Information and example of

Actions Sets

Contents

1 Introduction to Action Sets

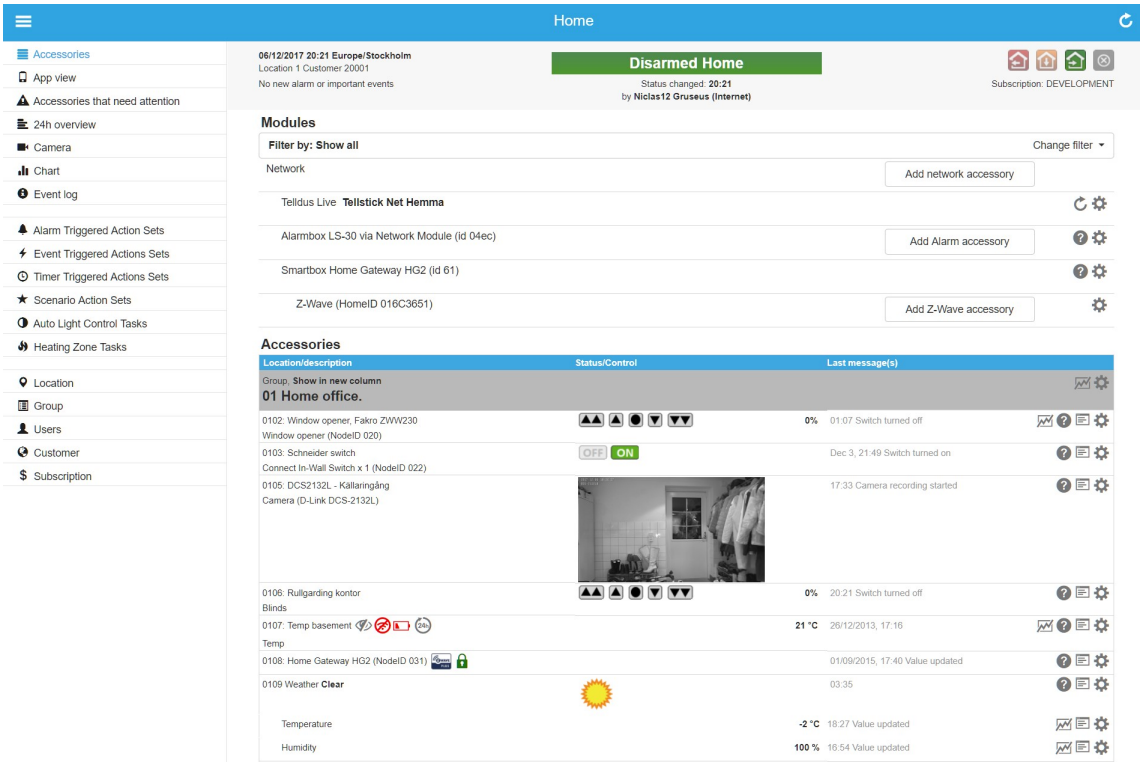
There are 4 different types of Action Sets available (and 2 in beta version)

- Alarm triggered Actions Sets, which are triggered by some kind of an alarm
- Event triggered Actions Sets, which are triggered by an event
- Timer triggered Actions Sets, which are run at a certain time
- Scenario Actions Sets, which are started manually or by any of the other Action Sets

Each Action Set is a collection of one or more Actions.

A user needs to have permissions to access and maintain Action Sets which all users with the Role SuperUser has as default.

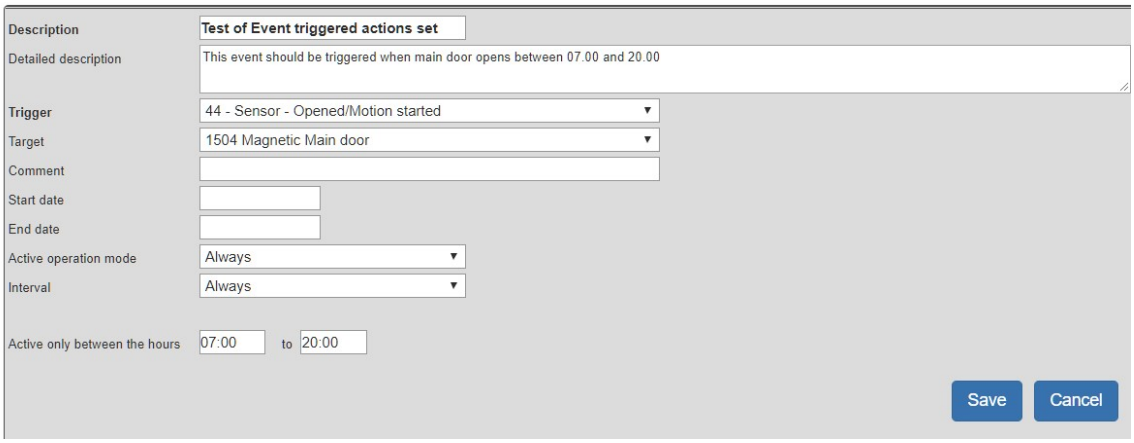
Access to the Actions Sets also depends on which subscription the location has. PREMIUM subscription has everything and FREE have none of them.



1.1 Actions Set

The Action Set information is similar in the different types of Action sets but there are some unique things for each one. For example in Event Triggered Action Sets there is a selection of which Trigger and Target that should trigger the Actions.

In the example below the Trigger "44 – Sensor – Opened/Motion started" will start this Action Set if the is triggered by the Target "1504 Magnetic Main door" and if the time is between 07:00 and 20:00



Enable / Disable

All Action Set except Scenario is possible to Disable via the user interface and via an Action

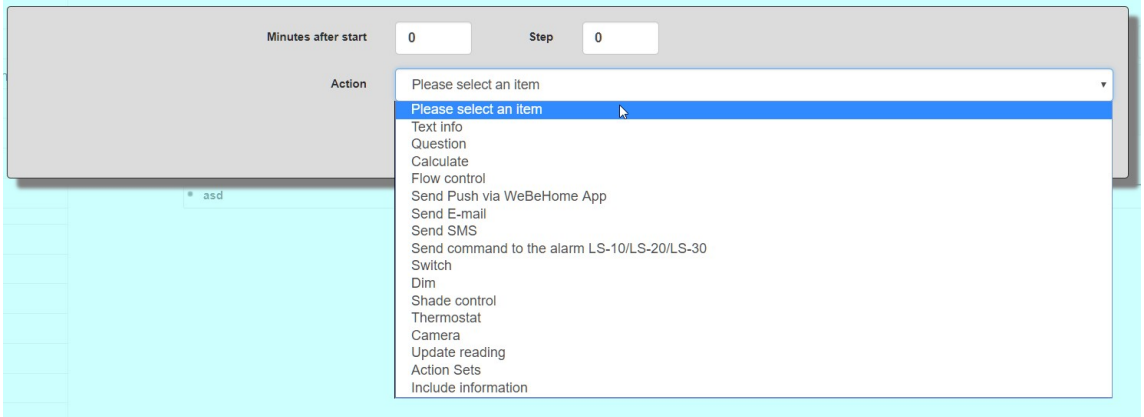
1.2 Action

There are many different types of actions. They are grouped into categories as shown below.

"Minutes after start" are used to execute action with X minutes after the Action Set was triggered.

"Step" is used to divide the Actions into different logical steps.

Questions are valid within the Step they are asked.



1.3 List of all Actions

Here is a list of the different Actions that are available

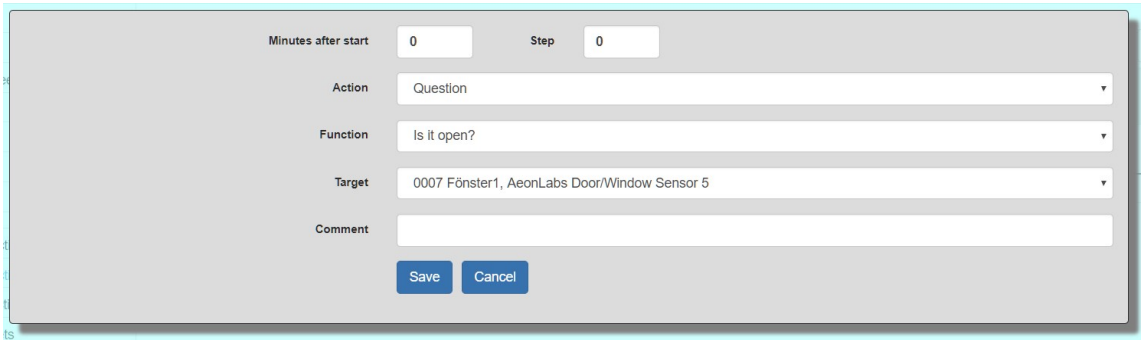
Action	Function of action
Text info	
Question	Is it armed away?
Question	Is it armed home?
Question	Is it disarmed?
Question	Is it open?
Question	Is it closed?
Question	Are value 1 = value 2?
Question	Are value 1 >= value 2?
Question	Are value 1 <= value 2?
Question	Any activity within given timeframe?
Question	Last reading just got higher than
Question	Last reading just got lower than
Question	Is Scenario active?
Question	Is sun up?
Question	Is sun set?
Question	Is light on?
Question	Is light off?
Calculate	=
Calculate	+
Calculate	-
Calculate	*
Calculate	LOOKUP
Calculate	Max of
Calculate	Min of
Calculate	= MAX value (time limit)
Flow control	End the Action
Flow control	Goto
Flow control	Skip all steps within same 'minutes after event'
Send Alarm Msg	
Send Push via WeBeHome App	
Send E-mail	
Send SMS	

Action	Function of action
Send command to Alarmbox	Clear status
Send command to Alarmbox	ARM AWAY
Send command to Alarmbox	ARM HOME
Send command to Alarmbox	DISARM
Send command to Alarmbox	Siren/Relay test
Send command to Alarmbox	Trigger Burglar Alarm on SensorIn 3
Switch	
Dim	
Shade control	Open
Shade control	Close
Shade control	Move to
Shade control	Move and tilt
Thermostat	Set Thermostat Setpoint
Thermostat	Set Thermostat Mode
Camera	Take a snapshot
Camera	Start recording
Update reading	Set reading
Action Sets	Set Event driven Action Set as enabled
Action Sets	Set Event driven Action Set as disabled
Action Sets	Set Time driven Action Set as enabled
Action Sets	Set Time driven Action Set as disabled
Action Sets	Enable Alarm Action Set
Action Sets	Disable Alarm Action Set
Action Sets	Activate a Scenario
Action Sets	Set Description of own Action Set
Include information	Include value from sensor

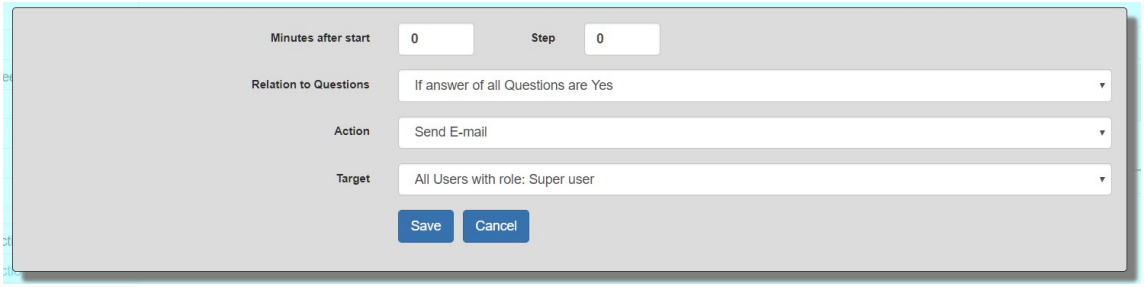
1.4 Questions

Questions can be used to take different Actions depending on the outcome of the questions.
The outcome of questions are valid within the same "Minutes after start" and "Step" as they are asked.

