

User Manual

Argo Client

V1.6





Confidentiality Notice

Copyright© 2025 Spark. All rights reserved.

This document is authored by Spark and is Spark intellectual property, including the copyrights in all countries in the world. This document is provided under a license to use only with all other rights, including ownership rights, being retained by Spark. This file may not be distributed, copied, or reproduced in any manner, electronic or otherwise, without the express written consent of Spark.



Table of contents

1. INSTALLATION	1
1.1 ARGO CLIENT AND ARGO CONFIG.....	1
1.2 ARGO RECORDER	1
1.3 SYSTEM REQUIREMENT	2
2. AUTO LOGIN	3
3. START	4
4. VIEWS	6
4.1 MANUALLY ADDING A SURVEILLANCE VIEW	6
4.2 AUTOMATIC GENERATE QUADS SPLIT	7
4.3 EDIT/DELETE VIEW	8
4.4 SWITCH DEVICE LIVE VIEW.....	9
4.5 FOLDER.....	10
4.5.1 Add view folder	10
4.5.2 Edit view folder	10
4.5.3 Delete view folder	11
5. LIVE VIEW	12
5.1 ADD/DELETE DEVICE ON VIEWS.....	12
5.1.1 Add device to the view	12
5.1.2 Delete device to the view	14
5.2 LIVE VIEW MODE	15
5.3 PLAYBACK.....	16
5.3.1 Thumbnail.....	17
5.3.2 Thumbnails Enable.....	17
5.3.3 Timeline settings.....	19
5.3.4 Print Image.....	19
5.3.5 Alarms visibility filter	19
6. WEB PAGES	20
6.1 ADD A WEB PAGE TO THE VIEWS.....	20
6.2 DELETE A WEB PAGE FROM THE VIEWS	20
6.3 EDIT A WEB PAGE ON THE VIEWS	21
7. INTERCOMS MONITOR	22
7.1 INTERCOM LIST	22
7.2 CALL CONTROL.....	23
8. BATCH EXPORT OF VIDEO FILES	24
8.1 BATCH EXPORT - BATCH EXPORT OF VIDEO FILES	24
8.2 PLAYBACK MODE -BATCH EXPORT OF VIDEO FILES	25



9. EXPORTED FILES	26
9.1 VIEW EXPORTED FILE STATUS AND RECORDS	26
9.2 DELETE EXPORTED FILE RECORDS	26
10. NOTIFICATION	27
10.1 VIEW EXPORT NOTIFICATIONS	27
11. MAPS	28
11.1 ADD/EDIT/DELETE MAPS	29
11.1.1 Add Maps	29
11.1.2 Edit Maps	30
11.1.3 Delete Maps	30
11.2 ADD/EDIT/DELETE MAPS FOLDER	31
11.2.1 Add Maps folder	31
11.2.2 Edit Maps folder	31
11.2.3 Delete Maps folder	32
11.3 ADD/EDIT/DELETE MAPS FROM VIEWS	33
11.3.1 Add Maps to view	33
11.3.2 Delete Maps	33
11.3.3 Edit Maps to view	34
12. AUDIO MIXER	37
12.1 AUDIO VOLUME ADJUSTMENT	37
13. PTZ CONTROL	38
13.1 CAMERA PTZ CONTROL	38
14. ACCESS CONTROL	39
14.1 REAL-TIME ACCESS CONTROL	40
14.2 RECORD MODE	41
14.3 ACCESS ID STATUS	43
15. AI SERVICE	44
15.1 REAL-TIME AI SERVICE	44
15.2 GO TO ARCHIVE	45
15.3 EXPORT AI SERVICES RECORDS	46
16. ANALYTICS DASHBOARD	47
16.1 ADD ANALYTICS DASHBOARD	47
16.2 EDIT ANALYTICS DASHBOARD	50
16.3 EXPORT ANALYTICS DASHBOARD	50
17. ADVANCED INSIGHT REPORT	51
17.1 ADD A NEW ANALYTICS CHART	51



17.2	EDIT AN ANALYTICS CHART	52
17.3	EXPORT ANALYTICS CHARTS	53
18.	ALARM	54
18.1	MANAGE ALARM	55
18.2	INFORMATION / LOG	57
18.3	SEARCH ALARMS	58
18.4	REAL-TIME ALARM OPTIONS	59
19.	PTZ CONTROLLED	60
20.	RESTORE LAYOUT	61
21.	OPTIONS	62
21.1	LANGUAGE	63
21.2	USER INTERFACE	64
21.3	SNAPSHOT	67
21.4	RENDERING	68
21.5	USER INTERACTION MODE	70
21.6	KEYBOARD CONTROLLERS	71
21.7	NOTIFICATIONS	71
21.8	ALARMS	72
21.9	SYSTEM	73
21.10	WATERMARK	74
22.	USER	75
22.1	CHANGE PASSWORD	75
22.2	LOGOUT/CLOSE	75
23.	ABOUT	76



1. INSTALLATION

Argo software is divided into three modules: Argo Client, Argo Config and Argo Recorder. The following content will provide a basic introduction to these three applications:

1.1 Argo Client and Argo Config

Argo Client installation file contains two modules: Argo Client and Argo Config.

- Argo Client: for monitoring real-time images, e-maps, playback, export images, etc.
- Argo Config: for managing users and connected devices, set events, etc.

1.2 Argo Recorder

Use setup_Spark_Argo_Recorder.exe installation file to install Argo Recorder. Argo Recorder will start automatically when the Windows system starts. Note that Argo Config and Argo Client applications can only be used once Argo Recorder is active. Argo Recorder acts as the recording server.

To avoid hardware overload, it is recommended to use different servers. Install Argo Recorder on one server for recording purposes and install Argo Client and Argo Config on another server to act as the main server for real-time viewing and configuration.

Below are reference values to facilitate users the calculation of their specific server requirement. The specific server requirements may vary according to different scenarios.

- CPU: Allocate 90 CPU marks per camera. You can search for suitable CPU specifications on the following website (https://www.cpubenchmark.net/high_end_cpus.html)
e.g.: If you need 50 cameras, the required CPU score would be 90 multiplied by 50, resulting in a total of 4500. After calculating the total score, you can visit the above website to find an appropriate CPU. Additionally, we recommend adding a buffer of 1800 points to ensure the system operates perfectly.
- RAM: 160GB or more
- Operating system: Windows 10(64-bit)
- HDD: Requirement varies depending on camera quantity, recording time and resolution.
 - 1 camera recording 20MP for 24hrs requires 211GB.
 - 1 camera recording 5MP for 24hrs requires 63GB.
 - 1 camera recording 2MP for 24hrs requires 42GB.



1.3 System Requirement

- Spark Client + Config minimum system requirements
CPU: Intel Core i5 @ 2.7GHz RAM 4GB
Disk space: 500 MB free disk space
Graphics Card: 1GHz, 1GB RAM
Screen Resolution: 1920x1080 Network Card Gigabit Ethernet
Operating System: Windows 8.1(64-bit); Windows 10(64-bit); Windows 11 (64-bit)

- Spark Player minimum system requirements
CPU: Intel Core i5 @ 2.7GHz RAM 4GB
Graphics Card: 1GHz, 1GB RAM Screen Resolution: 1024x768
Operating System: Windows 8.1(32-bit or 64-bit); Windows 10(32-bit or 64-bit);
Windows 11(32-bit or 64-bit)

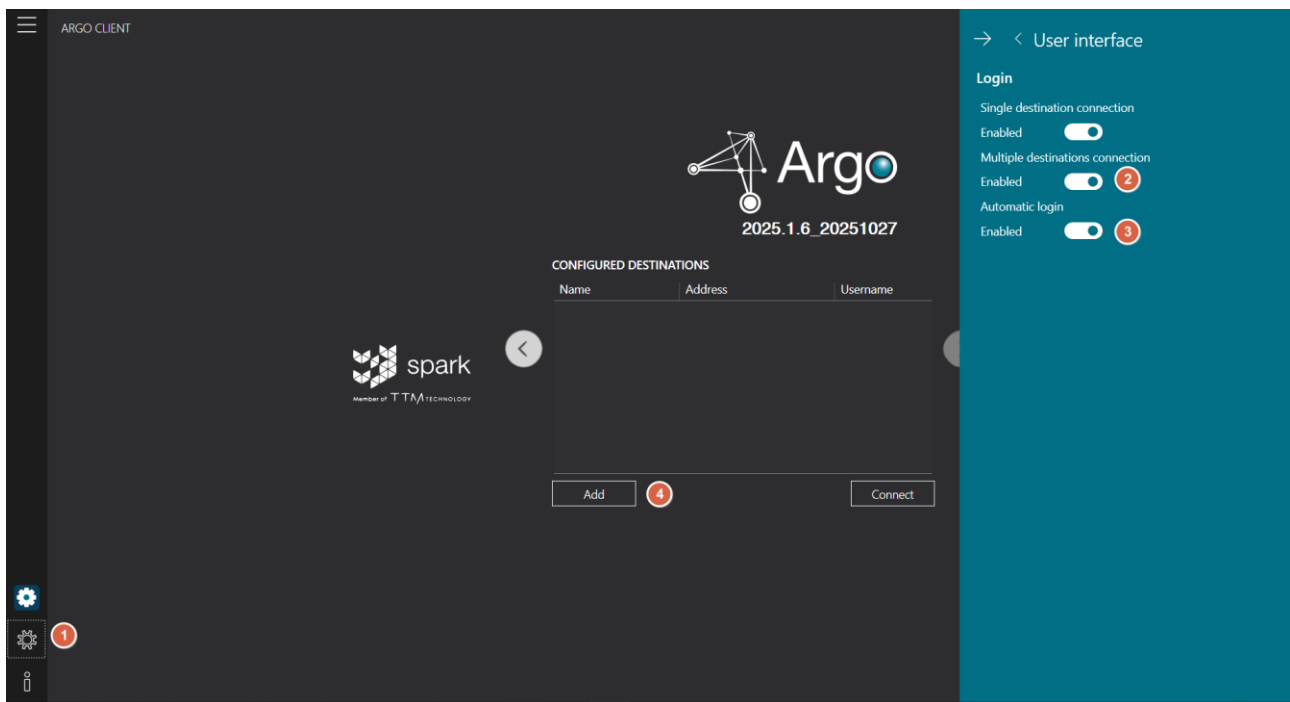
- Spark Recorder minimum system requirements
CPU: Intel Core i5 @ 2.7GHz RAM 8GB
Network Card: Gigabit Ethernet
Operating System: Windows Server 2012 R2; Windows Server 2016; Windows
7SP1(64bit); Windows 8(64-bit); Windows 8.1(64-bit); Windows 10 (64-bit); Windows
Server 2019; Windows Server 2022; Windows 11(64-bit)



2. AUTO LOGIN

When logging in to Argo Client for the first time, you must repeat the initial login procedure of Argo Config. For more details, please refer to the Argo Login section.

This section describes how to configure the Client Auto Login function, which allows the Client to automatically restart after the application closes unexpectedly or the computer reboots.



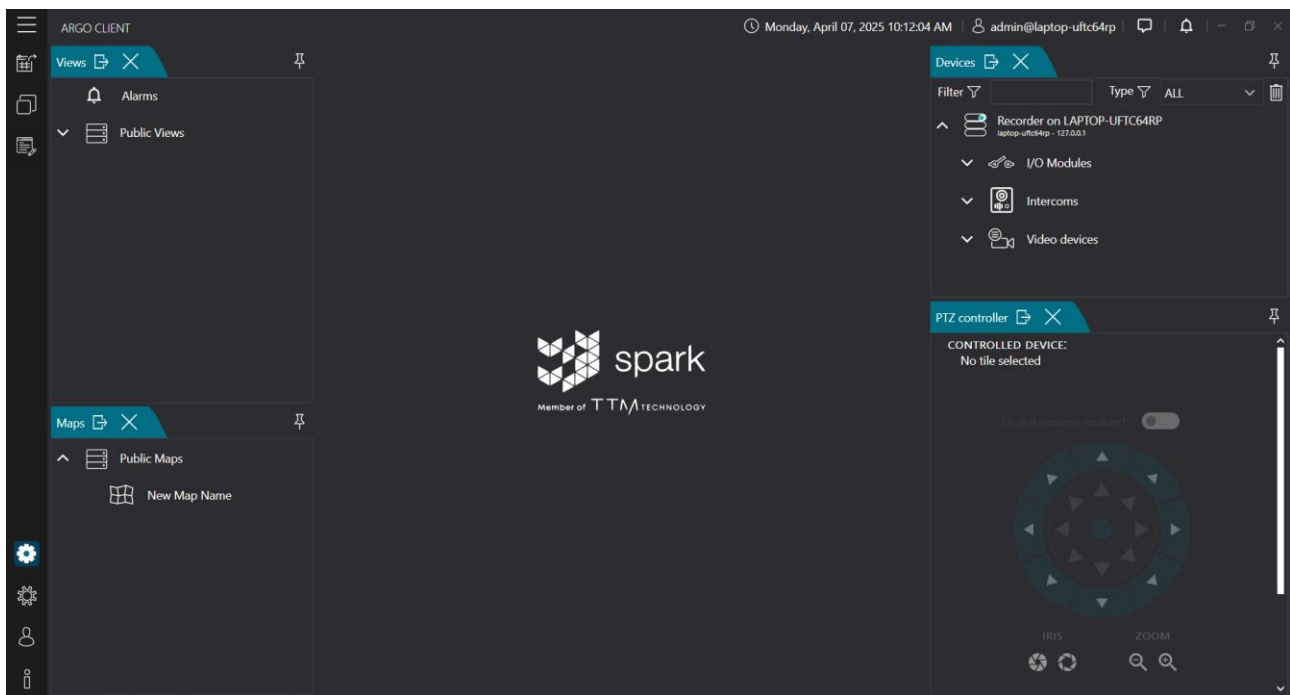
- Click the [Gear] icon in the lower-left corner to open the interface settings.
- Enable [Multiple destination connection].
- Enable [Automatic Login].
- Click [Add].

Note:

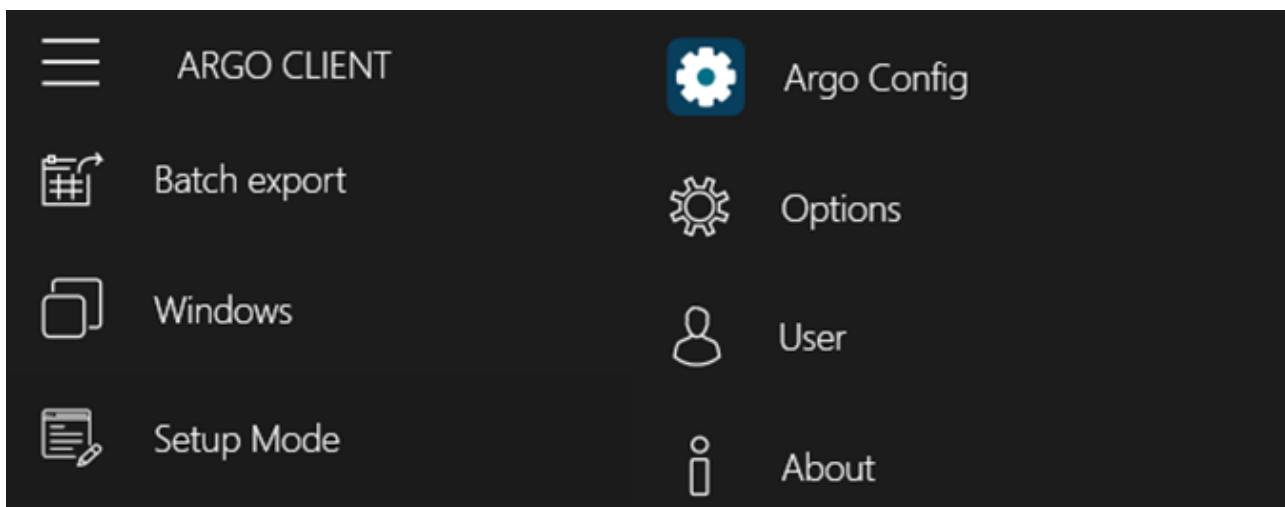
You must configure a set of Quick Login account information. The system will automatically remember the last used Quick Login credentials to activate the Auto Login function.



3. START



- Click the [☰] icon at the top-left corner to browse the menu options.



- Menu items:
 - **Batch Export:** Export recorded video files
 - **Windows:** Access function windows
 - **Setup Mode:** Edit devices, data dashboards, and more
 - **Argo Config:** Quick access to Argo configuration
 - **Options:** System settings and preferences
 - **User:** Change user password or log out of the system
 - **About:** View version information

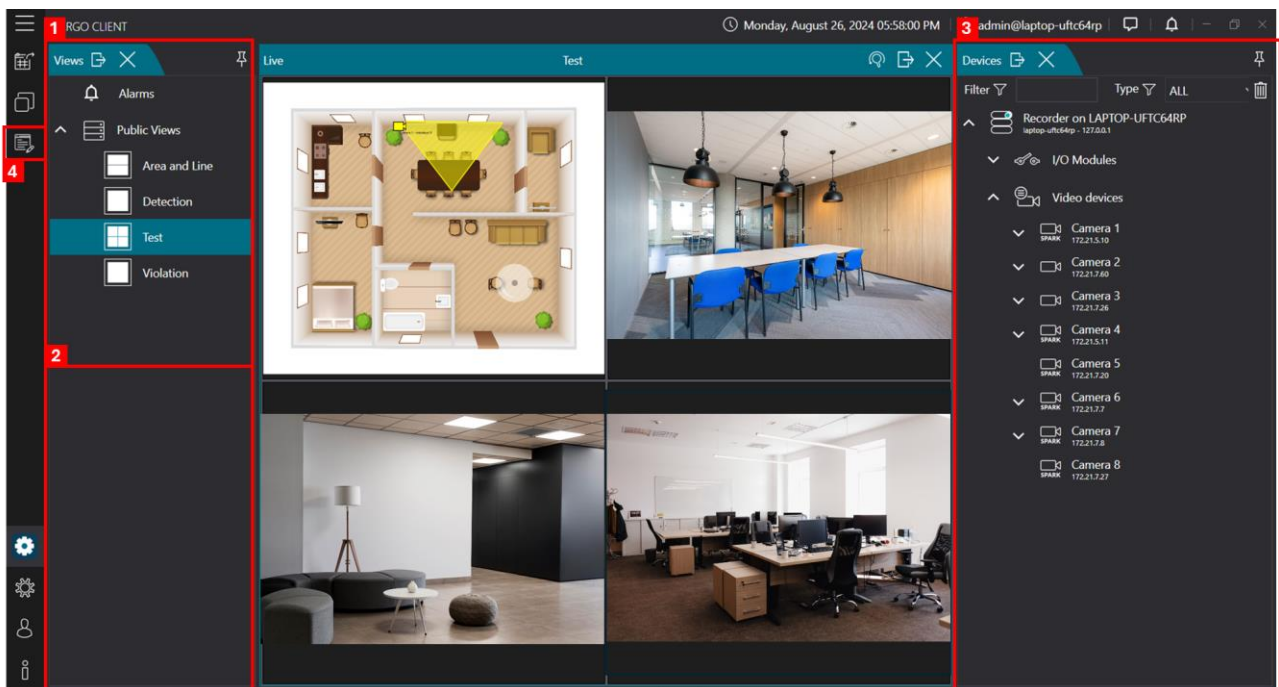


First time logging in to Argo Client will require to repeat Argo Config first log in procedure. See Argo Log In for more info.

Argo Client main page is divided in the following:


- (1) Views: screen layout list.
- (2) Maps: electronic map list.
- (3) Edit: click to activate edit mode to add, edit, delete views and maps.
- (4) Devices: device list.

	Edit Mode: Allows you to add, edit, and delete multiple layouts or items in bulk, then save all changes at once. This mode also supports the Undo function.
--	---

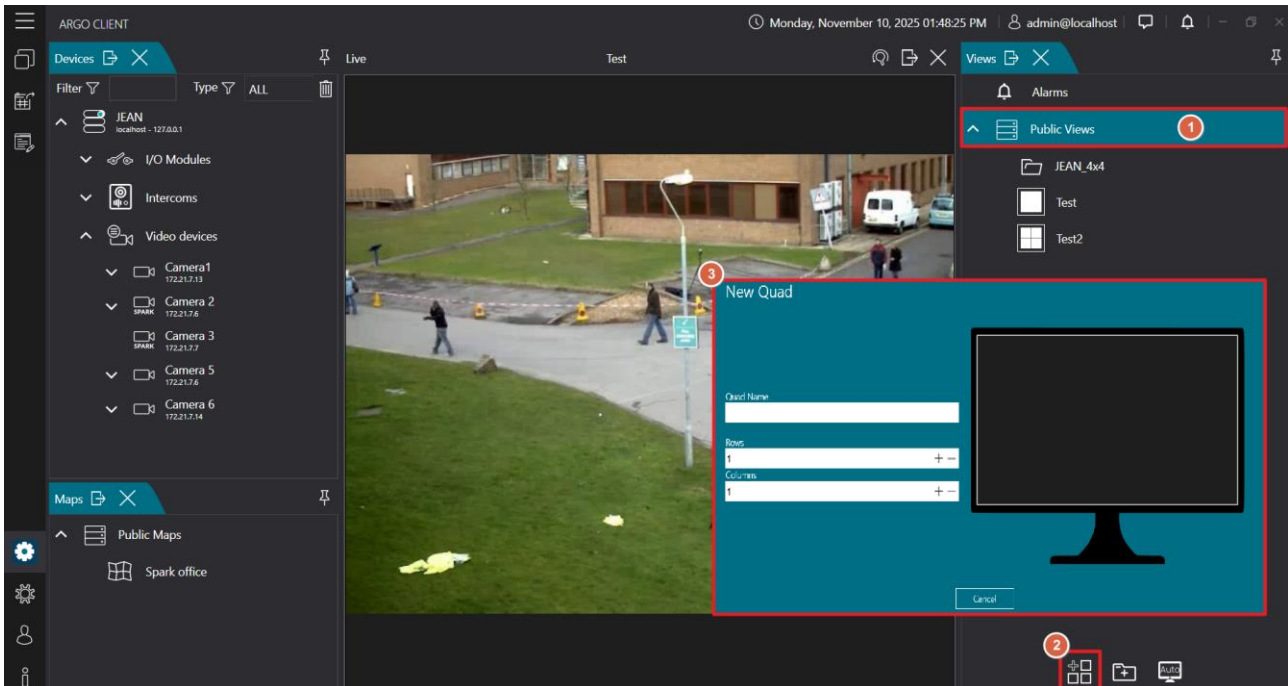




4. VIEWS

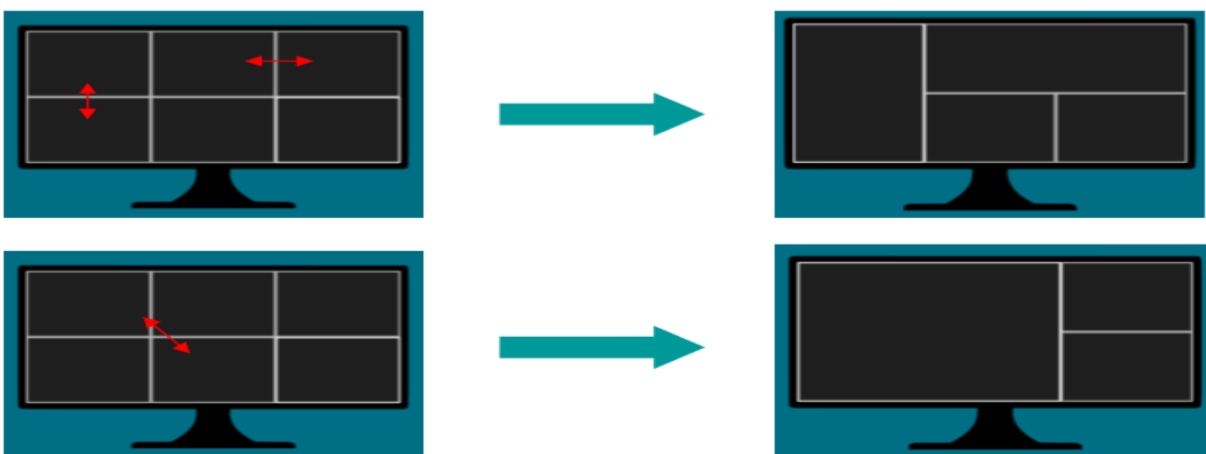
Configuration of Surveillance Views and Electronic Maps: New surveillance views can be added manually  or automatically  arranged by the system.

4.1 Manually Adding a Surveillance View



- Click **[+]** below the view list to add a new view.
- Name: insert name of the view.
- Row/Columns: add rows and columns as needed.
Rows and columns range: from 1 to 10 rows/columns.

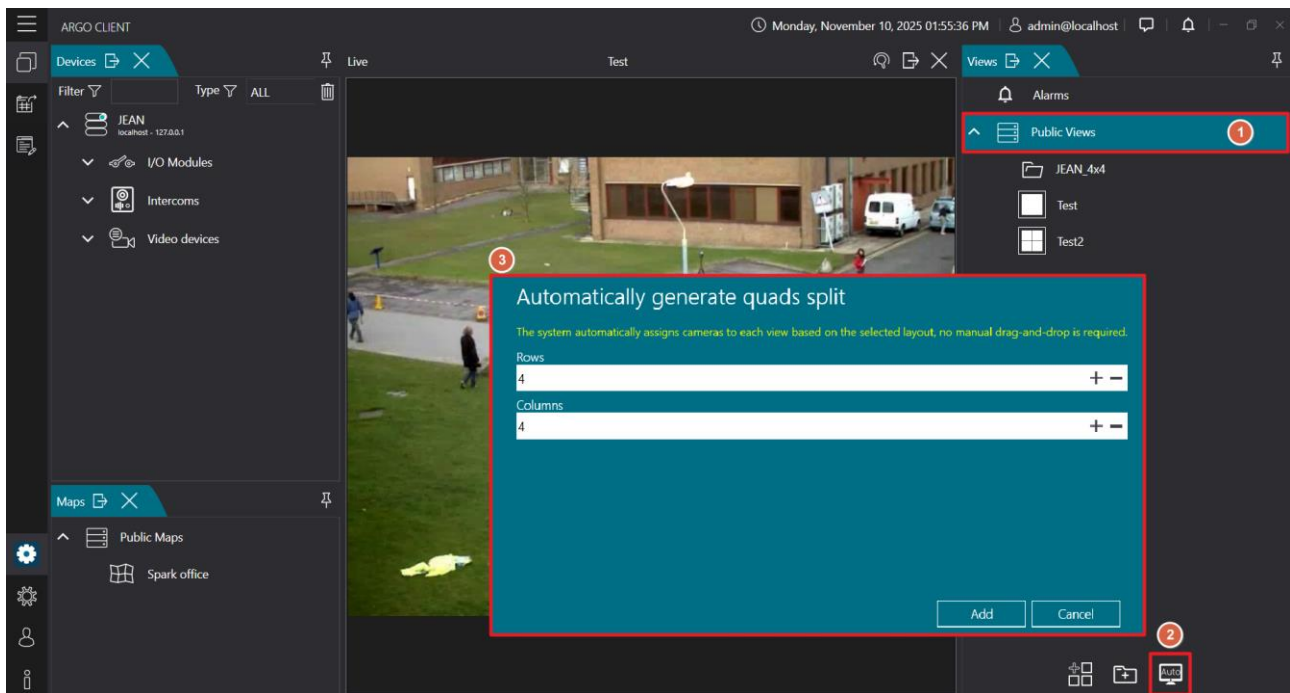
The layout can be freely adjusted by dragging the window dividers, as shown in the example below.





4.2 Automatic generate quads split

To automatically generate a split screen, click on "Edit" in the left panel, then select "Surveillance View." After clicking the corresponding option, a new window will pop up with a default 4x4 grid layout, which can be adjusted as needed. Once you click "Select," the system will automatically generate the layout with all devices, eliminating the need to manually drag and drop them.

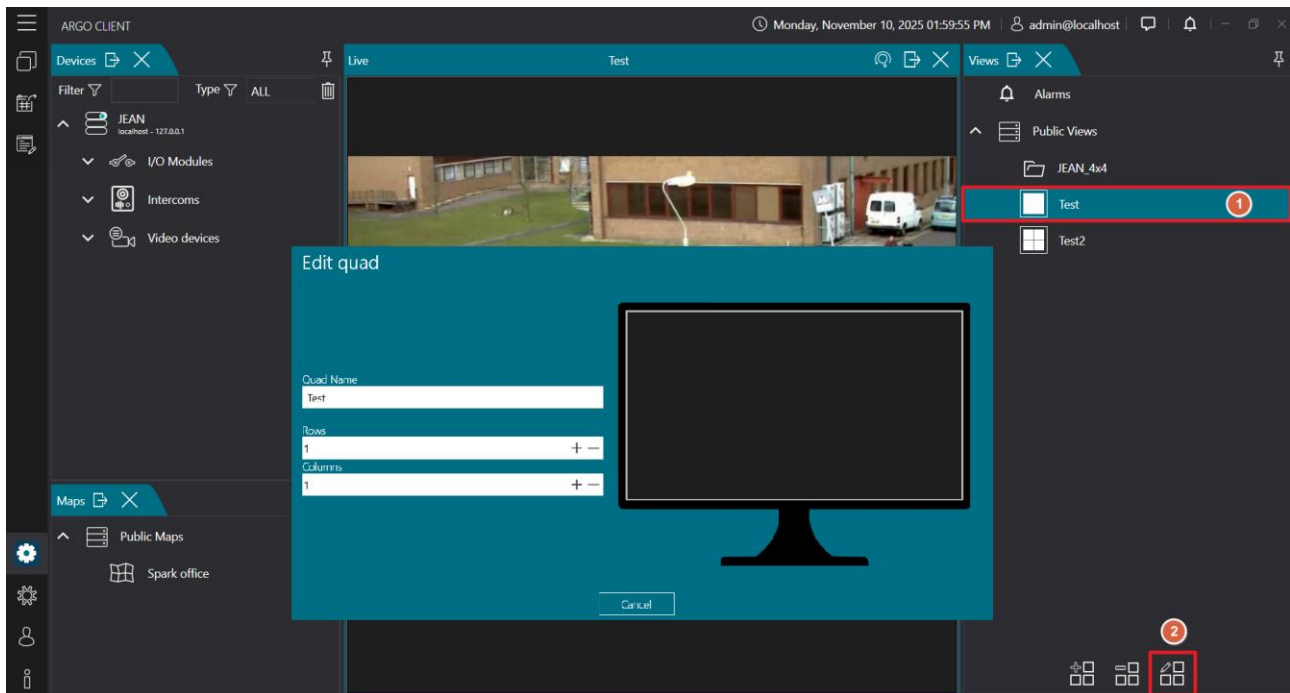


- Function: create a folder containing the specified rows and columns screen layout, and automatically add devices to the screens.
- Click [**Auto**] below the view list.
- Row/Columns: add rows and columns as needed.
Rows and columns range: from 1 to 10 rows/columns.



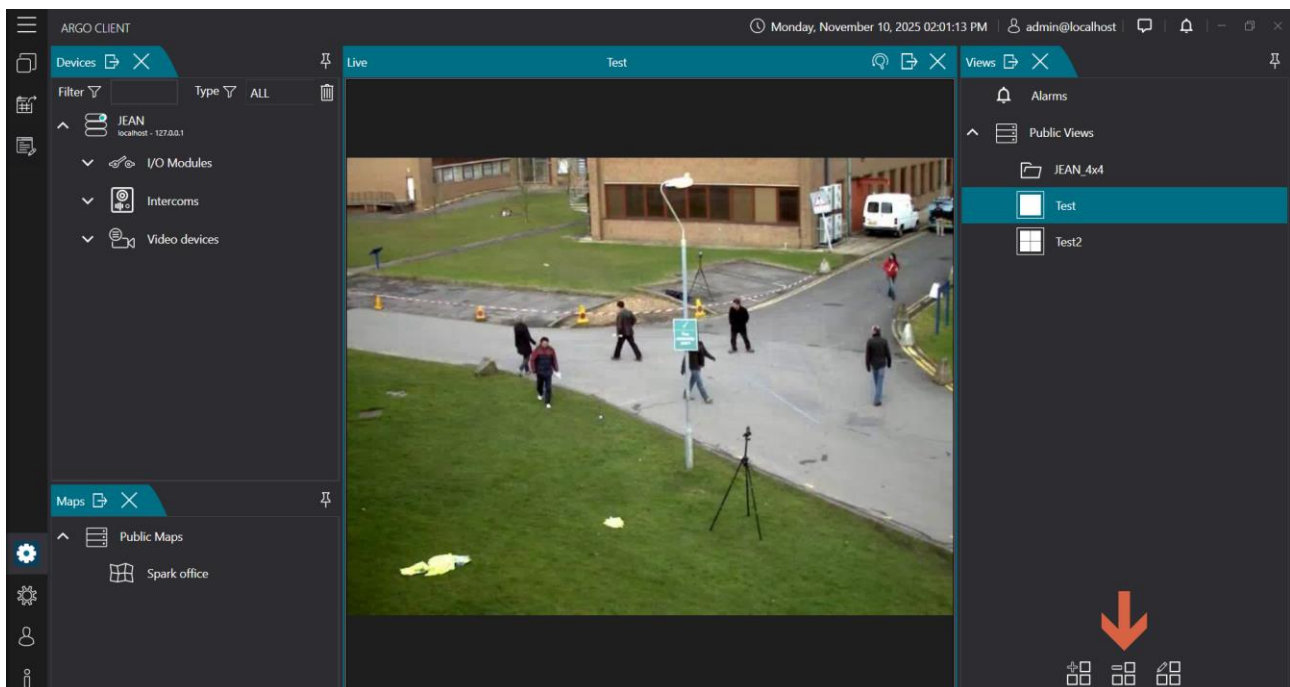
4.3 Edit/delete view

A. Edit view



- Click the [pencil icon] below the view list.

