Milesight Troubleshooting

How to set up Nx Embedded Camera

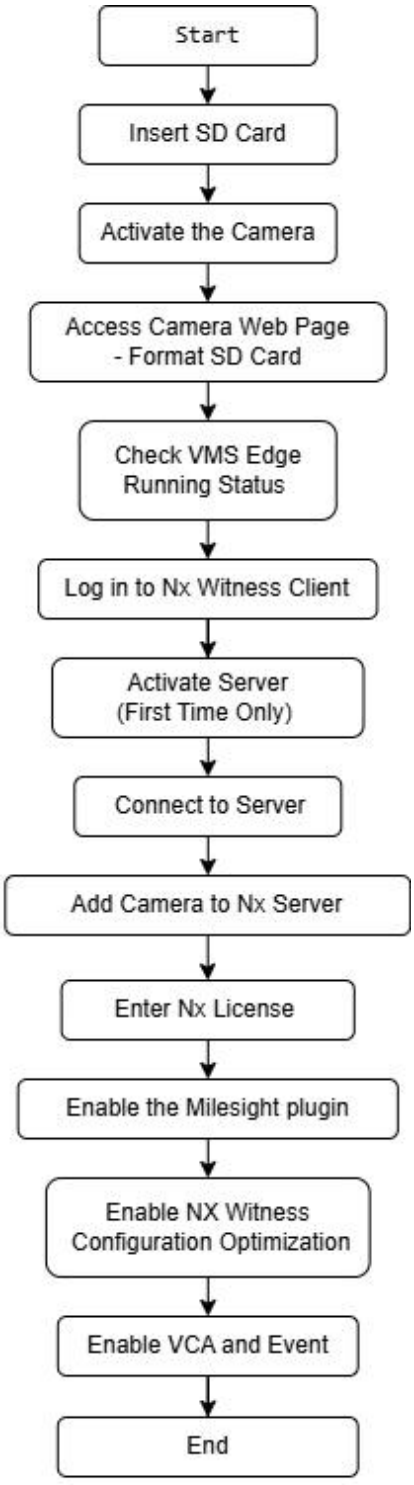
Thank you for purchasing the Milesight OpenVision Series product. This document provides an introduction on how to quickly get started with the Nx Embedded Camera. If you have any questions, please do not hesitate to contact our Milesight Support Team at support@milesight.com.

Introduction

- Embedded Nx Edge Server: The camera comes with an embedded Nx Edge server, supporting video streaming, storage, AI, and seamless integration with Nx. Nx recordings are stored on the camera's internal SD card. It supports DtC (Direct-to-Cloud) for direct cloud uploading. Additionally, it supports Nx Hive and Advanced Object Search.
- Nx Server Integration: The embedded Nx server only supports the addition of this specific camera.
- Video Quality: Supports 5MP resolution at 30FPS, with 8Mbps for both main and sub streams storage.
- Stream Forwarding: Capable of forwarding streams at up to 30Mbps.
- Storage Capacity: Supports up to 1TB micro SD card storage.

This section describes how to quickly get started and use your Nx Embedded Camera. If you want to learn more about how the Network Optix VMS operates, we recommend referring to the Network Optix website and their VMS and camera application manuals. Below is a brief operational procedure, for

detailed instructions please refer to the detailed descriptions below.



Note:

1. We recommend using Nx Witness Client version V6.0.6.41837.

2. Make sure your operating system is Windows (Windows 10/11).

1. Camera Set Up

Step 1: Insert SD Card.

Note: We strongly recommend using an SD card with a rating of no less than A2. The following are some recommended SD card models:

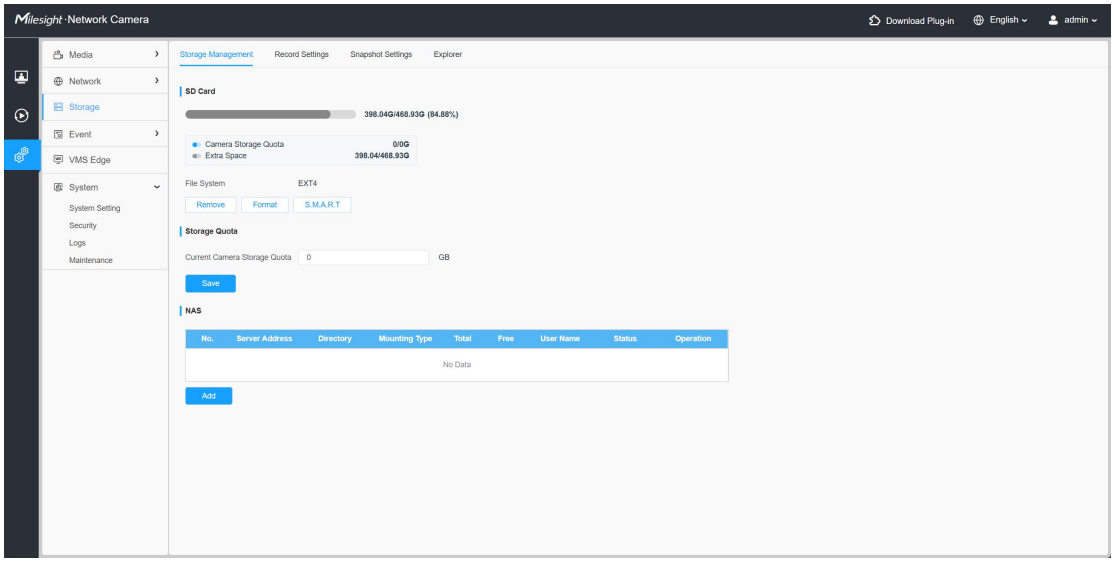
No.	Brand	Model
1	Kingston	512GB CANVAS Go! Plus A2 U3
2	Kingston	1TB CANVAS Go! Plus A2 U3
3	Lexar	512GB SILVER Plus A2 U3 V30
4	Lexar	1TB SILVER Plus A2 U3 V30
5	Samsung	512GB PRO Plus A2 U3 V30
6	Samsung	1TB PRO Plus A2 U3 V30
7	Samsung	512GB Pro Ultimate A2 U3 V30

Step 2: Activate the Camera.

