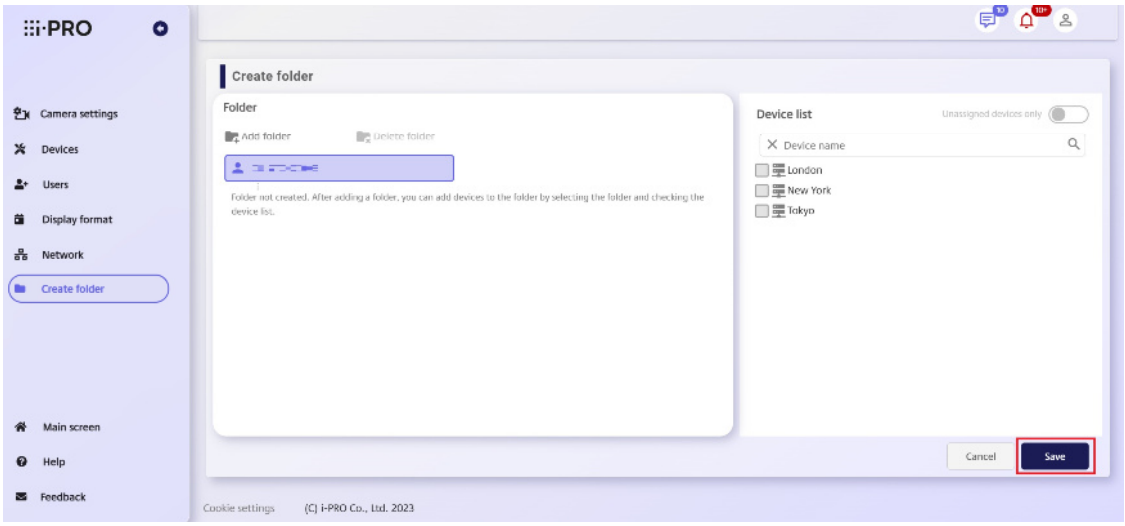
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. Make sure the account is selected and click the [Delete Folder] button.



5. If you want to delete all folders, click the [Yes] button. If you do not want to delete it, click the [No] button.



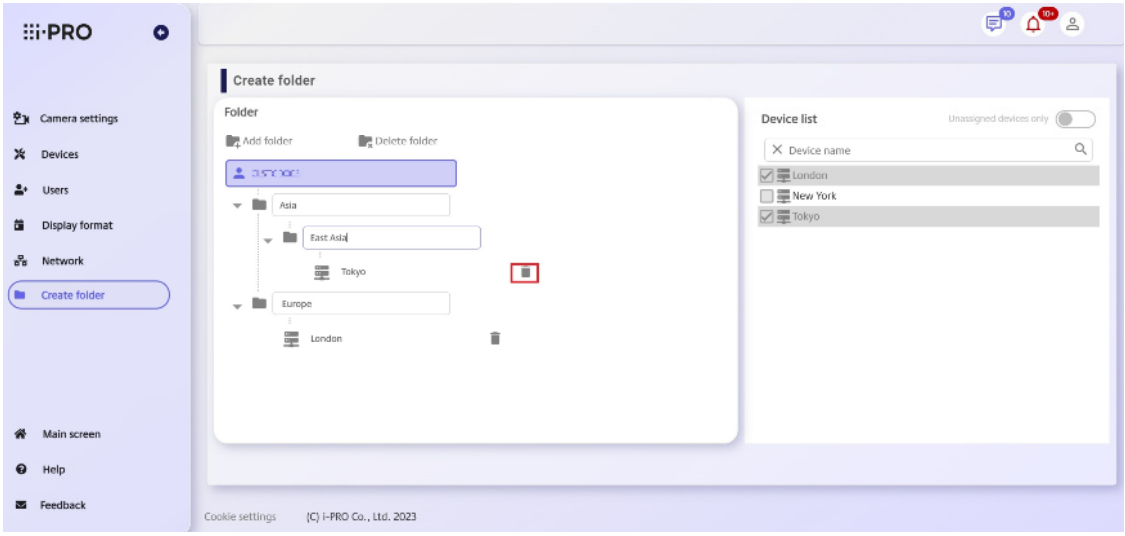
6. All folders will be deleted from the folder tree. To confirm deletion, click the [Save] button.



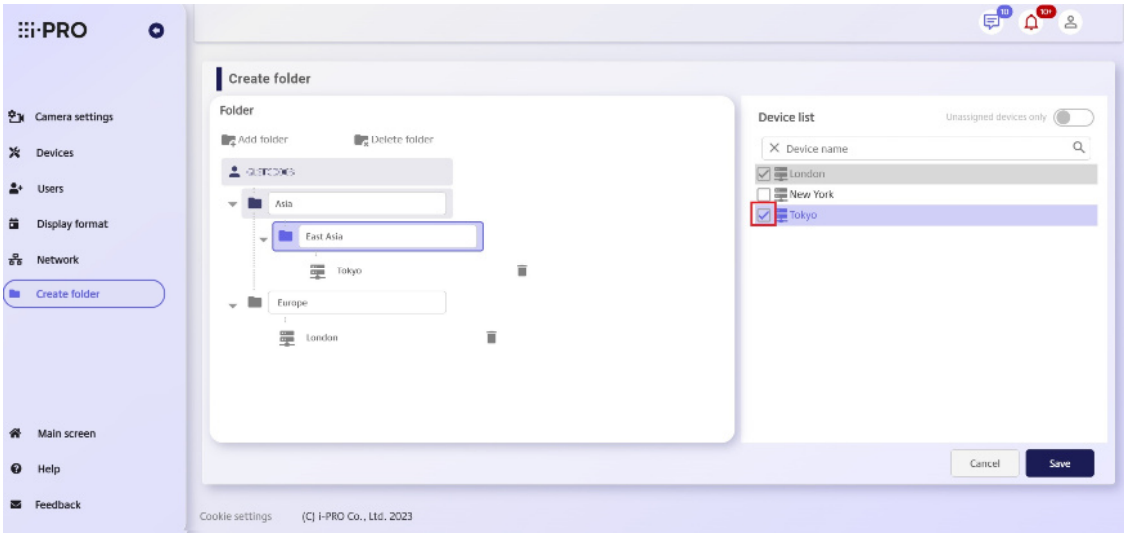
4.4.5 Delete devices from a folder

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. There are two ways to delete devices from a folder:

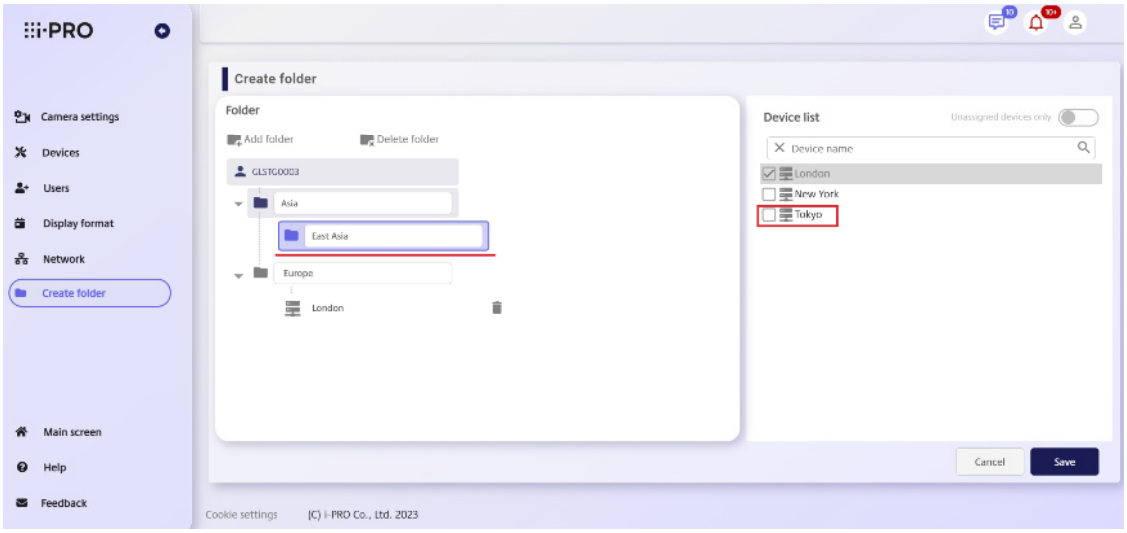
① Open the folder associated with the device you want to delete and click the trash can icon.



② Uncheck the device you want to delete from the device list.



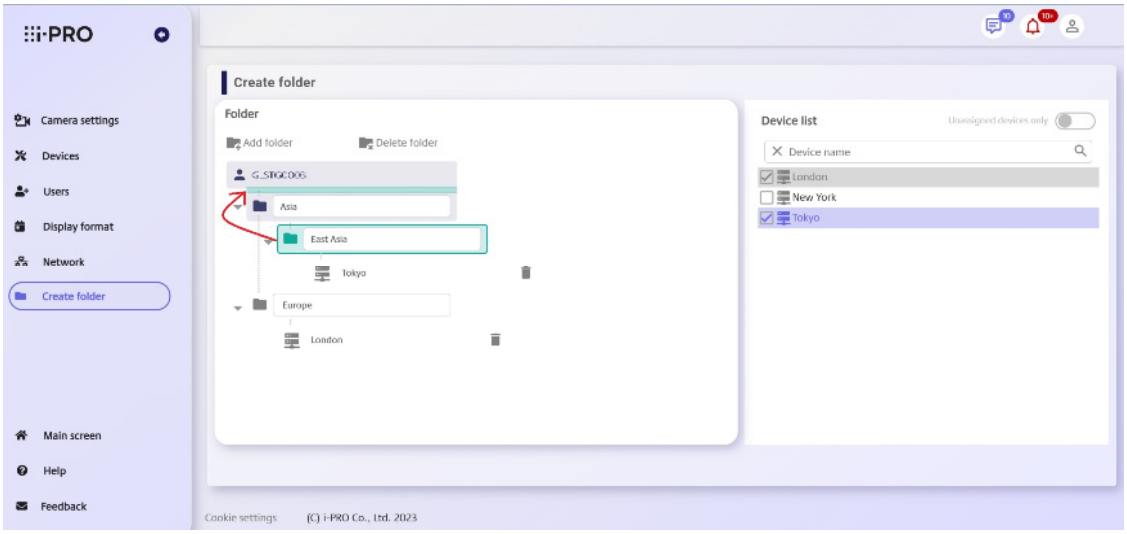
The device is deleted from the folder and unchecked from the device list.



5. To confirm deletion, click the [Save] button.

4.4.6 Sort folders

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. You can move the folder by dragging and dropping the folder icon of the folder you want to move.



Folders that are being moved have a green border and a light green background color.

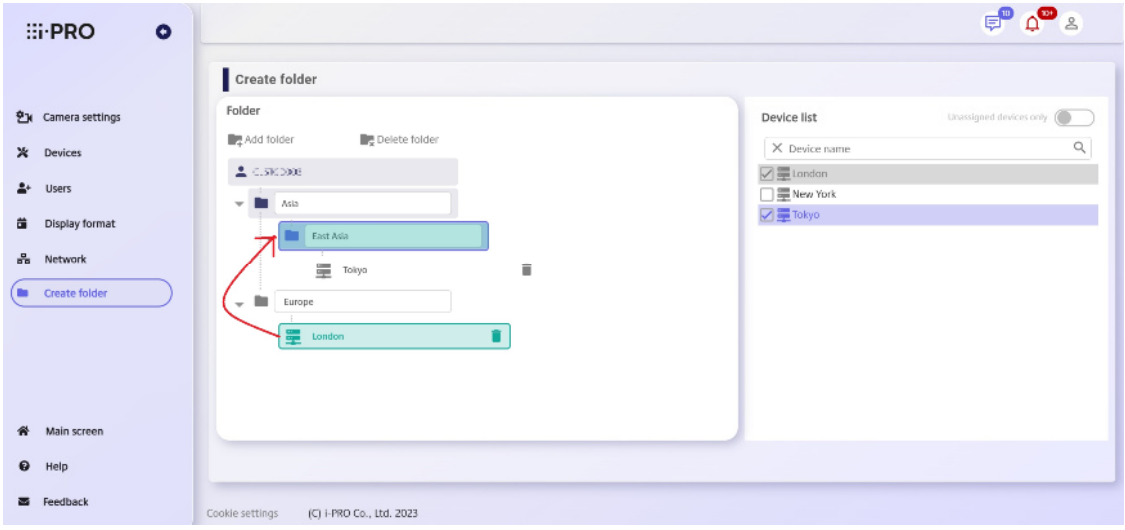
You can move to the location where a light green box appears when you hover.

If a folder is closed, you can open it by dragging and hovering over it for a while.

5. To confirm the move, click the [Save] button.

4.4.7 Sort devices

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. After logging in, click the [Settings] button.
3. Click the [Create folder] button.
4. You can move the position of the device by dragging and dropping the device you want to move.



Devices that are moving are displayed with a green border and a light green background color.

You can move within a folder by dragging and dropping it onto the folder.

You cannot change the order of devices within a folder.

5. To confirm the move, click the [Save] button.

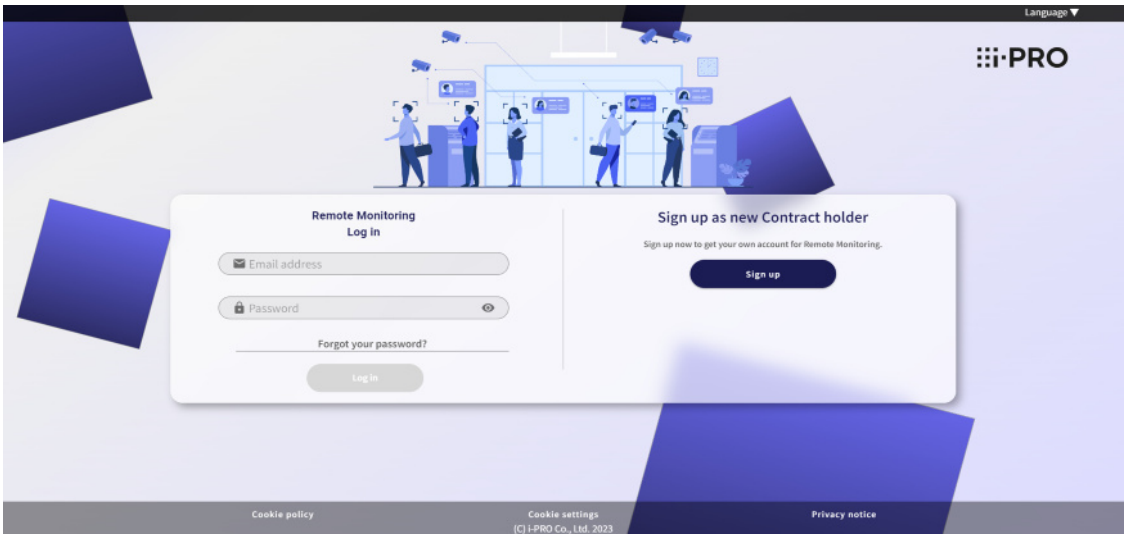
5. User portal screen operation

5.1 Initial registration

5.1.1 Register a new user

※ Please allow incoming mail for "no-reply@verificationemail.com" and "no-reply@rms.i-pro.com" in advance.

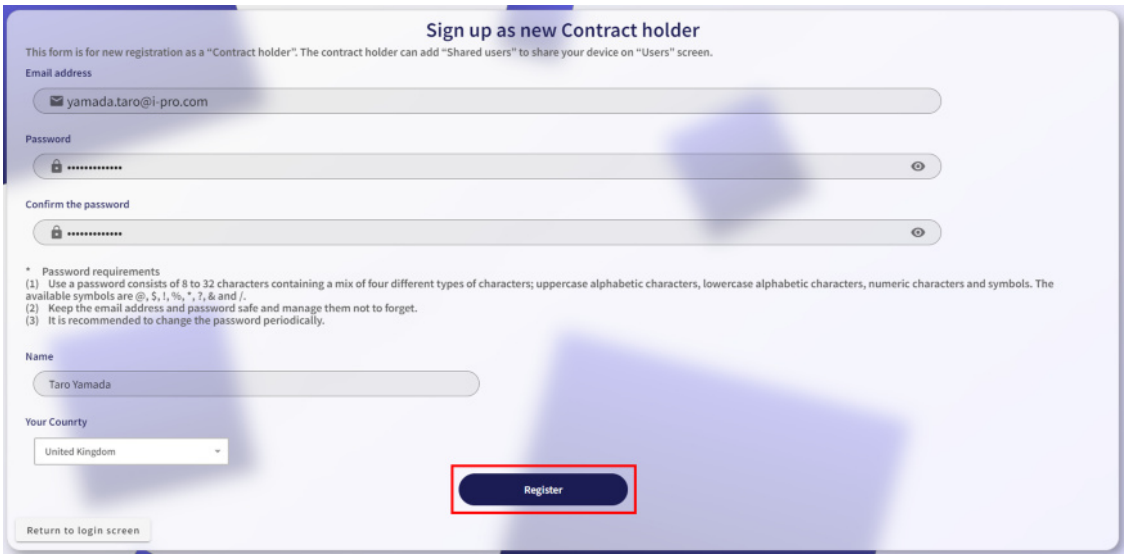
1. Visit the https://rms.i-pro.com/.
2. Click the [Sign up] button.



3. Confirm the contents of End User License Agreement, check [I agree], and click the [Next page] button.

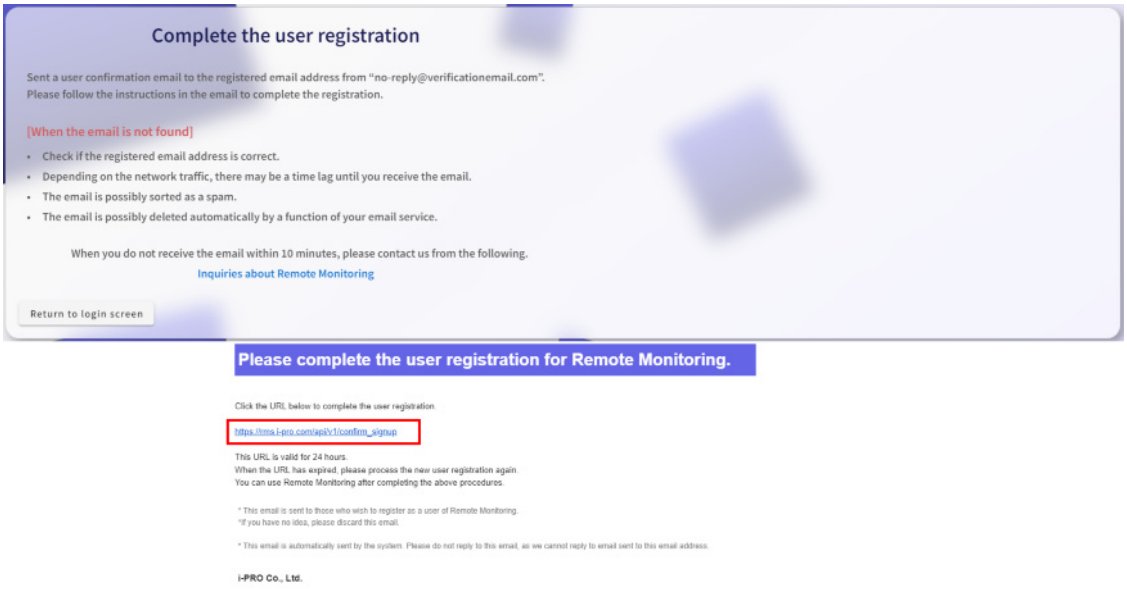
After confirming End User License Agreement by operating the scroll bar, you can check [I agree].

4. Enter a received e-mail address into the e-mail address, set the password and name, and click the [Register] button.



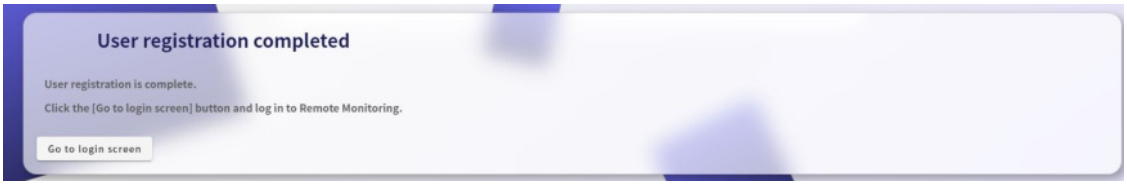
* Do not include all or part of the user name or e-mail address in the password, or use words or meaningful characters. You may be guessed by a third party and be logged in by impersonation.
* Do not use the same password on multiple systems.

5. A confirmation e-mail is sent to the registered e-mail address. Click the e-mail link destination after receiving.



You can log in to the remote monitoring service by completing your enrollment. Be sure to complete the user registration within 24 hours after receiving the e-mail.

6. When user registration is completed, the following screen is displayed. Return to the login screen and login with the registered account.



5.2 Login/Logout

5.2.1 Log in

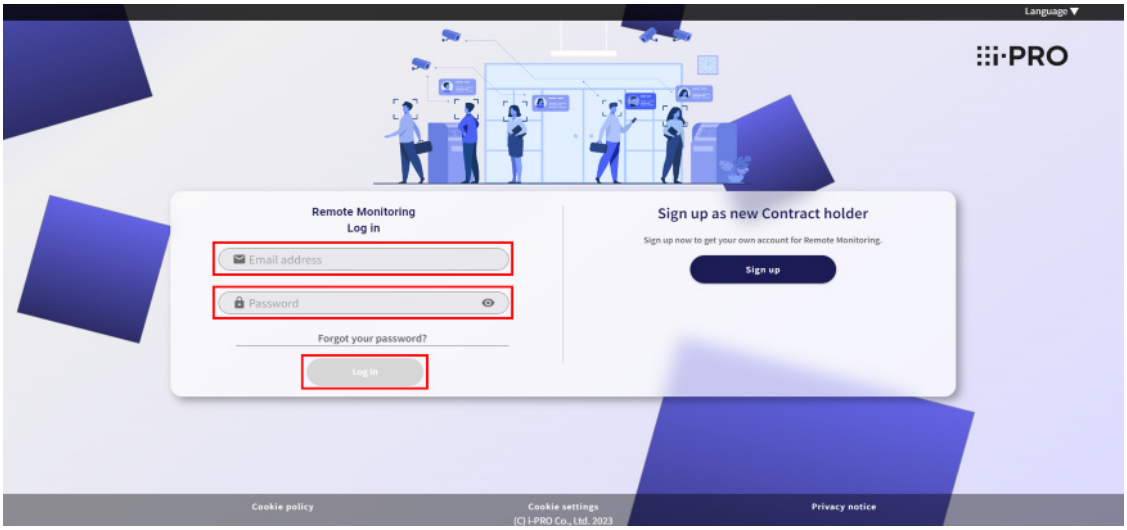
1. Visit the login site (https://rms.i-pro.com) in your browser.

The user who logs in can be selected from "Subscriber (registering as a service by yourself)" or "Shared user".

* "Shared users" are users other than the subscriber who can view live images and recorded images on the portal screen.

[If the user who logged in chooses "Subscriber (register for service by yourself)", please proceed here.]

2. In the "E-mail address" and "Password" fields, enter the e-mail address and login password registered at the time of the remote monitoring service contract, and then click the [Log in] button.



The portal screen is displayed.

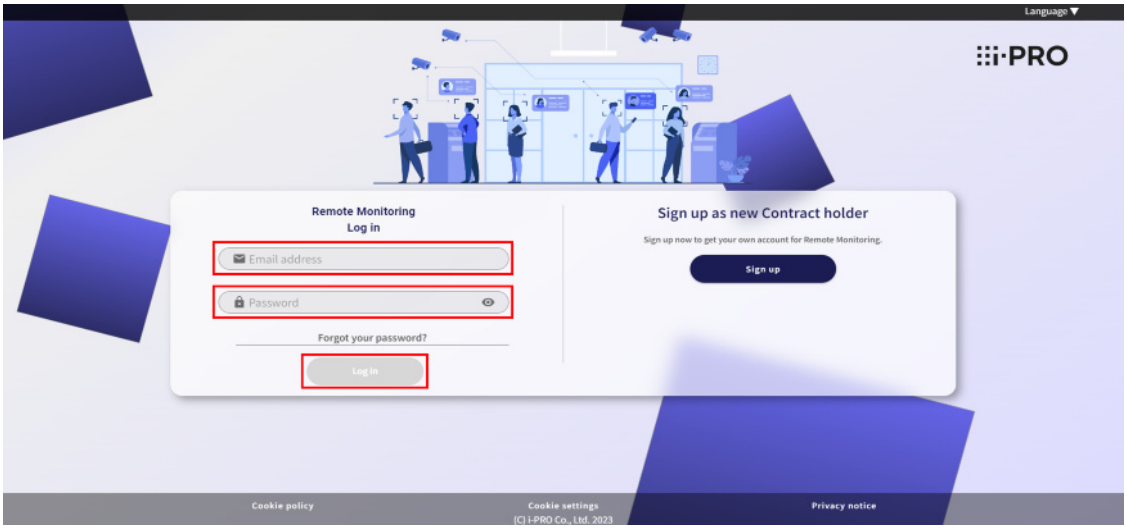
If a login fails more than once, a lockout occurs for up to 15 minutes. You will not be able to log in during lockout.

[If the user who logged in chooses "Shared user", please proceed here.]

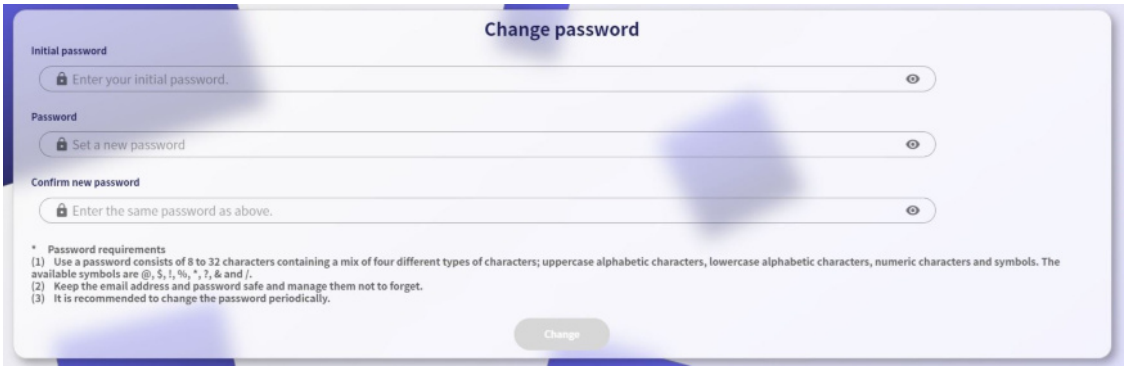
1. In the "E-mail address" and "Password" fields, enter the e-mail address and login password in the e-mail sent when you invited to the service, and click the [Log in] button.

* The e-mail is sent automatically when the subscriber adds a shared user.
* If a login fails more than once, a lockout occurs for up to 15 minutes. You will not be able to log in during lockout.

2. Enter the login password listed in the initial password email in the "Password" and "Confirm new password" fields, and click the [Change] button.



The portal screen is displayed. You do not need to change the password after the second login.

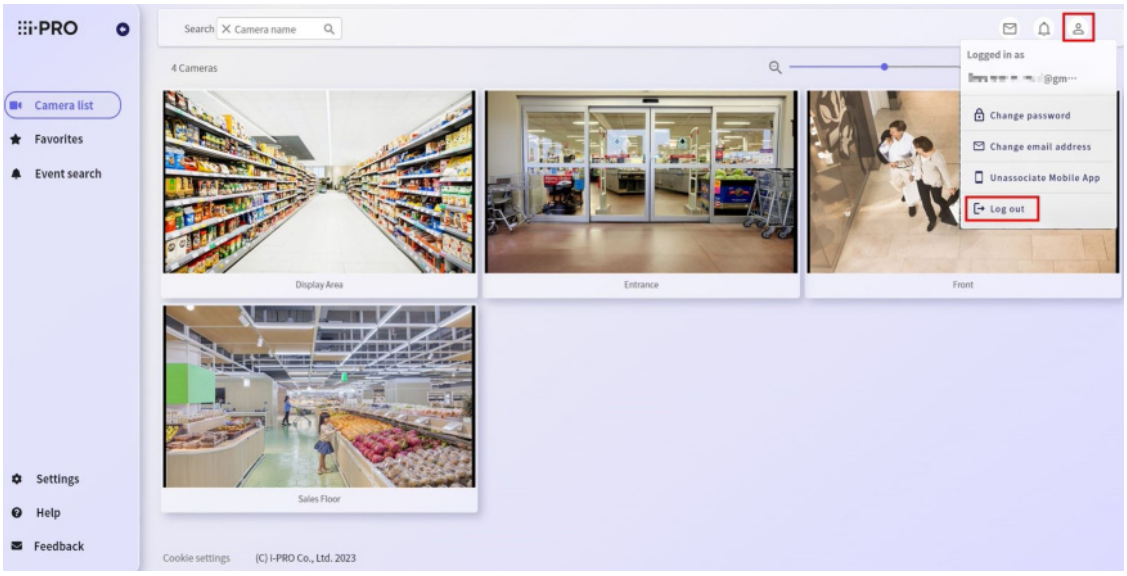


* Do not use all or part of the e-mail address registered in the login password, or use words or meaningful characters. You may be guessed by a third party and be logged in by impersonation.
* Do not use the same password on multiple systems.
* Do not use all or part of the registered e-mail address as the login password.

5.2.2 Log out

Log out of the remote monitoring service.

1. Click the user icon to display the menu bar, and click the [Log out] button.



2. Click the [Yes] button.

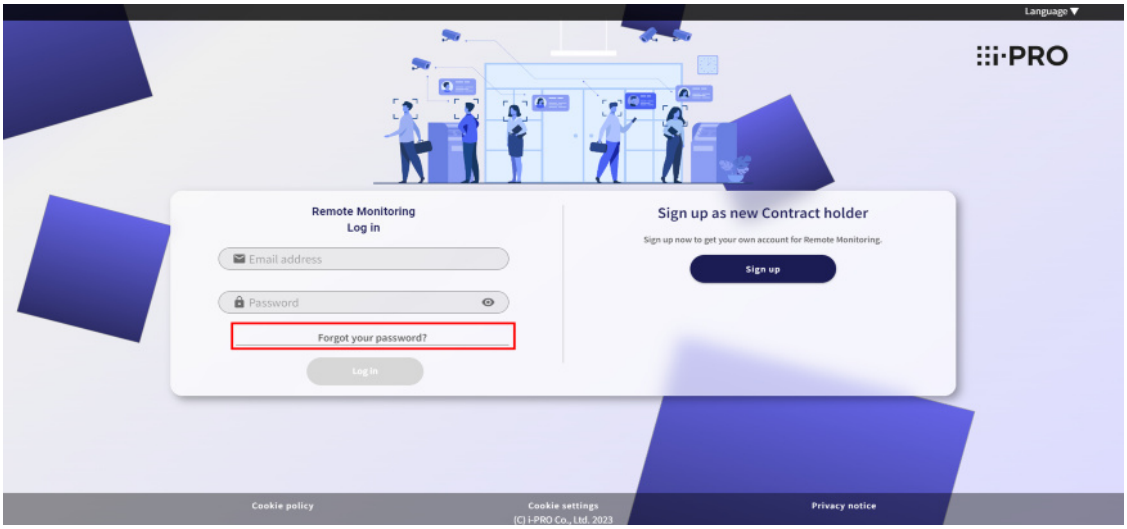
To not log out, click the [No] button. The "Confirm" window closes.

The login screen is displayed.

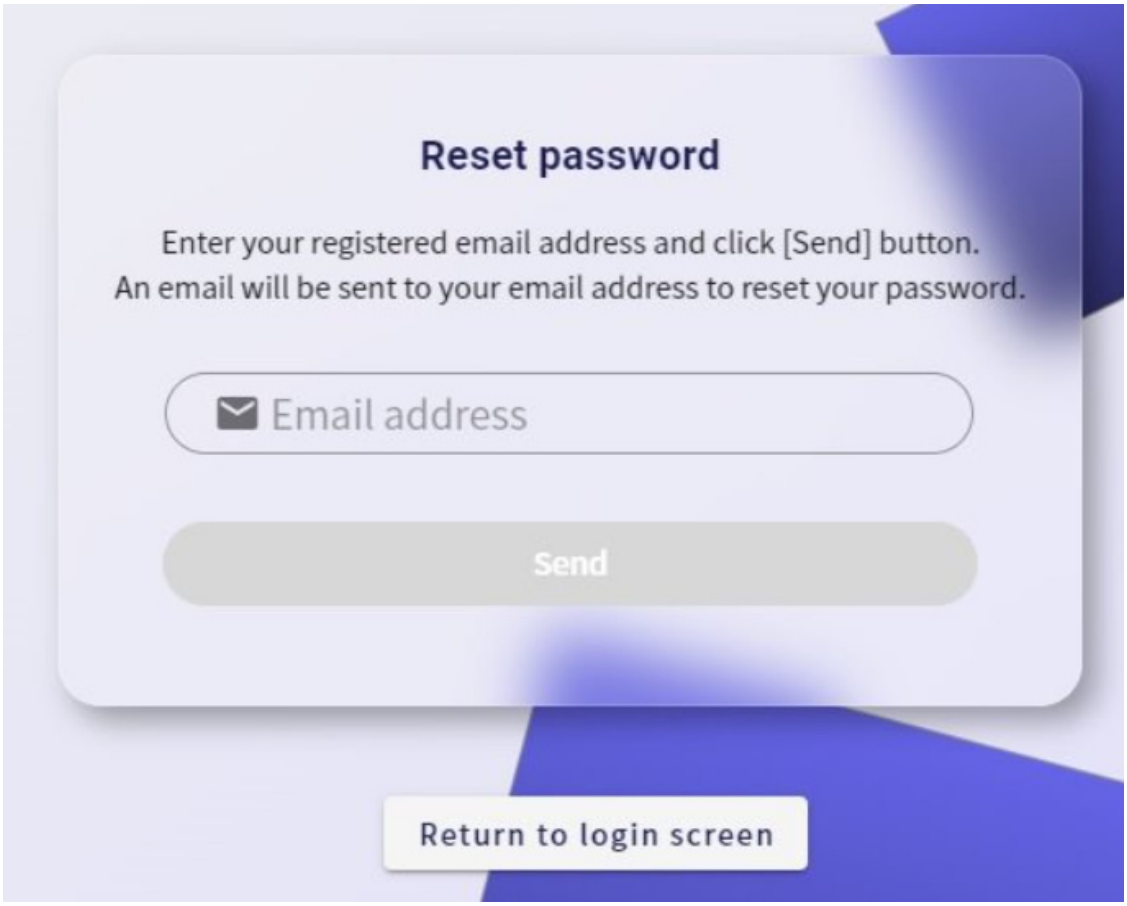
5.2.3 If you forget your login password

If you forget your login password, reset your login password.

1. Click [Forgot your password?] on the login screen.



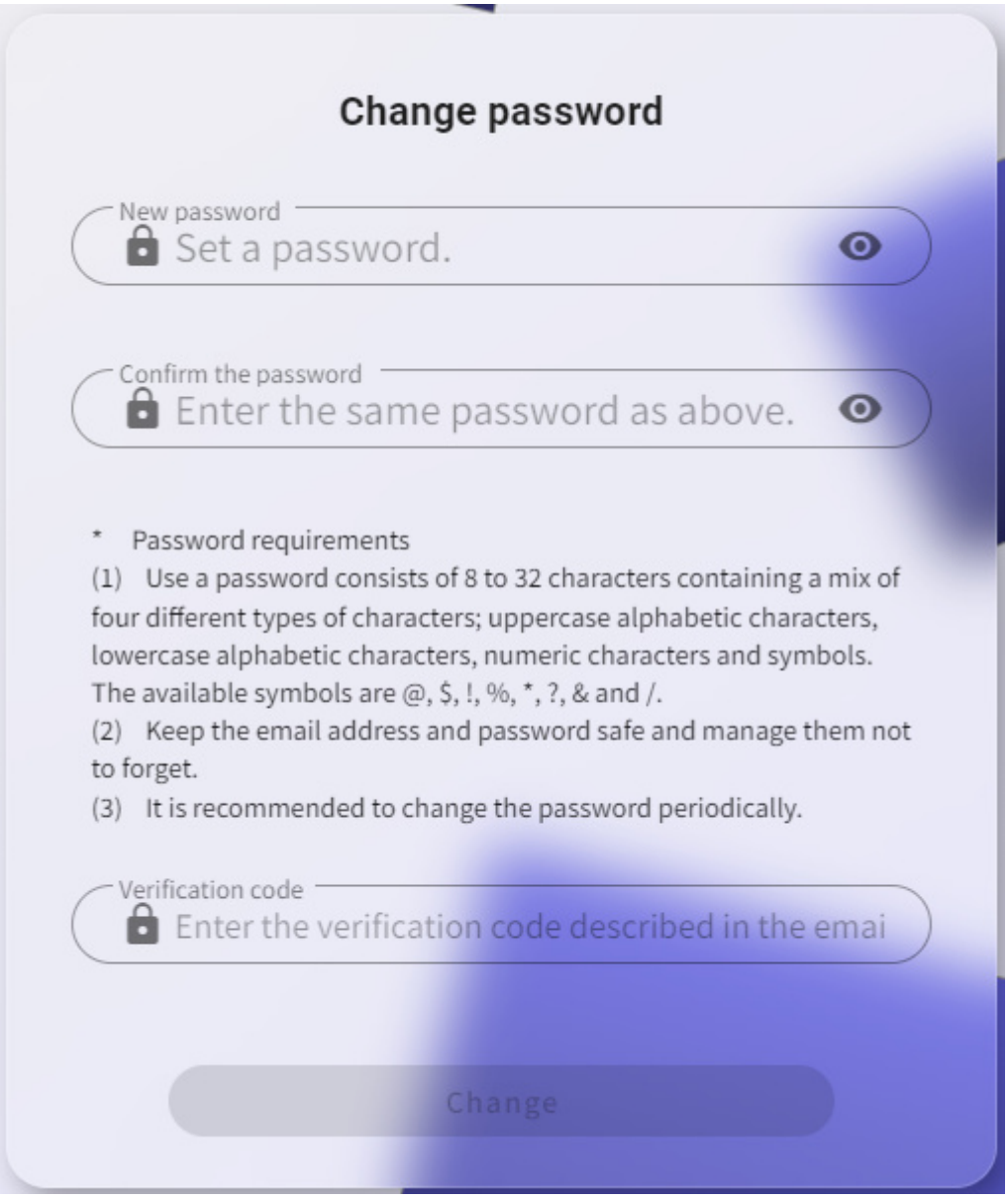
2. In the "E-mail address" entry field, enter the e-mail address registered at the time of remote monitoring service contract or when adding users, and then click the [Send] button.



The e-mail with "Verification Code" and "Please set new password" is delivered to the entered e-mail address.

* If you do not want to reset the login password, click the [Return to login screen] button. The Initialize Password screen closes.
* If the e-mail does not arrive, check that the entered e-mail address is correct and that it is not in the spam folder.

3. The URL specified in the "Notice of Initialization of Password" email is accessed.
4. Enter the new login password in the "New password" and "Confirm the password" fields, enter the authentication code for registration in the "Authentication Code for Registration" field, and click the [Change] button.



The login password is reset and you are returned to the login site.

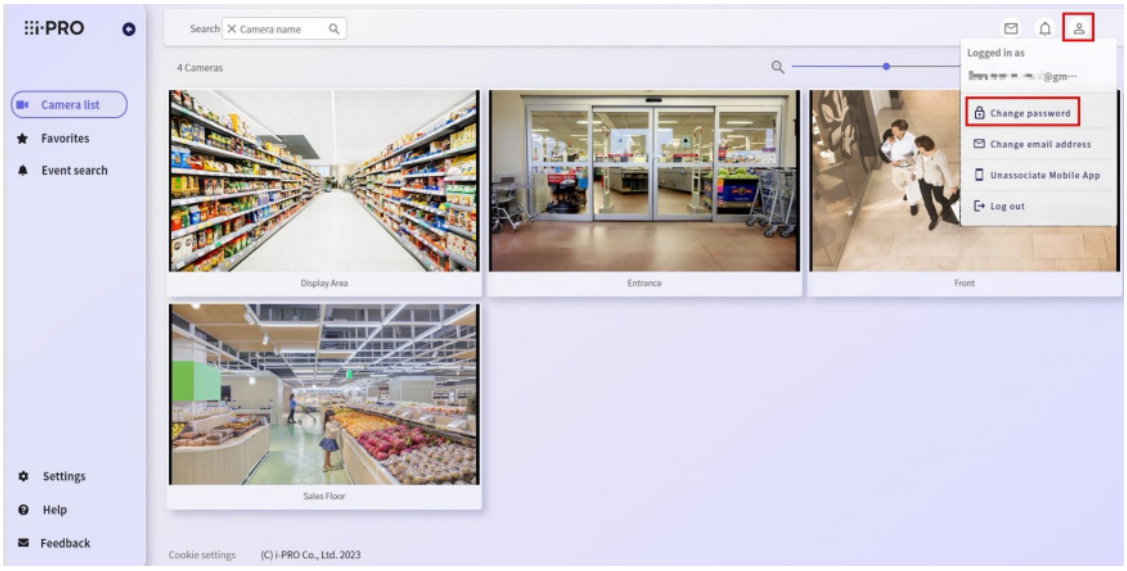
* Do not use all or part of the e-mail address registered in the login password, or use words or meaningful characters. You may be guessed by a third party and be logged in by impersonation.
* Do not use the same password on multiple systems.
* If you do not want to reset the login password, click the [Return to login screen] button. The Change Password screen closes.

If the "Reset Password" screen in step 4 does not appear, start again from step 1.