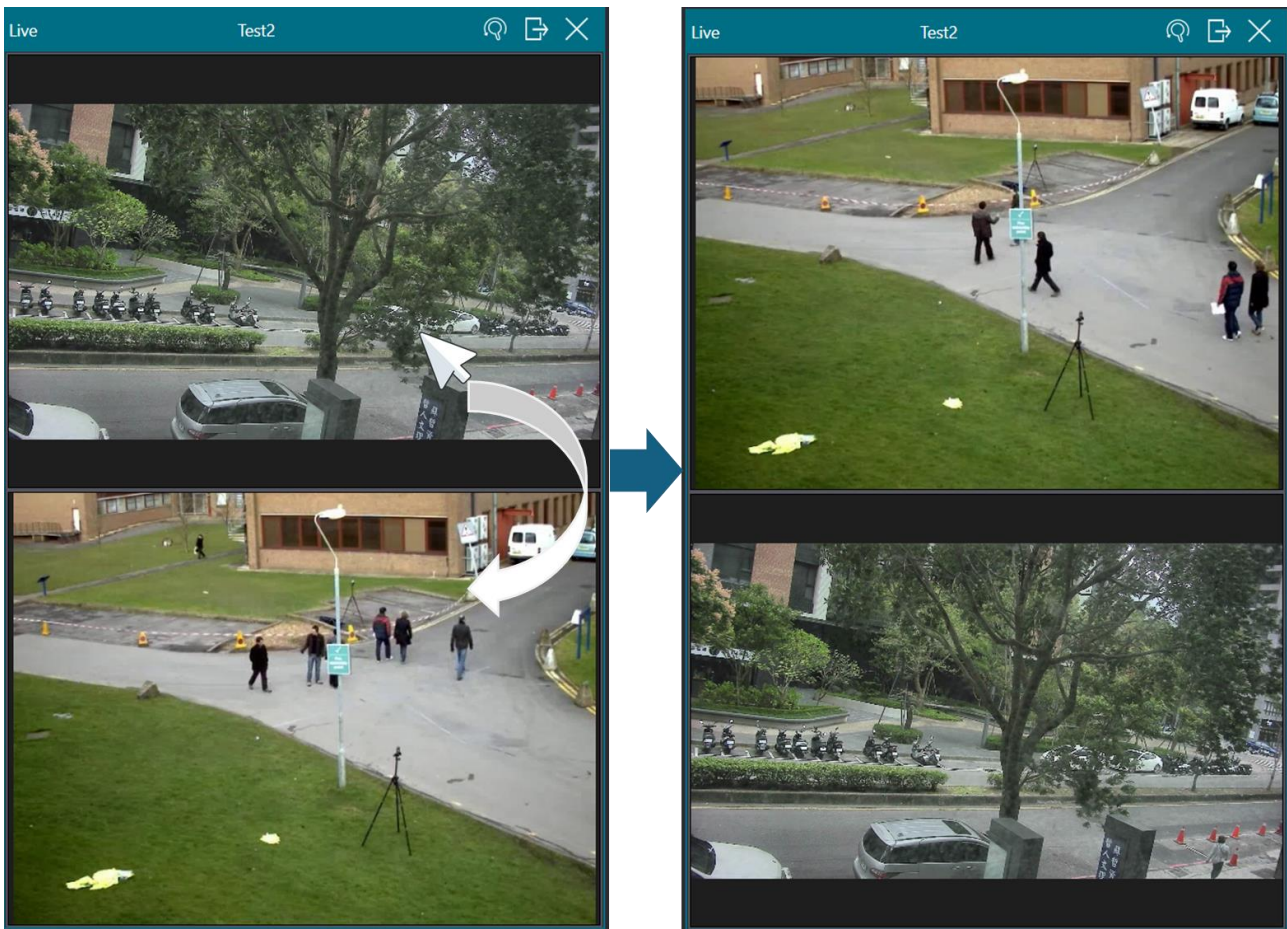
B. Delete view



- Click the [-] below the view list.



4.4 Switch Device Live View



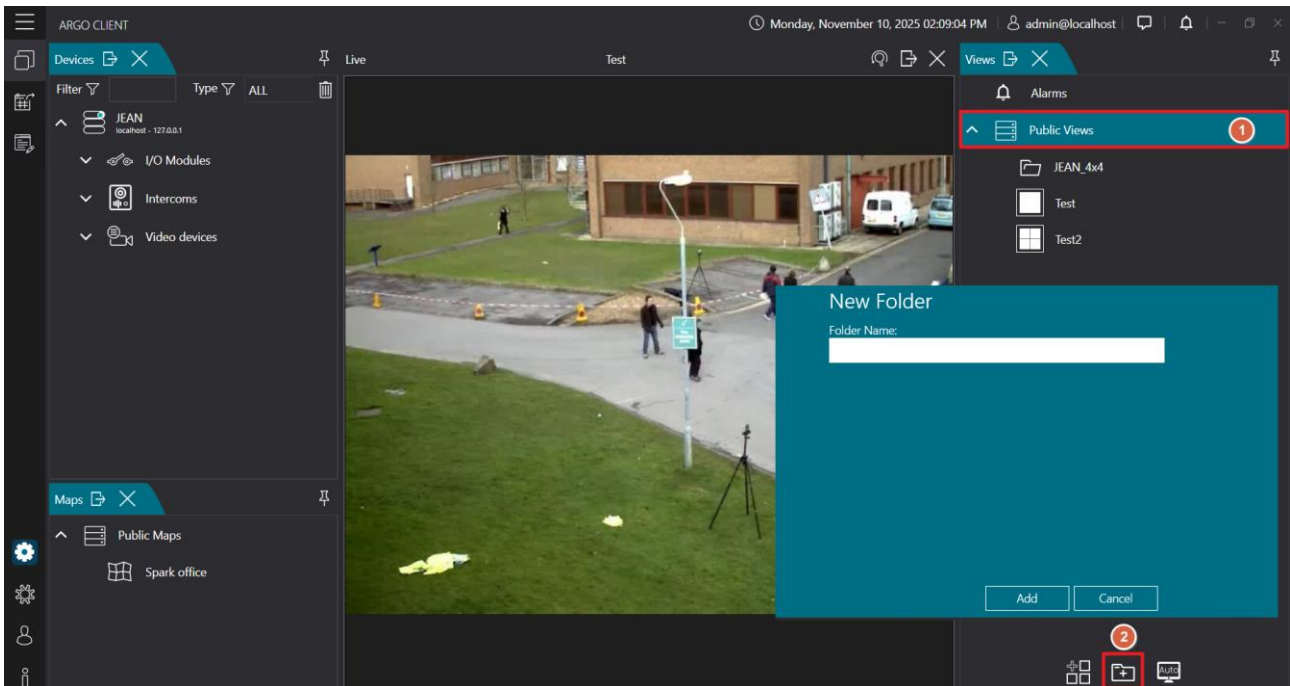
- Drag and drop live view windows with the mouse to swap their positions.

-



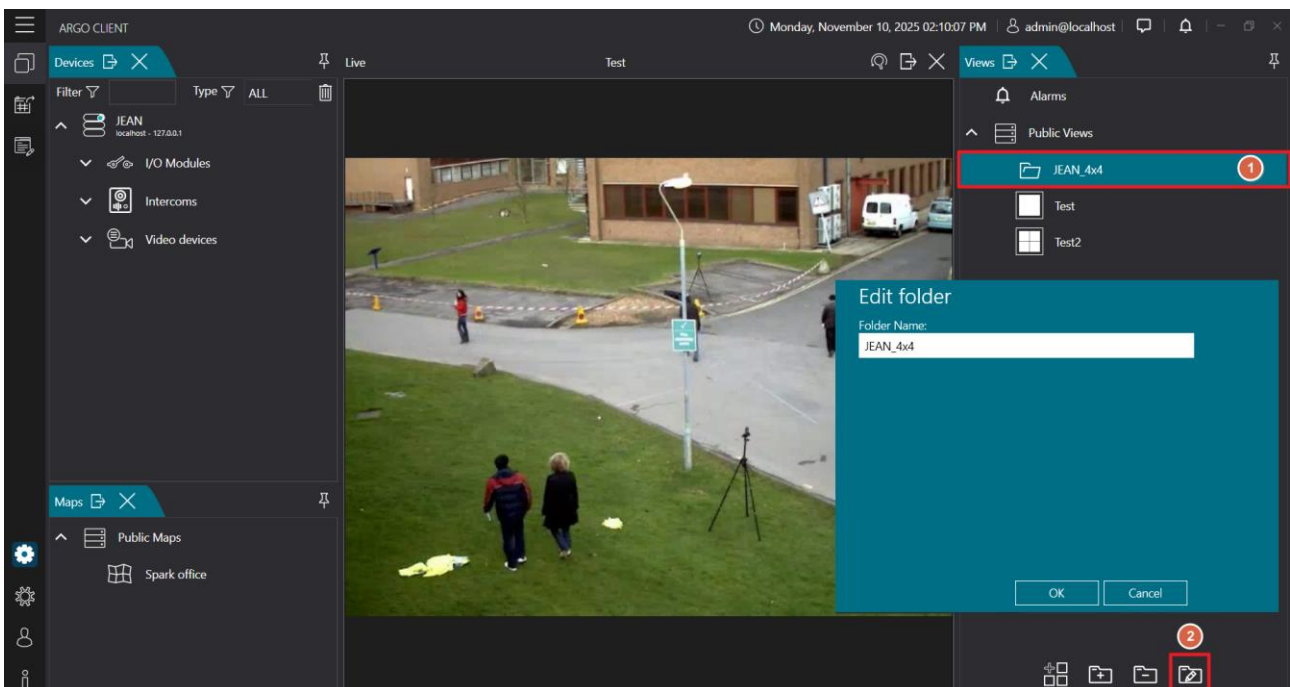
4.5 Folder

4.5.1 Add view folder



- Click the **[+]** folder below **[views]** to add a subfolder to the selected folder
- New folder - folder name: insert the name of the folder to be added

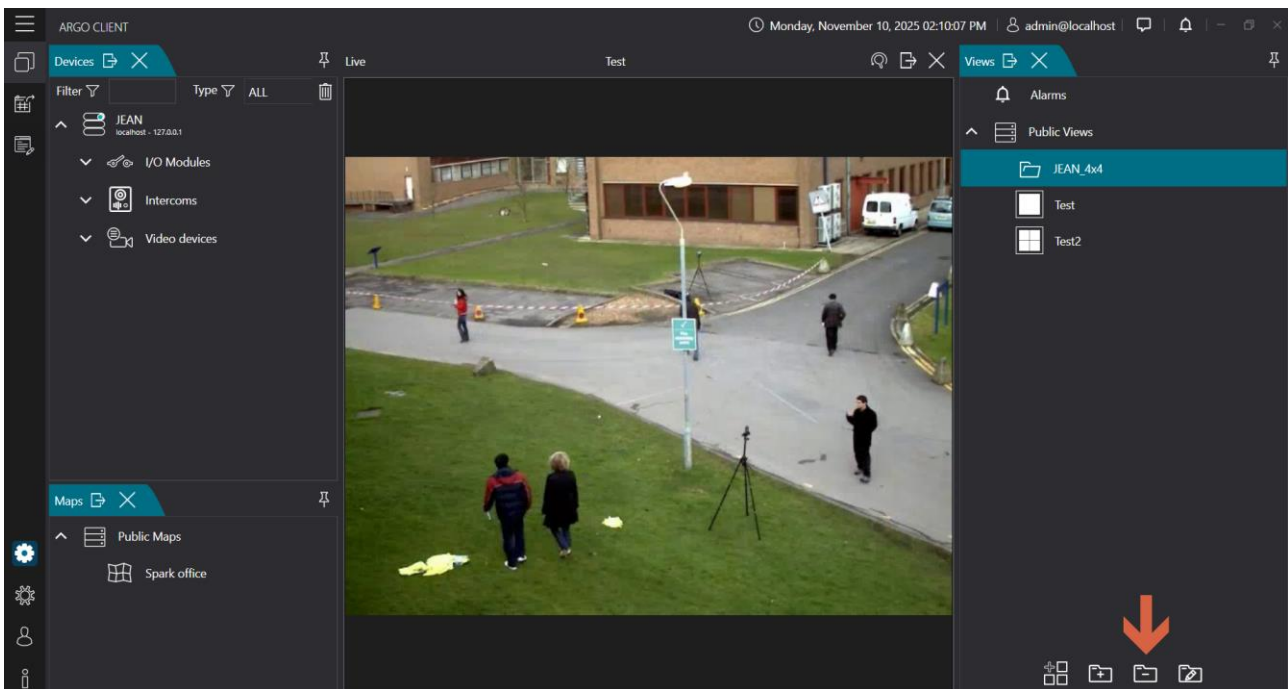
4.5.2 Edit view folder



- Click the **[pencil folder icon]** below **[Folder]** to edit the selected folder.
- Edit folder - folder name: insert the name of the folder to be edited



4.5.3 Delete view folder



- Click the **[folder - icon]** below **[Folder]** to delete the selected folder.



5. LIVE VIEW

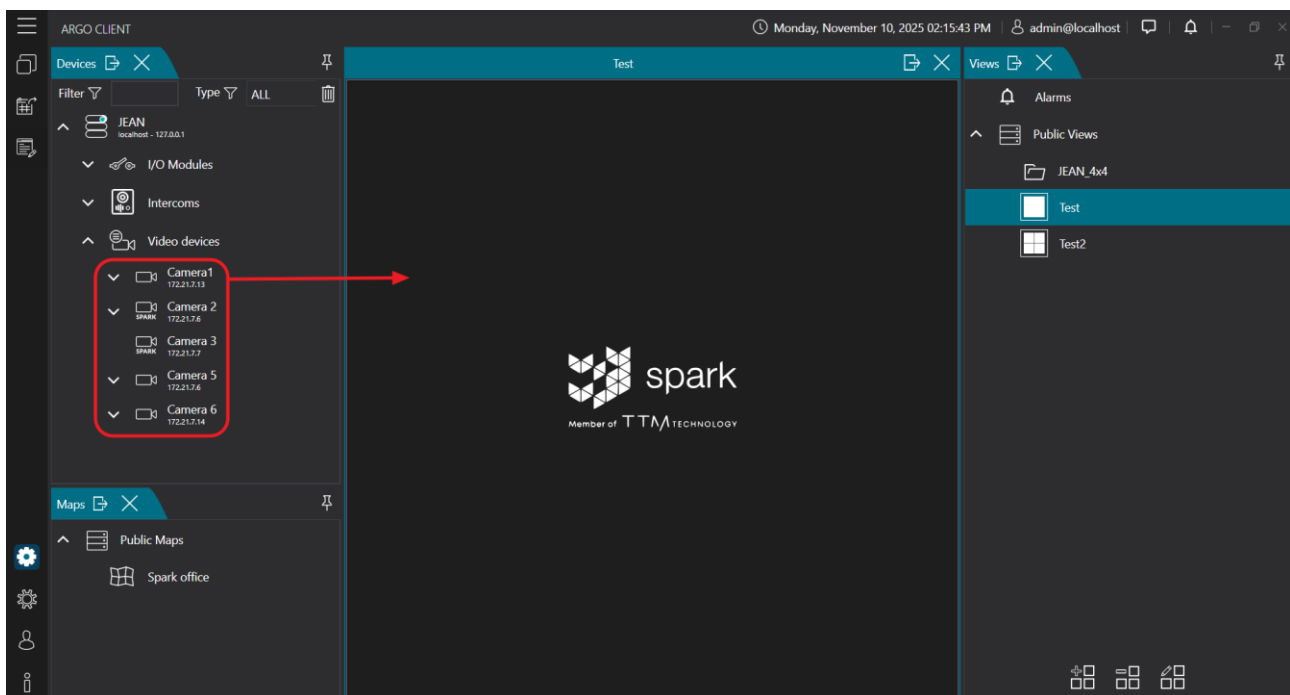
Users can monitor live camera feeds in real time, with support for multi-screen display, image quality adjustment, and PTZ control. In playback mode, users can review recorded footage using the timeline or filter options. Features include fast-forward, slow motion, frame-by-frame playback, and thumbnail preview, allowing for quick identification of key moments and convenient video export.

5.1 Add/delete device on views

5.1.1 Add device to the view

A. Quick Add Device View – Direct Drag-and-Drop

The quick add view allows displaying live video directly in the monitoring window without entering Edit Mode.

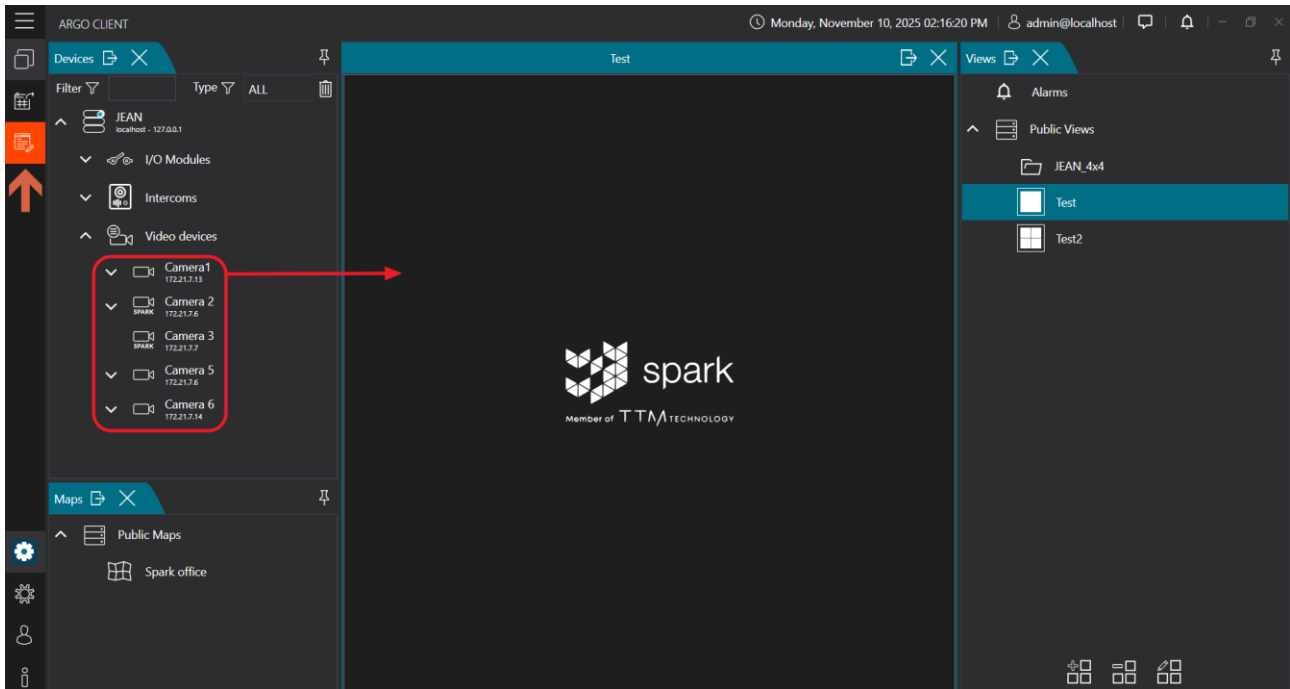


- Click the [Window Icon] and check [View and Device].
- Drag the desired camera from the device list and drop it onto the monitoring view.



B. Bulk Add Device View – Edit Mode

Enter Edit Mode to add multiple devices by dragging and dropping.



- Click the **[window icon]** then select **[views]**
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Drag the camera you want to add from the device window into the view.
- Click the **[save]**.



5.1.2 Delete device to the view

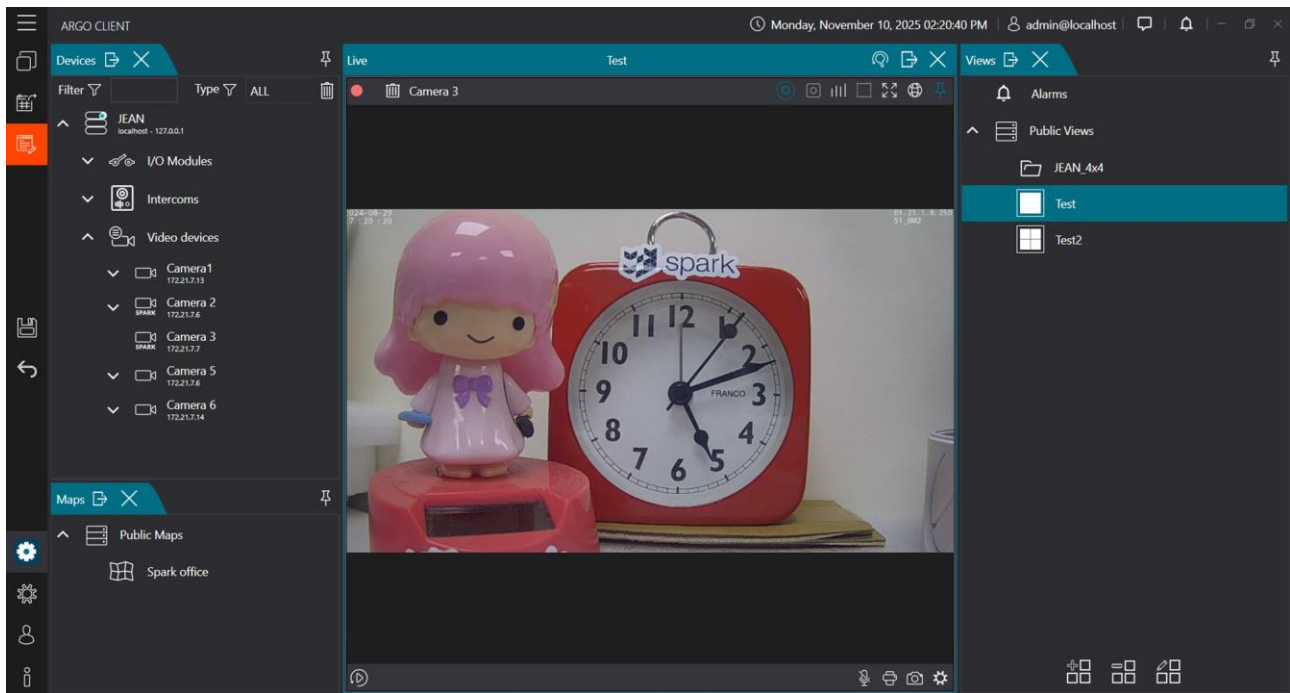


- Click the **[window icon]** then select **[views]**
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Hover the mouse over the camera you want to delete and click on the **[Trash can icon]** to delete the camera.

Note: double click on the image to maximize window and edit view.



5.2 Live view mode



- Click the **[window icon]** then select **[views]**. The default settings in live view mode.
- Hover the mouse over the camera in live view mode that you want to edit, or double-click to view and edit.

	Videos recording (Set in Argo Config)		Instant playback
	Enable stream statistics to show info		Print
	Manual recording shows teal status		Remove camera
	Camera selected shows teal checkmark		Save snapshot
	Toggle fullscreen		Switch Stream
	Toggle audio		Unpin/Pin toolbar
	Toggle smart analytics display		Mute/Unmute microphone
	Enable camera web		



5.3 Playback



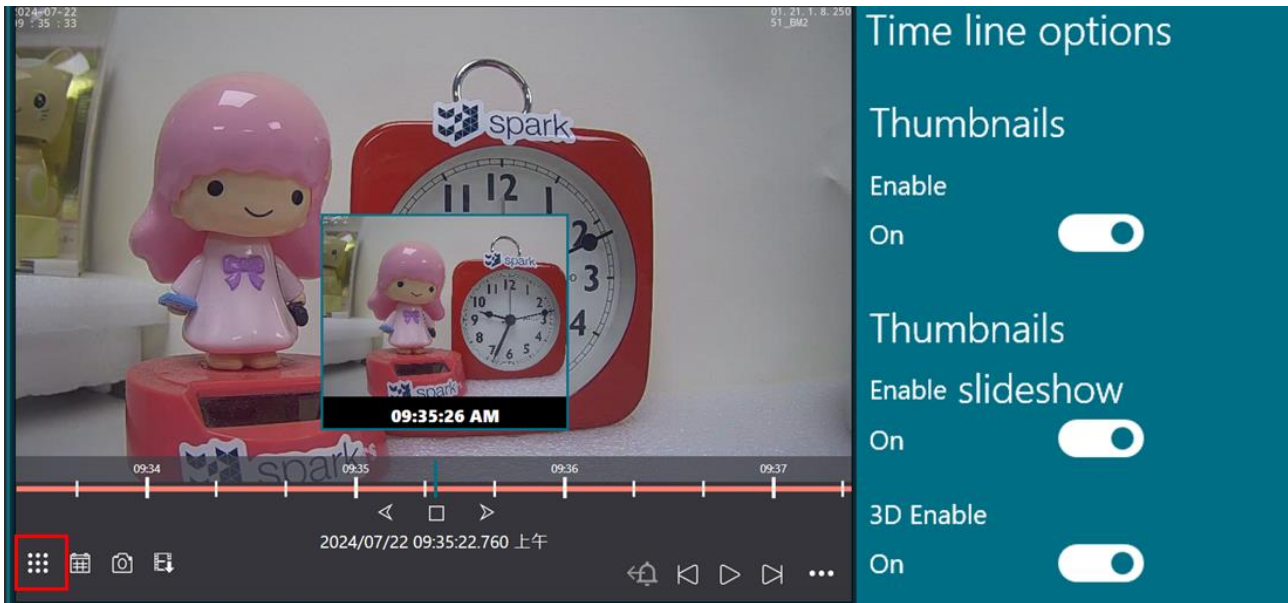
- Click the **[go to archive]** to enter playback mode.
- Hover over the camera in playback mode to edit, or double-click to view and edit.

		Red dot: recording (Set in Argo Config)		2x	Playback speed up
				-0.5x	Playback speed reverse
		Enable/Disable analytics data			Enable video export
		Manually start recording			Stream switch
		Show stream statistics			Previous/Next alarm
		Select camera (selection indicated by teal checkmark)			Play/Pause
		Open/close fullscreen			Previous/Next second
		Pin/auto toolbar			Next frame
		Timeline options : (thumbnails, slideshow/3D, right to be forgotten, timeline settings, alarm visibility filter) – see section 4.2.1 for details			Remove camera
		Select playback interval			Save snapshot
		Enable camera web			



5.3.1 Thumbnail

Hover over the timeline to preview video thumbnails, enabling quick access to key moments without playing the full video.



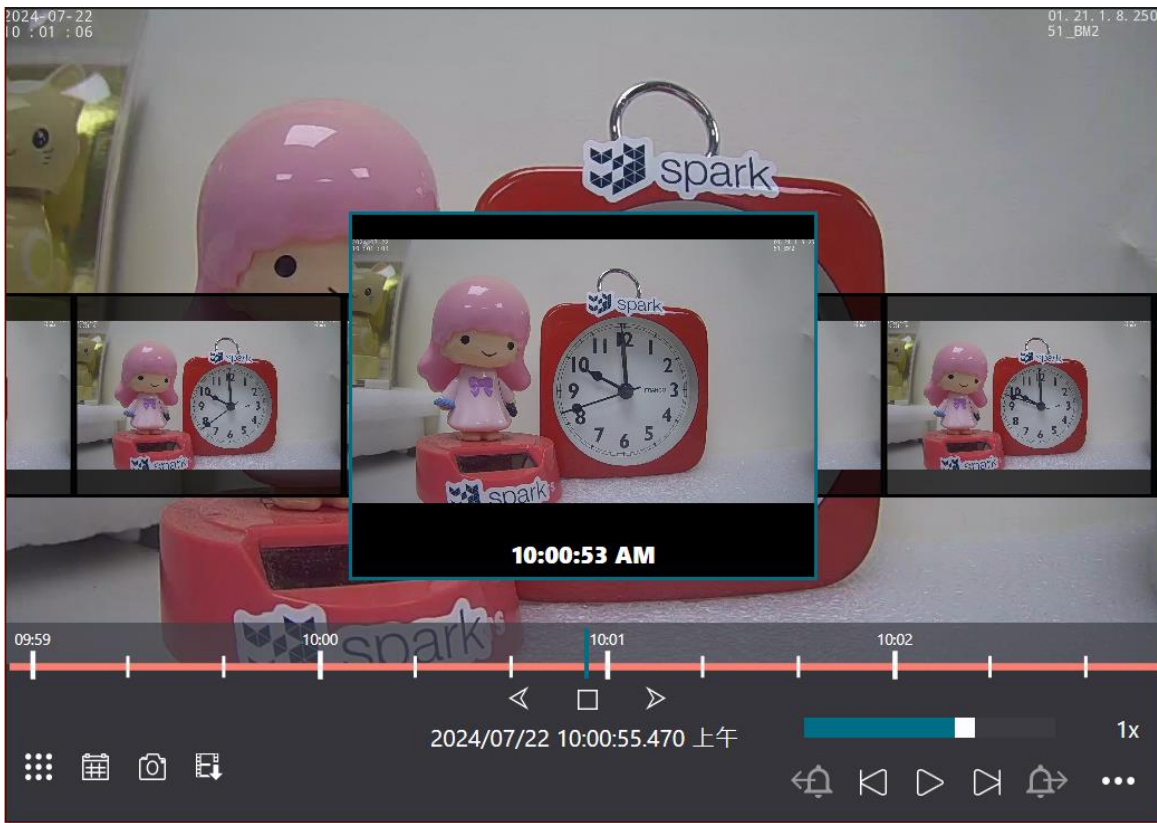
5.3.2 Thumbnails Enable



- For thumbnail function, the camera must have two or more recording streams open, and one of the streams FPS must be set to 1FPS.

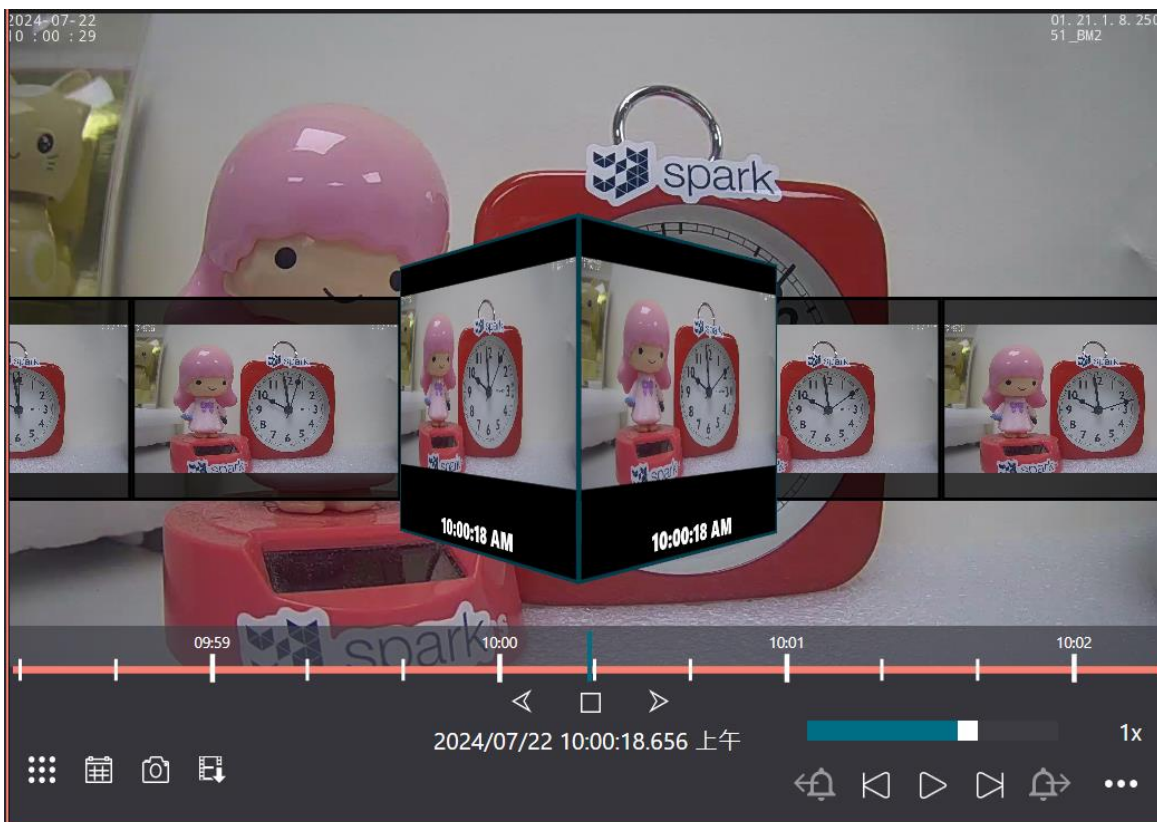


A. Enable Slideshow



- Dragging the timeline will show thumbnails as a slideshow

B. Enable 3D

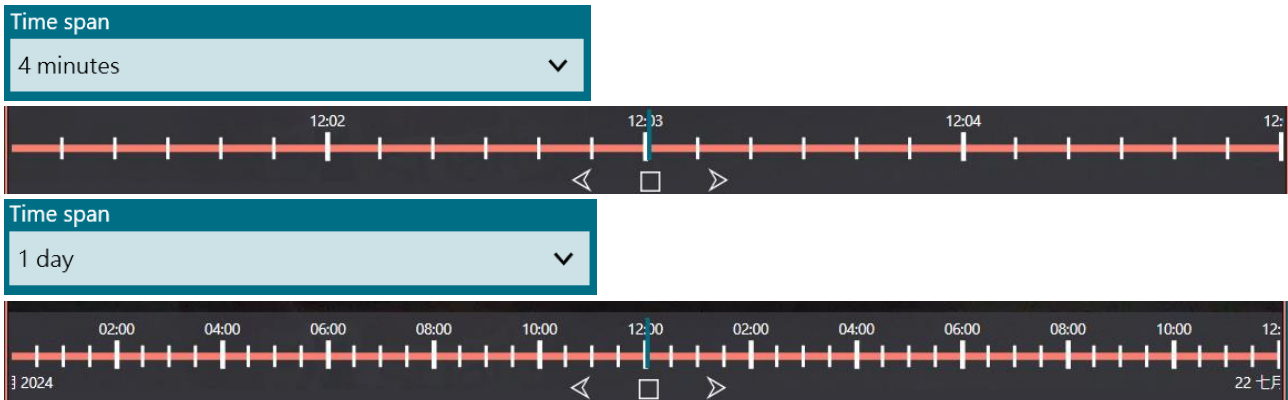


- Dragging the timeline will show the thumbnail effect in 3D.