Please activate the camera and set the password according to the manual. For detailed instructions, refer to the manual:

https://www.milesight.com/support/download/document-center/ipc-series/ndaa/en/user-manual/assigning-an-ip-address.html

Step 3: Access Camera Web Page.



Navigate to Settings - Storage - Storage Management. Please ensure that you insert and format the SD card.

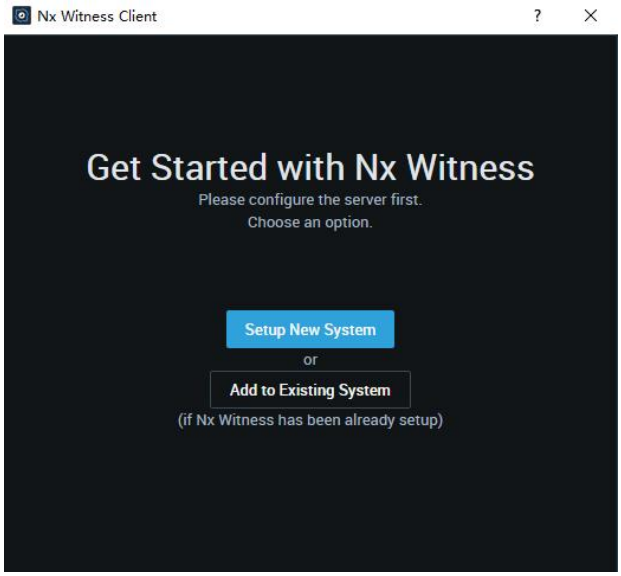
Note: By default, 10% of the SD card space is reserved for the camera system.

2. Nx Witness Set Up

Step 1: Activate Server(First Time Only).

- Initialize Nx Witness.

- Set custom username and password.



Step 2: Log in to Nx Witness Client.

Note:

1. We recommend using Nx Witness Client version V6.0.6.41837.

2. For instructions on how to initialize and log in to the Nx Witness Client, please refer to the Nx Witness manual:

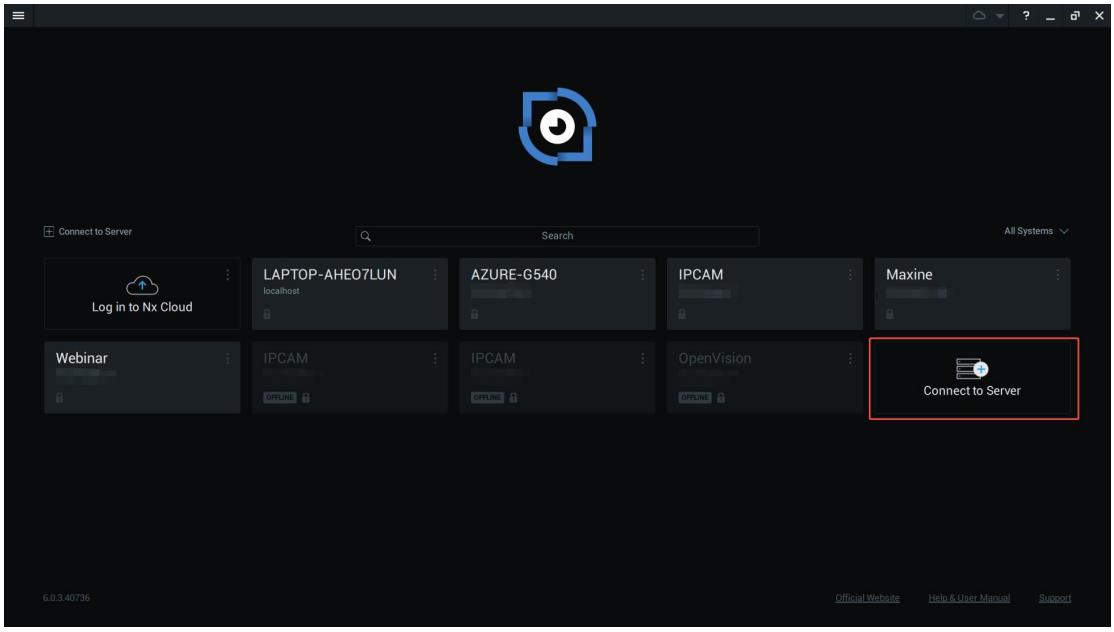
Nx Witness Fundamentals

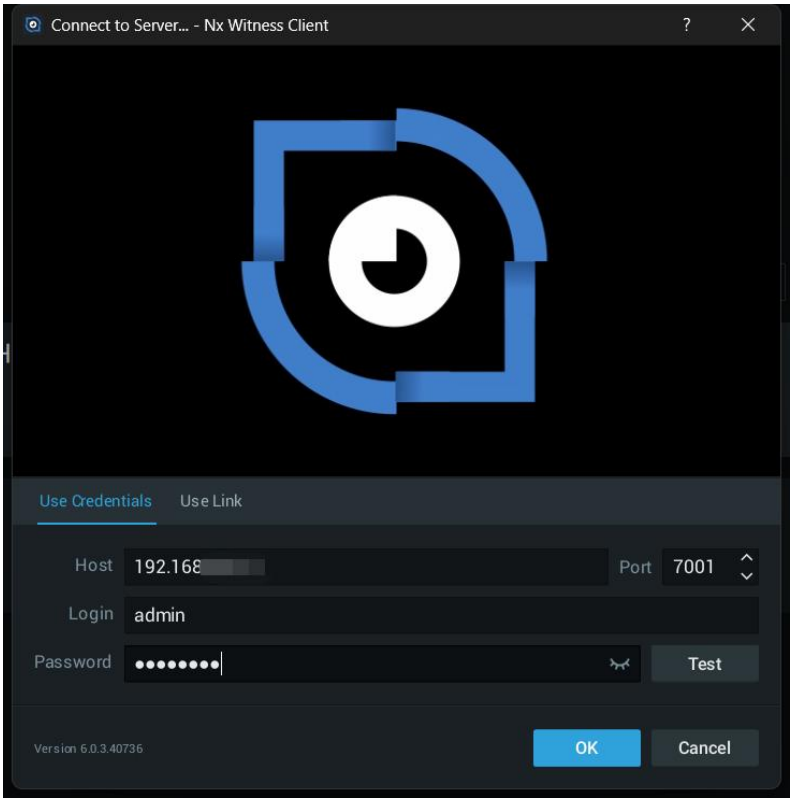
3. Connect to the server

Step 1: Connect to Server.

- Enter camera IP

- Port: 7001





Step 2: Connect the Camera.

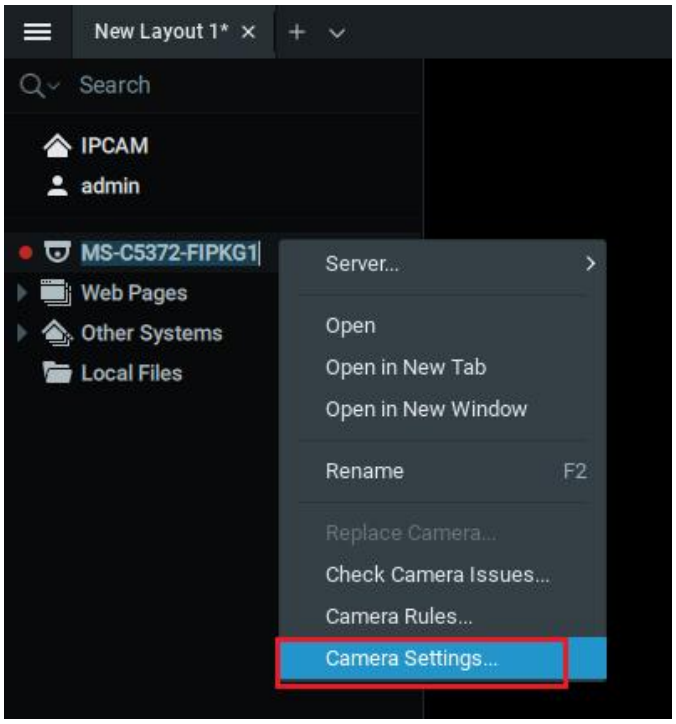
- Right-click the camera in the left panel.

