

SPRINT DELIVERY-3

DATE	17 November 2022
TEAM ID	PNT2022TMID52158
PROJECT NAME	Smart Farmer - IoT Enabled Smart Farming Application

Establishing Node-Red connection:

✚ Configuration of Node-Red to collect IBM cloud data:

Ibmiot in collect the data's in the device display.

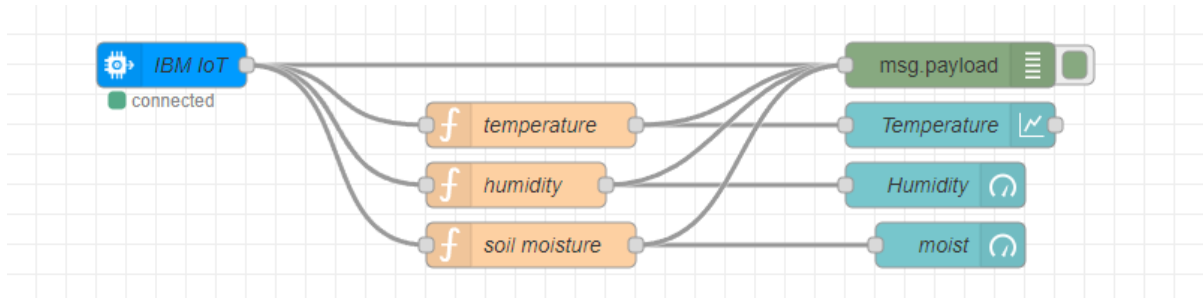
The screenshot shows the 'Edit ibmiot in node' configuration window in Node-Red. The window has a title bar 'Edit ibmiot in node' and three buttons: 'Delete', 'Cancel', and 'Done'. Below the buttons is a 'Properties' tab with a settings icon, a document icon, and a refresh icon. The configuration fields are as follows:

- Authentication:** API Key (dropdown)
- API Key:** IBM IOT SMART FARMING APIKEY (dropdown with edit icon)
- Input Type:** Device Event (dropdown)
- Device Type:** ☐ All or 123 (text input)
- Device Id:** ☐ All or 1234 (text input)
- Event:** ☒ All or + (text input)
- Format:** ☐ All or json (text input)
- QoS:** 0 (dropdown)
- Name:** IBM IoT (text input)
- Service:** reaistered (text input)

At the bottom, there is a checkbox labeled 'Enabled' which is currently unchecked.

IBM in node

✚ Get separate data using nodes:



Nodes connected in following manner to get each reading separately

✚ Java script Code in Temperature, Humidity and soil moisture:

❖ Temperature:

```
msg.payload=msg.payload.temp  
global.set("t",msg.payload)  
return msg;
```

❖ Humidity:

```
msg.payload=msg.payload.Humid  
global.set("h",msg.payload)  
return msg;
```

❖ Soil moisture:

```
msg.payload=msg.payload.moist  
global.set("m",msg.payload)  
return msg;
```

Node-red to send command in ibm cloud


Ibmiot out node is used to send from Node-red to IBM watson device




Edit ibmiot out node


Delete

Cancel


Done

 **Properties**


  


 Authentication

API Key


 API Key

IBM IOT SMART FARMING APIKEY




 Output Type


Device Command

 Device Type


123

 Device Id


1234

 Command Type


cmd

 Format

json


 Data

data

 QoS

0

▼

 Name

IBM IoT

☐ Enabled

Ibmiot out node

Motor on and off Commands:

➤ Motor on:

```
{"command":"motoron"}
```

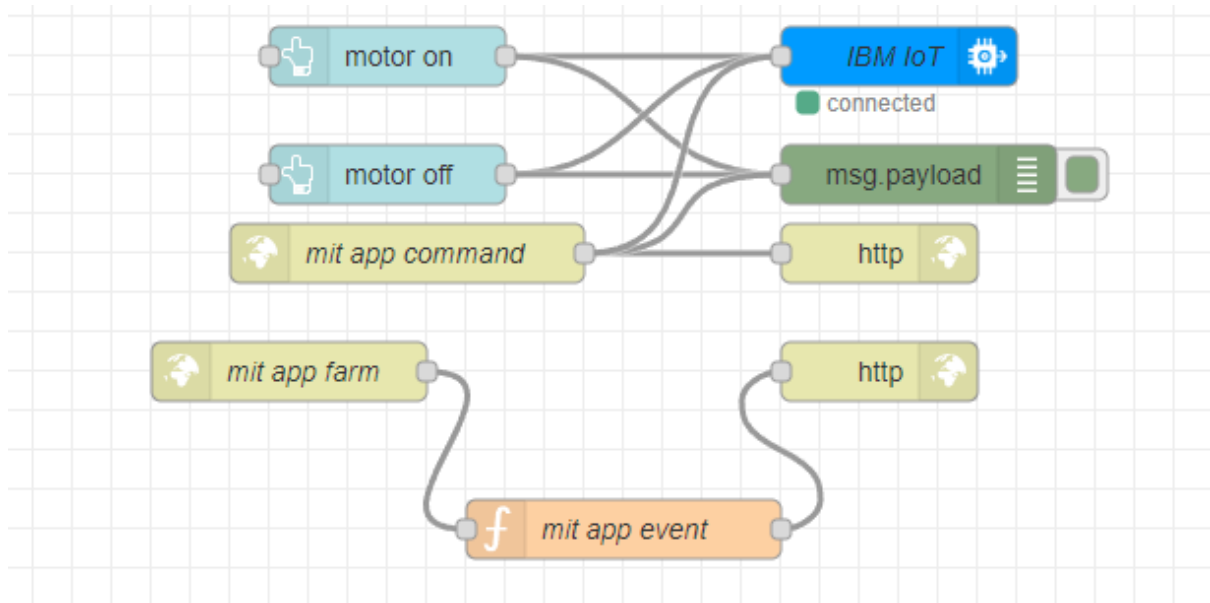
➤ Motor off:

```
{"command":"motoroff"}
```

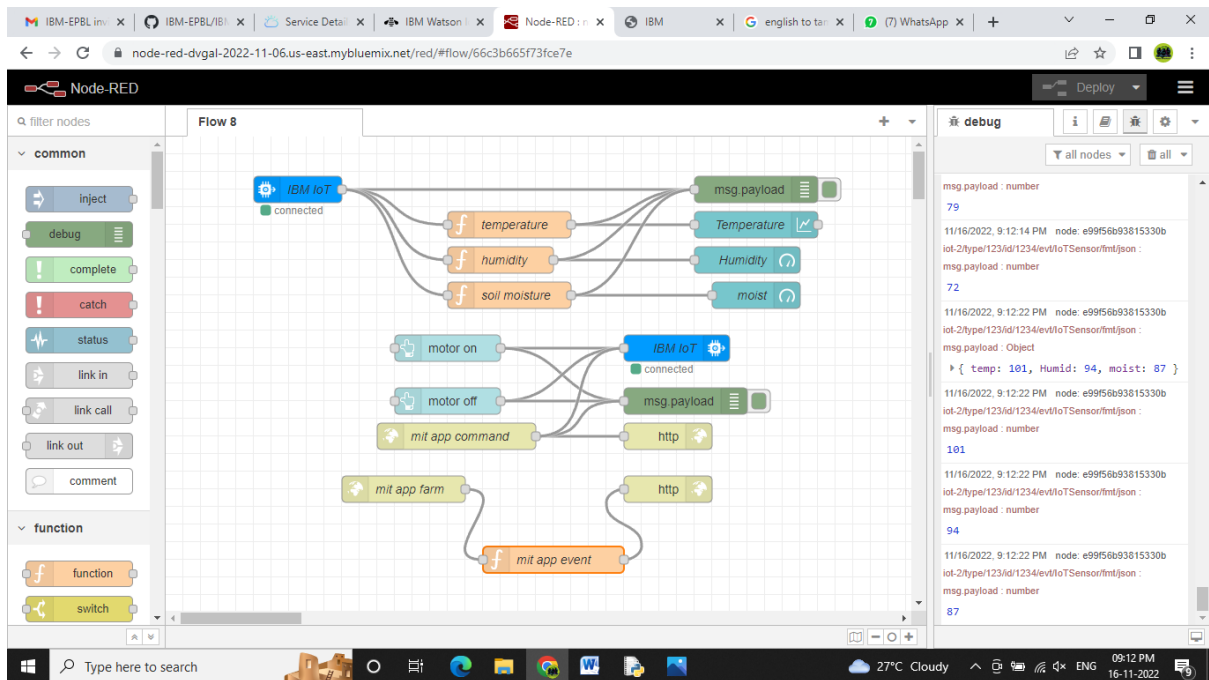
- Next connect the http request, response node to connect the website.

