

SPRINT 2

TEAM ID: PNT2022TMID20975

REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

AIM:

To create device in the IOT Watson Platform and Configure Node Red Services.

REQUIREMENT:

IBM cloud, IBM IOT WATSON PLATFORM,NODE RED SERVICES.

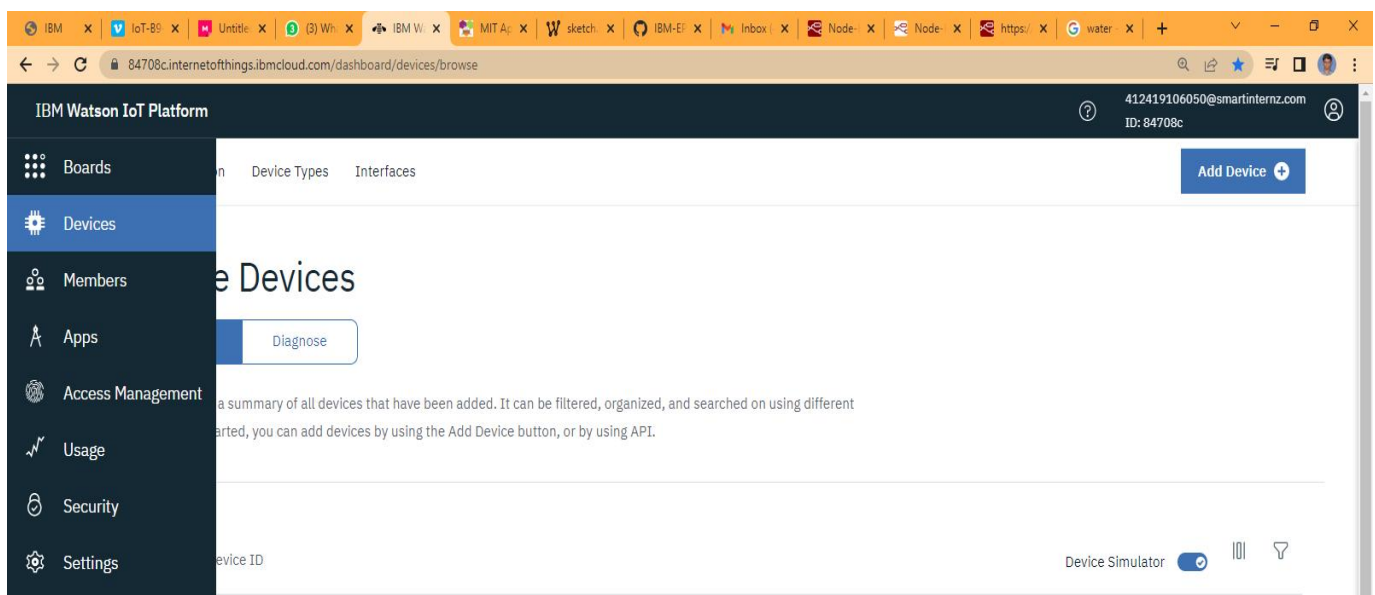
WORKFLOW:

STEP 1:

Log on to IBM cloud and create IBM Watson IOT Platform from IBM cloud Dashboard.

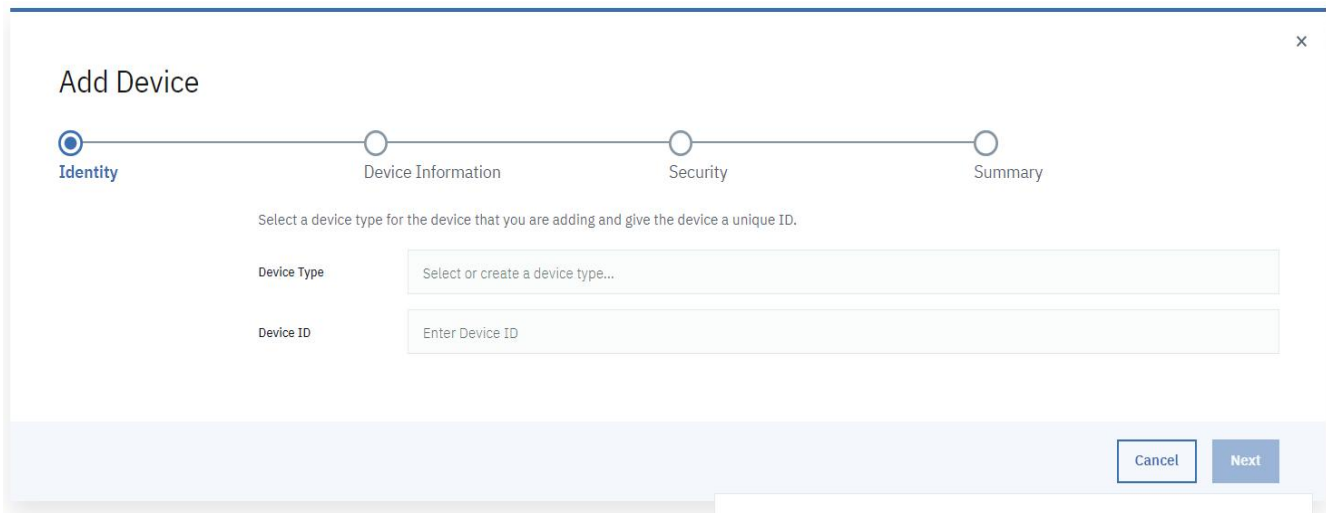
STEP 2:

After Creating IBM Watson IOT Platform,create an Organization (ex.84708c ID: 84708c Bluemix Free)



STEP 3:

Create an device IBM IOT PALTFORM.



