## What is the Sdomotica Gateway

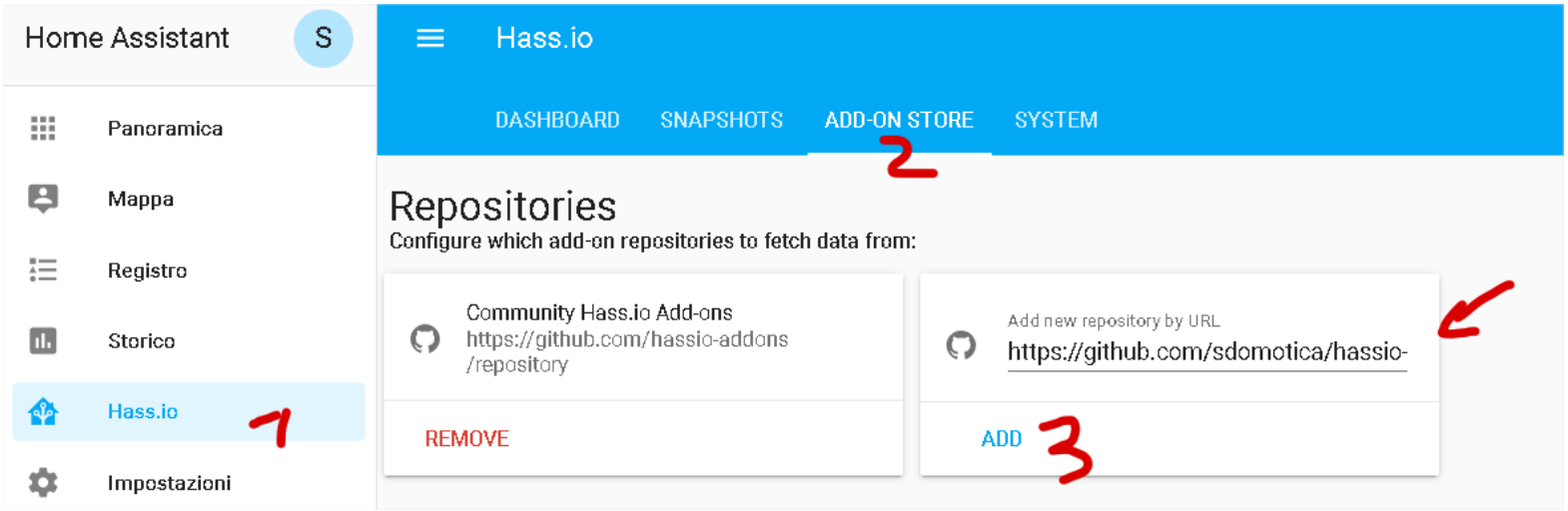
Sdomotica Gateway is Hass.io Add-on runs only a Raspberry Pi  which, in combination with a Gateway Bticino/Legrand already present in your system,  allows you to integrate and control MyHome automation system with a series of other software and third-party components.

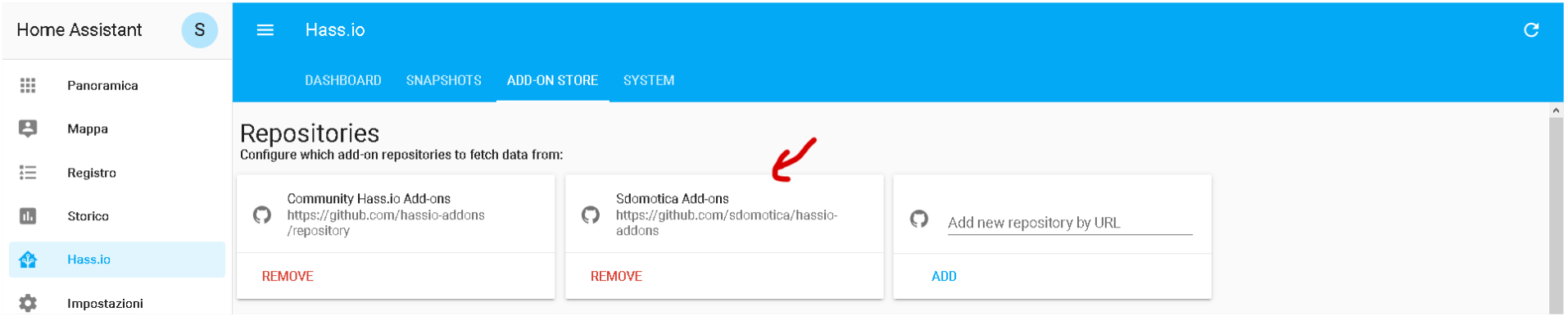
Fundamentally, Sdomotica Gateway translates home automation commands into MQTT messages and is a builder of Home Assistant package specifically for BTicino/Legrand items.

Please follow all the steps to install and configure add-on, don’t jump any step.

