Sdomotica Gateway

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.

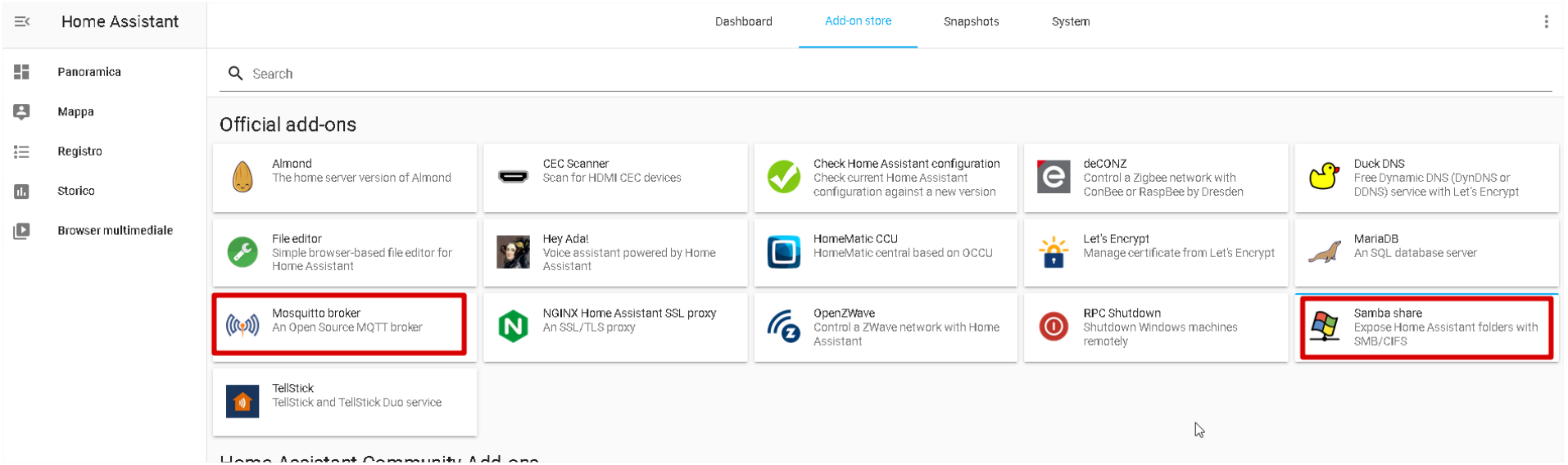
Please follow all the steps to install and configure add-on, don’t jump any step.

Hassio prerequisites and Home Assistant configuration

Other addons to be install for use Sdomotica

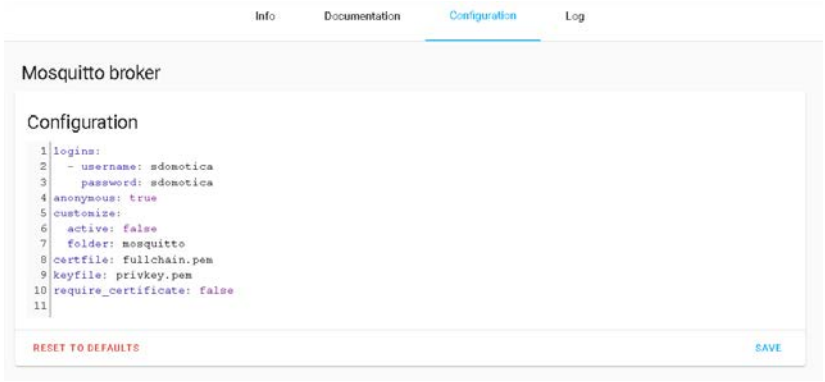
Sdomotica need for communicate with Hassio, a broker MQTT and for file transfer Samba for edit configuration file and upload Sdomotica package

Please install and configure these (Mosquito broker and Samba Share)



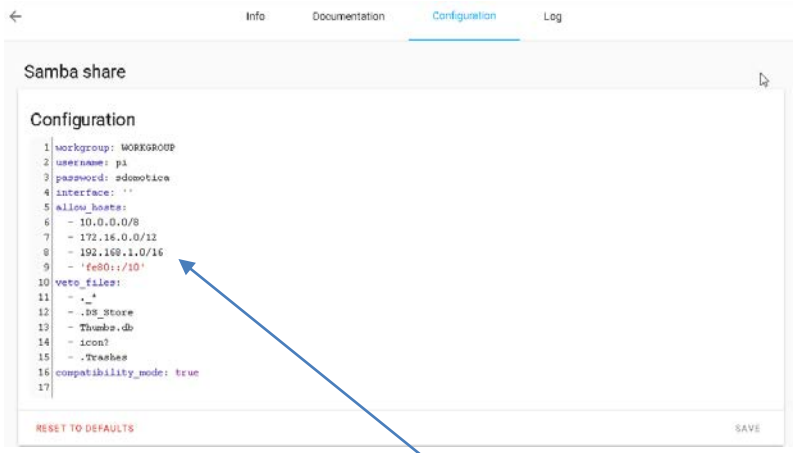
These are the configurations to do into the addons

Mosquito




```
logins:
  - username: sdomotica
    password: sdomotica
anonymous: true
customize:
  active: false
  folder: mosquitto
certfile: fullchain.pem
keyfile: privkey.pem
require_certificate: false
```

Samba

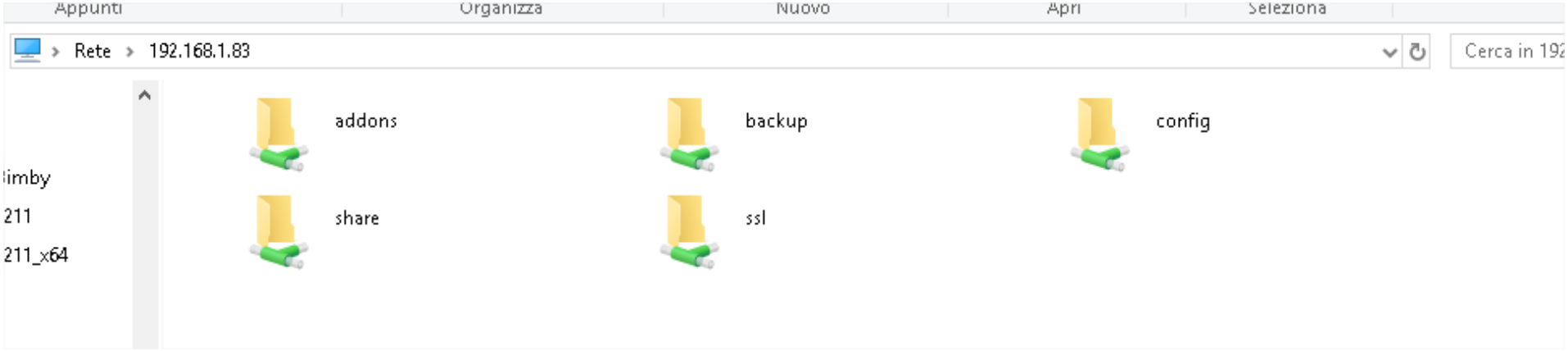


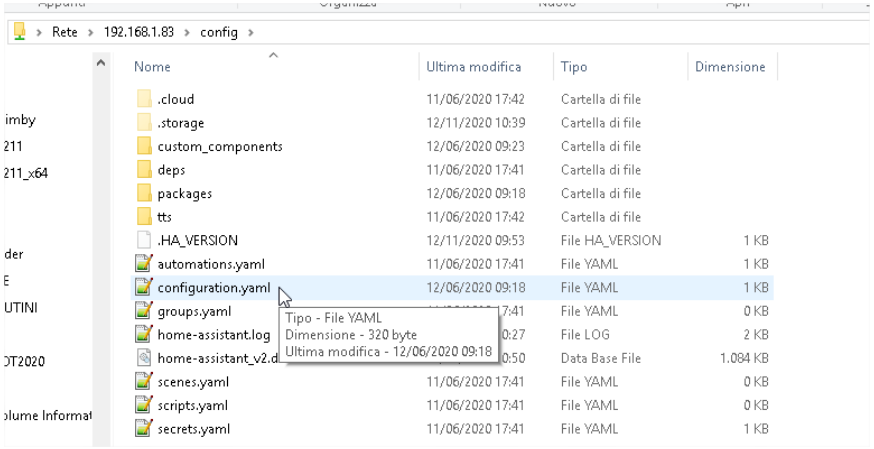
Please put your part of IP address into.
For Example, if your Raspberry has this IP
192.168.1.83 put in configuration 192.168.1.0/16

Please check all of other parameters as the above example

Home Assistant Configuration

Open configuration.yaml and edit as below.

