

# Home Assistant

De baas in huis

Serge Gielkens

- Van origine natuurkundige
- Eerste IT ervaring mainframe
- 20 jaar Linux
- Schrijf voor Linux Magazine

- Waarom gebruiken?
- Voorbeelden
- Installeer Home Assistant
- Wat vind je waar?
- Maak apparaatjes bekend (integrations)
- Demo: apparaatjes verbinden (automation)
- Vragen

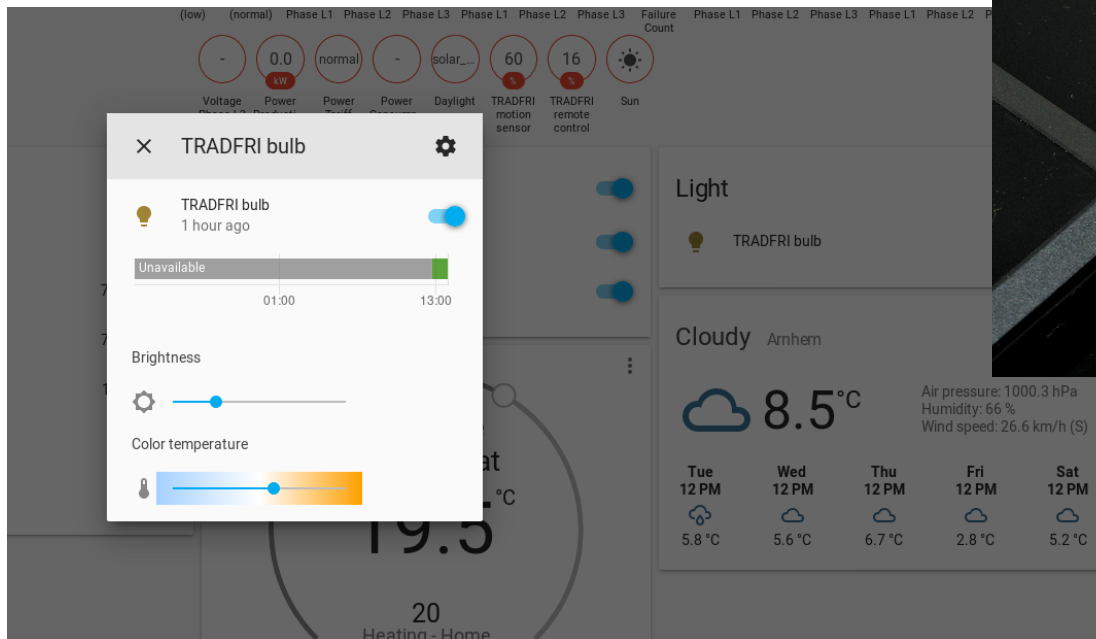
# Waarom gebruiken?



- Alles op centrale plek
- Geen cloud nodig
- Knoop apparaatjes aan elkaar
- Actieve community



## IKEA Trådfri





## Slimme meter



ser2net voor  
verbinding met Home Assistant

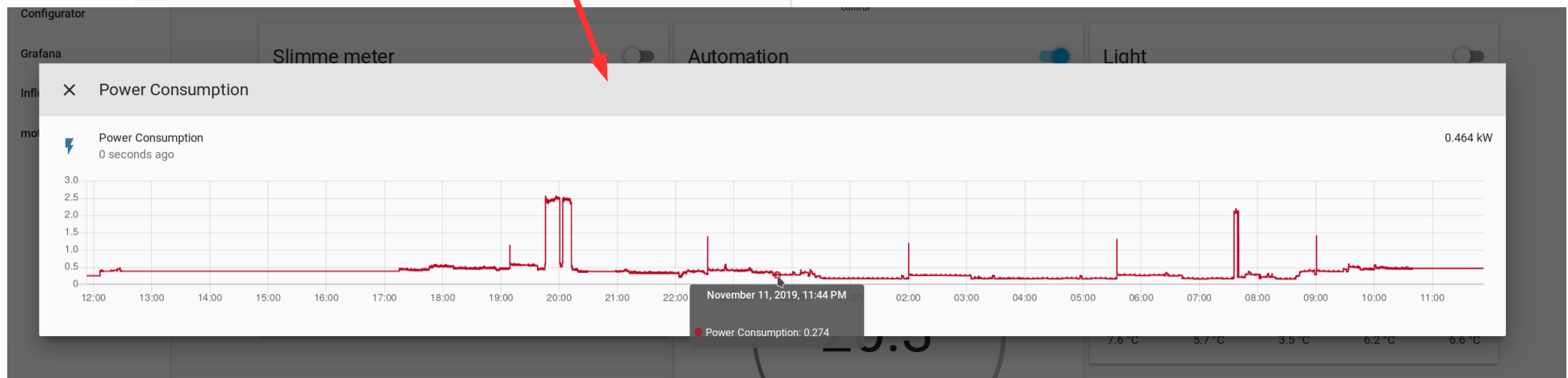


**Slimme meter**

⚡ Power Consumption	0.47 kW
⚡ Power Consumption (low)	80.027 kWh
⚡ Power Consumption (normal)	86.165 kWh
💧 Hourly Gas Consumption	0.0 m3/h
💧 Gas Consumption	53.892 m3
👁 Voltage Phase L1	230.0 V

