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Overview

IPVideo's HALO I.O.T. Smart Sensor is a multi-sensor capable of detecting vape, smoke, THC and sound abnormalities like shouting in areas a camera cannot be placed. Additional sensors give HALO the ability to monitor air quality for temperature, humidity, hazardous chemicals and more! The serial data from these events can be viewed and customized within exacqVision. This document will explain the integration process.

Requirements

- HALO Smart Sensor unit from IPVideo Corporation
- ExacqVision server and client software -Professional or Enterprise license preferred.

Tested Versions									
exacqVision Version Firmwa									
exacqVision Server 19.09	1.53								
exacqVision Server 19.12	1.53, 1.66								
exacqVision Server 20.03	1.53, 1.66								
exacqVision Server 20.09	2.2								
exacqVision Server 21.06	2.3.9								
exacqVision Server 21.09	2.3.9, 2.5.1								
exacqVision Server 21.12	2.5.1								

HALO Sensor Setup Process

CONFIGURE VMS SETTINGS

- 1. Login to the HALO SMART SENSOR web interface and click **Integrations.** In the top section (External Messaging) you will configure how event data is sent to ExacqVision.
- Enter at least "%EID%" for the Set String and Check the On radio button to enable (Do not include Quotations) More variables shown in the green box at the bottom of this image.
- 3. Enter "halo.reset" for the Set String and Check the **On** radio button to enable (**Do not include Quotations**)
- 4. Enter the IP Address of the ExacqVision Server in the IP Address field
- Enter a custom port number that will also be configured in exacqVision to communicate with the sensor. (example, **1234**)
 NOTE: Only one device can be configured per port number. Additional devices should be

NOTE: Only one device can be configured per port number. Additional devices should be subsequent numbers. (1235, 1236, etc...)

6. Click the Save button.

				Integration Partner Apply Settin
Protocol	● TCP ○ HTTP	Repeat Holdoff	5 \$ sec	
Set String	%NAME% - %IP%	\r\nEVENT: %EID% - %5	OURCE% %VAL% \r\n %TIM	E% \r\n\n
Reset Strin	halo.reset.%EID g	9%	3	⊙ On ⊖ Off
Above yo	u can use:	%THR	% - event threshold	%FWVER% - firmware version
%NAME% %IP% - in	- device name address	%VAL %DAT	% - sensor value F% - local date of event	\\ - 1 back slash \n - new line
%MAC% -	mac address	%TIM	E% - local time of event	\r - carriage return
%EID% - e	vent id	%PSW	/D% - password	\u#### - hex char code
%SOURCE	% - data source	%USE	R% - user	etc.



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exacqVision Serial Port Configuration

- 1. Log into the exacqVision Client as an Administrator and click on the Config (Setup) Icon.
- 2. Click on **Serial Ports** in the left navigation tree.
- 3. Click the *New* button in the bottom left corner, and enter a Name for the Serial Port.
- 4. Select Access Ctrl from the Use dropdown menu.
- 5. Select the *Profile created for HALO events* in the Profile dropdown menu.
- 6. Select *TCP Listener* from the type dropdown menu.
- 7. Enter the IP Address of the HALO Smart Sensor in the Address field.
- 8. Enter *1234* into the Port field.

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NOTE: This integration is currently serial data only. This device is **not** connected to exacqVision the same way an IP camera would be, and therefore does **not** require an IP camera license.



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exacqVision Serial Profile Configuration

- 1. Click on Serial Profiles in the left navigation tree.
- 2. Click the *New* button to create a new Serial Profile.
- 3. On the configuration tab, specify a Profile Name.
- 4. SOT and EOT markers are optional here.
- 5. Click *Apply* to save the Profile.

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Configuration Filter Filter Systems Add Systems Field Client Filter Field Client Fi	Profile Import HALO New Delete	Serial Profiles	cel ng Replacements Rules Profile Configuration Name: HALO Parser: Default V S SOT marker: SOT marker: Case Sensitive: C 5 Case Sensitive: C

In **Firmware version 2.2 and later**, you can now customize how the data strings are displayed from the Halo web interface if you prefer not to do so in the exacqVision client (shown above).

