

Sprint-2

Create and configure IOT device with node-red and Workflow for IOT scenario using local node-red

Create and configure IOT device with node-red

The screenshot shows the IBM Cloud Developer console for an application named "Node RED HJPCR 2022-11-10". The interface includes a sidebar with "Resource list" and "App details". The main content area is divided into several sections:

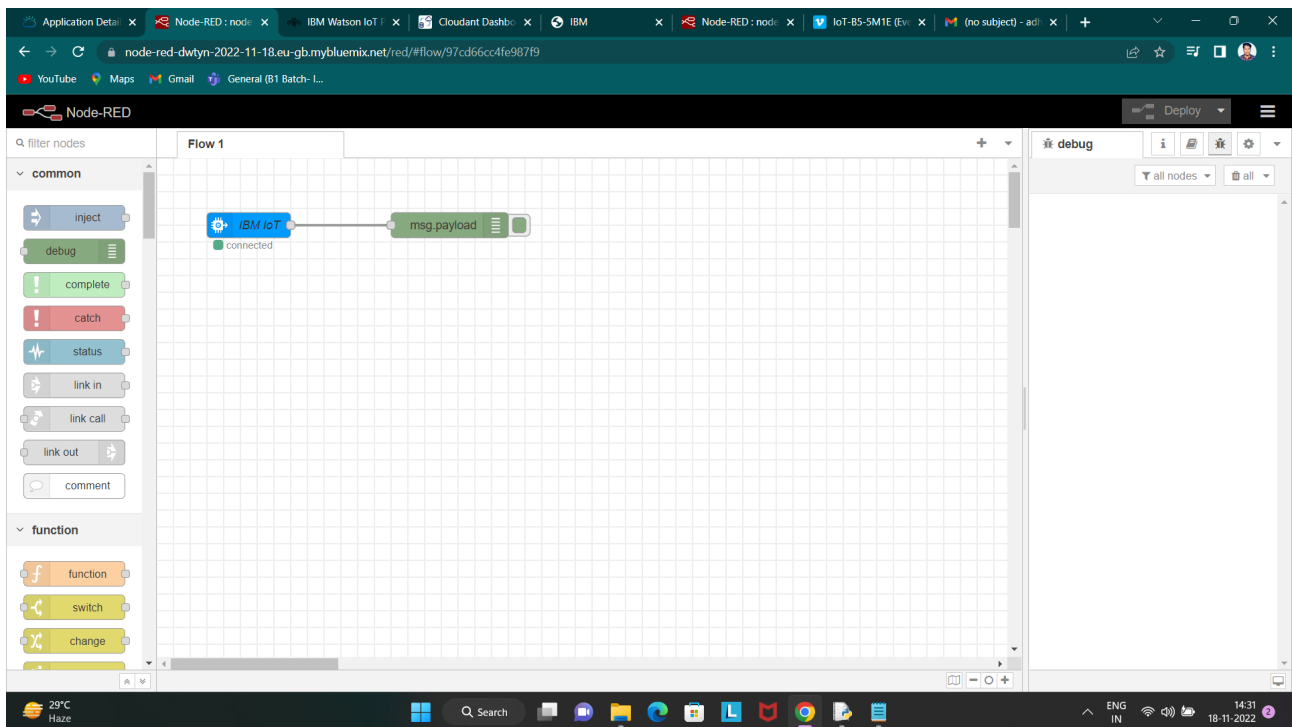
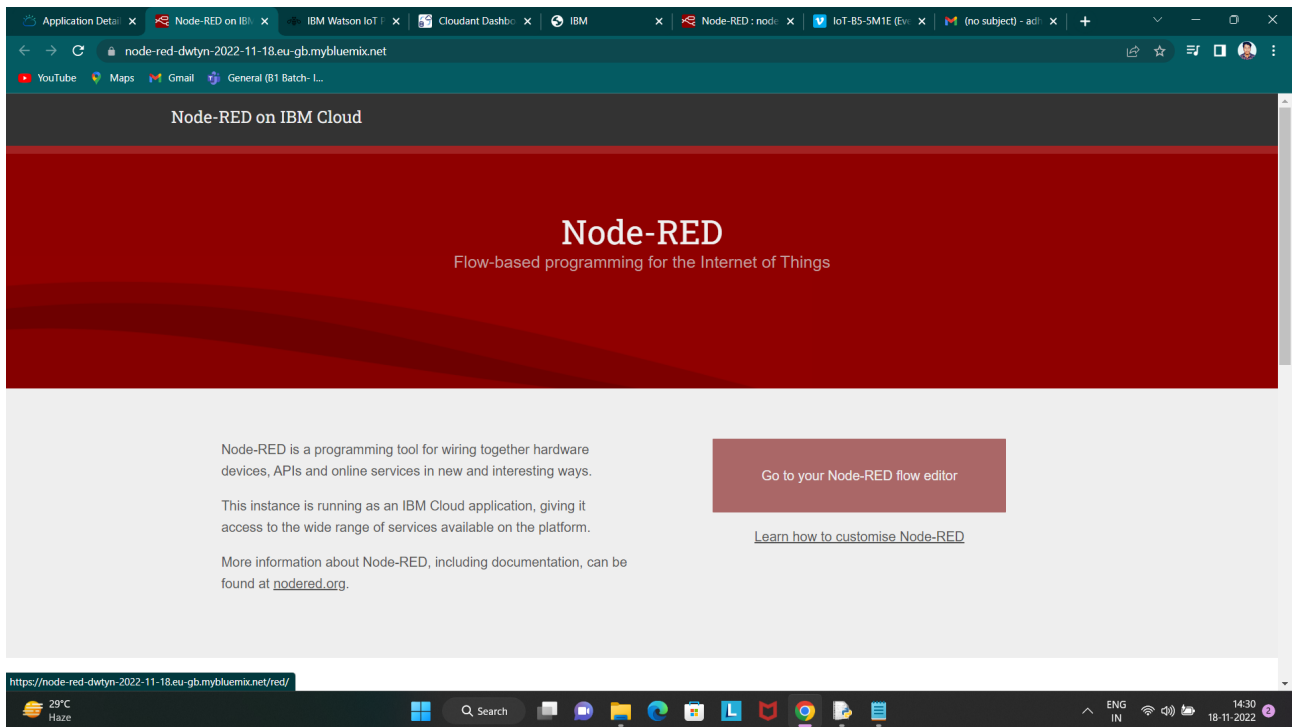
- Details:** Displays the App URL (<https://node-red-hjpcr-2022-11-10.eu-gb.mybluemix.net/>), Source (<https://eu-gb.git.cloud.ibm.com/adhiarasu001/NodeREDHJPC...>), Resource group (Default), Deployment target (Node RED HJPCR 2022-11-10), and Created date (10/11/2022).
- Services:** Shows the "Cloudbant" service with links to "Open dashboard", "Documentation", and "API reference". It also includes a "Credentials" dropdown and buttons for "Connect existing services" and "Create service".
- Deployment Automation:** Lists two pipelines: "ci-pipeline" (Status: Success) and "pr-pipeline" (Status: No stages detected).
- Getting started quickly:** A sidebar section with a "Configuring your app" guide, including steps for connecting services, downloading code, and deploying the app.