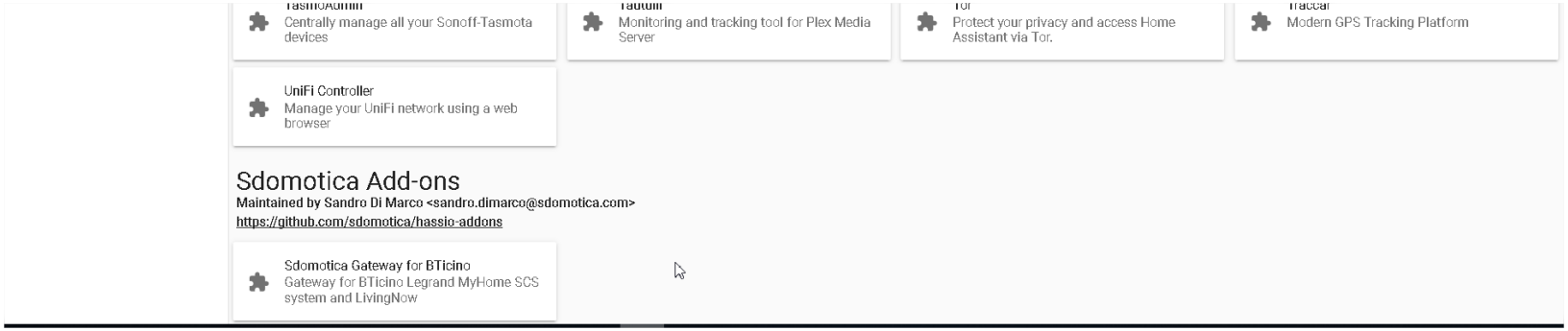
## Add-on Installation e setup

As every Hass.io add-ons please add our repository https://github.com/sdomotica/hassio-addons

