IOT ENABLED SMART FARMING APPLICATION

SPRINT DELIVERY – 2

5. Building Project

Connecting IOT Simulator to IBM Watson IOT

PlatformOpen link provided in above section 4.3

Give the credentials of your device in IBM Watson IOT

PlatformClick on connect

My credentials given to simulator are:

OrgID: **x0cI0i**

api: **a-157uf3- f5rg4qxpd3**

Device type: **nodemcu**

token: **6ogMaaQHNWFEgOD8R?**

Device ID : **sensor**

Device Token : **6GsCaVQ3-PfYy+J3ts**

You can see the received data in graphs by creating cards in Boards tab

➢ You will receive the simulator data in cloud

➢ You can see the received data in Recent Events under your device

➢ Data received in this format(json)

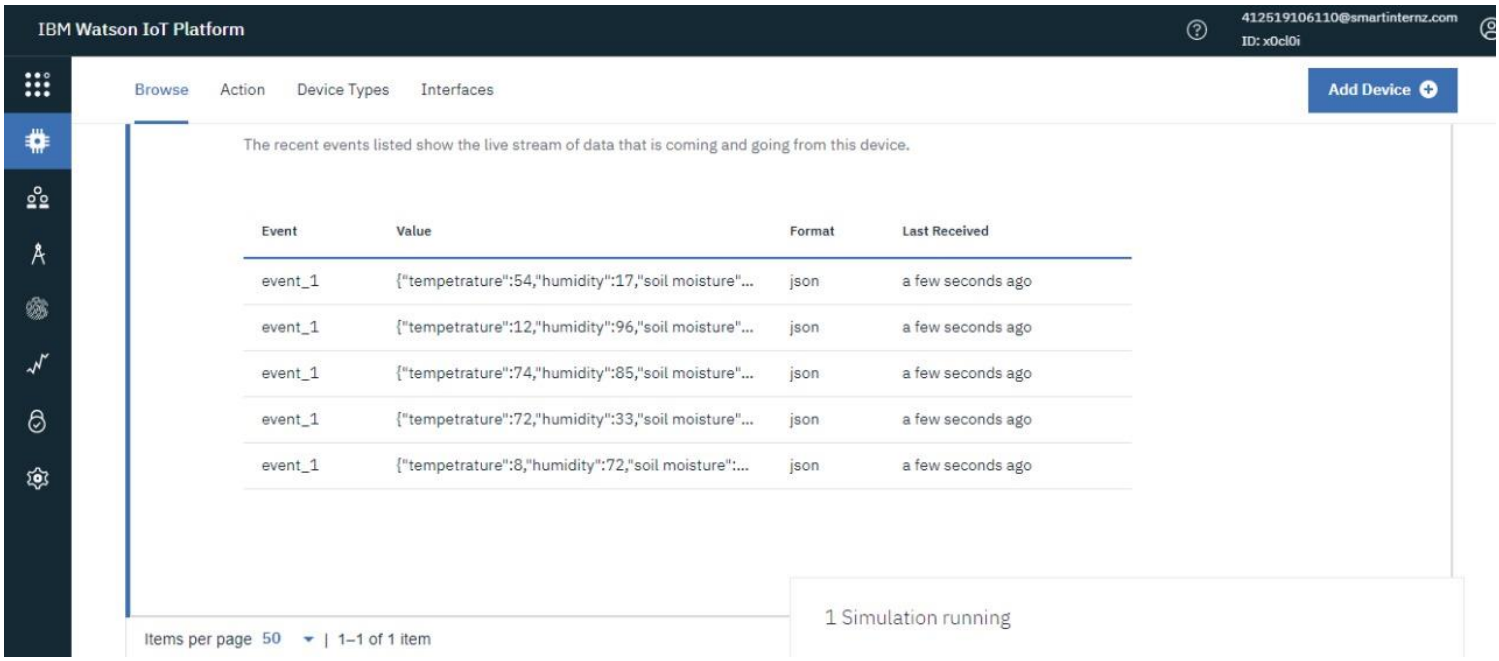
{

"d": {

- "name": "abcd",
- "temperature": 67,
- "humidity": 20,
- "Moisture ": 28

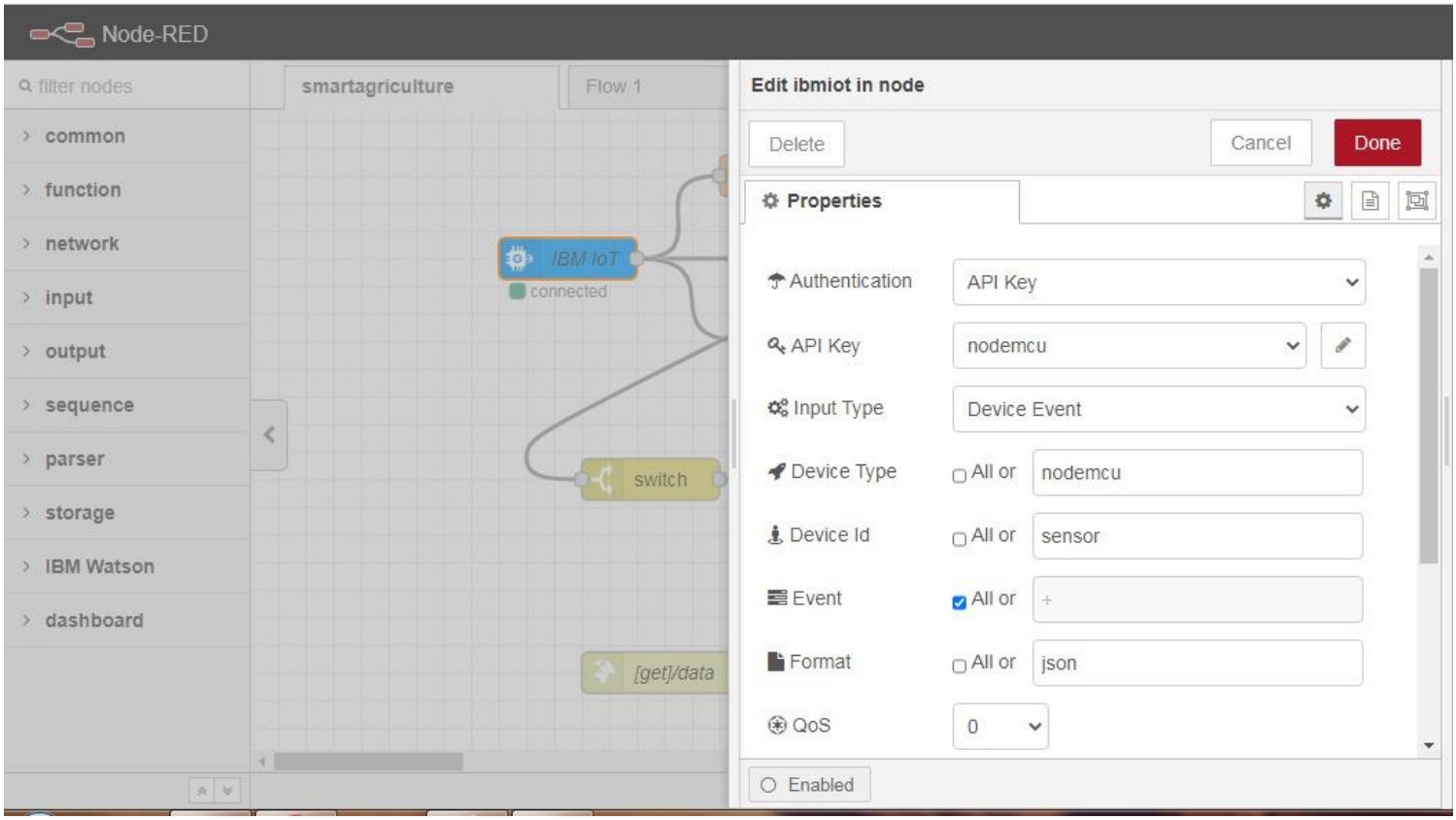
}

