Heimautomation mit Home Assistant

Eine Plattform, die es schafft einem riesigen und chaotischen Ökosystem einen Sinn und Verstand zu geben.

Sebastian Muszynski

17.07.2017

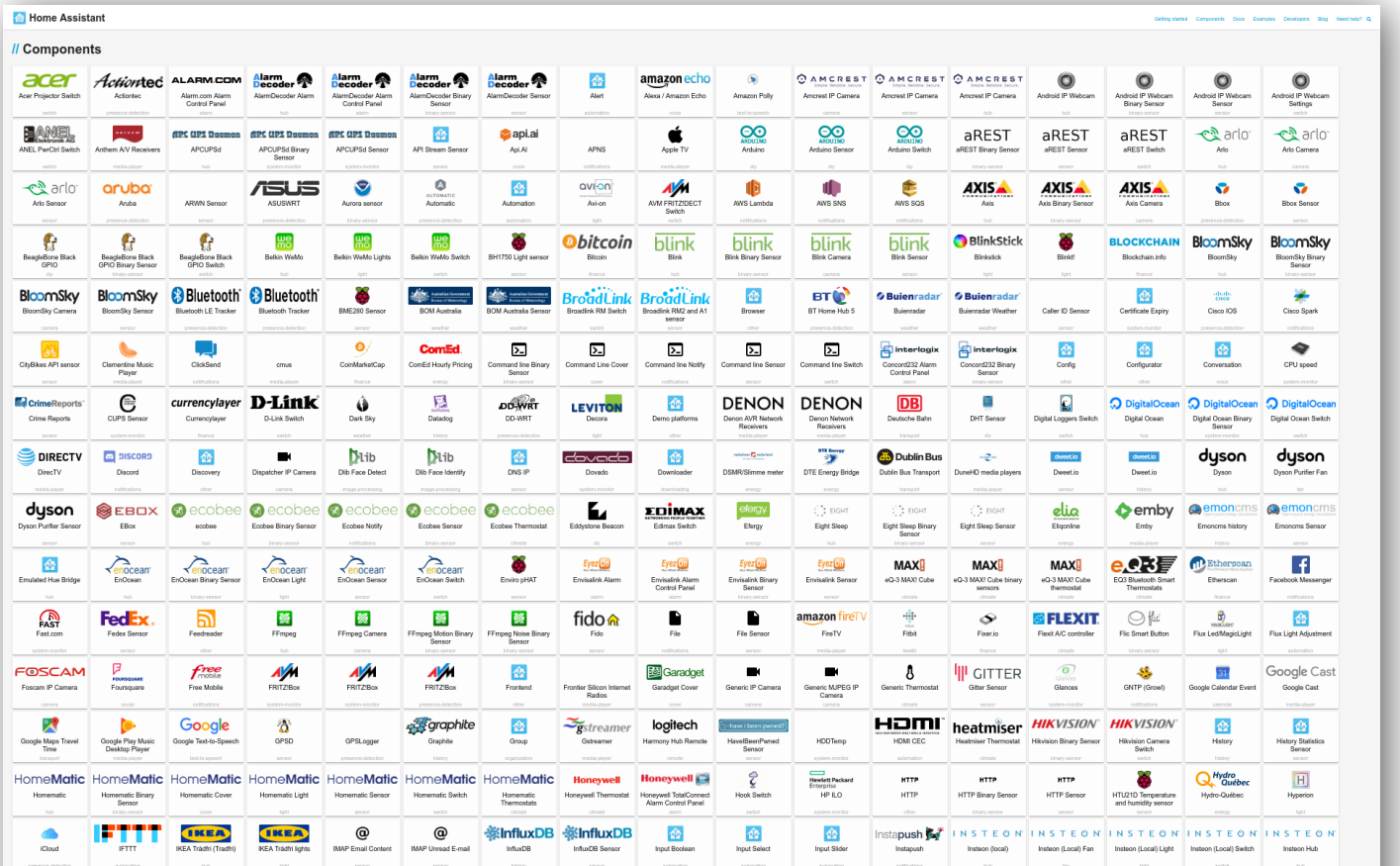
Home Assistant

- Plattform zur Heimautomation
  - → Verfolgung von Gerätezuständen
  - → Steuerung von Geräten
  - → Automatisierung
  - → Mobilgerätefreundliche Web-Oberfläche
  - → Lokale Datenspeicherung
  - → Leichtgewichtig
  - → Durchdacht!

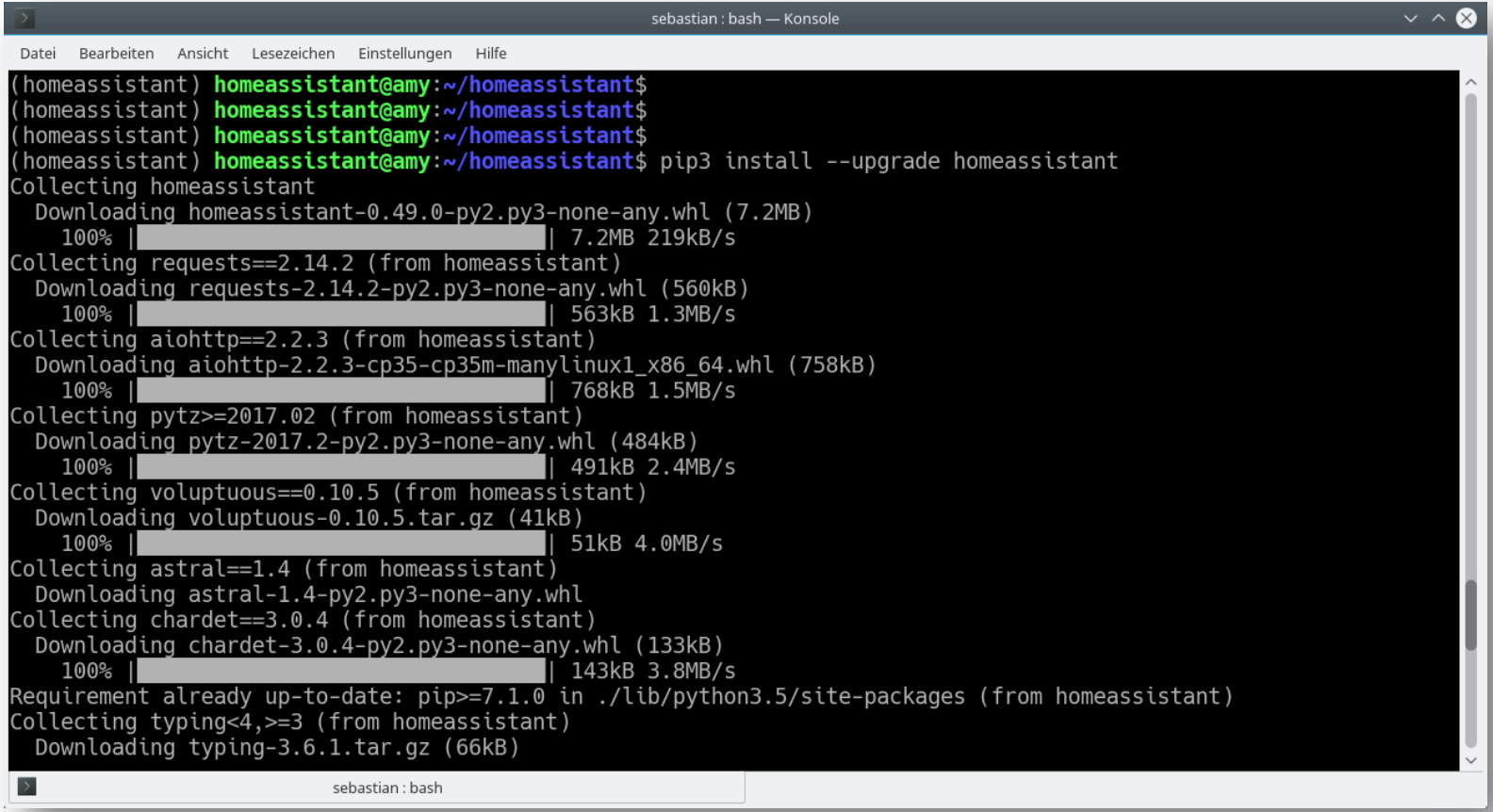
  - → freie Lizenz, leicht zu installieren, erweiterbar

Motivation

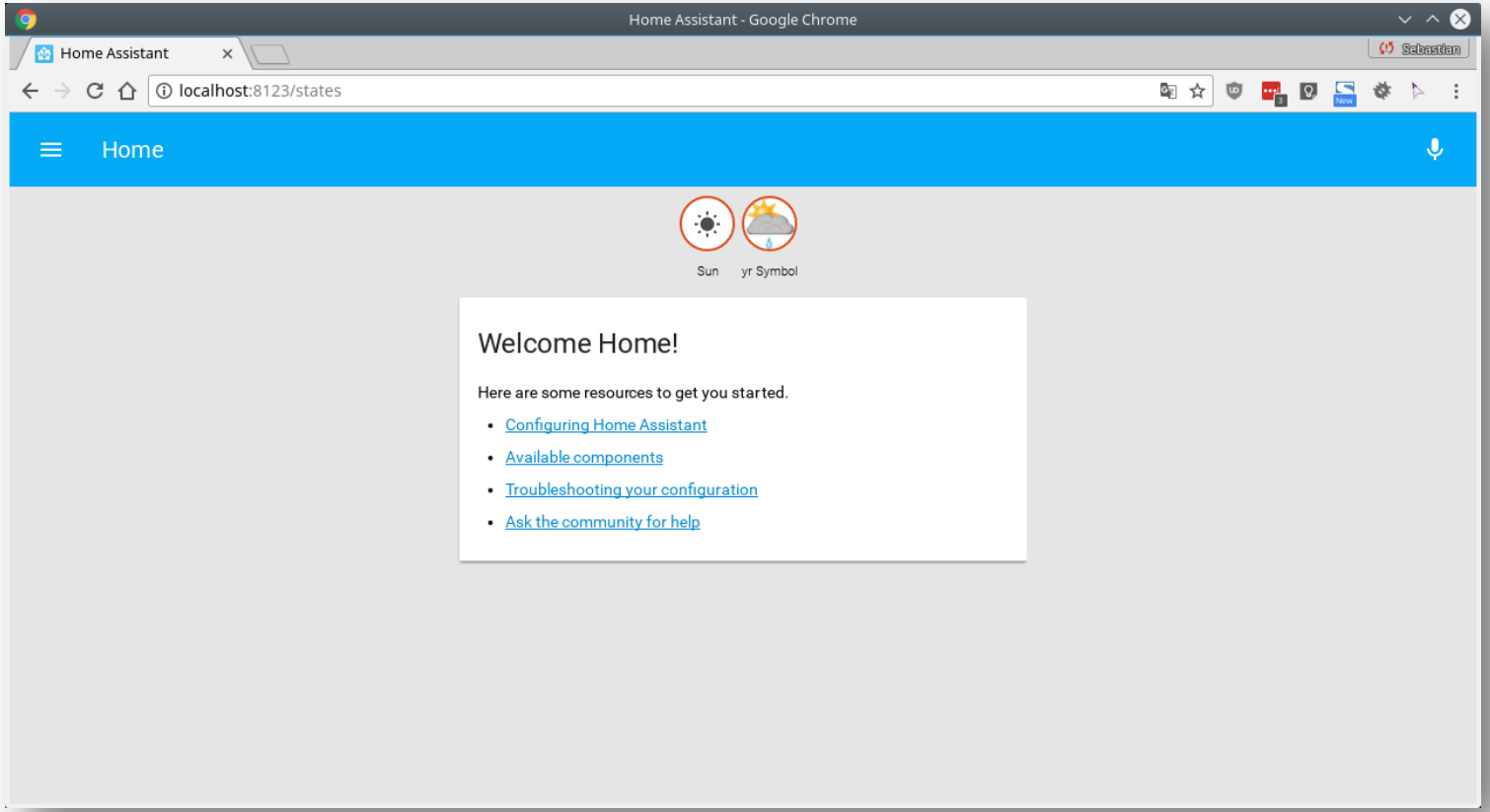
Das Internet der Dinge: Ein riesiges und chaotisches Ökosystem



