



Installation and Operating Guide

Milesight Plugin for Milestone

Version: V1.0
Date: 2025-05-23

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Chapter 1. Introduction

Using Milesight's advanced plugin, Milestone's video management software integrates seamlessly with Milesight cameras to enhance operational efficiency. The plugin acquires the AI metadata stream from Milesight cameras, supporting sophisticated Smart Video Content Analysis (VCA), Face Detection, and Automatic Number Plate Recognition (ANPR), etc., each metadata entity is transmitted as an individual object to the Milestone. These objects can be viewed, searched, and alarms can be configured upon their detection, enabling centralized management through the Milestone, and achieving smarter and faster monitoring.

This User Guide provides an overview of the integration between Milesight's plugin and Milestone for capturing and analyzing. For a more thorough understanding of how the Milestone handles AI metadata, we encourage you to consult the <https://www.milestonesys.com/>.

If you have any questions, please do not hesitate to contact our Milesight Support Team at support@milesight.com.

1.1 System Requirement

[Supported Milestone version]

We recommend to use the latest versions of Management Client and Smart Client. The latest version of Milesight Plugin is tested and compatible with the version 2014 R2.

[Supported Operating Systems]

Windows: 64-bit

[Supported Milesight Camera Version]

Table 1.

Camera Series	Firmware Version
Mini Series (PD)	51.7.0.77-r9-c2 or above
180° Panoramic Dome/Bullet Camera (PE)	61.8.0.4-r6 or above
AI Multi-directional Camera (PE)	62.8.0.4-r2 or above
OpenVision Camera (PE)	63.8.0.4-r1 or above

Camera Series	Firmware Version
Intelligent Traffic Series (PE)	T_61.8.0.4-r2 or above
4G Solar-Powered Series (SP111)	52.8.0.4-r4 or above

Chapter 2. Installations

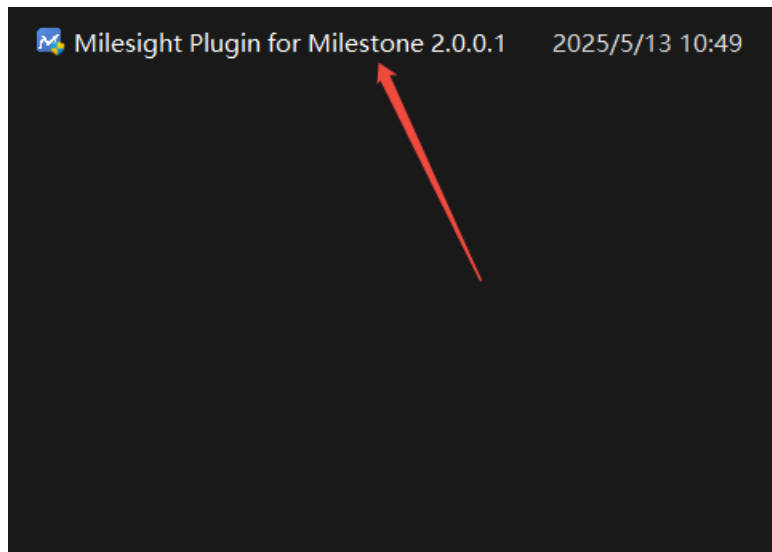
If you are using the old plug-in, we recommend removing it.

If you need, you can contact our Support Team to get the installation package of the Milesight Plugin or download the version from this link.

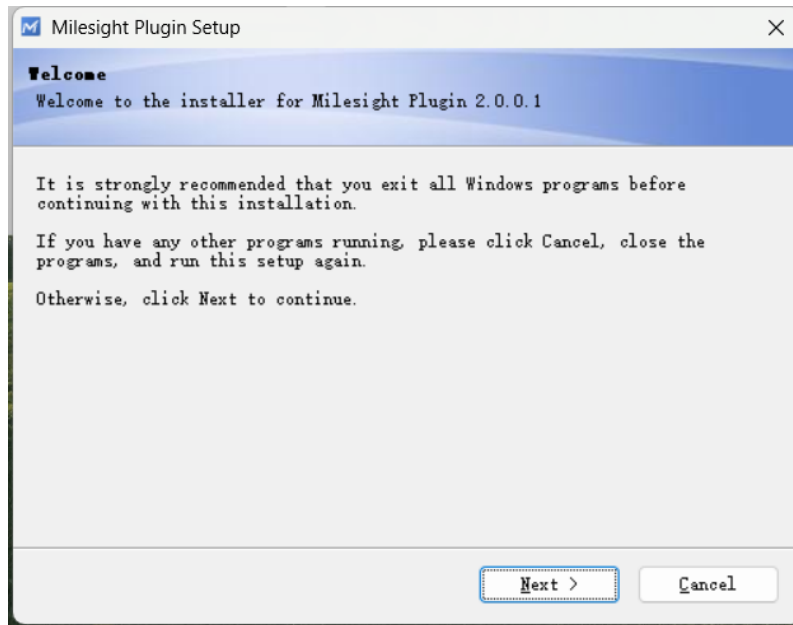
<https://www.milesight.com/support/download/firmware#compatibility>

2.1 *Windows Installation*

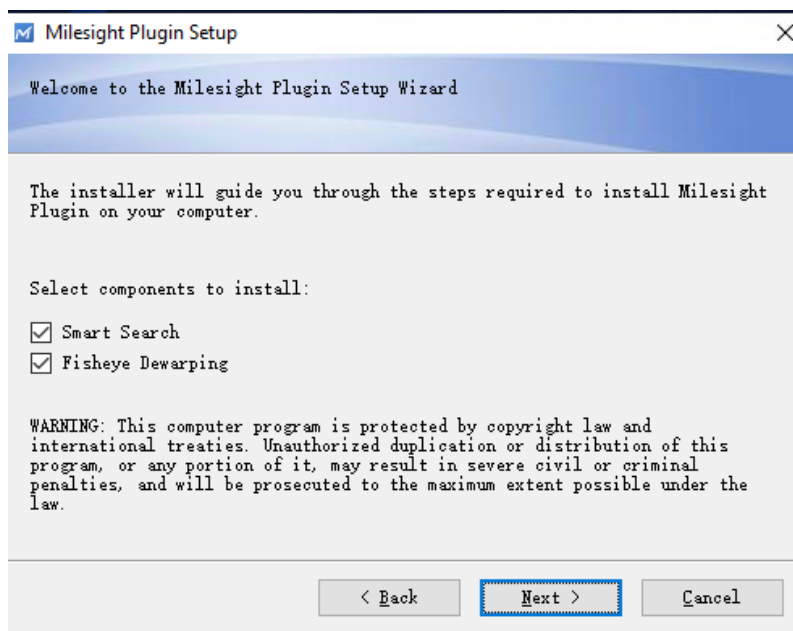
Step 1: Click `Milesight Plugin for Milestone 2.0.0.1`.

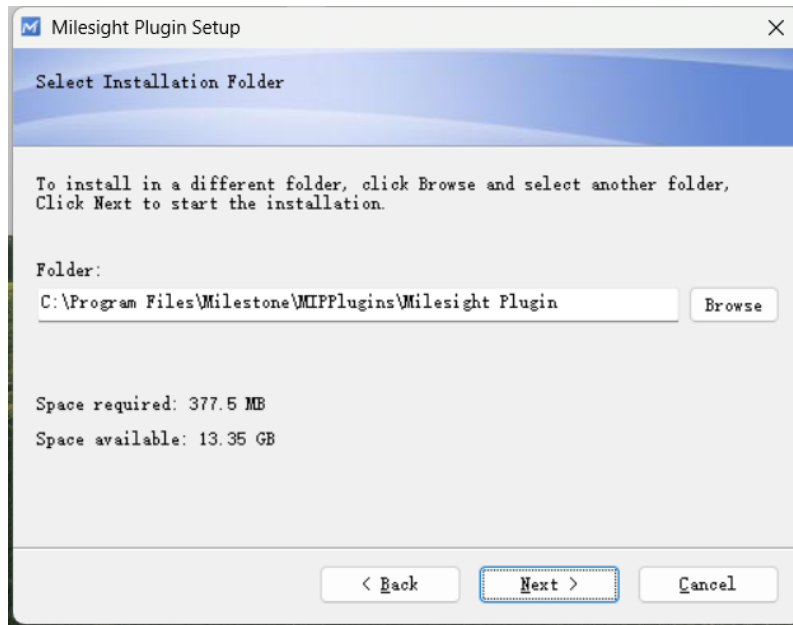


Step 2: Click "Next" and select components to install.



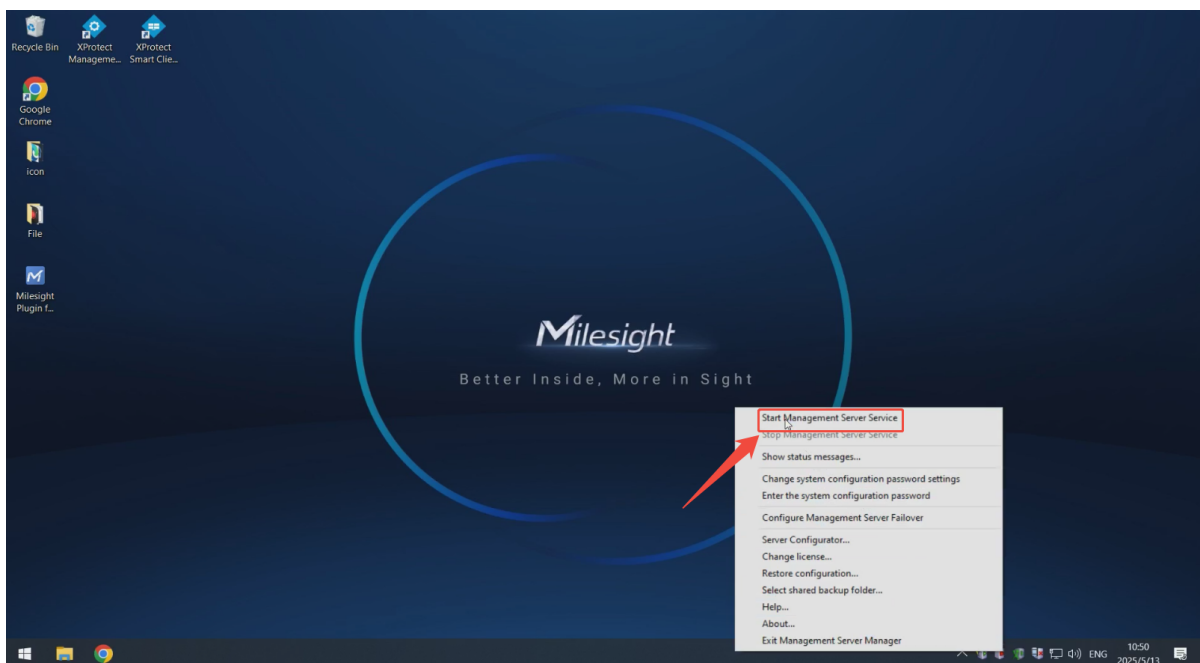
The plugin installation is divided into Smart Search and Fisheye Dewarping, which can be selected separately. We recommend selecting all components to ensure full functionality.





