Home Assistant

[homeassistant, domotic]

- home assistant
- raspberry
- https://github.com/scipioni/home-assistant-example

Install

- example 1
- pip3 install urllib3==1.20 –upgrade –target ~/.homeassistant/deps/ (telegram notify solved)

upgrade

```
pip install -U homeassistant
```

and after restart home assistant

with fabric

- https://github.com/home-assistant/fabric-home-assistant

hass

```
sudo apt install python3 python3-venv incron mc python3-dev libffi-dev
libssl-dev
python3 -m venv ~/lib
. ~/lib/bin/activate
echo "source ~/lib/bin/activate" >> ~/.bashrc
pip install -U pip
pip install homeassistant
```

service

/etc/systemd/system/home-assistant.service

```
[Unit]
Description=Home Assistant
After=network.target

[Service]
Type=simple
User=pi
ExecStart=/home/pi/lib/bin/hass -c "/home/pi"

[Install]
```

```
WantedBy=multi-user.target
```

enable service

```
systemctl daemon-reload
systemctl enable home-assistant
```

configuration example

```
sudo apt install git mc
git clone https://github.com/scipioni/home-assistant-example.git home-assistant-scipio
```

z-wave

TKB Home TZ10.XX / TZ10.36 termostato <Product type="0201" id="0501" name="TZ10.XX Wall Thermostat" config="wenzhou/tz10.xml"/>

/etc/udev/rules.d/local.conf

```
SUBSYSTEM=="tty", ACTION=="add", ATTRS{idVendor}=="0658", ATTRS{idProduct}=="0200", SYMLINK+="zwave"
```

Add to ~/lib/lib/python3.5/site-packages/python*openzwave/ozw*config/manufacturer_specific.xml near <Manufacturer id="0118" name="Wenzhou TKB Control System"

>

<

code> <Product type="0201" id="0501" name="TZ10.XX Wall Thermostat" config="wenzhou/tz10.xml"/> </code>

wenzhou/tz10.xml

```
<?xml version="1.0" encoding="utf-8"?>
<Product xmlns='http://code.google.com/p/open-zwave/'>
   <!-- COMMAND_CLASS_BASIC does not respond to requests -->
  <CommandClass id="32" action="remove" />
  <!-- This thermostat's setpoint descriptions are 0 based -->
  <CommandClass id="66">
                <Value type="string" genre="user" instance="1" index="0" label="Operating State" units=" mode" value="Idle" />
  </CommandClass>
```

```
  <CommandClass id="67" base="0" override_precision="2" />
</Product>
```

reverse proxy

/etc/nginx/sites-enabled/homeassistant

```
server {
    listen 80;
    server_name  "scipio.csgalileo.org";

    # create this folder empty
    location /.well-known/acme-challenge {
        root /var/www;
        allow all;
    }

    location / {
        return 301 https://$server_name$request_uri;
    }
}

server {
  listen 443 ssl;
  server_name  "scipio.csgalileo.org";
  ssl on;

  proxy_buffering off;
  location / {
    proxy_pass http://localhost:8123/;
    proxy_set_header Host $host;
  }

  ssl_certificate /etc/ssl/certs/scipio.csgalileo.org.cer;
  ssl_certificate_key /etc/ssl/private/scipio.csgalileo.org.key;
}
```

MQTT

```
apt install mosquitto
```

```
mosquitto_passwd /etc/mosquitto/pwfile scipio
```

zones

```
mosquitto_passwd /etc/mosquitto/pwfile simo
```

~/.homeassistant/known_devices.yaml

github

setup

```
git config --global push.default simple
git clone https://github.com/scipioni/home-assistant.git
cd home-assistant
git remote add upstream https://github.com/home-assistant/home-assistant.git
git fetch -v

# script/setup
```

create a branch with expected work

```
git branch telegram-webhooks
git checkout telegram-webhooks
git push --set-upstream origin telegram-webhooks
```

everyday work on branch

```
...
git add
git commit
git push
```

rebase before pull request

```
git fetch upstream dev
git rebase upstream/dev

# in case of conflicts
... edit conflicts
git add ...
git rebase --continue

# -f is necessary (Git will reject it because there isn't a direct path from the commit on the server to the commit on your branch)
git push -f
```

