

SPRINT 2

TEAM ID: PNT2022TMID40953

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.

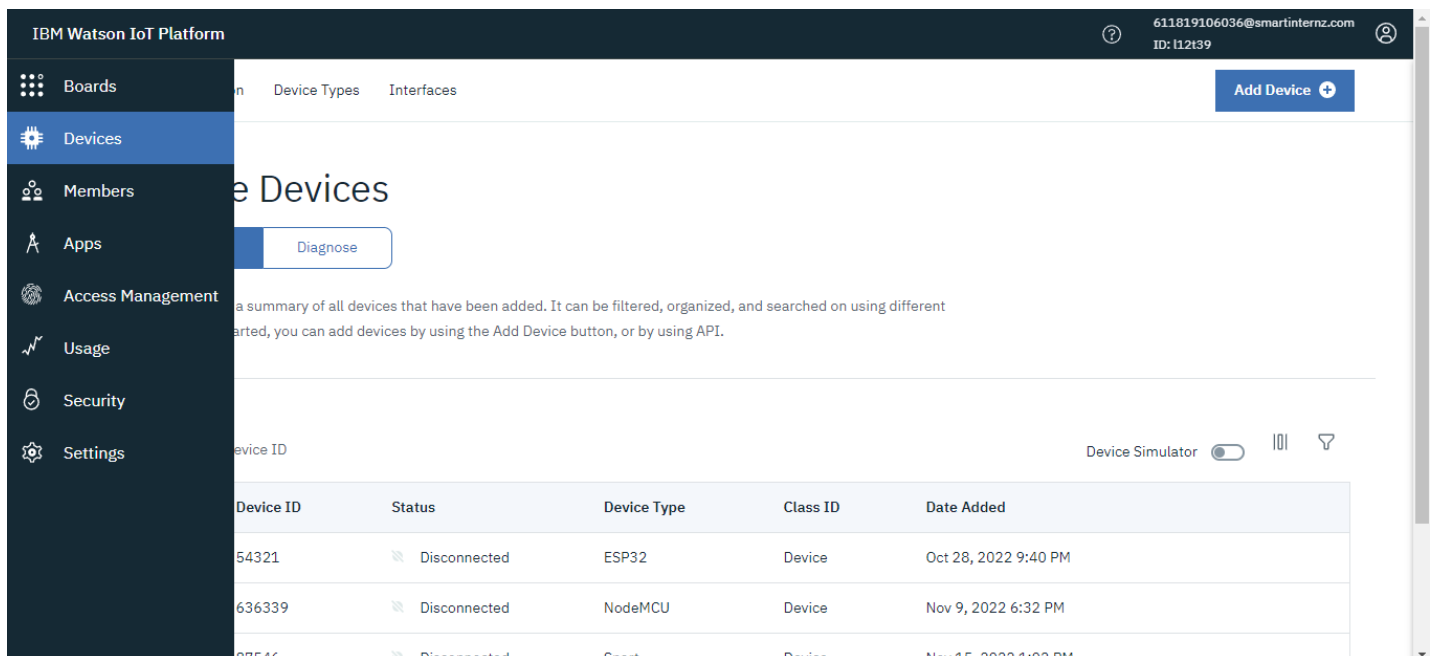
WORKFLOW:

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)



IBM Watson IoT Platform

611819106036@smartinternz.com
ID: 112139

Boards | Device Types | Interfaces | Add Device +

All Devices

Diagnose

A summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. If you have not started, you can add devices by using the Add Device button, or by using API.

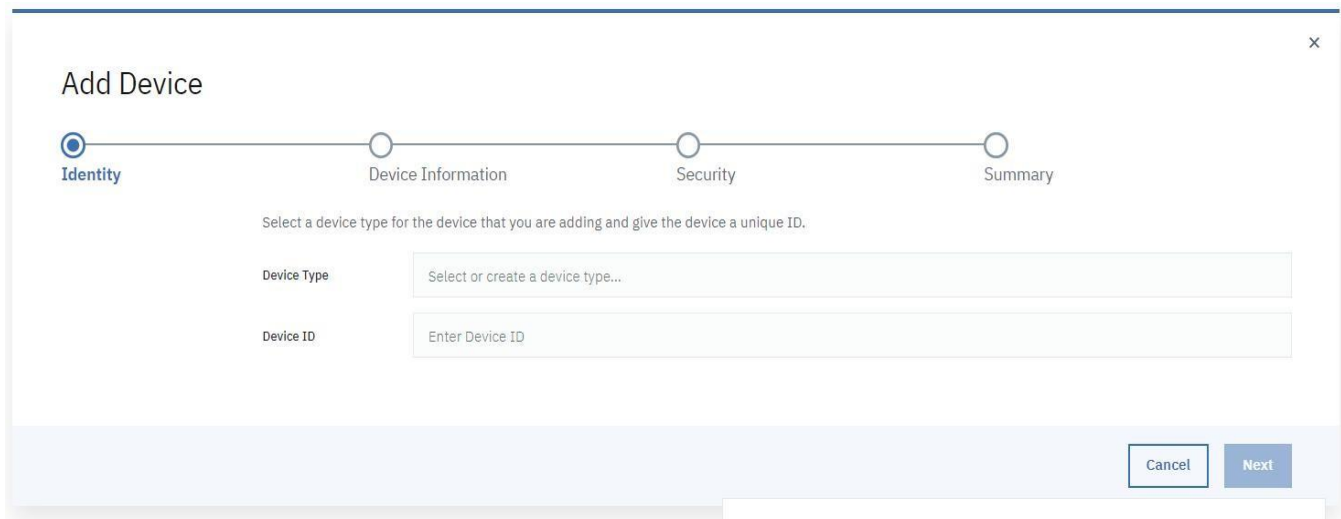
Device ID | Status | Device Type | Class ID | Date Added

54321	Disconnected	ESP32	Device	Oct 28, 2022 9:40 PM
636339	Disconnected	NodeMCU	Device	Nov 9, 2022 6:32 PM
87546	Disconnected	Smart	Device	Nov 15, 2022 1:02 PM

Device Simulator

STEP 3:

Create an device IBM IOT PALTFORM.



