

80 Virtual Sensors User Manual

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1. Introduction:

Virtual sensors can be a very powerful tool in your monitoring system. On the securityProbe, you can have up to 80 of these virtual sensors and they allow for a multitude of applications.

Integration with MODBUS networks with the securityProbe as a MODBUS master/slave, SNMPget and ping commands and others are all possible from the virtual sensors. An example use of this could be to use the securityProbe as a probe manager. If you had a securityProbe and multiple sensorProbe devices they could all be monitored, mapped and alerted via the securityProbe. You can perform SNMPget commands on a server to monitor memory or CPU load, or you can ping network enabled devices and be alerted if they go offline.



2. Configuring Virtual Sensors

The virtual sensors are found in the **Sensors tab** and "virtual sensors" from the left hand menu.

Summary	Map) j	Picture Log	Ser	isors
Sensors Me	nu		1	2	3
Sensor Ports		Auto Sense	Auto Sense	Auto Sense	Auto Sense
Camera Motion Detectio	<u>n</u>	Status	•	•	•
Sound Detector		Online			
No Camera Signal Detec	tion				
Virtual Sensors				10000000	[DIBDIDOD]
Help					
This page shows the se and their respective stat Click on a port to displa	ensor ports tus and state. v or configure		Dual Sensors	N/C	N/C
its settings.					Please s

You will then be presented with the following screen, showing your 80 virtual sensors:-

AKCD	Admin AKCP securityProbe																				
лись						- All N	51 51	courr													
Location: 7th floor																	Cu	rrent Sy	stem Tii	ne: 26/8	/08 08:58:29
Summary Map	Picture	Log / Sc	ound Log		9	Sensors			Not	ification	L	ſ	Settir	ngs	<u> </u>	Ap	plicatior	IS	ſ	He	lp
										Virtua	Settir	ngs									
Sensors Menu	Mirtual Concore	1	2	3	4	5	6	7	8	a	10	11	12	13	14	15	16	17	18	10	20
Sensor Ports	virtual Sensors	•	-	3		3		(.	Ů					15	•••		10			10	20
Camera Motion Detection		1	((?))	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sound Detector																					
No Camera Signal Detection		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors		1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Help																					
This page shows the Remote Sensor		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
ports. Remote Sensor is a visual sensor that reading value from Shell script. Shell script must print sensor value to		1	1	1	î	1	1	1	î	ĩ	1	1	1	Î	1	l	1	1	1	1	1
Standard Output. Scripts must return 0 if succeeed		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
otherwise is deternine as SENSOR ERROR.		1	1	1	I	1	1	ĩ	I	1	Ĩ	ĩ	ĩ	1	1	Ĩ	ĩ	1	1	1	1

Click on the first available virtual sensor (in this case 3) you can then choose what type of sensor to setup from the next screen. First click on the **"Configuration"** button, then you will have a choice of SNMP Get, Ping, Custom Script, MODBUS, Boolean, or Trap Receiver.



80 virtual sensors

					AK	CP se	ecuri	tyPro	obe											Admin
																Cu	rrent Sy	stem Tir	ne: 26/8	08 09:05:23
Pictur	e Log / So	ound Log	ſ	5	ensors			No	tification		ſ	Settin	gs	T I	Ар	plication	IS		He	lp 🛛
									Virtual S	lettir	igs									
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virtual Sensors					~	°.	·*		-	10					1.5	10			1.5	20
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				1000	1000	2228	10000	9223			1011	1000	120	100		10222	10		225	1000 A
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	8	8	1	8	1	1	1	1	1	1	1	1	1	1	1	8	1	8	1	1
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	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
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3. SNMP GET:

If you select SNMP get from the menu and click next, you will get the following page:

ЛКСР						AK	CP s	ecuri	tyPro	obe											Admin
Location: 7th floor																	Cu	rrent Sy	/stem Ti	me: 264	3/08 09:10:56
Summary Map	Picture	Log / So	und Log		\$	Sensors			Not	ification			Setti	ngs		Ap	plication	15		He	elp.
										Virtual	Setti	ngs									
Sensors Menu	Midual Canaara		2	3		5	6	7	0	0	10	11	12	43	14	15	16	47	19	10	20
Sensor Ports	virtual Sensors		6		1		U	<u></u>	0		10		12	15	14	15	10	"	10	19	20
Camera Motion Detection		1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sound Detector				100																	
No Camera Signal Detection		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors		1	1	1	1	8	8	1	1	1	1	1	8	8	1	8	8	8	1	1	1
<u>Virtual Sensor Port 3</u>											÷.										
Help		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the Remote Sensor ports. Remote Sensor is a visual sensor that reading up to form Sholl senior		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shell script must print sensor value to Standard Output.		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Scripts must return 0 if succeeed otherwise is determine as SENSOR		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
									Sens	or Name	Virt	ual Sens	sor Port	3					l.		
										Host											
								S	NMP Co	mmunity											
										OID											
									Sen	sor Style	SW	itch 👱									
								No	rmal Sta	ate Value	0										
						De	scription	n of Stat	us Whe	n Normal	Nor	mal									
						De	scription	n of Stat	us Whe	n Critical	Crit	ical									
																	Can	el	Back	Next	
1																_					

Sensor Name: - Input the name you wish to use to identify your virtual sensor.

Host: - The IP address of the unit on which you wish to perform an SNMPget command. For example, this could be the IP address of a sensorProbe2 device.

SNMP community: - The SNMP write access password, default is usually "public".

OID:- The OID for what you wish to monitor. If for example you want to poll temperature data from a sensorProbe 2 device with a temp sensor on port 1, then you would use the following OID:

1.3.6.1.4.1.3854.1.2.2.1.16.1.3.0

where the last digit (0) is port 1. For port 2 the last digit would be 1. If you are monitoring some other device, you will need the relevant OID for what you wish to measure. You may use the "**Get SNMP OID**" button to get OIDs for AKCP devices/sensors.

Sensor Style: - Choose either switch or analog. A switch sensor would be for example a water sensor, on or off, an analog sensor would be a temperature sensor or humidity sensor, or some other sensor that gives a data value.

Description when Normal: - ex., Normal, Critical, Online etc.

Description when Critical: - ex., Critical, Offline, Low etc.

Normal State value: - 0 or 1 (for switch type sensor only).

If you choose an **analog** style sensor, you will get a slightly different menu:

Sensor Name	Virtual Sensor Port	
Host SNMP Community		
OID Sensor Style	Analog 🗾	
Value Factor Unit Text	VIII	
Value Range for Slider Bar	μ το μυυ	Cancel Back Next

Value Factor gives you the chooses from the drop down menu as x1, x 0.1, x 0.01 or x0.001

Unit text: - example, if measuring temperature "degrees centigrade" or if measuring humidity "percentage humidity" etc.

Value range for slider bar: - The range that you wish to measure. For temperature you could put the max at 100 for 100 degrees, or humidity, 100 for 100%.

When finished, click on **next**, you can then configure the time interval between data polling.



4. PING

If you select a Ping virtual sensor and click next, you will get the following screen:-

ЛКСР						AK	CP si	ecuri	tyPro	obe											Admin
Location: 7th floor																	Cu	rrent Sy	stem Tir	me: 26/8	08 09:10:56
Summary Map	Picture	Log / Sou	und Log		\$	Sensors			Not	ification			Settir	ngs		Ap	plication	is		He	ilp
										Virtual S	Setti	ngs									
Sensors Menu			-	2				-			40		42	40		45	40	47	40	40	20
Sensor Ports	Virtual Sensors	1	-	_	4	5	6		9	9	10		12	15	14	15	10	17	10	19	20
Camera Motion Detection		1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sound Detector				بغبا		-				-				-	-		-			-	-
No Camera Signal Detection		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors		8	8	8	2	8	9	2	2	9	9	8	2	9	8	2	8	9	2	9	8
Virtual Sensor Port 3												4							4		
Help		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the Remote Sensor ports. Remote Sensor is a visual sensor that reading up to find the Shell context.		1	1	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Shell script must print sensor value to Standard Output		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Scripts must return 0 if succeeed otherwise is detemine as SENSOR ERROR		1	1	I	1	1	1	1	1	1	1	1	t	1	1	1	1	1	1	1	1
Linton.									Sens	or Name	Virt	tual Sens	or Port	3				-			
								s	NMP Co	Host	F						_				
										OID	F										
									Sen	sor Style	Su	vitch 💌									
								No	rmal Sta	ate Value	0										
						Des	scription	of State	us When	n Normal	Nor	mai									
						Des	scription	n of Stat	us Whe	n Critical	Crit	tical									
																	_			<u></u>	-
Þ		_		_						_	_	_	_	_	_	_	Canc	el	Back	Next	

Sensor Name: - The name you wish to use to identify the sensor, for example "Ping of server"

Host: - The IP address of the network device you wish to ping

Description when Normal: - ex., online

Description when critical: - ex., offline

Normal state value: - 0 = ping successful, 1 = ping times out.



