Ubiquitous Computing - Lab 4: Smart Home

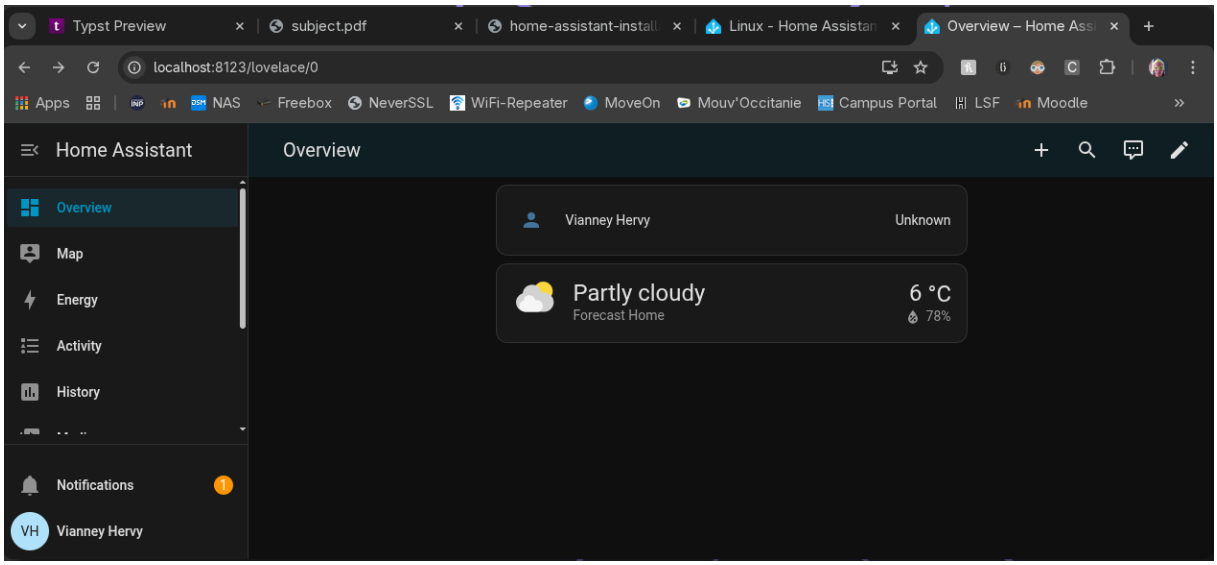
Vianney Hervy

1. Installation

My laptop runs on Linux and other lectures have taught me Docker. This is why I chose the second provided option. I wrote and ran the following script:

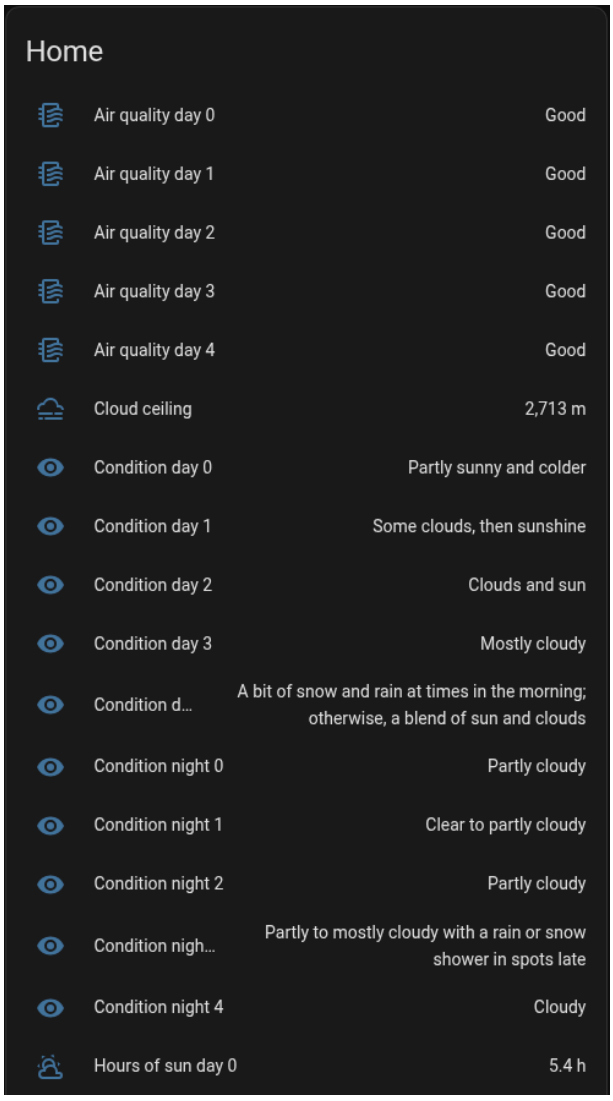
```
#!/usr/bin/env bash

docker rm -f homeassistant 2>/dev/null || true

docker run -d \
  --name homeassistant \
  --privileged \
  --restart=unless-stopped \
  -e TZ=Europe/Paris \
  -v "$(pwd)/config":/config \
  -v /run/dbus:/run/dbus:ro \
  --network=host \
  ghcr.io/home-assistant/home-assistant:stable
```

