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| Activity 5  TinyOS, Cooja, nodeRed, Thingspeak |  |
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Thingspeak channel: <https://thingspeak.com/channels/1071885>

In Cooja we have created three sky motes 1, 2 and 3. Motes 2 and 3 sends messages to mote 1 with as content a random value (between 0 and 100) and a topic related to sender mote (topic “123” for mote 2 and “246” for mote 3).

Mote 1 than prints the received messages to a serial tcp connection on port 60001 which are read by NodeRed.

In NodeRed we have:

1. TCP connection to serial server of mote 1 on port 60001
2. SWITCH to divide the messages from the two motes thanks to the different topic
3. SPLIT to isolate all the fields of the message
4. SWITCH to filter out only the value of the message
5. FUNCTION to create the payload as requested by Thingspeak MQTT channel
6. DELAY to set a rate limit of one message every 30 seconds (due to limitations of Thingspeak)
7. MQTT to send the message to Thingspeak.

GitHub repository with all the activities: <https://github.com/FraMaffezzoli/IoT_Project>