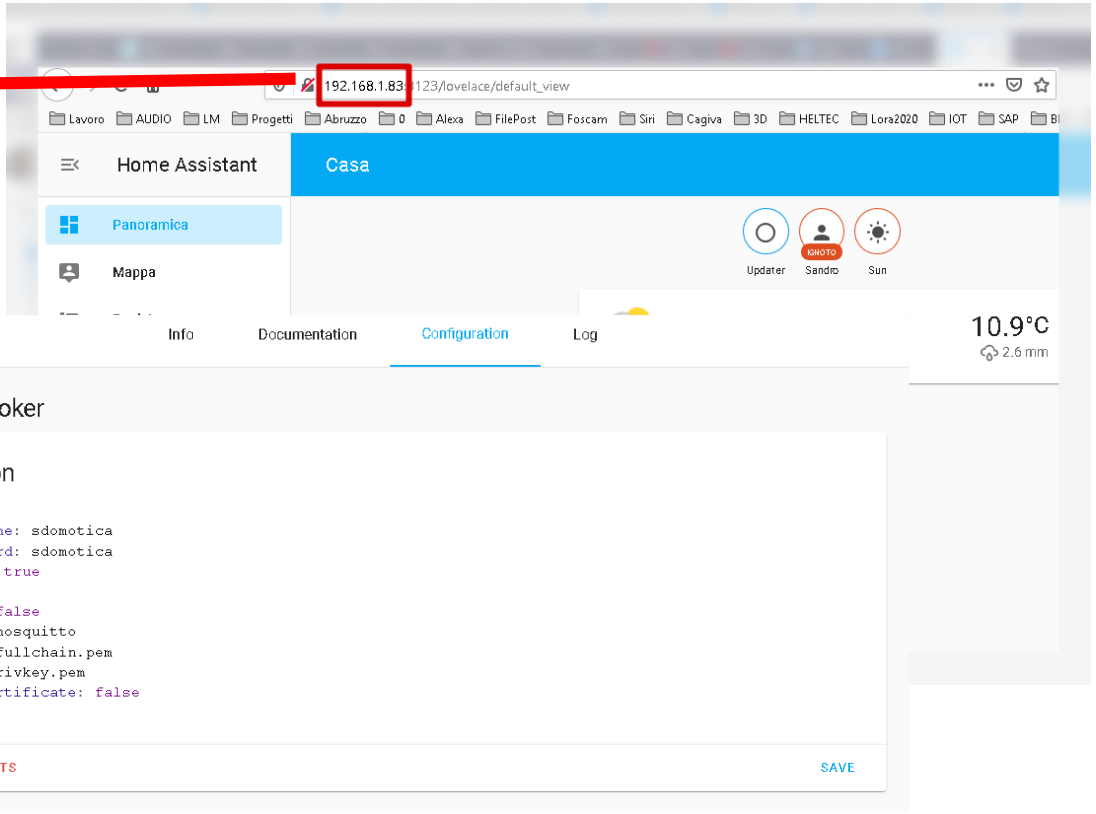




```
homeassistant:
  packages: !include_dir_named packages

# Configure a default setup of Home Assistant (frontend, api, etc)
default_config:

mqtt:
    broker: 192.168.1.83
    discovery: true
    discovery_prefix: homeassistant
    username: sdomotica
    password: sdomotica
```

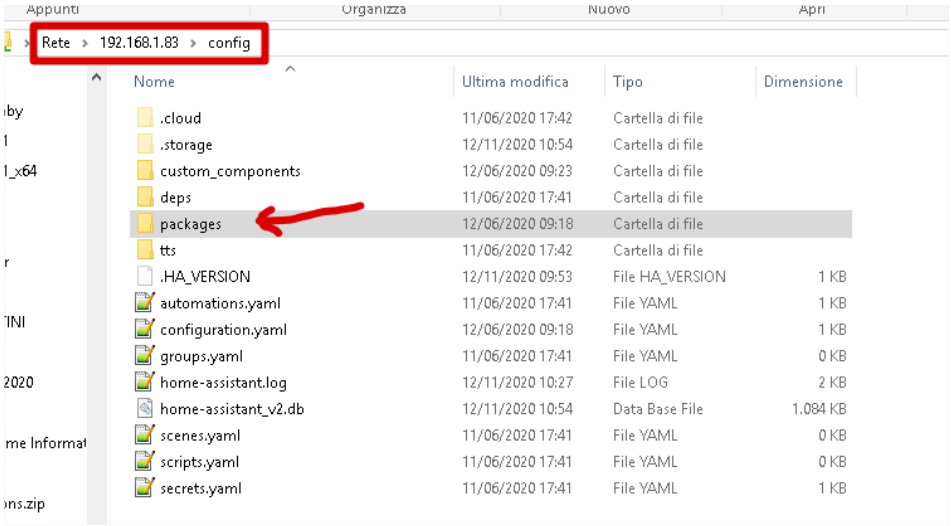


Please indicate in mqtt broker the IP of your raspberry

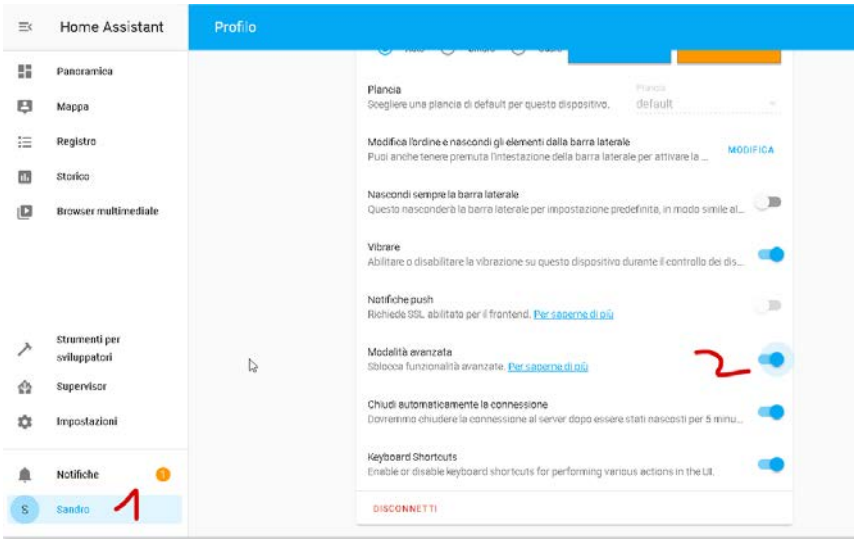
And username and password

Save

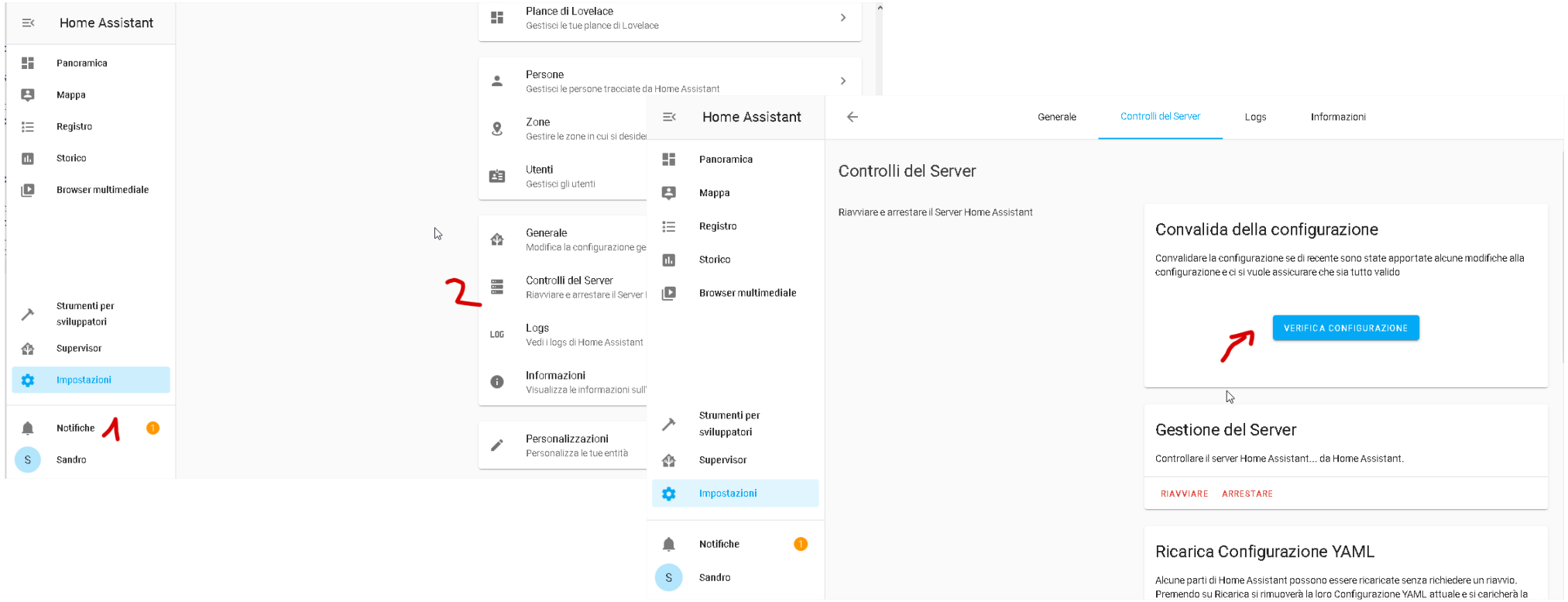
Create a folder if not exist in config folder named **packages**