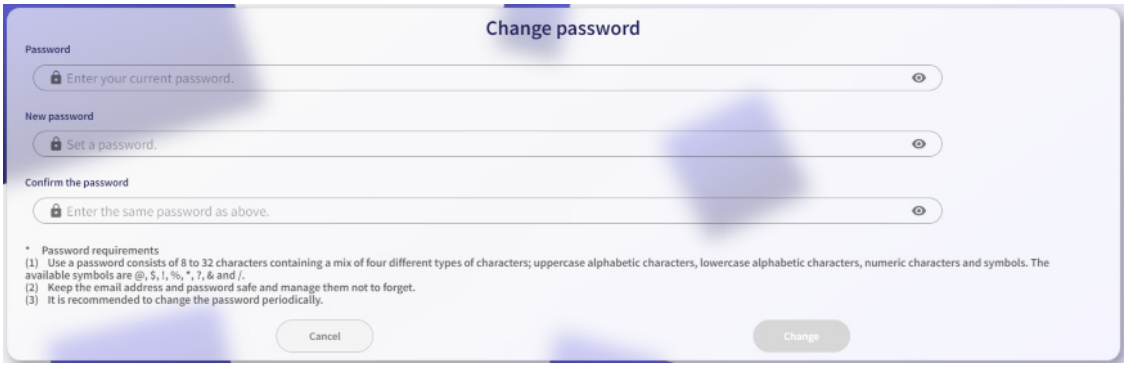
5.2.4 Change the login password

Change the login password.

1. Click the user icon to display the menu bar, and click the [Change password] button.



2. Enter the current login password in the "Password" input field, enter the new login password in the "New password" input field and the "Confirm the password" input field, and click the [Change] button.



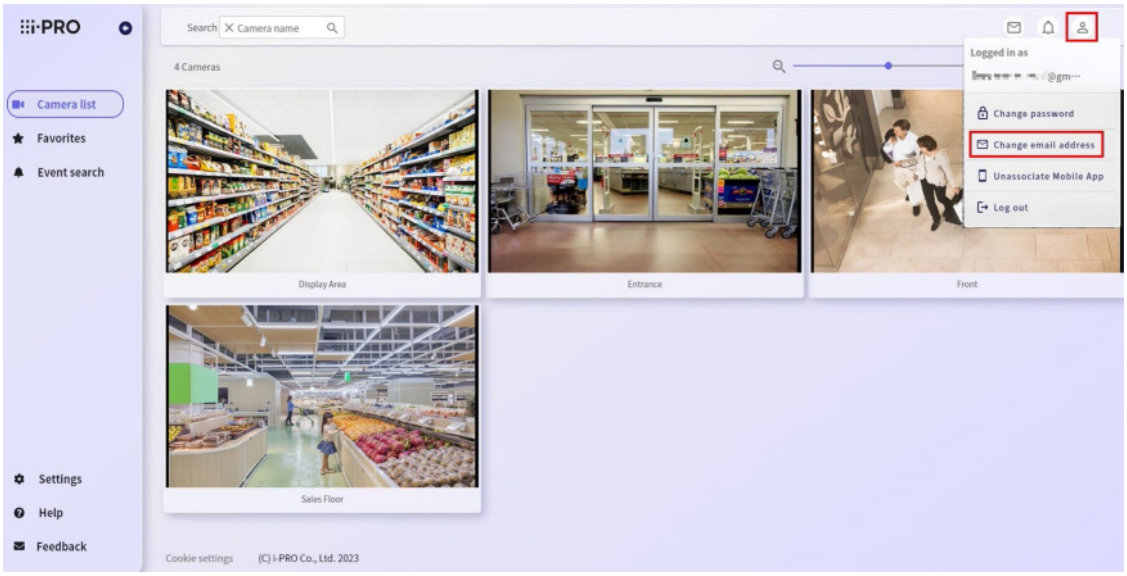
The login password is changed.

* Do not use all or part of the e-mail address registered in the login password, or use words or meaningful characters. You may be guessed by a third party and be logged in by impersonation.
* Do not use the same password on multiple systems.
* If password leakage is suspected, change the password immediately.
* To not change the login password, click the [Cancel] button. The "Change password" window closes.
* If you are using i-PRO Mobile APP (mobile application), please register your e-mail address and password again in the Web service registration screen of the mobile application after changing the password.

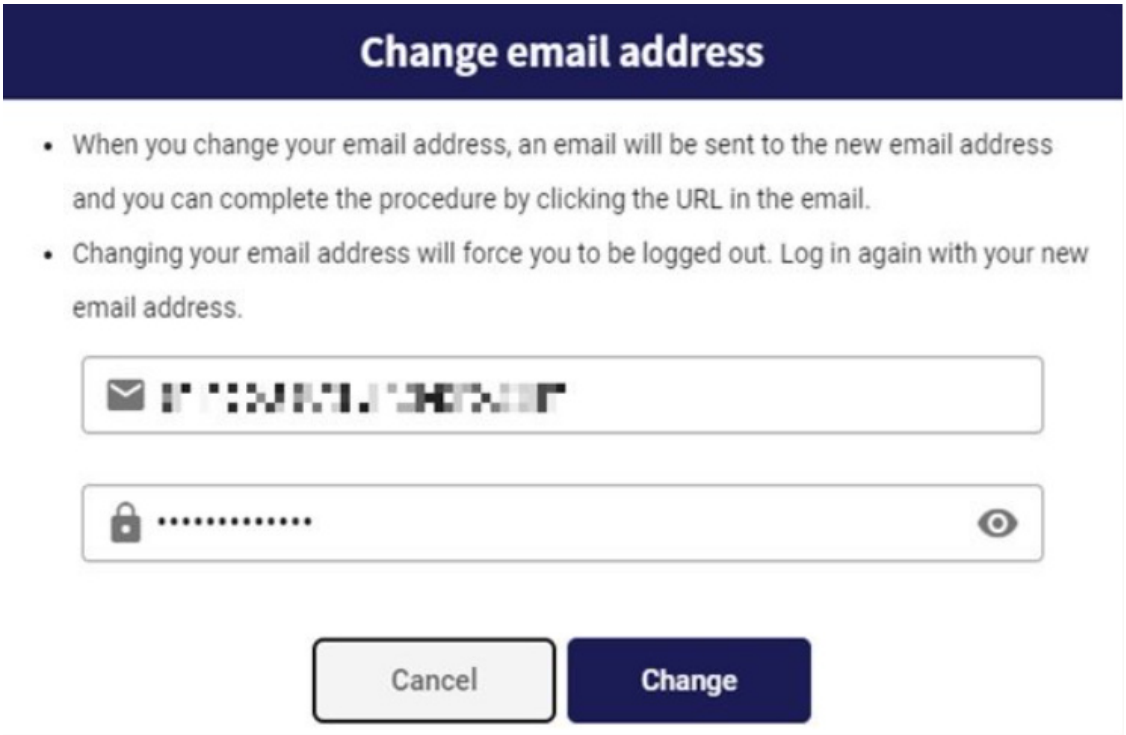
5.2.5 Change the mail address

To change mail addresses

1. Click the user icon to display the menu bar, and click the [Change email address] button.



2. Enter the e-mail address to be changed and the password of the logged-in user in the input field, and click the [Change] button.



"Change your email address" is delivered to the entered e-mail address.

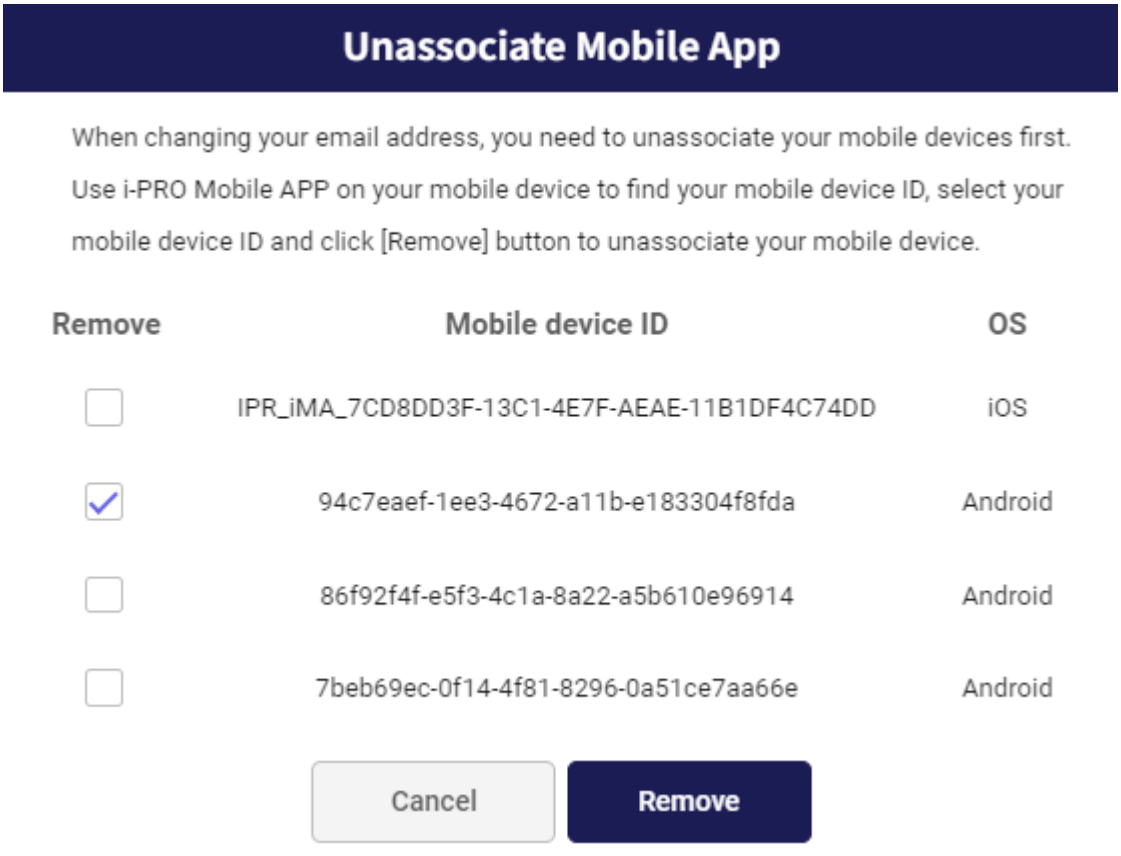
3. The URL specified in the e-mail of "Change your email address" is accessed.
The e-mail address change is completed.

* After you complete the email address change, you can log in to the remote monitoring service with the new email address. Please complete changing your e-mail address within 24 hours of receiving the e-mail.
* If you are using i-PRO Mobile APP (mobile application), please register your email address and password again in the Web service registration screen of mobile application after changing your email address.

5.2.6 Unassociate Mobile APP

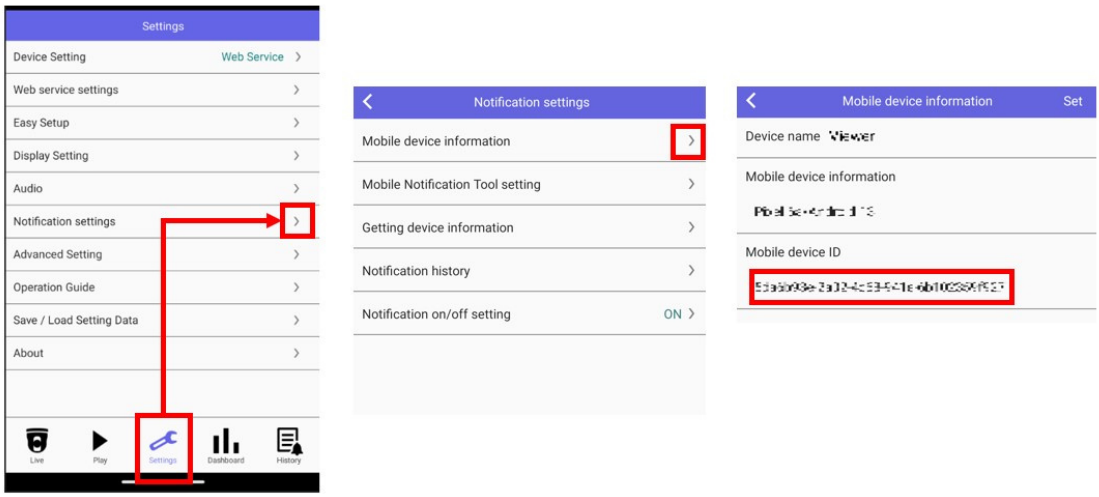
If you change your e-mail address on the remote monitoring service, if you are using the i-PRO Mobile APP (mobile application), you will need to delete the connection with the mobile device once and register your e-mail address and password again on the Web service registration screen of the mobile application.

1. Click the user icon to display the menu bar, and click the [Unassociate Mobile APP] button.
2. The linked mobile device ID is displayed. Select the mobile device to be deleted, and click the [Remove] button.

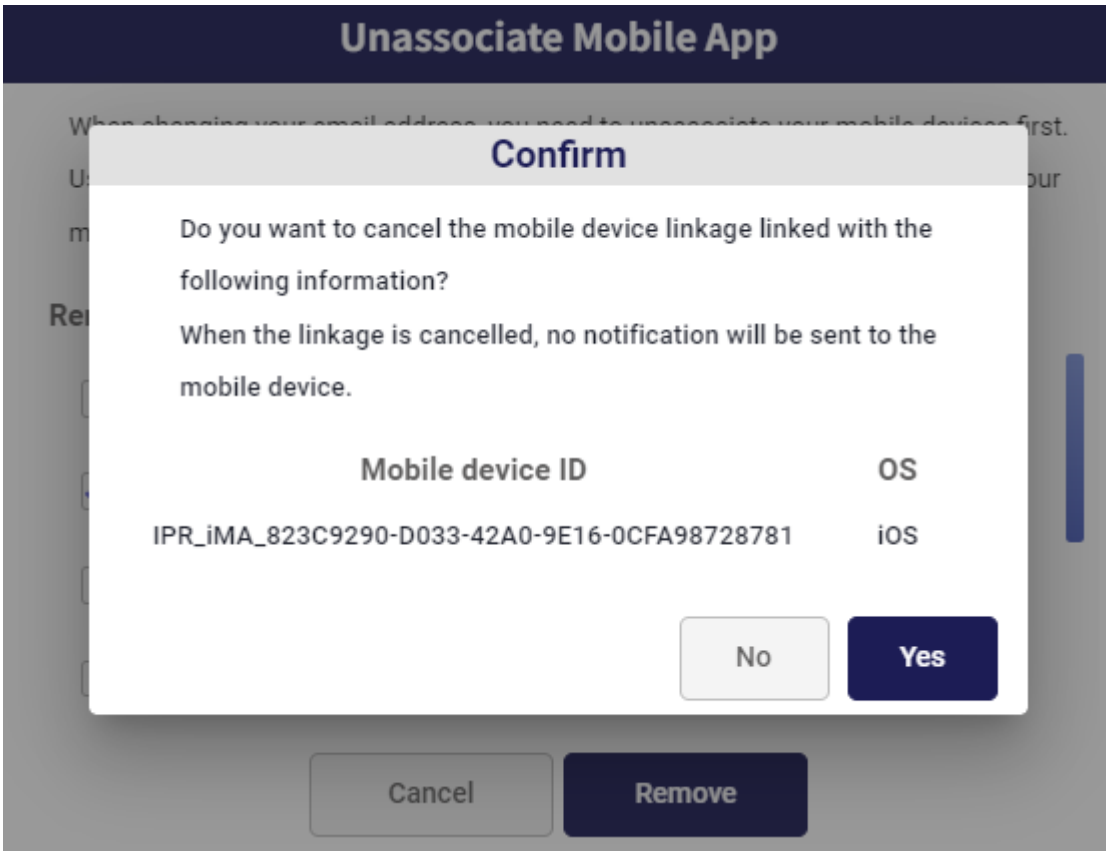


* To check the ID of mobile devices using the mobile application, go to [Settings] → [Notification

Settings] → [Mobile Device Info] → [Mobile Device ID] in the mobile application.



3. The following message is displayed. Confirm that the ID is the mobile device to be linked and deleted, and then click "Yes".



The connection with the mobile device is deleted.

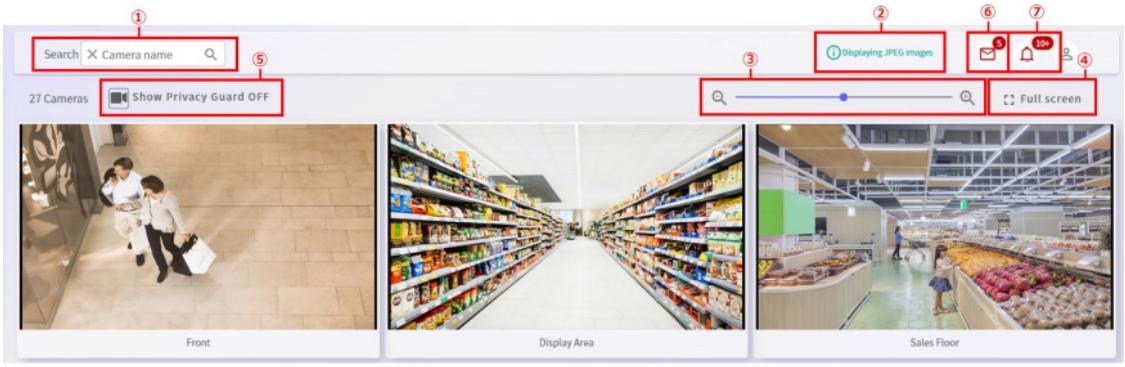
After deleting the connection with the mobile device, register the e-mail address and password again on the Web service registration screen of the mobile application.

5.3 Live

5.3.1 Viewing the Live Image (Cameras)

When viewing video on a smartphone or tablet, we recommend using the i-PRO Mobile APP (mobile application).

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.



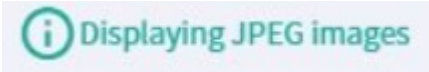
(1)[Search cameras]

Searches for the displayed cameras by camera name, and narrows down the display.

(2)[Display Info]

The information is displayed according to the display status of the live image.

* "Displaying JPEG Images" is displayed.



Up to 40 cameras can be displayed on the camera list screen. However, if there are 13 or more cameras or if you are using iPhone, iPad, Android, an JPEG is displayed. The image is updated every 30 seconds.

* "Reduced frame mode" is displayed.

When multiple screens are displayed, the resolution and frame rate of the displayed camera are automatically adjusted according to the number of cameras displayed. If you are viewing video from the same camera on another device or in another browser, the resolution and frame rate are not automatically adjusted. The displayed frame rate will then be 1fps.

(3)[Image resize bar]

By moving the bar, you can change the size of the displayed image to small, medium, or large.

(4)[Full screen]

You can view the screen in full screen.

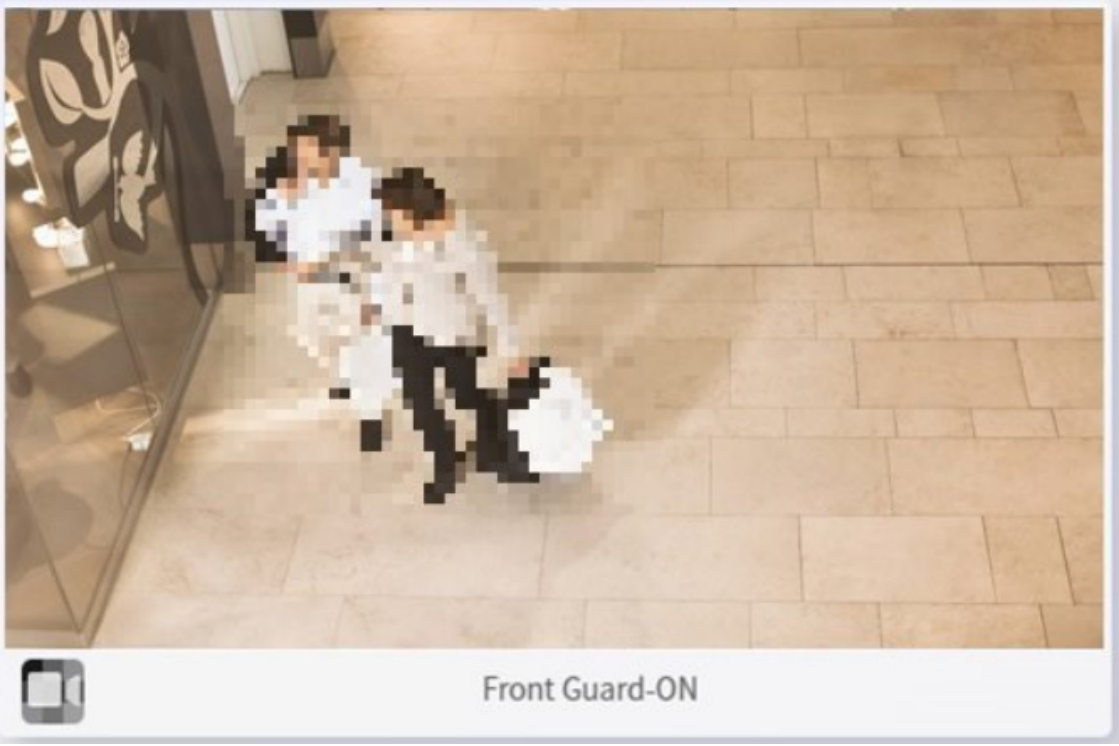
To exit full screen, click the [Exit full screen] button at the upper right of the screen or click the [Esc] button on the keyboard.

(5)[Privacy guard switch button]

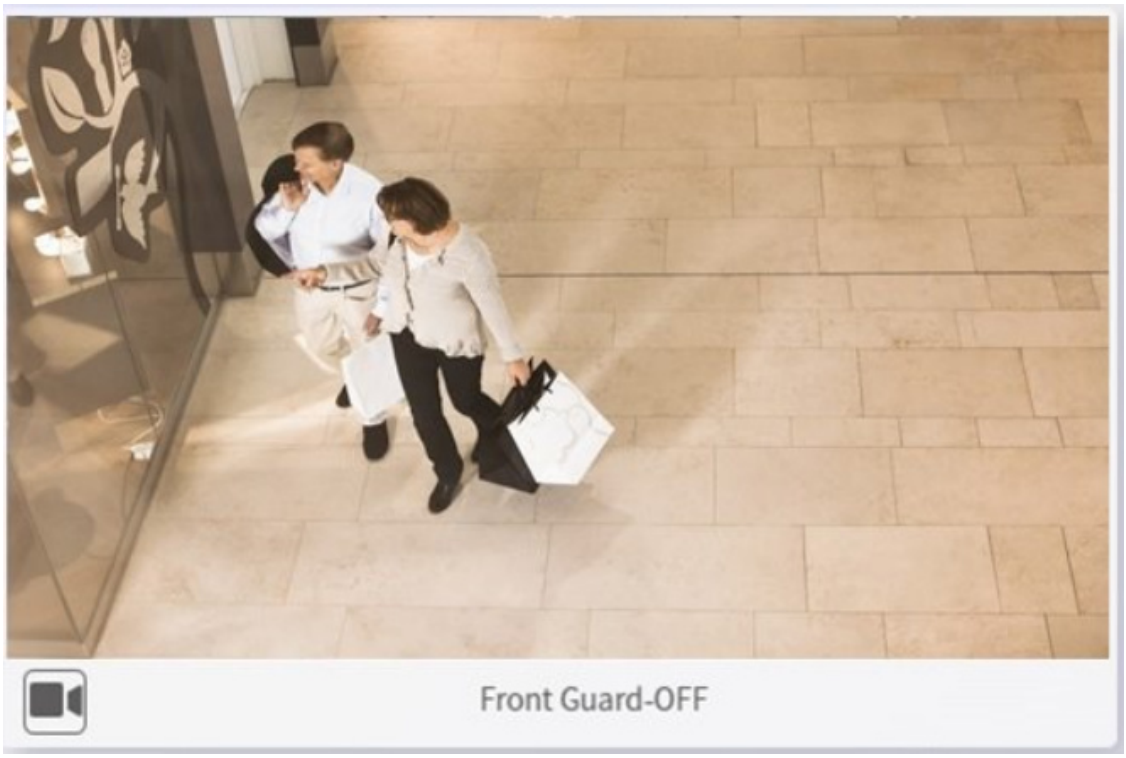
You can switch the display of the camera with privacy guard ON and the camera with privacy guard OFF. Displayed when a camera with Privacy Guard is registered.

Also, for cameras with privacy guard enabled, the following icon is displayed at the beginning of the camera title.

*Privacy guard ON



*Privacy guard OFF



(6)[Message icon]

If there are unconfirmed messages that have been notified, the number of unread messages will be displayed. You can check the details of the message by clicking it.

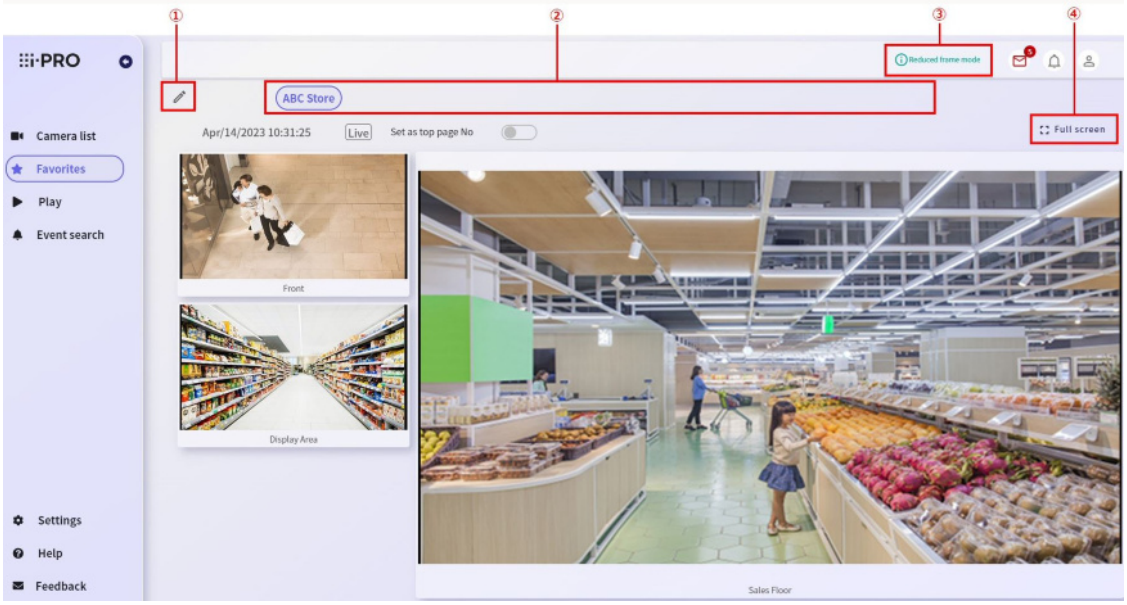
(7)[Alarm notification icon]

If there are unacknowledged alarms that have been notified, the unread count is displayed. You can check the details of the alarm by clicking it.

5.3.2 Viewing the Live Image Screen (Favorites)

When viewing video on a smartphone or tablet, we recommend using the i-PRO Mobile APP (mobile application).

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.



(1)[Edit button]

Edit the favorite group. For details on how to edit favorite groups, refer to 5.5 Favorite settings

(2)[Favorite groups]

The created favorite groups are displayed. When you select a favorite group, the selected group is displayed in the image display area.

(3)[Display info]

The information is displayed according to the display status of the live image.

・"Displaying JPEG Images" is displayed.

Up to 40 cameras can be displayed on the camera list screen. However, if there are 13 or more cameras or if you are using iPhone, iPad, Android, an JPEG is displayed. The image is updated every 30 seconds.

＊"Reduced frame mode" is displayed.

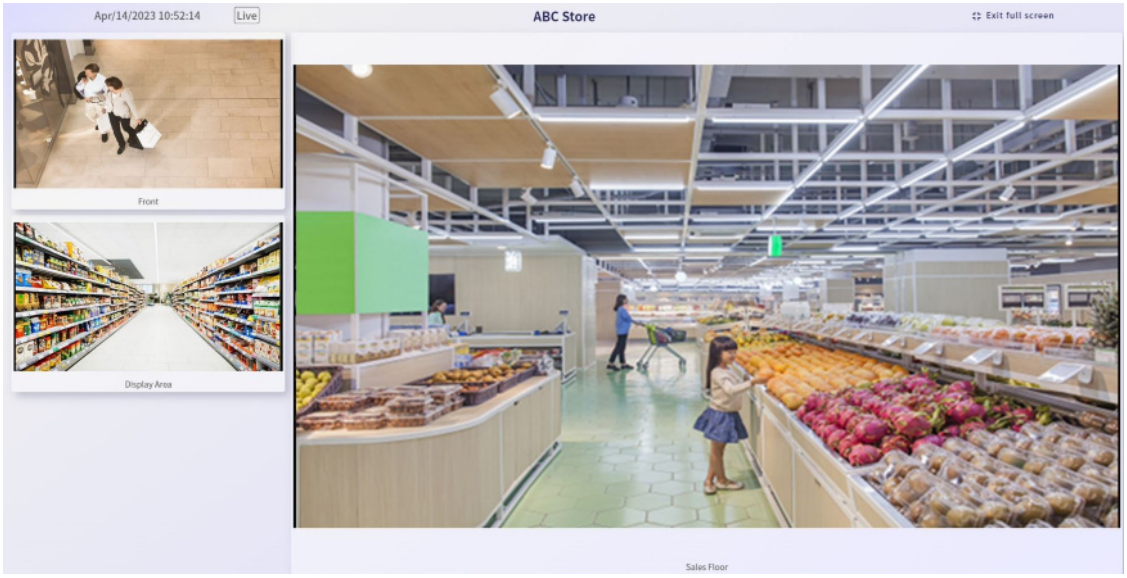
When multiple screens are displayed, the resolution and frame rate of the displayed camera are automatically adjusted according to the number of cameras displayed. If you are viewing video from the same camera on another device or in another browser, the resolution and frame rate are

not automatically adjusted. The displayed frame rate will then be 1fps.

(4)[Full Screen]

You can view the screen in full screen.

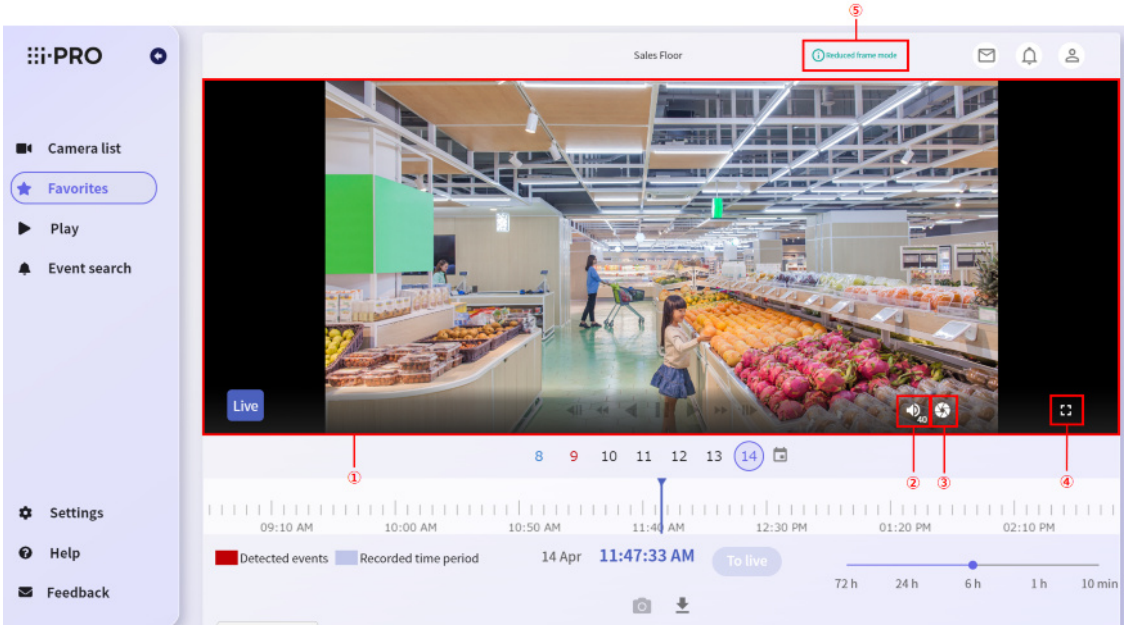
To exit full screen, click the [Exit full screen] button at the upper right of the screen or click the [Esc] button on the keyboard.



5.3.3 Viewing the Live Image Screen (Single Image)

Available only for Windows and Android browsers.

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Click the camera image.
   The single image of the selected camera is displayed, and the live image is displayed.



When the Favorites screen is displayed, clicking the image on the camera will switch to the single screen.

(1)[Live video display/digital zoom]

The live image of the selected camera is displayed.

You can also perform digital zoom by operating the wheel on the screen. After digital zooming, click centering is available.

Optical zooming is available for PTZ cameras. For details on operating the PTZ camera, refer to the next section, 5.3.4 Operate PTZ cameras

(2)[Volume button]

You can change the volume of the camera microphone.

When you mouse over the volume button, the volume adjustment bar appears, allowing you to adjust the volume of the microphone.

You can also turn mute on/off by clicking the icon.

(3)[Brightness button]

You can change the brightness of the camera image.

When the mouse is over the brightness button, the brightness adjustment button is displayed and the brightness of the camera image can be adjusted.

The [+] and [−] buttons can be held down. In addition, by clicking the [Reset] button, you can immediately change the brightness of the standard set in the camera.

(4)[Full screen]

You can view the screen in full screen.

When displaying a full screen, the camera's playback control buttons and volume/brightness buttons are displayed only when hovering.

To exit full screen, click the [Exit full screen] button at the lower right of the screen or click the [Esc] button on the keyboard.

(5)[Display info]

The information is displayed according to the display status of the live image.

* "Reduced frame mode" is displayed.

For cameras with resolutions larger than Full HD, the resolution and frame rate are adjusted automatically.

For information on playing back recorded images on a single screen, refer to 5.4 Playback and download recorded images

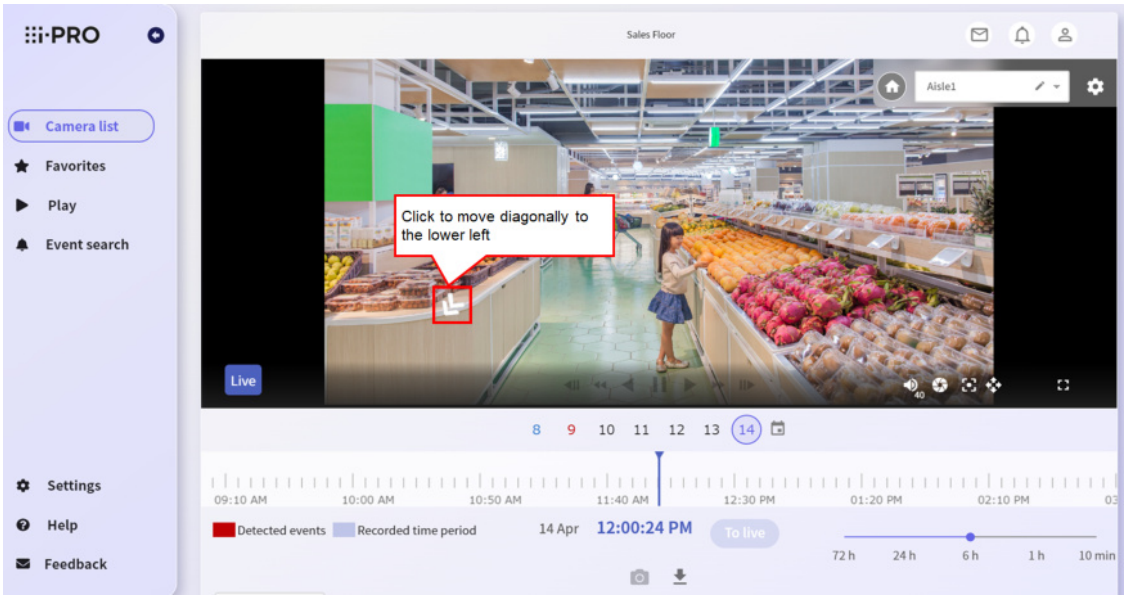
* The camera operation buttons are displayed when the mouse is over at the bottom of the image.
* Brightness can be adjusted only while a live image is displayed.
* If you change the brightness of the camera, the brightness of the video to be recorded is also changed and displayed.
* Depending on the communication environment, time lag may occur when operating the camera.

5.3.4 Operate PTZ cameras

You can adjust the horizontal/vertical position (pan/tilt) and optical zooming of the PTZ camera. You can also change or register the preset position.

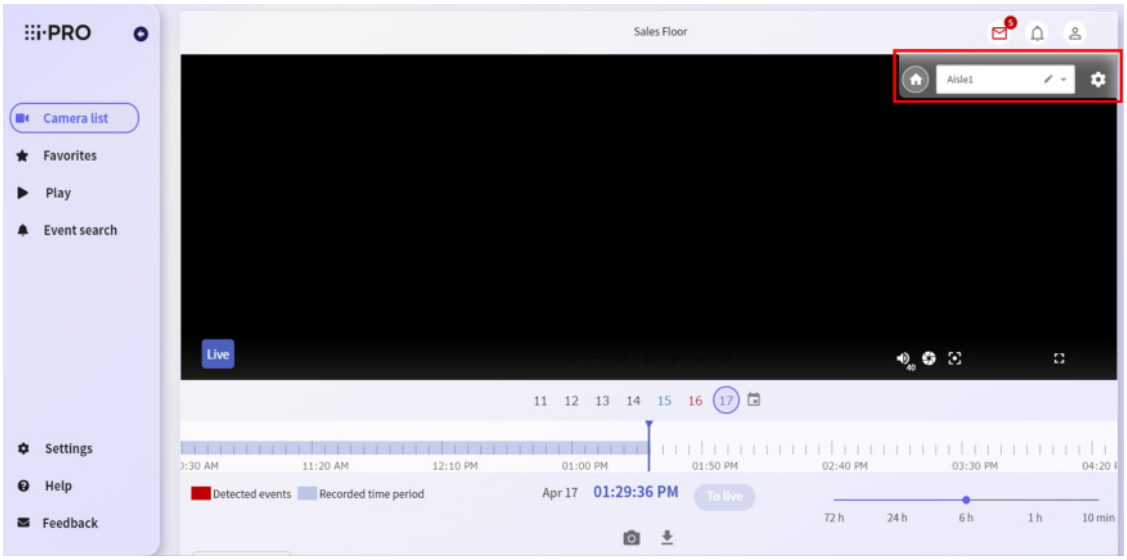
* The PTZ can be used only while a live image is displayed. You cannot operate during playback.
* When using 360-degree fish eye camera with Single or Quad PTZ, you can control Pan, Tilt, Zoom on each screen.
* When using a mobile device, you can only move presets and edit preset names (Pan, Tilt, Zoom and Preset cannot be registered).
* With some ONVIF cameras, you may not be able to operate PTZ depending on the model. At that time, digital zoom operation of live video cannot be performed.

If your camera is capable of pan and tilt operations, an arrow icon pointing in a moveable direction will appear when hovering over the image. By holding down the left mouse button, you can pan and tilt in the direction of the arrow.
The illustration below shows an arrow icon when it can be moved diagonally to the lower left.



If you can register or set a preset with your camera, the preset setting screen will appear as shown in the red frame below when hovering over the video.

For ONVIF cameras, the preset setting window is not displayed.



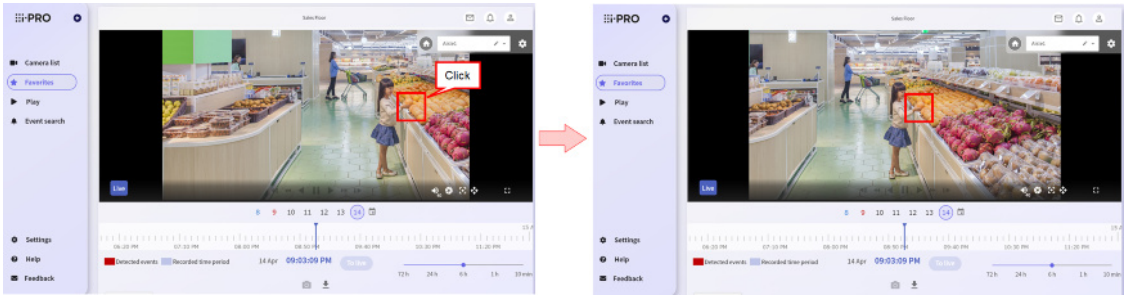
PTZ cameras can be operated only in single-image mode.

To display a single image, follow the procedure below.

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Select the PTZ images you want to operate.
   The operation screen of the selected camera is displayed.

5.3.5 Adjusting the horizontal position and vertical position (Pan and Tilt)

Clicking the position you want to make the center of the angle of view moves the camera's orientation to the position where you clicked.