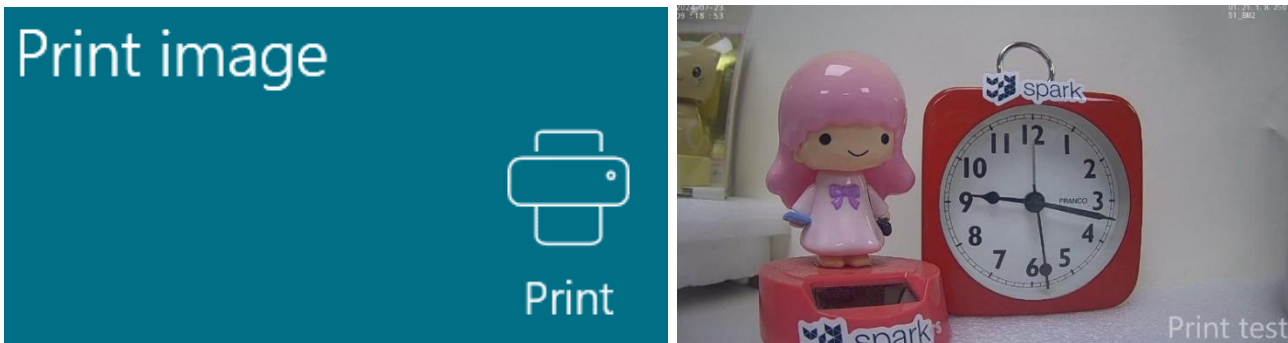
5.3.3 Timeline settings

Set the time interval on the time axis, minimum 4 minutes, maximum 1 day.



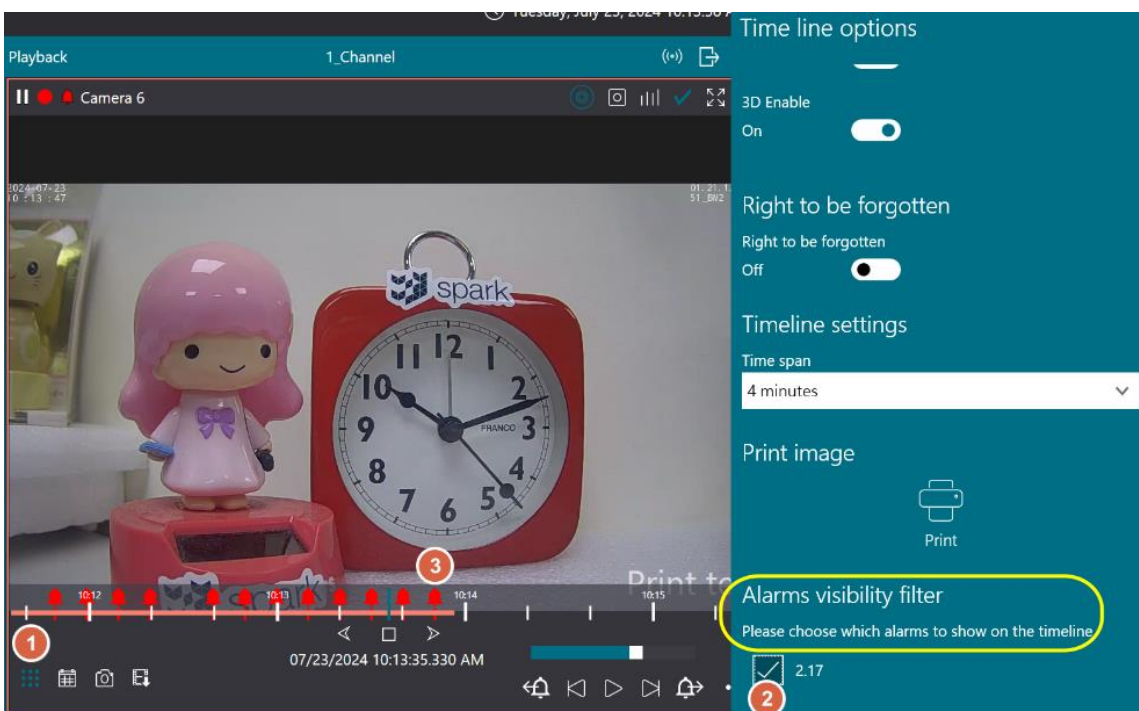
5.3.4 Print Image

After click print, printable image for live view



5.3.5 Alarms visibility filter

Please choose which alarms to show on the timeline, After checking the box, the alarm mark of the device will be shown on the timeline.

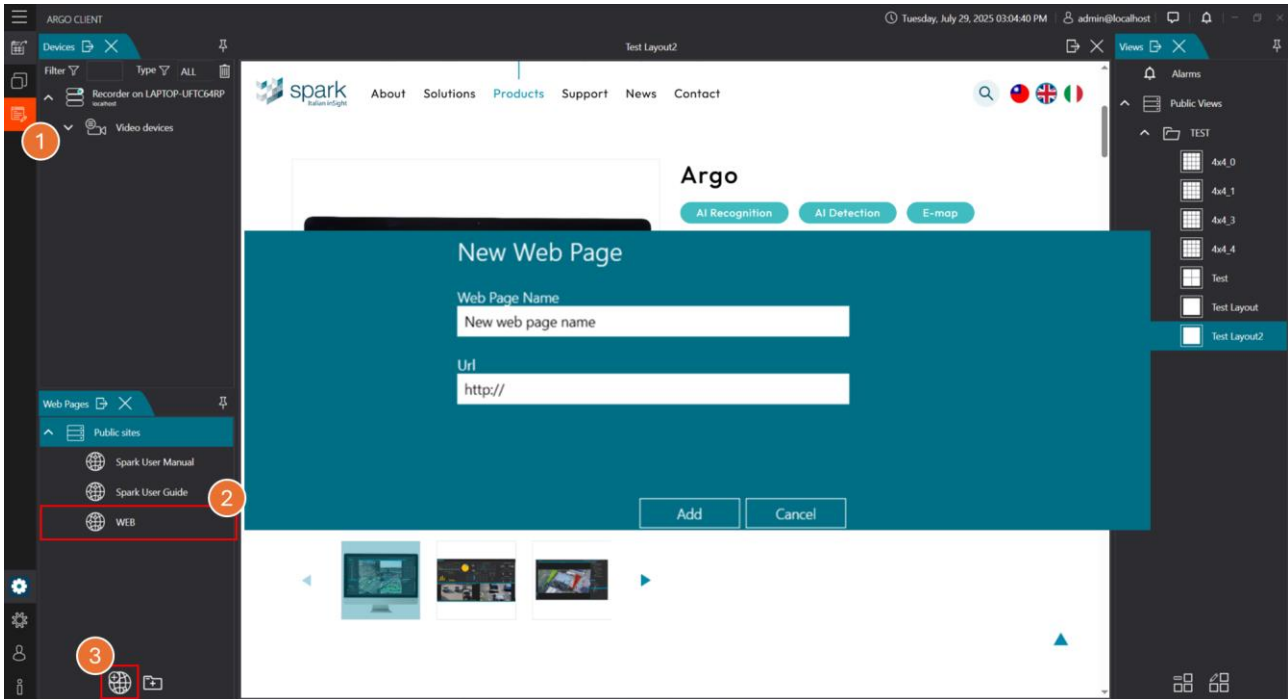




6. WEB PAGES

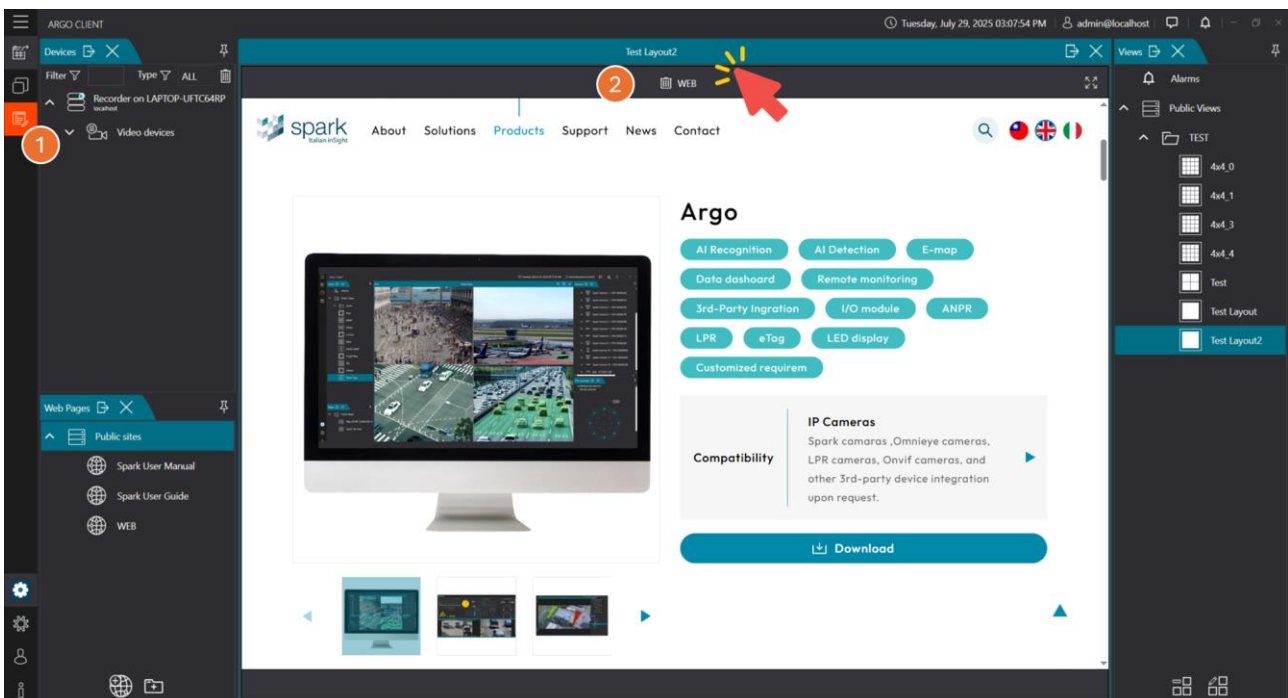
The monitoring interface supports embedding web pages via browser, allowing users to easily access and operate web content directly within the monitoring screen.

6.1 Add a Web Page to the Views



- Click the [**Edit**] Mode icon. When it turns orange, edit mode is enabled.
- Click [**Public Web Page**].
- Click [**Add**] Web Page, then enter a custom web name and URL.

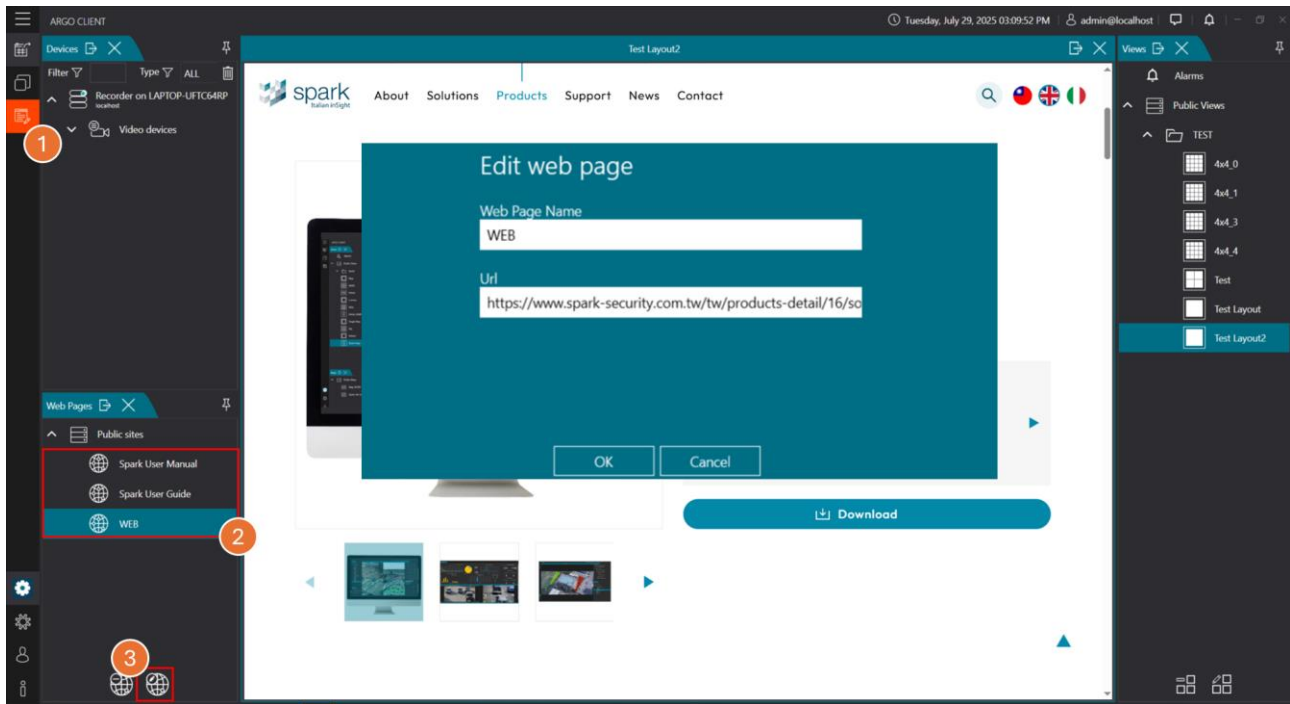
6.2 Delete a Web Page from the Views





- Click the **[Edit]** Mode icon. When it turns orange, edit mode is enabled.
- Hover your mouse over the top of the screen and click **[Delete]** to remove the web page from the monitoring screen

6.3 Edit a Web Page on the Views

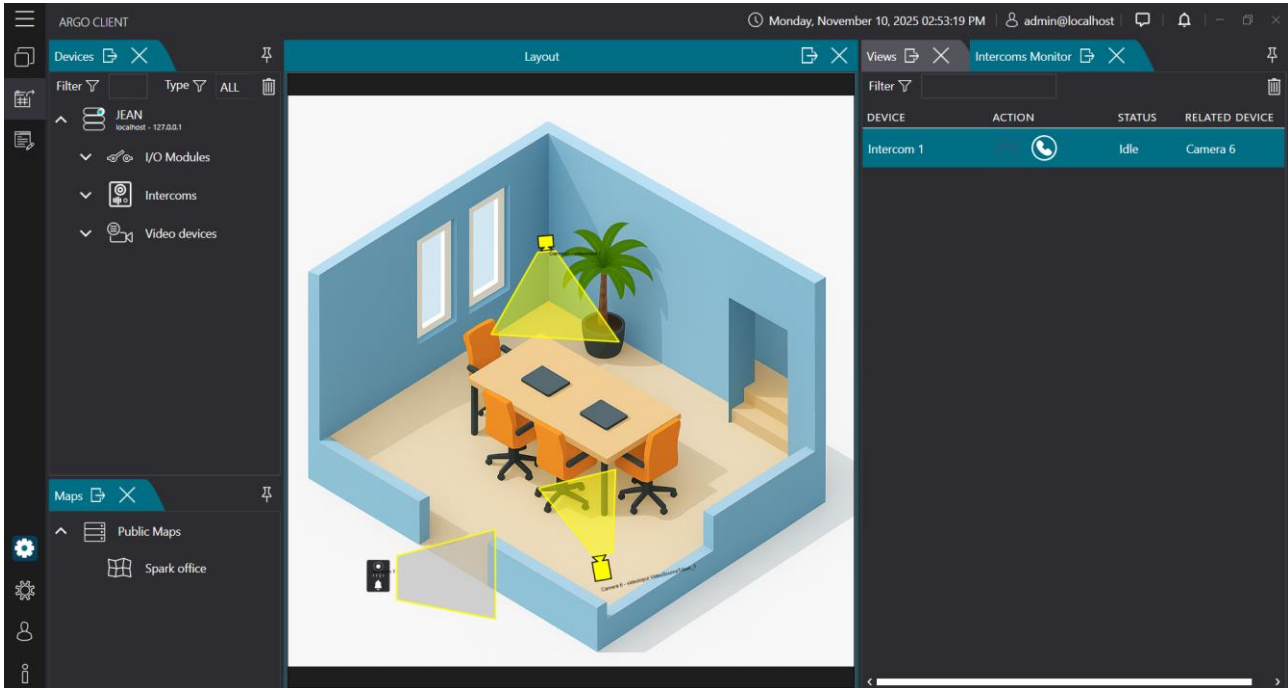


- Click the **[Edit]** Mode icon. When it turns orange, edit mode is enabled.
- Click the web page you want to edit.
- Click **[Edit]** to modify the web name and URL.



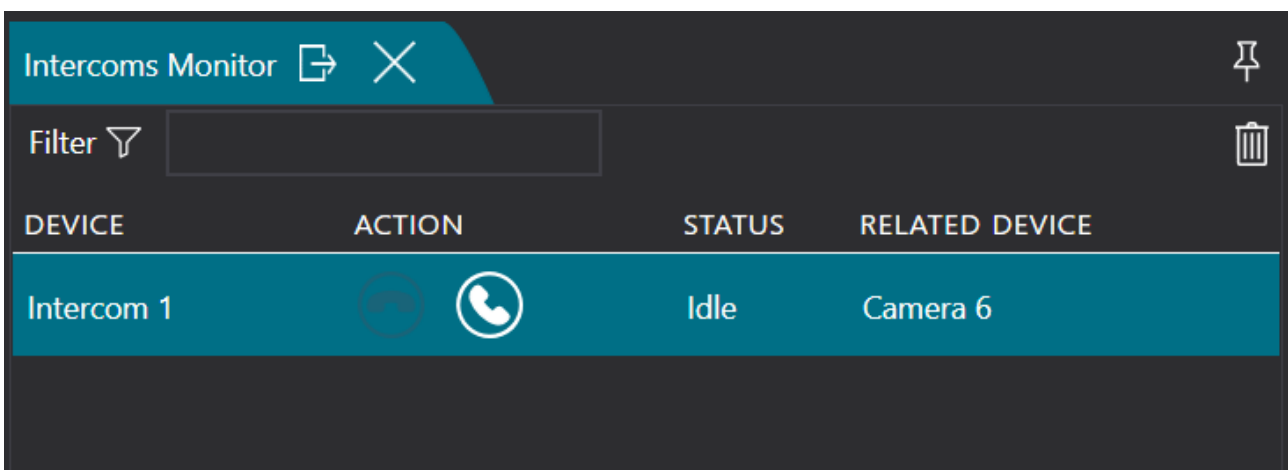
7. INTERCOMS MONITOR

Supports SIP network intercom devices, enabling real-time voice communication with remote equipment via the SIP protocol. Users can initiate intercom calls directly within Argo by clicking the intercom button. The intercom function can also be automatically triggered by events (e.g., access control anomalies or license plate recognition failures), enhancing monitoring and management efficiency.



7.1 Intercom List

This page provides an overview of all intercom devices and their associated camera feeds, allowing users to monitor device status in real time.



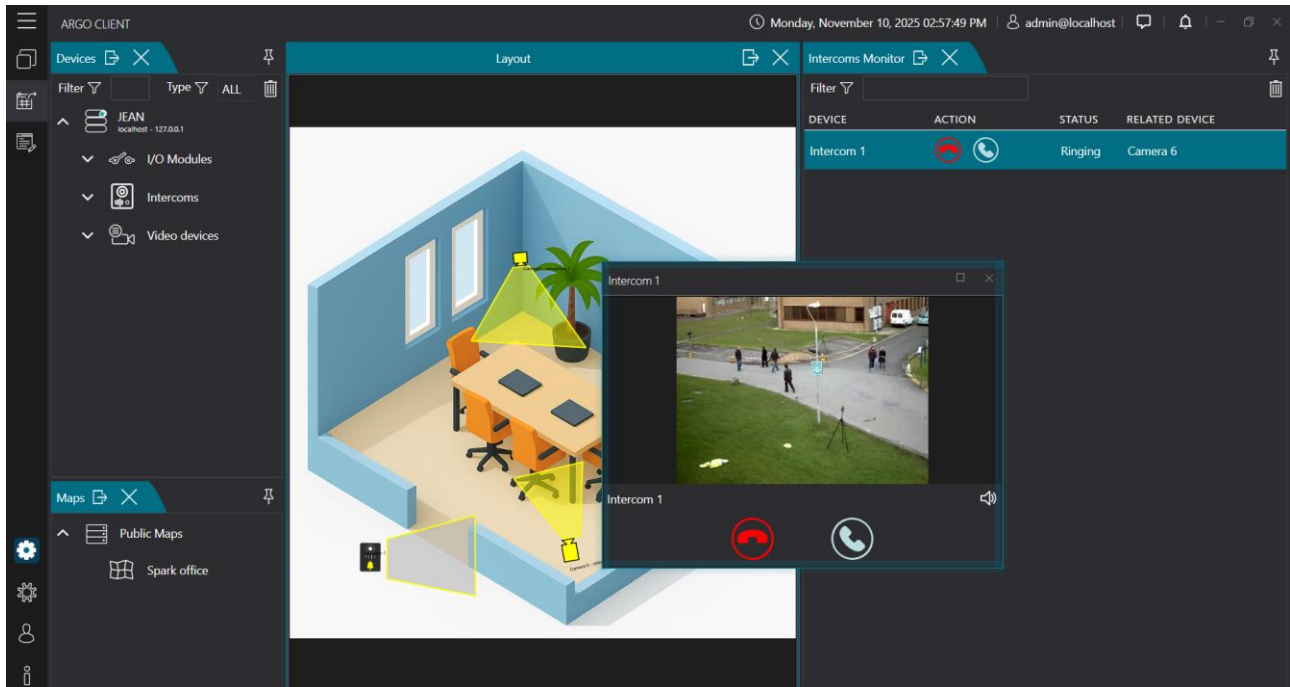
- Hang Up: End the current intercom call
- Dial: Initiate a call



7.2 Call control

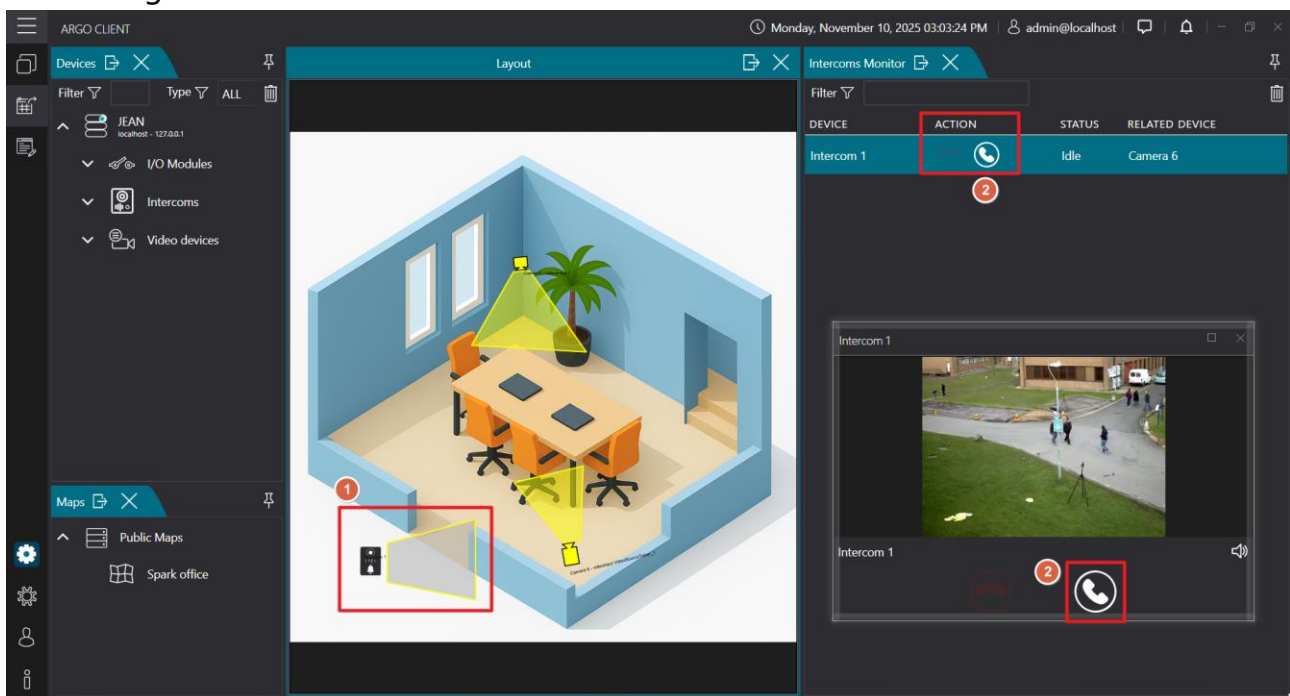
A. Incoming Call

When there is an incoming or outgoing call, a call window will automatically pop up in real time.



B. Outgoing Call

When an intercom device is added to the e-map, clicking the device on the map will open a real-time call window for dialing. You can also initiate a call directly through the intercom monitoring interface.





8. BATCH EXPORT OF VIDEO FILES

The video export feature allows users to export footage based on a selected time range. It supports five video formats: Spark format, MP4, MOV, MKV, and AVI.

8.1 Batch Export - Batch Export of Video Files

- Function: Export video files in a single screen format

- Click **[Batch export]**
- Export folder location: select the folder where the video files will be exported.
Save directory: click **[Browse]** to select the folder for exporting video files.
Export name: insert the name for the exported file.
Export format: select from Spark format/MP4/MOV/MKV/AVI.
- Select export start and end time:
Start time: click the **[Calendar icon]** to choose the date and time.
End time: click the **[Calendar icon]** to choose the date and time.
- Select cameras to export: select the cameras video files you want to export.
- Click **[start]** to begin export

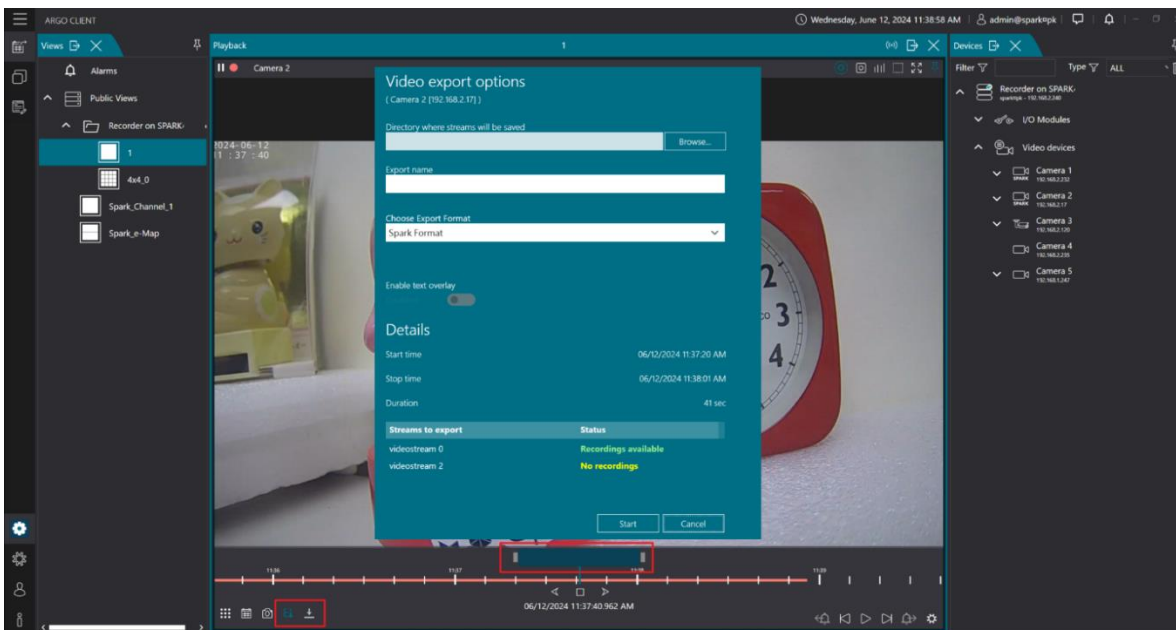


8.2 Playback mode - Batch Export of Video Files

- Export video files from the current view, with multiple screens exported as a single screen format.



- Click the **[window icon]** then select **[views]**. The default settings in live view mode.
- Click the **[go to archive]** to enter playback mode.



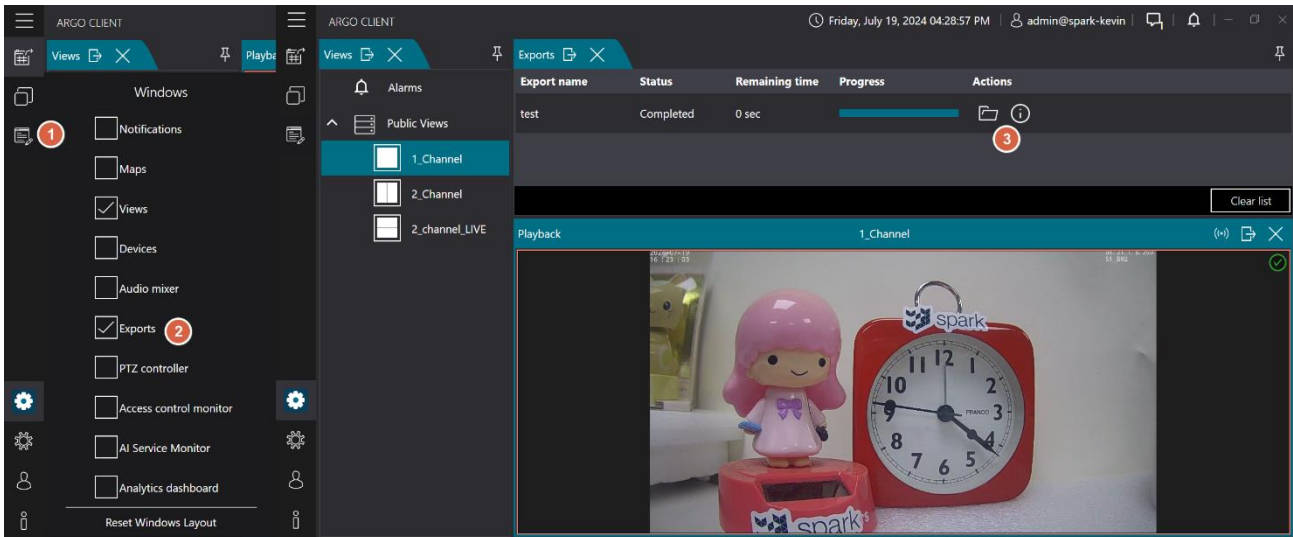
- Click **[Enable Video Export]** and select the segment to export, then click **[Download]**.
- Video Export Settings:
 - Save directory: click [Browse] to select the folder for exporting video files.
 - Export name: insert the name for the exported file.
 - Export format: select from Spark format/MP4/MOV/MKV/AVI.
 - Enable text overlay



9. EXPORTED FILES

This feature allows users to monitor the export progress in real time and open the destination folder to access the exported footage.

