

## **AI Box Integration with 3rd party client User Guide Document**

### **Summary**

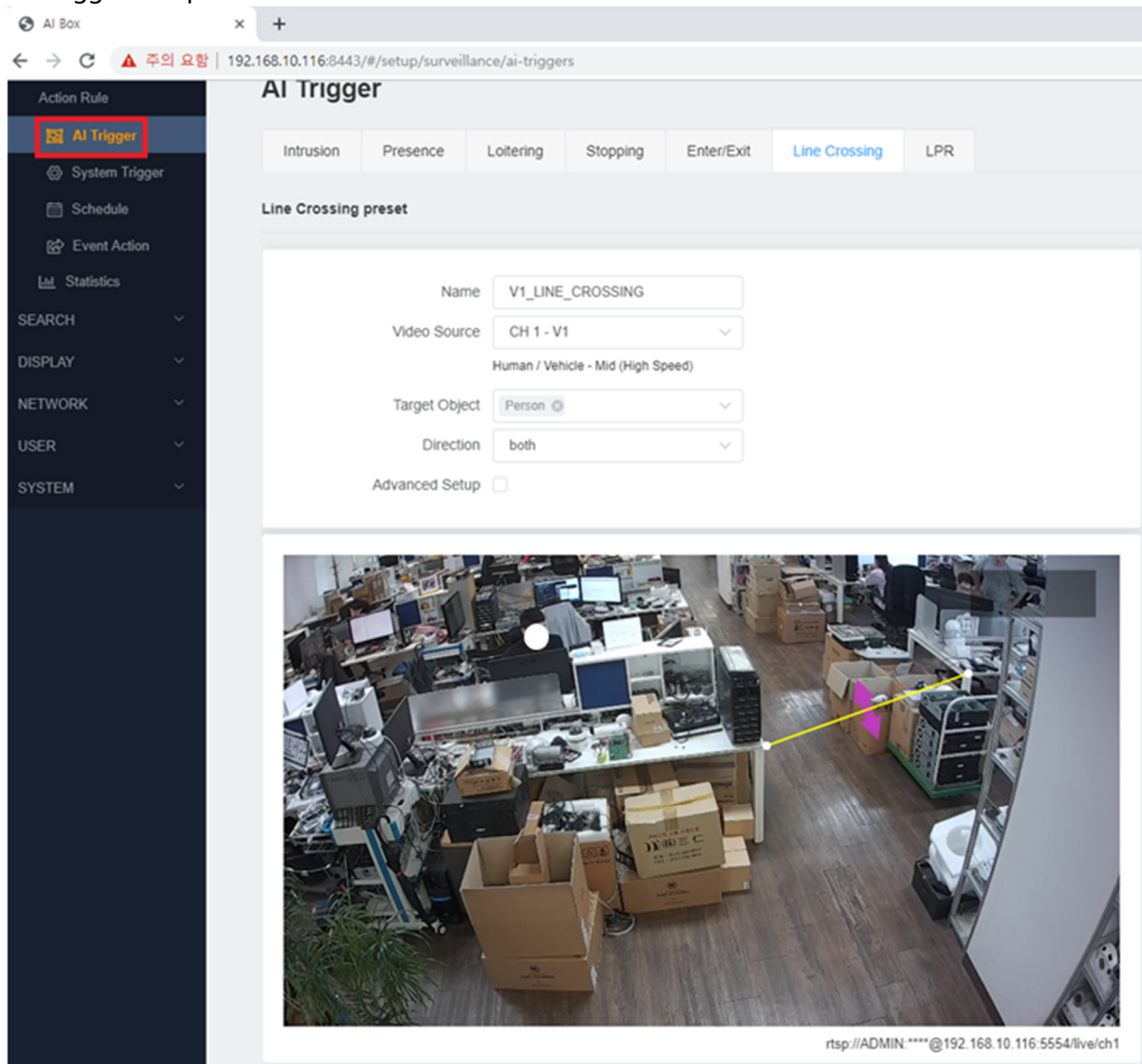
- 1) AI-Box Integration
  - a) Third Party Client Integration Guide Document.
  - b) AI-Box must be configured before integrating with 3rd party client.
- 2) Use Case
- 3) Annotated Video Streaming
  - a) 3rd Party Client Genetec / Omnicast Security Desk

### **History**

<b>Version</b>	<b>Date</b>	<b>Comment</b>
<b>V0.1 (Draft Version)</b>	<b>2019-11-19</b>	<b>Initial Version</b>

