HALO SMART SENSOR

MILESTONE XPROTECT INTEGRATION GUIDE

milestone

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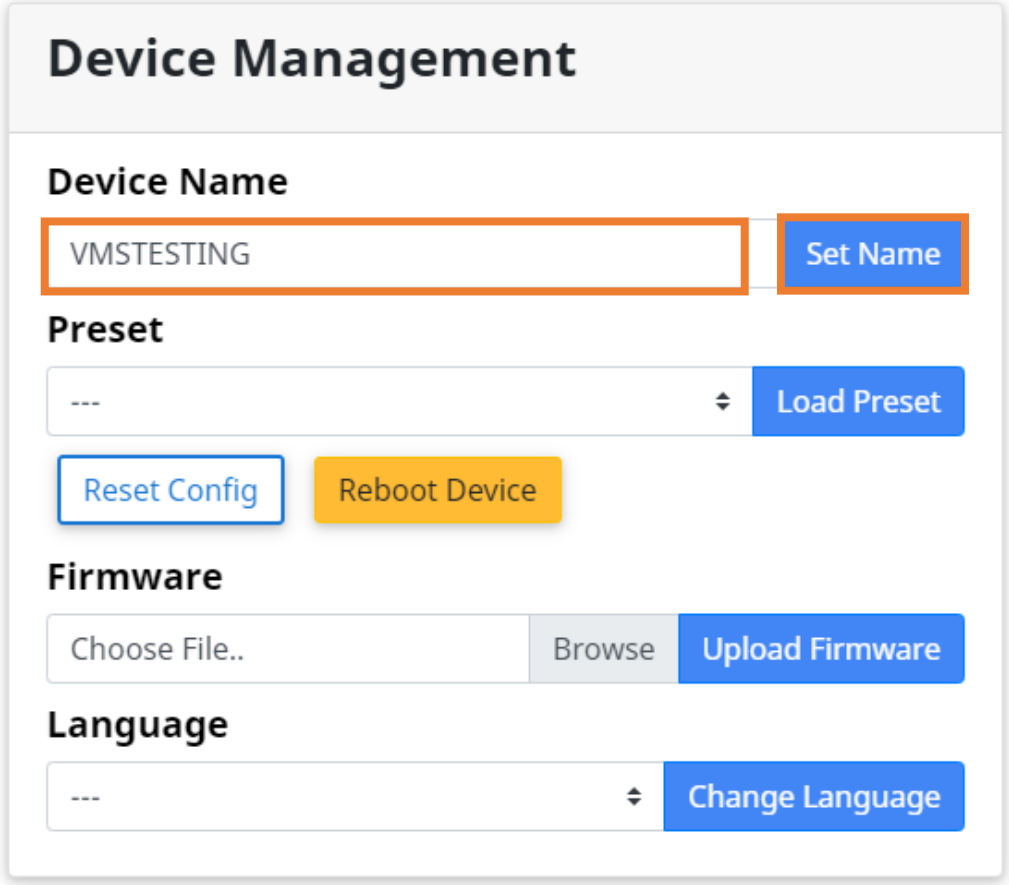
Contents

1. HALO SMART SENSOR – Device Name

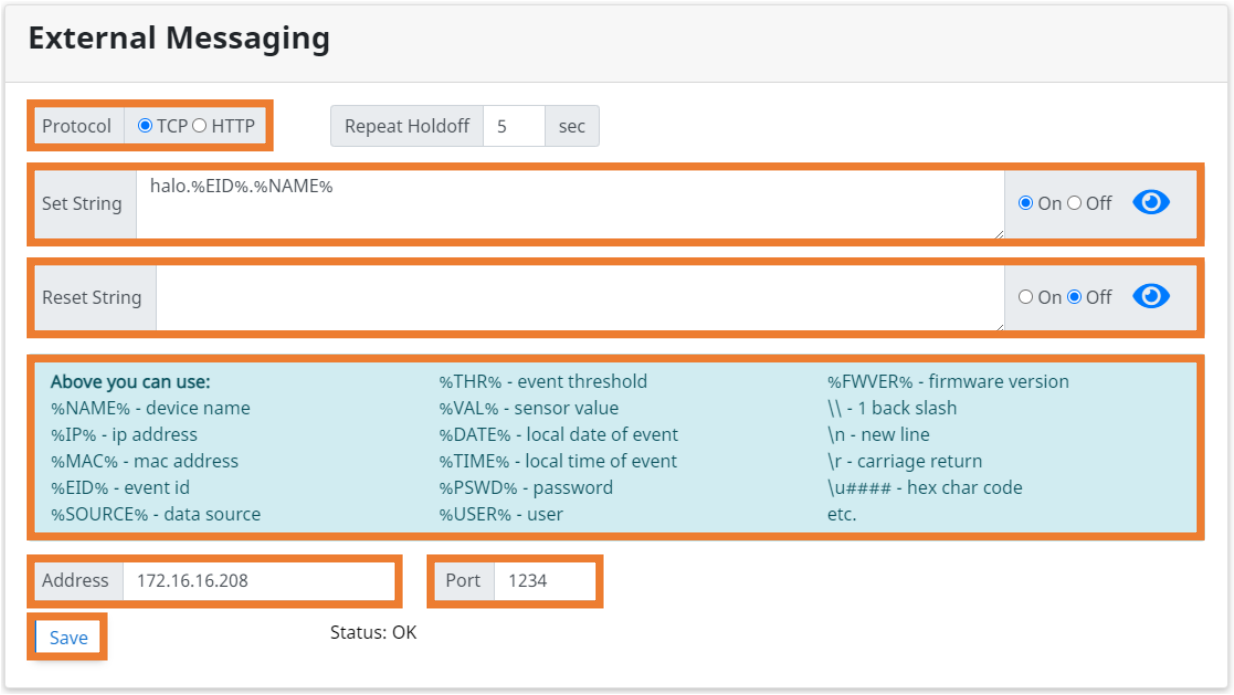
Connect to the HALO SMART SENSOR with a web browser and click on the ***Device*** Icon in the bottom navigation bar.



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

2. HALO SMART SENSOR – Integration

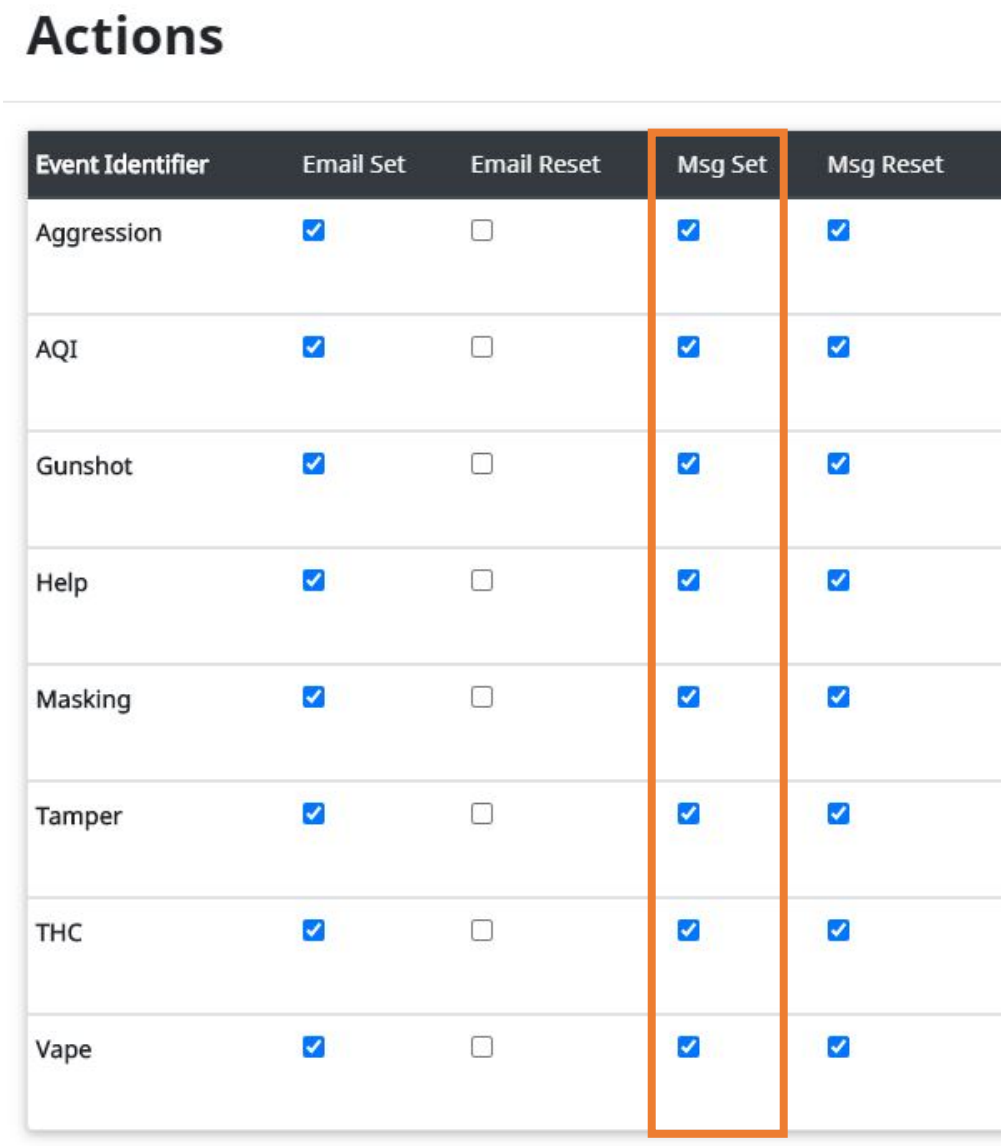
Click on the ***Integration*** Icon in the bottom navigation bar.