}



Configuration of Node-Red to collect IBM cloud data

The node IBM IOT App In is added to Node-Red workflow. Then the appropriatedevice credentials obtained earlier are entered into the node to connect and fetch device telemetry to Node-Red.



Once it is connected Node-Red receives data from the device

Display the data using debug node for verification

Connect function node and write the Java script code to get each reading separately.

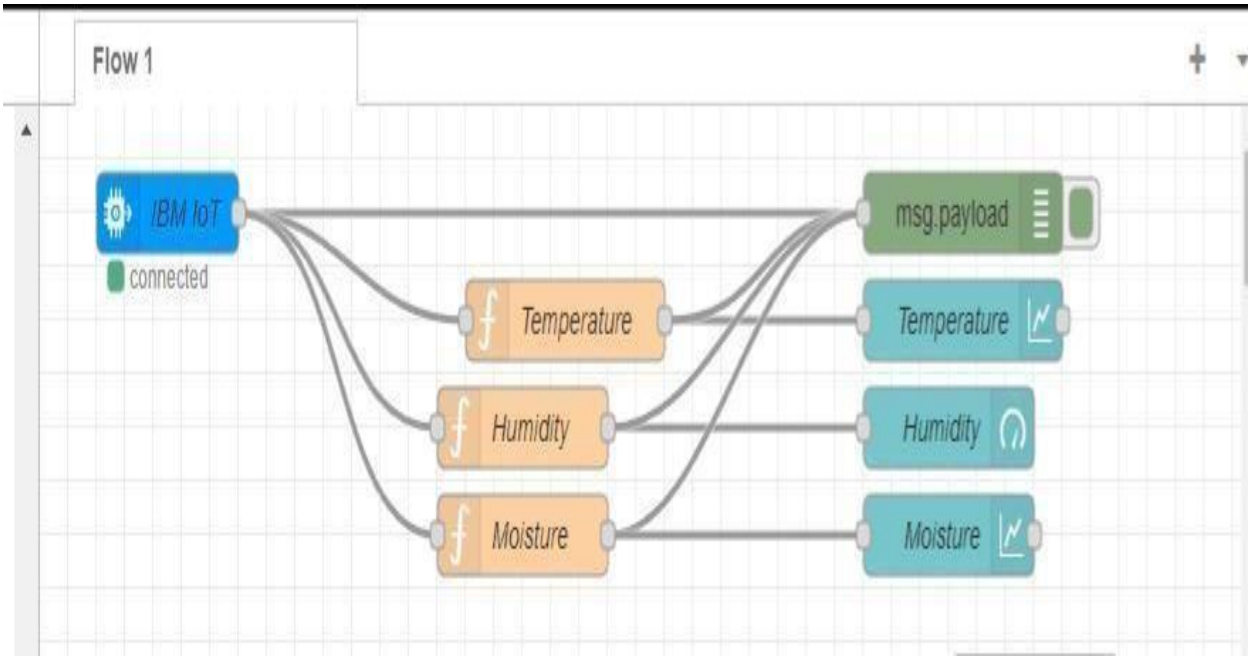
The Java script code for the function node is:

msg.payload=msg.payload.d.temperature return

msg;

Finally connect Gauge nodes from dashboard to see the data in UI

Data received from the cloud in Node-Red console



Nodes connected in following manner to get each reading separate.

This is the Java script code I written for the function node to get Temperature separately