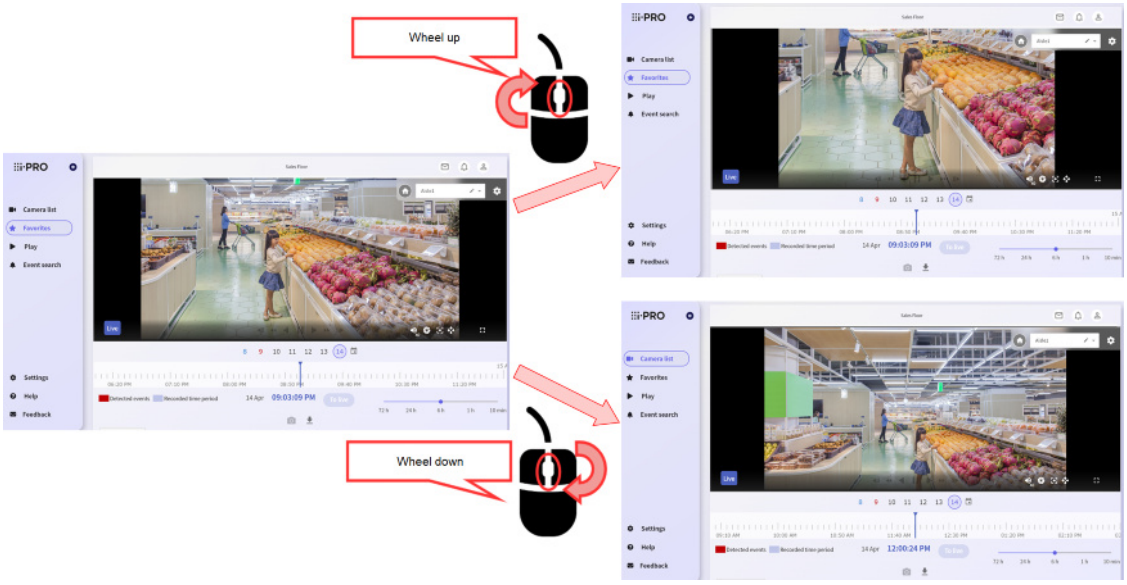
You can also move the camera image gradually by pressing and holding on the screen.

Press and hold a point away from the center of the screen to move the camera quickly.

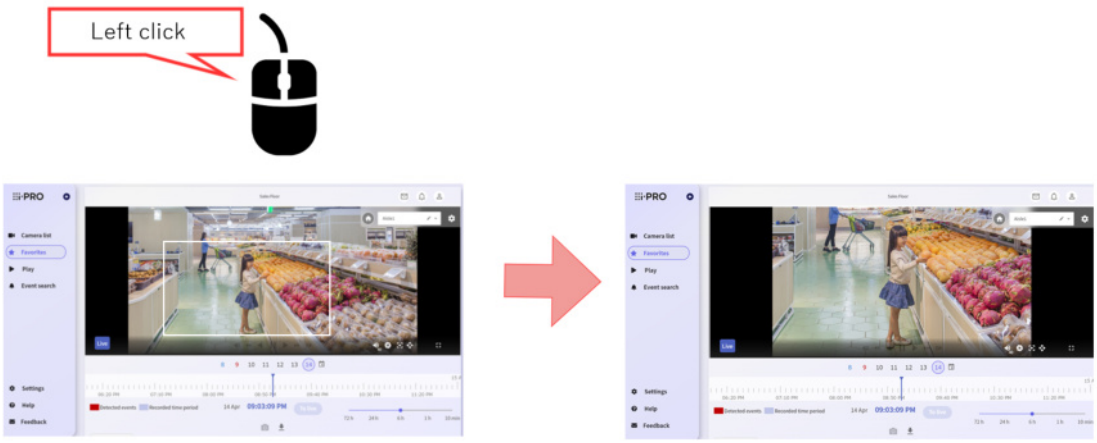
The black bars that are not on the image are excluded from click detection.

5.3.6 To adjust the zoom factor

You can adjust the zoom by using the wheel on the screen.
The upward-facing wheel zooms in to the telephoto and the downward-facing wheel zooms in to the wide-angle.

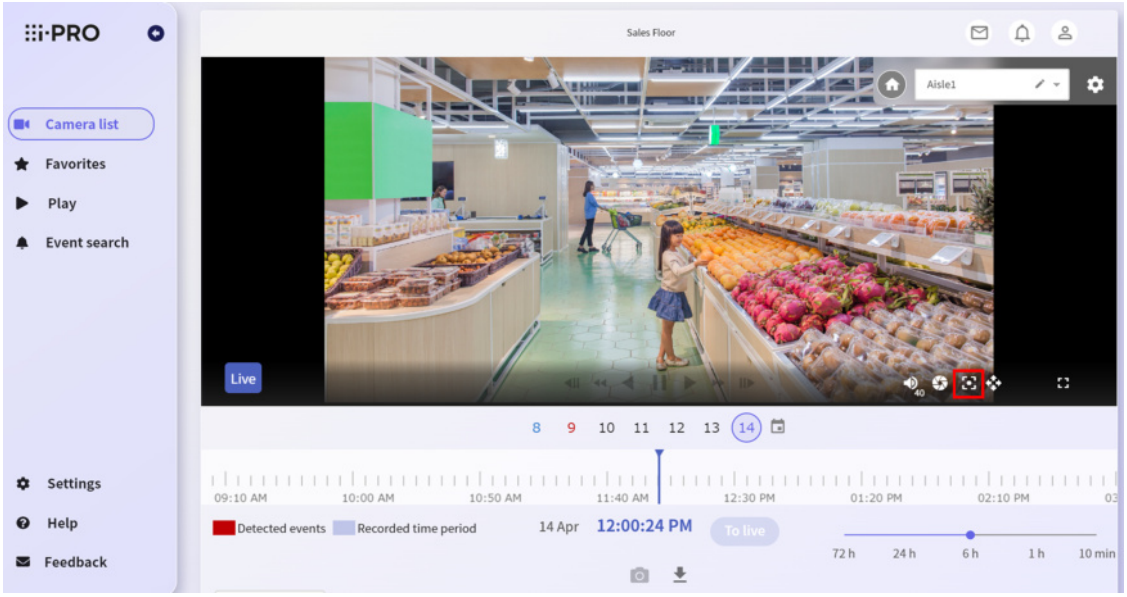


You can also use drag and zoom on the screen.

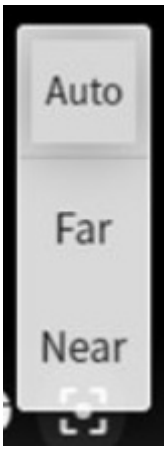


5.3.7 Adjust the focus

When you mouse over the focus button, the focus adjustment button is displayed.



The [Far] and [Near] buttons can be pressed for a long time, and [Auto] can be adjusted automatically with a single click.



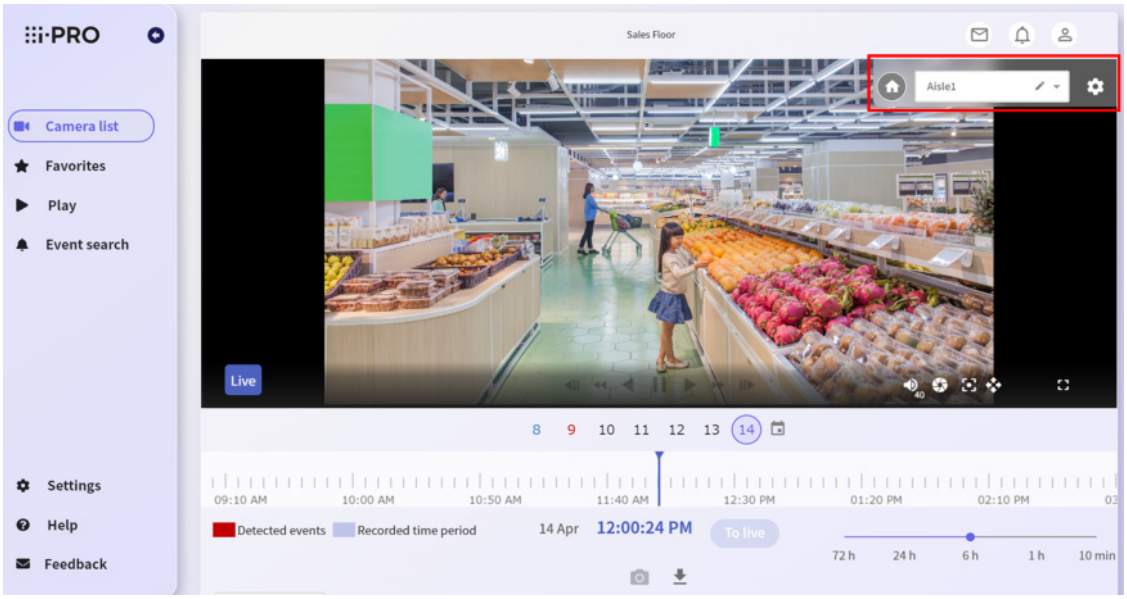
5.3.8 Move to the home position

By registering an angle of view (preset) as the home position to be checked carefully, you can move the camera in an instant.

The home position is the first preset in the list. To register a home position, follow the procedure in "Registering a Preset" below for the first preset in the list.

1. Hover over the single-screen image area.

The preset setting screen is displayed.



2. Click the [Home] button.

The camera orientation moves to the angle of view registered as the home position.

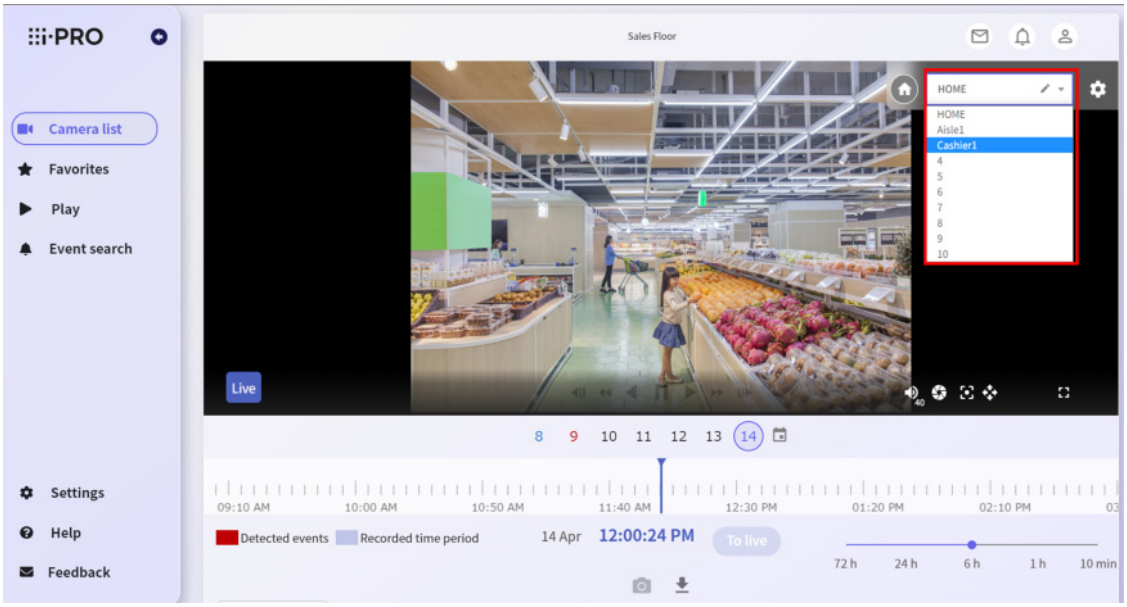
5.3.9 Move to a preset

By registering a specific angle of view (preset) in advance, you can move the camera in an instant.

For details on registering a preset, refer to 5.3.10 Register a preset in the next section.

1. Hover over the single-screen image area.

   The preset setting screen is displayed.



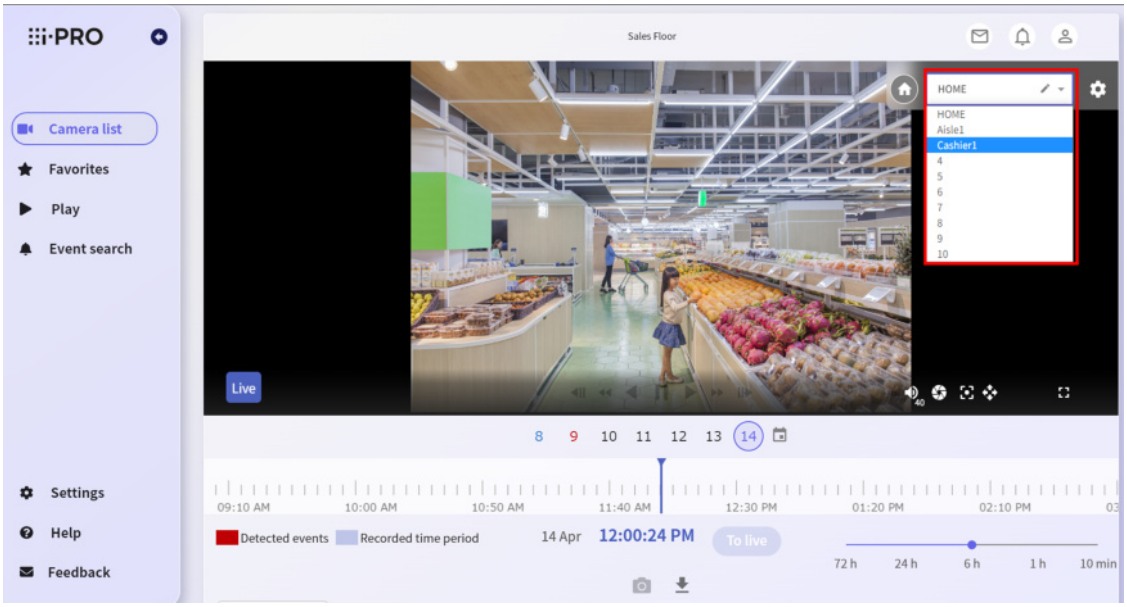
2. Click the part where the preset name is displayed, and select the preset you want to move from the list.

The camera orientation moves to the angle of view of the selected preset.

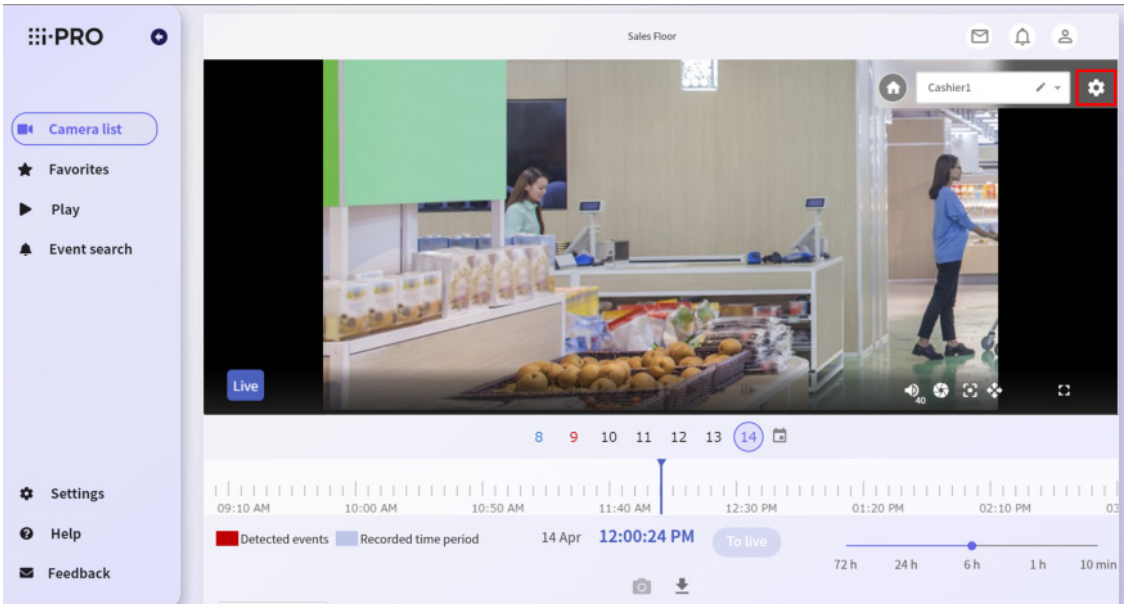
5.3.10 Register a preset

By registering a specific angle of view (preset) in advance, you can move the camera in an instant. Up to 10 presets can be registered.

1. Hover over the single-screen image area.
   The preset setting screen is displayed.
2. Click the part where the preset name is displayed, and select the preset for which you want to register the angle of view from the list.



3. Operate the mouse on the image to set the angle of view to be registered. For details on how to operate the angle of view, refer to 5.3.5 Adjusting the horizontal position and vertical position (Pan and Tilt) and 5.3.6 To adjust the zoom factor in the previous section.
4. Click the [Register] icon on the preset setting screen.



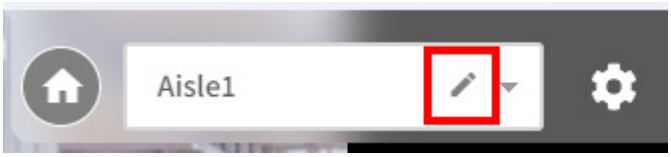
When a confirmation window appears, click [Yes] to register the preset.

The beginning of the preset list is registered as the home position.

5.3.11 Editing a preset's name

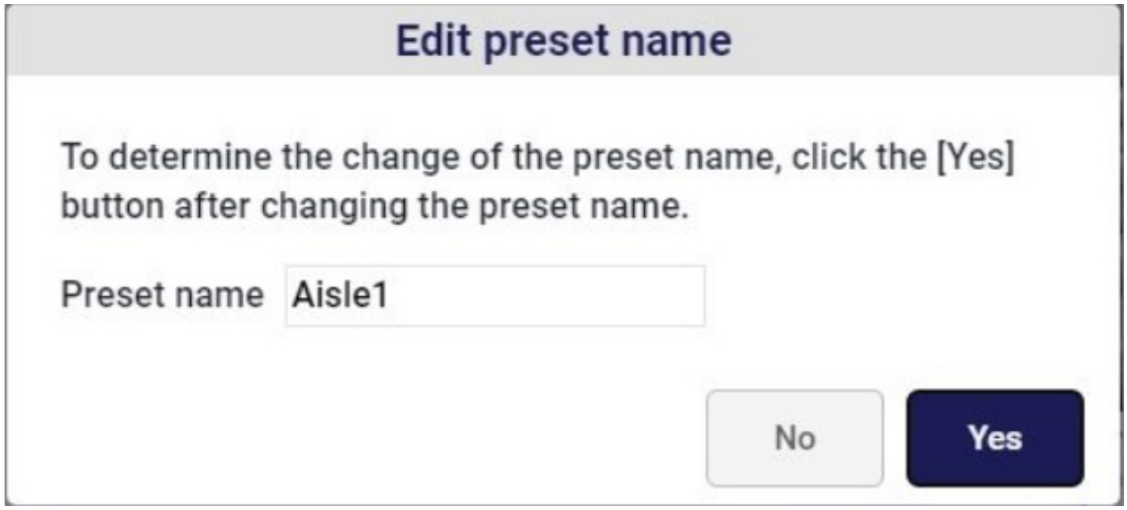
Any name can be registered or changed for the preset.

1. Hover over the single-screen image area.
   The preset setting screen is displayed.
2. Click the part where the preset name is displayed, and select the preset whose name you want to register from the list.
3. Click the [Edit preset name] button.

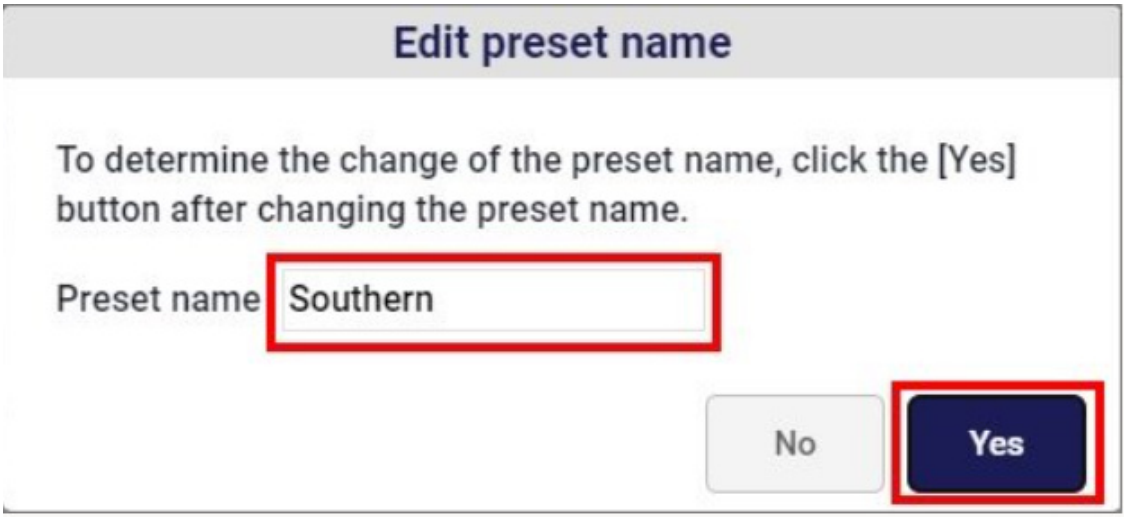


The preset name editing screen appears.

4. Enter the name of the preset you want to change, and click [Yes].



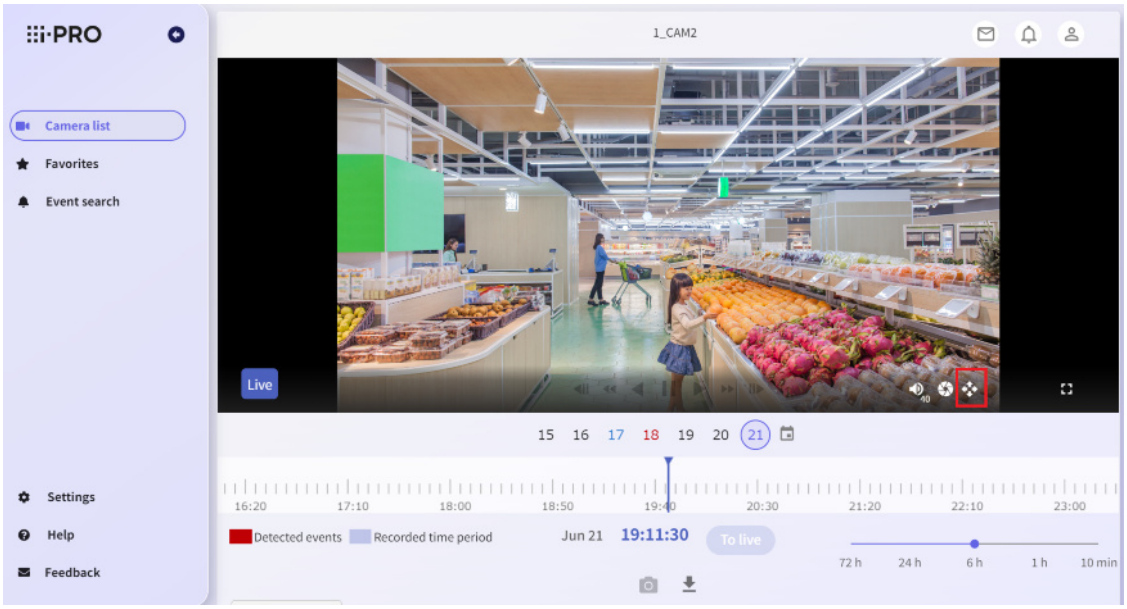
This completes editing of the preset name.



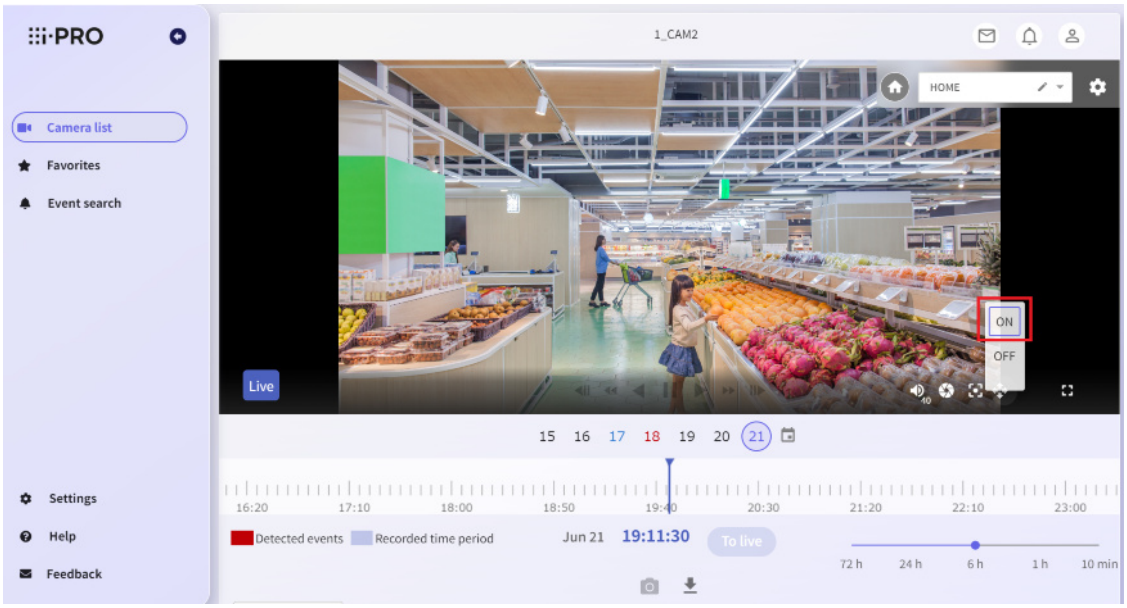
5.3.12 Forced PTZ operation

If you are using an old PTZ camera and want to operate PTZ, please try this method.

1. Click the [Forced PTZ operation] button.



2. Click [ON] button.



* Operation is not guaranteed.

* It does not work for non-PTZ cameras.

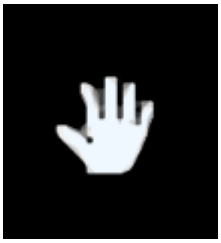
5.3.13 Operating the dewarp function

Available only in Windows browsers.

Dewarp function applies 3D technique to correcting the fisheye image of omnidirectional cameras, and rotates the image or cuts out the image and displays it on the PTZ.
In the remote monitoring service, you can operate the dewarp function while viewing live and recorded images in the full-heading camera (imaging mode: fish eye) in a single screen.

* The dewarp function can be operated only in a single screen with a full-orientation camera (imaging mode: fish eye).
You can.
* The Dewarp function cannot be operated on the [Favorites] screen.

If your camera is able to operate the dewarp function, the mouse icon changes to a grab icon when hovering over the video.

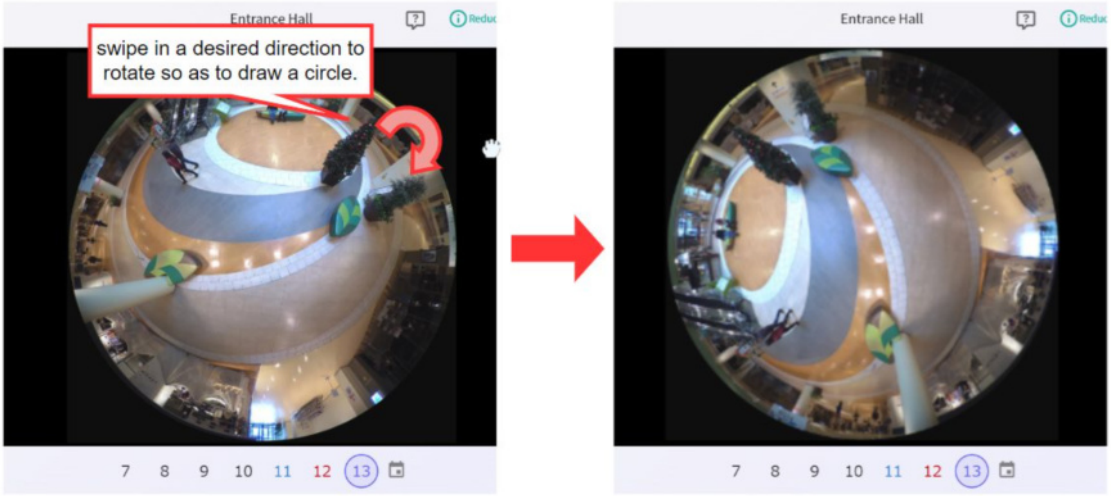


Operation of the dewarp function can be performed only on a single screen.
To display a single image, follow the procedure below.

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Click the image of the all-directional camera you want to operate.
   The operation screen of the selected camera is displayed.

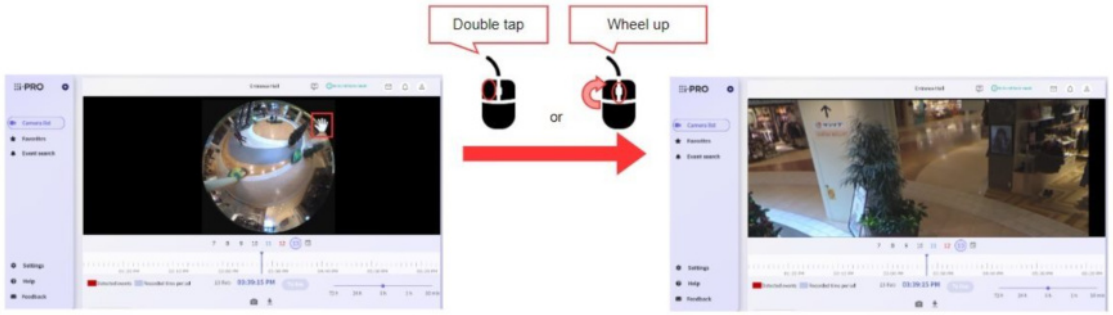
5.3.14 Rotate the fisheye image

You can rotate an image by dragging the mouse in the direction you want to rotate.



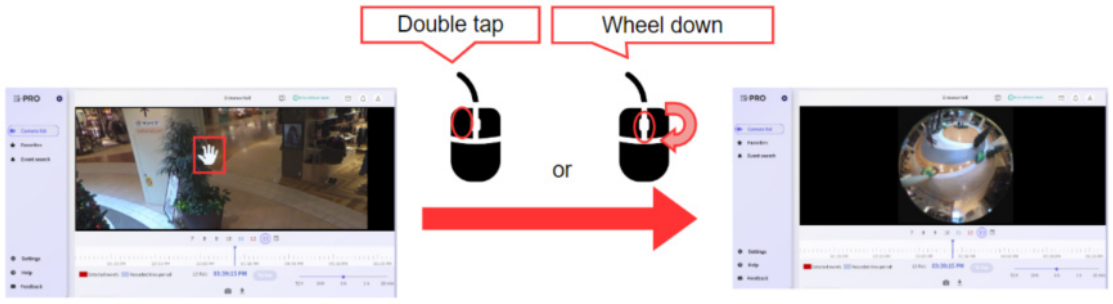
5.3.15 Switching to PTZ view

Double-click or wheel upward at the position where you want the center of the angle of view to appear in PTZ view, centered on the position of the mouse.



5.3.16 Return from the PTZ view to the fisheye view

Double-click or lower wheel on the picture to switch to fish-eye view.



5.3.17 Turn On/Off dewarp function

You can turn on or off the dewarp function.

For resolutions higher than 5M, video and audio delays may increase depending on the PC specs. In that case, turn off the dewarp and display the video.

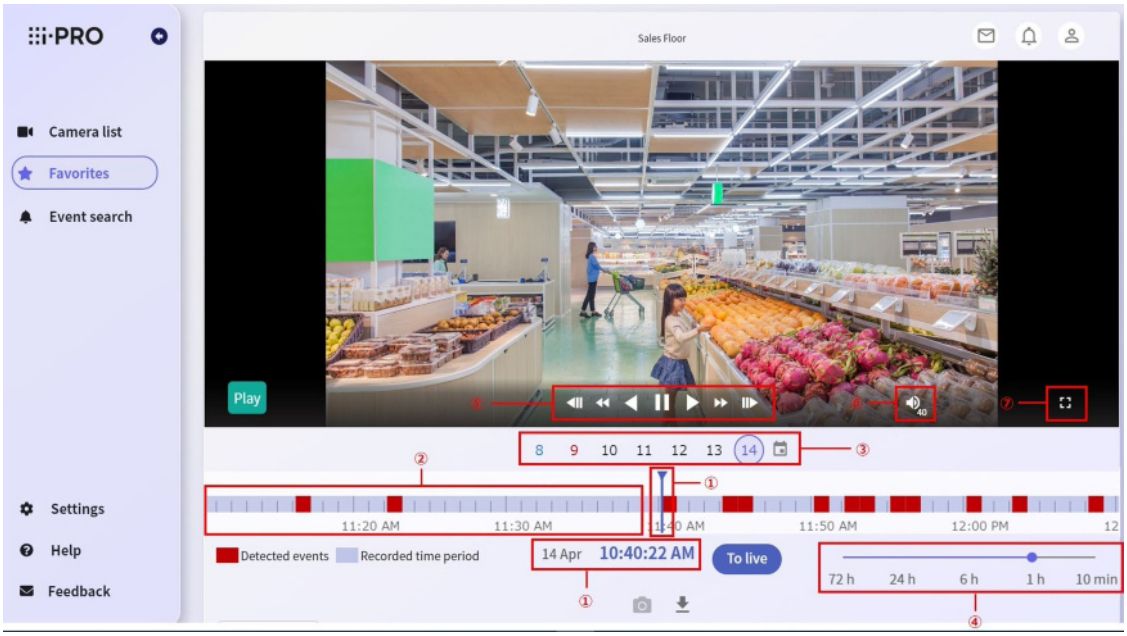
5.4 Playback and download recorded images

5.4.1 Playing recorded images (Single screen)

* Available only for Windows and Android browsers.
* When viewing video on a smartphone or tablet, we recommend using the i-PRO Mobile APP (mobile application).
* In case of 360-degree camera (Imaging Mode: Fisheye), you can operate the dewarp function while playing back recorded images on a single screen. For details on operating the dewarp function, refer to 5.3.14 Rotate the fisheye image.

You can playback recorded images from the recorder connected to the remote monitoring service.

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Click the image of the camera you want to playback.
   The operation screen of the selected camera is displayed.



(1)[Date and time]

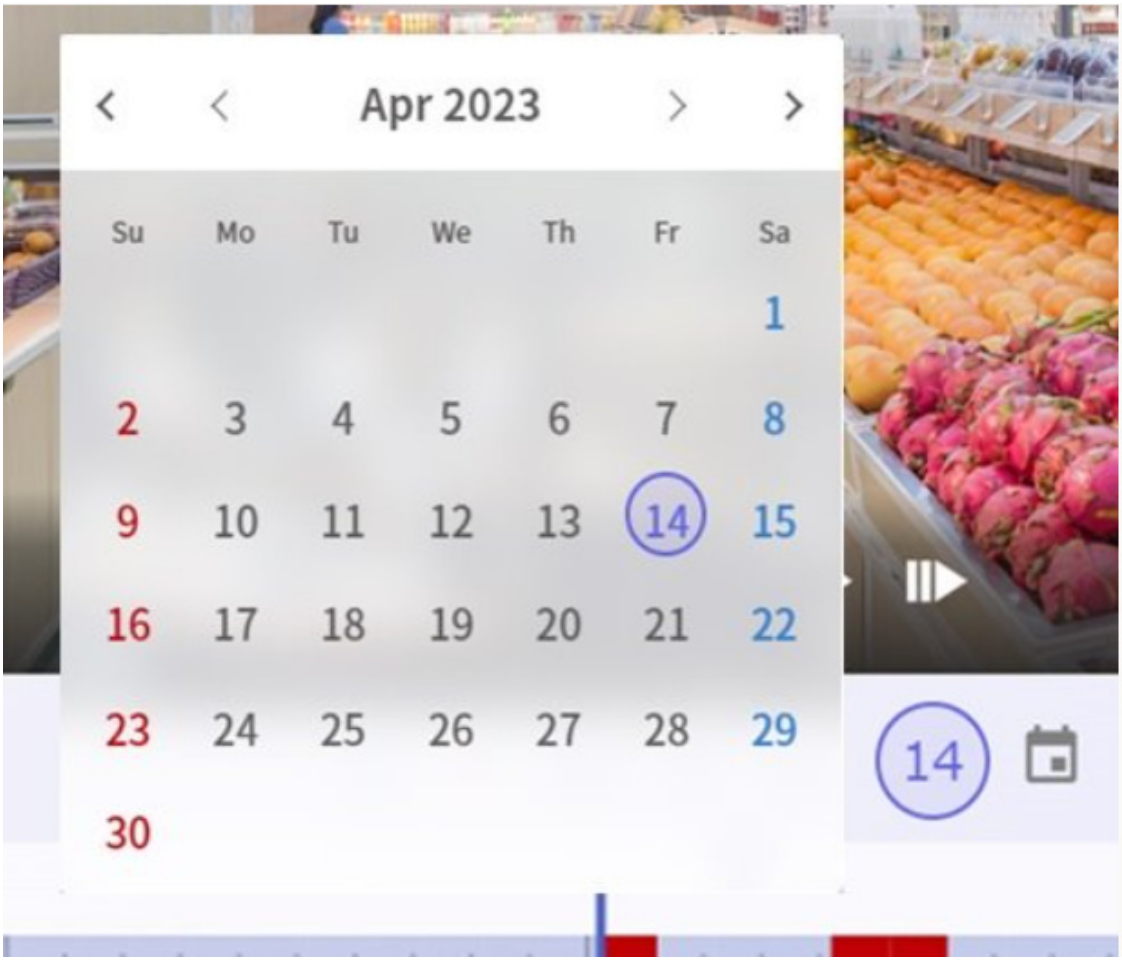
Displays the video date and time of the currently displayed image.

(2)[Timeline]

You can check the recording period and event detection status.

(3)[Calendar]

You can specify the date on which the timeline is displayed from the calendar.



(4)[Scale change bar]

You can change the display scale of the timeline.

(5)[Playback Control]

You can control playback, reverse playback, pause, high-speed playback, high-speed reverse playback, single-frame advance, and reverse frame advance.

(6)[Audio control]

You can adjust the volume of the audio being played back.

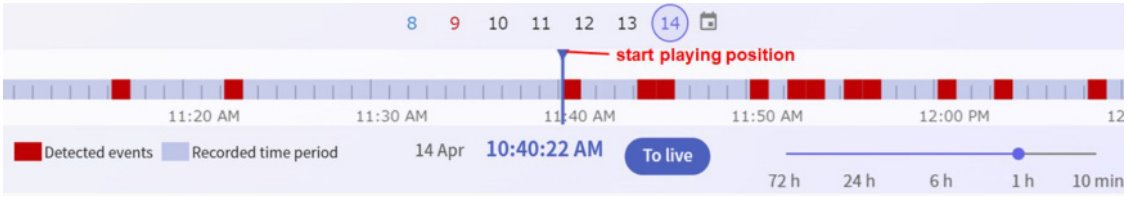
(7)[Maximize]

The screen can be maximized for display.

* Video and audio may be shifted by a few seconds depending on the communication conditions and PC loads.
* Up to four cameras can be played simultaneously for one recorder. You may not be able to start playback if it is being played on other devices or browsers.
* When the image format of camera is MJPEG, audio is not available when playing back.

3. You can playback recorded images by dragging the timeline or clicking where you want to play it.

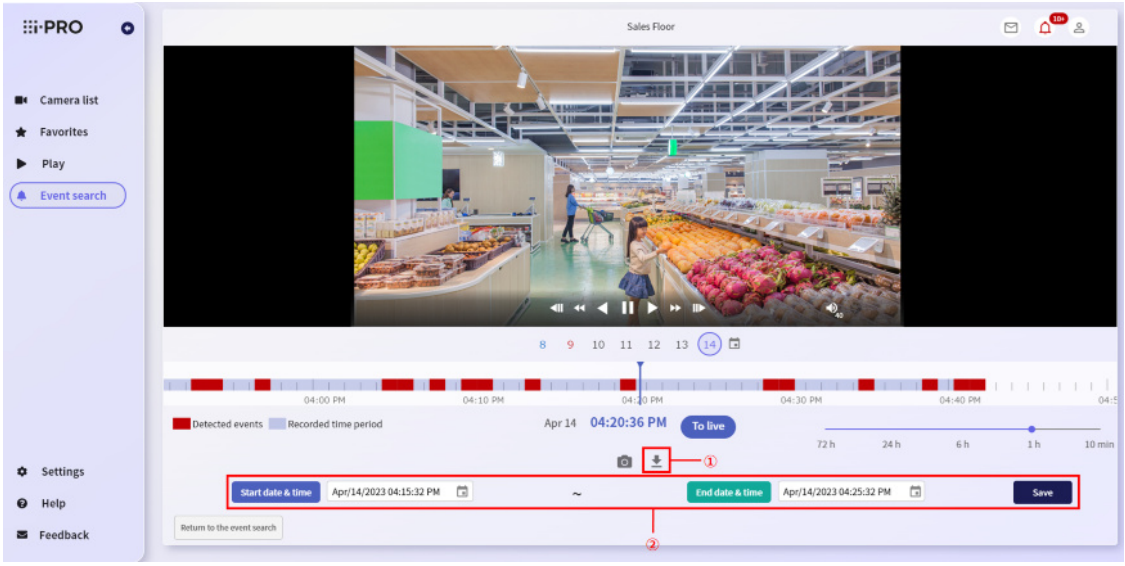
When you finish dragging or click on the timeline, the recorded image starts playing from the position indicated by the middle video date and time line.



5.4.2 Download recorded images

Available only in Windows browsers.

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Click the image of the camera you want to playback, then click the [Download videos] button.
   The download operation panel is displayed.



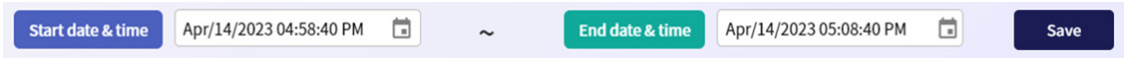
(1)[Download videos]

You can show or hide the "Download operation panel".

(2)[Download operation panel]

By specifying the [Start date & time] and the [End date & time] and clicking the [Save] button, you can download recorded images for the specified period.

* Up to 60 minutes can be specified for the download period.