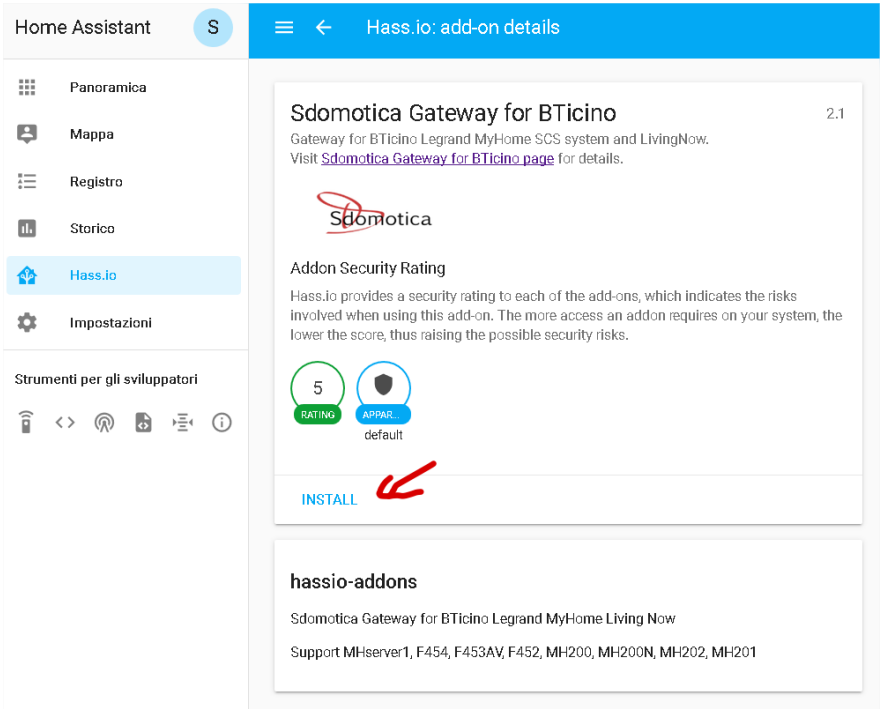


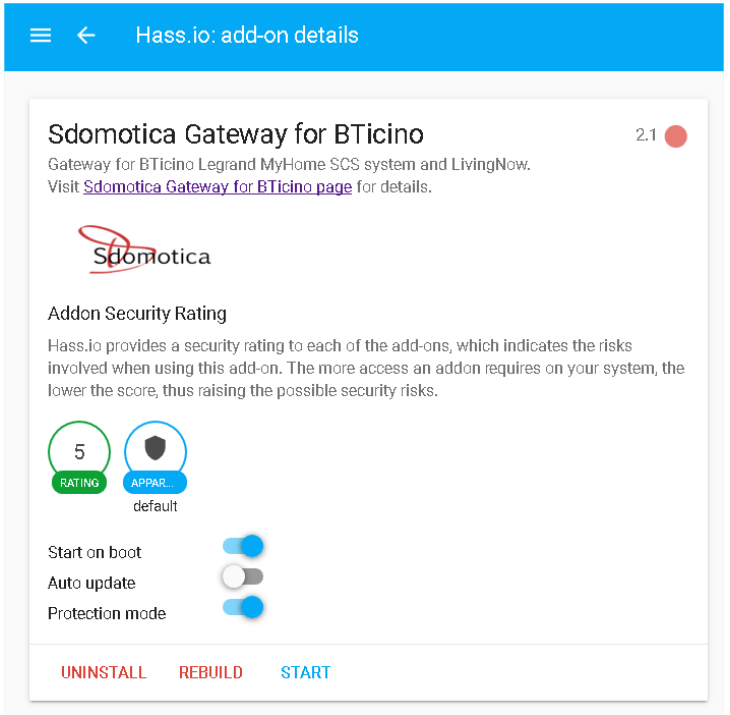



Scroll at the end of the page and



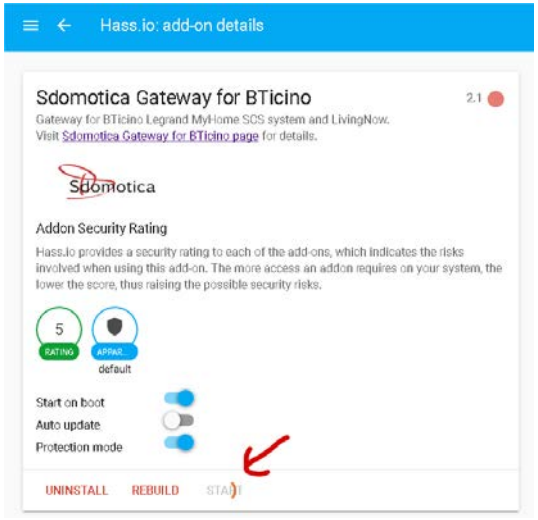

This take long time, on my Raspberry Pi 3B+ required 4 minutes to install the add-on