Add a question:



Then add an Action that should be done only if the outcome of the all the questions (more than one can be added) was Yes



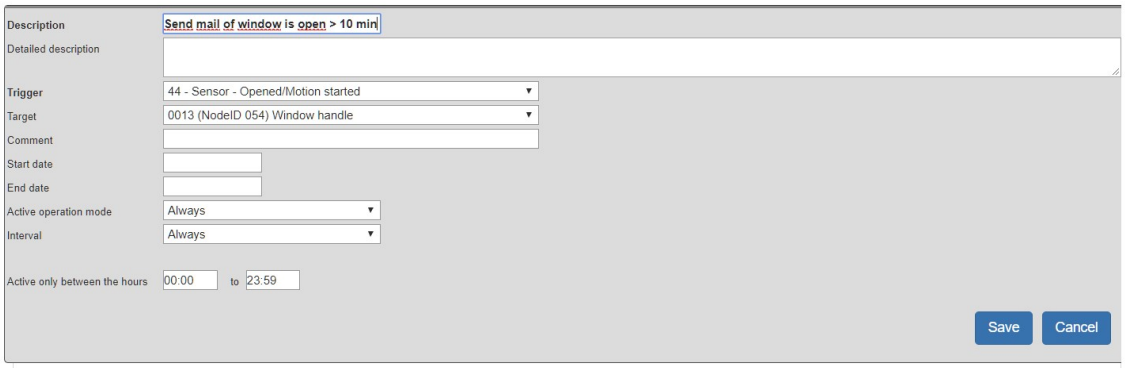
1.5 Relation to state and Minutes after Start

Some Triggers has States. For exampel "Open/Motion started" and "Closed/Motion stopped" updates an Open/Closed state.

Also "Change operated mode to XXX" updates the Operation Status State.

When the Triggers is related to a State, the Actions has a "Relation to State" option.

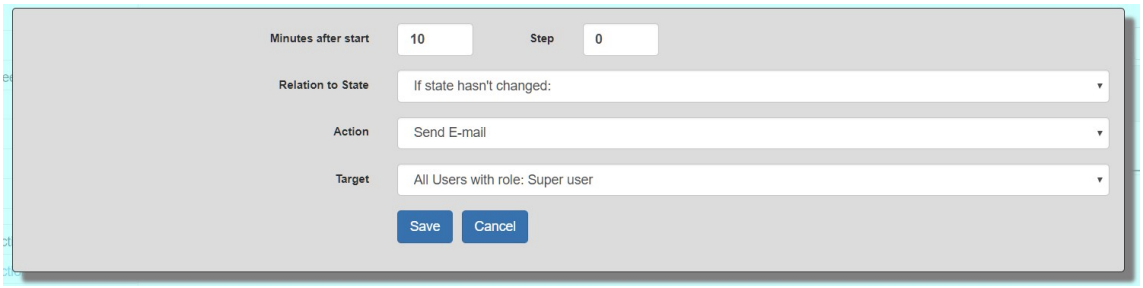
Here is a Event Triggered Action Set that is triggered by "Opened/Motion Started" which has the open/closed state.



The Action can then be executed based on the relation to the state. In this example, the Action is only executed "If state hasn't" changed which means in this case means if the window is still open.

The Action also excute 10 minutes after the window was opened "Minutes after start" = 10

The outcome of this example is that all Super Users get an email if the window is opened longer than 10 minutes.



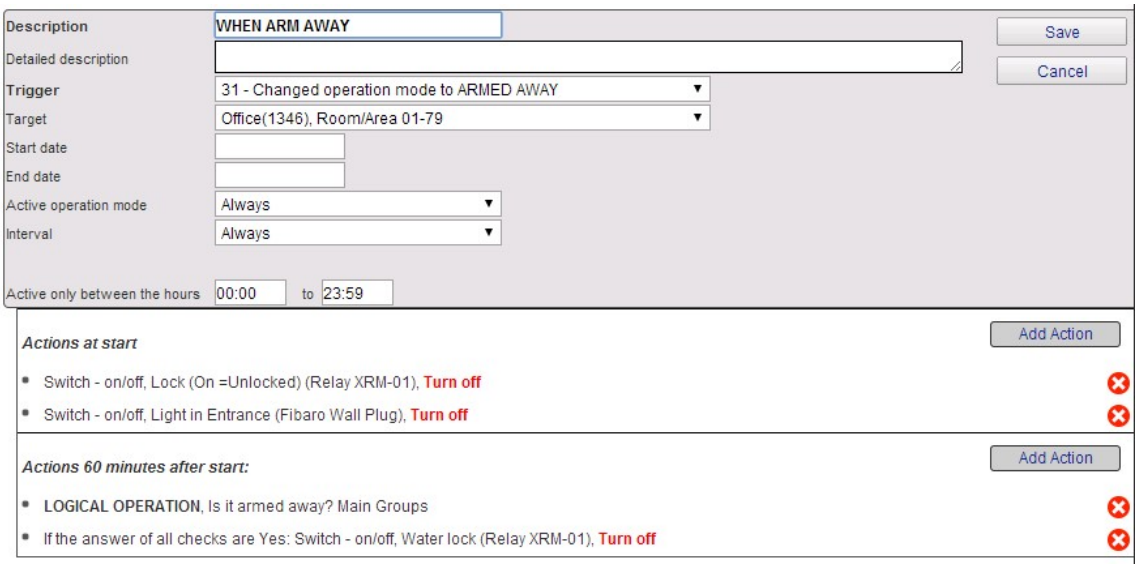
2 Examples, Event triggered Actions Sets

2.1 Do actions when change to ARM AWAY

This ActionSet is set to be triggered when the system change mode to ARM AWAY.

The example below is when two switches turn off when the mode is changed.

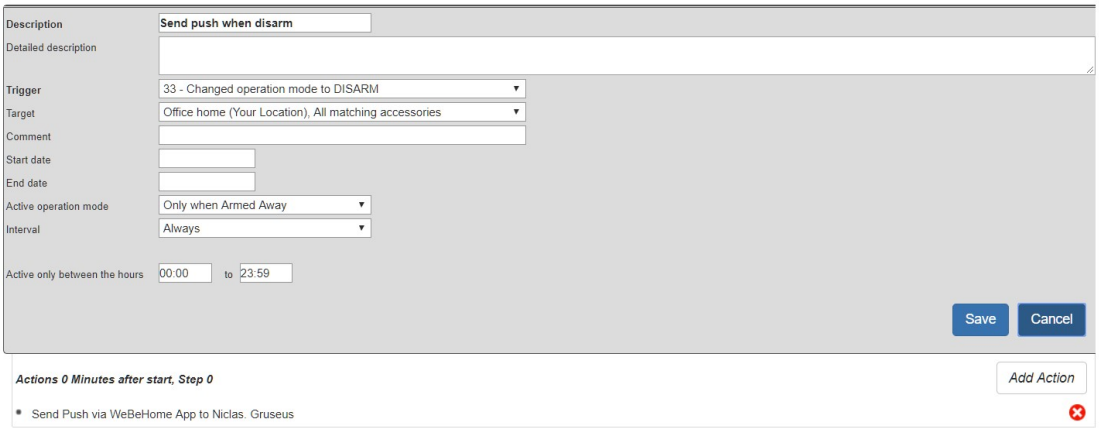
Then it turns off the water 60 minutes after it was changed to ARM AWAY if the system still is in ARM AWAY mode.



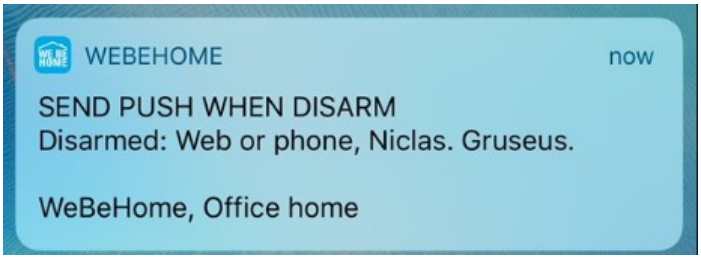
2.2 *Send push notification when change from ARMED AWAY to DISARM*

This ActionSet is set to be triggered when the system change mode from ARMED AWAY to DISARM.

In this case it is only one Action which send a push notification to the user Niclas Gruseus with information that the system was DISARMED and by who.



This is an example of how the Push notification can look like:

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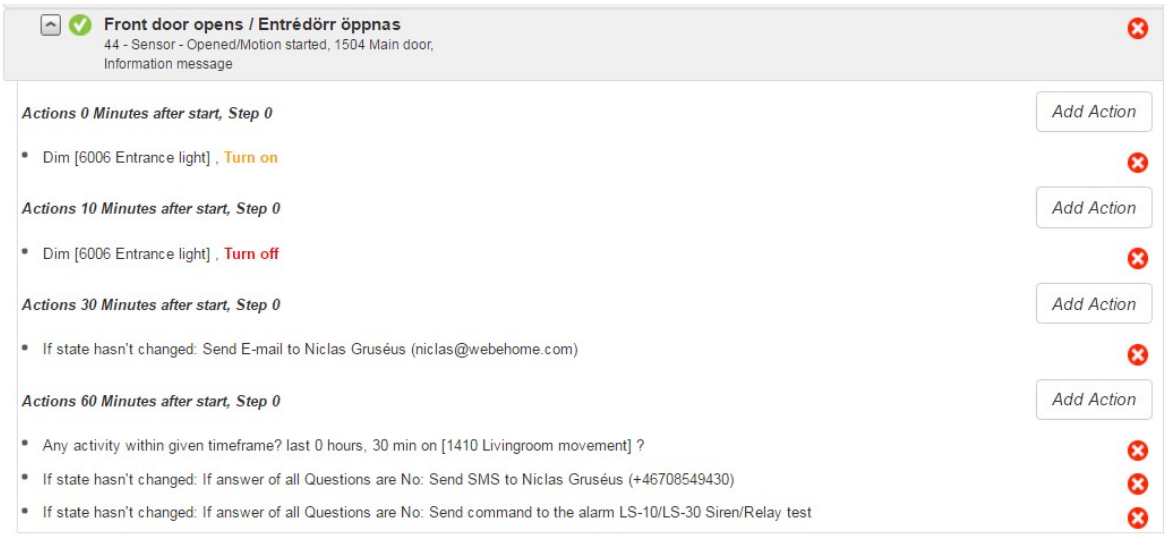
2.3 *Turn on light when Front door opens & alert if open to long*

This event is set to be triggered when the magnetic contact on the front door is opened.
It is defined to be triggered 24 hours a day regardless of alarm status.