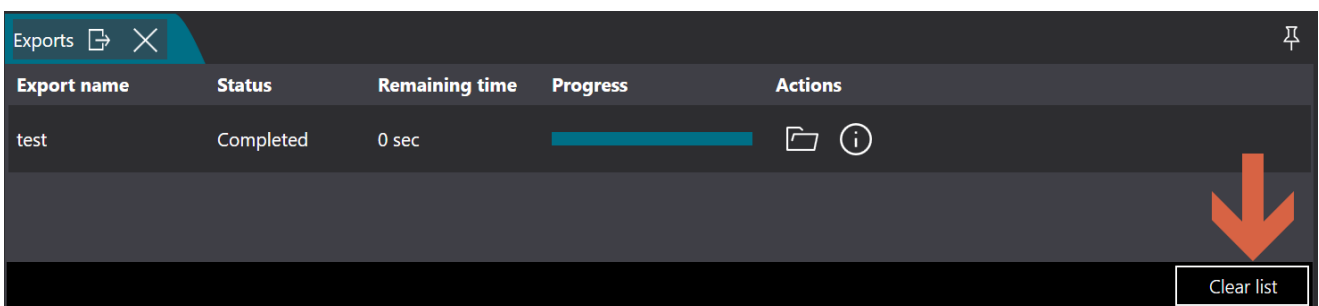
9.1 View exported file status and records



- Click the **[window icon]** then select **[exported files]**. The window will display the status of the exported files.
- Response action

	Cancel export
	Open destination folder
	View export details

9.2 Delete exported file records



- Click the **[window icon]** then select **[exported files]**.
- Click **[clear list]** to delete the record of exported files.





10. NOTIFICATION

10.1 View export notifications



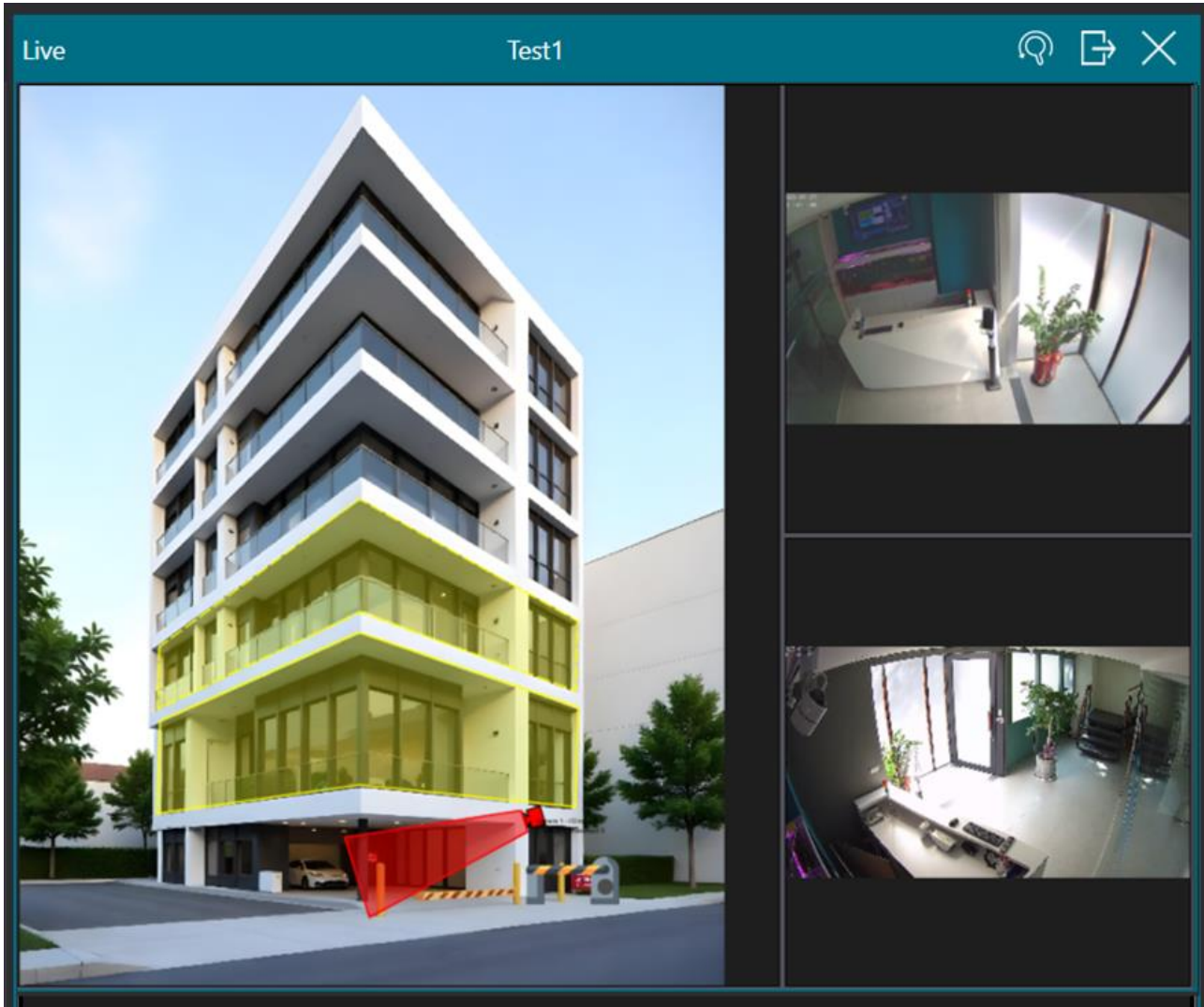
- Click the **[window icon]** then select **[notifications]**.
- Browse notifications for completed or failed status of video export processes.

	Delete notifications
	View export details



11. MAPS

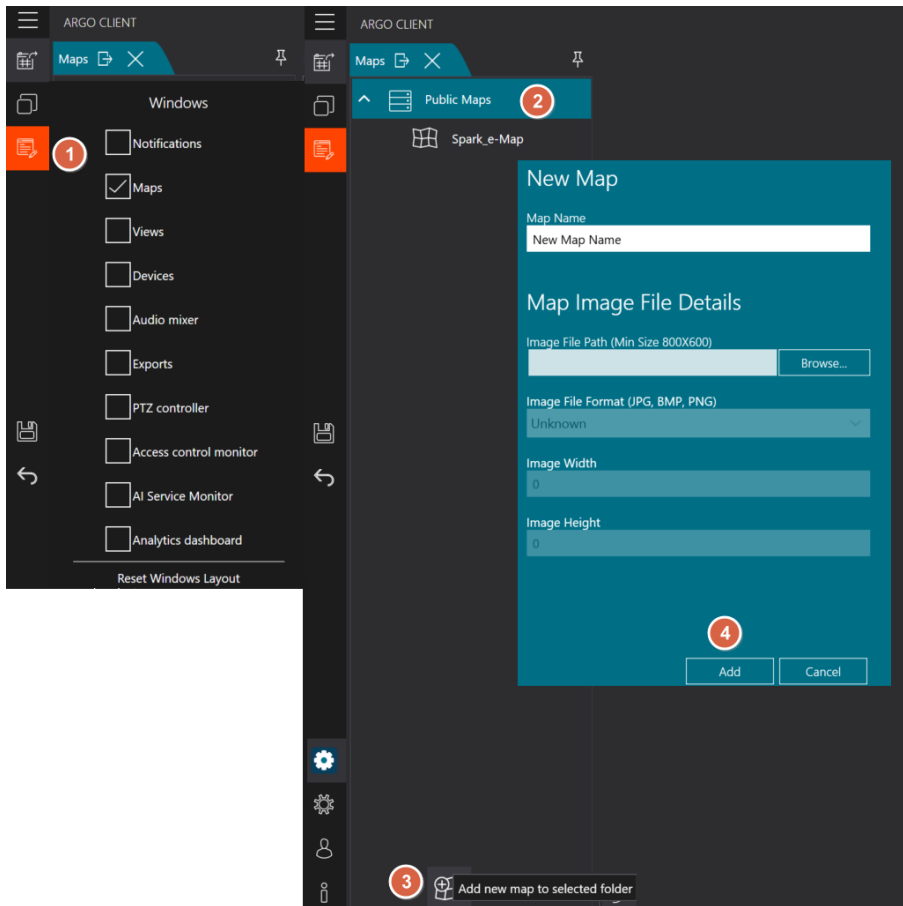
Argo's E-Map allows cameras, sensors, and other devices to be marked on a map for real-time monitoring and device management. Users can quickly locate camera positions through the map and click on devices to view live footage or related events. It supports multi-level map displays, making it ideal for large-scale surveillance environments and enhancing management efficiency and operational convenience.





11.1 Add/Edit/Delete Maps

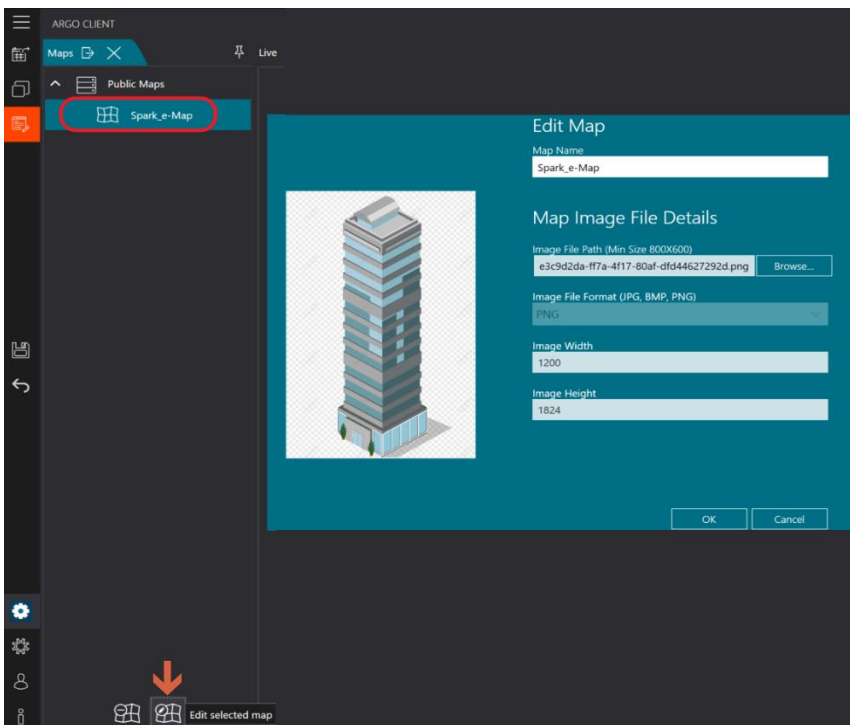
11.1.1 Add Maps



- Click the **[window icon]** then select **[Maps]**.
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Click on **[Maps icon]** and then click **[+]**
- New Maps
 - Map name: insert name for the Maps
- Image information
 - Image path: click on the right to browse and upload the digital map image file.
 - Image format: After uploading the digital map image file, the system will automatically display the format, width, and length of the image file, eliminating the need for manual input.

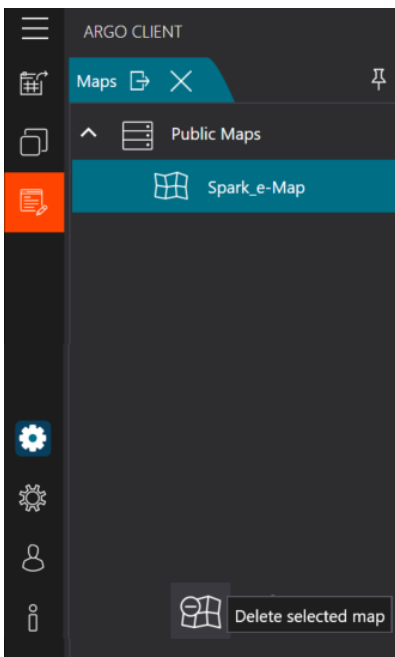


11.1.2 Edit Maps



- Click the **[window icon]** then select **[Maps]**.
- Click the **[Setup Mode]**. The icon turns orange in edit mode.
- Select the Maps you want to edit and click the **[Edit selected map]**

11.1.3 Delete Maps

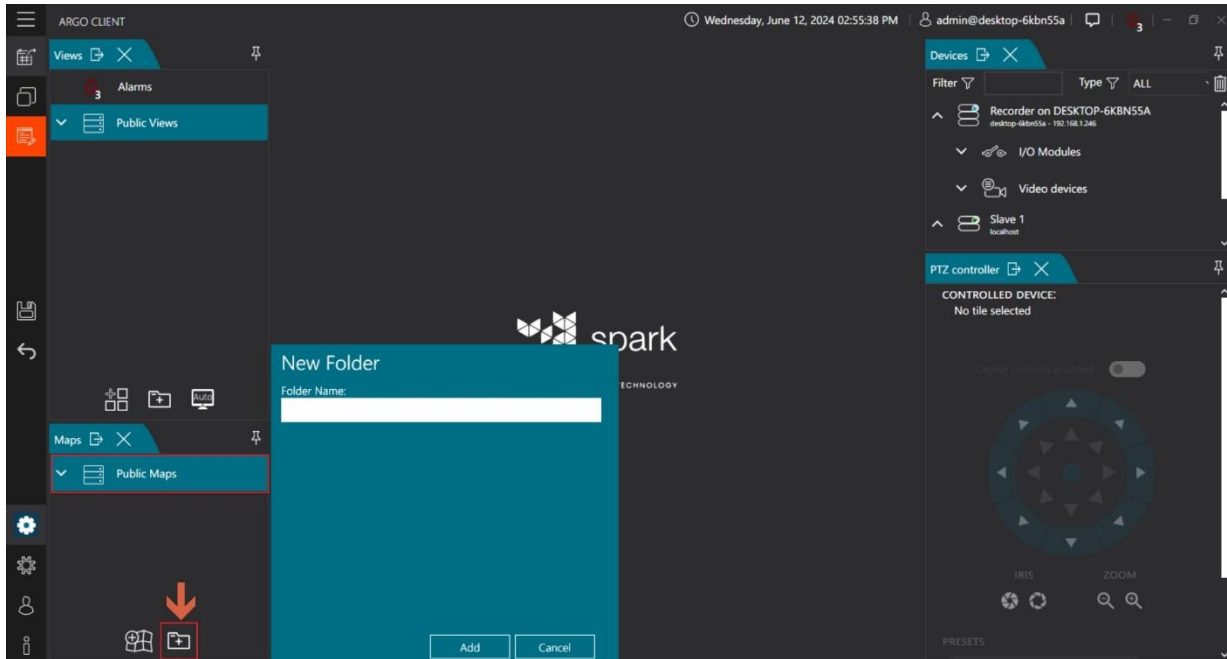


- Click the **[window icon]** then select **[Maps]**.
- Click the **[Setup Mode]**. The icon turns orange in edit mode.
- Select the Maps you want to edit and click the **[-] Delete selected map**



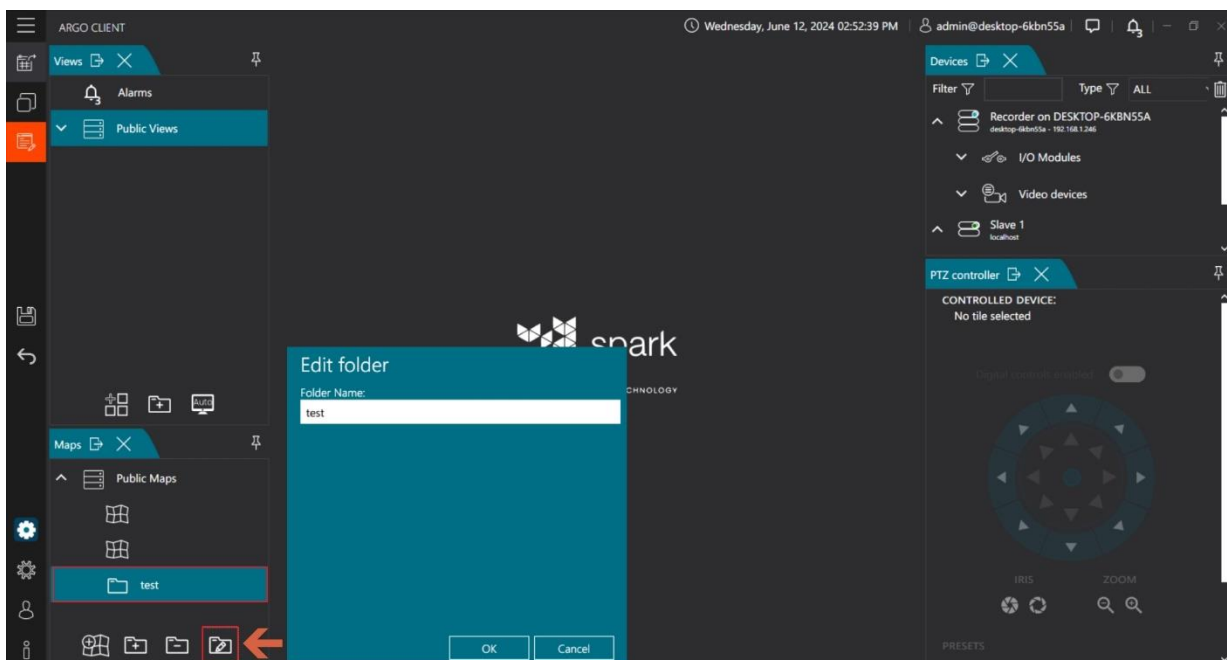
11.2 Add/Edit/Delete Maps folder

11.2.1 Add Maps folder



- Click the **[window icon]** then select **[Maps]**.
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Click the **[+Folder icon]** on **[Maps]** to add a new folder.
- New folder - folder name: insert the name of the folder to be added

11.2.2 Edit Maps folder

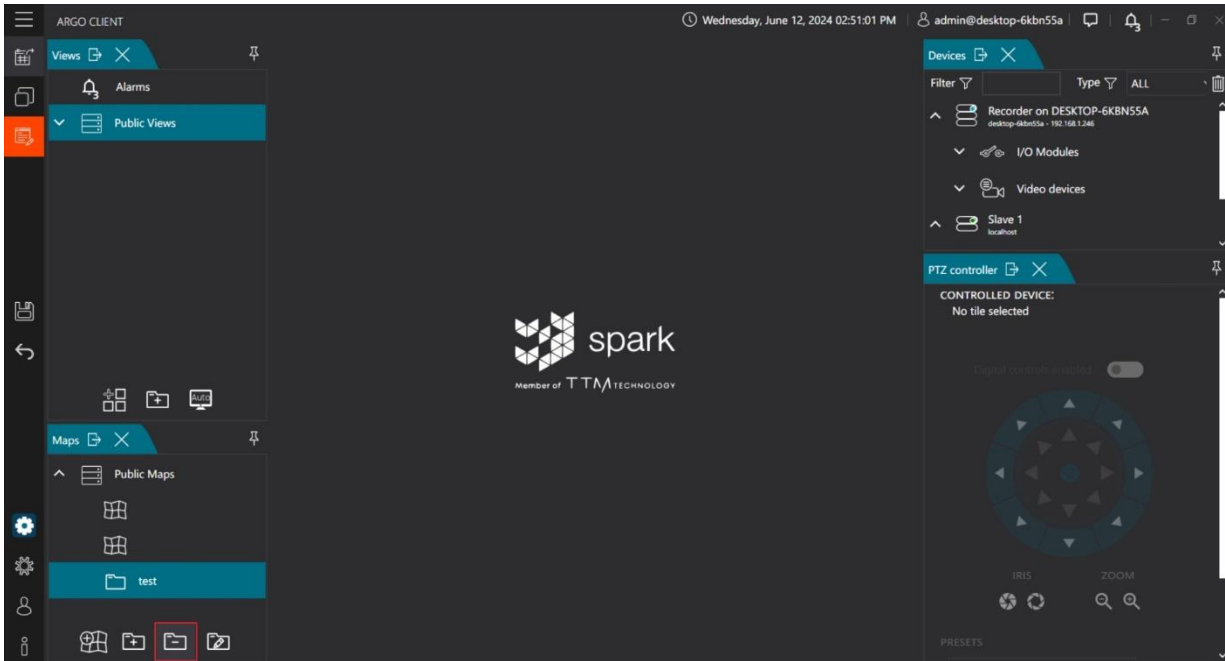


- Click the **[window icon]** then select **[Maps]**.



- Click the **[edit icon]**. The icon turns orange in edit mode.
- Click the **[pencil folder icon]** below **[Folder]** to edit the selected folder.
- Edit folder - folder name: insert the name of the folder to be edited

11.2.3 Delete Maps folder

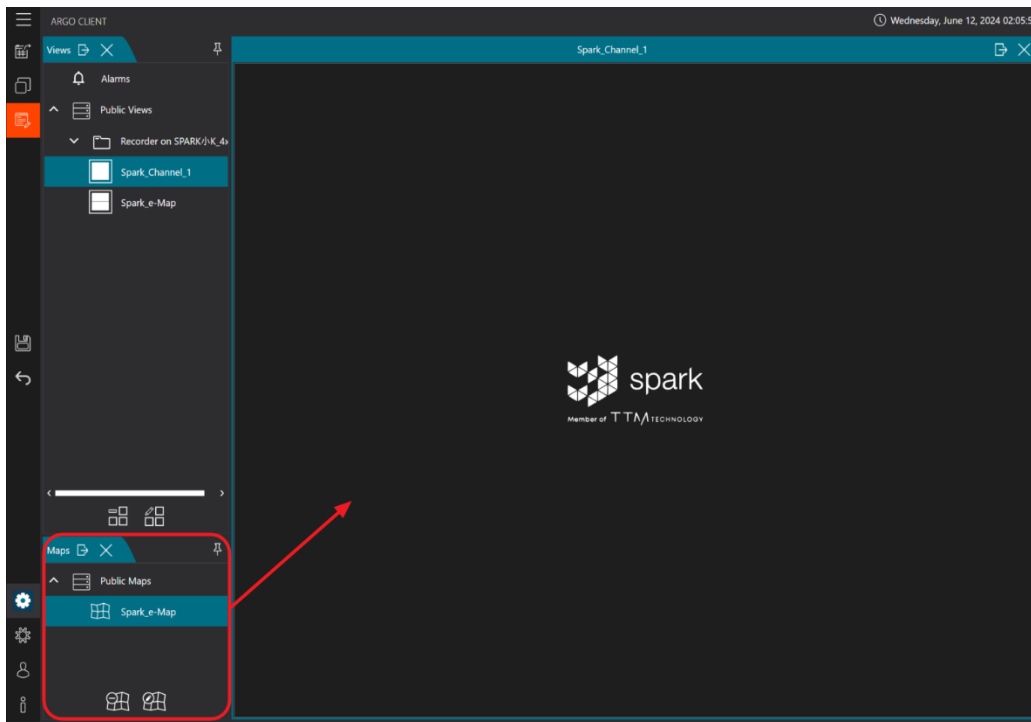


- Click the **[window icon]** then select **[Maps]**.
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Click the **[folder - icon]** below **[Folder]** to delete the selected folder.



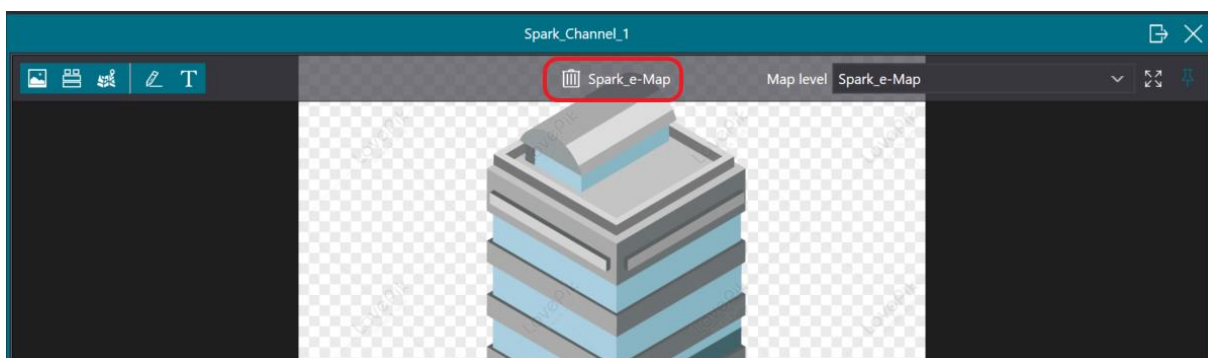
11.3 Add/Edit/Delete Maps from views

11.3.1 Add Maps to view



- Click the **[window icon]** then select **[Views and Maps]**.
- Drag the desired email to the quad view.

11.3.2 Delete Maps

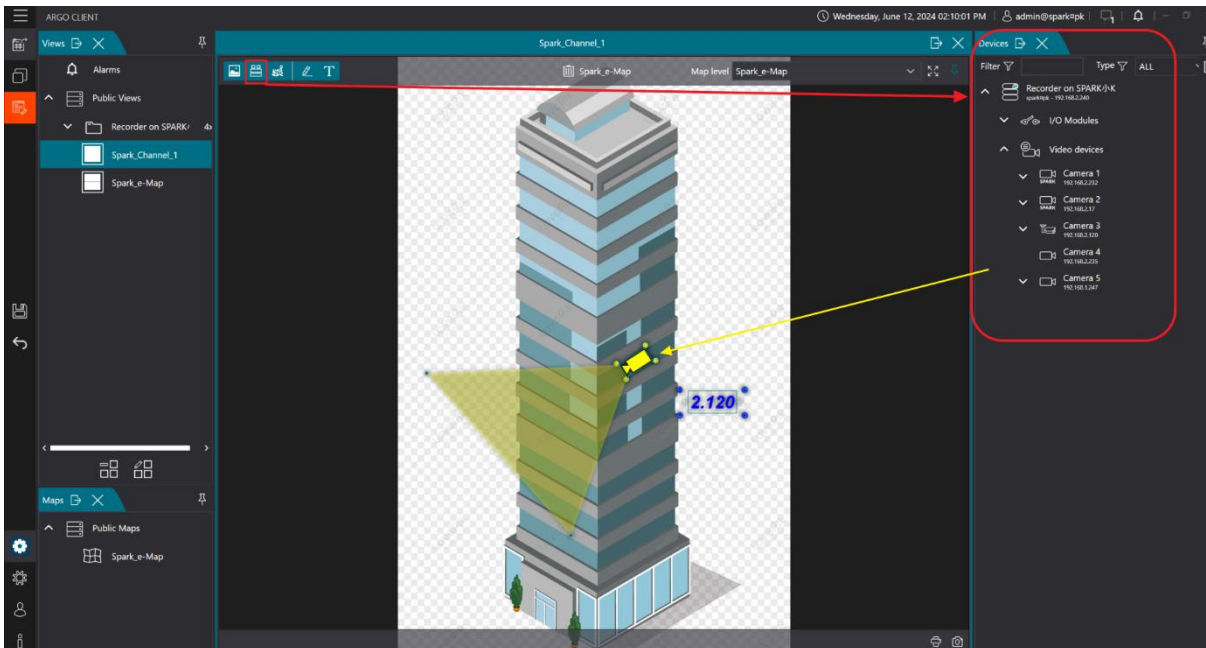


- Click the **[window icon]** then select **[views and Maps]**.
- Hover the mouse over the Maps you want to delete and click on the **[Trash can icon]** to delete the Maps.



11.3.3 Edit Maps to view

Step1: Add devices to the Maps



- Click the **[window icon]** then select **[views]**.
- Click the **[Steup Mode]**. The icon turns orange in edit mode.
- Click **[Display Device Page List View]** on the toolbar from Maps to open the device window.
- Drag the desired cameras from the device window to the corresponding positions on the Maps.


Step2: Edit map details

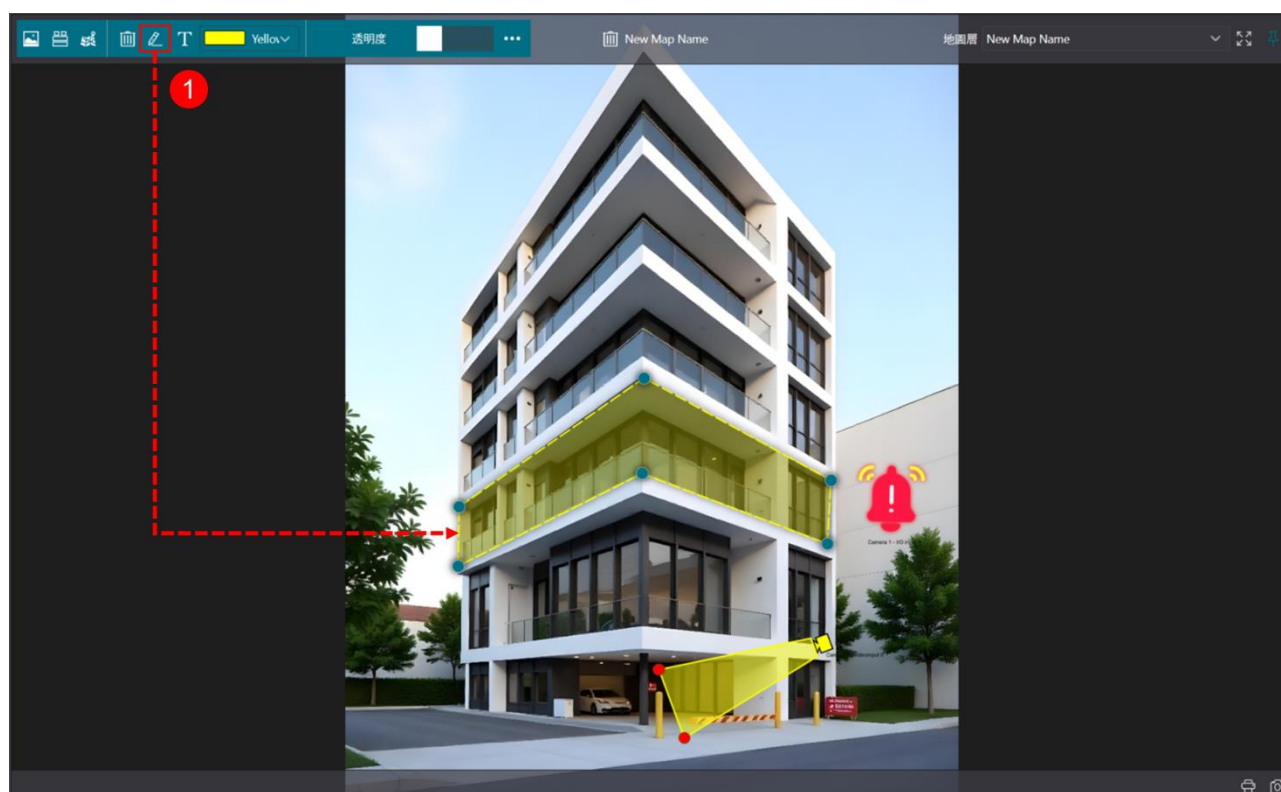


- Double click on the image to maximize window and edit view.
- Click on the object you want to edit (refer to the list below).



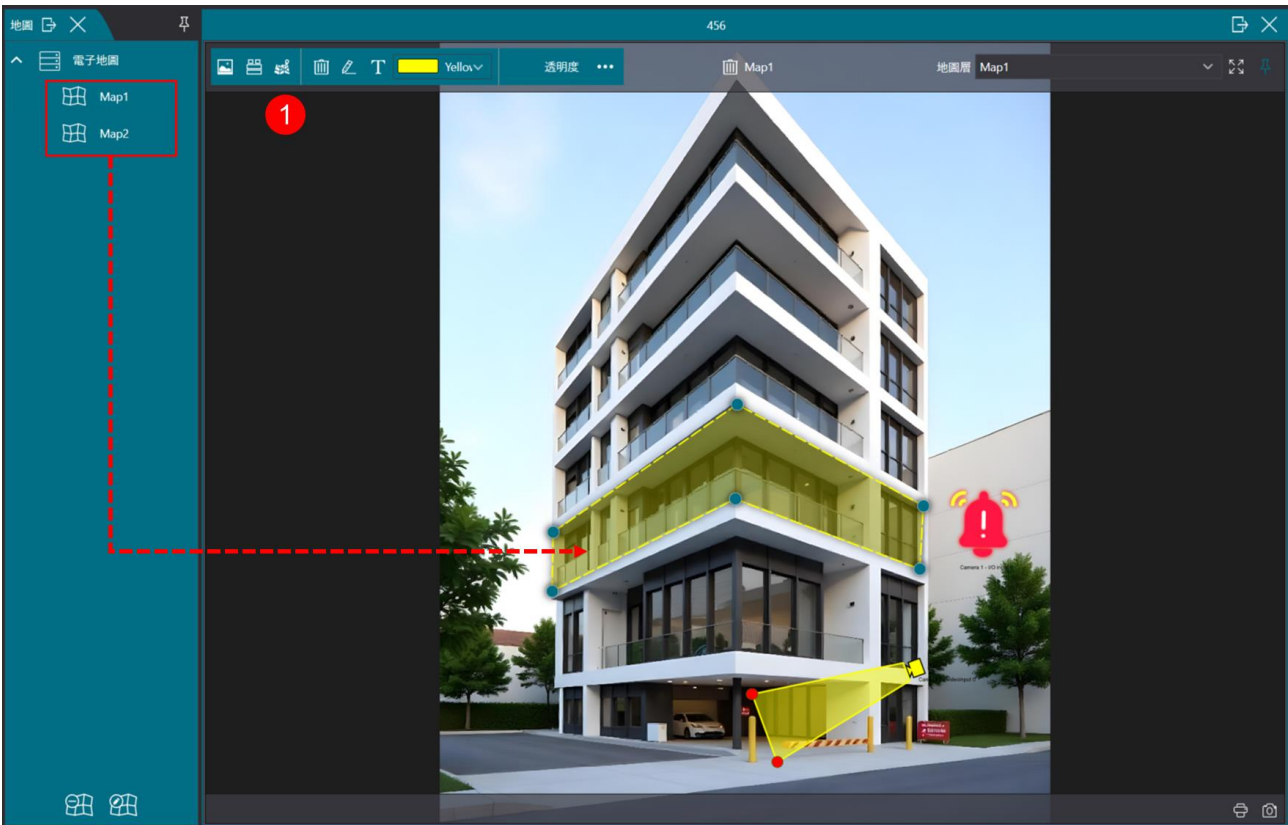
	Map Image Change		Change icon
	Display Device Page List View		Color list
	Link a Map layer to a shape		Transparency
	Draw hot zone		Border thickness
	Insert Text		Font size
	Bold Text		Font type
	Italic Text		Remove selected Objects
	Underlined Text		Save snapshot
	Outline Text		Print

Step3: Use the  to define the area on the map.





