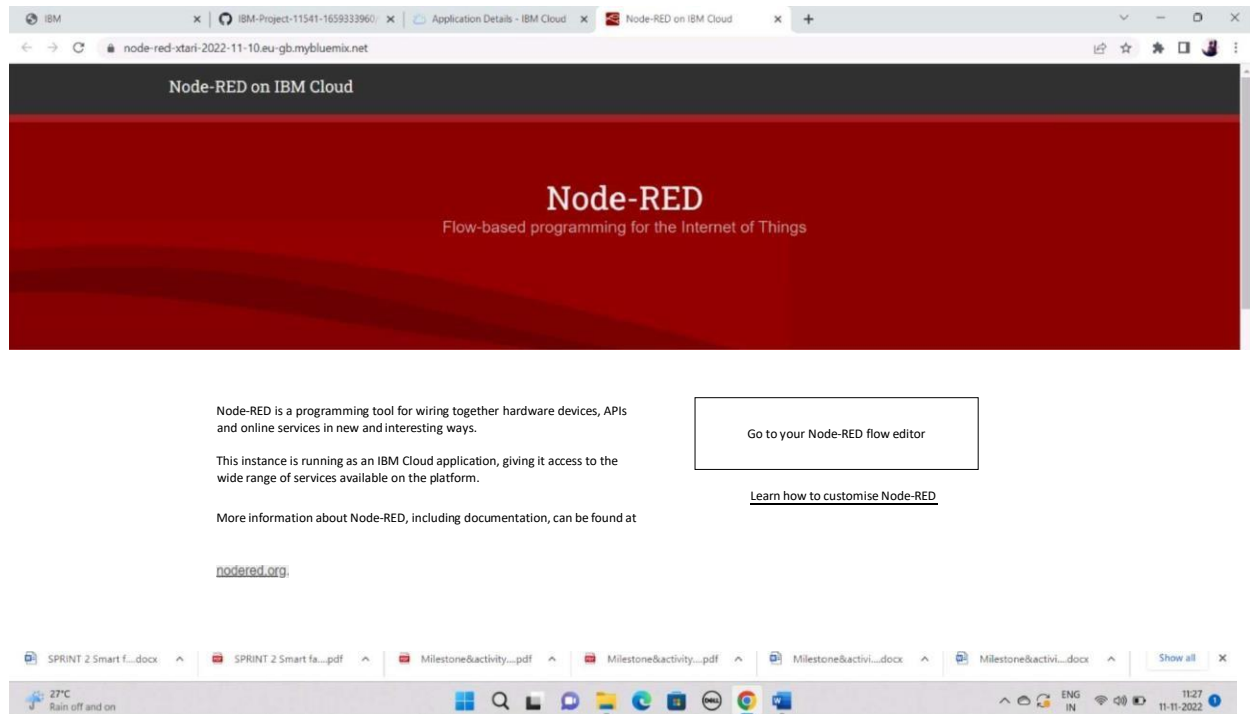


# SPRINT 3

TEAM ID: PNT2022TMID14846

PROJECT NAME: Smart Farmer-IOT Enabled Smart Farming Application

## Creating Node Red Service



Node-RED on IBM Cloud

# Node-RED

Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at [nodered.org](https://nodered.org).