1) Select **TCP** for **Protocol**.
2) Enter **halo.%EID%.%NAME%** in the **Set String** and click On
3) **Reset String** is set to Off.
4) In the **Address** field, enter the IP Address of the **Milestone Management Server**
5) In the **Port** field, enter 1234, as this is the default port for Generic Events in Milestone XProtect.
6) Click **Save** to retain settings.

3. HALO SMART SENSOR – Actions

Click on the ***Actions*** icon in the bottom navigation bar of the HALO Smart Sensor interface.



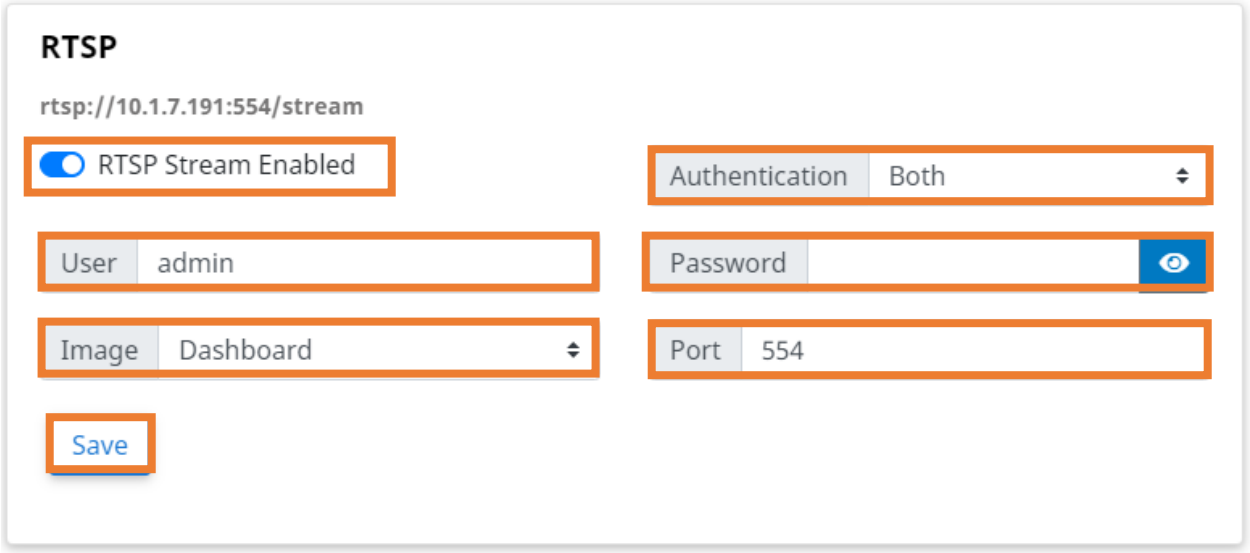
Check the **MSG Set** checkboxes for each of the **Event Identifiers**.

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

4. HALO SMART SENSOR – Enable RTSP Stream and Configure Settings

HALO Smart Sensor can be added to Milestone XProtect as a Hardware Device. HALO can transmit an output that appears as a "Camera" to Milestone XProtect. ***When adding a HALO Smart Sensor to Milestone XProtect, a Hardware Device License is required for each HALO Smart Sensor that is added as a "camera"***.

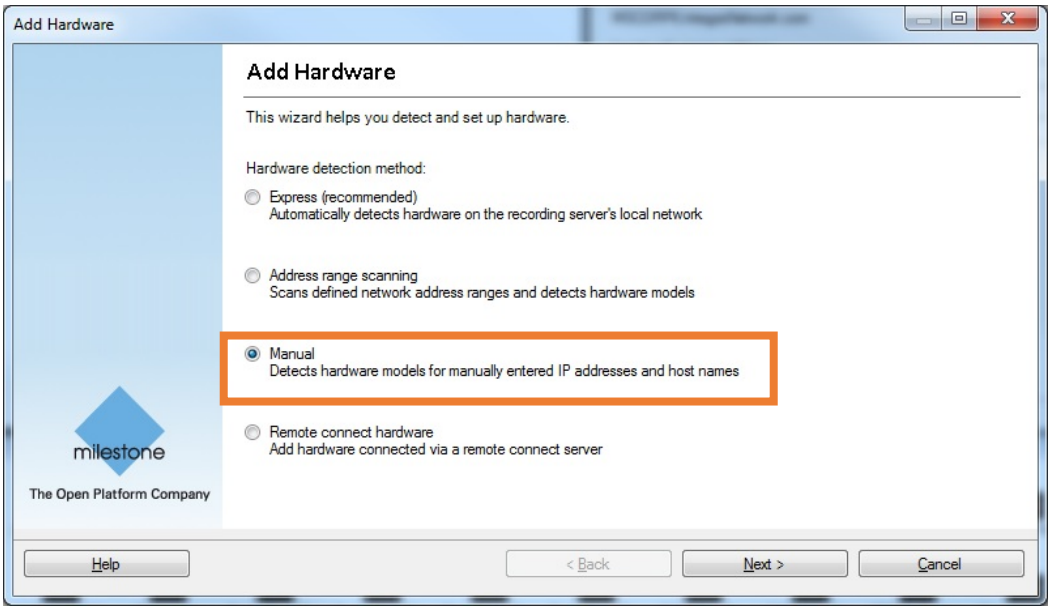
Click on the ***Image*** Icon in the bottom navigation bar of the HALO Smart Sensor interface.



