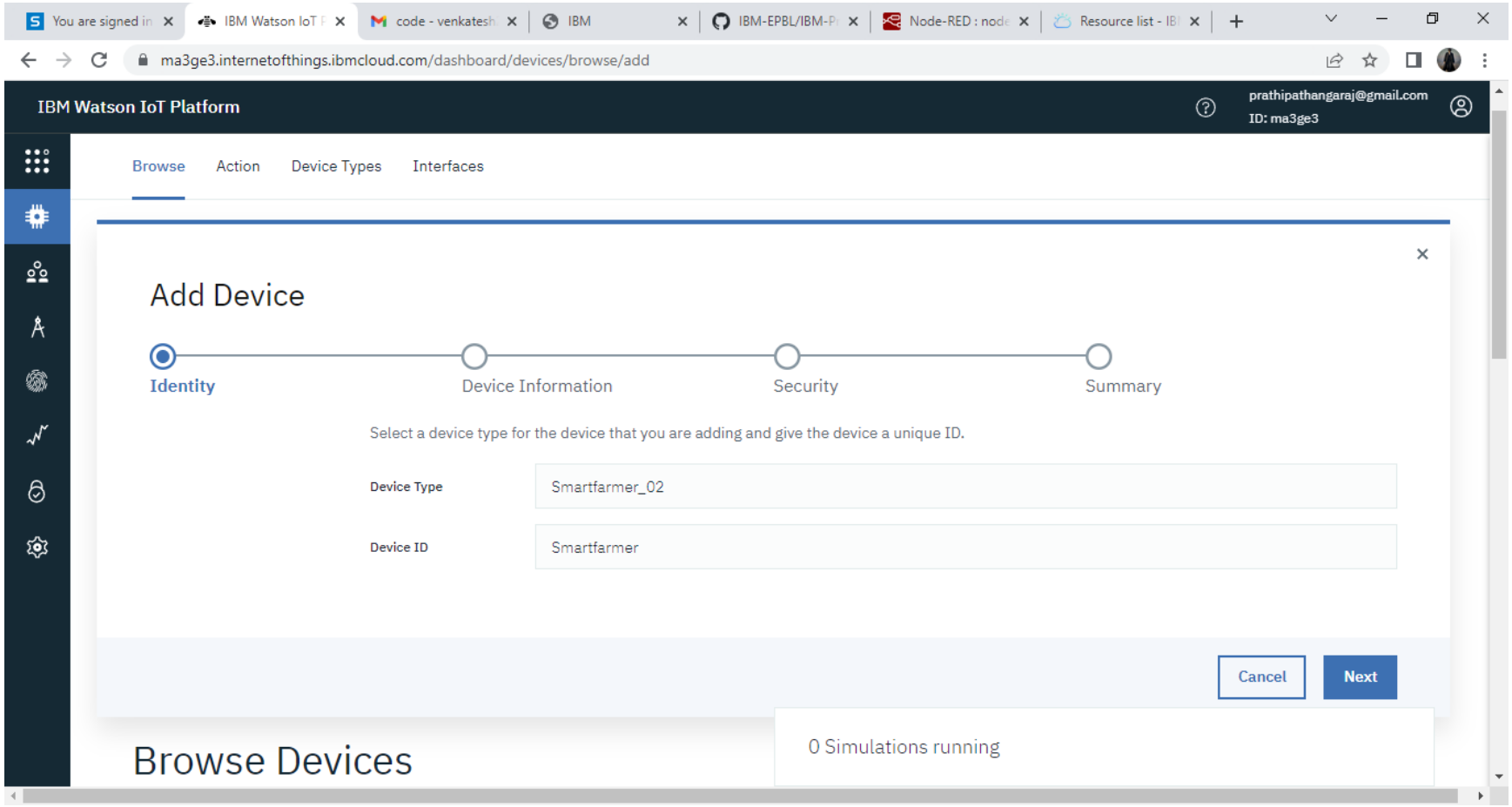
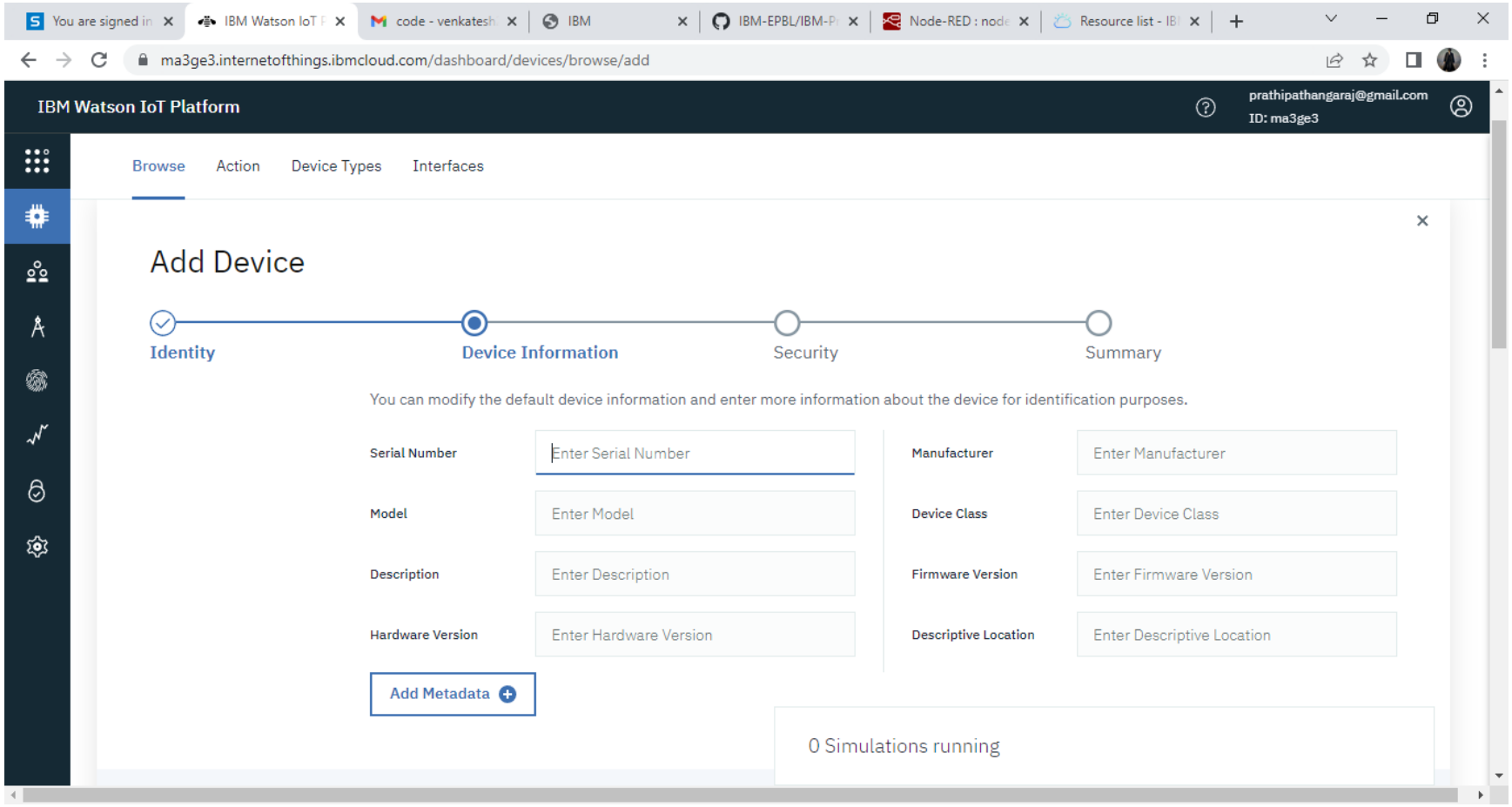
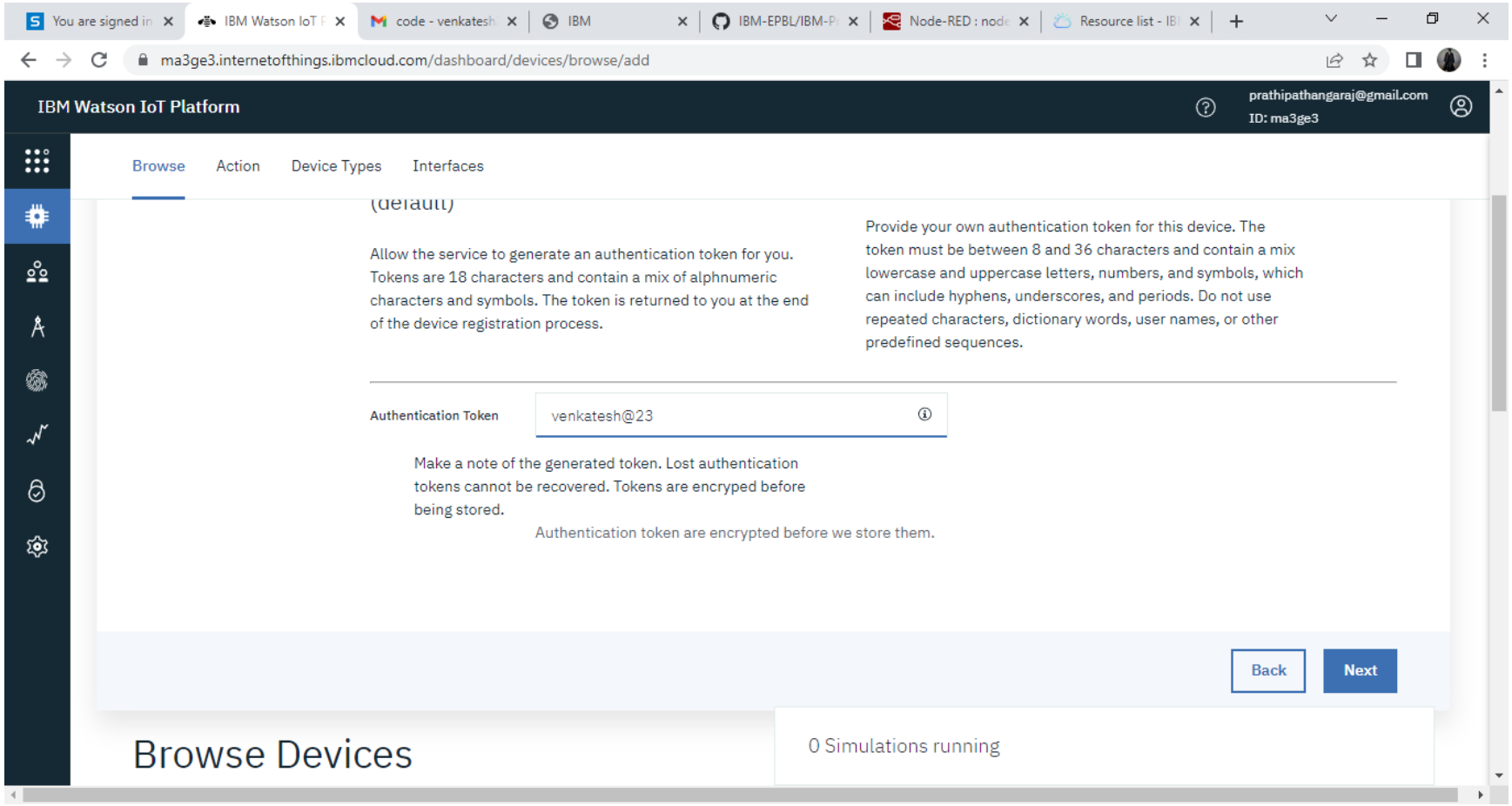
SPRINT-2

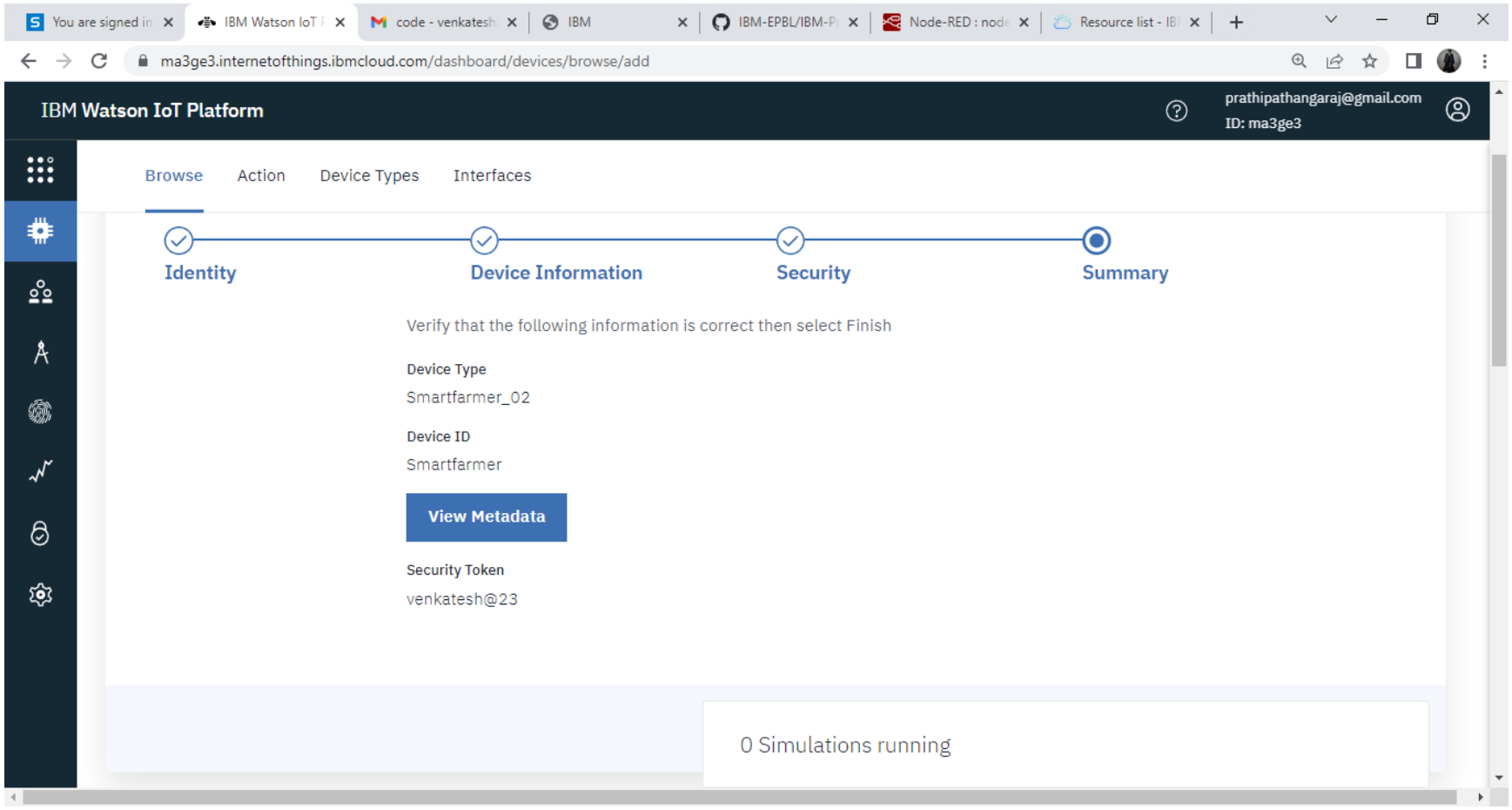
Team ID	PNT2022TMID42646
Project Name	Smart farmer - IoT Enabled smart farming application.

Create device in the Iot Watson platform

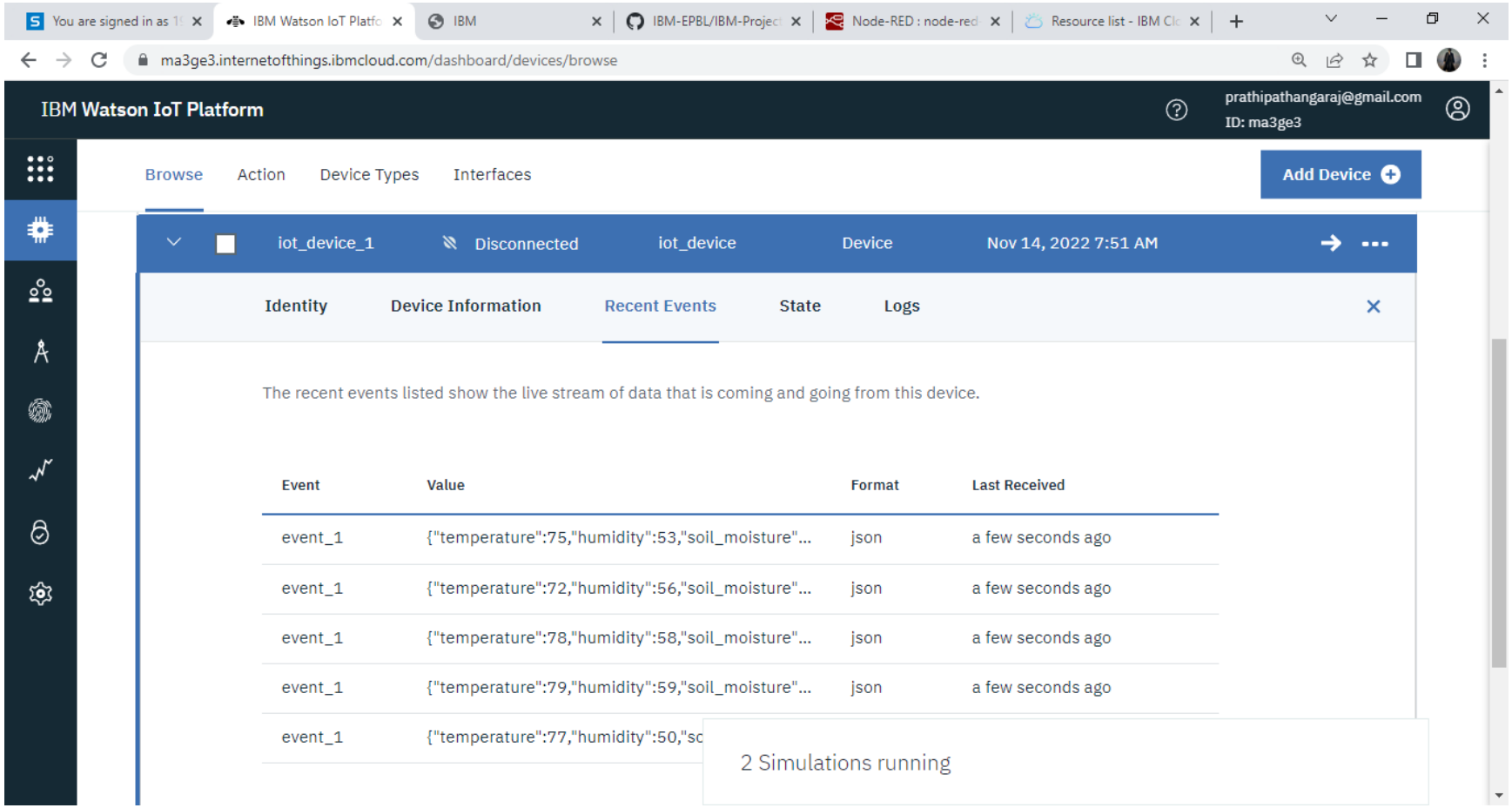



You are signed in
IBM Watson IoT
code - venkatesh
IBM
IBM-EPBL/IBM-P
Node-RED : node
Resource list - IB
ma3ge3.internetofthings.ibmcloud.com/dashboard/devices/browse/add
IBM Watson IoT Platform
prathipathangaraj@gmail.com
ID: ma3ge3
Browse
Action
Device Types
Interfaces
Add Device
Identity
Device Information
Security