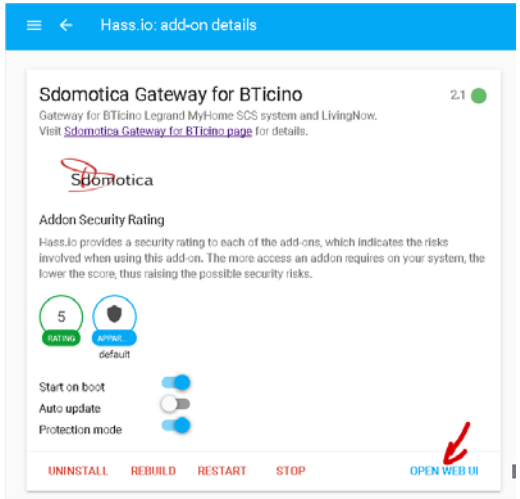



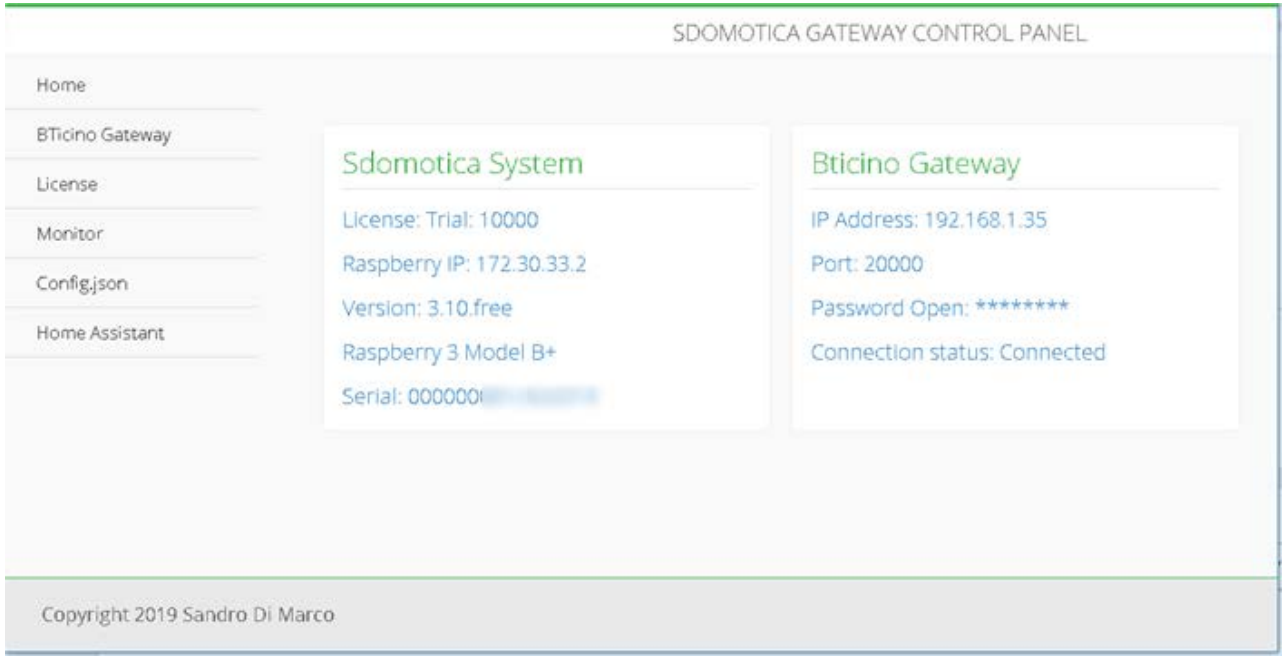
## Add-on Setup

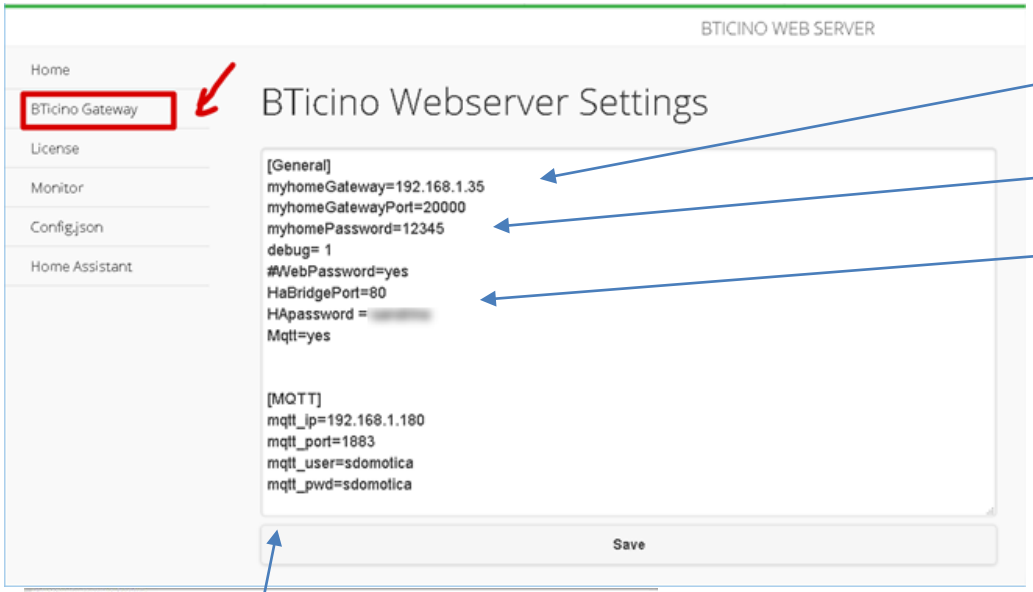
Start the add-on (more or less 30 seconds)

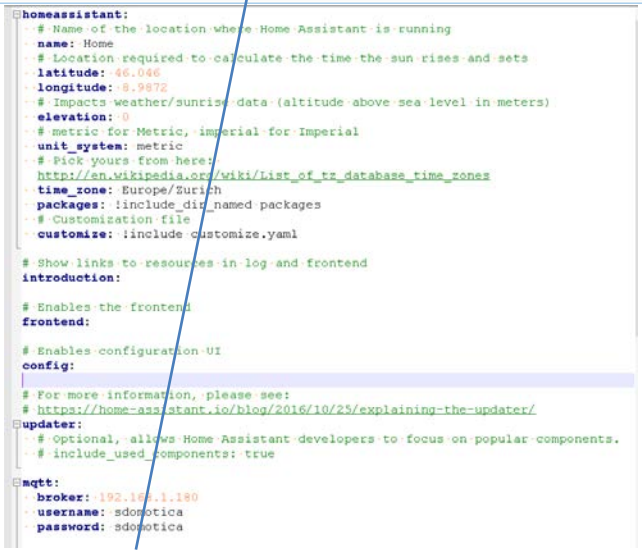



Open Sdomotica Web UI




SDOMOTICA GATEWAY CONTROL PANEL
Home
BTicino Gateway
License
Monitor
Config.json
Home Assistant
Sdomotica System
License: Trial: 10000
Raspberry IP: 172.30.33.2
Version: 3.10.free
Raspberry 3 Model B+
Serial: 000000
Bticino Gateway
IP Address: 192.168.1.35
Port: 20000
Password Open: ********
Connection status: Connected
Copyright 2019 Sandro Di Marco



