E-Sensor8

User Manual

1) Introduction

1. What is E-sensor8?

The E-sensor8 expansion module extends the securityProbe 5E capabilities by connecting additional intelligent sensors.

2. How to use this manual

This manual is meant to provide the user with a step by step guide on how to configure and set up their unit. It utilizes screen shots in an effort to make things simpler for the user to follow. It is split up into sections that form “mini tutorials”. These cover the basic set up and common configurations of the unit, and give an introduction to its most useful features.

At the end of the manual there is a FAQ section that provides some further in-depth information regarding specific set ups and answers some commonly asked questions. If you need any further information or help with using your unit then please contact us on support@akcp.com and one of our technical support staff will be only to pleased to help you with any information you require.

3. Package Contents

Your E-sensor8 package contains the following items:-

- 1x Product CD
- 1x 7.0 – 9 v, 2.5 A power supply
- 1x Brackets for rack mounting
- 1x 5 ft straight cable

4. Front and rear panels

Fig 1. Front panel

The front panel has several LED's that indicate the unit's status and notify you as to its activity.

1. **Power LED**

   When the unit is powered up the power LED will be lit continuously. If the power LED is flashing then it indicates a problem with the CPU. If you notice this then please contact us on support@akcp.com

2. **Link LED**

   The link LED indicates network connectivity and will light up when there is a connection present.

3. **Expansion in / Expansion Out**

   These are named E-in and E-out. The E-in is for connecting your Esensor8 module to the securityProbe 5E base unit via a CAT5E straight cable, the E-out is for daisy chaining additional expansion modules again using a CAT5E straight cable.

4. **Status / Online LED'S**

   These are numbered 1 – 8. They are used to indicate the connectivity status of the sensors connected to each port. These LEDs also can be used to indicate system status when undertaking various operations.

   1. The LEDs will indicate the progress of an upgrade. The red LEDs will move from left to right to indicate activity, and the green LEDs will indicate overall progress of the upgrade. When all the red lights are off and all green are on the upgrade / recovery process is complete.

   2. These lights will indicate if the unit is operating in safe mode. This is when the unit loads the Operating System (OS) with a minimal set of drivers. If your device enters safe mode after rebooting then please contact us on support@akcp.com

3. The unit may enter recovery mode if a firmware upgrade has been incomplete. This will be indicated by the unit displaying a continuously lit row of red LEDs. If this happens please contact us on support@akcp.com

Fig 2. Rear panel

1. **Sensor Ports**

   There are 8 RJ45 ports numbered from 1 – 8. These are for connecting AKCP intelligent sensors to the unit.

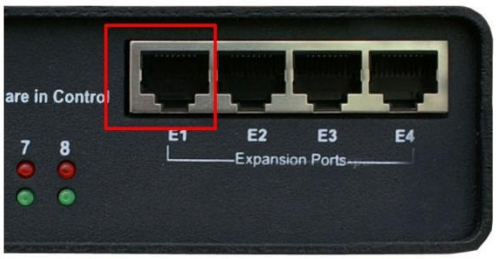
2. **Power Connector**

   This is a 7.5V DC plug. We recommend using a 7.0 – 9V, 2.5 A power supply.

1) Installation

1. Connecting to the base unit

In this section we will now look at connecting the E-sensor8 to the AKCP securityProbe 5E. To begin setup the unit by following the instructions below:-



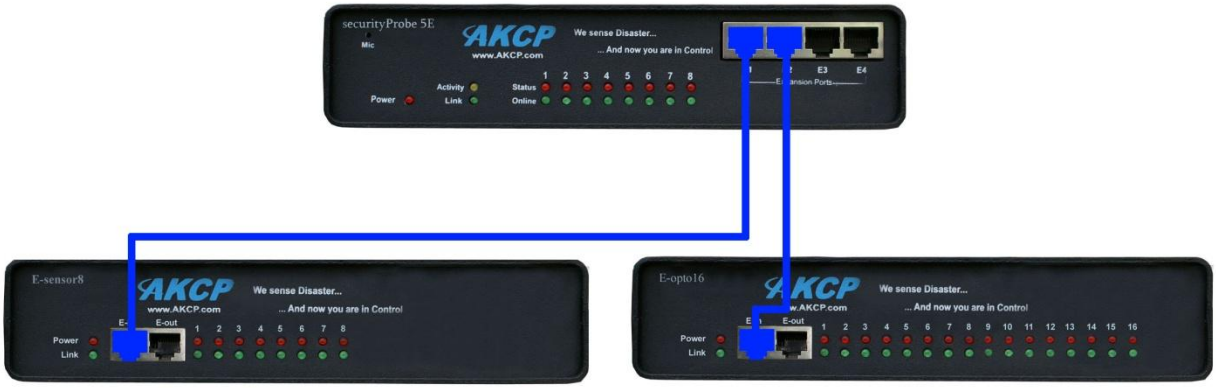
1) Connect the cable in your chosen port

2) Connect the opposite end in the "E-in" port

Note: make sure you also have your 7.5 volt power supply connected.

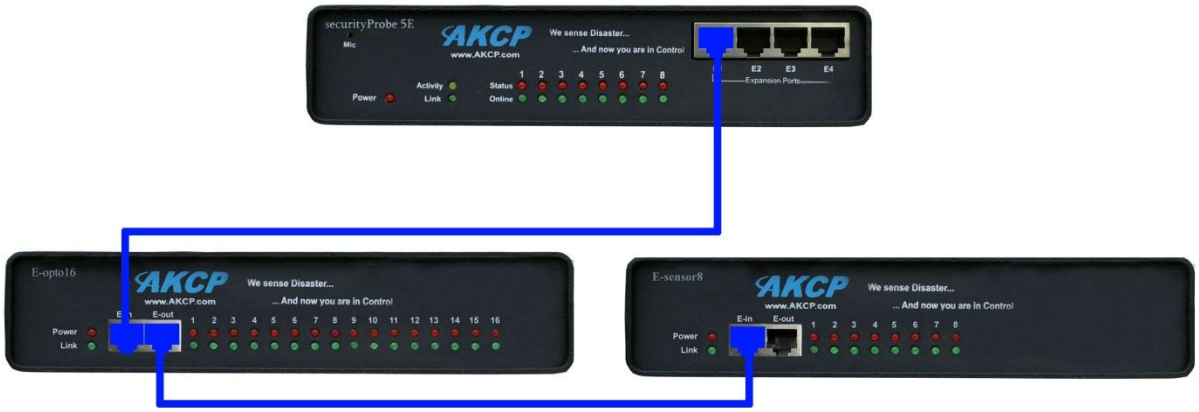
The expansion modules can be mounted in either a standard configuration, or daisy chained configuration. This is demonstrated below:-

Standard Configuration



In the above example you can see that we have connected two expansion modules from two separate expansion ports from the securityProbe. In the example below you can see we have connected the same two modules, only this time using the daisy chain method.

