

Internet of Things

Home Challenge II

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THE FOLLOWING REPORT PROVIDES SOME REASONING ABOUT THE NODE-RED TOPOLOGY, AS LONG AS OUR THINGSPEAK CHANNEL.

SWITCHER

The switching rules are written according to the challenge assignment.

While debugging this node, we noticed that some strings have more than one "Publish Message".

SPLITTER

Before converting the value in the actual payload, due to the consequences observed in the switcher, we decided to send every payload as a single Node-RED message.

The reason behind taking into account each one of them is that, in our opinion, it is not certainly clear which payload is referred to which topic. We assumed that this probably occurred due to an improper export of the portion of traffic observed by Wireshark.

FUNCTION

We chose only the substring of our interest, selecting what lies between the hexadecimal of `value`: , and the hexadecimal of , `"lat"`:. These constraints are univocal, since every value in the payload is followed by `lat` information.

MQTT PUBLISHER

MQTT messages are sent to the broker with QoS=0, for these are the only ones that ThingSpeak allows us to publish.

THINGSPEAK CHANNEL

<https://thingspeak.com/channels/1359665>