Automatiseer  mij  Sci

## Slimme meter



## Slimme thermostaat





# Voorbeelden



## Slimme thermostaat

208 kWh  
543 kWh  
71 m<sup>3</sup>/h  
3.397 m<sup>3</sup>  
230.0 V

mijn\_alarm

Plugwise  
Thermostat  
20.2 °C  
20  
Idle - Home

Cloud

12 PM  
5.8 °C





## Camera (MotionEyeOS)

Home Assistant interface showing the configuration for a camera (Camera1) using MotionEyeOS. The interface displays various settings including Preferences (Layout Columns, Fit Frames Vertically, Layout Rows, Frame Rate Dimmer, Resolution Dimmer), General Settings (Admin Username, Admin Password, Surveillance Username, Surveillance Password, motionEye Version, Motion Version, OS Version, Configuration Backup/Restore), and Video Device (Camera Name, Camera ID, Camera Device, Camera Type, Automatic Brightness, Video Resolution, Video Rotation, Frame Rate, Extra Motion Options). A live video feed of a person at a desk is shown in the center.



# Nog veel meer mogelijk



**NLLGG**  
Nederlandse Linux Gebruikers Groep

### // Integrations

**Note**  
Support for these integrations is provided by the Home Assistant community.

All (1492)

Featured

Added in:

- Alarm (30)
- Automation (21)
- Binary Sensor (110)
- Calendar (8)
- Camera (38)
- Car (11)
- Climate (59)
- Cover (44)
- DIY (46)
- Doorbell (4)
- Downloading (10)
- Energy (31)
- Environment (13)
- Fan (16)
- Finance (15)

 Bizkaibus next bus tracking sensor transport	 CityBikes Sensor transport	 De Lijn transport	 Deutsche Bahn transport
 Dublin Bus Transport transport	 Entur public transport transport	 Google Maps Travel Time transport	 GTT transport
 HERE Travel Time transport	 Irish Rail Transport transport	 London Underground transport	 Lyft Sensor transport
 MVG transport	 Nederlandse Spoorwegen transport	 NBS Sensor transport	 OASA Telematics transport

### // Integrations

**Note**  
Support for these integrations is provided by the Home Assistant community.

All (1492)

Featured

Added in:

- Alarm (30)
- Automation (21)
- Binary Sensor (110)
- Calendar (8)
- Camera (38)
- Car (11)

 17track.net postal-service	 AfterShip Sensor postal-service	 PostNL Sensor postal-service
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[home-assistant.io/integrations/](https://home-assistant.io/integrations/)



## // Installing Hass.io

[Edit this page on GitHub](#)

### Topics

#### Hass.io

- **Installation**
- Available add-ons
- Installing third-party add-ons

#### Advanced

- Command line
- Z-Wave
- Enable I2C

[Looking to create an add-on?](#)

The following will take you through the steps required to install Hass.io.

#### 1. Download the appropriate install option:

- As an image for your device:
  - [Raspberry Pi Zero](#) (not recommended for more than testing)
  - [Raspberry Pi Zero W](#) (not recommended for more than testing)
  - [Raspberry Pi 1 Model B](#) (not recommended for more than testing)
  - [Raspberry Pi 2 Model B](#)
  - [Raspberry Pi 3 Model B and B+ 32bit](#) (recommended)
  - [Raspberry Pi 3 Model B and B+ 64bit](#)
  - [\(RC\) Raspberry Pi 4 Model B 32bit](#) (recommended)
  - [\(RC\) Raspberry Pi 4 Model B 64bit](#)
  - [Tinkerboard](#)
  - [Odroid-C2](#)
  - [Odroid-XU4](#)
  - [OrangePi-Prime](#)
  - [Intel-Nuc](#)
- As a virtual appliance:
  - [VMDK](#) (VMWare Workstation)
  - [VHDX](#)

[home-assistant.io/hassio/installation/](https://home-assistant.io/hassio/installation/)





Etcher: [github.com/balena-io/etcher/releases](https://github.com/balena-io/etcher/releases)