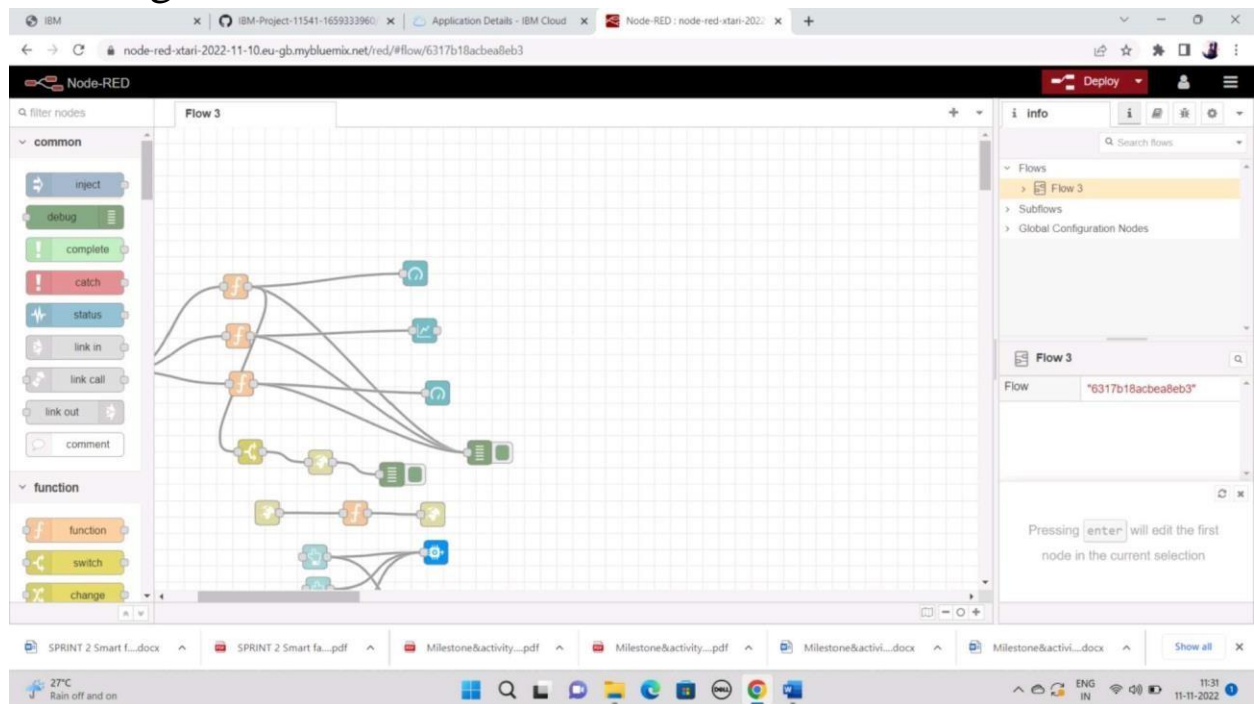
[Go to your Node-RED flow editor](#)

[Learn how to customise Node-RED](#)

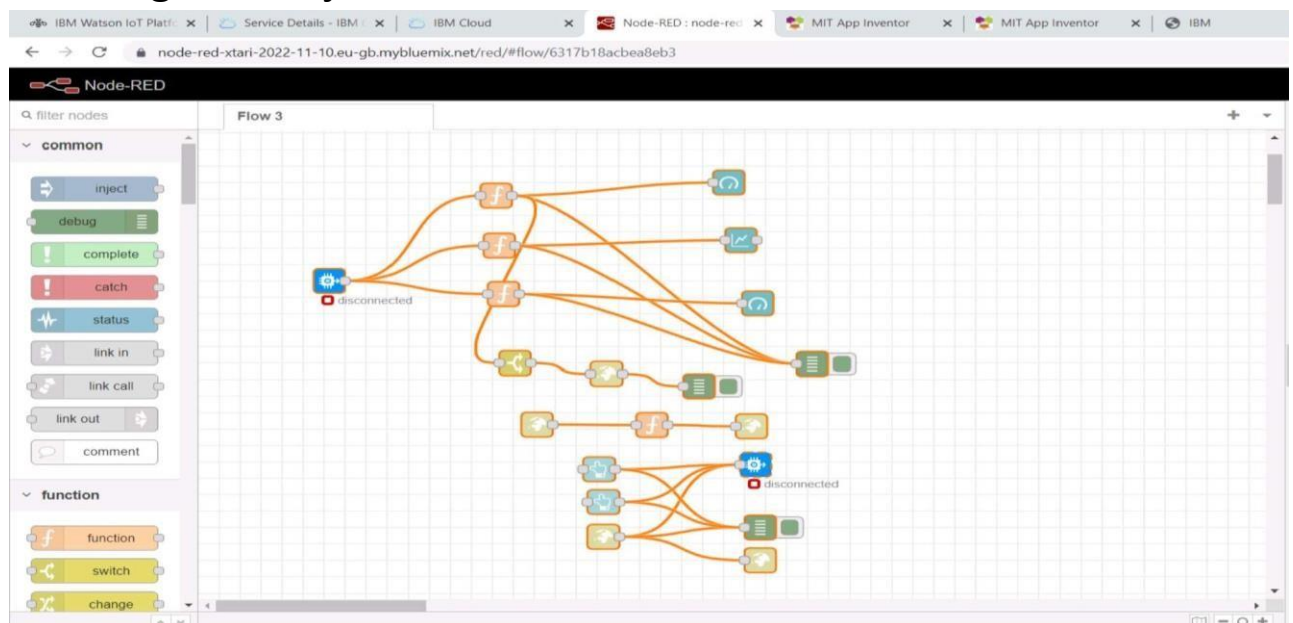
SPRINT 2 Smart f...docx | SPRINT 2 Smart fa...pdf | Milestone&activity...pdf | Milestone&activity...pdf | Milestone&activi...docx | Milestone&activi...docx | Show all