Installation



Erster Start



Konfiguration

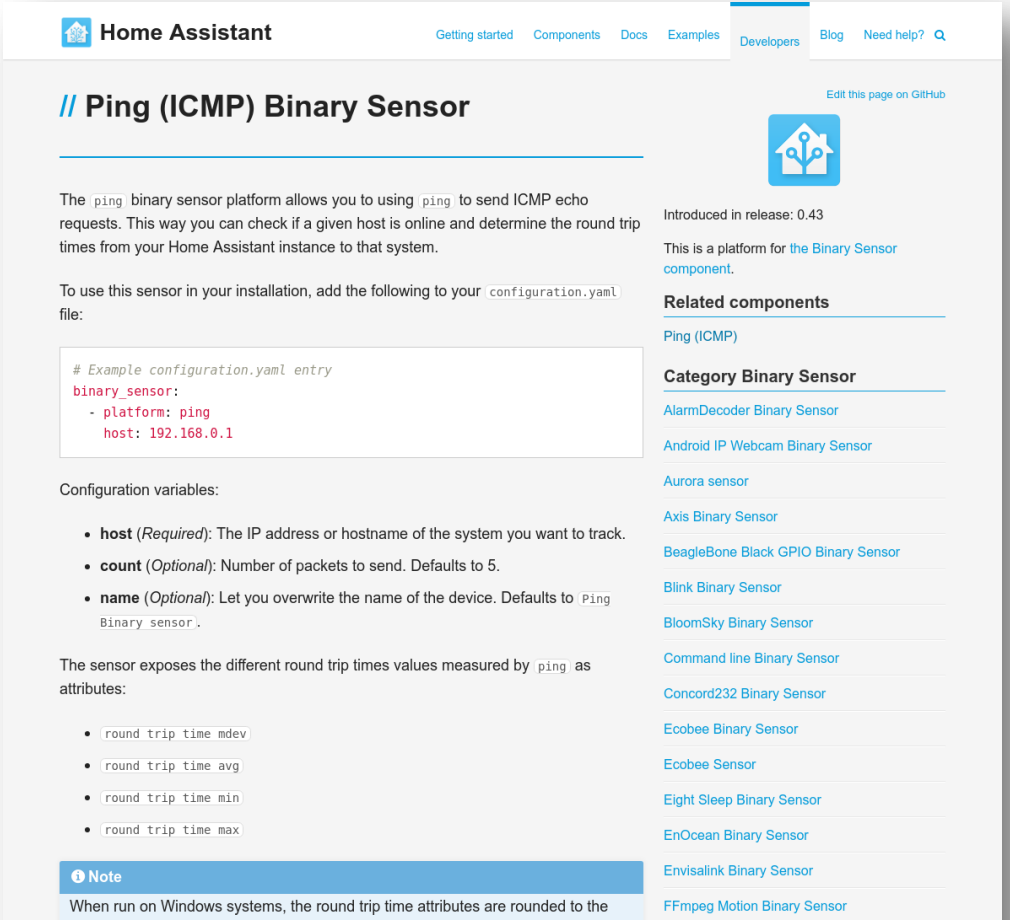
/home/homeassistant/.homeassistant/configuration.yaml • - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

configuration.yaml

```yaml
homeassistant:
  # Name of the location where Home Assistant is running
  name: Home
  # Location required to calculate the time the sun rises and sets
  latitude: 51.2993
  longitude: 9.491
  # Impacts weather/sunrise data (altitude above sea level in meters)
  elevation: 141
  # metric for Metric, imperial for Imperial
  unit_system: metric
  # Pick yours from here: http://en.wikipedia.org/wiki/List_of_tz_database_time_zones
  time_zone: UTC

# Show links to resources in log and frontend
introduction:

# Enables the frontend
frontend:

# Enables configuration UI
config:

http:

updater:
  # Optional, allows Home Assistant developers to focus on popular components.
  # include_used_components: true

# Discover some devices automatically
discovery:

# Allows you to issue voice commands from the frontend in enabled browsers
conversation:
```

Komponenten finden



Home Assistant

Getting started | Components | Docs | Examples | Developers | Blog | Need help?

// Ping (ICMP) Binary Sensor

Edit this page on GitHub

The `ping` binary sensor platform allows you to using `ping` to send ICMP echo requests. This way you can check if a given host is online and determine the round trip times from your Home Assistant instance to that system.

To use this sensor in your installation, add the following to your `configuration.yaml` file:

```
# Example configuration.yaml entry
binary_sensor:
  - platform: ping
    host: 192.168.0.1
```

Configuration variables:

- **host** (*Required*): The IP address or hostname of the system you want to track.
- **count** (*Optional*): Number of packets to send. Defaults to 5.
- **name** (*Optional*): Let you overwrite the name of the device. Defaults to `Ping Binary sensor`.

The sensor exposes the different round trip times values measured by `ping` as attributes:

- `round trip time mdev`
- `round trip time avg`
- `round trip time min`
- `round trip time max`

Note

When run on Windows systems, the round trip time attributes are rounded to the

Introduced in release: 0.43

This is a platform for the Binary Sensor component.

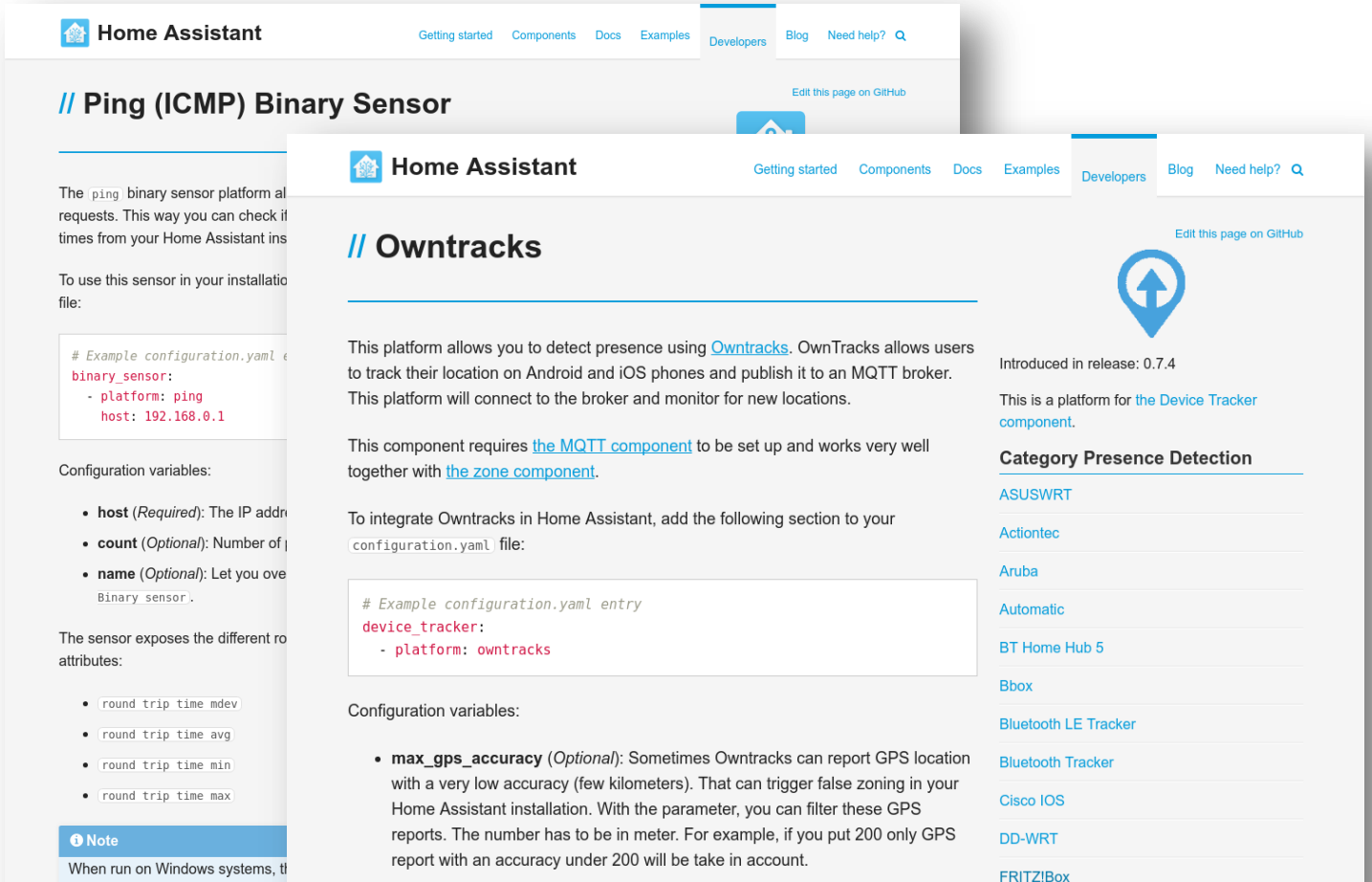
Related components

Ping (ICMP)

Category Binary Sensor

AlarmDecoder Binary Sensor
Android IP Webcam Binary Sensor
Aurora sensor
Axis Binary Sensor
BeagleBone Black GPIO Binary Sensor
Blink Binary Sensor
BloomSky Binary Sensor
Command line Binary Sensor
Concord232 Binary Sensor
Ecobee Binary Sensor
Ecobee Sensor
Eight Sleep Binary Sensor
EnOcean Binary Sensor
Envisalink Binary Sensor
FFmpeg Motion Binary Sensor

Komponenten finden



Home Assistant

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Note

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Home Assistant

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// Owntracks

Edit this page on GitHub

This platform allows you to detect presence using Owntracks. OwnTracks allows users to track their location on Android and iOS phones and publish it to an MQTT broker. This platform will connect to the broker and monitor for new locations.

This component requires the MQTT component to be set up and works very well together with the zone component.

To integrate Owntracks in Home Assistant, add the following section to your `configuration.yaml` file:

```
# Example configuration.yaml entry
device_tracker:
  - platform: owntracks
```

Configuration variables:

- **max_gps_accuracy** (*Optional*): Sometimes Owntracks can report GPS location with a very low accuracy (few kilometers). That can trigger false zoning in your Home Assistant installation. With the parameter, you can filter these GPS reports. The number has to be in meter. For example, if you put 200 only GPS report with an accuracy under 200 will be take in account.