Summary
You can modify the default device information and enter more information about the device for identification purposes.
Serial Number
Enter Serial Number
Manufacturer
Enter Manufacturer
Model
Enter Model
Device Class
Enter Device Class
Description
Enter Description
Firmware Version
Enter Firmware Version
Hardware Version
Enter Hardware Version
Descriptive Location
Enter Descriptive Location
Add Metadata
0 Simulations running

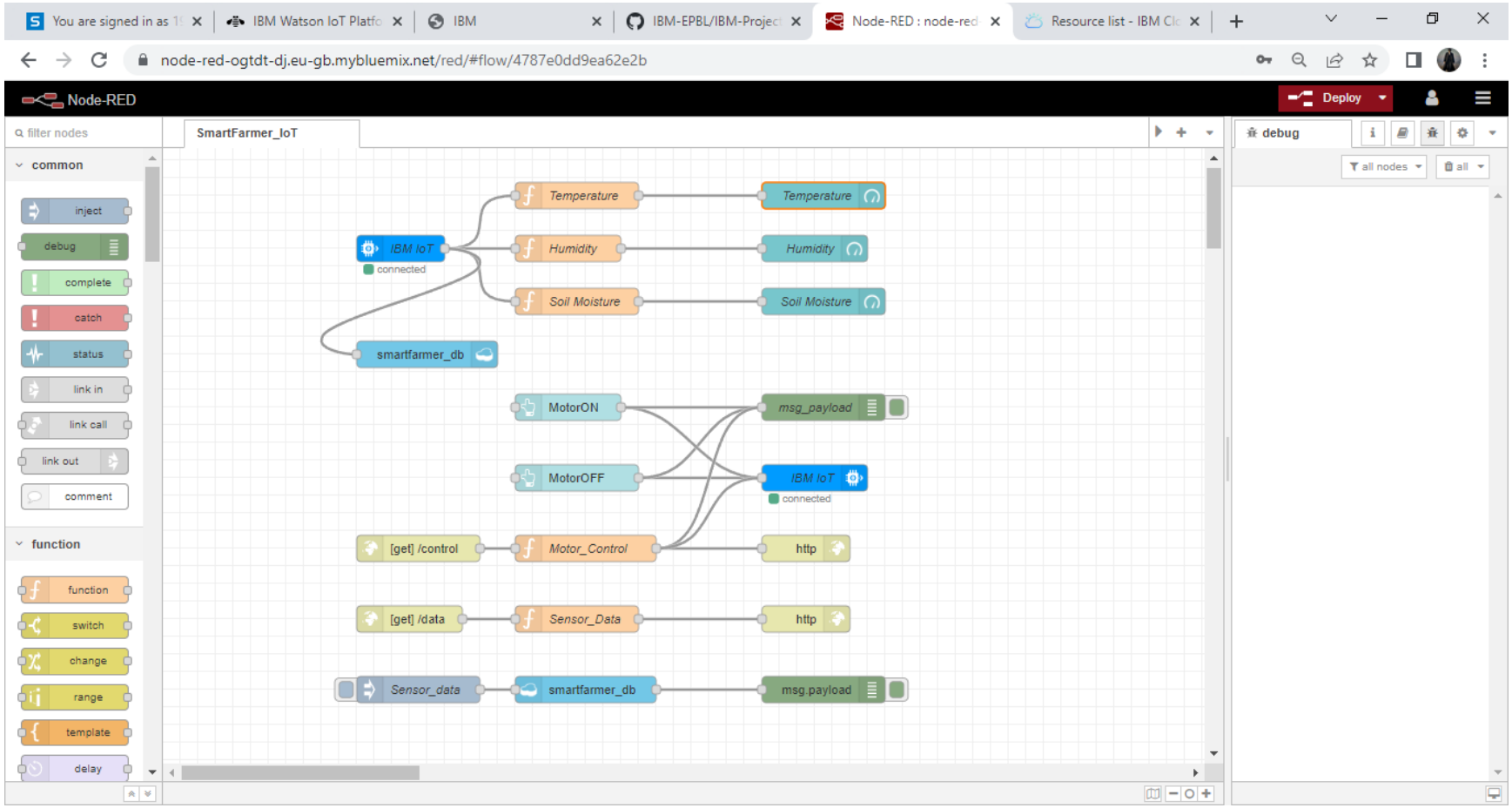

You are signed in
IBM Watson IoT
code - venkatesh
IBM
IBM-EPBL/IBM-P
Node-RED : node
Resource list - IB
ma3ge3.internetofthings.ibmcloud.com/dashboard/devices/browse/add
IBM Watson IoT Platform