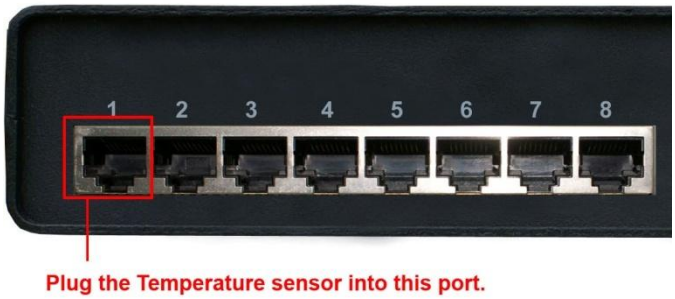
Daisy Chained Configuration



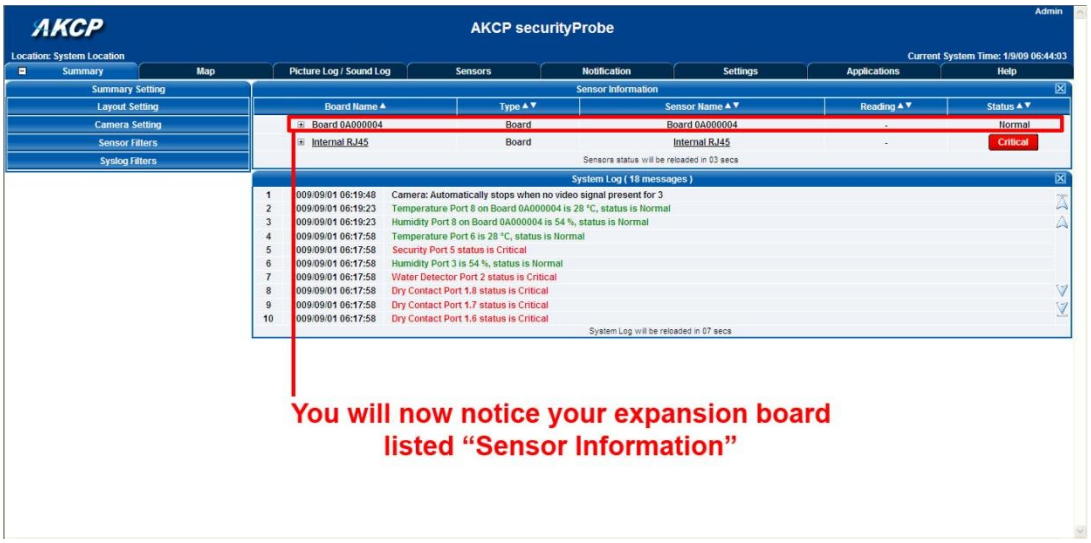
2. Setting up a Sensor (standard configuration)

In this section we will now go through the basic set up of a sensor. We will focus on the AKCP temperature sensor; however this basic set up process is applicable to all of our sensors. If you require information on specific functions of a particular sensor then please download the manual for that sensor from our website, or locate it on your product CD.

a) Plug the sensor into one of the RJ45 "intelligent sensor ports" on the rear panel of the unit. In this example we will use port 1.

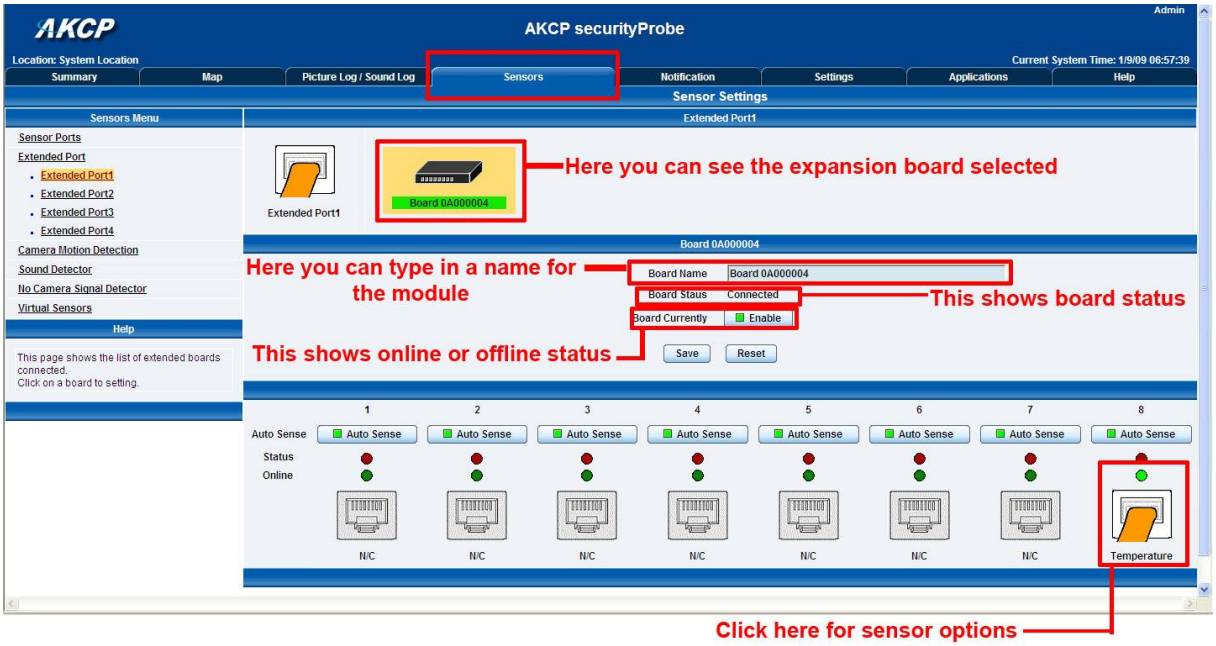


a) Now point your browser to the IP address of the unit (default, 192.168.0.100). Next you need to login as the administrator using your administrator password (default is "public"). You will then be taken to the summary page. This is shown below.