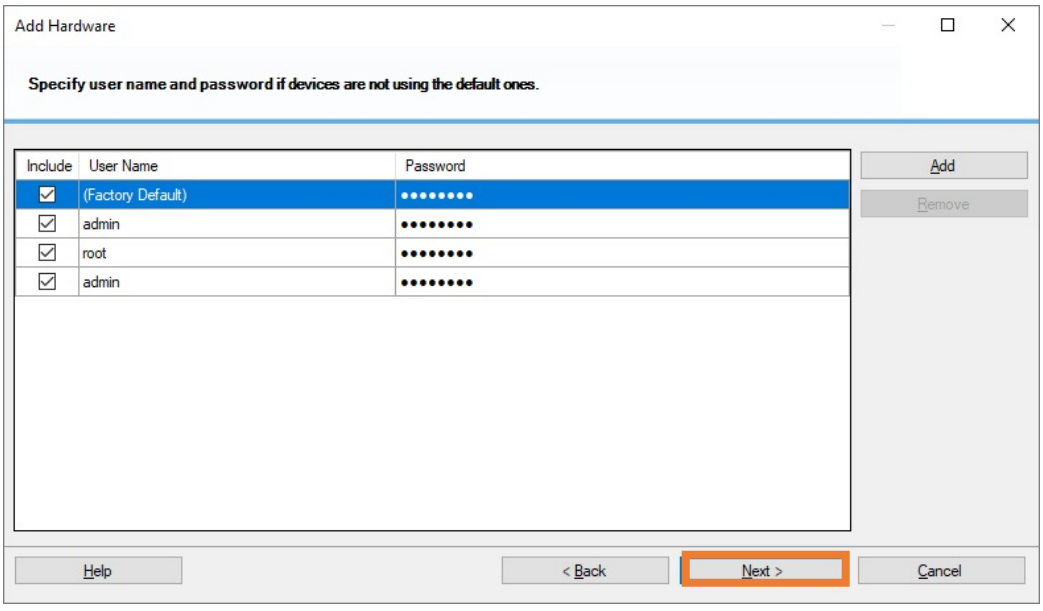
1) Click the RTSP Stream **Enabled** switch
2) Set Authentication to **Both**
3) Enter a **Username** and **Password**
4) Select the **Image** Type (Dashboard or Graph)
5) Enter the RTSP **Port** (Default is 554)
6) Click Save to **Save** RTSP Image Settings

5. MILESTONE MANAGEMENT CLIENT – Add HALO Smart Sensor to Milestone

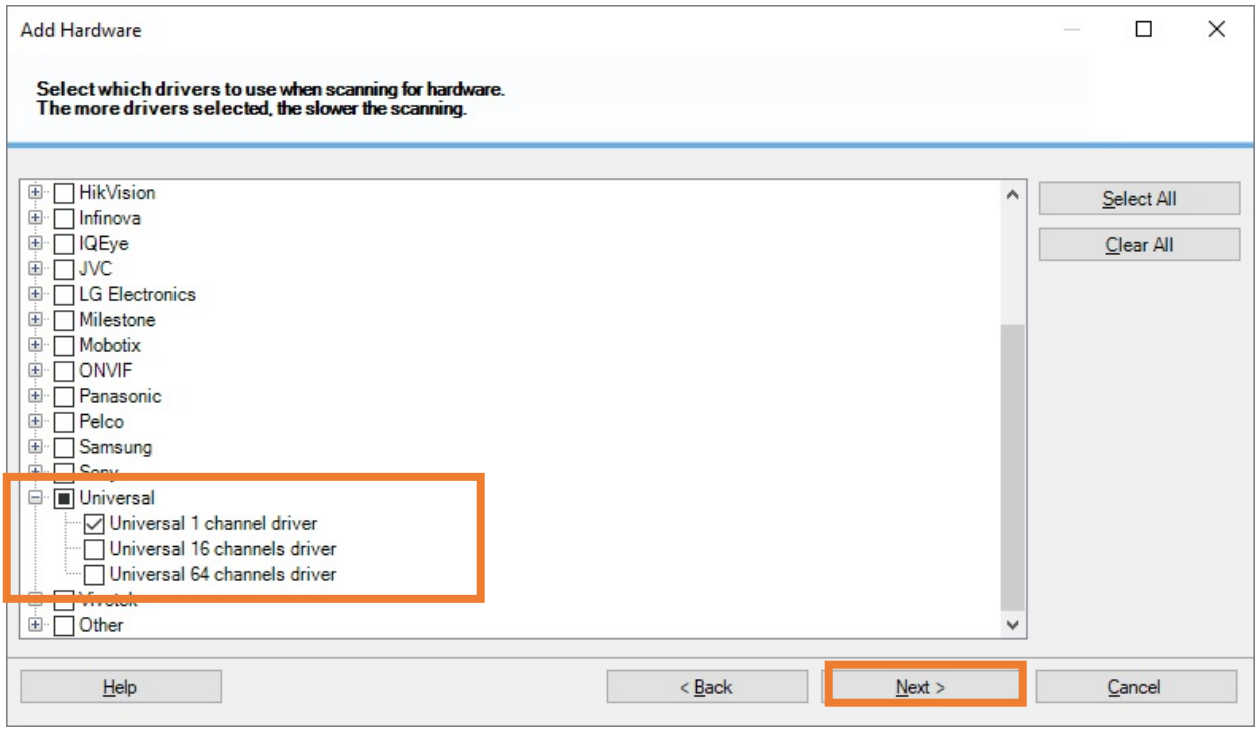
1) Open Milestone Management Client and navigate to the Servers section of the Site Navigation
2) Click on Recording Servers
3) Right click on the Recording Server that you would like to add HALO to, and select Add Hardware
4) In the Add Hardware Wizard, Select **Manual** and click **Next**.



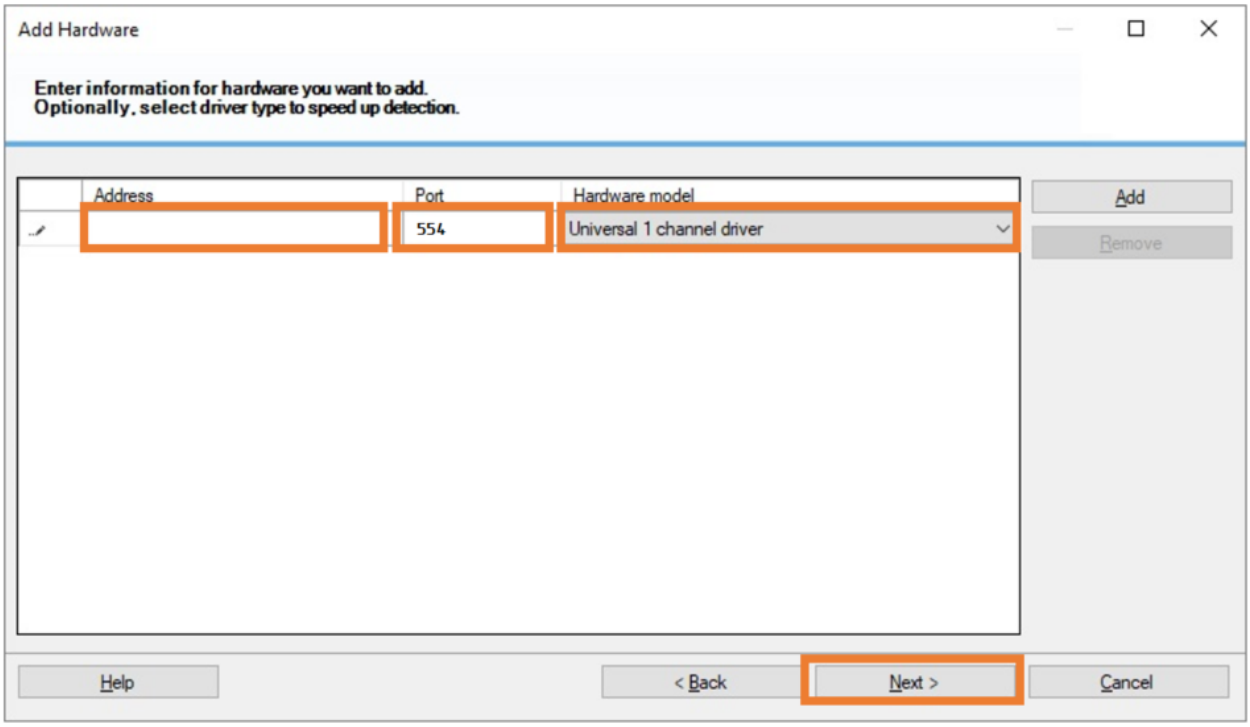
Enter the specific **RTSP Username and Password** specified in the **Image** settings of the HALO Smart Sensor and click **Next**.