Step4: Click the  , then drag the map you want to link into the defined area.

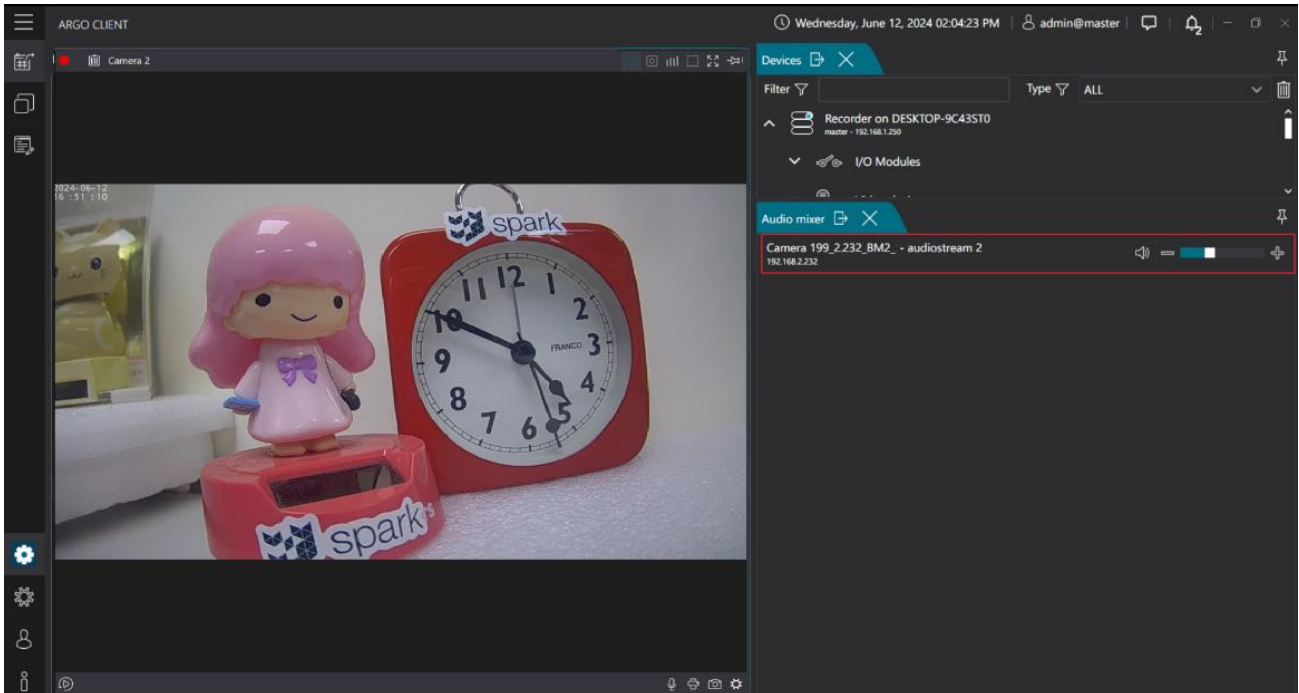




12. AUDIO MIXER

Support for camera audio functionality, allowing volume adjustment for each surveillance view.

12.1 Audio volume adjustment



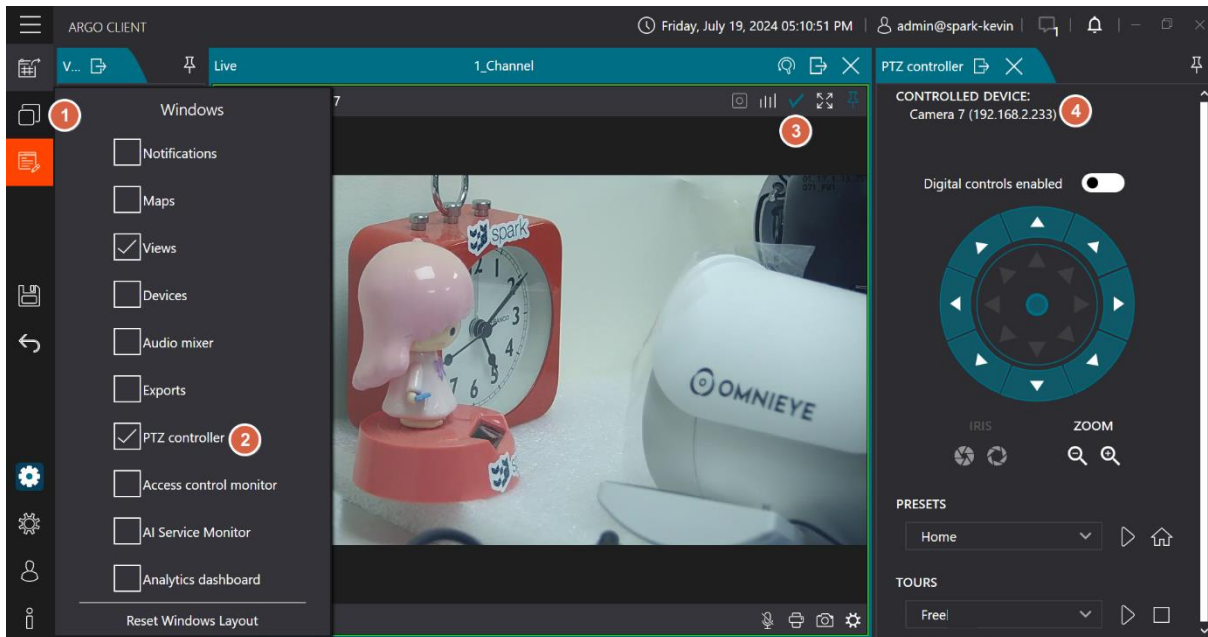
- Click [**window icon**] and select [**Audio mixer**]
- Drag [**volume bar**] to adjust the audio volume.

Tip: Make sure the audio function of the camera is enabled beforehand.



13. PTZ CONTROL

13.1 Camera PTZ control

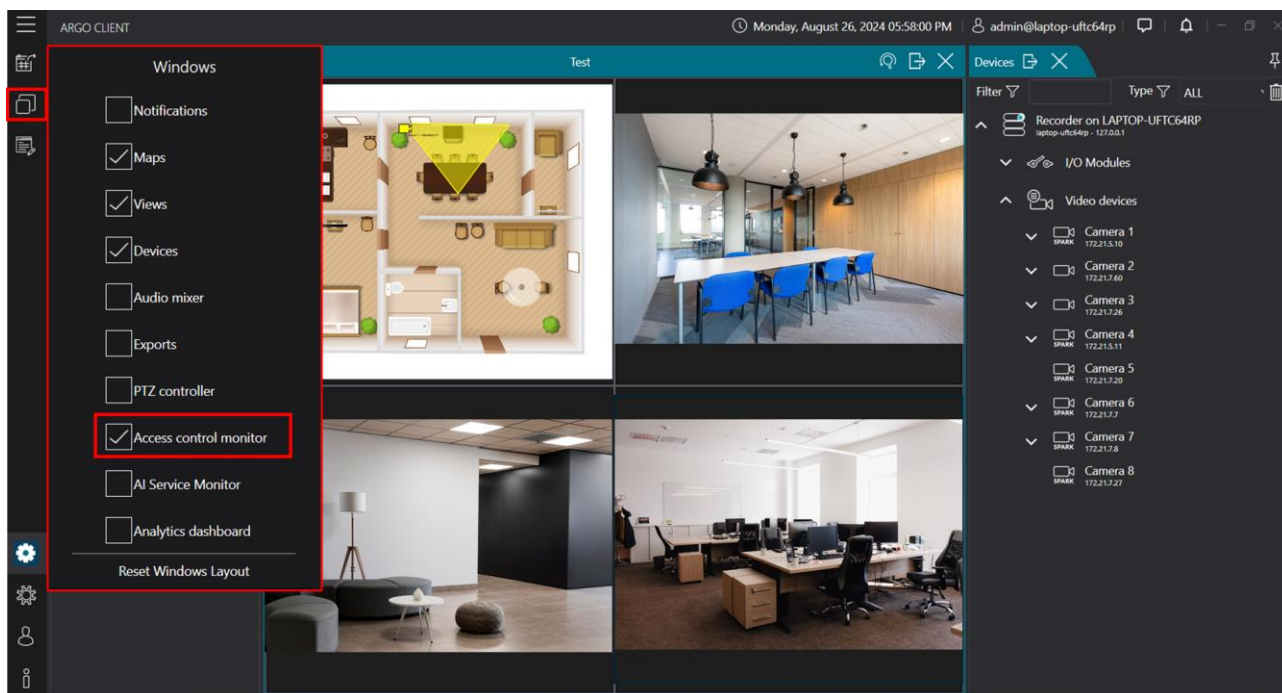


- Click **[window icon]** select **[PTZ control]**
 - Click on the **[dashed frame]** on the upper right corner of the PTZ camera you want to control.
 - Enable digital control:
When enabled, only digital zoom in and zoom out are applied to the current screen.
When disabled, zoom in and zoom out of the camera itself can only be done through the mouse scroll wheel.
 - Iris: adjust to avoid overexposure
 - Zoom: adjust image zoom
 - PRESETS: select preset position
 - TOURS: select path
- Note: to use this feature, the selected camera must support the PTZ function.



14. ACCESS CONTROL

This feature requires an additional license key. After activating the license key, go to Argo Client and click on Windows and select Access control monitor.





14.1 Real-time access control

Live Mode allows real-time viewing of access monitoring records.

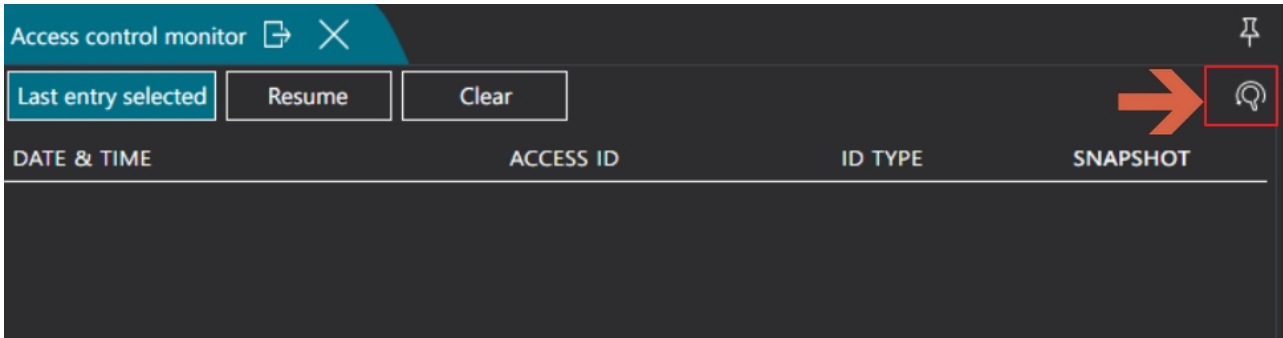
Option	Description
	Click [History Search] to browse historical data.
	Click [Playback] to quickly review the video footage of the selected event.
Display latest data	Automatically update to the latest record.
Pause	Temporarily stop updating records.
Clear all	Clear all real-time records (these records can still be found in the search records).



14.2 Record mode

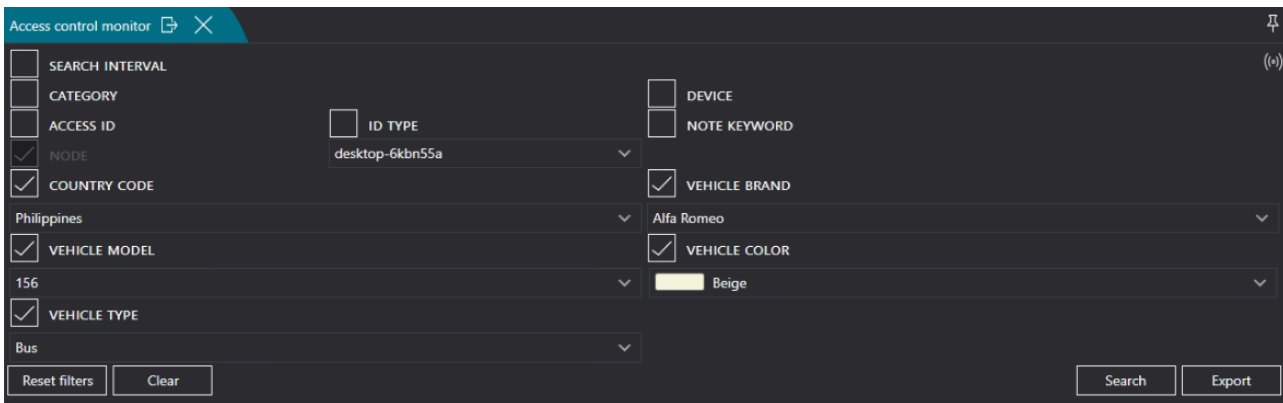
Search license plate access records through log files

Step1: Enable access control record page



- Click **[window icon]** select **[access control]**
- Click on **[Record Mode Icon]** to go to the access control record mode


Step2: Search access control record



- Select filtering options then click **[Search]**
- Filtering options:

Option	Description
Time interval	Filter based on the set time interval.
Speed range	Filter based on the set speed range.
List	Filter based on the set list.
Device	Filter based on the set device.
Access ID	Filter based on the set ID. For example, entering "123" will search for all Access IDs containing "123".
Access type	Filter based on the passage type (RFID/LPR).
Note keyword	Filter based on keywords in the note field.



Option	Description
	For example, entering "VIP" will search for all access IDs with "VIP" included in the notes.
Node	Filter based on the node where the device recording the access ID is located.
Country code	License plate country of origin
Vehicle brand	Vehicle manufacturer
Vehicle model	Vehicle model
Vehicle color	Supports 12 vehicle colors 
Vehicle type	Car, Van, Small truck, Motorcycle, Large Truck, Bus, SUV, Pick-up



14.3 Access ID status

To register, edit, or revoke real-time access IDs, select the desired ID and click the corresponding **Register / Edit / Unregister** button on the screen.

The screenshot displays the 'Access control monitor' software interface. On the left, there is a table with columns: DATE & TIME, SNAPSHOT, ACCESS ID, ID TYPE, EXPIRE DATE, TIME VALIDITY, and DEVICE. The table lists several events, with the first row highlighted in blue. On the right, the 'EVENT DETAILS' panel shows information for the selected event, including Accuracy (97%), Country code (Philippines), Vehicle type (SUV), and Vehicle color (Black). Below this information are three buttons: Register, Unregister, and Edit. A video feed on the right shows a dark SUV with license plate 27 I 338.

DATE & TIME	SNAPSHOT	ACCESS ID	ID TYPE	EXPIRE DATE	TIME VALIDITY	DEVICE
Monday, April 14, 2025 2:29:1		Z71133	LPR	None	None	Camera
Monday, April 14, 2025 2:29:1		Z7J338	LPR	None	None	Camera
Monday, April 14, 2025 2:29:0		541QDM	LPR	None	None	Camera
Monday, April 14, 2025 2:29:0		136805329	LPR	Friday, May 2, 00:00:00 - 24:00:00		Camera
Monday, April 14, 2025 2:29:0		Y3U832	LPR	None	None	Camera
Monday, April 14, 2025 2:29:0		541QDM	LPR	None	None	Camera
Monday, April 14, 2025 2:29:0		DBJ4949	LPR	None	None	Camera
Monday, April 14, 2025 2:29:0		AWB8993	LPR	Wednesday, A 01:55:00 - 14:1		Camera
Monday, April 14, 2025 2:28:5		NF84210	LPR	None	None	Camera

- Registered: click on the ID you want to add and click **[Register]** to complete add ID.
- Unregister: click on the ID you want to delete and click **[Unregister]** to delete ID.
- Edit: click on the ID you want to edit and click **[Edit]** to edit the ID, category, effective date, effective time, and notes.

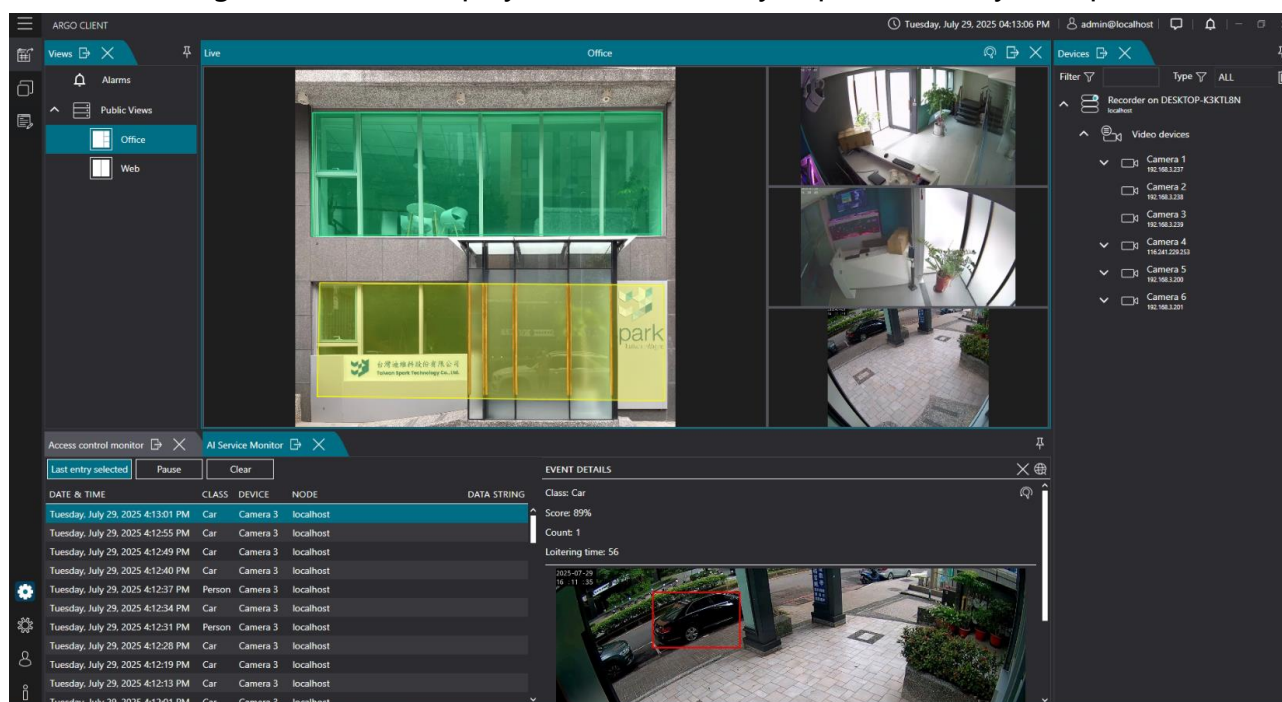


15. AI SERVICE

Instantly verify AI-based video analysis and recognition features, with real-time data updates and searchable history.

15.1 Real-time AI service

Real-time recognition data is displayed based on analysis performed by the Spark AI device.



- Click on the **[window icon]** and select **[AI service]**

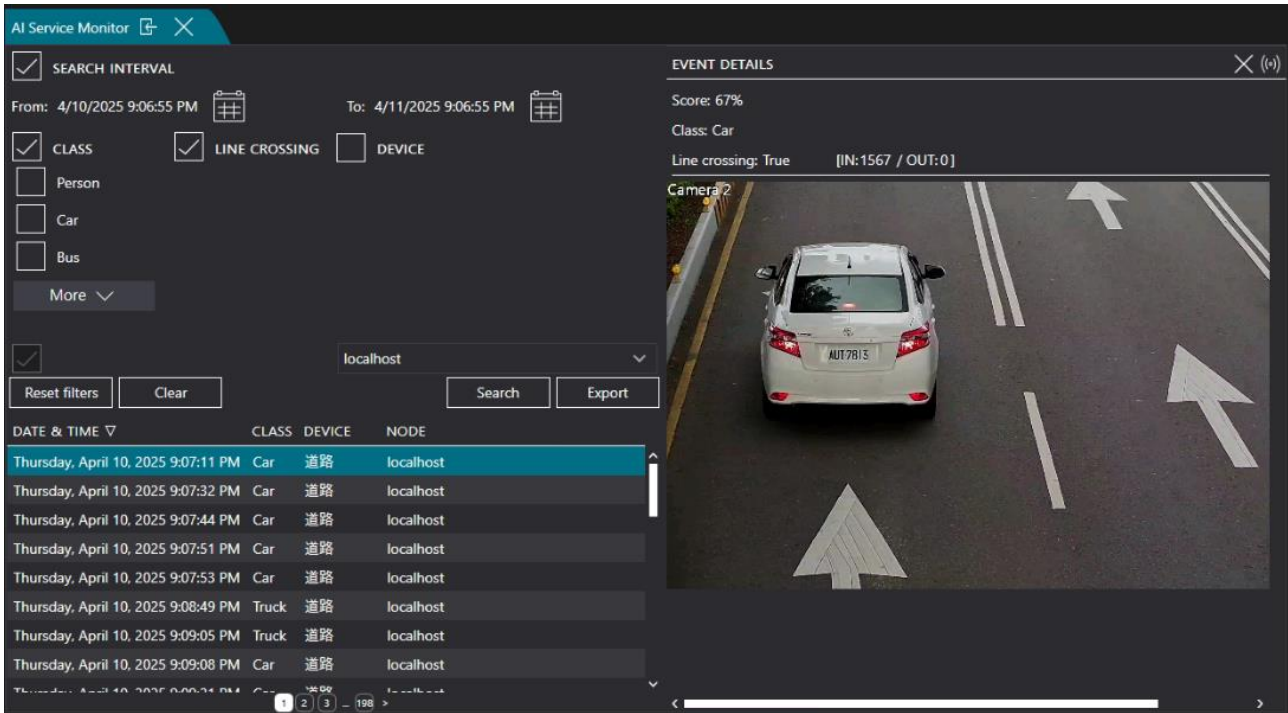
Note: by default, AI service is in real-time mode.

Option	Description
	Click [History Search] to browse historical data.
	Click [Playback] to quickly review the video footage of the selected event.
Display latest data	Automatically update to the latest record.
Pause	Temporarily stop updating records.
Clear all	Clear all real-time records (these records can still be found in the search records).



15.2 Go to archive

Users can filter search results and click on an event to view its details and related screenshots.



Option	Description
Time interval	Filter based on the set time interval.
Type	Filter based on AI service type. Type: person/ car / bus / truck / motorcycle / bicycle / fire / smoke
Device	Filter based on device.
Node	Filter by the node where the record device is located.



15.3 Export AI services records

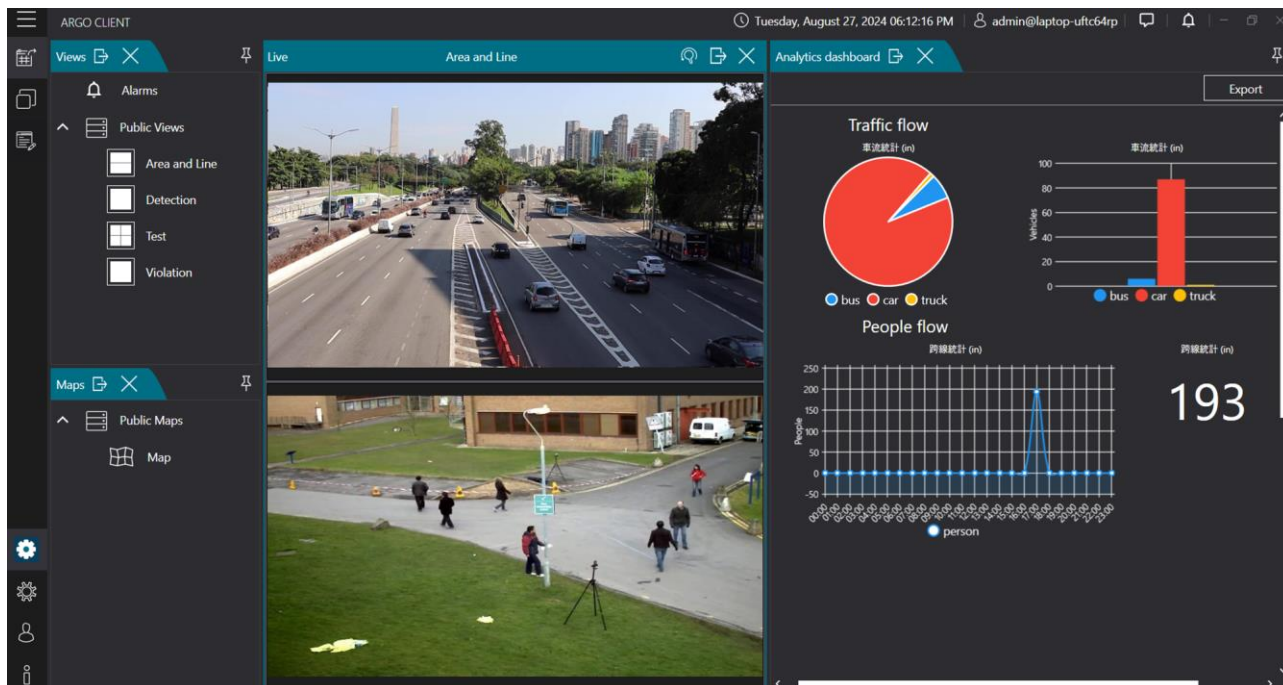
The screenshot shows the 'AI Service Monitor' interface. At the top, there is a title bar with 'AI Service Monitor' and window control icons. Below the title bar, there is a 'SEARCH INTERVAL' section with a checked checkbox. The search interval is set from '5/13/2024 11:30:23 AM' to '6/12/2024 11:30:23 AM'. There are two columns of filters. The left column has a checked 'Edit date and time' checkbox and three unchecked checkboxes for 'person', 'car', and 'bus'. The right column has a checked 'DEVICE' checkbox and three unchecked checkboxes for 'Camera 2_1.118 - videoinput 0', 'Camera 4_1.120 - videoinput 0', and 'Camera 3_1.119 - videoinput 0'. Below the filters, there are 'Reset filters' and 'Clear' buttons on the left, and a search input field containing 'desktop-6kbn55a' with 'Search' and 'Export' buttons on the right. The 'Export' button is highlighted with a red box and a red arrow pointing down to it. At the bottom, there is a table header with columns: 'DATE & TIME', 'DEVICE', 'CLASS', and 'NODE'.

- Click **[Export]** to export the AI services record

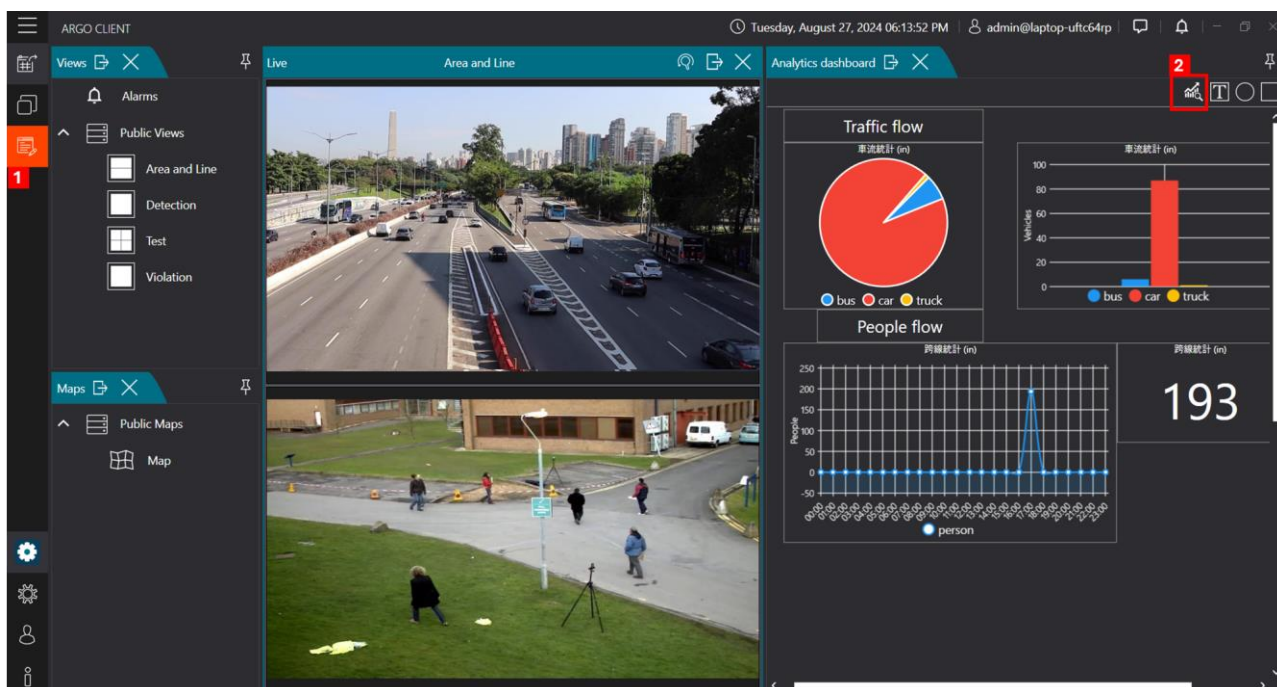


16. ANALYTICS DASHBOARD

Using cross-line counting via Sen Cam cameras or Spark AI devices, the system provides analytical reports. It is mainly used for vehicle and people flow counting, with results visualized in intuitive charts and graphs.



16.1 Add analytics dashboard



Step1: In the Config settings, ensure that Spark AI device setup is completed.





Note: The analytics chart function currently supports only object cross-line detection.

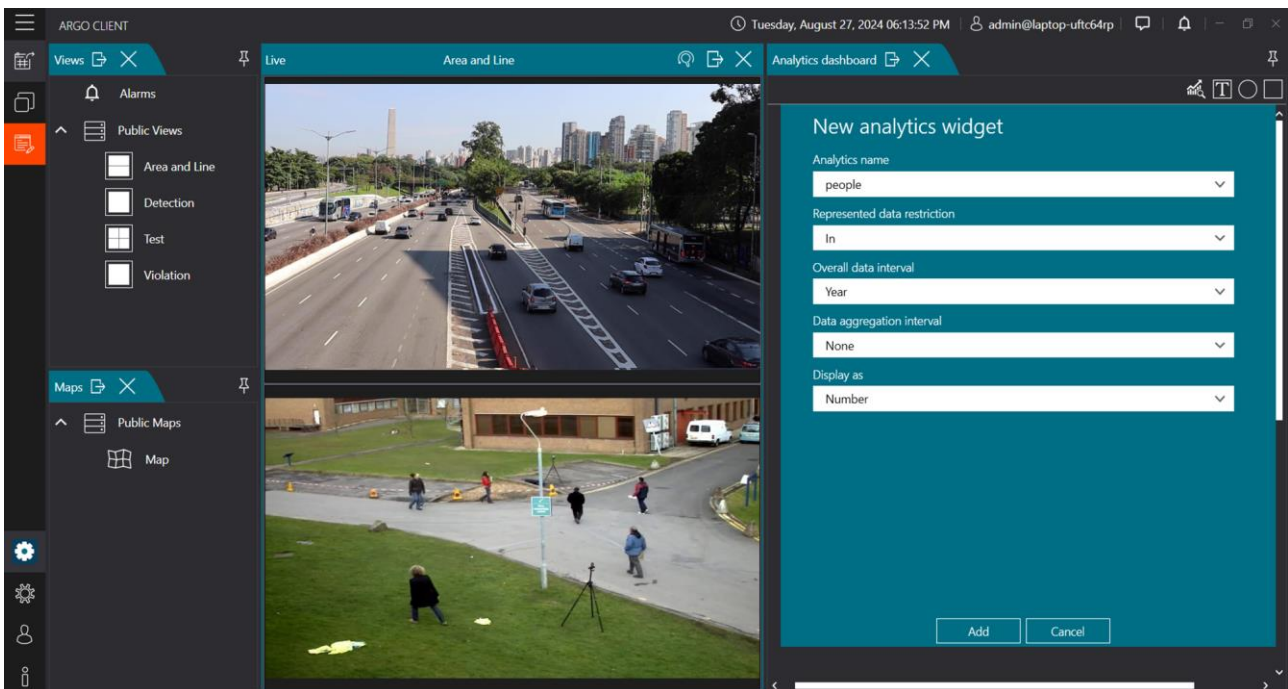


Step2: Make sure the analytics data settings have been configured in Config. Once completed, the analytics report feature will be available.

