

HHH - Family presence and absence triggers

Here is how I log my family members and auto arm the alarm when all leave home or disarm if someone comes home etc. I think this is a good example of how many possibilities the Zipato system offers without the need of writing any code. I do not believe that many of the other systems offer similar possibilities.

WHY? WHAT DOES THIS OFFER?

- With this setup we don't actually need a keypad for the alarm. At least we normally don't need to use it.
- Also the alarm always auto arm itself (unless we choose to disable the auto function)
- The alarm disarm automatically when we come home.
- We get a personal welcoming message from our friendly home. 😊
- Me and my wife get notifications when the children comes home. (but offcourse NOT if we are also home)

WARNING!

This is nothing I recommend for you!

I was asked to share how I did this so this is the reason for sharing.

It started with a crazy idea and I wanted to see if I could do it, and now it works perfect for us.

Don't spend hours and hours in front of your computer! Take breaks! Get some fresh air!

SYSTEM?

I am using a Zipabox 1 without a PRO license, an IFTTT account and a TP-Link Wi-Fi router Archer C3150. A virtual alarm and many virtual devices.

THIS GUIDE INCLUDES:

- VIRTUAL SENSORS. I use them to show who is home or not.
- VIRTUAL SWITCH. A simple switch to enable/disable the auto arm function.
- VIRTUAL METERS. I use these to log how long time we are not home. I also use them instead of wait blocks in the automation.
- ABSENCE. As a second part of making sure the house is empty I detect absence. The opposite of presence.
- CONNECTIONS. How I connect with my Wi-Fi router and IFTTT.
- AUTOMATION. The rules.

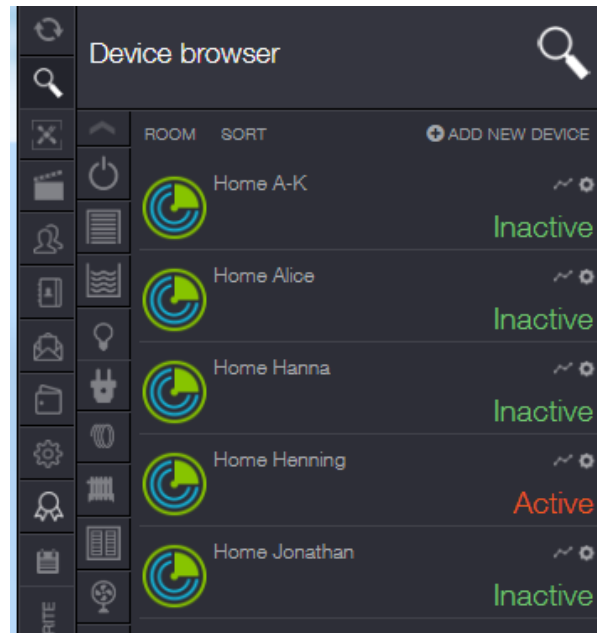
HHH - Family presence and absence triggers

VIRTUAL SENSORS

First I created one VIRTUAL SENSOR for each of us 5 family members. After creation I changed the sensor type to PERIMETER SENSOR.

I named all the sensors with our names but with the word "HOME" before each name to have them listed together in the long list of virtual devices in alphabetic order. (This is a general tip for naming devices)

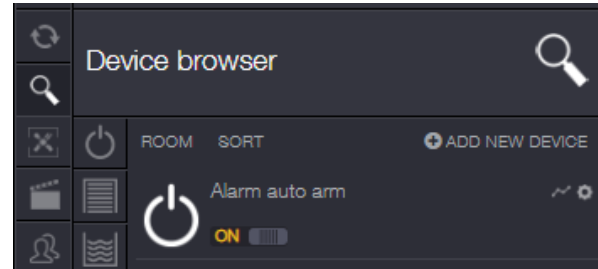
These five sensors will be detecting our mobile devices. So if my smart phone is home I would be displayed as ACTIVE as you can see in this screenshot. More about this in a minute....



HHH - Family presence and absence triggers

VIRTUAL SWITCH

I also created a virtual switch named LARM AUTO ARM to be able to turn off this function some days when we might not want to use it.