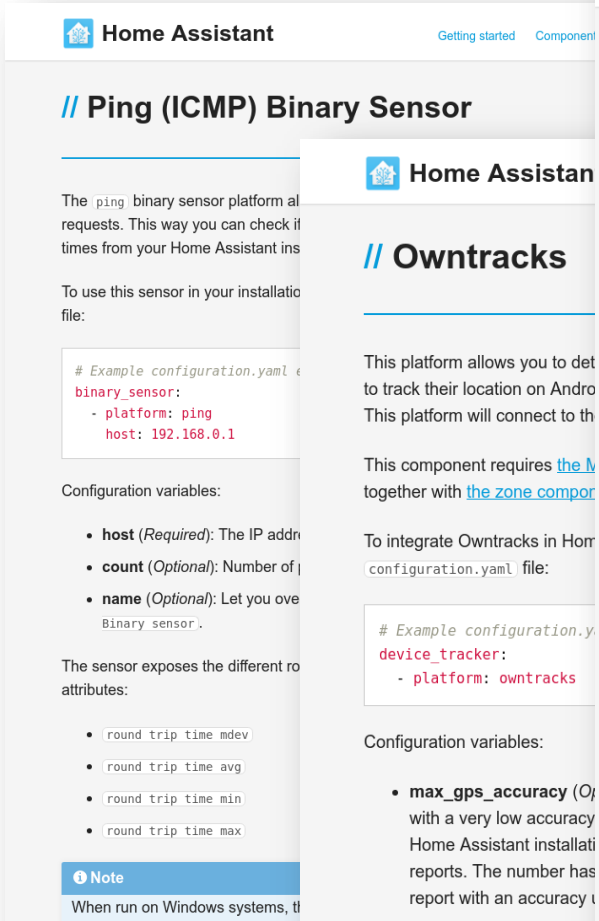
Introduced in release: 0.7.4

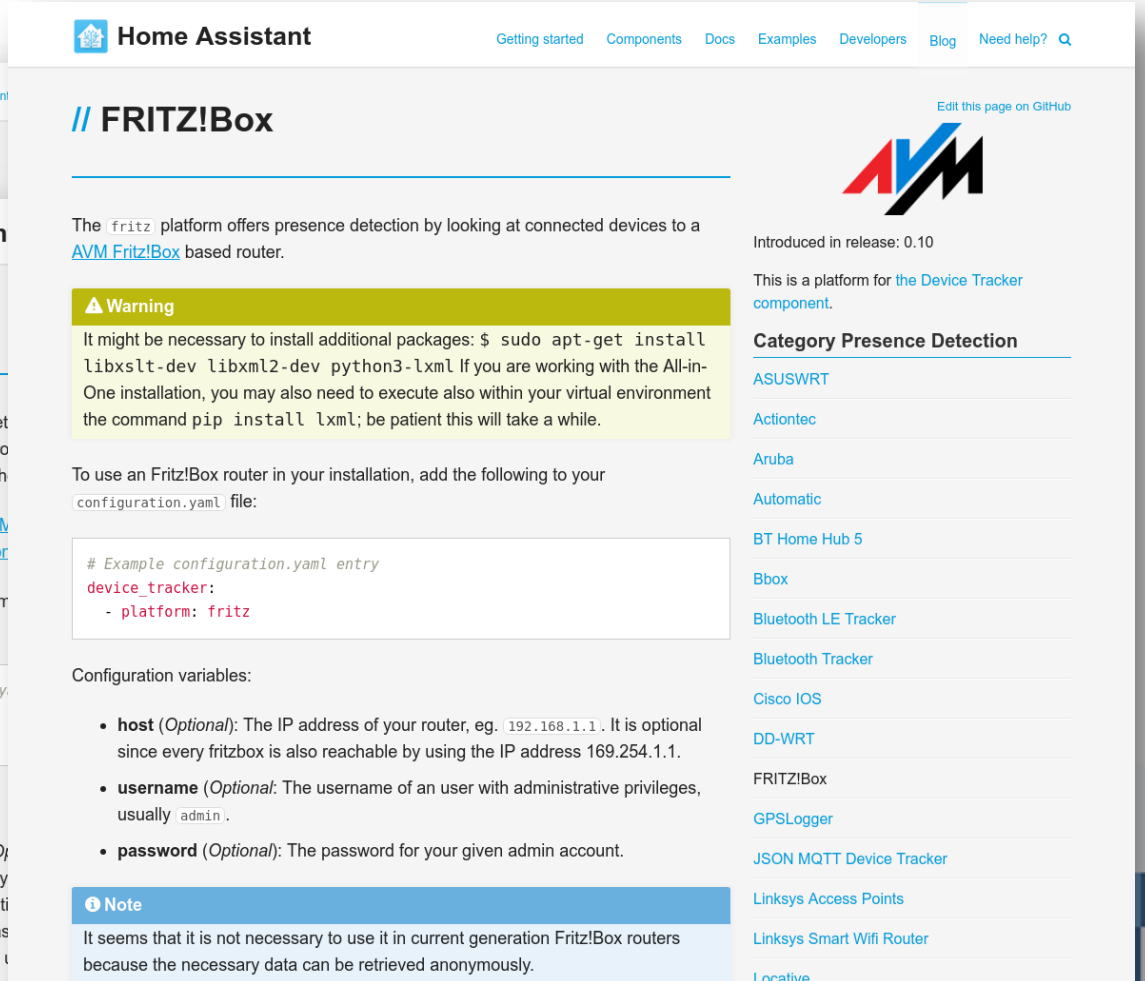
This is a platform for the Device Tracker component.

Category Presence Detection

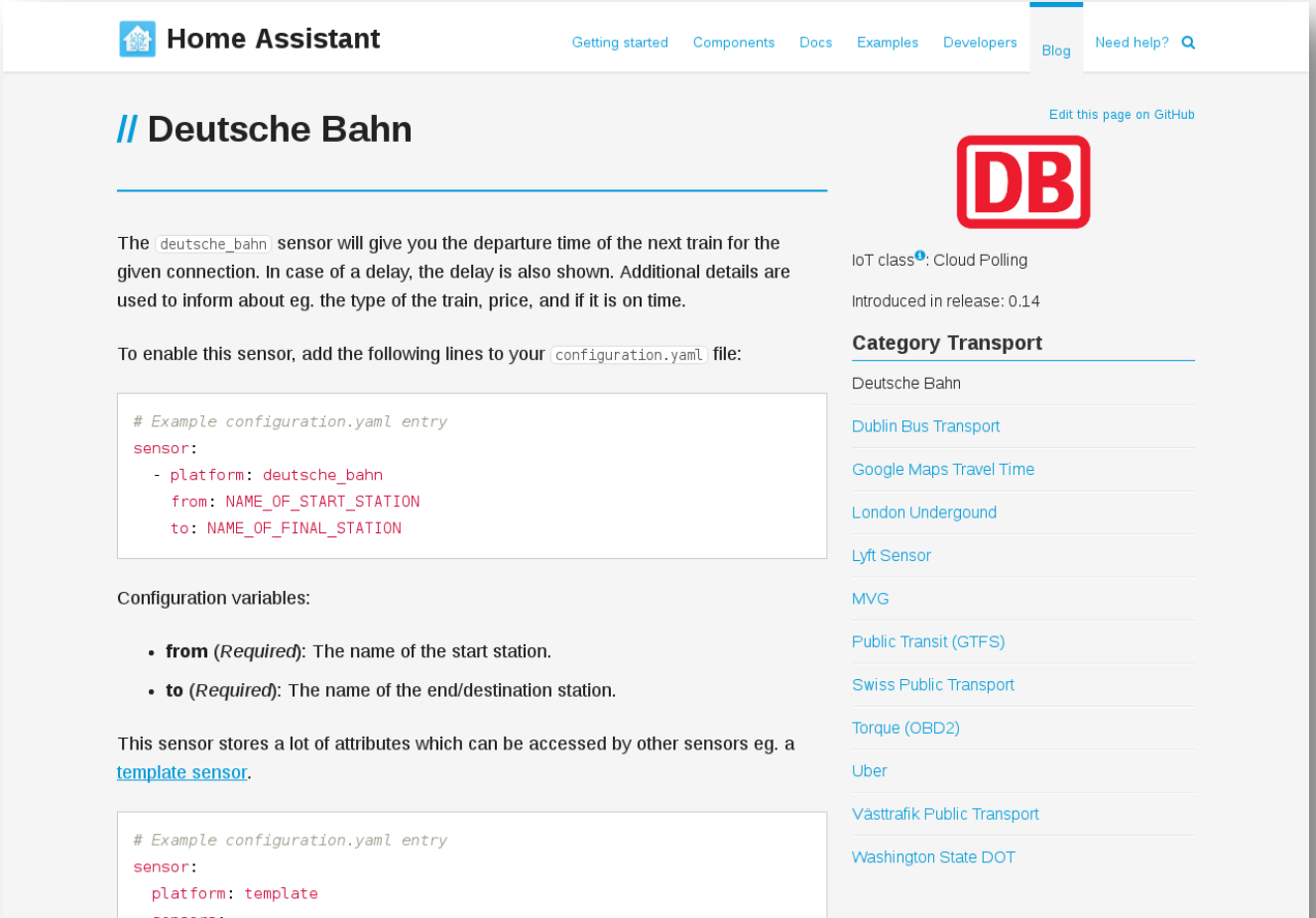
ASUSWRT
Actiontec
Aruba
Automatic
BT Home Hub 5
Bbox
Bluetooth LE Tracker
Bluetooth Tracker
Cisco IOS
DD-WRT
FRITZ!Box

Komponenten finden





Komponenten finden



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// Deutsche Bahn

Edit this page on GitHub

The `deutsche_bahn` sensor will give you the departure time of the next train for the given connection. In case of a delay, the delay is also shown. Additional details are used to inform about eg. the type of the train, price, and if it is on time.

To enable this sensor, add the following lines to your `configuration.yaml` file:

```
# Example configuration.yaml entry
sensor:
  - platform: deutsche_bahn
    from: NAME_OF_START_STATION
    to: NAME_OF_FINAL_STATION
```

Configuration variables:

- **from** (*Required*): The name of the start station.
- **to** (*Required*): The name of the end/destination station.