Step3: On the Client side, open the Analytics Report menu:

- Click **Edit Mode**
- Click **Add Video Analytics Widget**
- After configuration, draw the area where you want the chart to appear. The related statistics will be displayed accordingly.

	New analytics widget (refer to the following steps)		Add circle object
	Add new text object		Add rectangle object



- Click [**window icon**] and select [**Analytics dashboard**]
- Click [**Add new text object**]
- Analytics name: insert name
- Scene: select preconfigured scene
- Display data conditions: select counting conditions of the image analytics component.
Counting conditions type: in / out / in plus out / in minus out / out minus in
- Total data interval: select the time frequency of the total data of image analytics data
Time frequency: year / month / week / day / hour



- Data accumulation interval: select the time frequency of data accumulation for image analytics data.

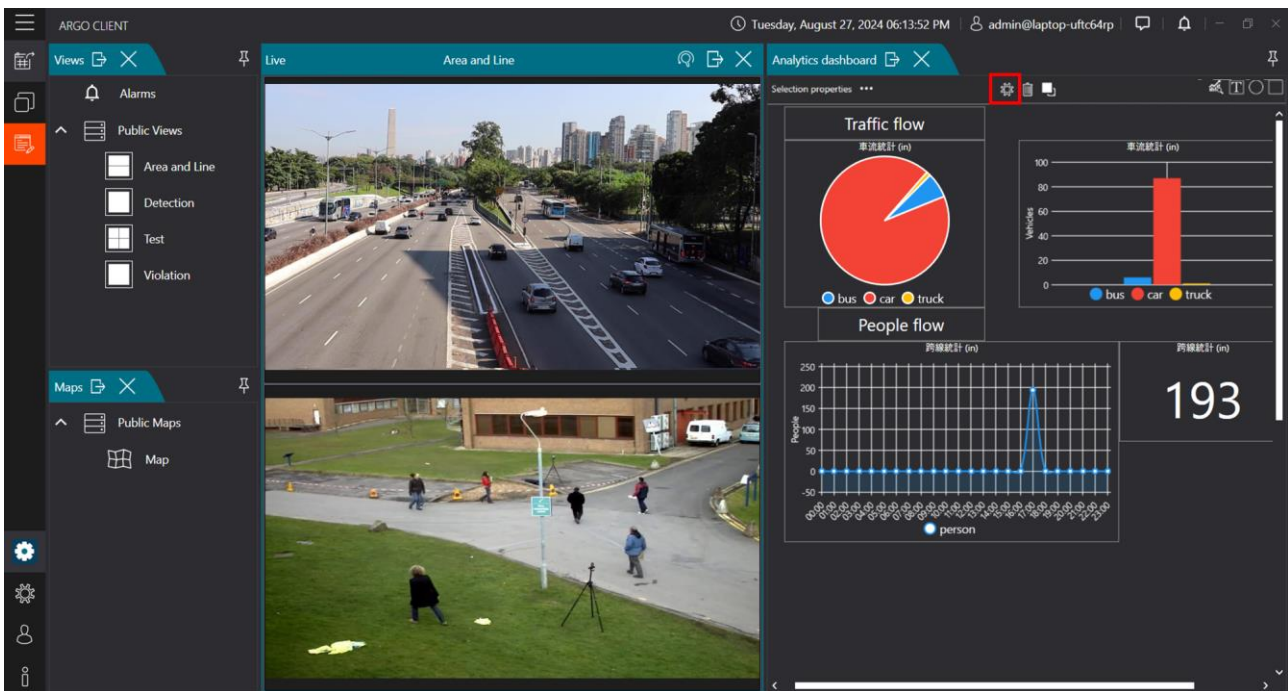
Time frequency: none / month

- Display as: select how the analytics component is displayed

Display type: number / bar chart / line chart / horizontal bar chart / pie chart

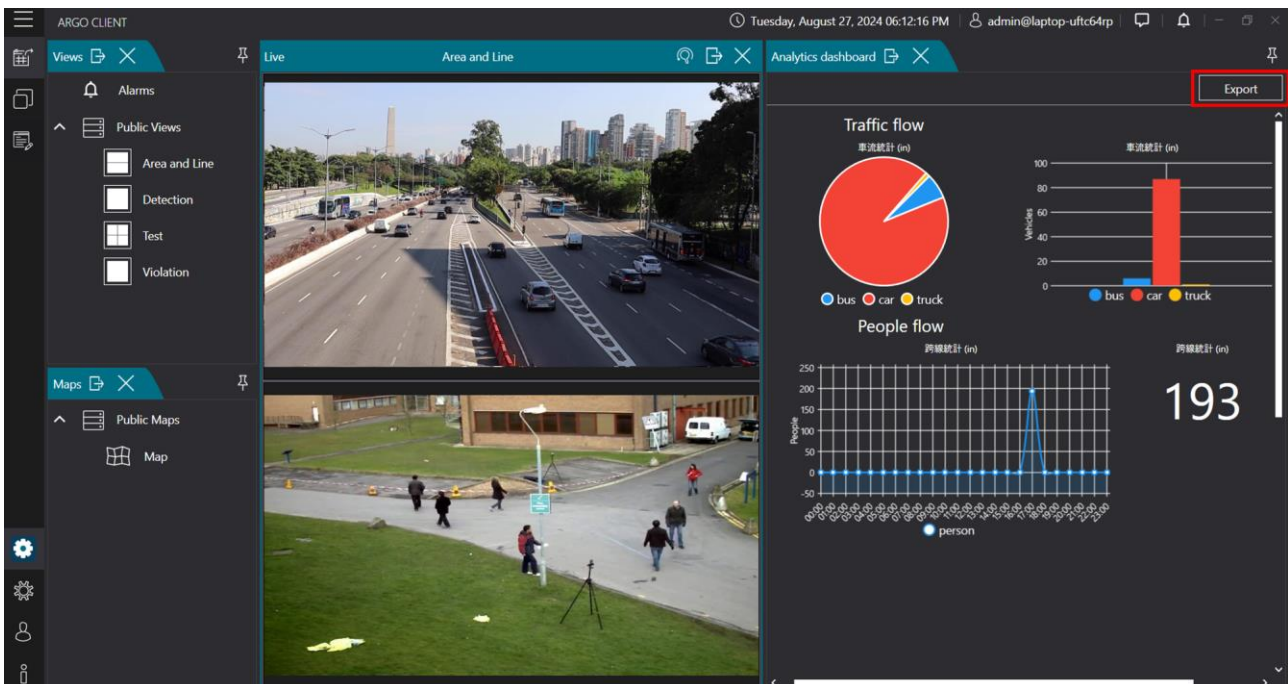


16.2 Edit analytics dashboard



- Click **[window icon]** and select **[Analytics dashboard]**
- Click the **[edit icon]**. The icon turns orange in edit mode.
- Click the **[settings icon]** above to edit

16.3 Export analytics dashboard



- Click **[window icon]** and select **[Analytics dashboard]**
- Click the **[export]**



17. ADVANCED INSIGHT REPORT

Data can be collected via Sen Cam cameras or Spark AI devices, and visualized through analytical reports. This feature supports a range of applications, including crowd analysis, people flow (unique and repeated visitors), age and gender demographics, vehicle type, and traffic flow—all presented through intuitive visual charts.

17.1 Add a New Analytics Chart

The screenshot shows the 'Add new analytics widget' configuration screen. The interface is dark-themed. At the top, there's a title bar with 'Advanced Insight Report' and a close button. Below the title bar, there are icons for analytics, text, and a square. The main area is titled 'Add new analytics widget' and contains several configuration options:

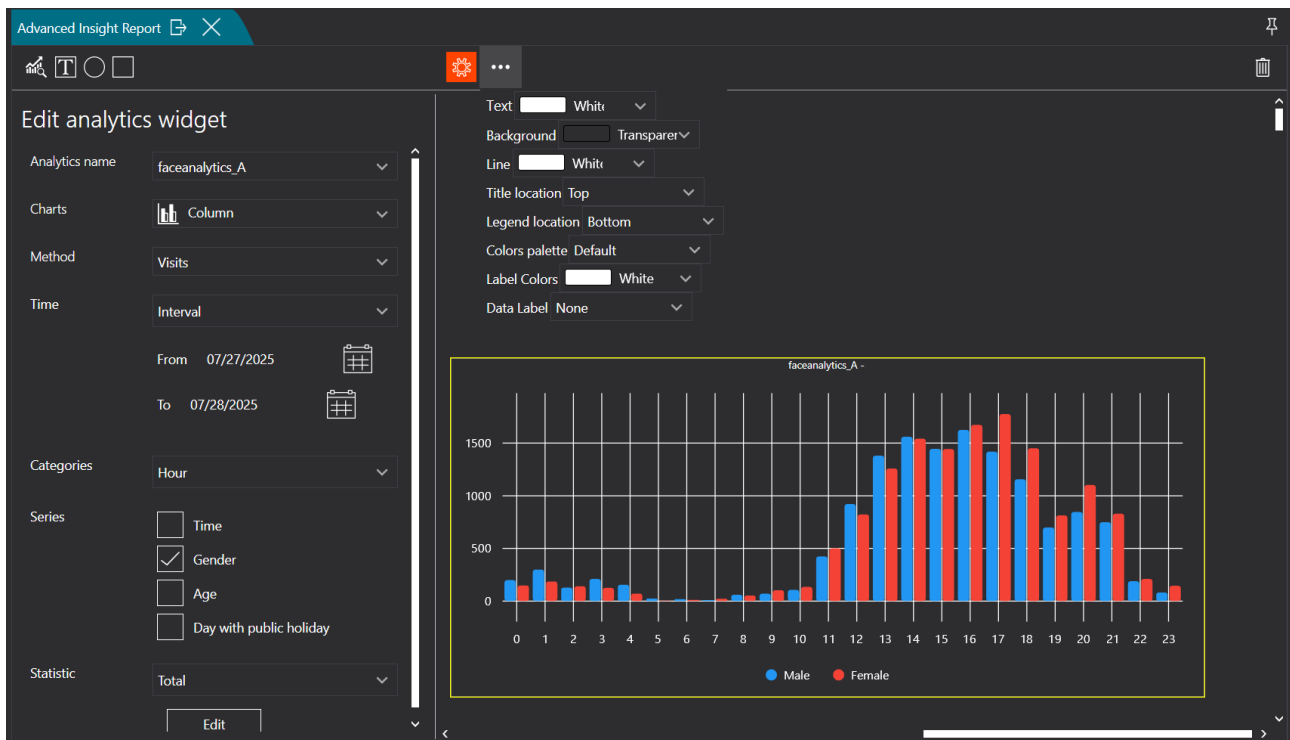
- Analytics name:** A dropdown menu with 'faceanalytics_all_area' selected.
- Charts:** A dropdown menu with 'StackedColumn' selected.
- Method:** A dropdown menu with 'Visits' selected.
- Time:** A dropdown menu with 'Interval' selected.
- From:** A date picker showing '07/28/2025'.
- To:** A date picker showing '07/29/2025'.
- Categories:** A dropdown menu with 'Hour' selected.
- Series:** A list of checkboxes: 'Time' (checked), 'Gender', 'Age', and 'Day with public holiday' (unchecked).
- Statistic:** A dropdown menu with 'Total' selected.
- Search:** A text input field.

- Click the Window icon and check **[Advanced Insight Report]**.
- Click New Image Analysis Widget to add a new chart.
- Analysis Name : Enter a custom name for the analysis widget.
- Chart Type : Choose the preferred chart display format: Number / Column / Stacked Column / Stacked Area / Pie / Curved line / Grouped and Stacked Bar / Curved Area
- Date Range : Select the timeframe for the data:
 - Specific : Choose multiple non-consecutive dates.
 - Interval : Choose a continuous date range.
- Category (Y-axis) : Select the vertical data category:
 - Year / Month / Week / Day / Hour / Weekday / Age
- Legend (X-axis) : Select different group items:
 - Time: No category distinction; statistics shown by time

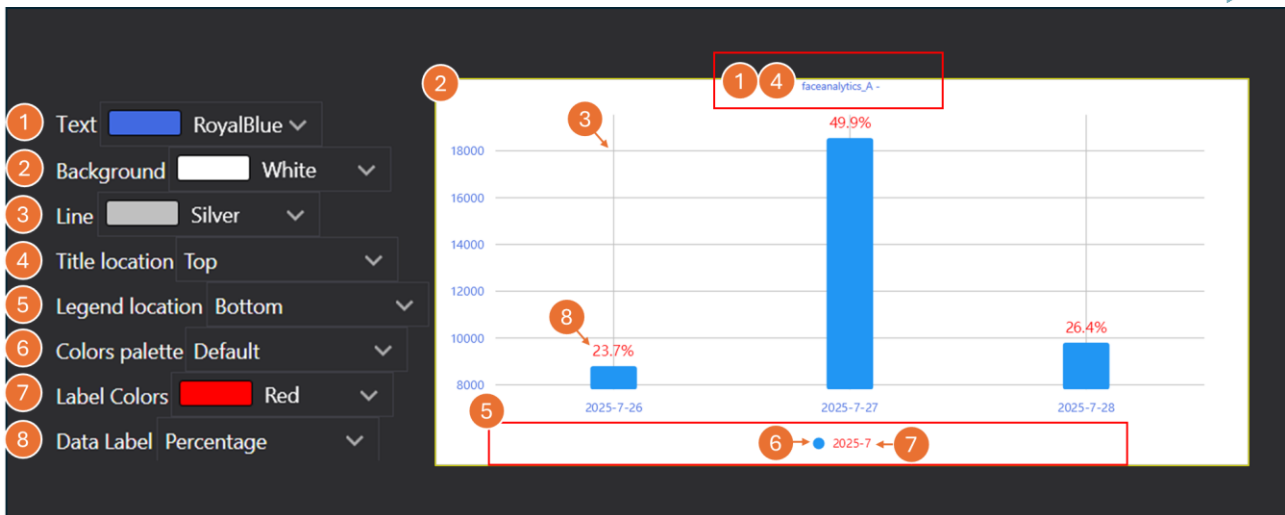


- Gender : Male, Female
 - Age : Grouped as 0–14, 15–24, 25–34, 35–44, 45–54, 55–64, 65+
 - Weekday/Holiday (including public holidays) : Weekday or Holiday. Users can define specific dates as either.
- Value: Method of data calculation:
- Minute Sum : Sum of all FPS values within 1 minute
 - Minute Max : Maximum FPS value recorded within 1 minute
 - Minute Avg : Average FPS value calculated from all frames within 1 minute
- Statistics Type : Choose to display the result as average or sum

17.2 Edit an Analytics Chart

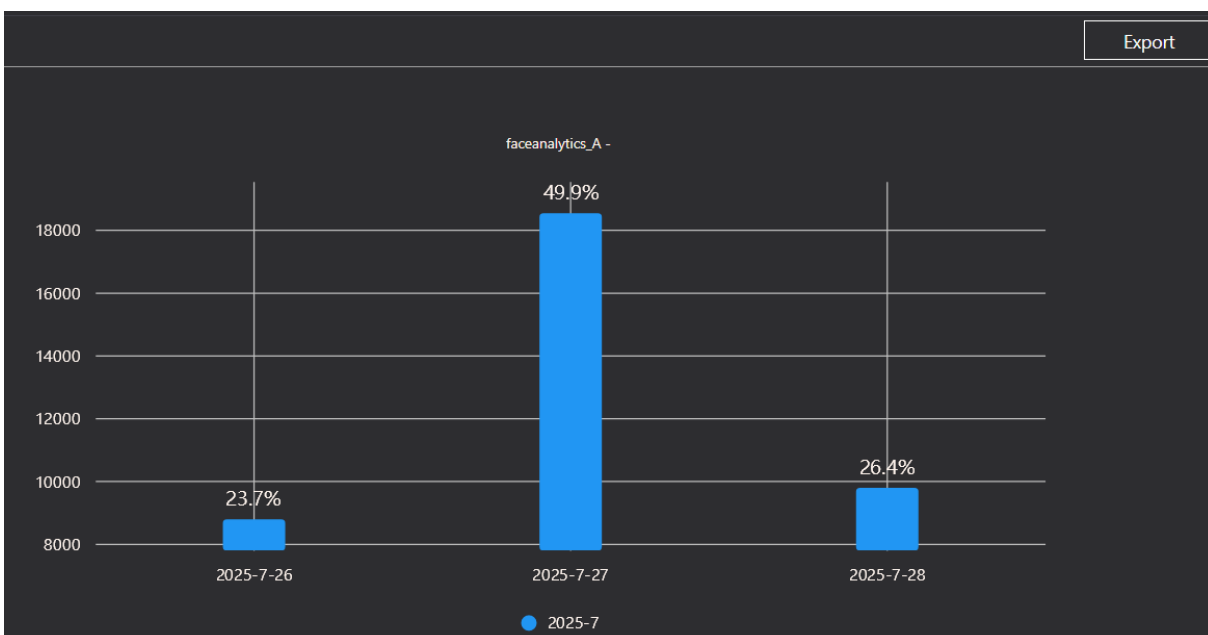


- Edit Data Settings : Click to modify the data parameters.
- Edit Chart Style : Click to change the chart layout, colors, and legend styles.



- Text : Title text color
- Background : Chart background color
- Line : Border lines of chart values
- Title location : Options include None / Top / Bottom
- Legend location : Options include None / Top / Bottom / Left / Right
- Color Palette : Colorful (default) / Morandi tones / Grayscale / Yellow tone / Green tone / Pink tone / Red tone / Sky blue tone / Blue tone
- Label Colors : Legend label text color
- Data Label : None / Percentage / Value / Value and Percentage


17.3 Export Analytics Charts

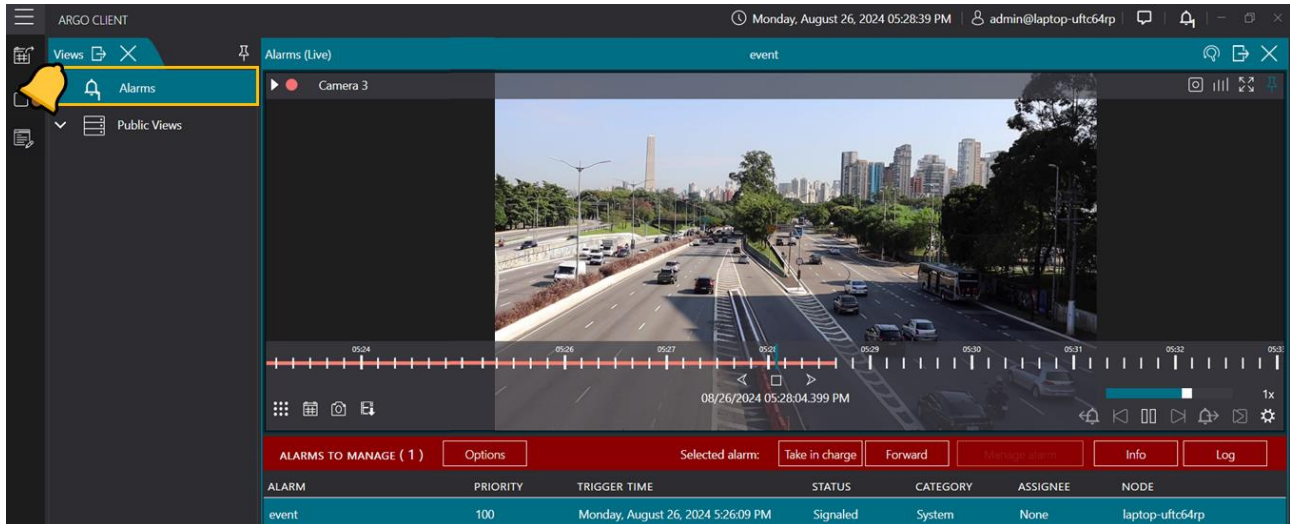


- Click the Window icon and check Advanced Analytics Report.
- Click Export to download the chart.



18. ALARM

This feature allows triggered events to be set as alarms, displaying a  notification to alert the user. It also enables users to search for related alarm events, manage alarms, or mark them as resolved.



- When an alarm is triggered, the alarm icon and the device on Maps will turn red.
- Click **[alarm icon on Alarm]** or **[red warning on Maps]** to enter alarm management page
- Alarm (real-time) page allows viewing of alarm-related information that has not yet been dealt with.

Alarm-related information includes: alarm name / priority / trigger time / status / list / assigned person / node.

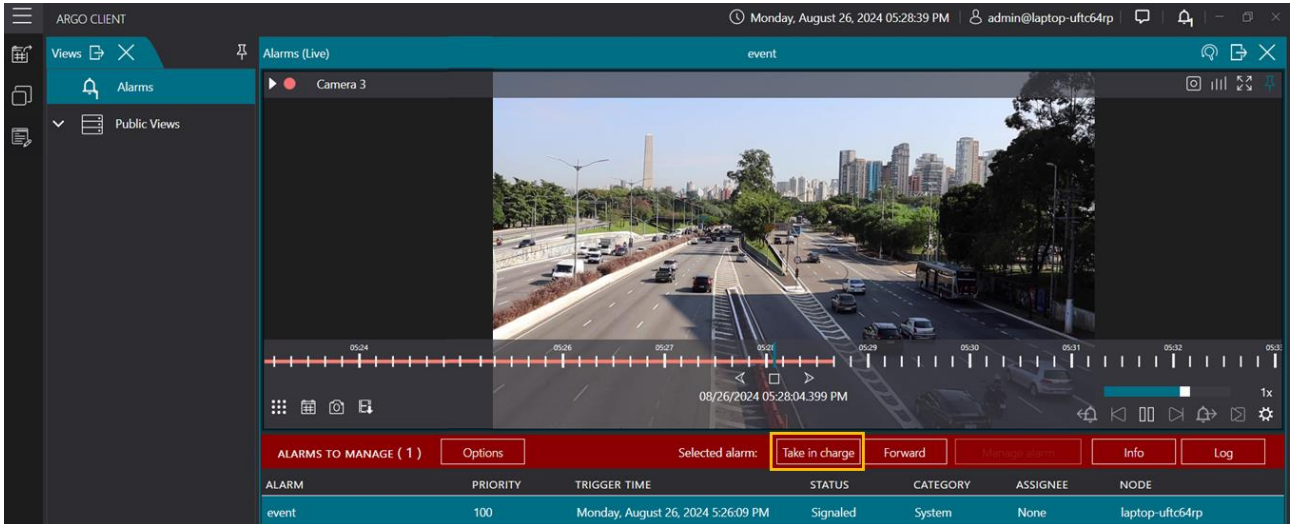
Note: Users need to configure related devices in Argo config event and alarm settings to display the related devices when an alarm is triggered.



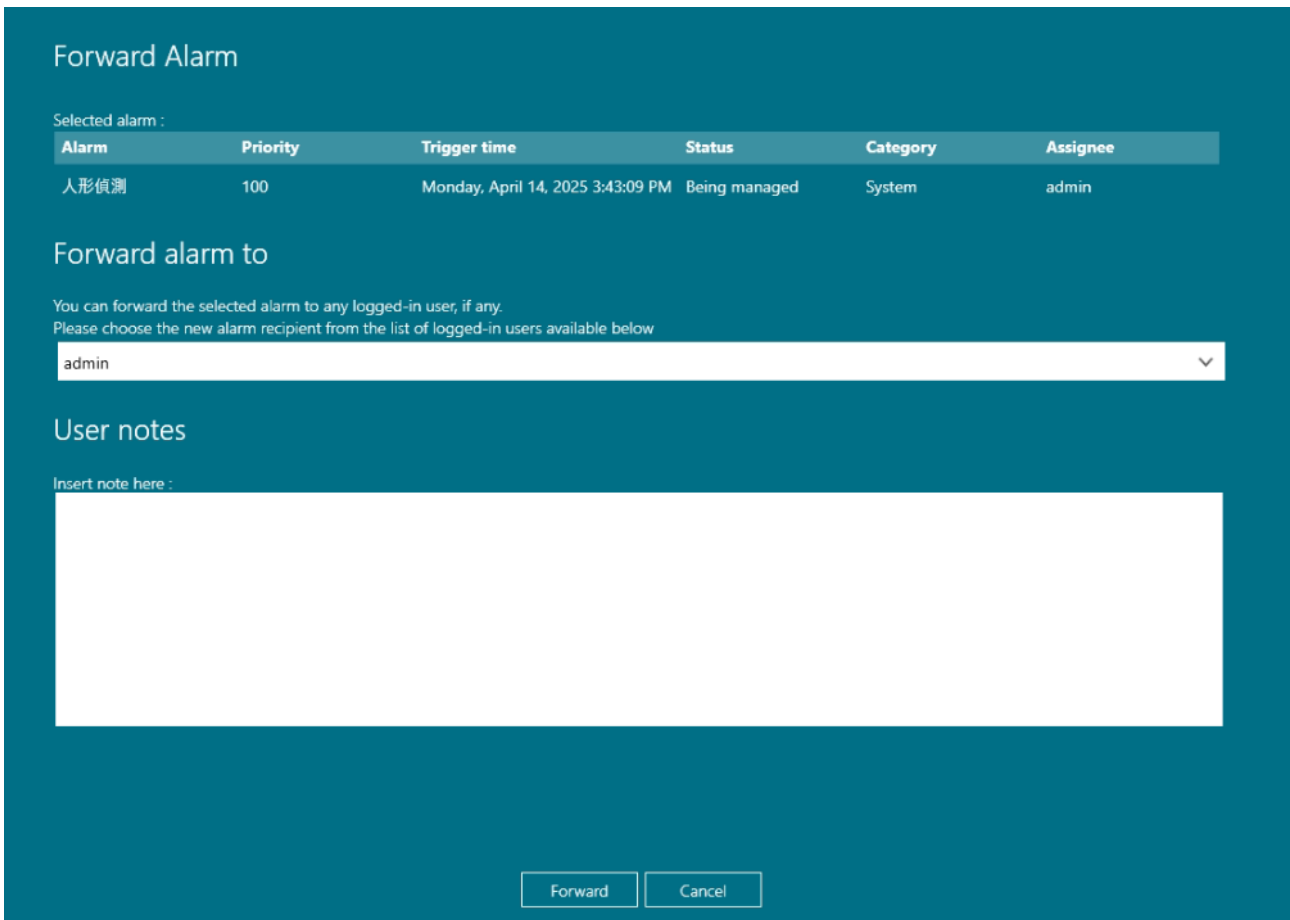
18.1 Manage alarm

Step1: Take in charge

- A. The user or group responsible for handling the alarm can click **[Take in charge]** to manage the alarm.



- B. Click **[Forward]** to assign the alarm to another user or group for handling.



- **Forward alarm Details:** Displays the selected alarm information, including alarm name, priority, trigger time, status, category, and assignee.



- **Forward alarm To:** Forward the selected alarm to an online user. Please select a recipient from the user list below.
- **User Notes:** Enter any relevant notes regarding the forwarded alarm.

Step2: After clicking "Manage Alarms", follow the procedures defined by the administrator to close the alarm

Close alarm

Selected alarm :

Alarm	Priority	Trigger time	Status	Category	Assignee
櫃台有人	100	Monday, April 14, 2025 3:45:31 PM	Being managed	System	admin

Closure type :
Acknowledge

Acknowledge procedure

Please follow the procedure indicated below then press the Ack button :

Step description	Step succeeded	Step failed
Step1. Alarm Notification	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Step2. On-site Support	<input type="checkbox"/>	<input checked="" type="checkbox"/>

User notes

Insert note here :

OK Cancel

- Click [**Manage alarm**] to close the alarm according to the procedure after the alarm ends.
- Close alarm: displays selected alarm information, such as alarm name / priority / trigger time / status / list / assigned person.
- Close alarm type: select the type of closing the alarm - close / false alarm / forced close.
Close: acknowledge this alarm, the alarm is valid.
False alarm: this alarm is a false alarm.
- Forced close: forcefully close this alarm.
- Closing Procedure: Follow the steps to check the successful or failed steps.
- User note: notes related to managing the alarm can be entered here.



18.2 Information / Log

A. Information

Alarm 人形偵測 info

Signaled time: Monday, April 14, 2025 3:46:08 PM

Status: Being managed

Assignee: admin

Trigger: Undefined

Category: System

Assigned by: admin

Alarm receiver server	Host name	Name	Description
IP Address			
220.129.138.133	laptop-ufc64p	Argo Client	
116.241.229.253	desktop-k3ktl8n	Argo Client	

Executed actions	Description
record	Recording: 大門 - videostream 0

ALARMS TO MANAGE (1) Take in charge Forward Manage alarm Info Log Options

PRIORITY	TRIGGER TIME	STATUS	CATEGORY	ASSIGNEE	NODE
100	Monday, April 14, 2025 3:46:08 PM	Being managed	System	admin	desktop-k3ktl8n

- Click **[Information]** to browse the selected alarm information: trigger time / status / list / assignee / assigned person / trigger type / alarm receiving server / related devices / actions executed

B. Log

Alarm log

Selected alarm

Alarm	Priority	Trigger time	Status	Category	Assignee
人形偵測	100	Monday, April 14, 2025 3:46:08 PM	Being managed	System	admin

Date & Time	Status	Operator	Assignee	User notes
Monday, April 14, 2025 3:46:08 PM	Signaled	None	None	
Monday, April 14, 2025 4:25:25 PM	Assigned	admin	admin	Self assignment
Monday, April 14, 2025 4:25:25 PM	Being managed	admin	admin	

Date & Time	Status	Source
Monday, April 14, 2025 3:46:08 PM	On	人形偵測
Monday, April 14, 2025 3:46:09 PM	Off	人形偵測
Monday, April 14, 2025 3:46:12 PM	On	人形偵測
Monday, April 14, 2025 3:46:13 PM	Off	人形偵測
Monday, April 14, 2025 3:53:25 PM	On	人形偵測
Monday, April 14, 2025 4:25:25 PM	Off	人形偵測


ALARMS TO MANAGE (1) Take in charge Forward Manage alarm Info Log Options

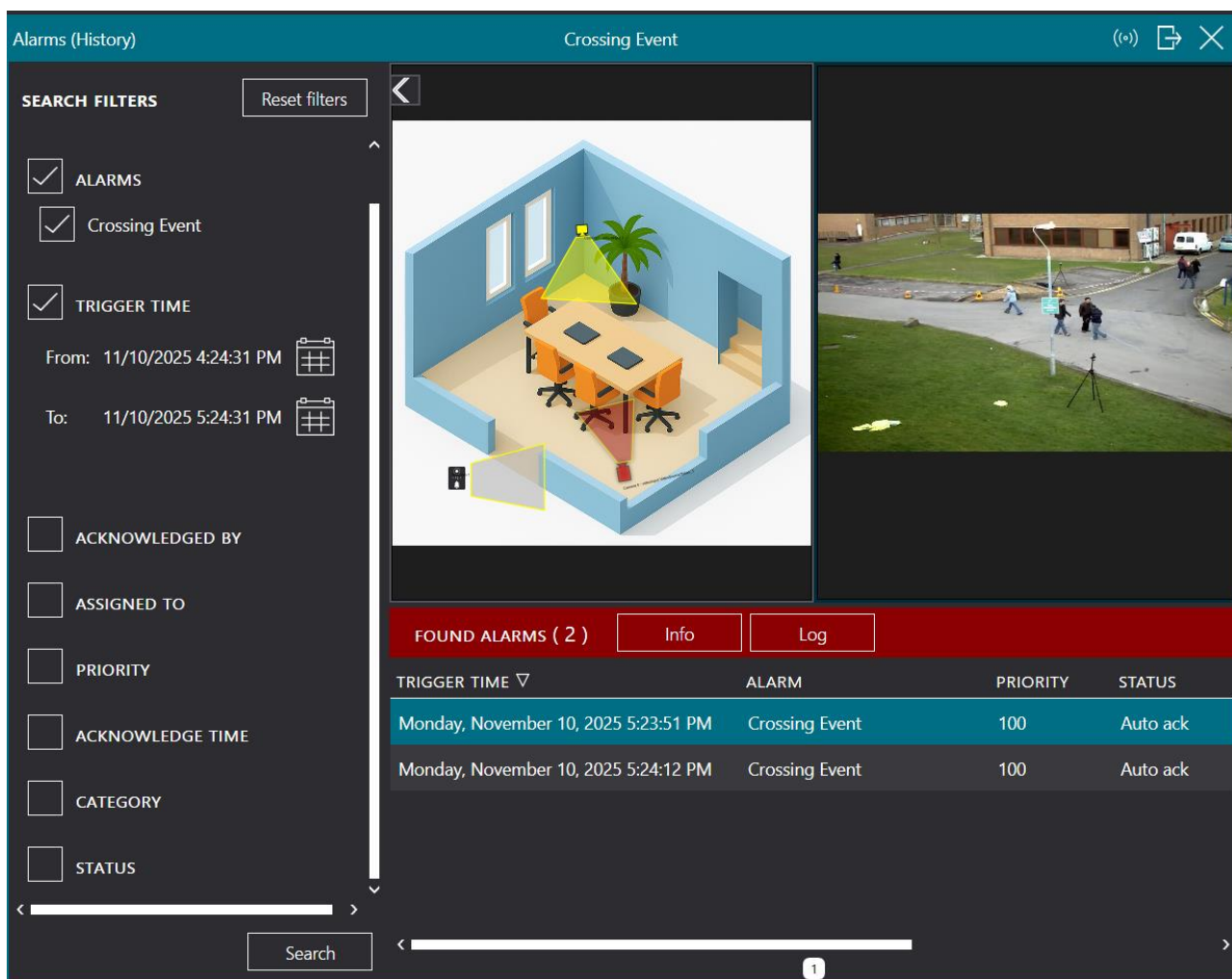
PRIORITY	TRIGGER TIME	STATUS	CATEGORY	ASSIGNEE	NODE
100	Monday, April 14, 2025 3:46:08 PM	Being managed	System	admin	desktop-k3ktl8n

- Click **[logs]** to browse the selected alarm logs: selected alarm / logs / related events



18.3 Search alarms

Access the Alarm Records by clicking the  alarm window. Search by alarms, trigger time, acknowledged by, assigned to, priority, category, and status.