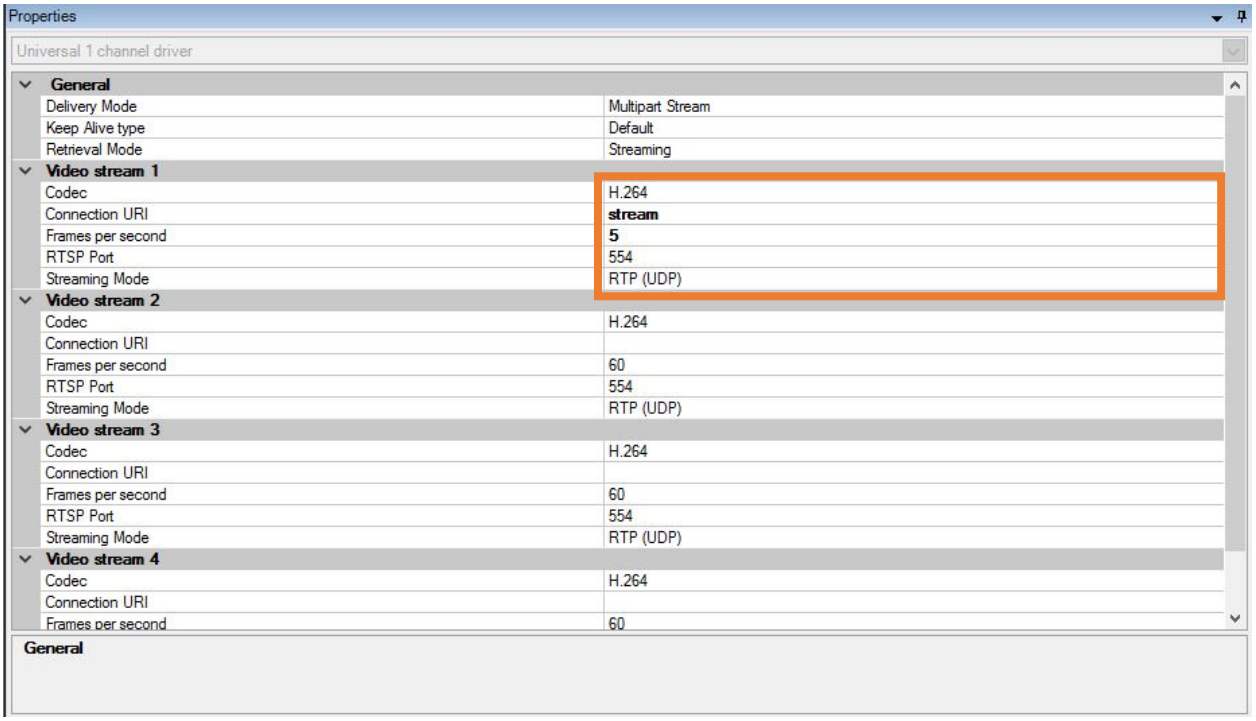
Select the **Universal 1 Channel Driver** and click Next



Enter the **IP Address** and **Port** of the HALO Smart Sensor and select **Universal 1 Channel Driver** from the **Hardware Model** dropdown menu and click Next

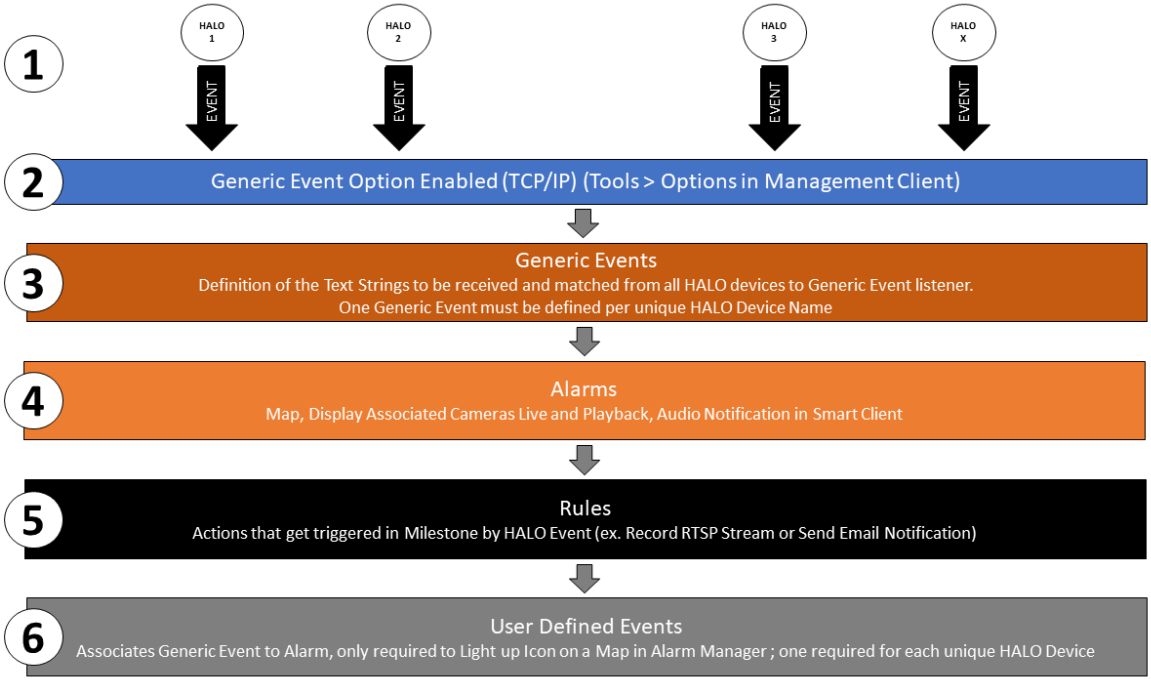


Once the Hardware Device has been successfully added, click on the HALO Smart Sensor device in the Navigation Tree and click on the Settings tab.



1. Select "**H.264**" for Codec
2. Enter "**stream**" in the **Connection URI** field
3. Set **Frames per second** to **5**
4. Set **RTSP Port** to "**554**"
5. Set the **Streaming Mode** to **RTP (UDP)**