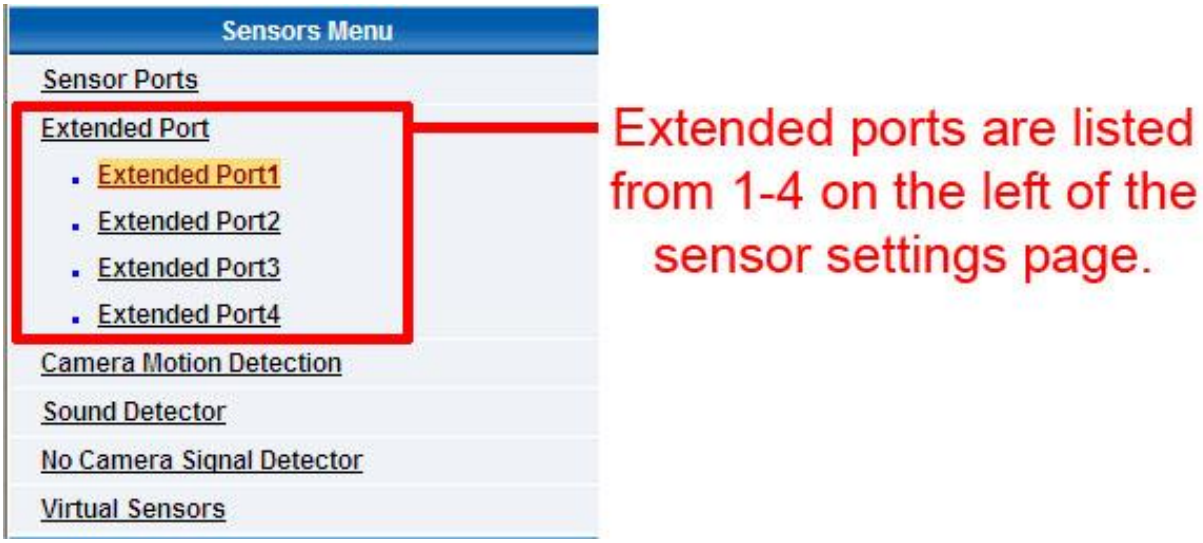


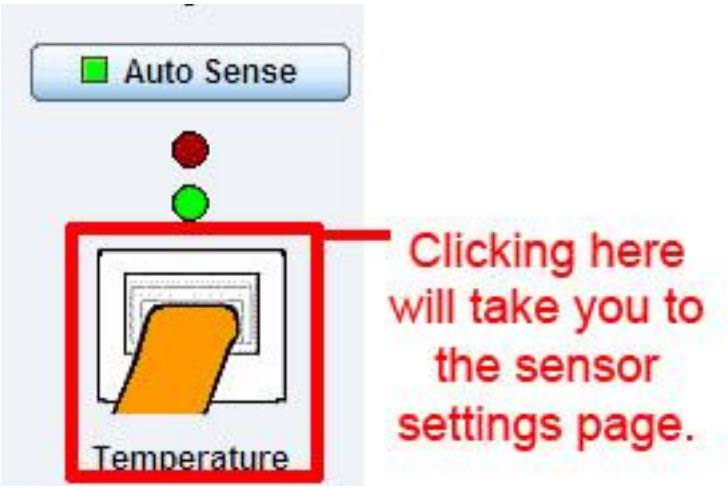
The temperature sensor should be listed, along with its current reading and status.

b) Now click on the temperature sensors name (indicated in previous screen shot). This will bring you to the following page, the sensors page:-

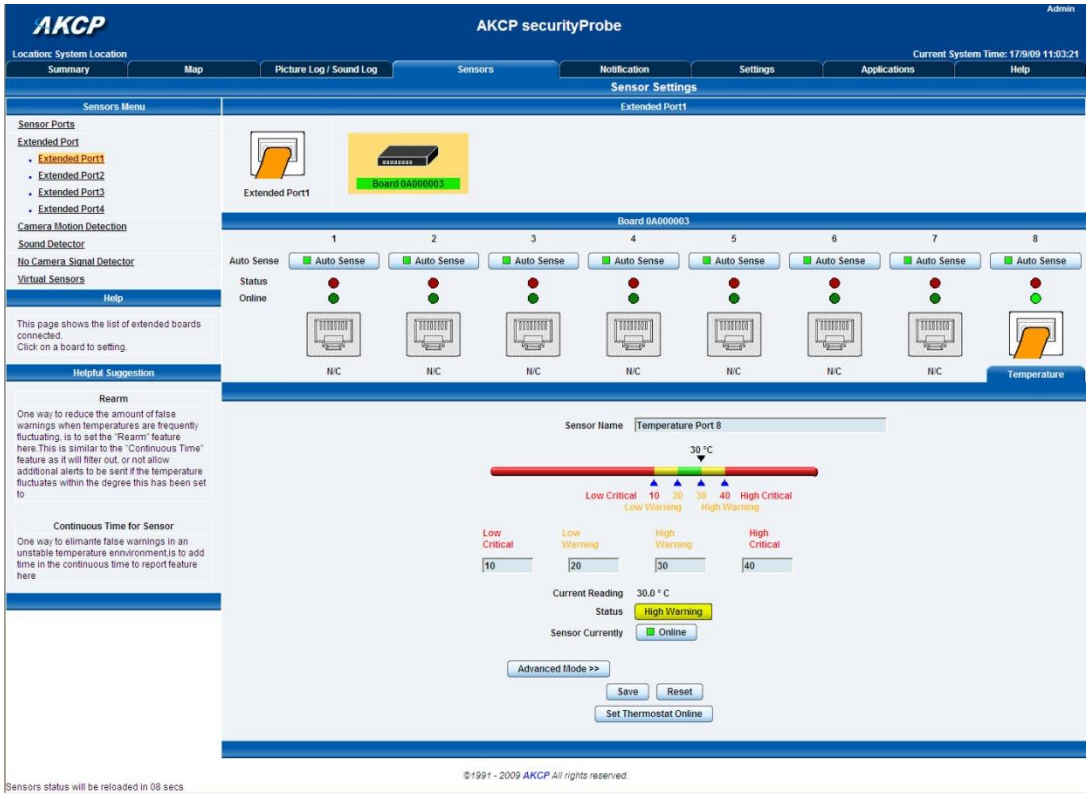


Note: another way of accessing this page is to click on the "sensors" tab indicated at the top of the page.





