

PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

Team ID	PNT2022TMID18536
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

```
#IBM Watson IOT Platform
```

```
#pip install wiotp-sdk
```

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
"orgId": "juel0b",
```

```
"typeId": "NodeMCU",
```

```
"deviceId": "12345"
```

```
    },
```

```
    "auth": {
```

```
"token": "12345678"
```

```
}
```

```
}
```

```
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)

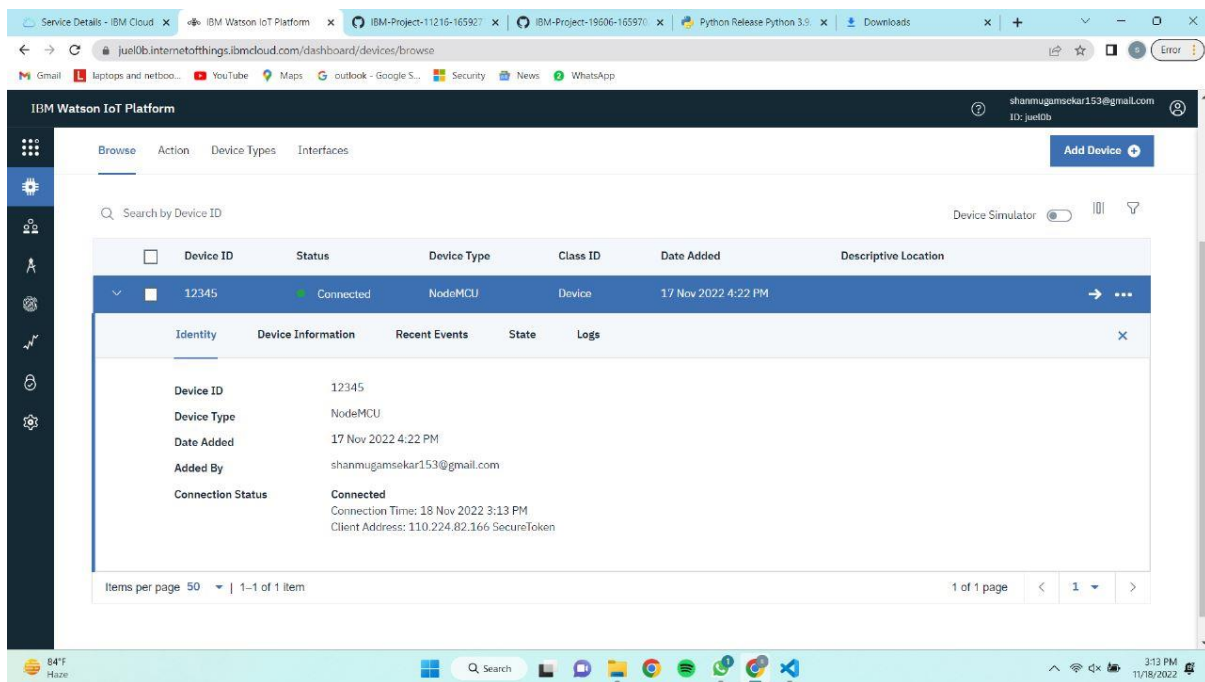
print("Published data Successfully: %s", myData)

client.commandCallback = myCommandCallback

time.sleep(2)

client.disconnect()

```



Service Details - IBM Cloud x IBM Watson IoT Platform x IBM-Project-11215-165827 x IBM-Project-19606-165970 x Python Release Python 3.9 x Downloads

juel0b.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

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Browse Action Device Types Interfaces Add Device

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Connected	NodeMCU	Device	17 Nov 2022 4:22 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	{"Hazardous Gas":33,"Temperature":56,"Humidity":...	json	a few seconds ago
status	{"Hazardous Gas":96,"Temperature":93,"Humidity":...	json	a few seconds ago
status	{"Hazardous Gas":44,"Temperature":55,"Humidity":...	json	a few seconds ago
status	{"Hazardous Gas":92,"Temperature":23,"Humidity":...	json	a few seconds ago
status	{"Hazardous Gas":19,"Temperature":0,"Humidity":...	json	a few seconds ago

84°F Haze

Search

3:14 PM 11/18/2022

File Edit Selection View Go Run Terminal Help

ibm-code.py - Visual Studio Code

```
1 #IBM Watson IoT Platform
2 #pip install wiotp-sdk
3 import wiotp.sdk.device
4 import time
5 import random
6
7 myConfig = {
8     "identity": {
9         "orgId": "juel0b",
10        "typeId": "NodeMCU",
11        "deviceId": "12345"
12    },
13    "auth": {
14        "token": "12345678"
15    }
16 }
17
18 def myCommandCallback(cmd):
19     print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
20     m=cmd.data['command']
21     client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
22     client.connect()
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Python Debug Console

```
Published data Successfully: %s {'Hazardous Gas': 22, 'Temperature': 43, 'Humidity': 93, 'Pressure': 5}
Published data Successfully: %s {'Hazardous Gas': 57, 'Temperature': 62, 'Humidity': 73, 'Pressure': 96}
Published data Successfully: %s {'Hazardous Gas': 33, 'Temperature': 89, 'Humidity': 1, 'Pressure': 71}
Published data Successfully: %s {'Hazardous Gas': 75, 'Temperature': 5, 'Humidity': 21, 'Pressure': 83}
Published data Successfully: %s {'Hazardous Gas': 95, 'Temperature': 5, 'Humidity': 96, 'Pressure': 67}
Published data Successfully: %s {'Hazardous Gas': 14, 'Temperature': 12, 'Humidity': 4, 'Pressure': 94}
Published data Successfully: %s {'Hazardous Gas': 5, 'Temperature': 27, 'Humidity': 44, 'Pressure': 4}
Published data Successfully: %s {'Hazardous Gas': 6, 'Temperature': 78, 'Humidity': 38, 'Pressure': 17}
Published data Successfully: %s {'Hazardous Gas': 31, 'Temperature': 63, 'Humidity': 52, 'Pressure': 59}
Published data Successfully: %s {'Hazardous Gas': 0, 'Temperature': 8, 'Humidity': 13, 'Pressure': 55}
Published data Successfully: %s {'Hazardous Gas': 58, 'Temperature': 27, 'Humidity': 8, 'Pressure': 7}
```

Ln 13, Col 20 Spaces: 4 UTF-8 CRLF Python 3.9.1 64-bit Go Live

15:13 18-11-2022