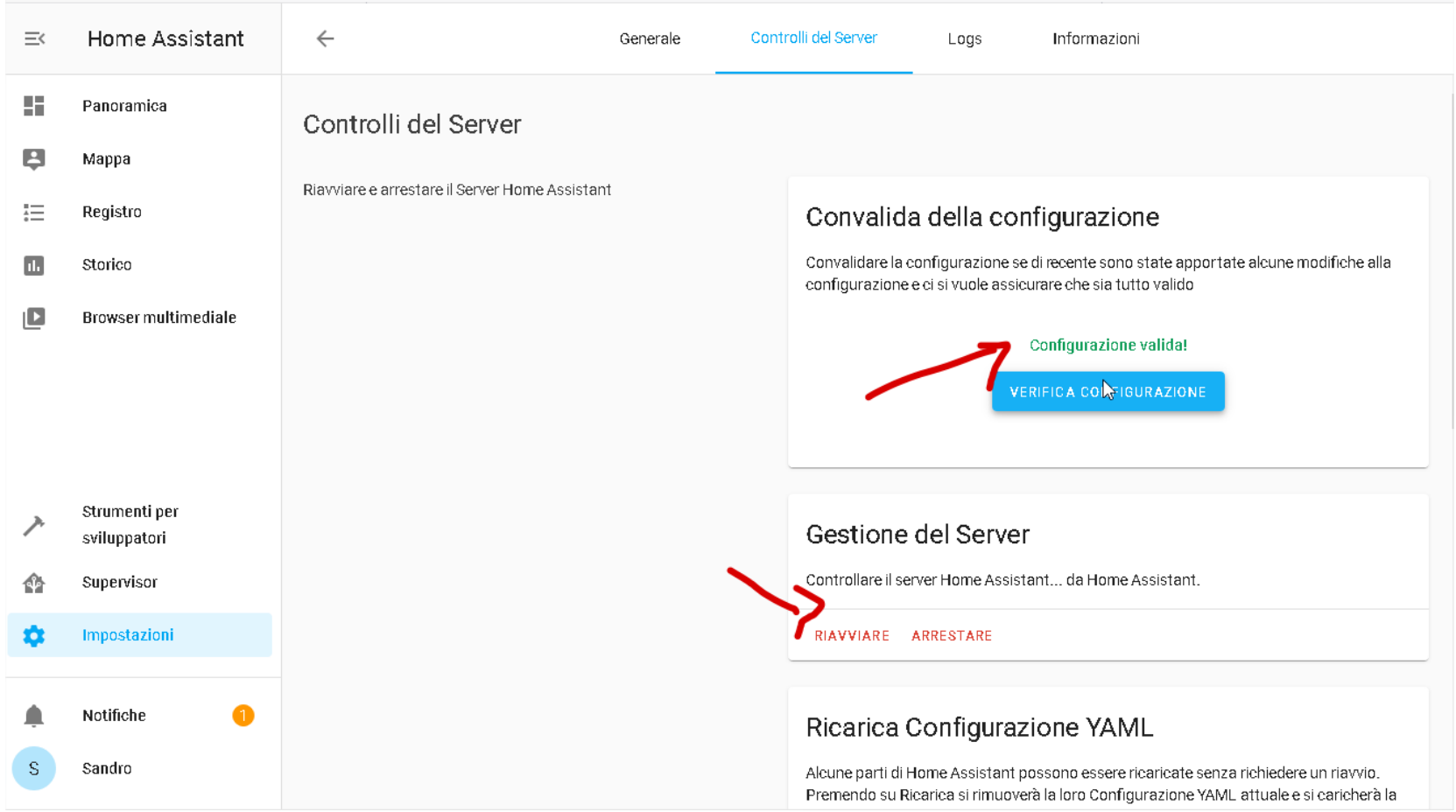


Enable your user to advanced



Check the configuration before restart

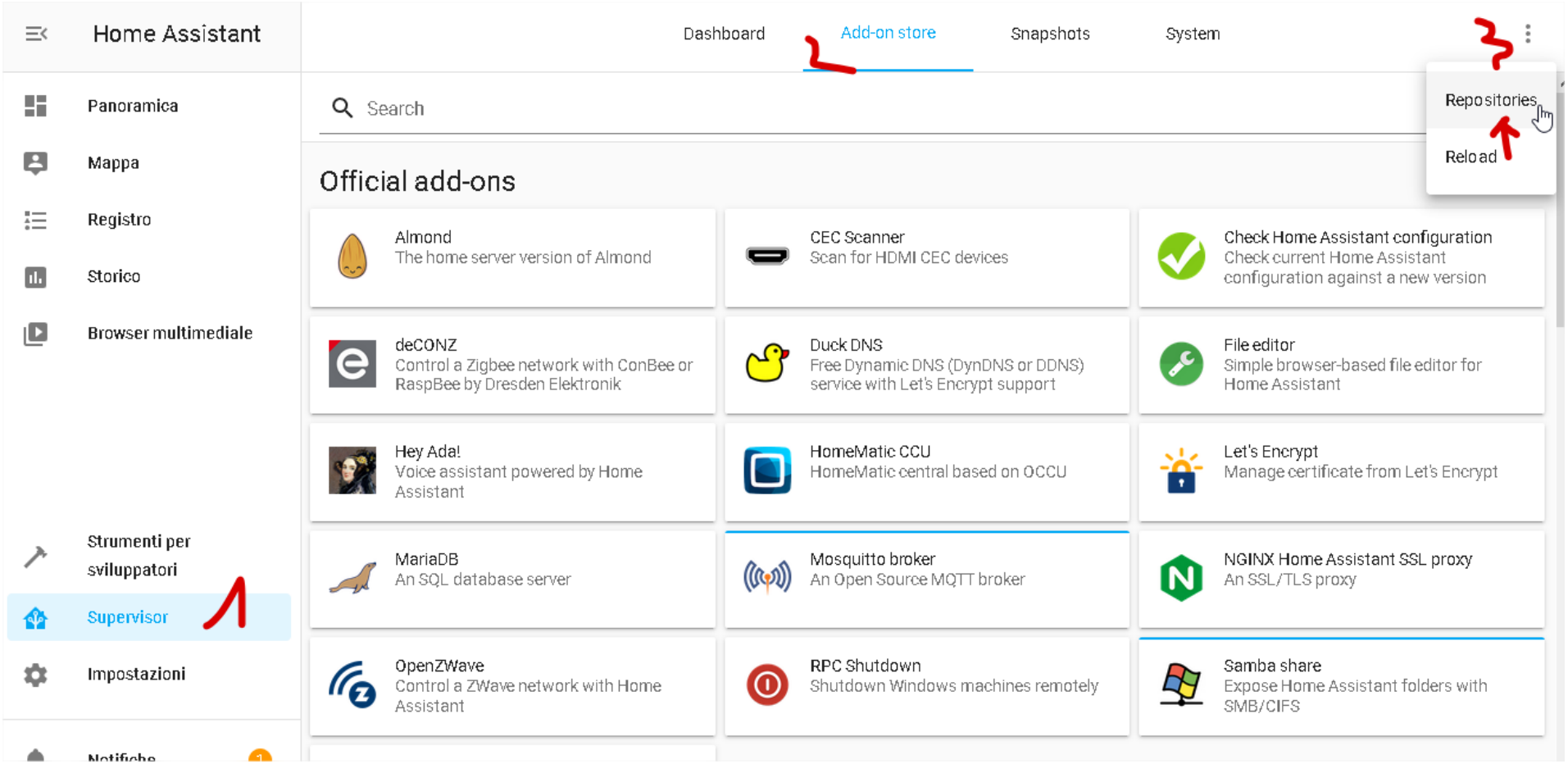


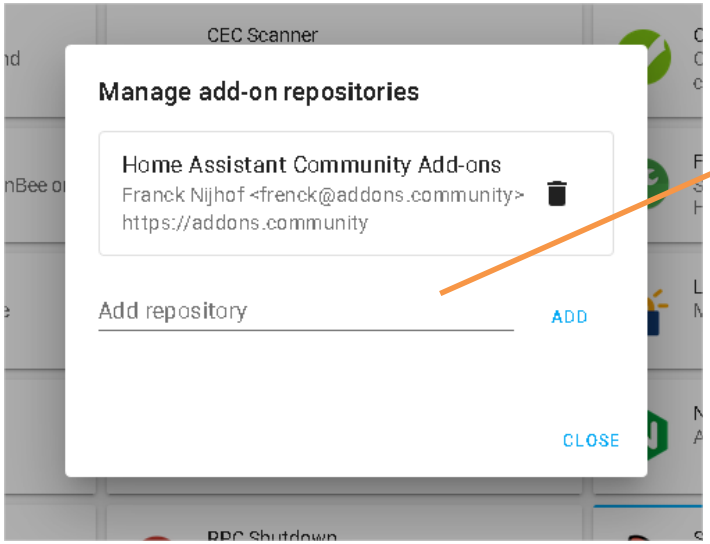


If OK please restart, otherwise check the errors. **Don’t restart without FIX the ERRORS**