Latest release

v1.5.63






a155811

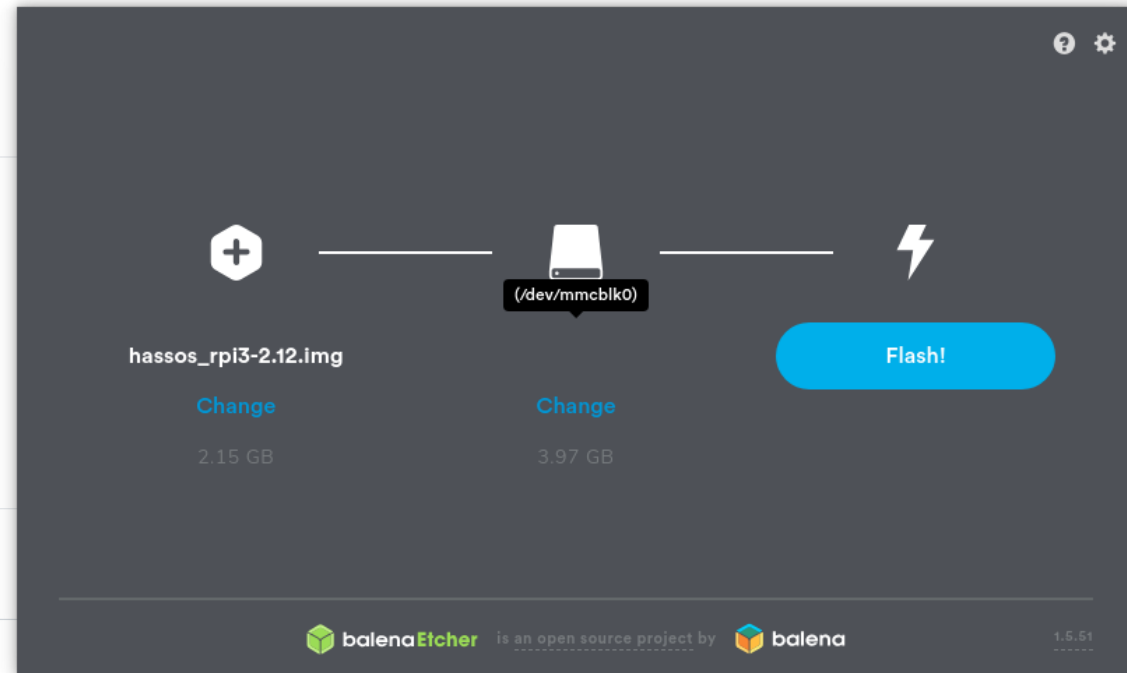
## v1.5.63

 balena-ci released this 3 days ago

1.5.63

▼ Assets 21

 <a href="#">balena-etcher-electron_1.5.63_amd64.deb</a>	
 <a href="#">balena-etcher-electron-1.5.63.x86_64.rpm</a>	54.7 MB
 <a href="#">balenaEtcher-1.5.63-x64.AppImage</a>	81.5 MB
 <a href="#">balena-etcher-electron-1.5.63-linux-x64.zip</a>	81.1 MB
 <a href="#">balenaEtcher-Portable-1.5.63.exe</a>	119 MB





## Browse naar hassio:8123



### Home Assistant

Are you ready to awaken your home, reclaim your privacy and join a worldwide community of tinkerers?

Let's get started by creating a user account.

Name

serge

Username

serge

Password

●●●●●●●●

Confirm Password

●●●●●●●●

CREATE ACCOUNT



### Home Assistant

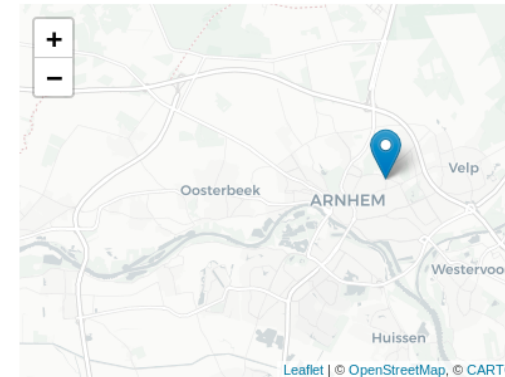
Hello serge, welcome to Home Assistant. How would you like to name your home?

Arnhem

We would like to know where you live. This information will help with displaying information and setting up sun-based automations. This data is never shared outside of your network.

We can help you fill in this information by making a one-time request to an external service.

DETECT



Time Zone

Elevation

0

meters

Unit System

Metric  
Celsius, kilograms

Imperial  
Fahrenheit, pounds

NEXT

# Wat vind je waar?



The screenshot shows the Home Assistant web interface for a location named 'Arnhem'. The left sidebar contains a menu with the following items: Overview, Map, Logbook, History, Developer Tools, Hass.io, Configuration, Notifications, and a user profile for 'serge'. Two red circles highlight the 'Overview', 'Map', 'Logbook', and 'History' items, and the 'Developer Tools', 'Hass.io', and 'Configuration' items. A red arrow points from the text 'Alles op centrale plek' to the first circle, and another red arrow points from the text 'Knoop apparaatjes aan elkaar' to the second circle. The main content area displays weather information for 'Arnhem', including a current temperature of 6.4°C, a weather icon of a cloud with rain, and a 5-day forecast. A small dialog box in the bottom right corner asks 'Do you want to save this login?' with 'NO THANKS' and 'SAVE LOGIN' buttons.