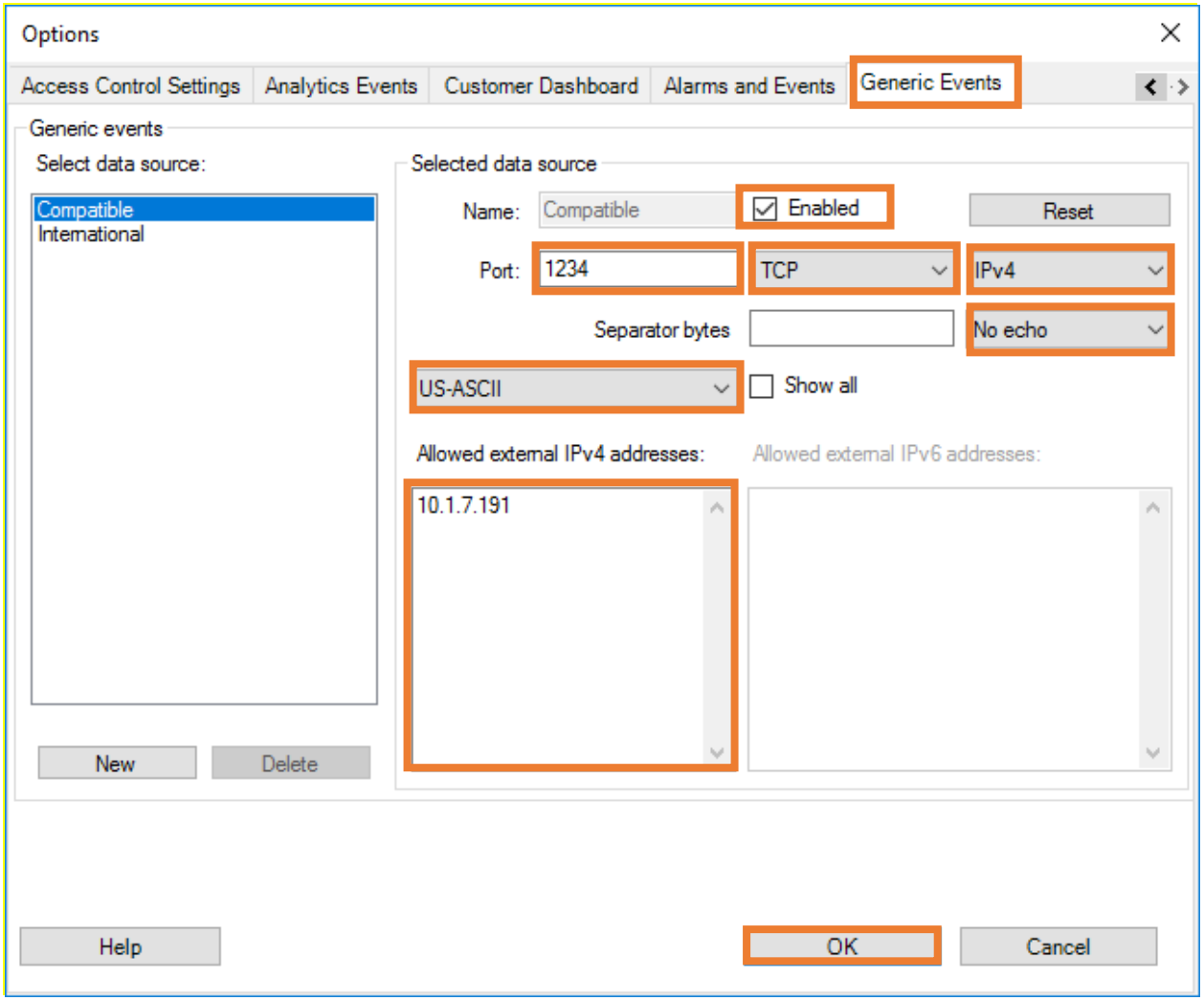
6. INTEGRATION ARCHITECTURE FOR EVENT MESSAGES



7. MILESTONE MANAGEMENT CLIENT – Enable and Configure Generic Events

Open the **Milestone Management Client**, click on **Tools** on the top toolbar and select **Options**.

Navigate to the **Generic Events** tab.

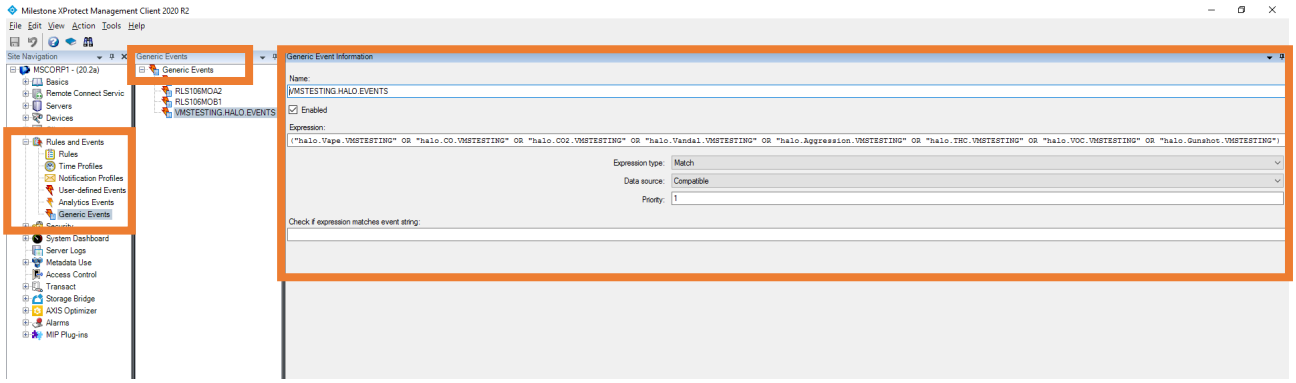


1) Check the **Enable** Checkbox
2) Select **No Echo**
3) Select **US-ASCII**
4) Add the IP Address of the Halo Smart Sensor to the "**Allowed external IP V4 Addresses**" list box. ***Enter the IP Address of EACH unique HALO Smart Sensor in this field.***
5) Click **OK** to save settings

8. MILESTONE MANAGEMENT CLIENT – Add Generic Events

Click on **Generic Events** under **Rules and Events** in the main navigation tree.

Right click **Generic Events** at the top of the adjacent tree and select **Add New Generic Event**



1) Add a **Generic Event** named "**INSERTDEVICENAME.HALO.EVENTS**"
2) Check the **Enabled** checkbox
3) Specify the **Expression** (See screen shot above and example below)

("halo.Vape.INSERTDEVICENAME" OR "halo.CO.INSERTDEVICENAME" OR "halo.CO2.INSERTDEVICENAME" OR "halo.Vandal.INSERTDEVICENAME" OR "halo.Aggression.INSERTDEVICENAME" OR "halo.THC.INSERTDEVICENAME" OR "halo.VOC.INSERTDEVICENAME" OR "halo.Gunshot.INSERTDEVICENAME" OR "halo.AQI.INSERTDEVICENAME" OR "halo.Help.INSERTDEVICENAME")

Make sure to include the brackets and quotations in this case. It is critical that the text strings specified here identically match those specified in the HALO Smart Sensor.

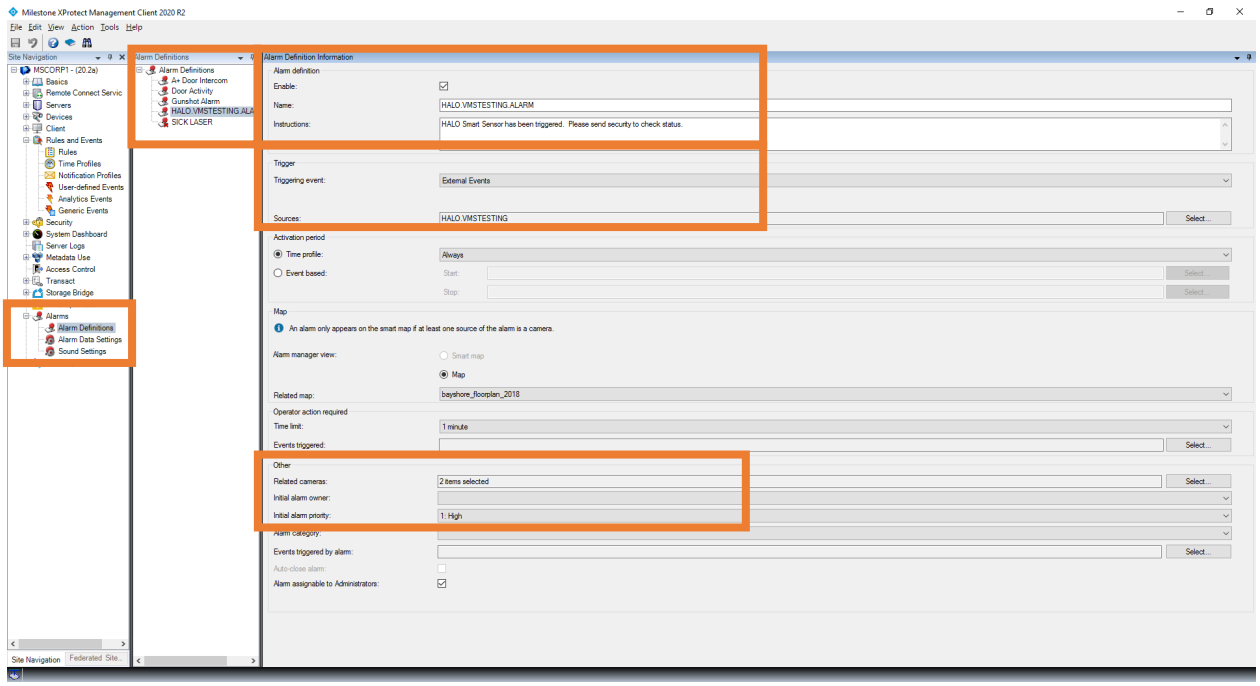
4) Set Expression Type to Match
5) Set Data Source to Compatible
6) Set Priority to 1

NOTE : A unique Generic Event needs to be created for each HALO Smart Sensor being integrated to Milestone

