



Home Assistant

Smart Home für jedermann

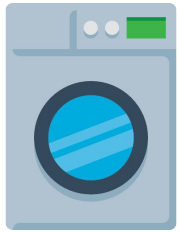
Ben Lebherz
Pi and More 10½ (2018), Stuttgart

Internet of Things

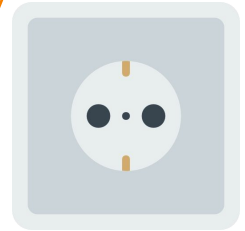
Steckdosen
Schlösser
Kameras
Lampen
Rasenmäher
Schalter
Zahnbürsten
Katzenklappen
TVs
Rolläden
Lautsprecher
Thermostate
Sensoren
Staubsauger

Technik & Protokolle

Lorem ipsum dolor s...



0100110001101111011...

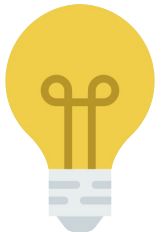
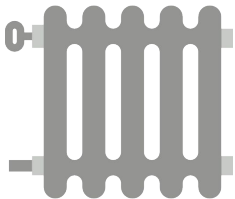


0x4c0x6f0x720x650x6...



0x4c0x6f0x720x650x6...

TG9yZW0gaXBzdW0gZG8...



Home Assistant

- Personen/Geräte tracken
- Smart Home Kontrolle
- Mediaplayer steuern
- Sensoren auslesen