Home Assistant Arnhem

Overview  
Map  
Logbook  
History

Developer Tools  
Hass.io  
Configuration

Notifications  
serge

Updater serge Sun

Rainy Arnhem

6.4°C

Air pressure: 998.3 hPa  
Humidity: 89 %  
Wind speed: 21.2 km/h (S)

Tue 1 PM	Wed 1 PM	Thu 1 PM	Fri 1 PM	Sat 1 PM
6.1°C	6.4°C	7.1°C	3.1°C	5.5°C

Do you want to save this login?  
NO THANKS SAVE LOGIN

Alles op centrale plek

Knoop apparaatjes aan elkaar



## Add-on ≠ integration

The screenshot shows the Home Assistant web interface. On the left is a sidebar with navigation items: Home Assistant, Overview, Map, Logbook, History, Developer Tools, Hass.io (circled in red), Configuration, and Notifications. The main content area is titled 'Hass.io' and has a navigation bar with 'DASHBOARD', 'SNAPSHOT', 'ADD-ON STORE' (circled in red), and 'SYSTEM'. Below this is the 'Official add-ons' section, maintained by Home Assistant, with a grid of add-on cards. The 'Configurator' add-on is circled in red. Below the official add-ons is the 'Community Hass.io Add-ons' section, maintained by Franck Nijhof, with a grid of community add-on cards. The 'Hass.io' menu item in the sidebar is circled in red.

Official add-ons			
<b>Almond</b> The home server version of Almond (Not available)	<b>CEC Scanner</b> Scan for HDMI CEC devices	<b>Check Home Assistant configuration</b> Check current Home Assistant configuration against a new version	<b>Configurator</b> Browser-based configuration file editor for Home Assistant
<b>deCONZ</b> Control a ZigBee network with ConBee or RaspBee by Dresden Elektronik	<b>DHCP server</b> A simple DHCP server	<b>Dnsmasq</b> A simple DNS server	<b>Duck DNS</b> Free Dynamic DNS (DynDNS or DDNS) service with Let's Encrypt support
<b>Git pull</b> Simple git pull to update the local configuration	<b>Google Assistant SDK</b> A virtual personal assistant developed by Google	<b>Hey Ada!</b> Home Assistant featured voice assist (Not available)	<b>HomeMatic CCU</b> HomeMatic central based on OCCU
<b>Let's Encrypt</b> Manage certificate from Let's Encrypt	<b>MariaDB</b> An SQL database server	<b>Mosquitto broker</b> An Open Source MQTT broker	<b>NGINX Home Assistant SSL proxy</b> An SSL/TLS proxy
<b>RPC Shutdown</b> Simple way for remote windows shutdowns	<b>Samba share</b> Expose Hass.io folders with SMB/CIFS	<b>Snips.AI</b> Local voice control platform	<b>SSH server</b> Allows connections over SSH
<b>TellStick</b> TellStick and TellStick Duo service			

Community Hass.io Add-ons			
<b>ADB - Android Debug Bridge</b> The Android Debug Bridge server program	<b>AdGuard Home</b> Network-wide ads & trackers blocking DNS server	<b>AirCast</b> AirPlay capabilities for your Chromecast devices.	<b>AirSonos</b> AirPlay capabilities for your Sonos (and UPnP) devices.



# Configurator



Home Assistant Hass.io: add-on details

Configurator 3.6  
Browser-based configuration file editor for Home Assistant.  
Visit [Configurator page](#) for details.

6 RATING HASS APPAR... AUTH INGRESS

**INSTALL**

Hass.io Core Add-on: Configurator  
Browser-based configuration file editor for Home Assistant.  
aarch64 yes amd64 yes armhf yes armv7 yes i386 yes

1

Home Assistant Hass.io: add-on details

Configurator 3.6

Browser-based configuration file editor for Home Assistant.  
Visit [Configurator page](#) for details.

6 RATING HASS APPAR... AUTH INGRESS

Start on boot

Auto update

Show in sidebar

Protection mode

UNINSTALL **START**

2

Home Assistant Hass.io: add-on details

Configurator 3.6

Browser-based configuration file editor for Home Assistant.  
Visit [Configurator page](#) for details.