The screenshot displays the 'Alarms (History)' window with the following components:

- SEARCH FILTERS:** A sidebar on the left with a 'Reset filters' button and various filter categories, each with a checkbox:
 - ALARMS
 - Crossing Event
 - TRIGGER TIME
 - From: 11/10/2025 4:24:31 PM
 - To: 11/10/2025 5:24:31 PM
 - ACKNOWLEDGED BY
 - ASSIGNED TO
 - PRIORITY
 - ACKNOWLEDGE TIME
 - CATEGORY
 - STATUS
- Visuals:** A 3D isometric view of an office interior with a yellow cone of light and a video feed of an outdoor area with people.
- FOUND ALARMS (2):** A red header bar with 'Info' and 'Log' buttons.
- Table:** A table with columns for TRIGGER TIME, ALARM, PRIORITY, and STATUS.

TRIGGER TIME	ALARM	PRIORITY	STATUS
Monday, November 10, 2025 5:23:51 PM	Crossing Event	100	Auto ack
Monday, November 10, 2025 5:24:12 PM	Crossing Event	100	Auto ack
- Search:** A search bar at the bottom with a 'Search' button and a notification badge '1'.



18.4 Real-time alarm options

Wednesday, June 12, 2024 02:30:01 PM

Alarms (Live) 1.183 密度 (i5 PC)

→ Live alarm grid options

Stream
Playback

Playback autoplay
Off

Playback offset
Specifies how many seconds you can anticipate or posticipate the playback of recorded video streams of devices associated to alarms
Offset (sec.) - [0 - 7200]
0 + - Seconds

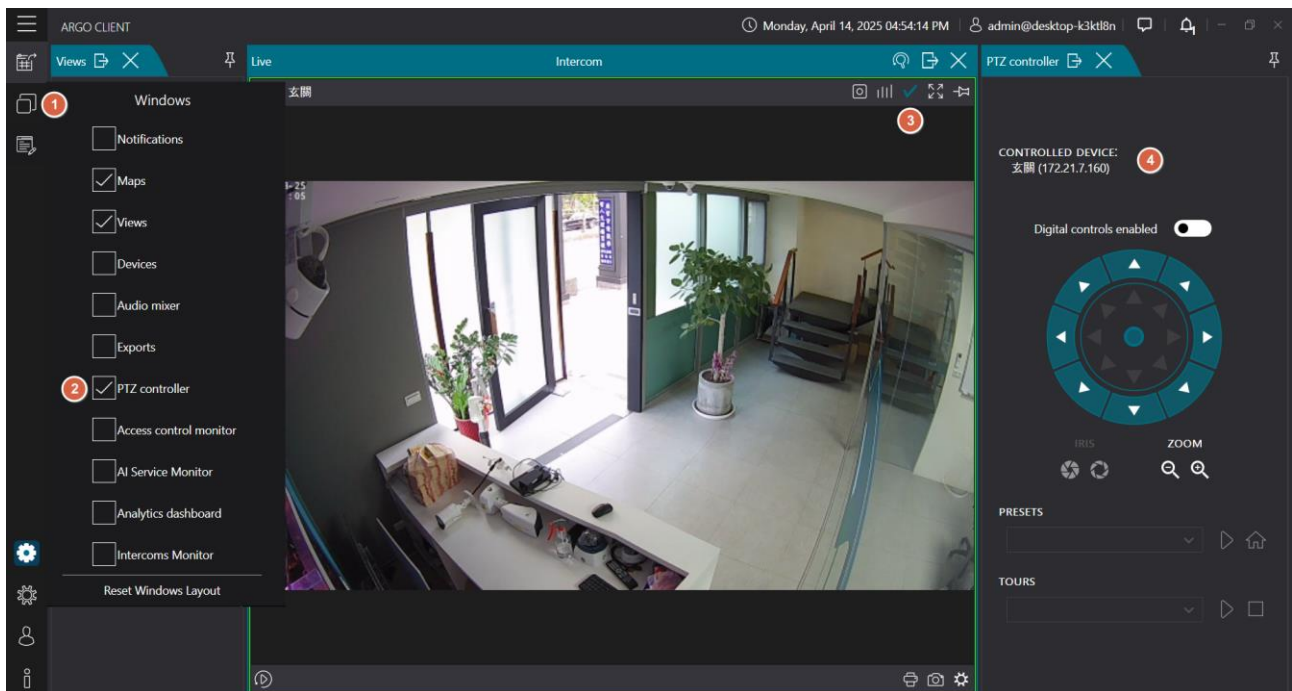
ALARMS TO MANAGE (1) Options Selected alarm: Take in charge Forward Manage alarm

TRIGGER TIME	STATUS	CATEGORY	ASSIGNEE	NODE
Wednesday, June 12, 2024 2:29:45 PM	Signaled	System	None	desktop-6kbn55a

- Click **[Options]**
- Profile: select behavior when an alarm is triggered (live view / playback / live view and playback).
- Auto playback: when enabled, automatically display playback when an alarm is triggered.
- Playback adjustment: increase or decrease the number of seconds before and after the event for specified devices related to the alarm. Range: 0 to 7200 seconds.



19. PTZ CONTROLLED

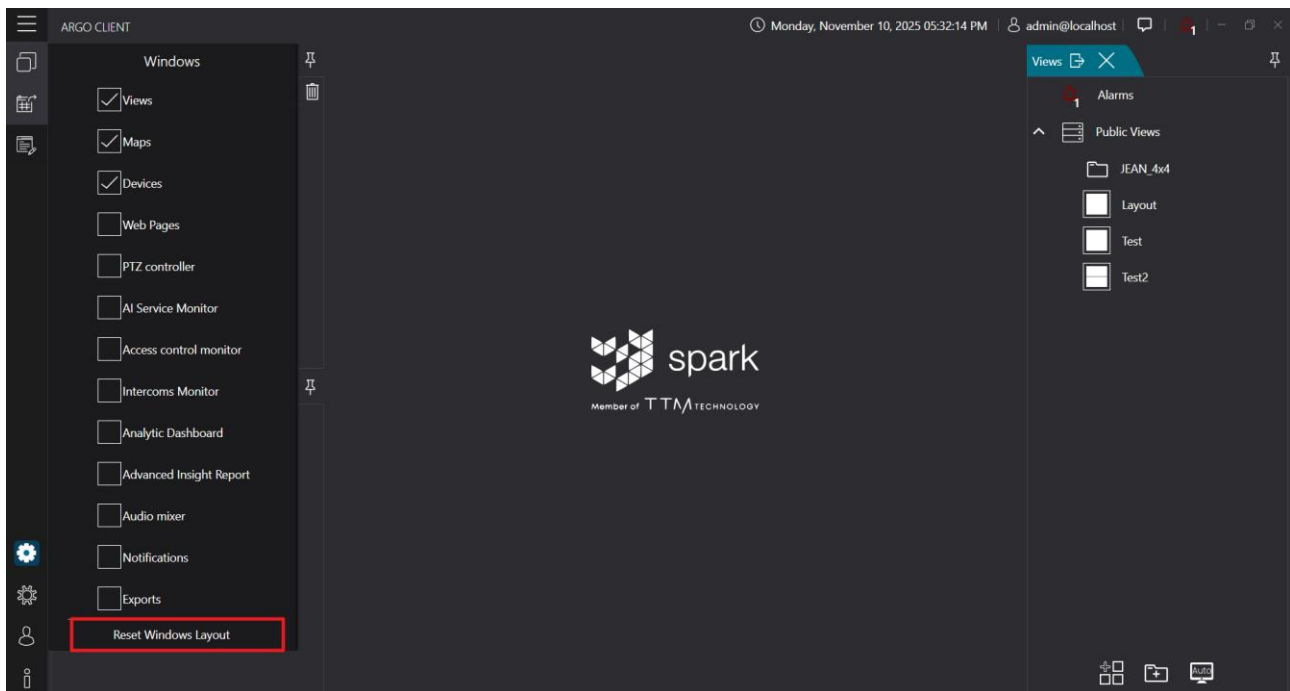


- Click the **[Window Icon]** and check **[PTZ Controlled]**.
- In the monitoring view of the desired camera, click the **[dashed box]** in the upper-right corner to select it.
- Enable Digital Control:
 - When enabled, only digital zoom is applied to the current view.
 - When disabled, only optical zoom via mouse scroll is available.
- Iris: Adjust the iris settings to prevent overexposure.
- Zoom: Adjust the zoom level of the view.
- PRESETS: Select preset positions.
- TOURS: Select a patrol route.

Note: Make sure the camera is selected and supports PTZ control; otherwise, this feature will not be available.



20. RESTORE LAYOUT

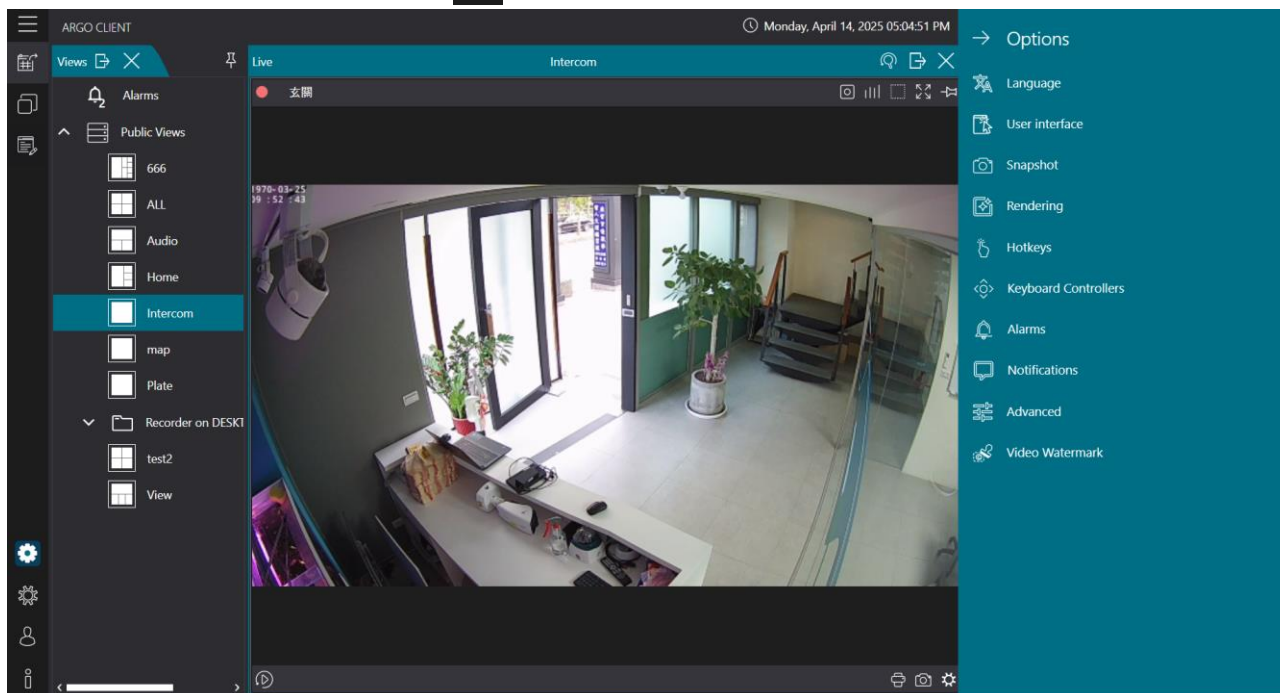


- Click [**window icon**] and select [**Restore layout**]
- Restore the layout to include Map / Screen / Devices .



21. OPTIONS

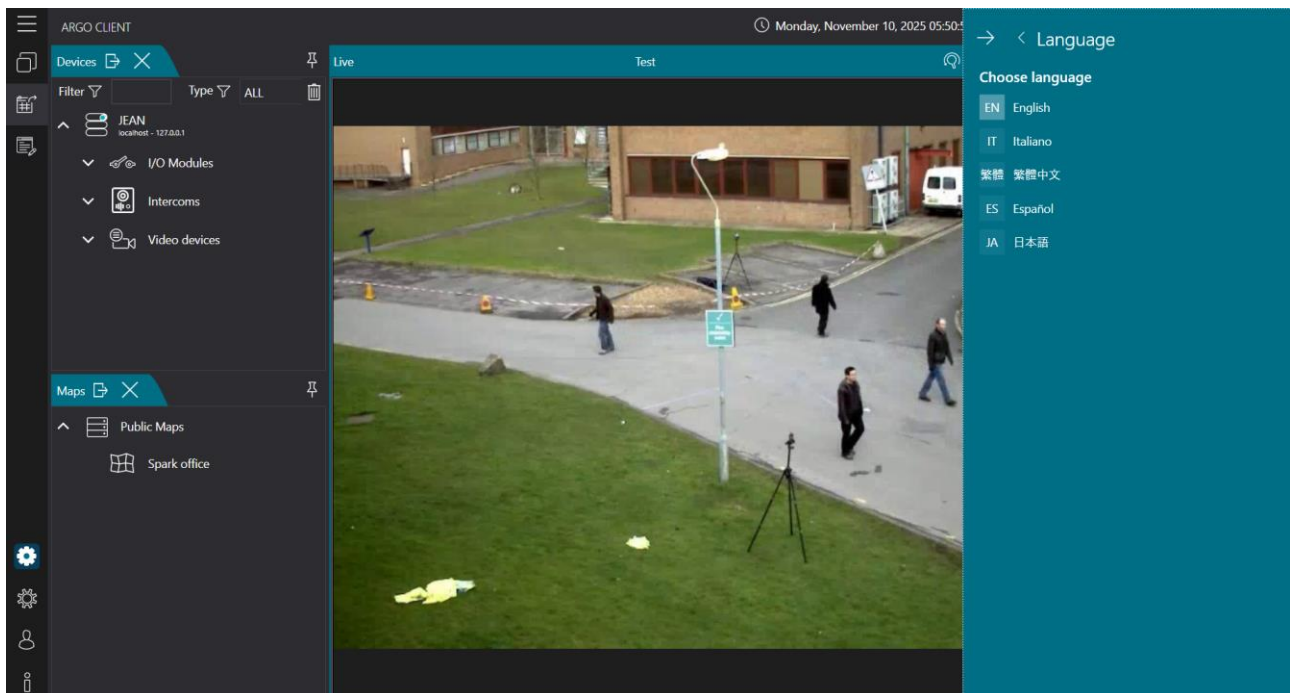
Click the bottom-left corner  to enter System Settings.



Feature	Description
Language	Set the system language.
User Interface	Configure destination connection (quick login), playback settings, etc.
Snapshot	Set snapshot configurations, including format and save location.
Rendering	Adjust screen ratio and related video settings.
Hotkeys	Enable page and function shortcut buttons
KeyboardControllers	Configure joystick-related settings.
Alarms	Set alarm-related configurations.
Notification s	Configure notification settings.
System	Set logout/shutdown options.
Video Watermark	Configure video watermark settings.



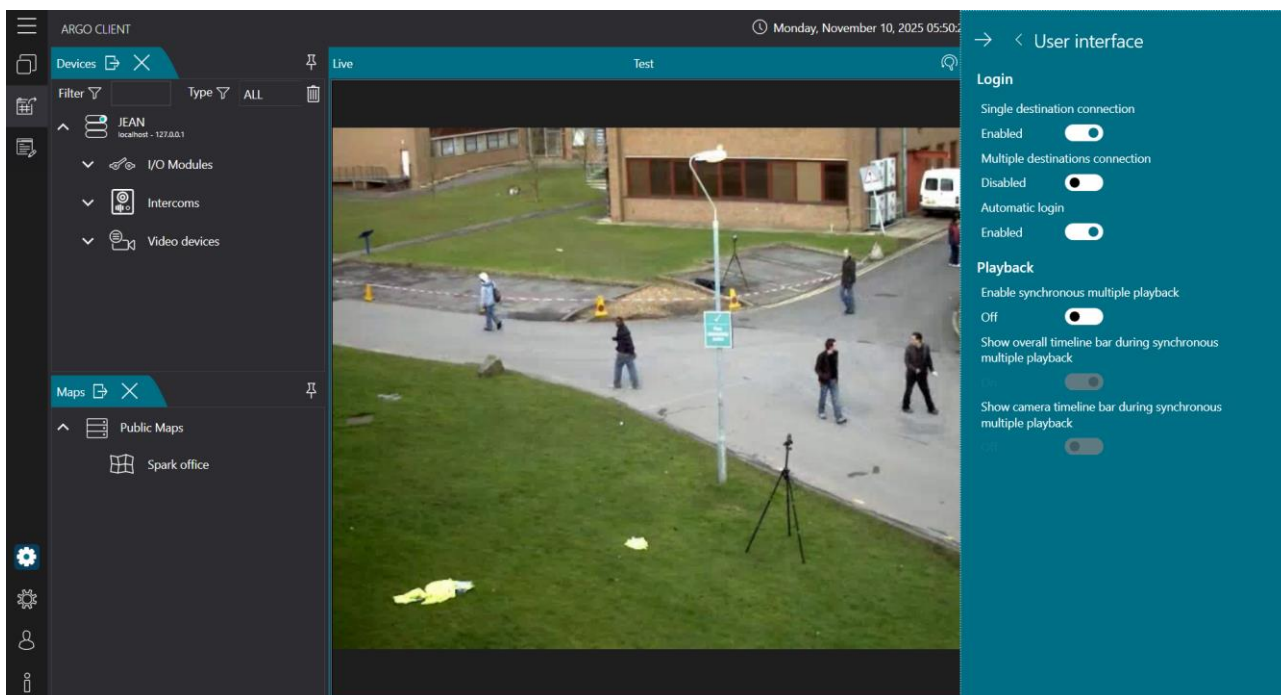
21.1 Language



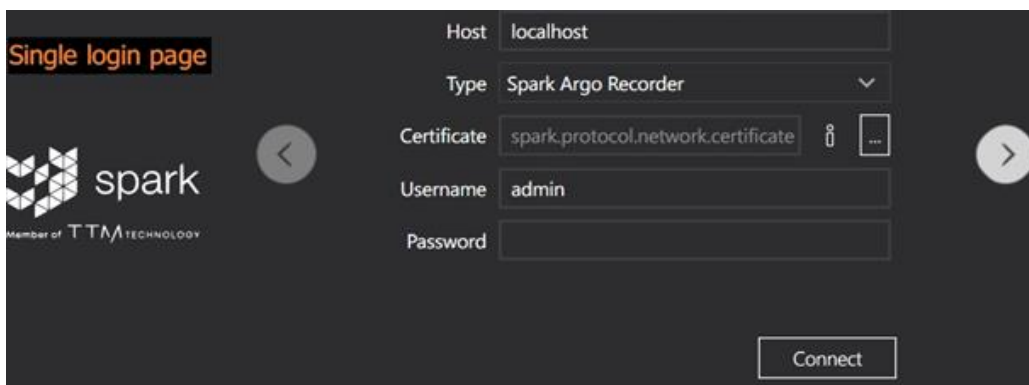
- Click the bottom left **[Options]** and select **[Language]**.
- Language options: English / Italiano / 繁體中文 / Español / 日本語



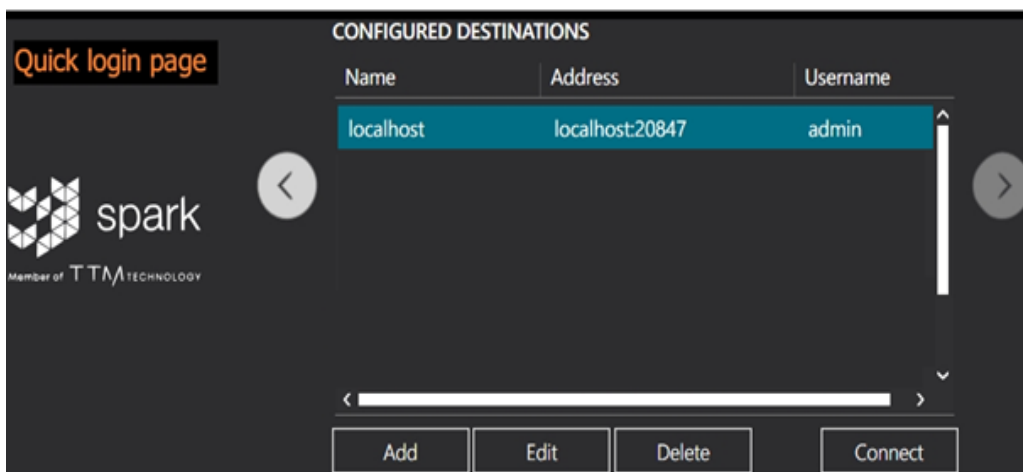
21.2 User Interface



- Click the bottom left **[Options]** and select **[Interface]**.
- Log in:
 - A. Single login page: password is required to log in.

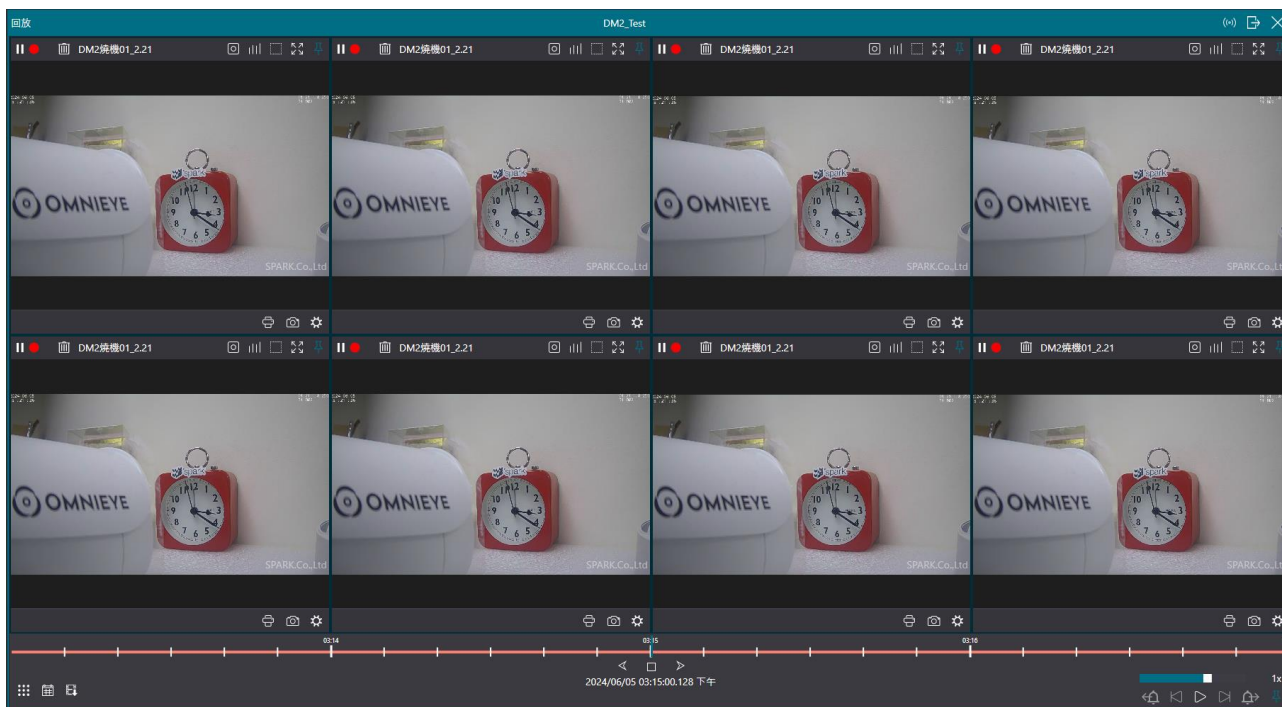


- B. Quick login page: log in without a password for direct connection.

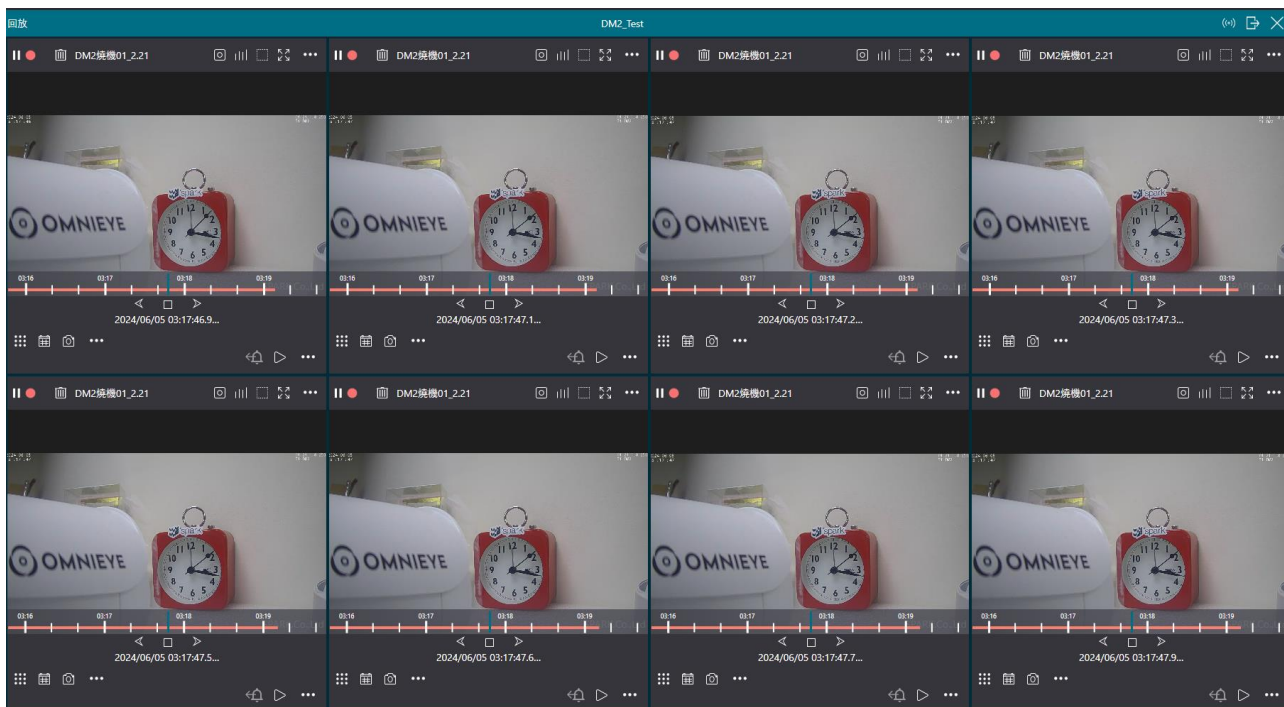




- Playback: Playback settings
 - A. Enable synchronized playback: when enabled, screens can be synchronized during playback.

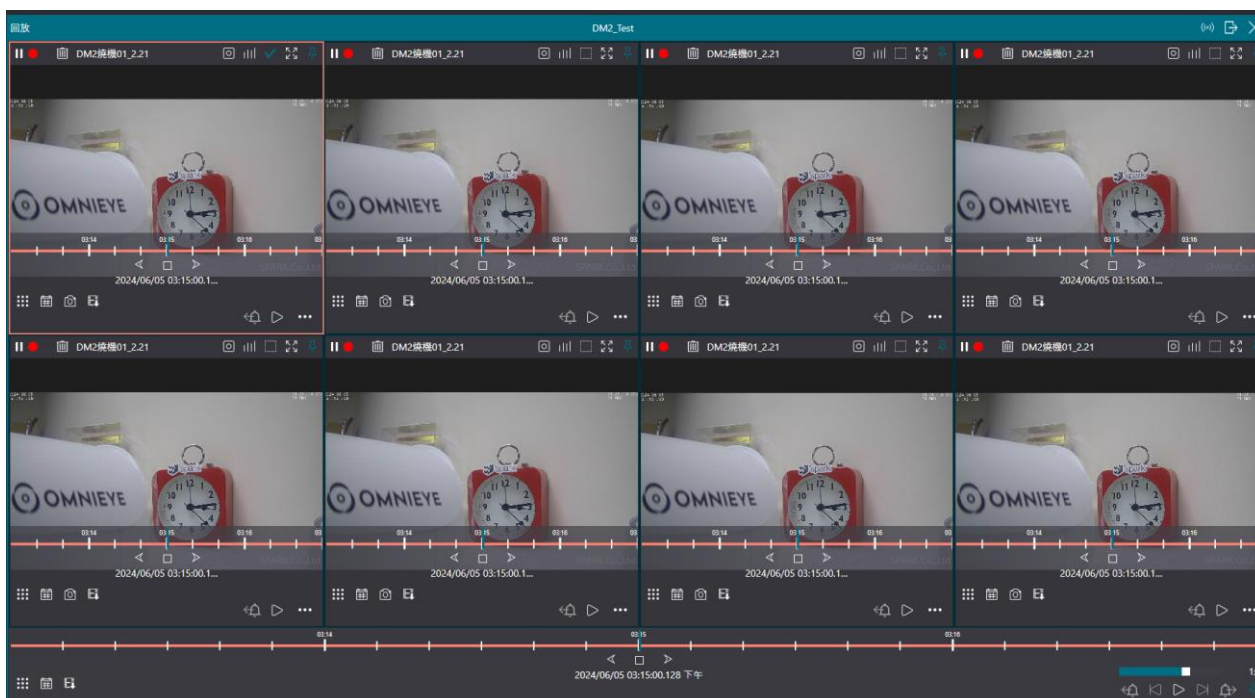


- B. Enable total timeline when multiple synchronized playback is displayed: when enabled, screen will display total timeline.



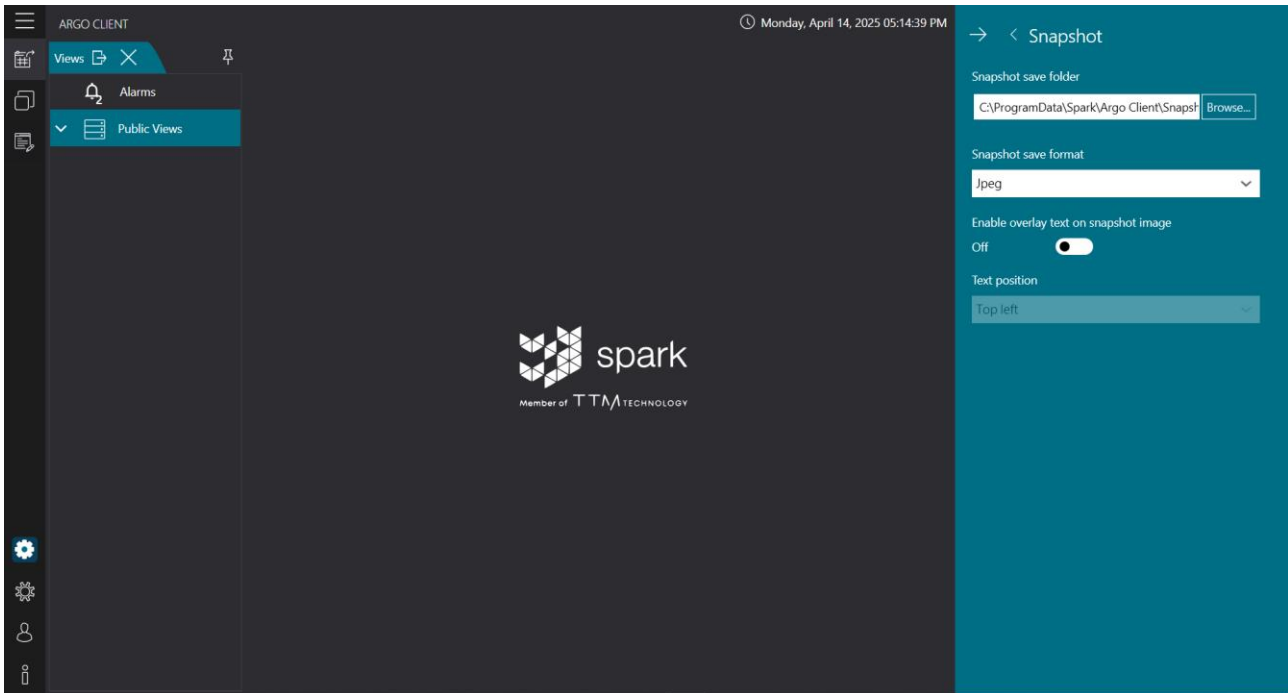


- C. Enable timeline of each device when multiple synchronized playback is displayed: when enabled, screen will display individual device timeline.