## 1. AI-Box Setup

### 1) AI-Trigger Setup



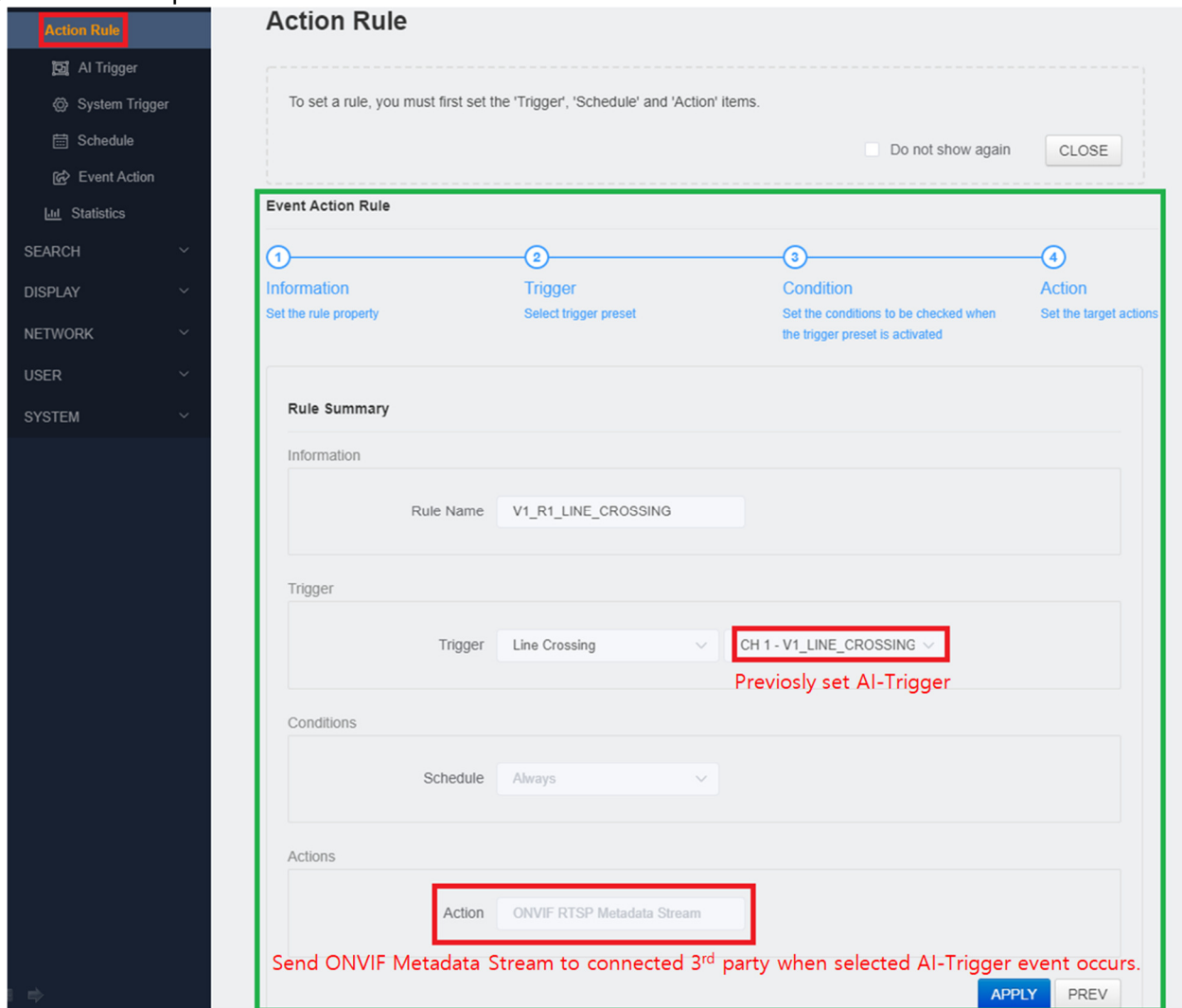
The screenshot displays the AI Trigger configuration page in a web browser. The browser's address bar shows the URL: `192.168.10.116:8443/#/setup/surveillance/ai-triggers`. The left sidebar contains a navigation menu with 'AI Trigger' highlighted. The main content area is titled 'AI Trigger' and features several tabs: 'Intrusion', 'Presence', 'Loitering', 'Stopping', 'Enter/Exit', 'Line Crossing' (selected), and 'LPR'. Under the 'Line Crossing' tab, there is a 'Line Crossing preset' section with the following configuration:

- Name: `V1_LINE_CROSSING`
- Video Source: `CH 1 - V1`
- Human / Vehicle - Mid (High Speed)
- Target Object: `Person`
- Direction: `both`
- Advanced Setup:

Below the configuration form is a live video feed showing a cluttered office environment. A yellow line is drawn across the floor in the video feed, indicating the detection zone for the Line-Crossing trigger. The video feed URL is `rtsp://ADMIN:****@192.168.10.116:5554/live/ch1`.

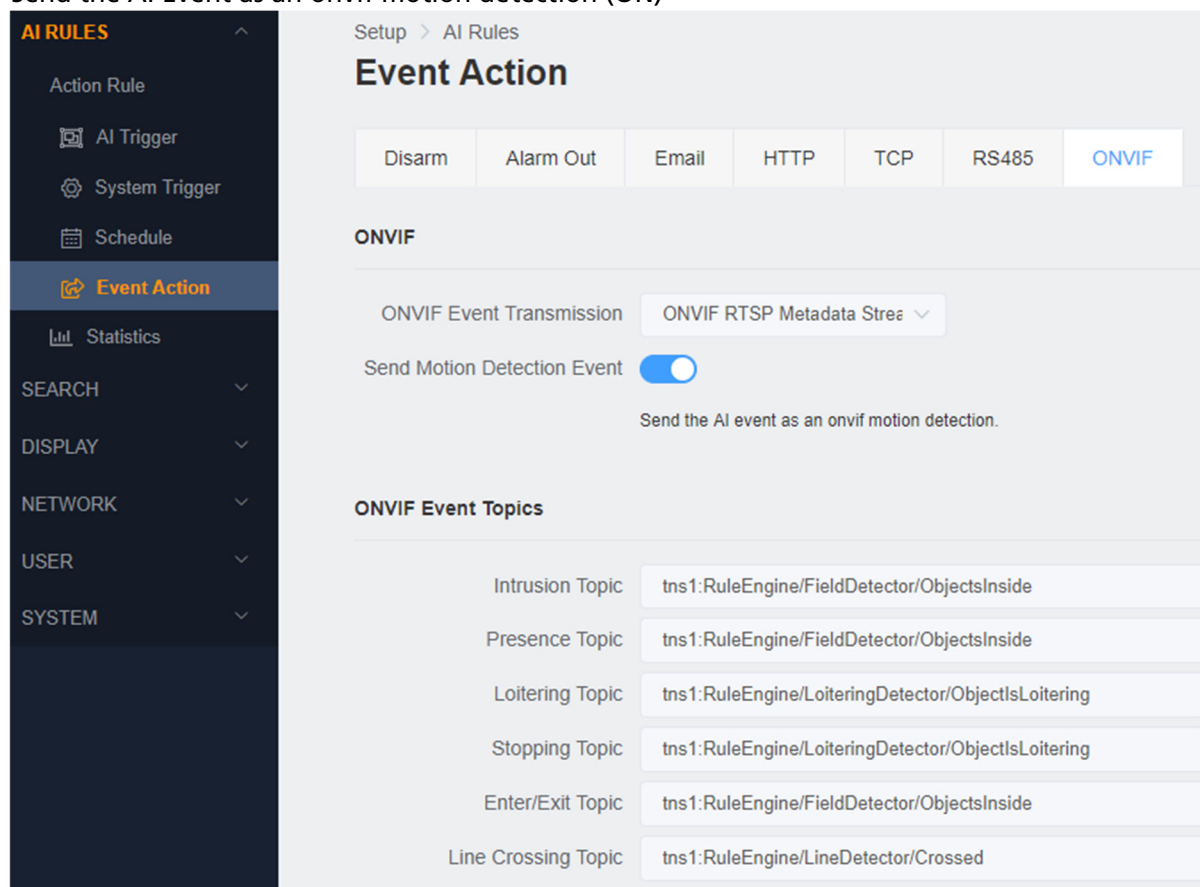
a) The above figure shows the Line-Crossing AI-Trigger Setup