6 RATING HASS APPAR... AUTH INGRESS

Start on boot

Auto update

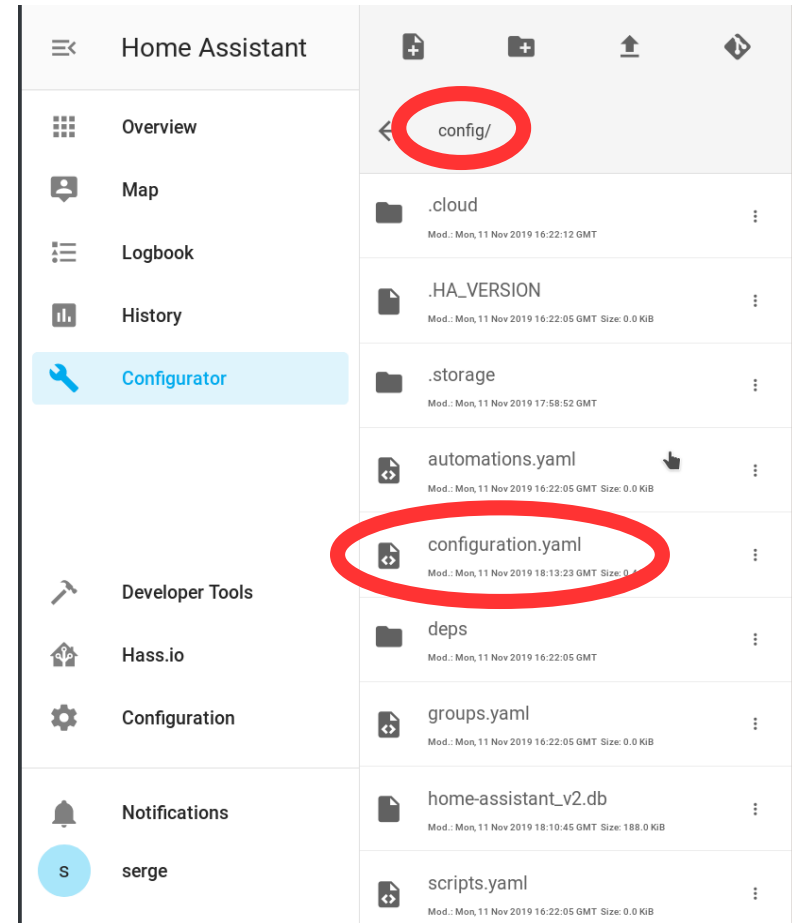
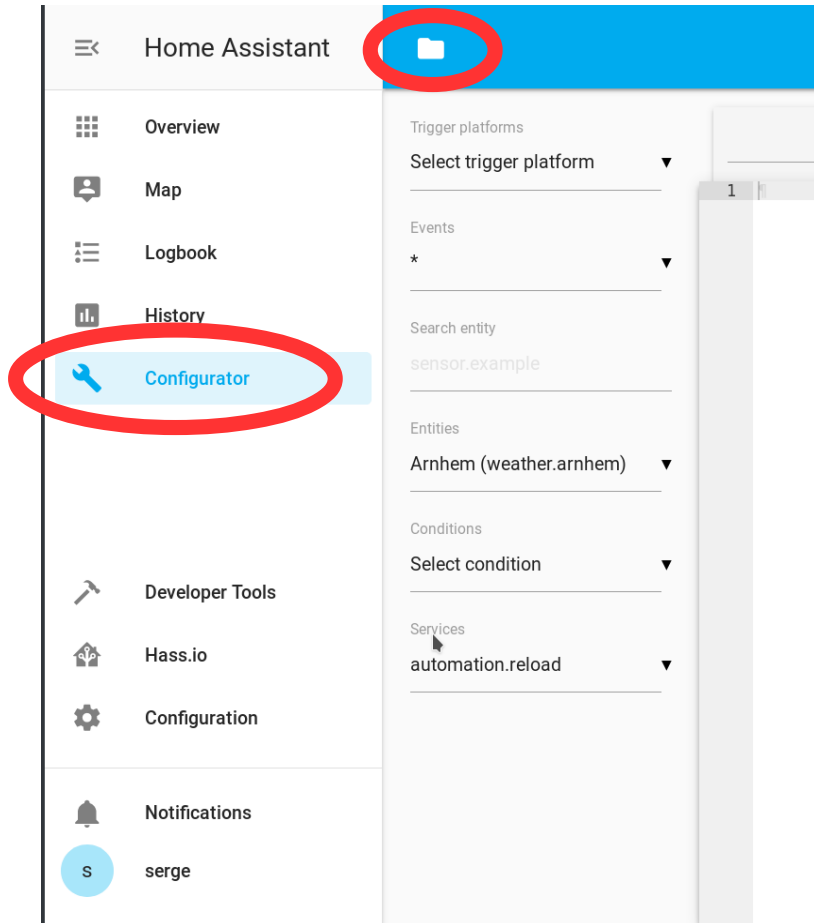
Show in sidebar