HHH - Family presence and absence triggers

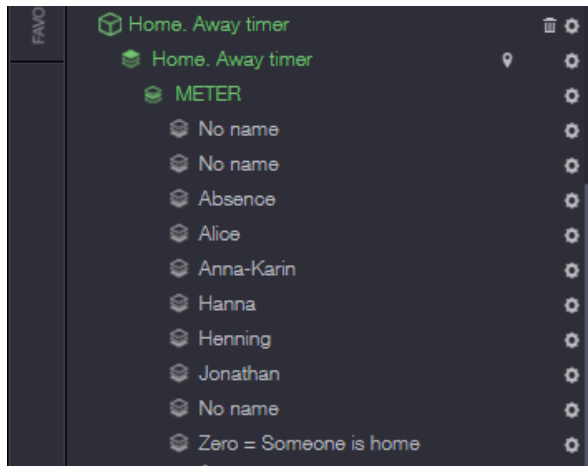
VIRTUAL METER

I created a virtual meter named Home Away Meter. A virtual meter is including up to 16 channels with different values.

My meter includes these channels:

- Absence. This channel has a value that increase by 1 every 10 minutes. Both presence sensors set it back to 0 at presence detection.
- Henning. This channel has a value that increase by 1 every 30 minutes when I am not home. When my virtual sensor is set to "ACTIVE" it sets this value back to 0. (Same for the channels for the other family members)
- Zero = Someone is home. This channel has a value that is calculated from the other values and simply showing 0 if any one of us is home.

Screenshots from both device manager and device browser:



HHH - Family presence and absence triggers

ABSENCE

As a second part of detecting if no one is home I also make sure there is no presence in the house.

Otherwise the system could arm the alarm if we all turn of our mobile phones. Or if a guest is alone in the house.

So I need to explain how I detect ABSENCE.

Absence is in theory the opposite at presence so we normally use a presence sensor and a time delay.

I have two main presence sensor detecting the main areas of the house.

These sensors are normally used for turning on the lights in the rooms where they are located.

But they can also be used to detect absence. Why only use a sensor for one job when they can do several jobs?

So when both of them have not detected any movement for 30minutes I decided that this is what I call ABSENCE.

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TIP

It would also be easy to use any other functions to also help to detect absence. Some examples:

-Any door window sensor.

-A light switch in a room. Maybe a bedroom where there is no presence sensor?

-A power consumption meter maybe?

All of these (and many more) could also reset the absence counter (virtual meter) and indicate that the house is not totally empty.

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HHH - Family presence and absence triggers

CONNECTIONS

The virtual sensors are controlled by IFTTT. So as soon as my smartphone leave home there is an IFTTT trigger go into my Zipato system and set the virtual sensor to INACTIVE.

When I return home again there is another IFTTT trigger that does the opposite. Setting my virtual sensor to ACTIVE again.

So totally for us 5 family members we have 10 different triggers in IFTTT.

Now there is many different services that can keep track of your phone. Most of them use GEO FENCING functionality.

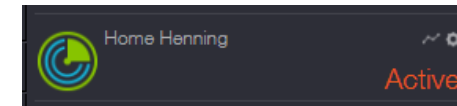
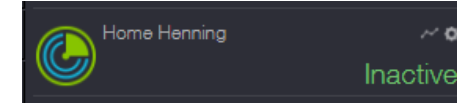
This is sometimes a bit inaccurate and sometimes consuming to much battery.

I am lucky to have a TP-link Wi-Fi router with the possibility to communicate with IFTTT.

This is much more accurate and we always have the Wi-Fi enabled anyway so no extra power consumption.

More info about how to communicate between IFTTT and Zipato can be found here:

<https://zipato.infoserv.wiki/uncategorized/how-to-use-ifttt-with-zipato/>



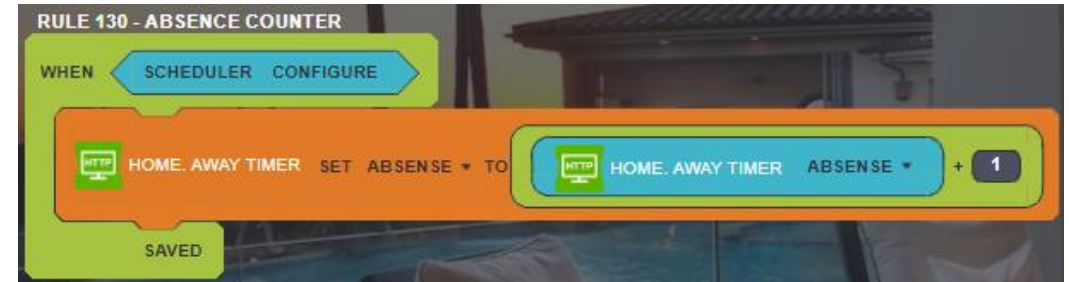
HHH - Family presence and absence triggers