2) AI-Rule Setup



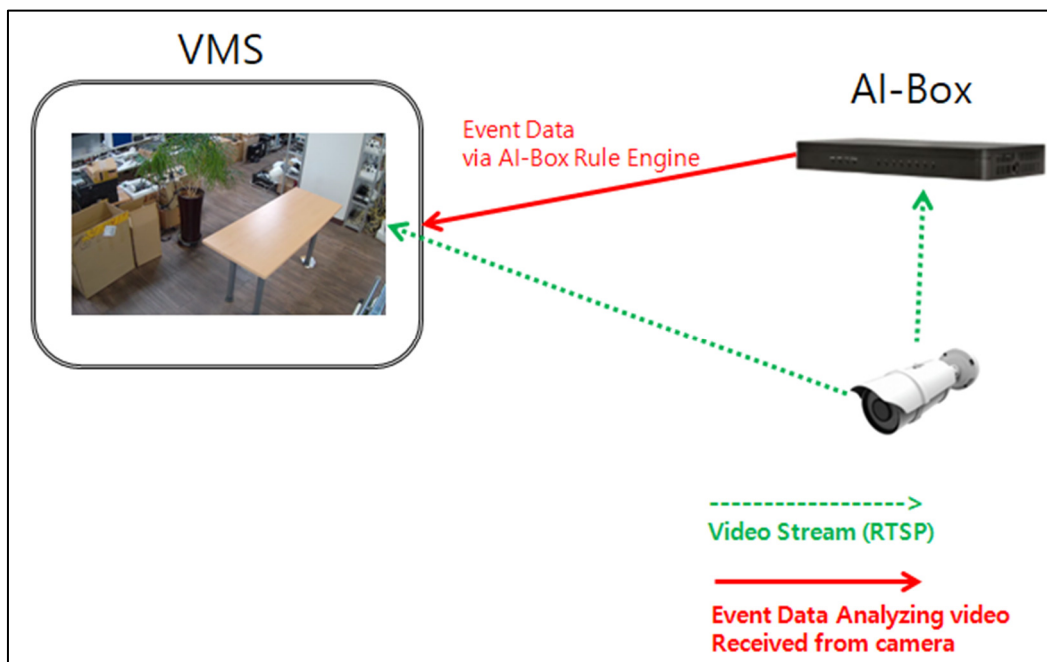
a) The above figure shows the AI-Rule Setup.

3) Send the AI Event as an onvif motion detection (ON)



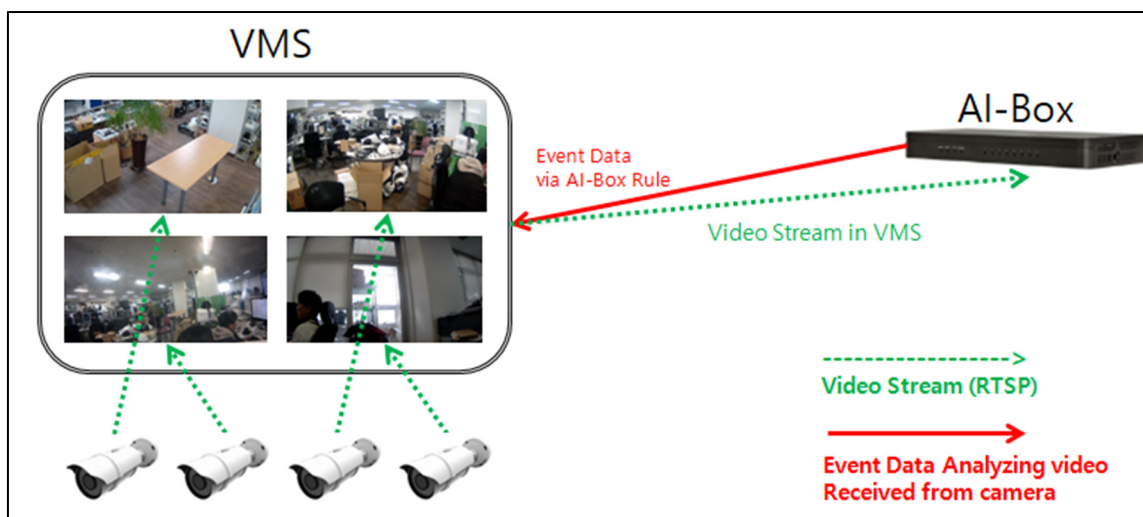
- a) When AI-Box send ONVIF Analytics Event Metadata, also send onvif motion detection data.
  - i) Because Legacy System does not recognize ONVIF Analytics Spec Event data, AI-Box sends as ONVIF Motion Detection Data. (Almost Legacy System can recognize ONVIF Motion Event Data.)
- b) If you enable this option, AI-Box will send ONVIF Motion Detection Data data additionally when an event occurs for all AI-Rule you set.
- c) After enabling on that option, if you set up Line-Crossing AI-Rule on channel 1, it sends two onvif metadata (Line-Crossing Event data, ONVIF Motion Detection data)

**2. Use Case**



1) Case

- a) register camera to VMS
- b) AI-Box received camera video stream over RTSP ( add Video Source in AI-Box)
- c) Analyze the video and send event data to VMS

