

Project Development Phase Sprint-3

Date	19 November 2022
Team ID	PNT2022TMID07205
Project Name	Project – SMART FARMER(IoT Enabled Smart Farming Application)

Build a web application using Node-RED, Configure the Node-RED and create APIs for communicating with mobile application and web application

Steps to configure Node-RED

IBM IoT launch:

1. in dashboard, scroll down to resource summary
2. click on internet of things
3. scroll and click on internet of things platform
4. launch, sign in and click on org id in the profile icon.

Node-RED:

1. in dashboard scroll down to resource summary and click on compute
2. click on node red
3. click on visit app url
4. click on go to node-red flow editor

Node-RED installation:

1. in dashboard open catalog
2. search for node-red app and click on it
3. click on get started and create
4. it will take some time to load
5. once the deploy your app in enabled click on it
6. select cloud foundry
7. beside the cloud foundry in the get started box click on create org
8. click on create button and give org name and save it
9. open the org and add a space and click save
10. old tab of cloud foundry, refresh it and again select the cloud foundry
11. click on new and ok button for API key
12. select different regions so that org and space is auto selected.
13. click on next
14. select same region of before page and click on create
15. it will take 15 to 20 mins to load
16. you need to get CI pipeline as success

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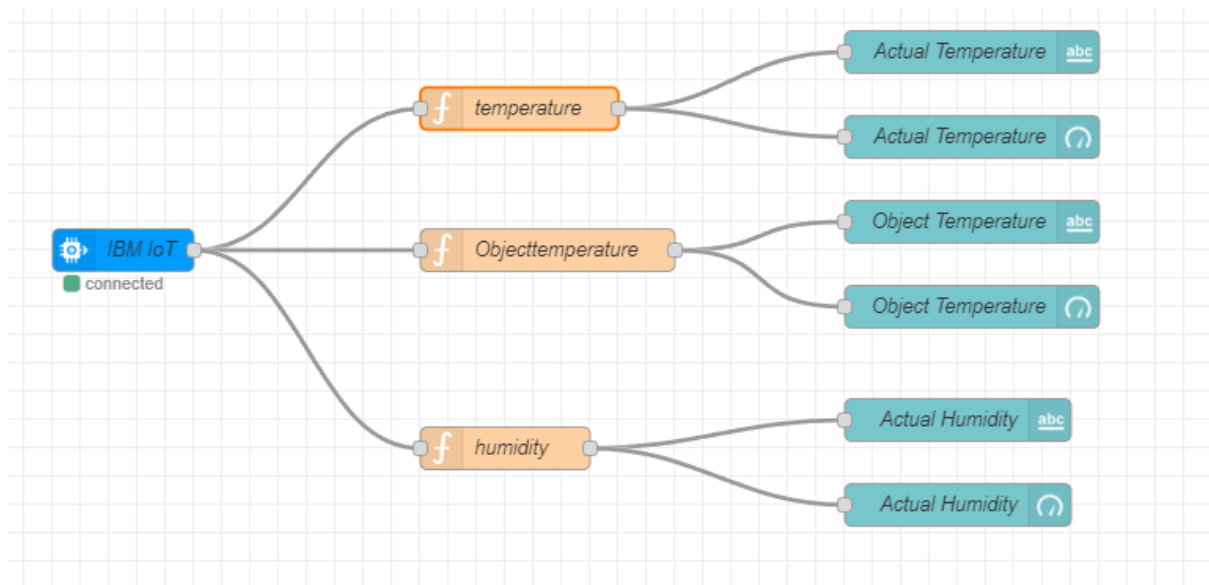
IBM IoT to Node-RED connection:

1. go to hamburger menu on top right corner
2. click on manage palette

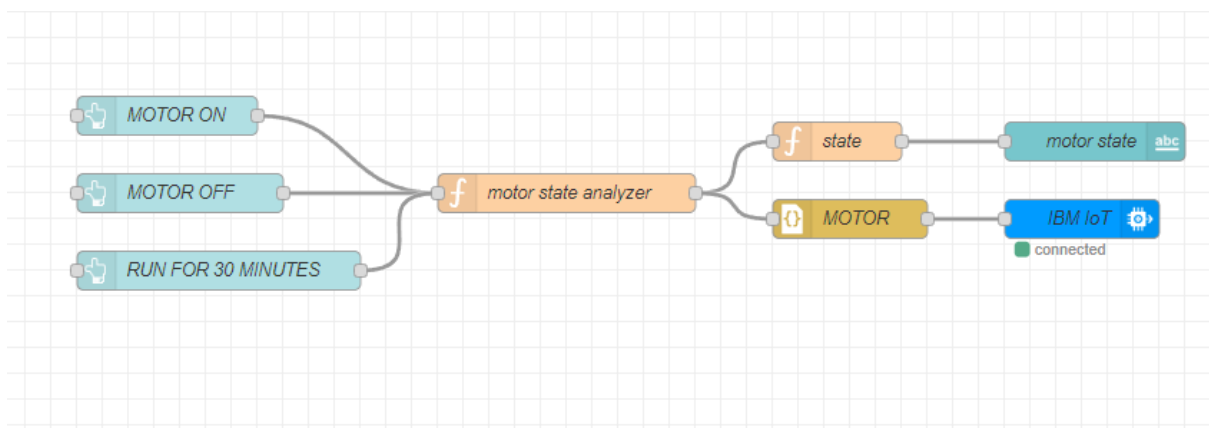
3. go to install
4. search for node-red-contrib-scx-ibmiotapp and install it and close

Node-RED dashboard installation:

1. go to hamburger menu on top right corner
2. click on manage palette
3. go to install
4. search for node-red-dashboard and install it and close
1. add chart and guage to the workspace
2. edit chart and add group and tab as HALL ac and Home
3. give labels and other details as per your wish
4. repeat for all the charts and guage
1. click on down arrow below hamburger icon on the right corner
2. select dashboard
3. click on the redirect icon below the down arrow



Nodes connected in following manner to get each reading separately



This program flow for sending commands to cloud