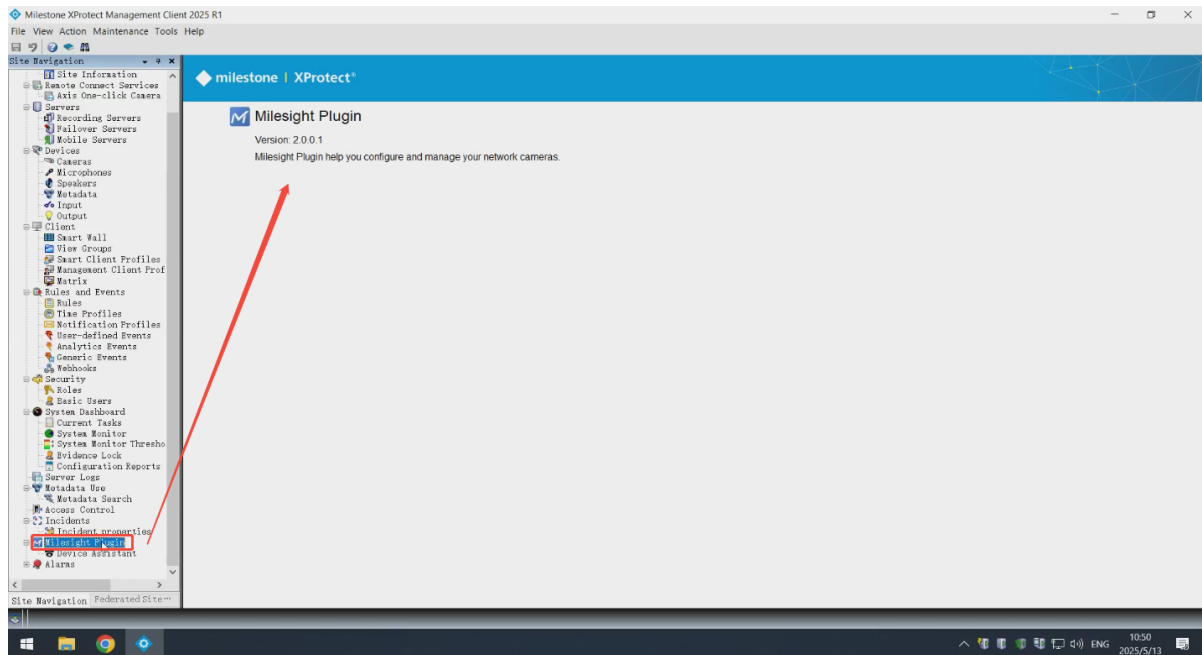
Step 3: Start Milestone Management Server service.

After the installation, you must start the Management Server Service before using the **XProtect Management Client 2025 R1**.



Step 4: Login Management Client to check if correctly installed.

If the screen shown below appears, it indicates that the installation was successful.

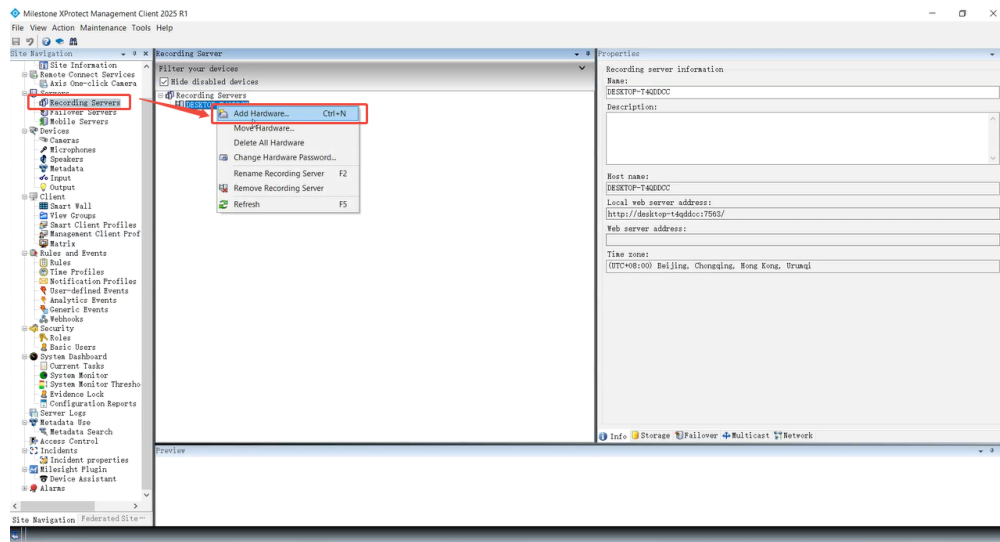


Chapter 3. Event Configuration

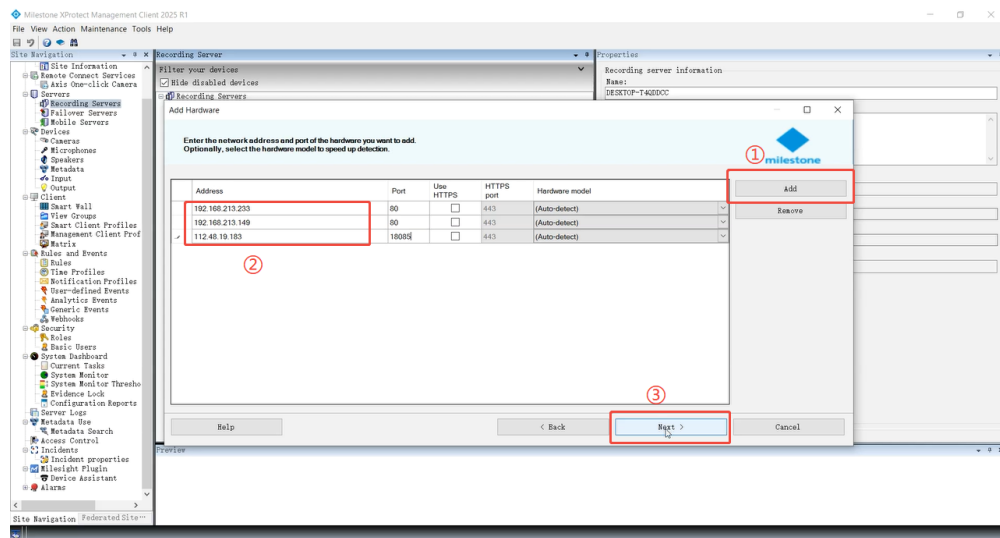
3.1 Add Devices

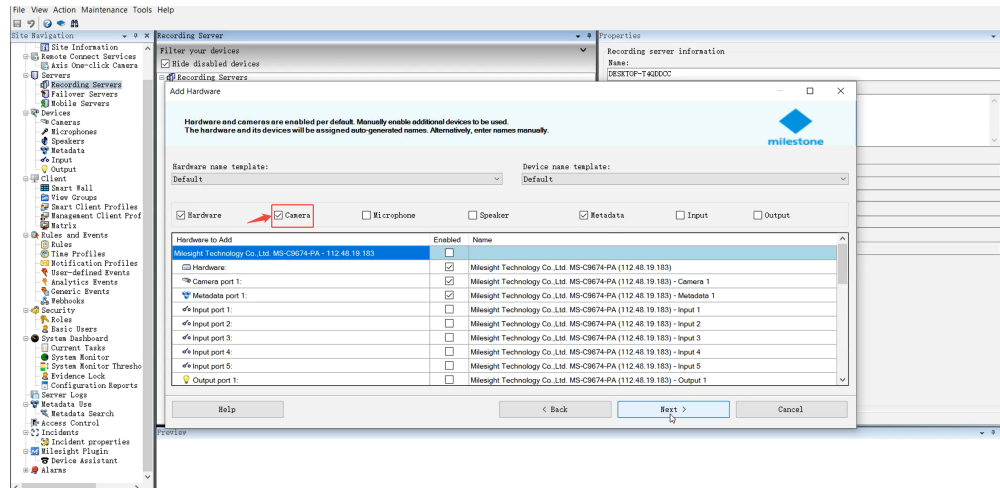
After completing the installation, you need to add the Mileight device on the server using the IP address and host name.

Step 1: Right-click, select "Add Hardware", and then choose the "Manual" method.



Step 2: Enter the IP address of the Mileight Camera to add the device.





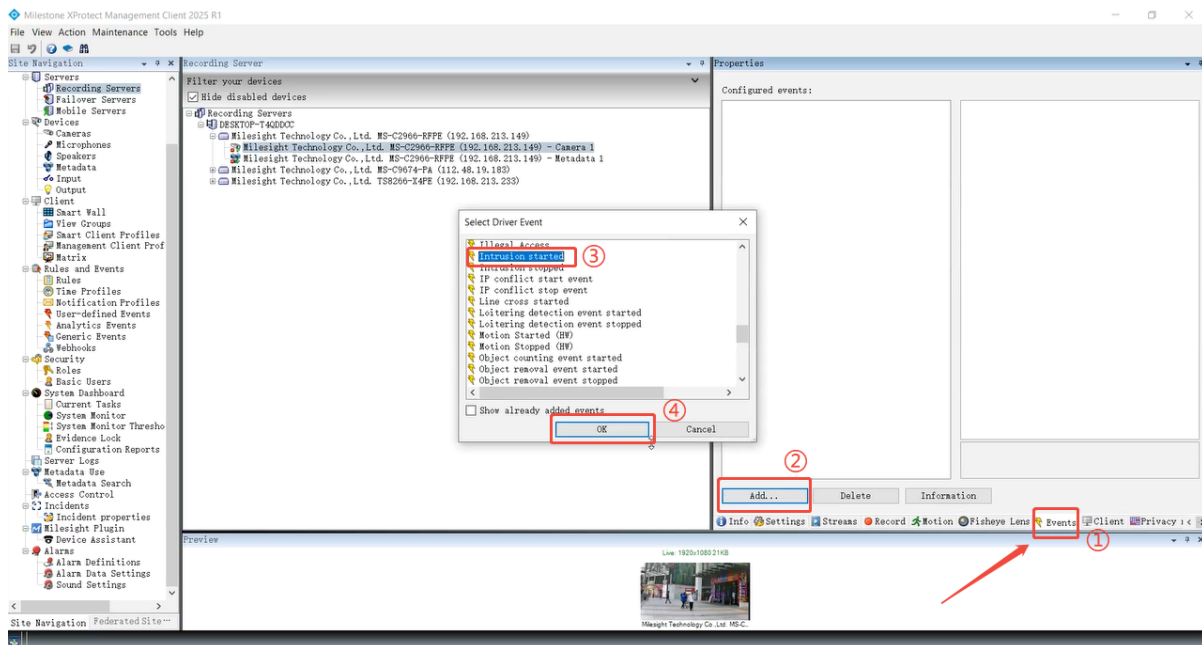
Note:

If you need the camera's Metadata information, please select the "Metadata" option. For instructions on configuring Metadata, please refer to Chapter 4.

