



# Compatibility between Network Optix and Milesight Camera

<b>Camera Version</b>	<b>XX.7.0.78-r1</b>	<b>Update</b>	<b>2021.8.27</b>
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## Part I HTTP Notification between Network Optix and Milesight VCA

### 1. What is Milesight VCA

VCA is short for Video Content Analysis. Milesight VCA provides advanced, accurate smart video analysis for Milesight network cameras. It enhances the performance of network cameras through 8 detection modes which are divided into basic function and advanced function, enabling the comprehensive surveillance function and quicker response of cameras to different monitoring scenes. There are 8 detection modes of Milesight VCA as follow.



Region  
Entrance



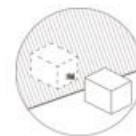
Region Exiting



Advanced Motion  
Detection



Tamper  
Detection



Object Removed



Line Crossing



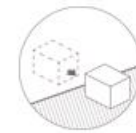
Loitering



Human  
Detection



People  
Counting

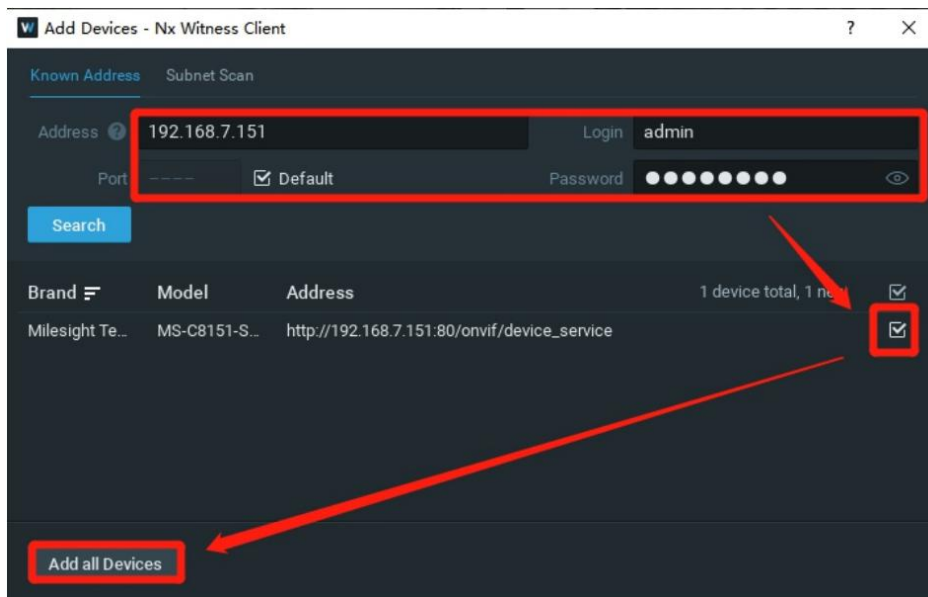


Object Left

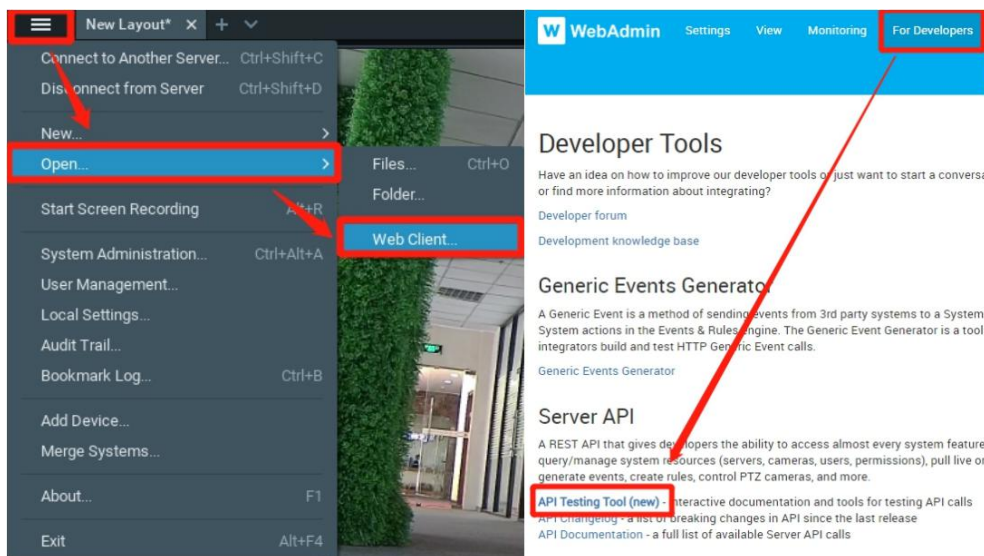
Milesight VCA can work with some third-party VMS like Network Optix by using the HTTP Notification. But how to do the settings? Here we will **take Region Entrance as an example.**