Protection mode

UNINSTALL RESTART STOP **OPEN WEB UI**

3

## Configuration.yaml



# Integrations



Home Assistant Configurator interface showing the configuration file `/config/configuration.yaml`. The file content is as follows:

```
1 -
2 # Configure a default setup of Home Assistant (frontend, api
3 default_config:
4 -
5 # Uncomment this if you are using SSL/TLS, running in Docker
6 # http:
7 #   base_url: example.duckdns.org:8123
8 -
9 # Text to speech
10 tts:
11   platform: google_translate
12 -
13 group: !include groups.yaml
14 automation: !include automations.yaml
15 script: !include scripts.yaml
16 -
17 # Eigen toevoegingen
18 -
19 # Detecteer automatisch
20 discovery:
21 -
22 # Sensor voor slimme meter via ser2net
23 sensor:
24   platform: dsmr
25   host: 192.168.yy.yy
26   port: 2801
27   dsmr_version: 5
28   ...
29 # Voor slimme thermostaat
30 climate:
31   platform: plugwise
32   password: xxxx
33   host: 192.168.yy.yy
34 ...
```

```
1 -
2 # Configure a default setup of Home Assistant (frontend, api
3 default_config:
4 -
5 # Uncomment this if you are using SSL/TLS, running in Docker
6 # http:
7 #   base_url: example.duckdns.org:8123
8 -
9 # Text to speech
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13 group: !include groups.yaml
14 automation: !include automations.yaml
15 script: !include scripts.yaml
16 -
17 # Eigen toevoegingen
18 -
19 # Detecteer automatisch
20 discovery:
21 -
22 # Sensor voor slimme meter via ser2net
23 sensor:
24   platform: dsmr
25   host: 192.168.yy.yy
26   port: 2001
27   dsmr_version: 5
28   ...
29 # Voor slimme thermostaat
30 climate:
31   platform: plugwise
32   password: xxxx
33   host: 192.168.yy.yy
34 ...
```



Home Assistant

Getting started Integrations Docs Examples Blog Need help?

## // Plugwise

This enables [Plugwise Anna](#) thermostats to be integrated. This integration talks locally to your **Smile** interface, and you will need its password and IP address.

The password can be found on the bottom of your Smile, it should consist of 6 characters. To find your IP address use the Plugwise App:

- Open the Plugwise App and choose the 'Settings'-icon (☰) and choose 'HTML-interface'.
- Go to the (lower) 'Settings'-icon (☰) and choose 'Preferences'.
- Choose 'System' then 'Networking' and your IP address will be shown.

### Configuration

You have to add the following to your configuration.yaml file:

```
# Minimal configuration.yaml entry
climate:
  - platform: plugwise
    password: YOUR_SHORT_IP
    host: YOUR_SMILE_LOCAL_IP
```

#### CONFIGURATION VARIABLES

**password**  
(string) (Required)  
Your Smile ID (located on the bottom of the Smile, not the Anna).

**host**  
(string) (Required)  
The IP address of your Smile.

## Configuration

You have to add the following to your configuration.yaml file:

```
# Minimal configuration.yaml entry
climate:
  - platform: plugwise
    password: YOUR_SHORT_IP
    host: YOUR_SMILE_LOCAL_IP
```

YAML Copy

#### CONFIGURATION VARIABLES

**password**  
(string) (Required)

home-assistant.io/integrations/

# Integrations



Home Assistant Configurator interface showing the configuration file editor. The left sidebar contains navigation options: Overview, Map, Logbook, History, Configurator (selected), Developer Tools, Hass.io, Configuration, Notifications, and a user profile for 'serge'. The main area displays the configuration file `/config/configuration.yaml`. A red box highlights the configuration content, which includes sections for 'Eigen toevoegingen' (custom additions) and 'Sensor voor slimme meter via ser2net'.

```
1 -
2 # Configure a default setup of Home Assistant (frontend, api
3 default_config:
4 -
5 # Uncomment this if you are using SSL/TLS, running in Docker
6 # http:
7 #   base_url: example.duckdns.org:8123
8 -
9 # Text to speech
10 tts:
11   platform: google_translate
12 -
13 group: !include groups.yaml
14 automation: !include automations.yaml
15 script: !include scripts.yaml
16 -
17 # Eigen toevoegingen
18 -
19 # Detecteer automatisch
20 discovery:
21 -
22 # Sensor voor slimme meter via ser2net
23 sensor:
24   platform: dsmr
25   host: 192.168.yy.yy
26   port: 2801
27   dsmr_version: 5
28 -
29 # Voor slimme thermostaat
30 climate:
31   platform: plugwise
32   password: xxxx
33   host: 192.168.yy.yy
34 -
```