27°C Rain off and on | ENG IN | 11:27 11-11-2022

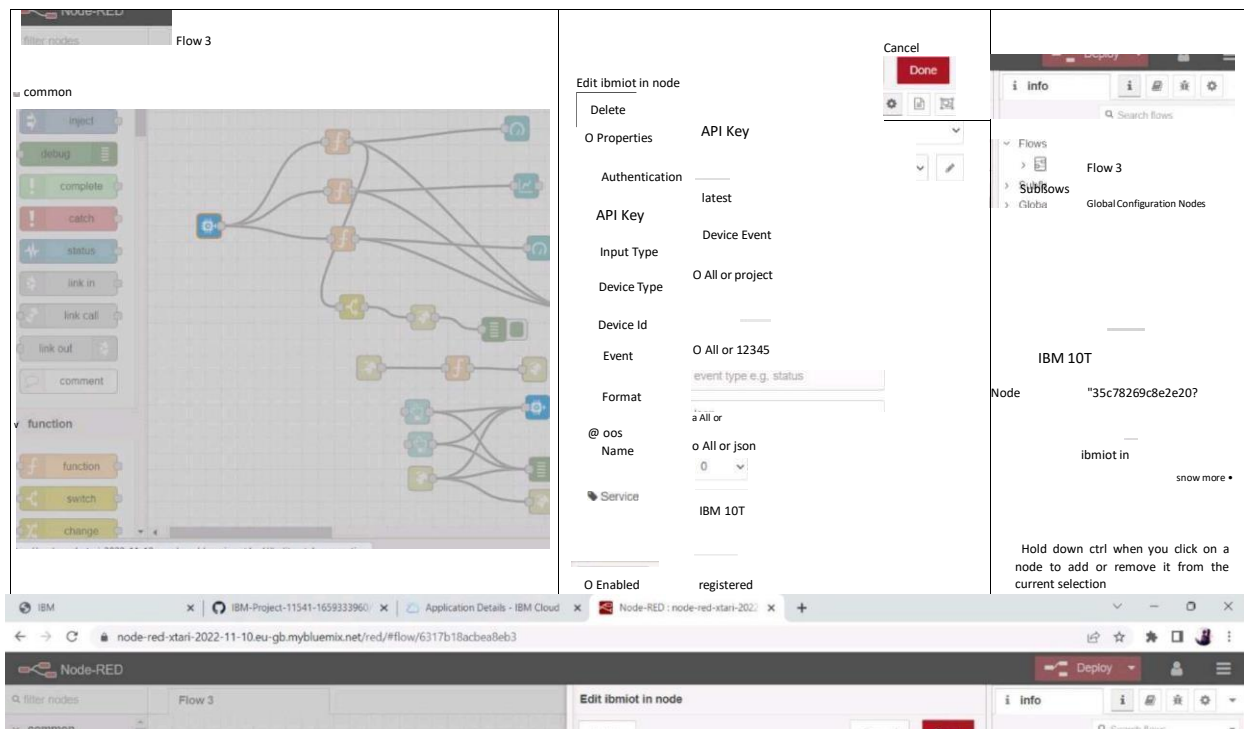
## Creating a Flow



## Creating the Project Flow



# Configuring the Node with the Credentials



The screenshot displays the Node-RED web interface in a browser. The browser's address bar shows the URL: `node-red-xtari-2022-11-10.eu-gb.mybluemix.net/red/#flow/6317b18acba9eb3`. The interface is divided into several sections:

- Left Sidebar:** Contains two main categories of nodes:
  - common:** Includes nodes like inject, debug, complete, catch, status, link in, link call, link out, and comment.
  - function:** Includes nodes like function, switch, and change.
- Flow Canvas:** The central area where the flow diagram is built. It shows a flow starting from an 'inject' node, branching into multiple parallel paths, and then converging into a single path that ends with a 'debug' node. The flow is labeled 'Flow 3'.
- Right Sidebar:** Contains the 'debug' console, which displays a log of messages. The log shows a sequence of messages, including a 'motoroff' command and a 'motoron' command, along with their respective payloads and timestamps.