3.2 Configure Events

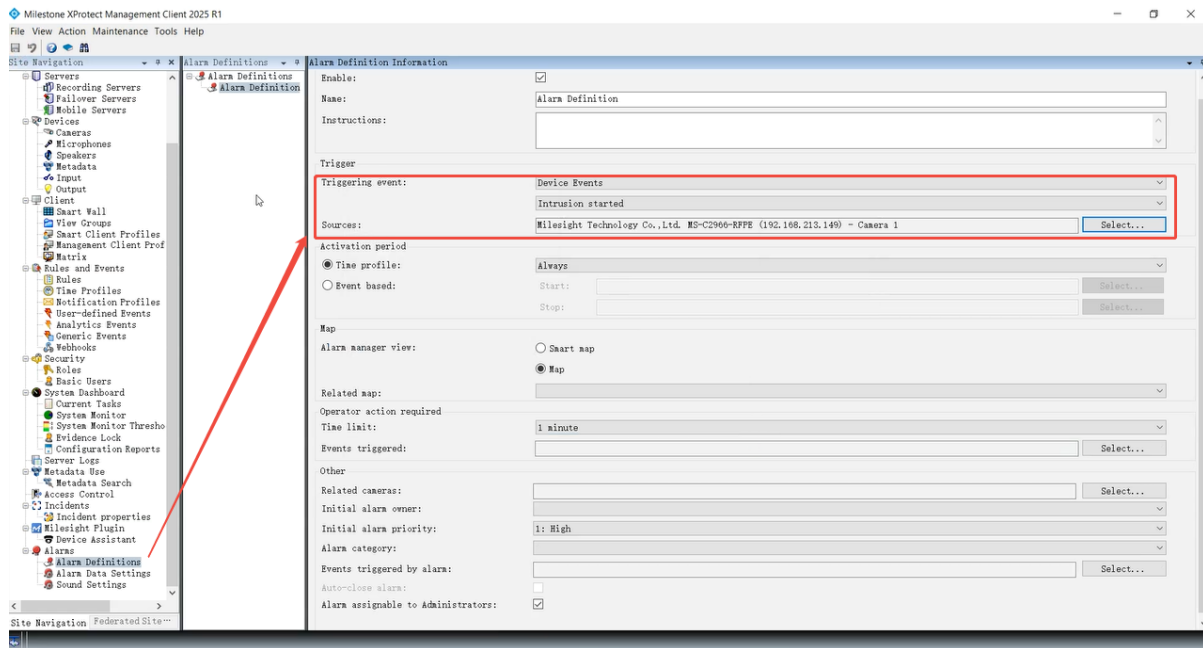
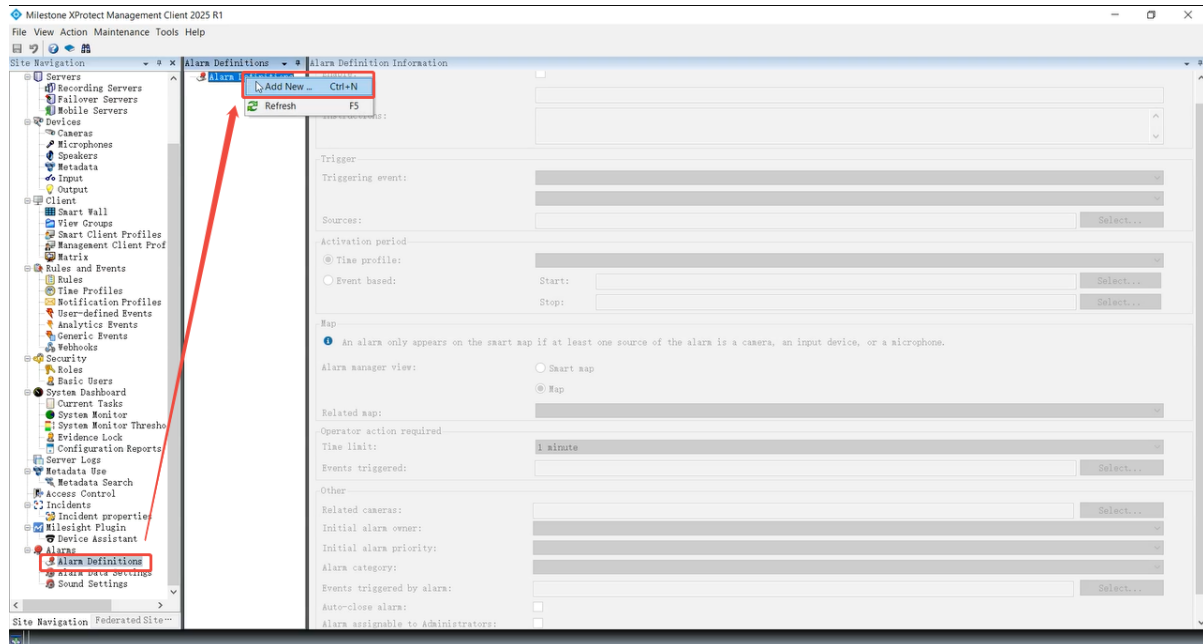
After adding devices, you can configure the events you want to monitor and set up alarms for them.

Step 1: Subscribe to Onvif Events.



Step 2: Configure Alarms.

Right-click on "Alarm Definitions" to add new alarms. Then select the corresponding events and devices, and save the settings.



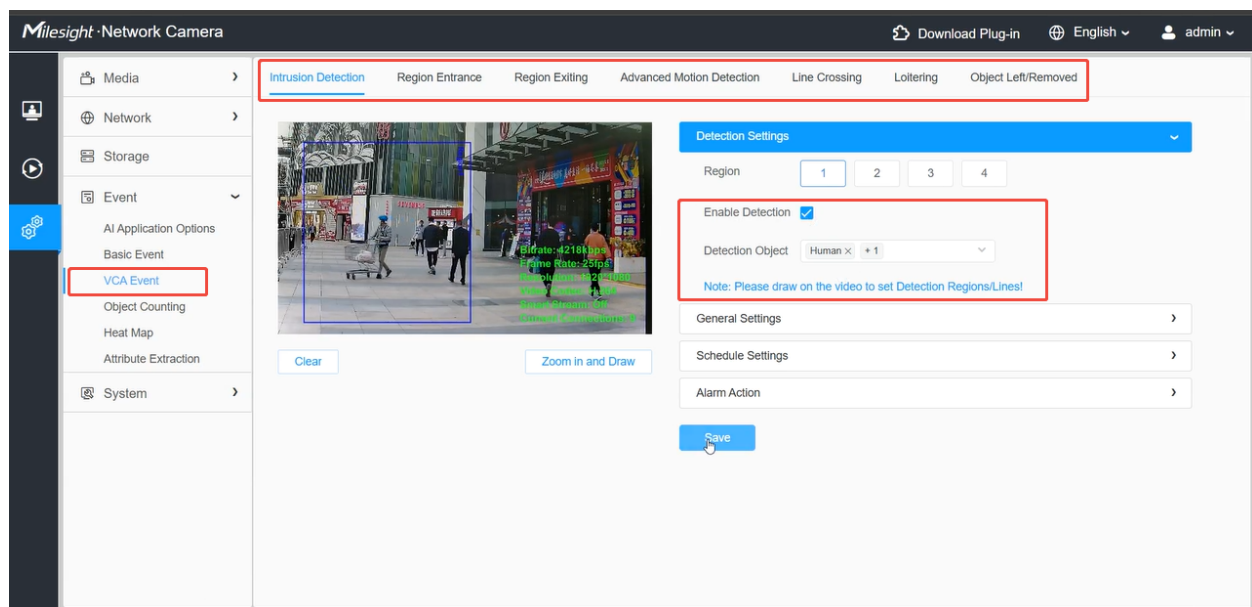
3.3 Camera Event Configuration

After completing the event subscription and configuration, you need to enable the camera's Event Detection to ensure that XProtect receives event alarms.

Milesight Video Surveillance

The following uses **Intrusion Detection** as an example, other events follow the same steps.

Access the camera's webpage, complete the necessary configurations, and click "Save" to apply the settings. Meanwhile, these configurations will take effect on Milestone XProtect.



Intelligent Traffic Series

The following uses **Visitor List Rising** as an example, other events follow the same steps.

Access the camera's webpage, complete necessary configurations, and click "Save" to apply the settings.

The first screenshot shows the 'General' tab of the LPR configuration page. The 'Enable LPR' checkbox is checked. The 'Country / Region' is set to 'General'. The 'Detection Region' table shows a single region with ID 1, Name ROI_1, and Trigger Line Line1. The 'Detection Settings' section shows 'Detection Mode' set to 'Plate Priority' and 'Min. Plate Size Filter' is disabled. A 'Save' button is at the bottom.

The second screenshot shows the 'List Event' tab. The 'List Type' is set to 'Black List'. The 'Enable' checkbox is checked. The 'Detection Direction' is set to 'All'. The 'Schedule Settings' section shows a calendar view with all days selected. The 'Alarm Action' dropdown is set to 'Push'. A 'Save' button is at the bottom.

After completing the above settings, when an event is triggered, the event information will be pushed in real-time.

3.4 Viewing Events

Then you can login Smart Client to view alarm messages.

The screenshot shows the Milesight Alarm Manager interface. The top navigation bar includes 'Milesight', 'Exports', 'Search', 'Alarm Manager' (active), 'Incidents', and 'System Monitor'. The main area is divided into a left sidebar with 'Quick Filters' (New (4), In progress (0), On hold (0), Closed (0)) and 'Servers' (DESKTOP-T4QDDCC). The central panel displays a table of alarms with columns: ID, Time, Priority Level, State Level, State Name, Message, and Source. A red box highlights the 'Message' column for alarm ID 25533, which contains the text 'RuleEngine/LPRDetector/VisitorList Rising-2'. To the right, a video feed shows a road scene with two cars. The bottom status bar indicates the current time as 16:50:43.446.