The screenshot shown on <u>page 1</u> shows the use of **\r** and **\n** to end the line of data in the string and start over on a new line. The output of this, as it would display in exacqVision, is shown here:



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Testing data flow

HALO SMART SENSOR - ACTIONS

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

Actions

Event Identifier	Email Set	Email Reset	Msg Set	Msg Reset	Relay 1	Relay 2	LED Color	LED Pattern	LED Priority	Sound		Actions
Aggression	N					~	~ Cyan ~	1 Sec Blink	∽ High ∽		~	Test
AQI					5 sec	×	~ Red ~	Steady	- High -	Siren-Alarm.wav	~	Test
Gunshot						×	~ Blue ~	1 Sec Blink	✓ High ✓	Emergency2C2N.wav	~	Test
Help						×	~ Violet ~	1 Sec Blink	~ High ~	Siren-Euro.wav	~	Test
Masking						×	~ ~ ~	Steady	~ High ~		~	Test
Tamper	Ø					×	~ Yellow ~	1 Sec Blink	✓ High ✓	440_5sec.wav	~	Test
тнс	Ø					×	· · ·	Steady	- High -		~	Test
Vape						×	· - ·	Steady	~ High ~		~	Test

- 2. Make sure that the checkbox in the Msg Set (previously called VMS Set) column are check for each of the individual Events.
- 3. Use the Test buttons for each of the individual Halo Events to send test commands to ExacqVision.
- 4. *The transmitted events will be displayed in the ExacqVision client in the Serial Profiles or Live View. These events are also recorded and searchable when used in **Event Linking**.





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EXACQ – SERIAL PROFILE KEYWORDS

In order to associate HALO Smart Sensor Events to ExacqVision actions, you must first create a set of Keywords. These keywords must identically match the output received from HALO, as indicated in the previous section.

Please note that the string values are inherently case sensitive.

- 1. Click on the Event Keywords tab, then click the New button
- 2. Enter the event **string value** for each of the individual HALO Events that have been defined, such as %NAME%, or use any other words from the string of data received (show in the Serial Profiles Configuration tab). Event keywords can be customized to your needs.
- 3. Click **Apply** to save the Keywords.

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Configuration Filter Add Systems Client Glint G	Profile Import Export Halo Smart Sensor New Delete	Seital Profiles	Delete ply Cancel



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exacqVision Event Linking Configuration

Once the keywords have been added, go to **Event Linking** in the configuration tree on the left. Here you will create associations between the HALO Events and actions that ExacqVision can perform based on those events.

- 1. Click the *New* button to create a new Link.
- 2. Select Serial Port as the Event Type.
- 3. Select the Event Source (Halo Alarm) to associate to an action(s)
- 4. Specify the *Action Type*, *Action Target*, *Pre and Post Trigger*, then click *Apply* to save changes.

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Add Systems Add Security Integration Add Security Integration Add Security Integration	Log Event Vide Vide Vide Vide Vide Seris Heal IP Ca Soft Time	Event Type Serial Port Type Motion Loss Trigger IPort I Profile th mrera Connecti Trigger	Event Source Halo - Keyword halo.Agg	At Le ession Imme : Source) - Keyword ha - Keyword ha	ast Action Typ diate Record Vic	e Action Target eo Q3505 Action Type Log Event Record Mule Record Mule Record Mule Notify Auto Export PTZ Preset Security Trig Webbook	Pre Tri O Acti ger	gger PostTrigger 0 2017 PostTrigger 2017	Status Off	Pre Trigger 0 Seconds Post Trigger 0 Seconds
System Audio Maio Inputs/Output Storage Serial Ports Notifications Auto Expont Custom Londa Custom Icons File Management Scharge Password Custom Icons Scharge Password	Anal Sour Out Secu Secu Seria No R	ytics ce Group ound Connecti rity Integration rity Integration rity Integration I Port Connecti lecording	on Connection Alert Alarm on	ists at Least	Log Settings Maximum Da	ys to Keep Logged Event	ts: 30 Cancel	1		

Contact Info & Support

IPVideo Corporation Technical Support

Web: https://ipvideocorp.com/support/ Phone: 631-647-9970

exacqVision Technical Support

Web: https://exacq.com/support/techsupport/



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