When front door opens:

- it turns on the entrance light (using wireless Nexa switch and Tellstick Net)
- after 10 minutes it turns the light off
- if the door is still open after 30 minutes, it sends an email to Niclas about it
- after 60 minutes, it makes a check if there has been any motion in the living room. If the answer is no (no activity) and the front door is still open, then it sends a SMS to Niclas and also make a short siren beep from the base unit

If the door for example is closed after 5 minutes and the opened again after 8 minutes, the action is restarted from the beginning and turn on the light etc.

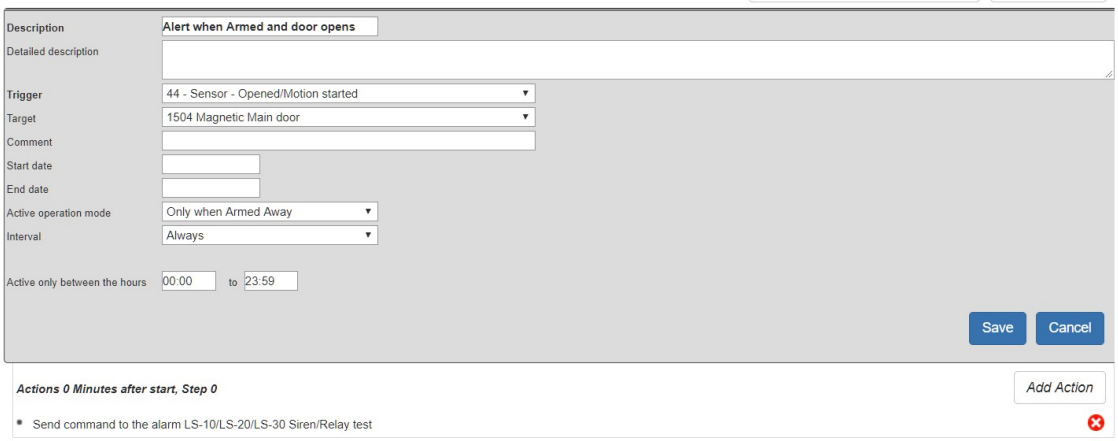


2.4 Siren alert when door opens and system is ARMED AWAY

For installations that has a delayed activation of the alarm on the magnetic contact for the entrance door there is a risk to forget to disarm the system even if the Alarmbox is set to make beeps on the delay time.

One more efficient method is to let the Siren make a short beep some seconds after the door has opened if the system is ARMED AWAY

Below is an example which sends a Siren/Relay test to the Alarmbox when the Main door opens and the sytem is ARMED AWAY.



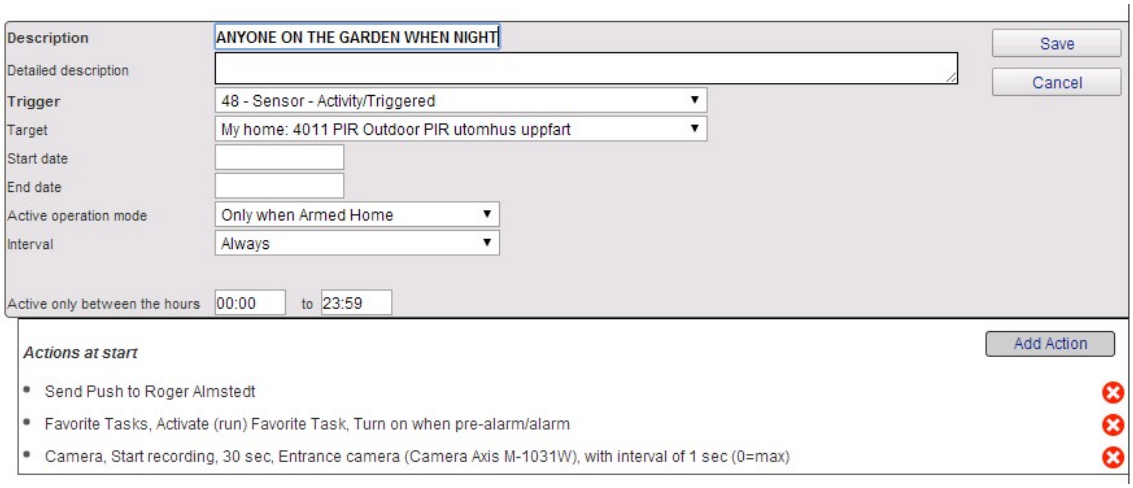
2.5 Warning when someone in the Garden at night

With the use of one or more Outdoor motion detectors (PIR-OD1) it is possible to do smart things to keep unwanted people away.

The PIR-OD1 is set to not trigger any alarm. Instead the event is captured in this Event Triggered Action Set.

This Action Set is only triggered when ARMED HOME (usually done during sleeping hours) and starts a Scenario which turn on the light, sends a Push to Roger and start recording from the Entrance camera.

The lights will have will give a clear indication that the person has been noticed.



2.6 *Warning when someone in the Garden when you are away*

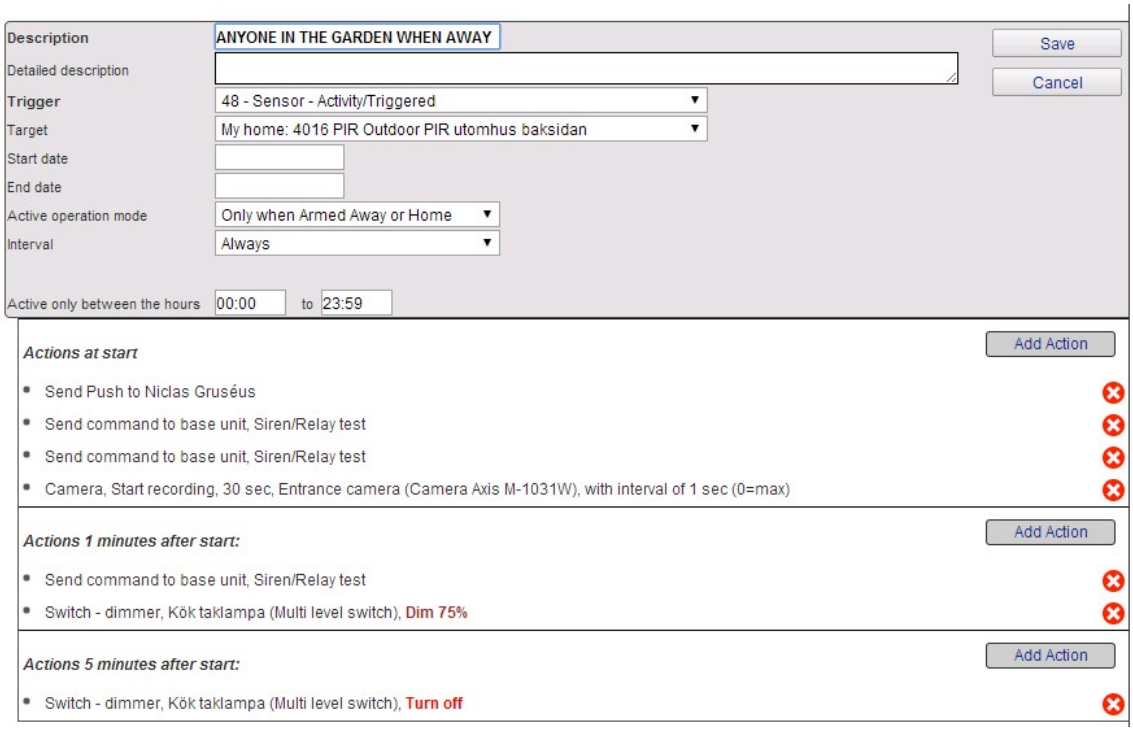
This Action Set is similar to the one above except it is set to be triggered only when ARMED AWAY.

It will let the Siren sound two short alarms beeps, sends a Push to Niclas and start recording.
The two alarms beeps will hopefully be heard by the people entering the garden and make the go away.

After another 60 seconds the Siren will send another beep and the light in the kitchen is turned on.

After 5 minutes the lights in the kitchen are turned off.

Hopefully this will make unwanted guest understand that they are noticed and think that someone is at home.



2.7 Take action based on values from sensors

This is an example on how values like temperature, humidty, light etc can be used to control other things. For example turn heating on/off based on temperature interval, control blinds or lights etc.

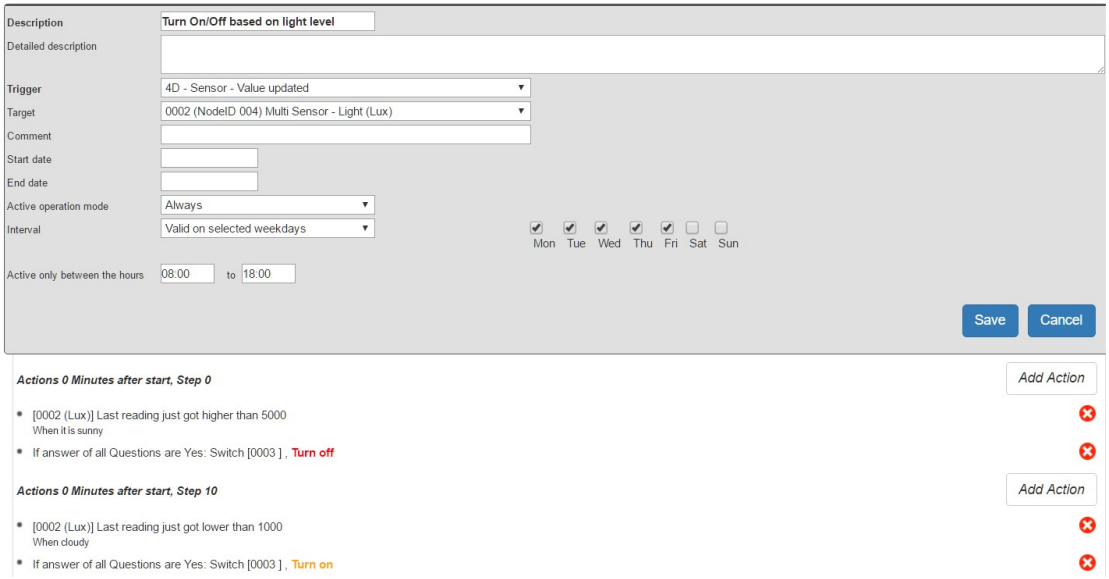
In this example a light sensor that report the light level in Lux is used to trigger an event on each new value.

