

PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

Date	17st November 2022
Team ID	PNT2022TMID15784
Project Name	Gas Leakage Monitoring and Alerting System

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "spk098 ",
        "typeId": "typenew",
        "deviceId":"12345"
    },
    "auth": {
        "token": "E(vgZgYW-Mfli3KuL6 "
    }
}

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:

    gas=random.randint(0,100)

    temp=random.randint(0,100)

    hum=random.randint(0,100)

    pre=random.randint(0,100)

    myData={'Hazardous Gas':gas, 'Temperature':temp, 'Humidity':hum,
    'Pressure':pre }

    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()

```

The screenshot displays the IBM Watson IoT Platform interface. The main dashboard shows a list of devices, with 'typenew' selected. The 'Recent Events' tab is active, showing a table of events. A modal window is open for configuring the device's event type, 'event_1'.

Device List:

Device ID	Status	Device type	Class ID	Date
12345	Disconnected	typenew	Device	Nov 2
typenew_1	Disconnected	typenew	Device	Nov 2

Recent Events Table:

Event	Value	Format	Last Received
event_1	{ "temperature": 59, "Humidity": 87, "Hazardous gas": ... }	json	a few seconds ago
event_1	{ "temperature": 71, "Humidity": 62, "Hazardous gas": ... }	json	a minute ago
event_1	{ "temperature": 37, "Humidity": 85, "Hazardous gas": ... }	json	2 minutes ago

Event Configuration Modal (Device Type: typenew):

- Event type name:** event_1
- Schedule:** 1 Every Minute
- Payload:**

```

{
  "temperature": random(0, 100),
  "Humidity": random(0, 100),
  "Hazardous gas": random(0, 100),
  "pressure": random(0, 100)
}

```