

CURSUSAVOND 4:

INTRODUCTIE HOME ASSISTANT



CURSUSAVOND 5: 14 MEI

CURSUSAVOND 6: 28 MEI

JOEP WEIJERS

VUGTSE PROGRAMMEERCLUB

INTRODUCTIE SMART HOME



WiFi

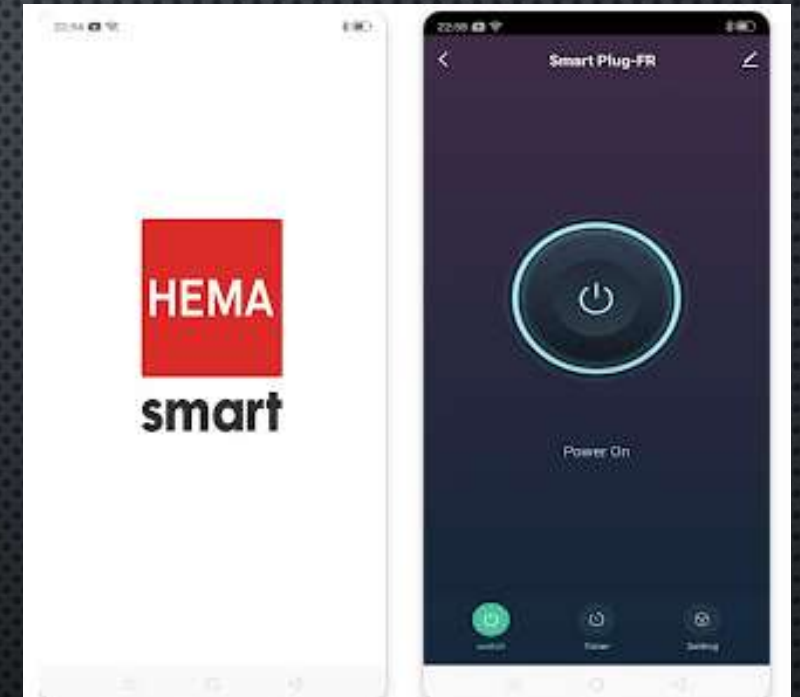
BLUETOOTH

ZIGBEE

Z-WAVE



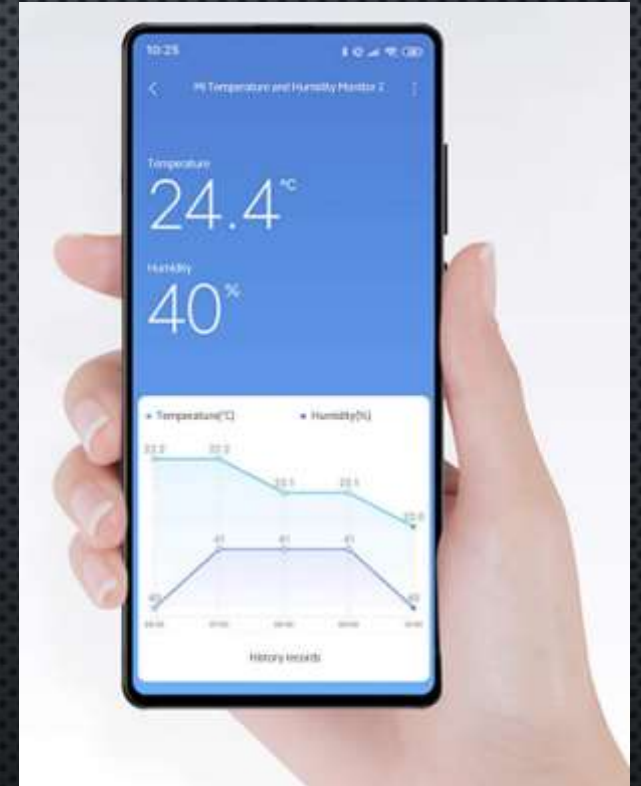
VOORBEELD VERBINDING SMART HOME: WIFI



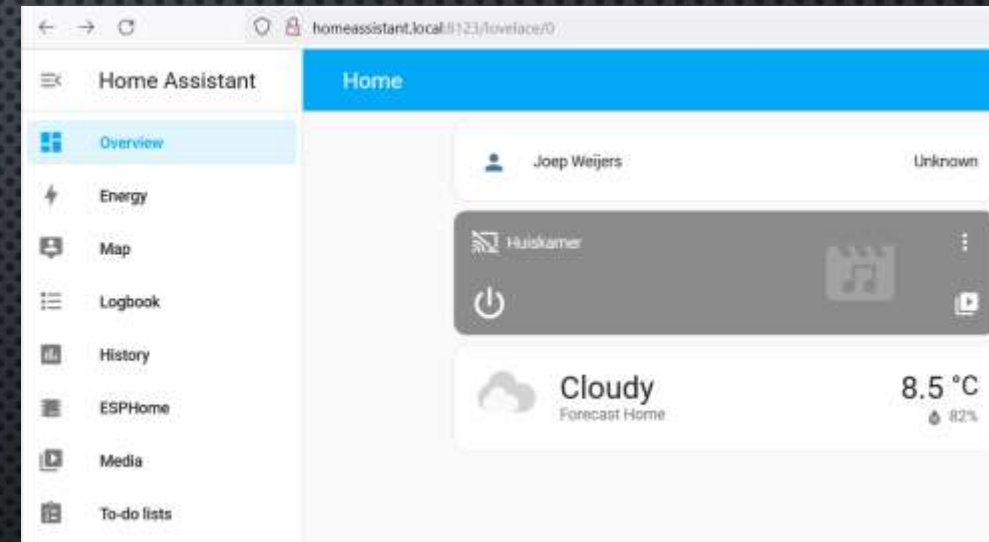
VOORBEELD VERBINDING SMART HOME: BLUETOOTH



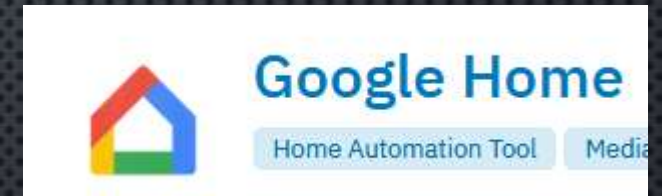
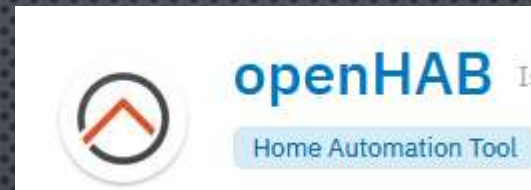
BLUETOOTH