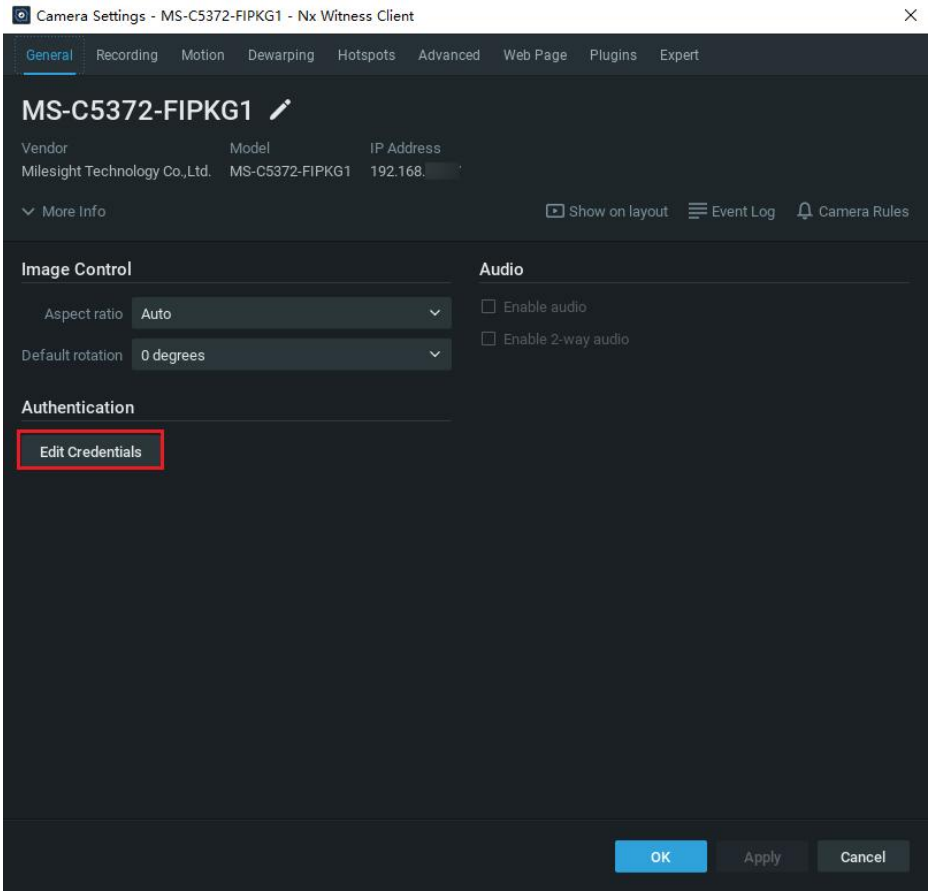
- Click **Camera Settings.**

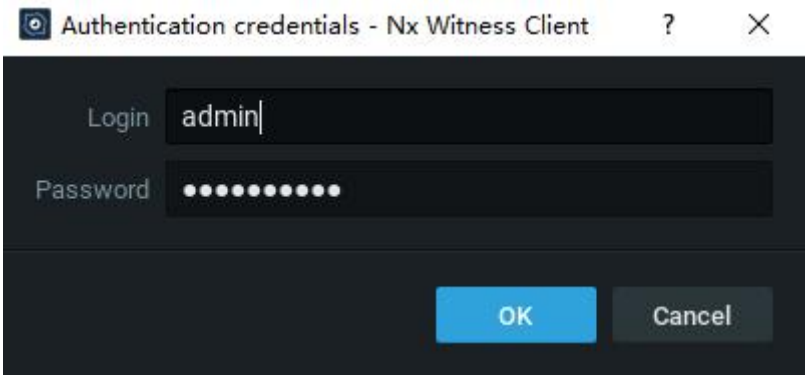
- Click **Edit Credentials.**

- Enter username and password.

- Click **OK.**

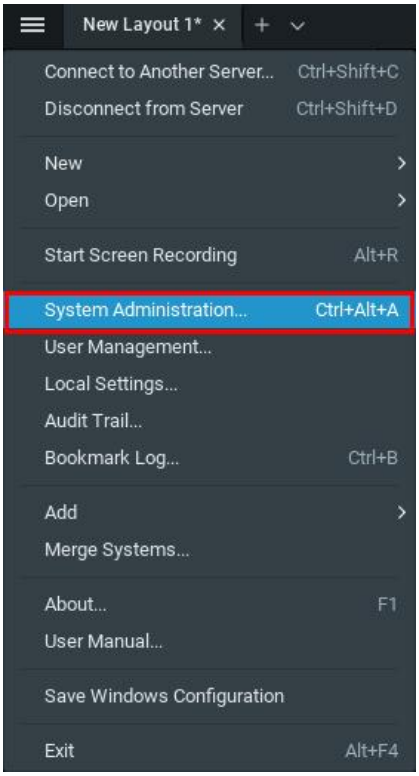


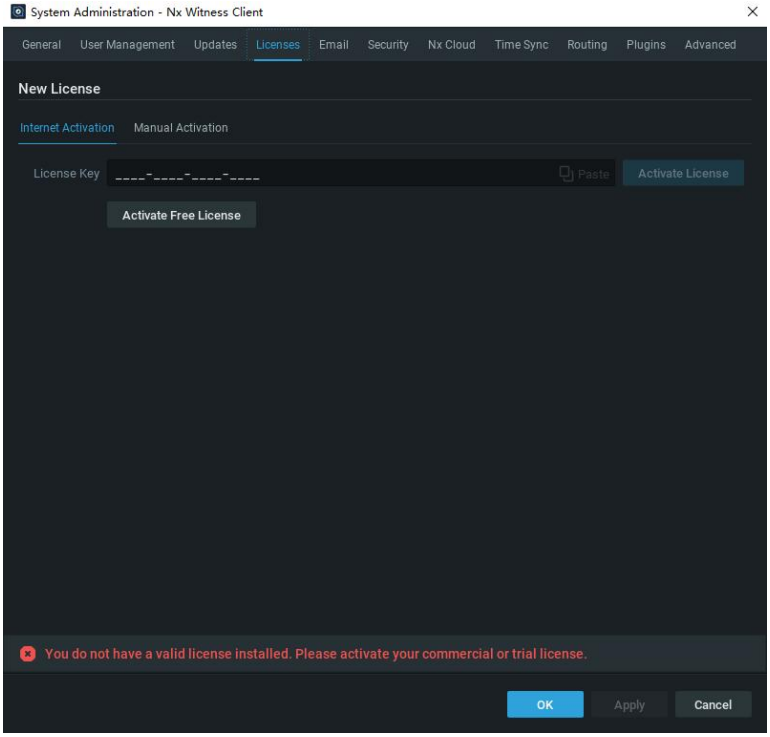

Camera Settings - MS-C5372-FIPKG1 - Nx Witness Client
General
Recording
Motion
Dewarping
Hotspots
Advanced
Web Page
Plugins
Expert
MS-C5372-FIPKG1
Vendor
Milesight Technology Co.,Ltd.
Model
MS-C5372-FIPKG1
IP Address
192.168.
More Info
Show on layout
Event Log
Camera Rules
Image Control
Aspect ratio
Auto
Default rotation
0 degrees
Audio
Enable audio
Enable 2-way audio
Authentication
Edit Credentials
OK
Apply
Cancel


Authentication credentials - Nx Witness Client
Login
admin
Password
OK
Cancel

4. Enter Nx License

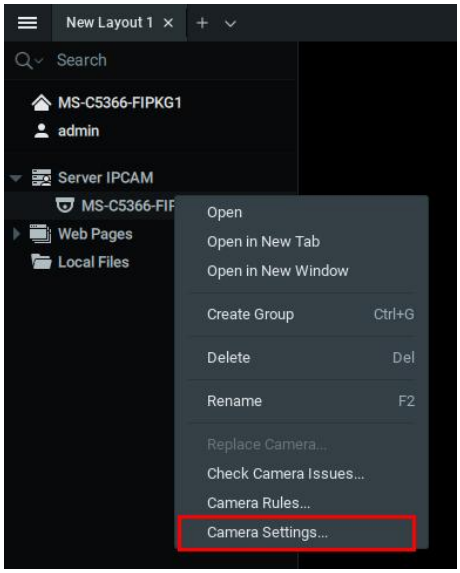
System Administration -> License: Enter the Nx License. For first-time use, you can activate a free license.