prathipathangaraj@gmail.com
ID: ma3ge3
Browse
Action
Device Types
Interfaces
(default)
Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphnumeric characters and symbols. The token is returned to you at the end of the device registration process.
Provide your own authentication token for this device. The token must be between 8 and 36 characters and contain a mix lowercase and uppercase letters, numbers, and symbols, which can include hyphens, underscores, and periods. Do not use repeated characters, dictionary words, user names, or other predefined sequences.
Authentication Token
venkatesh@23
Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encryped before being stored.
Authentication token are encrypted before we store them.
Back
Next
Browse Devices
0 Simulations running

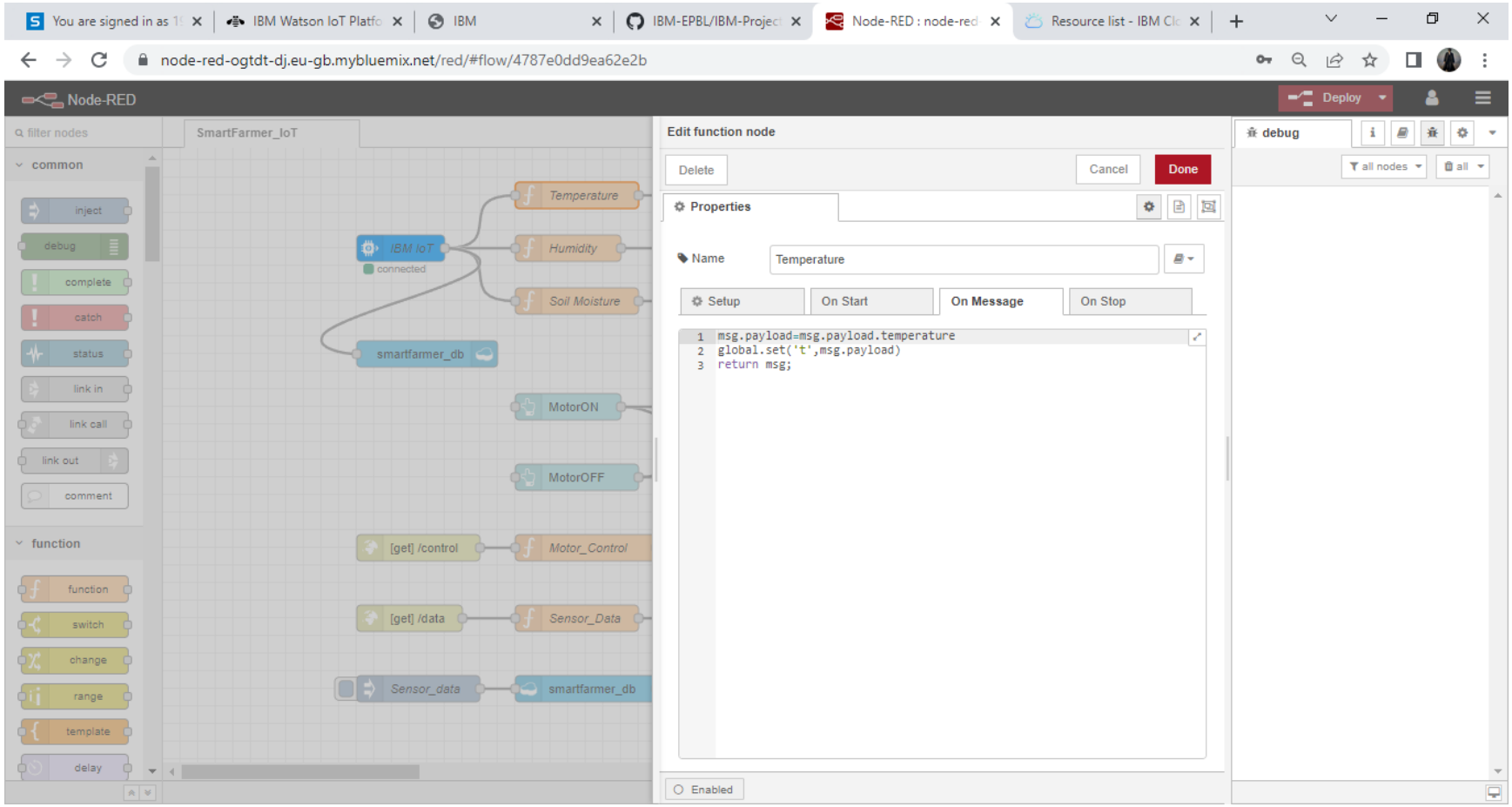

You are signed in
IBM Watson IoT
code - venkatesh
IBM
IBM-EPBL/IBM-P
Node-RED : node
Resource list - IB
ma3ge3.internetofthings.ibmcloud.com/dashboard/devices/browse/add
IBM Watson IoT Platform
prathipathangaraj@gmail.com
ID: ma3ge3
Browse
Action
Device Types
Interfaces
Identity
Device Information
Security
Summary
Verify that the following information is correct then select Finish
Device Type
Smartfarmer_02
Device ID
Smartfarmer
View Metadata
Security Token
venkatesh@23
0 Simulations running

