

HALO

NXWITNESS INTEGRATION GUIDE 2.0



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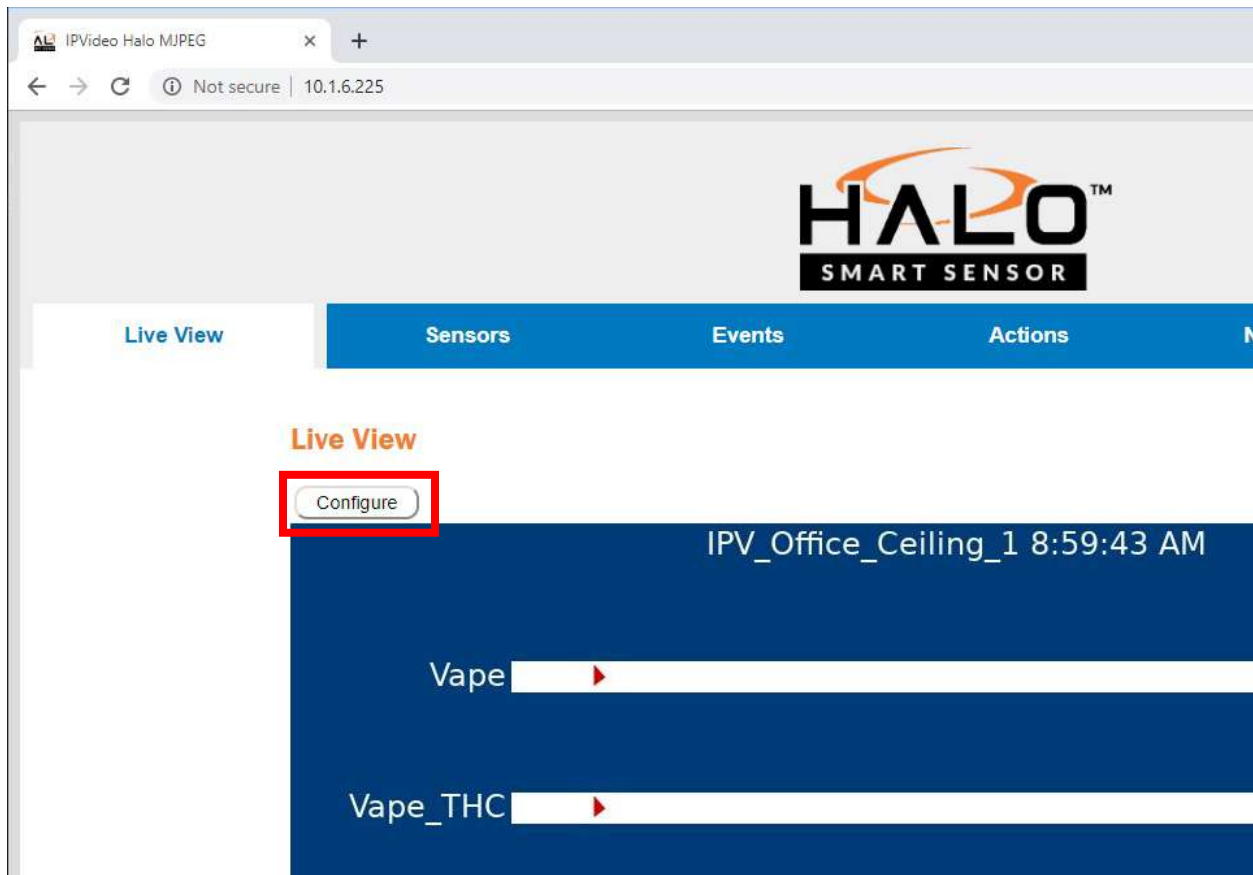
INTRODUCTION

The HALO Smart Sensor can be integrated into Network Optix's NxWitness Video Management Software using the MJPEG output from the HALO device and the Generic URL support of NxWitness. This allows operators to visualize and record the realtime data from the HALO Smart Sensor, as though it were a typical IP Camera.

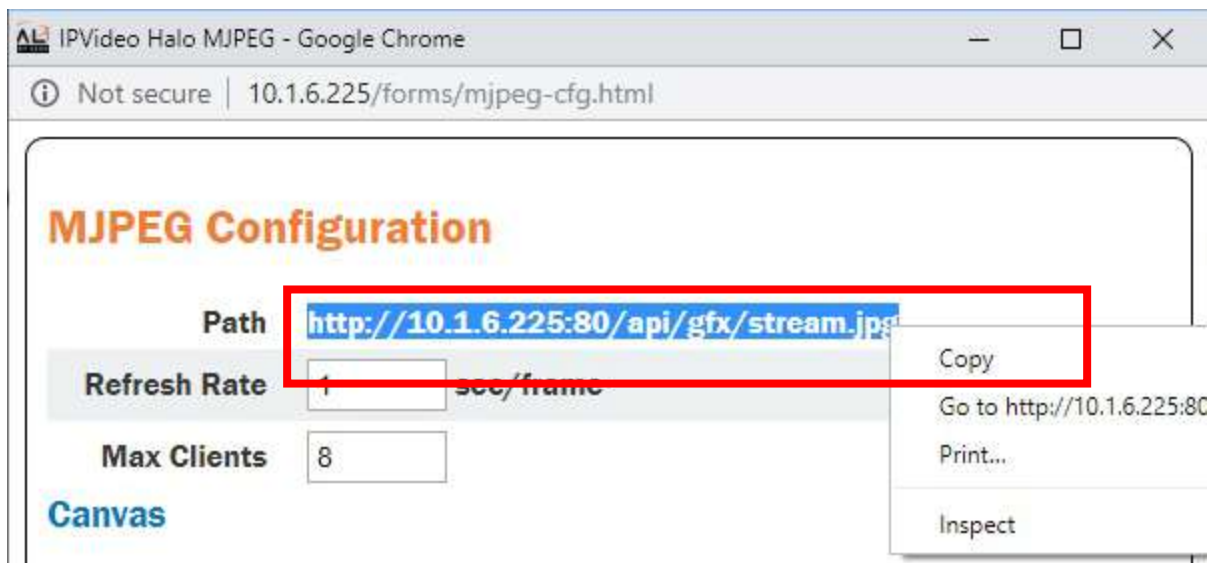
Note : This integration was tested using version NXWitness 4.4 with a HALO Smart Sensor running v 1.58 firmware. The v1.58 firmware is required for the Generic Event support.

HALO SMART SENSOR – Motion MJPEG Output Stream URL

To capture the Stream URL needed to connect NxWitness to HALO, simply navigate to the HALO Smart Sensor with a Web Browser, and click on the **Configure** button.



Highlight the Stream URL that is displayed in the Configuration Pop Up window with the mouse and cursor, then right click and select Copy.