ID	Time	Priority Level	State Level	State Name	Message	Source
25533	16:50:42 2025/5/13	1	1	New	RuleEngine/LPRDetector/VisitorList Rising-2	Milesight Technology Co.,Ltd. TS8266-X4PE
25532	16:39:28 2025/5/13	1	1	New	IntrusionStart	Milesight Technology Co.,Ltd. MS-C2966-R
25531	16:31:12 2025/5/13	1	1	New	IntrusionStart	Milesight Technology Co.,Ltd. MS-C2966-R
25530	16:30:02 2025/5/13	1	1	New	IntrusionStart	Milesight Technology Co.,Ltd. MS-C2966-R

Double-click the event you want to view, and a detailed information page will pop up. In the popup, you can view the corresponding images and recordings.

The screenshot shows the detailed view of an alarm event. The top navigation bar is the same as the previous screenshot. The main area is divided into a left sidebar with 'Quick Filters' and 'Servers'. The central panel displays a detailed view of the alarm event. The top section shows the camera feed and the alarm details. The bottom section shows the 'Activities' table, which lists the events related to the alarm. The right sidebar shows the 'Reports' section. The bottom status bar indicates the current time as 16:50:46.981.

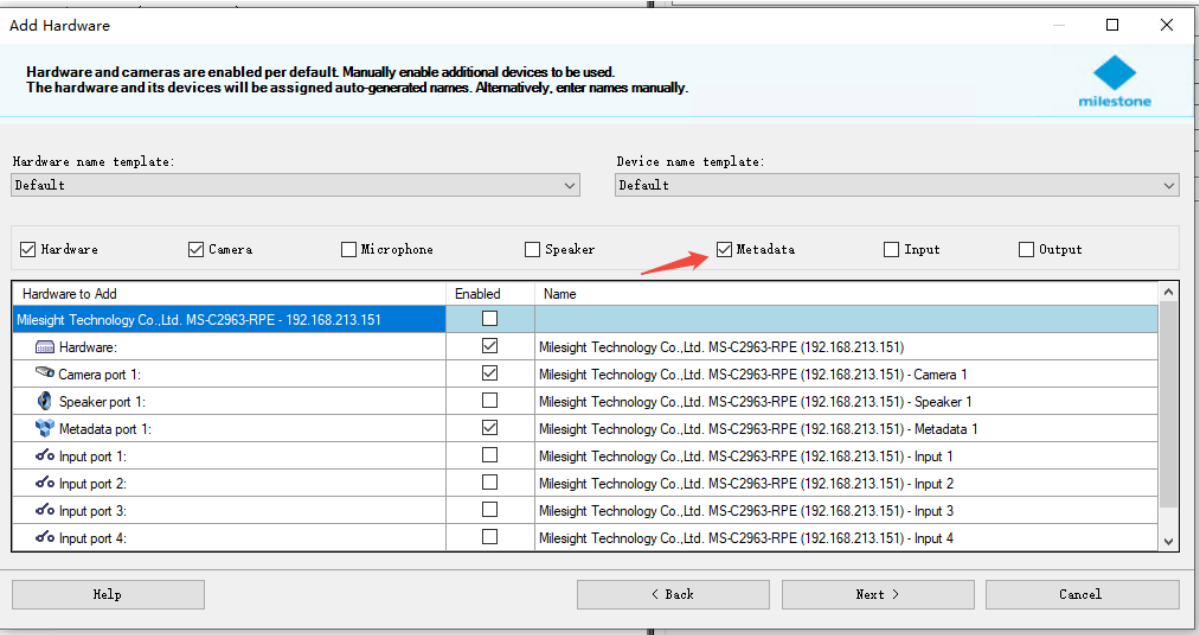
ID	Time	Activity	Owner
25533	16:50:42 2025/5/13	Initial state: 1: New	
25532	16:39:28 2025/5/13	Initial priority: 1: New	
25531	16:31:12 2025/5/13		
25530	16:30:02 2025/5/13		

Chapter 4. Object Search

4.1 Configure Metadata Recording

After adding devices, to ensure that detected objects are recorded and displayed correctly, you must verify that the camera video stream is being record.

Step 1: When adding a device, please check the "Metadata" is selected to allow access to the device's Metadata. Enable Metadata Recording to store the data for retrieval.



Hardware and cameras are enabled per default. Manually enable additional devices to be used. The hardware and its devices will be assigned auto-generated names. Alternatively, enter names manually.

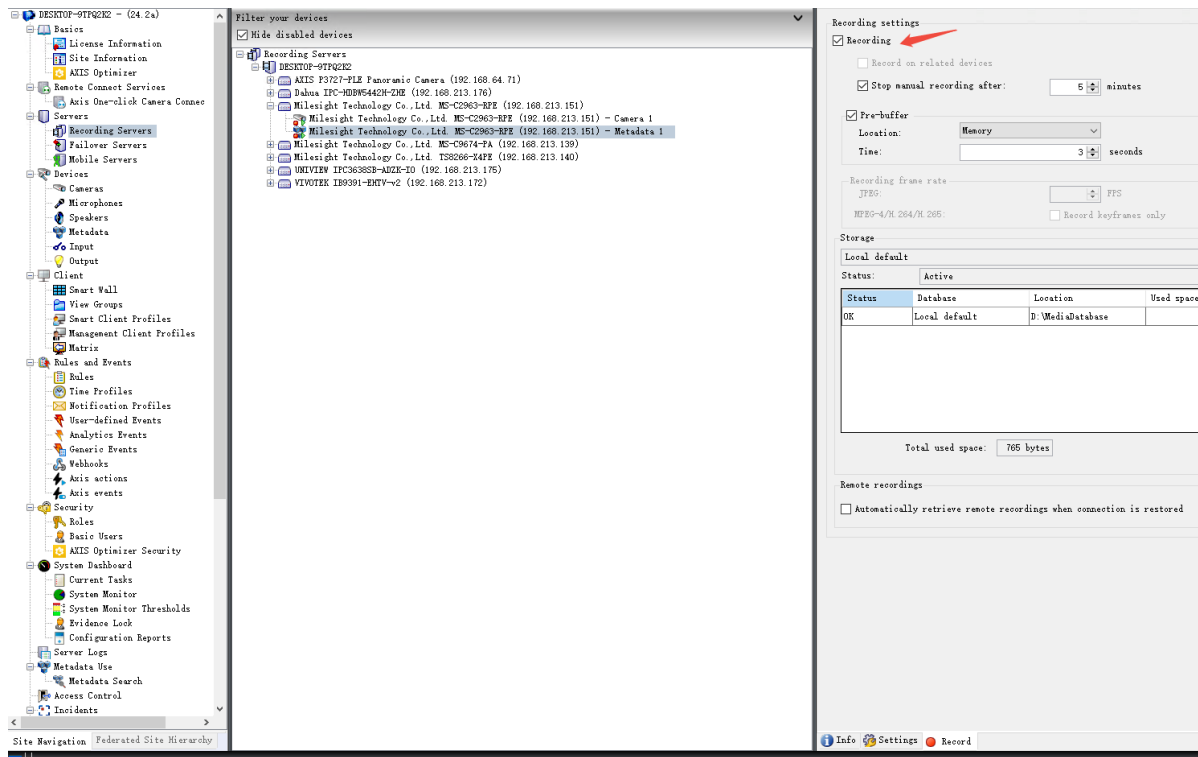
Hardware name template: Default

Device name template: Default

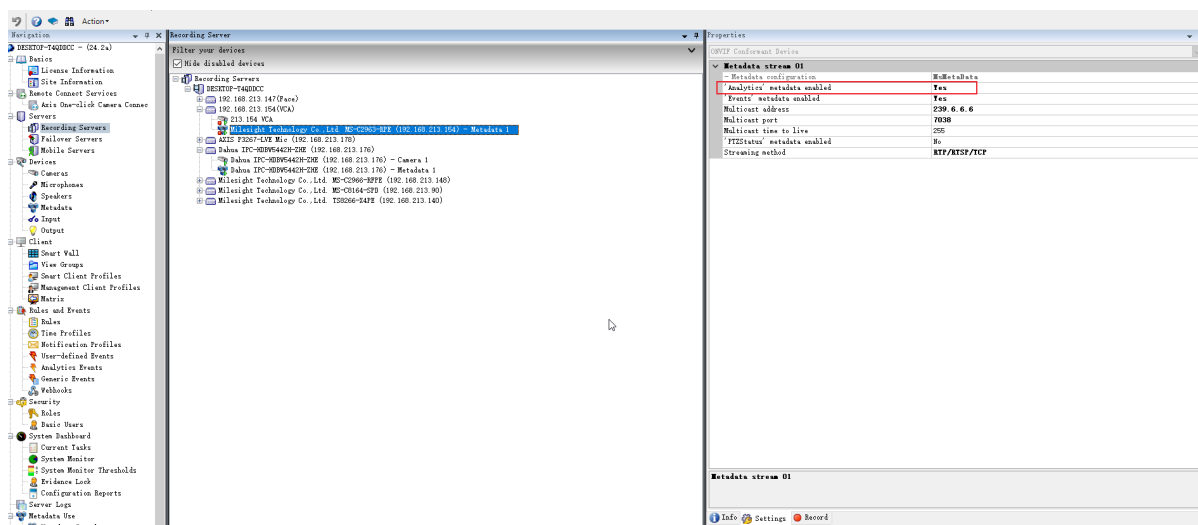
☒ Hardware ☒ Camera ☐ Microphone ☐ Speaker ☒ Metadata ☐ Input ☐ Output

Hardware to Add	Enabled	Name
Milesight Technology Co.,Ltd. MS-C2963-RPE - 192.168.213.151	☐	
Hardware:	☒	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151)
Camera port 1:	☒	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Camera 1
Speaker port 1:	☐	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Speaker 1
Metadata port 1:	☒	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Metadata 1
Input port 1:	☐	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Input 1
Input port 2:	☐	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Input 2
Input port 3:	☐	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Input 3
Input port 4:	☐	Milesight Technology Co.,Ltd. MS-C2963-RPE (192.168.213.151) - Input 4

Buttons: Help, < Back, Next >, Cancel



Step 2: Check again that Metadata is enabled and that Metadata Recording is configured.

