Introduction

This document describes of controlling and monitoring a RAPIX Lighting Control System using Home Assistant.

MQTT is a commonly used protocol used for communicating between industrial devices.

In the RAPIX Lighting Control System, a Zone Controller can act as a MQTT Client.

Home Assistant can also act an MQTT Client. This is the method used for control and monitor the RAPIX Lighting Control System from Home Assistant.

For details of using RAPIX with MQTT, refer to Application Note APN-RAPIX-026: *Using RAPIX with MQTT*, available here: https://ozuno.com/go/mqtt/.

This application note assumes that the user:

a. Has Home Assistant installed and is familiar with using it; and

b. Has a RAPIX Lighting Control System with Zone Controller, which is fully commissioned and running. The project must contain at least one Zone.

This Application Note has three sections; and assumes the user has no knowledge of MQTT in association with Home Assistant:

a. Step 1: Add MQTT Broker to Home Assistant(HA).

b. Step 2: Setting Zone Controller to subscribe to HA MQTT Broker.

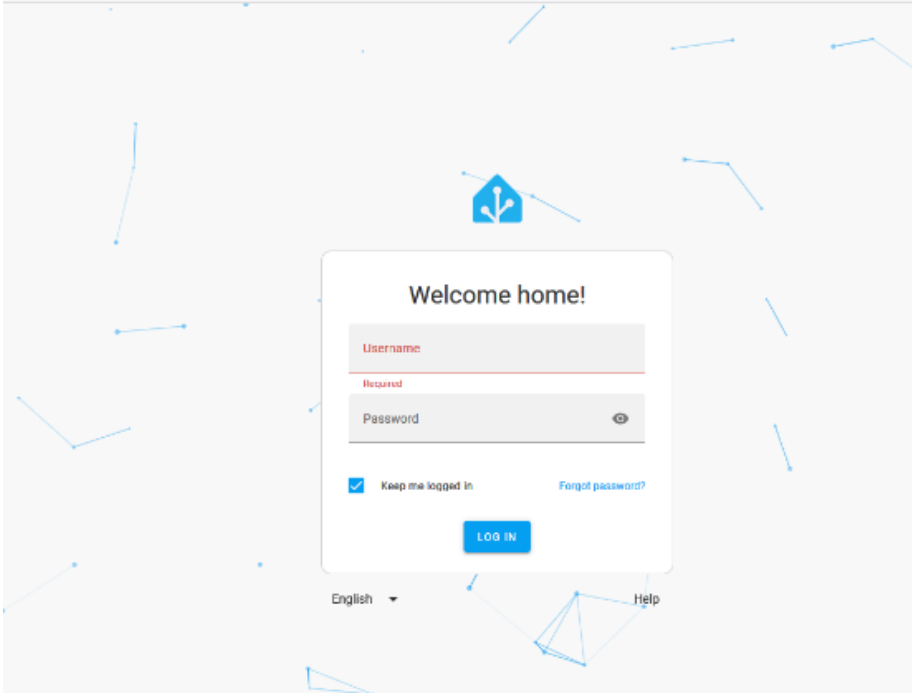
c. Step 3: Getting ZC Device and Entities to HA Dashboard.

Step 1: Add MQTT Broker to Home Assistant(HA).

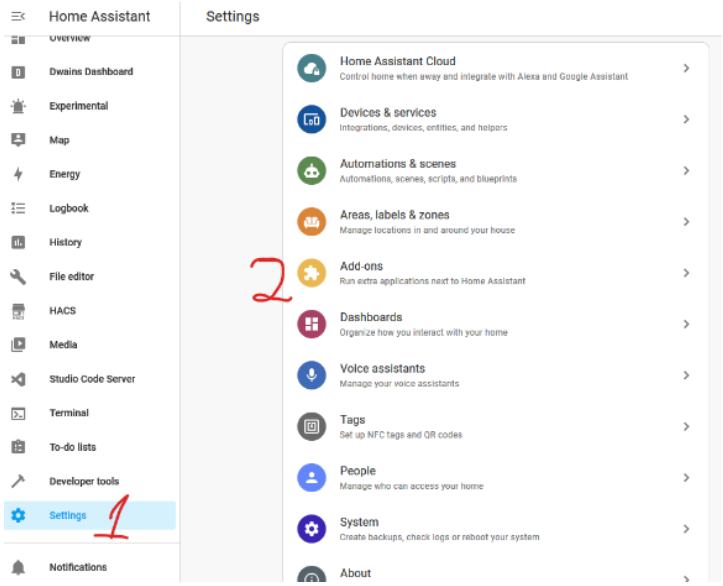
(Skip this section if you already have a separate MQTT Broker server)

a. Access your local Home Assistant (HA), typically using a URL like http://homeassistant.local:8123 or type **<IP>:8123** on the address bar of your web browser.

b. You will get a Home Assistant "Welcome Home!" screen. Enter your Username and Password to log into your HA.