It ActionSet is defined to be active on weekdays between 08.00 and 18.00

When a new value is received it first make a check if last reading just past 5000 Lux. If the answer on that question is Yes, then it turns a Switch off (or it could move a blind down or similar).

Then, in a different Step it make another check if last reading just got below 1000 Lux. If the anser on that question is Yes, then it turns a Switch on (or it could move a blind up or similar).

Notice:
Each Step evalute its Questions separate from previos steps. That is used in this example to have two different Questions where the Answer is handled for each Question.



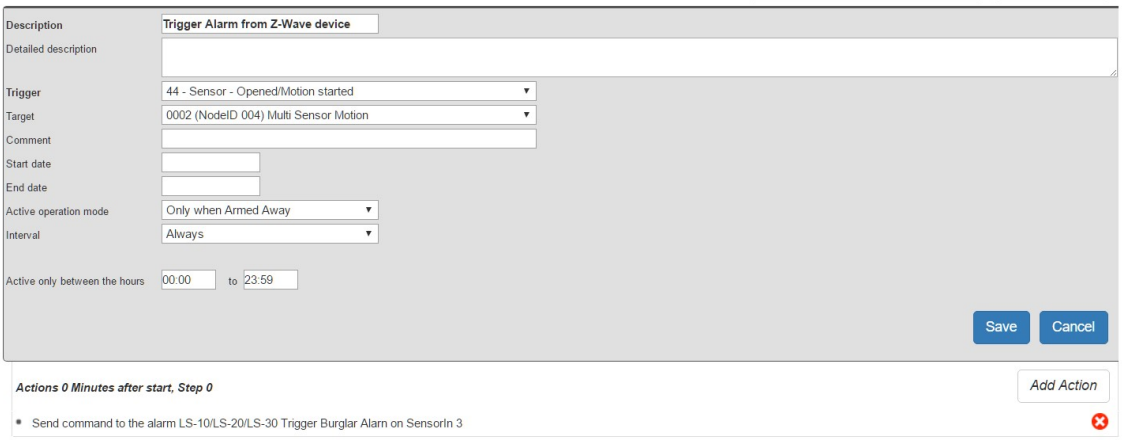
2.8 Trigger an Alarm from a Z-Wave accessory

The Alarmbox (LS-20/LS-30) is real EN-50131-1 approved wireless alarm system. All its parts are battery backuped and it triggers sirens alarms etc regardless if it is connected to our cloud or not. Normally Z-Wave device can't act like a real Alarm device and can't trigger an real Burglar Alarm.

But using this function it is possible to trigger a real Burglar Alarm from any Z-Wave device by catch the event from the Z-Wave sensor in the cloud service and send a command back to the Alarmbox to trigger a Burglar Alarm.

This function use the wired SensorIn3 on the back of the LS-20/LS-30 to similate a wired device that triggers an alarm. Therefor you can't use SensorIn3 together with this function.

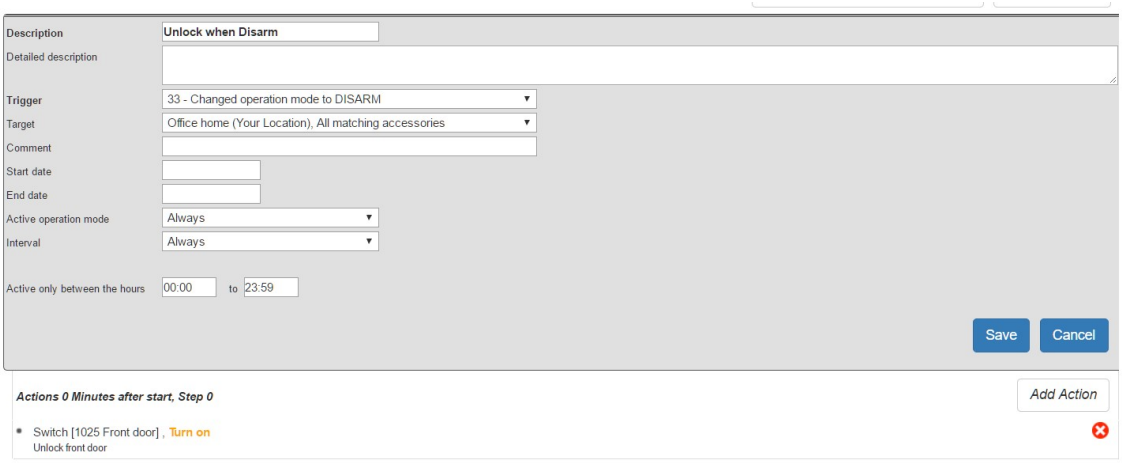
This function will work as long as the HomeGateway and the Alarmbox are connected to our cloud service.



2.9 *Unlock a Z-Wave lock when Disarm alarm*

Here is an example which send a unlock (Switch On) command to a Z-Wave lock when the LS-10/LS-20/LS-30 send a Disarm event.

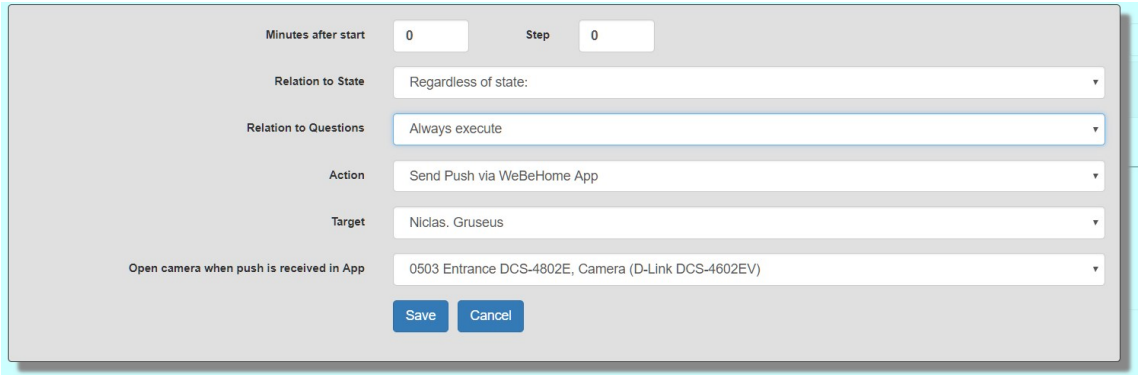
This function will work as long as the HomeGateway and the Alarmbox are connected to our cloud service.



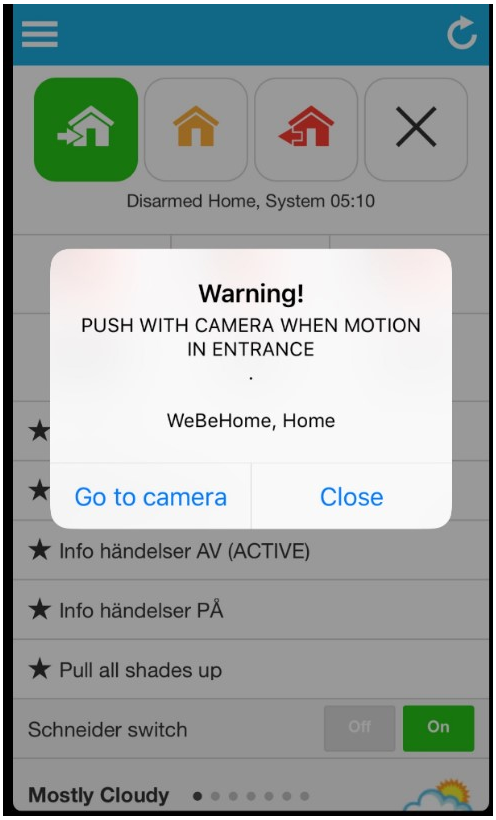
2.10 Send a push notification with a Camera link

If you for an example have a outdoor motion detector at the entrance door and a camera placed outside at the entrance, then it might be good to get information when the motion is triggered and an easy way to access the camera.

To include the camera link, select a camera in the "Open camera when push is received in the App" in a Push notification Action. A push notification action can be added to any Action Set you like.



The push notification will be shown like this in the app. When press the "Go to camera" it will open the live view of the camera that was selected in the Action.



2.11 Control a fan based on humidity and CO2 using Variables and Lookup

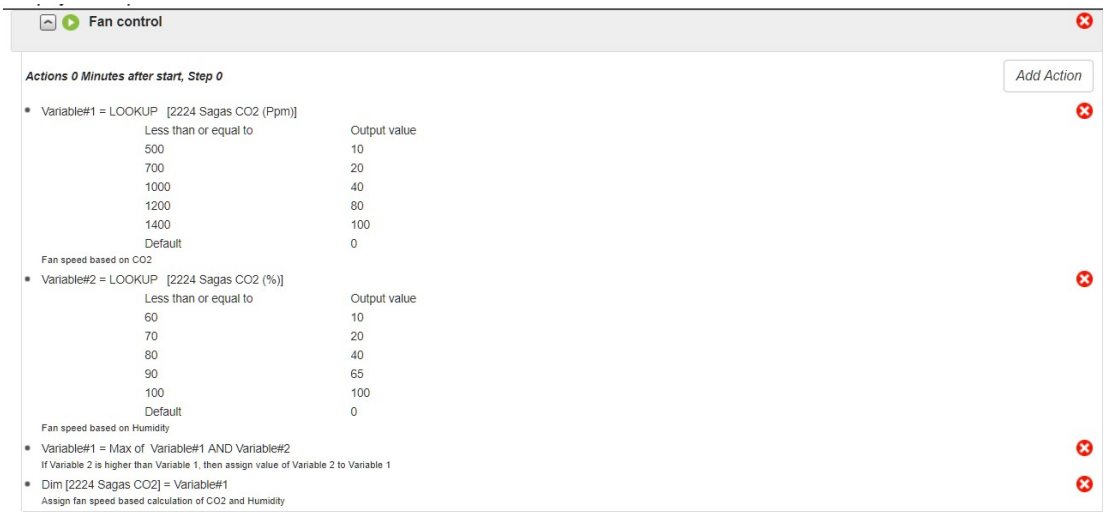
This combination of Action Set's will control the speed of a Fan that is connected to a dimmer. The speed is controlled based on Humidity and CO2 readings.

