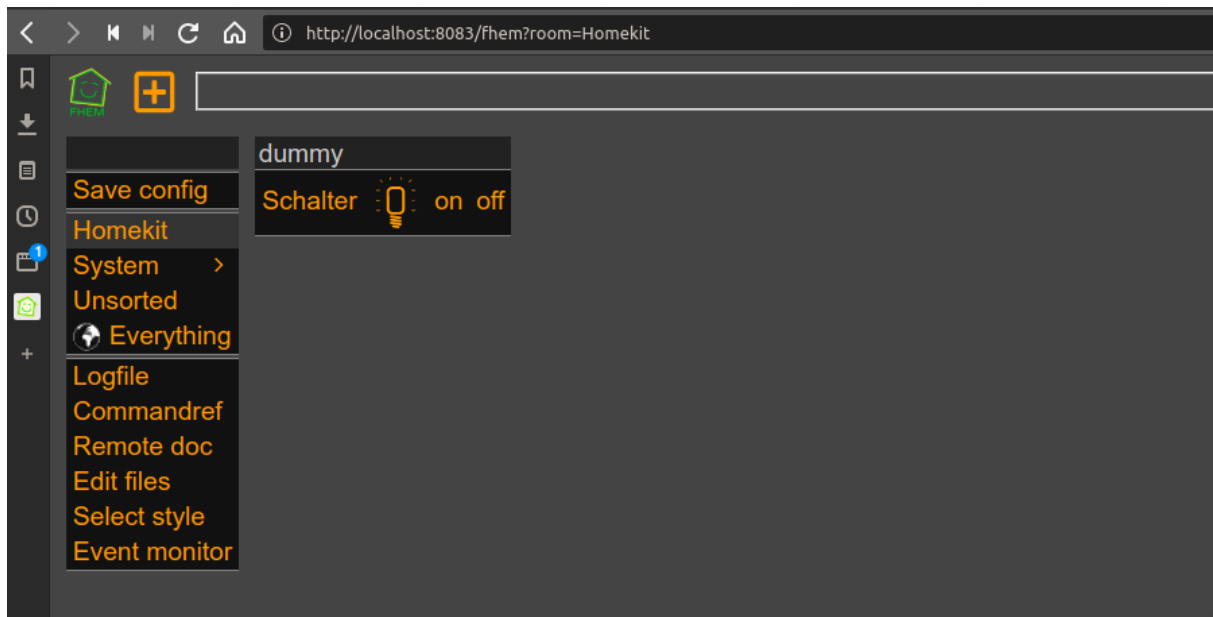


---

## Home Automation Stack



The stack contains everything to run FHEM on a Docker host. Mosquitto is used as message broker. SIRI functions are realized with the help of a homebridge container. The complete stack runs on x86 as well as arm architectures. It is very easy to clone its complete productive environment and has a simple way to build a test system.

### Todo

- deCONZ Image Container Integration
- DBLog Integration

### Requirements

- docker
- docker-compose

### Installation raspberrypi

#### System Update

- 1 `sudo apt-get update`
- 2 `sudo apt-get upgrade`

---

### Raspberry Config

```
1 sudo raspi-config
2 sudo reboot
```

### Intall additional packages

```
1 sudo apt-get install wget git apt-transport-https vim telnet
```

### Install docker

```
1 curl -sSL https://get.docker.com | sh
2 sudo systemctl enable docker
3 sudo systemctl start docker
4 sudo usermod -aG docker pi
```