## 2. How to set up the HTTP Notification between Network Optix and Milesight VCA

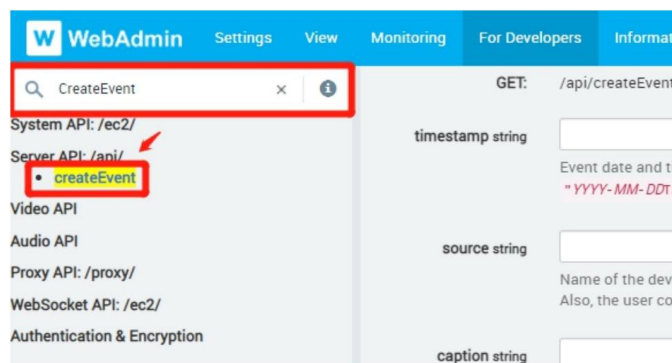
**Step 1:** Adding Milesight Camera in Nx Witness.



**Step 2:** Open Nx Witness Server Web Client, click the tag **"For Developers"** after logging into Web Client and then open **"API Testing Tools(new)"** .



Search **"CreateEvent"** to quickly find the API we want.



**Step 3:** The tool will automatically form Requesting URL after you fill in the content. We use three of these commonly used parameters. Fill in the information you want to send to Nx Witness when the Region Entrance is triggered.

source string	MS-C2961-REOPB <small>Name of the device which has triggered the event. It can be used in a filter in event rules to assign different actions to different devices. Also, the user could see this name in the notifications panel. Example: "POS terminal 5".</small>
caption string	Region Entrance <small>Short event description. It can be used in a filter in event rules to assign actions depending on this text.</small>
description string	Someone in the zone <small>Long event description. It can be used as a filter in event rules to assign actions depending on this text.</small>

**Request URL** `https://192.168.9.120:7001/api/createEvent?source=MS-C2961-REOPB&caption=Region%20Entrance&description=Someone%20in%20the%20zone`

Copy the Requesting URL.

**Step 4:** Open web page of the camera. Enable *HTTP Notification* in *Alarm Action*. Select *Get* in *HTTP Method* and choose one of the three URLs to enable. Set Trigger Interval from 0s to 900s. Paste the URL you just copied from API test tool in Nx Witness Server Web Client.

Reform the URL:

<http://192.168.7.33:7001/api/createEvent?source=MS-C2961-REOPB&caption=Region%20Entrance&description=Someone%20in%20the%20zone>

HTTP Notification:	<input checked="" type="checkbox"/>
HTTP Notification URL:	URL 1
Enable:	<input checked="" type="checkbox"/>
Trigger Interval:	0 (0-900) s
HTTP Method:	Get
URL:	REOPB&caption=Region%20Entrance&description=Someone%20in%20the%20zone
User Name:	admin
Password:	*****