The higher Humidity or higher CO2 values the faster speed on the fan.
The dimmer that control the fan has value between 0 and 100 where 0 is off and 100 is full speed.

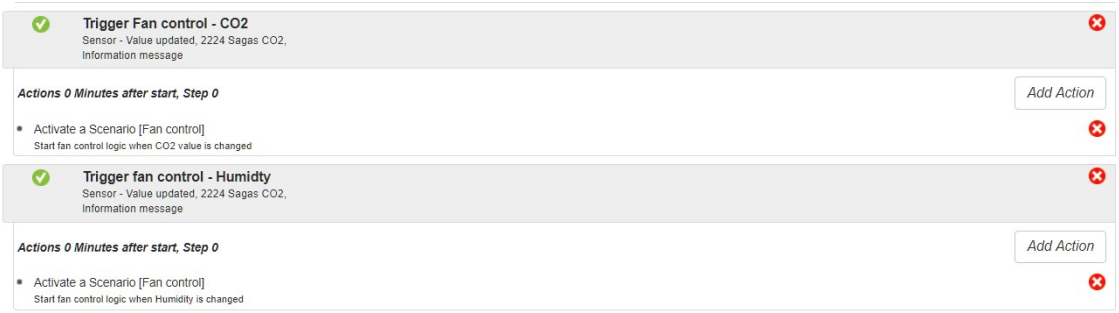
To know which speed, two lookup table is used, one for Humidity and one for CO2.
A lookup table use for example CO2 value as input and based on its value and the values entered in the table it will return a new value.

In this case, the max value of speed from CO2 lookup table and Humidity lookup table will be assigned to the dimmer that control the fan.

Scenario Action Set: Fan control
This is scenario that calculate the fan speed and set it to the dimmer. Each part is described below.

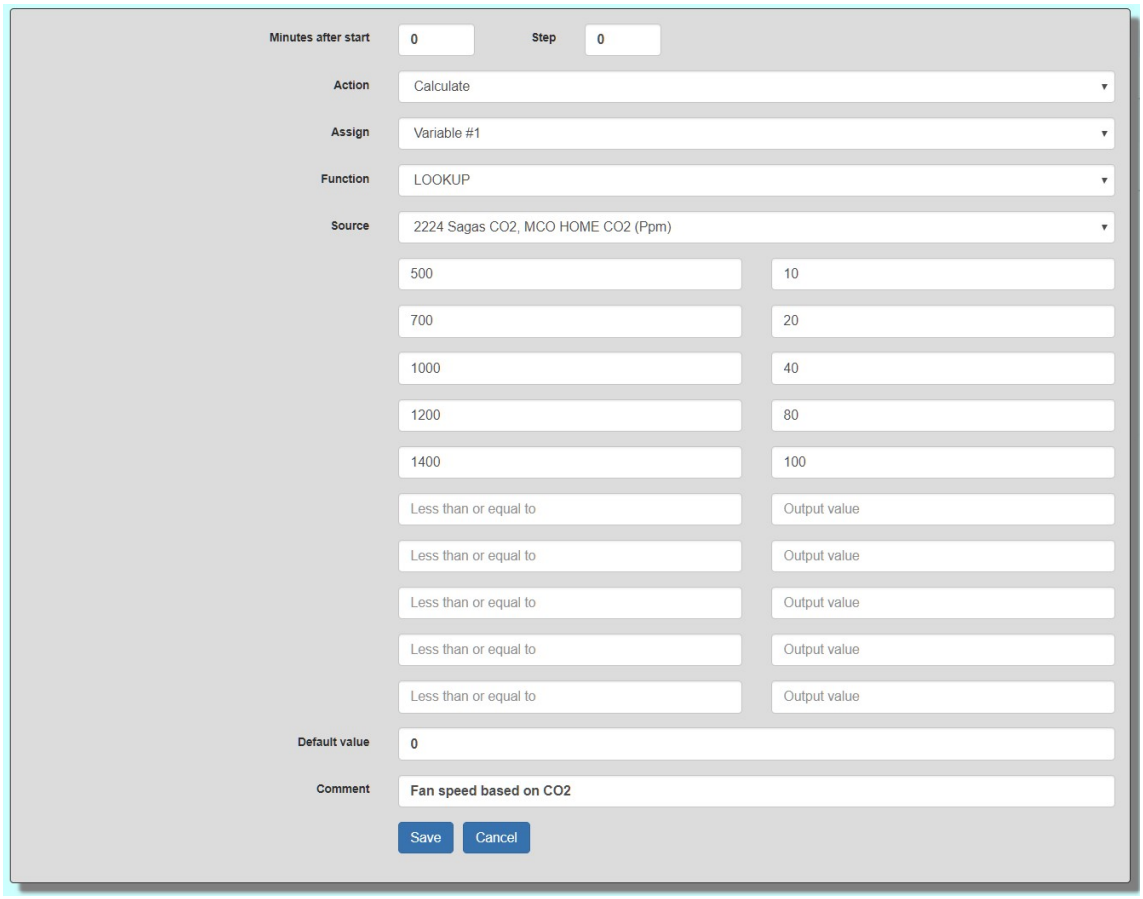


Event triggered Actions Set's that start the Fan control scenario when CO2 value or Humidity is changed.

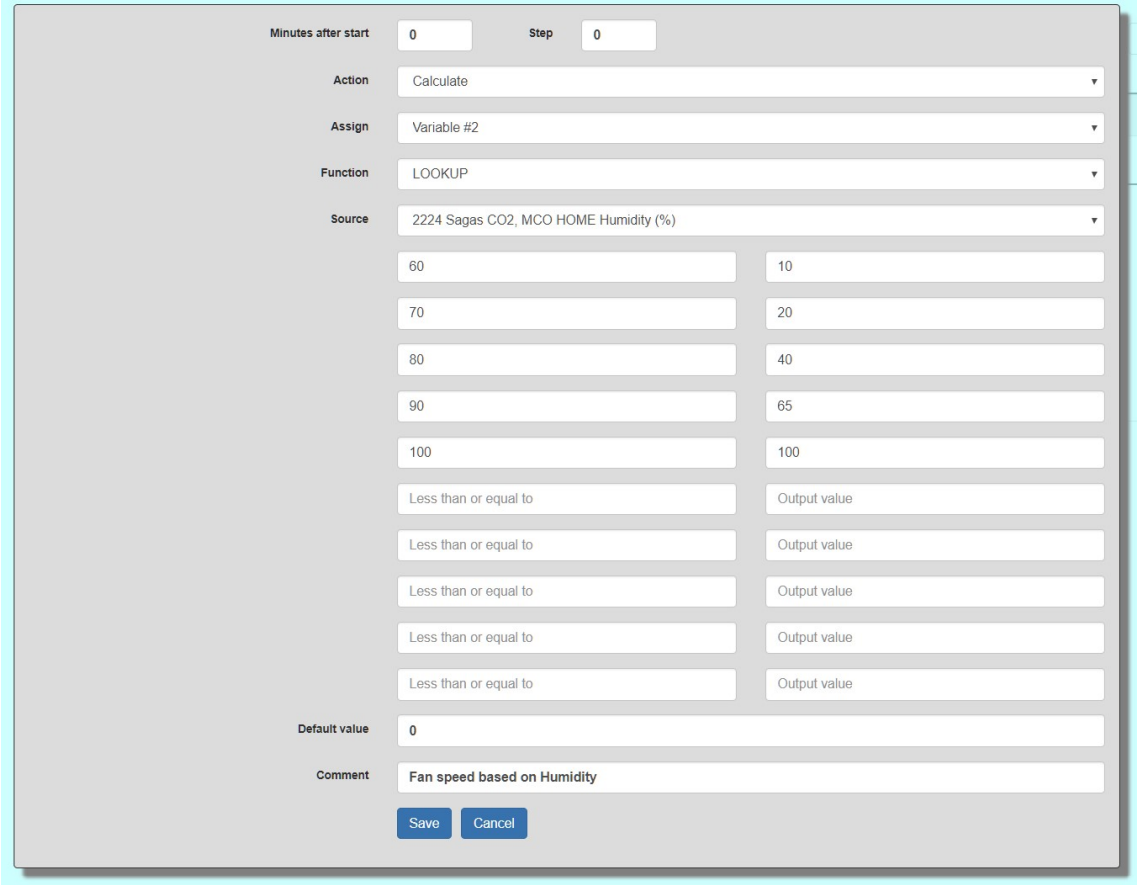


Details of the Actions that is used in the Scenario Fan Control

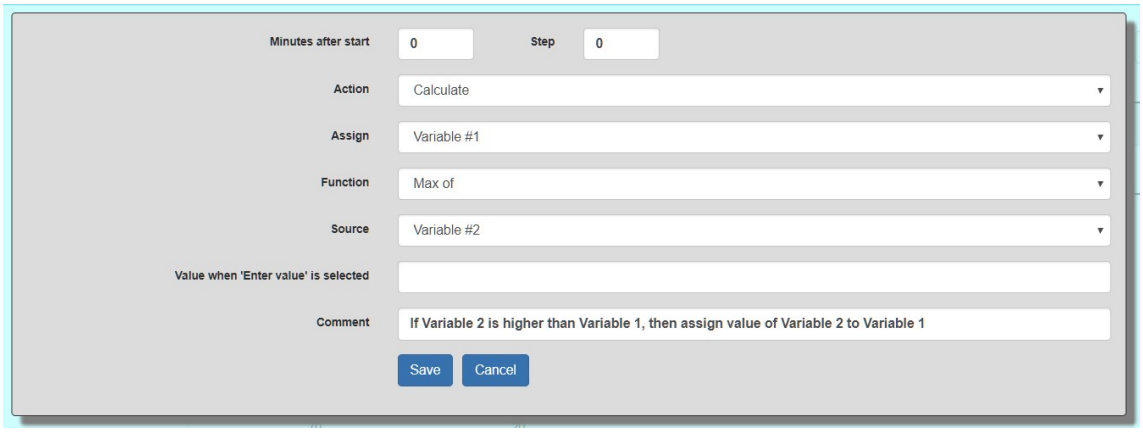
This is the lookup table for CO2.
It take the source “2224 Sagas CO2 .. (ppm) ” value as lookup value and assign the output value to **Variable#1**