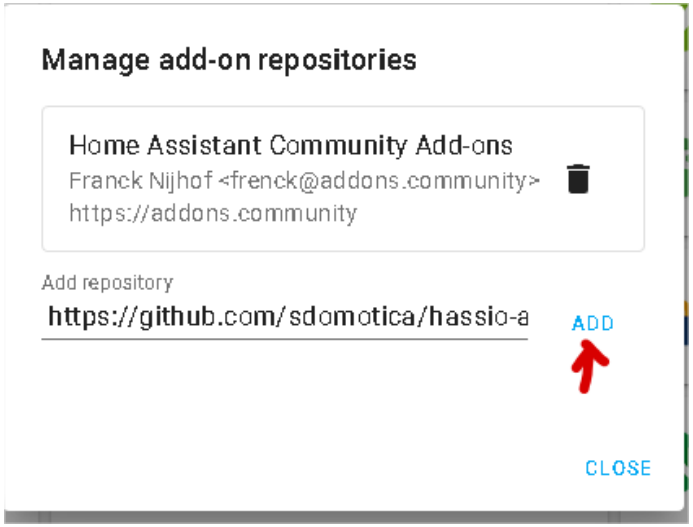
Add-on Installation e setup

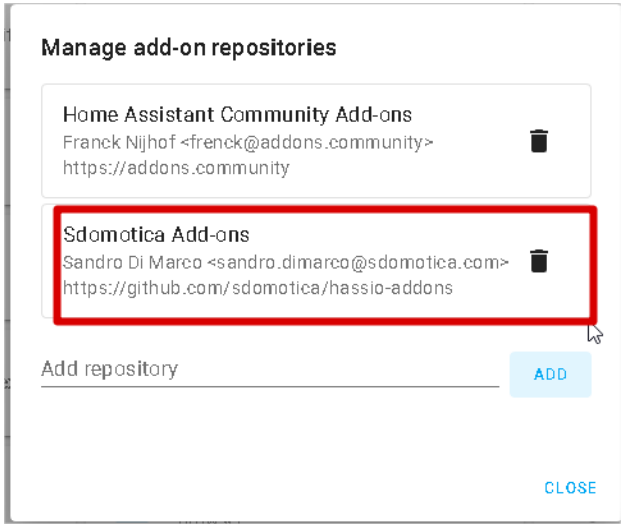
As every Hass.io add-ons please add our repository https://github.com/sdomotica/hassio-addons



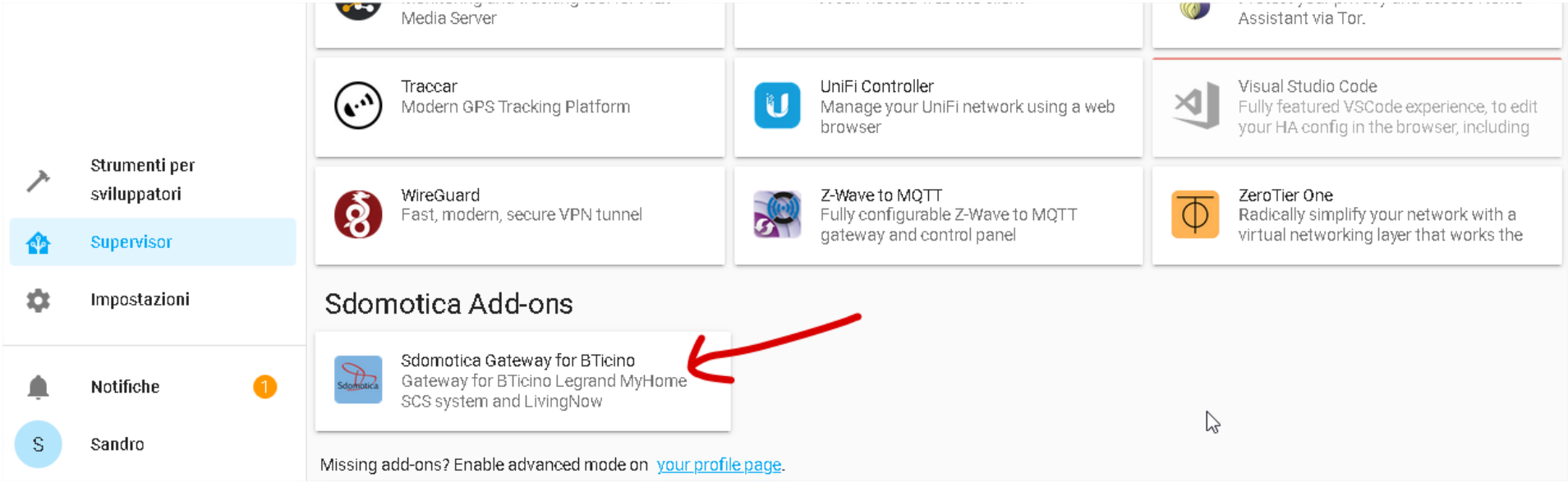


https://github.com/sdomotica/hassio-addons

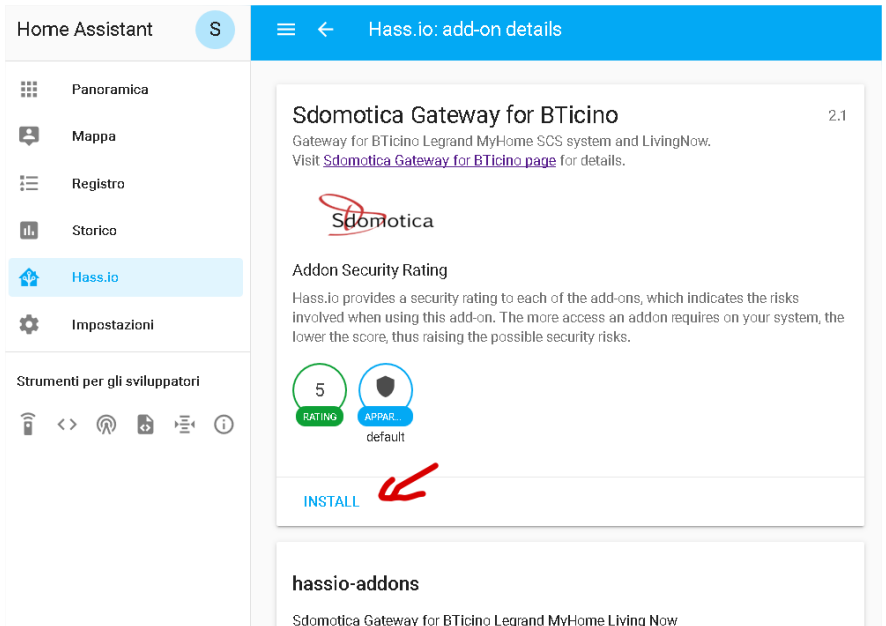


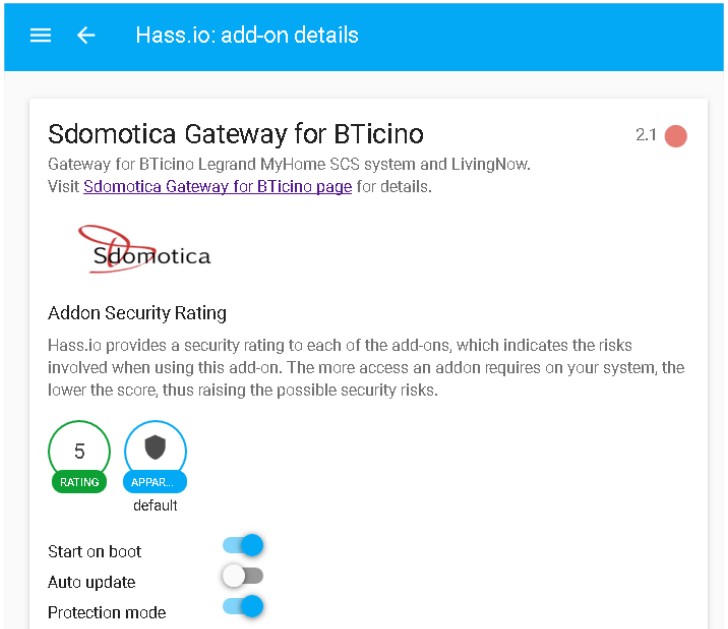


Scroll at the end of the page and



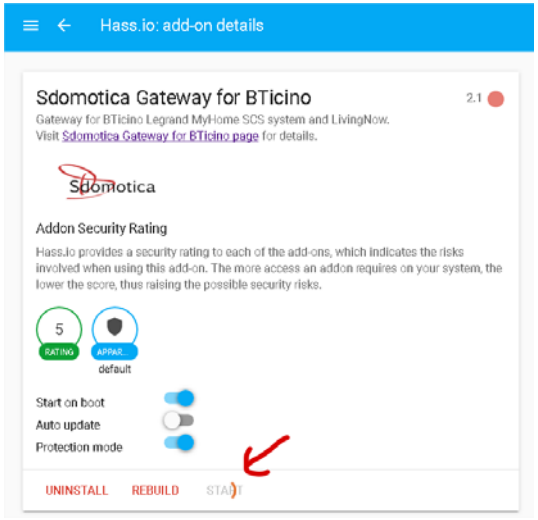
This take long time, on my Raspberry Pi 3B+ required 4 minutes to install the add-on