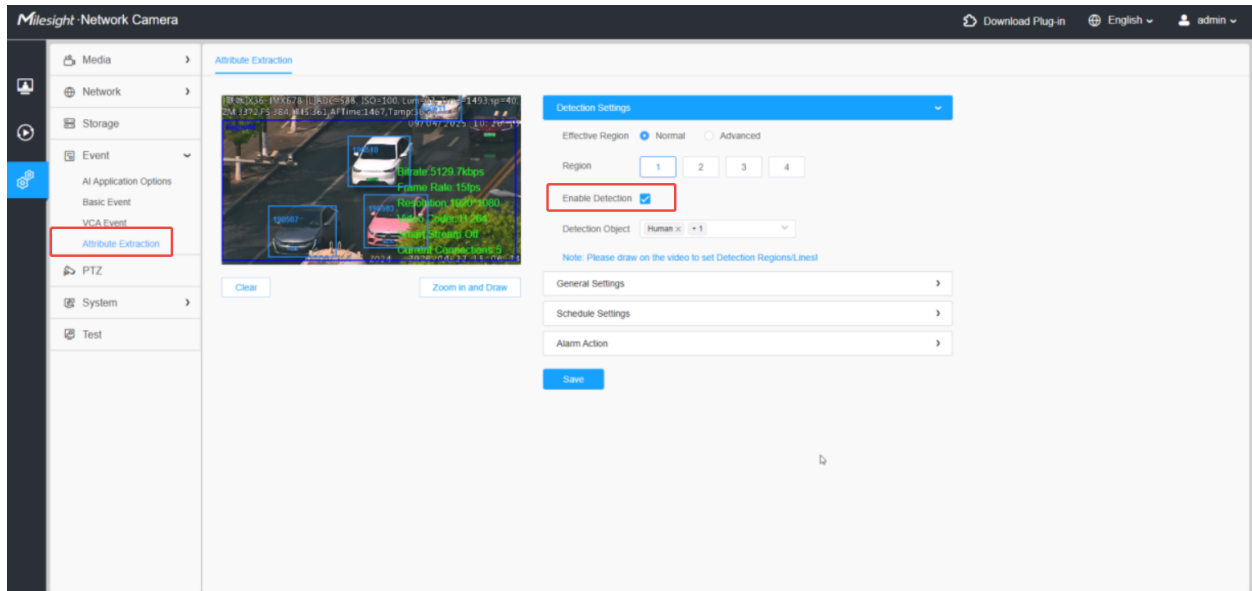


4.2 Configure Object Attribute Recognition

After completing the Metadata configuration, you need to enable the Attribute Extraction on the device side to obtain the camera's attribute recognition results. The detailed steps are as follows:

Mileight Video Surveillance

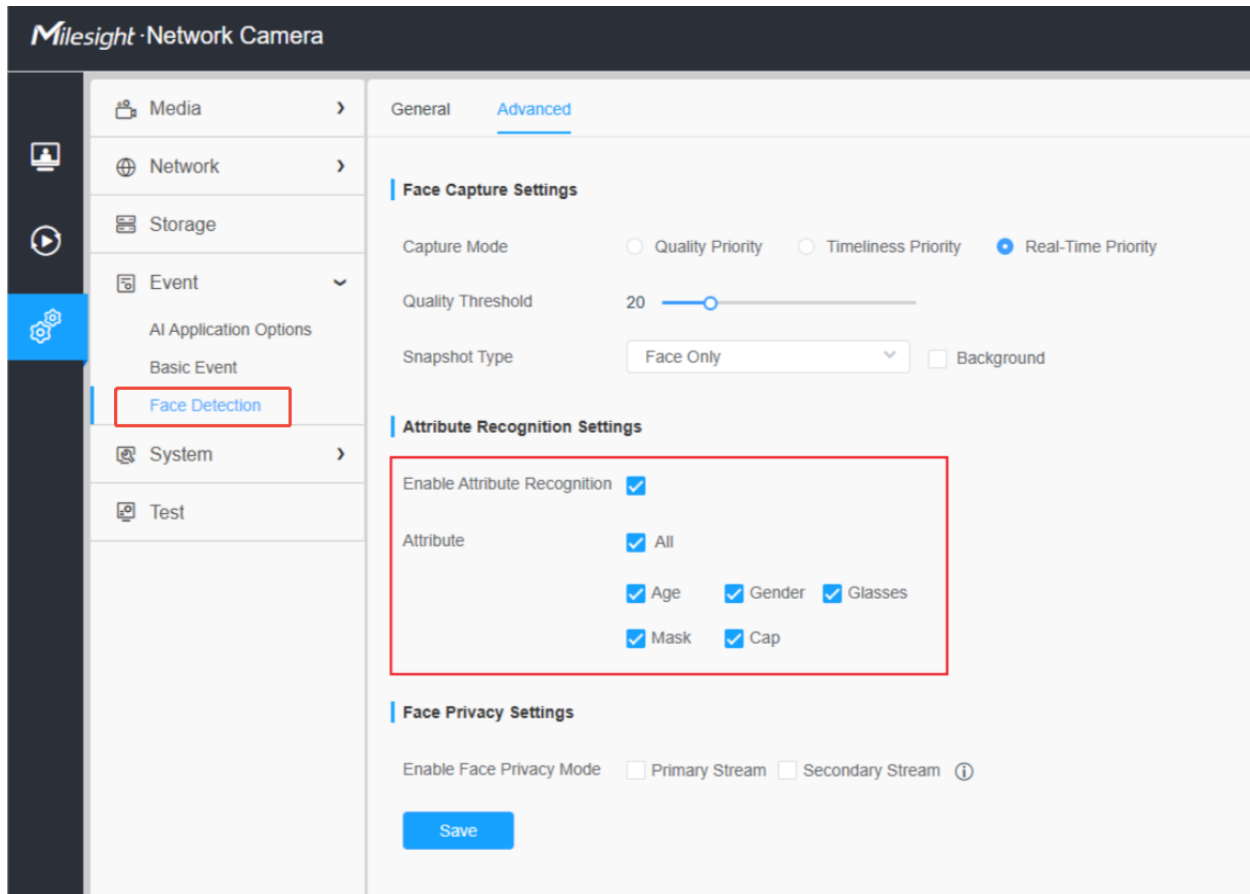
Step 1: Visit the webpage of the camera and enable Attribute Extraction.



Note:

Mileight Video Surveillance Series with **Attribute Extraction** enabled can recognize Human objects (attributes include Hat, Upper Clothing Color, Lower Clothing Color) and Vehicle objects (attribute includes Vehicle Type only).

Step 2: Enable Face Detection.

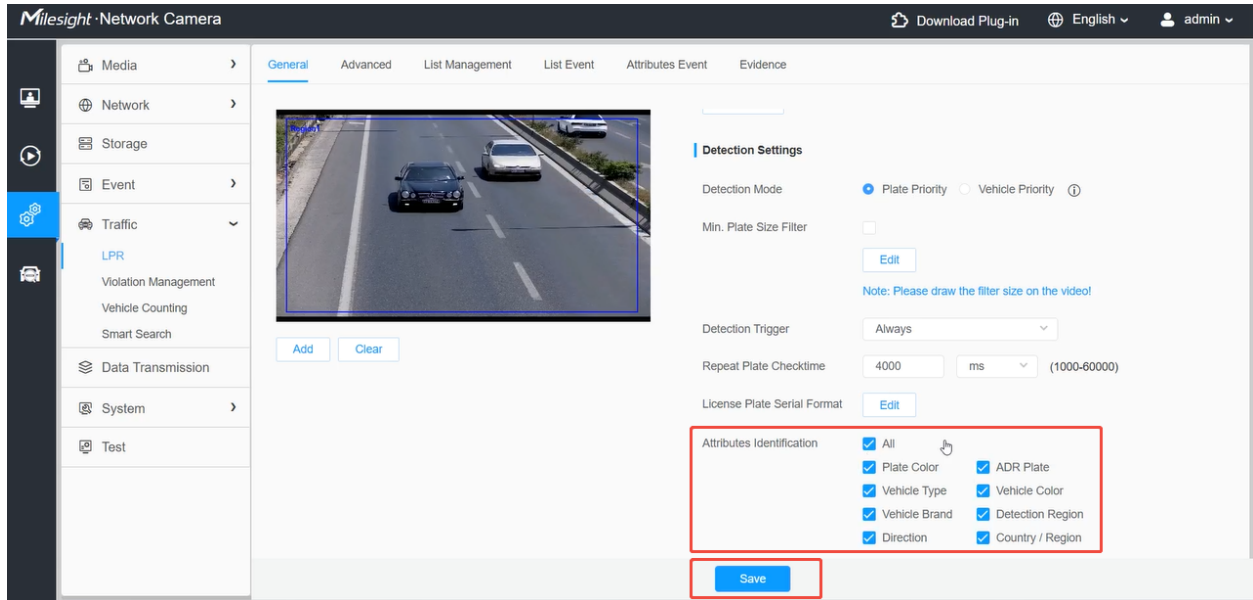


Note:

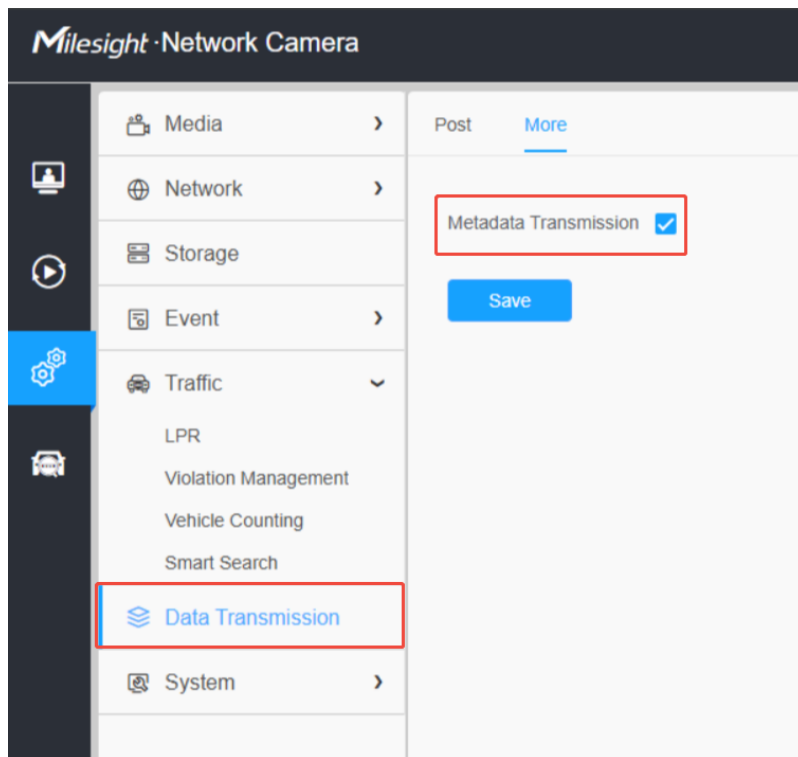
Milesight Video Surveillance Series with **Face Detection** enabled and Attribute selected support Face-related attributes for Human objects (including Age, Gender, Glasses, Mask, Cap).

Intelligent Traffic Series

Step 1: Visit the webpage of the camera and enable Attribute Extraction.