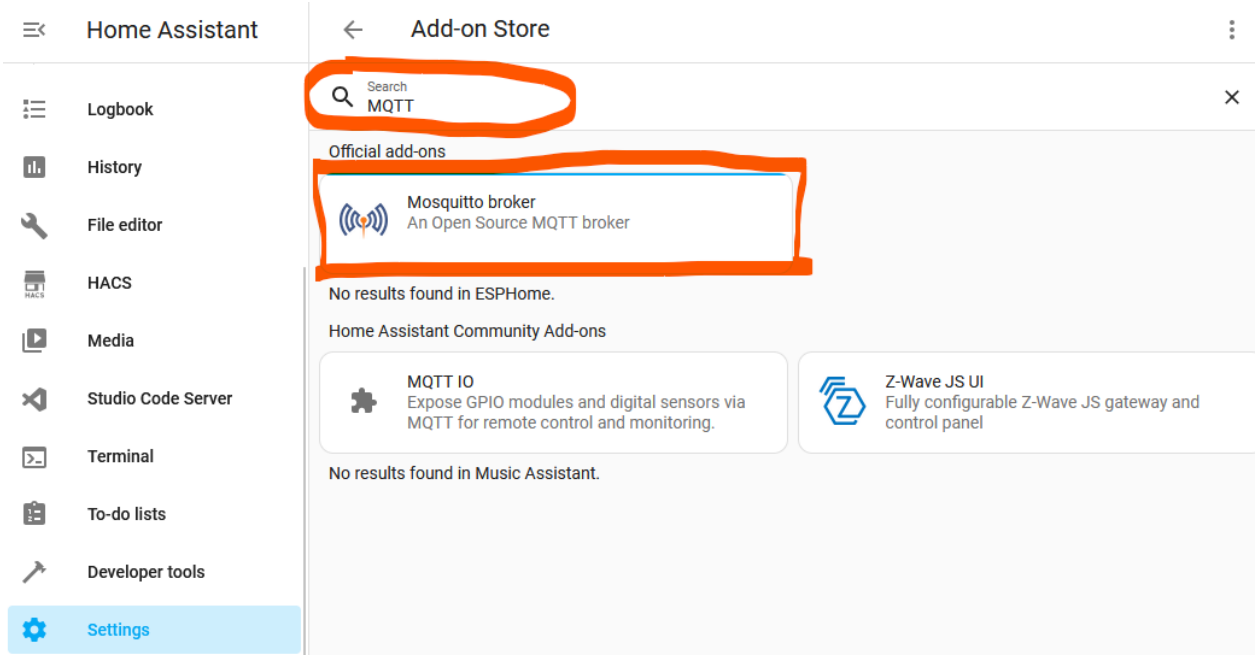
c. After Login you should see the HA Dashboard. On the Left Hand Side you should see **Settings** tab. Click on the **Setting**s tab.



d. Then Click on **Add-ons**

e. Now Click on the Blue **Add-on store** button at the bottom Right-Hand corner.

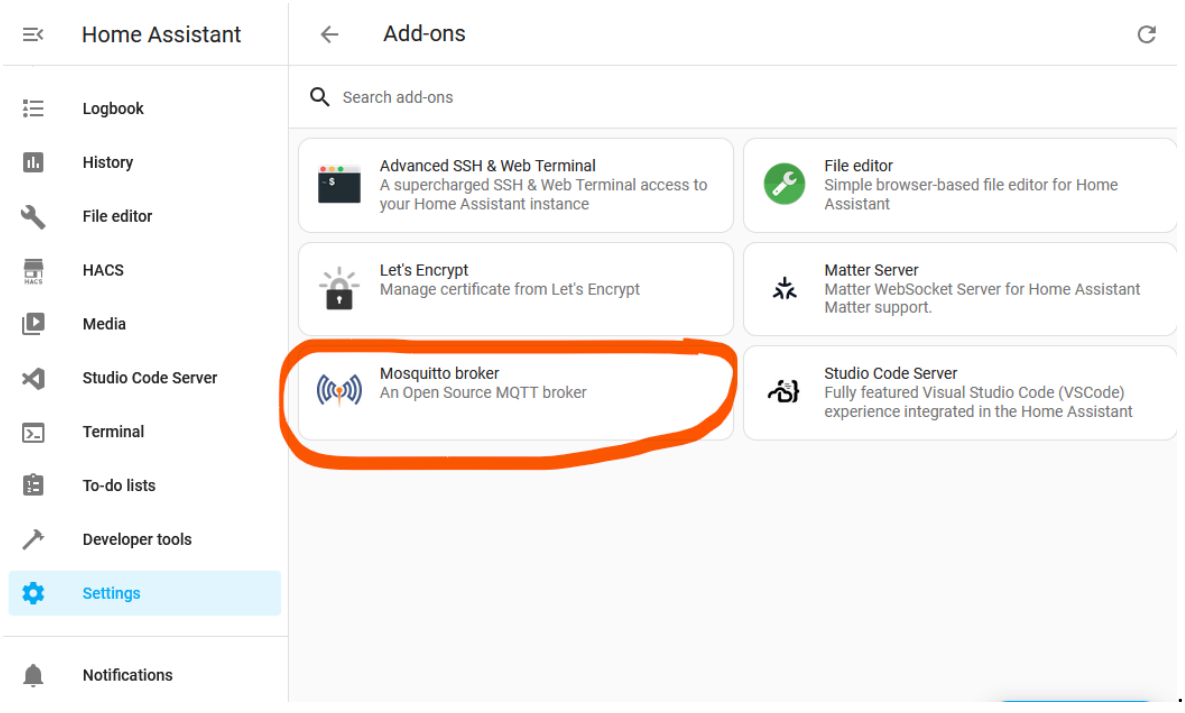
f. In the Add-on Store Type **MQTT** into the search at the top.