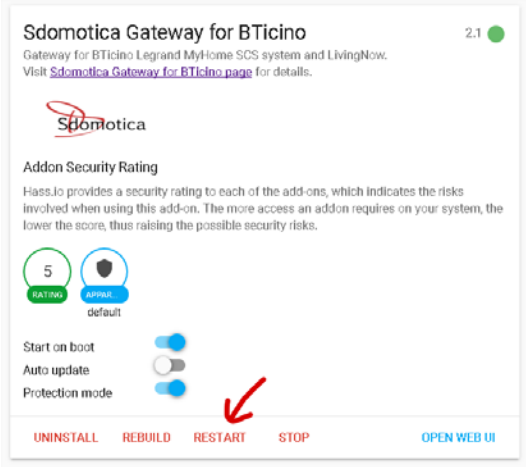

Enter the IP address of your Bticino Gateway. 192.168.1.35

Enter the Open password of your Bticino Gateway – it is normally 12345

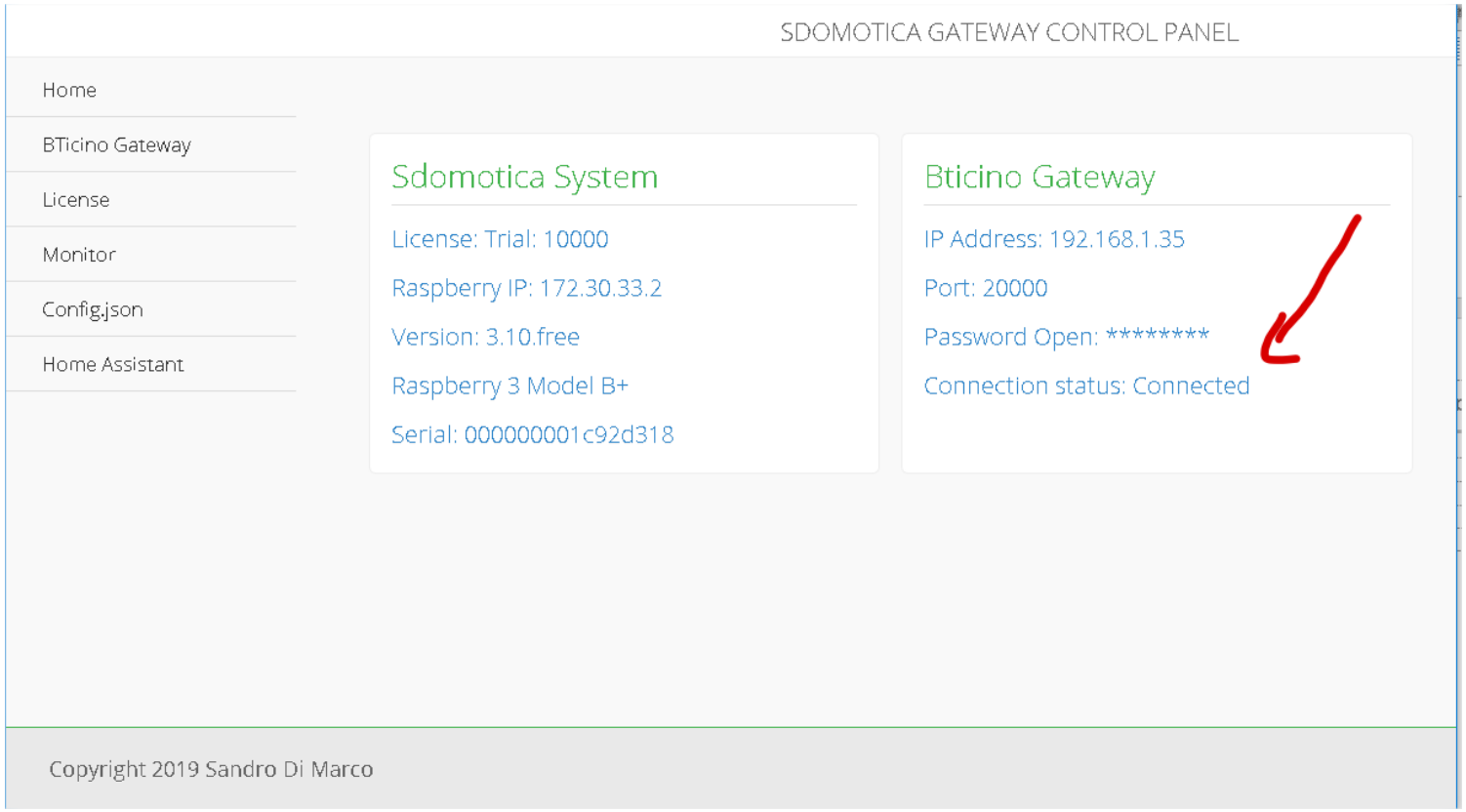
HA legacy password is optional

Set the data of your MQTT broker (as per configuration.yaml)

Save and Restart the add-on.