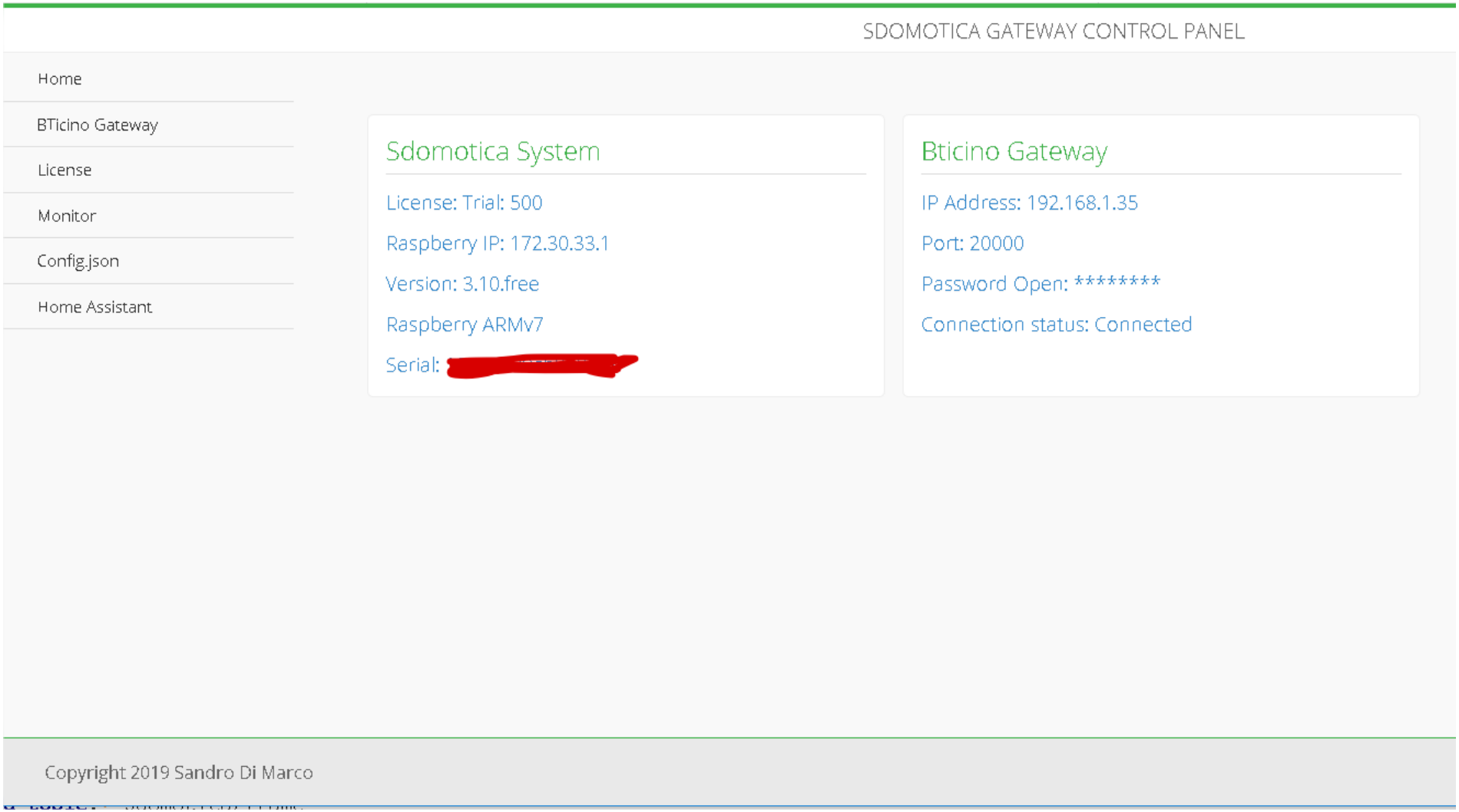


Add-on Setup

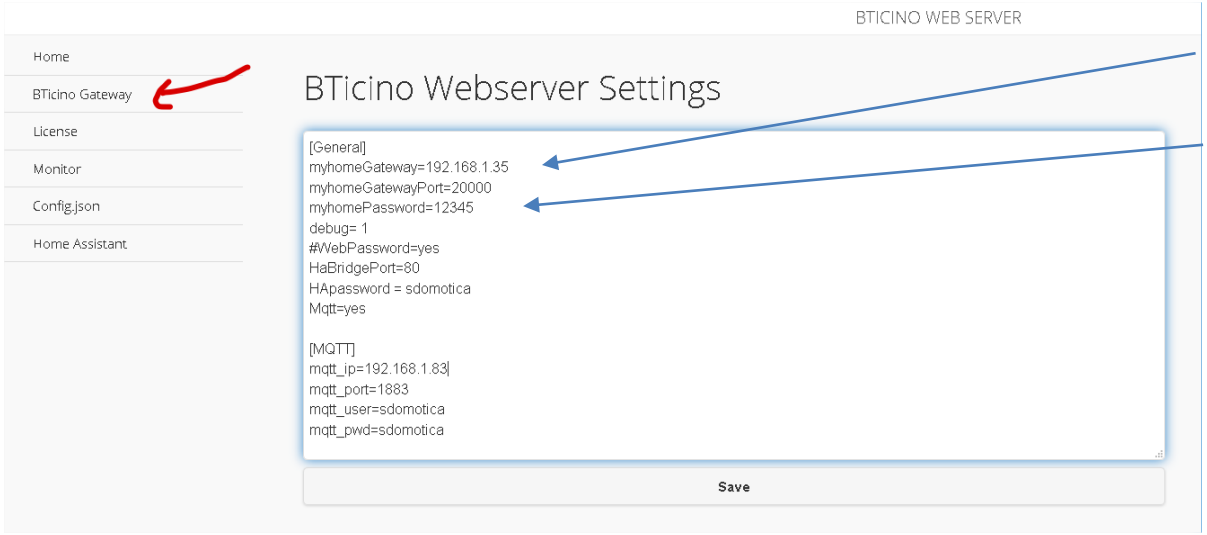
Start the add-on (more or less 30 seconds)



Open Sdomotica Web UI


SDOMOTICA GATEWAY CONTROL PANEL
Home
BTicino Gateway
License
Monitor
Config.json
Home Assistant
Sdomotica System
License: Trial: 500
Raspberry IP: 172.30.33.1
Version: 3.10.free
Raspberry ARMv7
Serial:
Bticino Gateway
IP Address: 192.168.1.35
Port: 20000
Password Open: ********
Connection status: Connected
Copyright 2019 Sandro Di Marco