TYPE THE REQUIRED FIELDS (TYPE: ESP32 , ID: 1234)
GIVE AUTH-TOKEN.

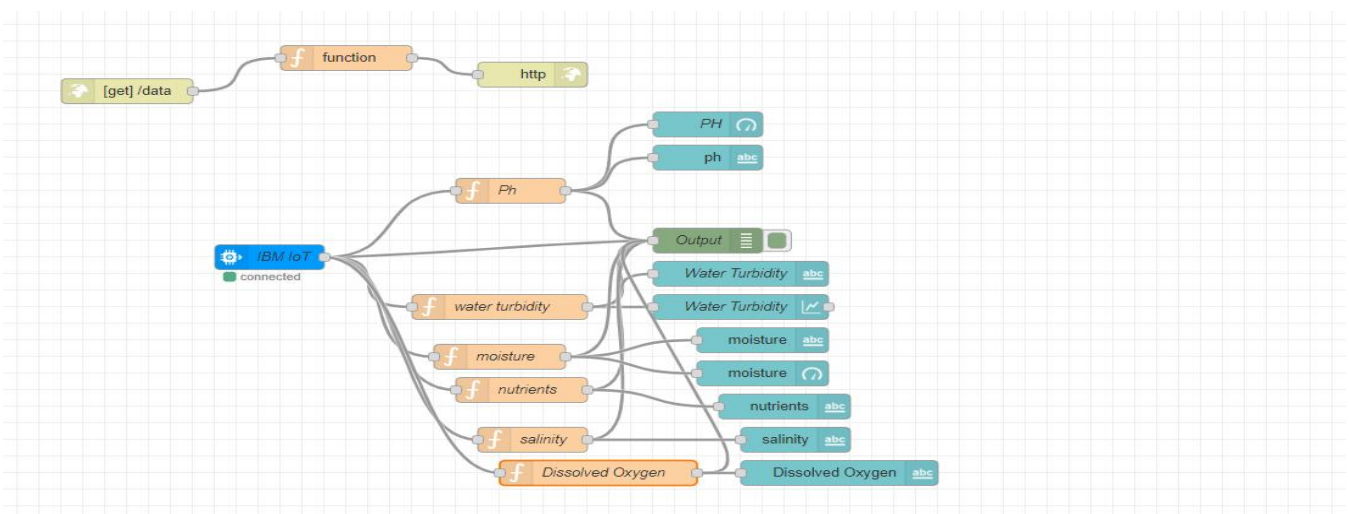
STEP 4:

NODE RED SERVICE

- INSTALL IBM IOT IN MANGE PALETTE.
- INSTALL NODE RED DASHBOARD.

STEP 5:

Configuring the corresponding nodes



STEP 6:

Deploy the Services and verify the output values.

OUTPUT IN IBM WATSON IOT PLATFORM:

The screenshot displays the IBM Watson IoT Platform interface. At the top, the header shows 'IBM Watson IoT Platform' on the left, a user profile icon and email '412419106050@smartinternz.com' on the right, and a status 'ID: 84708c'. Below the header is a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains various icons for navigation. The main content area is titled 'Add Device' and features a tabbed interface with 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a message: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table with four columns: 'Event', 'Value', 'Format', and 'Last Received'. The table lists five events, all labeled 'event_1', with JSON-formatted values and a timestamp of 'a few seconds ago'.

Event	Value	Format	Last Received
event_1	{"Water_Turbidity":73,"Ph":4,"moisture":60,"nutr...	json	a few seconds ago
event_1	{"Water_Turbidity":71,"Ph":4,"moisture":75,"nutr...	json	a few seconds ago
event_1	{"Water_Turbidity":31,"Ph":11,"moisture":60,"nu...	json	a few seconds ago
event_1	{"Water_Turbidity":30,"Ph":8,"moisture":2,"nutri...	json	a few seconds ago
event_1	{"Water_Turbidity":62,"Ph":13,"moisture":2,"nutr...	json	a few seconds ago

The screenshot shows a dialog box titled 'Event Payload' with a close button (X) in the top right corner. It displays the following information:

- Event Name:** event_1
- Time Received:** Nov 15, 2022 10:05 PM

Below this information is a code editor showing a JSON payload:

```
1 {"Water_Turbidity": 97,  
2  "Ph": 6,  
3  "moisture": 10,  
4  "nutrients": 85,  
5  "salinity": 47,  
6  "dissolved_O2": 53  
7 }  
8
```