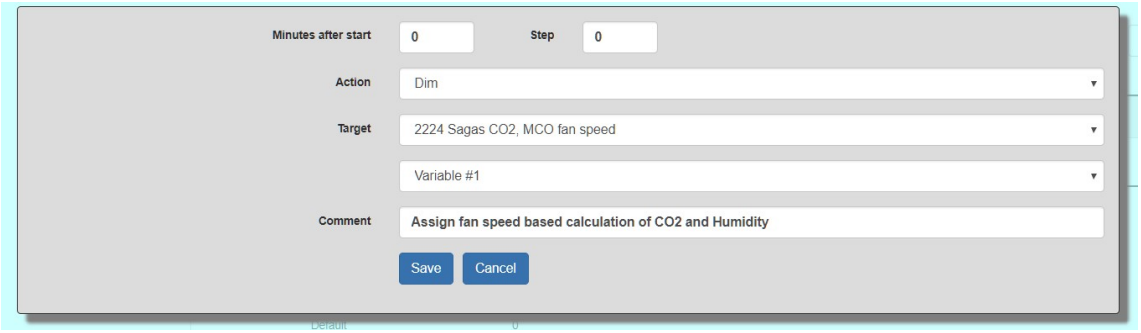
This is the lookup table for Humidity.
It take the source “2224 Sagas CO2…Humidity (%)” value as lookup value and assign the output value to **Variable#2**



Then it assign the Max value of Variable#1 and Variable#2 to Variable#1
This will get the highest value of these to into Variable#1



Finally the dimmer level of the dimmer that control the fan is set to the value of Variable#1

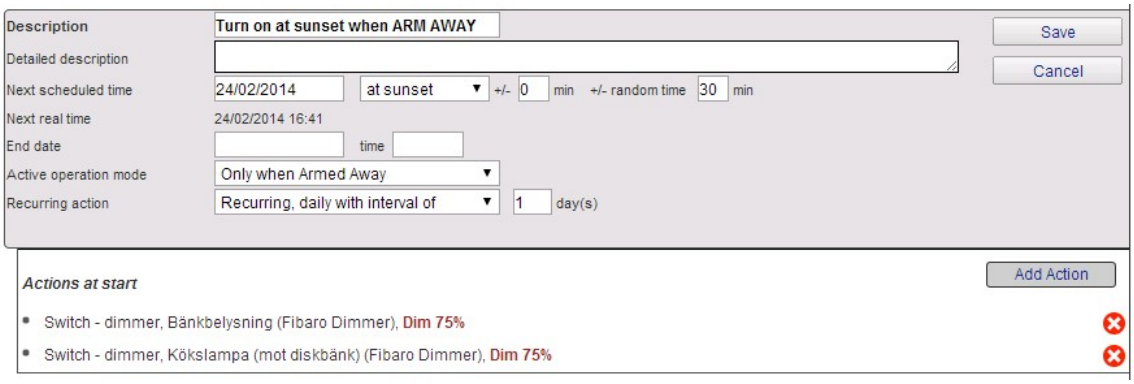


3 Examples, Timer Triggered Action Set (Schedule)

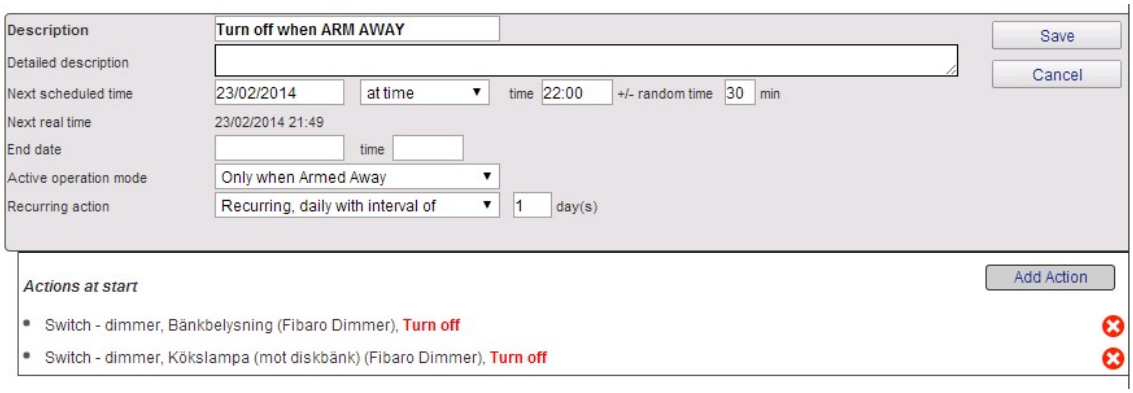
3.1 Automation of light when not at home

These two Timer Triggered Action Set automate the light when you are not at home to get people to think you are at home.

The first Actions Set turns on some lights at sunset +/- 30 minutes.
The random time makes it less obvious that the lights are turned on by a timer.



The second Actions Set turns off the same lights at 22.00 +/- 30 minutes.
In this way, it looks like someone is a home since light turn on/off at partly random time.


Description
Turn off when ARM AWAY
Save
Detailed description
Cancel
Next scheduled time
23/02/2014
at time
time
22:00
+/- random time
30
min
Next real time
23/02/2014 21:49
End date
time
Active operation mode
Only when Armed Away
Recurring action
Recurring, daily with interval of
1
day(s)
Actions at start
Add Action
Switch - dimmer, Bänkbelysning (Fibaro Dimmer), Turn off
Switch - dimmer, Kökslampa (mot diskbänk) (Fibaro Dimmer), Turn off

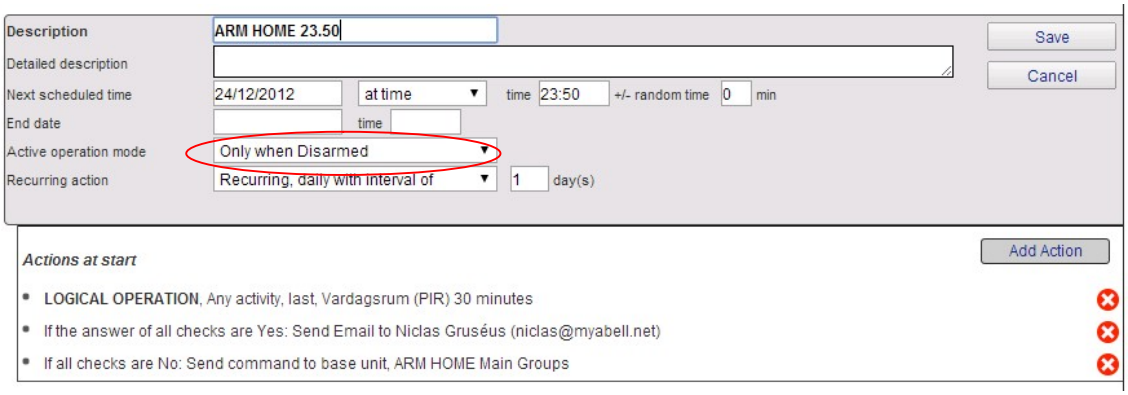
3.2 Automatic ARM HOME at night

This Action Set is good to help you really use the alarm and let it work for you.

At 23.50 this Action check if there has been any activity in the living room (“Vardagsrum”) the last 30 minutes when the system is Disarmed.

If there has been activity, it sends a mail to Niclas as a reminder that the system has to be armed manually.

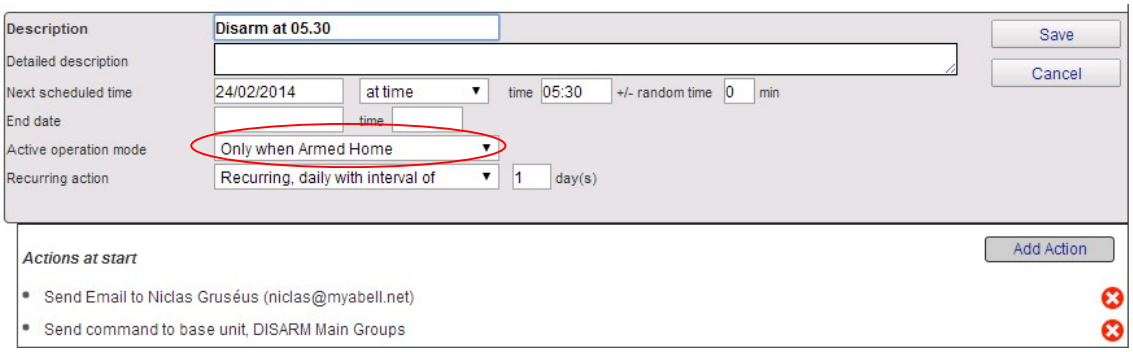
If there hasn’t been any activity, then it sends a command to the base unit to change it to ARMED HOME mode.



3.3 Automatic DISARM in morning (from ARM HOME)

This is very useful to avoid false alarm when you are tired and getting the newspaper in the morning or leave to work early and might be so tired that you forget to disarm the system.

This Timer Trigger Action Set disarms the system at 05.30 if it is in ARMED HOME mode.

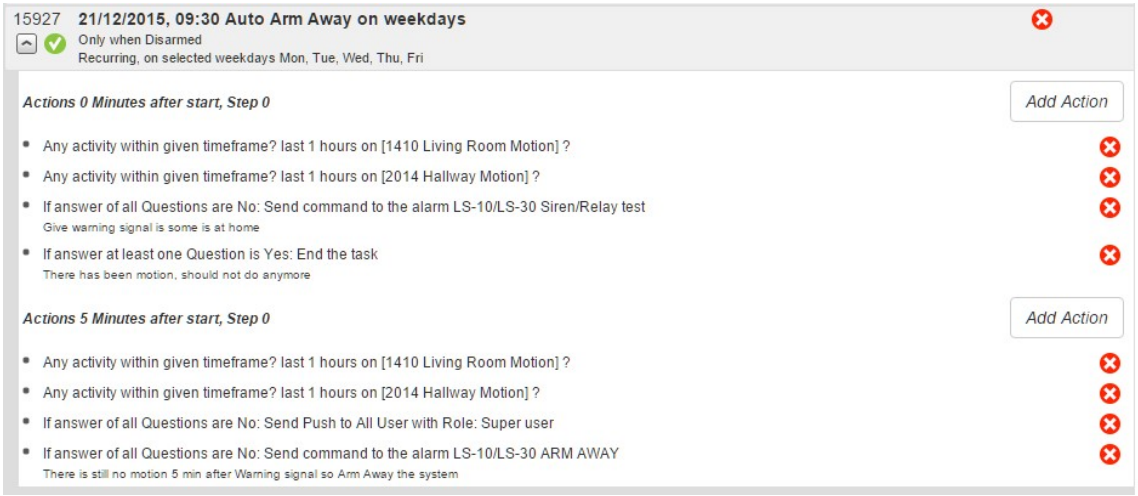


3.4 Auto Arm on weekdays with check, warning and notification

This is an example that auto arms the system if no one is at home during the morning on weekdays. It includes checks and a warning signal to ensure that it only arms the system when no one is at home.