Once you have clicked on the sensor port you require you will be bought to the following page:-

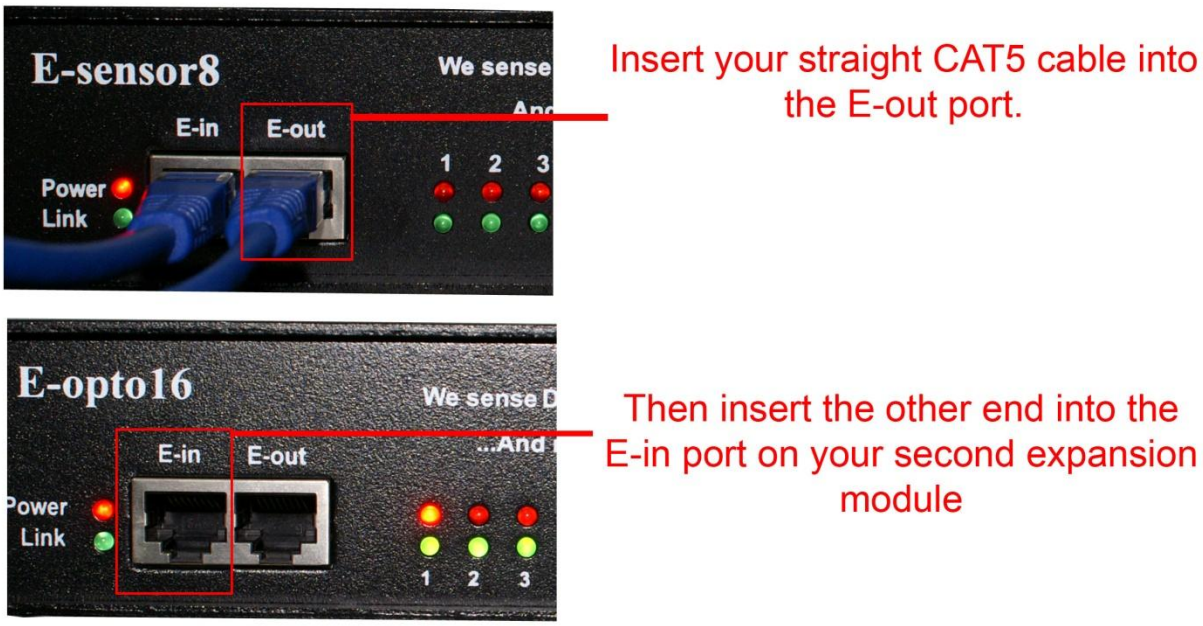


As with the securityProbe the procedure for changing sensor values remains the same, for more information on sensor settings refer to the securityProbe manual or individual sensor manual.

3. Setting up a Sensor (Daisy chained configuration)

Once again we will now go through the basic set up of a sensor, only this time we will look at the daisy chained configuration. We will focus once more on the AKCP temperature sensor; however this basic set up process is applicable to all of our sensors. If you require information on specific functions of a particular sensor then please download the manual for that sensor from our website, or locate it on your product CD.

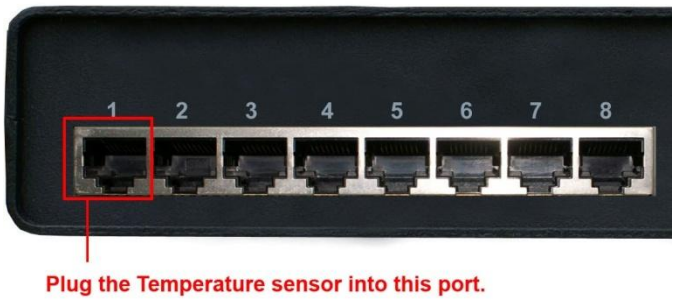
a) Connect the two modules together by following the instructions below:-



Note: make sure you also have your 7.5 volt power supply connected.

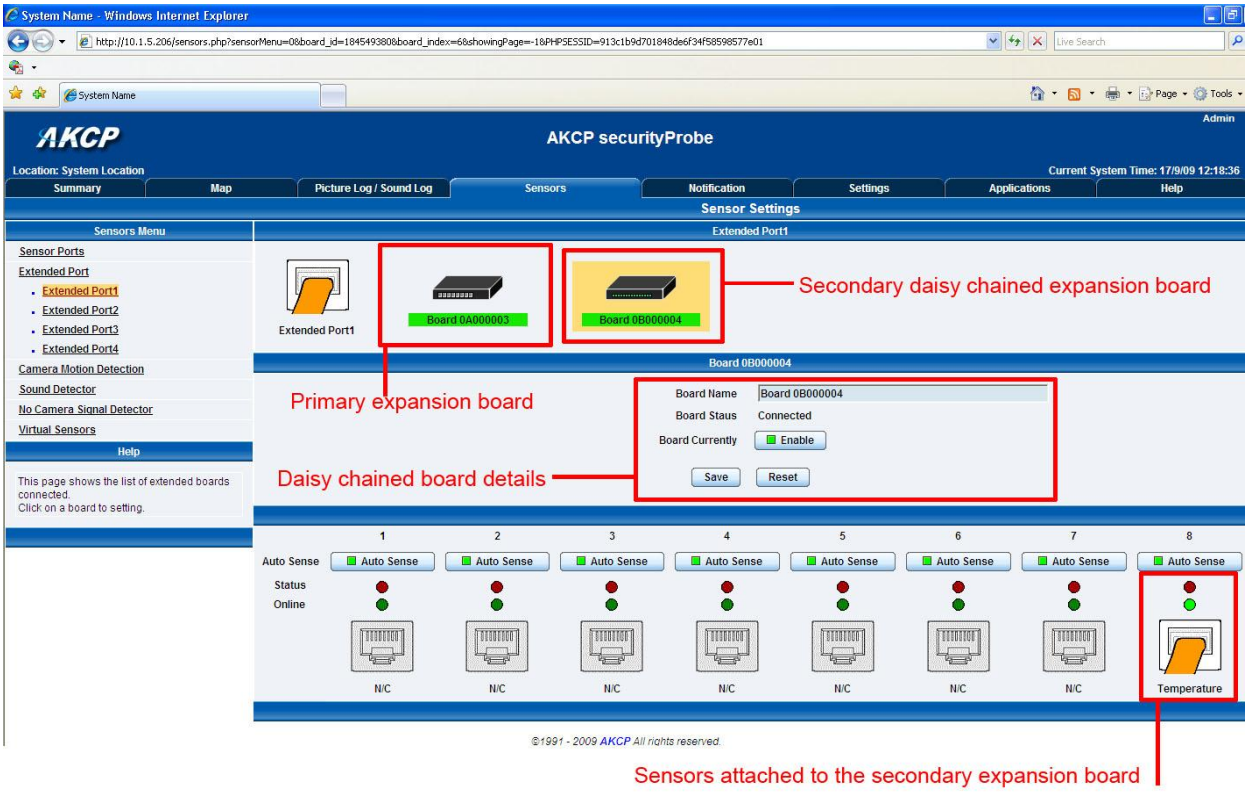
Once the unit is connected you will see the LED'S enter the boot-up sequence indicating your expansion module is communicating with your securityProbe 5E.