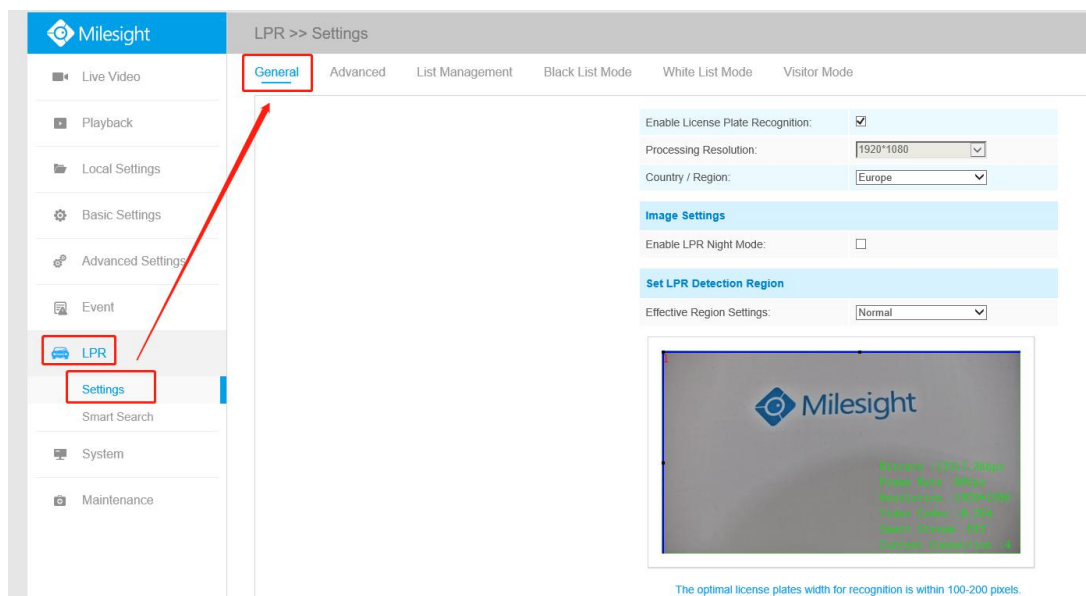
**Note:** Do not forget to finish User Name and Password (Nx Witness Server' s User Name and Password) and click Save.

**Result:** Once Region Entrance is triggered, Nx Witness will show the Notification.



## Part II HTTP Notification between Network Optix and Milesight LPR

**Step1:** Log in webpage, and go to "LPR" → "Settings". Check the checkbox "Enable License Plate Recognition", you can draw the screen to select area interested.



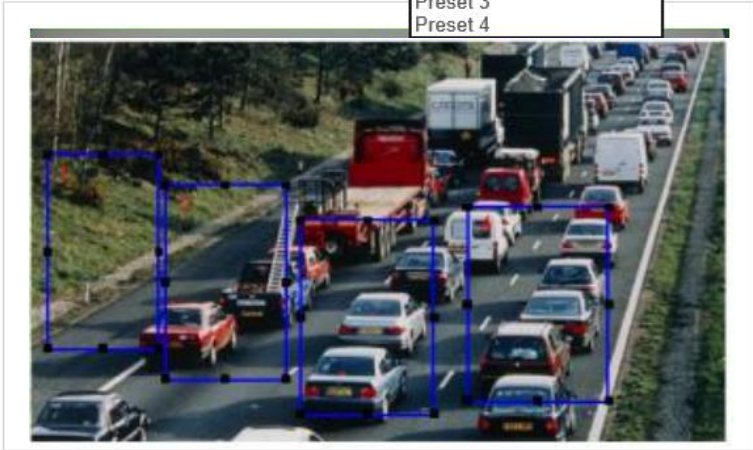
You can set up to 4 ROI areas by drawing the screen. If you choose **Normal Mode**, it supports configuring the LPR detection regions for the current area. If you choose **Advanced Mode**(Only for PTZ series), it supports configuring

different LPR detection regions for different PTZ presets (Only support Preset 1~4 so far).

