

Compatibility between Network Optix and Milesight Camera

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| Camera VersionXX.7.0.78-r1Update2021.8.27 |
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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.



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.

| M Add Devices | - Nx Witness Clie | nt | | | ? | × |
|---------------|-------------------|----------------------------------|--------------|----------------------|----|---|
| | Subnet Scan | | | | | |
| Address 🔞 | 192.168.7.151 | | Login | admin | | |
| Port | 🗹 | Default | Password | •••• | | ۲ |
| Search | | | | | | |
| Brand 📻 | Model | Address | | 1 device total, 1 no | ٩, | ß |
| Milesight Te | MS-C8151-S | http://192.168.7.151:80/onvif/de | vice_service | | | R |
| Add all Devic | ces | | | | | |

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.

| W WebAdmin | Settings | View | Monitoring | For Devel | lopers | Informati |
|---|----------|------|------------|-------------|--------|---------------------------|
| Q CreateEvent | × | 0 | | GET: | /api/o | createEvent |
| System API: /ec2/ | | | timesta | amp string | | |
| Server API: /api/ • createEvent Video API | | | | | Event | date and tir Y-MM-DDTH |
| Audio API | | | SO | urce string | | |
| Proxy API: /proxy/ | | | | | Name | e of the devi |
| WebSocket API: /ec2/ | | | | | Also, | the user cou |
| Authentication & Encryption | n | | сар | tion string | | |



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 |
|--------------------|---|
| | 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". |
| caption string | Region Entrance |
| | Short event description. It can be used in a filter in event rules to assign actions depending on this text. |
| description string | Someone in the zone |
| | Long event description. It can be used as a filter in event rules to assign actions depending on this text. |

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: | |
|------------------------|---|
| HTTP Notification URL: | URL1 V |
| Enable: | |
| Trigger Interval: | 0 (0-900) s |
| HTTP Method: | Get 🗸 |
| URL: | REOPB&caption=Region%20Entranc ▲ e&description=Someone%20in%20t ▼ he%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 " \rightarrow "Settings". Check the checkbox "Enable License Plate Recognition", you can draw the screen to select area interested.

| 📀 Milesight | LPR >> | Settings | | | | | |
|-------------------|---------|----------|-----------------|-----------------|-----------------------------------|-----------|-----------------------|
| Live Video | General | Advanced | List Management | Black List Mode | White List Mode Visitor M | lode | |
| Playback | 1 | | | | Enable License Plate Recognition: | V | |
| | / | | | | Processing Resolution: | 1920*1080 | \checkmark |
| Local Settings | | | | | Country / Region: | Europe | ~ |
| Basic Settings | | | | | Image Settings | | |
| Advanced Settings | | | | | Enable LPR Night Mode: | | |
| | | | | | Set LPR Detection Region | | |
| Event | | | | | Effective Region Settings: | Normal | ~ |
| 🖨 LPR | | | | | | | 2 |
| Settings | | | | | A | lasight | |
| Smart Search | | | | | | liesignu | |
| System | | | | | | | 1991 2 Steller |
| Maintenance | | | | | | | a Personal |
| Maintonanco | | | | | | | ite (11.004) |
| | | | | | | Carrens (| and the second second |
| | | | | | | | |

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).



| 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.



Step3: Detection Settings.

| Detection Settings | |
|------------------------------|---|
| Detection Trigger: | Always 🗸 |
| Confidence Level: | |
| Repeat Plate Checktime: | 0 minute V (0~60min) |
| License Plate Serial Format: | Edit |
| Features Identification: | All Plate Color Vehicle Type Vehicle Color Detection Region 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)

| Enable LPR Message Post: | |
|--------------------------|---|
| Post Type: | HTTP |
| HTTP Method: | Get 🗸 |
| HTTP Notification URL: | https://192.168.9.120:7001/api /createEvent?source=MS-C2961- X23TLPC&caption=LPR&descriptio |
| User Name: | admin |
| Password: | 0000000 |



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".

| ٧/ | Event | Rules - N | x Witness Client | | | | | | | s= | | × |
|----|-------|-------------------------------------|--|---------------------|-------------------|---------------------|-------------|-------------|----------|----|----------|----|
| | Q Fi | lter by ca | | | | | | + Add | - Delete | | Event Lo | j |
| | # | On | Event | Source | Action | Target | Interva | l of Action | | | | |
| | | | On Generic Event | | Show text overlay | T MS-C2961-X23 | TLPC N/A | | | | | |
| | | | On Generic Event | 合 <system></system> | Show text overlay | 😈 MS-C2961-X23 | TLPC N/A | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | hen Ger | eric Event | | ✓ Occurs ✓ | Do Show text of | verlay | | | | | |
| | | | s: 🛞 Keywords separ | | | at 😈 MS-C2 | 961-X23TLPC | | | | | |
| | | | | ated by space | | Also show on sour | ce camera | | | | | |
| | | | | | | 🗹 Display text for: | | | | | | |
| | To ge | mit Loggir nerate Ge Schedule | ig neric Event, please refer to <u>Ser</u> | | | Use custom text: | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Rest | ore All Rul | es to Default | | | | | | ок Ар | | Cance | əl |

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.

| New Layout 🗙 🕂 🗸 | System Administration - I | Nx Witness Client | | | ? × |
|--|-----------------------------|---------------------------|--------------------------------|------------------|---------------|
| Connect to Another Server Ctrl+Shift+C | General Licenses Emai | | Routing Management Time S | | |
| Disconnect from Server Ctrl+Shift+D | | | | | |
| New > | Milesight 🖌 | | | | |
| Open ≻ | | | | | |
| Start Screen Recording Alt+R | Ţ | ₽ <u></u> | | <u>ه</u> | |
| System Administration Ctrl+Alt+A | r un l | | • — | | |
| User Management | Event Rules | EventLog | Camera List | Audit I raii | Bookmarks |
| Local Settings Audit Trail | System Settings | | | | |
| Bookmark Log Ctrl+ | Fnable cameras and ser | vers autodiscoverv and a | utomated camera status chec | (@) | |
| Add Device | Send anonymous usage | and crash statistics to s | oftware developers (recomme | nded) 🙆 | |
| Merge Systems | Allow System to optimize | e camera settings (recor | nmended) | | |
| About F1 | Warning! This will make the | Quality and Frame Rate (| FPS) settings in the Recording | | |
| Exit Alt+F4 | Security | | Backu | p and Restore 💿 | |
| | 🗹 Enable audit trail 🛞 | | Crea | te Backup Restor | e from Backup |
| | Allow only secure conne | ctions | | | |
| | | | | | |
| | Limit session duration | | | | |
| | Display watermark with | username over video | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | ок | Apply Cancel |

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.



