

TEAM ID:PNT2022TMID22839

The screenshot shows the IBM Cloud IoT Platform console. The browser address bar displays the URL: `cloud.ibm.com/services/iotf-service/cm%3Av1%3Abluemix%3Apublic%3Aiotf-service%3Aeu-gb%3Aa%2F51dc61a4460547cc93ea894a34eb0181%3AF724ecca-d319-42f...`. The page title is "Internet of Things Platform-t4" with a green "Active" status and "Add tags" link. The left sidebar shows "Manage" (selected), "Plan", and "Connections". The main content area features a "Let's get started with IBM Watson IoT Platform" section with a "Launch" button and a "Docs" button. Below this, a "Ready for the next level?" section shows the "IBM Watson IoT Platform Journey" with three stages: "Lite" (selected), "Non-Production", and "Production". The "Lite" stage description states: "The Lite service plan provides a lightweight development environment to get you started". The "Non-Production" stage description states: "The Non-Production service plan is a full-featured, fully-integrated offering that enables". The "Production" stage description states: "The Production service plan is a fully managed SaaS offering that enables you to manage and analyze". The bottom of the screen shows a Windows taskbar with various application icons and a system clock showing 18:49 on 19-11-2022.

The screenshot shows the "Browse Devices" page in the IBM Watson IoT Platform console. The browser address bar displays the URL: `n78n7r.internetofthings.ibmcloud.com/dashboard/devices/browse`. The page title is "IBM Watson IoT Platform" and the user ID is "732919ecr099@smartintemz.com ID: n78n7r". The left sidebar shows a navigation menu with icons for "Browse" (selected), "Action", "Device Types", and "Interfaces". The main content area has a "Browse Devices" heading and two buttons: "All Devices" (selected) and "Diagnose". Below the heading, a text block states: "This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API." A search bar labeled "Search by Device ID" is present. Below the search bar, a table displays the following data:

Device ID	Status	Device Type	Class ID	Date Added
12345	Connected	TestDeviceType	Device	Nov 6, 2022 7:35 PM

Below the table, it shows "Items per page 50" and "1 of 1 page". A "Device Simulator" toggle is set to "On". At the bottom, a status bar indicates "1 Simulation running". The bottom of the screen shows a Windows taskbar with various application icons and a system clock showing 18:50 on 19-11-2022.

IBM Watson IoT Platform

732919ecr099@smartinternz.com  
ID: n78n7r

Browse Action Device Types Interfaces

Add Device +

Device ID	Status	Device Type	Class ID	Date Added
12345	Connected	TestDeviceType	Device	Nov 6, 2022 7:35 PM

Identity Device Information Recent Events State Logs

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

Event	Value	Format	Last Received
status	{"temperature":79,"humidity":3}	json	a few seconds ago
event_1	{"temperature":40,"humidity":55}	json	a few seconds ago
event_1	{"temperature":24,"humidity":36}	json	a few seconds ago
status	{"temperature":68,"humidity":25}	json	a few seconds ago
event_1	{"temperature":12,"humidity":43}	json	a few seconds ago

1 Simulation running

cloud.ibm.com/developer/appservice/apps/1ff92bfc-fa97-4355-a0dd-abfd479174e0

IBM Cloud Search resources and products... Catalog Manage PUVIYA M's Account

Resource list / App details /

## Node RED MUJNG 2022-11-08

Add tags Node RED MUJNG 2022-11-08 Actions...

### Details

App URL <https://node-red-mujng-2022-11-08.eu-gb.mybluemix.net>

Source <https://eu-gb.git.cloud.ibm.com/732919ECR099/NodeREDMUJNG2...>

Resource group Default

Deployment target Node RED MUJNG 2022-11-08

Created 11/8/2022

### Services

Cloudant

[Open dashboard](#) [Documentation](#) [API reference](#)