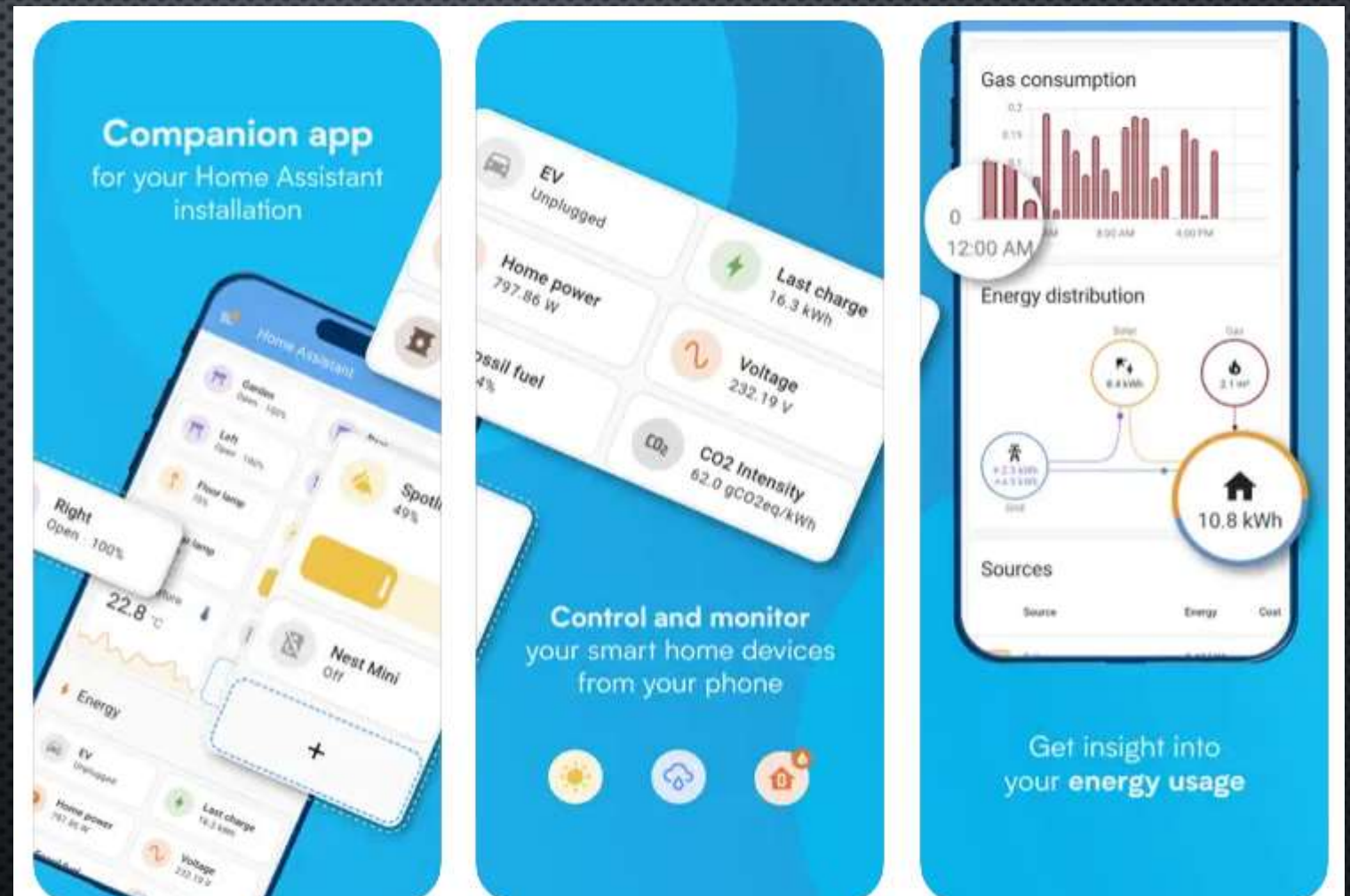
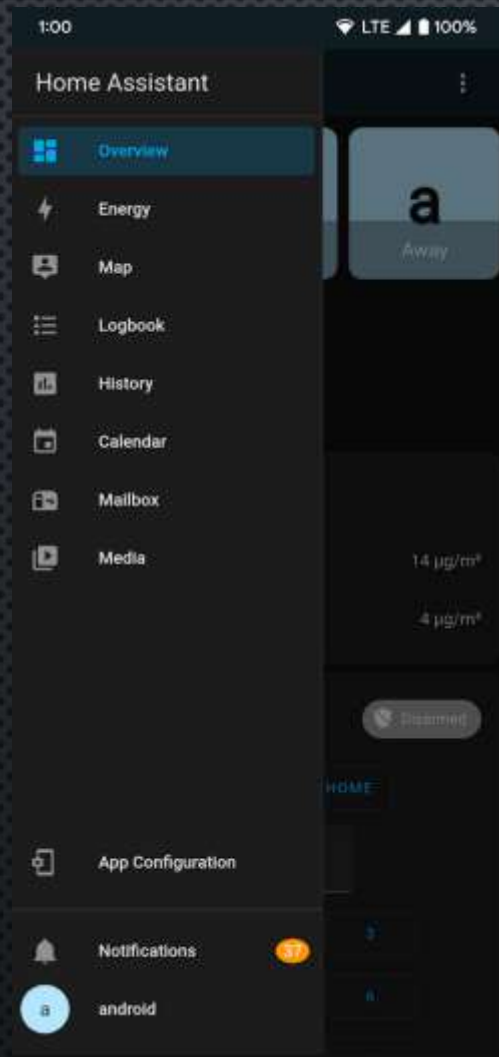
VOORBEELD VERBINDING SMART HOME: BLUETOOTH



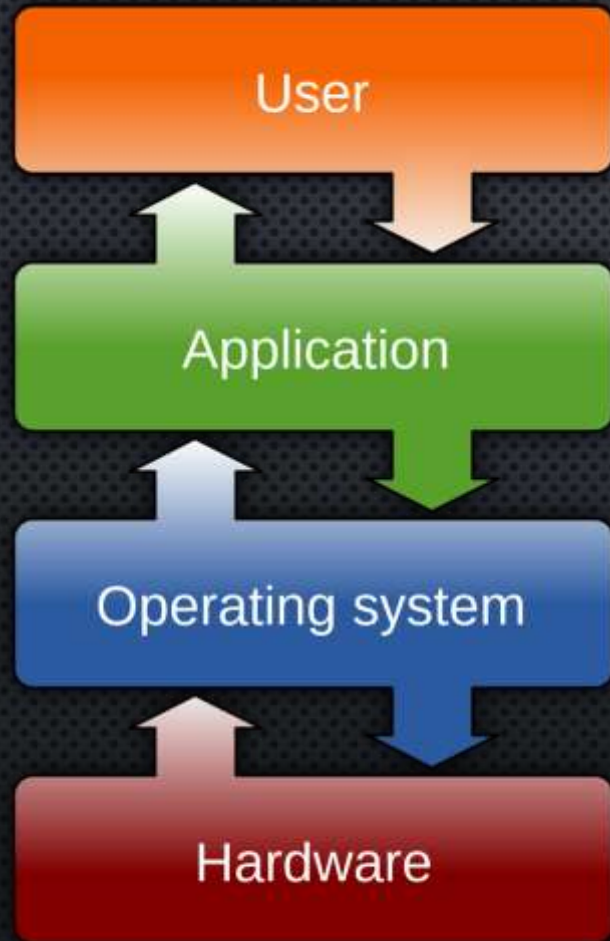
HOME ASSISTANT ALTERNATIEVEN



HOME ASSISTANT APP



HOME ASSISTANT INSTALLEREN: OPERATING SYSTEM



HOME ASSISTANT INSTALLEREN

EASIEST

Plug and play with Home Assistant Green

The affordable Home Assistant Green is the easiest way to start using Home Assistant. It's plug-and-play and comes with Home Assistant already installed.