now in github project “new pull request”

github docs

```
git clone https://github.com/scipioni/home-assistant.git
cd home-assistant.github.io.git
git remote add upstream https://github.com/home-assistant/home-
assistant.github.io.git
git fetch -v

# script/setup
```

create a branch with expected work

```
git branch telegram-webhooks
git checkout telegram-webhooks
git push --set-upstream origin telegram-webhooks
```

ruby

```
sudo apt install y ruby ruby-dev
sudo gem install bundler
cd home-assistant.github.io.git
bundle
rake generate
```

test site

```
rake preview
```

everyday work on branch

```
...
git add
git commit
git push
```

rebase before pull request

```
git fetch upstream next
git rebase upstream/next

# in case of conflicts
... edit conflicts
git add ...
git rebase --continue

# -f is necessary (Git will reject it because there isn't a direct path from
```

```
the commit on the server to the commit on your branch)
git push -f
```

now in github project “new pull request”

motion

Install latest release from https://github.com/Motion-Project/motion

/etc/motion/motion.conf

```
on_picture_save /usr/bin/motion-homeassistant %f
```

/usr/bin/motion-homeassistant

```
#!/bin/sh

F=$1
ln -sf $(basename $F) $(dirname $F)/lastsnap.jpg
```

config.yaml

```
camera:
  - platform: local_file
    name: soggiorno
    file_path: /media/usb0/photo/lastsnap.jpg
```

sensors

- /dev-service → zwave → set*config*parameter

disable LED on fibardo FGMS-001

```
{
"node_id": 3,
"parameter": 80,
"value": 0
}
```

Foscam IP camera

```
vlc rtsp://hass:password1@192.168.2.14:554/videoMain
```

automation

create a virtual switch

input_boolean.yaml

```
motion_detected:
  name: Motion rilevato
  initial: off
  icon: mdi:run
```

we can turn on this virtual switch with as web service

```
curl -X POST -H "x-ha-access: xxx" -H "Content-Type: application/json" -d
'{"state": "on"}' \
 http://localhost:8123/api/states/input_boolean.motion_detected
```

automation that reset virtual switch after 2 seconds

automation/on-motion.yaml

```
alias: 'reset motion state'
trigger:
  platform: state
  entity_id: input_boolean.motion_detected
  to: 'on'
action:
  # after two seconds reset motion_detected state
  - delay: '00:00:02'
  - service: input_boolean.turn_off
    data:
      entity_id: input_boolean.motion_detected
```

camera motion

- https://github.com/hokus15/home-assistant-config

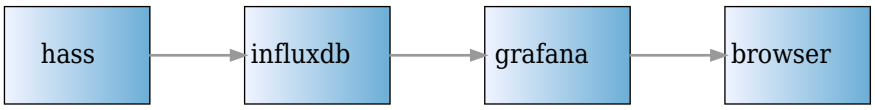
```
sudo apt install incron
```

```
echo hass > /etc/incron.allow
```