5. CUSTOM SCRIPT

If you select a Custom Script and click next, you will get the following screen:-

ЛКСР						AK	CP se	ecuri	tyPro	obe											Admin
Location: 7th floor																	Cu	rrent Sy	rstern Ti	me: 26/8	08 09:23:56
Summary Map	Picture	Log / So	und Log		\$	Sensors			Not	ification		(Settir	ngs		Ар	plication	ıs		He	lp
										Virtual	Settir	ngs									
Sensors Menu	1							-	0		40		40	40		45	40	47	40	40	
Sensor Ports	Virtual Sensors	1	2	3	4	5	б	1	8	9	10	11	12	13	14	15	16	17	18	19	20
Camera Motion Detection		1		8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sound Detector		-		-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-
No Camera Signal Detection		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors																					•
<u>Virtual Sensor Port 3</u>			A	4	A			•		- 1				1		1		1		Α.	1
Help		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the Remote Sensor																					•
ports. Remote Sensor is a visual sensor											. A.										1
that reading value from Shell script. Shell script must print sensor value to		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Standard Output.																					
Scripts must return 0 if succeeed otherwise is detemine as SENSOR		Ĩ	Ĩ	Ĩ	1	Ĩ	1	Ĩ	1	1	1	Î	Î	1	1	Î	Î	Î	1	Î	1
ERROR.									Sens	or Name	Virt	ual Sens	or Port	3							
									0011	or nume	June	adi boni	or r or c	0							
									Scr	ipt Name	No	ne 🗾									
								Sc	cript Pa	ameters											
											Ad	ld Your ()wn Scr	ipt							
									Sen	sor Style	Sw	itch 🔻									
N								No	rmal Sta	ite Value	O										
45						Des	cription	of Stat	us Whe	n Normal	Nor	mal									
						Des	cription	of Stat	us Whe	n Critical	Crit	ical									
																	Cano	:el	Back	Next	

Sensor Name: - The name you wish to use to identify the sensor, for example "Custom Script of sensor"

You can add **Script Parameters**. **Add Your Own Script** button allows you to attach your own script file. If you have chosen **Analog** from the **Sensor Style** option you will get a slightly different menu:

Sensor Name	Virtual Sensor Port 3	
Script Name	None 💌	
Script Parameters		
	Add Your Own Script	
Sensor Style	Analog 💌	
Value Factor	x1 🗾	
Unit Text	Unit 🥢	
Value Range for Slider Bar		
		Cancel Back Next



The securityProbe supports Perl and Bash scripts. When uploading these types of script files, you have to conform to the Linux script file format specifications. Most importantly, these files need headers like this: #!/

for Perl script:	#!/usr/bin/perl
for Bash (shell) script:	#!/bin/sh
for PHP script:	#!/usr/bin/php -q

The SEC is using a hash-bang tag (#!) to validate the script. It checks if there is the hash-bang tag (#!) at the beginning of the script. This tag is used to give the interpreter path to run the script, for example the PHP interpreter.

The file must be in UNIX format, if it's created in the Windows format it will not work as the SEC is running Linux (the line break characters are different). You need to convert the file format to UNIX (you can use Notepad++ program: Format Menu> Convert to UNIX Format) before using it.

How to generate an SNMP Set on a remote device as an action

First you need to create a "Custom Script" action in the Notifications page, and then add the script below.

Note: check the script format requirements in the previous section.

This is a Bash script so it needs a file header like this: #!/bin/sh

#!/bin/sh

COMMUNITY=\$1 DESTINATION=\$2 SET_VALUE=\$3 snmpset -v1 -c\$COMMUNITY \$DESTINATION .1.3.6.1.4.1.3854.1.2.2.1.18.1.3.0 i \$SET_VALUE

The script requires 3 arguments. Specify them by entering them in the **Arguments** box of the Custom Script action.