HOME ASSISTANT GREEN

The easiest way to get started with Home Assistant

SKILLS REQUIRED

- Interest in setting up a smart home

TOOLS REQUIRED

- Ethernet connection

[Get Home Assistant Green >](#)

[View tutorial >](#)

HOME ASSISTANT INSTALLEREN

EASY

DIY with Raspberry Pi

Raspberry Pi, a mini low-cost computer, is one of the most popular platforms for running Home Assistant. If you want to learn how to DIY, this is a good way to start and gain experience.



INSTALL HOME ASSISTANT ON RASPBERRY PI

A low-cost DIY solution to get started with Home Assistant

SKILLS REQUIRED

- Assembling a Raspberry Pi setup
- Flashing a Raspberry Pi

TOOLS REQUIRED

- Raspberry Pi 3, 4 or 5 with power supply
- MicroSD card
- Ethernet connection

[Get Raspberry Pi >](#)

[View tutorial >](#)

HOME ASSISTANT INSTALLEREN

Install on other hardware

Home Assistant can be repurposed and installed on various hardware, such as an Odroid or a generic x86-64 machine. The Home Assistant Operating System allows you to install Home Assistant on these devices even if you have little to no Linux experience.



INSTALL HOME ASSISTANT ON X86-64 MACHINES

Repurpose workstation hardware to run Home Assistant

SKILLS REQUIRED

- You can use a command line and install a boot medium on your hardware
- You're comfortable configuring the BIOS based on instructions.

TOOLS REQUIRED

- An x86-64 machine
- Storage hard drive
- USB stick
- Ethernet connection

[View tutorial >](#)

HOME ASSISTANT INSTALLEREN: ANDERE INSTALLATIEMETHODEN

	HA OS ¹	Container ¹	Core ¹	Supervised ¹
Automations	✓	✓	✓	✓
Dashboards	✓	✓	✓	✓
Integrations	✓	✓	✓	✓
Blueprints	✓	✓	✓	✓
Uses container	✓	✓	✗	✓
Supervisor	✓	✗	✗	✓
Add-ons	✓	✗	✗	✓
Backups	✓	✓ ²	✓ ²	✓
Managed Restore	✓	✗ ³	✗ ³	✓
Managed OS	✓	✗	✗	✗