g. Click on the **Mosquitto broker** icon to add the Mosquitto integration to HA. Leave all settings as default.

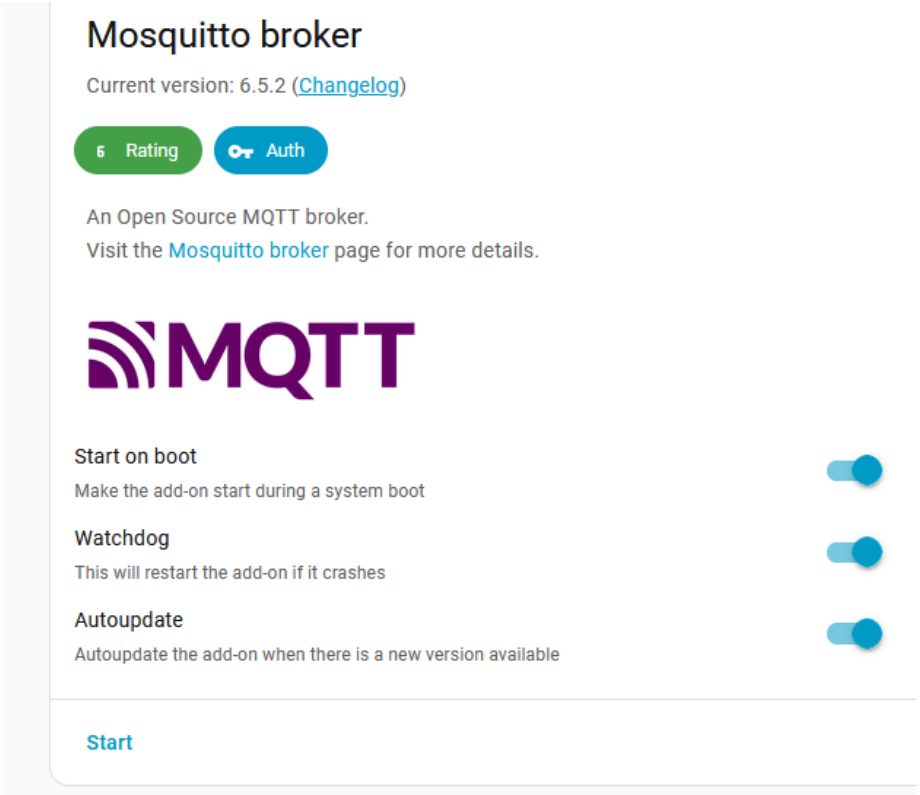
h. Press the left arrow **<-** at the top left hand side near the title **Add-on Store**.

i. You should now have a screen that looks like this:

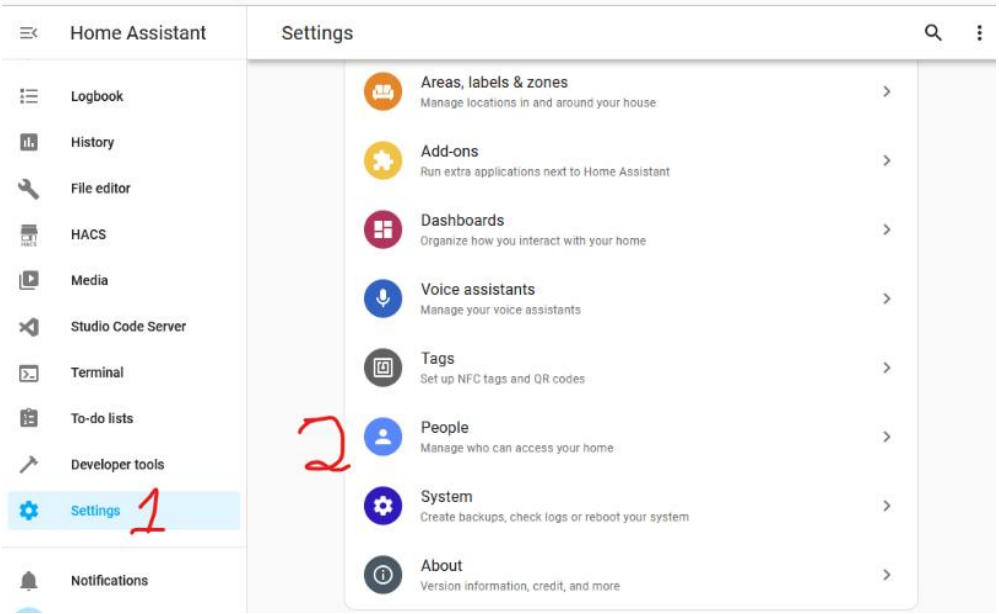


j. If you see **Mosquitto broker** in the Add-ons then congratulations: you have now added Mosquitto MQTT Broker to Home Assistant.
Be aware that a Mosquitto Server can be anywhere, you don't have to use the HA one.

k. Click the **Mosquitto broker** icon to open it. Make sure **Start on boot** and **Watchdog** are enabled. Then press **Start** to start the Mosquitto broker service.



l. Add a New User to HA by click on Home Assistant **Settings** then **People**



m. Name new user as **mqtt** and password **123456** or anything else that you want.

The RAPIX Zone Controller needs to subscribe to the Home Assistant MQTT Broker, so the Zone Controller MQTT setting for username and password must match the username and password you configure here.

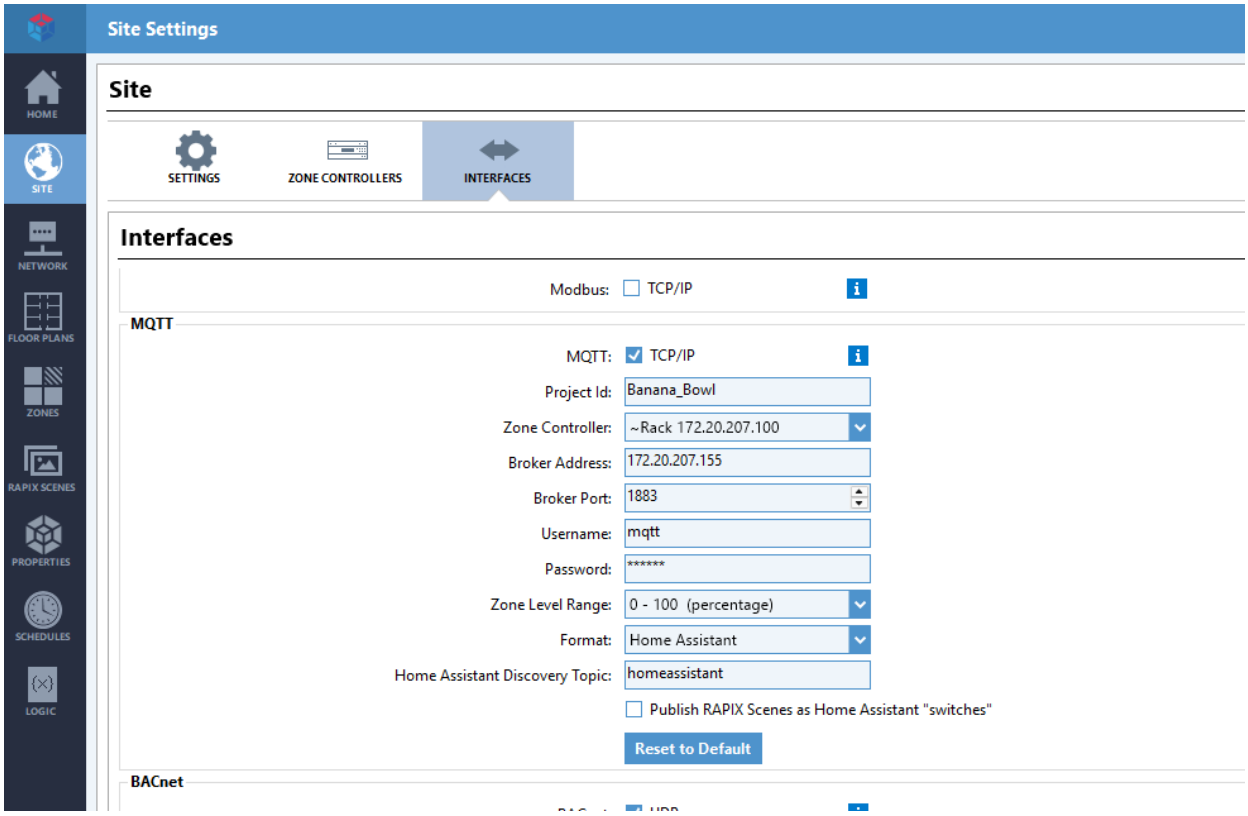
For reconfigure MQTT, Consult this link https://www.home-assistant.io/integrations/mqtt/