b) Once again plug a sensor into one of the RJ45 "intelligent sensor ports" on the rear panel of the unit. In this example we will use port 1

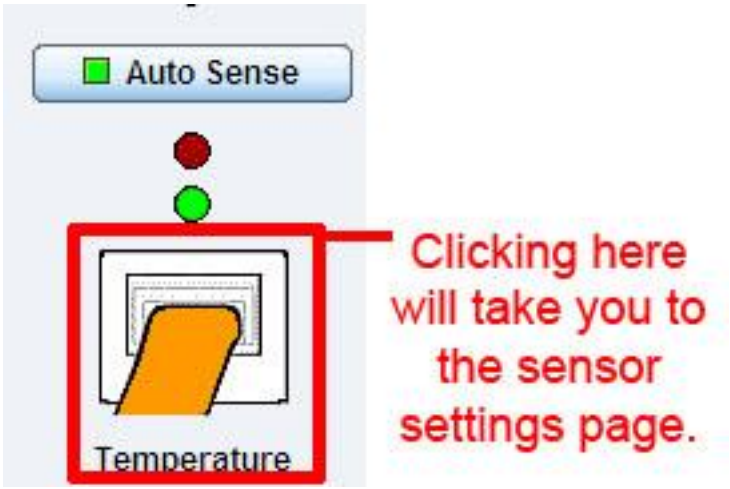


c) Once the unit is connected you will need to access your web interface, point your browser to your desired IP address and log in, and navigate to the summary page. You will see two boards displayed within the sensor information window:-

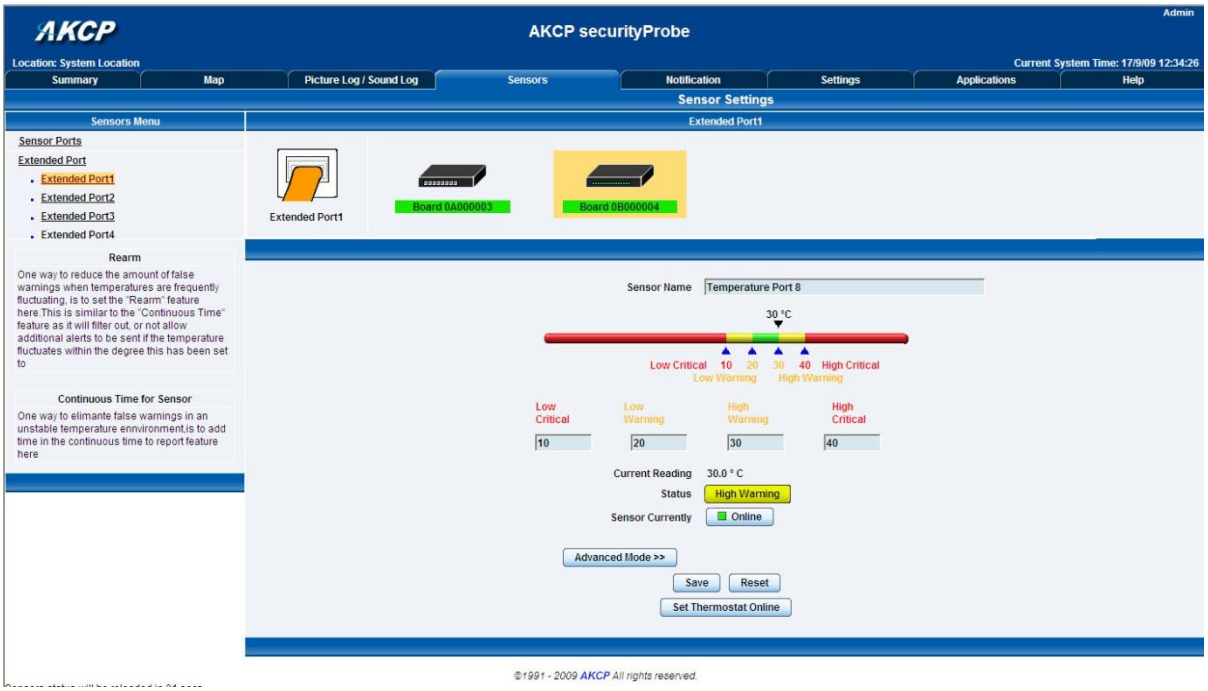
By clicking on the lower of the two boards you will be taken to the sensors page. (this page can also be accessed by clicking the sensors tab at the top of the summary page).



By clicking on any available sensors you will be taken to the settings for that particular sensor as shown below:-



Once you have clicked on the sensor port you require you will be bought to the following page:-



2) Notifications

If you setup a notification you can define the action to take when the sensor gives a reading beyond your previously set thresholds. This allows you to determine how you will be notified that a sensors reading has reached the specified parameters (high warning, critical etc) that we looked at in the previous section.