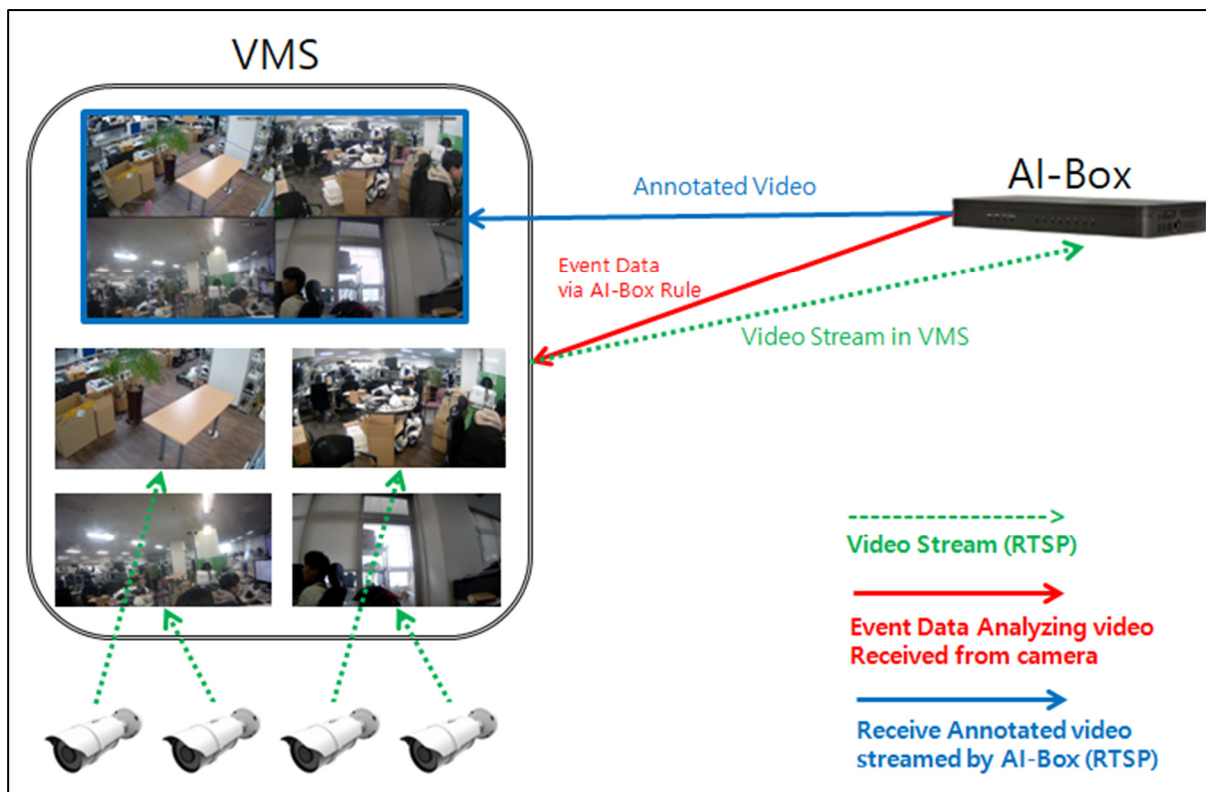


2) Case

- a) register camera to VMS
- b) AI-Box received video stream over RTSP from VMS (VMS Video Server)
- c) Analyze the video and send event data to VMS

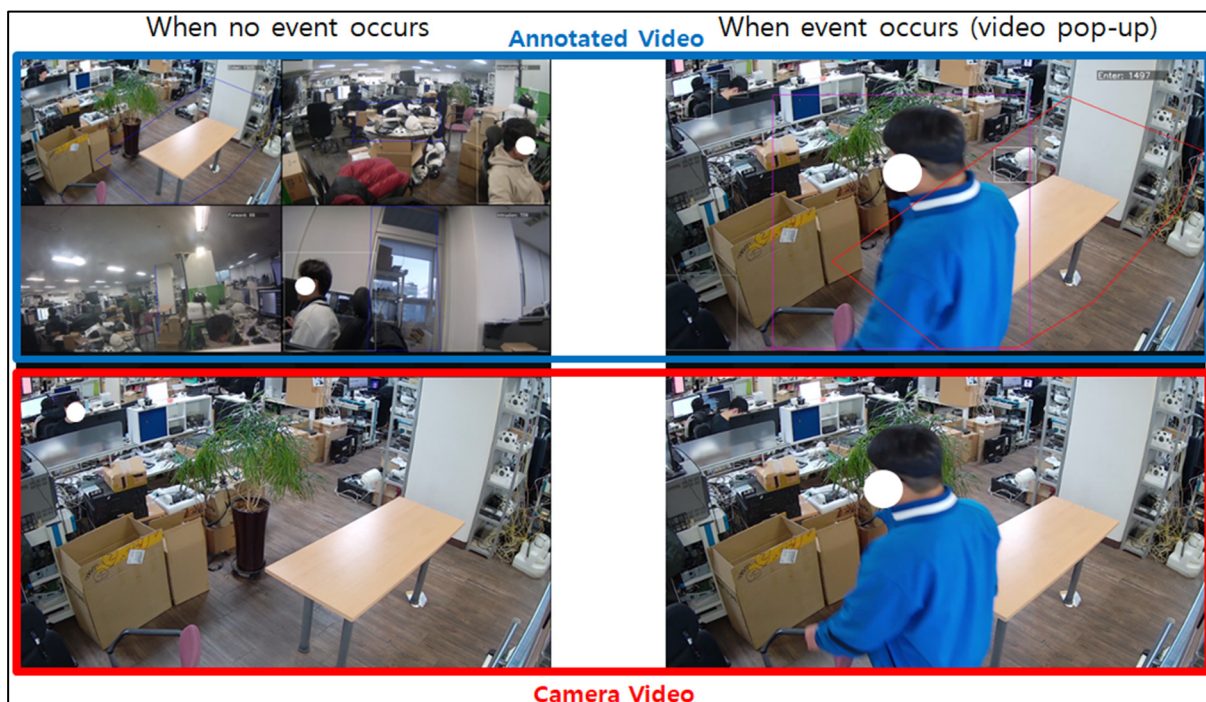


**3. Annotated Video**



1) register AI-Box as ONVIF device or RTSP annotated video URL in VMS

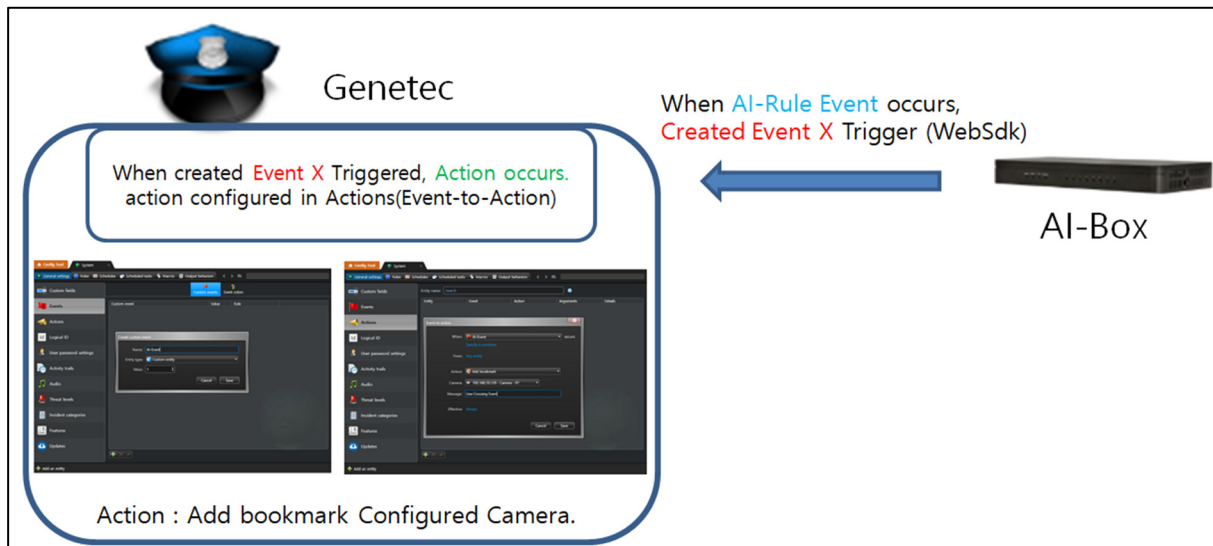
( Annotated Video )