- **Java script code**

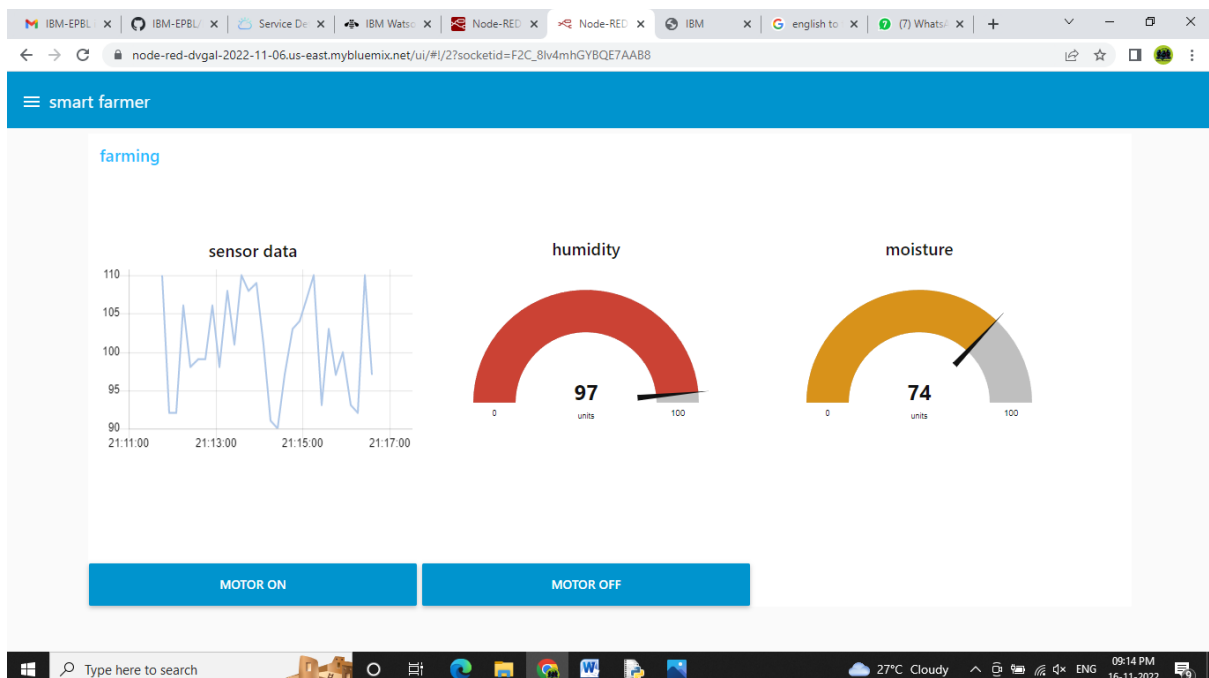
```
msg.payload={ "temp":global.get("t"),"humid":global.get("h"),"moist":global.get("m")}  
return msg;
```