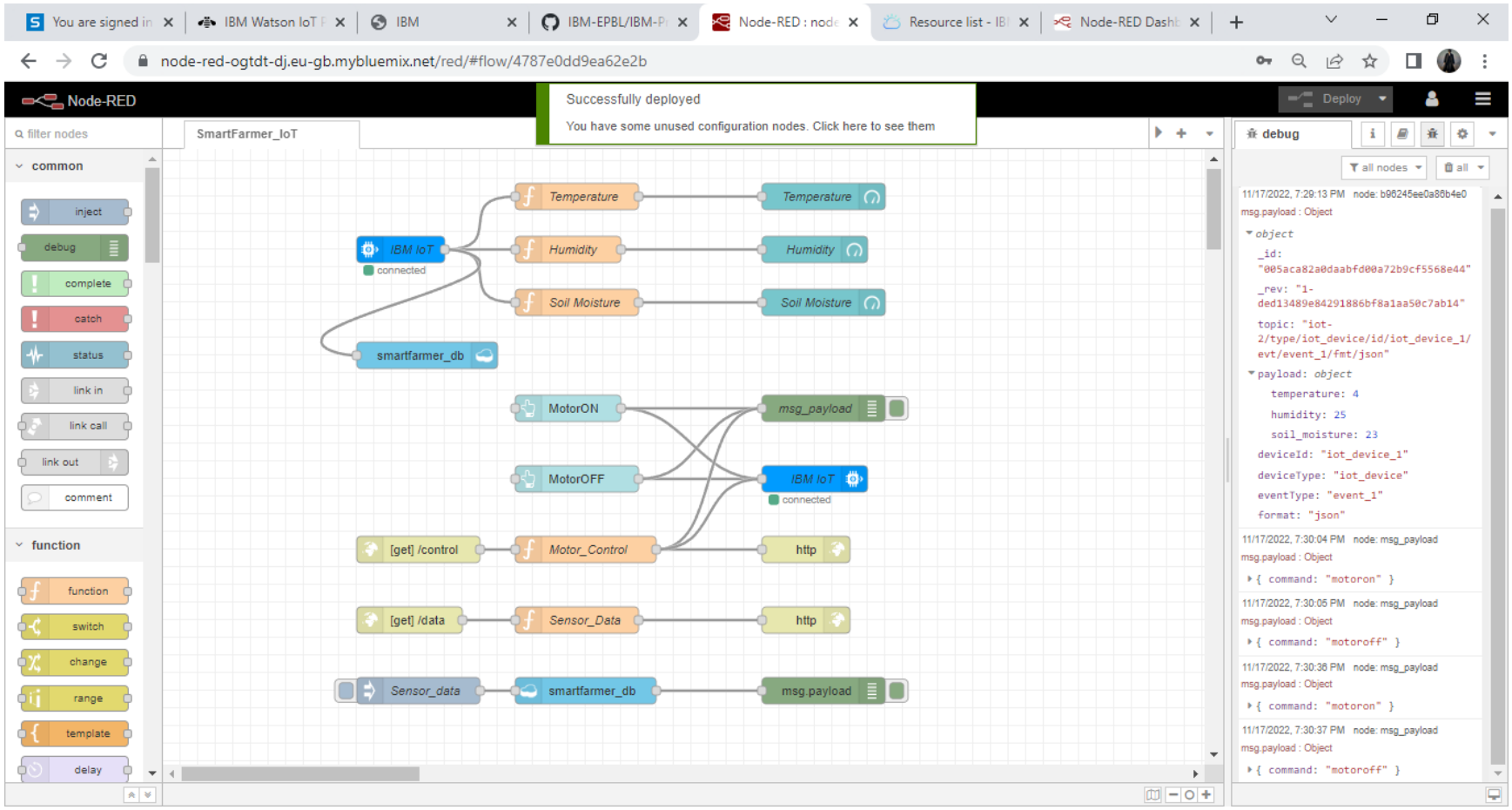
Output


IBM Watson IoT Platform
prathipathangaraj@gmail.com
ID: ma3ge3
Browse
Action
Device Types
Interfaces
Add Device
iot_device_1
Disconnected
iot_device
Device
Nov 14, 2022 7:51 AM
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
event_1
{"temperature":75,"humidity":53,"soil_moisture"...
json
a few seconds ago
event_1
{"temperature":72,"humidity":56,"soil_moisture"...
json
a few seconds ago
event_1
{"temperature":78,"humidity":58,"soil_moisture"...
json
a few seconds ago
event_1
{"temperature":79,"humidity":59,"soil_moisture"...
json
a few seconds ago
event_1
{"temperature":77,"humidity":50,"sc
