



SENSTAR SYMPHONY COMMON OPERATING PLATFORM
INTEGRATION GUIDE

SENSTAR®



Contents

INTRODUCTION.....	2
HALO SMART SENSOR – DEVICE NAME.....	3
HALO SMART SENSOR – ENABLE RTSP STREAM	4
HALO SMART SENSOR – ACTIONS	5
HALO SMART SENSOR – INTEGRATION.....	6
SENSTAR SYMPHONY SERVER – ADD HALO SMART SENSOR.....	7
SENSTAR SYMPHONY SERVER– RULES	12
SENSTAR SYMPHONY CLIENT– VISUALIZING HALO EVENTS.....	18

INTRODUCTION

The HALO Smart Sensor can be integrated into Senstar's Symphony Common Operating Platform using the RTSP output from the HALO device and the Generic URL support of Senstar Symphony. This allows operators to visualize and record the real-time data from the HALO Smart Sensor, as though it were a typical IP Camera.

HALO Smart Sensor can also send event messages to the TCP Listener of Senstar Symphony. When the threshold of sensors is exceeded, TCP/IP messages are transmitted to Senstar Symphony and the Rules can be used to associate cameras and alarms to the HALO Smart Sensor events.

Note : This integration was tested using version 7.6.0.8

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.

Device Management

Device Name

VMSTESTING

Set Name

Preset

Load Preset

Reset Config

Reboot Device

Firmware

Choose File..

Browse

Upload Firmware

Language

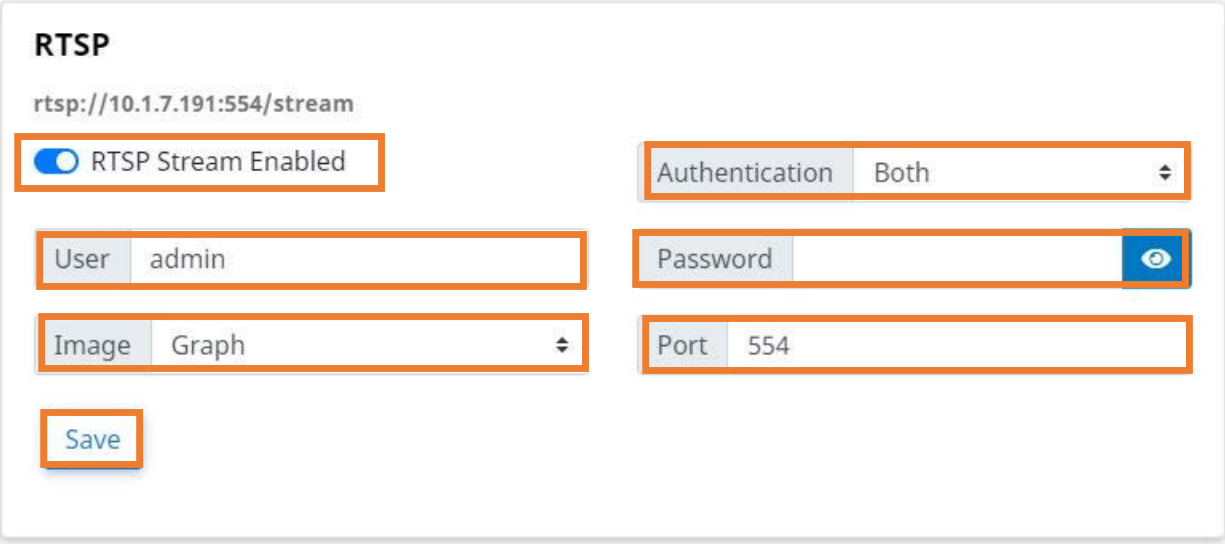
Change Language

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

HALO SMART SENSOR – ENABLE RTSP STREAM

To capture the Stream URL needed to connect Symphony to HALO, simply navigate to the HALO Smart Sensor with a Web Browser, and click on the **Image Icon** in the bottom navigation bar

Scroll down to the RTSP settings.



The screenshot shows the RTSP settings page. At the top, the stream URL is `rtsp://10.1.7.191:554/stream`. Below this, several settings are highlighted with orange boxes: the 'RTSP Stream Enabled' toggle switch, the 'Authentication' dropdown menu set to 'Both', the 'User' field containing 'admin', the 'Password' field with a toggle icon, the 'Image' dropdown menu set to 'Graph', and the 'Port' field containing '554'. A 'Save' button is located at the bottom left of the settings area.

- 1) **Highlight** and **Copy** the **Stream URL** displayed at the top of the settings area.
- 2) Click the **RTSP Stream Enabled** switch
- 3) Set **Authentication** to **Both**
- 4) Enter a **Username** and **Password**
- 5) Select the **Image** Type (Dashboard or Graph)
- 6) Enter the RTSP **Port** (Default is 554)
- 7) Click **Save** to save RTSP Image Settings

HALO SMART SENSOR – ACTIONS

Click on the **Actions Icon** on the HALO Smart Sensor interface.