This sensor stores a lot of attributes which can be accessed by other sensors eg. a template sensor.

```
# Example configuration.yaml entry
sensor:
  platform: template
```

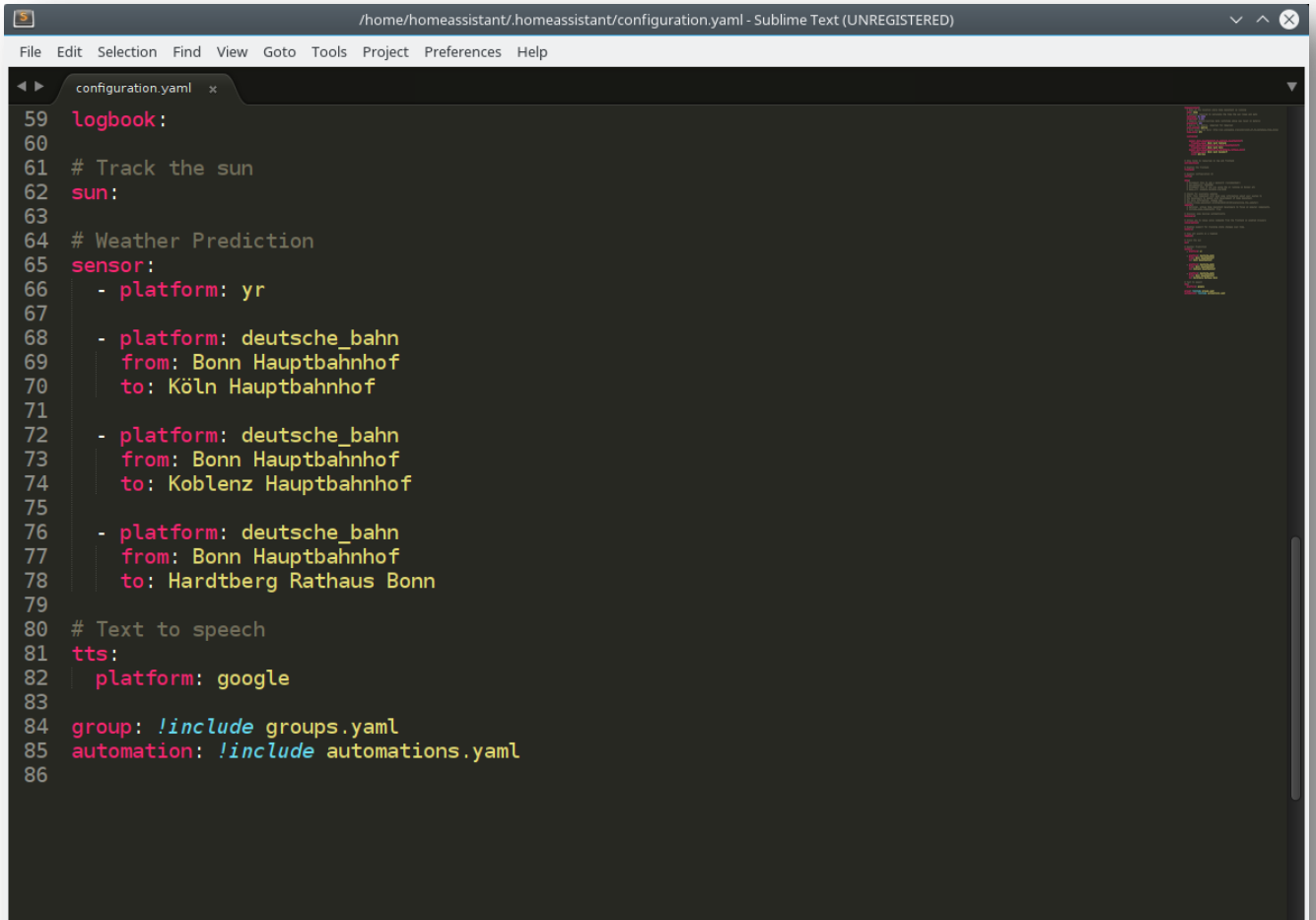
IoT class: Cloud Polling

Introduced in release: 0.14

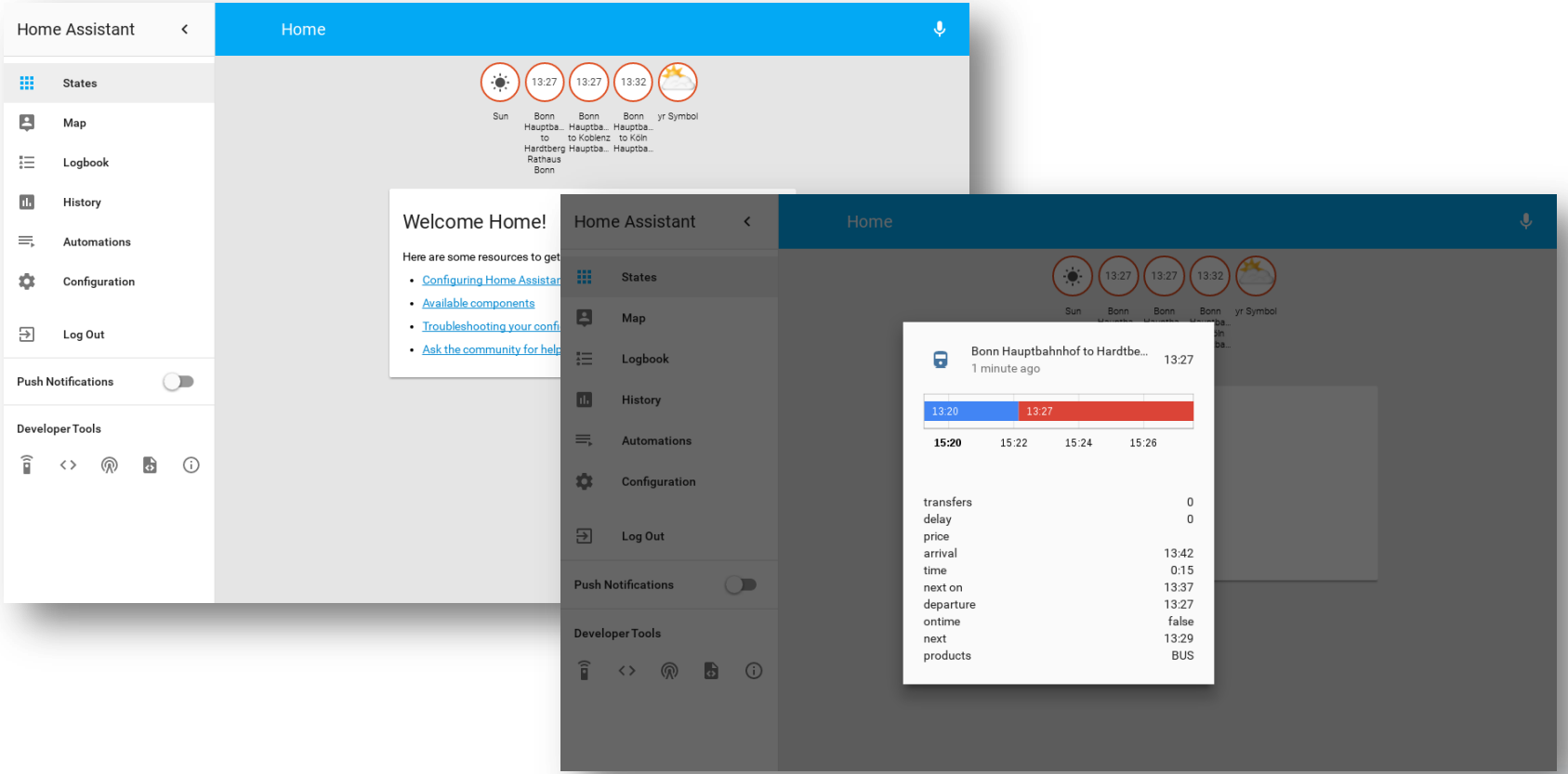
Category Transport

Deutsche Bahn
Dublin Bus Transport
Google Maps Travel Time
London Undergound
Lyft Sensor
MVG
Public Transit (GTFS)
Swiss Public Transport
Torque (OBD2)
Uber
Västtrafik Public Transport
Washington State DOT

