

IoT - HOME CHALLENGE # 4

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Node Red

In our solution, check repo¹, we have used the following blocks:

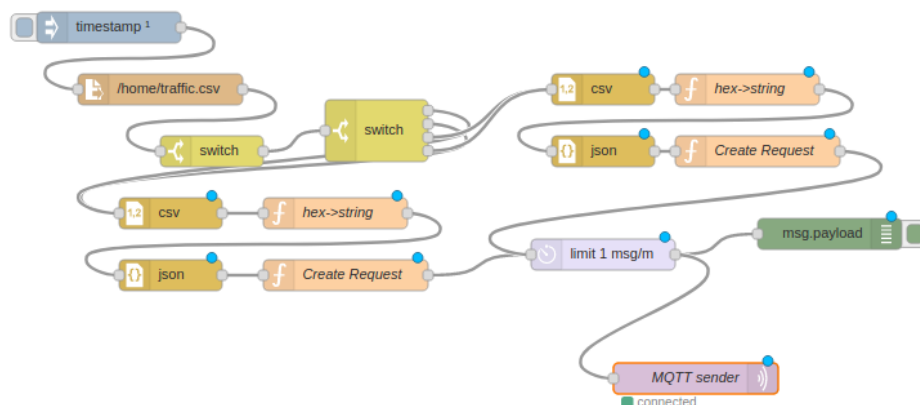


Figure 1: Node-Red flow

First, we filter each line of the *traffic.csv* file, that matches with a MQTT publish request by means of *Switch* block. Then, we filter by the name of topics, to follow the requirements to fill the fields that will be published. Later we convert the .csv in a javascript object and then the last property of the object from hexadecimal to string. Finally, we create the request, selecting the proper topic and value depending on the source to send the MQTT publish.

To create the request, is important to mention that we follow the recommendations in the *ThingSpeak* API², where the request must be created with this pattern

channels/<channelID>/publish/fields/field<fieldnumber>/<apikey>

ThingSpeak

The final plots with the given data are shown in Figure2.

The link of the channel is available here

¹The Github repository is available here

²Check: Publish to a Channel Using Desktop MQTT Client

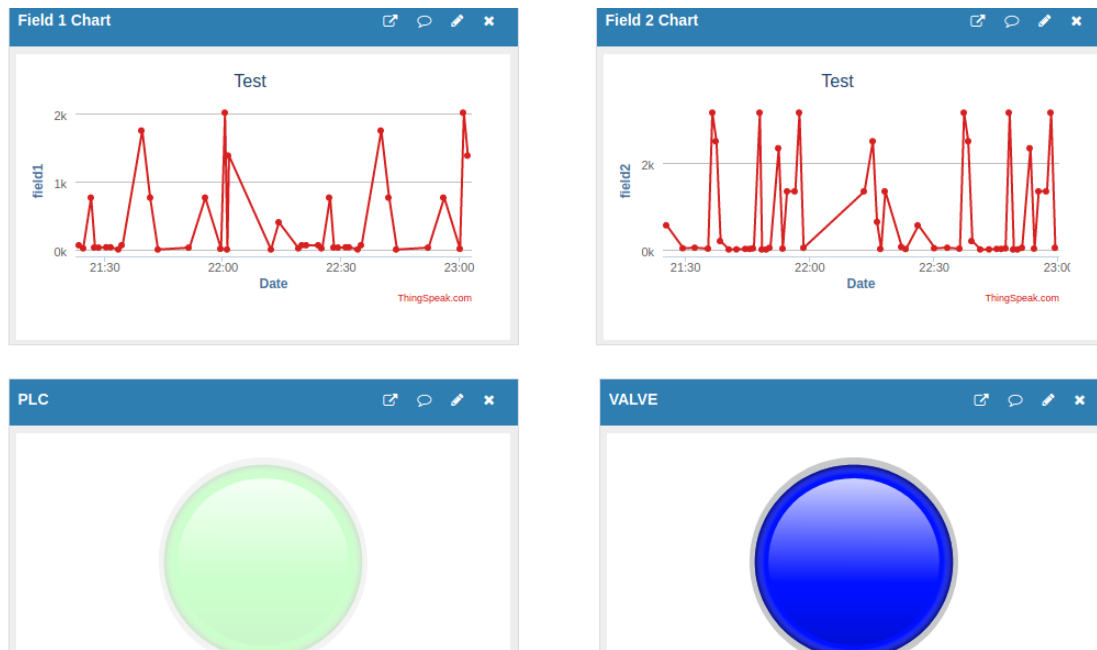


Figure 2: ThingSpeak final result