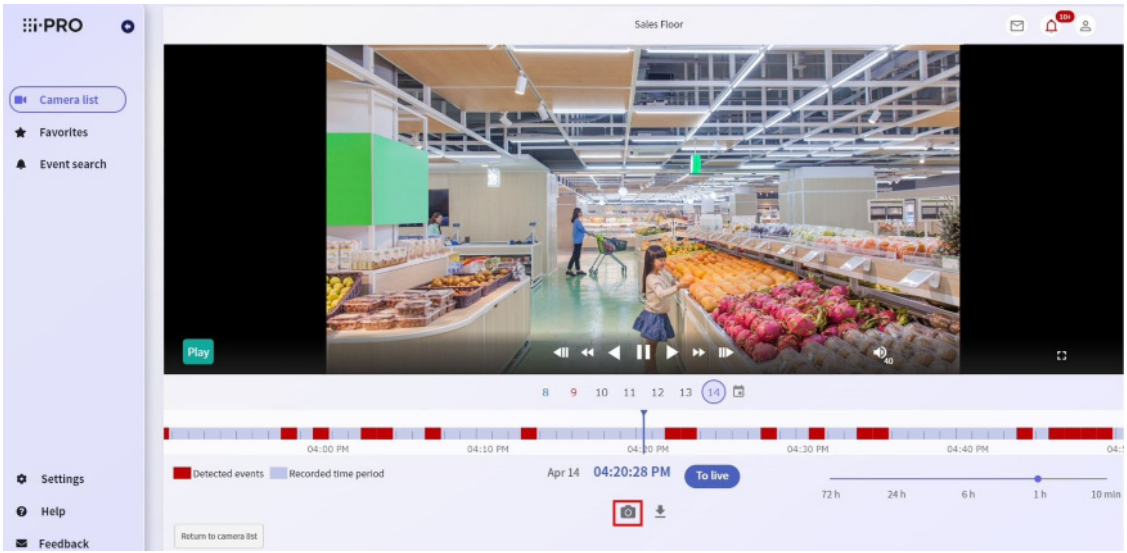


3. Specify the date and time you want to download, and click the [Save] button.
   The download starts.

* You cannot navigate to other screens during downloading. To move to another screen, cancel the download.
* If the recording data is divided due to the change of daylight saving time, etc., it may not be possible to download all the video for the specified period.

5.4.3 Downloading recorded images or still images from a live image

1. Visit the login site (https://rms.i-pro.com) in your browser.
   The live image is displayed on the portal screen.
2. Click the camera image you want to playback and click [Take a snapshot image] button.



The image displayed on the video panel is downloaded.

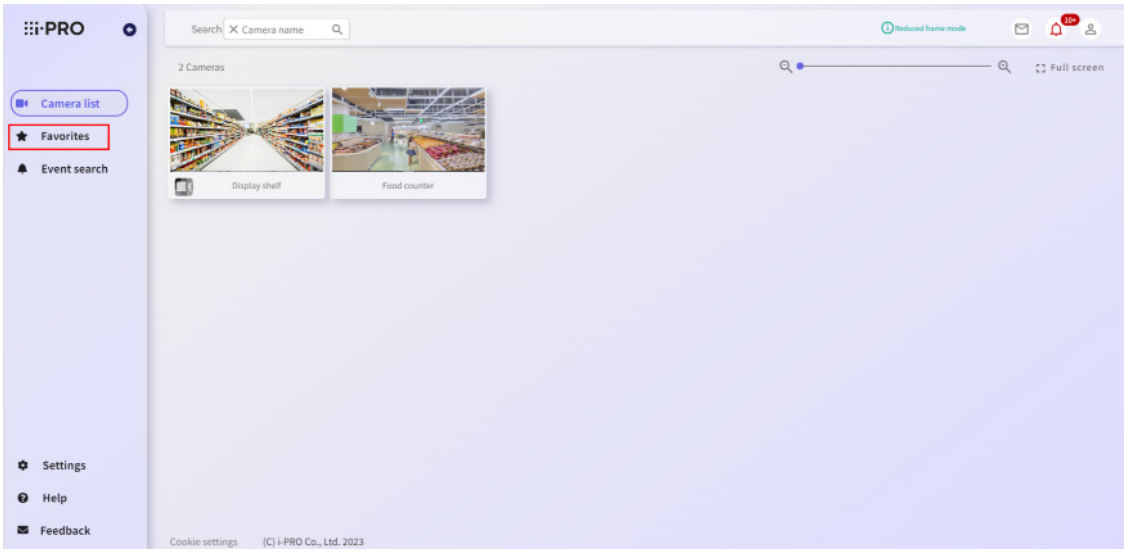
The download destination is the download folder set in your browser.

5.5 Favorite settings

5.5.1 Creating favorite groups

Available only in Windows browsers.

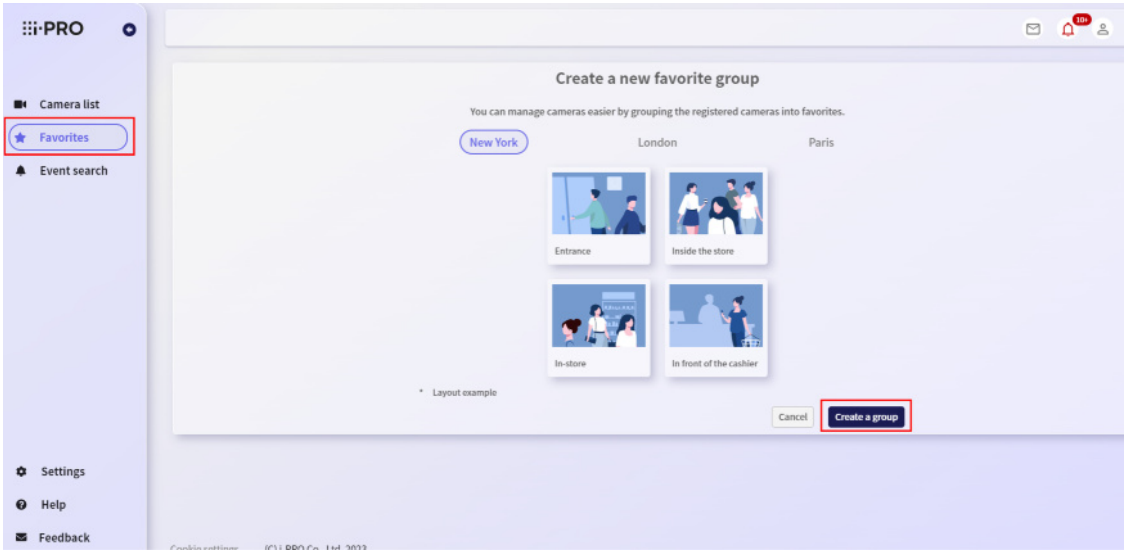
When cameras are registered in the remote monitoring service, images can be displayed as favorite groups at the same time. You can create up to 50 favorite groups.



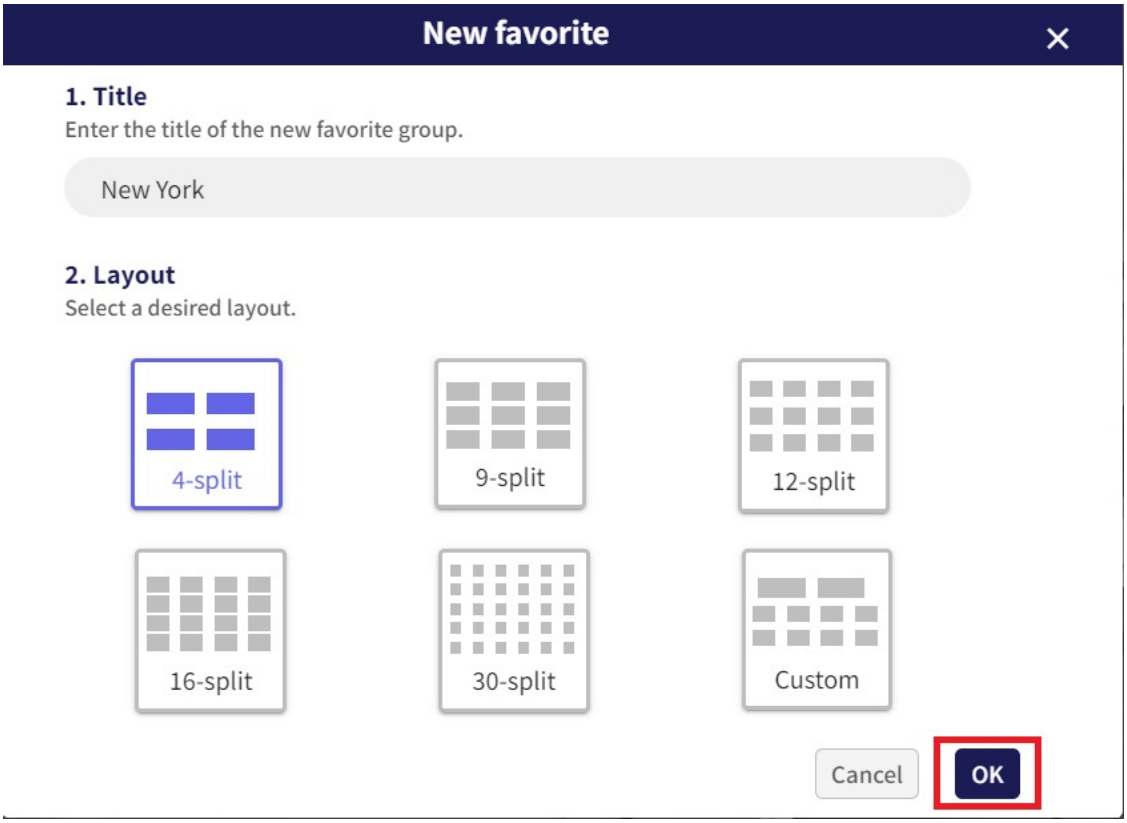
If the editable area cannot be allocated, the following message is displayed.
"Use a display with a resolution of 1024x768 or more. Otherwise, the editing area may not be secured when displaying the bookmark bar, etc. When this message does not disappear, close the bookmark bar. When a mobile device is used, create a group using a browser for PC. The editing area sometimes can be secured by increasing the magnification of the browser or reducing the size with the display settings of Windows."

5.5.2 Creating favorite groups for the first time

1. Select [Favorites] from the side menu, and click the [Create a group] button.



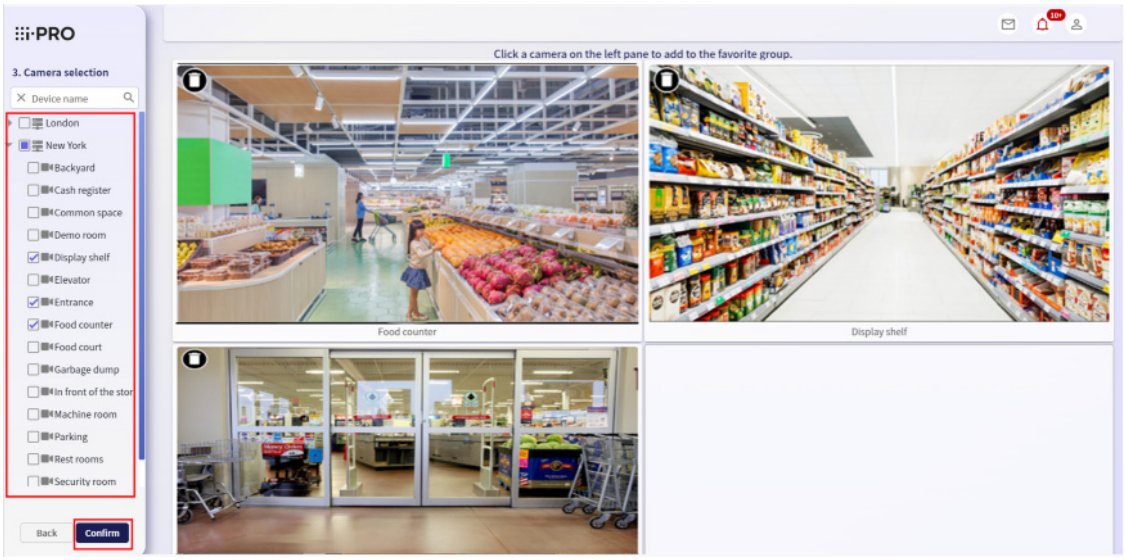
2. Enter a title, select a layout, and click the [OK] button.



3. The creation method varies depending on the selected layout type.

When "4-split", "9-split", "12-split", "16-split" and "30-split" are selected

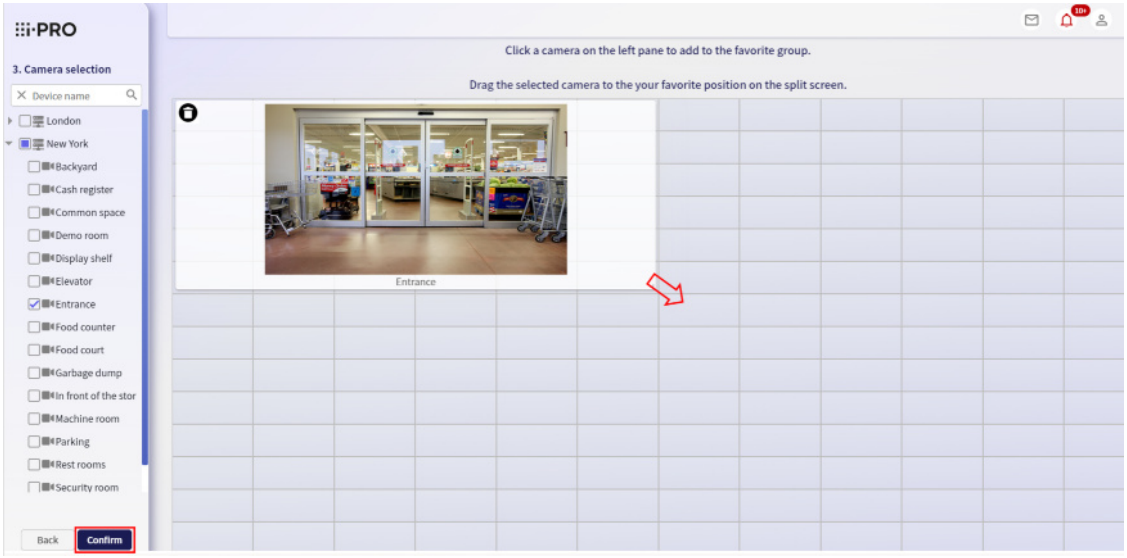
Click the camera you want to register from the left menu and it will be arranged in order in the right frame. To correct the camera, click the trash icon or uncheck the camera in the left menu and reselect the camera. When finished, click the [Confirm] button.



You can drag and drop aligned camera images to swap them.

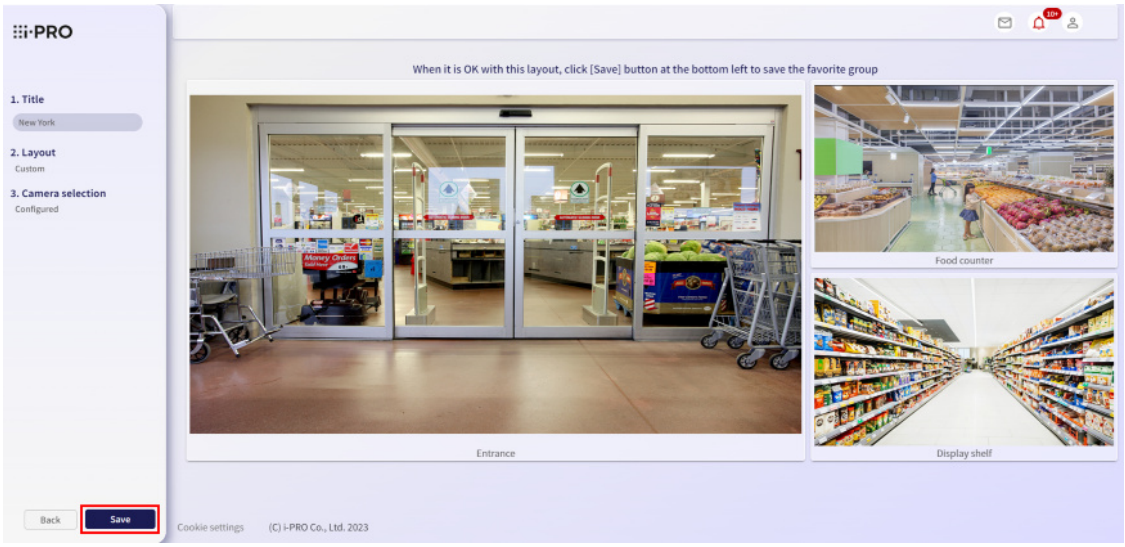
When "Custom" is selected

Click the camera you want to register from the left menu to place it in the canvas on the right. By dragging the mouse, you can move or resize it to any position. When you have finished arranging all the cameras you want to register, click the [Confirm] button.



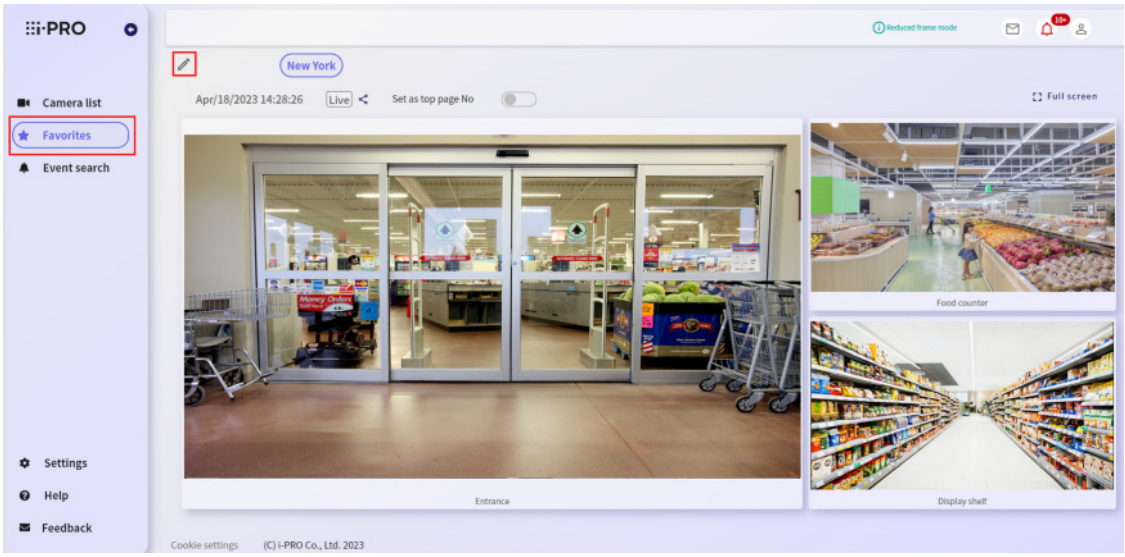
You cannot register multiple identical cameras to the same favorite.

4. Check the final layout and click the [Save] button if there is no problem. To change it, click the [Back] button. If you want to change the favorite title, you can edit it by clicking the title name.

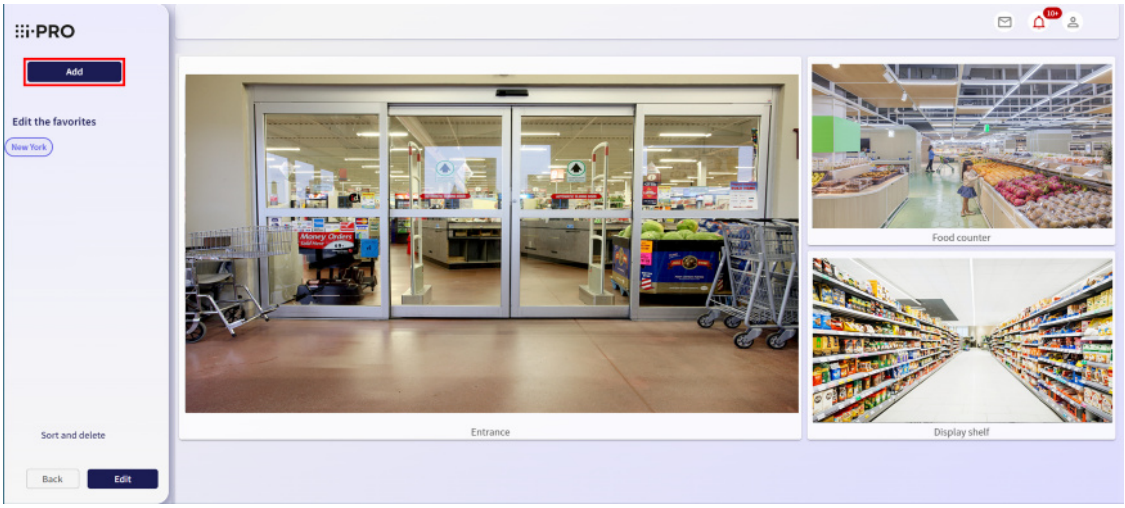


5.5.3 To create an additional favorite

1. Select [Favorites] from the side menu, and click the [Edit] button (pen icon).

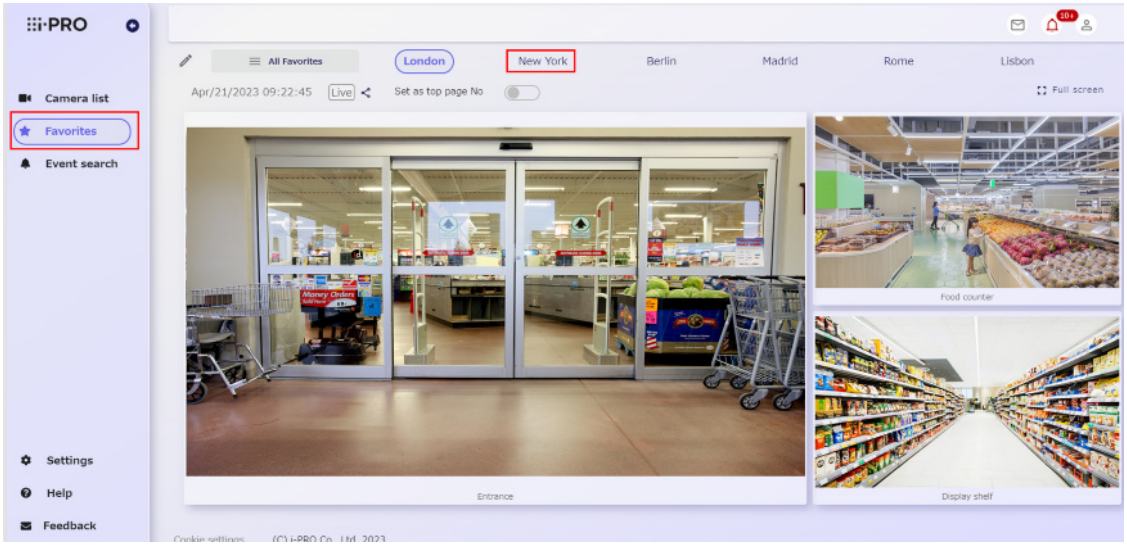


2. Click the [Add] button. Following operations are the same as creating a favorite for the first time.

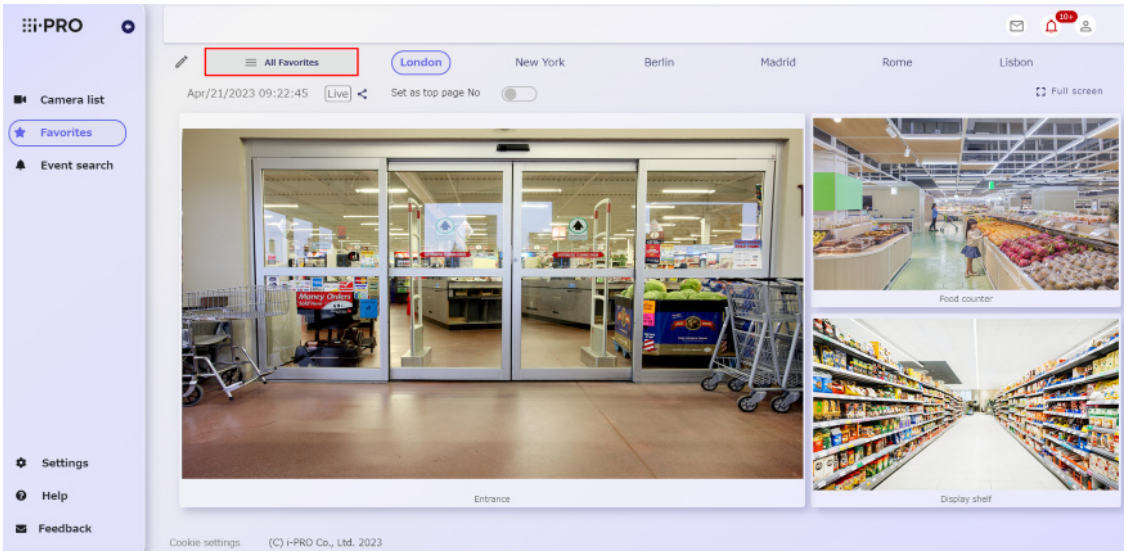


5.5.4 Switching favorite group to display

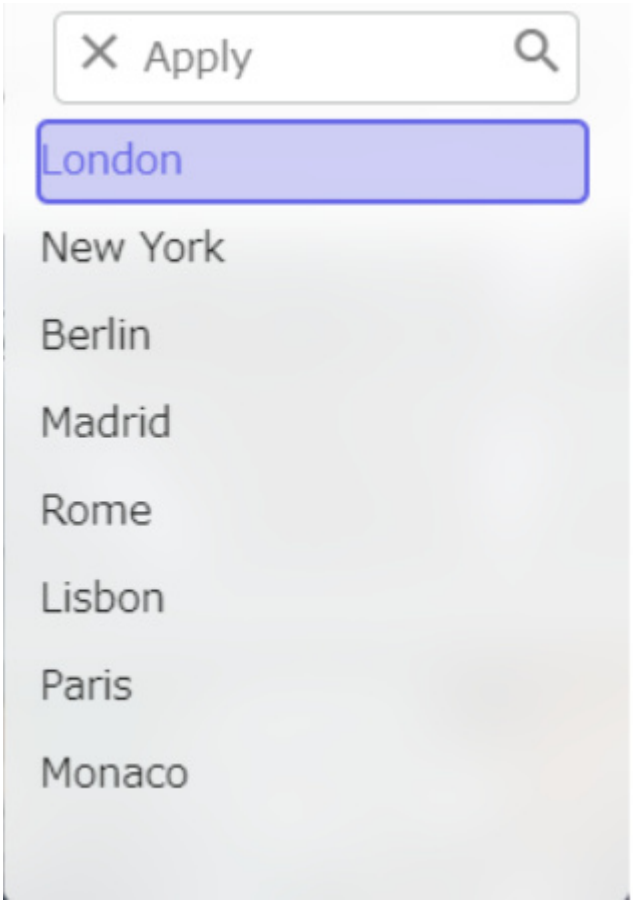
Select [Favorites] from the side menu, and select the favorite you want to view.



If the number of created favorite groups is large, the [All favorites] button and the favorites at the top in the sequence are displayed.

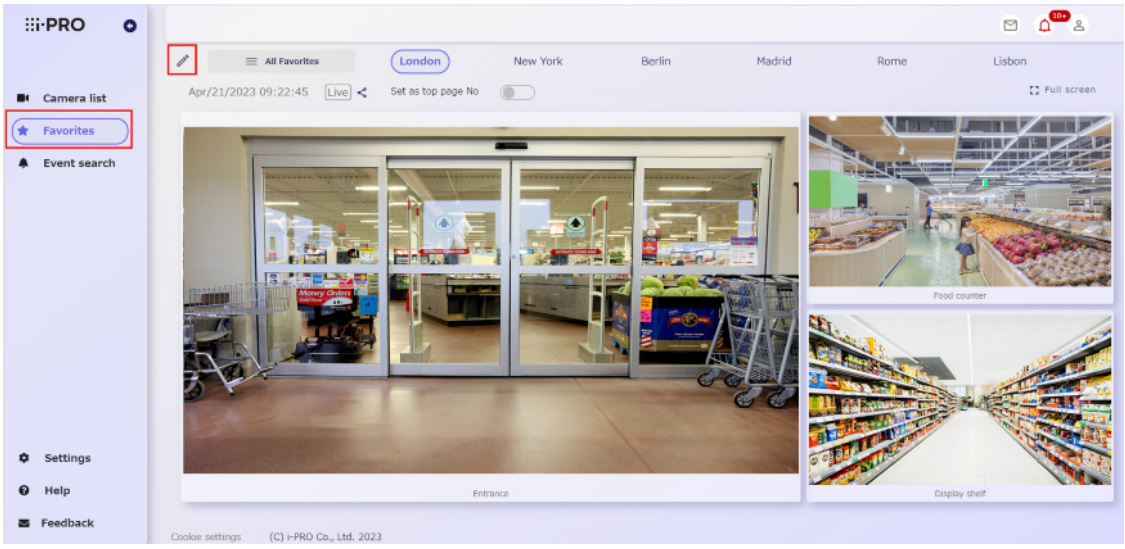


If the favorite button you want to switch to is not displayed, select the [All favorites] button and select a favorite from the favorites tree.

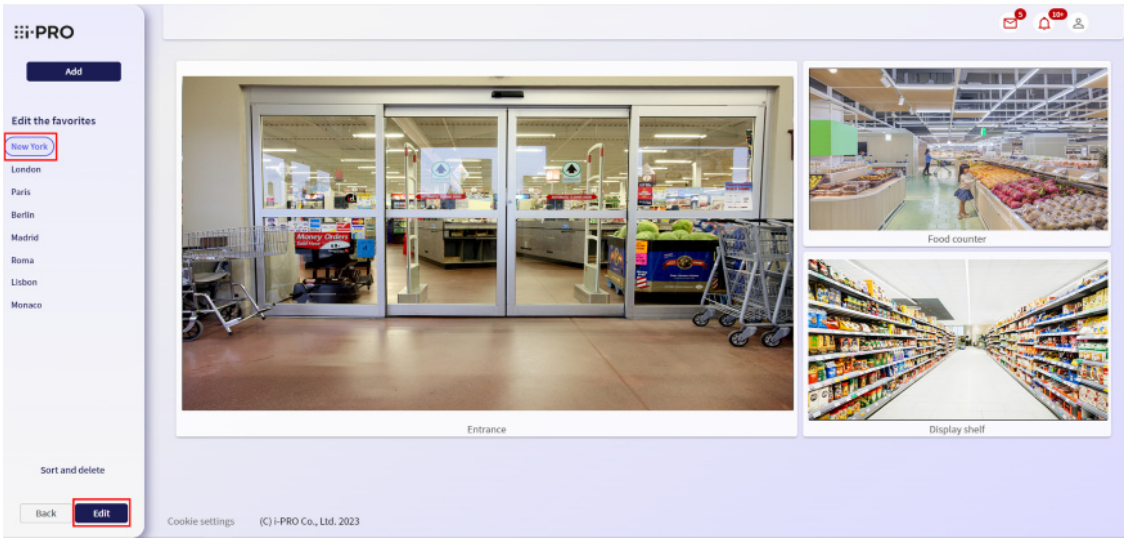


5.5.5 Adding cameras to favorite group

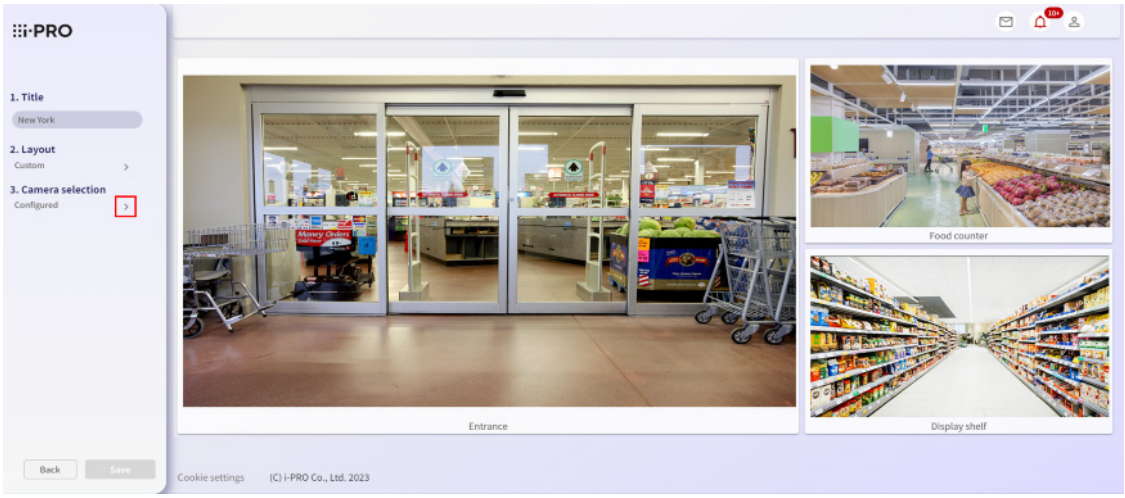
1. Select [Favorites] from the side menu, and click the pen icon.



2. Select the name of the favorite to which you want to add a camera from the list of favorites under [Edit the favorites], and click the [Edit] button.



3. From [Camera selection], click the [>] button.



4. Depending on the selected layout type, the method of addition varies.

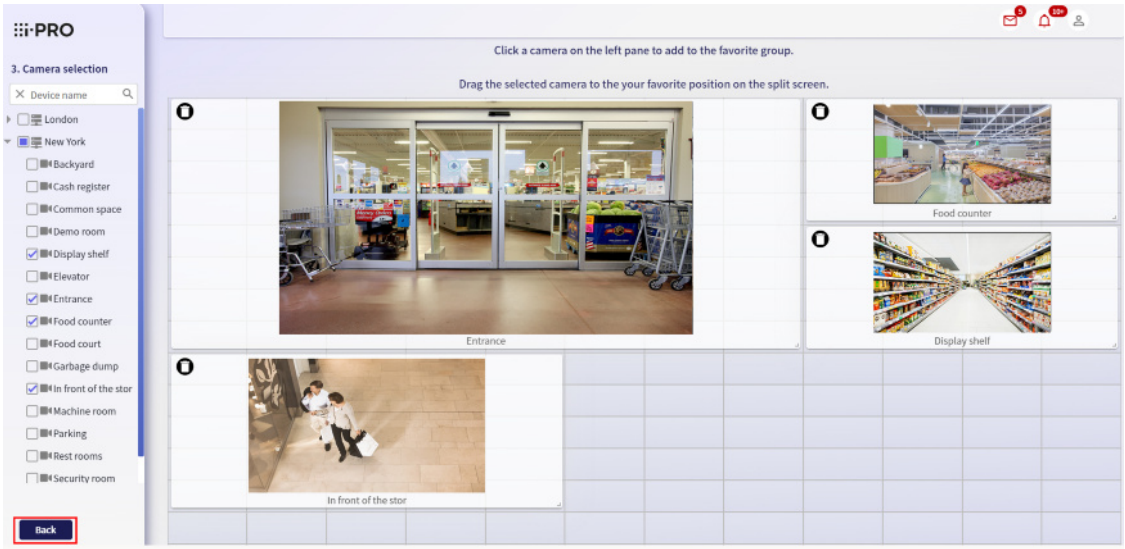
When "4-split", "9-split", "12-split", "16-split" and "30-split" are selected

When you click the camera you want to register from the left menu, it will be arranged in the order of the empty frame on the right. When you finish, click the [Back] button.

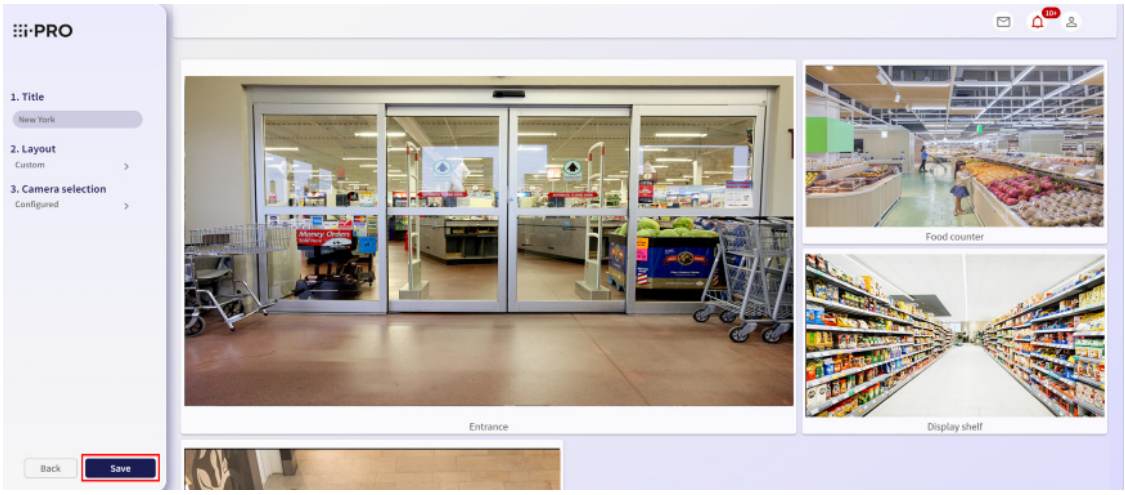
You can't add more than the maximum number. For example, if you want to add a camera to a "4-split" layout, change the layout to "9-split", "Custom", etc.

When "Custom" is selected

Click the camera you want to register from the left menu to place it in the canvas on the right. Adjust the layout by dragging the mouse and click the [Back] button.

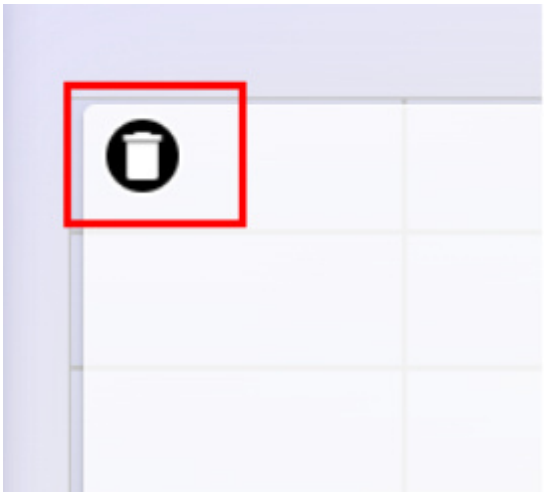


5. Click [Save] to confirm.



5.5.6 Removing cameras from favorite group

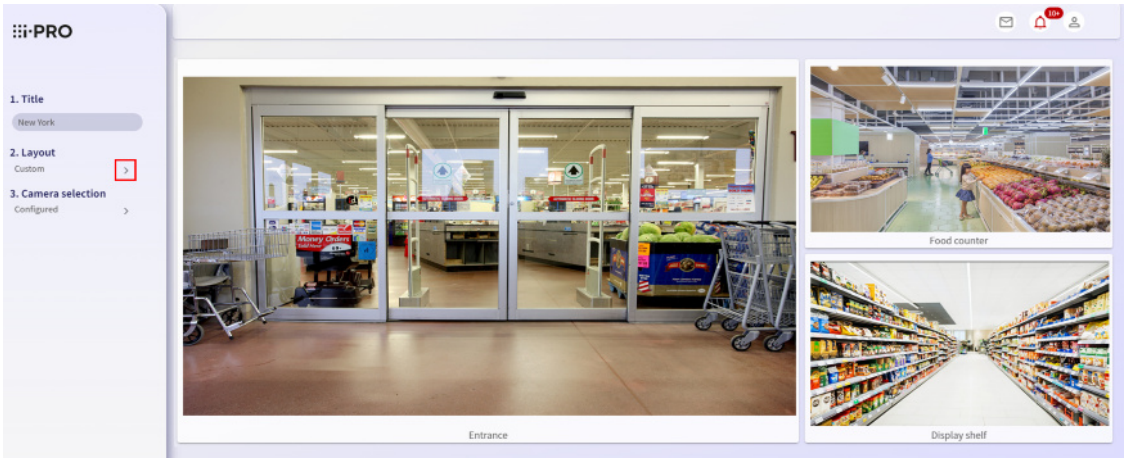
1. Perform steps 1 to 3 in 5.5.5 Adding cameras to favorite group.
2. Click the trash icon in the upper left corner of the thumbnail image of the camera you want to delete.



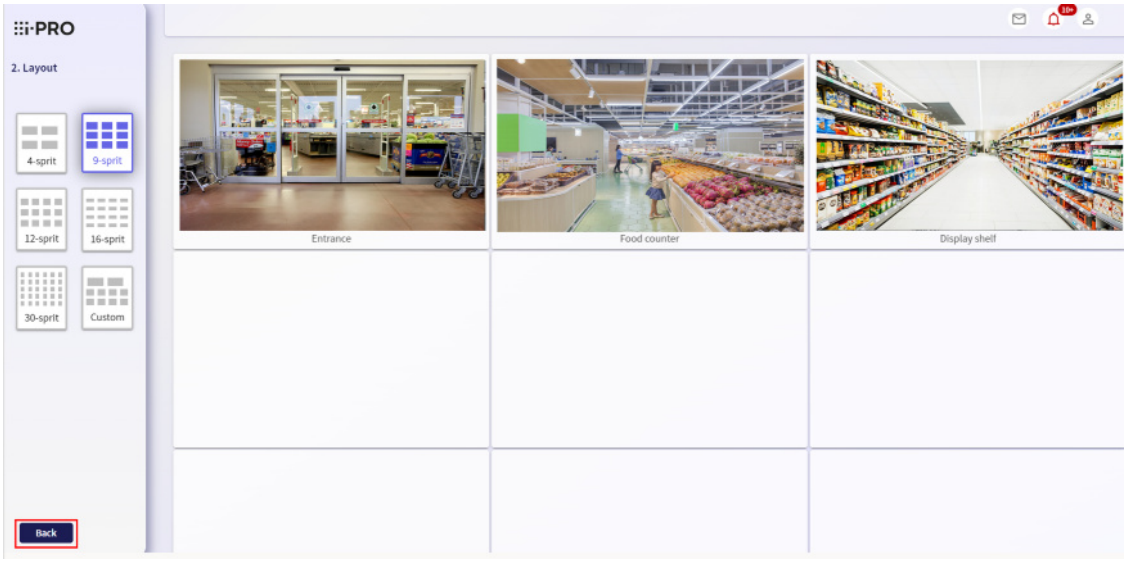
3. After completing, click the [Back] button and perform step 5 of 5.5.5 Adding cameras to favorite group.