Example of the arguments value: **public "192.168.0.100" 2**

Where	
public	means the SNMP community
"192.168.0.100"	means the destination IP address
2	means the value needed to be set (must be an integer)



Setting Up a Timed Virtual Sensor Custom Script

This Custom Script (request the file from support) can be run on the virtual sensor to trigger a sensor at a certain time:

Use the attached (please request from support) script with these settings below:

Script Parameters: TIME_HOUR TIME_MIN example:20 0 (means 20:00) Sensor Style: Switch Normal State Value: 0

The custom script virtual sensor status will change to critical when the time is matched. So, for example, if you wanted the camera to take a picture at a certain time, you would need to first create the picture log action, and link the virtual sensor with that picture log action.

For example, you can also then link this custom script to trigger a switch type sensor.



6. MODBUS

If you select MODBUS and click next, you will get the following screen:-

ЛКСР							АКС	P se	curit	yPro	be											Admin
Location: 7th floor																		Curre	nt Syst	em Time	: 26/8/08	09:48:30
Summary	Мар	Pictur	e Log / So	ound Log		S	ensors			Notif	ication			Setting	s		Appli	ications			Help	
		-									firtual s	Settin	gs									
Sensors N	tenu	Virtual Sensors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Sensor Ports																						
Camera Motion Detectio	<u>m</u>		I	4 X 0	I	I	I	I	I	I	I	I	I	I	X	I	I	I	I	I	I	I
Sound Detector	41		21	22	23	24	25	26	27	20	20	30	34	32	33	34	36	36	37	30	30	40
No Camera Signal Delec	2000				20		20	20		20	20			52	00							
Virtual Sensor Port 3			1	1	1	1	1	1	1	Ĩ	1	1	1	1	Ĩ	1	1	1	1	1	Ĩ	1
Help			41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the R ports. Remote Sensor i	emote Sensor s a visual sensor		ĩ	1	1	1	1	1	1	1	ĩ	1	ĩ	1	î	ĩ	1	1	1	1	ĩ	1
Shell script must print s	snell script. ensor value to		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Scripts must return 0 if otherwise is determine a	succeeed as SENSOR		ĩ	ĩ	1	1	1	1	1	ĩ	1	1	1	ĩ	ĩ	ĩ	1	1	1	1	1	1
ERROR.										Senso	r Name	Virtu	al Sens	or Port 3	1							
									м	lodbus F	rotocol	Mod	bus RTL									
										Sei	ial Port	RS48	35 💌									
									Se	erial Por	Speed	9600										
									S	erial Po	t Parity	None										
									Seria	al Port S	top Bits	1 -			_							
									Mo	dbus Co	mmand	(0x0	1) Read	Coil Stat	his	•						
								Mo	ibus Re	eaister A	ddress	(UNU	i) neau	Coll Stat		OXNAN						
										Sens	or Style	Swit	tch 💌									
									Nor	mal Stat	e Value	0										
							Desc	cription o	of Statu	s When	Normal	Norm	nal									
							Des	cription	of Statu	s When	Critical	Critic	al									
																		Cancel	Ba	ick	Next	

Sensor Name: - The name you wish to use to identify the sensor, for example "MODBUS"

You can select the Modbus Protocol to either **Modbus RTU (serial)** or **Modbus TCP** (Ethernet Network).



7. MODBUS RTU

If selecting the Modbus RTU protocol, you will use the RS485 port to connect the Modbus device. See the following picture of the securityProbe with the RS485 port highlighted.



Still following the screen shot above, you will then select your **Serial Port Speed**, your **Serial Port Parity** as *None*, *Odd* or *Even*. Select the **Serial Port Stop Bits** as 1 or 2, enter the **Modbus Slave ID** (each slave in a network is assigned a unique unit address from 1 to 247), the **Modbus Command**, which includes 4 options for the virtual sensor: (0x01) Read Coil Status, (0x02) Read Input Status, (0x03) Read Holding Registers and (0x04) Read Input Registers. You will then enter the **Modbus Register Address** and the **Style** of the sensor, the **Normal State Value** and **Descriptions** of the sensor status.