Configure your Bticino webserver connection

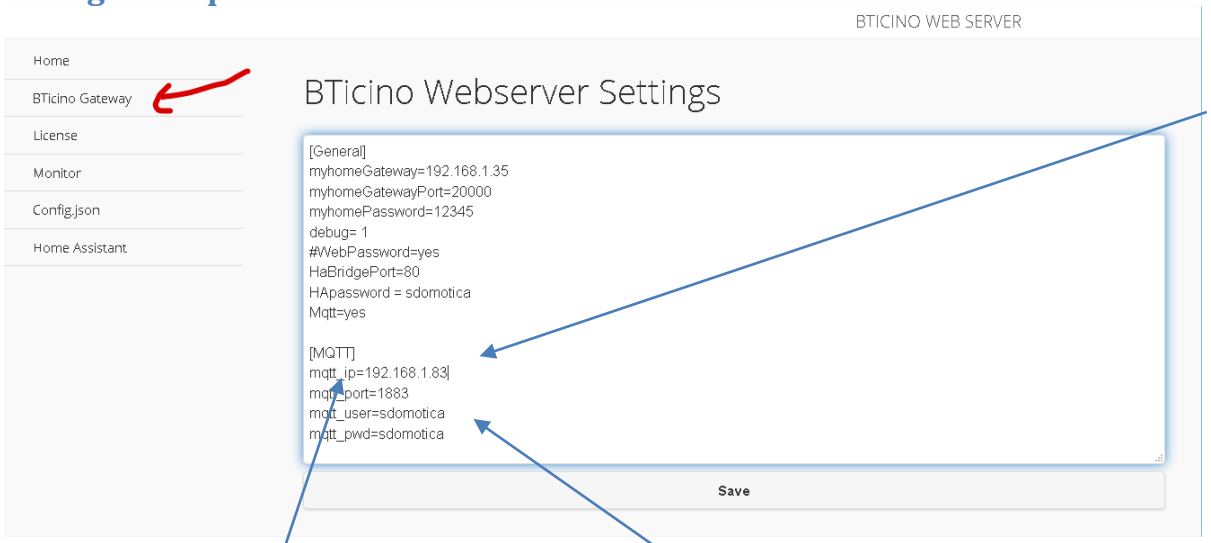


Enter the IP address of your Bticino Gateway.
192.168.1.35

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

Save

Configure Mqtt connection

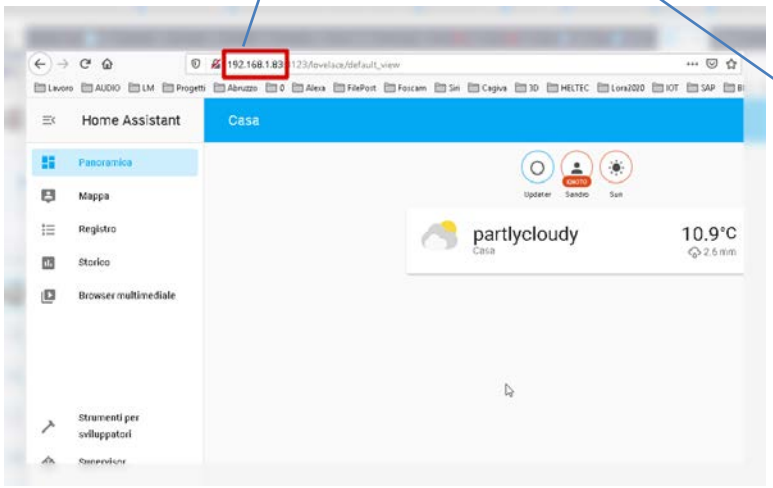


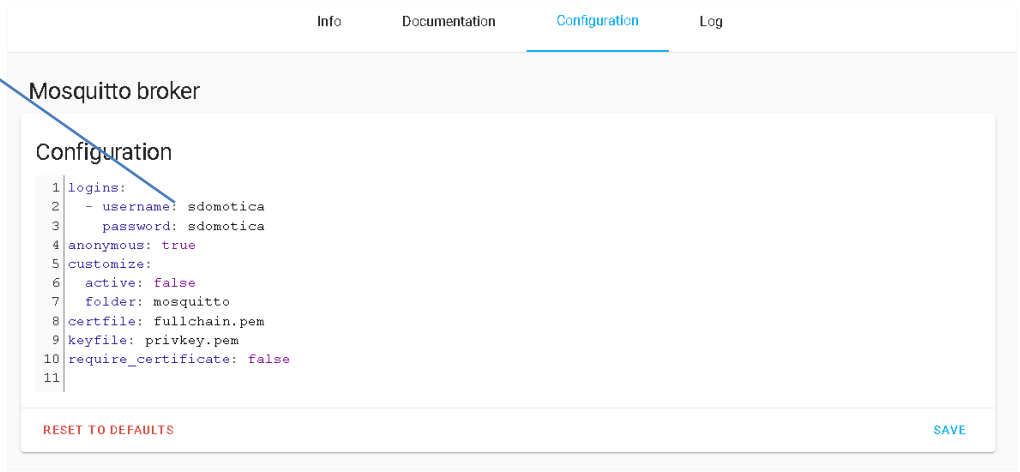
Change the MQTT settings

Put in MQTT the IP of your raspberry running Hassio

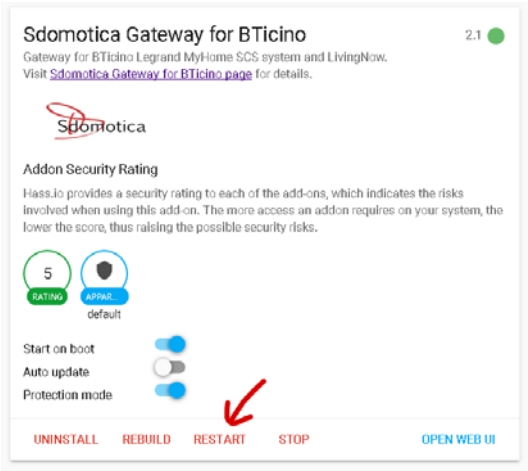
And the user and pwd from Mosquitto

Save

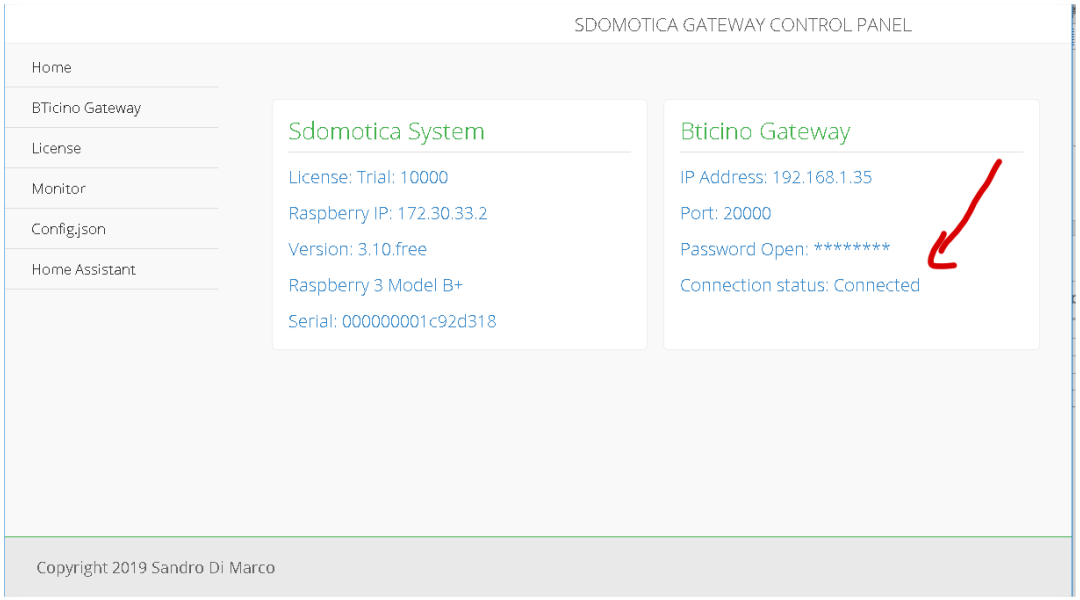




Save and restart addon

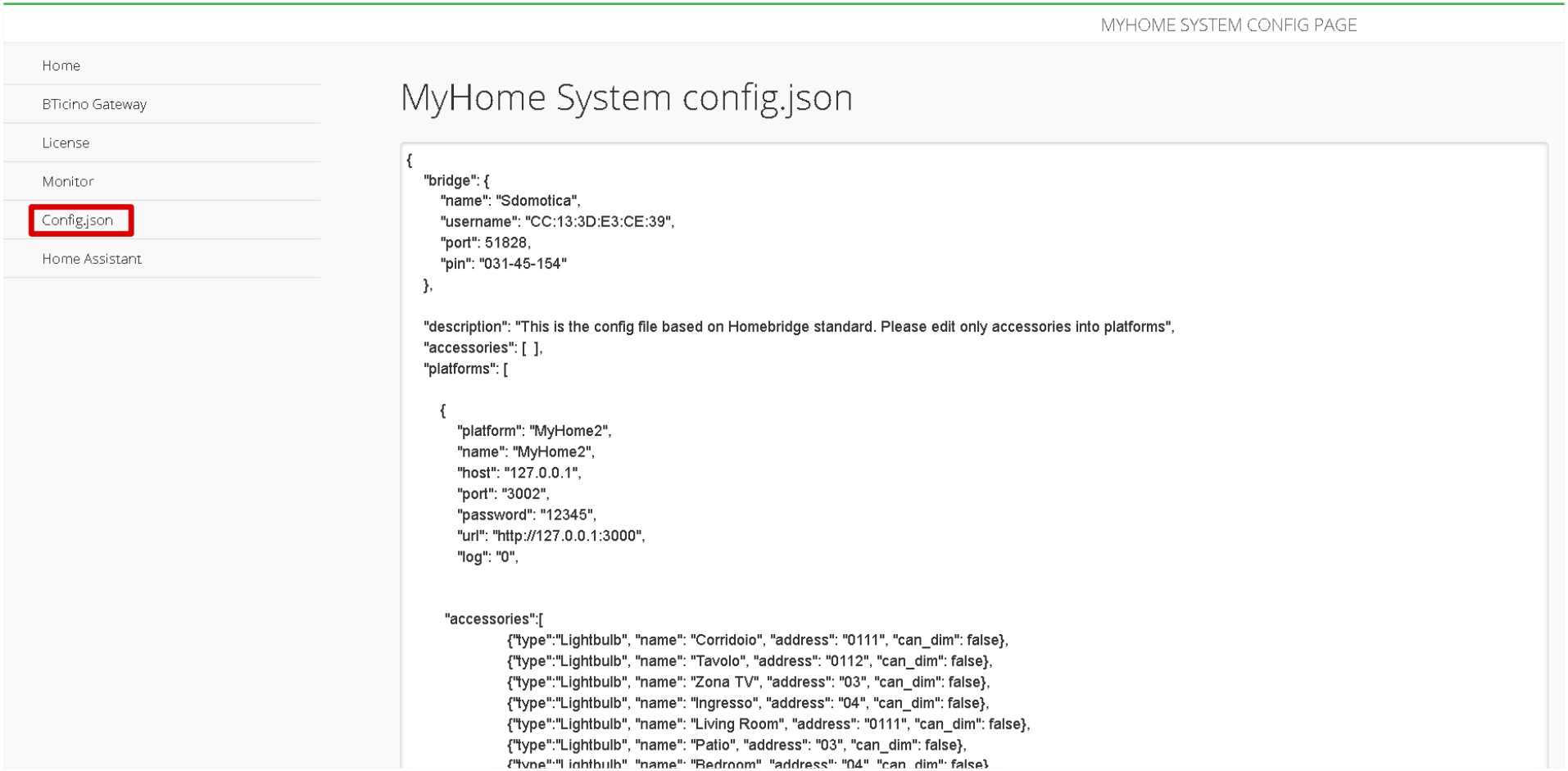


If the connections is OK



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.