PS. Please ensure that the Data Transmission is enabled.



After completing the above settings, if object attributes are detected, the object's attribute information will be pushed in real-time.

4.3 Set the System Time

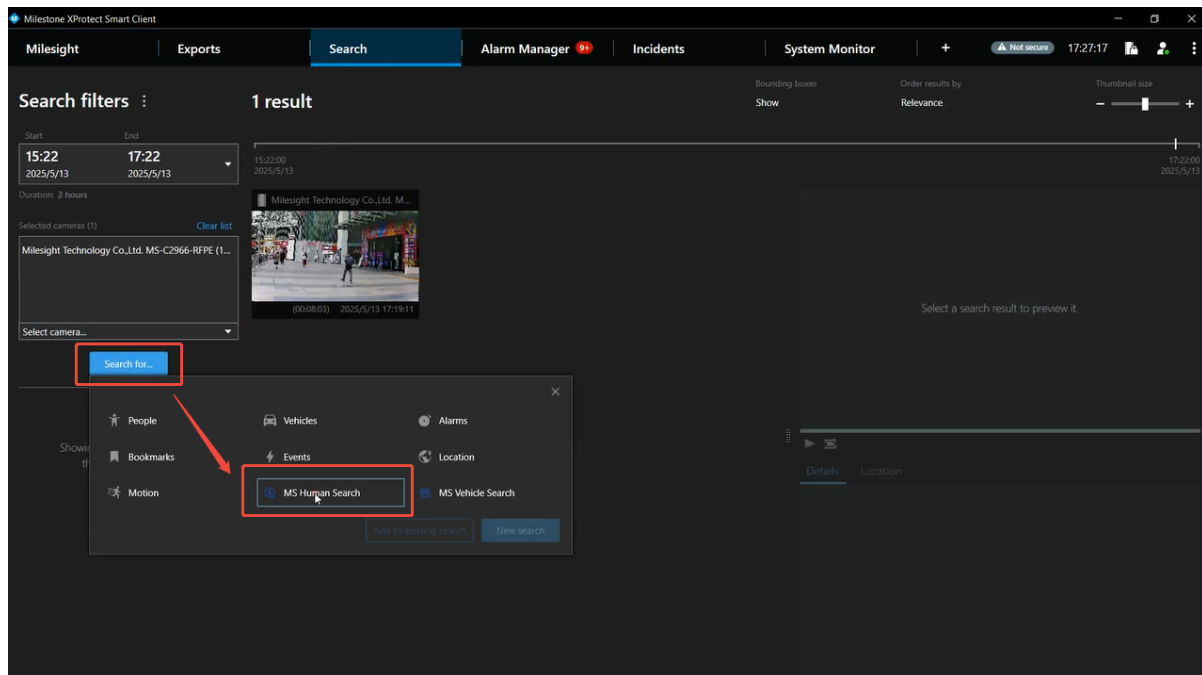
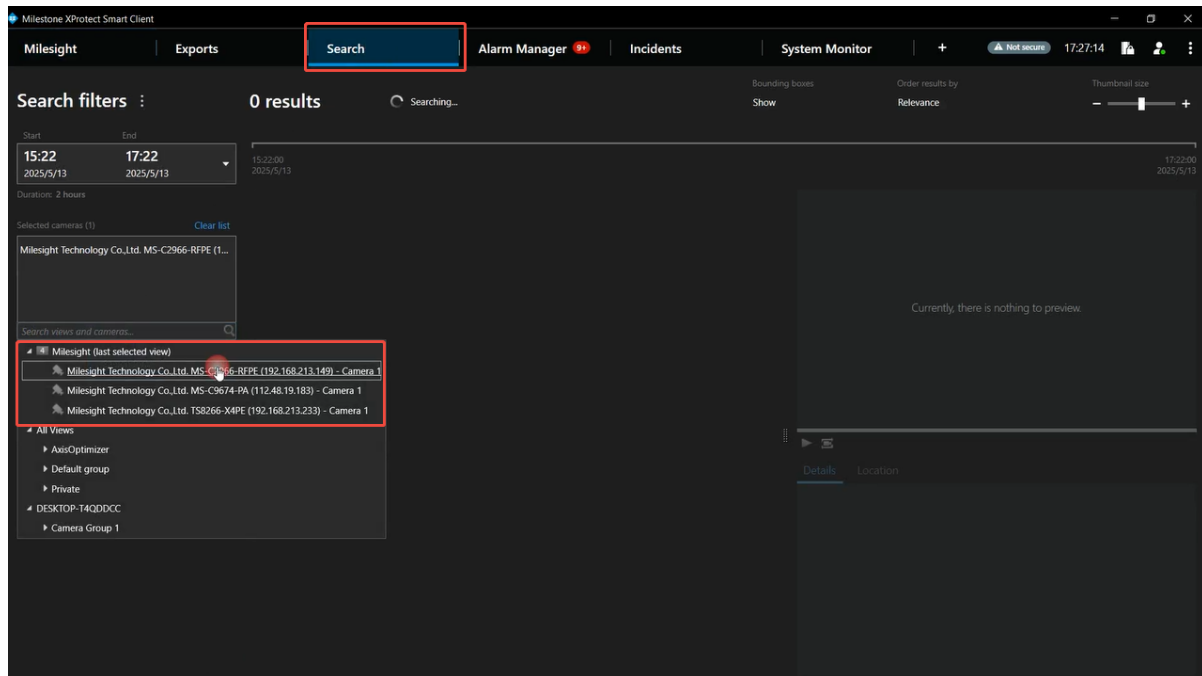
Before viewing the detection results, please ensure that the camera's system time is the same as the Milestone XProtect Recording Server. (You can set both the Camera and the Recording Server to synchronize their time via an NTP Server, or configure the Camera's time to synchronize with the computer time on the host where the Recording Server is located.)

The screenshot displays the 'Date&Time' configuration window. It features two tabs: 'System Info' and 'Date&Time'. The 'Date&Time' tab is selected. Under the 'Current System Time' section, the date is 22/04/2025 and the time is 14:22:41. The 'Set the System Time' section includes a 'Time Zone' dropdown menu showing '(UTC+08:00) China(Beijing, Ho', a 'Daylight Saving Time' dropdown menu showing 'Automatic', and a 'Synchronize Mode' section with three radio buttons: 'NTP server', 'Manual', and 'Synchronize with computer time' (which is selected). Below these are 'Date' (22/04/2025) and 'Time' (14:19:36) fields. A blue 'Save' button is located at the bottom left.

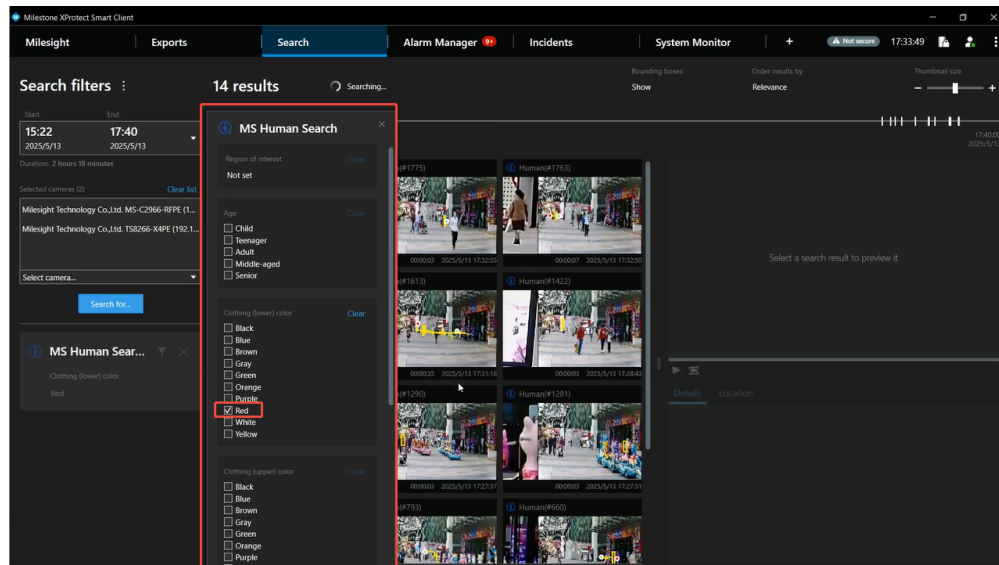
4.4 Viewing the Detection Results

Searching for Human Detection Results

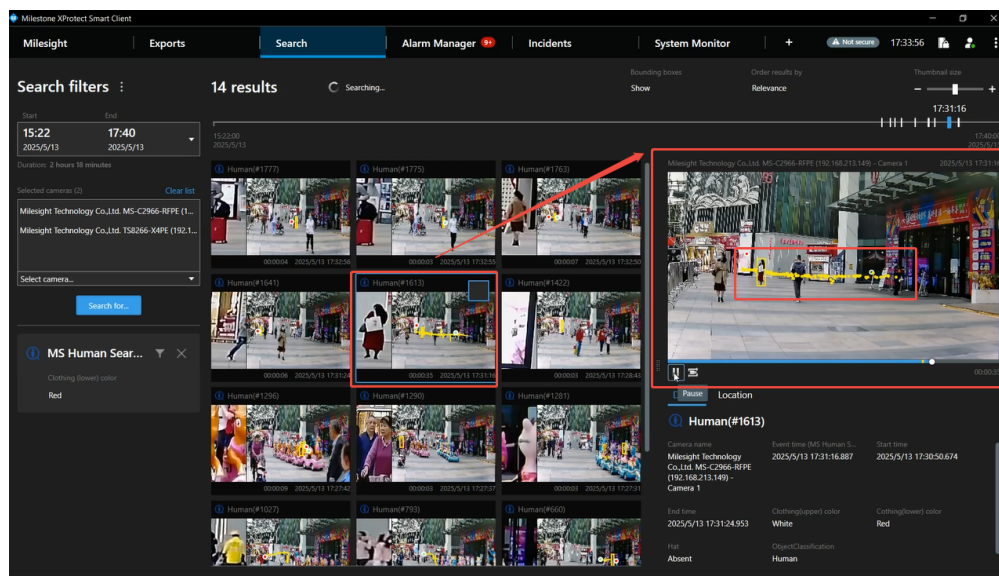
On the Search interface, select the corresponding camera first, then click "Search For" to choose "MS Human Search", and view the search results.



The Milesight plugin is chosen, and its Object Types are displayed like the following image. A set of attribute-specific filters is shown, allowing the user to specify the search criteria. For instance, the user can select "red" to filter out all detected human whose lower clothing color is red.



Users can also view the movement trajectory of the detected human.