HALO SMART SENSOR – Authentication

In order to connect HALO Smart Sensor to Milestone Xprotect, the device must be set to Basic HTTP Authentication.

Open HALO Smart Sensor in a web browser and click on the Device tab.

Scroll down to HTTP / API and click on the Authentication dropdown menu, and select Basic Only.

HTTP / API

Port	80
Authentication	Basic Only ▼
Save	

Click the **Save** button to save changes and re-boot the HALO Smart Sensor.

HALO SMART SENSOR – Device Name

Click on the Device tab of the HALO Smart Sensor interface.

Network Configuration

Device Name



Device name Bathroom123

Save

Enter a **UNIQUE** name in the Device Name field. Click the **Save** button to save settings.

HALO SMART SENSOR – Actions

Click on the Actions tab of the HALO Smart Sensor interface.

Actions



Event Identifier	Email Set	Email Reset	Messaging Set	Messaging Reset	Relay 1
Aggression	☒	☐	☒	☐	---
CO	☒	☐	☒	☐	---
CO2	☐	☐	☒	☐	---
Vandal	☒	☐	☒	☐	---
Vape	☒	☐	☒	☐	---
Vape_THC	☒	☐	☒	☐	---

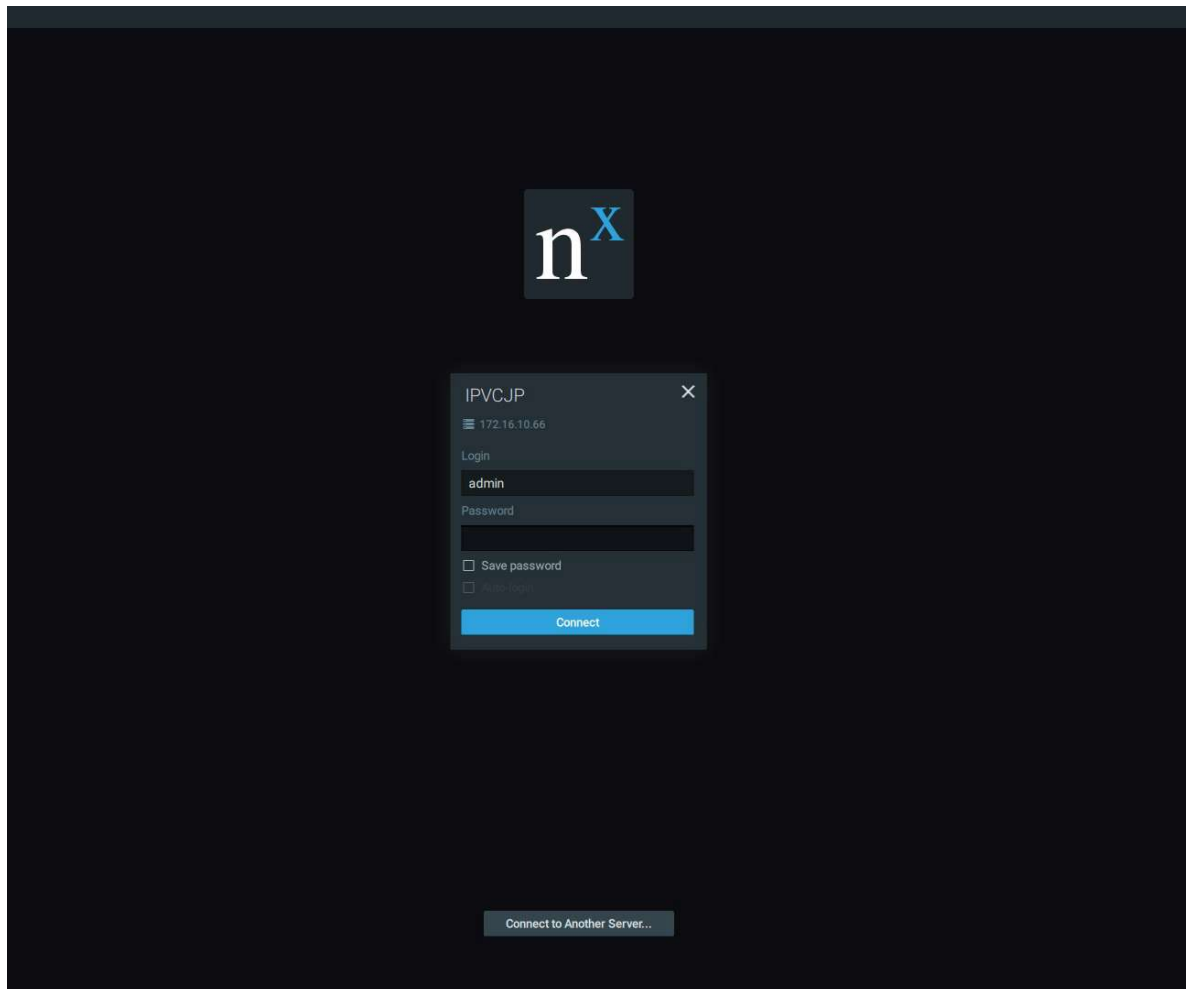
Save

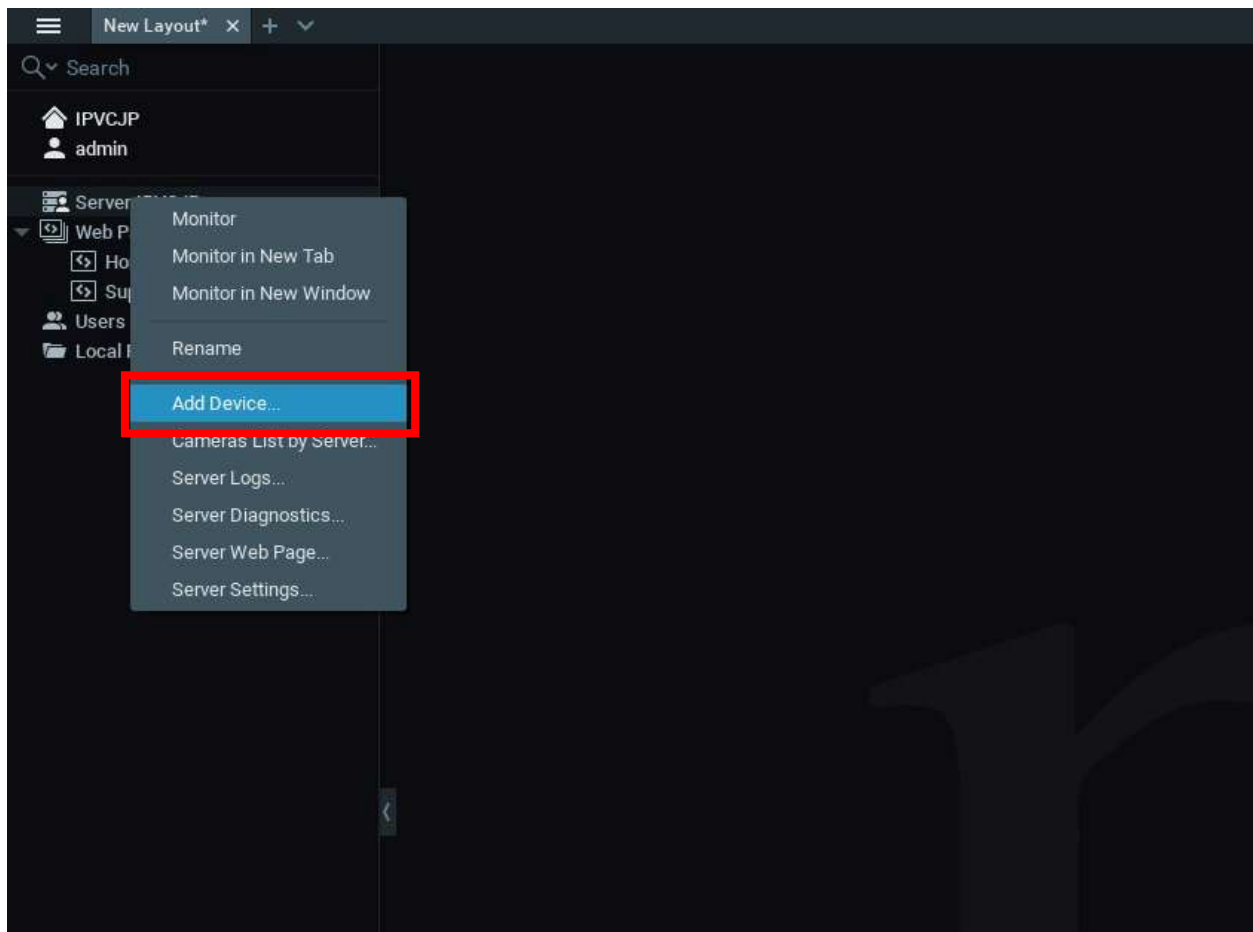
Check the **Messaging Set** checkboxes for each of the **Event Identifiers**.

Click the **Save** button to save settings.

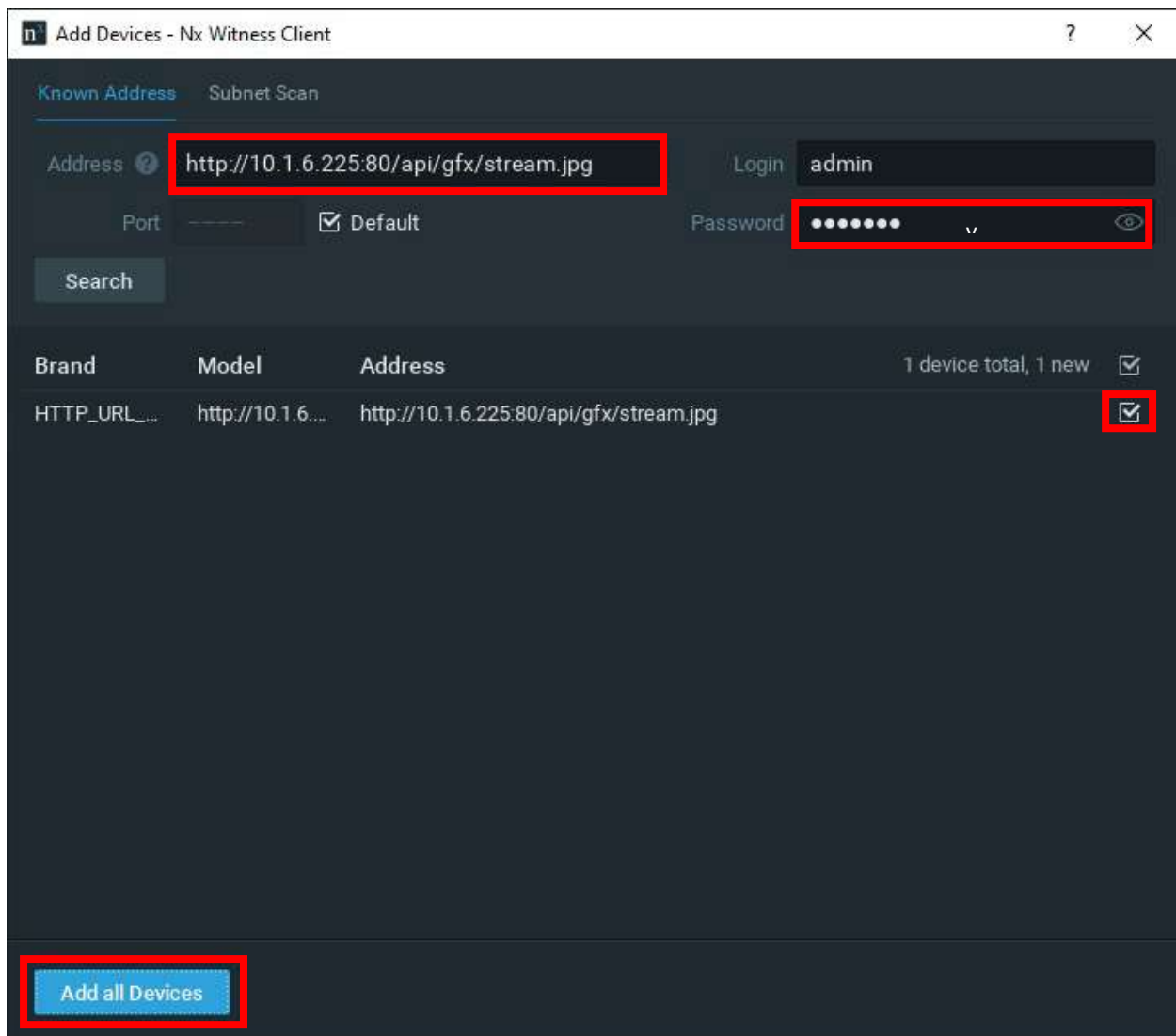
NXWITNESS – Add Device

Login to the NxWitness client with Administrator rights to add the HALO Smart Sensor as a device.





Right click on the Server in the left navigation tree and select Add Device from the menu.