### Set LPR Detection Region

Effective Region Settings: Advanced

Effective with Presets: 
 Preset 1  
 Preset 2  
 Preset 3  
 Preset 4

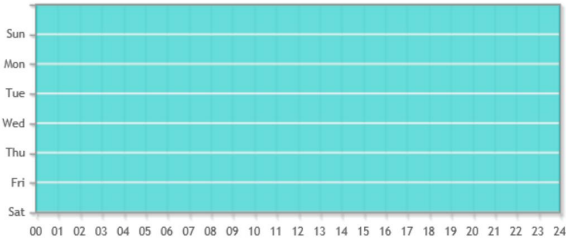


Add
Clear
Delete All

ID	Name	Edit	Delete
1	ROI_1		
2	ROI_2		
3	ROI_3		
4	ROI_4		

**Step2:** Schedule Settings. You can draw the schedule by clicking “Edit” button. And then click “Save” or “Reset” after finishing setting. You also can copy the settings to other channels.

### Schedule Settings



Edit

Milesight Network Camera

	Period1		Period2		Period3		
<input checked="" type="checkbox"/> Sunday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Monday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Tuesday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Wednesday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Thursday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Friday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		
<input checked="" type="checkbox"/> Saturday	00   00   24   00	00   00   00   00	00   00   00   00	00   00   00   00	Copy to Other Days		

Save Reset

**Step3:** Detection Settings.

Detection Settings	
Detection Trigger:	Always <input type="button" value="v"/>
Confidence Level:	<input type="range" value="4"/>
Repeat Plate Checktime:	<input type="text" value="0"/> <input type="button" value="minute"/> <input type="button" value="v"/> (0~60min)
License Plate Serial Format:	<input type="button" value="Edit"/>
Features Identification:	<input type="checkbox"/> All <input type="checkbox"/> Plate Color <input type="checkbox"/> Vehicle Type <input type="checkbox"/> Vehicle Color <input type="checkbox"/> Detection Region <input type="checkbox"/> Direction

**[Detection Trigger]:** If you choose “Always”, camera will always detect the license plate. If you choose “Alarm input”, camera will only detect the license plate during Alarm Input is being triggered.

**[Confidence Level]:** You can set the confidence level from 1 to 10. When the confidence level of the license plate is higher than the set confidence level, it will push the license plate image to the logs interface.

**[Repeat Plate Checktime]:** Set the time interval for repeatedly reading license plates to effectively avoid duplicate identification of parking vehicles.

**[Feature Identification]:** Check **Direction**, **Vehicle Type** or **All** to enable Features Identification, it will display the corresponding information on the logs interface.

**Step4:** Enable LPR Message Post, Select post type as **HTTP**, then input the HTTP Notification URL、 User Name and Password.