5.5.7 Changing the favorite layout

1. Perform steps 1 and 2 of 5.5.5 Adding cameras to favorite group.
2. From [Layout], click [>] button.



3. Select the layout you want to change and click the [Back] button.



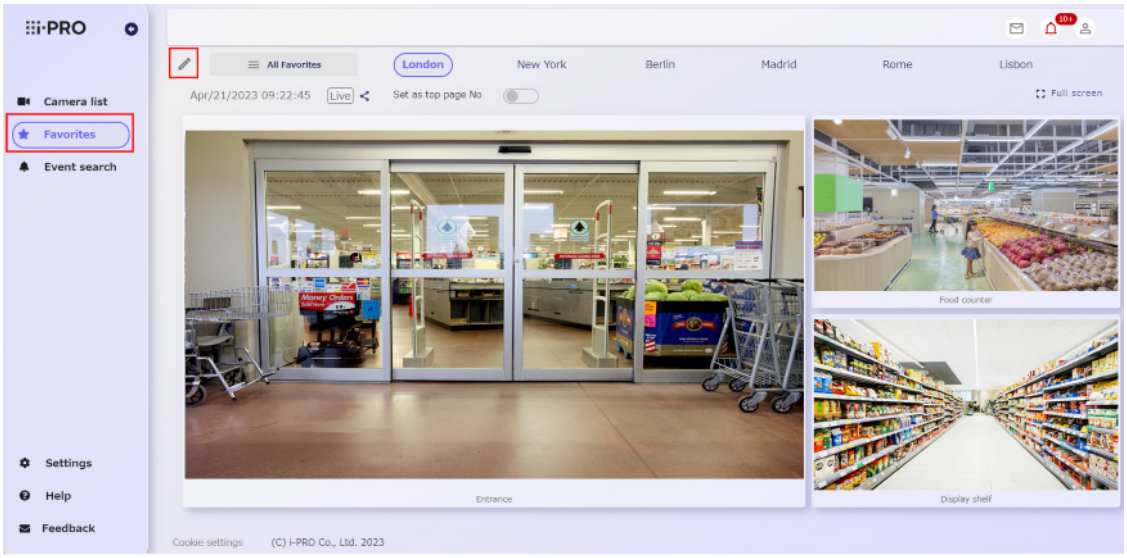
4. Perform step 5 in 5.5.5 Adding cameras to favorite group.

5.5.8 Changing favorite name

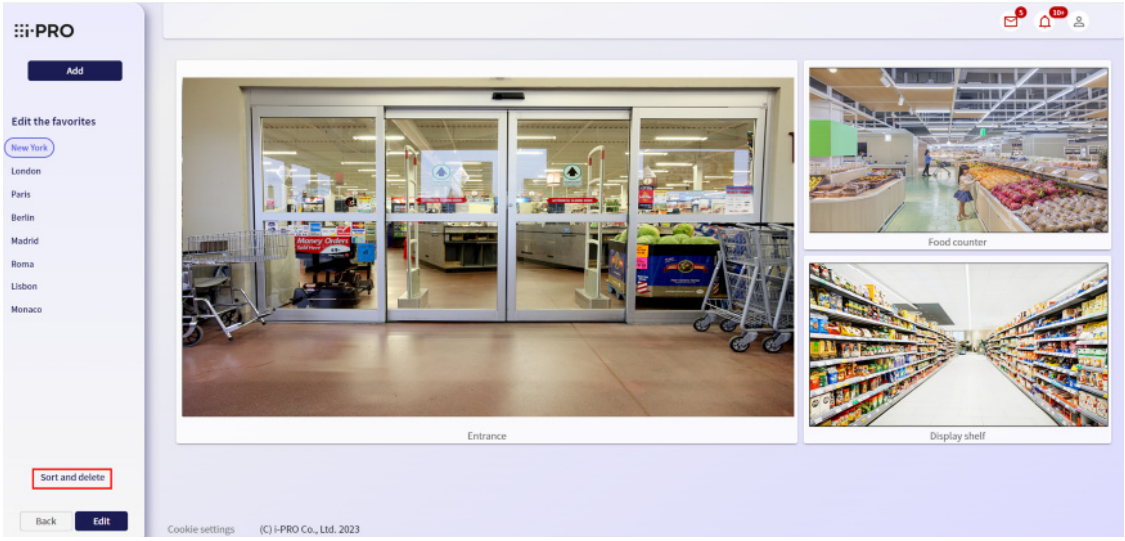
1. Perform steps 1 and 2 of 5.5.5 Adding cameras to favorite group.
2. Change the [Favorite title] and confirm by clicking the [Save] button.

5.5.9 Changing the display order of favorite names

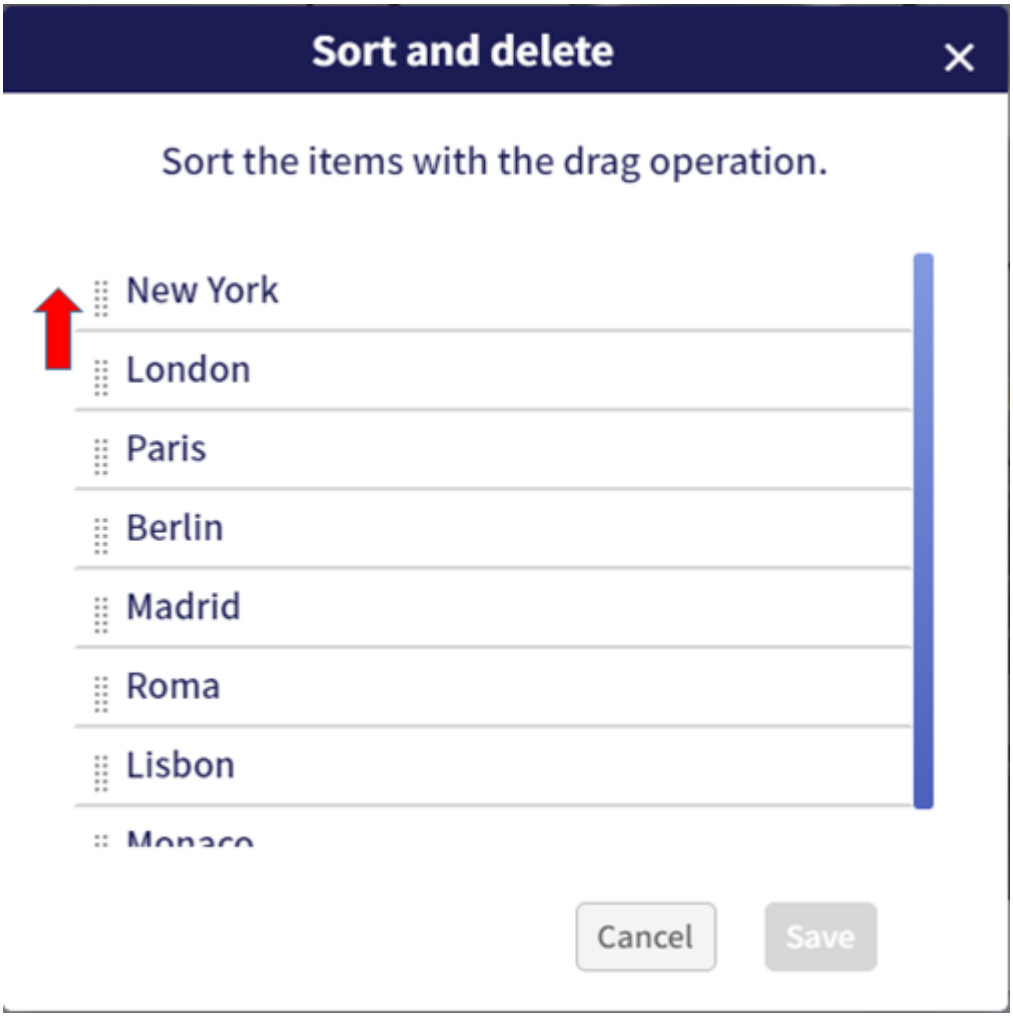
1. Select [Favorites] from the side menu, and click the pen icon.

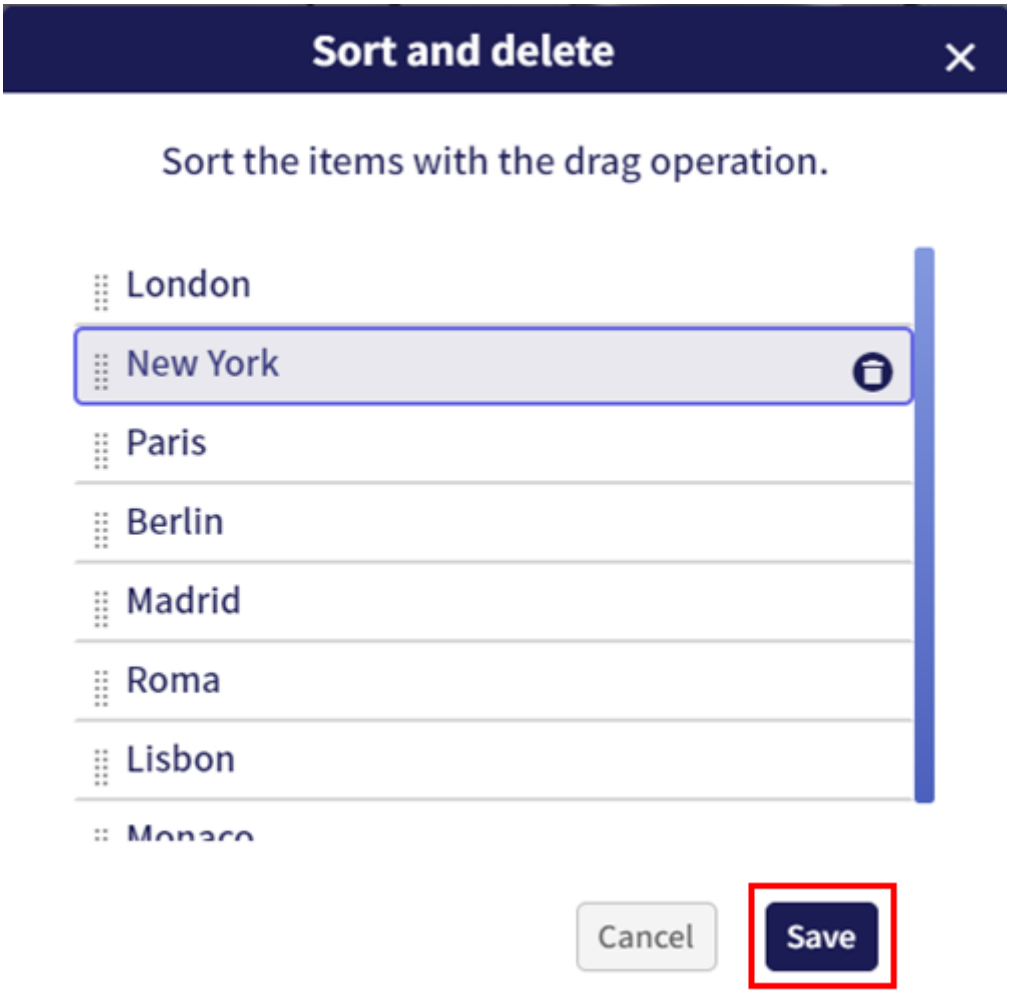


2. Click on [Sort and delete].



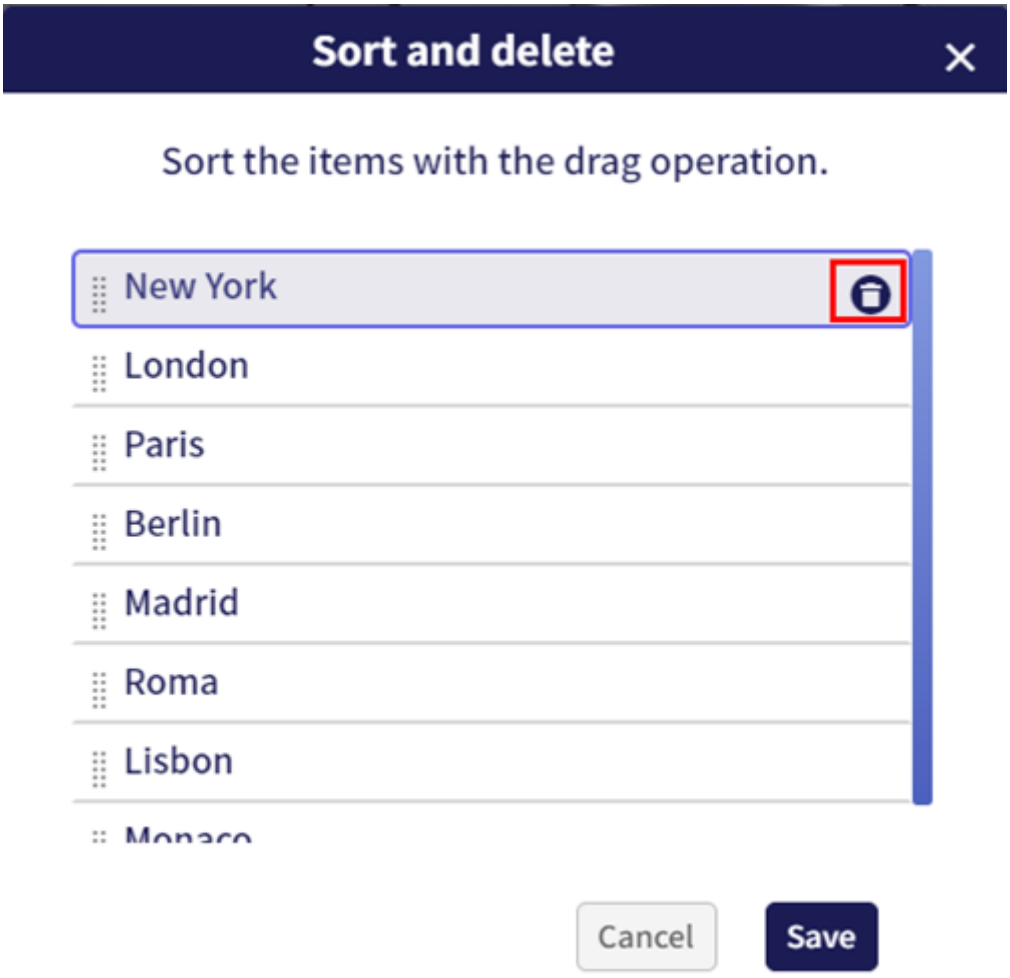
3. Drag the drag icon to the left of the favorite name you want to sort, change it to the position you want to replace, and click the [Save] button.

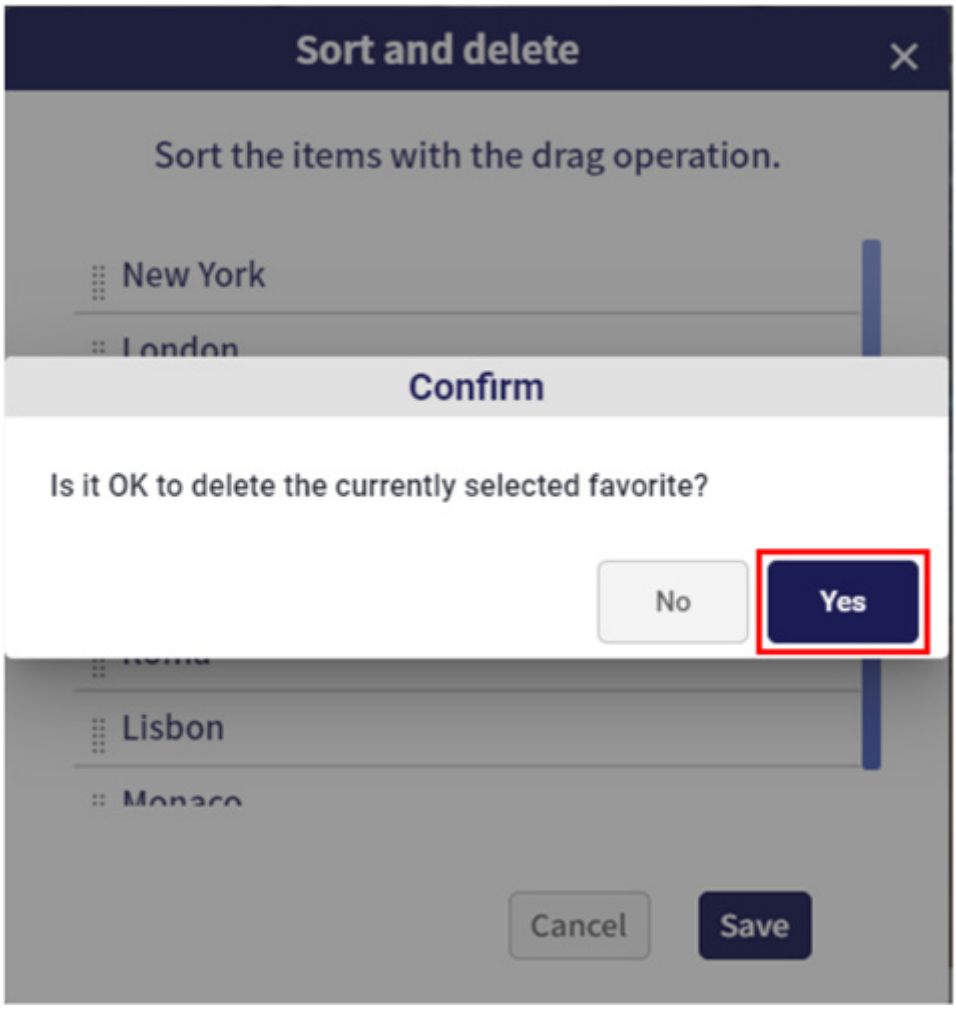

Sort and delete
Sort the items with the drag operation.
New York
London
Paris
Berlin
Madrid
Roma
Lisbon
Monaco
Cancel
Save



5.5.10 Delete a favorite

1. Follow steps 1 and 2 in 5.5.9 Changing the display order of favorite names.
2. Move the cursor to the name of the favorite you want to delete, then click the trash icon. If there is no problem, click [Yes] to delete it.


Sort and delete
Sort the items with the drag operation.
New York
London
Paris
Berlin
Madrid
Roma
Lisbon
Cancel
Save



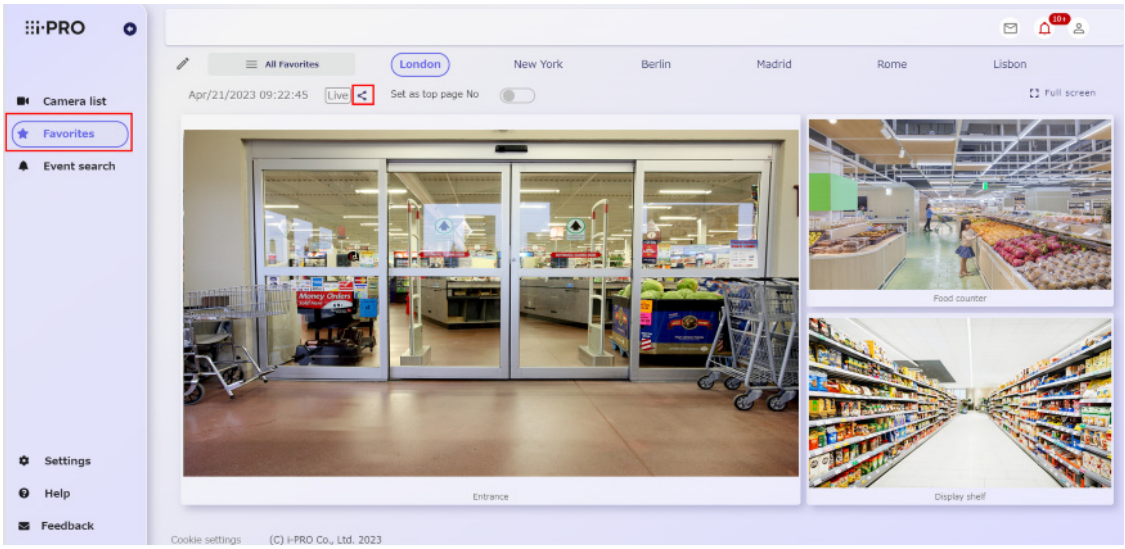
5.5.11 Share your favorite cameras

You can set the camera included in favorites to be used by shared users.

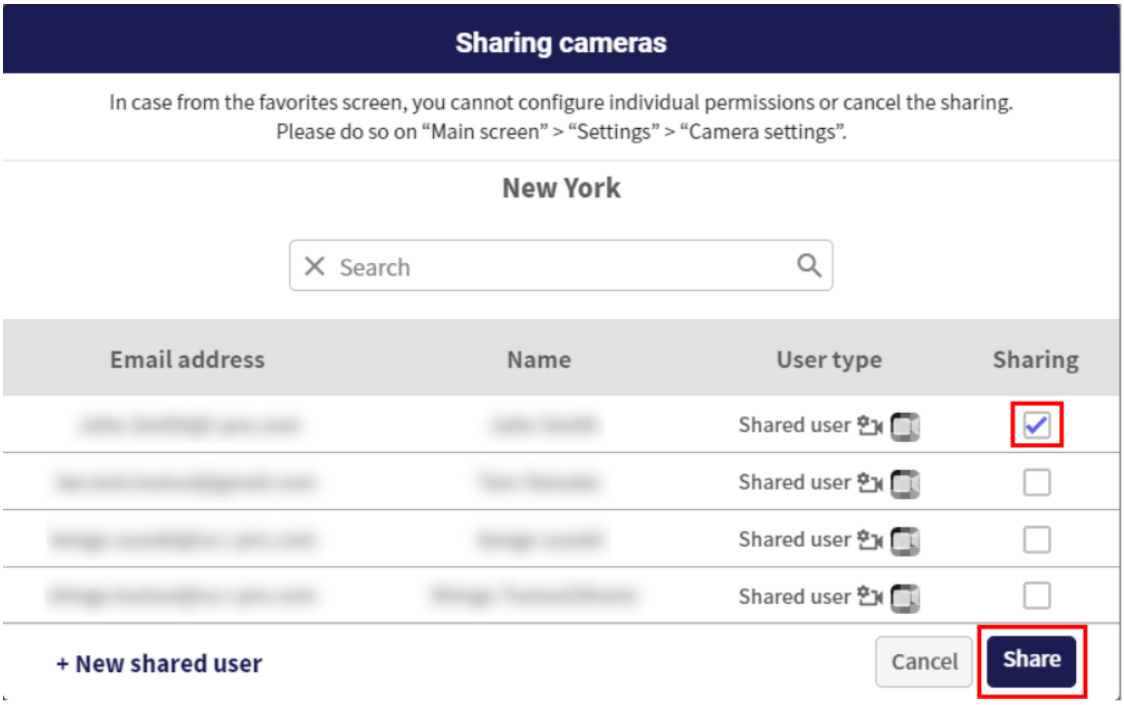
*For details on creating shared users, refer to 4.1.2 Set up shared users or 4.3.1 Register a shared user.

* Only subscribers can share favorite cameras.
* You cannot share individual cameras or unshare share settings from the Favorites screen.

1. Select [Favorites] from the side menu, and click the [Share the favorite cameras] icon.



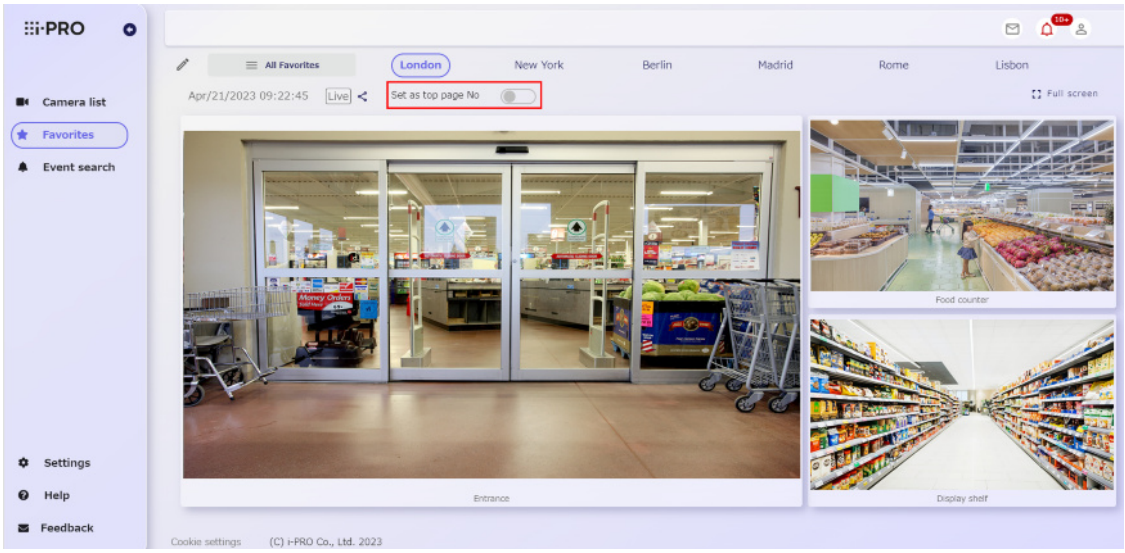
2. Select the [Sharing] check box of the user who wants to share the camera included in the favorites, and click the "Share" button.



3. The message "Camera sharing is complete" is displayed, and the settings are completed.

5.5.12 Change top screen to Favorites page

You can change the top screen after login to the favorite screen by clicking the button of [Set as top page]. You can clear it by clicking it again.



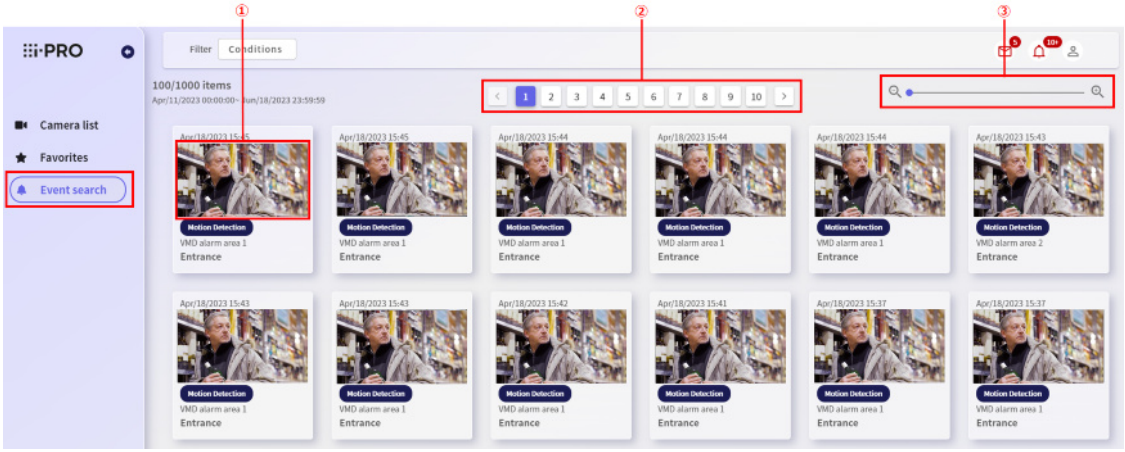
This setting is valid for each browser you use.

5.6 Event

5.6.1 To display events from the side menu

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Select [Event search] from the side menu.

   The event list is displayed.



(1)[Event image]

Clicking an image changes to a single screen and plays back the recorded video from the event occurrence time. For information on playing back recorded images, see 5.4.1 Playing recorded images (Single screen).

(2)[Page transition]

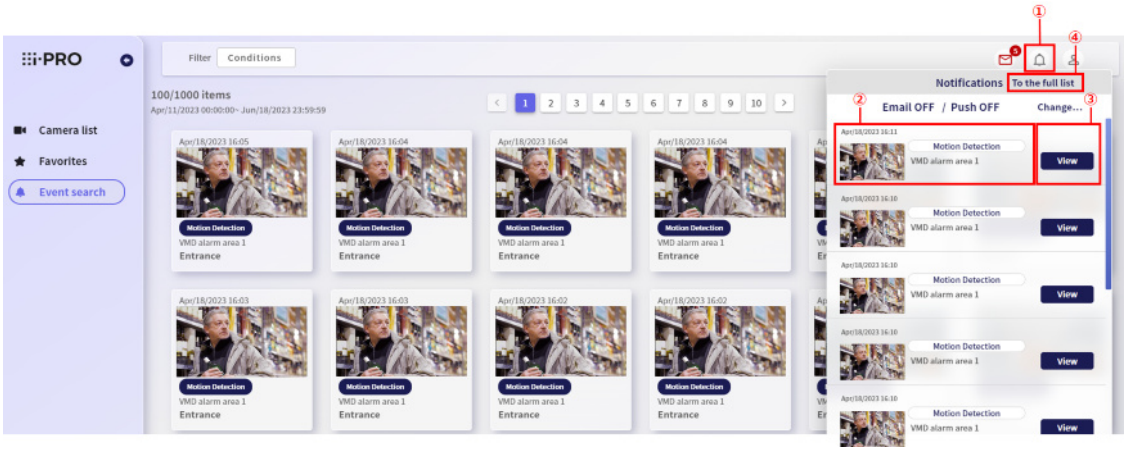
When there are more than 100 event search results, you can change the page to check.

(3)[Image size change bar]

Move the bar to change the size of the displayed image to small, medium, or large.

5.6.2 To display an event from the alarm notification icon

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Click the [Alarm notifications] button on the upper right of the portal screen.
   The last 10 events are displayed.



(1)[Alarm notifications button]

The last 10 events are displayed.

(2)[Event display]

The occurrence date and time of the generated event, thumbnail, and alarm type are displayed.

(3)[View button]

Display the screen to play recorded video from the event occurrence time.

(4)[To the full list button]

Displays the event search screen.

5.6.3 Event type

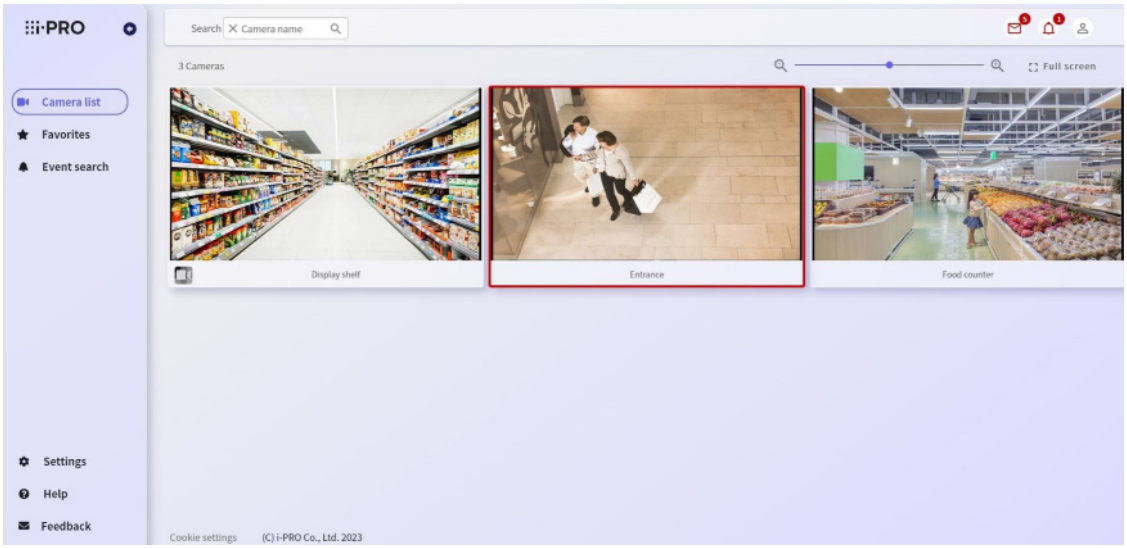
The events that can be detected vary depending on the camera model or recorder.

When using ONVIF cameras, all events are classified as Camera Site Alarms.

5.6.4 Confirm the occurrence of an event

When an event occurs, a red frame appears around the image of the camera where the event occurred on the camera list screen or favorite screen. If the red frame does not need to be displayed, set to OFF by referring to 4.1.7 Changing event notification settings.

The red frame disappears after about one minute.

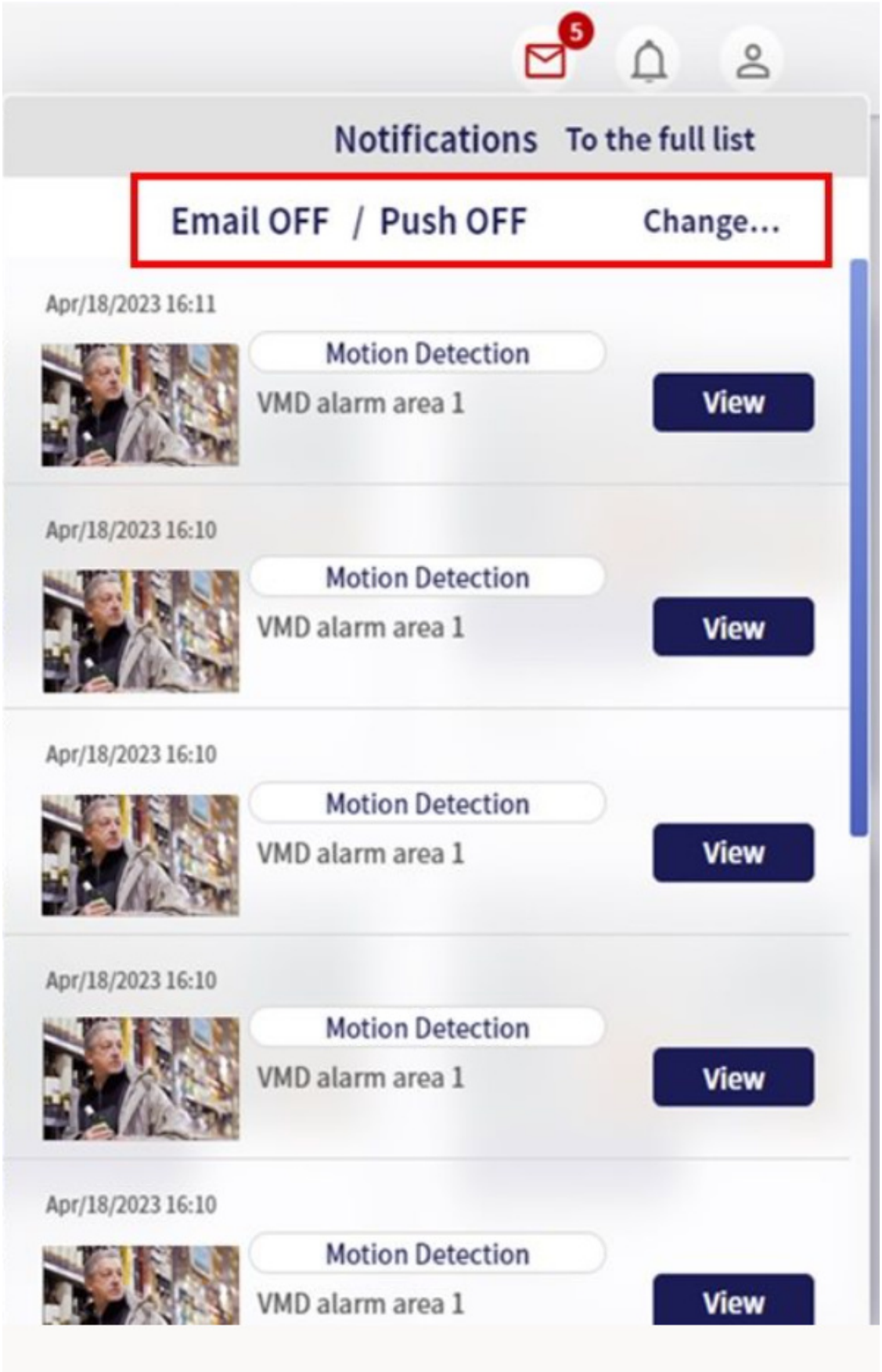


In addition, when an event occurs, you can send an email or send an PUSH notification to the mobile app.

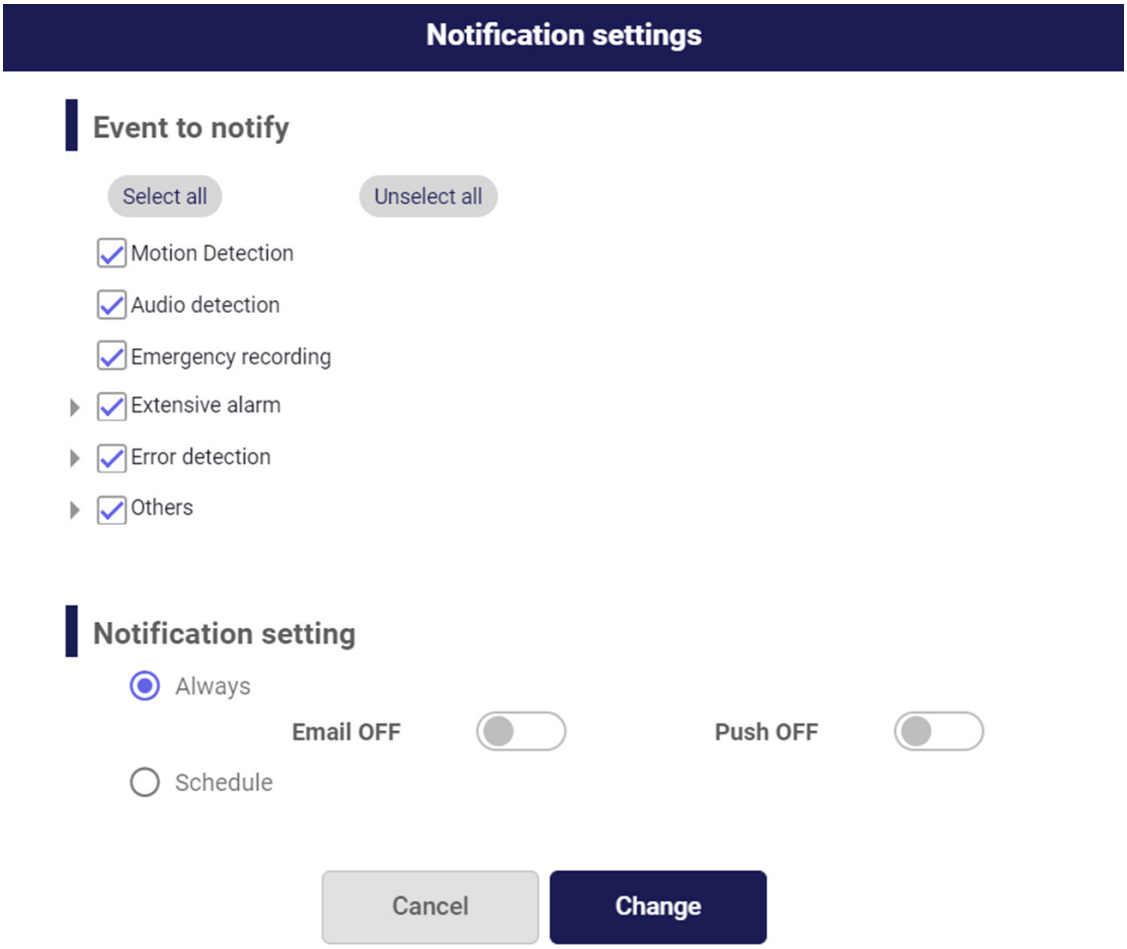
In the e-mail, the event type, the device where the event originated, and the date and time when the event occurred are notified.

Clicking the URL that says "To check the details, log in to the remote monitoring service from the URL below" specified in the received email will access the remote monitoring service login site.

To enable this function, click "Change" on the screen displayed by clicking the "Alarm notifications/Error detections" on the portal screen.

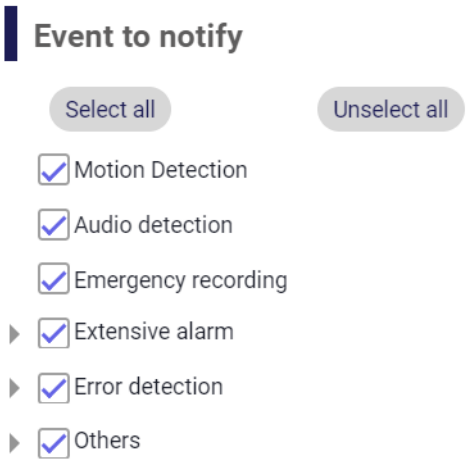

5
Notifications
To the full list
Email OFF / Push OFF
Change...
Apr/18/2023 16:11
Motion Detection
VMD alarm area 1
View
Apr/18/2023 16:10
Motion Detection
VMD alarm area 1
View
Apr/18/2023 16:10
Motion Detection
VMD alarm area 1
View
Apr/18/2023 16:10
Motion Detection
VMD alarm area 1
View
Apr/18/2023 16:10
Motion Detection
VMD alarm area 1
View

The notification setting you want to enable can be set by turning "ON" and clicking "Change". If OFF, e-mail notification or PUSH notification to the mobile app will not be performed.