Actions

Event Identifier	Email Set	Email Reset	Msg Set	Msg Reset
Aggression	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AQI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gunshot	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Help	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Masking	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tamper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
THC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vape	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Scroll down and click the **Save** button to save settings.

HALO SMART SENSOR – INTEGRATION

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

External Messaging

Partner Integration Templates ---Select a template---

Protocol ☒ TCP ☐ HTTP

Repeat Holdoff sec

Set String

☒ On ☐ Off

Reset String

☐ On ☒ Off

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
%USER% - user

%FWVER% - firmware version
\\ - 1 back slash
\n - new line
\r - carriage return
\u#### - hex char code
etc.

Address

Port

Status: OK

- 1) Select **TCP** for **Protocol**.
- 2) Enter `<metadata text="halo.event.%EID%.%NAME%\n"></metadata>` in the **Set String** and click On
- 3) In the **Address** field, enter the IP Address of the **Symphony Server**
- 4) In the **Port** field, enter **50XXX**. The Port Listener for each camera is determined by the Camera ID in Symphony. If your camera ID is "1", take $50003 + (\text{CAMERAID} \times 10)$ or $50003 + 10 = 50013$ for the port number. Each HALO should send data to a unique port number.

NOTE : The Camera ID can be found next to each camera on the Cameras list

SENSTAR

DevicesSecurityRulesLicensesSettings

Farm ID 135105Web ClientLog OutHelp

Cameras

TemplatesHardwareIntegrationsAccess DevicesDevice TreeCarousels

Cameras

Add Cameras

Edit

Delete

Export

Set Password

Move to Server

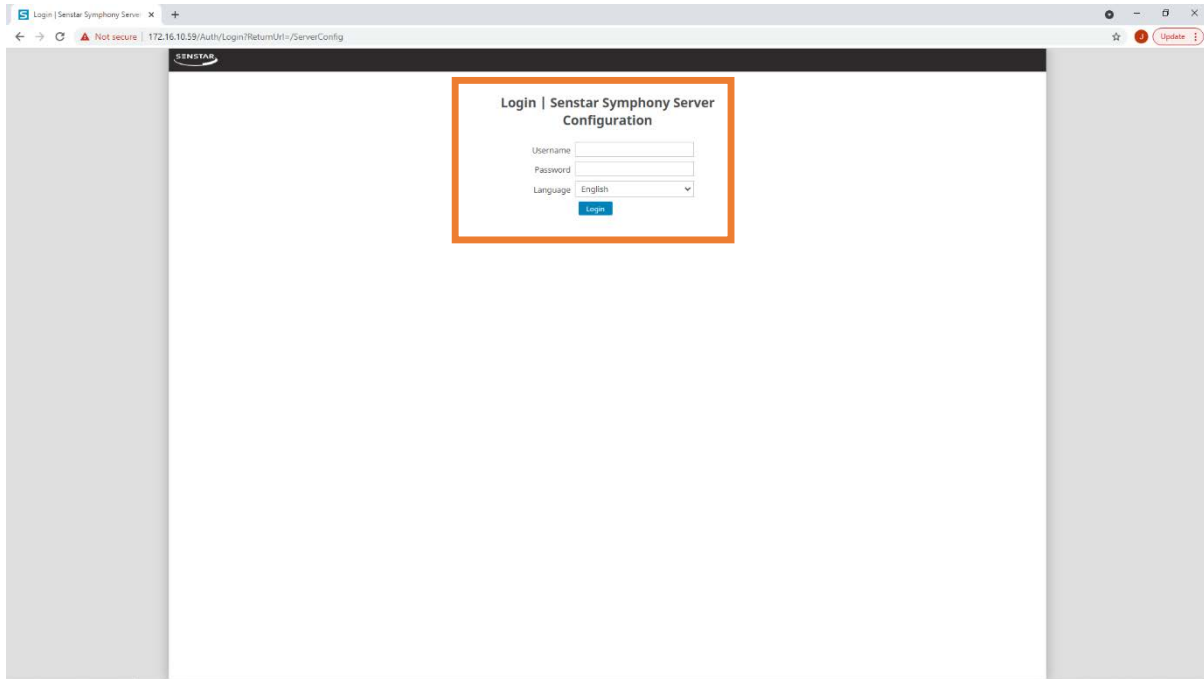
Open in Web Client

Q	ID	Name	Type	IP Address	Brand	Model	Template	Resolution	FPS	Groups	Add-On
<input type="checkbox"/>	10	HALO Smart Sensor	Fixed	10.1.7.191	RTSP URL	RTSP URL	Default	1280 x 720	5	Devices	None