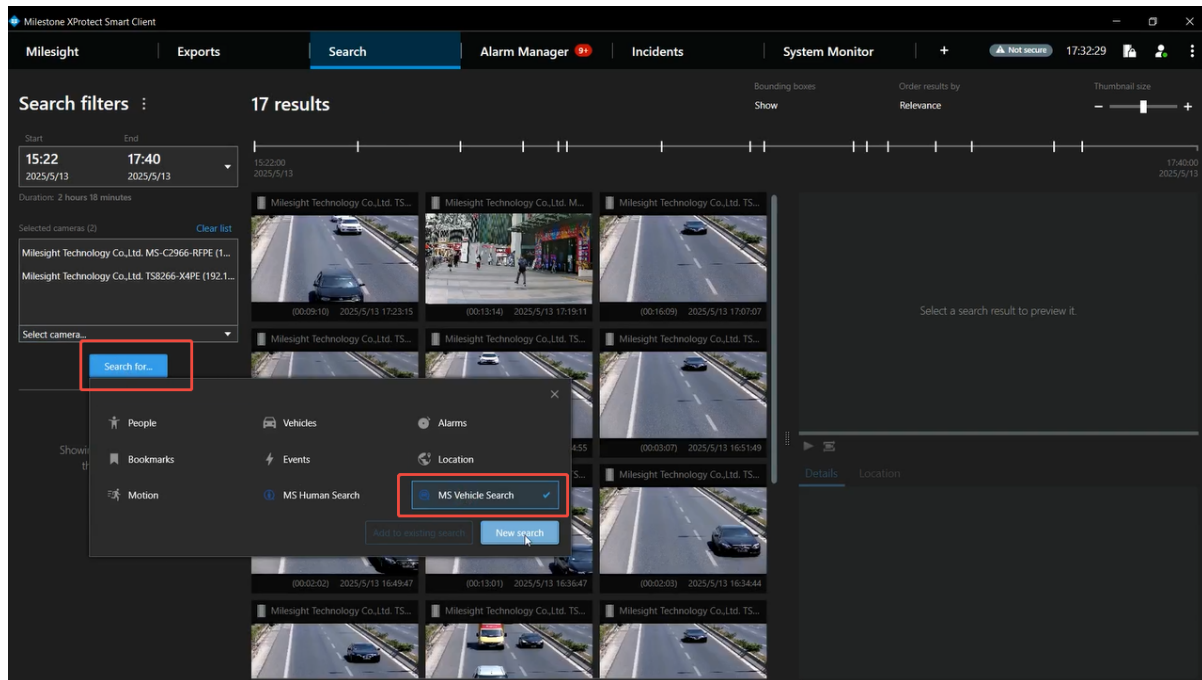


Note:

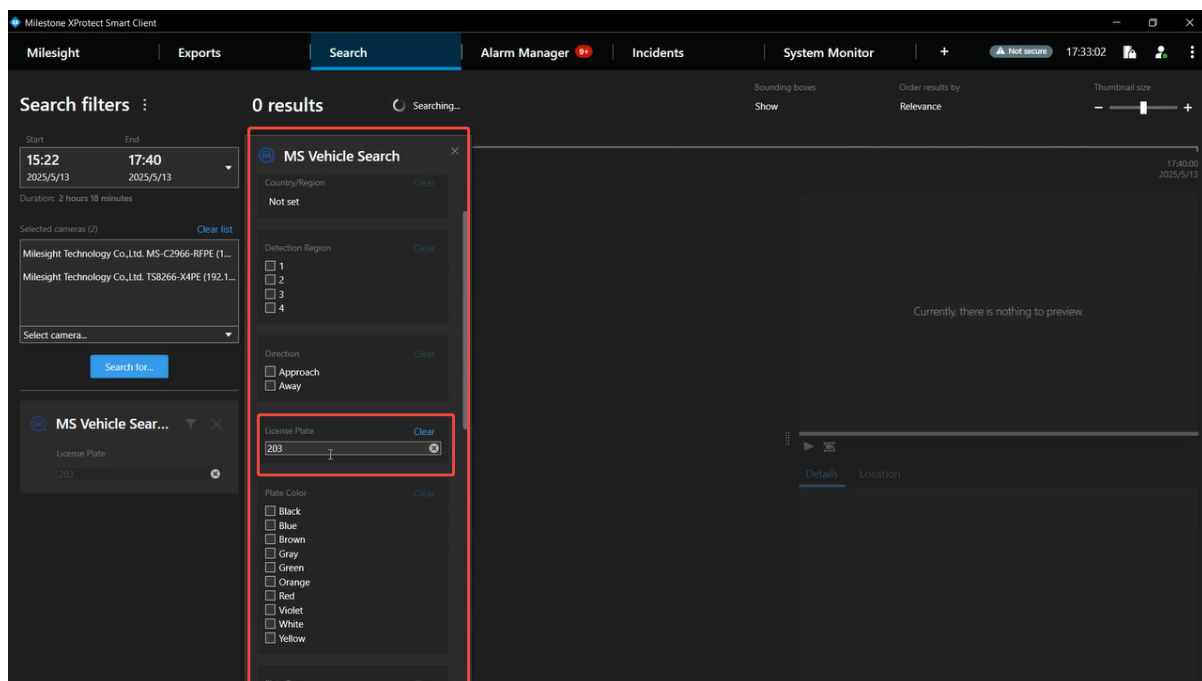
Milesight Video Surveillance Series are compatible with 61.8.0.4-r6 and above. Attribute recognition search requires version 8.0.5.

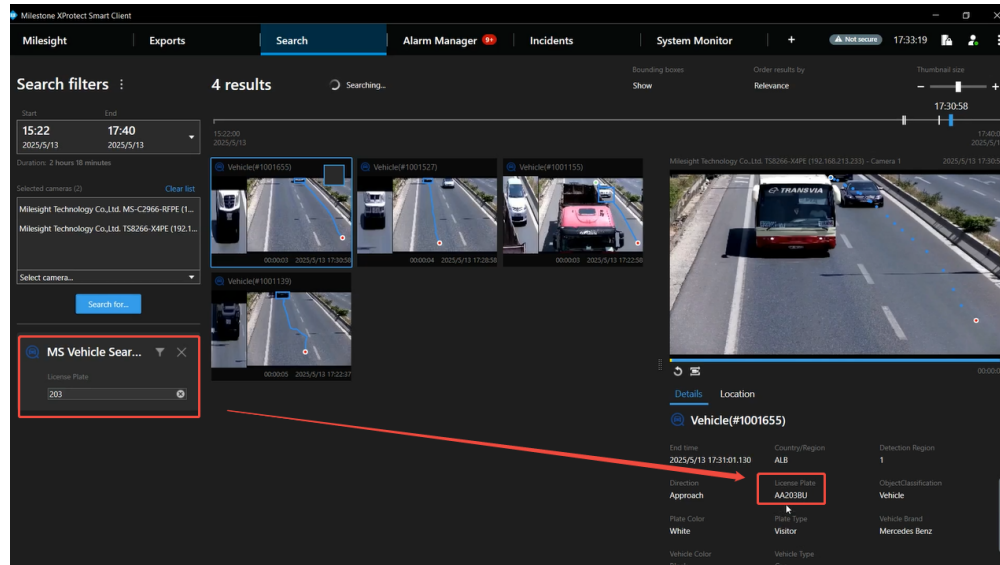
Searching for Vehicle Detection Results

On the Search interface, select the corresponding camera first, then click "Search For" to choose "MS Vehicle Search", and view the search results.



You can also find desired results by selecting specific attributes and view the movement trajectory of the detected vehicles.





Note: Milesight Intelligent Traffic Series are compatible with T_61.8.0.4-r2 and above.

4.5 Object and the Corresponding Attributes

Table 2. Metadata Objects and Attributes

Camera Series	Camera Name Rules	Objects	Attributes
Milesight Video Surveillance Series	Model number starting with MS-C, without "L" in ending letters. E.g. MS-C5372-FPE	Person	Hat
			Upper Clothing Color
			Lower Clothing Color
		Vehicle	Vehicle Type
		Face	Gender
			Age
			Mask
			Hat
			Glasses

Camera Series	Camera Name Rules	Objects	Attributes
Intelligent Traffic Series	Model number starting with TS. E.g. TS4441-X36RPE	Vehicle	Color
			Vehicle Type
			Brand
			Speed
			Direction
		License Plate	Number
			Color
			Country/Region
			Plate Type

Chapter 5. Fisheye Dewarping

The new Milestone plugin supports multi-mode Fisheye dewarping, such as 1O 3D, 1P, 2P, 4R, 1O4R, 1P1R, 1P4R, 1P6R, and 1O7R. The plugin is not limited to specific camera manufacturers and supports all Fisheye Cameras.

