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INTRODUCTION

The HALO Smart Sensor can be integrated into Mirasys Video Management Software using the MJPEG output from the HALO device and the Generic Text Trigger support of Mirasys. This allows operators to visualize and record the real time data from the HALO Smart Sensor, as though it were a typical IP Camera.

*Note: This integration was tested using version Mirasys 8.3.4.1 with a HALO Smart Sensor running v 1.58 firmware.*
HALO SMART SENSOR – Motion MJPEG Output Stream URL

To capture the Stream URL needed to connect Mirasys 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 Mirasys, 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.
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**

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

**HALO SMART SENSOR – Configure VMS Settings**

Login to the HALO Smart Sensor and click on the Notifications tab. Scroll down to VMS Settings.
1. Enter “halo.%EID%” for the Set String and Check the On radio button to enable (Do not include Quotations)
2. Enter “halo.reset” for the Set String and Check the On radio button to enable (Do not include Quotations)
3. Enter the IP Address of the Mirasys Server in the IP Address field
4. Enter 40000 in the Port field.
5. Click the Save button.

HALO SMART SENSOR – Actions

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

**Actions**

<table>
<thead>
<tr>
<th>Event Identifier</th>
<th>Email Set</th>
<th>Email Reset</th>
<th>Messaging Set</th>
<th>Messaging Reset</th>
<th>Relay 1</th>
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<tr>
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<td>✔</td>
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</tr>
</tbody>
</table>

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

Click the **Save** button to save settings.
MIRASYS ENTEGRA – Add Device

Login to the Mirasys Entegra System Manager client with Administrator rights to add the HALO Smart Sensor as a device.
Click on the VMS Servers tab in the left navigation tree.

Double click on Hardware, in the VMS Servers navigation tree.
In the Hardware Settings window, click on the *Add IP Camera* button
In the Configure IP Camera window:

1. **Search Mode**: Select “Selected Drivers”
2. **Driver**: Select “HttpIPCapture”
3. **Address**: Paste the Stream URL that was previously copied from the HALO Smart Sensor interface in the Address field
4. **Port**: Enter the HALO Smart Sensor port (Default =80)
5. **Username**: Enter the HALO device username.
6. **Password**: Enter the HALO device password

Click on the Green Checkbox button to save the settings.
Upon clicking the Green Checkbox, the **Accept IP Camera Driver** popup window will appear.

![Accept IP camera driver](image)

Click on the Green Checkbox to acknowledge this window and proceed with the selected driver.
The device will now be listed in the Hardware Settings window. In the Device Settings section, edit the Name field to reflect a proper name for the HALO Smart Sensor that will easily identify its installation location.
MIRASYS ENTEGRA – Text Channel

Utilize the Text Channel to be able to receive events from a HALO Smart Sensor as the sensors are triggered.

Click on the VMS Systems icon and double click Text Channels.
1. Select *UniversalDataTcpModel* from the *Model* dropdown menu
2. Specify *40000* for the *TCP Port Number*
3. Specify *Text* as the *Validation*
4. Specify “*UDD4Halo.xml*” for the *Configuration File*.
5. Click on the *Green Checkbox* button to save the settings.
Enter a meaningful name for the Text Channel in the Name field, then click on the Green Checkbox button to save settings.
MIRASYS ENTEGRA – Alarms

Alarms are the association to the Text Channel created in the previous step. Specify specific triggers and create actions based on those unique triggers.

1. On the General Tab, Enter a unique name for the Alarm.
2. Check the Visible checkbox in the Profiles section.
3. Click on the Green Checkbox button to save settings
1. Click on the **Type** dropdown menu and select **Text Data**
2. Click on the Text Channel labeled **HALO Smart Sensor** to expose the available Event List
3. Click on a specific Event to associate the **Alarm** to a specific **Event Type**
1. Click on the **Actions** tab
2. Click on the Type dropdown menu to select an Action from the list to associate to the Alarm. There are a wide array of options to choose from.

Once the Actions have been configured, they will be listed in the Visible section. Multiple Actions can be associated to an Alarm.
Click on the Green Checkbox button to save the Alarm.

Once the defined Alarm is saved, it will appear in the Alarms List.
MIRASYS SPOTTER – Monitor HALO Smart Sensor Live

Launch the Mirasys Spotter client software, and login.
Drag the HALO Smart Sensor from the Cameras left navigation tree into the Viewing panel of the Mirasys Spotter Client to visualize the live, real-time output from the HALO Smart Sensor.
When HALO Smart Sensor is triggered, the bar graph for the sensor will light up RED and an indicator that the defined threshold for that sensor has been exceeded.

HALO Smart Sensor can be displayed in a grid of cameras as well.
When the HALO Smart Sensor is triggered, the HALO Dashboard will indicate the sensor that has been triggered, and the Alarm will be listed in the Alarm window of Spotter. Any of the Actions defined in the Alarm will be triggered. Mouse over the alarm for additional details about the alarm.