

SPRINT 2

TEAM ID: PNT2022TMID31051

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.

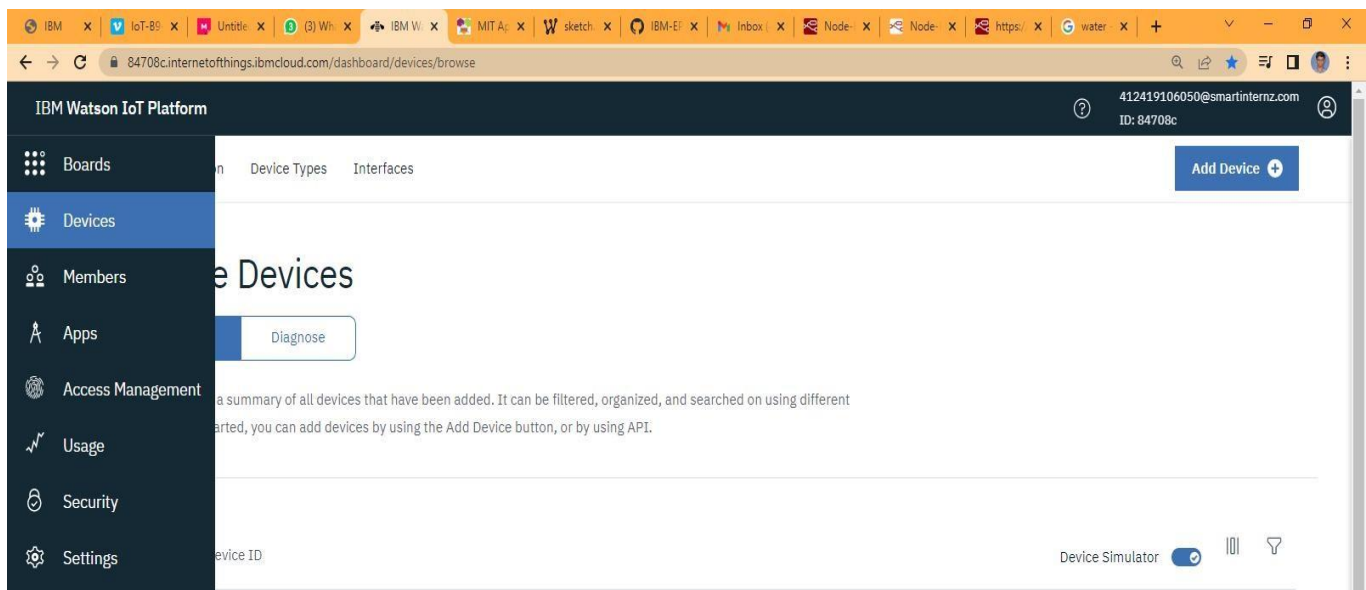
WORKFLOW:

STEP 1:

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

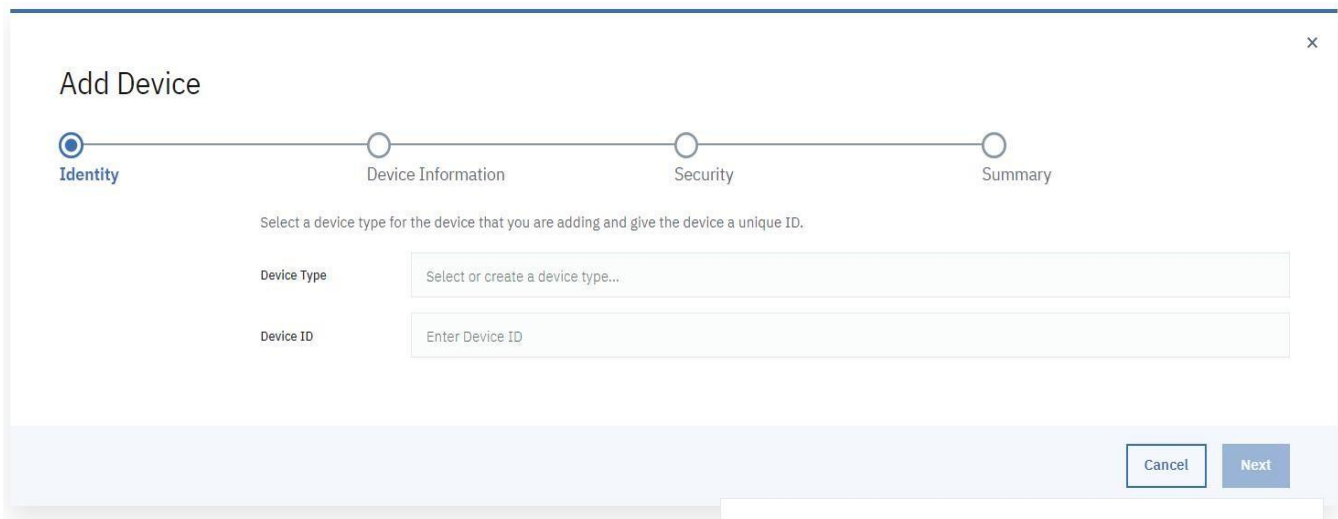
STEP 2:

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.

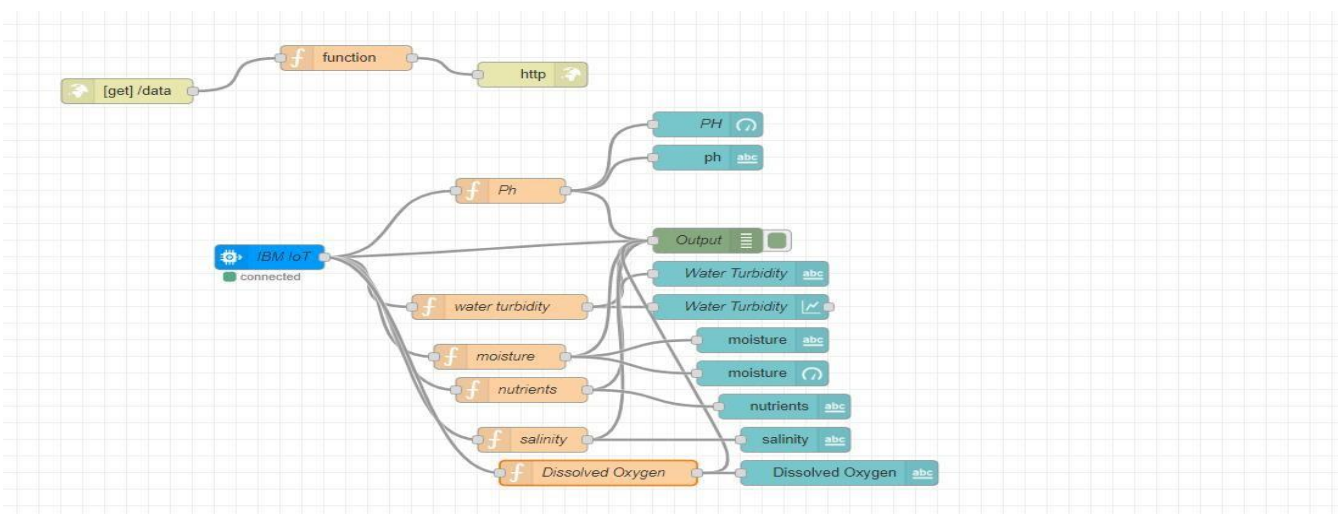
STEP 4:

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 the platform name, a user profile icon, and the email address 412419106050@smartinternz.com with ID: 84708c. Below the header, a navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces', along with an 'Add Device' button. The main content area is titled 'Recent Events' and contains a table of device events.

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	{"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 'Event Payload' dialog box displays the details for event_1. It shows the event name, the time received, and the JSON payload.

Event Name: event_1

Time Received: Nov 15, 2022 10:05 PM

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