I had no issue starting the container or accessing the dashboard at the expected address http://localhost:8123.



2. Adding a first Service/Device

This part was also pretty straight forward given the detailed instructions and the online documentation. The following result was immediately achieved:

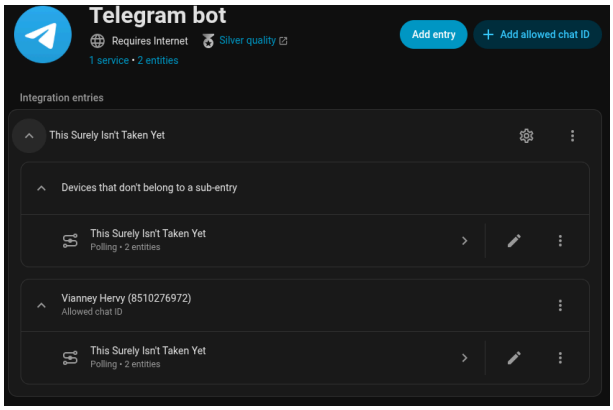


I however noted that the AccuWeather website changed its structure and that the “My Apps” tab does not exist anymore but the API key can be found in the “Subscriptions & Keys” tab[1] instead.

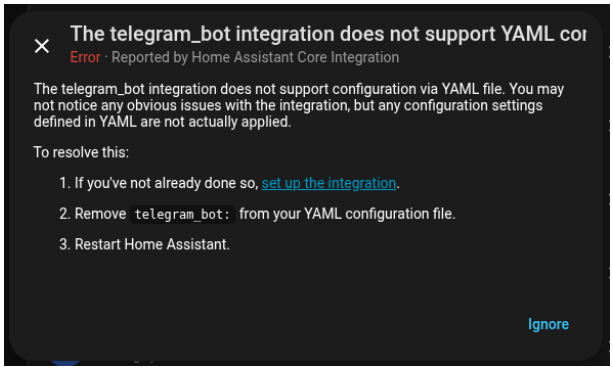
3. First automations

After trying numerous unavailable usernames, I created a Telegram bot called *@ThisSurelyIsntTakenYetBot*[2] and connected it to the Home Assistance instance using the provided API key. Following a YouTube tutorial[3], I then added my user chat ID to later use my account as target for automations.