Step 2: Setting Zone Controller to subscribe to HA MQTT Broker.

(Make sure you have at least RAPIX Integrator version 12.39. Zone Controller needs Firmware 13.1.0 installer, or later.)

a. Start RAPIX Integrator and open your Project. Click on the **Site** tab then **INTERFACES.**

b. Check the tick box **MQTT** so that it is checked.



c. Give your project an ID (in the above example, it is **Banana_Bowl**)

d. Select the **Zone Controller** that will subscribe to Home Assistant MQTT Broker.

e. Enter the HA MQTT Broker Address in the **Broker Address** box (If using the Home Assistant Mosquitto broker, this should be your Home Assistant IP.)

f. Leave **Broker Port** as default **1883**

g. Enter HA **Username** that was created in Step 1 – example: **mqtt**

h. Enter HA **Password** that was created in Step 1 – example:**123456**

i. Select **Zone Level range as 0-100 (percentage)**

j. Set Format to **Home Assistant**

k. Set **Home Assistant Discovery Topic** to **homeassistant**

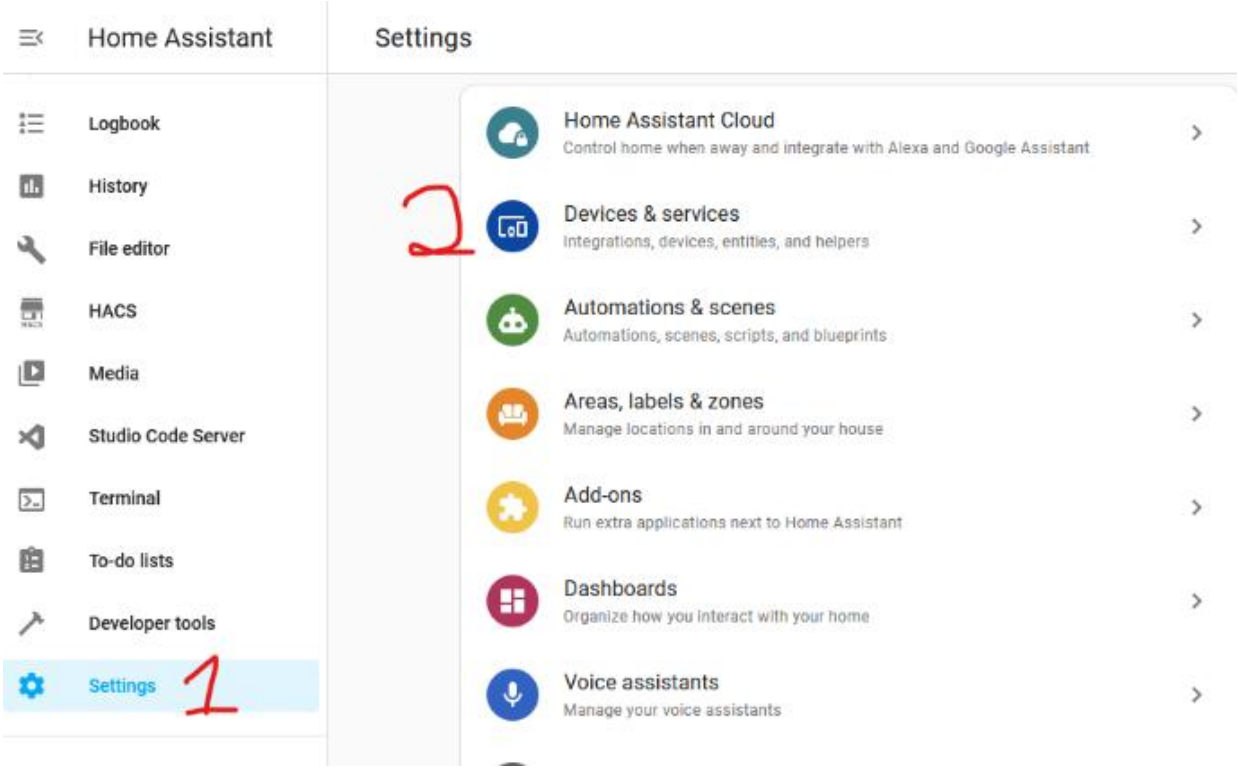
l. Make sure you have a few Zones or Scenes or Flags or Operating Properties in your project.

m. Transfer your project to Zone Controller.