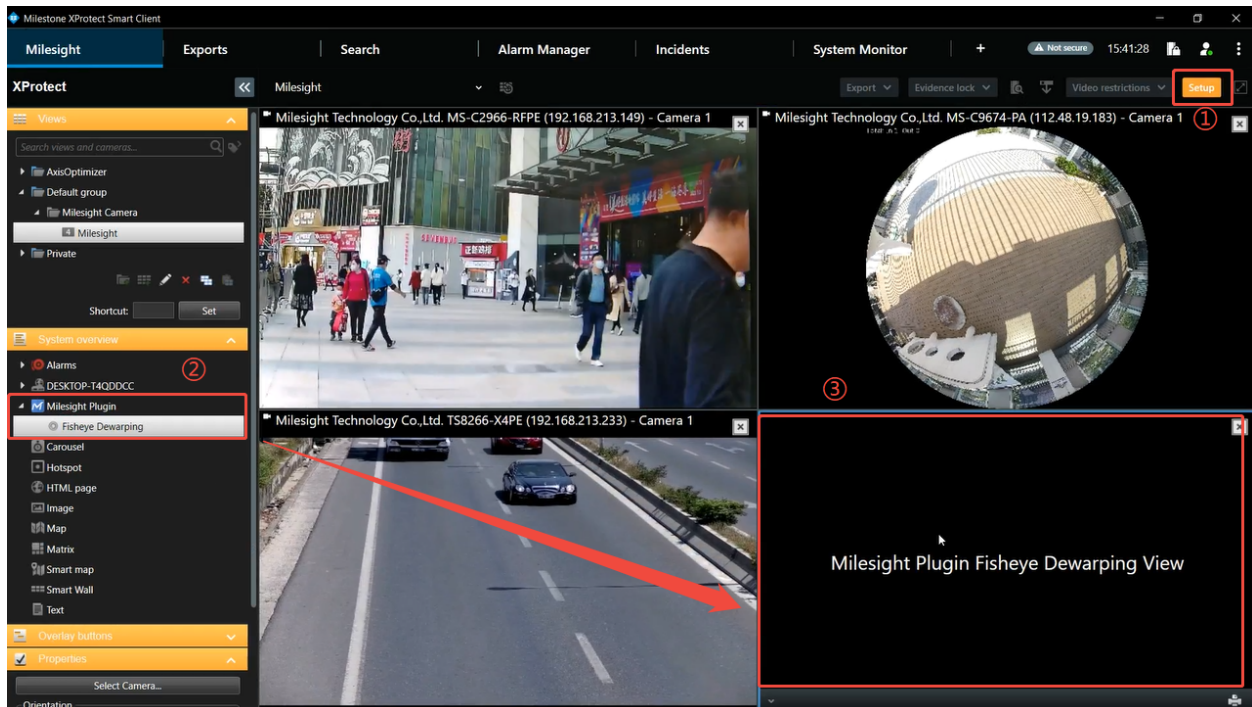
5.1 Configure Fisheye Dewarping

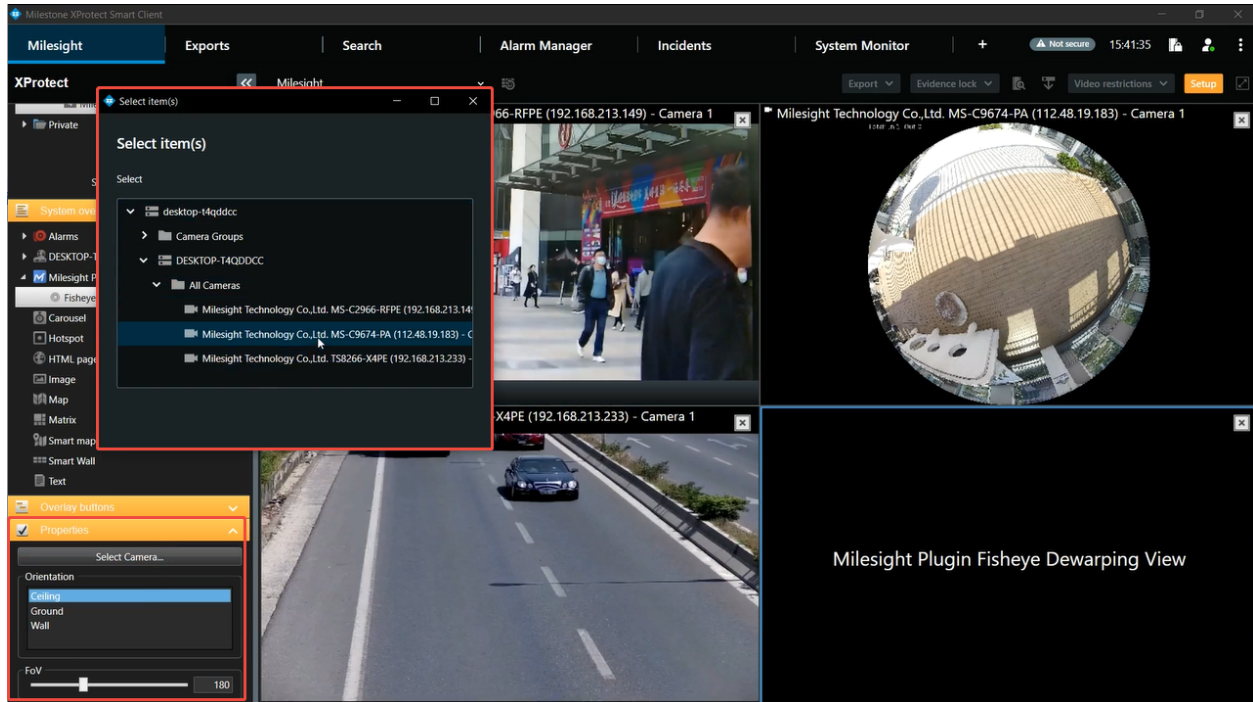
The detailed configuration steps are as follows:

Step 1: In the XProtect Smart Client preview interface, click "Setup" on the right side, drag the Milesight Plugin's Fisheye Dewarping component into the window, and configure the Camera, installation method, and field of view.

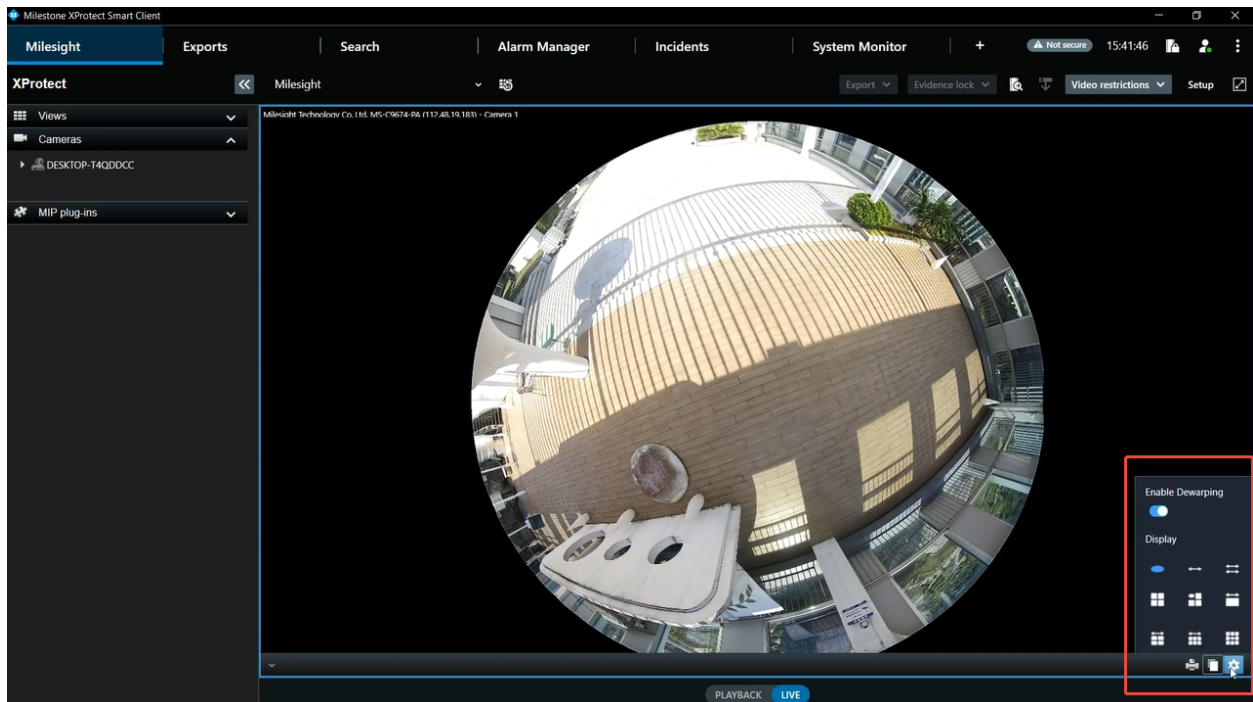
Note:

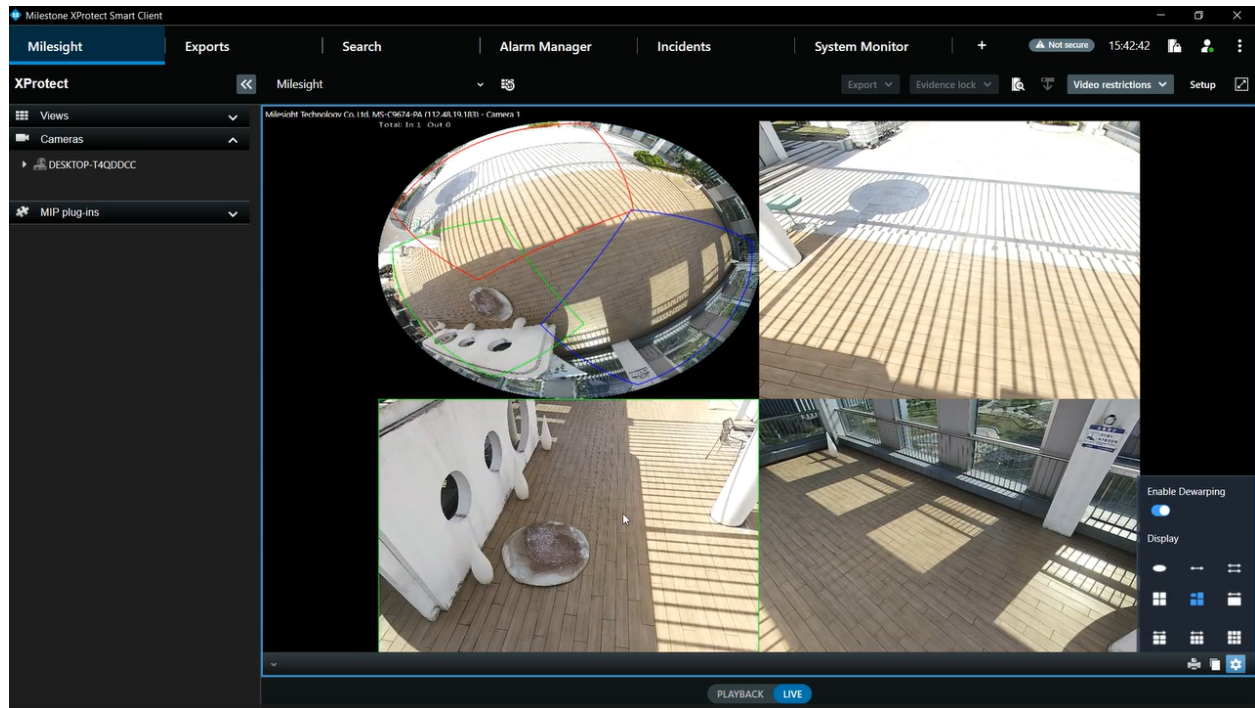
The range of Fov is from 160 to 220, with a default of 180. Users can set the appropriate field of view angle according to the camera.





Step 2: After configuring, exit "Setup", click the settings icon in the lower right corner of the Live window, and configure the Display mode. Users can select and view the area of interest by using the scroll wheel and dragging with the mouse.





Chapter 6. Uninstall

Uninstall Milesight plugin

[Windows]

Before uninstallation, first check if any Milestone components are being used. If no components are in use, proceed directly with the uninstallation process. Upon completion, a success popup will be displayed.



Chapter 7. Services

Milesight provides customers with timely and comprehensive technical support services. End-users can contact your local dealer to obtain technical support. Distributors and resellers can contact directly with Milesight for technical support.

Technical Support Mailbox: support@milesight.com

Web: <https://www.milesight.com>

Online Problem Submission System: <https://www.milesight.com/service/feedback.asp>

MILESIGHT CHINA

TEL: +86-592-5922772

Add: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China