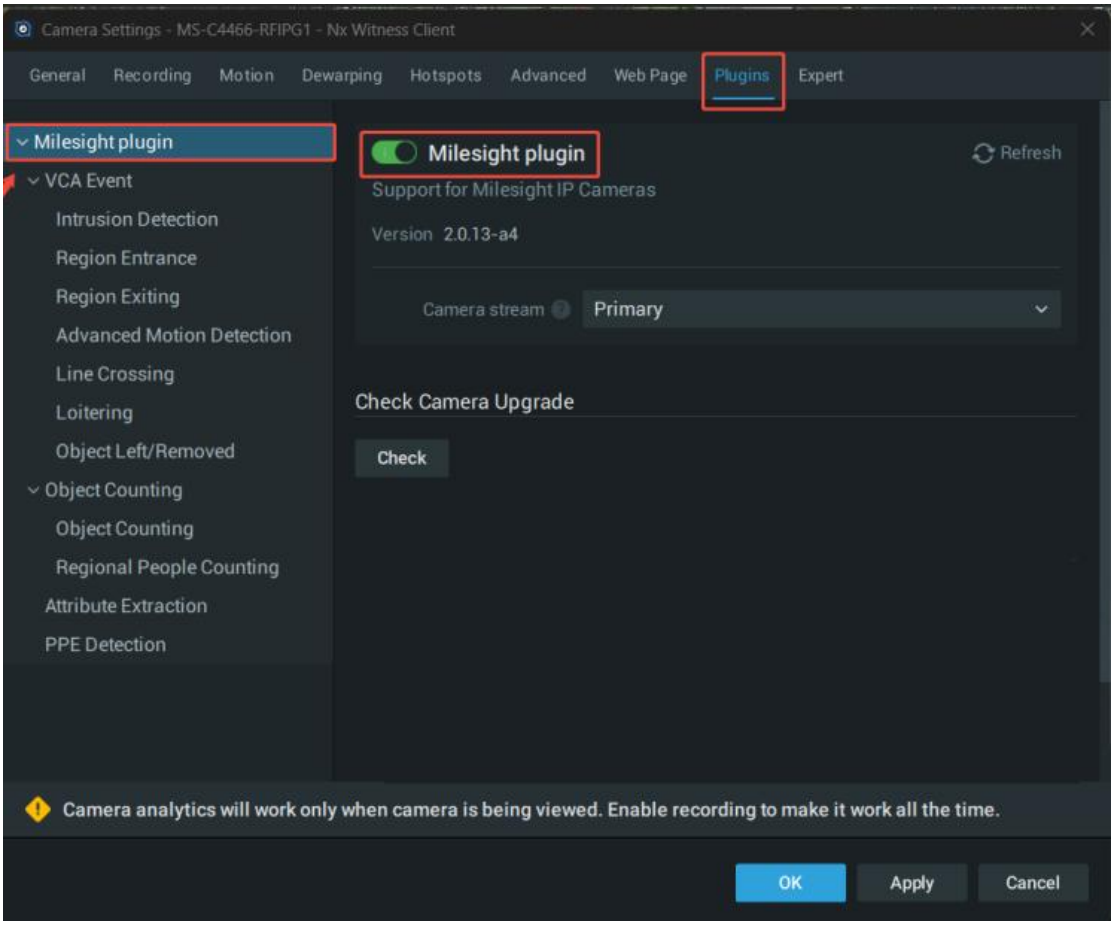




5. Enable the Milesight plugin

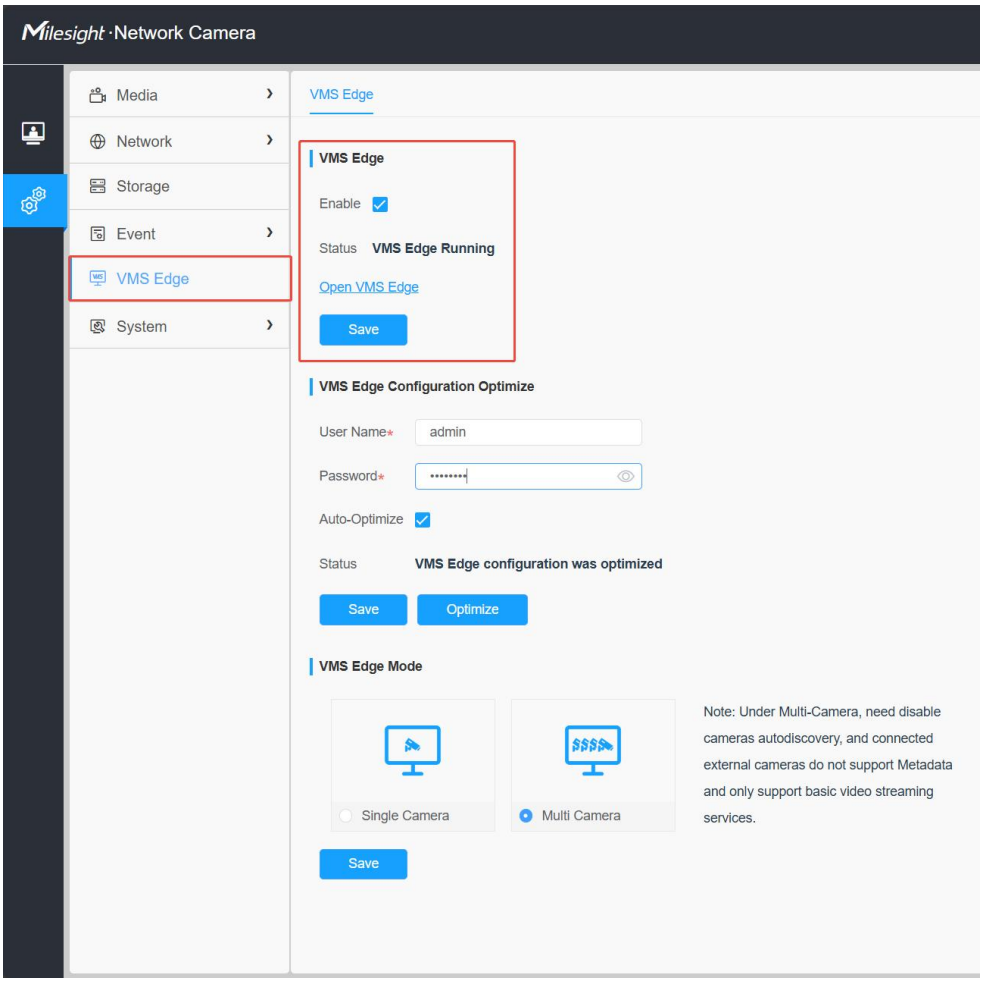
Right-click on the camera, select Camera Settings -> Plugins -> Milesight plugin, and then click to enable the Milesight plugin.