2) Annotated RTSP URL : **rtsp://<device ip>:<port>/live/ch0** , It is multi-view stream of video to camera received from AI-Box.  
 Normally, while maintaining multi-view, when AI-Event occurs, only the video of the channel where the event occurred is shown. **(Auto Video Pop-Up / Channel0 Encoding)**

#### 4. 3rd Party Client

- 1) Genetec / Omnicast Security Desk
  - a) Omnicast Security Desk Version
    - i) Genetec Inc. Security Desk Version 5.8 GA (5.8.865.27)

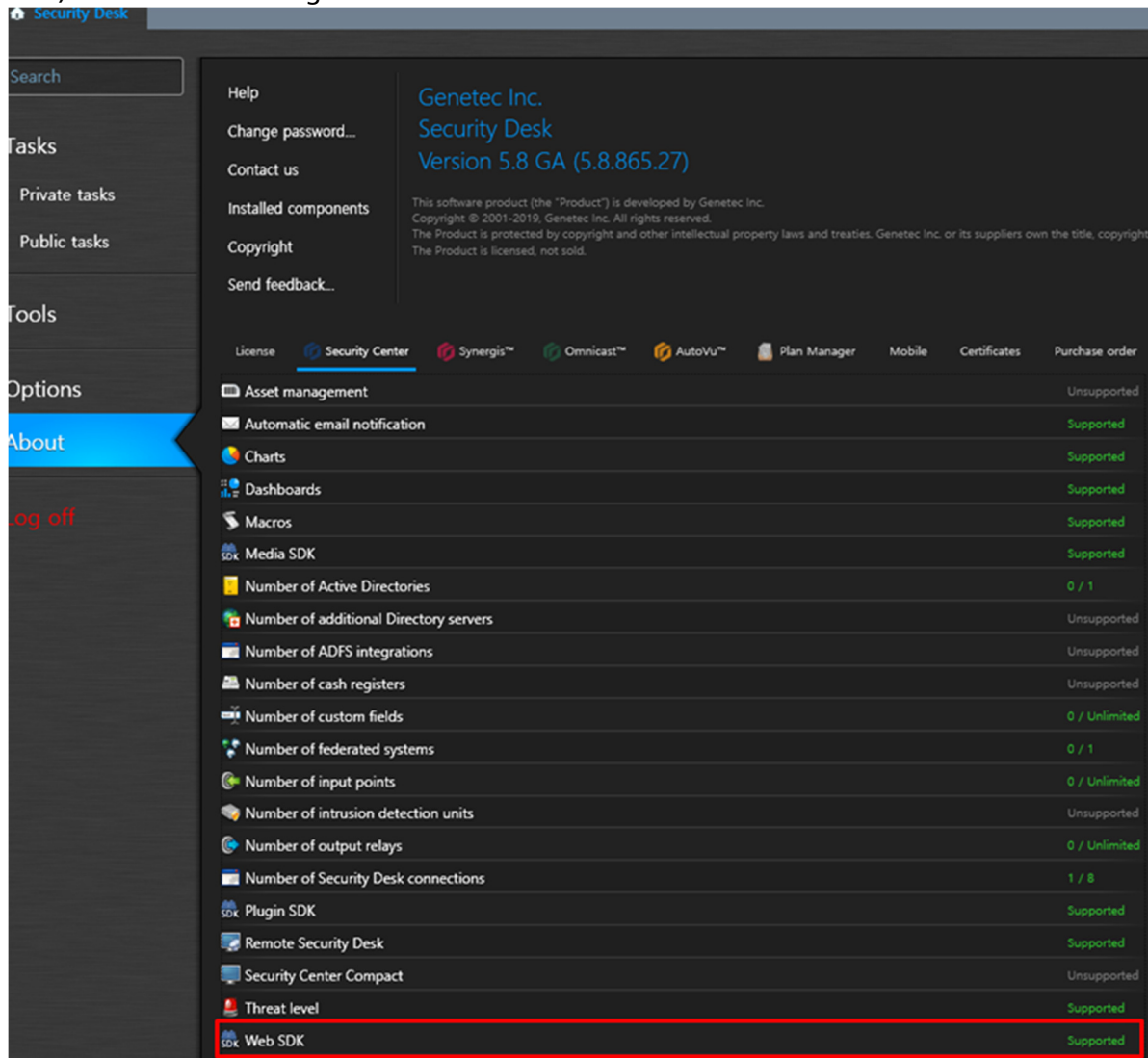


#### b) AI-Box & Genetec Overview

- ① When Rule set in AI-Box occurs, AI-Box sends Event to Genetec via WebSdk
- ② Genetec receive Event sent from AI-Box via WebSdk  
Event is triggered through the received WebSdk. Action occurs connected to event (Event-to-Action)

\* Through the above process, when the AI-Rule Event set up in AI-Box occurs, it can occur the action configured in Genetec.

c) Check before Integration



The screenshot shows the 'About' page of Genetec Security Desk. The page title is 'Genetec Inc. Security Desk Version 5.8 GA (5.8.865.27)'. Below the title, there is a list of components and their support status. The 'Web SDK' component is highlighted with a red box and is marked as 'Supported'.

Component	Support Status
Asset management	Unsupported
Automatic email notification	Supported
Charts	Supported
Dashboards	Supported
Macros	Supported
Media SDK	Supported
Number of Active Directories	0 / 1
Number of additional Directory servers	Unsupported
Number of ADFS integrations	Unsupported
Number of cash registers	Unsupported
Number of custom fields	0 / Unlimited
Number of federated systems	0 / 1
Number of input points	0 / Unlimited
Number of intrusion detection units	Unsupported
Number of output relays	0 / Unlimited
Number of Security Desk connections	1 / 8
Plugin SDK	Supported
Remote Security Desk	Supported
Security Center Compact	Unsupported
Threat level	Supported
Web SDK	Supported