HOME ASSISTANT INSTALLEREN

← → ↺

homeassistant.local:8123/lovelace/0

🏠 ☆

📧 ⌚ 🗨 🍷 📅 ⚙ ⚡ 🔍

☰ Home Assistant

Home

🔍

🏠 Overview

⚡ Energy

🗺 Map

📖 Logbook

📊 History

🏠 ESPHome

🎬 Media

📅 To-do lists

🔧 Developer tools

⚙ Settings 3

👤 Joep Weijers Unknown

📶 Huiskamer ⋮
🔌 🎵 📺

☁ Cloudy 8.5 °C
Forecast Home 82%

ESPHome Web fedae0

💧 Het hok Room Humidity Unavailable

🌡 Het hok Room Temperature Unavailable

P1 meter

⚡ Active power -495 W

⚡ Active power phase 1 -212 W

⚡ Active power phase 2 -201 W

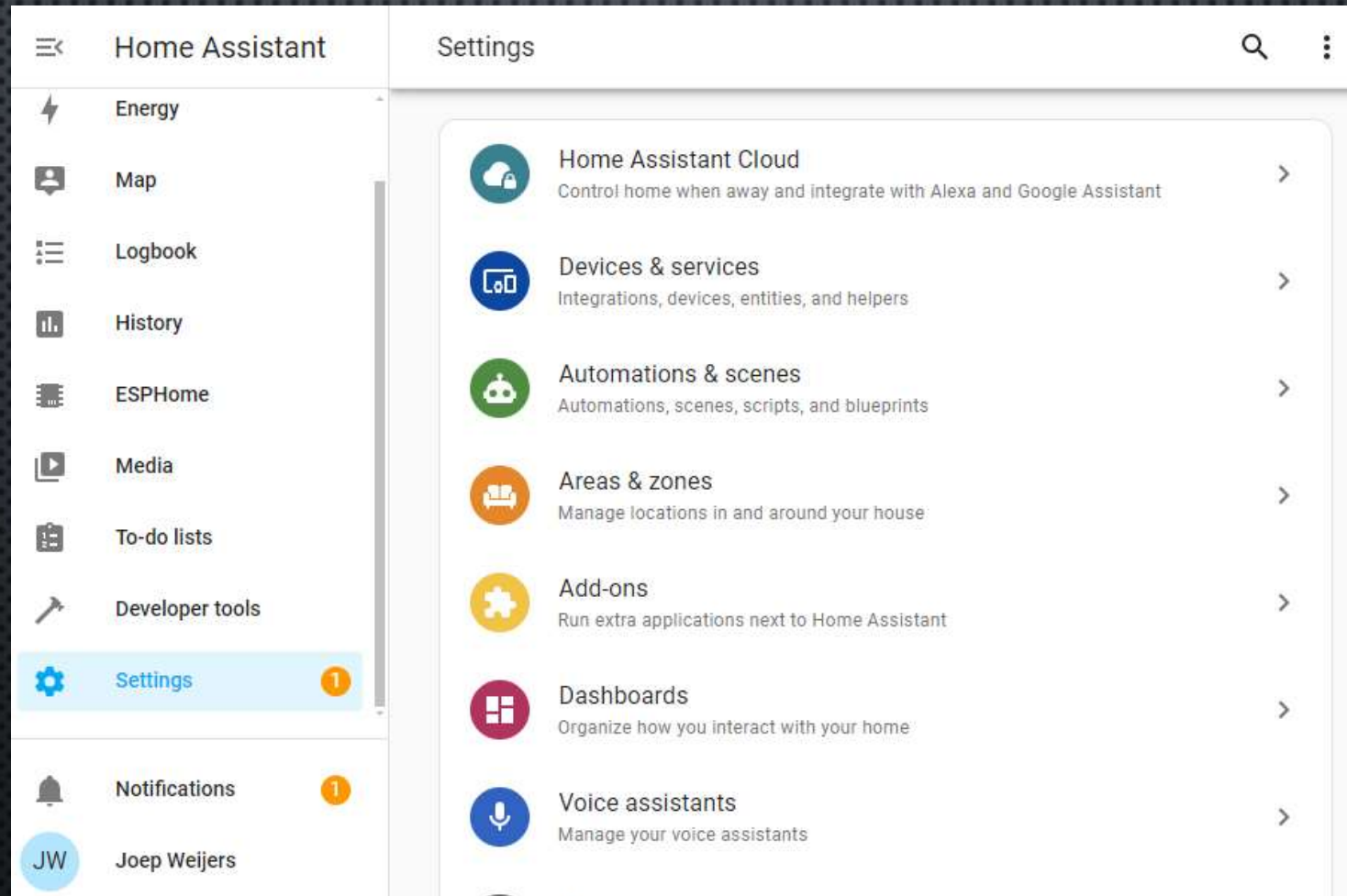
⚡ Active power phase 3 -81 W

📅 Active tariff 2

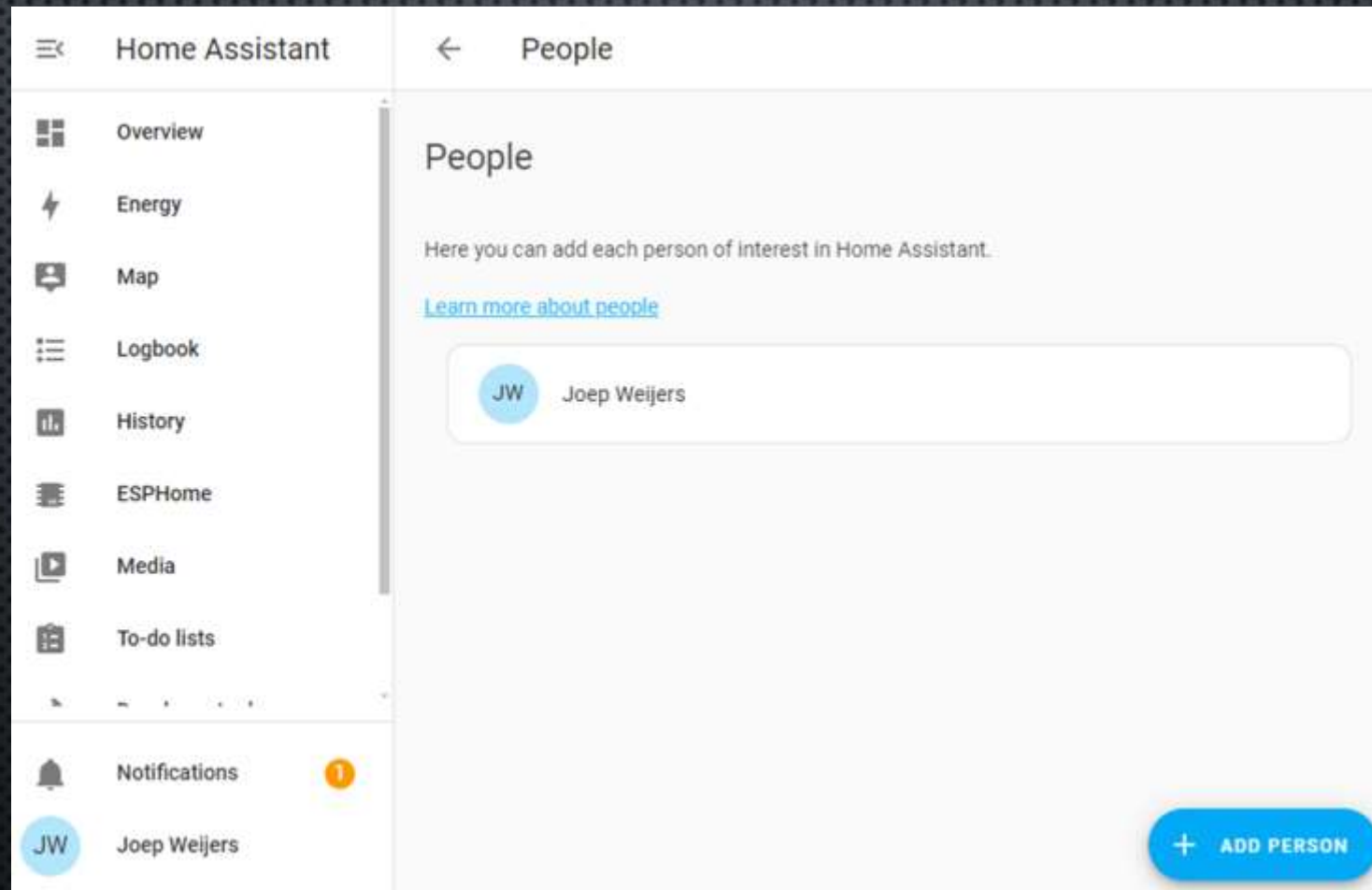
⚡ Total energy export 5,417.684 kWh