AUTOMATION

Now I will show you the rules. Finally! Are you still awake? 😊

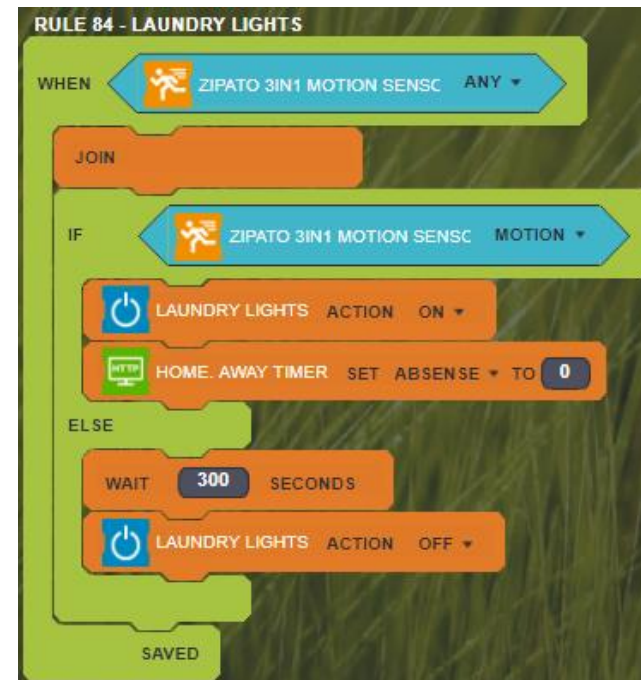
RULE 130 - Absence counter

This triggers every 10minutes and increase the value of the virtual meter HOME AWAY TIMER and channel ABSENCE by 1.



RULE 84 - Laundry lights

This rule runs the lights but also reset the absence counter back to 0 (zero) every time it detects motion. (I have two of these rules but in theory it could be ever more of them)



HHH - Family presence and

RULE 103 – Home Away Timer

This rule triggers every 30min and increase those individual virtual meters IF that person is not home.
The rule also calculates the value for the ZERO = SOMEONE IS HOME meter.



HHH - Family presence and absence triggers

RULE 1 – Alarm Auto Arm

This rule triggers every 10min when the value of the meter Absence is updated by rule #130.

-If someone is home OR if auto arm is off it will stop.

-When the absence timer is 2 (20min) it will send a message: -The alarm will auto arm in 10min.

-When the absence timer reach 3 (30min) it will auto arm and send a message: -The alarm is armed!



HHH - Family presence and absence triggers

RULE 130 – Home/Away Henning

This rule triggers every time my virtual sensor changes status between Active (home) and Inactive (away)

-When I leave home the away timer is set to 1. This helps the auto arm rule #1 to work correctly.

-If I am coming home (sensore switch to active) a number of things can happen:

-If I have been away for more than 2hrs two things can happen:

-If the alarm is armed.....I will get a message: -Welcome home! I disarm the alarm for you!....and the alarm is disarmed.

-If the alarm is not armed.....I will get a message: -Welcome home!

-If I been away for less than 2hrs....and the alarm is armed...the alarm will be disarmed and I get a message: -Alarm disarmed.

-Regardless the above options the home away timer is set back to 0 (zero)

Yes. This is “over engineered” but I like it! 😊

(My wife have a copy of this rule)



HHH - Family presence and absence triggers

RULE 129 – Home/Away Jonathan

This rule triggers every time Jonathan's virtual sensor changes status between Active (home) and Inactive (away)

-When Jonathan leaves home the away timer is set to 1. This helps the auto arm rule #1 to work correctly.

-If Jonathan is coming home (sensor switch to active) a number of things can happen:

-If the alarm is armed....it will be disarmed.....and Jonathan will get a message: -Welcome home! I disarmed the alarm for you!