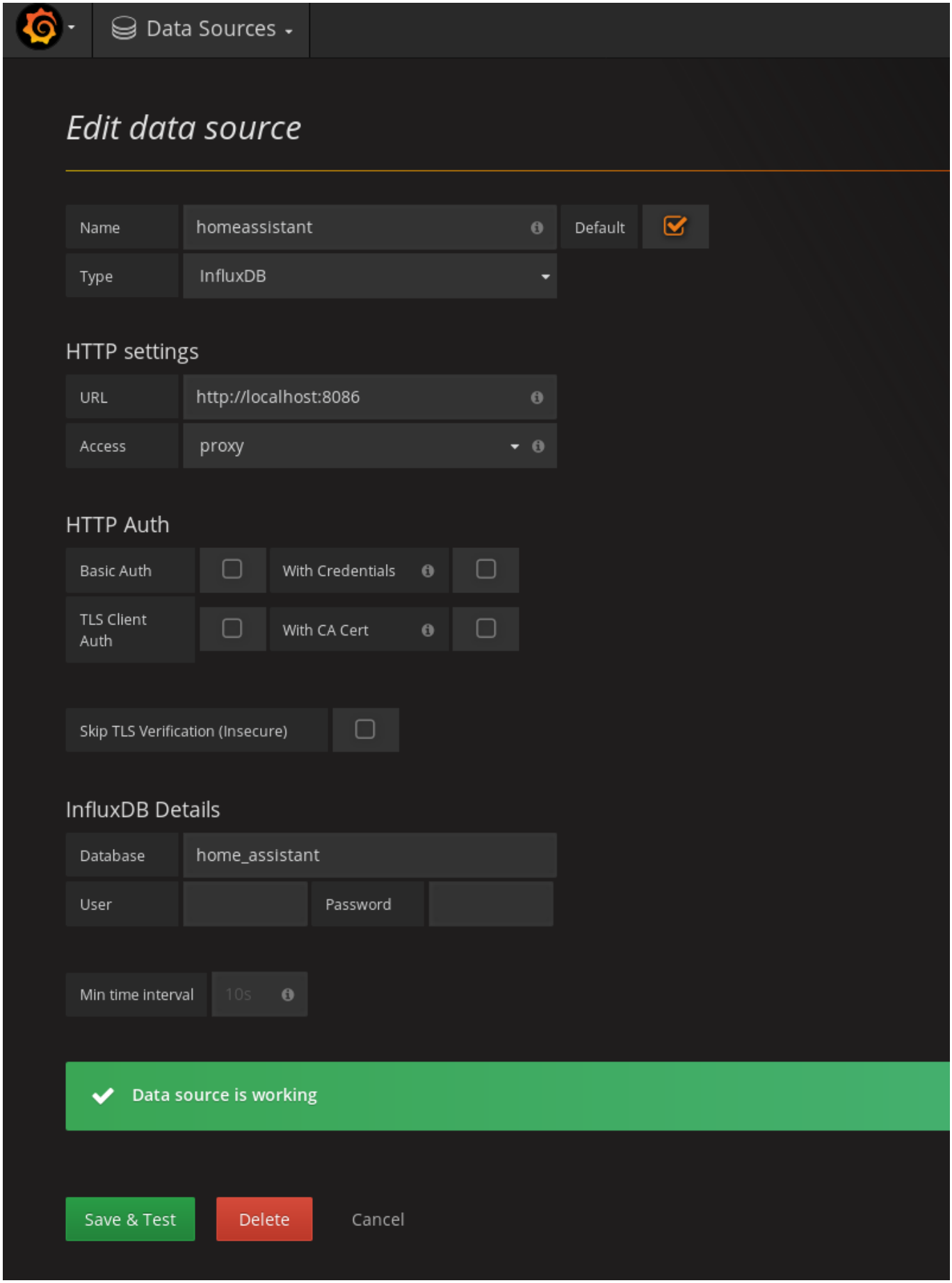
as hass user edit incron table '`incrontab -e`' (incrontab -l to see)

```
/media/usb0/photo/C1_00626E611E80/snap/ IN_CLOSE_WRITE echo "$$ $@ $# $% $&"
```

grafana



Add influxdb datasource


Data Sources
Edit data source
Name
homeassistant
Default
Type
InfluxDB
HTTP settings
URL
http://localhost:8086
Access
proxy
HTTP Auth
Basic Auth
With Credentials
TLS Client Auth
With CA Cert
Skip TLS Verification (Insecure)
InfluxDB Details
Database
home_assistant
User
Password
Min time interval
10s
Data source is working
Save & Test
Delete
Cancel

alexa

- https://home-assistant.it/integrare-alexa-in-home-assistant-senza-usare-il-cloud-e-a-costo-zero/

Modificare https://github.com/mike-grant/haaska per il multiclient.

haaska.py gira come servizio sui lambda server amazon. Anziché leggere la configurazione (ad esempio bearer*token) da file, prevedere una chiamata ad un web service esterno (ad esempio https://ha.csagalileo.org/alexa?client=id_client_alexa) da cui recuprare i dati. Ovviamente va mappato id*client_alexa con albertis