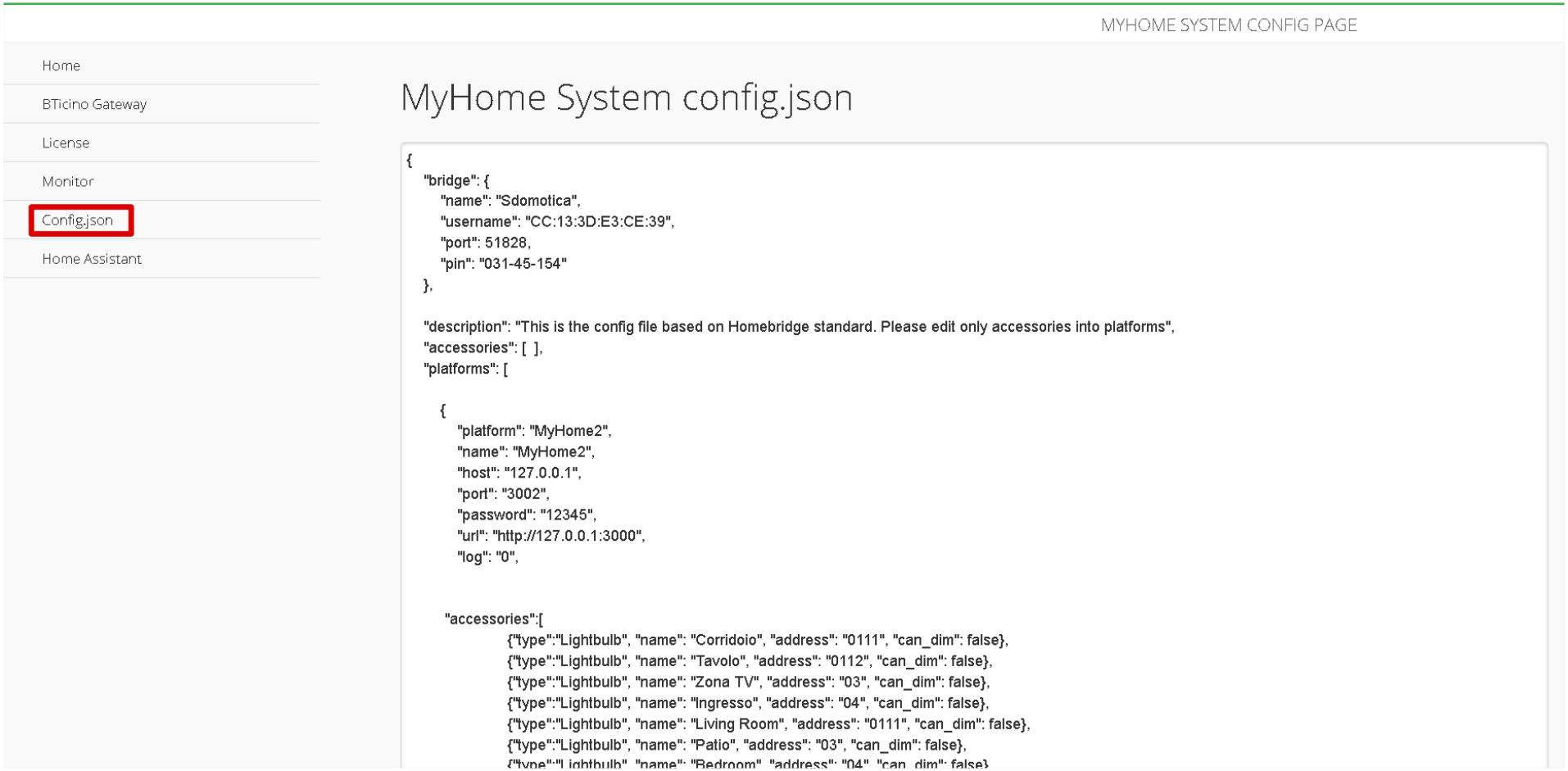


If the connections is OK



## Mapping your MyHome system

Once connected to the BTicino gateway, you must enter the objects from your MyHome system.




Entry is always done via the WebInterface. You have to fill MyHome System config.json which is Homebridge standard config.json file

## Rules to follow in writing the config.json

The maximum number of Homebridge / Homekit objects is 99 but for Sdomotica you don't have limit.

DON'T USE WORD for edit the file. I suggest Notepad++ https://notepad-plus-plus.org/

The name of the objects (see the paragraph for the implemented objects) must be **unique**, duplicates are not allowed.

For the addresses of the light actuators it is necessary to follow some restrictions:

In the case of A > 1 and up to 9 and PL from 1 to 9, the addresses will be only two characters.

For example: A=1 PL =2 -> "address": "12"

In the case of A = 0 and PL from 1 to 9, the addresses will be only two characters.

For example: A=0 PL = 2 → "address": "02"

In the case of A > 9 or PL > 9 the addresses will be of four characters.

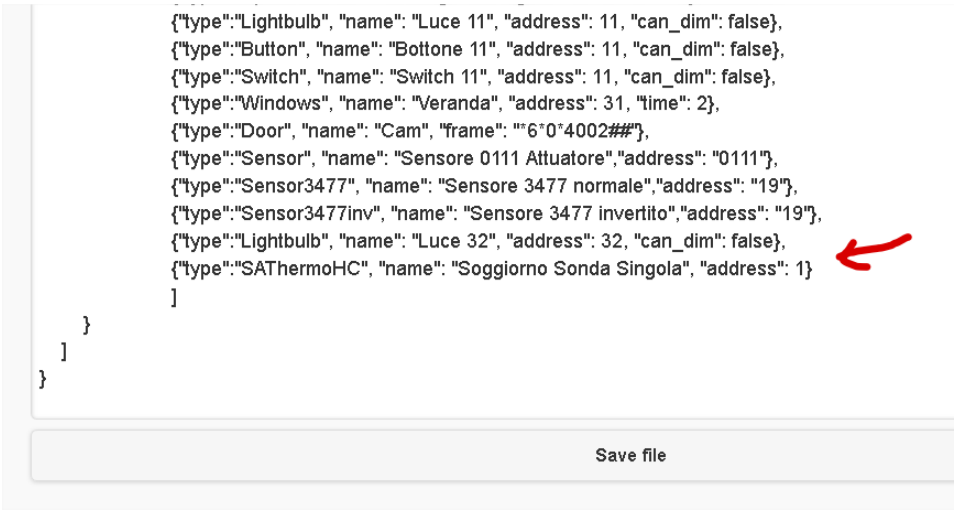
For example: A = 1 and PL =15 -> "address": "0115"
For example: A = 11 and PL =01 -> "address": "1101"

If in your system there is a F422 the APL format will be

For example: A=1 PL =2 -F422=1> "address": "12#4#01"

All addresses must be written in quotes without space inside.

You will have to add as many lines as necessary for all of your objects. Each line is terminated by a comma, except the **last one** that does not have to have the comma at the bottom.




Once completed, click on Save and Restart Add-on.