# Integrations



```
1 -  
2 # Configure a default setup of Home Assistant (frontend, api  
3 default_config:-  
4 -  
5 # Uncomment this if you are using SSL/TLS, running in Docker  
6 # http:-  
7 #   base_url: example.duckdns.org:8123  
8 -  
9 # Text to speech  
10 tts:-  
11   - platform: google_translate  
12 -  
13 group: !include groups.yaml  
14 automation: !include automations.yaml  
15 script: !include scripts.yaml  
16 -  
17 # Eigen toevoegingen  
18 -  
19 # Detecteer automatisch  
20 discovery:-  
21 -  
22 # Sensor voor slimme meter via ser2net  
23 sensor:-  
24   - platform: dsmr  
25     host: 192.168.yy.yy  
26     port: 2001  
27     dsmr_version: 5  
28     ...  
29 # Voor slimme thermostaat  
30 climate:-  
31   - platform: plugwise  
32     password: xxxx  
33     host: 192.168.yy.yy  
34     ...
```

bad indentation of a sequence entry at line 32, column 4:  
password: xxxx  
^

OK



Home Assistant Configuration

Configure Home Assistant

Here it is possible to configure your components and Home Assistant. Not everything is possible to configure from the UI yet, but we're working on it.

- Home Assistant Cloud
- Integrations
- Devices
- Users
- General
- Server Control**
- Persons
- Entity Registry

Home Assistant Server Control

Restart and stop the Home Assistant server

Server management

Control your Home Assistant server... from Home Assistant.

**RESTART** STOP

# Autodiscovery



The screenshot shows the Home Assistant interface. On the left is a sidebar with a menu including: Home Assistant, Overview, Map, Logbook, History, Configurator, Grafana, InfluxDB, motionEye, Developer Tools, Hass.io, Configuration (highlighted with a gear icon), Notifications (with a notification badge), and Serge. The main content area is titled 'Server Control' and contains a 'Server manager' card with 'RESTART' and 'STOP' buttons.

The screenshot shows the 'Integrations' page in Home Assistant. It is divided into 'Discovered' and 'Configured' sections. Under 'Discovered', there is a card for 'IKEA TRÅDFRI' with a 'CONFIGURE' button circled in red. Under 'Configured', there is a card for 'Met.no: Home' with a cloud icon and a right-pointing arrow.

The screenshot shows the 'Notifications' page. A notification card is displayed with the title 'New devices discovered' and the text 'We have discovered new devices on your network. [Check it out](#)' followed by '2 minutes ago' and a 'DISMISS' button. A red arrow points from the notification to the 'CONFIGURE' button in the Integrations page above.



# Autodiscovery



IKEA TRÅDFRI CONFIGURE

Configured

Met.no: Home >

**Enter security code**

You can find the security code on the back of your gateway.

Security Code

SUBMIT



MQTT: Mosquitto broker

Own Tr >

deCON >

**Success!**

Created config for 192.168.0.6.

We found the following devices:

**Gateway**  
E1526 (IKEA)

Area  
No Area

[ADD AREA](#) [FINISH](#)



The screenshot shows the Home Assistant Overview dashboard for the location 'Arnhem'. The left sidebar is titled 'Home Assistant' and contains several menu items: Overview (highlighted with a red circle), Map, Logbook, History, Configurator, Grafana, InfluxDB, motionEye, Developer Tools, Hass.io, Configuration, Notifications, and a user profile for 'Serge'. The main dashboard area is titled 'Arnhem' and features a top row of 18 circular gauges displaying various metrics such as power consumption, voltage, and TRADFRI remote control status. Below this, there are three panels: 'Meter readings' with a table of energy and gas usage, 'Automation' with a list of active automations, and 'Light' with a TRADFRI bulb control. A large 'Plugwise Thermostat' card shows the current temperature at 19.5°C and the target temperature at 19.5°C. To the right, a weather card for 'Arnhem' shows 'Partly cloudy' conditions with a current temperature of 6.5°C and a 5-day forecast.