This Timer based Action Set runs every weekday at 9.30 when system is Disarmed.
First it checks two Motion Detectors if there has been any motion last 60 minutes.
If there hasn't been any motion, let the Siren make a short beep as a warning signal, otherwise Exit this Action Set

After 5 minutes it makes the same motion detection check.
If no motion is detected this time either (after the Warning signal) then it Arms the system and sends a Push notification to all SuperUsers.

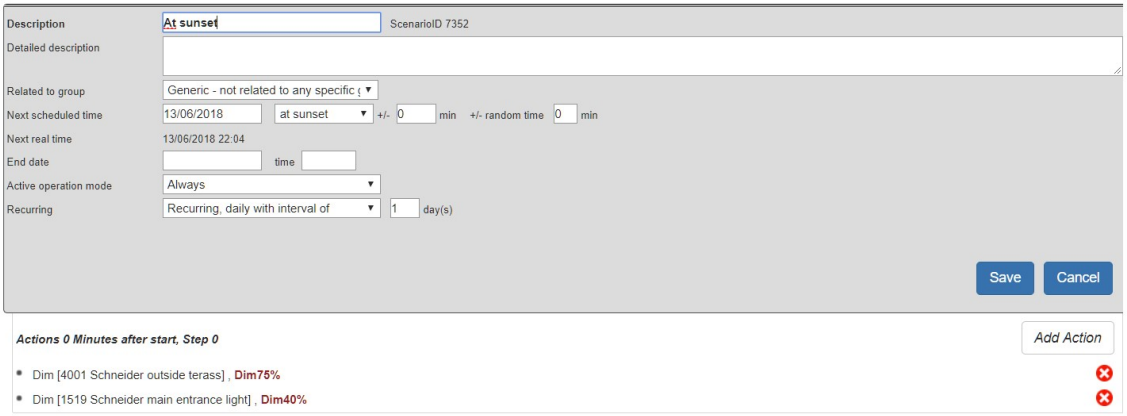


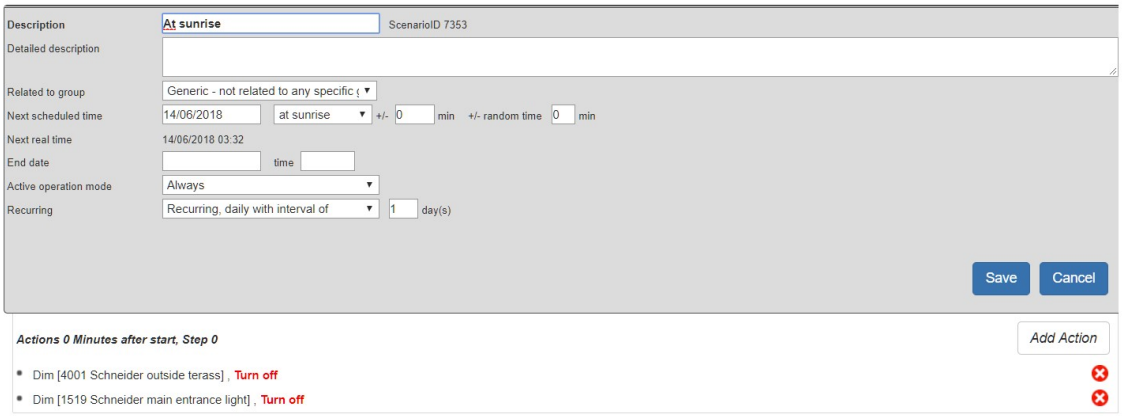
3.5 *Turn on / off light based on sun rise and sun set*

It is easy to use Timer Triggered Action Sets to turn on lights at sunset and turn off at sunrise.

Two Action Sets are needed, one for sunrise and one for sunset.

Below is an example which turn on/dim outdoor lights at sunset and turn them off at sunset.



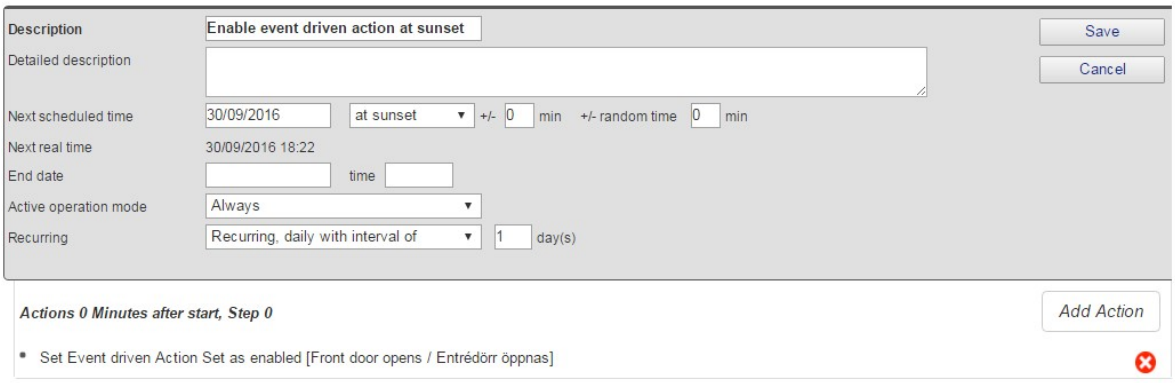


3.6 Event Triggered Actions that is “Enabled” only when it is dark

It is possible to define start and stop time for Action Sets but it is not possible to use Sun set or Sun rise as start stop time. This example show how this can be achieved anyway.

Add two Timer Triggered Action Sets.

- One as below that Enables those Event Triggered Action Sets that you select.
- Then add one more that Disables the same Event Triggered Action Sets



3.7 Turn on light in the morning if sun is not up and turn off at sunrise

This will turn on a switch (=light) at 5.30 if the sunrise has not occurred.
It will also turn off the switch 20 minutes after the sunrise.

The turn off will be done regardless if the switch (=light) was turned on or not. If the sunrise is 05.00 then it will turn of the switch at 05.20 and there will be no turn on which means there is no need to turn on the light and it will not be turned on.

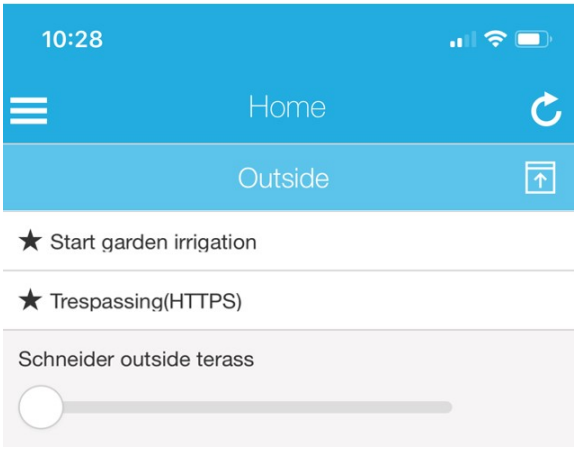
4 Examples, Scenario Actions Sets

4.1 Add a button in the App that starts garden irrigation in a separate system using a http call with JSON content

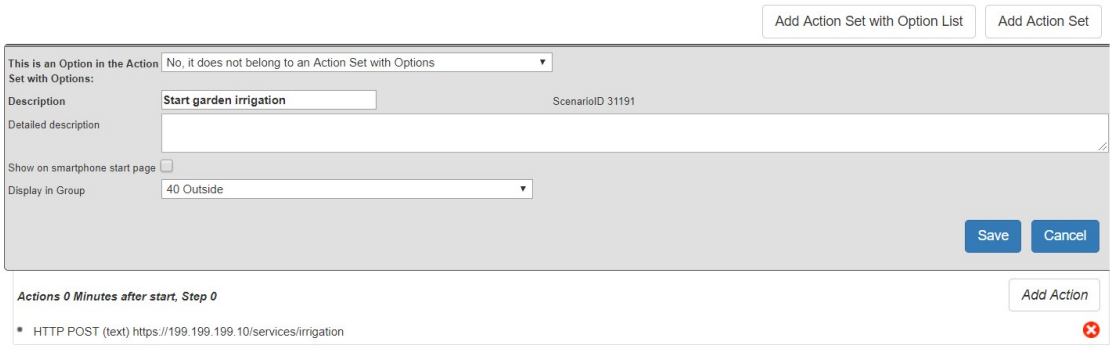
In this example there is a irrigation system which has a web/https access that can be used to start irrigation. By adding a Scenario Action Set and select “Display in Group” the scenario can be started in the app.

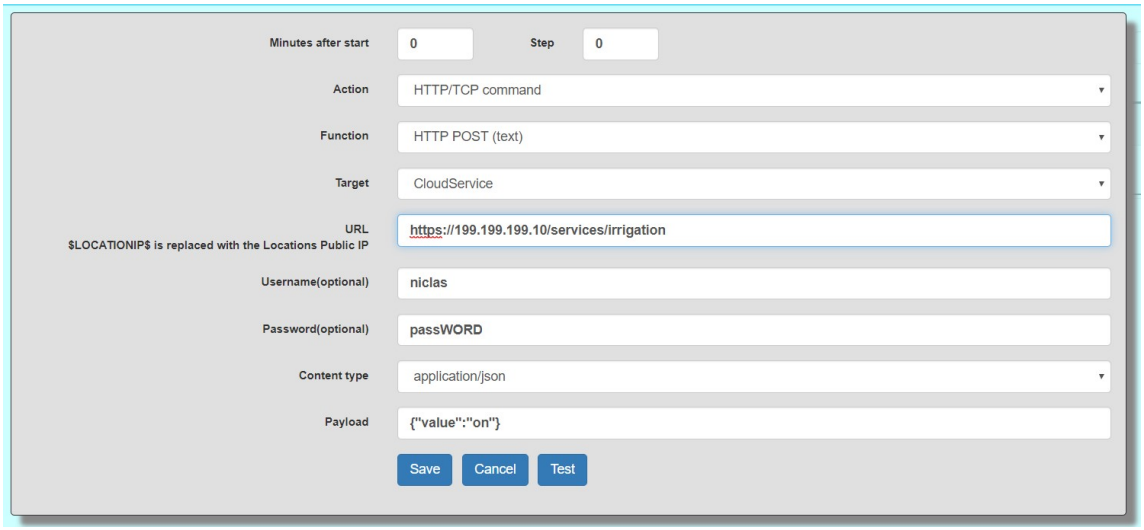
The same http call can also be used in Event triggered and Timer triggered actions set. A recommendation if a function should be possible to start both on Timer and manual is to create a Scenario Action Set (which can be started manually) and a Timer Action Set which call the Scenario (instead of adding the information on two places)

This is how it looks in the App. The Action Set is started by pressing the “Start garden irrigation” row.