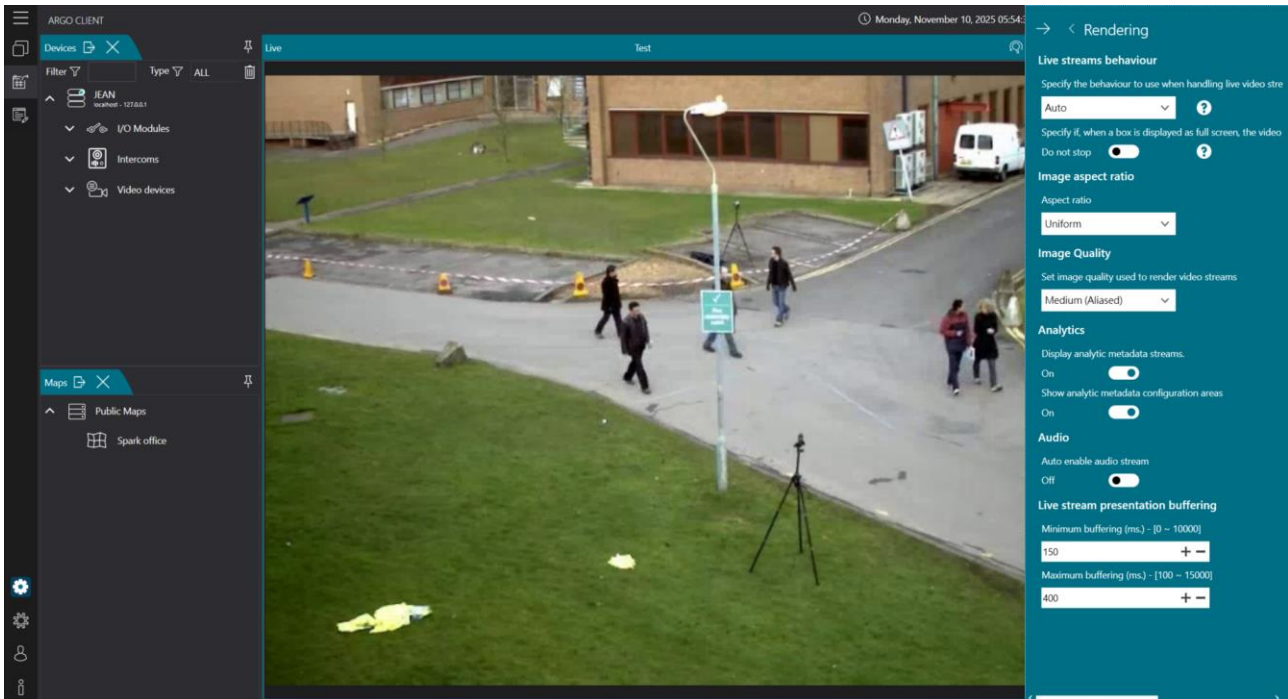
21.3 Snapshot



- Click on the bottom left **[Options]** and select **[Snapshot]**.
- Snapshot folder: select folder where snapshots will be saved.
- Snapshot format: select the format for snapshot output.
- Snapshot format: Bitmap / Jpeg / Png / Gif / Tiff / Wmp
- Enable overlay on snapshots: when enabled, overlay will be displayed on snapshots.
- Text position: select position for overlay on snapshots.



21.4 Rendering



- Click the bottom left **[Options]** and select **[Rendering]**.
- Real-time streaming behavior
 1. Specify real-time streaming behavior: can be set to auto or highest resolution

Note:

 - A. When setting the specified behavior for processing real-time streams to automatic, it typically defaults to lower resolution to reduce computer energy consumption.
 - B. The selected option will apply the following rules:
 - a. When a user opens a screen, the client will choose the lowest resolution available for the camera (excluding thumbnail streams).
 - b. When a user enters full-screen mode, the client will automatically switch to the highest resolution available for the camera.
 - c. When a user exits full-screen mode, the client will automatically switch back to the lowest resolution available for the camera (excluding thumbnail streams).
 2. Pause other channels when entering full-screen mode:
 - A. Enabled: When this feature is enabled, entering full-screen mode on one channel will pause other channels
 - B. Disabled: When this feature is disabled, entering full-screen mode on one channel will not pause other channels



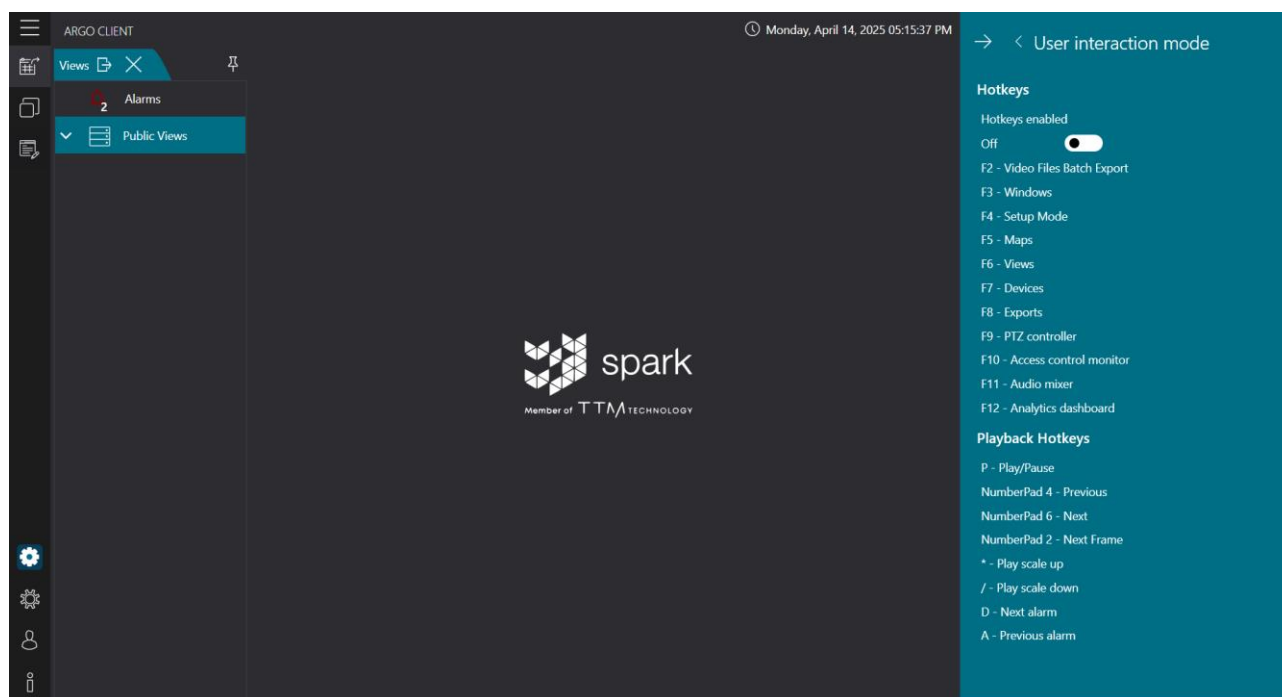
- live view aspect ratio: set aspect ratio for live view.
Aspect ratio: select between standard or full screen.
- Image quality: set image quality
Options: Low (ghosting), Medium (no ghosting), High (smooth without ghosting).
- Video analytics: set the video analytics data and detection area.
 - A. Display video analytics data when viewing a single camera: when enabled, the screen will display a red frame.
 - B. Display detection area: when enabled, the screen will display the detection area.

Note: if video analytics data is disabled, the detection area configuration will be disabled.
- Audio: set audio when viewing camera.

Automatically start audio when viewing camera: when enabled, sound will be heard when viewing camera.
- Real-time stream buffering: edit minimum and maximum buffering time.
 - A. Minimum buffer time range: 0~10000 milliseconds
 - B. Maximum buffer time range:100~15000 milliseconds
Note: for effective video analytics, pre-configuration on the camera's web interface is required.



21.5 User interaction mode

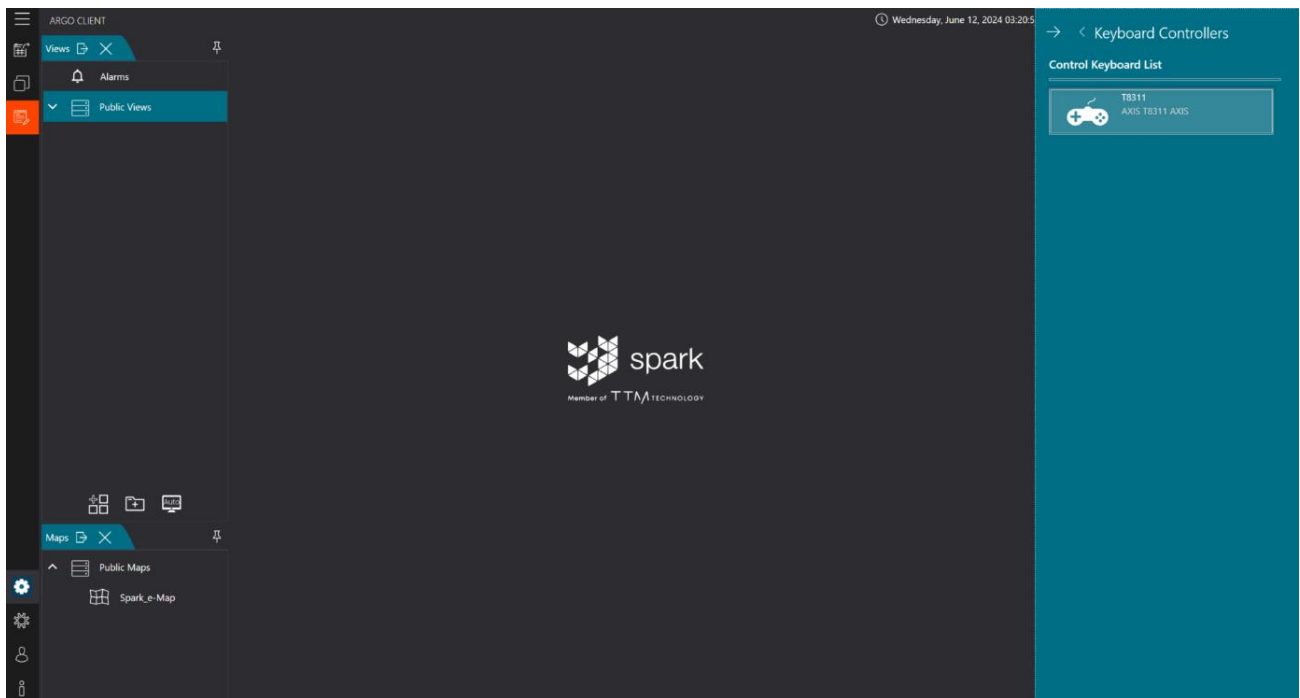


- Click the bottom left **[Options]** and select **[user interaction mode]**.
- Shortcuts: when enabled, users can use below shortcuts.

Hotkeys	Description	Playback Hotkeys	Description
Escape	Exit	P	Play/Pause
F2	Batch export file	NumberPad 4	Previous
F3	Window	NumberPad 6	Next
F4	Edit mode	NumberPad 2	Next Frame
F5	Maps	*	Play scale up
F6	View	/	Play scale down
F7	Device	D	Next alarm
F8	Export file	A	Previous alarm
F9	PTZ control		
F10	Access control		
F11	Audio		
F12	Analytics report		

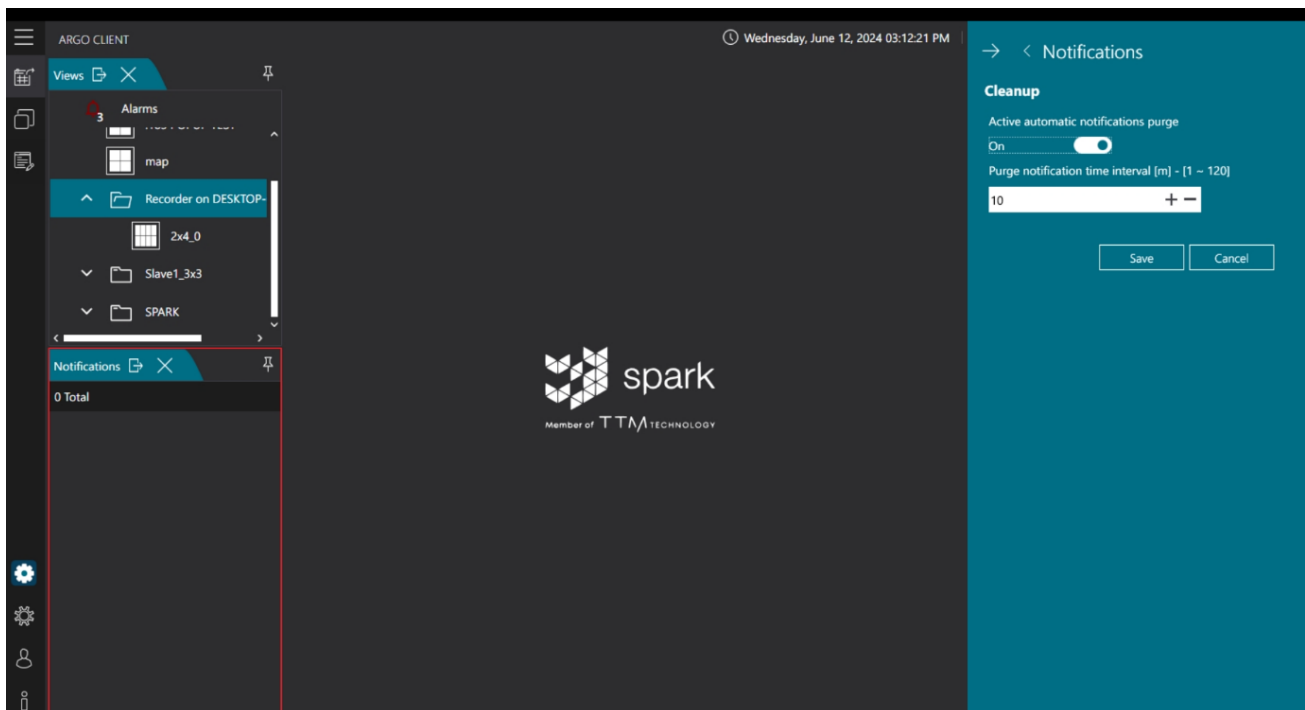


21.6 Keyboard controllers



- Click the bottom left **[Options]** and select **[Keyboard controllers]**.

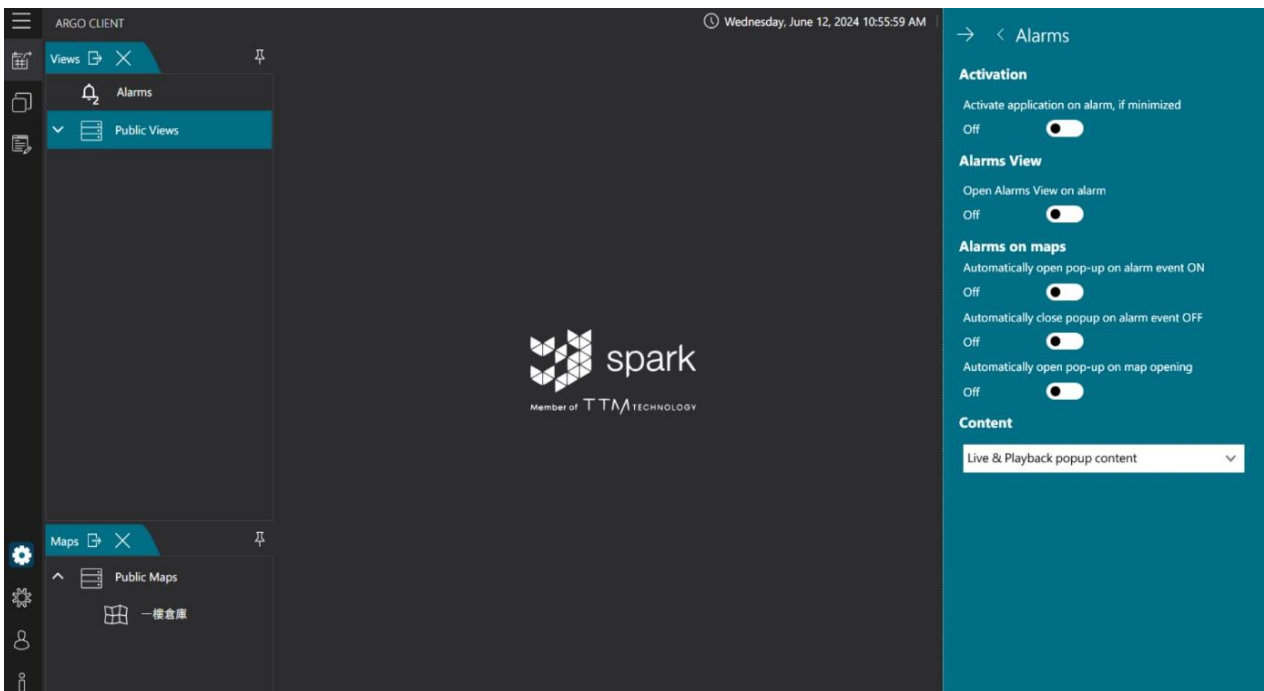
21.7 Notifications



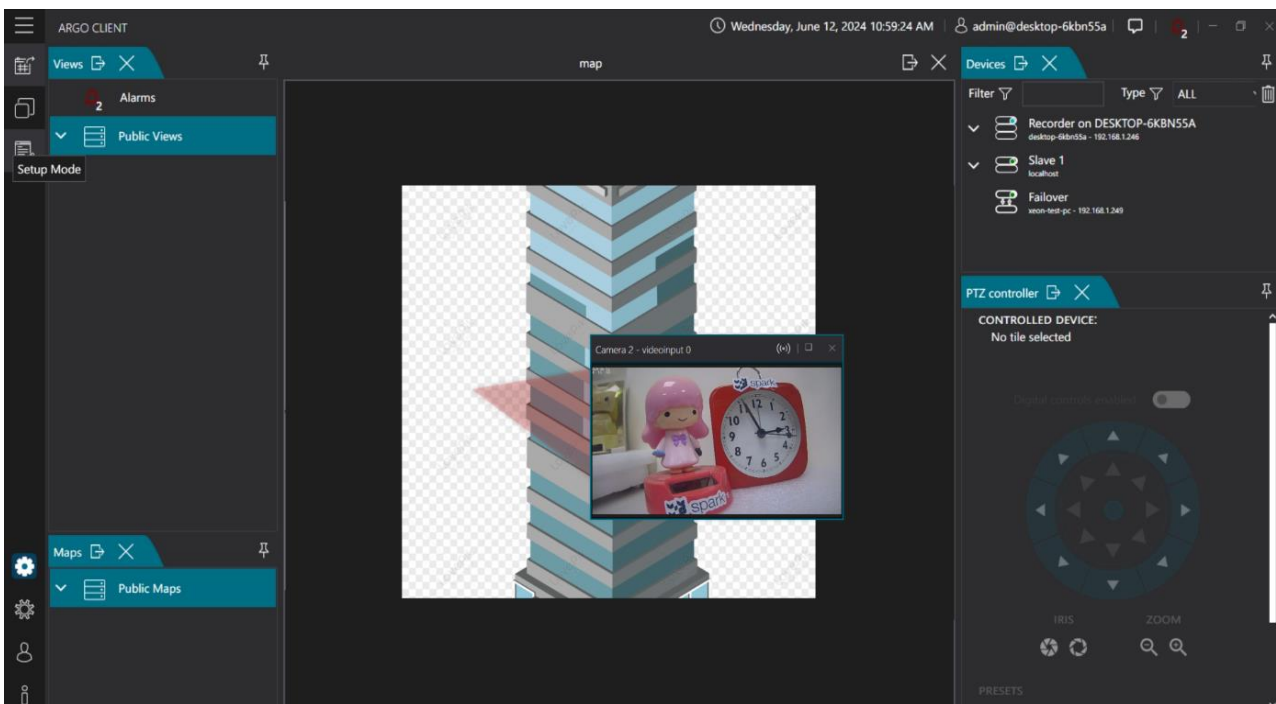
- Click the bottom left **[Options]** and select **[notification]**.
- Clear: select automatic clearing of notifications or set interval.
Clearing interval range: 1~120 minutes



21.8 Alarms



- Click the bottom left **[Options]** and select **[alarms]**.
- Restore from Minimize: When enabled, the window will be restored from minimize when an alarm occurs
- Alarm View: When enabled, the system will automatically switch to the alarm page when an alarm occurs.



- Alarm on Maps
 - A. Open alarm popup: when enabled, a popup window will automatically open on the Maps when an alarm is triggered.



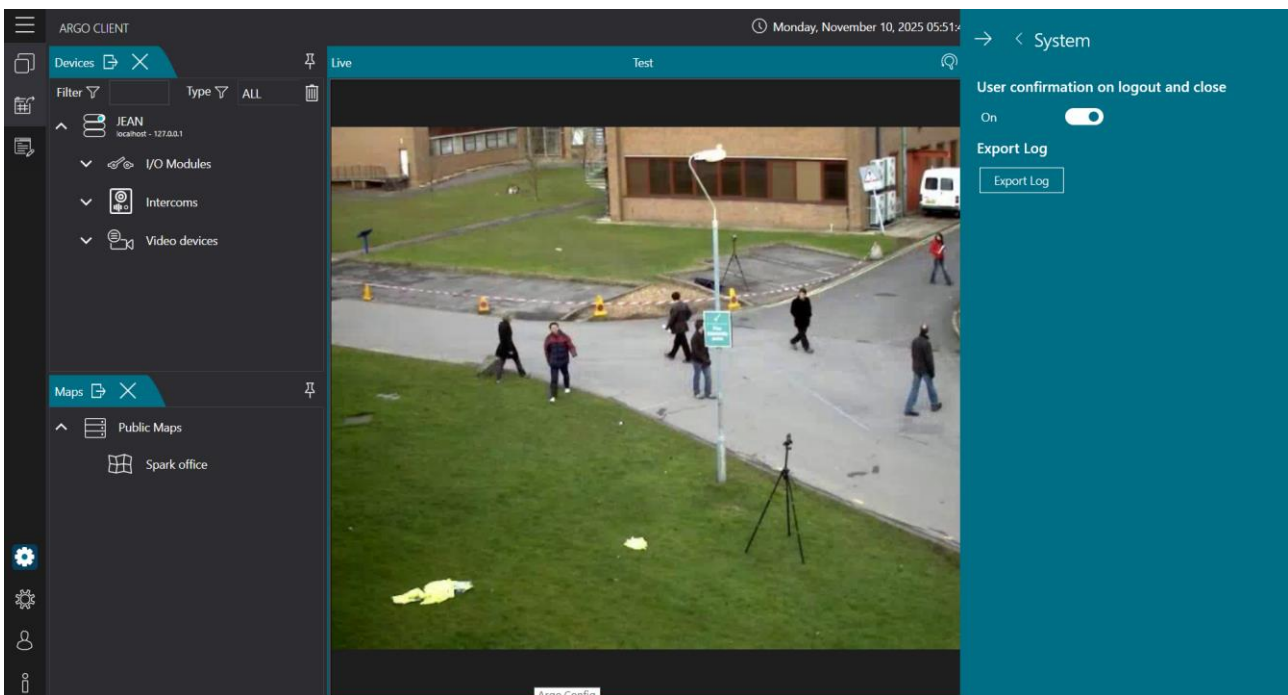
- B. Close alarm popup: when enabled, the popup window will automatically close on the Maps when the alarm is dealt with.
- C. Open popup on Maps: when enabled, the popup window will automatically open when the Maps is opened.

To open the Maps, double-click on the Maps and it will display in full screen mode.

– Popup window content:

- A. Live view popup: when enabled, the popup window will display the device live view.
- B. Playback popup: when enabled, the popup window will playback the images of the event triggered.
- C. Live view and playback popup: when enabled, live view and playback images will display simultaneously.

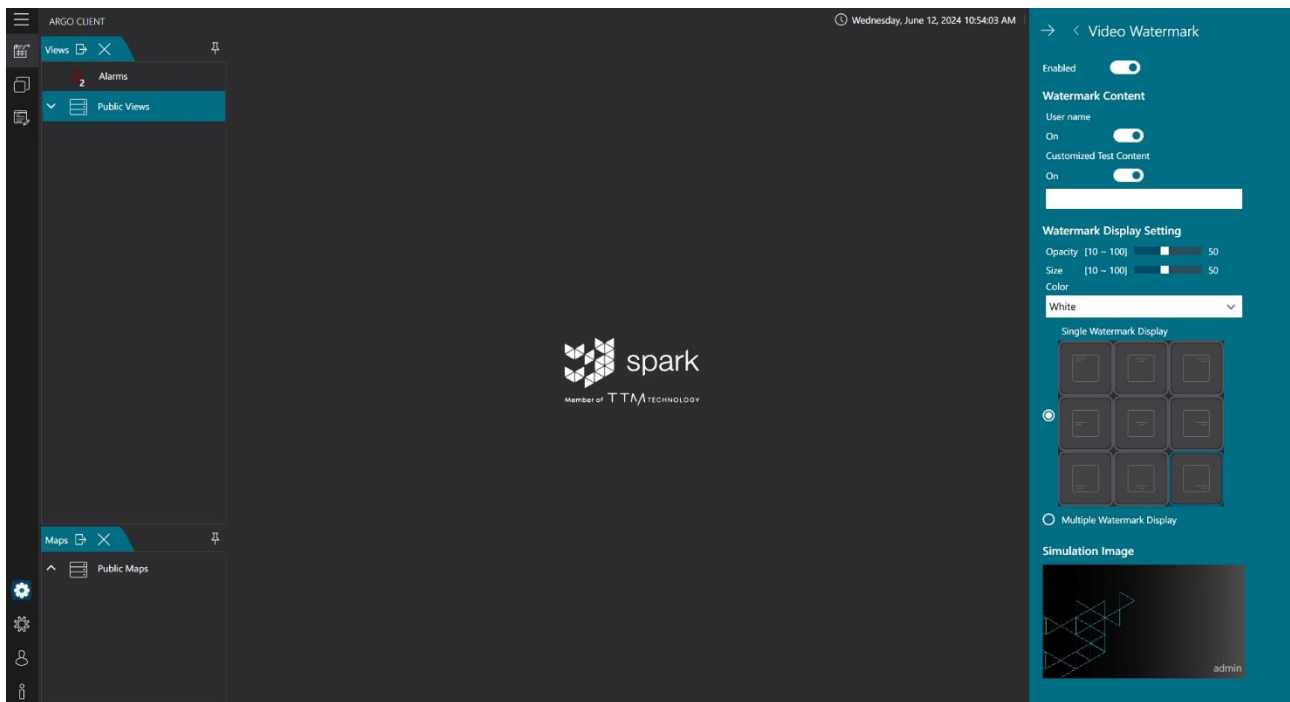
21.9 System



- Click the bottom left [**Options**] and select [**System**].
- Logout/close program confirmation
Enabled: a confirmation prompt will be displayed when logging out or closing the program.
- Export log: Click [**Export logs**] to export complete system program log



21.10 Watermark



- Click the bottom left **[Options]** and select **[Watermark]**.
- Watermark content: edit the username and custom content.
Username: when enabled, the watermark will display the username.
Custom content: when enabled, users can custom watermark content.
- Watermark display options:
Edit the text transparency, text size, text color, single watermark display position, or multiple watermarks filling the image.
Text transparency: edit the transparency of the watermark text, ranging from 10 to 100.
Text size: edit the size of the watermark text, ranging from 10 to 100.
Text color: edit the watermark text color, choosing between white or black.
Single watermark display position: display a single watermark at the specified position.
Position options: top left / top center / top right / center left / center / center right / bottom left / bottom center / bottom right (9 positions in total)
Multiple watermarks filling the image: display watermarks at all nine positions, filling the image with watermark content.
Watermark preview: preview the watermark settings.



22. USER

22.1 Change password

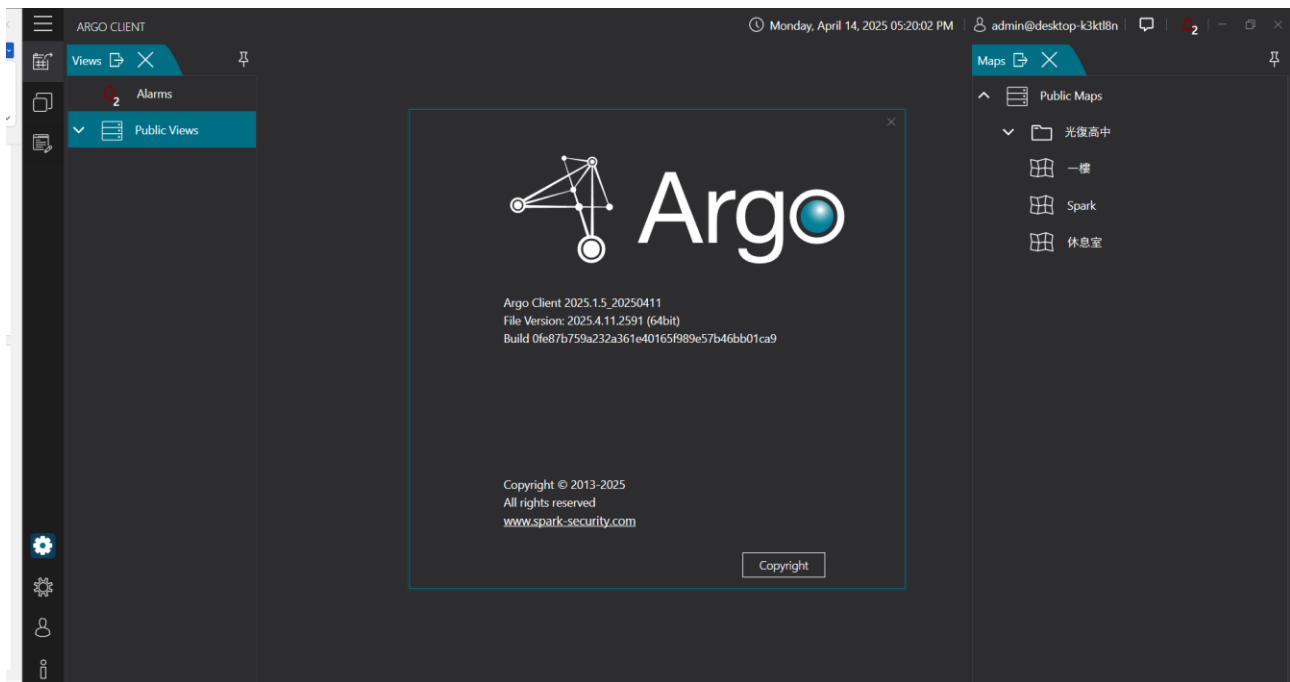
- Click on **[User]** then click **[change password]**. After changing password, click **[change password]** to confirm.
- Username: usernames cannot be modified.
- Old password: insert username old password
- New password: insert new password
- Retype password: retype the password

22.2 Logout/Close

- Logout: click **[logout]** to logout of Argo Client and return to the login page.
- Close: click **[close]** to close Argo Client.



23. ABOUT



- Click on the bottom left [i] to browse the system program version.
- Click "License Summary" to view information such as license keys, license status, expiration dates, and more.
- Click www.spark-security.com to access Spark official website
- Click **[Copyright]** to browse detailed copyright information.



spark

Spark S.r.l

Via Antonio Gramsci, No. 86/A
42124 Reggio Emilia, Italy
Tel. +39 0522 929850
info@spark-security.com

Taiwan Spark

No. 45, Aikou 2nd Rd., Zhubei City,
302053 Hsinchu County, TaiwanTel.
+886 3 575 2786
info@spark-security.com.tw

For more information,
please visit us at www.spark-security.com.tw