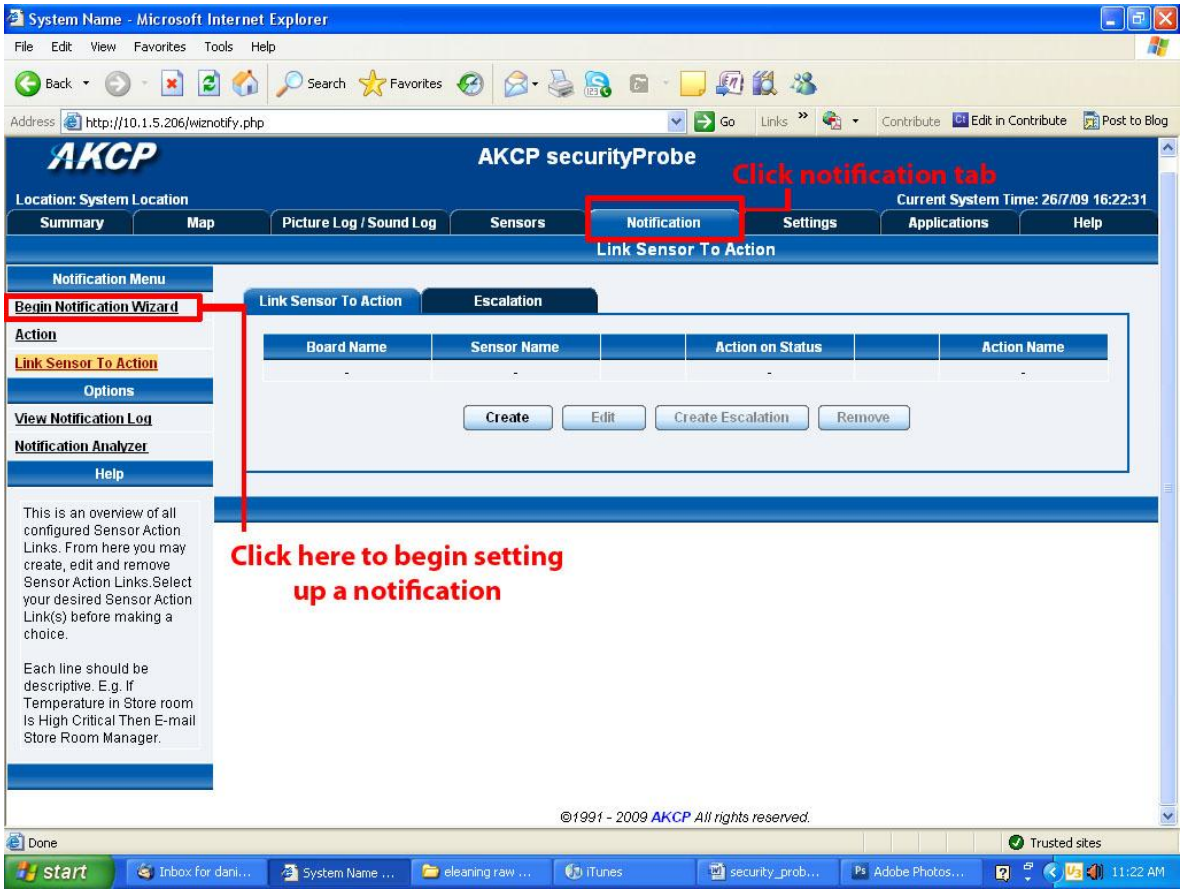
This tutorial provides you the information needed to setup a notification.

To get to the starting point of this tutorial:

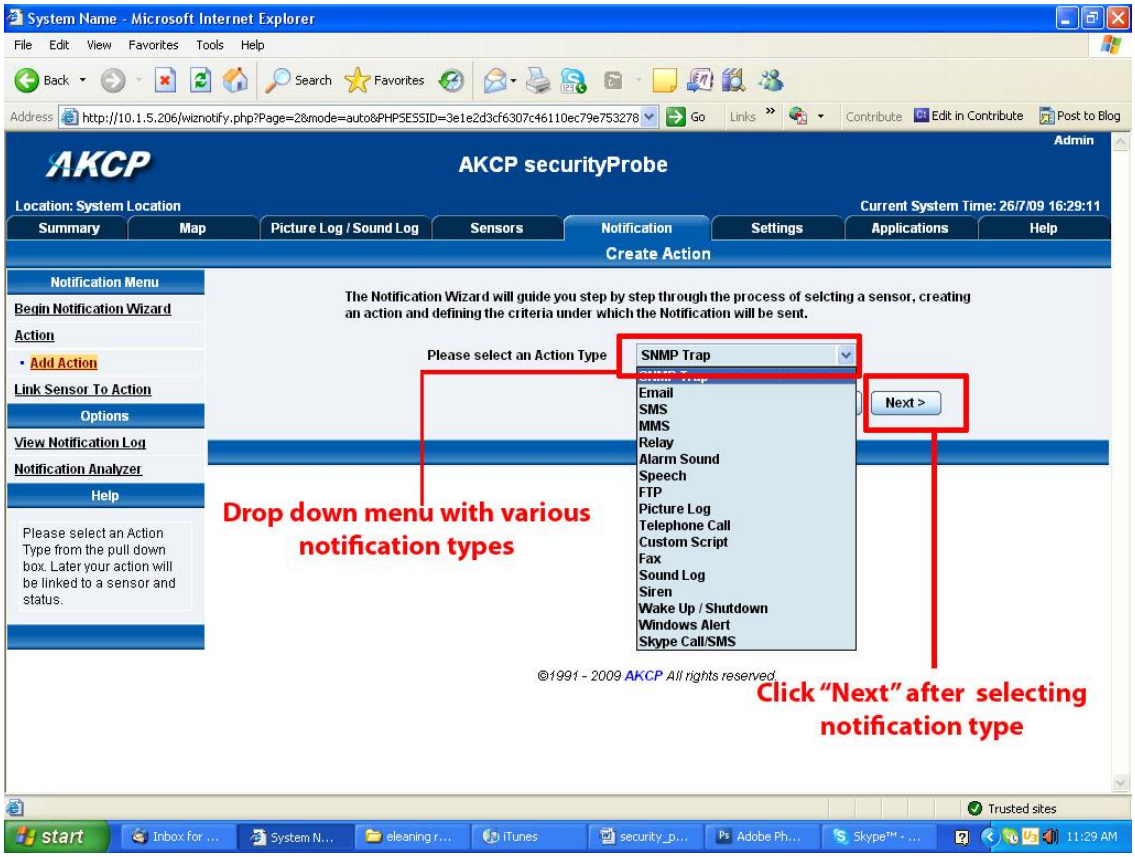
- Login as administrator
- Click the “Notifications” tab

1. Adding a notification

a) First click on the “notification wizard”



b) You will now have the notification wizard page displayed, like below.



We will now show a sample notification. To learn what the other types of notifications do refer to the separate notification manuals that can be found on your product CD.

SNMP trap

We will set up a notification via SNMP trap, so that when your sensor reaches a certain threshold it will send a notification to your SNMP server.

This tutorial provides you the information needed to setup an SNMP trap.