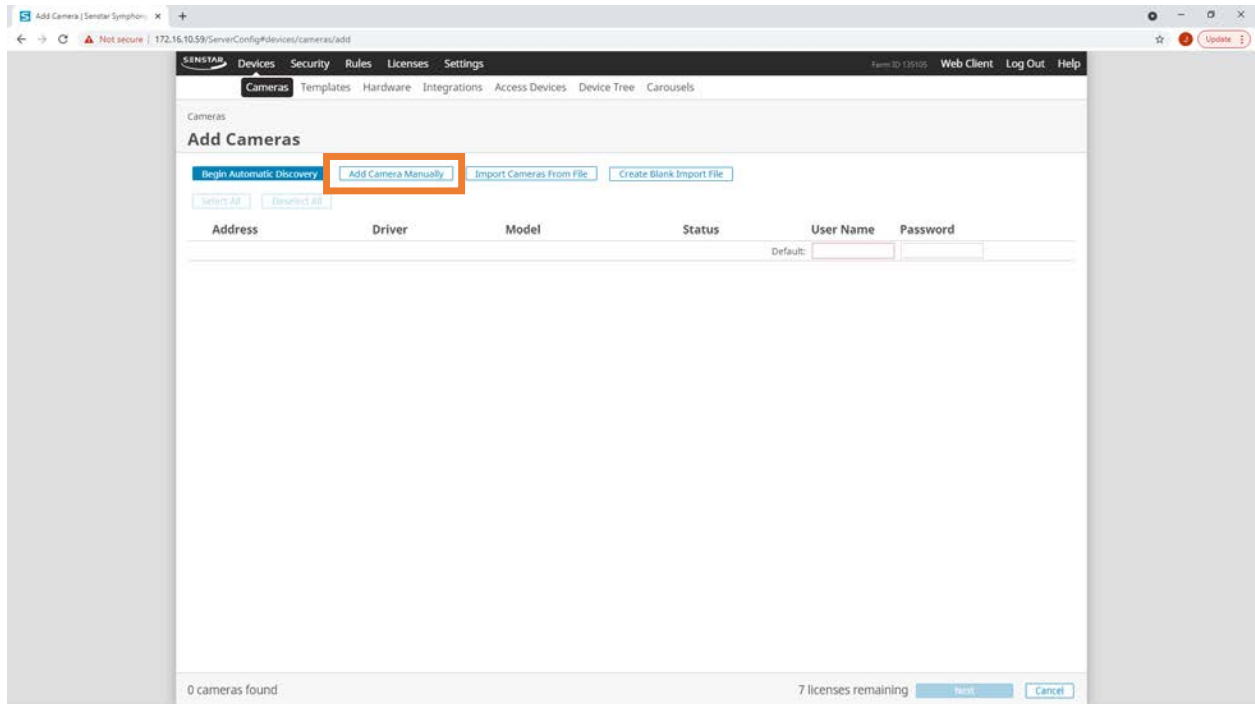
- 5) Click **Save** to retain settings

SENSTAR SYMPHONY SERVER – ADD HALO SMART SENSOR

Open **Senstar Symphony Server** to add the HALO Smart Sensor as a device.



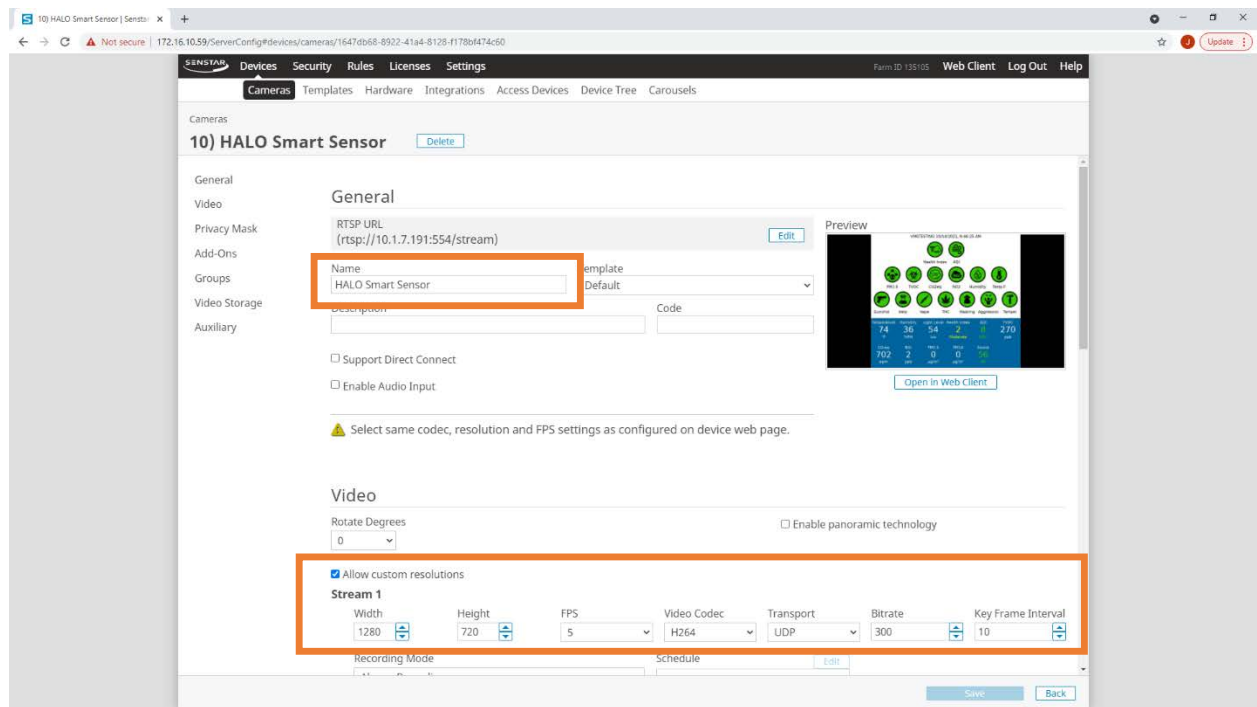
- 1) Navigate to the server's IP Address in a Web Browser
- 2) Enter Username and Password and click Login