Step 3: Getting RAPIX Devices and Entities to Home Assistant Dashboard

a. Go to HA webpage (refer Step 1, above)

b. Select the **Settings** tab then **Devices & Services**

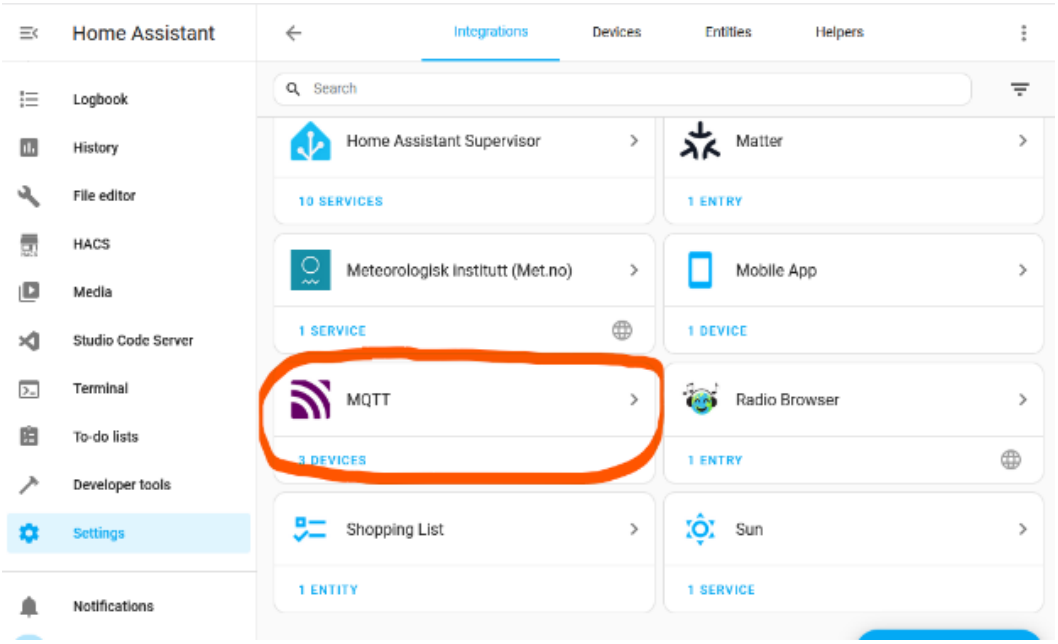


c. Click the Blue **ADD INTEGRATION** and search for **MQTT**

d. Click the **MQTT** Integration to add to Home Assistant.

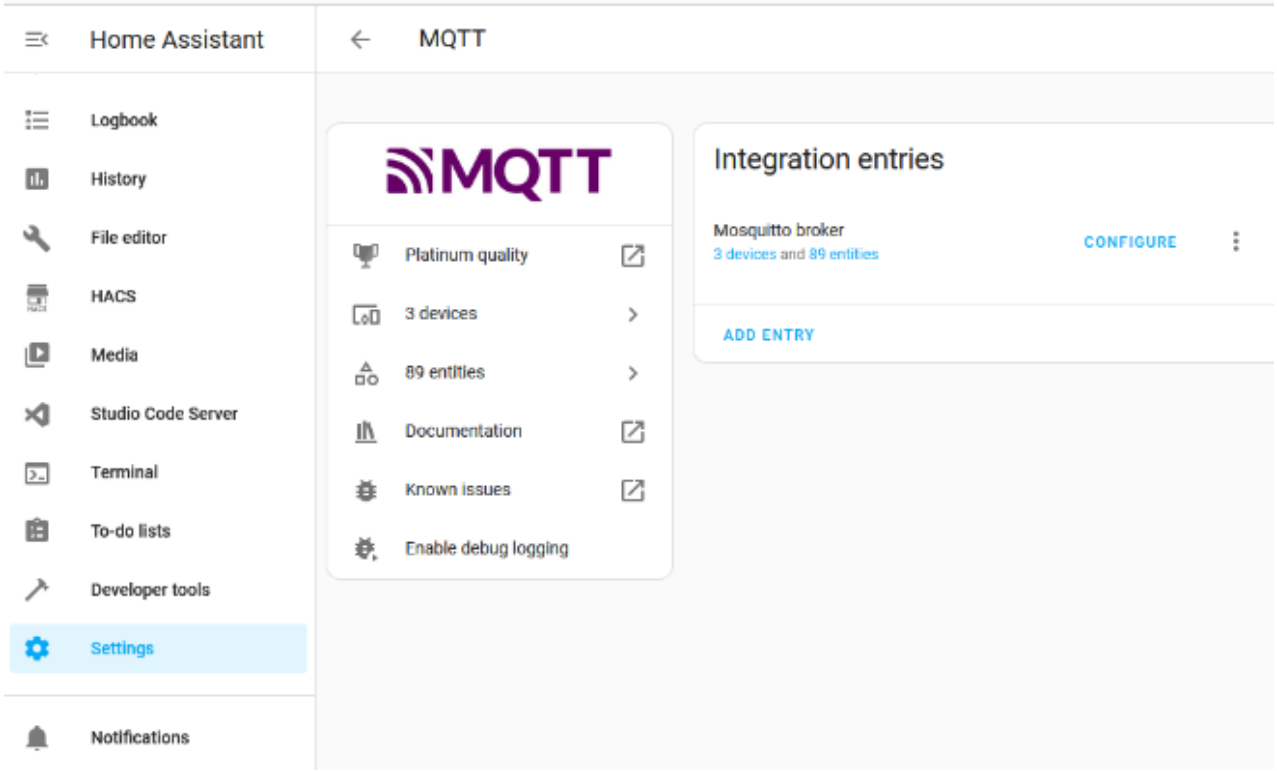
Home Assistant may auto detect MQTT Device and prompt you to accept the MQTT integration.