To get to the starting point of this tutorial:

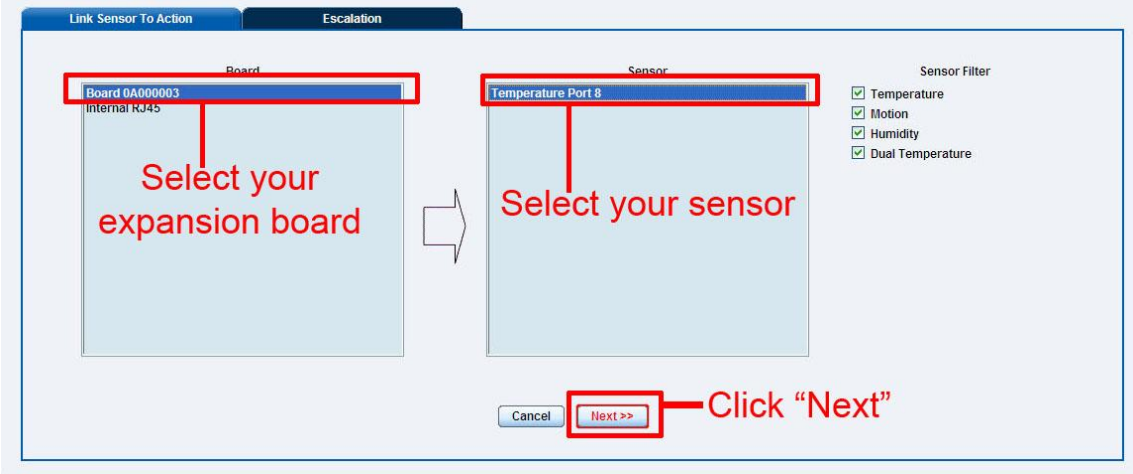
- Log in as administrator
- Click the “Notifications” tab
- Choose “Notifications wizard”
- Choose SNMP trap

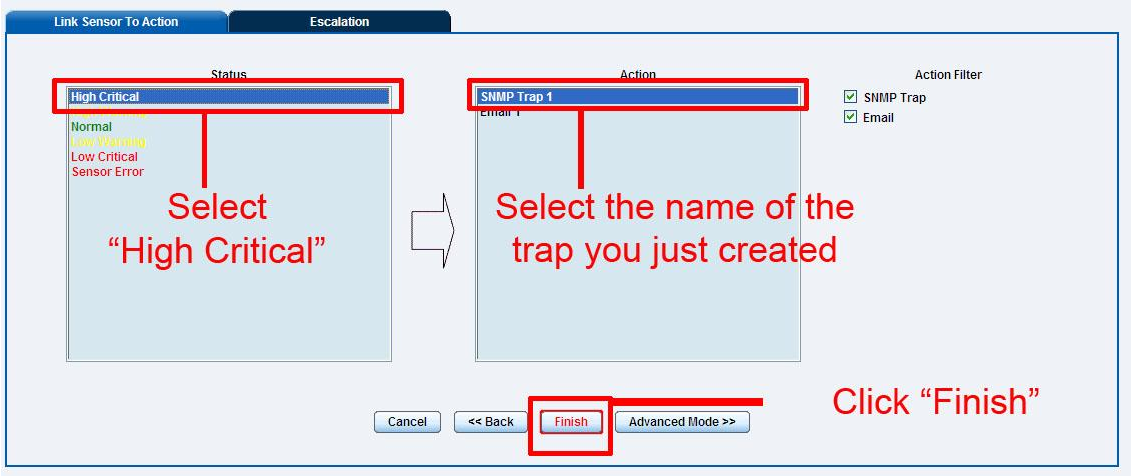
a) After selecting to add an SNMP trap you will need to fill in the following information

b) Once this information is correct you can press the “Add Trap Destination” button. After clicking this you have the option of inputting another trap, or clicking on “Next”. Now you can enter the following parameters:-

These parameters set the maximum number of times to send the trap notification and the time interval between each notification.

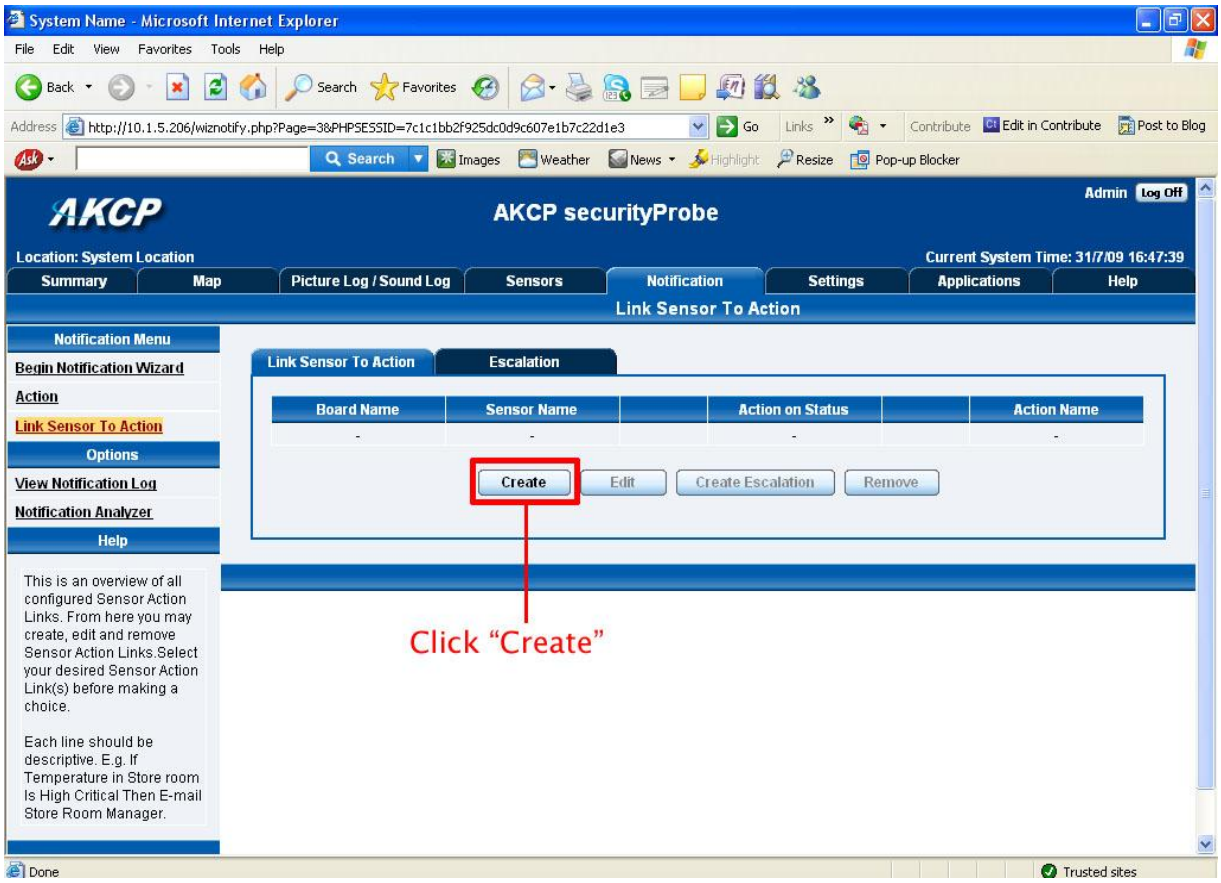
c) After clicking next you will be presented with the following screens:-