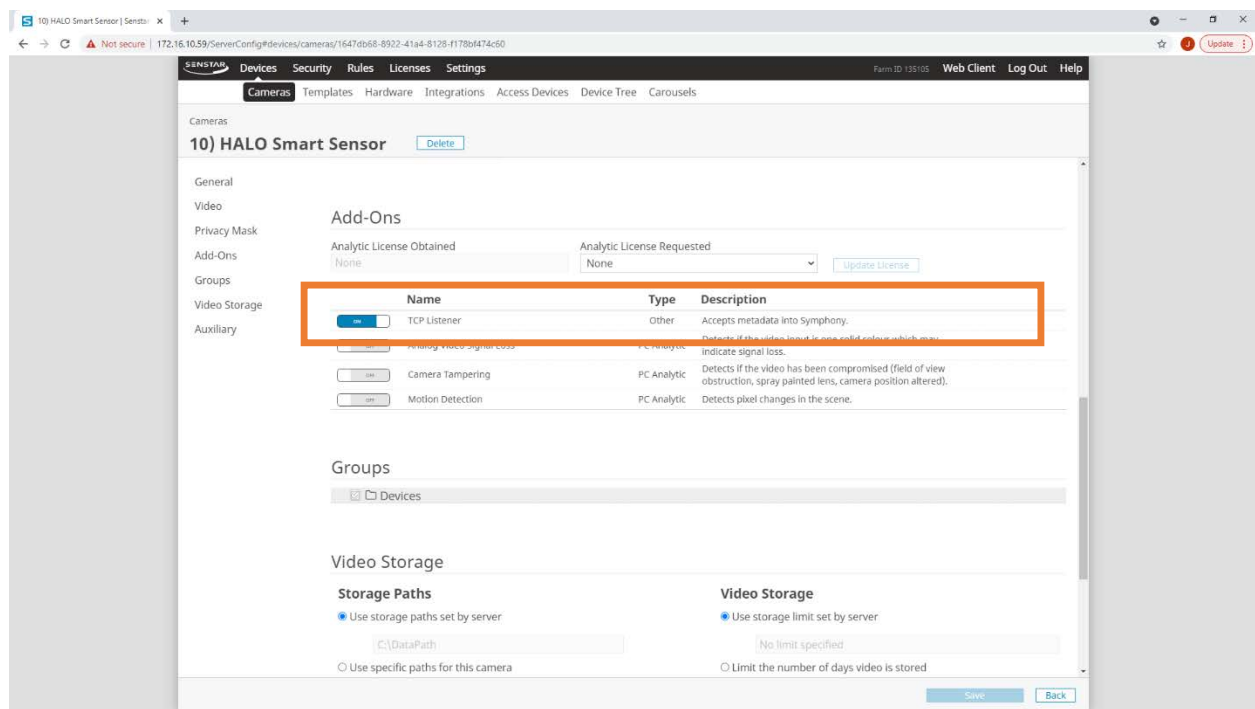
- 1) Click on Devices in the primary navigation bar then click on Cameras
- 2) Click on the Add Camera Manually button

The screenshot shows the 'Add Cameras' page in the Senstar Symphonix web interface. The page has a navigation bar with tabs: Cameras, Templates, Hardware, Integrations, Access Devices, Device Tree, and Carousels. Below the navigation bar, there are buttons for 'Begin Automatic Discovery', 'Add Camera Manually', 'Import Cameras From File', and 'Create Blank Import File'. The 'Add Camera Manually' button is selected. Below these buttons, there is a table with columns: Address, Driver, Model, Status, User Name, and Password. The 'Address' field contains the text 'rtsp://10.1.17.191:554/stream', the 'Driver' dropdown is set to 'RTSP URL', and the 'User Name' field contains 'admin'. The 'Password' field is empty. A 'Connect' button is located to the right of the 'Password' field. At the bottom of the page, it says '0 cameras found' and '7 licenses remaining'.