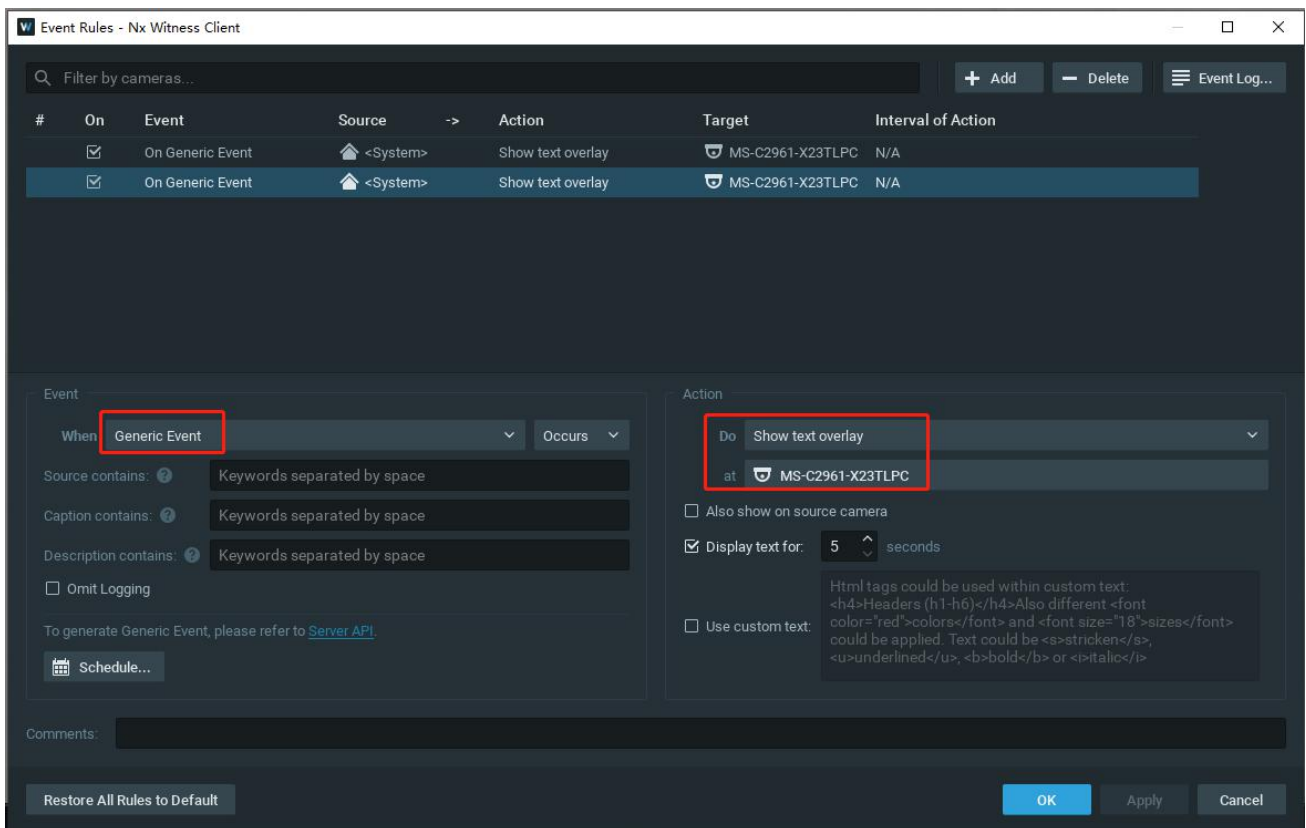
- You must be carefully to put in correct **HTTP Notification URL** from API test tool in Nx Witness Server Web Client :

<https://192.168.9.120:7001/api/createEvent?source=MS-2961-X23TLPC&caption=LPR&description=Number>

( Refer to page 3 )

LPR Message Post Settings	
Enable LPR Message Post:	<input checked="" type="checkbox"/>
Post Type:	HTTP <input type="button" value="v"/>
HTTP Method:	Get <input type="button" value="v"/>
HTTP Notification URL:	<input type="text" value="https://192.168.9.120:7001/api/createEvent?source=MS-C2961-X23TLPC&amp;caption=LPR&amp;descriptio"/>
User Name:	<input type="text" value="admin"/>
Password:	<input type="password" value="....."/>

**Step5:** After finishing the settings at camera' s side, log in NX VMS and create the Event as "**Generic Event**", then set the Action as "**Show text overlay**".