And this is how it is set up in the Scenario Action Sets





4.2 Trigger an alarm from the App

An alarm can manually be triggered from a Scenario Action Set. In this example it will trigger an Panic alarm but it can also trigger a Burglar, Fire alarm etc.

This function uses a wired input on the back of the Alarm box to simulate that an alarm sensor triggers an alarm.

To make it work, these steps needs to be done

1) Add a wired sensor on Sensor In
2) Configure the Sensor In
3) Add a Scenario
4) Test from the App

1) Adding a wired sensor on Sensor In

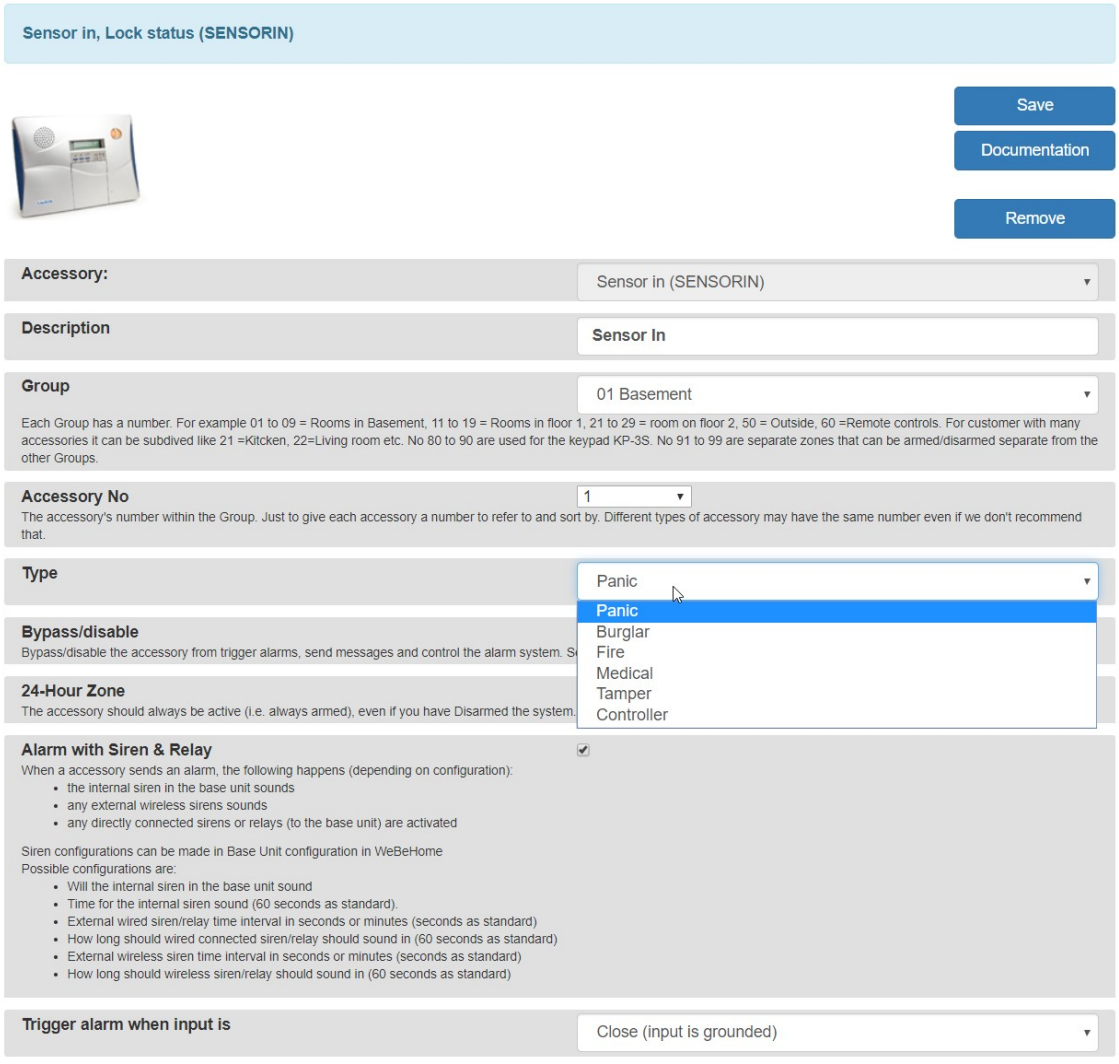
An open/close action on Sensor In will add a device for it in WeBeHome. Take a small wire and put it between GND on SensorIn on connector at the back of the Alarm box and the remove it. That should trigger an open/close even which should create the device.

2) Configure the Sensor In

Look in the accessory list for Sensor In. It will have a name of "…" and be on the top of the list somewhere.

Click on the cogwheel to configure it.

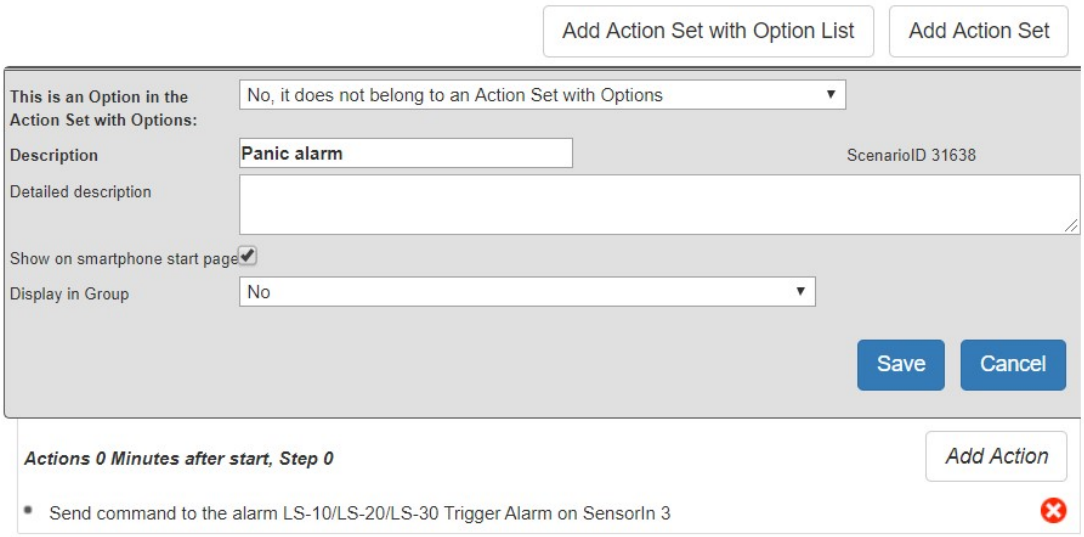
Select which "Type" of alarm it should trigger. For example Burglar alarm Panic alarm etc.
Also check so it triggers the Alarm with Siren & Relay if that is what you want.



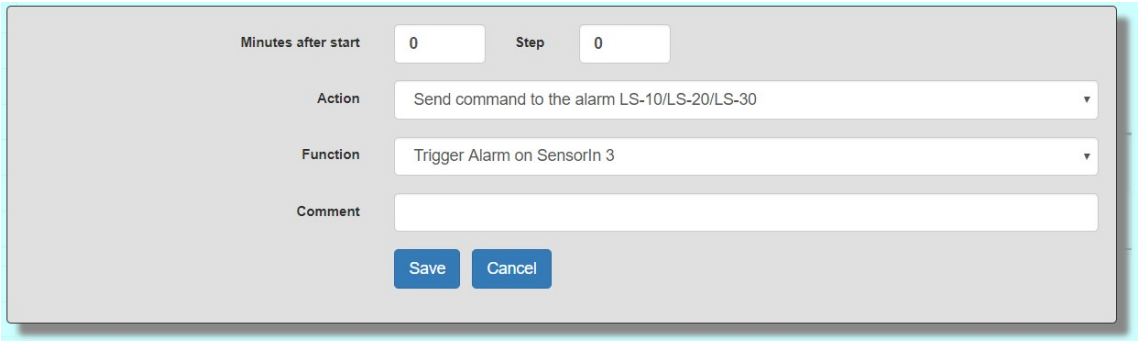
3) Add a Scenario

Select Scenario Action Sets page and add an Action Set.

Select “Show on smartphone start page” to make it show on the apps start page.

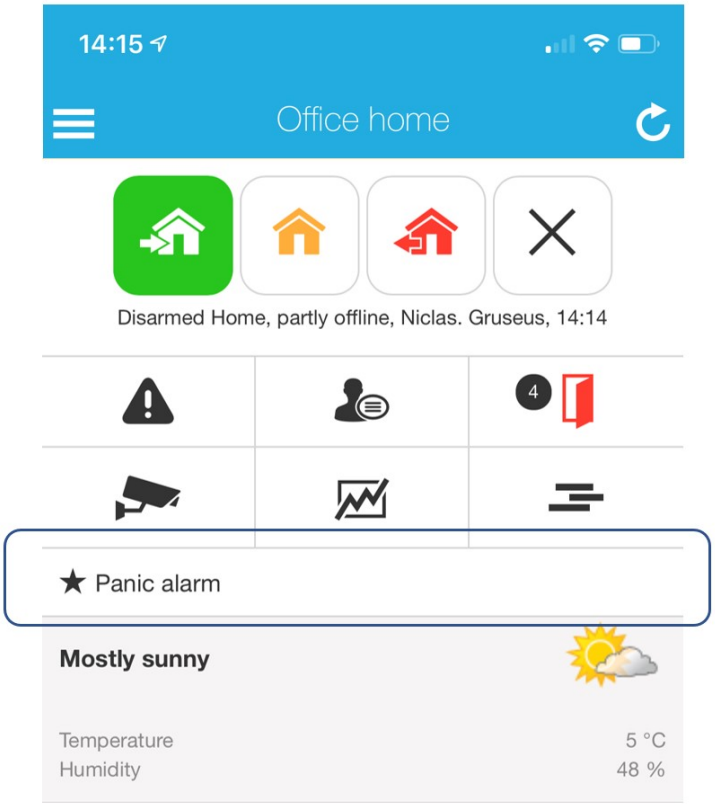


Then add an Action “Send command to alarm LS-10/LS-20/LS-30” and the function “Trigger Alarm on SensorIn 3”



4) Test from the App

Open the app and just below the short cuts the “Panic alarm” scenario should be shown. Press it to start the scenario which in our case should trigger a Panic alarm.



Click on this row to start the Scenario