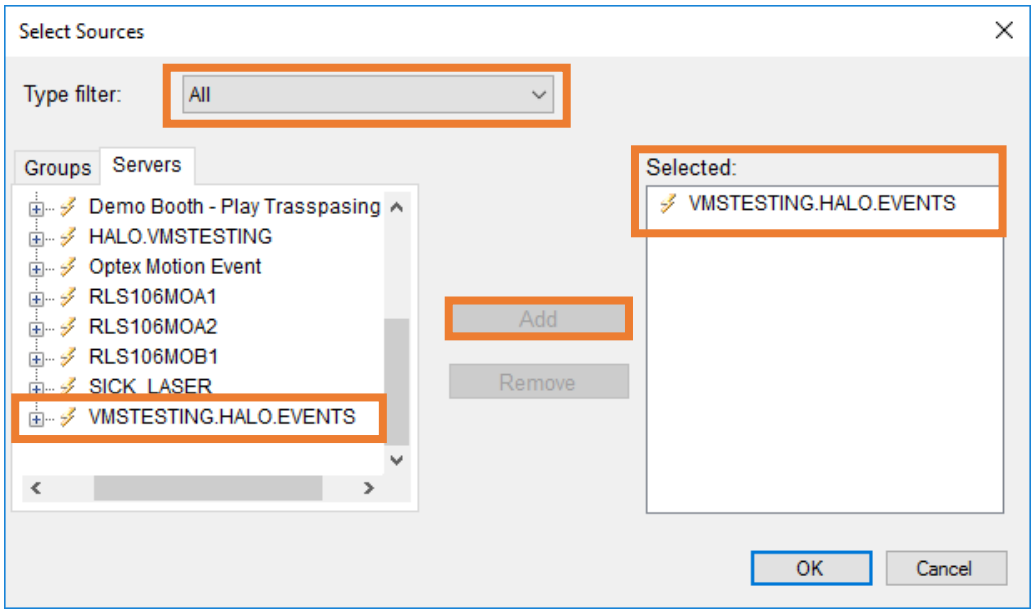
9. MILESTONE MANAGEMENT CLIENT – Add Alarm Definition

The addition of an Alarm Definition enables the events triggered by HALO Smart Sensor to be displayed in the Alarm Manager tab of the Milestone Smart Client.

1) Click on **Alarm Definitions** under the Alarms section of the Main Navigation Tree.
2) Right click on **Alarm Definitions** in the adjacent tree and select **Add new…**
3) Check the **Enable** checkbox for the Alarm.
4) Provide a unique **Name** for the Alarm.
5) Enter **Instructions** to be displayed in the Smart Client when the Alarm is acknowledged.
6) Click on the **Triggering Event** and select **External Events** from the dropdown menu.



7) Click on the Select button next to Sources



8) Switch the Type Filter to All
9) Click on the Servers tab
10) Expand the navigation tree to expose the User Defined Events
11) Select the User Defined Event that is associated to the HALO Smart Sensor that is being added.
12) Specify the **Related Map** to display on the Alarm Manager Tab. (Optional step)
13) Under the Other section, select **Related Cameras**. Typically, the HALO Smart Sensor device and the camera(s) in closest proximity to the HALO Smart Sensor are selected for association.
14) Specify the **Initial Alarm Priority** from the dropdown menu. This correlates to the Sound Settings and determines which sound file will play on event in the Smart Client.

Please refer to the Milestone XProtect VMS Administrator Manual for more details on the **Alarms and Alarm Data Settings**.

10. MILESTONE MANAGEMENT CLIENT – Rules

Now that there are **Generic Events** configured that will trigger when the HALO Smart Sensor Event thresholds are exceeded, you can use those events to *trigger* **Actions** in **Rules**.

Rules can be configured to include, but will not be limited to:

a. Set Matrix to Display
b. Add Bookmark to recorded video
c. Email Notification
d. New Log Entry
e. Show Text on Smart Wall
f. Lock Door on integrated Access Control System

At this point, there are hundreds of variables that can be used to generate Events. Please refer to the Milestone XProtect VMS Administrator Manual for more details on the **Rules**.

11. MILESTONE MANAGEMENT CLIENT – HALO Record on Trigger Rule

Click on **Rules** under **Rules and Events** in the main navigation tree.

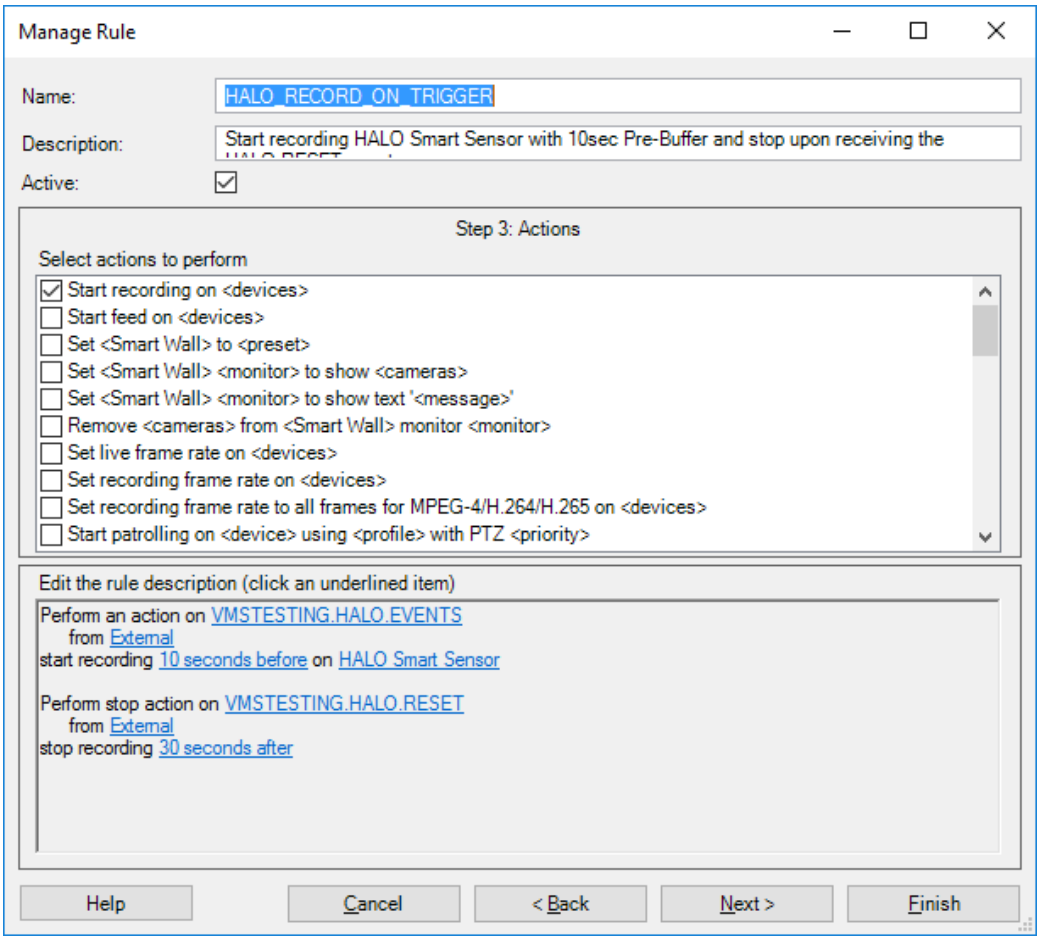
Right click on **Rules** at the top of the navigation tree and select **Add Rule**.

Step 1, Select **Perform an Action on Event** and select ***VMSTESTING.HALO.EVENTS*** from External Events-> Generic Events

Step 2 will be skipped unless you want to define a schedule.