6. Enable VMS Edge

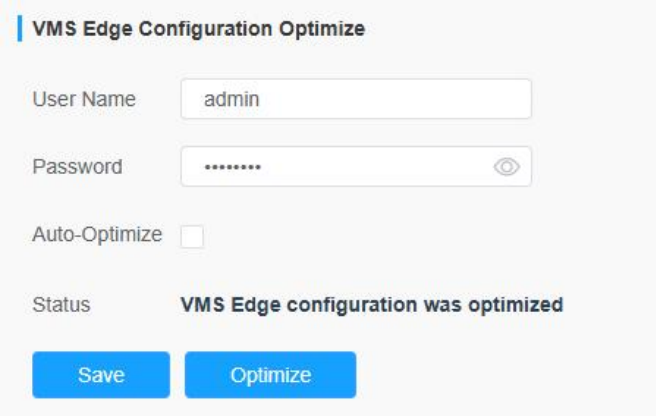
Step 1: Enable VMS Edge.



After enabling VMS Edge, the status will change to 'VMS Edge Running', indicating that the Nx Server is enabled.

Note: If 'VMS Edge Stopped' is displayed, please check the status of the SD card.

Step 2: Enable VMS Edge Configuration Optimize.

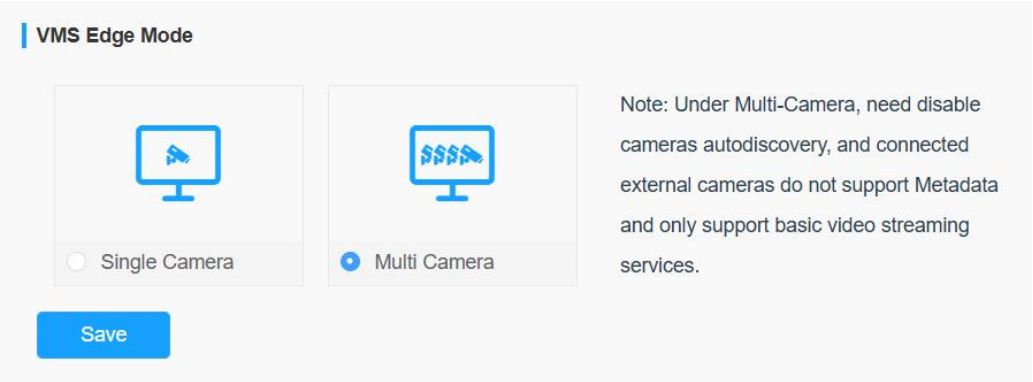


Next, enable VMS Edge Configuration Optimize. Enter the NX Server username and password, then click Optimize. If the status displays 'VMS Edge configuration was optimized', the optimization was successful.

Note: This step primarily optimizes SD card storage for optimal performance. Please ensure it is enabled, as failure to do so may result in storage errors.

Step 3: Select VMS Edge Mode.

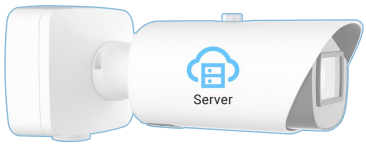
Supports Single Camera and Multi-camera modes, with single camera mode as the default.



1. Single Camera Mode:

This mode supports the registration of a maximum of one camera (with the purchase of a license for 1× NX channel), with a total bandwidth of up to

10Mbps.

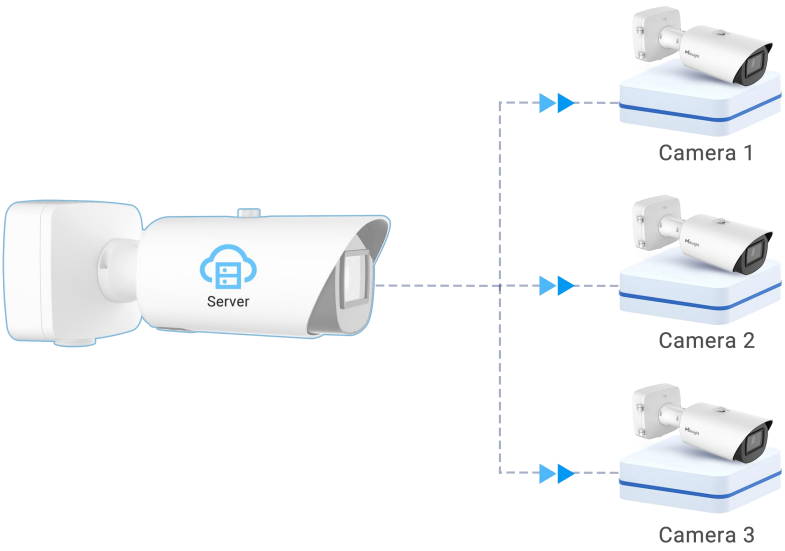


Note: AI Mode can be enabled for 1 camera setup.