The 'Add Device' dialog box shows a four-step process: Identity, Device Information, Security, and Summary. The 'Identity' step is active. It prompts the user to 'Select a device type for the device that you are adding and give the device a unique ID.' There are two input fields: 'Device Type' with a dropdown menu showing 'Select or create a device type...' and 'Device ID' with a text input field showing 'Enter Device ID'. At the bottom right are 'Cancel' and 'Next' buttons.

TYPE THE REQUIRED FIELDS (TYPE: ESP32 , ID: 5432)
GIVE AUTH-TOKEN.

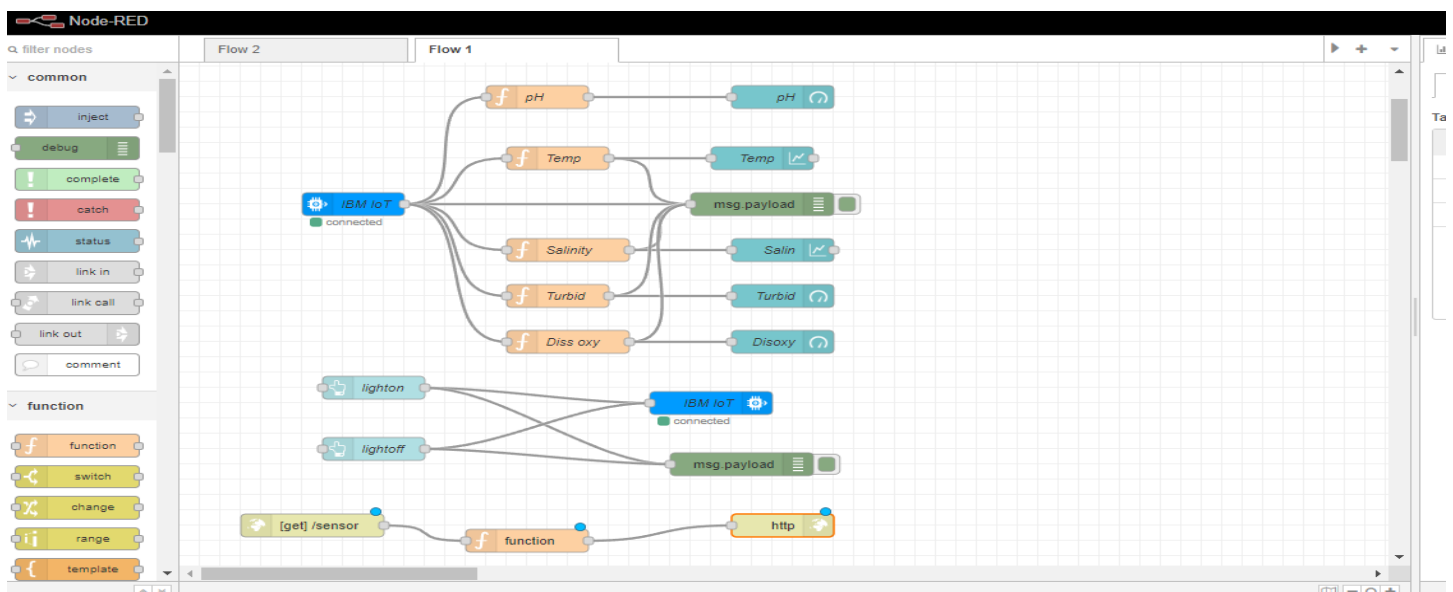
STEP 4:

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:

IBM Watson IoT Platform

611819106036@smartinternz.com

ID: 112139

Boards

Devices

Members

Apps

Access Management

Usage

Security

Settings

Device Types

Interfaces

Add Device +

636339	Disconnected	NodeMCU	Device	Nov 9, 2022 6:32 PM	
87546	Disconnected	Spart	Device	Nov 15, 2022 1:02 PM	→ ...
Identity Device Information Recent Events State Logs X					
The recent events listed show the live stream of data that is coming and going from this device.					
Event	Value	Format	Last Received		
demo	{ "pH":13,"turb":7,"temp":16,"Salin":20,"Doxy":96 }	json	a few seconds ago		
demo	{ "pH":1,"turb":9,"temp":83,"Salin":3,"Doxy":79 }	json	a few seconds ago		
demo	{ "pH":5,"turb":8,"temp":87,"Salin":8,"Doxy":103 }	json	a few seconds ago		
demo	{ "pH":4,"turb":10,"temp":33,"Salin":77,"Doxy":88 }	json	a few seconds ago		
demo	{ "pH":14,"turb":8,"temp":49,"Salin":42,"Doxy":1...	json	a few seconds ago		

X

Event Payload

Event Name

demo

Time Received

Nov 19, 2022 8:11 PM

1

2

3

4

5

6

7

{

"pH": 13,

"turb": 7,

"temp": 16,

"Salin": 20,

"Doxy": 96

}