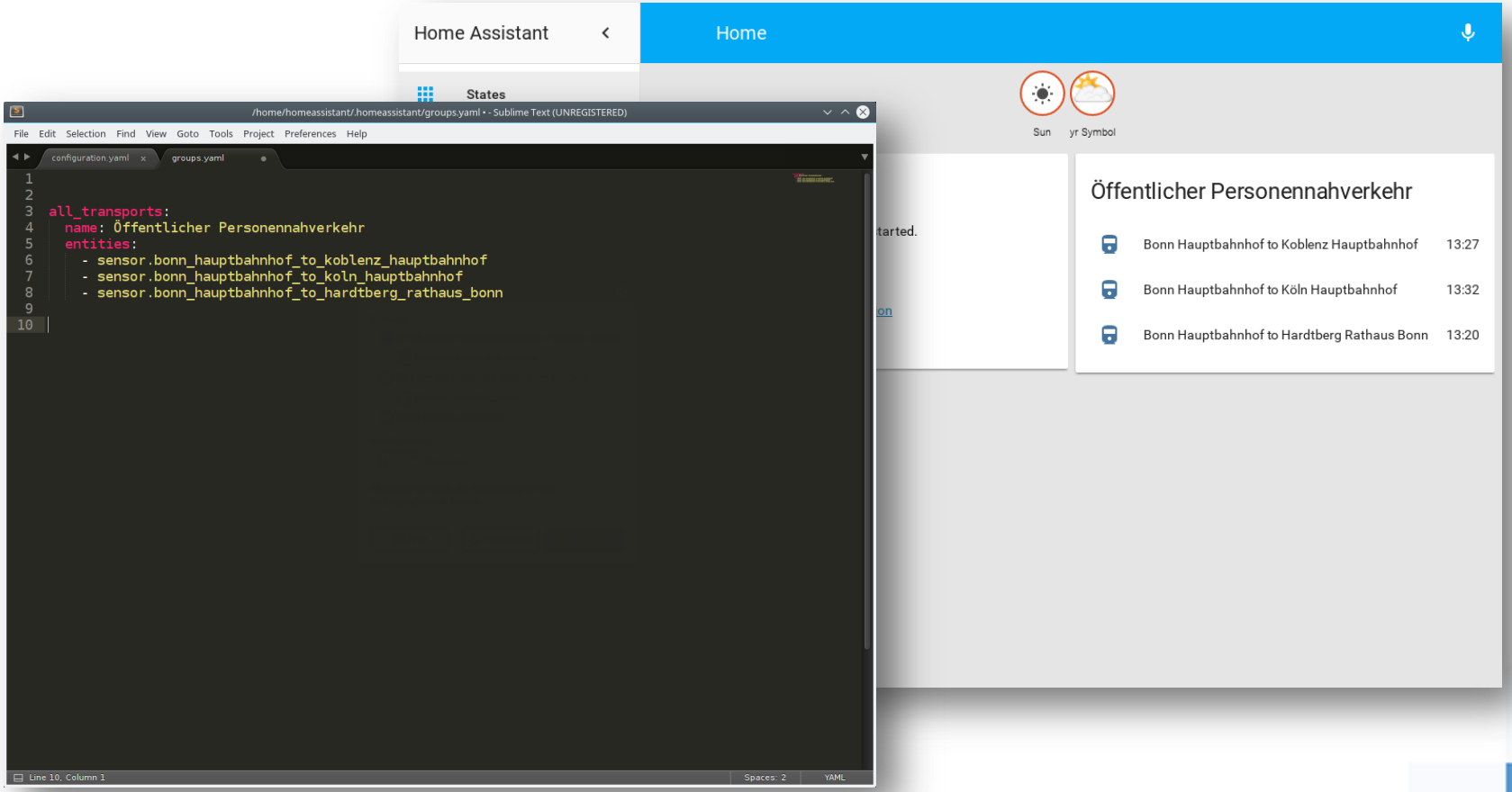
Komponente laden



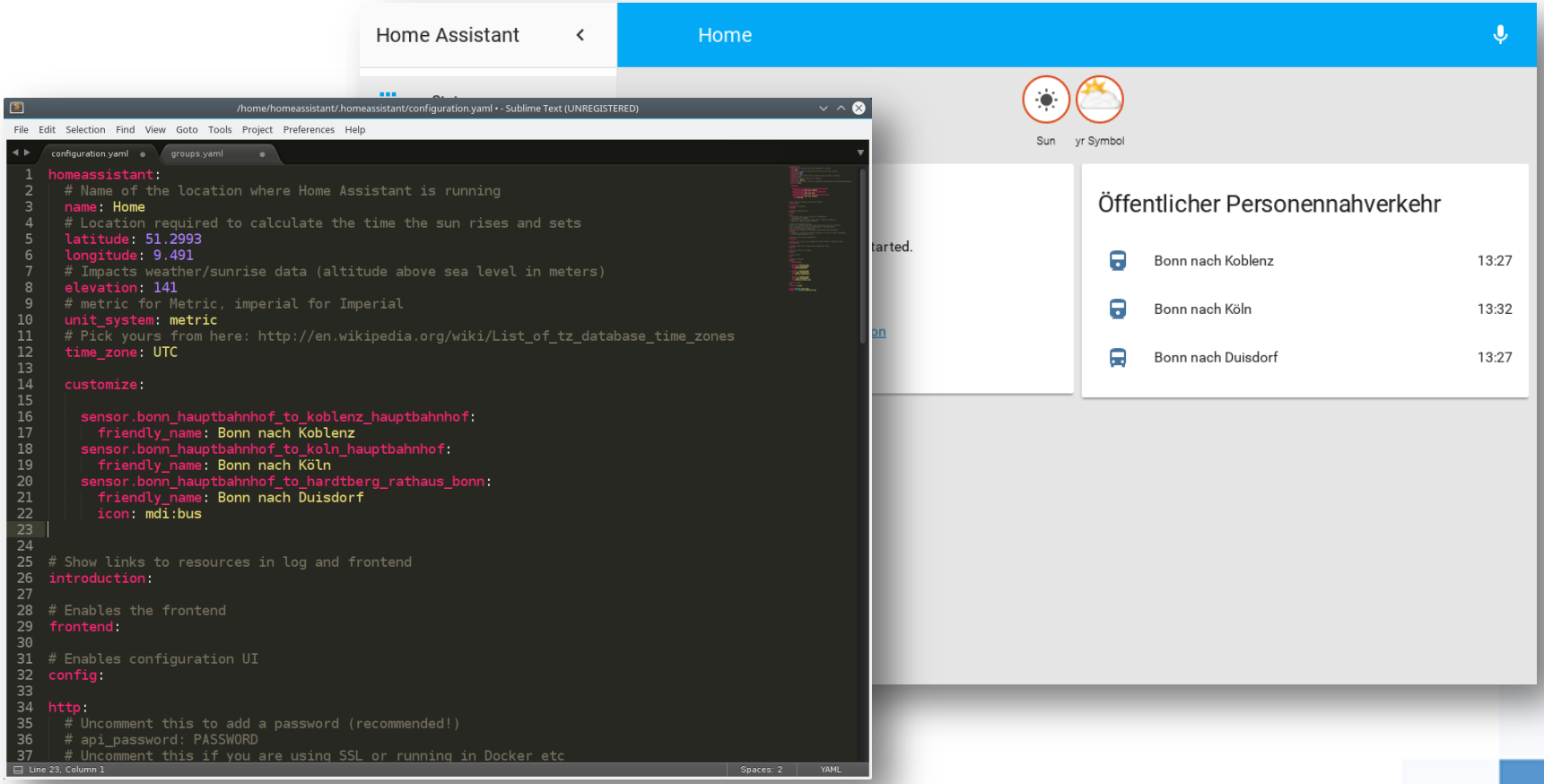
Darstellung in der Web-Oberfläche



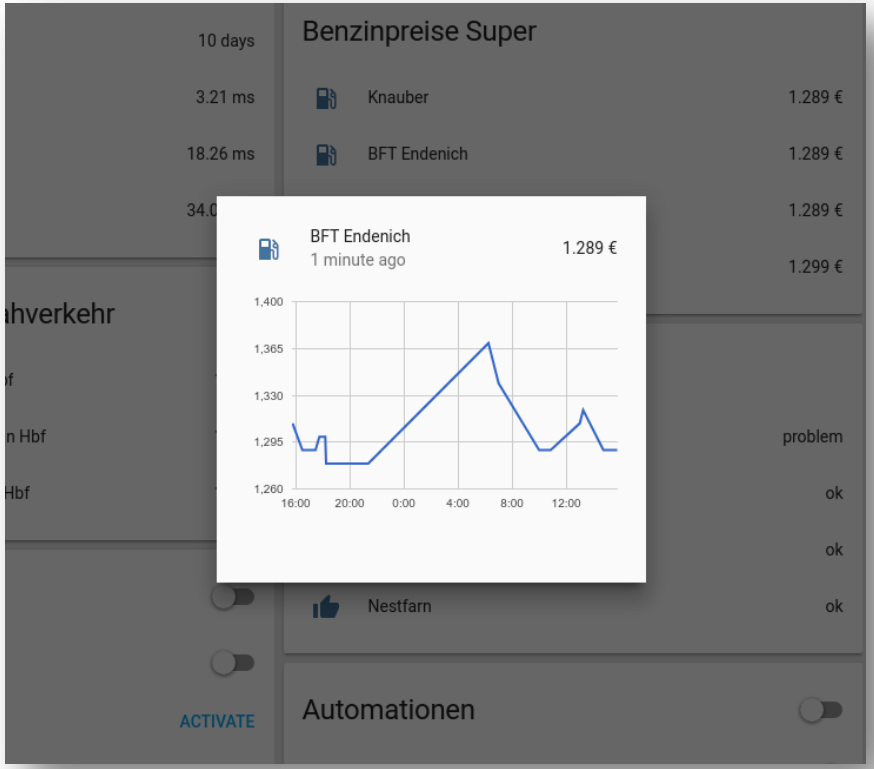
Gruppieren


Home Assistant
States
Home
Sun
yr Symbol
Öffentlicher Personennahverkehr
Bonn Hauptbahnhof to Koblenz Hauptbahnhof 13:27
Bonn Hauptbahnhof to Köln Hauptbahnhof 13:32
Bonn Hauptbahnhof to Hardtberg Rathaus Bonn 13:20
/home/homeassistant/.homeassistant/groups.yaml • - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
configuration.yaml
groups.yaml
all_transports:
name: Öffentlicher Personennahverkehr
entities:
- sensor.bonn_hauptbahnhof_to_koblenz_hauptbahnhof
- sensor.bonn_hauptbahnhof_to_koln_hauptbahnhof
- sensor.bonn_hauptbahnhof_to_hardtberg_rathaus_bonn
Line 10, Column 1
Spaces: 2
YAML