Zentrales
Hub



- Open-Source

- Aktive Community

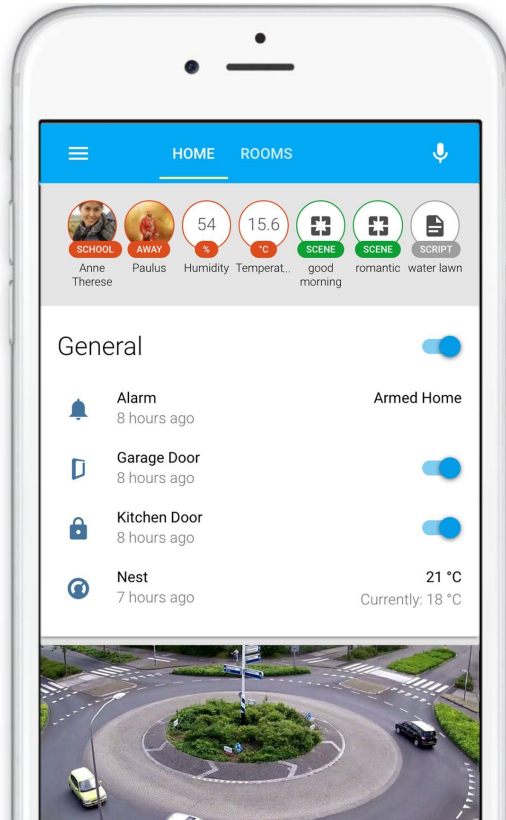
- Lokale Datenhaltung

- Alle 2W eine neue Version

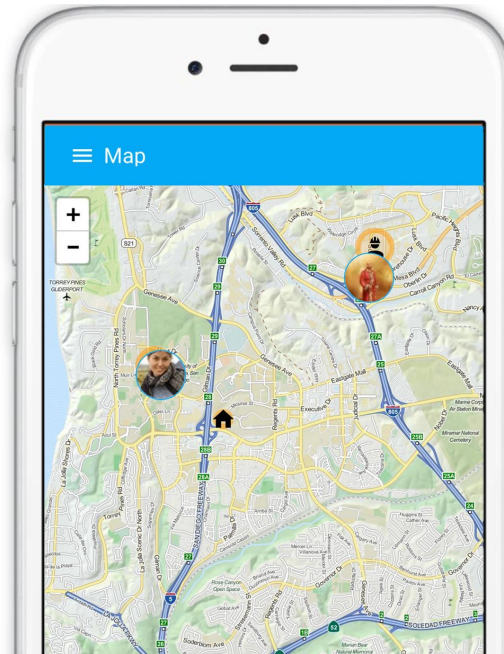


App & Web

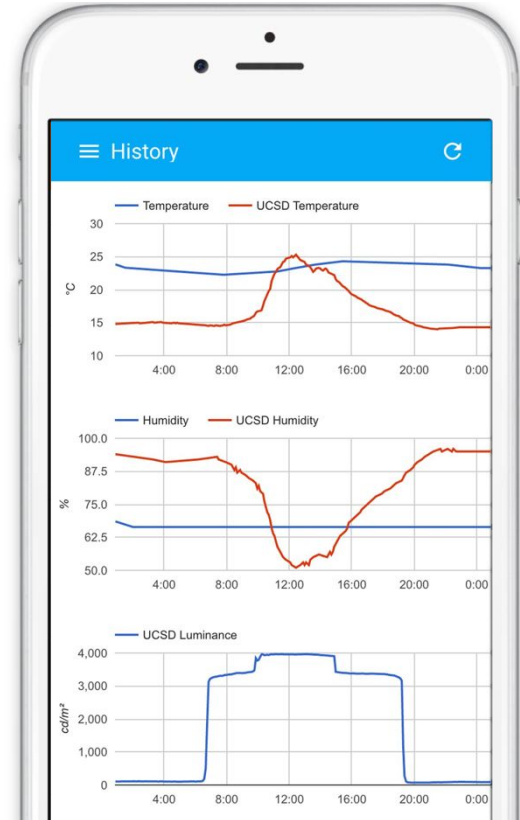
Kontrolle



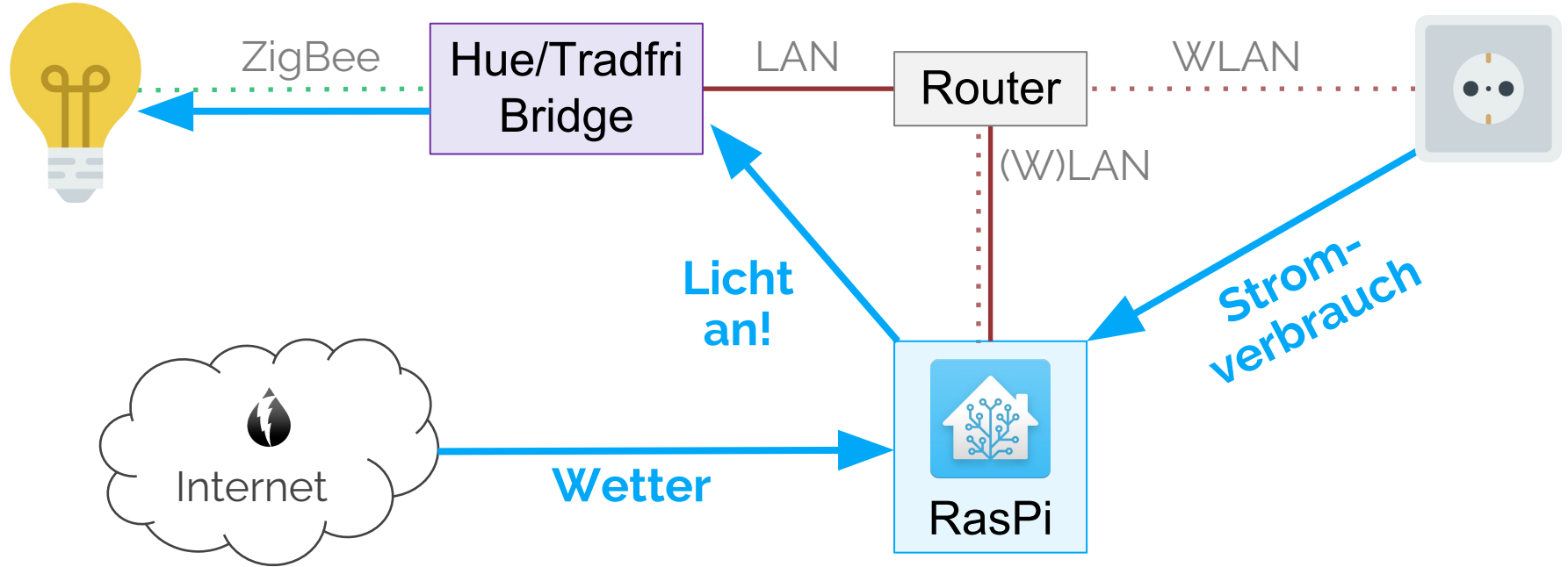
Tracking

















Visualisierung



Kommunikation

























Installation