- 1) Enter the RTSP URL for the HALO Smart Sensor in the Address field (ex rtsp://10.1.7.191:554/stream) and enter the User Name and Password for the HALO device.
- 2) Click Connect

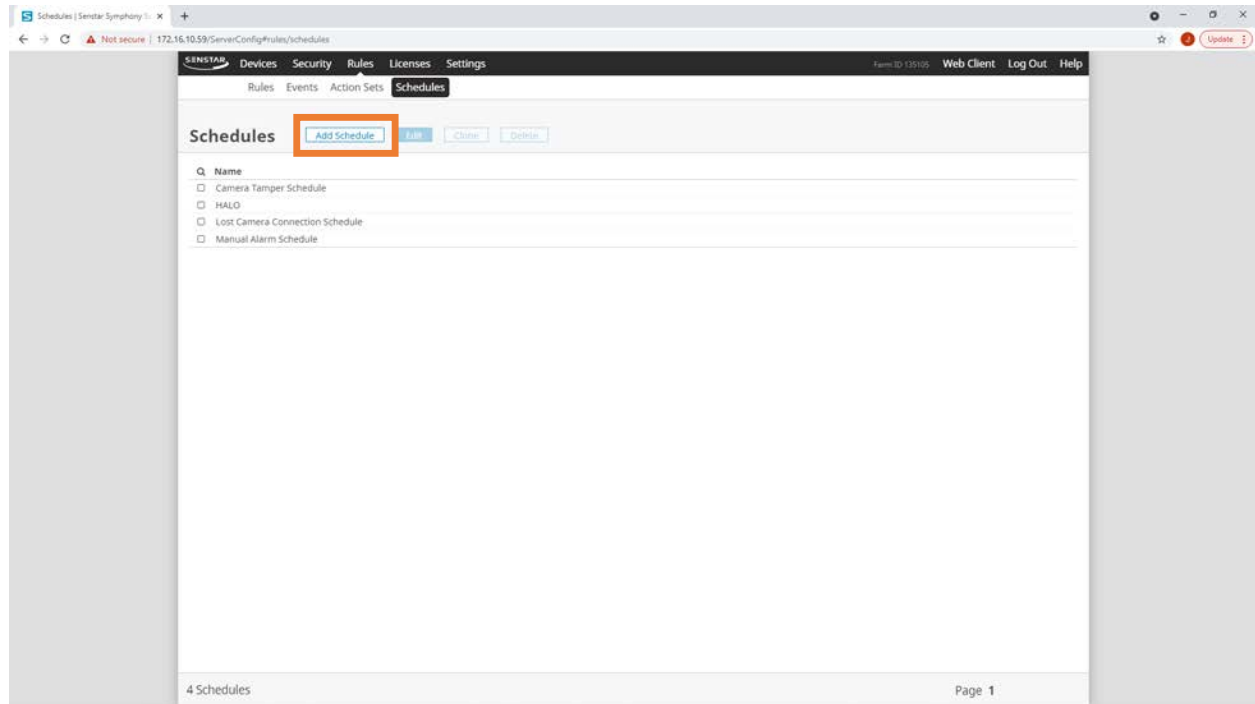


- 1) Edit the device name in the General Settings
- 2) Specify 1280x720 for Width and Height
- 3) Set FPS to 5
- 4) Set Video Codec to H264
- 5) Set Transport to UDP
- 6) Set Bit Rate to 300
- 7) Set Key Frame Interval to 10