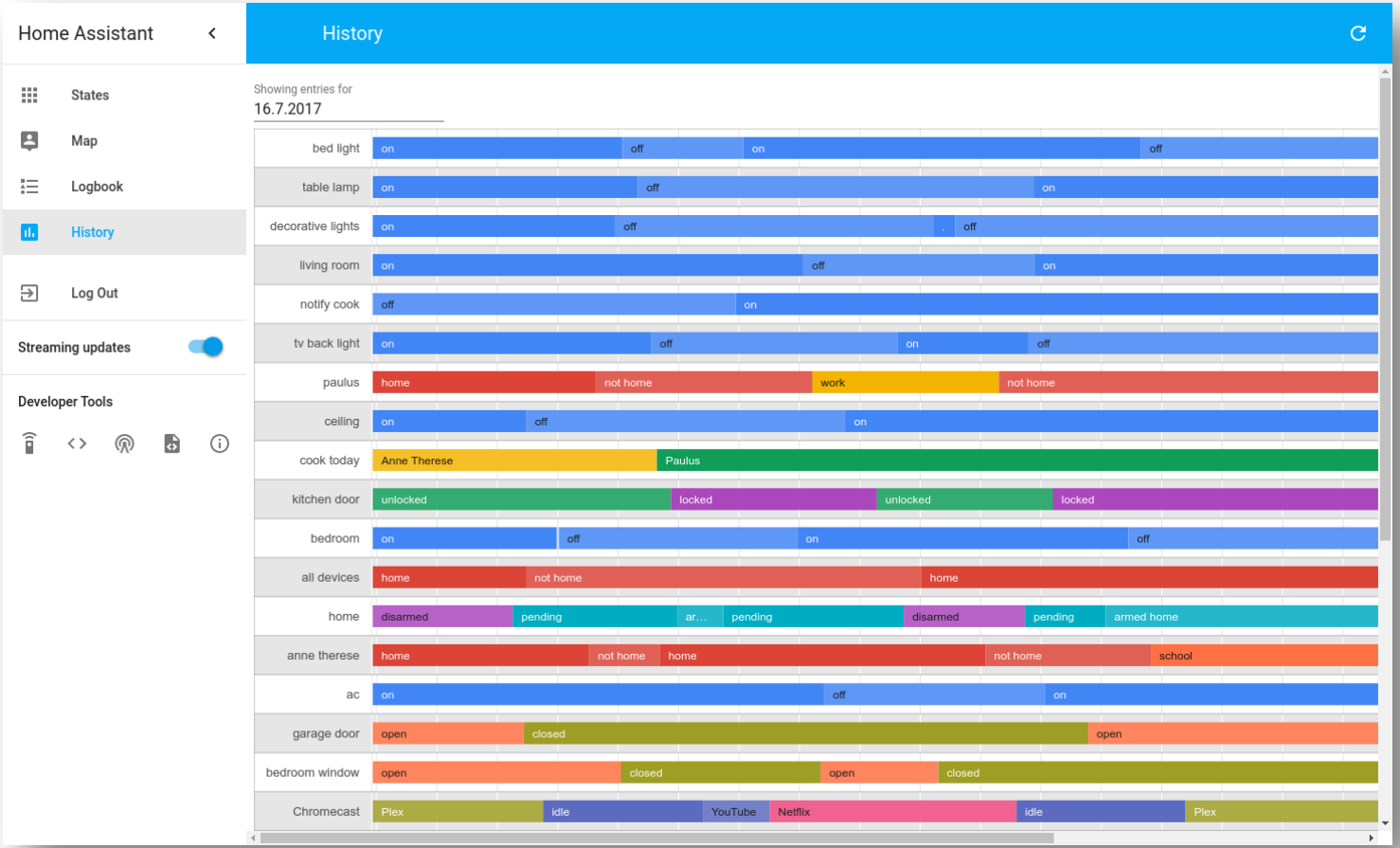
Individualisieren



Zahlenwerte



Historie der Zustände

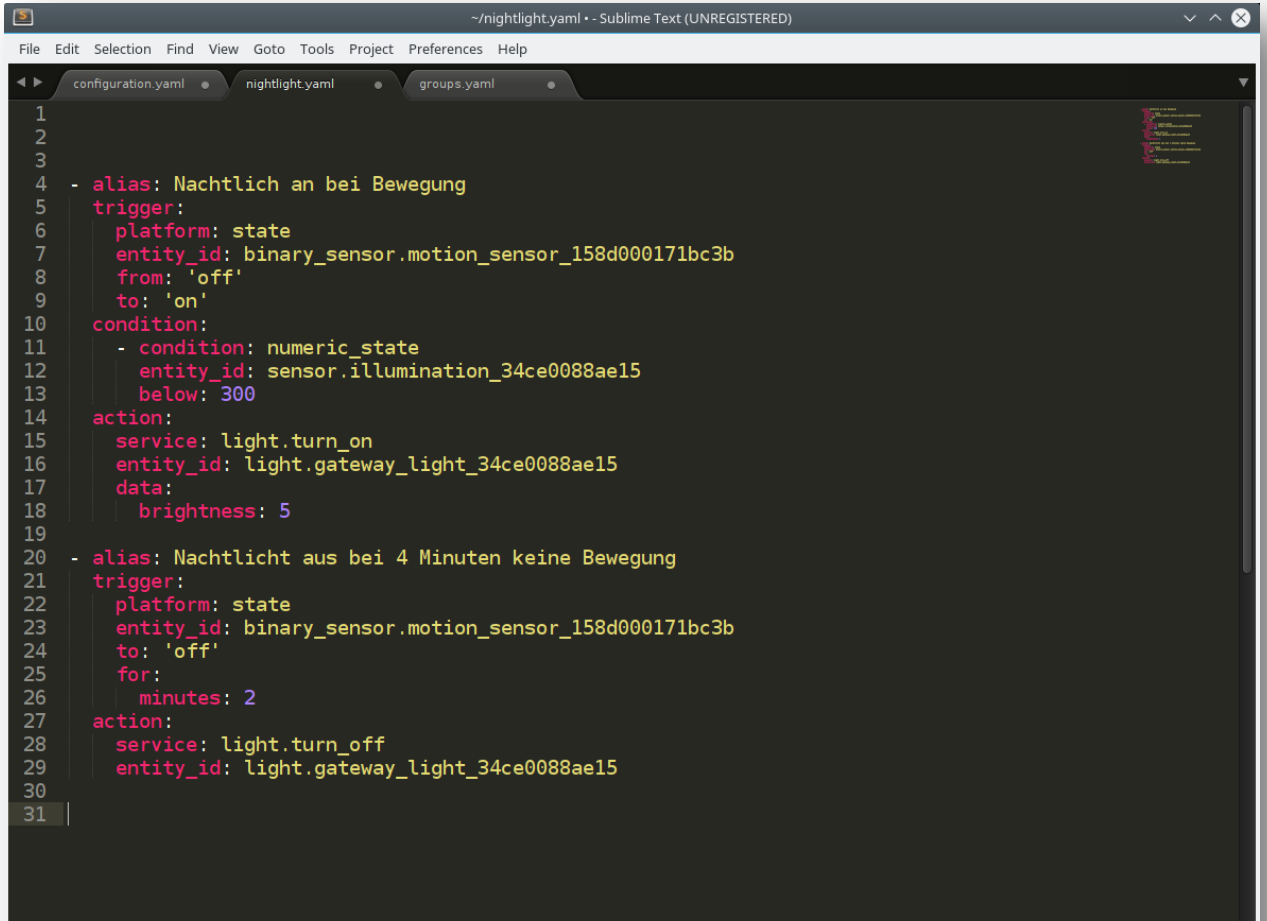


Werbung

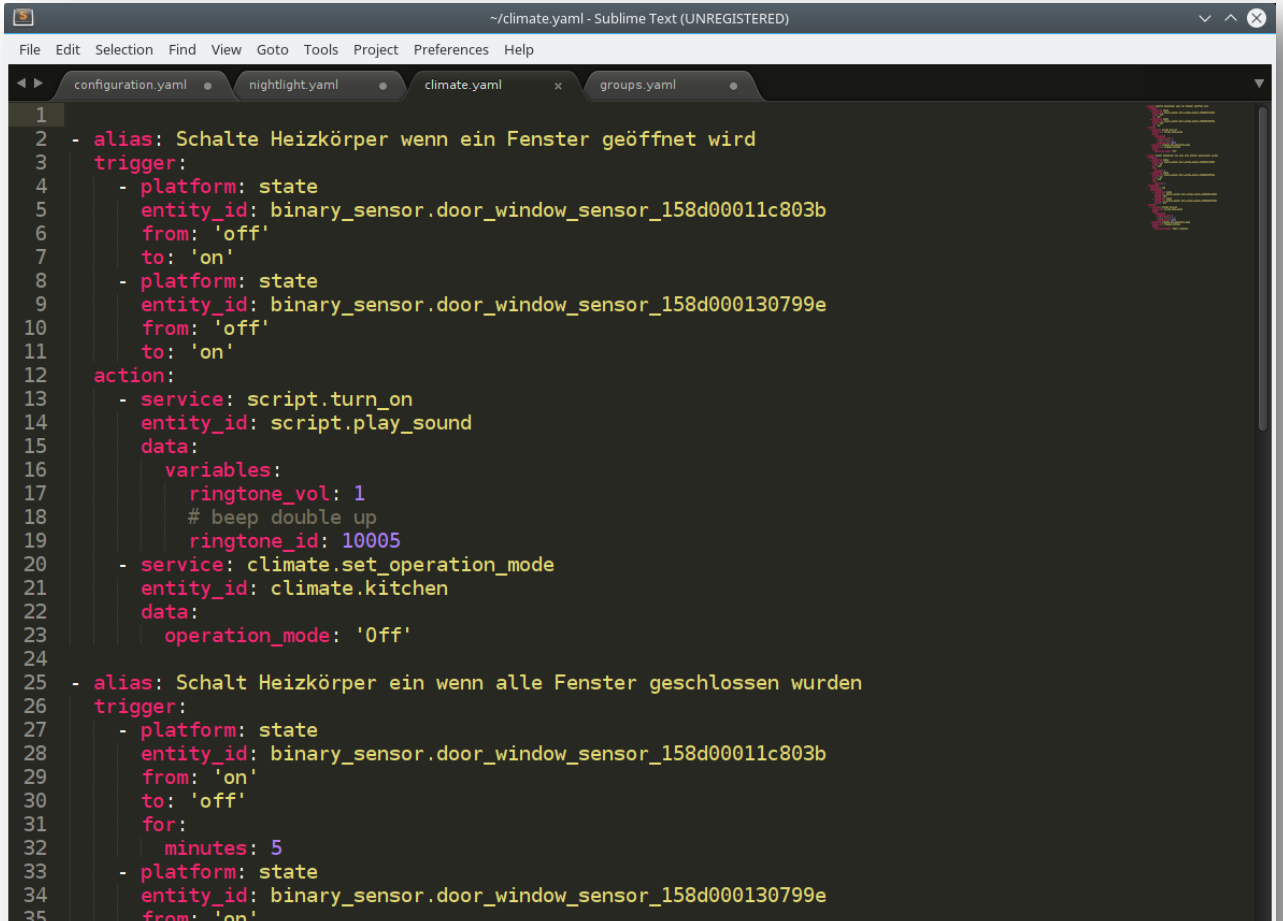
Xiaomi Aqara

Ikea Tradfri

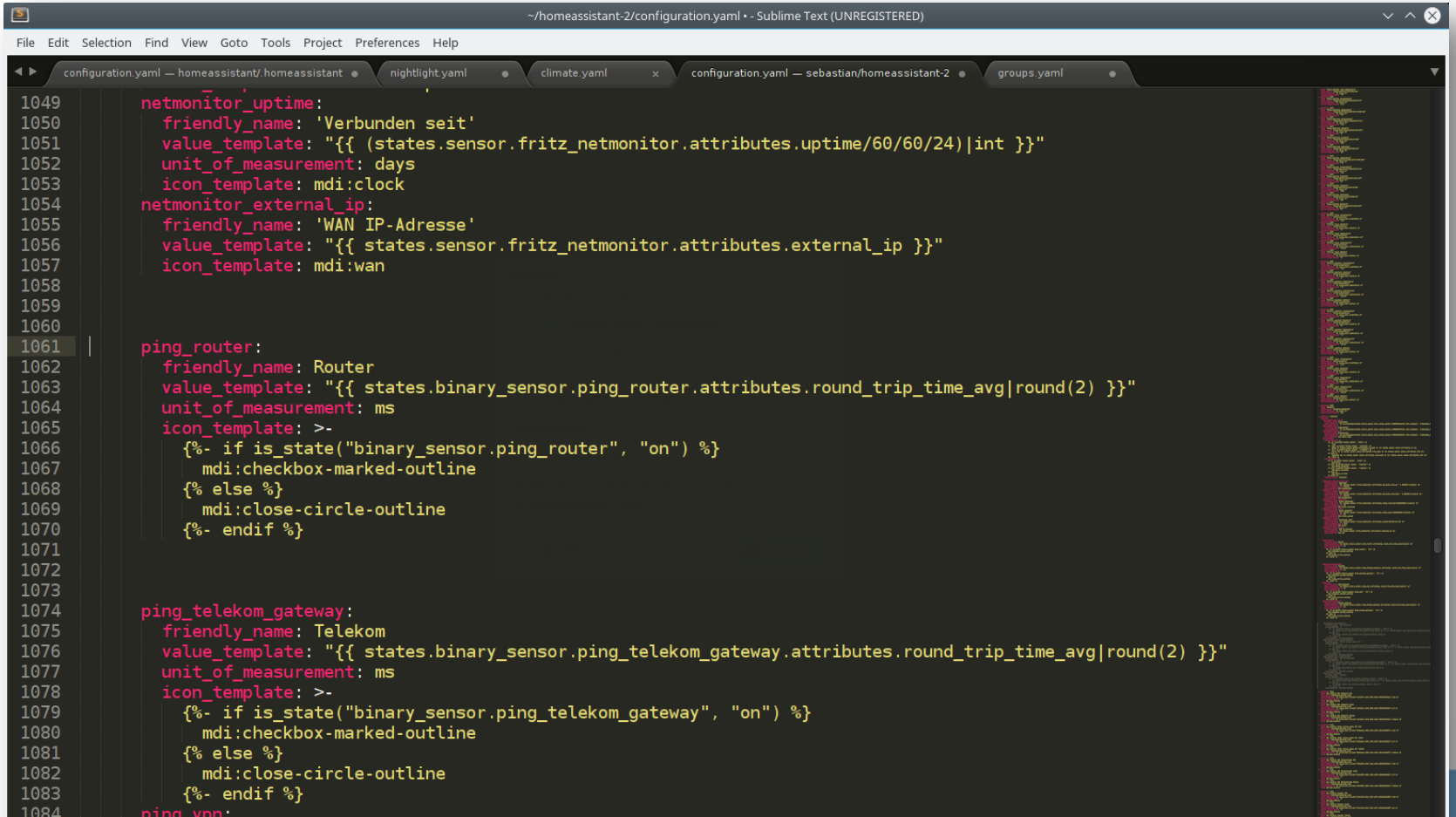
Automation: Bewegungsmelder



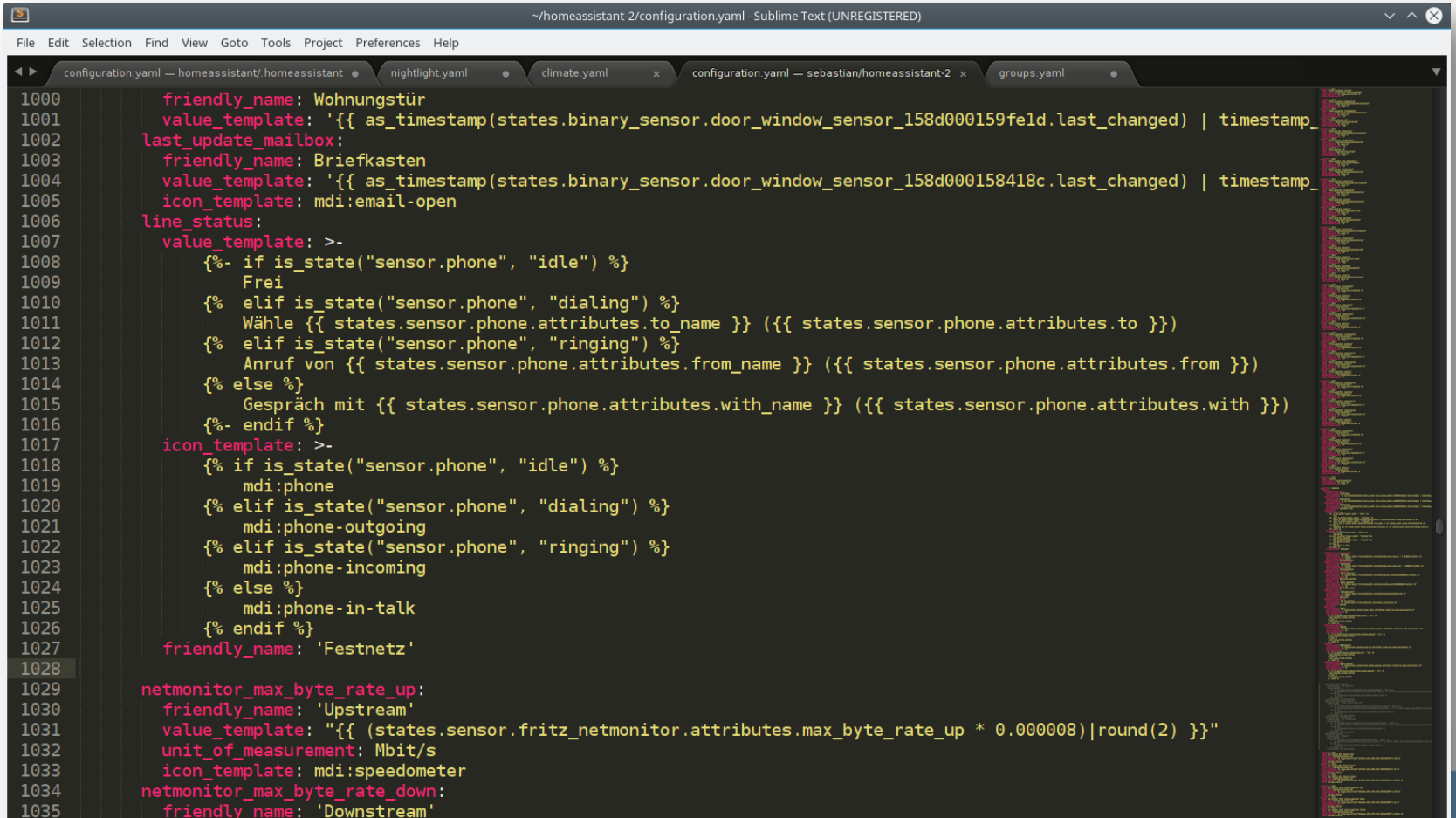
Automation: Heizung aus bei offenem Fenster



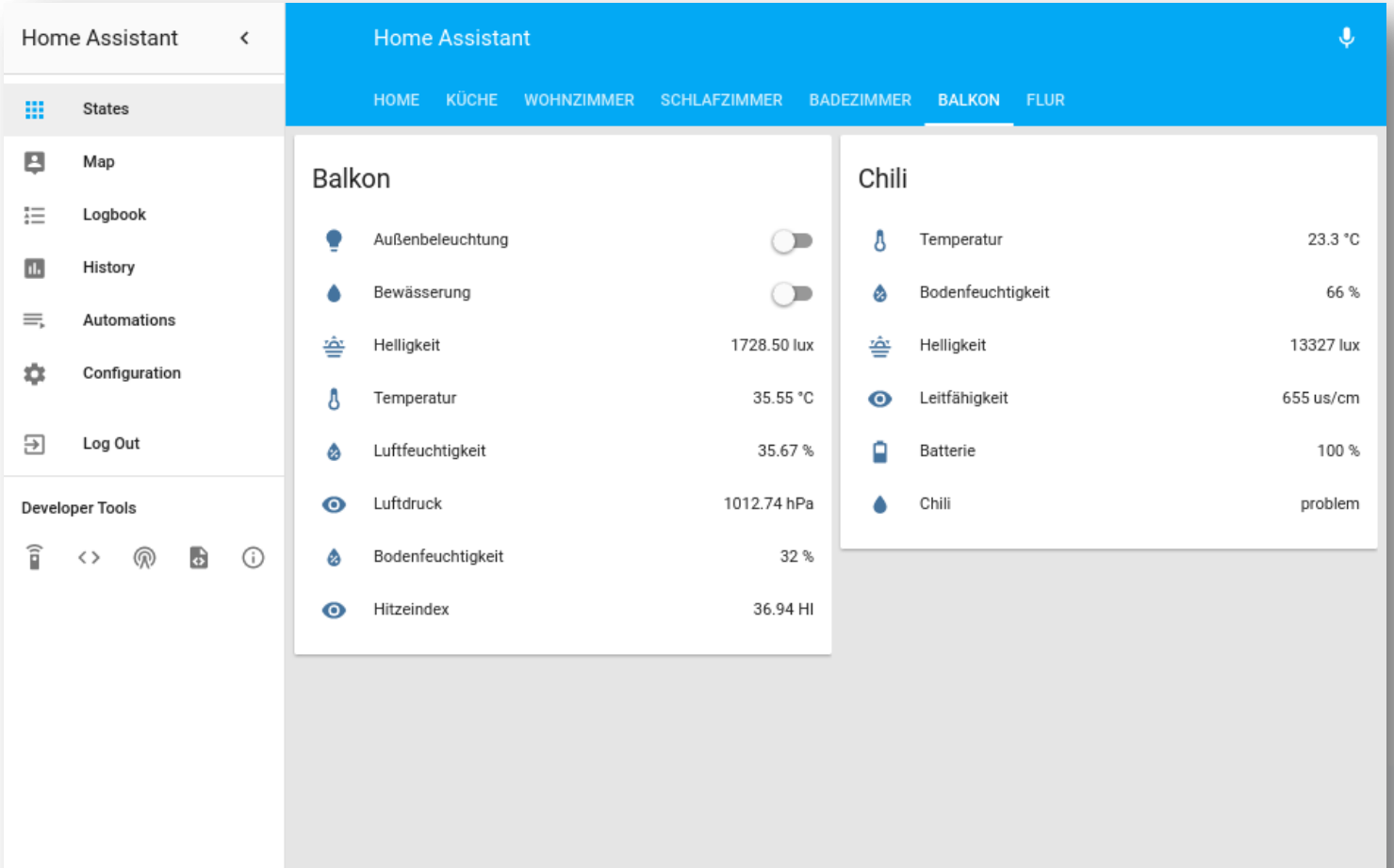
Virtuelle Sensoren: Templates



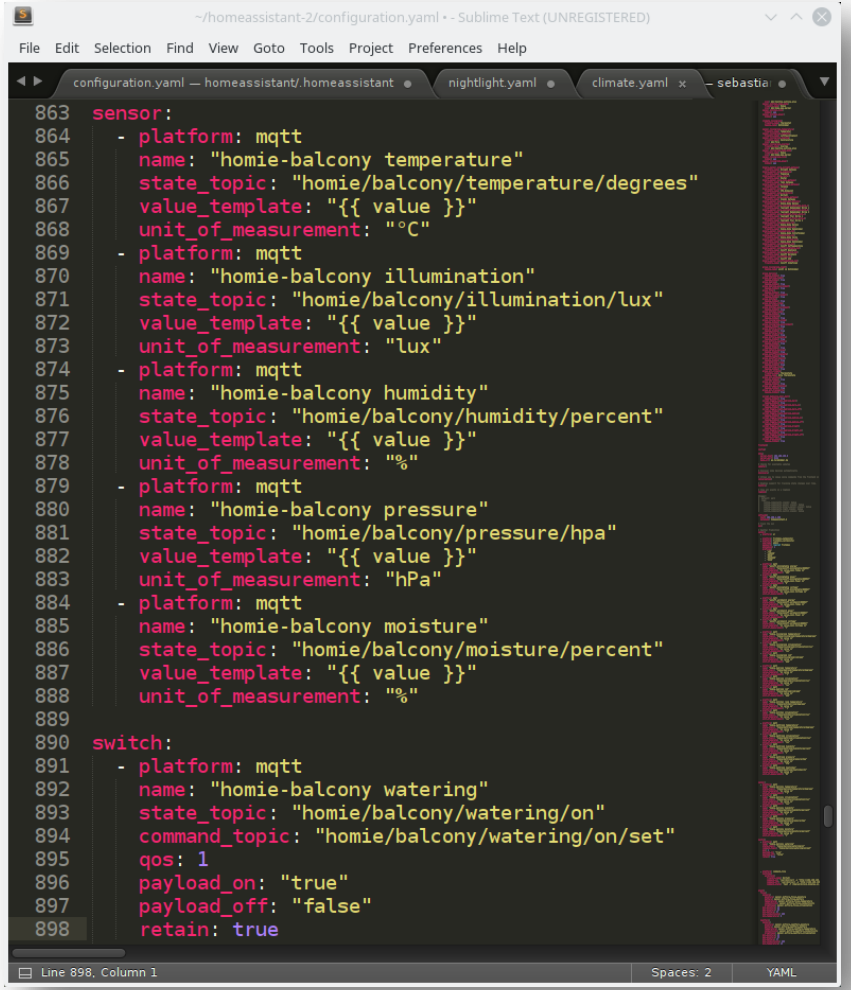
Virtuelle Sensoren: Templates



MQTT


Home Assistant
States
Map
Logbook
History
Automations
Configuration
Log Out
Developer Tools
Home Assistant
HOME
KÜCHE
WOHNZIMMER
SCHLAFZIMMER
BADEZIMMER
BALKON
FLUR
Balkon
Außenbeleuchtung
Bewässerung
Helligkeit 1728.50 lux
Temperatur 35.55 °C
Luftfeuchtigkeit 35.67 %
Luftdruck 1012.74 hPa
Bodenfeuchtigkeit 32 %
Hitzeindex 36.94 HI
Chili
Temperatur 23.3 °C
Bodenfeuchtigkeit 66 %
Helligkeit 13327 lux
Leitfähigkeit 655 us/cm
Batterie 100 %
Chili problem

