

DEVELOP A WEB APPLICATION USING NODE-RED

Team ID	PNT2022TMID18013
Project Name	Project – IOT Based Real time River Water Quality Monitoring and ControlSystem

1. Connecting IBM IoT Platform with Node-Red, by generating API key and Token

The screenshot shows the 'Edit ibmiot node' configuration window in Node-RED. The window has a title bar 'Edit ibmiot in node > Edit ibmiot node' and three buttons: 'Delete', 'Cancel', and 'Update'. Below the buttons is a 'Properties' tab. The configuration fields are as follows:

- Name:** IBM IOT
- API Key:** a-vy7e2h-1h8393d2as
- API Token:**
- Server-Name:** orgid.messaging.internetofthings.ibmcloud.com
- Scalable:** ☐
- Application ID:** (empty field)
- Keep Alive:** 60 Seconds
- Use Clean Session:** ☒

At the bottom, there is a status bar showing 'Enabled', '1 node uses this config', and a dropdown menu set to 'On all flows'.

Edit ibmiot in node

Delete Cancel Done

Properties

Authentication API Key

API Key IBM IOT

Input Type Device Event

Device Type All or +

Device Id All or device id e.g. ab12cd231a21

Event All or +

Format All or json

QoS 0

Name IBM IoT

Service registered

Enabled

2. Write a payload to fetch value from IBM IoT platform to node-red and display them

Payload for Ph

Edit function node

Delete Cancel Done

Properties

Name PH

Setup On Start On Message On Stop

```
1 msg.payload=msg.payload.ph
2 global.set("ph",msg.payload)
3 return msg;
```

Enabled

Payload for Turbidity

The screenshot shows the 'Edit function node' dialog box. At the top, there are 'Delete', 'Cancel', and 'Done' buttons. Below is the 'Properties' section with a 'Name' field containing 'Turb'. There are four tabs: 'Setup', 'On Start', 'On Message', and 'On Stop', with 'On Message' currently selected. The code editor contains the following JavaScript code:

```
1 msg.payload=msg.payload.turb
2 global.set("h",msg.payload)
3 return msg;
```

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

Payload for Temperature

The screenshot shows the 'Edit function node' dialog box. At the top, there are 'Delete', 'Cancel', and 'Done' buttons. Below is the 'Properties' section with a 'Name' field containing 'Temp'. There are four tabs: 'Setup', 'On Start', 'On Message', and 'On Stop', with 'On Message' currently selected. The code editor contains the following JavaScript code:

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

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