8. MODBUS TCP

If selecting the Modbus TCP protocol, you will get the following screen:

Sensor Name	Virtual Sensor Port 3		
Modbus Protocol Modbus IP Address Modbus TCP Port	Modbus TCP		
Modbus Command Modbus Register Address	(0x01) Read Coil Status		
Sensor Style	Switch	UNINAN	
Description of Status When Normal	Normal Critical		
Description of status when Childan	L'INCAI		Cancel Back Next

You will then enter your **Modbus IP Address**, your **Modbus TCP Port**, and again your **Modbus Command**, your **Modbus Register Address**, your **Sensor Style**, **Normal State Value** and the **Descriptions** of the sensor status.





You will get the follow screen when choosing either Modbus RTU, or Modbus TCP:

Polling Interval	15	15 secs		
Execute Time Out	10	10 secs		
Retry	3	Times		
			- <u>16</u>	
			Cancel	Back

This screen is where you will enter your **Polling Interval**, your **Time Out periods** for the sensor and also your **Retry amount**. You will click on the **Finish** button to complete the Modbus setup wizard and return to the Virtual Sensor main screen.



9. Boolean

If selecting Boolean, you will get the following screen:

ЛКСР						AK	CP se	ecuri	ityPr	obe											Admin
Location: 7th floor										Current System Time: 26/8/08 11:58:42											
Summary Map	í Pictu	Picture Log / Sound Log			ound Log Sensors				Notification Settings							App	olication	is	1	He	lp
										Virtual	Settir	ngs			_						
Sensors Menu	Virtual Senso	re 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Sensor Ports	¥II (40) 36.188	3																			
Camera Motion Detection		I	(1)	1	1	ï	I	I	I	I	I	I	I	I	I	1	I	1	I	I	1
Sound Detector					1																
No Camera Signal Detection		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors		1	1	1	1	1	1	8	1	8	1	1	1	1	8	1	1	1	1	1	1
Virtual Sensor Port 3			•	•																	a
Help		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the Remote Sensor		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
that reading value from Shell script.		-	-			-	-	-		-	-	-	_	-		-	-	-	-	-	-
Shell script must print sensor value to		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Standard Output. Scripts must return 0 if succeeed		2		2		2	8	2	2	2	8	2	8	2	8	2	8	2	8	2	2
otherwise is determine as SENSOR				4				4		4					4				4		4
ERROR.						,	Select S	ensor t	o Boole:	an Statu:	s Statu	s to Boo	lean								
							M	lotion D	etector	Port 4	- Critic	cal	-								
							D	ry Cont:	act		• Norm	nal	-								
							N	.one			 None 	•									
																					_
																	Cance	3 E	lack	Finish	
2																					

Boolean works on the virtual sensor by checking the status of, for example 2 to 3 sensors and if the sensors status matches that of the setting, they will return a value of 1 (TRUE). The normal value is 0 (FALSE).

The Boolean virtual sensor is an AND type Boolean: all configured statuses have to be TRUE to have the virtual sensor's final status return TRUE (or 1).

For example, you can set your motion sensor to *critical* and the dry contact to *normal* like the image example below, and then set your notification page to make the notification:

1.000	ION DELECTOR PORT 4	Critical		
Dry	Contact 🗾 💌	Normal	-	
Non	e 💌	None 💌		

The virtual sensor will return TRUE (1) status when the Motion Detector is in *critical* status AND the Dry Contact is in *normal* status.

Otherwise, in all other cases, the virtual sensor will return FALSE (0) status.



10. Trap Receiver

If selecting the Trap Receiver, you will get the following screen:

ЛКСР					AK	CP se	ecuri	tyPro	be											Admin
Location: 7th floor																Cu	rrent Sy	stem Tir	ne: 26/8	08 12:27:23
Summary Map	Picture	Log / Sound	I Log	9	Sensors			Not	fication		ſ	Settir	igs		Ар	plication	IS	ſ	He	lp
									Virtual	Setti	ngs									
Sensors Menu	X64.10				e	e	7		0	40	44	42	42	44	45	46	47	40	40	20
Sensor Ports	· virtual Sensors				5	U		0	9	10		12	13	14	15	10		10	19	20
Camera Motion Detection		1 (1) 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sound Detector																				
No Camera Signal Detection		21 2	22 23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Virtual Sensors		1	1 1	2	2	2	2	1	2	8	8	8	8	2	8	2	2	2	2	1
<u>Virtual Sensor Port 3</u>											a			a	a					
Help		41 4	12 43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
This page shows the Remote Sensor ports. Remote Sensor is a visual sensor that reading value from Sholl context.		1	II	1	1	1	I	Ĩ	1	ĩ	1	î	ĩ	Ĩ	1	1	1	I	I	I
Shell script must print sensor value to Standard Output.		61 6	62 63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Scripts must return 0 if succeeed otherwise is detemine as SENSOR FRROR		1	1 1	1	1	1	1	1	1	ĩ	1	1	ĩ	ĩ	1	ĩ	1	1	1	I
Enver								IP	Address											
									OID											
								Trap s	ub-Type											
								Sen	sor Style	SM	eitch 💌									
							No	rmal Sta	te Value	0										
A land					Des	cription	n of Stat	us Whei	Normal	Nor	mal									
A Server					Des	scription	n of Stat	us Whe	n Critical	Crit	lical									
															[Cance	9 B	ack	Finish	
		_		_		_	-	_		-		-	-	_				(_

The Trap Receiver feature on the Virtual Sensor will check 3 parameters before setting a value. These three parameters are the **IP Address**, the **sensors OID** and the **Trap sub-type**.

In our example below the Trap is sent by the motion sensor on port 5 of our sensorProbe unit. Our *device IP* is 192.168.0.100. Our sensorProbe *Trap Type* is set to the specific sub type and will check status of our motion sensor in the following screen.

IP Address	192.168.0.100	
OID	.1.3.6.1.4.1.3854.1.7.1.0	
Trap sub-Type	305	
Sensor Style	Switch	
Normal State Value	2	
Description of Status When Normal	Normal	
Description of Status When Critical	Critical	
	*	Cancel Back Finish

The Trap Receiver feature on the Virtual Sensor will check 3 parameters before setting a value.



Normally the Trap will have 6 OIDs:

1. spSensorStatus (.1.3.6.1.4.1.3854.1.7.1.0). The current integer status of the sensor causing this trap to be sent.

(noStatus(1), normal(2), highWarning(3), highCritical(4), lowWarning(5), lowCritical(6), sensorError(7), turnOn(8), turnOff(9)).

2. spSensorValue (.1.3.6.1.4.1.3854.1.7.2.0). The current integer value of the sensor causing this trap to be sent.

3. spSensorLevelExceeded (.1.3.6.1.4.1.3854.1.7.3.0). The integer level that was exceeded causing this trap to be sent.

4. spSensorIndex (.1.3.6.1.4.1.3854.1.7.4.0). The integer index of the sensor causing this trap to be sent.

5. spSensorName (.1.3.6.1.4.1.3854.1.7.5.0). The name of the sensor causing this trap to be sent.

6. spSensorDescription (.1.3.6.1.4.1.3854.1.7.6.0). The description of the sensor causing this trap to be sent.

The specific value depends on the sensorProbeTrap type (.1.3.6.1.4.1.3854.1.2.2.1.60.0)

If it is set to specificTypeTrap(1) specific value is to show the sensor type and port (Specific value of Motion Sensor port 5 is 305)

If it is set to generalTypeTrap(2) specific value is to show the sensor type (Specific value of Motion Sensor port 5 is 30)

If it is set to bothTypeTraps(3) device will send the trap two times specific value will show sensor type and show sensor type and port (Specific value of Motion Sensor port 5 is 305 and 30)

If it is set to statusTypeTraps(4) specific value is up to status of sensor (spSenUnknownStatus(51), spSenNoemalStatus(52), spSenWarningStatus(53), spSenCriticalStatus(54))



Example: Trap send by Motion Sensor port 5 on our device, IP is 192.168.0.100 sensorProbeTrapType is set to pecificTypeTrap and need to check the status of the Motion Sensor:

IP Address is 192.168.0.100

OID is .1.3.6.1.4.1.3854.1.7.1.0

Trap sub-Type(Specific) is 305

Sensor Style is Switch

Normal State Value is 2 (2 means sensor status is normal so far)



Please contact <u>support@akcp.com</u> if you have any further technical questions or problems.

Thanks for Choosing AKCess Pro!