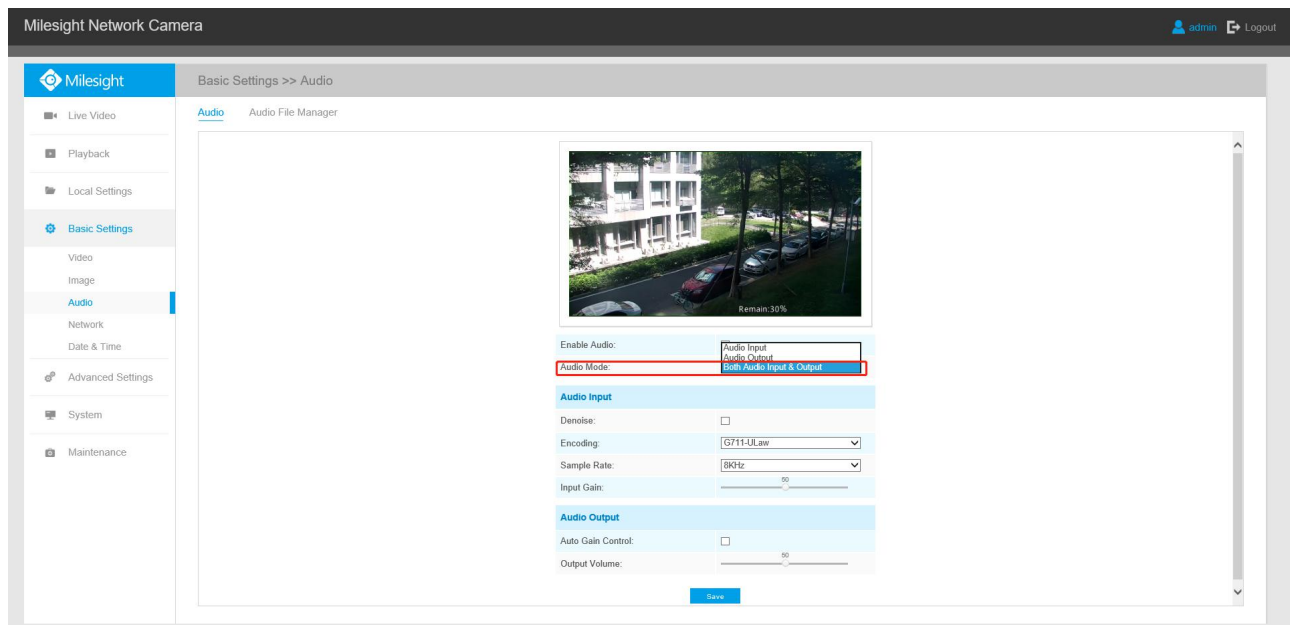
**Step6:** After setting successfully, if the license plate is detected, you will see the HTTP Notification showed as the picture as follow on the live video page in Network Optix.