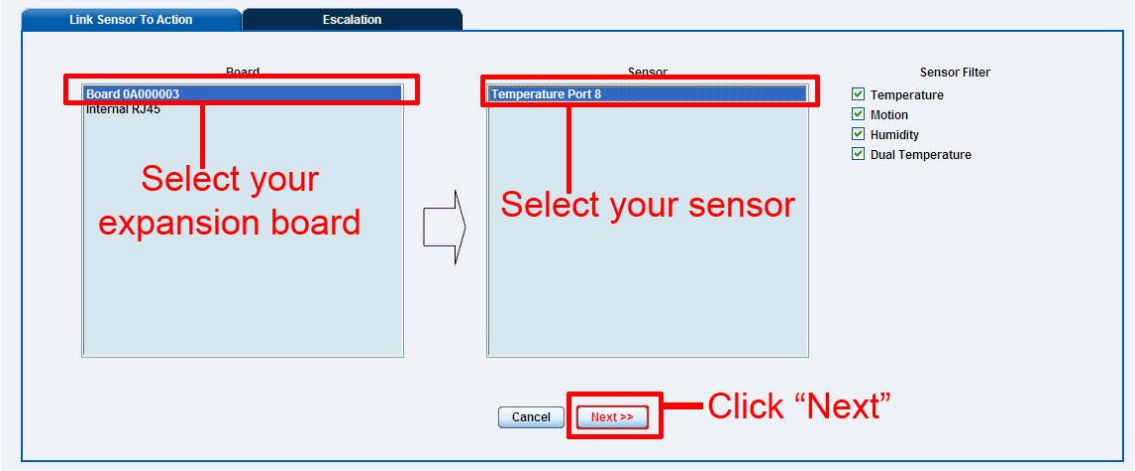


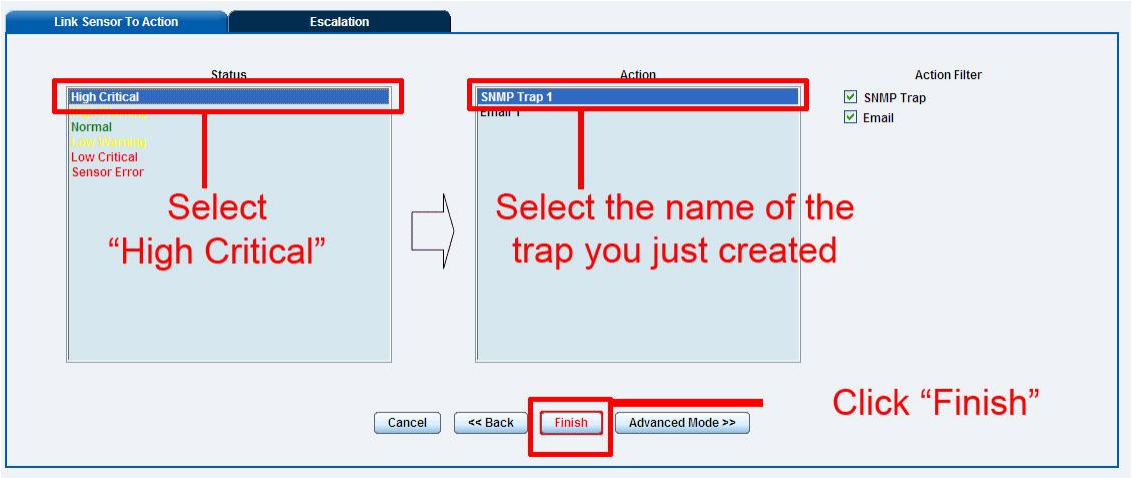
On these screens you can select the parameters for when to send the SNMP trap notification. In our example we have selected to bind the SNMP trap to the temperature sensor we have connected on port 1. The trap will be sent when the sensor reads a "High Critical" and we bind this to the SNMP trap we just created and named "SNMP Trap 1"

d) Once we have created the parameters for the SNMP trap, we need to make it active. To do this go back to the notifications tab and it should look like the following:-

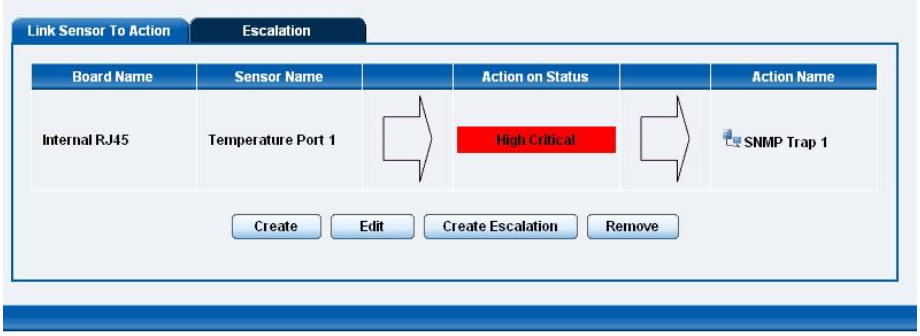


d) Select the sensor and SNMP trap parameters as before





f) Now you will see the SNMP trap has been added to our notifications page:-



Note: To remove this trap and make it inactive, highlight the notification and click remove.

You can repeat this process to set up multiple SNMP traps for different sensors, or for multiple SNMP servers etc.