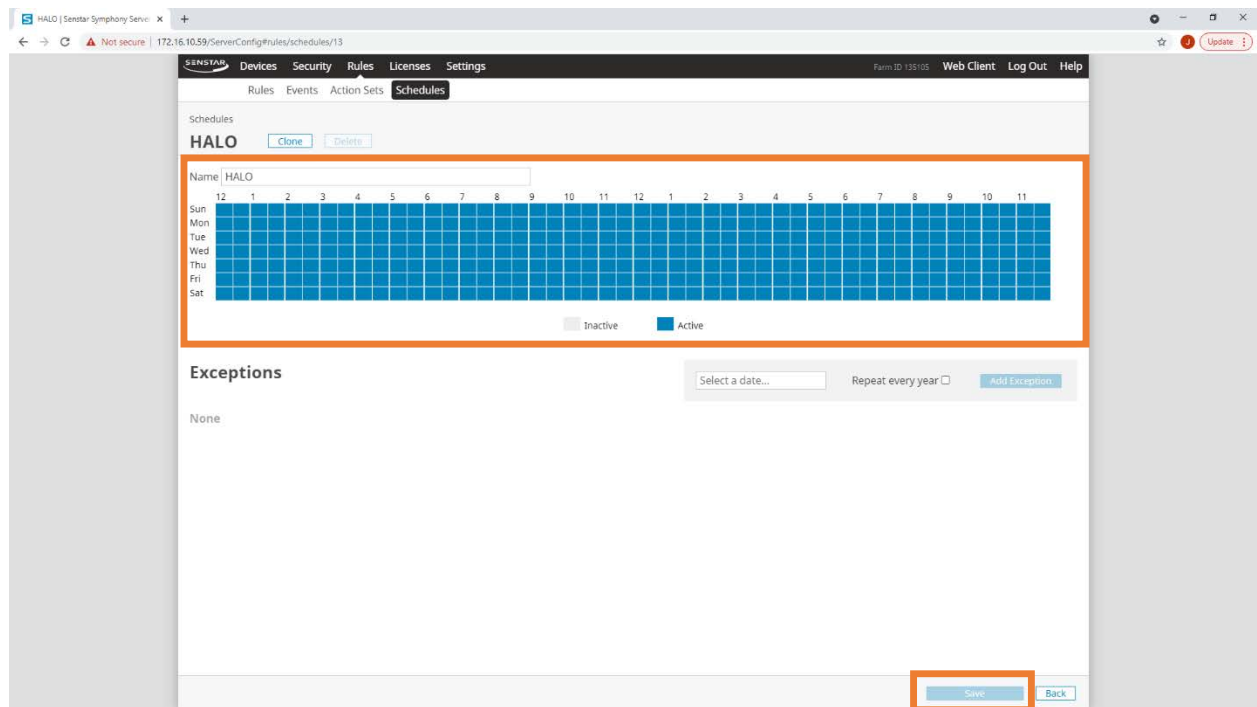


- 1) Scroll down to Add Ons section and Enable TCP Listener for the HALO Smart Sensor
- 2) Click Save at the bottom of the page to save settings.

SENSTAR SYMPHONY SERVER– RULES



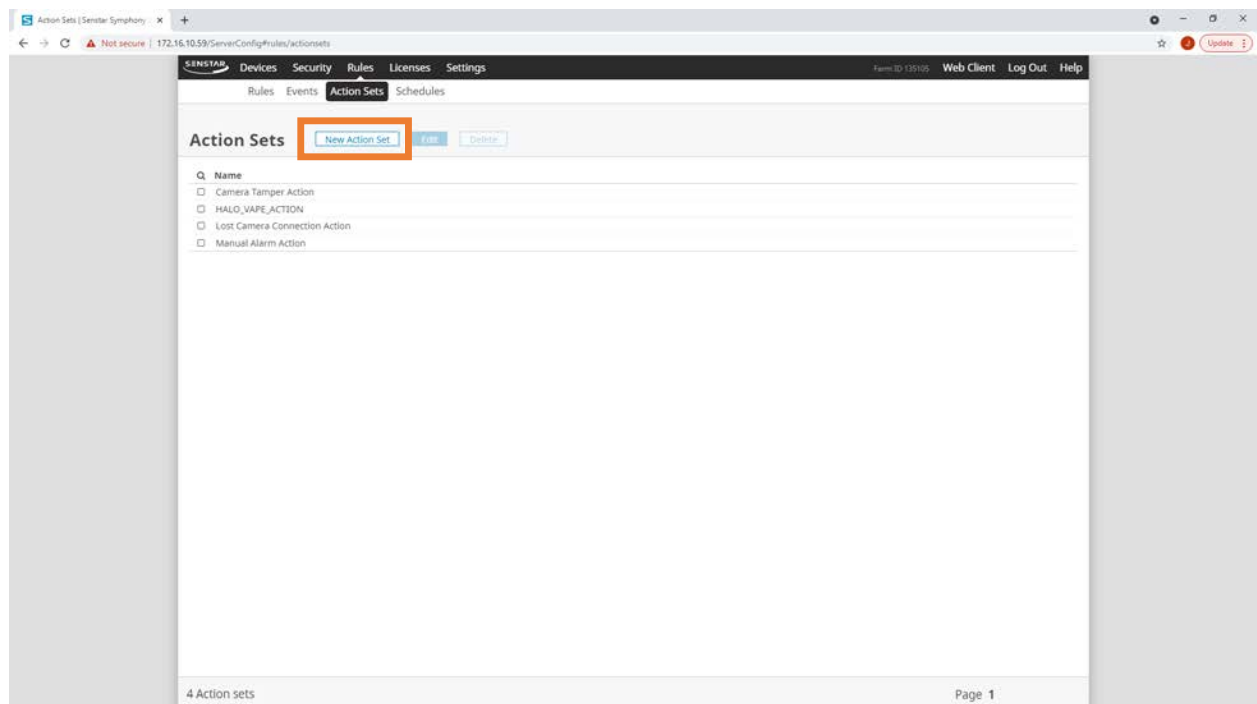
- 1) Click on Rules in the Primary Navigation
- 2) Click on Schedules
- 3) Click the Add Schedule button