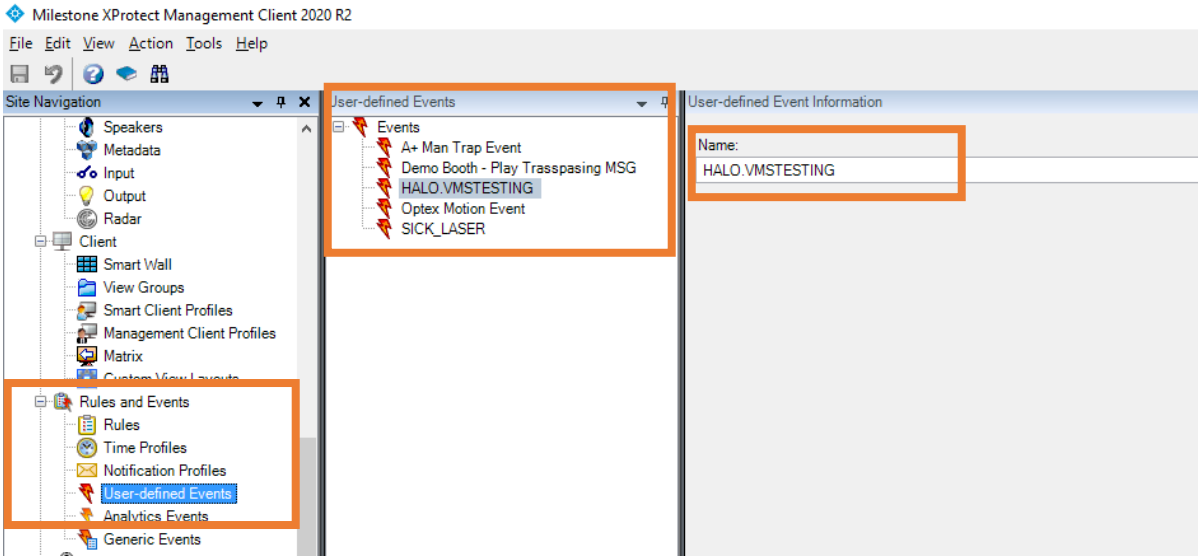
Step 3 select **Start Recording on <devices>** and select the **HALO Smart Sensor. Specify -10 Seconds for the Relative Time**

Step 4 Select Perform Stop Action on <event> and select ***VMSTESTING.*HALO.RESET** from External Events-> Generic Events and select **Stop Recording and specify 30 seconds after**.



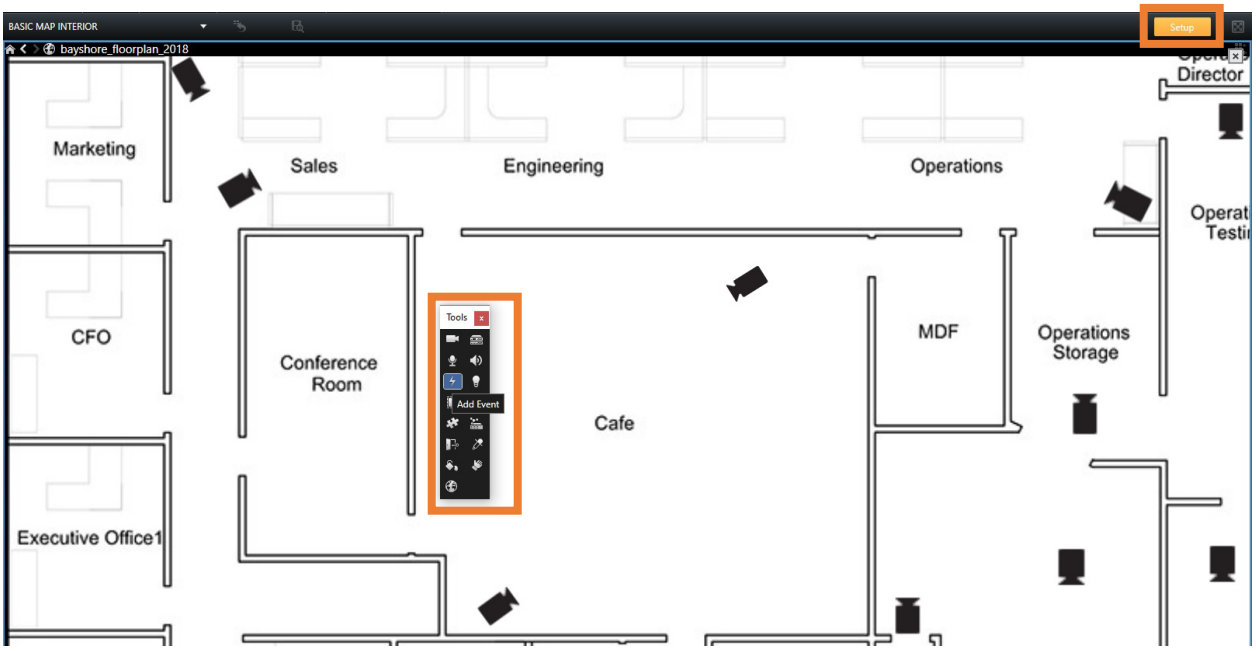
12. MILESTONE MANAGEMENT CLIENT – Add User Defined Events

1) Click on **User Defined Events** under **Rules and Events** in the main navigation tree.
2) Right click on **Events** in the adjacent tree and select **Add User Defined Event**
3) **Create a *UNIQUE* User Defined Event for each HALO Smart Sensor that is connected to the network. *Make sure to use unique names for each.* It is suggested to match the User Defined Events to the HALO Smart Sensor Device Name**



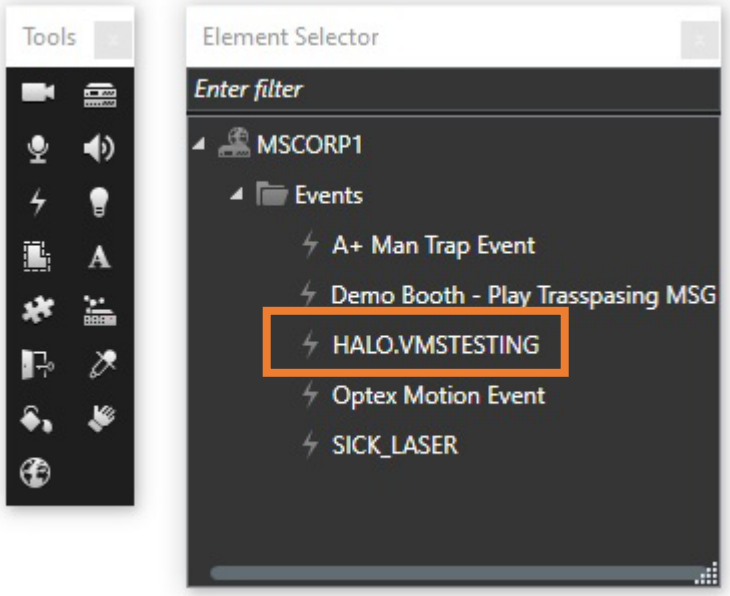
13. MILESTONE SMART CLIENT – Add Icon to Basic Map to Represent HALO Smart Sensor

In Milestone Smart Client, open a Basic Map and click the Setup button.



When the Mode is toggled into Setup, the Tools pop up window will launch.

Click on the **Add Event** button in the panel.

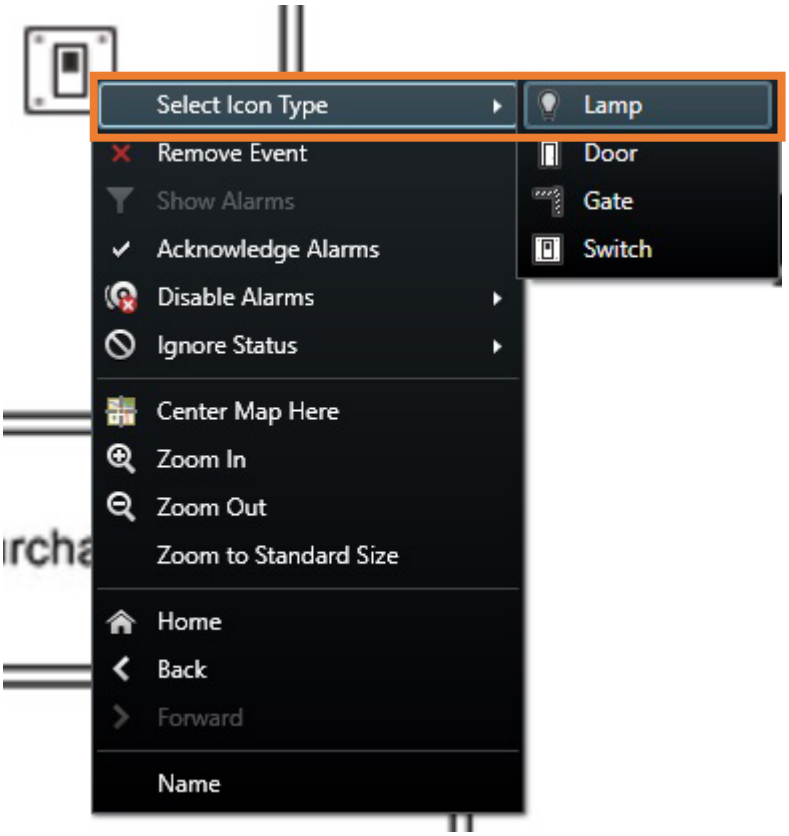


From the Element Selector panel, click and drag the User Defined Event (HALO.VMSTESTING) on to the Basic Map.