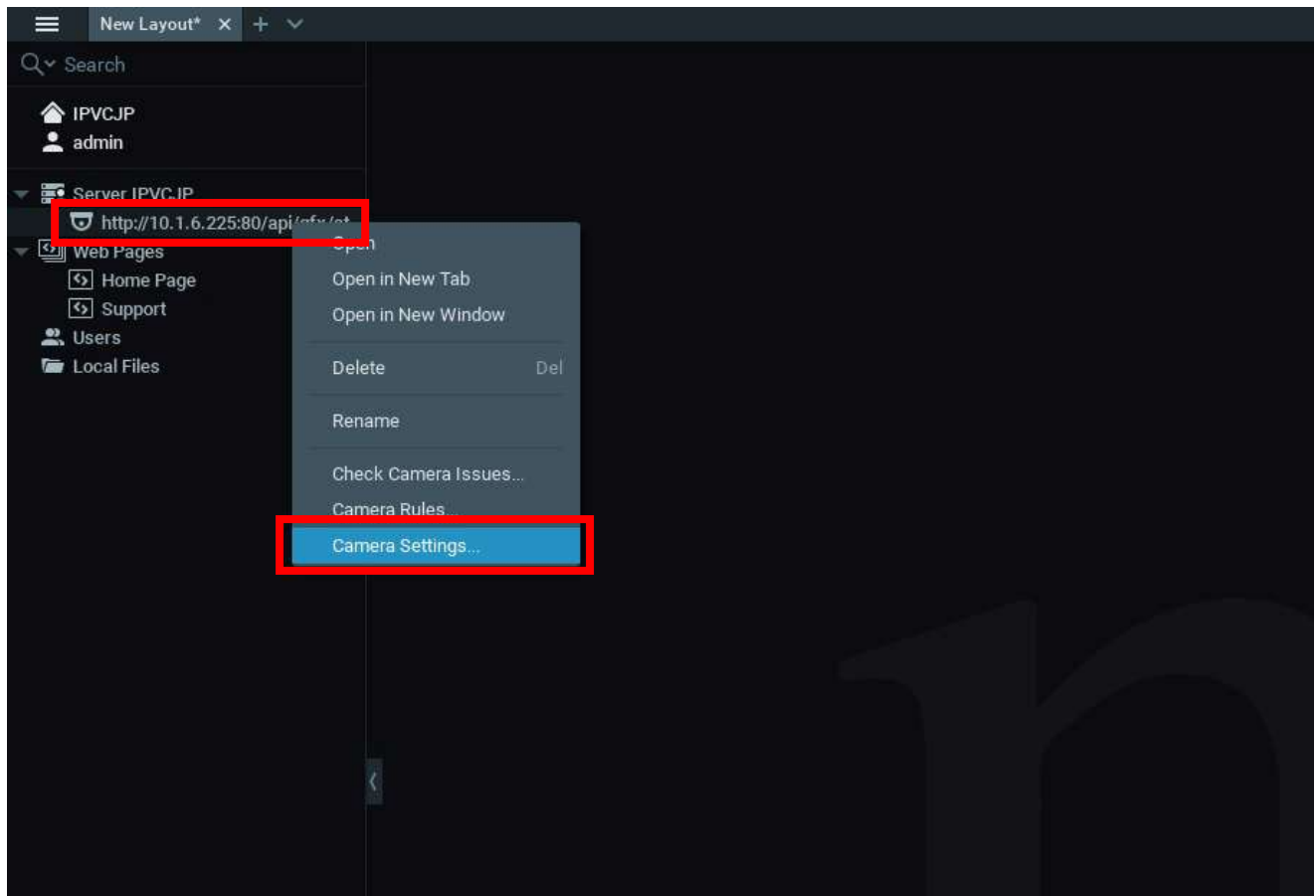
Paste the Stream URL that was previously copied from the HALO Smart Sensor interface in the Address field

Enter the HALO device user name in the **Login** field.

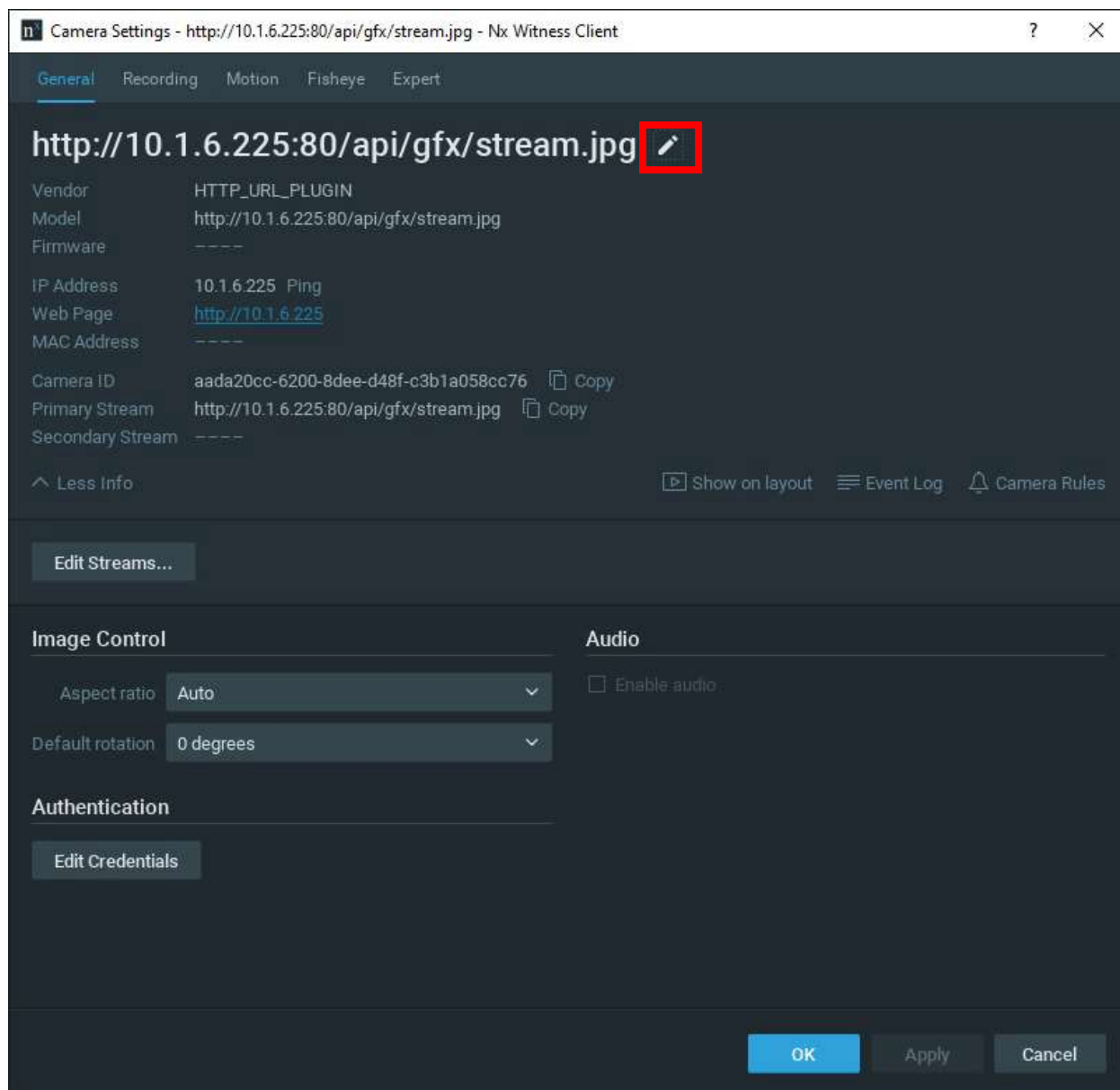
Enter the HALO device password in the **Password** field, then click the Search button.