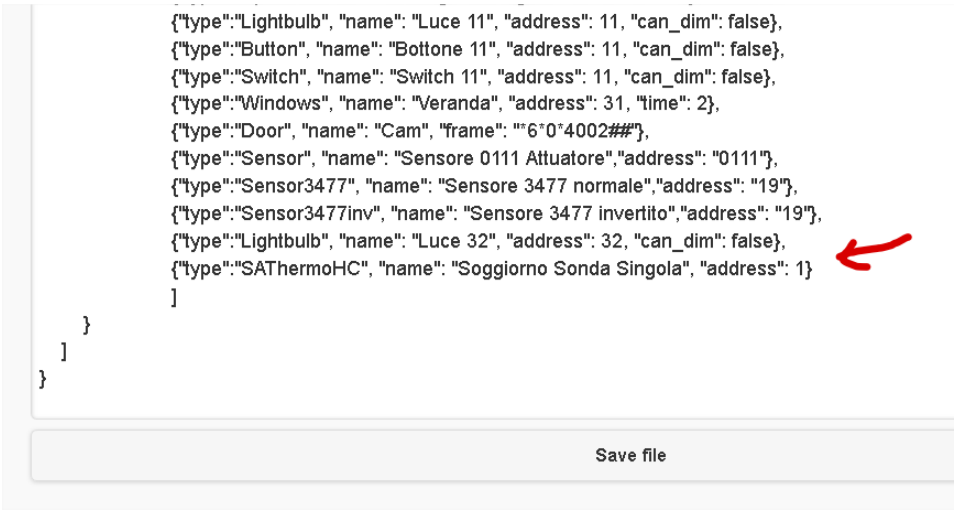
For example: A = 1 and PL =15 -> "address": "0115"
For example: A = 11 and PL =01 -> "address": "1101"

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},
```

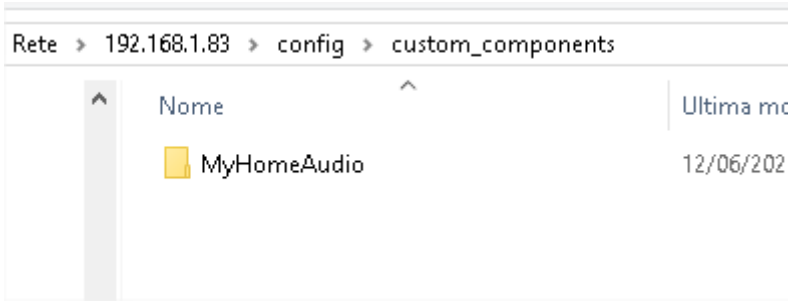
However, if the actuators installed instead are the 4661M2 or F401 and the gateway is an F454 with the latest firmware or the MHserver1, you can manage the positions - in this case, given you are able to manage the status, the % of opening will be highlighted. The object to use in this case will be:

```
{"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",
```

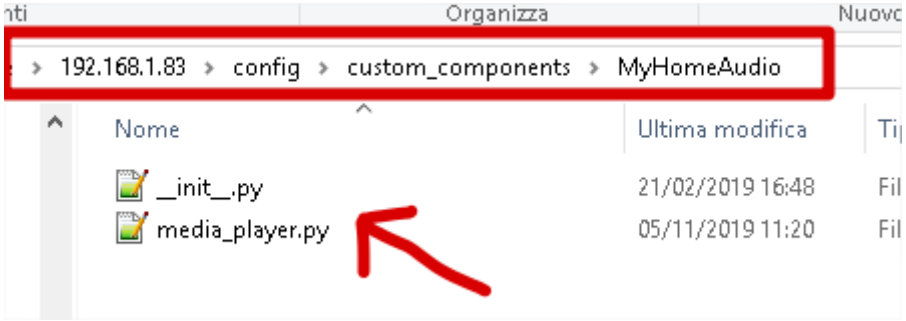


A maximum of 4 sources can be added - they must be written in order and always with the comma at the end

```
"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 MyHomeAudio custom component in your Home Assistant folder

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

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

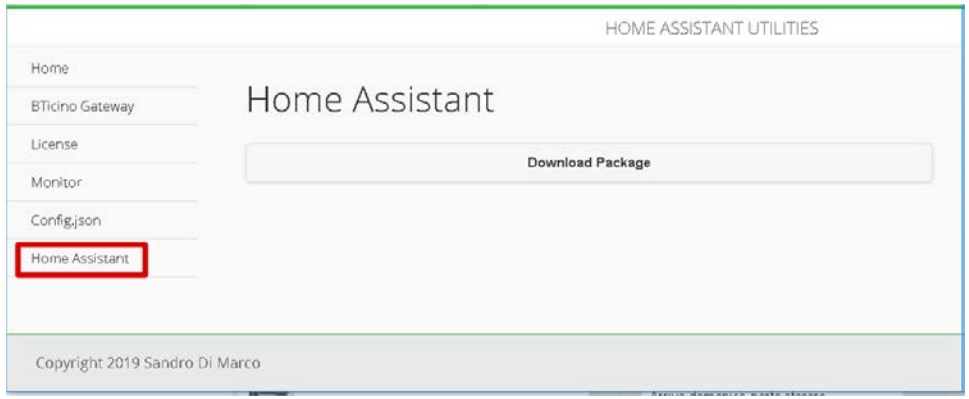
```
{"type":"Door" , "name": "Porta Garage", "address": 11, "frame": "*1*18*71##"},
{"type":"Door" , "name": "Cancelletto", "address": 11, "frame": "*6*10*4000##"},
```

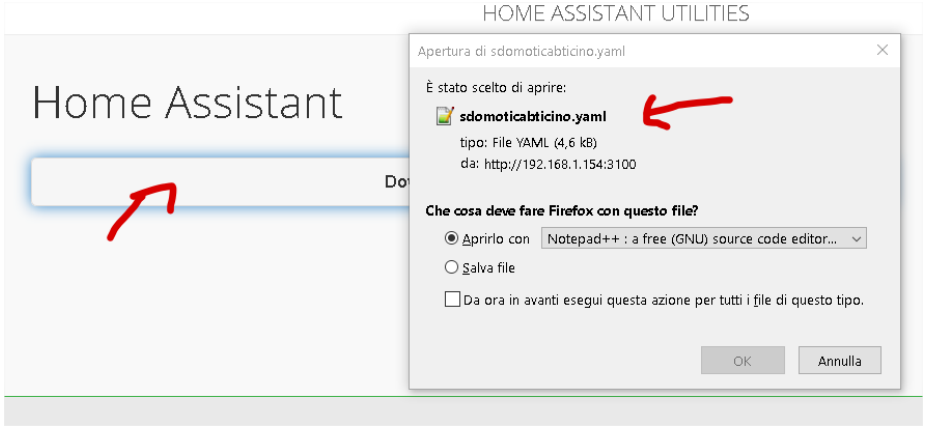
Generic Buttons

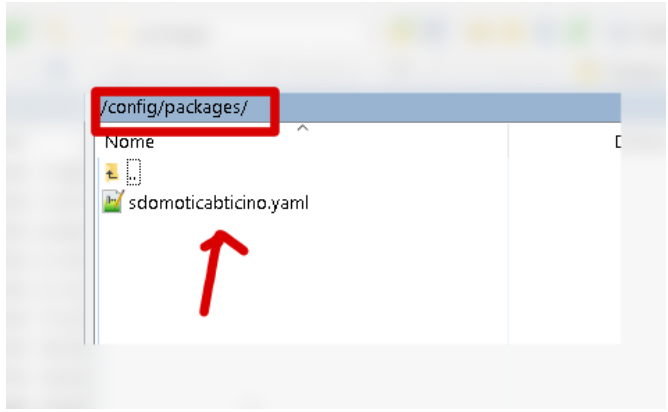
```
{"type":"Button", "name": "Cancello","address": 12},
{"type":"Cen", "name": "Cen command", "frame": "*25*23#1*21##"},
```

Build Home Assistant package

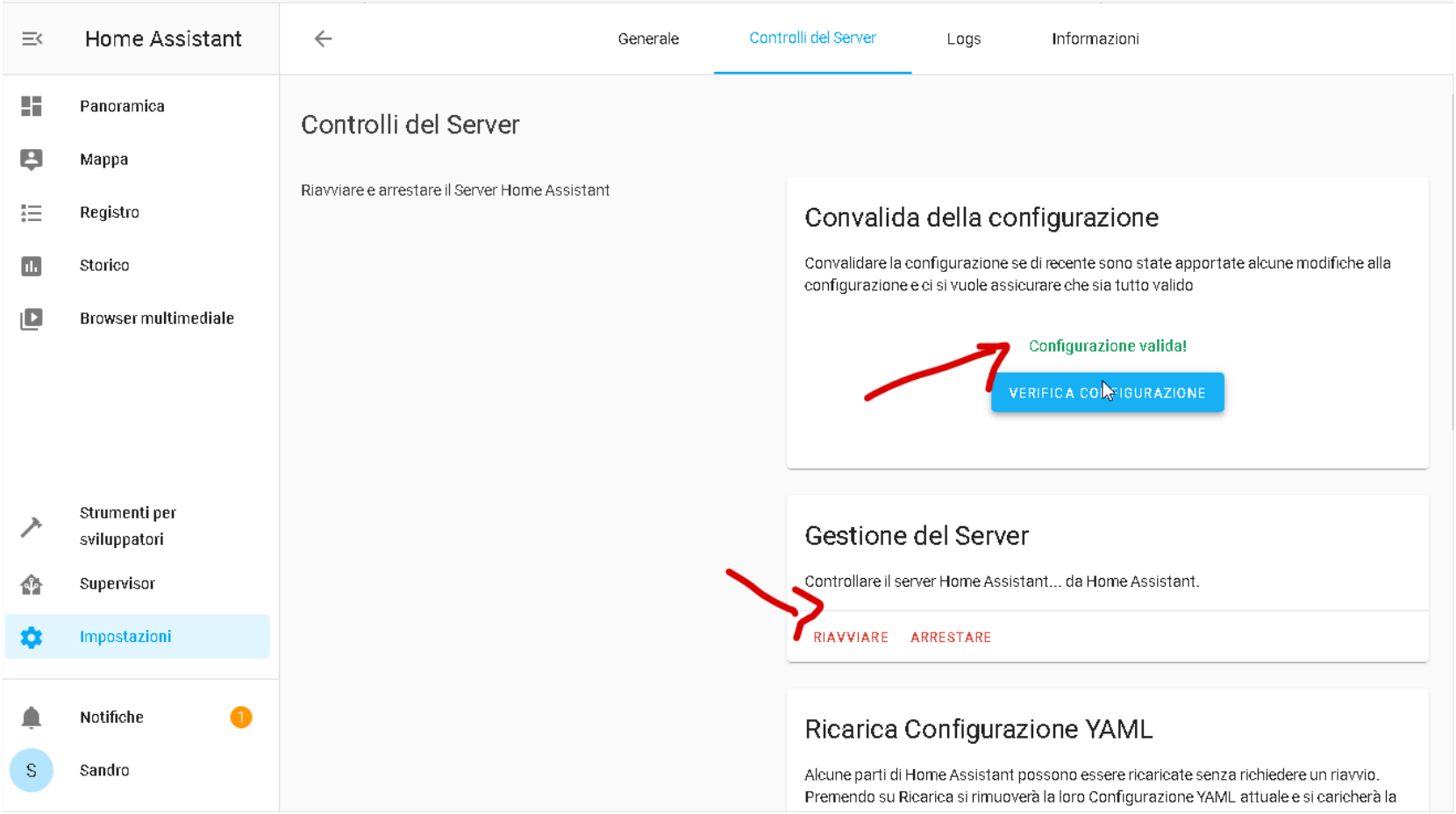
Once connected to the BTicino gateway and mapped your system you can build the package.yaml to insert in your Home Assistant configuration folder