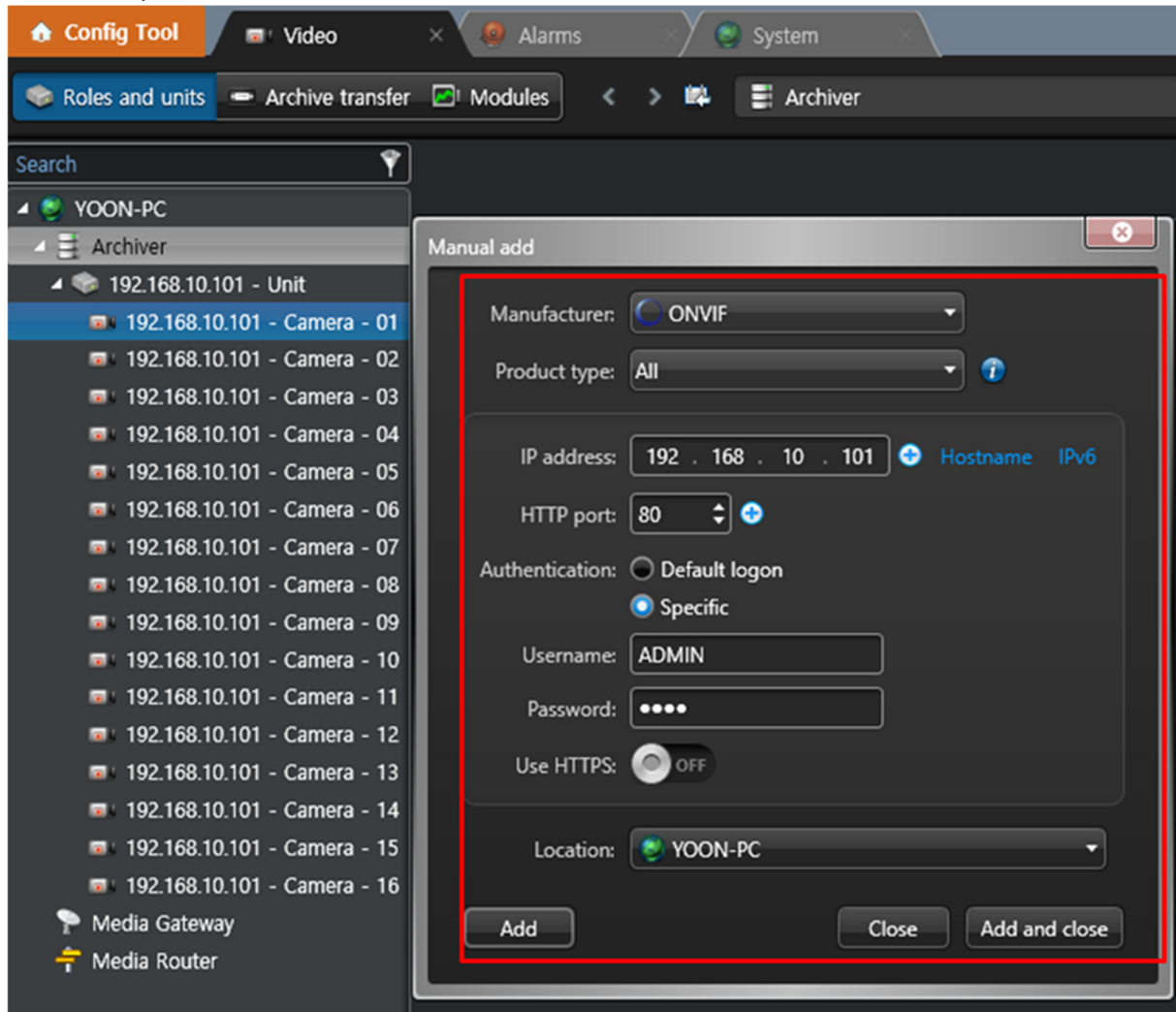
\* You must request a license from Genetec with **GSC-1SDK-ITXM2M-AIBOX** (Partner Number)

Security Desk -> About -> Security Center

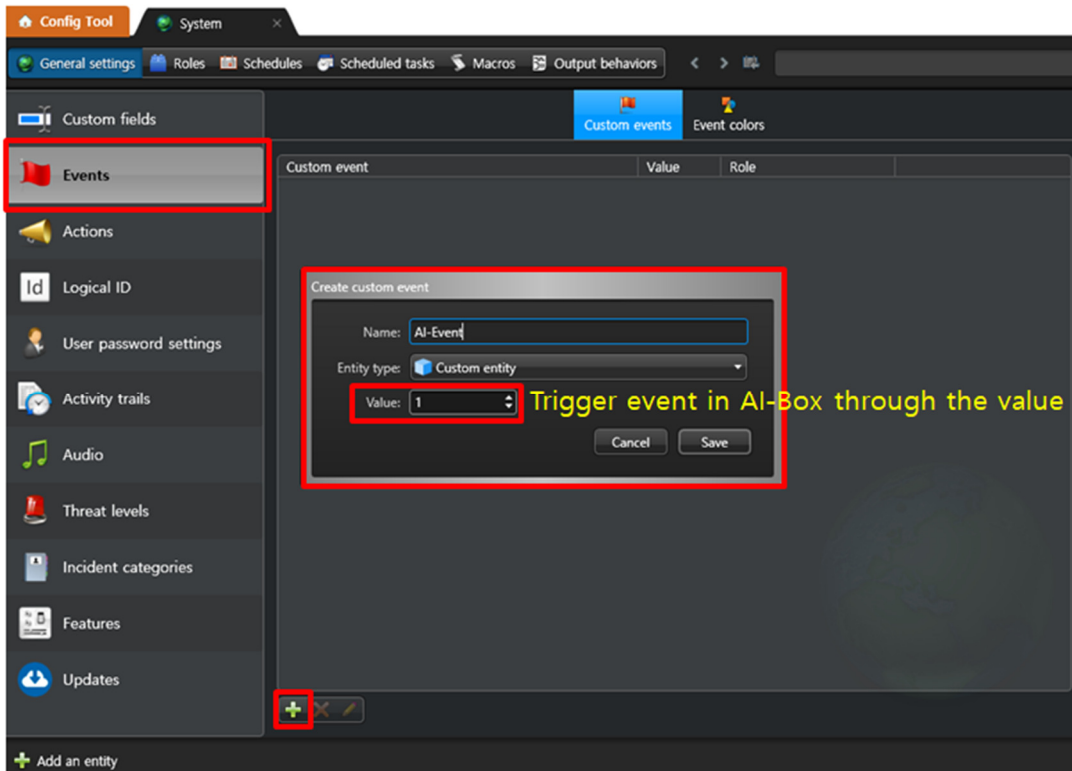
\* It is necessary to check whether it is a license that supports Web SDK function. If it is not, it does not work properly.  
In order to integrate AI-Box and Genetec, you need to purchase WebSDK license.