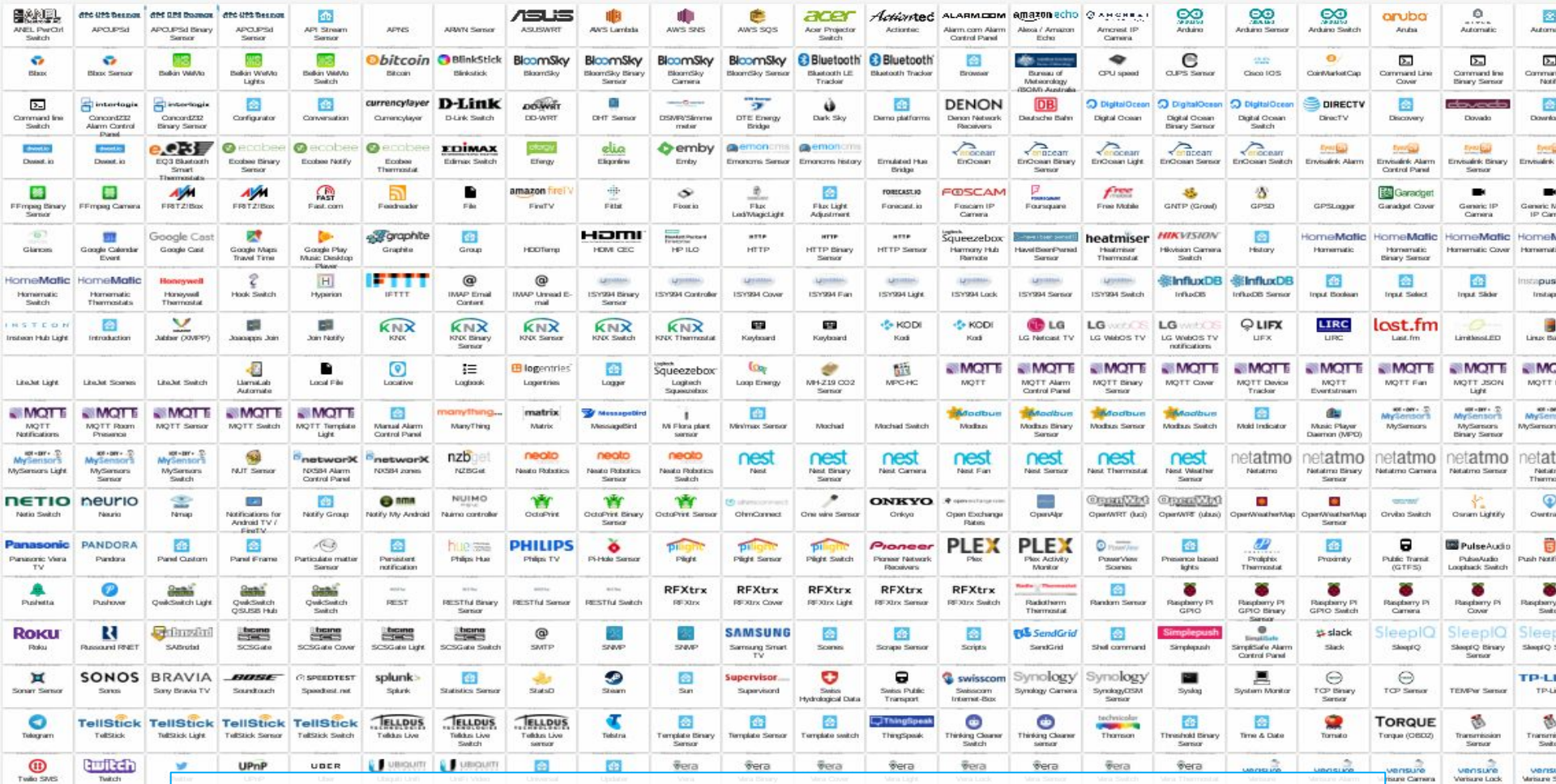
 Hass.io (Beginner friendly)	 python™ On top of an existing Python 3.5+ installation	 Hassbian
 Raspbian	 archlinux. ArchLinux	 armbian armbian
 fedora ^f Fedora	 CentOS CentOS/RHEL	 Windows Windows
 macOS	 Synology [®] Synology	 docker Docker
 VAGRANT Vagrant	 FreeNAS™ FreeNAS	

```
// installieren  
$ python3 -m pip install homeassistant  
  
// starten  
$ hass
```