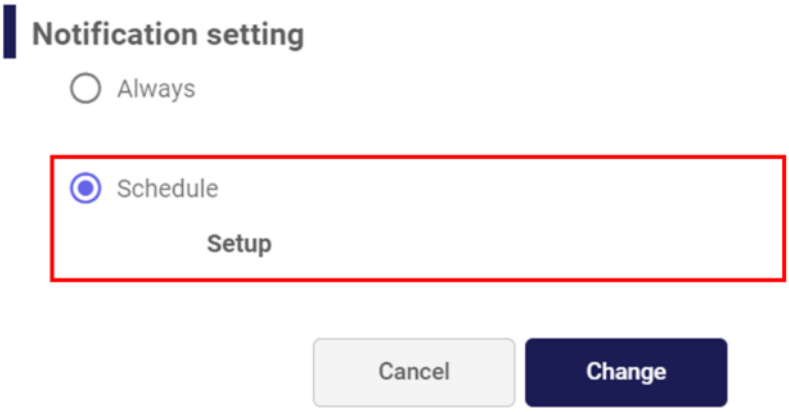


You can also set the type of event to be notified and the notification time.

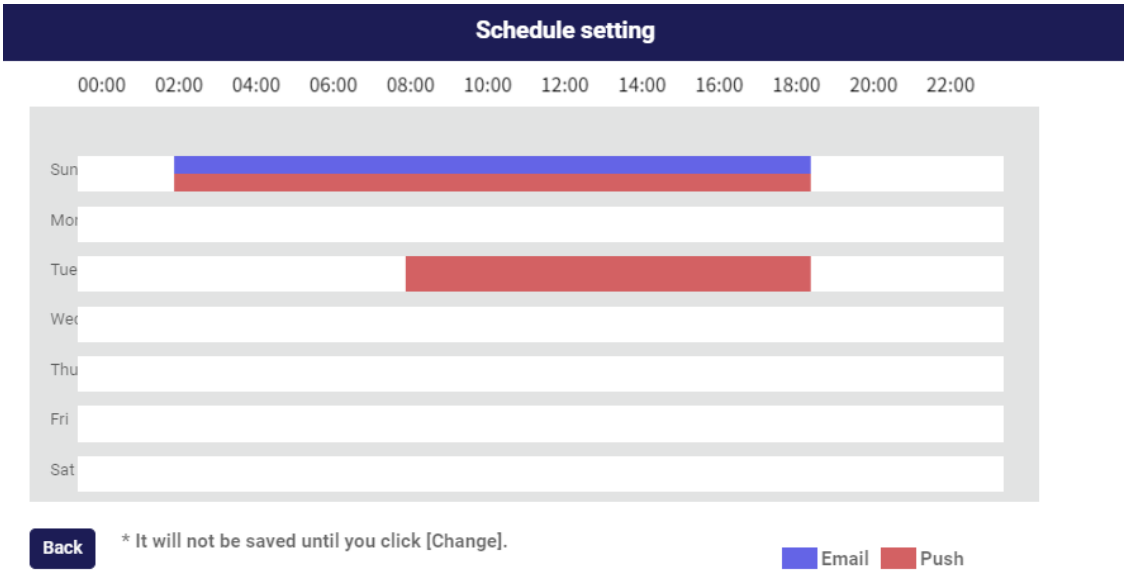
If you want to set the type of event to be notified, select the event you want to be notified of from [Events to notify] below.



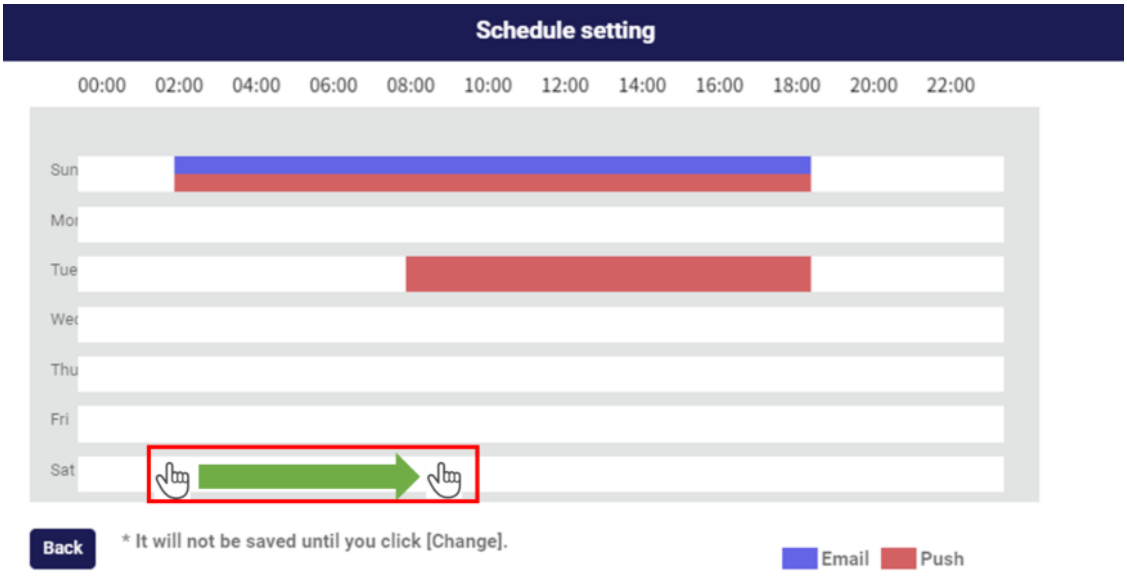
If you want to set the notification time, select [Schedule] below.



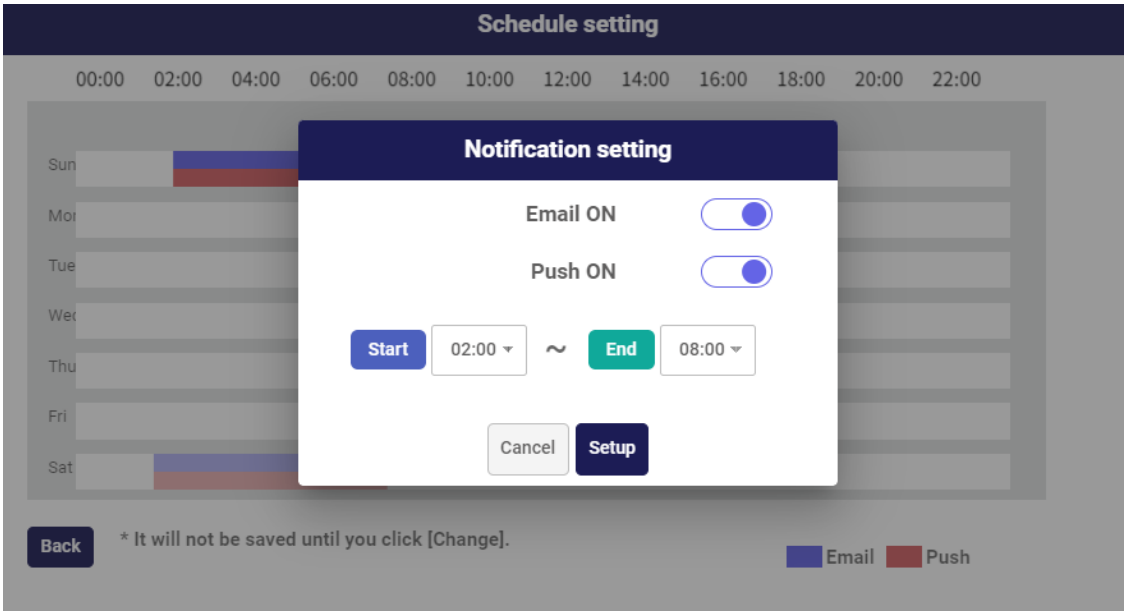
1. Select [Setup] to display the schedule settings screen.



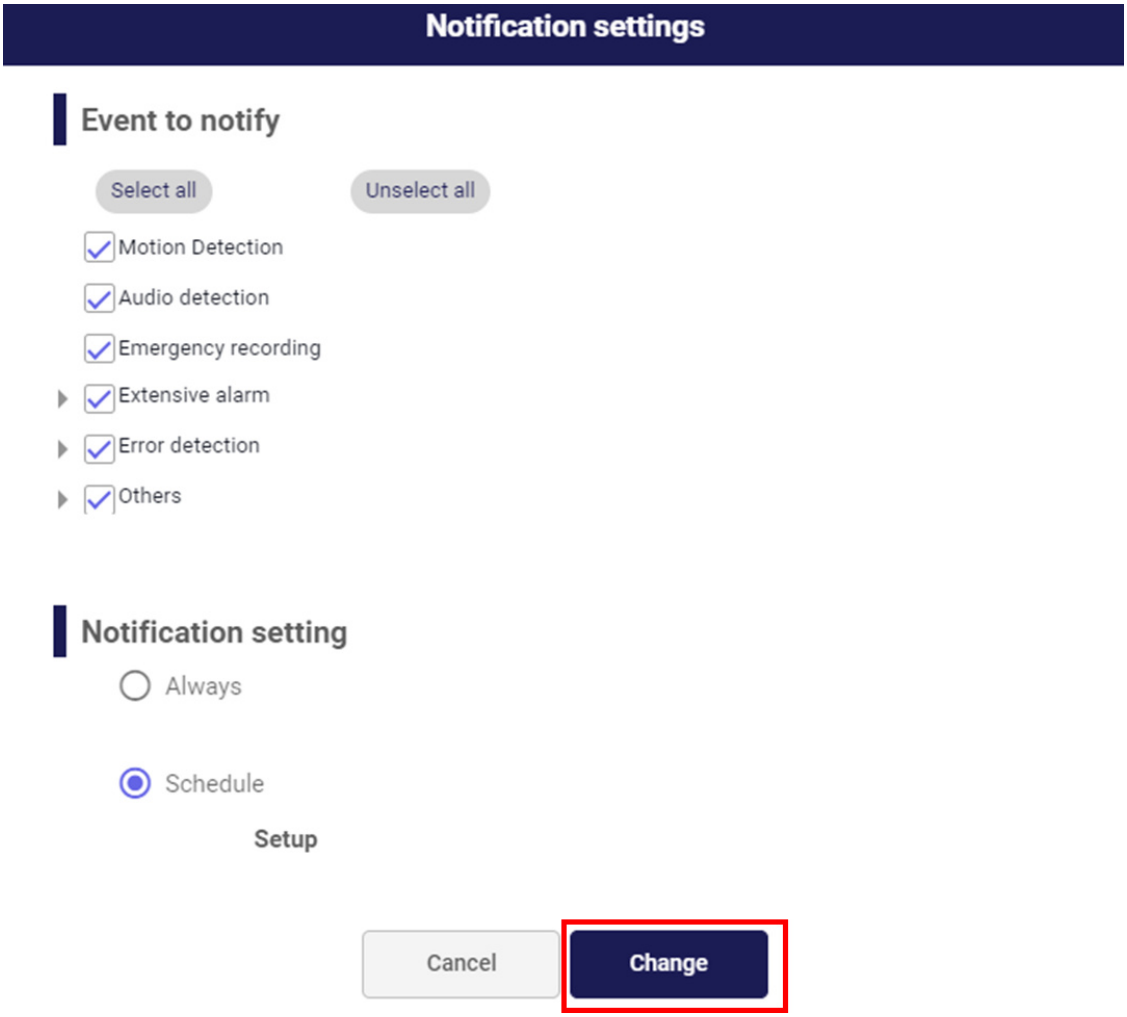
2. Select the time by left-clicking the mouse at the start time and dragging it to the end time.



3. Release the left mouse click at the end time and the [Notification setting] screen will be displayed. On this screen, set whether to send email notifications and push notifications at the specified time. You can also change the displayed start and end times. After changing, press the [Setup] button.

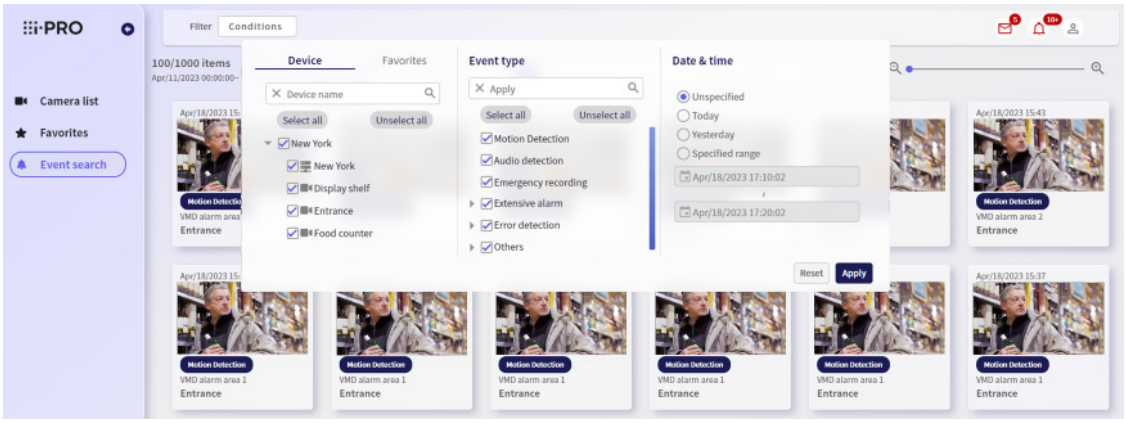


4. Return to the [Notification settings] screen and press the [Change] button to complete the settings.



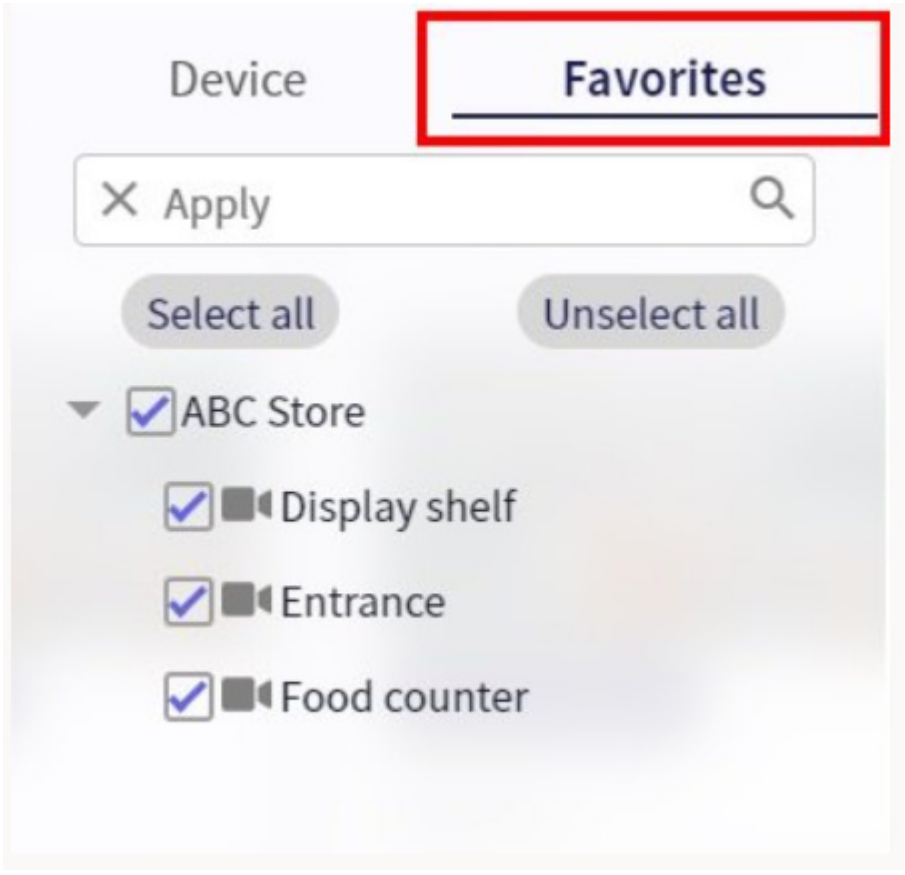
5.6.5 Search for events

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Select [Event search] from the side menu. The event list is displayed.
3. Click the [Conditions] button at the top of the screen.
4. The search condition setting screen is displayed.
   Enter your search criteria.



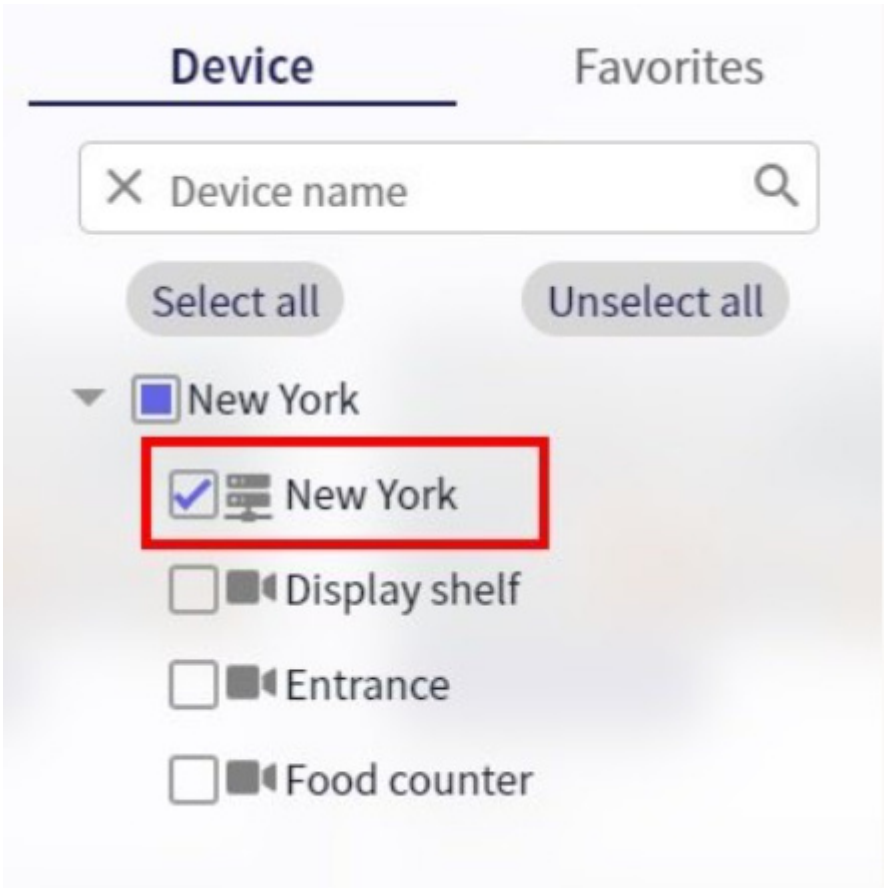
1) Select a device.

Displays the name of the device registered in the remote monitoring service. If a Favorite is registered, you can also select it from the Favorites list.

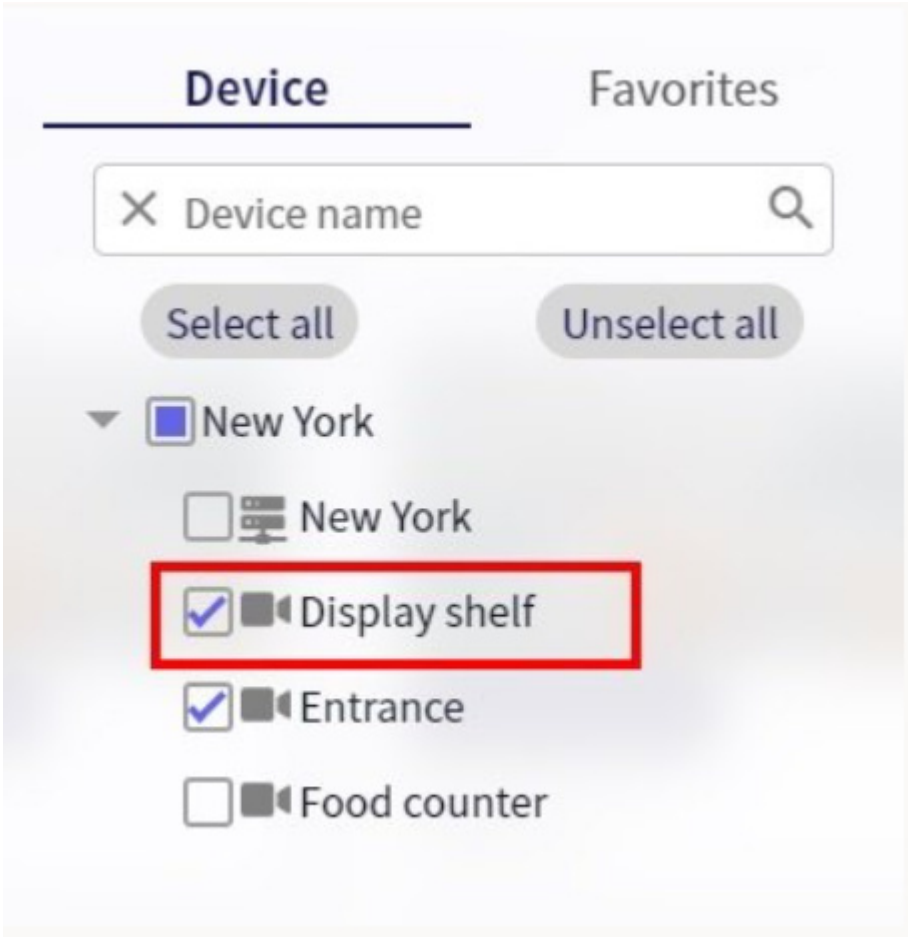


Select the target device to be searched for events. If you want to search only the recorder or camera, select the checkbox only for the target device. If you select the checkbox of the parent, you can select all devices at once.

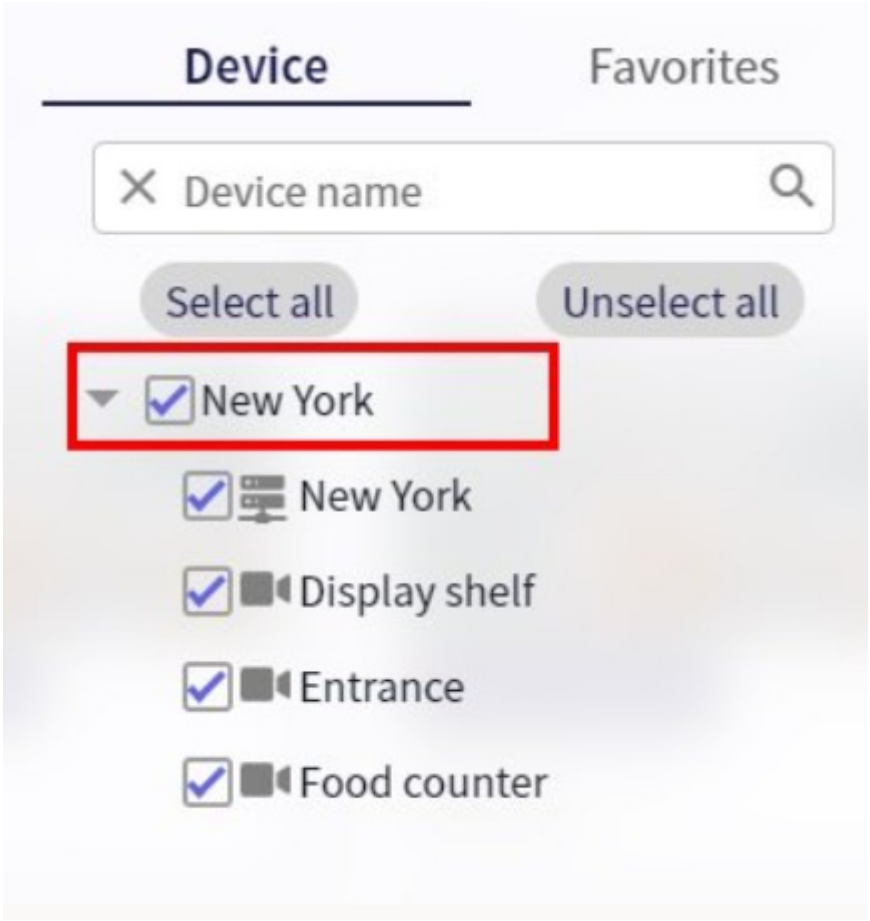
Select only recorder



Select only camera



Select both recorder and camera



2) Select the event type.

Select the type of event to be searched.
For extended alarms, error detection, and other events, you can select all event types collectively by selecting the checkbox of the parent.
Click the [Select all] button to select all event types.
Click the [Unselect all] button to unselct all event types.

3) Select a search period.

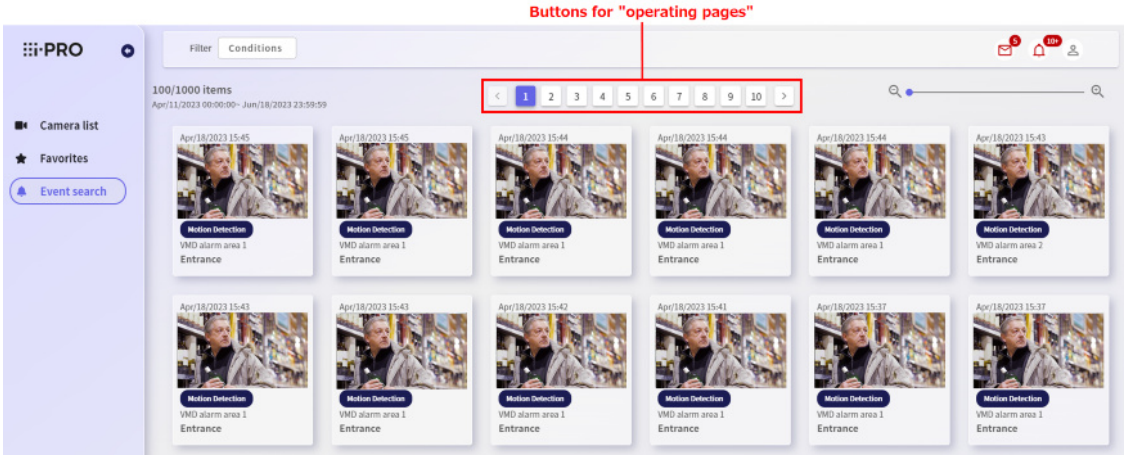
You can select from "Unspecified", "Today", "Yesterday" or "Specified range". When "Specified range" is selected, specify the search start date & time and end date & time from the calendar.

4) Click the Search button.

The search begins.

* Click the [Reset] button if you want to restore the default input conditions.

5. The search result is displayed.

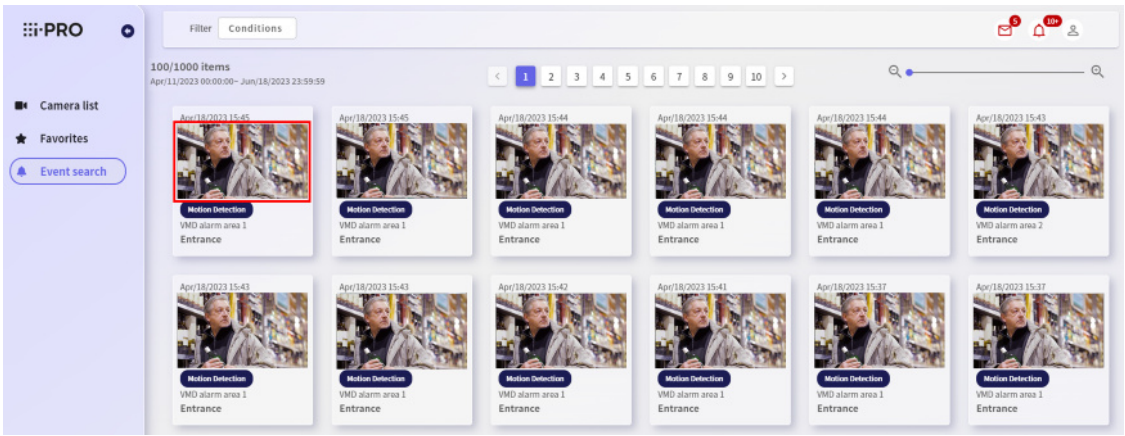


* Up to 100 search results are displayed on one screen. You can scroll to see the whole.
* If there are more than 100 search results, click the [Page Operations] button in the upper right corner to display the next search results.
* Up to 1000 search results (10 pages) are displayed.

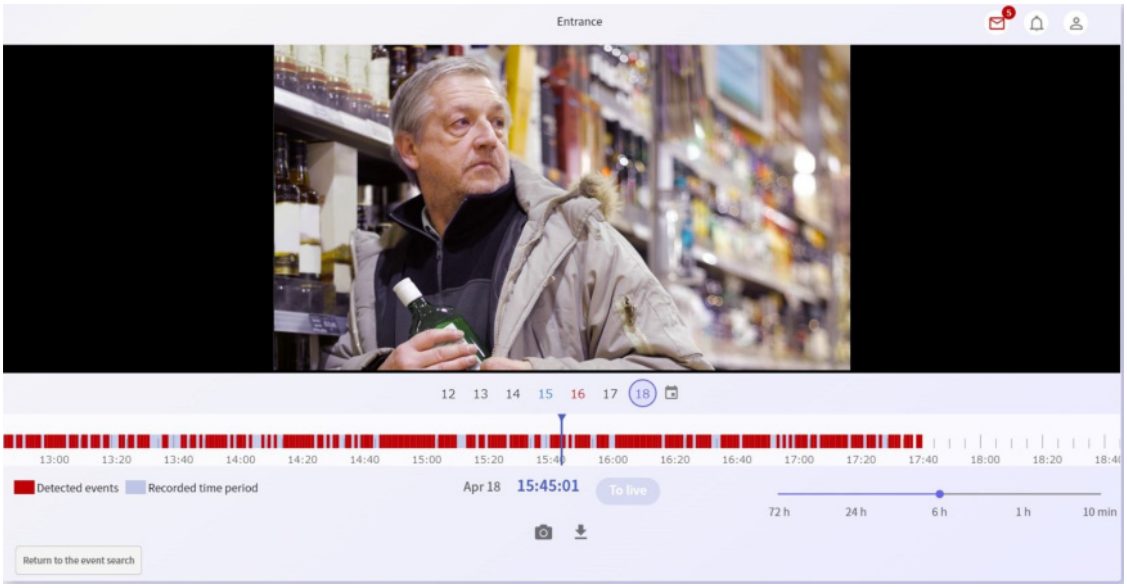
6. Display the recording and playback screen of the event occurrence time.

Available only for Windows and Android browsers.

1) Click images for the event you want to view.



2) Displays the video of the selected device when an event occurs.



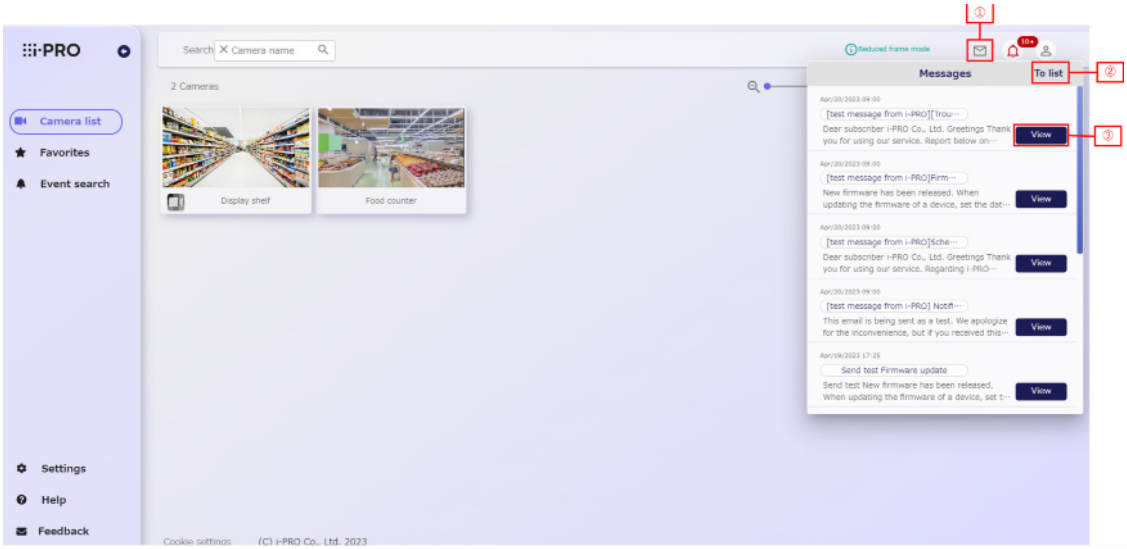
For information on playing back recorded images, see 5.4.1 Playing recorded images (Single screen).

5.7 Message

5.7.1 Checking the Message

You can check the announcement from Remote Monitoring.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Click the [Messages] button on the upper right of the portal screen.
   The last 10 messages are displayed.



(1)[Messages button]

The last 10 messages are displayed.

(2)[To list button]

Displays the message history screen.

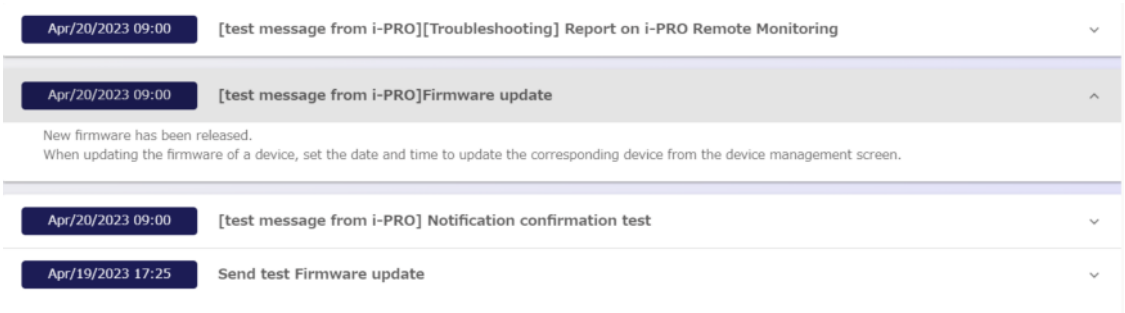
(3)[View button]

Screen transition is performed according to the notification content.

When the firmware update is notified, the device management screen is displayed. For details on how to update the firmware on the device management screen, refer to 4.2.3 Reserve or change the reservation for the firmware update.

In the case of service maintenance notification, it is displayed with the corresponding notification contents opened on the maintenance history screen.

In the case of other notifications, the corresponding information is displayed in the message history window with the corresponding information open.

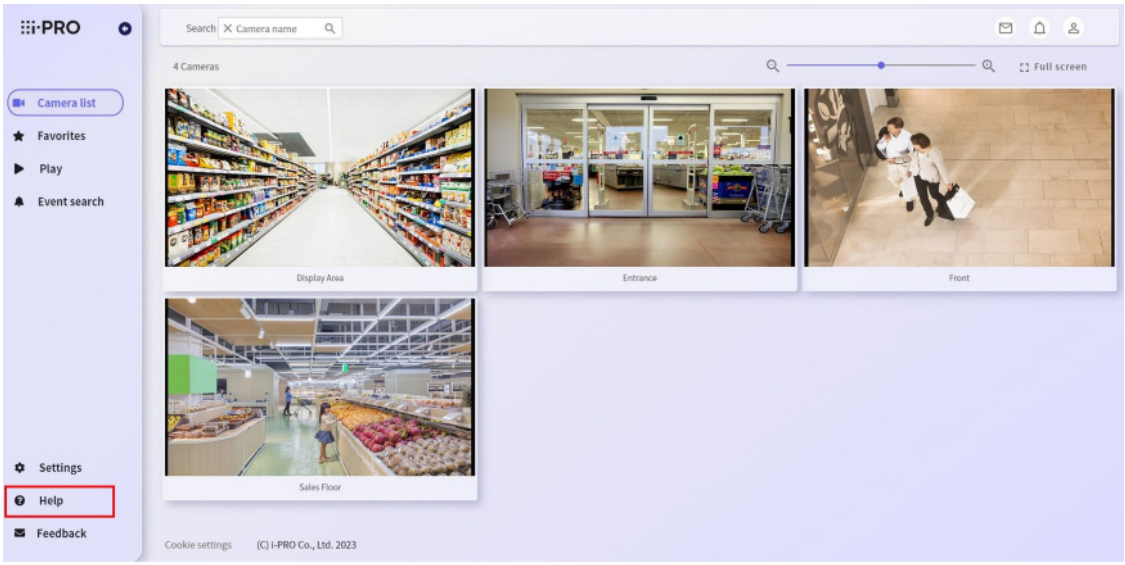


5.8 Help

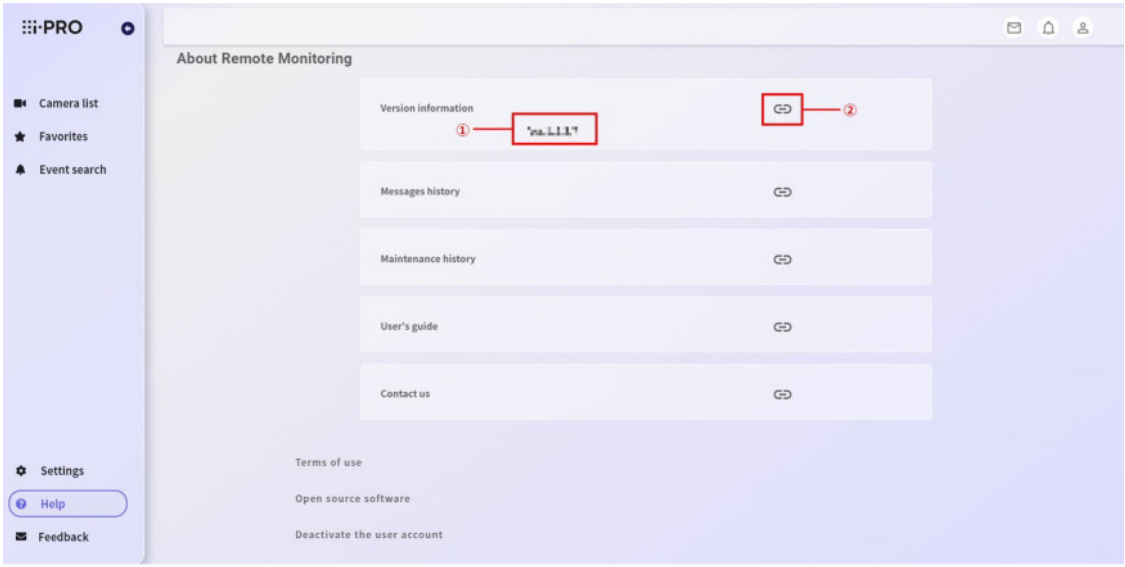
5.8.1 Check the version information

You can check the version of remote monitoring service.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Select [Help] from the side menu.



The Help screen is displayed. The remote monitoring service version-information is displayed at the top of the help-screen.



(1)[Version information]

Displays the present version of the remote monitoring service.

(2)[Link to version information]

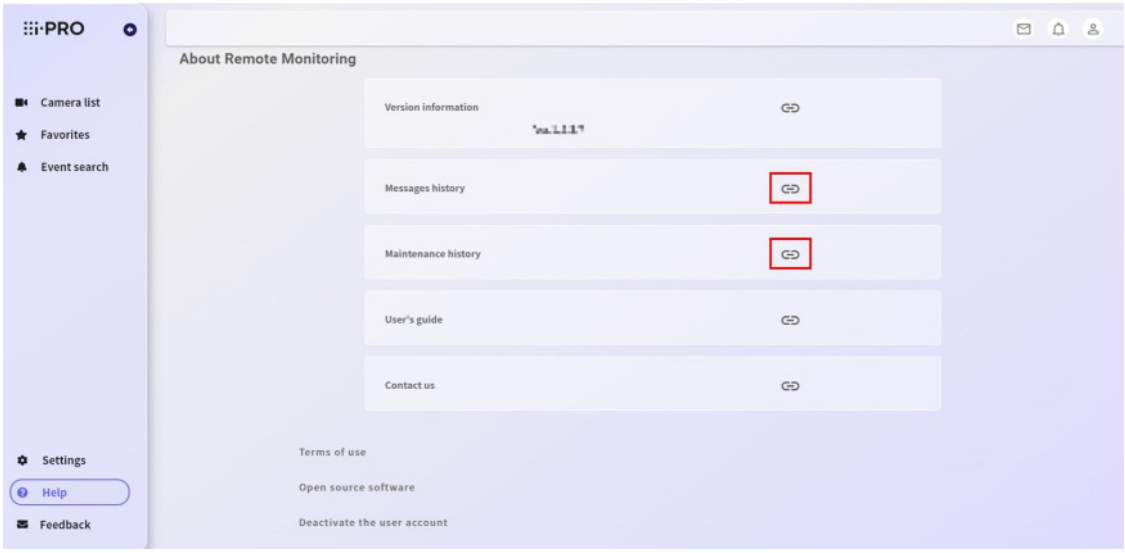
The manuals that contain information for each version of the remote monitoring service are displayed on separate tabs. If you want to check now, please check "Service Notice".

5.8.2 Checking message history and maintenance history

You can check the announcement from the remote monitoring service operation.

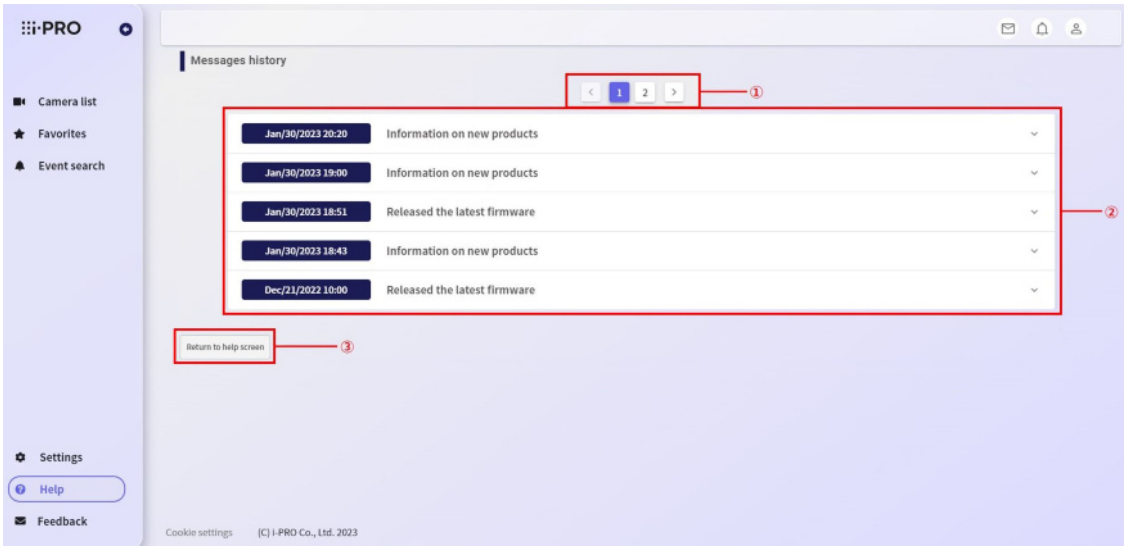
The notification history displays the notification of the firmware disclosure and the notification from the service operation, and the maintenance history displays the service maintenance notification.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Select [Help] from the side menu.
3. Click the [Message history] or [Maintenance history] link.