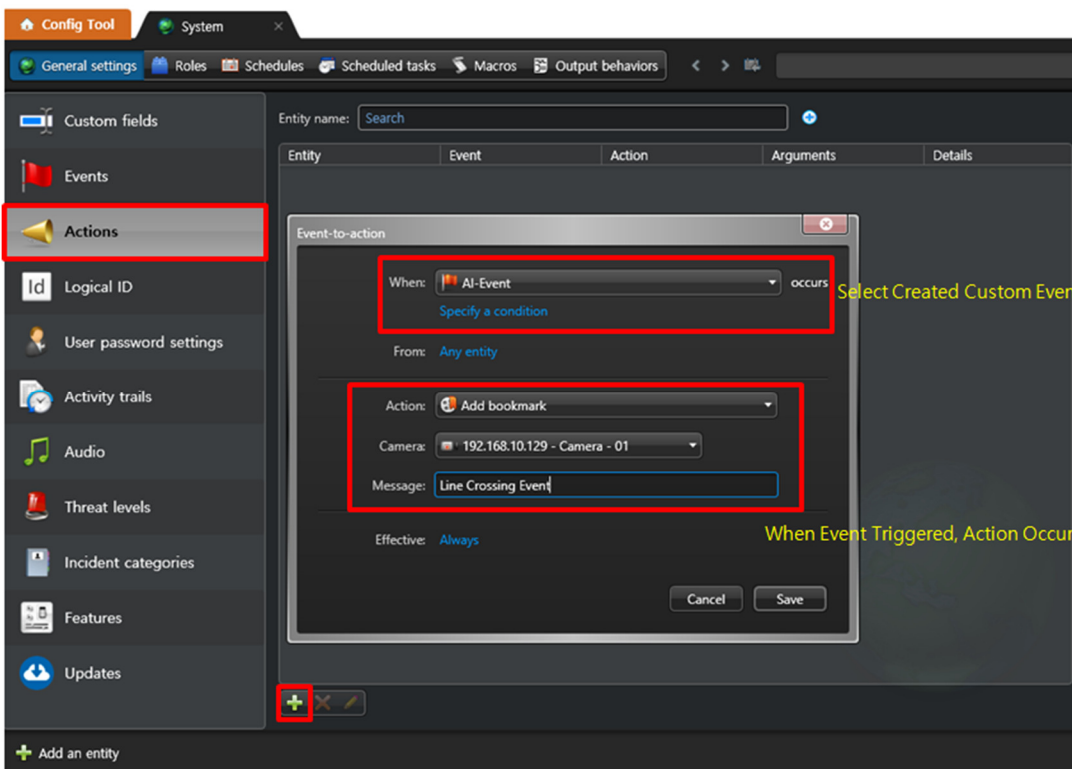
- d) AI-Box & Genetec Integration (Genetec Setup)
- i) Genetec Video Added



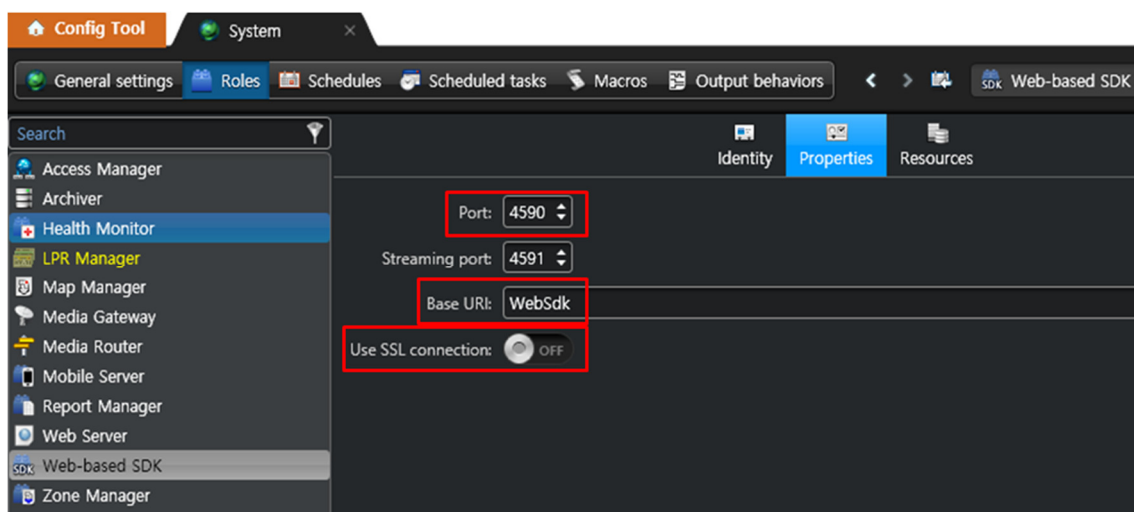
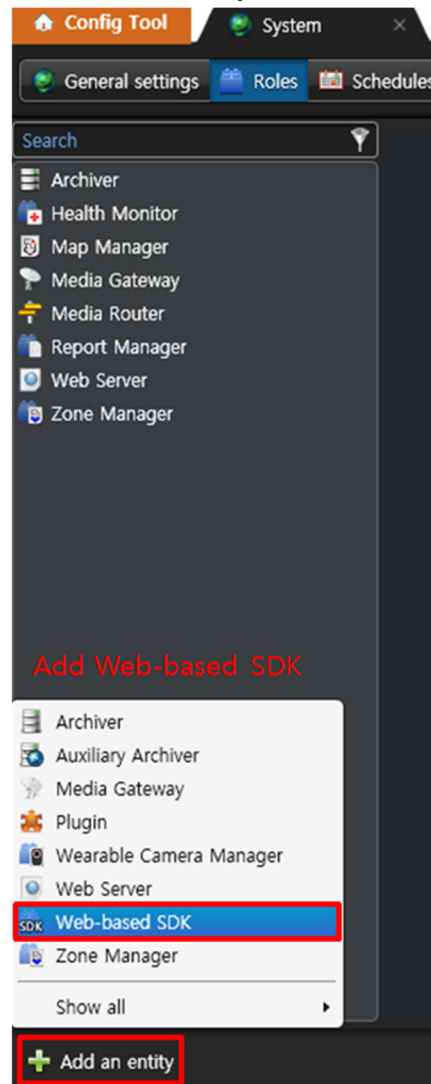
ii) AI-Box and Genetec are integrated through Event  
Config Tool > System > Events : Create Custom Event