2. Multi-camera Mode:

1) For MS-CXX66-FIPKG1, MS-CXX66-RFIPKG1,MS-CXX72-FIPKG1, MS-CXX72-RFIPKG1:

This mode supports the registration of a maximum of four cameras (with the purchase of a license for 4× NX channels), with a total bandwidth of up to 20Mbps.



Note:

1. If multi-camera mode is selected, you need to disable cameras autodiscovery and manually add cameras in the Nx Witness interface.

2. AI Mode can also be enabled for 4 camera setups. However, for external

connections, only basic video streaming services are supported, and Metadata is not supported.

2) For MS-C8477-HPKG1:

This mode supports the registration of a maximum of two cameras (with the purchase of a license for 2× NX channels), with a total bandwidth of up to 24Mbps.

Note:

In multi-camera mode, it is recommended to enable AI only on the main camera. For external connections, only basic video streams are supported, and metadata is not supported.

7. Manage Camera Analytics Event

The supported event types include Basic Motion Detection, Audio Alarm, External Input, Intrusion Detection, Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Object Left, Object Removed, Object Counting, Attribute Extraction, PPE Detection, Violence Detection, Fall Detection and Sound Classification(only for

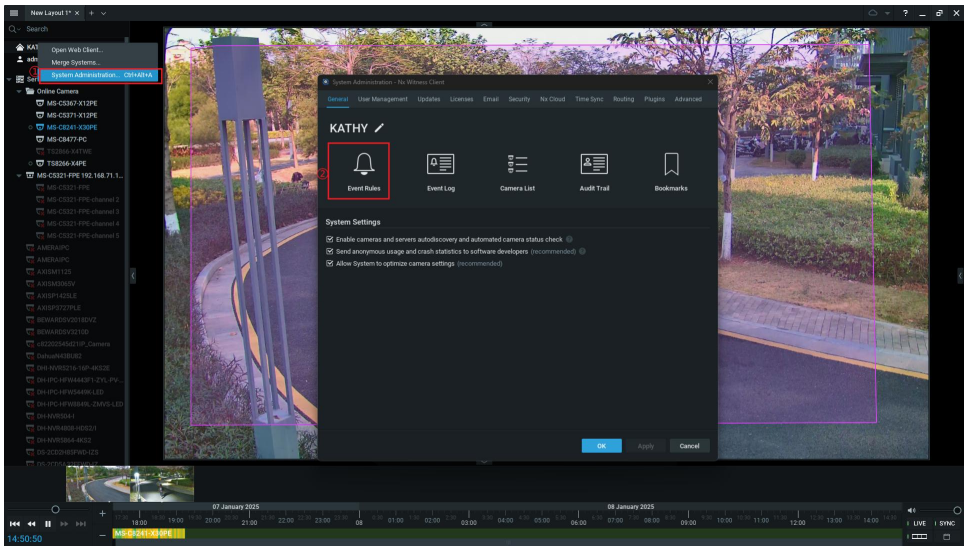
MS-CXX72-PG1 model). Below is an example using "**Advanced Motion Detection**":

Note: Analytics must be configured in the camera first in order to be detected by Nx Witness.

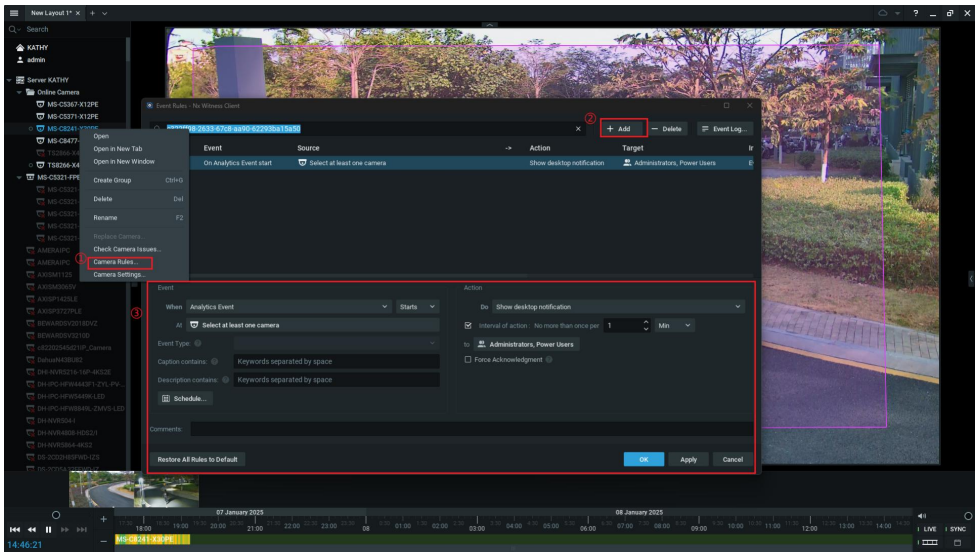
Step 1: Access the camera's web page to confirm that event detection is properly configured and enabled on the camera you plan to use. Milesight's cameras can have their detection configured within the Nx Witness desktop client.