The lines should correspond to the currently implemented objects and are as follows:

### Lights / Controlled Outlets

```
{"type":"Lightbulb", "name": "Cucina","address": "12", "can_dim": false},
{"type":"Lightbulb", "name": "Dimmer TV","address": "19, " "can_dim": true},
{"type":"Outlets", "name": "Presa Rack 12", "address": "12"},
{"type":"Switch", "name": "Switch 11", "address": "11" },
{"type":"Lightbulb", "name": "Palla Balcone Nico","address": "41#4#01"},
{"type":"Lightbulb", "name": "Cancello","address": "12" , "frame": "*1*17*12##"},
```

### Sensors (3476-3477)

```
{"type":"Sensor", "name": "Sensore 0111 Attuatore","address": "0111"},
{"type":"Sensor3477", "name": "Sensore 3477 normale","address": "19"},
{"type":"Sensor3477inv", "name": "Sensore 3477 invertito","address": "19"},
```

### Controlled Loads

```
{"type":"Energy", "name": "Generale","address": "1"},
{"type":"F522", "name": "Lavastoviglie","address": "2"}
{"type":"F523", "name": "Lavatrice","address": "5"},
```

### Heating/Cooling (99 zone controller, external probe/sensor and passive probe/sensor)

```
{"type":"TemperatureSensors", "name": "Sonda Esterna","address": 1},
{"type":"Thermostat", "name": "Soggiorno","address": 1},
{"type":"TemperatureSensorsInternal", "name": "Zona non controllata", "address": 112}
```

### Heating/Cooling (4 zone controller)

```
{"type":"4ZThermo", "name": "Soggiorno 4 Zone","address": 1},
```

### Heating/Cooling (Stand Alone 4691 with F430/2 typically with MyHomeServer1)

Based on your mix (Heating/Cooling) you have to use:

Both Heating and Cooling

```
{"type":"SAThermoHC", "name": "Soggiorno Sonda Singola", "address": 1},
```

Only Cooling

```
{"type":"SAThermoC", "name": "Soggiorno Sonda Singola", "address": 1},
```

Only Heating

```
{"type":"SAThermoH", "name": "Soggiorno Sonda Singola", "address": 1},
```

### Shutters/Blinds

The Bticino blinds do not indicate the state – only their movement is managed. For example, you can't tell if they are open or closed. Therefore, Bticino Gateway only indicates that the blinds are opening / closing / or are still.

The shutter object in Homekit only indicates a %. Therefore, we have simplified them by indicating them at 50% if they are stationary. It's 0 % or 100% if they are in the process of closing or opening.

```
{"type":"Windows", "name": "Veranda", "address": 31},
```

However, if the actuators installed instead are the 4661M2 or F401 and the gateway is an F454 with the latest firmware or the MHserver1, you can manage the positions - in this case, given you are able to manage the status, the % of opening will be highlighted. The object to use in this case will be:

```
{"type":"WindowsAdvance", "name": "Veranda Avanzata", "address": 55}
```

## Multi-Channel Audio System

In the main part of the config.json you will have to add your sources

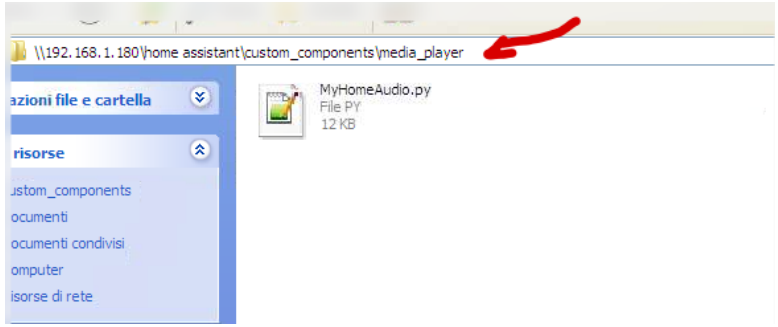
```
    "platforms": [
        {
            "platform": "MyHome2",
            "name": "MyHome2",
            "host": "127.0.0.1",
            "port": "3002",
            "password": "12345",
            "url": "http://127.0.0.1:3000",
            "log": "0",
            "source1": "Radio",
            "source2": "Radio Dab",
            "source3": "MediaPlayer Spotify",
```

A maximum of 4 sources can be added - they must be written in order and always with the comma at the end

```
"source1": "Name of your source 1",
"source2": "Name of your source 2",
"source3": "Name of your source 3",
"source4": "Name of your source 4",
```

Then, in the area of the objects, you will indicate the zone amplifiers

```
{"type":"Audio", "name": "Ampli Cucina","address": "11"},
{"type":"Audio", "name": "Bagnetto","address": "21"},
{"type":"Audio", "name": "Bagno Padronale","address": "22"},
```




Please add media_player custom component in your Home Assistant folder

https://github.com/sdomotica/hassio-addons/tree/master/custom_components/media_player

### Burglar Alarm (controller 3486)

In the event that you have enabled the automations feature (such as an arming / disarming) on the burglar-alarm central unit, Aux commands will allow you to manage your home burglar alarm system from Homebridge / Homekit.

Here are the instructions to enable the automation (CAUTION THIS PROCEDURE LOWERS THE SAFETY LEVEL OF YOUR BURGLAR ALARM SYSTEM)

```
{"type":"SecuritySystem" , "name": "Antifurto","zone": "8",
                  "STAY_ARM": "*9*4*1##",
                  "AWAY_ARM": "*9*1*9##",
                  "NIGHT_ARM": "*9*4*3##",
                  "DISARMED": "*9*0*9##",
                  "ZONA1": "Ingresso",
                  "ZONA2": "Soggiorno",
                  "ZONA3": "Finestre sotto",
                  "ZONA4": "Finestre sopra",
                  "ZONA5": "Test"
},
```