Once the HALO Smart Sensor appears in the discovered device list, check the checkbox that appears to the right of the listed device and click the **Add all Devices** button.

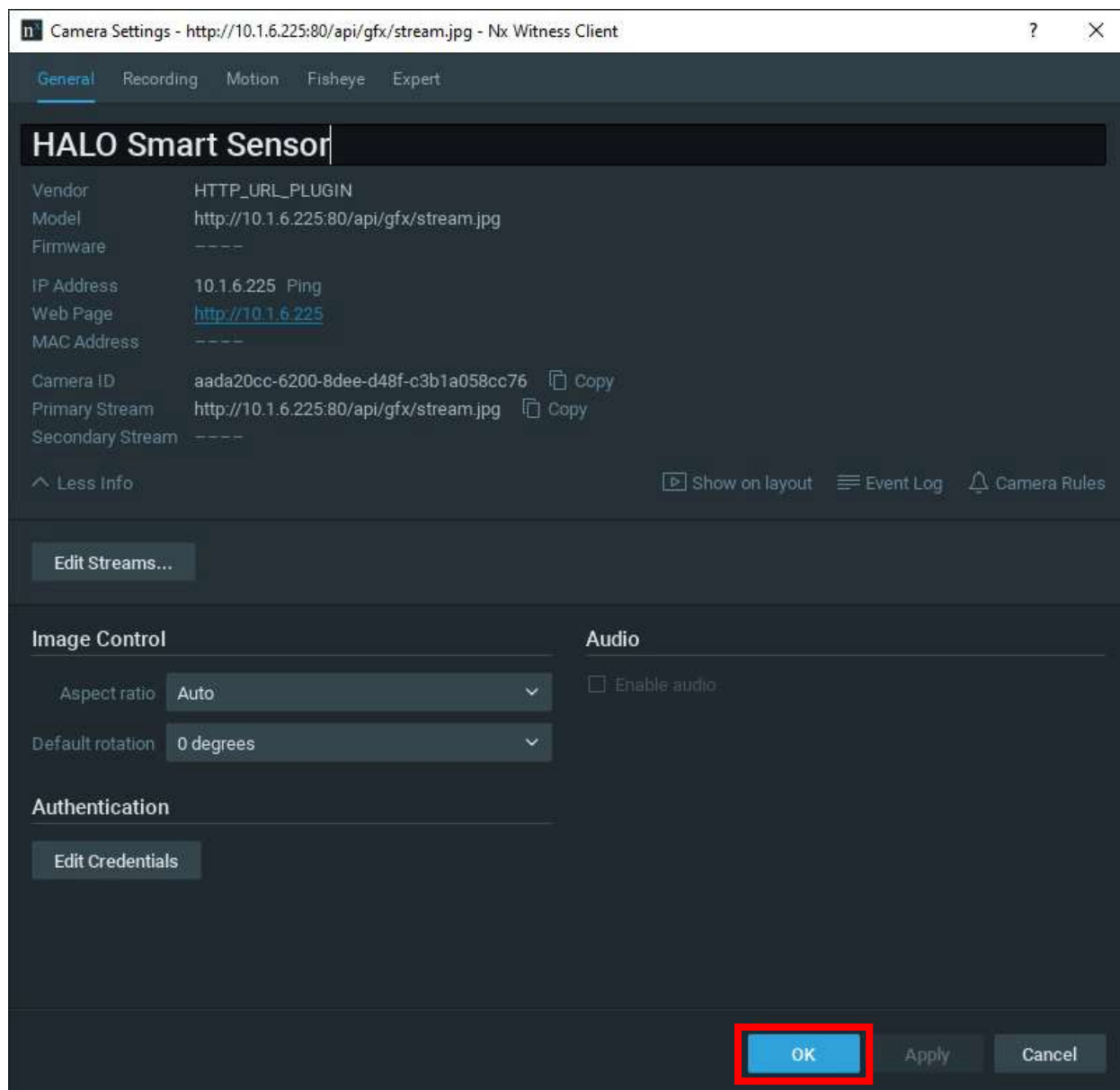
NXWITNESS – Camera Settings



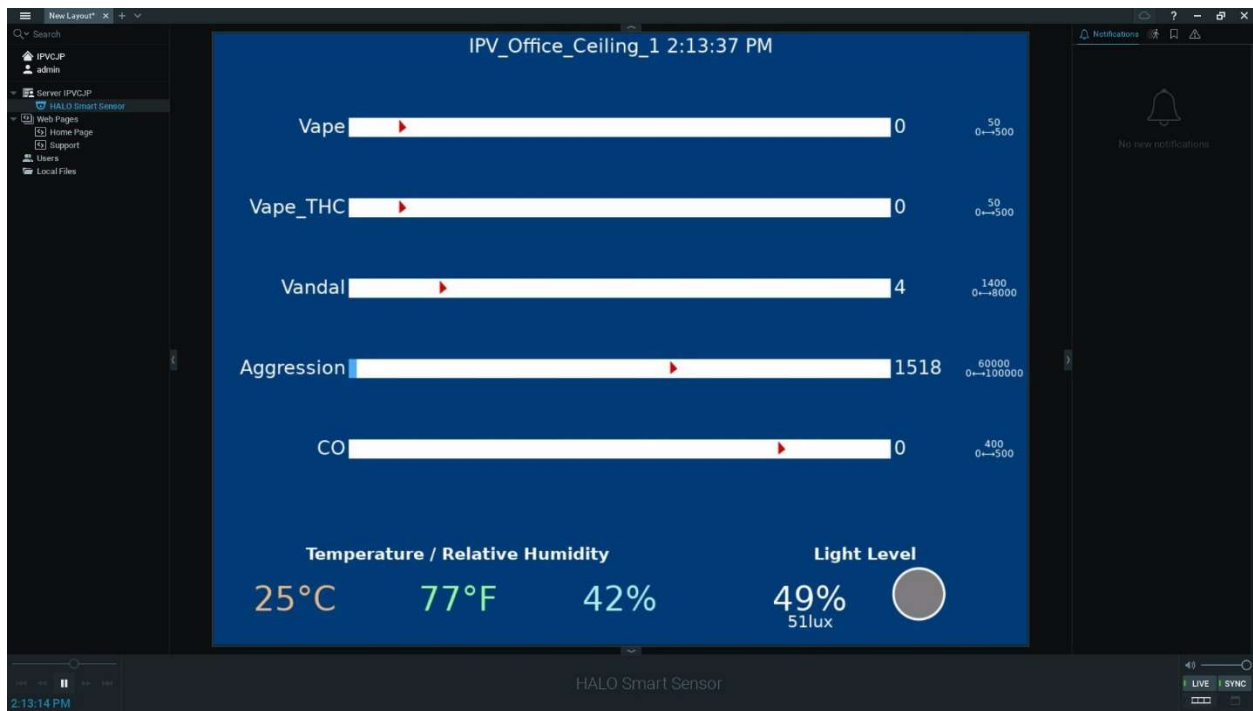
Right Click on the newly added device in the navigation tree and select **Camera Settings** from the menu.