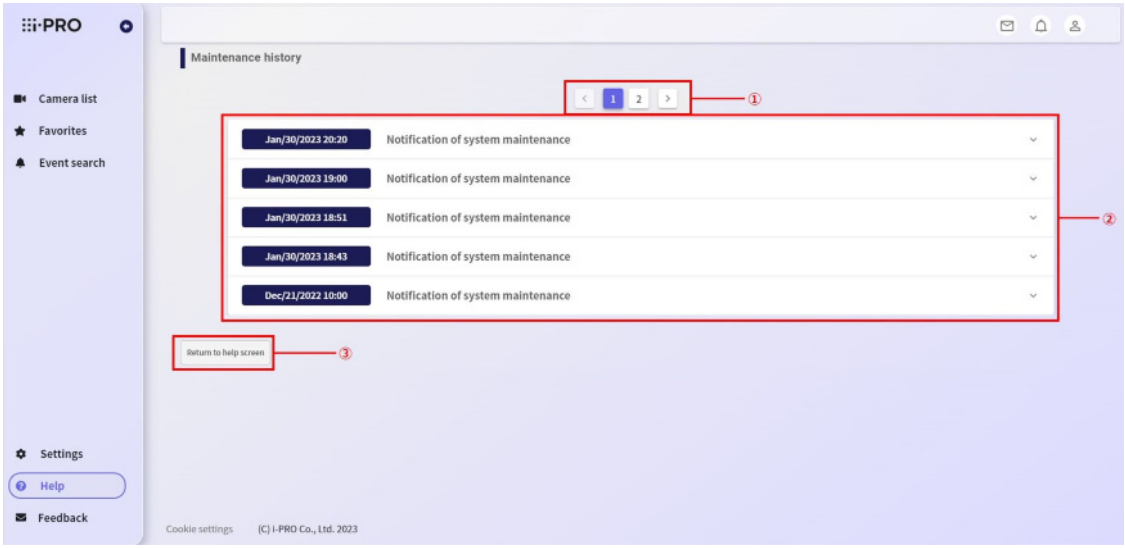


The notification or maintenance history that has been notified so far is displayed.

[Message history]



[Maintenance history]



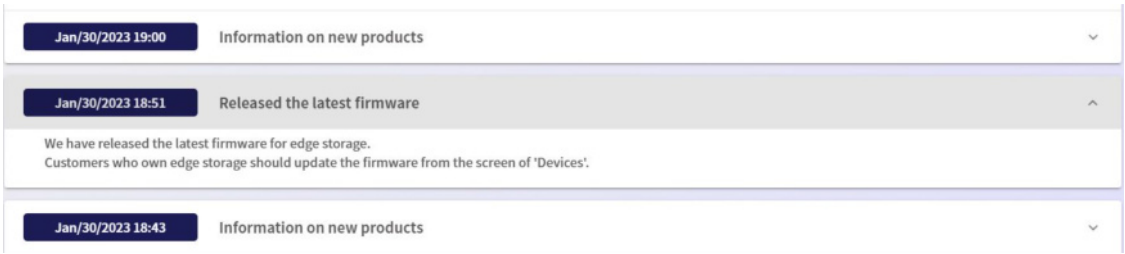
(1)[Page transition]

When there are 10 or more notifications, you can change the page to check.

(2)[Message history/Maintenance history]

The list of notifications that have been notified in the past is displayed.

You can check the information by clicking the notification you want to check.



(3)[Return to help screen button]

You can return to the help top screen.

6. Confirmation or change of contract details

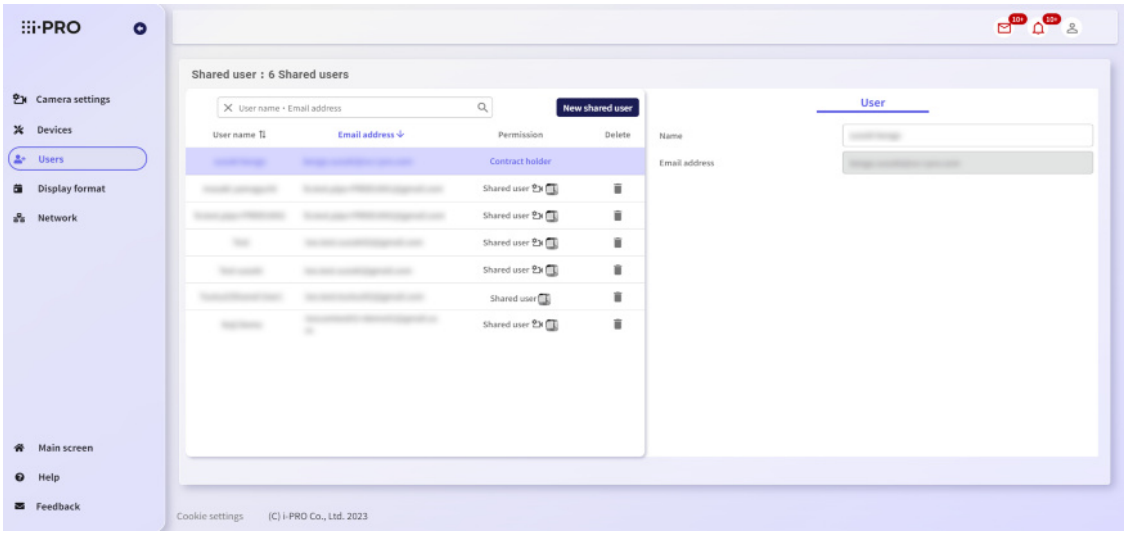
6.1 Confirmation and change of contract holder information

6.1.1 Confirm or change the information of the contract holder (administrator)

You can change the contract holder information (user name).

Visit the login site (https://rms.i-pro.com) in your browser.

1. From the side menu, click [Settings].
2. Click [Users].
3. Click the line for the contract holder.

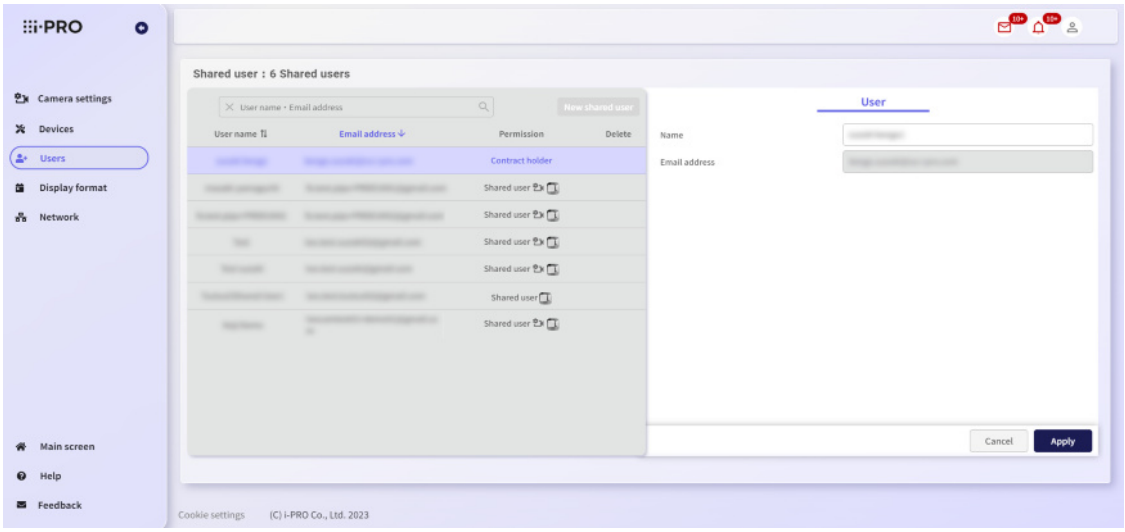


→ The confirmation screen of subscriber information is displayed. You can check the information of the currently registered subscriber.

4. Enter the change items and click the [Apply] button.

If you do not want to change the customer information, click the [Cancel] button.

※ Only [Name] can be changed.



5. The message "The changes for the user are completed." is displayed. Click the [OK] button to check the new information.

This completes the procedure for changing the customer information.

6.2 Updating Passwords

You can update your password. Please see this link.

Log In/Out | Change the login password

6.3 Additional registration and replacement of devices

6.3.1 STEP1. Pre-confirmation (Equipment/Environment)

Please check in advance.

1. The device is a compatible model.

For details on the types of cameras and recorder supported by Remote Monitoring, see "Compatible Camera Info."

2. The device and the PC are connected to the router and can connect to the Internet.

・You cannot register services on a tablet or smartphone.

・Service-registration is available from the HDMI monitor connected to the recorder.

3. The setting screen of the device can be seen from the PC.

・Perform the initial settings so that the device's screen (camera image, etc.) can be viewed on the browser according to the device's instruction manual.
→ When connecting the camera via recorder, you can use the Easy Start function of the recorder. For details, refer to the "Instruction Manual Installation" of the recorder.
・To access the configuration screen, you need an administrator user name and password for the instrument. Please check and prepare in advance.
・When replacing the device, you can transfer the recorded data and setting data of the recorder as required. For details, contact the service center.

4. You are registered to Remote Monitoring.

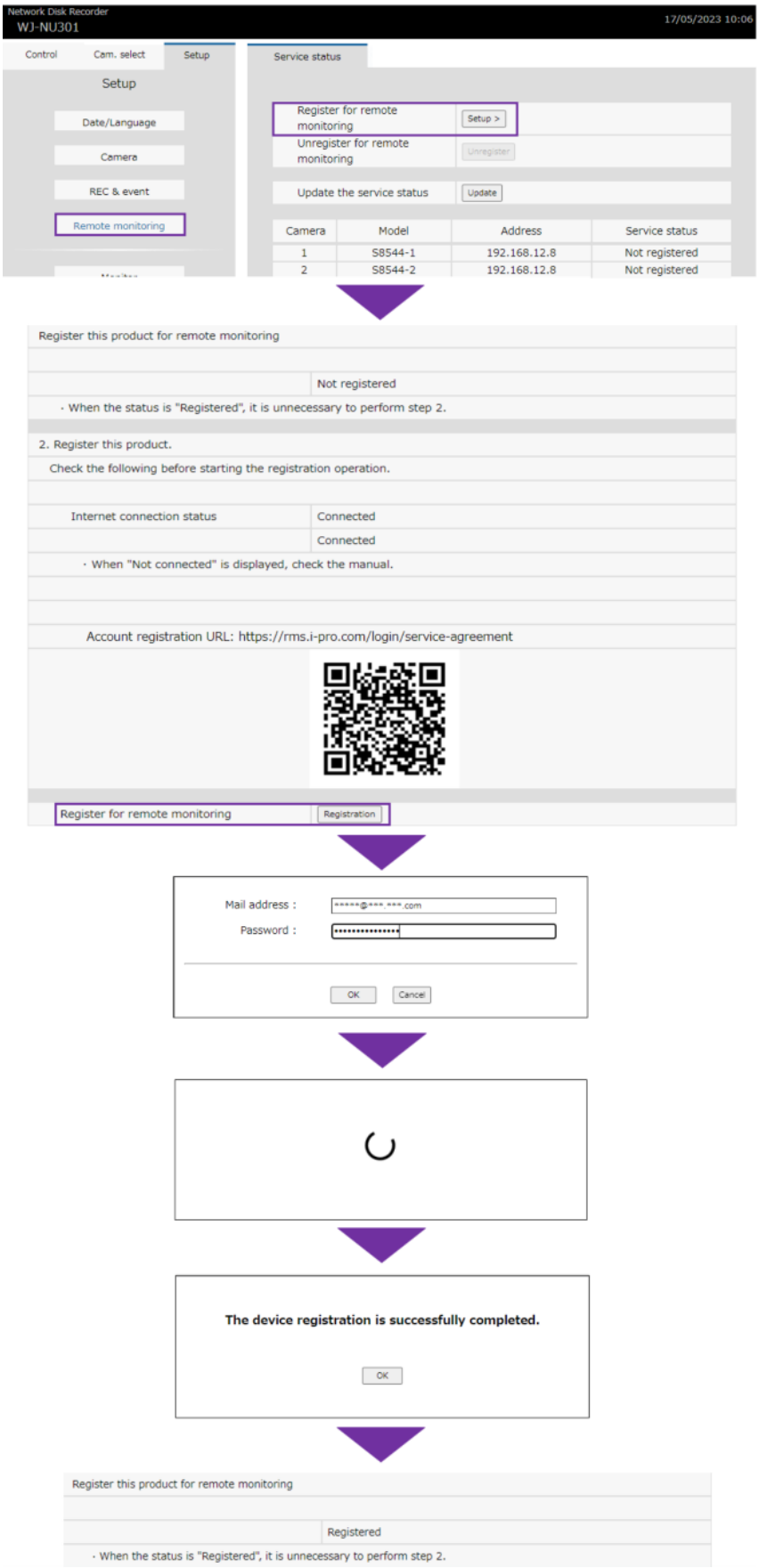
For details on creating a user for Remote Monitoring, refer to "Register a new user".

6.3.2 STEP2. Registering devices to Remote Monitoring

Registering the camera via a recorder

You can register the device in Remote Monitoring. Service by specifying the e-mail address and password registered in the STEP1 after setting the camera in the recorder.

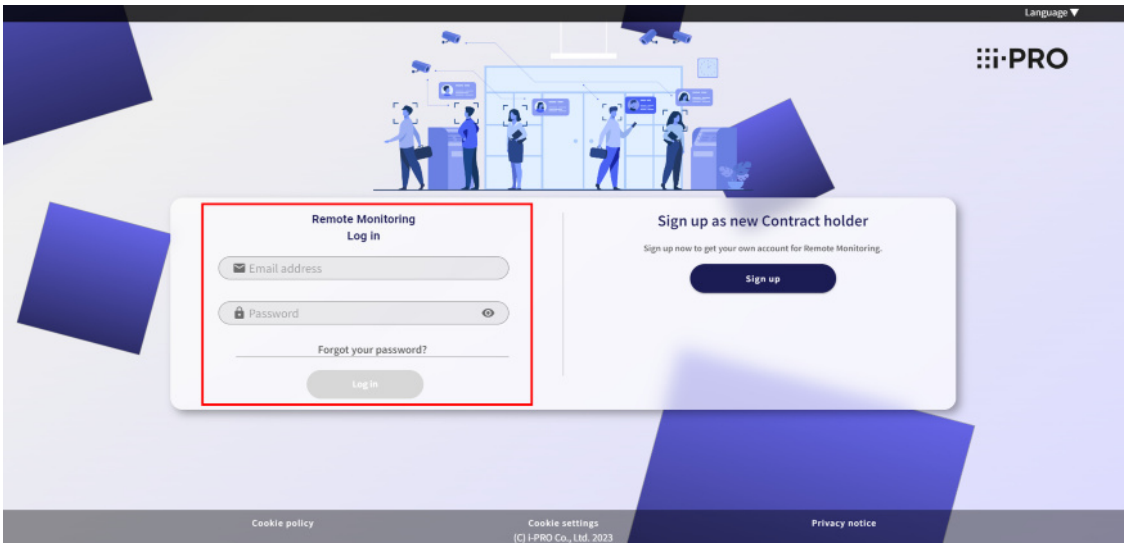
Click the [Registration] button in "Remote Monitoring" menu.


Network Disk Recorder
WJ-NU301
17/05/2023 10:06
Control
Cam. select
Setup
Service status
Setup
Date/Language
Camera
REC & event
Remote monitoring
Register for remote monitoring
Setup >
Unregister for remote monitoring
Unregister
Update the service status
Update
Camera
Model
Address
Service status
1
S8544-1
192.168.12.8
Not registered
2
S8544-2
192.168.12.8
Not registered
Register this product for remote monitoring
Not registered
· When the status is "Registered", it is unnecessary to perform step 2.
2. Register this product.
Check the following before starting the registration operation.
Internet connection status
Connected
Connected
· When "Not connected" is displayed, check the manual.
Account registration URL: https://rms.i-pro.com/login/service-agreement
Register for remote monitoring
Registration
Mail address :
Password :
OK
Cancel
The device registration is successfully completed.
OK
Register this product for remote monitoring
Registered
· When the status is "Registered", it is unnecessary to perform step 2.

To add a camera to the recorder after registering it to Remote Monitoring, register the camera to the recorder. By doing this, the camera is automatically registered in Remote Monitoring.

6.3.3 STEP4. launch of services

Visit the login site (https://rms.i-pro.com) in your browser. The login screen is displayed.



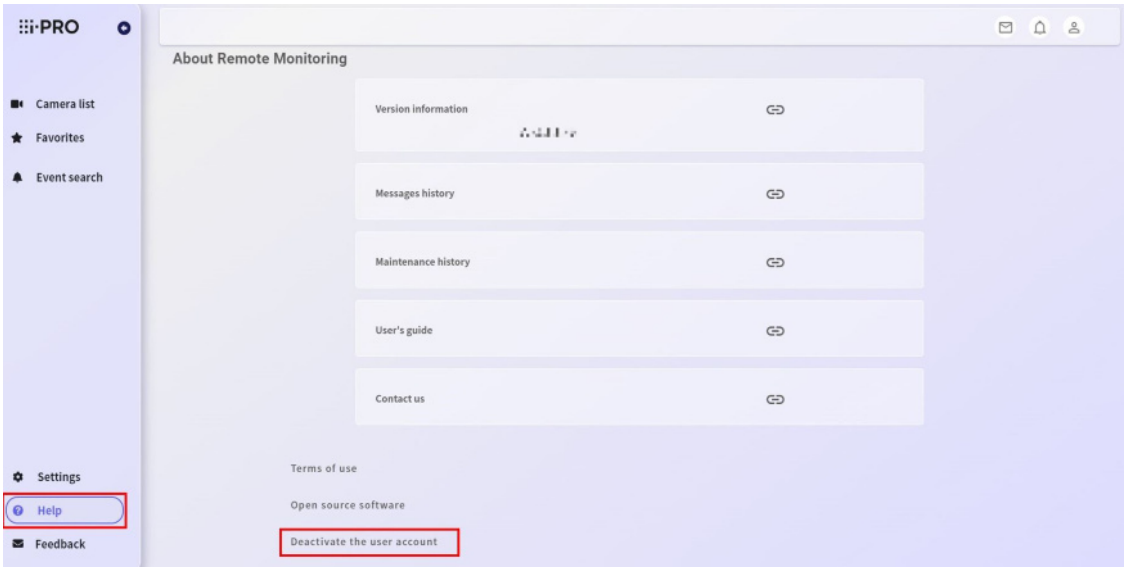
You can log in to the User Portal to view camera images.

This completes the registration and replacement of the device.

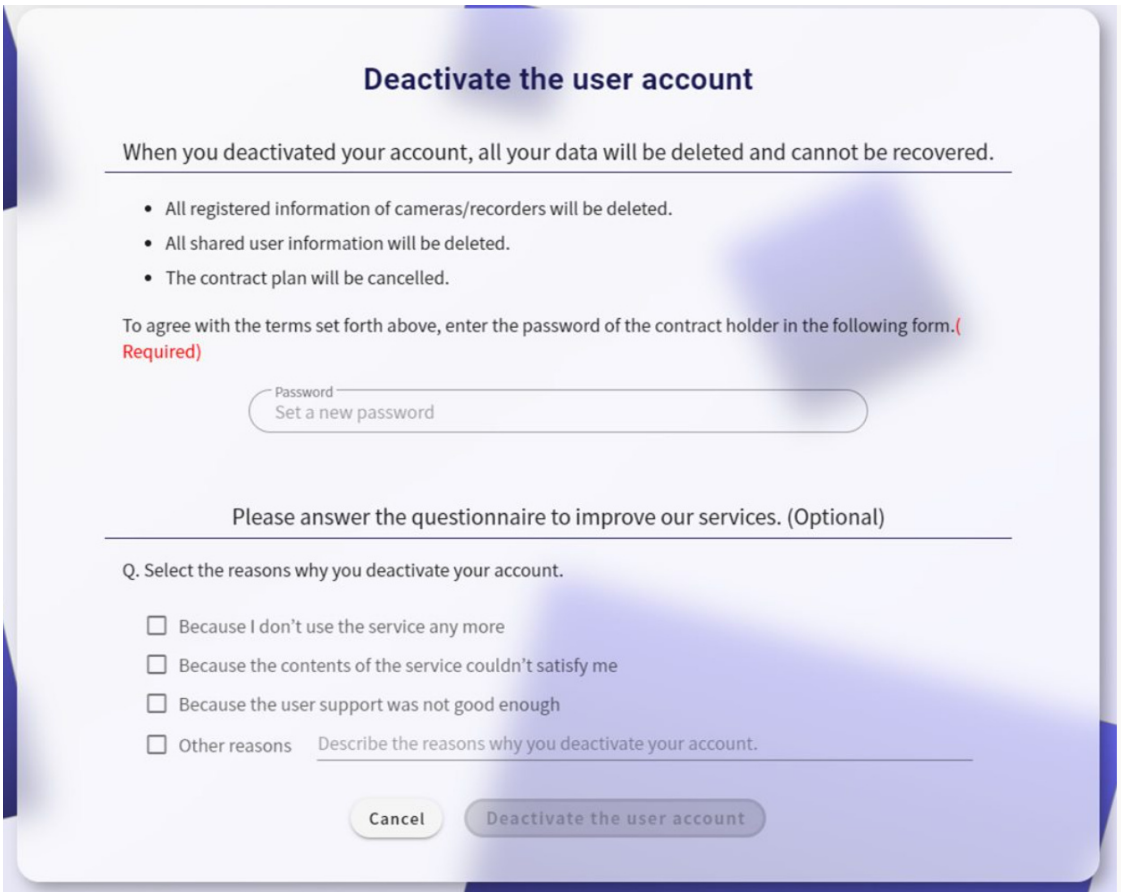
6.4 Deactivate the user account

This procedure deletes all registered subscriber information and cancels the subscription from the service.

1. Visit the login site (https://rms.i-pro.com) in your browser.
2. Select [Help] from the side menu.
   → A link to the withdrawal procedure is displayed. Select "Deactivate the user account".



3. The deactivate procedure screen is displayed.



Enter the password of the contract holder, fill in the questionnaire (optional), and click the [Deactivate the user account] button.

・All camera and recorder registration information will be deleted.

・All registered shared user information is deleted.

Now, the procedure to cancel the subscription has been completed.

7. Trouble shooting

7.1 Frequently asked questions

7.1.1 I forgot my login password

Confirm 5.2.3 If you forget your login password and reset the password.

7.1.2 Cannot receive e-mail when registering as a user

You may not be able to receive mail if the reception restriction is set in the spam mail setting or the domain selection.
Please configure the settings so that you can receive mail from the following domains.
rms.i-pro.com, verificationemail.com
Temporary registration mail cannot be delivered again. "Temporary registration mail" is valid for 24 hours, so to register a new member with the same mail address, register again after 24 hours have elapsed from "temporary registration".

7.1.3 I logged in to the portal site but no live image is displayed

* If you are using recorder, make sure that the user name and password of the camera are correctly registered in the recorder. For details, refer to the manual of the recorder, and check it.
* Check that the camera and recorder are turned on.
* Due to network quality, communication restrictions of security software, etc., the video may be stuck or not displayed. Check the following to see if the communication environment is sufficient.
- Are many devices used on the network other than the target device?
- Is the radio wave in the area where the target device is used weak?
- Is there any obstacle between the router and the other router?
- Is communication restricted by security software?

If the problem is not resolved by checking the above, restart the target device or router to see if the problem improves. If the problem is not improved, the communication speed may not be sufficient. Contact your provider or carrier.

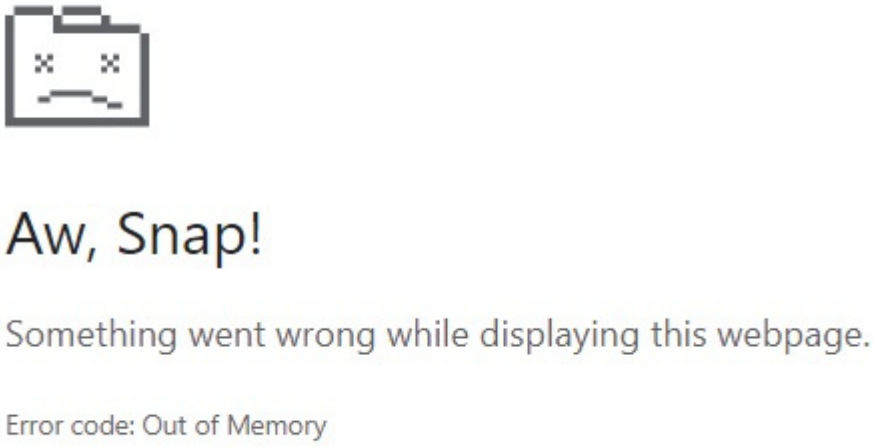
* Check the connection status of the recorder from the [Devices] screen. When restarting the recorder, log out of the portal screen and log in again.

7.1.4 The live image or playback image will not be displayed.

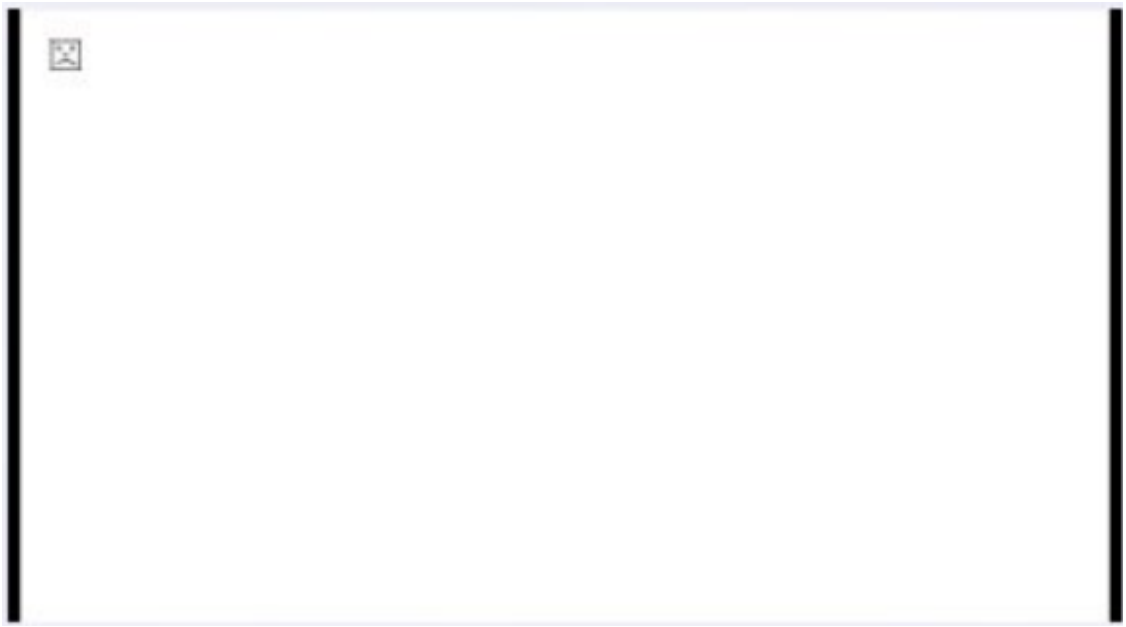
*Depending on conditions such as the communication environment of the recorder, the video may not be displayed for a certain period of time (the video display area may be black). When the communication environment etc. is restored normally, the image is displayed again automatically. If it does not appear for a long time, close the browser and log in to the portal site again.
*Video may not be displayed if the time zone or time settings of the PC displaying the browser, the mobile device on which the i-PRO Mobile APP is installed, or the recorder are incorrect. Please set the time and timezone correctly.

7.1.5 An error message appears while displaying a live image or playback image.

* The following errors may be displayed depending on the use status of your PC's browser or the PC's environment.



Close the browser once and log in to the portal site again. In addition, it may be improved by deleting the browser cache.
* The following error images may be displayed in the image display area depending on the use status of your computer's browser or the computer's environment.



Close the browser once and log in to the portal site again.

If this does not work, download and run the following file: After that, a Chrome or Microsoft Edge shortcut for accessing the remote monitoring service on the desktop is created. Connect to the service using that shortcut. (To avoid this error, optimize the browser settings and start the browser.)

Click here to download "Create shortcut" file.

1) Download and save the above file and extract the file. When extracted, the following two files are created.

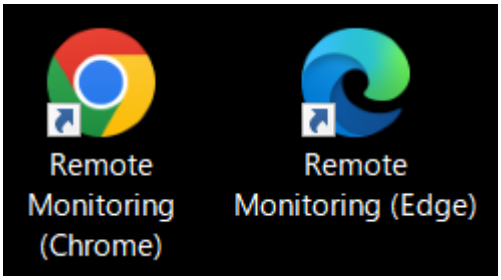
For Chrome: CreateRemoteMonitoringShortcut_Chrome.vbs

For Microsoft Edge: CreateRemoteMonitoringShortcut_MSEdge.vbs

2) Double-click the file created in step 1) to execute it. A shortcut is created on the desktop.

Chrome shortcut filename: Remote Monitoring (Chrome)

Microsoft Edge shortcut filename: Remote Monitoring (Edge)



3) After exiting your browser, double-click one of the above shortcut files. The service login screen is displayed.

4) Please log in to the service.

7.1.6 When the camera setting screen, device management screen is displayed, log information is acquired, alarm is restored, or error is displayed or is not activated.

* The specification of your PC may not meet the recommended system requirements. Check the recommended operating environment. When using a smartphone or tablet, connection with the device may take some time. If the problem persists after a while, use your computer's browser.
* Depending on the communication environment and the status of the target device, connection to the device may fail or communication may become unstable. At this time, an error may be displayed or operation may not be performed if log information is acquired, alarm recovery is performed, or error recovery is performed. If the problem persists even after waiting for a while, restart the router or other network device to check if the problem improves.

7.1.7 Delay or stopping of image-display (audio) occurs (heavy PC motion).

* Depending on the communication environment and the status of the target device, connection to the device may fail or communication may become unstable. At this time, delay or stop of image display (audio) may occur, or playback control such as pause or fast forward may be delayed. If the problem persists even after waiting for a while, restart the router or other network device to check if the problem improves.
* The specification of your PC may not meet the recommended system requirements. Confirm the recommended operating environment.
* Depending on the type of browser you are using, its version, and the camera's settings, the delay may be large or it may be stuck.
* The load on the connected equipment may be high. Reducing the load on connected devices may improve the symptoms.
* Due to the characteristics of this service, video and audio are usually shifted by about 1 to 2 seconds.

7.1.8 Audio is interrupted or noise is output.

* When you are operating the camera or multiple users are accessing it, audio may be temporarily interrupted or noise may be output. Increasing the interval between camera transmissions can reduce audio interruptions and noise. For details on setting the transmission interval, refer to the camera's instruction manual.

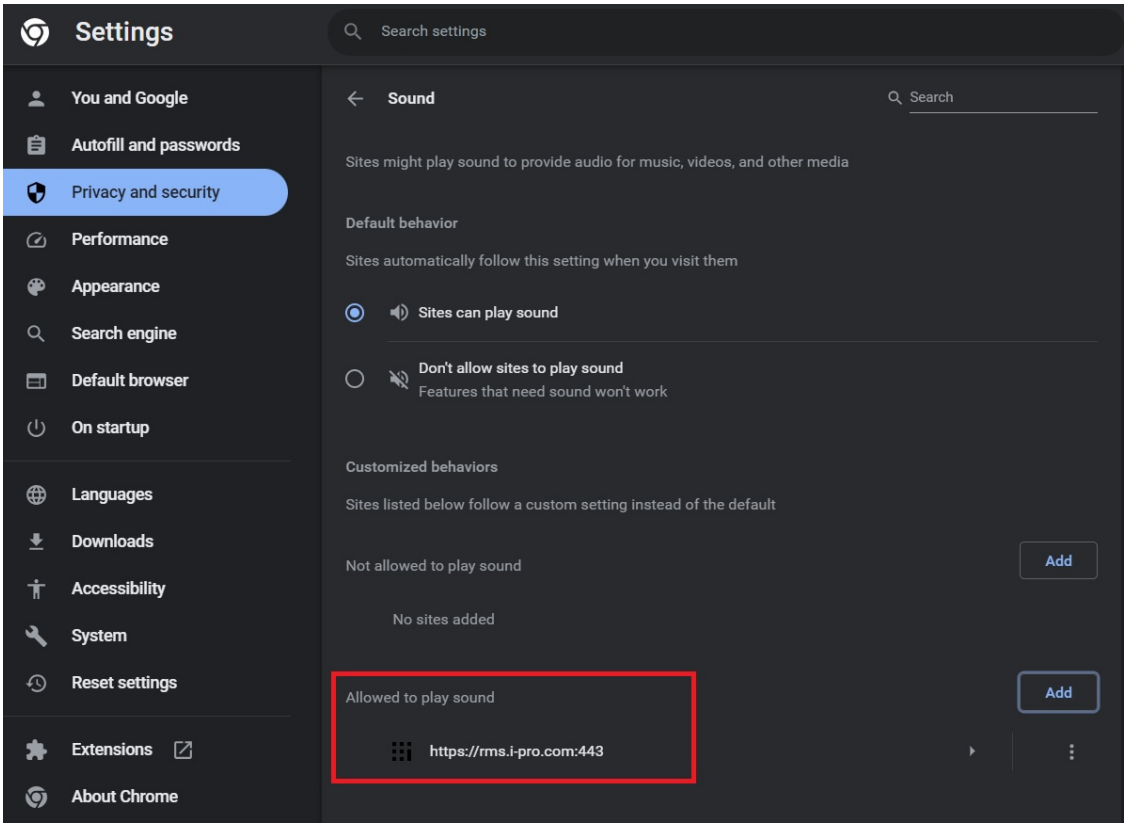
* When using the Microsoft Edge, audio from the video may be interrupted. To check the sound, use the Chrome.

7.1.9 Audio is not output. There is noise in the sound.

* For microphones, the operating conditions for the pick-up sound may not be met. Check the setting.
* This software supports only the "AAC" audio compression method. If any other compression method is set, set it to "AAC".
* Depending on the settings of the browsers, the audio may not be output when the F5 is updated. Check the following browser settings.

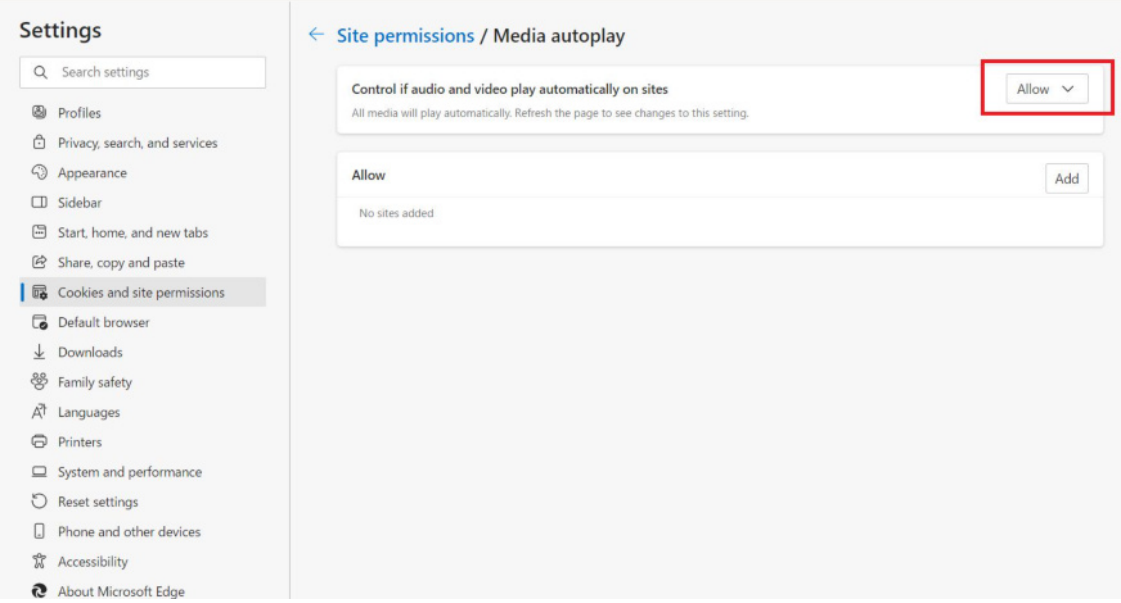
1) For Chrome

From [Settings] → [Privacy and Security] → [Site Settings] → [Sound] → [Allowed to play sound]
Add a https://rms.i-pro.com.



2) For Microsoft Edge

[Settings] → [Cookies and site permissions] → [Media autoplay]
Set the "Control if audio and video play automatically on sites" setting to "Allow".



7.1.10 Downloaded files cannot be played back

* The file may be corrupted. Download again before playing.

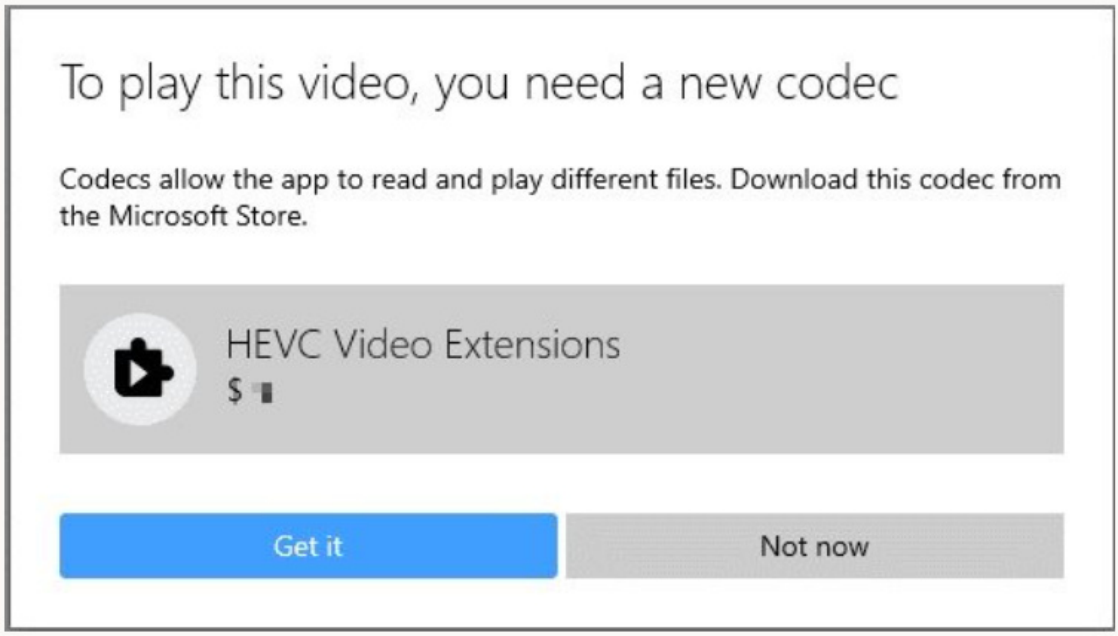
* You can specify a maximum download time of 1 hour. However, if your network is under load, you may be able to download correctly by shortening the specified time.

* During downloading, the recorded data may have been deleted at the download destination recorder. Check the recorder or camera, download it again, and then play it.

7.1.11 Fail to download

* Downloading may fail depending on the network conditions. You may be able to download correctly by taking some time or by shortening the specified time.

7.1.12 When a H.265 recording file in MP4 format is played on the Windows Media Player, "To play this video, you need a new codec" is displayed.



When playing H.265 recording files in MP4 format on PC, they can be played on the Windows Media Player(WMP installed in the Windows10, but since the " Windows10 Fall Creators Update (Version 1709/RS3)" which was started on October 17, 2017, the "HEVC codec" required for playback has been deleted and it can no longer be played on media players.
Follow the dialogue to download the codec, or use another player such as VLC media player to play it.

7.1.13 Play/Search/Download will not work in the specified time zone.

* The time zone, date & time of the camera registered in the recorder may be different from the time zone, date & time of the recorder. Set the time zone and date & time of the recorder with the camera.

7.1.14 Cannot restart the recorder or the camera.

Check the connection status of the recorder from the [Devices] screen. You cannot restart the system if it is not connected to the network.

7.1.15 Time information differs between devices

* Set the monitoring PC to have the NTP server function and synchronize the time of the cameras, recorder, and browsing environment registered in the recorder.

7.1.16 Event thumbnails are not displayed

* Thumbnails are not displayed for events caused by recorders.
* Thumbnails of events that have occurred for more than two weeks are not displayed.

7.1.17 No event is reported

* Check if the event-notification setting is OFF.
* If you are logged in from two or more browsers, an alarm notification is sent to the browser that you log in later.
* If the same alarm occurs from the same camera in a short period of time, the alarm notification may be skipped.

7.1.18 I want to stop e-mail notification of events

Turn OFF the event-notification setting, but you cannot stop maintenance-related e-mails.