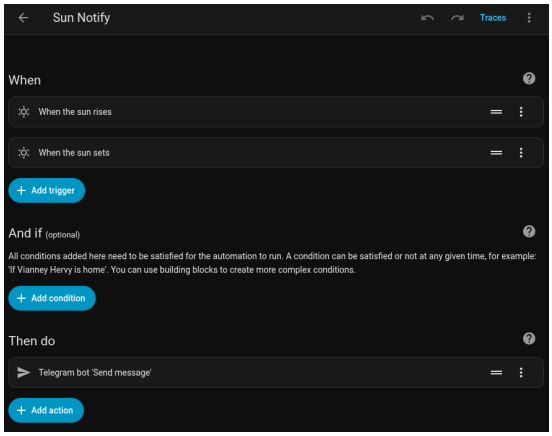
[1] https://developer.accuweather.com/subscriptions
[2] https://t.me/ThisSurelyIsntTakenYetBot
[3] https://www.youtube.com/watch?v=5gcdUMCxYAk

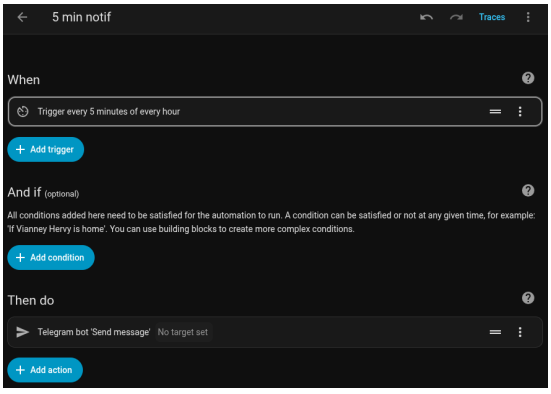


Here again, the subject wasn't up to date. The `telegram_bot` integration does not support YAML configuration anymore. Everything has been moved to the graphical interface.



Following the instructions, I created the two described automations with the desired triggers and actions. The periodic trigger was tricky to configure since I had to guess that the expected value would be `/5` to obtain a trigger every 5 minutes.



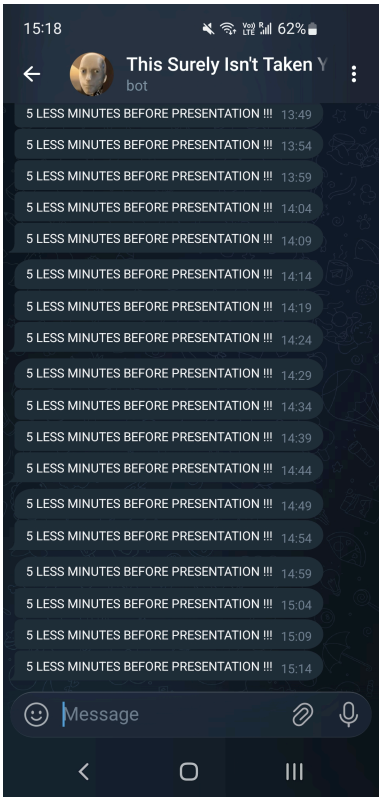


For more details, here is the generated yaml corresponding to the two configured automations:

```yaml
- id: '1768911732071'
alias: Sun Notify
description: ''
triggers:
- trigger: sun
  event: sunrise
  offset: 0
- trigger: sun
```

```
    event: sunset
    offset: 0
  conditions: []
  actions:
  - action: telegram_bot.send_message
    metadata: {}
    data:
      config_entry_id: 01KFDN5AGHZN5BPAM4Z3SF5CJ3
      message: Helloww
      target:
      - '8510276972'
  mode: single
- id: '1768912021568'
  alias: 5 min notif
  description: ''
  triggers:
  - trigger: time_pattern
    minutes: /5
  conditions: []
  actions:
  - action: telegram_bot.send_message
    metadata: {}
    data:
      config_entry_id: 01KFDN5AGHZN5BPAM4Z3SF5CJ3
      message: 5 LESS MINUTES BEFORE PRESENTATION !!!
      target:
      - '8510276972'
  mode: single
```

I didn't wait long enough to see the messages sent by the Sun Notif automation, but here is a screenshot of the periodic automation.



4. Smart Home Planning