

2018-09-09 - SlackUP

Retro

Fabian Ihl

Smart Home: Accessing proprietary IKEA Tradfri via python

- (Way cheaper than Phillips hue)
 - Tradfri uses central gateway to communicate with devices via ZigBee.
 - Controllable via IKEA smart phone app
 - Gateway is LAN bound, API was reverse engineered by some clever guy (not me).
 - Used `pytradfri` package
- Can be used to send commands, get current stats and listen to change events
Requires `libcoap` that needs to be build from source 😞 => Dockerize all the things
!!!!11eleven

Dockerfile

```
FROM python:3.7.0

RUN apt-get update -y
&& \
    apt-get install -y
python python-pip git
libtool autoconf
automake
build-essential && \
    git clone
--recursive
https://github.com/obgm/libcoap.git && \
    cd libcoap && \
    git checkout dtls
&& \
    git submodule
update --init
--recursive && \
    ./autogen.sh && \
    ./configure
--disable-documentati
on --disable-shared
--without-debug
CFLAGS="-D
COAP_DEBUG_FD=stderr"
&&\
    make && \
    make install && \
    pip install wheel
aiocoap pytradfri
```

Pitch

Fabian Ihl

Moar smart home stuff

Lauch docker

```
docker run -it --rm
tradfri bash -c
"python3 -i -m
pytradfri <Gateway
IP> -K <Gateway key>"
```

Some Commands

```
# List lights
lights

# Set brightness
(0-100)
api(lights[0].light_c
ontrol.set_dimmer(50)
)
```