### git repository export

```
1 cd
2 git clone https://github.com/stormmurdoc/fhemdocker.git
3 cd fhemdocker
```

### Installation docker compose

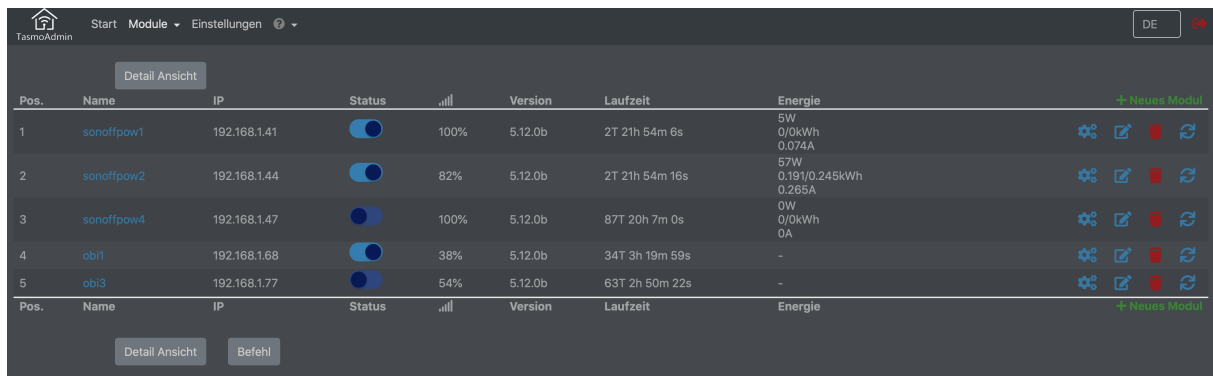
```
1 sudo apt-get install python-pip
2 sudo pip install docker-compose
```

### Start all container

```
1 docker-compose up
```

## Container

### Tasmota Admin

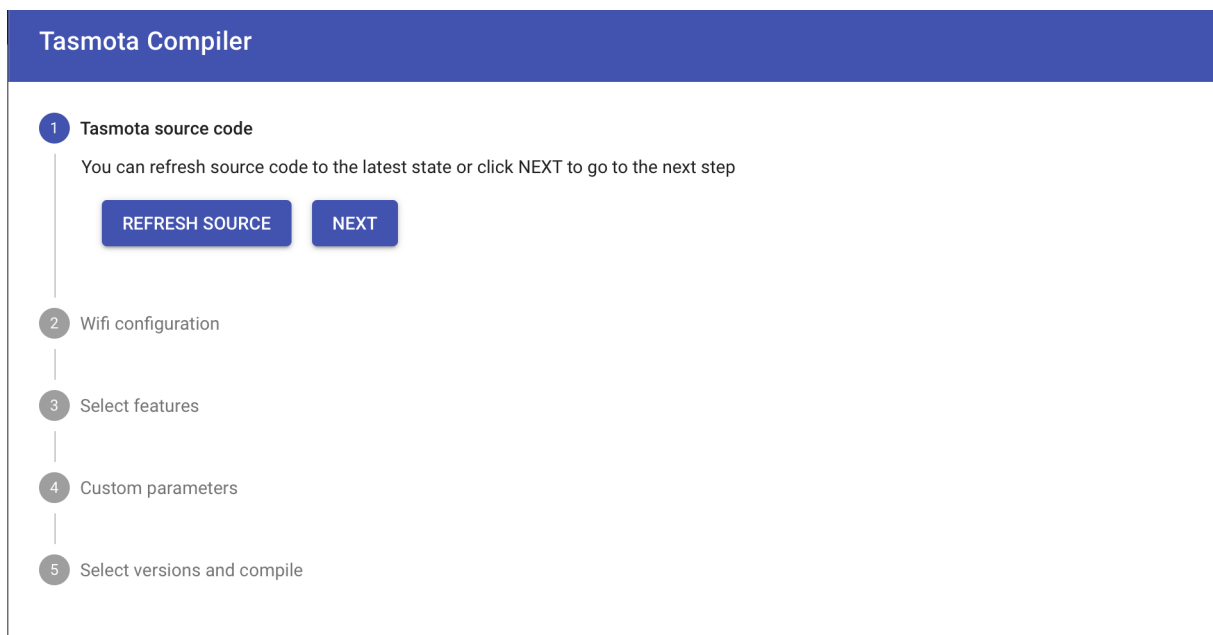


The screenshot shows the Tasmota Admin web interface. At the top, there is a navigation bar with 'Start', 'Module', and 'Einstellungen'. A 'DE' button is in the top right. Below the navigation bar, there is a 'Detail Ansicht' button. The main content is a table with columns: Pos., Name, IP, Status, Signal strength, Version, Laufzeit, and Energie. There are five rows of modules. Each row has a set of icons (gear, edit, stop, refresh) on the right. Below the table, there are 'Detail Ansicht' and 'Befehl' buttons.