Components

 Alexa / Amazon Echo voice	 Arduino diy	 Belkin WeMo hub	 Dark Sky Sensor weather
 ecobee hub	 Google Assistant voice	 Google Cast media-player	 IFTTT automation
 IKEA Trådfri (Tradfri) hub	 Kodi media-player	 MQTT hub	 MySensors hub
 Nest hub	 OwnTracks (via HTTP) presence-detection	 Philips Hue hub	 Plex media-player
 Pushbullet notifications	 Sonos media-player	 Wink hub	 Z-Wave hub


Luftdaten Sensor
health
Mercedes me
hub
Deutsche Bahn
transport



Nahezu 1000 Components

Components



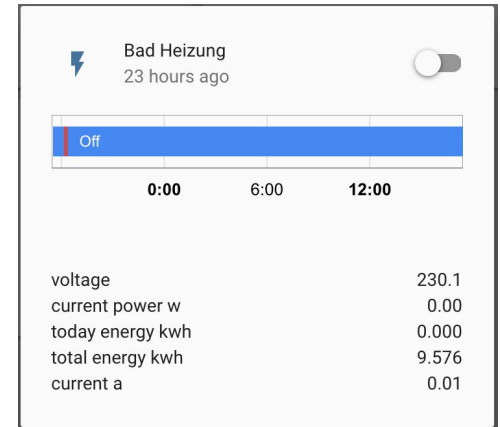
Luftdaten
Sensor

```
- platform: luftdaten  
  sensorid: 1234  
  monitored_conditions:  
    - P1  
    - P2
```



Steckdose

```
- platform: tplink  
  name: 'Bad Heizung'  
  host: 10.0.0.123
```



Automations

Trigger Wenn die Terrassentür geöffnet wird

Condition und niemand zu Hause ist

Action benachrichtige mich auf dem Handy

Automations

Wenn die Terrassentür
geöffnet wird

```
trigger:  
  platform: state  
  entity_id: 'sensor.door_terrasse'  
  from: 'off'  
  to: 'on'
```

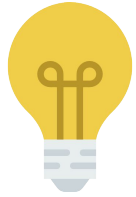
und niemand zu Hause ist

```
condition:  
  platform: state  
  entity_id: group.family  
  state: 'not_home'
```

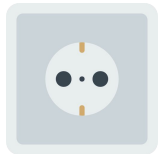
benachrichtige mich auf dem
Handy

```
action:  
  service: notify.ios_ben  
  data:  
    message: "Einbrecher?!"
```

Hardware



Lampen Set
~80-130€



Smarte
Steckdose
~25€



Bewegung
~11€



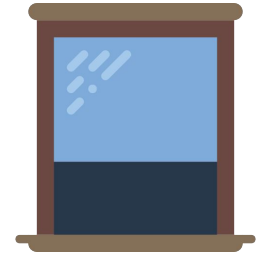
Temperatur
~9€



Gateway
~22€



Button
~8€



Tür/Fenster
~8€

Hardware

Lampen Set
~80-130€



Bewegung
~11€



Tür/Fenster
~8€



Gateway
~22€



Smarte
Steckdose
~25€



Temperatur
~9€

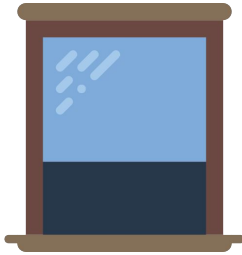


Button
~8€



Heizung abschalten

Schält die Heizung ab wenn das Fenster geöffnet wird



```
trigger:  
  platform: state  
  entity_id: 'sensor.window_bad'  
  from: 'off'  
  to: 'on'  
  
action:  
  service: homeassistant.turn_off  
  entity_id: 'switch.bad_heizung'
```

