
Home Automation Stack

The stack contains everything to run FHEM on a Docker host. Mosquitto is used as message broker. SIRC 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/stormmurdock/fhemdocker.git
3 cd fhmdocker
```

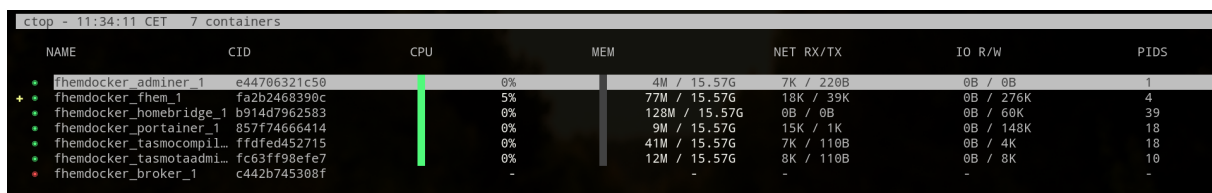
Installation docker compose

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

ctop

Description

ctop is a commandline monitoring tool for linux containers



The screenshot shows the ctop interface with a title bar 'ctop - 11:34:11 CET 7 containers'. It displays a table of container metrics with columns: NAME, CID, CPU, MEM, NET RX/TX, IO R/W, and PIDS. The CPU column features a green bar chart. The data is as follows:

| NAME | CID | CPU | MEM | NET RX/TX | IO R/W | PIDS |
|----------------------------|--------------|-----|---------------|-----------|-----------|------|
| * fhmdocker_adminer_1 | e44706321c50 | 0% | 4M / 15.57G | 7K / 220B | 0B / 0B | 1 |
| + fhmdocker_fhem_1 | fa2b2468390c | 5% | 77M / 15.57G | 18K / 39K | 0B / 276K | 4 |
| * fhmdocker_homebridge_1 | b914d7982503 | 0% | 128M / 15.57G | 0B / 0B | 0B / 60K | 39 |
| * fhmdocker_portainer_1 | 857f74666414 | 0% | 9M / 15.57G | 15K / 1K | 0B / 148K | 18 |
| * fhmdocker_tasmocompil... | ffdfed452715 | 0% | 41M / 15.57G | 7K / 110B | 0B / 4K | 18 |
| * fhmdocker_tasmotaadmi... | fc63ff98efe7 | 0% | 12M / 15.57G | 8K / 110B | 0B / 8K | 10 |
| * fhmdocker_broker_1 | c442b745388f | - | - | - | - | - |

Abbildung 1: “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.

```
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
```