Define the Schedule to receive Alarms from HALO Smart Sensor

Click Save

Click on Action Sets and click the New Action Set button



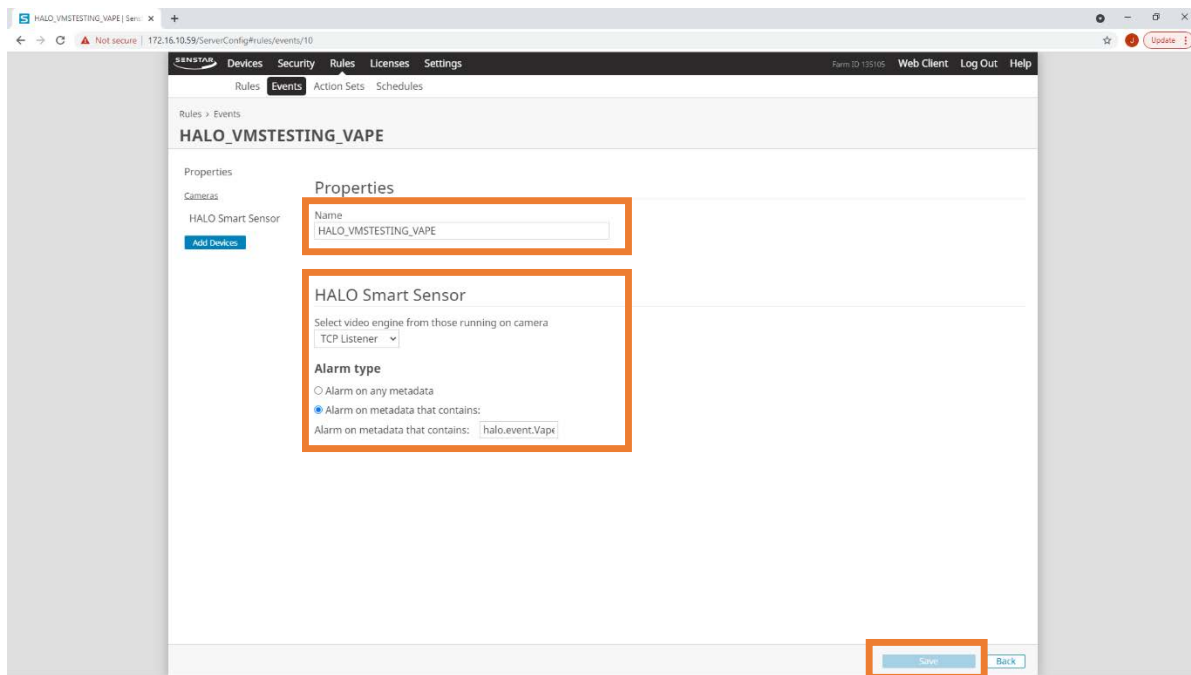
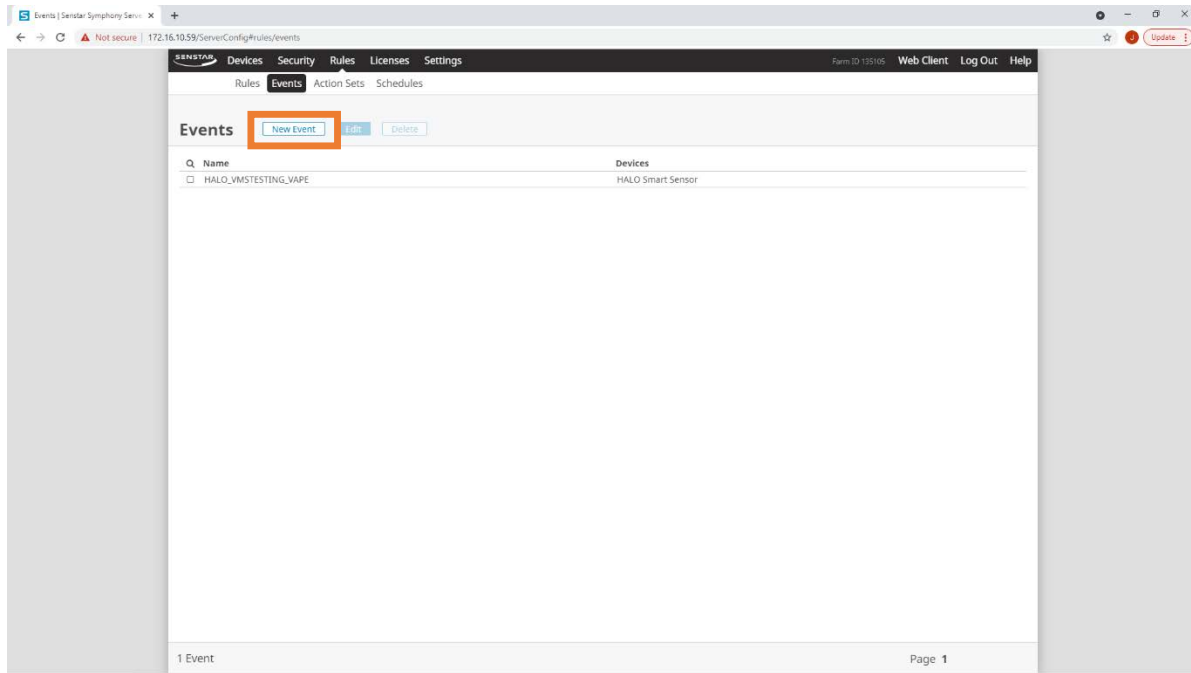
1) Enter a Name for the Action Set

The screenshot shows the 'HALO_VAPE_ACTION' configuration page in the Symphonia Client. The 'Name' field under the 'Properties' section is highlighted with an orange box and contains the text 'HALO_VAPE_ACTION'. The 'Alarm' section is also visible, showing options to 'View other cameras on alarm' and 'Raise Alarm'. The 'Instructions' section is empty.