⚡ Total energy export tariff 1 1,621.217 kWh

HOME ASSISTANT INRICHTEN: INSTELLINGEN



HOME ASSISTANT INRICHTEN: GEBRUIKERS



HOME ASSISTANT INRICHTEN: GEBRUIKERS

New person

✕

Name

Henk

ADD PICTURE

Or drop your file here

Supports JPEG, PNG, or GIF image

Allow person to login

Can only log in from the local network

Pixel 6a

device_tracker:pixel_6a

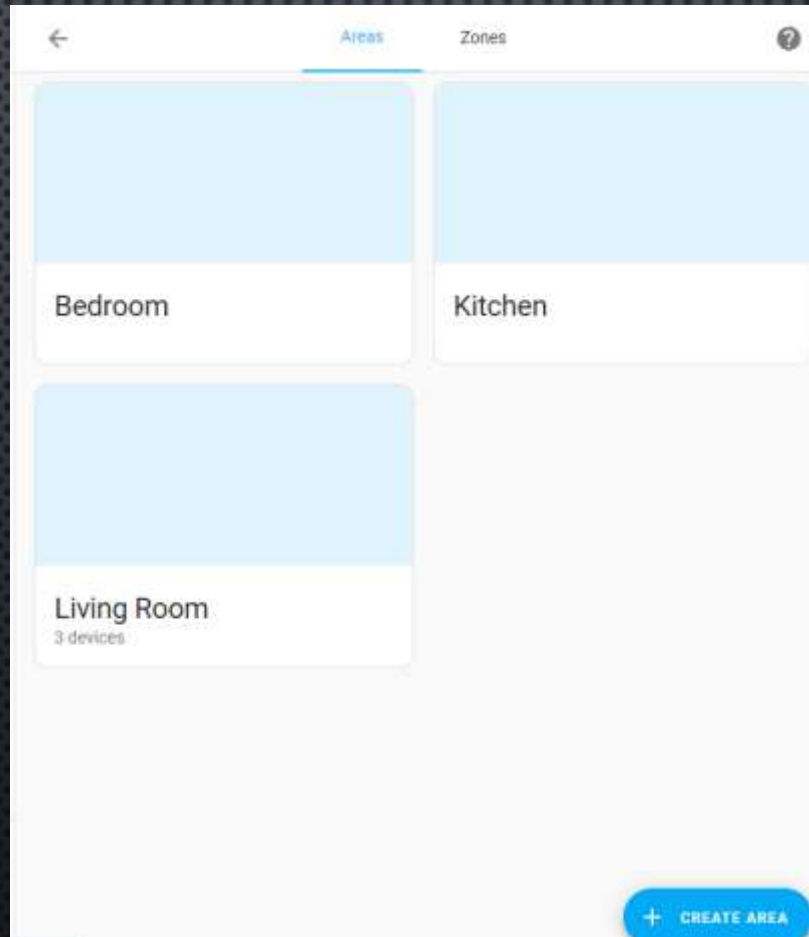
Pick device to track

CREATE

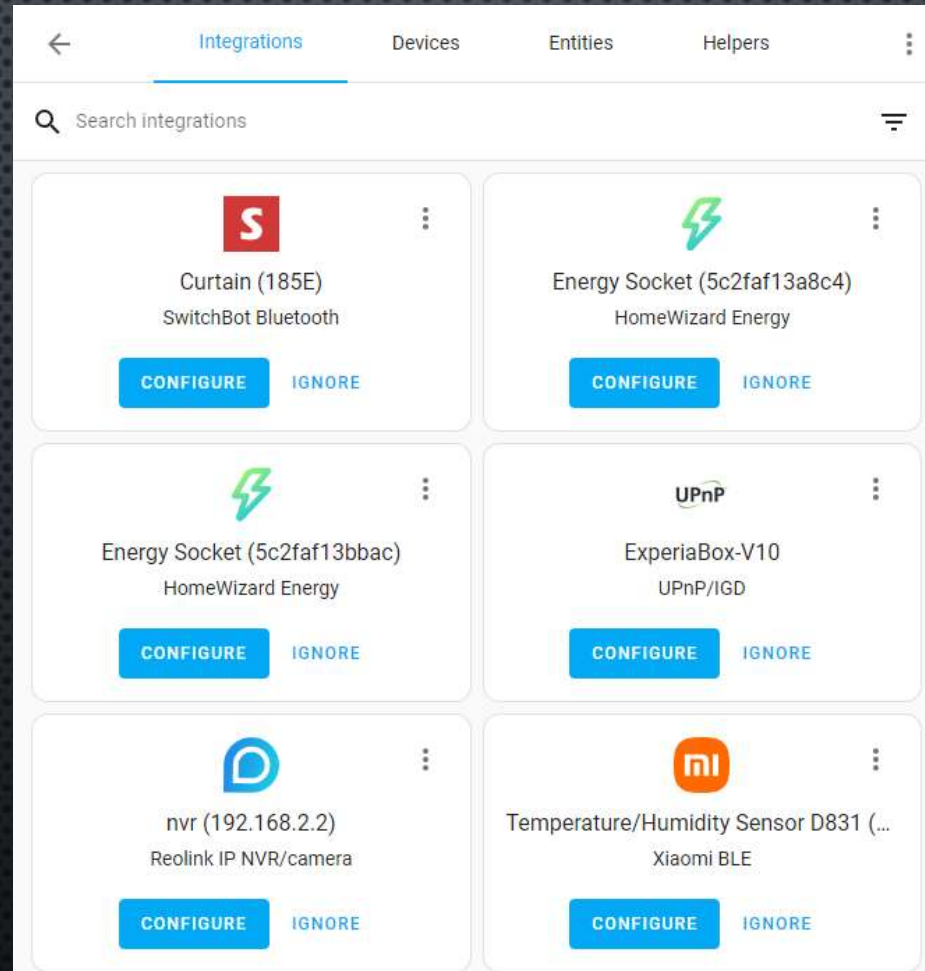
+

ADD PERSON

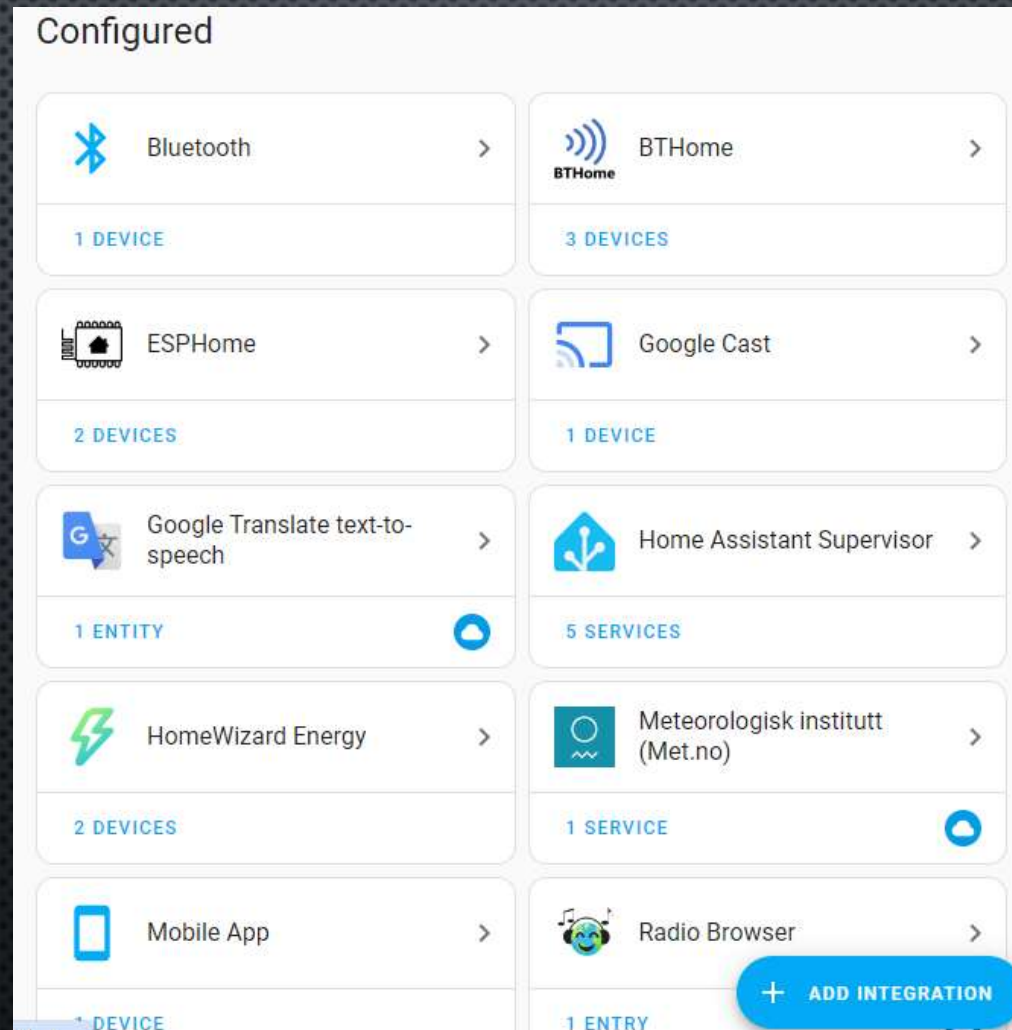
HOME ASSISTANT INRICHTEN: RUIMTES



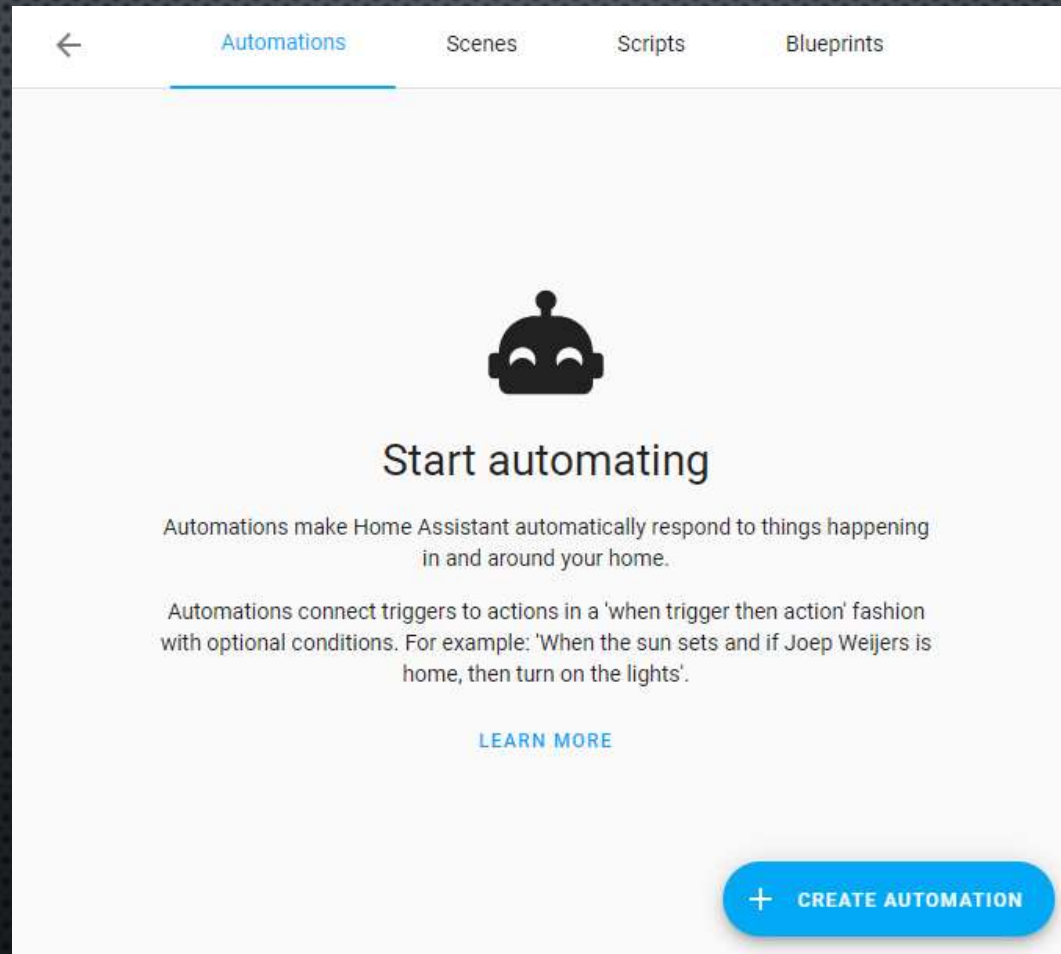
HOME ASSISTANT INRICHTEN: APPARATEN



HOME ASSISTANT INRICHTEN: APPARATEN



HOME ASSISTANT INRICHTEN: AUTOMATION



HOME ASSISTANT INRICHTEN: AUTOMATION

When

ATC D831 Temperature temperature changes

Device
ATC D831

Trigger
ATC D831 Temperature temperature changes

Above
20 °C

Below

Duration (optional)
hh mm ss
0 : 00 : 00

Then do

Turn on Woon Smart Plug Socket 1

Device
Woon Smart Plug

Action
Turn on Woon Smart Plug Socket 1

HOME ASSISTANT INRICHTEN: SCENE



Create your first scene


Scenes capture entities' states, so you can re-experience the same scene later on. For example, a 'Watching TV' scene that dims the living room lights, sets a warm white color and turns on the TV.

[LEARN MORE](#)