The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time (10-11-2022, 09:39).

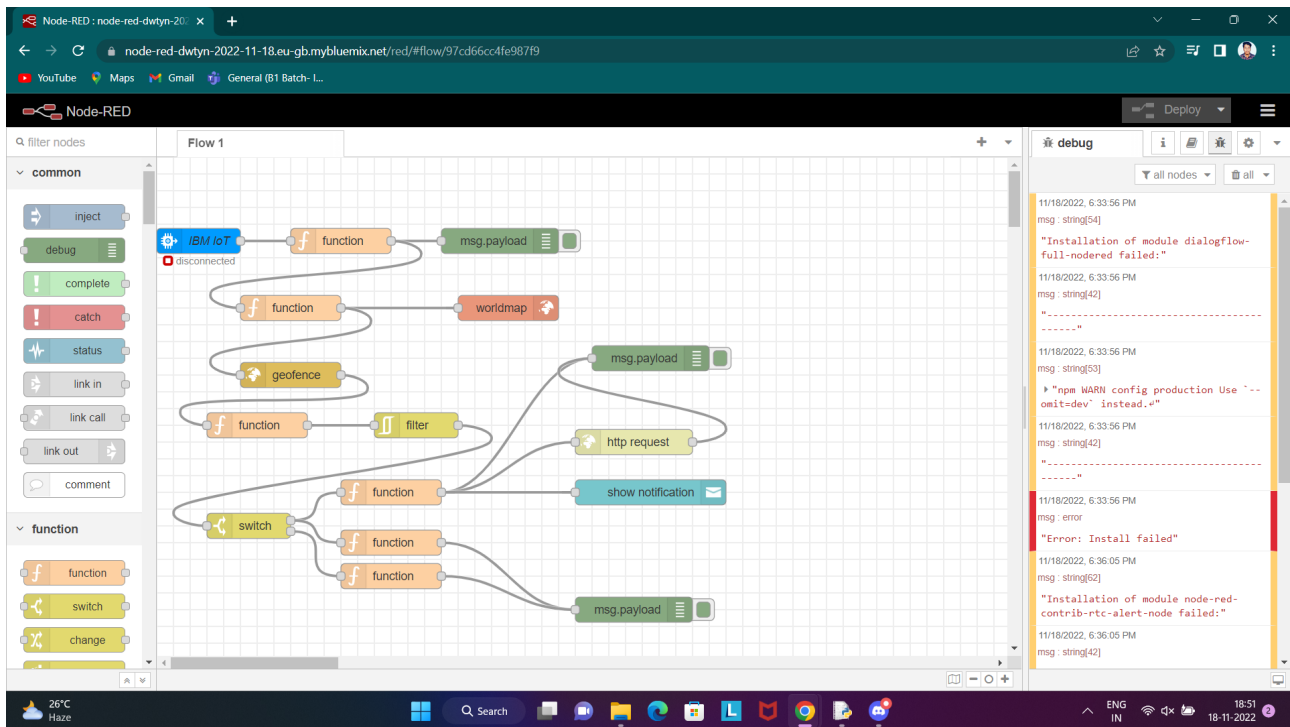
The screenshot shows the IBM Cloud Developer console for an application named "Node RED DWTYN 2022-11-18", which is currently "Running". The interface includes a sidebar with "Resource list" and "App details". The main content area is divided into several sections:

- Overview:** Displays the application status as "Running" with a green checkmark. It includes a "Visit App URL" button and an "Add tags" link.
- Instances:** Shows the application is running with 1 instance. The health status is "100%" and "1/1 instance(s) are running". A slider for "MB memory per instance" is set to 256 MB, with a range from 0 to 2048 MB.
- Runtime:** Displays a donut chart showing the memory usage of the Node.js runtime. The total MB allocation is 256 MB, and 1.75 GB is still available. The chart is divided into "Free" (white) and "Used" (purple) segments.
- Runtime cost:** Shows the current and estimated cost for the billing period (Nov 1, 2022 - Nov 30, 2022). The current charges are \$0.00, and the estimated total is also \$0.00.
- Connections (1):** Lists the connection details for the application, including the URL: node-red-dwtyn-2022--cloudbant-1668756508610-87707.

The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time (10-11-2022, 14:30).



workflow for IOT scenario using local node-red



```
tracker.py - C:\Users\adhit\OneDrive\Desktop\New folder\Python Script\tracker.py (3.7.0)
File Edit Format Run Options Window Help

import json
import wiotp.sdk.device
import time
myConfig={
  "identity":{
    "orgId":"go45cf",
    "typeId": "NODERED",
    "deviceId":"12345"
  },
  "auth":{
    "token":"123456789"
  }
}
client = wiotp.sdk.device.
client.connect()
while True:
  name="smartbridge"
  #in area location
  #latitude=17.4219272
  #longitude=78.5488783
  #out area location
  latitude=17.4219272
  longitude=78.5488783
  myData={'name':name,'l
  client.publishEvent(ev
  print("Data published
  time.sleep(5)
client.disconnect()
```

```
*Python 3.7.0 Shell*
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\adhit\OneDrive\Desktop\New folder\Python Script\tracker.py
2022-11-18 18:52:10,369 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:go45cf:NODERED:12345Data published to IBM IOT platform:
{'name': 'smartbridge', 'lat': 17.4219272, 'log': 78.5488783}
```

Inbox (624) - adhiarasu001

(7064) IoT Based Safety Ga

Service Details - IBM Cloud

IBM Watson IoT Platform

IBM

(7063) Child Tracker - Nod

qo45cf.internetofthings.ibmcloud.com/dashboard/devices/browse

YouTubeMapsGmailGeneral (B1 Batch- L...

IBM Watson IoT Platform

adhiarasu001@gmail.com
ID: qo45cf

BrowseActionDevice TypesInterfaces

Add Device

Search by Device ID

Device Simulator

	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	
	12345	Connected	NODERED	Device	18 Nov 2022 12:44		

IdentityDevice InformationRecent EventsStateLogs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{ "name": "smartbridge", "lat": 17.4219272, "log": 7...	json	a few seconds ago

Items per page 50 | 1-1 of 1 item

1 of 1 page

0 Simulations running

26°C
Haze

Search

ENG
IN

18:53
18-11-2022