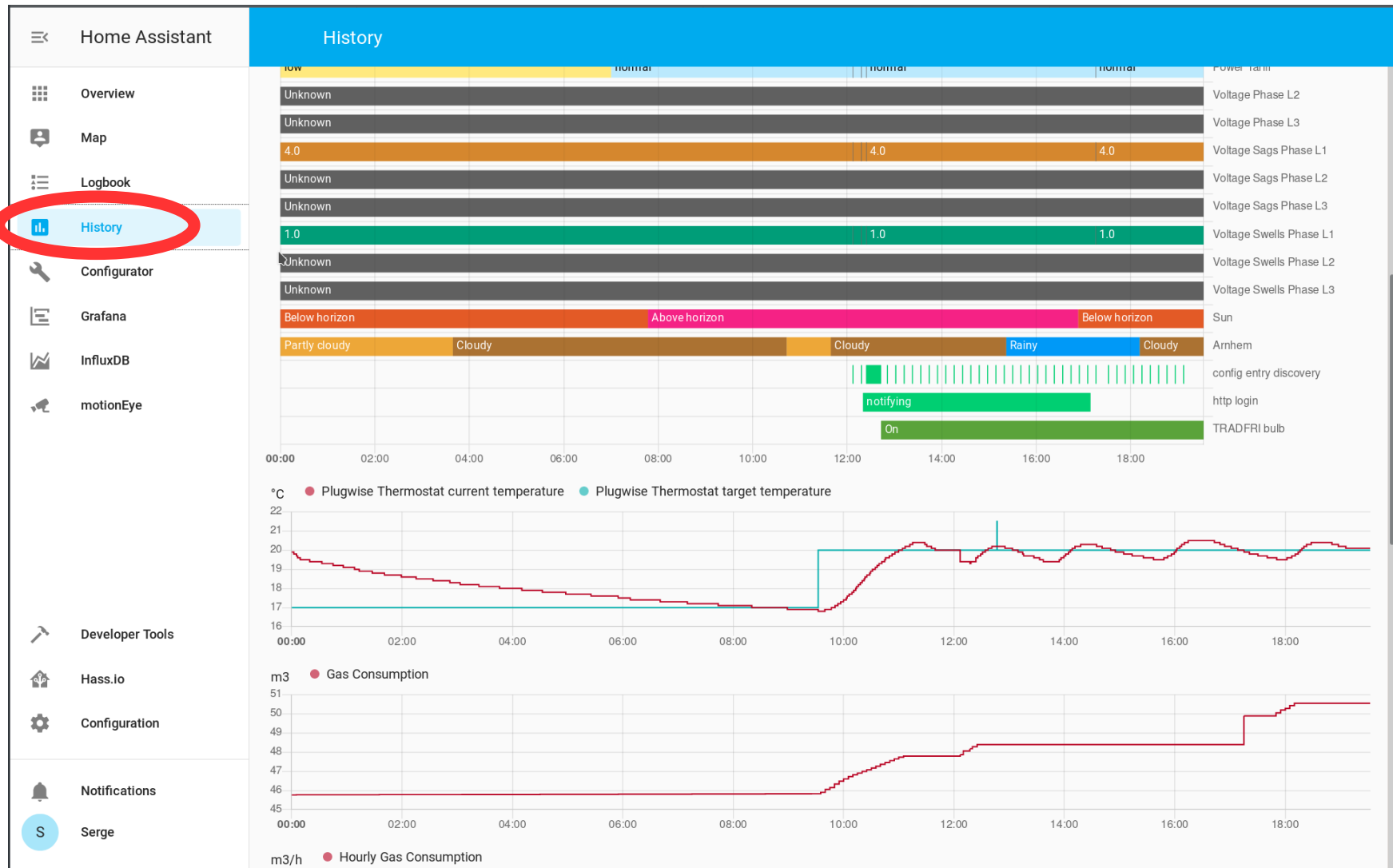
Metric	Value
Power Consumption (low)	58.209 kWh
Power Consumption (normal)	67.81 kWh
Power Production (low)	0.0 kWh
Power Production (normal)	0.0 kWh
Gas Consumption	33.331 m3

Day	Time	Temperature	Condition
Fri	12 PM	7.5 °C	Partly cloudy
Sat	12 PM	7.2 °C	Partly cloudy
Sun	12 PM	7.4 °C	Partly cloudy
Mon	12 PM	4.4 °C	Partly cloudy
Tue	12 PM	6.5 °C	Partly cloudy

# Centraal overzicht



**NLLGG**  
Nederlandse Linux Gebruikers Groep



[home-assistant.io/hassio/installation/](https://home-assistant.io/hassio/installation/)



Virtueel



- [Odroid-XU4](#)
- [OrangePi-Prime](#)
- [Intel-Nuc](#)
- As a virtual appliance:
  - **[VMDK](#)** (VMWare Workstation)
  - [VHDX](#)
  - [VDI](#)
  - [OVA](#) (not available at this time!)

2. Install Hass.io:

UEFI

~~BIOS~~



ConBee



ZigBee: 2.4 GHz



Z-Wave: rond 900 MHz



433 MHz





- Officieel
- USB stick klaarmaken  
<https://www.home-assistant.io/hassio/installation/>
- NetworkManager bestand maken  
<https://github.com/home-assistant/hassos/blob/dev/Documentation/network.md>

- Via console
- Login als root, geen wachtwoord nodig
- Tik commando in:  
`login`
- Voer NetworkManager commando uit:  
`nmcli device wifi connect "je_ssid"  
password "je_wachtwoord"`