### Open Doors

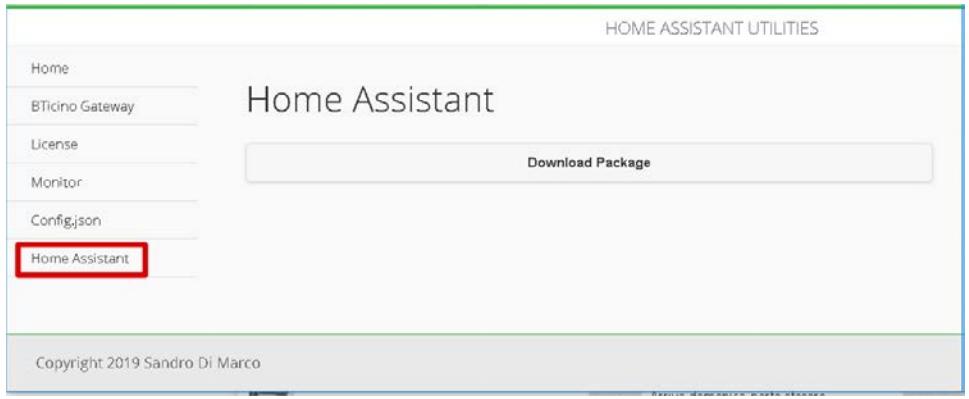
```
{"type":"Door" , "name": "Porta Garage", "address": 11, "frame": "*1*18*71##"},
{"type":"Door" , "name": "Cancelletto", "address": 11, "frame": "*6*10*4000##"},
```

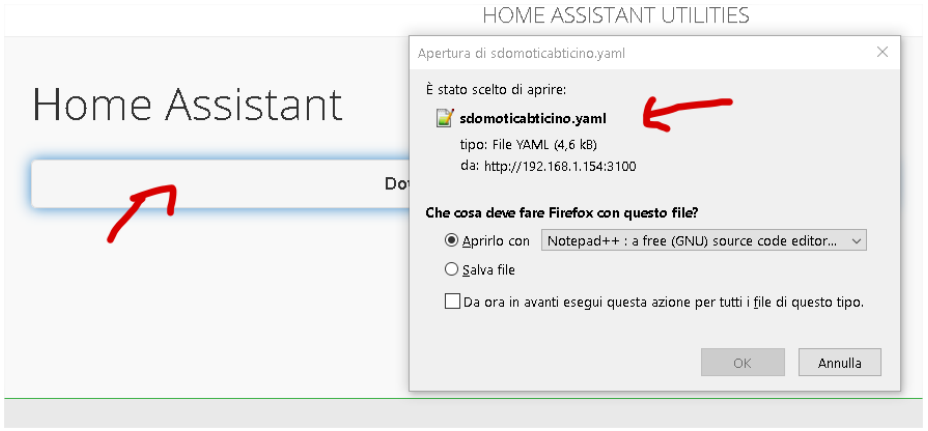
### Generic Buttons

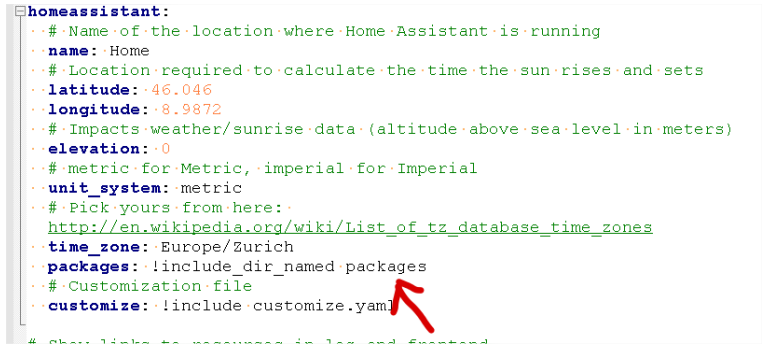
```
{"type":"Button", "name": "Cancello","address": 12},
{"type":"Cen", "name": "Cen command", "frame": "*25*23#1*21##"},
```

## Build Home Assistant package

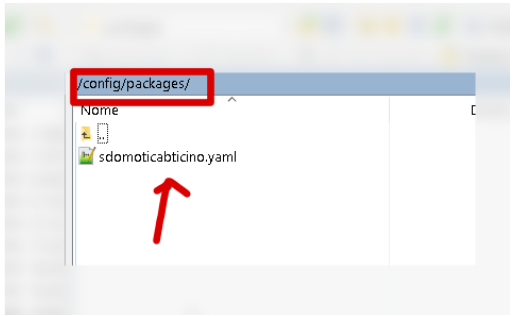
Once connected to the BTicino gateway and mapped your system you can build the package.yaml to insert in your Home Assistant configuration folder



```
homeassistant:
  # Name of the location where Home Assistant is running
  name: Home
  # Location required to calculate the time the sun rises and sets
  latitude: 46.046
  longitude: 8.9872
  # Impacts weather/sunrise data (altitude above sea level in meters)
  elevation: 0
  # metric for Metric, imperial for Imperial
  unit_system: metric
  # Pick yours from here:
  http://en.wikipedia.org/wiki/List_of_tz_database_time_zones
  time_zone: Europe/Zurich
  packages: !include_dir_named packages
  # Customization file
  customize: !include customize.yaml
```




Restart your Home Assistant

## OpenWebNet Monitor / Client

In Sdomotica Gateway there's a client for see and send OpenWebnet Messages