

## PUBLISH DATA TO THE IBM CLOUD

Team ID	PNT2022TMID22305
Project Name	Signs With Smart Connectivity for Better Road Safety

### Publish Data To The IBM Cloud:

Python code is used to send random sensor data to the cloud and also to receive commands from the cloud.

Below is the reference link provided for the python program to publish and subscribe from the IBM Watson IoT Platform.

### PYTHON CODE :

ibm.py - C:\Users\91994\OneDrive\Desktop\ibm.py (3.7.0)

File Edit Format Run Options Window Help

```
import wiotp.sdk.device
import time
from random import randint as ri
myConfig = {
    "identity": {
        "orgId": "{orgId}",
        "typeId": "cloud",
        "deviceId": "CL"
    },
    "auth": {
        "token": "{token}"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    myData={"Temperature":ri(28,35), "Visibility":ri(56,79), "location":"Chennai, In"}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

## PYTHON SHELL OUTPUT :

```
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\91994\OneDrive\Desktop\ibm.py =====
2022-11-19 08:54:12,250 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:c0mbt9:cloud:CLPublished data Successfully: %s
{'Temperature': 34, 'Visibility': 76, 'location': 'Chennai, In'}
Published data Successfully: %s {'Temperature': 33, 'Visibility': 69, 'location':
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 31, 'Visibility': 72, 'location':
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 29, 'Visibility': 74, 'location':
: 'Chennai, In'}
Published data Successfully: %s {'Temperature': 29, 'Visibility': 78, 'location':
: 'Chennai, In'}
|
```

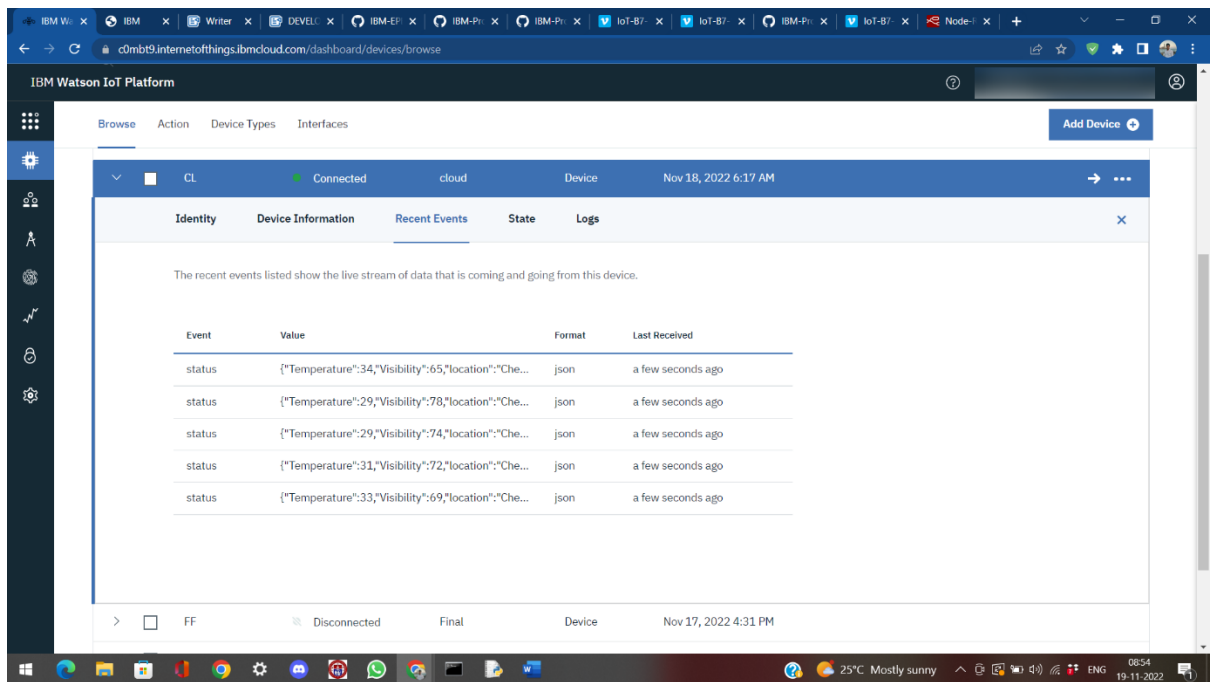
## CLOUD OUTPUT :

The screenshot displays the IBM Watson IoT Platform dashboard. The main view shows a list of devices, with one device selected for detailed information. The device is identified as 'CL' with a status of 'Disconnected'.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
1234	Disconnected	Node	Device	Oct 25, 2022 6:20 PM	
CL	Disconnected	cloud	Device	Nov 18, 2022 6:17 AM	

The selected device 'CL' is shown in a detailed view with the following information:

- Device ID:** CL
- Device Type:** cloud
- Date Added:** Nov 18, 2022 6:17 AM
- Added By:** dayanidhis.cse19@veltechmultitech.org
- Connection Status:** Disconnected
- Last Connected:** Nov 18, 2022 2:56 PM
- Client Address:** 106.198.36.228
- SecureToken:** SecureToken
- Duration:** 6 minutes
- Data Transferred:** 15.9 KB



## CODE RUNNING :