HOME ASSISTANT INRICHTEN: SCENE

New scene

Name
Ik heb het warm

Icon
 mdi:air-filter


X ▼

Area ▼

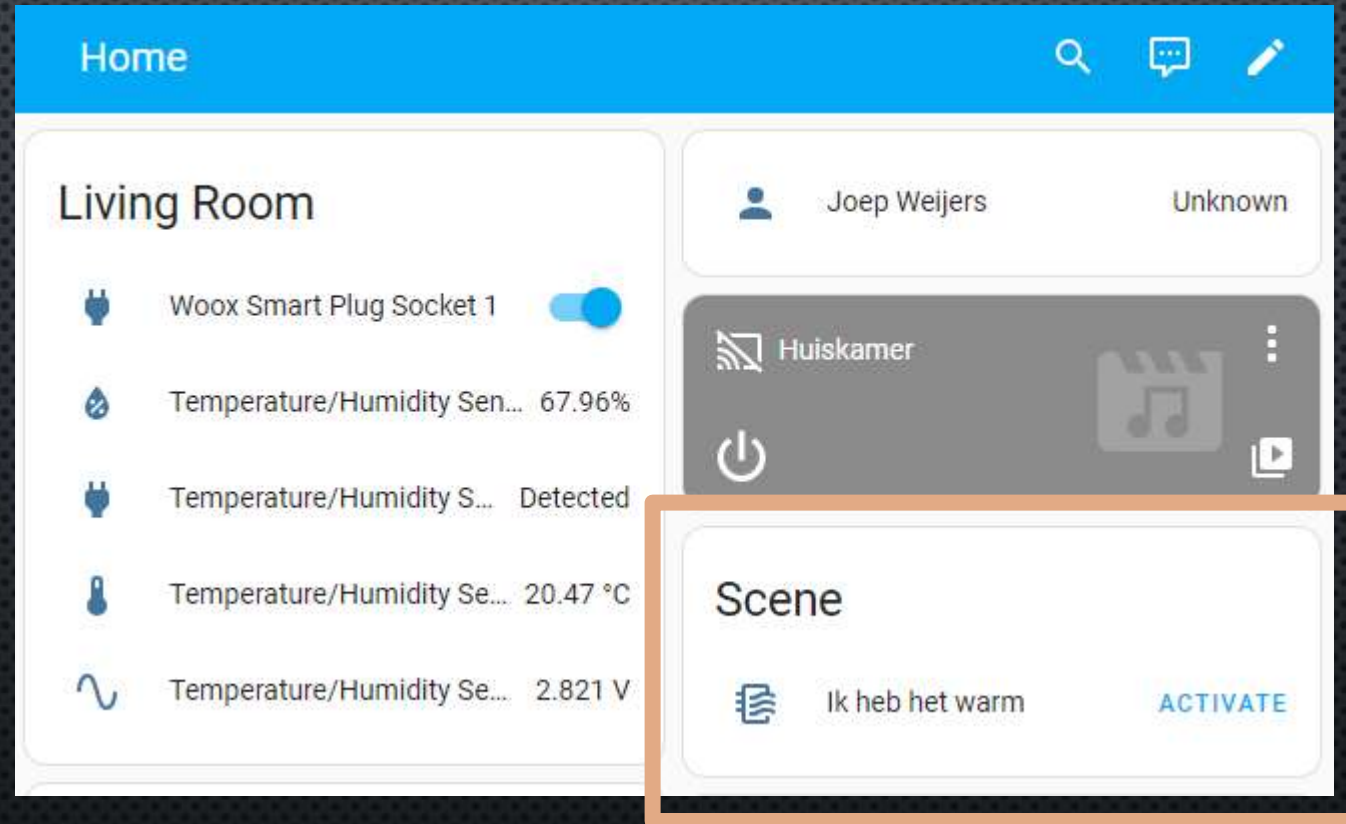
Devices

Add the devices that you want to be included in your scene. Set all entities in each device to the state you want for this scene.

Woox Smart Plug

 Woox Smart Plug Socket 1

HOME ASSISTANT INRICHTEN: SCENE ACTIVEREN



HOME ASSISTANT INRICHTEN: SCRIPT

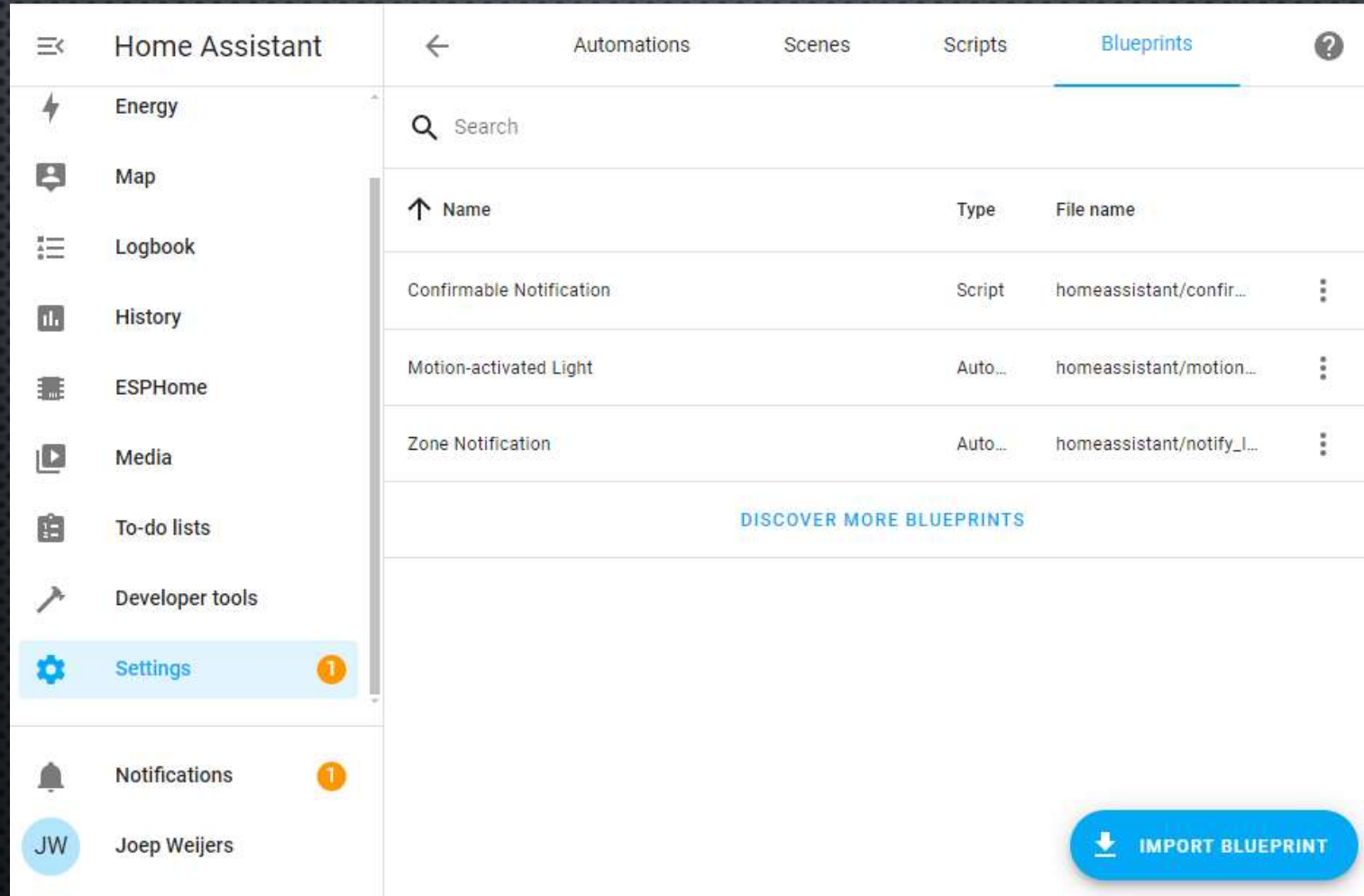


Create your first script

A script is a sequence of actions that can be run from a dashboard, an automation, or be triggered by voice. For example, a 'Wake-up routine' script that gradually turns on the light in the bedroom and opens the blinds after a delay.

[LEARN MORE](#)

HOME ASSISTANT INRICHTEN: BLUEPRINTS



The screenshot shows the Home Assistant web interface with the 'Blueprints' tab selected. The left sidebar contains navigation links for various Home Assistant features. The main content area displays a list of installed blueprints with columns for Name, Type, and File name. A search bar is at the top of the list. Below the list is a link to 'DISCOVER MORE BLUEPRINTS'. At the bottom right, there is a button to 'IMPORT BLUEPRINT'.

Home Assistant Sidebar:

- Home Assistant
- Energy
- Map
- Logbook
- History
- ESPHome
- Media
- To-do lists
- Developer tools
- Settings** (1 notification)
- Notifications (1 notification)
- JW Joep Weijers

Blueprints Tab:

← Automations Scenes Scripts **Blueprints** ?