Click on the **Edit** icon to change the name as it will be displayed in NxWitness to a name that best identifies the device and its location.



Click the **OK** button to save the name.



Drag the device into the Viewing panel of the NxWitness Client to visualize the live, real-time output from the HALO Smart Sensor.

HALO SMART SENSOR – External Messaging

HALO Smart Sensor can send Generic Event messages to NXWitness via the External Messaging feature. These events can be used to trigger notifications in the NXWitness Client and Event Rules.

Connect to the HALO Smart Sensor via a web browser and navigate to the Notifications tab.

Scroll down to the External Messaging section to enable the External Messaging.

External Messaging

Protocol: ☒ TCP ☐ UDP ☒ HTTP

Set string: ☒ On ☐ Off

Reset String: ☐ On ☒ Off

User:

Password:

Save

Above, you can use:
%NAME% - device name
%IP% - ip address
%MAC% - mac address
%EID% - event id
%SOURCE% - data source
%THR% - event threshold
%VAL% - sensor value
%DATE% - local date of event
%TIME% - local time of event
%PSWD% - password

Select **HTTP** for the Protocol

Enter <http://172.16.10.66:7001/api/createEvent?caption=%NAME%&description=%EID%> in the Set String field. This URL contains the IP Address of the NXWitness server and the default port for Generic Events.

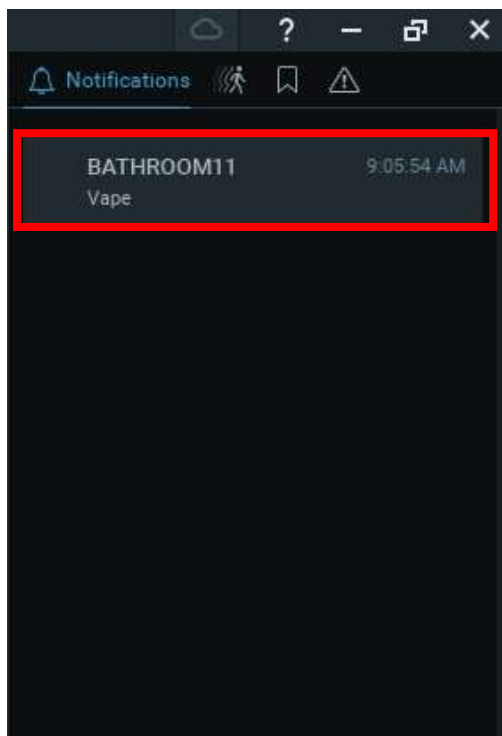
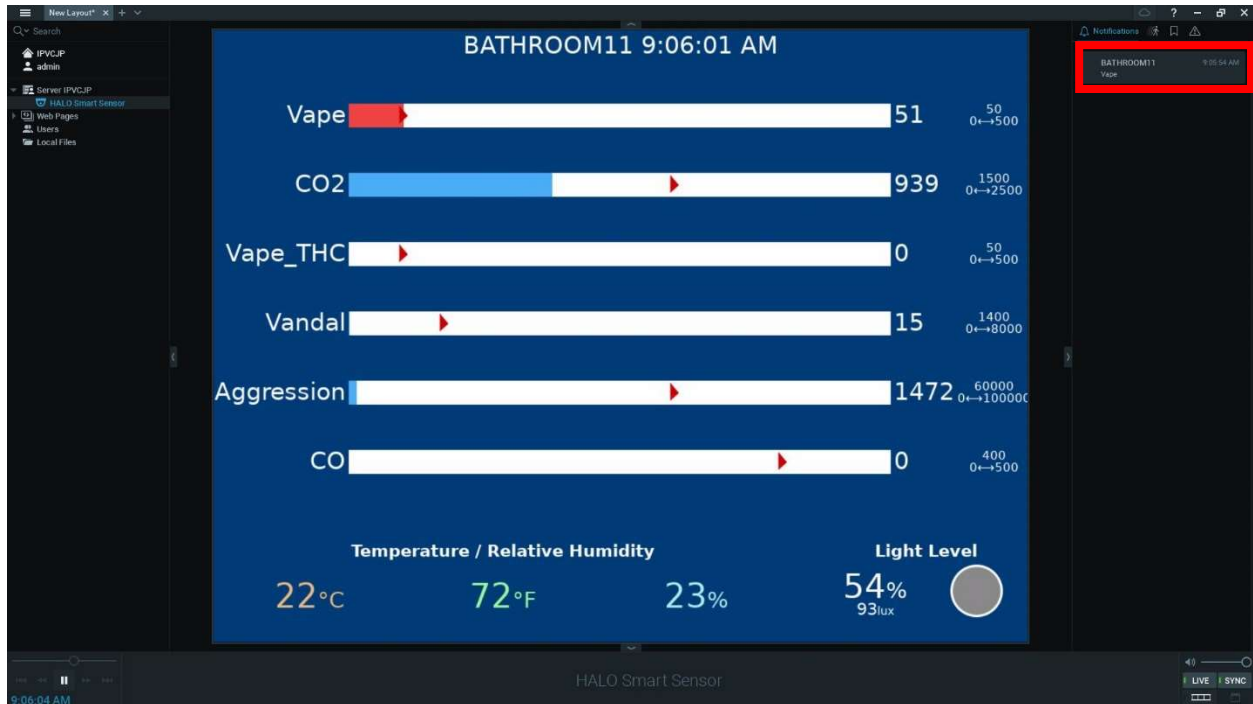
Click the **On** radio button to enable the Set String

Enter the User Name and Password to connect to the NXWitness Server

Click the Save button

NXWITNESS – Client Notifications

When a HALO Smart Sensor is triggered, the events will be sent to the NXWitness Generic Event collector and displayed in the Notifications section of the NXWitness client.