Step 2: Entering Event Rule Setup.

Method 1: Right-click the system home icon and select the "System Administration", and choose "Event Rule".

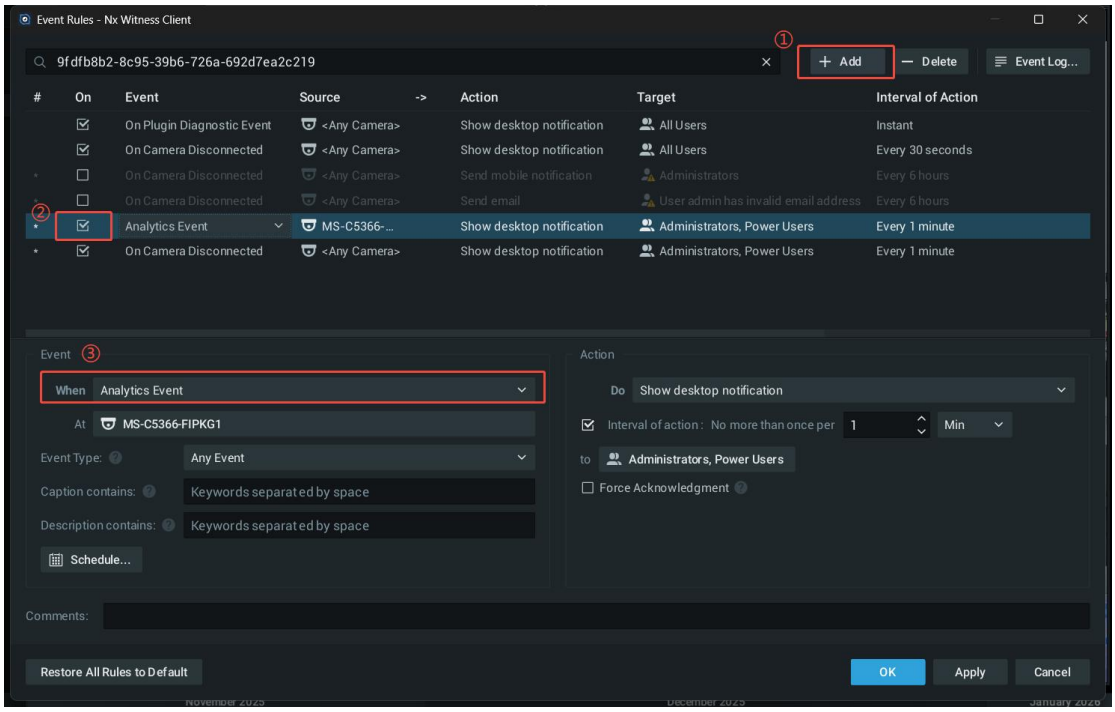


Method 2: Alternatively, add a rule for the designed camera by right-clicking and selecting "Camera Rules".

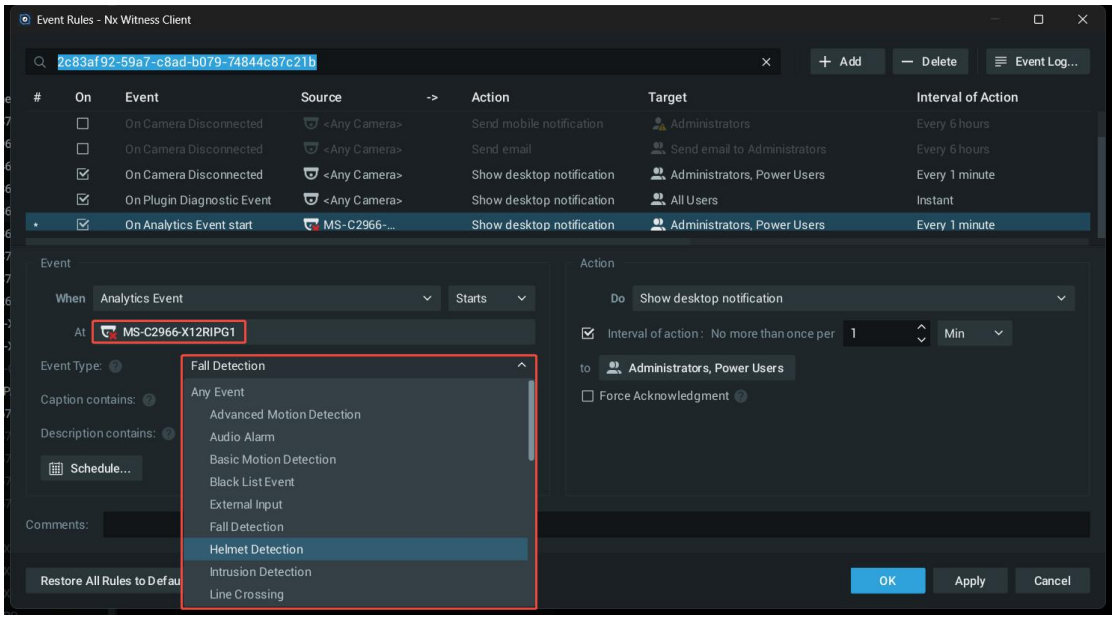


Step 3: Nx Witness generates a default set of Event Rules. Click on the “+Add” button.

When the default Event row appears, click on the “Event” dropdown menu and select “Analytics Event”, or select “Analytics Event” from the “When” field.



Step 4: Click on the “At” field to select the camera(s) and choose the “Event Type” that will trigger the rule.



Step 5: After completing the above settings, a notification will appear on the NOTIFICATIONS panel when the corresponding event rule is matched.

——————— END ———————