The screenshot shows the IBM IoT Platform console interface. At the top, there is a navigation bar with a 'Deploy' button and a user profile icon. Below this, a sidebar on the left contains a 'debug' tab. The main area displays a log stream for a device named 'motoron'. The logs show a sequence of messages: a 'msg payload: Object' followed by a command 'motoroff', then another 'msg payload: Object' followed by a command 'motoron'. The logs are timestamped 11/11/2022, 1:51:11 AM and originate from node: IBM IoT. The interface includes a top navigation bar with a 'Deploy' button and a sidebar with a 'debug' tab.

debug

Deploy

Y all nodes

all

11/11/2022, 1:51:11 AM node: IBM IoT  
msg payload: Object  
{ command: "motoroff" }

11/11/2022, 1:51:11 AM node: IBM IoT  
msg: string[51]  
"[ApplicationClient:publish] Client is not connected"

11/11/2022, 1:51:11 AM node: 0e1f56b2ab4b3941  
msg payload: Object  
{ command: "motoron" }

11/11/2022, 1:51:11 AM node: IBM IoT  
msg: string[51]  
"[ApplicationClient:publish] Client is not connected"

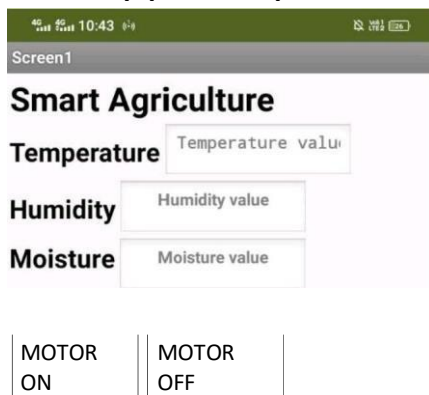
11/11/2022, 1:51:11 AM node: 0e1f56b2ab4b3941  
msg payload: Object  
{ command: "motoroff" }

11/11/2022, 1:51:11 AM node: IBM IoT  
msg: string[51]  
"[ApplicationClient:publish] Client is not connected"

11/11/2022, 1:51:11 AM node: 0e1f56b2ab4b3941  
msg payload: Object  
{ command: "motoron" }



## MIT App as Input and Node Red as Output



# User Interface Displaying the Random Data