Check the configuration before restart



If OK please restart, otherwise check the errors. **Don’t restart without FIX the ERRORS some errors are relating climate and cover, check next page to solve**

Restart your Home Assistant

Manual edit for support last HA version

The Sdomotica builded package need some editing

1) Comment and edit Windows Advance if used

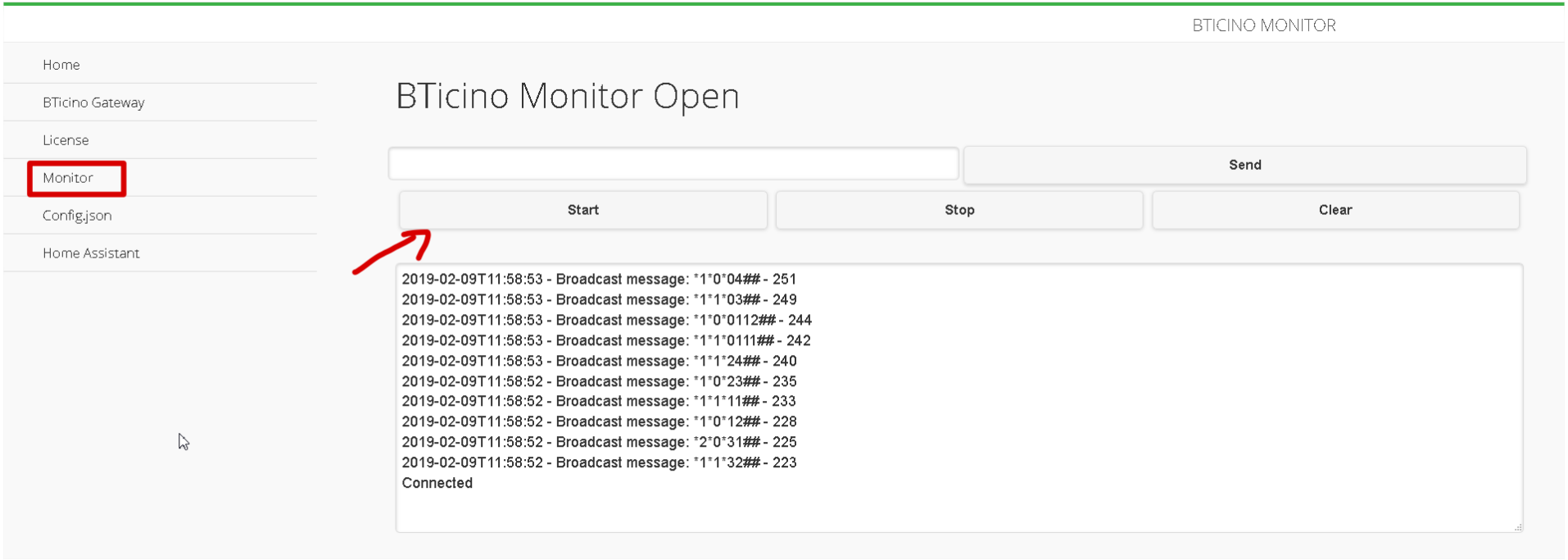
```
cover:
  - platform: mqtt
    name: Veranda Avanzata
    unique_id: bticino61
    command_topic: "sdomotica/cover/55/set"
    optimistic: false
    #set_position_template: "{{value.x }}"
    set_position_topic: "sdomotica/cover/55/position"
    position_topic: "sdomotica/cover/55/statusposition"
```

2) Comment or remove on all the climates

```
climate:
  - platform: mqtt
    name: Soggiorno
    #unit_of_measurement: "°C"
    modes:
      - Manual
      - Automatic
      - "OFF"
      - Antifreeze
      - Protection
    current_temperature_topic: "sdomotica/4/1/status"
    temperature_state_topic: "sdomotica/4/1/setpoint"
    temperature_command_topic: "sdomotica/4/1/settemperature"
    mode_state_topic: "sdomotica/4/1/mode"
    mode_command_topic: "sdomotica/4/1/setmode"
    power_command_topic: "sdomotica/4/1/power"
    #optimistic: false
```

OpenWebNet Monitor / Client

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



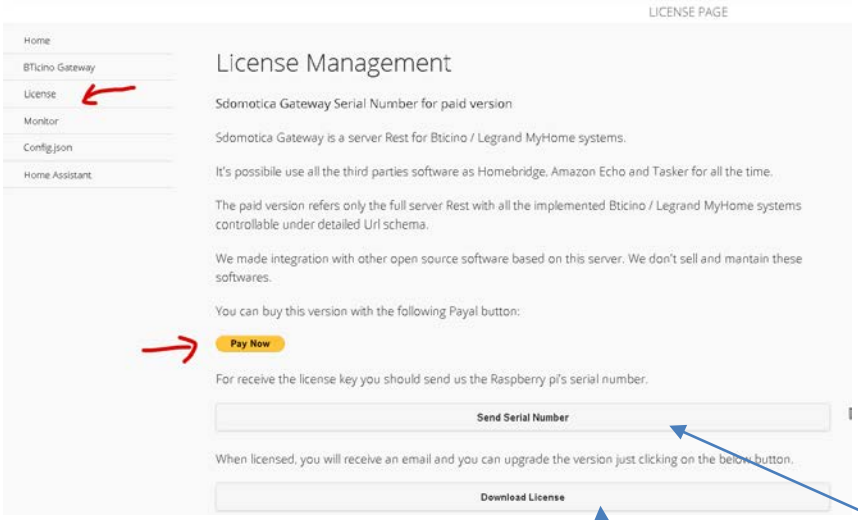
Buy Addon

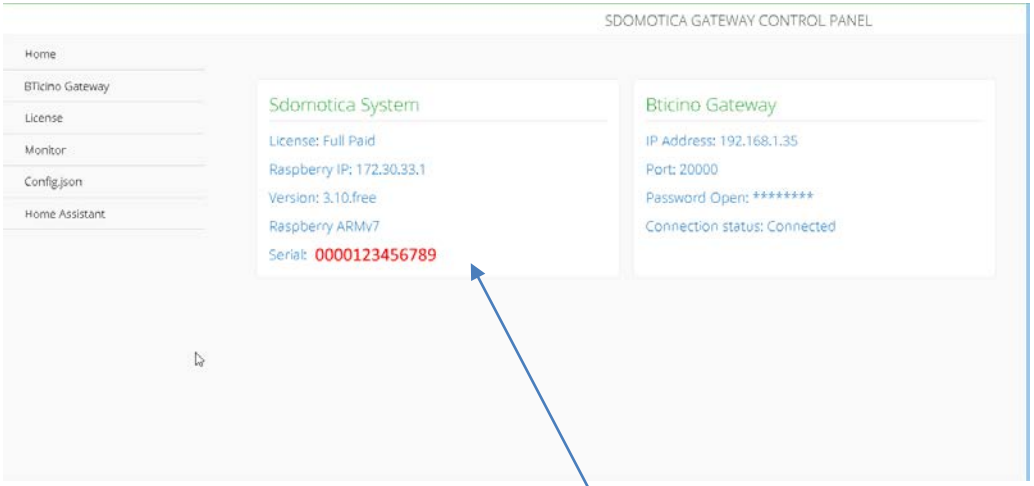
For unlock all the features you have to buy license.

License is linked to Raspberry serial number

First you should pay

Please access to addon webinterface and go in License page. There's a Paypal button to do the payment





The send by email the Raspberry serial number, or clicking on webinterface button or by email to sandro.dimarco@sdomotica.com

Then wait my license generation and confirmation mail.

Received the confirmation, please click on download license and restart addon