The complete Node-red connections:



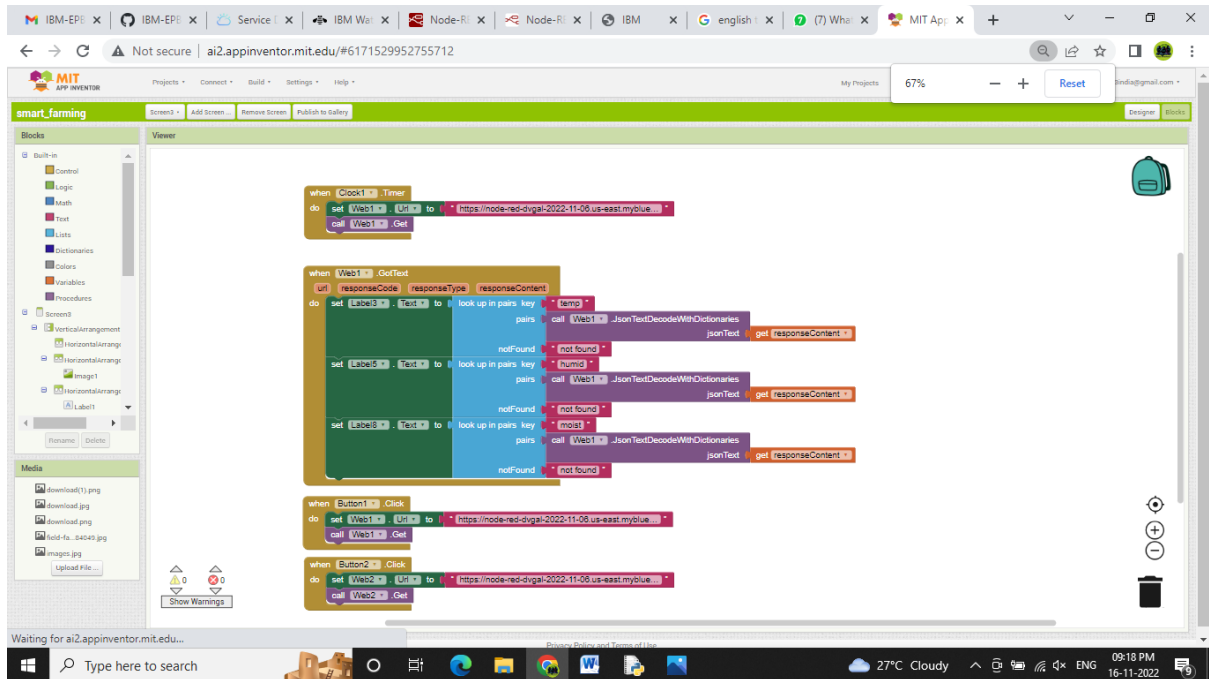
The Temperature, Humidity, soil moisture Dashboards:



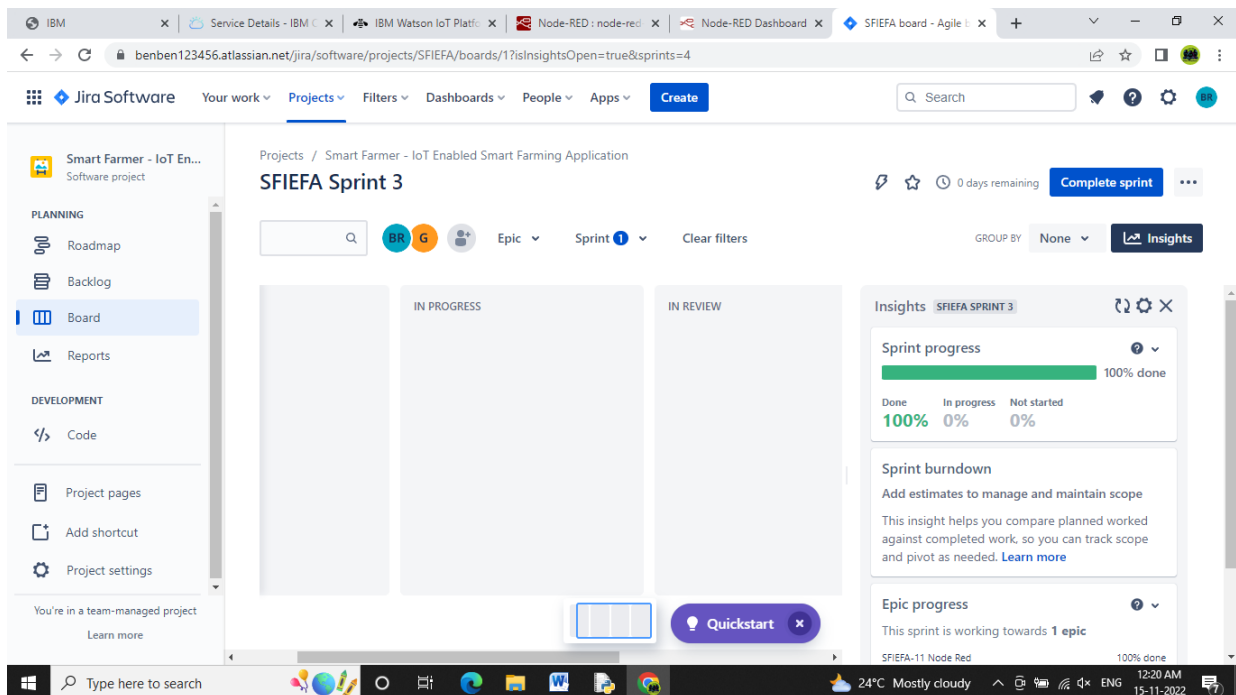
Connecting application with Node-Red and further application development:



Connecting Node-red with MIT app inventor:



JIRA Software Sprint Planning:



IBM | Service Details - IBM | IBM Watson IoT Platform | Node-RED : node-red | Node-RED Dashboard | Smart Farmer - IoT En...

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Smart Farmer - IoT En... Software project

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- Roadmap
- Backlog
- Board
- Reports

DEVELOPMENT

- Code

Project pages

- Add shortcut
- Project settings

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Backlog

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Insights

SFIEFA Sprint 3 11 Nov - 15 Nov (2 issues) 0 0 16 Complete sprint

- SFIEFA-5 Establishing Node-Red connection NODE RED 8 DONE 100%
- SFIEFA-6 Connecting application with Node-Red ... NODE RED 8 DONE 100%

+ Create issue

SFIEFA Sprint 4 15 Nov - 19 Nov (1 issue) 8 0 0 Complete sprint

- SFIEFA-7 Testing developed appli... APPLICATION DEVELOPMENT 8 TO DO 0%

+ Create issue

Quickstart

CEICFA Sprint 5 19 Nov - 23 Nov (1 issue) 8 0 0 Complete sprint

CEICFA-8 Testing developed appli... APPLICATION DEVELOPMENT 8 TO DO 0%

+ Create issue

Insights SFIEFA Sprint 3

Sprint commitment

16 points Over target of 10 - 12 points

10.6 Average points completed over the last 3 sprints

Issue type breakdown

Your top issue type to focus on in this sprint.

Story

Give feedback

IBM | Service Details - IBM | IBM Watson IoT Platform | Node-RED : node-red | Node-RED Dashboard | Smart Farmer - IoT En...

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Roadmap

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Sprints

- SFIEFA-8 Connection
- SFIEFA-9 Connection
- SFIEFA-10 Application development
- SFIEFA-11 Node Red
- SFIEFA-12 Testing

+ Create Epic

Today | Weeks | Months | Quarters

Quickstart