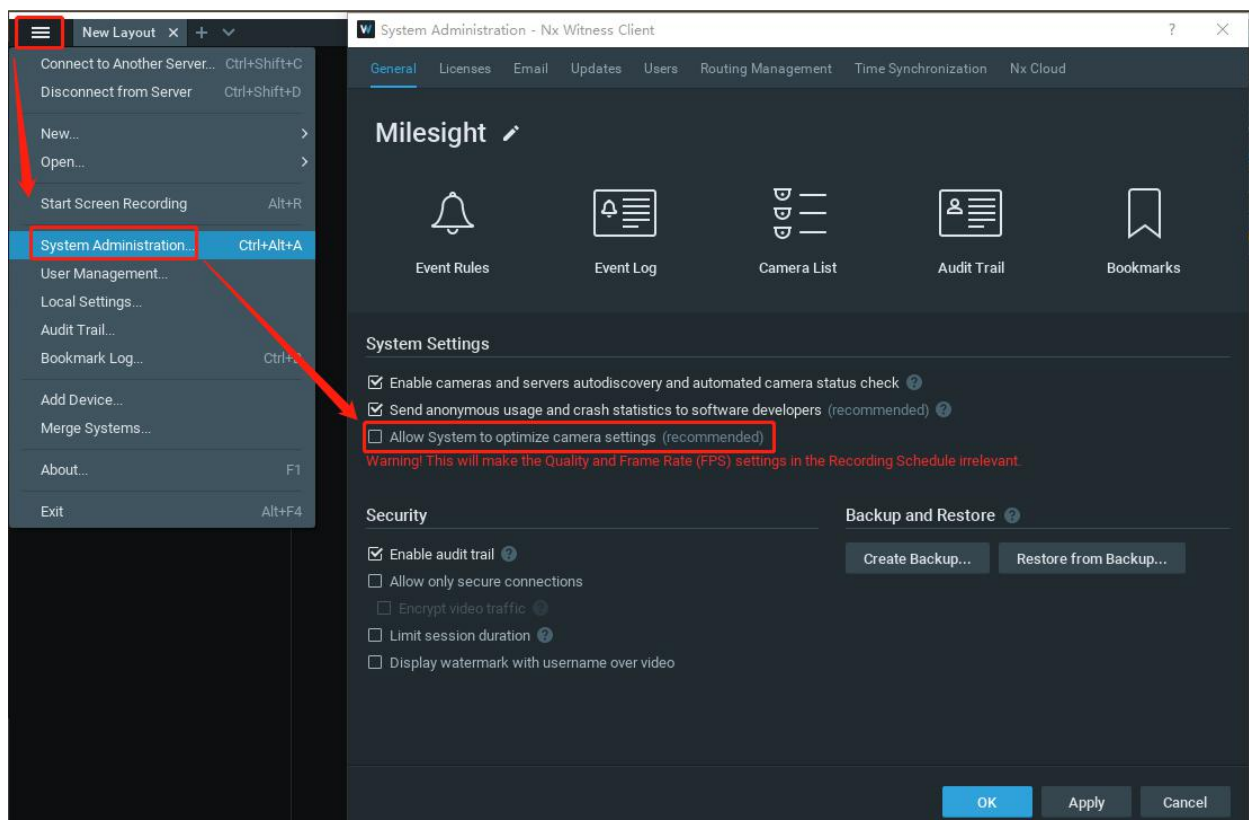


## Part III ONVIF two-way audio

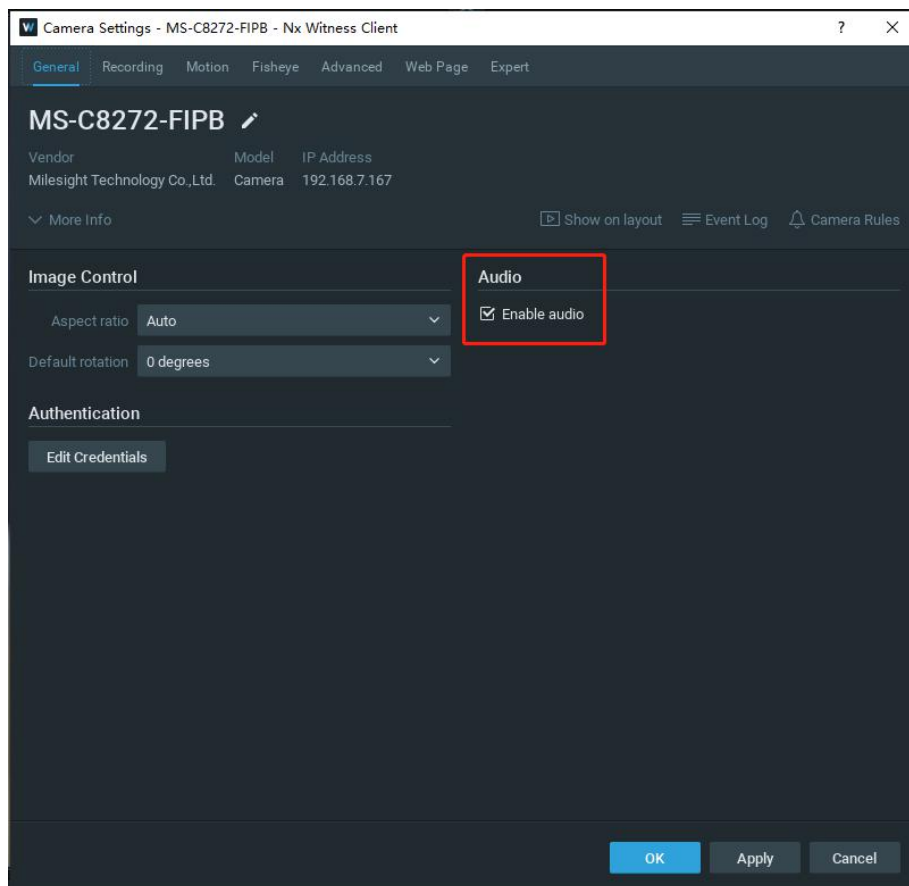
**Step1:** Enable both audio input and output on camera web.



**Step2:** Before adding camera, need to cancel "Allow System to optimize camera settings" firstly.



**Step2:** Enable audio when adding camera to Network Optix.



**Step3:** Hold down the button in the lower right corner of the live view to speak.



**END**