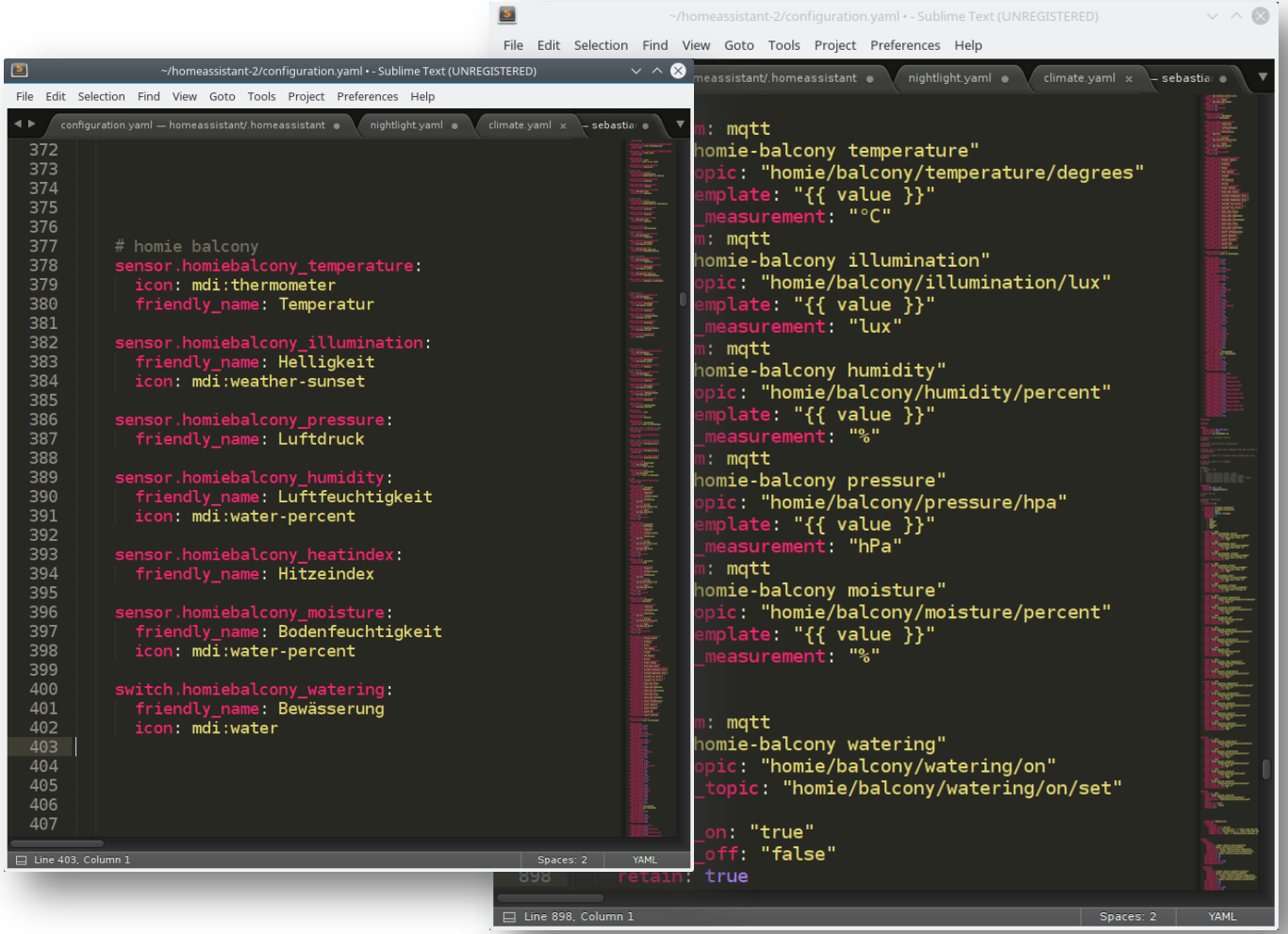
MQTT



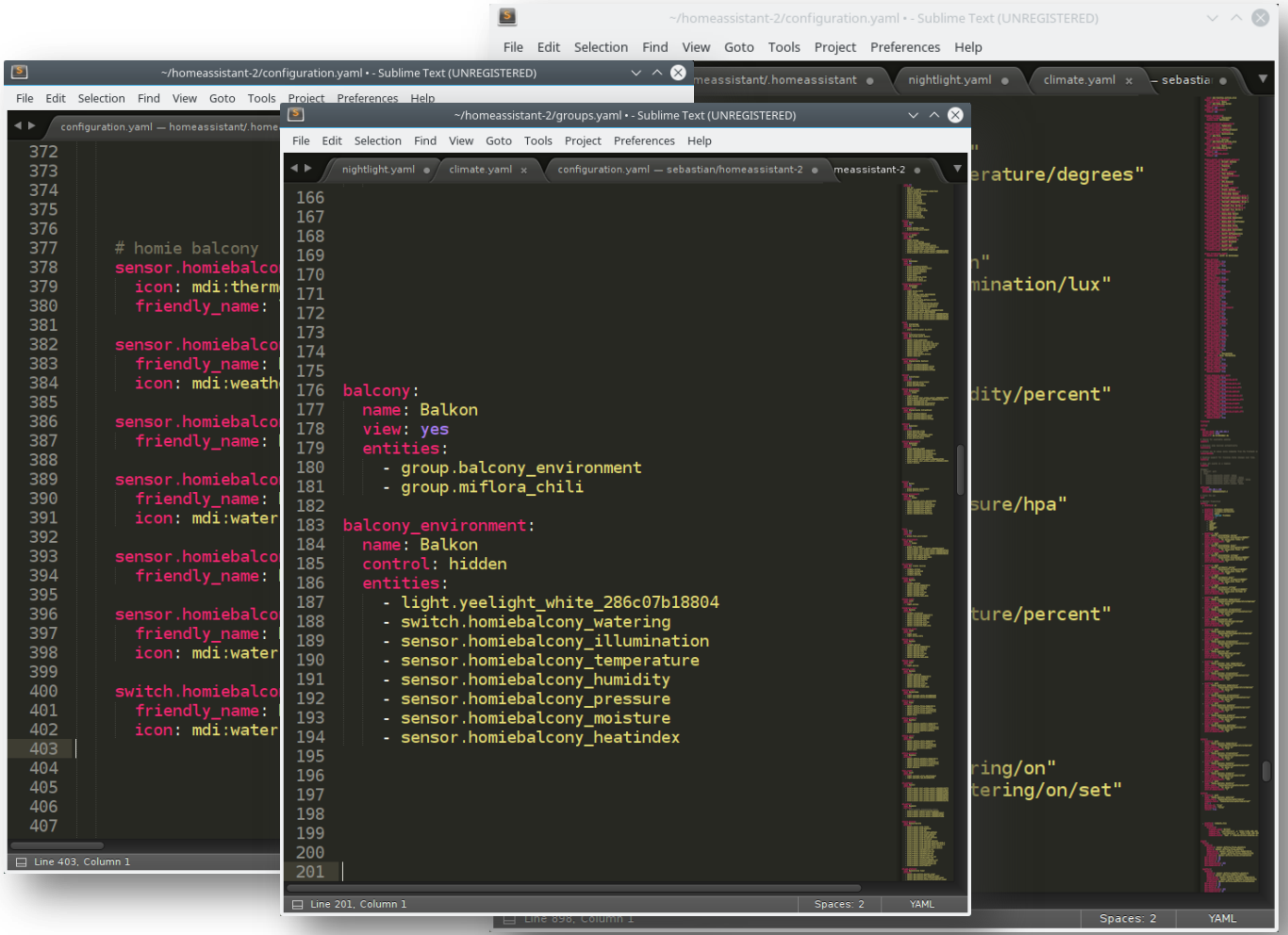

```yaml
sensor:
  - platform: mqtt
    name: "homie-balcony temperature"
    state_topic: "homie/balcony/temperature/degrees"
    value_template: "{{ value }}"
    unit_of_measurement: "°C"
  - platform: mqtt
    name: "homie-balcony illumination"
    state_topic: "homie/balcony/illumination/lux"
    value_template: "{{ value }}"
    unit_of_measurement: "lux"
  - platform: mqtt
    name: "homie-balcony humidity"
    state_topic: "homie/balcony/humidity/percent"
    value_template: "{{ value }}"
    unit_of_measurement: "%"
  - platform: mqtt
    name: "homie-balcony pressure"
    state_topic: "homie/balcony/pressure/hpa"
    value_template: "{{ value }}"
    unit_of_measurement: "hPa"
  - platform: mqtt
    name: "homie-balcony moisture"
    state_topic: "homie/balcony/moisture/percent"
    value_template: "{{ value }}"
    unit_of_measurement: "%"

switch:
  - platform: mqtt
    name: "homie-balcony watering"
    state_topic: "homie/balcony/watering/on"
    command_topic: "homie/balcony/watering/on/set"
    qos: 1
    payload_on: "true"
    payload_off: "false"
    retain: true
```

MQTT


~/homeassistant-2/configuration.yaml • - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
configuration.yaml — homeassistant/.homeassistant
nightlight.yaml
climate.yaml
homie balcony
sensor.homiebalcony_temperature:
icon: mdi:thermometer
friendly_name: Temperatur
sensor.homiebalcony_illumination:
friendly_name: Helligkeit
icon: mdi:weather-sunset
sensor.homiebalcony_pressure:
friendly_name: Luftdruck
sensor.homiebalcony_humidity:
friendly_name: Luftfeuchtigkeit
icon: mdi:water-percent
sensor.homiebalcony_heatindex:
friendly_name: Hitzeindex
sensor.homiebalcony_moisture:
friendly_name: Bodenfeuchtigkeit
icon: mdi:water-percent
switch.homiebalcony_watering:
friendly_name: Bewässerung
icon: mdi:water
Line 403, Column 1
Spaces: 2
YAML
~/homeassistant-2/configuration.yaml • - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
nightlight.yaml
climate.yaml
: mqtt
homie-balcony temperature"
opic: "homie/balcony/temperature/degrees"
emplate: "{{ value }}"
_measurement: "°C"
: mqtt
homie-balcony illumination"
opic: "homie/balcony/illumination/lux"
emplate: "{{ value }}"
_measurement: "lux"
: mqtt
homie-balcony humidity"
opic: "homie/balcony/humidity/percent"
emplate: "{{ value }}"
_measurement: "%"
: mqtt
homie-balcony pressure"
opic: "homie/balcony/pressure/hpa"
emplate: "{{ value }}"
_measurement: "hPa"
: mqtt
homie-balcony moisture"
opic: "homie/balcony/moisture/percent"
emplate: "{{ value }}"
_measurement: "%"
: mqtt
homie-balcony watering"
opic: "homie/balcony/watering/on"
_topic: "homie/balcony/watering/on/set"
_on: "true"
_off: "false"
retain: true
Line 898, Column 1
Spaces: 2
YAML

MQTT


~/homeassistant-2/configuration.yaml • - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
~/homeassistant-2/groups.yaml • - Sublime Text (UNREGISTERED)
nightlight.yaml
climate.yaml
configuration.yaml — sebastian/homeassistant-2
balcony:
name: Balkon
view: yes
entities:
- group.balcony_environment
- group.miflora_chili
balcony_environment:
name: Balkon
control: hidden
entities:
- light.yeelight_white_286c07b18804
- switch.homiebalcony_watering
- sensor.homiebalcony_illumination
- sensor.homiebalcony_temperature
- sensor.homiebalcony_humidity
- sensor.homiebalcony_pressure
- sensor.homiebalcony_moisture
- sensor.homiebalcony_heatindex
Line 201, Column 1
Spaces: 2
YAML

Erweiterbarkeit

- AppDaemon
- Homebridge
- Haaska – Home Assistant Alexa Skill Adapter (AWS Lambda Function)
- Eigene Komponenten

Vielen Dank!

Fragen?

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