7.1.19 The camera image is not displayed on the smartphone or tablet.

* Depending on the communication environment and the status of the target device, connection to the device may fail or communication may become unstable. At this time, it may take some time to display the camera image or it may not be displayed. If the problem persists even after waiting for a while, restart the router or other network device to check if the problem improves.
* The load on the connected equipment may be high. Reducing the load on connected devices may improve the symptoms.
* If the number of cameras is large, all images may not be displayed depending on the model and browser version. When viewing video on a smartphone or tablet, we recommend using the i-PRO Mobile APP (mobile application).

7.1.20 After logging in to the portal site, you can no longer operate it if you leave it for a while.

After logging in, if a certain period of time has elapsed, or if you log in from another browser and change the settings, a dialog box saying "The auto logout will be performed due to the session timeout." is displayed. Log out and log in again.

7.1.21 Required Internet Bandwidth

The bandwidth required varies depending on the usage method. If you are using a portal site, we recommend using an always-on optical line with a bandwidth of at least 1.0Mbps per camera (for FullHD resolution).

The following symptoms may occur depending on the bandwidth is insufficient or the communication environment is busy.

- The live image or recorded video is not displayed (black image or "!" icon is displayed)
- Stopping live video or video playback (Capturing a still image)
- Delay or clock is generated in the live image or the video and audio of the recorder.
- It takes a while (10 seconds or longer) for the live image or recorded video to be displayed.

Check the following to see if the communication environment is sufficient.

- Are many devices used on the network other than the target device?
- Is the radio wave in the area where the target device is used weak?
- Is there any obstacle between the router and the other router?
- Is communication restricted by security software?

If the problem does not resolve even after checking the above, restart the target device or router to see if the problem improves. If the problem is not improved, the communication speed may not be high enough. Contact your provider or carrier.

In some cases, you can improve this by closing your browser and logging back in to the portal site.

7.1.22 When an Internet connection is displayed as "Not connected" in the WEB service registration window of the recorder

If not, check the following:

* Verifying the Connection

- Is the router-side network connected to the PC port* of the recorder?

  The camera port is only for use with cameras (100Mbps), so it is not linked with a Gigabit-compatible router or HUB.

* For DHCP(IP auto-allocation)
  - Is the IP of the recorder network setting turned DHCP?
  - Is the DNS of the recorder network setting turned AUTO?
  - Is the IP on the maintenance window of the recorder* the same as the router?

  * In the Maintenance Window, if the IP cannot be obtained by DHCP, the IP set by the fixed IP is displayed.
  - Are other networking devices under DHCP connected to the Internet?
  - Is there a special limit on the DHCP server?

* For fixed IP
  - Are the IP of the recorder network settings set correctly?
  - Is the default gateway in the recorder network settings set to the IP of the router?
  - Are the DNS of the recorder network settings set correctly?

* Mobile-environment such as LTE or 5G
  - Is the Internet bandwidth sufficient?
  - Has the speed limit been applied?

7.2 Error code

Category	Error code	Error detail code	Message	How to fix
Common to each screen	-	500	System error	Please wait for a while and please operate again.
			Sorry for your inconvenience. Please wait for a while and retry again.	
	500800	50201	Confirm	It is displayed when a certain time has passed after logging in, or when you log in from another browser and change the settings. Log out once and log in again.
			The auto logout will be performed due to the session timeout.	
	500800	50205	Confirm	

			Since the setting of the device is changed, the auto logout will be performed. Please log in again.	Log in from another terminal with the same account and the equipment settings may have been changed. Log out once and log in again.
	500900	50203	The connection with the camera is temporarily suspended because the video is being displayed for a certain period of time. Reload the browser to refresh the connection with the camera.	Depending on your environment, the video may be stopped in about 20 minutes. Click the browser reload button to resume the video display.
	500999	50115	Failed to connect to the camera. Reload your browser to reconnect.	It is displayed when the device cannot be connected to the service due to a network error. Please make sure that your device is connected to the Internet.
	500300	50204	Confirm	It is displayed if communication with a camera that does not go through the recorder fails. Click the OK button to reconnect with the camera.
			Failed to communicate with direct connection camera ({deviceDispName}). When the [OK] button is clicked, the screen will be refreshed and the connection to the camera will be established again.	
Login	–	400225	Input error	It will be displayed if you fail to log in a certain number of times. Please wait for a while and log in again.
			Failed to log in multiple times. Please retry after a while.	
	–	400224	Input error	The e –mail address or

			The email address or the password is incorrect.	password you have entered is not correct. Please check if the input content is wrong.
	500999	1701	Network error	It is displayed when you cannot connect to the service due to a network error. Please make sure that your device is connected to the network.
			Failed to log in. Check if the device in use is connected to the network.	
Terms of use	Common	Common	Network error	It is displayed when you cannot connect to the service due to a network error. Please make sure that your device is connected to the network.
			Failed to load the terms of use. Check if the device in use is connected to the network.	
New register	–	400215	Input error	Your account will be displayed when you have already registered.If you forget your password, the top page [Do you forget your password?], Please do the procedure again.
		400229 400230 400259 400260 400261 400262	Your account is already registered. When you forgot your password, reset your password from [Forgot your password?] on the login screen.	
	–	400249	Input error	Please specify your name.
			Cannot register since no name is specified.	
	–	400250	Input error	Please register within 32 characters.
			Register with a name of up to 32 characters.	
	Other	Other	Network error	It is displayed when you cannot

			Check if the device in use is connected to the network.	connect to the service due to a network error. Please make sure that your terminal is connected to the network and operate it again.
Change password	Common	Common	Error	It is displayed when you cannot connect to the service due to a network error. Please make sure that your terminal is connected to the network and operate it again.
			Failed to change the password.	
Initialize password	–	400210	Input error	It is displayed when the time limit of the verification code for initializing the password has expired. Please follow the password initialization procedure again.
			The verification code has expired.Initialize the password again to get a new verification code.	
	–	400211	Input error	It is displayed when the verification code when initializing the password is incorrect. Please confirm that the verification code is correct and operate again.
			Password reset failed.The verification code is wrong.	
	Other	Other	Network error	It is displayed when you cannot connect to the service due to a network error. Please make sure that your terminal is connected to the network and operate it again.
			Password reset failed. Check if the device in use is connected to the network.	
Terms of	–	400	Network error	It is displayed when you cannot

use		Other	Failed to load the terms of use. Check if the device in use is connected to the network.	connect to the service due to a network error. Please make sure that your terminal is connected to the network and operate it again.
Change password	–	–	Input error	It is displayed if you cannot connect to the service due to a network error and fail to change your password. Please make sure that your terminal is connected to the network and operate it again.
			Failed to change the password.	
Logout	–	–	(No titile)	Wait until the video is downloaded, or cancel the download and then log out.
			You cannot log out while downloading a video. Log out after the download is complete.	
Single	–	1691	Input error	It is displayed when the time zone without a recorded video is specified when downloading the video.
			Cannot download because the download function does not support the data format of the recording data in the specified time range.	
	–	1693	Input error	It is displayed when multiple users download video from the same recorder at the same time. Please wait for a while and then operate again.
			Exceeded the available number of download processes. Please wait for a while and retry.	
	–	1694	Input error	If you download a video with

			To download a video with audio, specify a download time of less than 30 minutes.	audio, the file size will increase, so set it within 30 minutes from the start of downloading to the end time.
	–	1695	Input error Specify the start and end date and time.	When downloading the video, specify the download start time and end time.
	–	1696	Input error A future date and time later than the end date and time is selected for the start date and time. Correct the specified date and time.	When downloading the video, specify the download start time before the end time.
	–	1697	Input error Specify a download time of less than 60 minutes.	When downloading the video, set it within 60 minutes from the download start to the end time.
	–	1698	Network error Failed to download data. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the recorder due to a network error and cannot download the video. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.

500990	50196	Failed to receive the video. Check if you are not accessing the device using multiple browsers and ¥n no error is occurring in the device.	It is displayed when multiple users perform recording and regeneration from the same recorder at the same time. Please wait for a while and then operate again.
–	50601	Network error Failed to obtain preset information. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the recorder due to a network error and cannot get a preset information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
–	50602	Network error Failed to set preset information. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the recorder due to a network error and cannot set preset information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.

	500900	50197	Playback of images from this camera is unavailable under your network environment. Check the status of the connected network.	Video of 5 megapixel resolutions, videos of ONVIF cameras, and AI privacy recording settings via the recorder may not be displayed depending on the network environment. From "Check the communication environment" on the login screen, check whether it is an appropriate environment in both the network environment connecting the camera and the recorder and the network environment for watching the video on the PC/mobile app.
	Other	Other	Network error Failed to download data. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the recorder due to a network error and cannot download the video. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Favorites	212212	510010	Network error	It is displayed if you cannot

			Failed to obtain favorite information. Check if the device in use is connected to the network.	connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	Other	Other	Network error	It is displayed if you cannot
			Failed to obtain favorite information. Check if the device in use is connected to the network.	connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Favorites	100001	100099	System error	It is displayed if you cannot
			An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	100002	–	System error	It is displayed if you cannot

	100003 100004 100005 100006 100007 100008 100009		An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	Other	Other	Network error Failed to save favorite information. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Favorites	100001	100099	Network error Failed to save favorite information. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and display your favorite screen or edit your favorite. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Playback	–	–	Confirm	It is displayed when a camera is

			Failed to add the selected camera. Connecting to the NVR.	selected while connecting to the recorder from the browser. Please wait for a while and operate again. If it does not solve it, finish the browser once, log in again and operate it again.
Event search	500004	–	System error	It is displayed when the event information cannot be obtained due to a network error or the like and cannot be obtained. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	500006 500100 600001		An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	
	–	490	Network error	It is displayed when the event information cannot be obtained due to a network error or the like and cannot be obtained. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
		491	Failed to obtain the event information. Check if the device in use is connected to the network.	
	Other	Other	Network error	It is displayed when the event

			Failed to obtain the event information. Check if the device in use is connected to the network.	information cannot be obtained due to a network error or the like and cannot be obtained. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Camera settings	–	500004	System error	It is displayed if you cannot connect to the service due to a network error and you can not get the camera setting information. Please wait for a while and operate again. If it does not solve it, finish the browser once, log in again and operate it again.
		500006 500100 500999	An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	
	–	500001	Network error	It is displayed if you cannot connect to the service due to a network error and you can not get the camera setting information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browse once, log in again and operate it again.
		001001 001002 Other	Check if the device in use is connected to the network.	
Shared settings	500200	50301	Error	Please wait for a while and operate again.
			Failed to obtain shared setting information.	
	500200	50302	Error	Please wait for a while and operate again.
			Failed to register shared setting information.	
	–	400229	Error	It will be displayed when you

		400230 400231 400232 400233	The specified user is already registered.	try to register a shared user already registered.
	–	400249	Error Cannot register since no name is specified.	Specify the name of the shared user.
	–	400250	Error Register with a name of up to 32 characters.	Specify the name of the shared user within 32 characters.
	–	500007	Error Reached the maximum number of shared users that can be created. Create a new user after deleting an unused user on the user management screen.	Up to 10 shared users can be created.
Device management	128	–	Network error Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	500200	400000 002301	Network error Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.

	Other	Other	Network error Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
Device management	400100	50401	Input error The date and time is past.	Please specify the update reservation time on the future date and time.
	500200	50410	Network error	It is displayed if you cannot connect to the service due to a network error and you can not set a firm update. Please make sure that your terminal is connected to the network and operate it again.
			Failed to set firmware update. Check if the device in use is connected to the network.	If it does not solve it, finish the browser once, log in again and operate it again.
	Other	Other	Network error An error occurred. Check if the device in use is connected to the network.	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
User	–	400001	Network error	It is displayed if you cannot

management			Failed to delete the shared user. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	–	400002	Input error	Please check the password of the contract user and then operate it again.
		400224	Failed to delete the shared user. Enter the correct password of the contract holder.	
	–	400249	Input error	Please specify your name and operate again.
			Failed to register the shared user. Cannot register since no name is specified.	
	–	400250	Input error	Please specify your name within 32 characters and then operate again.
			Failed to register the shared user. Register with a name of up to 32 characters.	
	–	400229	Input error	It is displayed when the user is already registered.
		400230 400231 400232 400233	The specified user is already registered.	
	500007	50303	Upper limit error	Up to 10 shared users can be created.
			Reached the maximum number of shared users that can be created. Create a new user after deleting an unused user on the user management screen.	
	–	500001	Network error	It is displayed if you cannot

			Failed to change user settings. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	–	210234	Network error	It is displayed if you cannot
			Failed to obtain user management information. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	Other	Other	Network error	It is displayed if you cannot
			Failed to obtain user management information. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	400	400001	Network error	It is displayed if you cannot

			Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	–	500004 500006 500100 500999	System error	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
			An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	
	–	500001	Network error	It is displayed if you cannot connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
			Check if the device in use is connected to the network.	
Message	500200	1501	Network error	It is displayed if you cannot

history			Failed to obtain notification information. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
	500004 500005	–	System error	It is displayed if you cannot connect to the service due to a network error and you can not get information information. Please wait for a while and operate again.
			An error occurred. Sorry for your inconvenience. Please wait for a while and retry again.	If it does not solve it, finish the browser once, log in again and operate it again.
	Other	Other	Network error	It is displayed if you cannot connect to the service due to a network error and you can not get information information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.
			Failed to obtain notification information. Check if the device in use is connected to the network.	
Unscribe	–	400224	Input error	It is displayed when the user's password is wrong when you unsubscribe. Check your password and operate again.
		100001	Deleted the shared user. Enter the correct password of the contract holder.	
	Other	Other	Network error	It is displayed if you cannot

			Failed to delete the shared user. Check if the device in use is connected to the network.	connect to the service due to a network error and you can not get equipment information. Please make sure that your terminal is connected to the network and operate it again. If it does not solve it, finish the browser once, log in again and operate it again.

8. Other

8.1 Cookie policy

Last Modified :2023/7/1

This Cookie Policy (Policy) provides you with information about the use of technologies that store or access information on your device like cookies, pixels, and plugins by i-PRO Co., Ltd, 2-15-1 Konan, Minato-ku, Tokyo, Japan (referred to as “we”, “us” or “i-PRO”) and certain permitted third parties that provide content, advertising, or other functionalities when you visit our website. For convenience these technologies are all referred to as “cookies”.

This Policy explains what cookies are, which types of cookies we use and what our legal bases are. It also provides you with information on how your personal data (if any) is used, what your rights in relation to cookies are under the EU General Data Protection Regulation (GDPR) and how you can contact us if want to exercise your rights or have a complaint. This Policy lists which cookies are placed and used, for which purposes and for how long these cookies last. In addition, this Policy describes how you can manage and delete cookies.

Please click on the links below for further information on our privacy practices:

1. What are cookies?
2. Which types of cookies do we use and what are our legal bases?
3. How do we and certain permitted third parties use cookies and process your personal data and what are your rights?
4. Which cookies are placed and used by whom, for which purposes and how long do they last?
5. How can you manage and delete cookies?
6. Contact us
7. Changes to this Policy

8.1.1 What are cookies?

Cookies are small text files which are stored on your device when you visit our website and act as an identifier. They allow our website to recognize your device when it interacts with and returns to our website, particularly when you are using the same browser as you did when you last visited our website.

Depending on their function and purpose cookies are classified as **essential, performance, functional and advertising cookies.**
For more information on this, please see section 8.1.2.
In addition, cookies are classified either as **first party** or as **third party cookies.** First party cookies are placed by us whereas third party cookies are placed by a third party website while you are visiting our website. For more information about the relevant third parties please see section 8.1.4.
Cookies can be either **session** or **persistent cookies** depending on their duration. Session cookies are temporary cookies that last only for the duration of your visit to our website and are deleted when you close your browser. In contrast, persistent cookies are created upon your visit to our website and remain on your device after you close your browser or restart your device until their set expiry date unless you delete them before the expiry date; they are active when you return to our website.

8.1.2 Which types of cookies do we use and what is our legal basis?

We use the following categories of cookies on our website:

8.1.2.1 Essential cookies

These cookies are essential to make our website work or to provide necessary functions relating to the services you request or to enable communications. They allow us to provide you with a seamless internet experience. We also use them for security purposes.

8.1.2.2 Performance cookies

These cookies analyze, how you use our website to improve the way our website works for you and for others visitors to our website. They enable us (and our third party service providers) to recognize and count the visitors and see how visitors move around our website when they are using it. We use them to understand which pages are popular with visitors. This helps us to improve how our website works by, for example, ensuring that you can easily find what you are looking for and to overall enhance visitors' experience on our website.

8.1.2.3 Our legal bases

We rely on our legitimate interests for processing personal data collected through our first-party essential cookies. These cookies are strictly necessary for our website to work and allow us to provide the visitors to our website with the services they request, to enable communications, or to

comply with security obligations under the applicable data protection law.
All other non-essential cookies will only be used with your consent.

8.1.3 How do we and certain permitted third parties use cookies and process your personal data and what are your rights?

8.1.3.1 Cookies owned and placed by i-PRO

To the extent that our first-party cookies and the data we collect with them, qualify as personal data we determine the means and purposes of such processing and are the data controller as defined in the GDPR. Such processing takes place in accordance with our online Privacy Notice that applies in addition to this Cookie Policy. We encourage you to read our Privacy Notice where you can find more about e.g.:

- how we use and protect your personal data collected through cookies (if any);
- your data protection rights; if you are based in the EU/EEA these include the right to access your personal data and obtain a copy thereof, the right to request the correction or update of any inaccurate personal data, the right to object to or restrict the processing of your personal data under the conditions set out in the GDPR and the right to request the erasure of your personal data under certain conditions;
- if you are based in the EU/EEA how you can file a complaint with the competent supervisory authority, https://edpb.europa.eu/about-edpb/board/members_en;
- how long will we store/keep your personal data;
- to whom and where we disclose your personal data; and
- the existence of automated decision-making and, where this is the case, useful information on the underlying logic and the importance and consequences of the processing.

8.1.3.2 Cookies owned and installed by authorized third parties

On our website we have integrated links to third party websites, plug-ins and applications e.g. for marketing purposes and, for example, to allow you to easily share content in social media networks. We have no control over these third party websites' use of those cookies and refer to their Privacy Policies for further information on how they use these cookies. For more information on the third parties please see section 8.1.4.

8.1.4 Which cookies are placed and used by whom, for which purposes and how long do they last?

The following table lists all cookies in use on our website. We will update this table as our website changes and evolves.

8.1.4.1 Essential cookies

Cookie	Purpose	Placed by	Used by	Data collected and purpose of collection	Duration
Session ID	Managing Session Information	We	We	For managing sessions to access the Services	Session
Session data	Managing Session Information	We	We	For managing sessions to access the Services	Session
Session Expiration	Managing Session Information	We	We	For managing sessions to access the Services	Session
Consent to use cookies	Cookie consent	We	We	It is used to manage the status of consent to the use of cookies	1 year
Cookie settings	Setting cookies	We	We	This cookie keeps track on if the end user agreed to use category of cookies on this site.	1 year

8.1.4.2 Performance cookies

Cookie	Purpose	Placed by	Used by	Data collected and purpose of collection	Duration
_ga	Website usage analysis	Google	We	To analyze the usage status of this service and improve the service	2 years
_ga_ QHKY9WZV3Z	Website usage analysis	Google	We	To analyze the usage status of this service and improve the service	2 years
_gid	Website usage analysis	Google	We	To analyze the usage status of this service and improve the service	1 day

8.1.5 How can you manage and delete cookies?

8.1.5.1. Except for essential cookies you can change your preferences and withdraw your cookie consent at any time by navigating to **“Cookie settings”.**

8.1.5.2. You can manage and delete non-essential cookies by changing your browser settings. The methods for doing so vary from browser to browser. Please bear in mind that if you block all cookies some features and services on our website might not be delivered to you and you will be served with advertising less tailored to your interests.

You can obtain information on how to manage and how to delete cookies for the most popular browsers by following these links:

- Chrome : https://support.google.com/chrome/answer/95647?hl=en
- Edge : https://support.microsoft.com/en-us/microsoft-edge/delete-cookies-in-microsoft-edge-63947406-40ac-c3b8-57b9-2a946a29ae09

For further information on how to manage and delete cookies, please visit https://www.allaboutcookies.org/

8.1.6 Contacts us

If you have any questions about how we as the controller of your personal data (if any) use cookies on our website or would like to exercise your rights, you can contact us at 2-15-1 Konan, Minato-ku, Tokyo, Japan.

8.1.7 Changes to this policy

We may from time to time make changes to this Policy which was first published on July 1st, 2023. Changes to this Policy will be published on our website and will be effective as of the date of publication. This Policy was last updated in July 1st, 2023.

If the changes materially alter how we use cookies, we will post a notice on our website and request your consent again for the use of cookies. Please check back frequently to any updates or changes to our Cookie Policy.

8.2 Privacy Notice

This Privacy Notice is intended to tell you how we use any information we collect about you (called

Personal Data as defined below) and what your rights and our obligations are in relation to the processing of your Personal Data, in accordance with the General Data Protection Regulation (the "GDPR").

This Privacy Notice applies to the use of our Remote Monitoring (collectively, our "Services") and will apply whether you access our Services using a computer, mobile phone, tablet, TV or other devices.

If you are a California resident, additional privacy notice applies to you, in accordance with the California Privacy Rights Act. Please see CPRA Appendix.

Please click on the links below for further information on our privacy practices:

1. Who are we?
2. What is Personal Data?
3. What Personal Data do we collect about you?
4. On which legal basis do we process Personal Data?
5. Why do we use your Personal Data?
6. To whom and where do we disclose your Personal Data?
7. What do we do to keep your Personal Data secure?
8. What are your rights and how can you exercise them?
9. How long do we store your Personal Data?
10. Third-party links and products on our Services
11. Cookies
12. Changes to this Privacy Notice
13. Representative

1. Who are we?

I. i-PRO Co., Ltd. Shinagawa Intercity A Tower 14F, 2-15-1 Konan, Minato-ku, Tokyo, Japan is responsible for the processing of your Personal Data acting as controller ("i-PRO", "we", "us" or "our");

II. We are part of the i-PRO Company, headquartered in Tokyo, Japan;

2. What is Personal Data?

For the purposes of this Privacy Notice, "Personal Data" consists of any information that relates to an identified individual (such as you).

For example, information which identifies you may consist of your name, address, telephone number, photographs, payment details, a specific i-PRO product/device identification number

that you purchased, location data, an online identifier (e.g. cookies and your IP address). Information which does not identify you on its own but that we link to you also qualifies as Personal Data.

3. What Personal Data do we collect about you and how?

Personal Data you provide directly about yourself.
Some Services we offer enable/require you to directly provide us with Personal Data relating to you.

Essential cookies

I. These cookies are essential to make our website work or to provide necessary functions relating to the services you request or to enable communications.

They allow us to provide you with a seamless internet experience.
We also use them for security purposes.

Performance cookies

I. These cookies analyze, how you use our website to improve the way our website works for you and for others visitors to our website. They enable us (and our third party service providers) to recognize and count the visitors and see how visitors move around our website when they are using it. We use them to understand which pages are popular with visitors. This helps us to improve how our website works by, for example, ensuring that you can easily find what you are looking for and to overall enhance visitors' experience on our website.

Account Information

I. When you create a i-PRO account or profile for our websites.
When you create an account or profile for a i-PRO website, we ask you to provide certain Personal Data, including your name, country, industry and email address. You will use your email address and your password to login to your account/profile.

4. On Which legal basis do we process Personal Data?

Essential cookies

I. We rely on our legitimate interests for processing personal data collected through our first-party essential cookies.

Performance cookies

I. Performance cookies will only be used with your consent.

Account Information

I. We will only process your Personal Data when: the processing is necessary to perform our contractual obligations towards you or to take pre-contractual steps at your request;

5. Why do we use your Personal Data?

We may use the Personal Data we collect for the following purposes:

Essential cookies

I. To make our website work or to provide necessary functions relating to the services you request or to enable communications.
They allow us to provide you with a seamless internet experience. We also use them for security purposes.

Performance cookies

I. These cookies analyze, how you use our website to improve the way our website works for you and for others visitors to our website. They enable us (and our third party service providers) to recognize and count the visitors and see how visitors move around our website when they are using it. We use them to understand which pages are popular with visitors. This helps us to improve how our website works by, for example, ensuring that you can easily find what you are looking for and to overall enhance visitors' experience on our website.

Account information

I. Create an Account/Log in on our Websites - to enable you to create a profile on our websites, and to enable you to log in to such websites;

II. Provide our Services - to provide our Services or any specific feature that you may request, including to enable us to fulfil our obligations under any contract with you (such as any product or device warranty);

III. Legal Obligations - to comply with our legal obligations under European Member States laws or under European Union law;

IV. Security - to protect our customers (e.g. to prevent spam or attempts to defraud users of our Services); to operate and maintain the security of our Services (e.g. to prevent or stop an attack on our systems or networks); or to protect the rights or property of i-PRO, including enforcing any terms or agreements governing the use of our Services;

V. Updates - to communicate with you, including communicating with you about your account, profiles or transactions with us, giving you important information about your products, devices, application or other Services, sending you notices about any material changes to our Privacy Notice;

VI. Corporate Transaction - to manage corporate transactions involving our company, including reorganization, merger, transfer, sale, joint venture, assignment or other disposition of all or any portion of i-PRO's business, assets or stock, including, without limitation, in connection with any bankruptcy or similar proceeding.

6. To whom and where do we disclose your Personal Data?

A. Third parties recipient of the Personal Data

We may disclose your information to the following entities:

I. i-PRO Affiliates

We may need to transfer your Personal Data to other i-PRO Affiliates to provide the Services you require or any other

services/assistance.

All i-PRO Affiliates are required to follow the privacy practices set forth in this Privacy Notice.

II. Selected Partners

We may share your Personal Data with our business partners.These partners may use your Personal Data to provide you

with i-PRO Services you request.

III. Service Providers

We use third party service providers to help us to administer certain activities and services on our behalf, such as

analyzing usage of our Services.

We share Personal Data about you with such third party service providers solely for the purpose of enabling them to

perform services on our behalf and they will operate only in accordance with our instructions.

IV. Third parties when required by Law or to Protect our Services

We will disclose your Personal Data to comply with applicable Member State or European Union law or respond to valid

legal process, including from law enforcement or other government agencies.

V. Other Parties in Connection with Corporate Transactions

We may disclose your Personal Data to a third party (or other i-PRO Affiliate) as part of a reorganization, merger,

transfer, sale, joint venture, assignment or other disposition of all or any portion of i-PRO's business, assets or

stock, including, without limitation, in connection with any bankruptcy or similar proceeding.

B. International transfer of Personal Data

The Personal Data that we collect from you may be stored and processed in your region, or transferred to, stored at or

otherwise processed outside the European Economic Area ("EEA"), including but not limited to Japan or in any other

country which do not offer an adequate level of data protection as recognised by the European Commission and where i-PRO

or its Affiliates, subsidiaries or service providers maintain facilities

Where we transfer your Personal Data outside the EEA, we will ensure that suitable safeguards such as appropriate

transfer agreements and mechanisms (such as the EU Model Clauses) are in place to help ensure that our third party

service providers provide an adequate level of protection to your Personal Data. You may request additional information

in this respect and obtain a copy of the relevant safeguards upon request through sending a

request to the contact
indicated in section 8 below.

7. What do we do to keep your Personal Data secure?

A. General

i-PRO has put in place appropriate technical and organisational measures to safeguard the Personal Data we collect in
connection with our Services.
These measures take into account:

I. the state of the art of the technology;
II. the costs of its implementation;
III. the nature of the data; and
IV. the risk of the processing.

The purpose thereof is to protect against accidental or unlawful destruction or alteration, accidental loss,
unauthorized disclosure or access and against other unlawful forms of processing.

However, please note that although we take appropriate steps to protect your Personal Data, no website, product, device,
online application or transmission of data, computer system or wireless connection is completely secure and therefore we
cannot guarantee the security of your Personal Data.

B. Encryption

All Personal Data you provide to us is stored on our secure servers. Where we have given you (or where you have chosen)
a password that enables you to access certain Services, you are responsible for keeping this password confidential and
we ask you not to share your password with anyone.

C. Other security measures

Information security, including the protection of Personal Data is organized in a global i-PRO Program called
"Information Security Management" (ISM).

The related aim, standards and implementation measures are organized in globally valid policy, standards and guidelines.

All central European IT systems are externally assessed and fall under the information security management rules

applicable under the ISO 27001 certification.

The program in all its parts follow a strong yearly PDCA (Plan-Do-Check-Act) approach to secure the confidentiality,

integrity and availability of all data (including your Personal Data) for the whole information lifecycle from

collection to destruction of such data.

8. What are your rights and how can you exercise them?

A. What are your rights?

i-PRO will collect, store and process your Personal Data in accordance with your rights under any applicable data

protection laws.

Your rights under the GDPR include, the right to access a copy of your Personal Data, the right to request the

correction or the update of any inaccurate Personal Data and the right to object to the processing of your Personal

Data under the conditions set out in the GDPR.

You also have the right to request the erasure of your Personal Data and, where you have consented to the processing of

your Personal Data, you have the right to withdraw such consent at any time (without this withdrawal affecting the

lawfulness of the processing prior to such withdrawal).

In addition, you also have the right to data portability in certain cases.

This is the right to request the return of the Personal Data you have provided to us in a structured, commonly used and

machine-readable format and to request the transmission of such Personal Data to a third party, without hindrance from

us and subject to your own confidentiality obligations.

B. Exercising your rights

If you wish to exercise any of the above rights, please contact us by using any of the communication means below.

When doing so, please provide us with a proof of your identity for identification purpose.

By mail:

Shinagawa Intercity A Tower 14F, 2-15-1 Konan, Minato-ku, Tokyo, Japan

We will respond to your request without undue delay and no later than one month from receipt of any such request,

unless a longer period is permitted by applicable data protection laws.

C. Complaints

If you are not satisfied with how we process your Personal Data, you may also file a complaint with the competent

supervisory authority, in addition to your rights outlined above.

EEA/EU authorities: Members | European Data Protection Board (europa.eu)

https://edpb.europa.eu/about-edpb/board/members_en

United Kingdom (UK): Make a complaint | ICO

https://ico.org.uk/make-a-complaint/

9. How long do we store your Personal Data?

We will retain your Personal Data for the period necessary to fulfil the purposes for which your Personal Data has been collected as outlined in this Privacy Notice unless a longer retention period is required by law.

When your Personal Data is no longer required for the purpose it was collected or as required by applicable law, it will be deleted and/or returned to you in accordance with applicable law.

10. Third-party links and products on our Services

Our websites, applications and products may contain links to other third party websites that are not operated by i-PRO, and our websites or your products and devices may contain applications that you can download from third parties.

These linked sites and applications are not under i-PRO's control and as such, we are not responsible for the privacy practices or the content of any linked websites and online applications.

If you choose to use any third party websites or applications, any Personal Data collected by the third party's website or application will be subject to any existing privacy policy of that third

party.

We strongly recommend that you take the time to review the privacy policies of any third parties to which you provide Personal Data.

11. Cookies

A. What are Cookies?

i-PRO, as well as certain other third parties that provide content, advertising, or other functionality on our

Services, may use cookies and other technologies in certain areas of our Services.

Cookies are small text files which may be placed on your device when visiting our website.

It can be read by the web server which put the cookie on your hard drive.

We may use cookies to store your preferences and settings, help you with signing in, provide targeted advertisement and

to analyse your browsing experience on our website.

Please note that you can modify your browser so that it notifies you when cookies are sent to it.

If you do not want to receive cookies, you may also refuse cookies altogether by activating the relevant settings on

your browser.

Please note that if you choose to refuse all the cookies, some features of the Services may not be accessible to you or

not work properly.

Finally, you can also delete cookies that have already been sent.

B. Further information on cookies

For further information on cookies and how i-PRO and other third parties use them, and for details of how cookies can

be disabled, please see our Cookie Policy.

12. Changes to this Privacy Notice

i-PRO may change this Privacy Notice from time to time. The "Date last updated" mention at the bottom of this page states when the notice was last updated and any changes will become effective upon our posting of the revised Privacy Notice.

Where required by applicable law, we will request your consent to any such changes.

We will provide this notice by email or by posting notice of the changes on the i-PRO website or through any relevant Services.

13. Representative

If you have questions about Data Protection in Europe, please contact us at:

i-PRO EMEA B.V.
Laarderhoogtweg 25, 1101 EB, Amsterdam, The Netherlands

data_protection.eu@i-pro.com

If you have any questions about Data Protection in the United Kingdom (UK), please contact us at:
i-PRO EMEA B.V. - UK Branche
1010 Cambourne Business Park, Cambridgeshire CB23 6DP, Cambridge

uklegal@i-pro.com
Date last updated: 1, January 2023

CPRA Appendix

Date last updated: 1, January 2023
This CPRA Appendix complements Privacy Notice and tells you what your rights and our obligations are in relation to the processing of your Personal Data in accordance with the California Privacy Rights Act (the "CPRA"). If there is any discrepancy between the terms of this CPRA Appendix and those of Privacy Notice, this CPRA Appendix will prevail.
We may change this CPRA Appendix from time to time. The "Date last updated" mention at the top of this page states when the CPRA Appendix was last updated and any changes will become effective upon our posting of the revised CPRA Appendix to the extent permitted by applicable laws. Where required by the CPRA or other applicable law, we will request your consent to any such changes. We will provide the revised CPRA Appendix by email or by posting notice of the changes on our website or through any relevant Services.
Please click on the links below for further information on our privacy practices for residents in California:
1. What is Personal Data?

2. What Personal Data did we collect about you in the preceding 12 months?
3. On which legal basis do we process Personal Data?
4. What are your rights and how can you exercise them?
5. Disclosure of Personal Data
6. Sale of Personal Data
7. Share of Personal Data
8. Children's Personal Data
9. Contact Information

1. What is Personal Data?

For the purposes of this CPRA Appendix, "Personal Data" means information that identifies, relates to, describes, is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household. For example, Personal Data includes, but is not limited to, audio, electronic, visual, thermal, olfactory, or similar information or inferences drawn from other Personal Data to create a profile about a consumer reflecting the consumer's preferences, characteristics, psychological trends among other things.

2. What Personal Data did we collect about you in the preceding 12 months?

Categories of Personal Data collected	Categories of sources	Categories of sources Business or commercial purpose(s) for collecting Personal Data	Retention duration
Essential cookies	Direct collection	Business	Until end of service
Performance cookies	Direct collection	Business	Until end of service
Account information	Direct collection	Business	Until end of service

3. On which legal basis do we process Personal Data?

We process Personal Data of residents in California in compliance with the CPRA. If we are to use your Personal Data for purposes other than the purposes we notified on or before collecting your Personal Data, we will notify the new purposes to you and obtain your express consent.

4. What are your rights and how can you exercise them?

A. What are your rights?

(1) Your rights under the CPRA include, the right to know about your Personal Data that we collect, use, disclose the

right to request the deletion of your Personal Data, and the right to limit the use of your Sensitive Personal

Data, and the right to request the corrections to your Personal Data.

(2) We will not unreasonably discriminate against you for exercising the rights such as the right to know about

Personal Data information under the CPRA by using methods including but not limited to the following:

I. Denying to provide goods or services to you

II. Charging different prices or rates for goods or services, including through the use of discounts or other

benefits or imposing penalties

III. Providing a different level or quality of goods or services to you

IV. Suggesting that you will receive a different price or rate for goods or services or a different level or

quality of goods or services

B. Exercising your rights (right to know and right to request the deletion of your Personal Data)

If you wish to exercise the right to know or the right to request the deletion of your Personal Data, and

the right to limit the use of your Sensitive Personal Data, and the right to request corrections to your Personal Data

under the rights of A. (1) above, please contact us by using the following means in addition to the communication means

described in Privacy Notice. Upon receiving your request to exercise such rights, we will require you to submit your

[name and e-mail address] in order to verify your identity.

I. By online request form

https://i-pro.com/us/en/surveillance/contact-us/

We will confirm receipt of your requests to exercise your rights within 10 business days in the same manner in which the request was received and provide information about how we will process the request and the limit of our response. We will respond to requests to know and requests to delete within 45 days, and if we exceed the period, we will notify you and respond within 90 days from the day that we receive the requests. If we cannot verify your requests within the 45-day time period, we may not process your requests.

We will record your requests and store them for 24 months.

If you use an authorized agent to submit a request to know or a request to delete, the authorized agent is required to submit to us a written permission proving the authorized agent is permitted to do so and the authorized agent's own identity verification document(s).

5. Disclosure of Personal Data

We have not and will not disclose your Personal Data to any third party for a business purpose.

6. Sale of Personal Data

We have not and will not sell your Personal Data to any third party.

For the purposes of this CPRA Appendix, "sell" means selling, renting, releasing, disclosing, disseminating, making available, transferring, or otherwise communicating orally, in writing, or by electronic or other means, your Personal Data by us to another business or a third party for monetary or other valuable consideration.

7. Share of Personal Data

We have not and will not share your Personal Data to any third party.

For the purposes of this CPRA Appendix, "share" means sharing, renting, releasing, disclosing, disseminating, making available, transferring, or otherwise communicating orally, in writing, or by electronic or other means, your Personal Data by us to another business or a third party for cross-context behavioral advertising, whether or not for monetary or other valuable consideration.

8. Children's Personal Data

We do not sell Personal Data of anyone under the age of 16.

9. Contact Information

You may contact us with questions or concerns about this CPRA Appendix and your choices and rights under CPRA at:

Company name: i-PRO CO., Ltd

Company address: Shinagawa Intercity A Tower 14F, 2-15-1 Konan, Minato-ku, Tokyo, Japan

9. Service Notice

[Version update] December 26, 2023, Added audio on/off setting. (Version: V1.7.1)

New Features / Improvements

・Added audio on/off setting.

Added audio on/off setting.

You can set the initial audio state during live and playback.

The initial setting after this version update is OFF.

Please see here for the detail.

[Version update] November 1, 2023, Supported i-PRO NX recorder series, alarm notification scheduling, drag zoom function (Version: V1.7)

New Features / Improvements

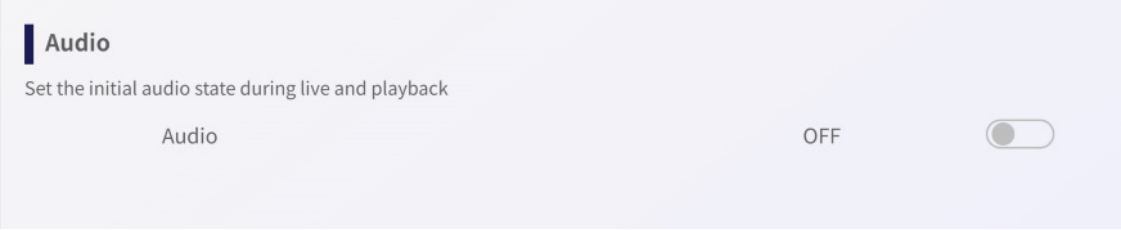
・Support i-PRO Network Recorder WJ-NX310/WJ-NX410/WJ-NX510.

・Support alarm notification schedule setting.

・Support drag and zoom on PTZ camera image.

・Add minor design improvements.

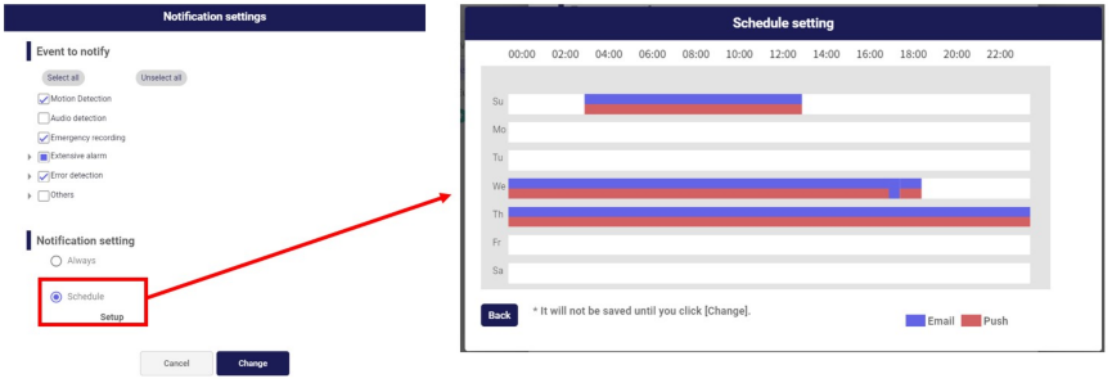
Support i-PRO Network Recorder WJ-NX310/WJ-NX410/WJ-NX510.



Support alarm notification schedule setting.

You can now schedule when to activate alarm notifications.

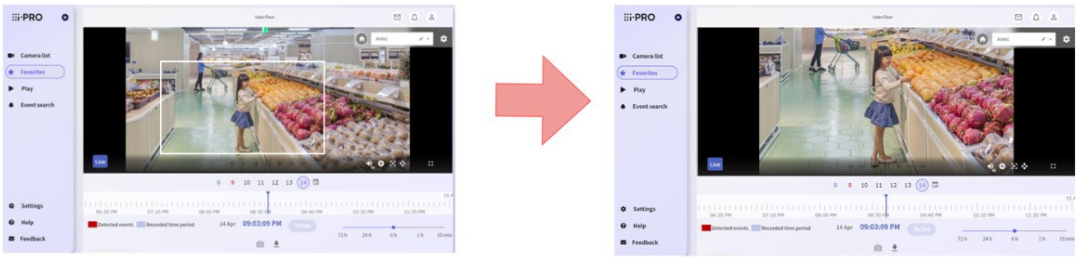
You can now schedule when to activate alarm notifications.



Please see here for the detail.

Please see here for the detail.

Support drag and zoom on PTZ camera image.



By specifying an area to display desired images by dragging on the screen, the camera will move to the position making the specified area as the center and the zoom ratio will be automatically adjusted.

Please see here for the detail.

Add minor design improvements.

We have improved the design of existing pages.