Credentials

Connect existing services + Create service +

### Deployment Automation

Name NodeREDMUJNG2022-11-08

Location London

Tool integrations

### Delivery Pipelines

Name pr-pipeline

Status No stages detected

Name ci-pipeline

Status Success

ASK A QUESTION

```
sensor.py - C:\Users\murug\Desktop\sensor.py (3.7.0)
File Edit Format Run Options Window Help

import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

# Provide your IBM Watson Device Credentials
organization = "8gyz7t" # replace the ORG ID
deviceType = "weather_monitor" # replace the Device type
deviceId = "b827ebd607b5" # replace Device ID
authMethod = "token"
authToken = "LNVpQPaVQ166HNM40Z" # Replace the authtoken

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    print(cmd)

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId,
                    deviceCli = ibmiotf.device.Client(deviceOptions)}
    #.....

except Exception as e:
    print("Caught exception connecting device: %s" % str(e))
    sys.exit()

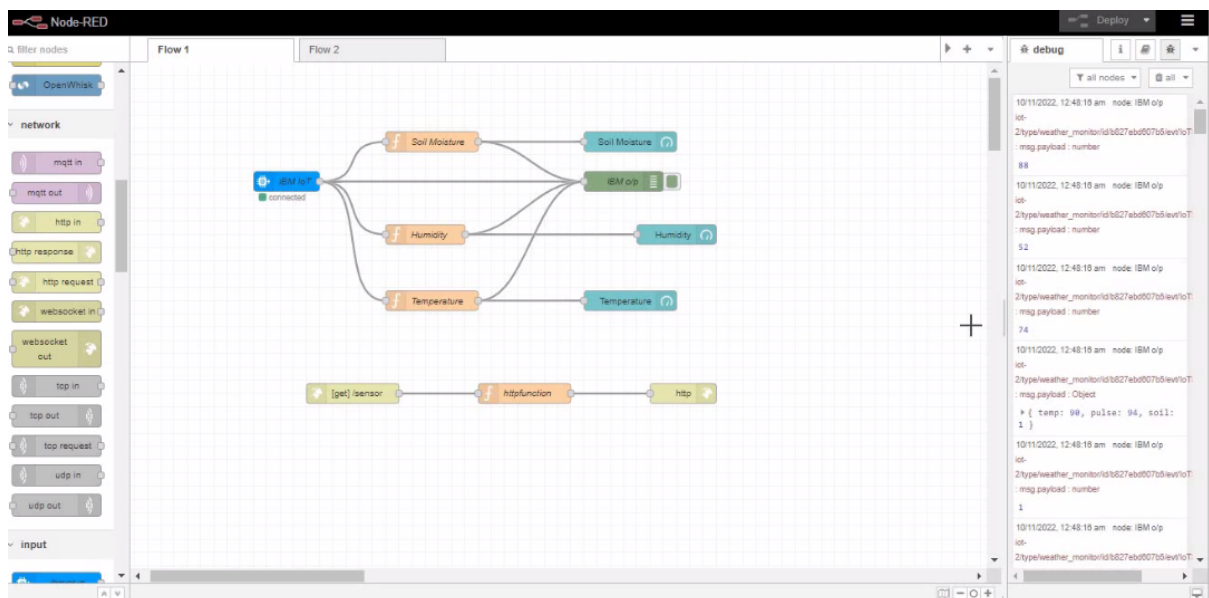
# Connect and send a datapoint "hello" with value "world" into the cloud as an evs
deviceCli.connect()

while True:
    temp=random.randint(0,100)
    pulse=random.randint(0,100)
    soil=random.randint(0,100)

    data = { 'temp': temp, 'pulse': pulse, 'soil':soil}
    #print data

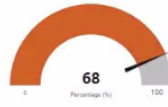
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\murug\Desktop\sensor.py =====
2022-11-10 00:47:45,423 ibmiotf.device.Client INFO Connected successful
ly: d:8gyz7t:weather_monitor:b827ebd607b5
Published Temperature = 81 C Humidity = 27 % Soil Moisture = 33 % to IBM Watson
Published Temperature = 90 C Humidity = 91 % Soil Moisture = 52 % to IBM Watson
Published Temperature = 5 C Humidity = 26 % Soil Moisture = 38 % to IBM Watson
Published Temperature = 76 C Humidity = 93 % Soil Moisture = 27 % to IBM Watson
Published Temperature = 56 C Humidity = 91 % Soil Moisture = 95 % to IBM Watson
Published Temperature = 35 C Humidity = 13 % Soil Moisture = 79 % to IBM Watson
Published Temperature = 74 C Humidity = 85 % Soil Moisture = 22 % to IBM Watson
Published Temperature = 12 C Humidity = 56 % Soil Moisture = 83 % to IBM Watson
```