Bad lüften

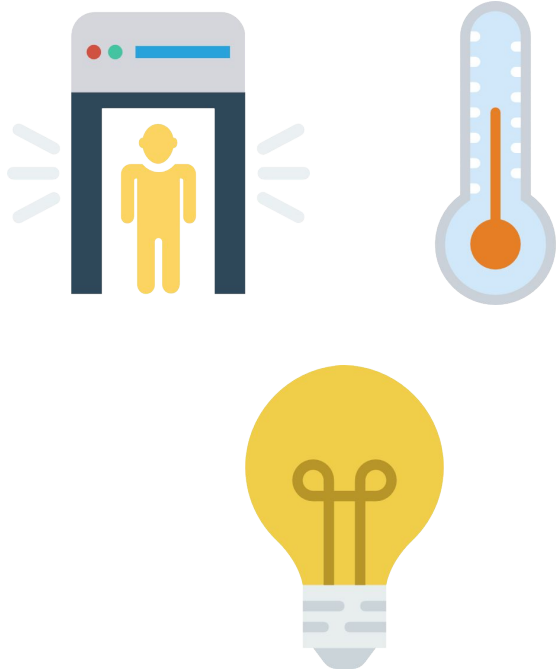
Erinnert daran, das Fenster nach dem Lüften wieder zu schließen



```
trigger:  
  platform: state  
  entity_id: sensor.window_bad  
  from: 'off'  
  to: 'on'  
  for:  
    hours: 0  
    minutes: 5  
    seconds: 0  
  
action:  
  service: notify.family  
  data:  
    message: "Badfenster schließen!"
```


Licht

Automatisches Licht, z.B. im Bad



```
trigger:  
  platform: state  
  entity_id: sensor.motion_bad  
  from: 'off'  
  to: 'on'
```

```
condition:  
  condition: state  
  entity_id: light.bad  
  state: 'off'
```

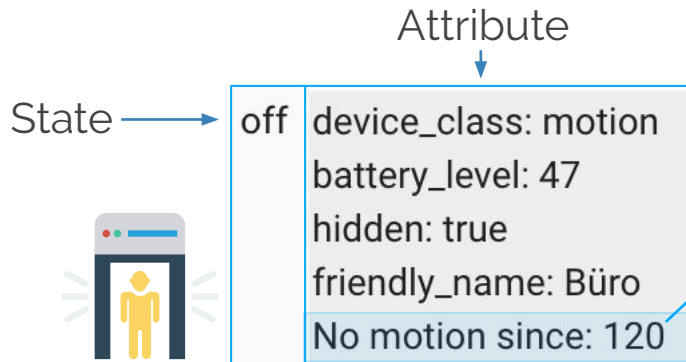
```
action:  
  service: light.turn_on  
  entity_id: light.bad
```

Licht v2

Licht nach 180 Sekunden ohne Bewegung wieder ausschalten

action:

- service: `light.turn_on`
entity_id: `light.bad`
- **wait_template:**
→ `'{{ states.sensor.motion_bad.attributes['No motion since'] > 180 }}'`
- service: `light.turn_off`
entity_id: `light.bad`