e. After adding MQTT integration to HA. The MQTT Integration in HA should look like this:

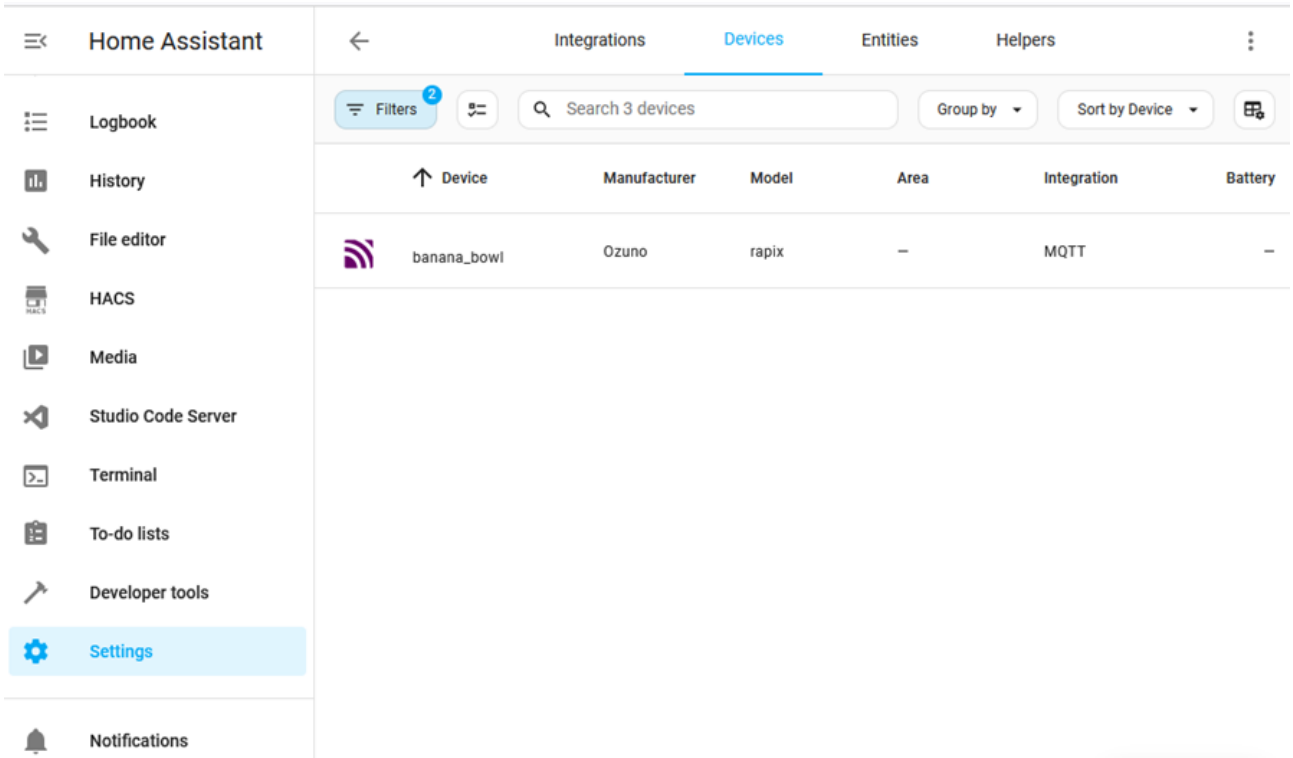


f. You should only see one RAPIX MQTT Device.