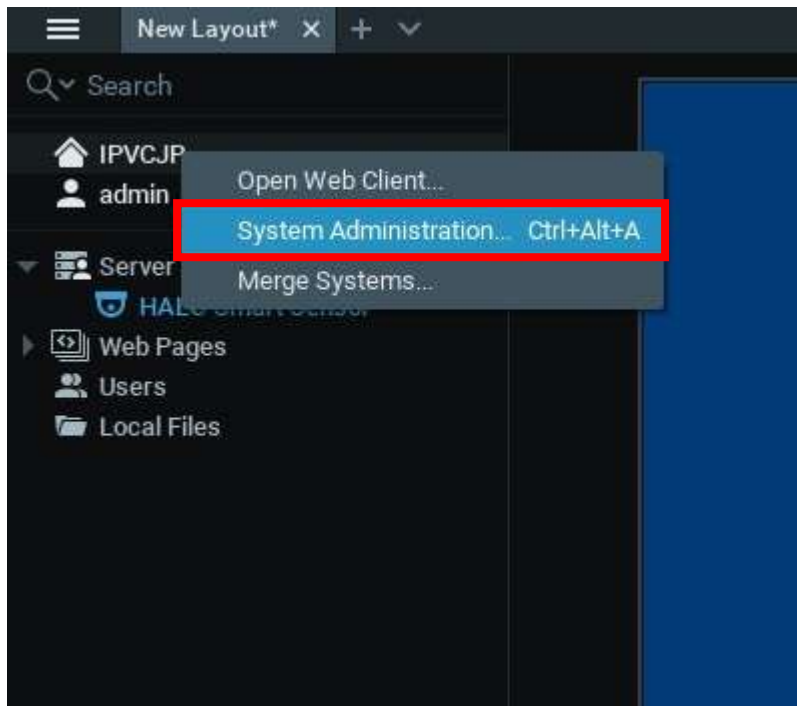
The Notification will display the Unique Name of the HALO Smart Sensor that was triggered, the Type of Event that was triggered and the time that the event occurred

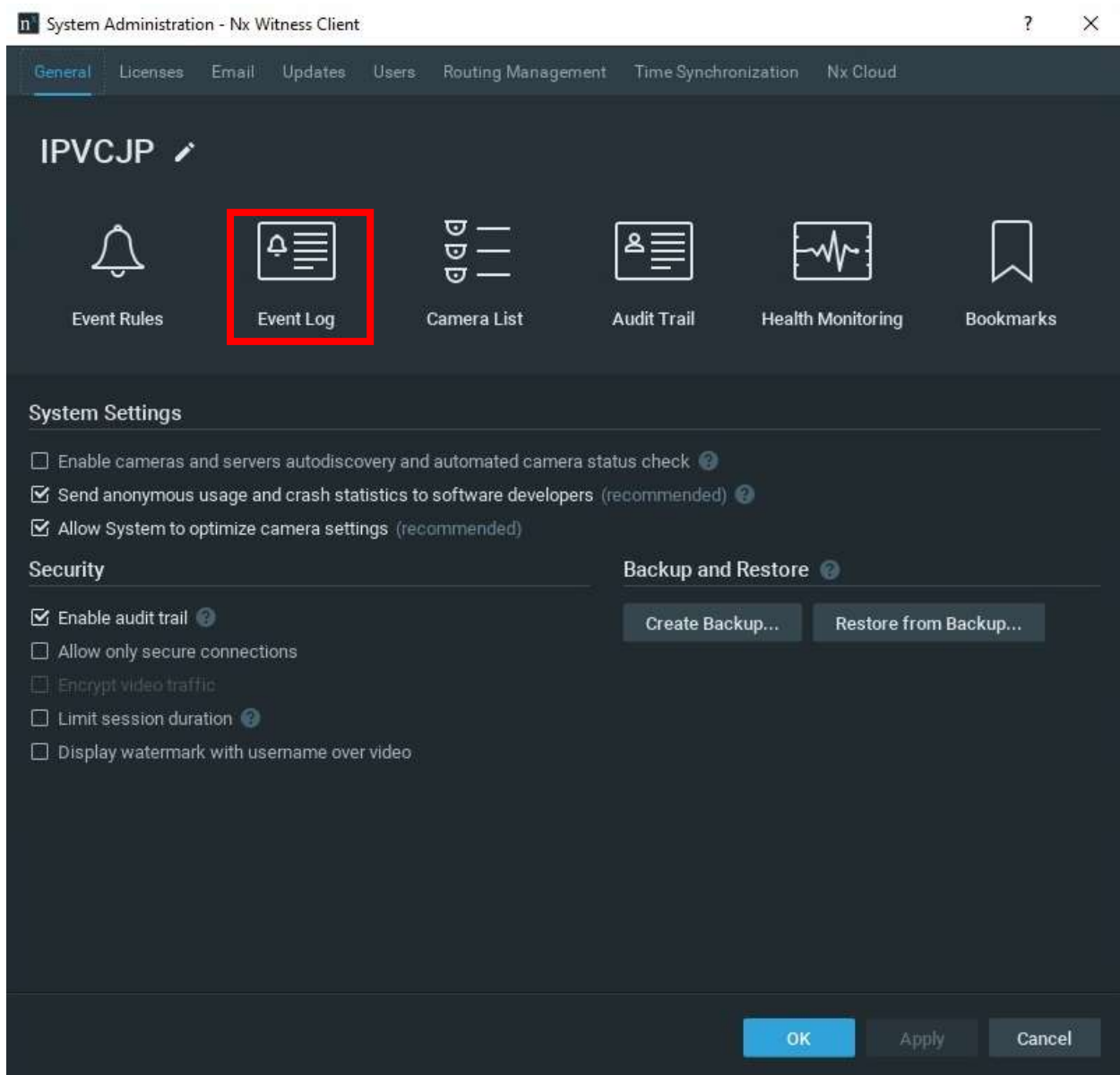
The HALO Video Stream will display the event in the live dashboard as indicated by the red bar showing that the defined threshold for that sensor has been exceeded.