The default icon (Light Switch) will be displayed on the Basic Map.

Right click on the Icon and choose Select Icon Type to change the icon.

Click on the Setup button again to save the changes to the Basic Map.



14. MILESTONE MANAGEMENT CLIENT – Flash Red Circle on Icon on Event

Click on **Rules** under **Rules and Events** in the main navigation tree.

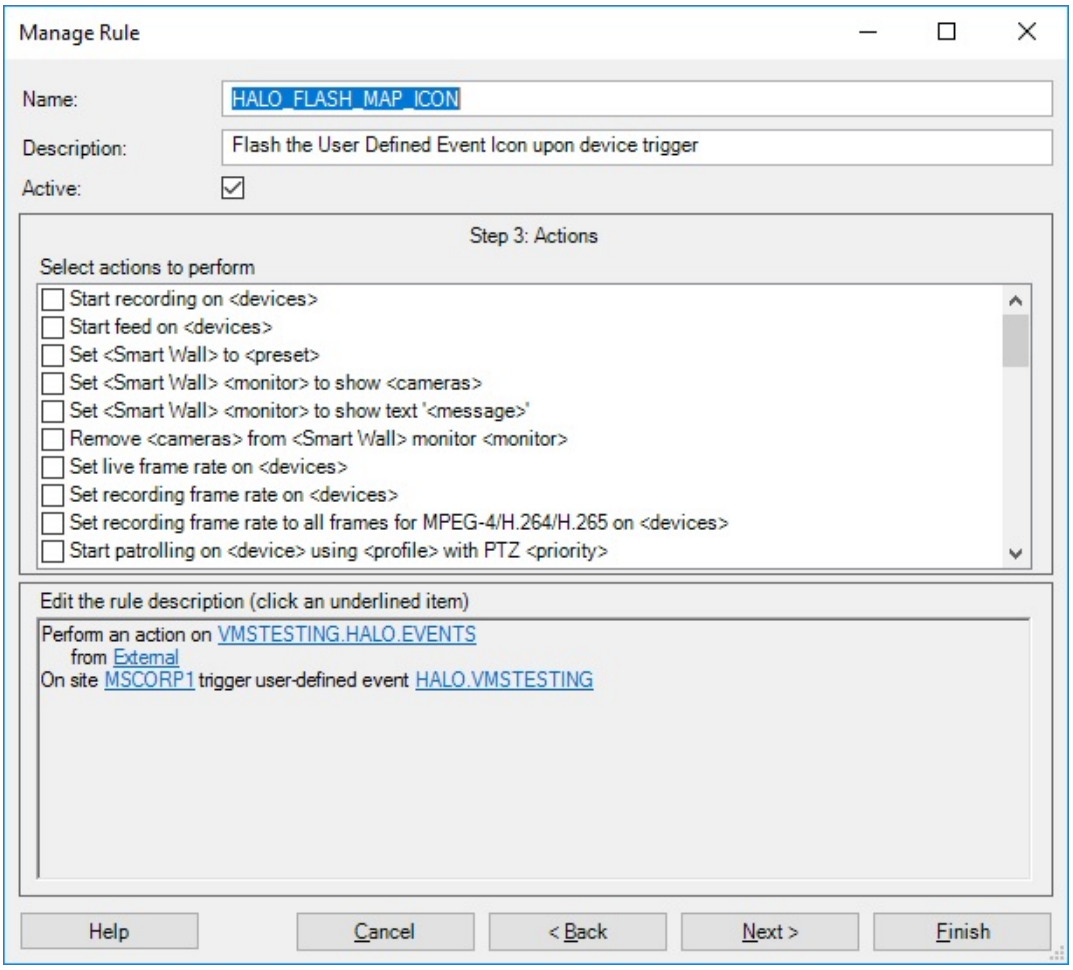
Right click on **Rules** at the top of the navigation tree and select **Add Rule**.

Step 1, Select **Perform an Action on Event** and select ***VMSTESTING.HALO.EVENTS*** from External Events-> Generic Events

Step 2 will be skipped unless you want to define a schedule.

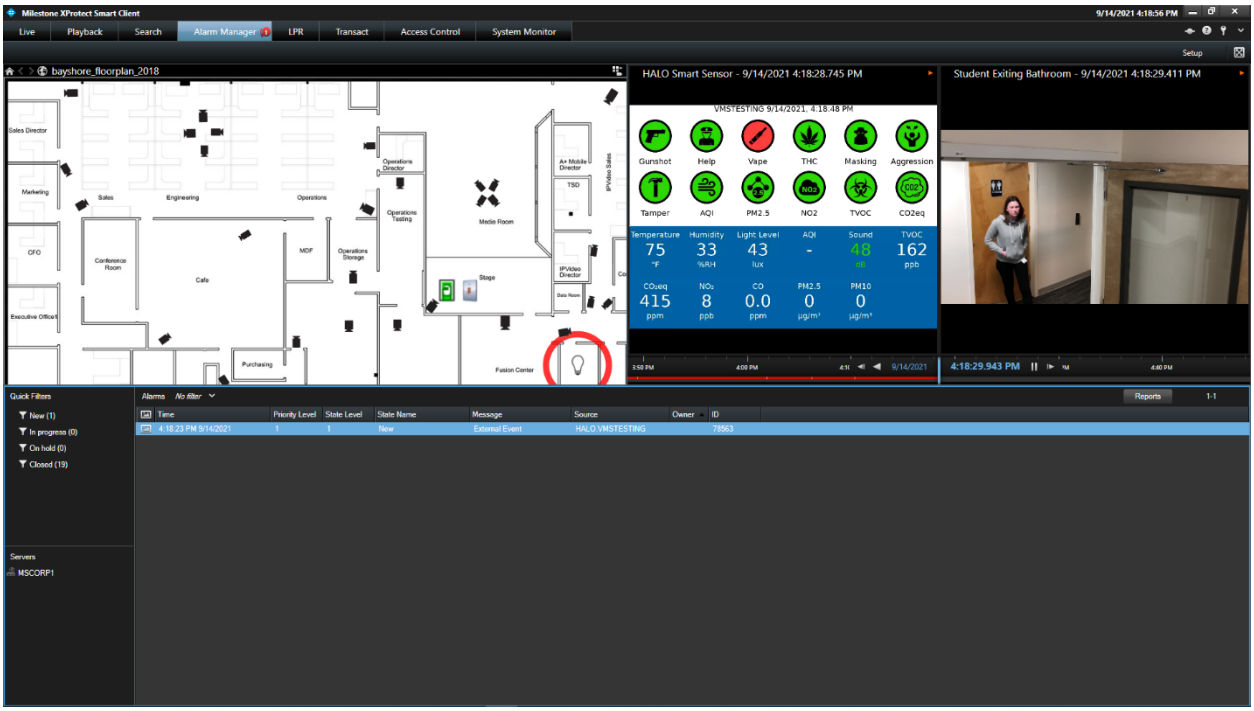
Step 3 select **On <site> trigger <user-defined event>,** and associate the **Site** and the **User Defined Event** that is associated with the HALO Smart Sensor in question
(ex. ***HALO.VMSTESTING***)

Step 4 Select No Actions performed on Stop



15. MILESTONE SMART CLIENT – Alarm Manager

Once all the Events, Alarms and Rule definitions are created, there is nothing to do on the Smart Client side. When HALO Smart Sensors are triggered, the events will be displayed in the Alarm Manager tab, for the versions of Milestone that support Alarm Manager.



When operators click on the listed Halo Event, the Icon for the User Defined Event that is associated to the HALO Smart Sensor is displayed and begins to flash.

The recorded video from HALO Smart Sensor and any associated camera(s) is displayed, and automatically begins playback from the time of the offending trigger.

The screenshot above shows the physical location of the HALO Smart Sensor on a map, the recorded video from HALO showing the VAPE sensor surpassing the defined threshold, and the associated camera showing the student leaving the bathroom directly after the HALO Smart Sensor was triggered for VAPE.