g. Click on the **MQTT Integration**, it will show the MQTT Integration entries:

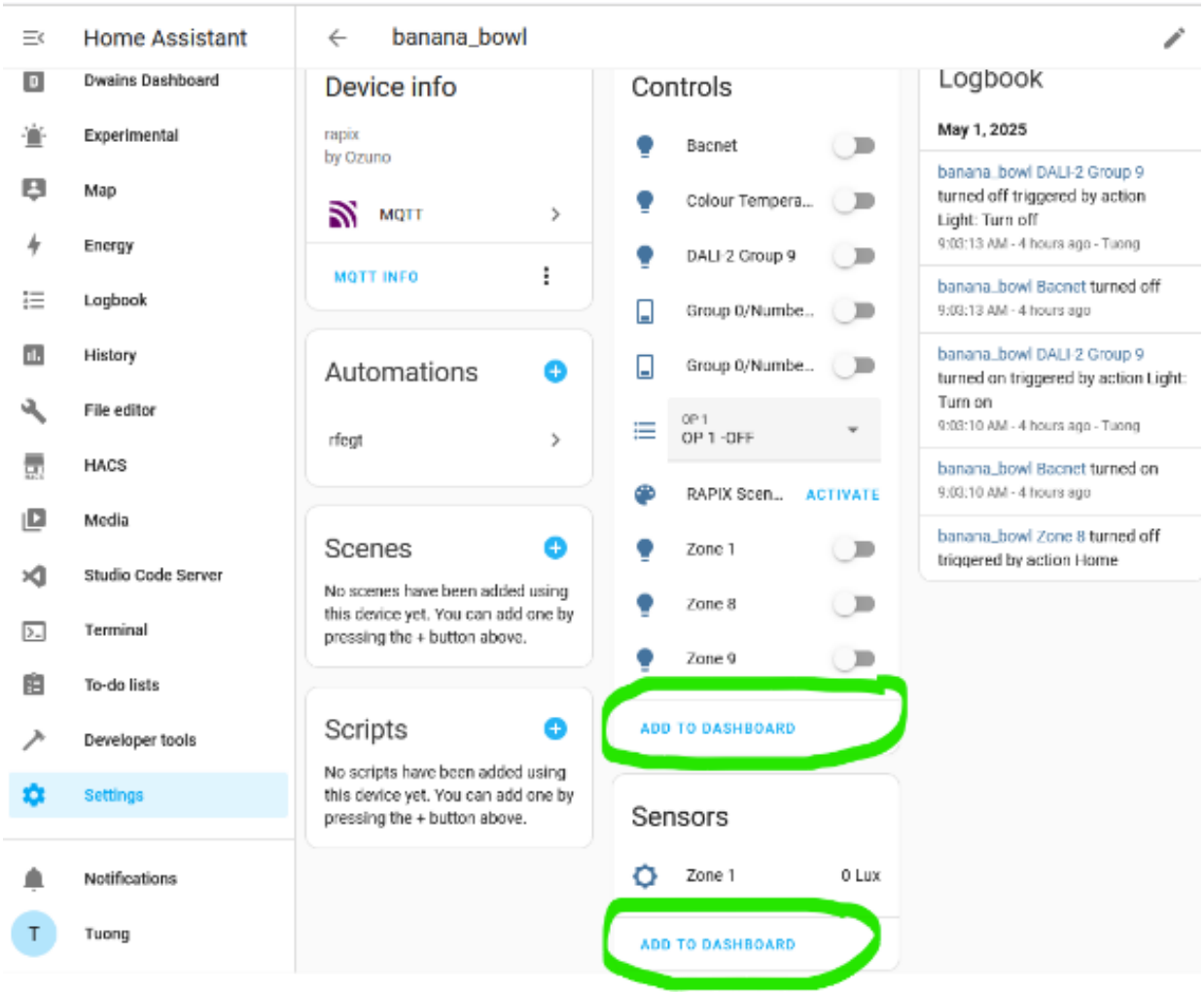


h. Click on "**device**" and it will show ZC project as a device:



i. Click on the RAPIX Zone Controller project device and it will show all Project Entities (Zones, Flag, Scene etc.).

j. Add Zone Controller devices to HA Dashboard and control of all the Entities.



Change History

Rev	Date	Updated By	Comment
1	7th Jan 2026	TV & DS	First Release

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