NXWITNESS – EVENT RULES

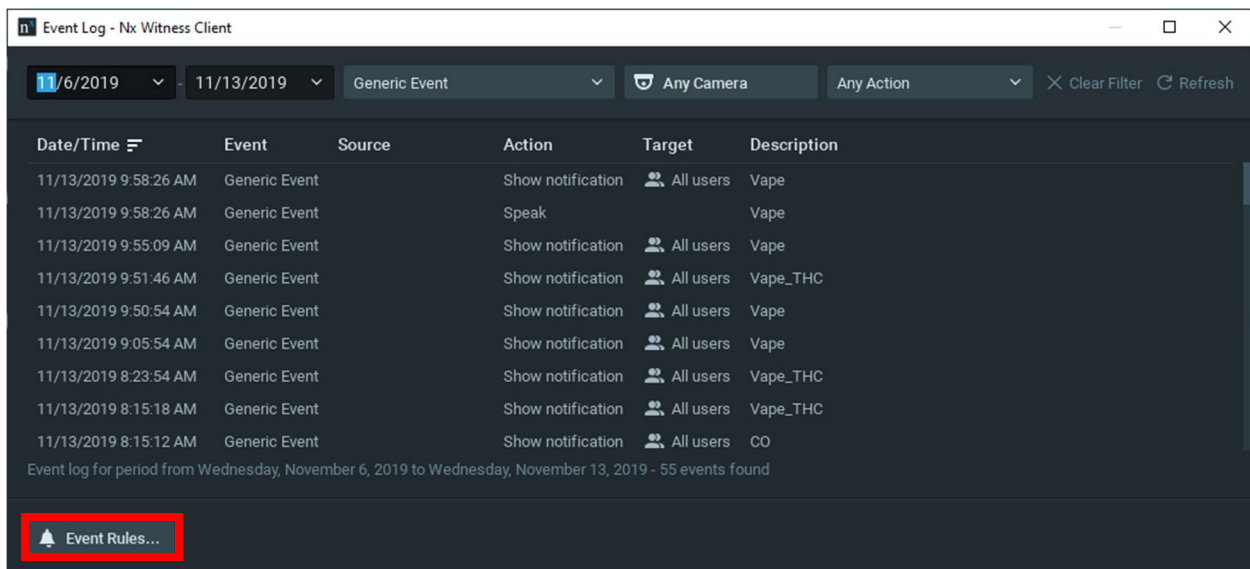
Rules can be defined and associated to the Generic Events that are sent by the HALO Smart Sensor in NXWitness, so that specific actions occur on HALO Events. For example, when a HALO Smart Sensor detects Vape, a text to speech message is played at the NXWitness client stating that “Vape has been detected in Bathroom 11”.

To set this up, right click on the server in the Left Navigation tree and select System Administration.

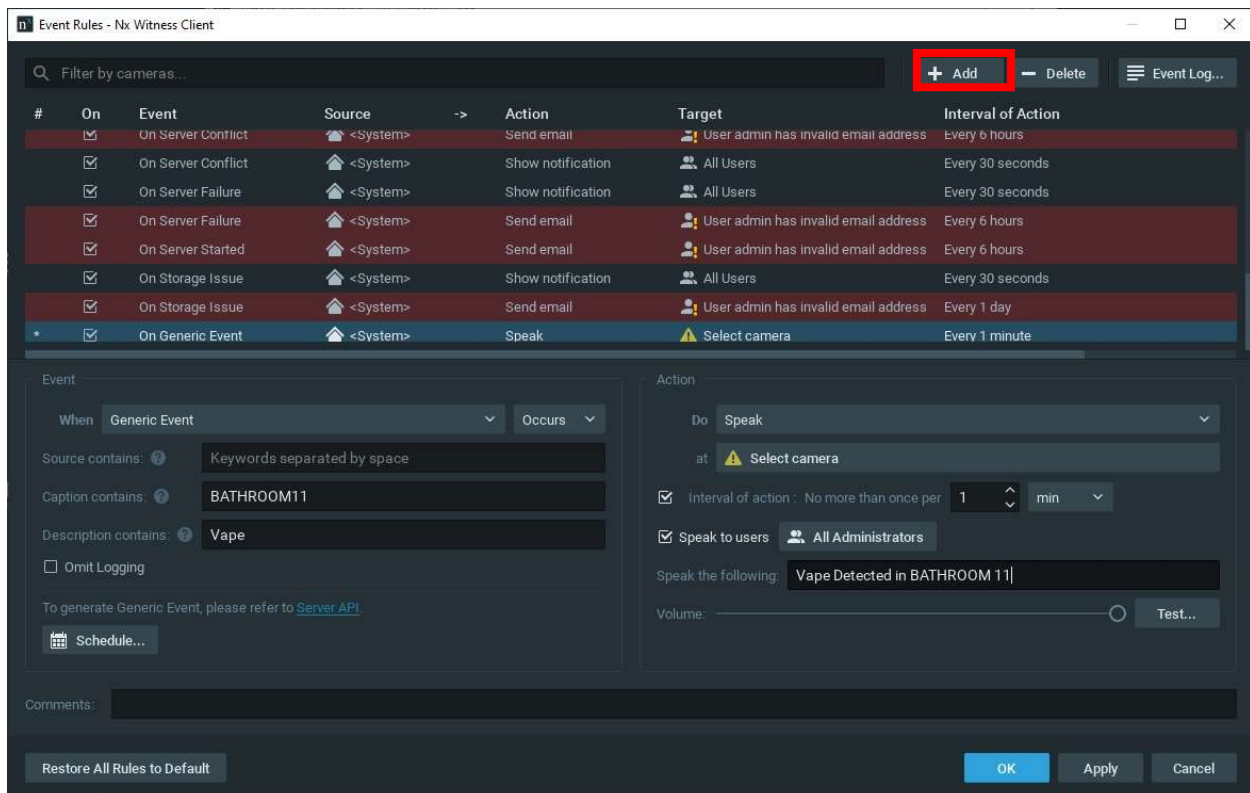




On the System Administration window, click on Event Log.



On the Event Log window, click on the Event Rules button



On the Event Rules window, click on the **Add** button

Event

When: **Generic Event** **Occurs**

Source contains: ? Keywords separated by space

Caption contains: ? BATHROOM11

Description contains: ? Vape

☐ Omit Logging

To generate Generic Event, please refer to [Server API](#).

Schedule...

Click the **When** dropdown menu and select **Generic Event** and **Occurs**

Enter the unique name of the HALO Smart Sensor in the **Caption Contains** field

Enter the Halo Sensor Name for the rule, for example **Vape**, or **Vape_THC**

Action

Do **Speak**

at **Select camera**

☒ Interval of action : No more than once per **1** **min**

☒ Speak to users **All Administrators**

Speak the following: Vape Detected in BATHROOM 11

Volume: **Test...**

Click the Do dropdown menu and select the Action of your choice, for example **Speak**

Enter the phrase you want to hear when a HALO event occurs in the **Speak the Following** field.

Click **Apply** and **OK** to save the rule definition.

Note : A unique rule will need to be created for each unique event defined in each separate qHALO Smart Sensor.