2 Simulations running

Workflow for IoT scenarios using local Node Red




Node-RED
Deploy
node-red-ogtdt-dj.eu-gb.mybluemix.net/red/#flow/4787e0dd9ea62e2b
filter nodes
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
change
range
template
delay
SmartFarmer_IoT
Temperature
IBM IoT
connected
Humidity
Soil Moisture
smartfarmer_db
MotorON
MotorOFF
[get] /control
Motor_Control
[get] /data
Sensor_Data
Sensor_data
smartfarmer_db
Edit function node
Delete
Cancel
Done
Properties
Name
Temperature
Setup
On Start
On Message
On Stop
1 msg.payload=msg.payload.temperature
2 global.set('t',msg.payload)
3 return msg;
Enabled
debug
all nodes
all


You are signed in
IBM Watson IoT P
IBM
IBM-EPBL/IBM-Pr
Node-RED : node
Resource list - IBI
Node-RED Dashb
node-red-ogtdt-dj.eu-gb.mybluemix.net/red/#flow/4787e0dd9ea62e2b
Node-RED
Successfully deployed
You have some unused configuration nodes. Click here to see them
Deploy
filter nodes
SmartFarmer_IoT
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
change
range
template
delay
Temperature
Temperature
IBM IoT
connected
Humidity
Humidity
Soil Moisture
Soil Moisture
smartfarmer_db
MotorON
msg_payload
MotorOFF
IBM IoT
connected
[get] /control
Motor_Control
http
[get] /data
Sensor_Data
http
Sensor_data
smartfarmer_db
msg.payload
debug
all nodes
all
11/17/2022, 7:29:13 PM node: b96245ee0a86b4e0
msg.payload : Object
object
_id: "005aca82a0daabfd00a72b9cf5568e44"
_rev: "1-ded13489e84291886bf8a1aa50c7ab14"
topic: "iot-2/type/iot_device/id/iot_device_1/evt/event_1/fmt/json"
payload: object
temperature: 4
humidity: 25
soil_moisture: 23
deviceId: "iot_device_1"
deviceType: "iot_device"
eventType: "event_1"
format: "json"
11/17/2022, 7:30:04 PM node: msg_payload
msg.payload : Object
{ command: "motoron" }
11/17/2022, 7:30:05 PM node: msg_payload
msg.payload : Object
{ command: "motoroff" }
11/17/2022, 7:30:36 PM node: msg_payload
msg.payload : Object
{ command: "motoron" }
11/17/2022, 7:30:37 PM node: msg_payload
msg.payload : Object
{ command: "motoroff" }