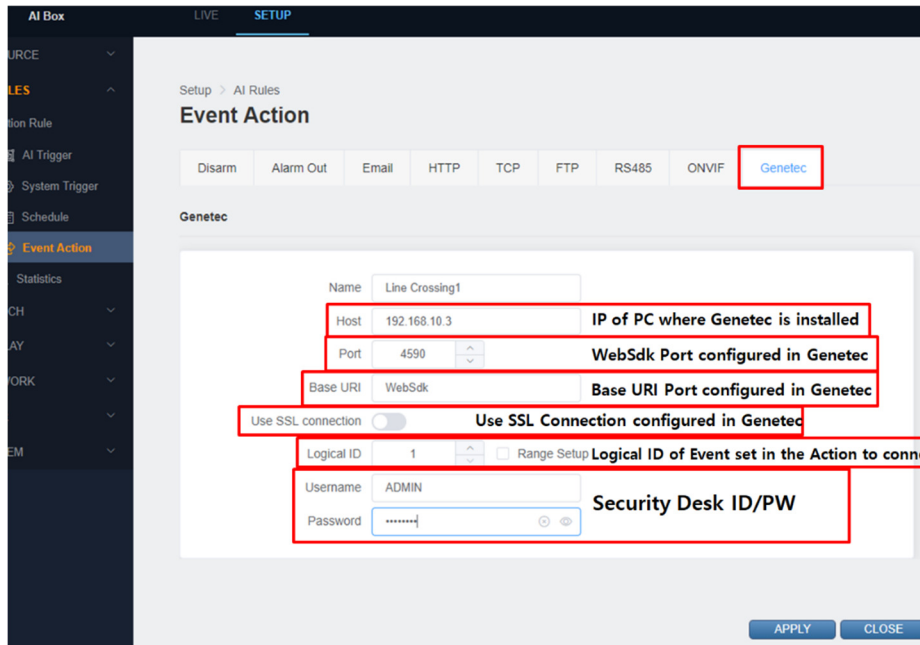
Config Tool > System > Actions : When created Custom event triggered, Action occurs



- iii) Genetec WebSdk Setup  
Config Tool > Roles : Add an entity Web-based SDK



- e) AI-Box & Genetec Integration (AI-Box Setup)
  - i) Setup > AI Rules > Event Action



AI Box LIVE SETUP

Setup > AI Rules

**Event Action**

Disarm Alarm Out Email HTTP TCP FTP RS485 ONVIF **Genetec**

**Genetec**

Name Line Crossing1

Host 192.168.10.3 **IP of PC where Genetec is installed**

Port 4590 **WebSdk Port configured in Genetec**

Base URI WebSdk **Base URI Port configured in Genetec**

Use SSL connection  **Use SSL Connection configured in Genetec**

Logical ID 1  Range Setup **Logical ID of Event set in the Action to connect in Genetec**

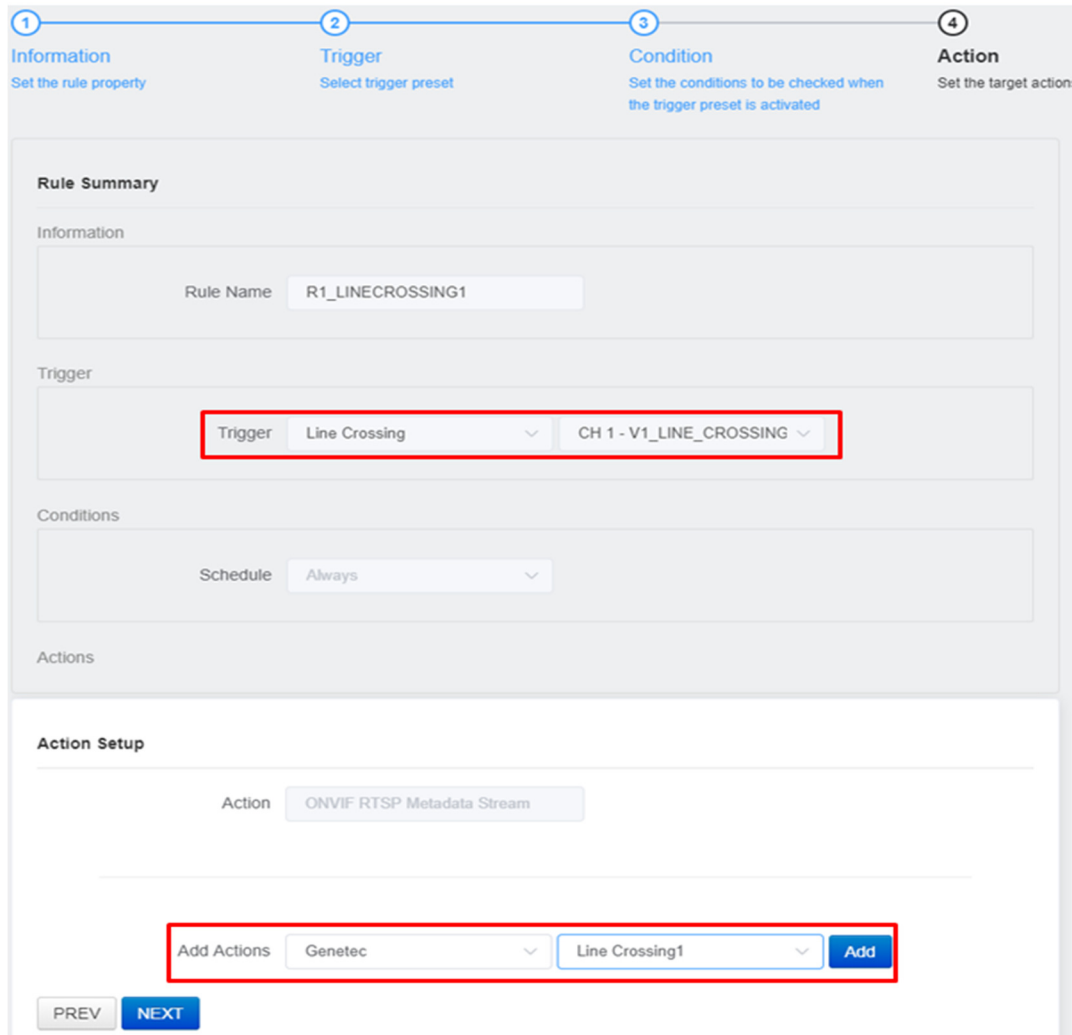
Username ADMIN **Security Desk ID/PW**

Password .....

APPLY CLOSE

\* Refer to Genetec WebSdk Setup Check

ii) Setup > AI Rules > Action Rule



1 Information Set the rule property

2 Trigger Select trigger preset

3 Condition Set the conditions to be checked when the trigger preset is activated

4 Action Set the target actions

**Rule Summary**

Information

Rule Name R1\_LINECROSSING1

Trigger

Trigger Line Crossing CH 1 - V1\_LINE\_CROSSING

Conditions

Schedule Always

Actions

**Action Setup**

Action ONVIF RTSP Metadata Stream

Add Actions Genetec Line Crossing1 Add

PREV NEXT

\* When trigger event occurs, send Genetec WebSdk API(Event Trigger with Event Value)