The screenshot shows the 'HALO_VAPE_ACTION' configuration page in the Symphonia Client. The 'Instructions' section is highlighted with an orange box and contains the text 'HALO_VAPE DETECTED (VMSTESTING)'. The 'Record' section is also visible, showing options to 'Start recording on other cameras' and 'Devices'. The 'Save' button is highlighted with an orange box.

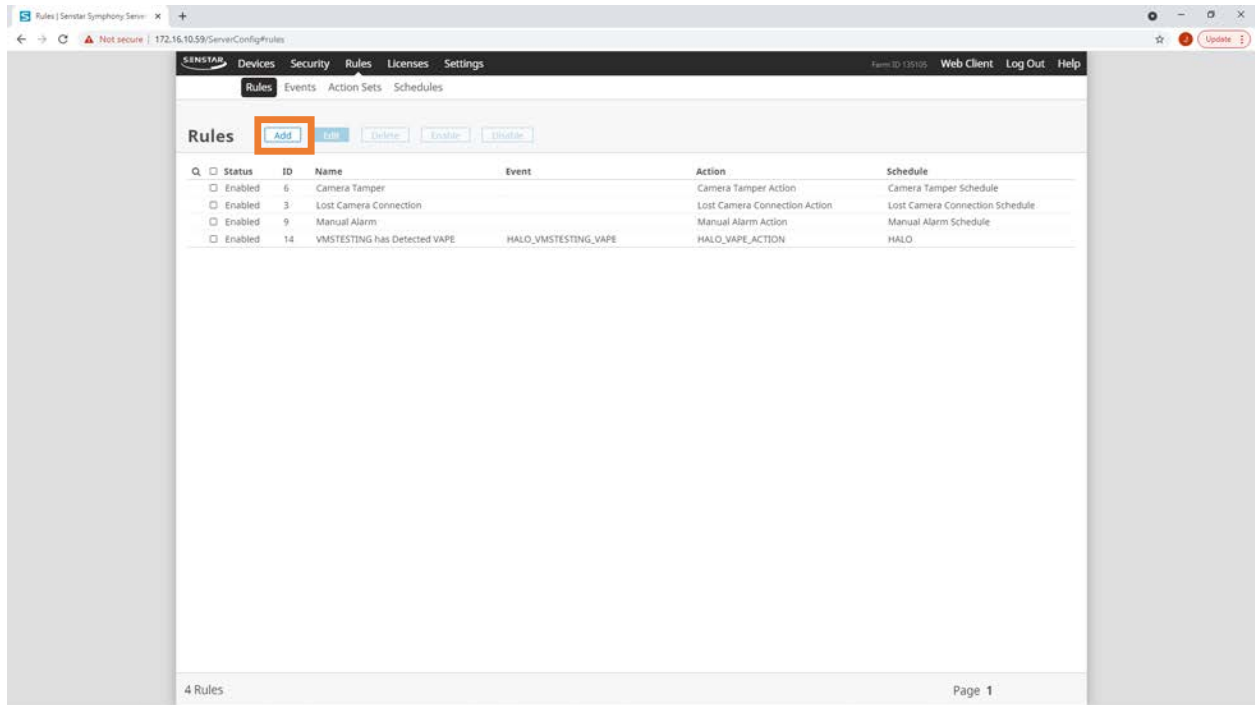
- 2) Specify the Instructions to Display upon trigger of this HALO event type
- 3) Click Save

- 1) Click on Events
- 2) Click on the New Event Button



- 1) Specify a name for the Event
- 2) Select TCP Listener from the Dropdown menu for Video Engine
- 3) Select "Alarm on metadata that contains" and specify the event string for the event (ex. halo.event.Vape.VMSTESTING)
- 4) Click Save

- 1) Click on Rules
- 2) Click the Add button



VMSTESTING has Detected VAPE

Properties

Rule name
VMSTESTING has Detected VAPE

☒ Enabled

Events

HALO_VMSTESTING_VAPE
Devices: HALO Smart Sensor

Active Action Set
HALO_VAPE_ACTION

Schedule

Save Back

VMSTESTING has Detected VAPE

Events

HALO_VMSTESTING_VAPE
Devices: HALO Smart Sensor

Active Action Set
HALO_VAPE_ACTION

Schedule

Active Schedule:
HALO

Severity
3

Save Back

- 1) Specify a Name for the Rule and check the Enabled checkbox
- 2) Select an Event for the Rule from the dropdown menu
- 3) Select an Action for the Rule from the dropdown menu
- 4) Select a Schedule for the Rule from the dropdown menu
- 5) Click Save

SENSTAR SYMPHONY CLIENT– VISUALIZING HALO EVENTS

The screenshot shows the HALO Smart Sensor RTSP stream displayed as a camera.

When the HALO is triggered, an event is displayed in the Alarm Console with the Instructions and Time and Date of the event. When clicked, this acts as a bookmark for the recorded video for the event.