Pos.	Name	IP	Status	Signal	Version	Laufzeit	Energie	Icons
1	sonoffpow1	192.168.1.41	On	100%	5.12.0b	2T 21h 54m 6s	5W 0/0kWh 0.074A	Icons
2	sonoffpow2	192.168.1.44	On	82%	5.12.0b	2T 21h 54m 16s	57W 0.191/0.245kWh 0.265A	Icons
3	sonoffpow4	192.168.1.47	On	100%	5.12.0b	87T 20h 7m 0s	0W 0/0kWh 0A	Icons
4	obi1	192.168.1.68	On	38%	5.12.0b	34T 3h 19m 59s	-	Icons
5	obi3	192.168.1.77	On	54%	5.12.0b	63T 2h 50m 22s	-	Icons

Abbildung 1: “tasmotaadmin”

### Tasmota Compiler



The screenshot shows the Tasmota Compiler web interface. It has a blue header with the title 'Tasmota Compiler'. Below the header, there is a vertical list of steps: 1. Tasmota source code, 2. Wifi configuration, 3. Select features, 4. Custom parameters, and 5. Select versions and compile. Step 1 is currently active. Below step 1, there is a text prompt: 'You can refresh source code to the latest state or click NEXT to go to the next step'. Below this text are two buttons: 'REFRESH SOURCE' and 'NEXT'.

**Tasmota Compiler**

- 1 Tasmota source code**  
You can refresh source code to the latest state or click NEXT to go to the next step  
[REFRESH SOURCE](#) [NEXT](#)
- 2 Wifi configuration
- 3 Select features
- 4 Custom parameters
- 5 Select versions and compile

Abbildung 2: “tasmotacompiler”

## Homebridge

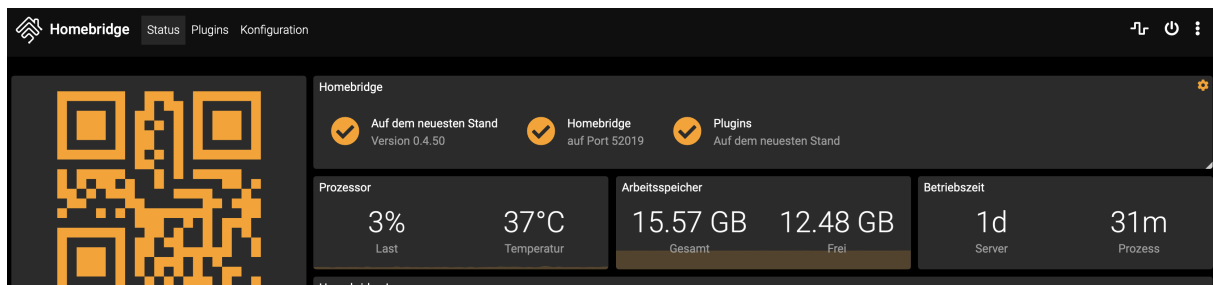


Abbildung 3: “homebridge”

## ctop

### Description

ctop is a commandline monitoring tool for linux containers

The screenshot shows the ctop command-line interface. At the top, it says 'ctop - 11:34:11 CET 7 containers'. Below this is a table with columns: NAME, CID, CPU, MEM, NET RX/TX, IO R/W, and PIDS. The table lists several containers, including 'fhemdocker\_adminer\_1', 'fhemdocker\_fhem\_1', 'fhemdocker\_homebridge\_1', 'fhemdocker\_portainer\_1', 'fhemdocker\_tasmocompil...', 'fhemdocker\_tasmotaadmi...', and 'fhemdocker\_broker\_1'. Each row shows the container's name, ID, CPU usage, memory usage, network activity, and I/O activity. The CPU column has a green bar indicating usage, and the MEM column has a grey bar. The table is scrollable, and the bottom of the table shows the 'fhemdocker\_broker\_1' container with 0% CPU and 12M / 15.57G memory usage.

Abbildung 4: “ctop”

### Installation

ctop is available in AUR, so you can install it using AUR helpers, such as YaY, in Arch Linux and its variants such as Antergos and Manjaro Linux.

### Installation Linux

```
1 sudo wget https://github.com/bcicen/ctop/releases/download/v0.7.3/
   ctop-0.7.3-linux-amd64 -O /usr/local/bin/ctop
2 sudo chmod +x /usr/local/bin/ctop
```