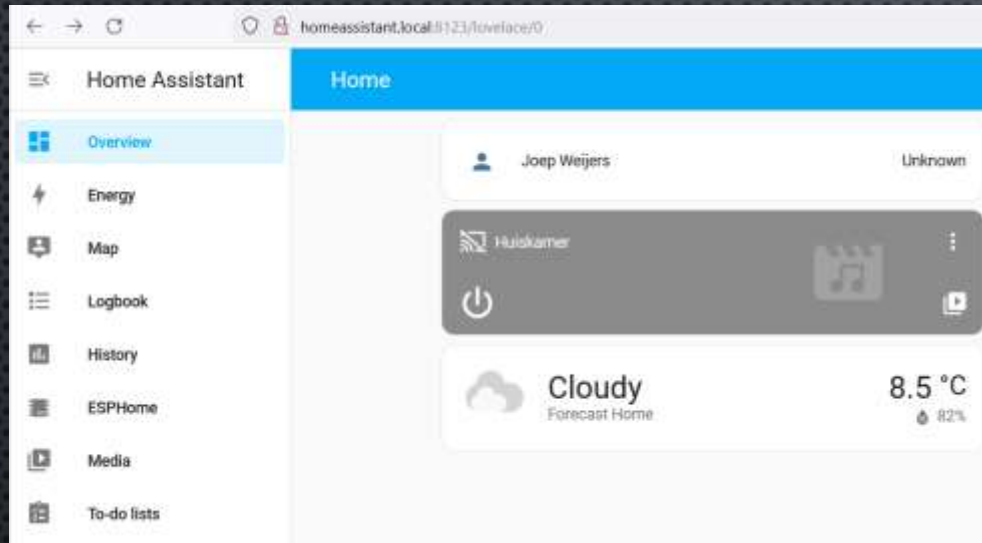
Search

↑ Name	Type	File name	
Confirmable Notification	Script	homeassistant/confir...	⋮
Motion-activated Light	Auto...	homeassistant/motion...	⋮
Zone Notification	Auto...	homeassistant/notify_l...	⋮

[DISCOVER MORE BLUEPRINTS](#)

[IMPORT BLUEPRINT](#)

HOME ASSISTANT OVERAL BEREIKBAAR





HOME ASSISTANT CLOUD

The missing cloud piece for Home Assistant, by the founder of Home Assistant. Control your Home Assistant from anywhere. Fully encrypted.

[Start a free 31 day trial](#)

After the trial, it will charge a monthly or annual fee. For more available plan details, see [pricing](#)

Access from anywhere

No longer worry if you left the garage door open. Quickly access your Home Assistant instance from your phone, your favorite coffeeshop or at work.

All data is fully encrypted between your device and your Home Assistant instance. No snooping.



Easily connect to voice assistants

With Home Assistant Cloud, you can control your Home with your voice using Assist, our own voice assistant.

Assist works on a series of devices such as Android, Wear OS, iPhone, Apple Watch, and others.

You can still connect to both Google Assistant and Amazon Alexa to use the Amazon Echo or Google Home.

SPELEN MET HOME ASSISTANT

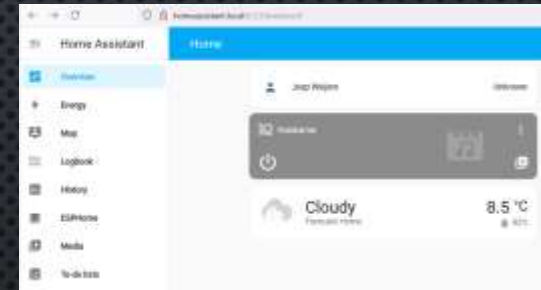
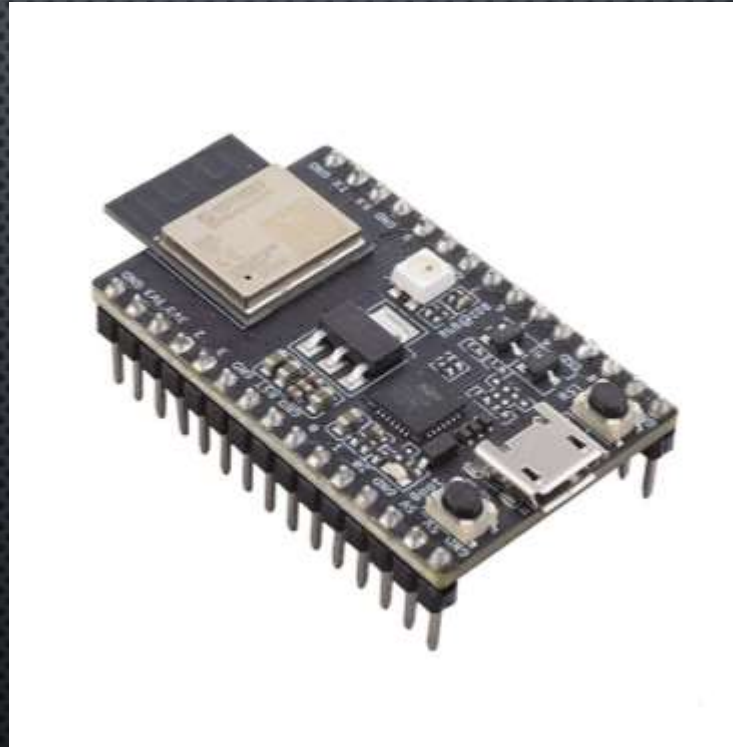
- Maak 4 groepen
- 1 groep: Bluetooth
 - Gordijn
 - Wifi stekker
- 3 groepen:
 - Temperatuur sensor
 - Lamp



SPELEN MET HOME ASSISTANT

- Ga met je groep bij elkaar zitten
- Verbindt met het wifi HomeAssistant
- Ga met je browser naar:
<https://ha1.local:8123>
<https://ha2.local:8123>
<https://ha3.local:8123>
<https://ha4.local:8123>
- Maak accounts aan voor je groep (Settings -> People)
- Voeg een ruimte “groepsnaam” toe (Settings -> Areas & Zones)
- Voeg de apparaten toe (Settings -> Devices & Services)
- Geef de apparaten op het dashboard weer
- Probeer Automations en Scenes te maken. Wees creatief!

VOORBEELD VERBINDING SMART HOME: BLUETOOTH OVER WIFI



HOME ASSISTANT TIPS

- Gebruik Zones voor locatie gebaseerde functies
 - Zet Advanced Mode aan
 - Gebruik MultiFactor Authenticatie
 - Maak Backups
-
- Zet SSH aan
 - HACS: Home Assistant Community Store
 - File editor add-on

VOLGENDE SESSIE:
DINSDAG 14 MEI 20:00



CURSUSAVOND 6: 28 MEI

[HTTPS://GITHUB.COM/VUGHTSEPROGRAMMEERCLUB/VPC-IOT/](https://github.com/VUGHTSEPROGRAMMEERCLUB/VPC-IOT/)