monitor

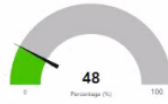
Soil Moisture



Humidity

Temperature

Humidity



Temperature



Form

MOTOR ON

MOTOR OFF

```
motor.py - C:\Users\murug\Desktop\motor.py (5.0)
File Edit Format Run Options Window Help

import time
import sys
import ibmiotf.application # to install pip install ibmiotf
import ibmiotf.device

# Provide your IBM Watson Device Credentials
organization = "8gyz7t" # replace the ORG ID
deviceType = "weather_monitor" # replace the Device type
deviceId = "b827ebd607b5" # replace Device ID
authMethod = "token"
authToken = "LMVpQPaVQ16HNN48Z" # Replace the authToken

def myCommandCallback(cmd): # function for Callback

    if cmd.data['command'] == 'motoron':
        print("MOTOR ON IS RECEIVED")

    elif cmd.data['command'] == 'motoroff':
        print("MOTOR OFF IS RECEIVED")

    if cmd.command == "setInterval":
        if 'interval' not in cmd.data:
            print("Error - command is missing required information: 'interval'")
        else:
            interval = cmd.data['interval']
    elif cmd.command == "print":
        if 'message' not in cmd.data:
            print("Error - command is missing required information: 'message'")
        else:
            output = cmd.data['message']
            print(output)

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
# .....

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Published Temperature = 85 C Humidity = 64 % Soil Moisture = 83 % to IBM Watson
Published Temperature = 18 C Humidity = 72 % Soil Moisture = 0 % to IBM Watson
Published Temperature = 92 C Humidity = 63 % Soil Moisture = 42 % to IBM Watson
Published Temperature = 15 C Humidity = 84 % Soil Moisture = 29 % to IBM Watson
Published Temperature = 81 C Humidity = 58 % Soil Moisture = 48 % to IBM Watson
Published Temperature = 59 C Humidity = 81 % Soil Moisture = 5 % to IBM Watson
Published Temperature = 35 C Humidity = 36 % Soil Moisture = 71 % to IBM Watson
Published Temperature = 73 C Humidity = 77 % Soil Moisture = 8 % to IBM Watson
Published Temperature = 37 C Humidity = 82 % Soil Moisture = 37 % to IBM Watson
Published Temperature = 19 C Humidity = 66 % Soil Moisture = 14 % to IBM Watson
Published Temperature = 59 C Humidity = 21 % Soil Moisture = 19 % to IBM Watson
Published Temperature = 63 C Humidity = 23 % Soil Moisture = 93 % to IBM Watson
Published Temperature = 72 C Humidity = 93 % Soil Moisture = 69 % to IBM Watson
Published Temperature = 66 C Humidity = 27 % Soil Moisture = 28 % to IBM Watson
Published Temperature = 51 C Humidity = 92 % Soil Moisture = 27 % to IBM Watson
Published Temperature = 21 C Humidity = 49 % Soil Moisture = 97 % to IBM Watson
Published Temperature = 42 C Humidity = 70 % Soil Moisture = 68 % to IBM Watson
Published Temperature = 75 C Humidity = 17 % Soil Moisture = 87 % to IBM Watson
Published Temperature = 100 C Humidity = 56 % Soil Moisture = 49 % to IBM Watson
Published Temperature = 20 C Humidity = 68 % Soil Moisture = 53 % to IBM Watson
Published Temperature = 80 C Humidity = 76 % Soil Moisture = 22 % to IBM Watson
Published Temperature = 3 C Humidity = 77 % Soil Moisture = 36 % to IBM Watson
Published Temperature = 53 C Humidity = 35 % Soil Moisture = 9 % to IBM Watson
Published Temperature = 47 C Humidity = 61 % Soil Moisture = 10 % to IBM Watson
Published Temperature = 47 C Humidity = 63 % Soil Moisture = 19 % to IBM Watson
Published Temperature = 2 C Humidity = 94 % Soil Moisture = 41 % to IBM Watson
Published Temperature = 61 C Humidity = 10 % Soil Moisture = 83 % to IBM Watson
Published Temperature = 20 C Humidity = 11 % Soil Moisture = 96 % to IBM Watson
Published Temperature = 6 C Humidity = 34 % Soil Moisture = 43 % to IBM Watson
Published Temperature = 94 C Humidity = 25 % Soil Moisture = 88 % to IBM Watson
Published Temperature = 5 C Humidity = 70 % Soil Moisture = 41 % to IBM Watson
Published Temperature = 77 C Humidity = 20 % Soil Moisture = 50 % to IBM Watson
Published Temperature = 9 C Humidity = 77 % Soil Moisture = 7 % to IBM Watson
Published Temperature = 85 C Humidity = 49 % Soil Moisture = 79 % to IBM Watson
Published Temperature = 1 C Humidity = 53 % Soil Moisture = 94 % to IBM Watson

===== RESTART: C:\Users\murug\Desktop\motor.py =====
2022-11-10 00:49:51.101 ibmiotf.device.Client INFO Connected successful
ly: d:8gyz7t:weather_monitor:b827ebd607b5
```