Vergangene Sekunden seit letzter, erkannter Bewegung

Licht v3 Bad Edition

Licht nicht ausschalten,
wenn Luftfeuchtigkeit $\geq 70\%$

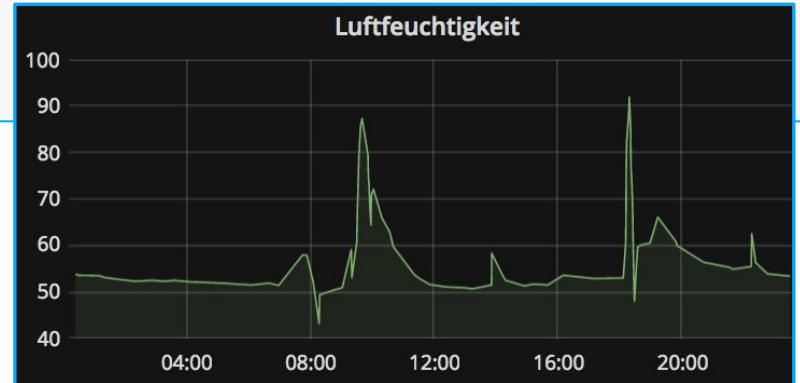
action:

- service: `light.turn_on`
entity_id: `light.bad`

- **wait_template:**

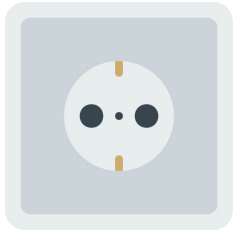
- `'{{ states.sensor.motion_bad.attributes['No Motion'] | int > 180
and
states.sensor.humidity_bad | int < 70 }}'`

- service: `light.turn_off`
entity_id: `light.bad`



Wäsche fertig!

Sagt Bescheid, wenn Waschmaschine oder Trockner fertig sind



Attribute



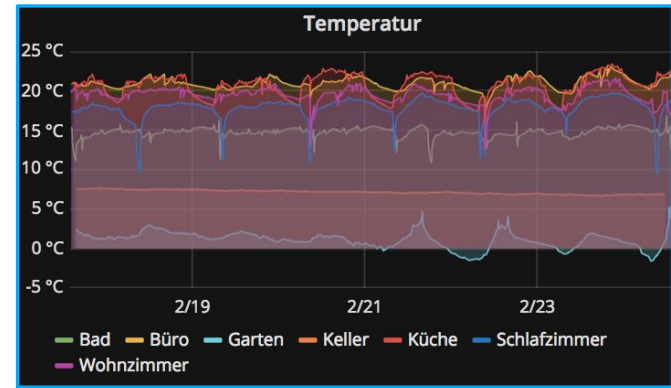
voltage: 230.2
current_power_w: 0.00
today_energy_kwh: 1.608
friendly_name: Waschraum
total_energy_kwh: 148.392
current_a: 0.07

```
trigger:
  platform: numeric_state
  entity_id: switch.trockner
  value_template:
    → '{{ state.attributes.current_power_w }}'
  below: '10'
  for:
    hours: 0
    minutes: 2
    seconds: 0

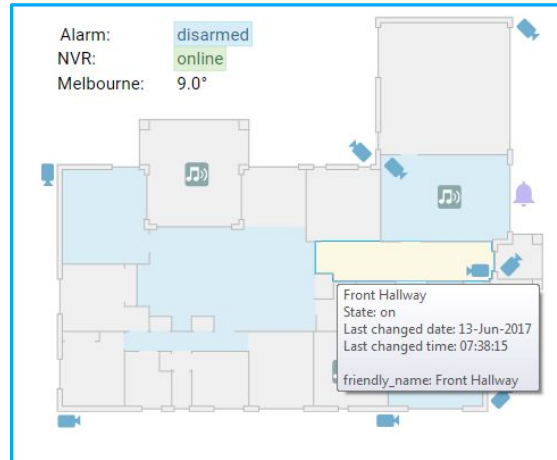
action:
  service: notify.family
  data:
    message: "Wäsche fertig! :)"
```

Mehr Möglichkeiten

- InfluxDB und Grafana



- Floorplan



- „Share your Projects“ -> community.home-assistant.io/c/projects

Vielen Dank!



Home Assistant Demo

home-assistant.io/demo/

Components Liste

home-assistant.io/components/

Ben Lebherz

@ben_leb | b@benleb.de

Home Assistant Logos & Screenshots: home-assistant.io (u.A. Paulus Schousten & Fabian Affolter)

luftdaten.info Logo: Büro für Gestalten, CC BY-ND

Floorplan Screenshot: github.com/pkozul/ha-floorplan

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