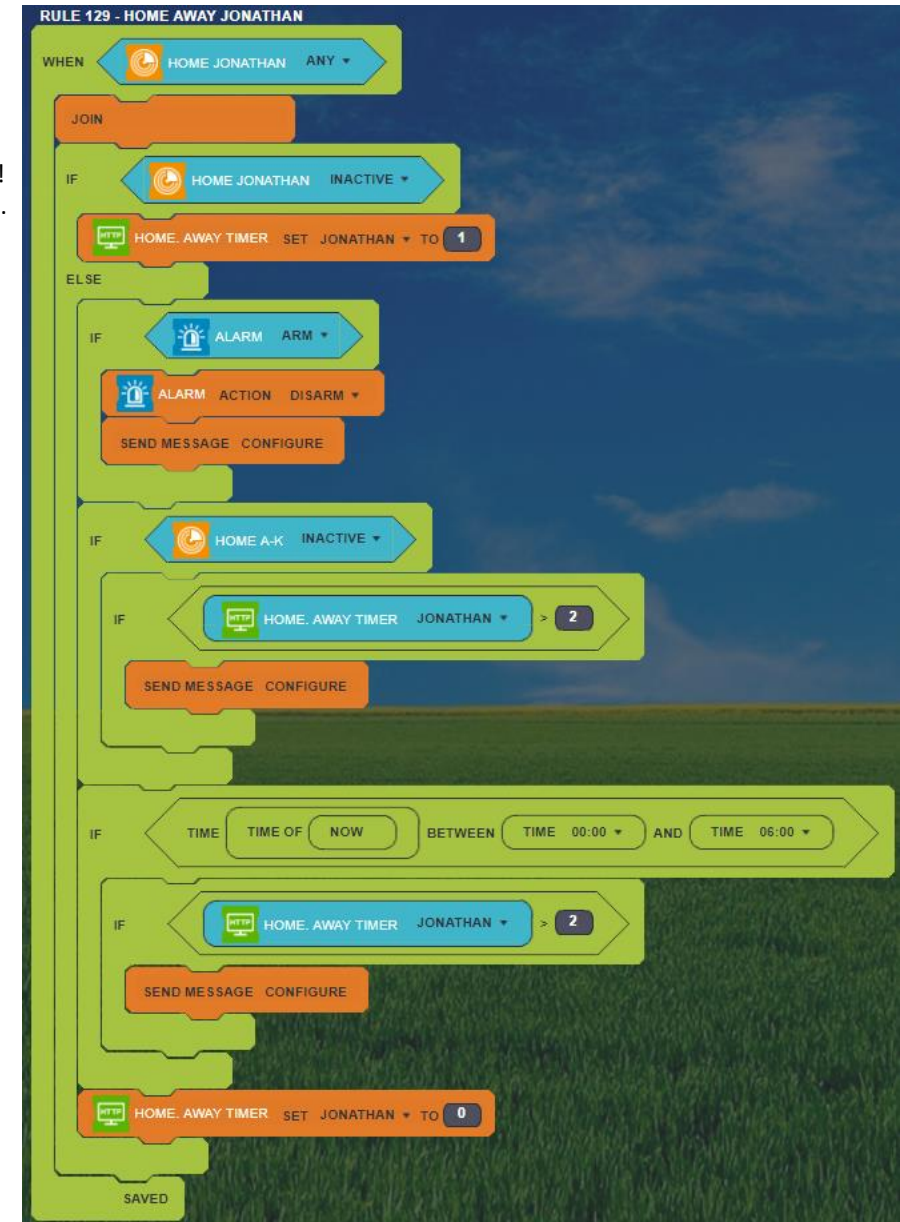
-If Anna-Karin is not home....and Jonathan has been away for more than 2hrs...she will get a message: -Jonathan arrived home.

-If Jonathan arrives very late....and has been away for more than 2hrs us parents will get a message: -Jonathan arrived home.

-Regardless of the above options the home away timer is set back to 0 (zero)

So this automation is typical for the kids.

They don't have to care about the alarm and they know, that we know, when they arrive home.



HHH - Family presence and absence triggers

That was all. Thanks for reading!

Good luck with your home automation project!

// Henning ☺