

## PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

|              |   |
|--------------|---|
| Date         | 15 NOVEMBER 2022  |
| Team ID      | PNT2022TMID14261  |
| Project Name | GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES |

**Code:**

**#IBM Watson IOT Platform**

**#pip install wiotp-sdk**

**import wiotp.sdk.device**

**import time**

**import random**

**myConfig = {**

**"identity": {**

**"orgId": " 6a4pz2",**

**"typeId": "Node\_1",**

**"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:
```

```
temp=random.randint(-20,125)
```

```
hum=random.randint(0,100)
```

```
myData={'temperature':temp, 'humidity':hum}
```

```
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()
```

```
Welcome To Colaboratory - Colab x Untitled1.ipynb - Colaboratory x +
colab.research.google.com/drive/1l-tXM2Wny3kzIMeLS27VN6rNvWOK2tly#scrollTo=03ukqydGmGSO

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File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

temp=random.randint(-20,125)
hum=random.randint(0,100)
myData={'temperature':temp, 'humidity':hum}
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()

... 2022-11-09 04:18:34,831 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:6a4pz2:Node_1:12345
INFO:wiotp.sdk.device.client.DeviceClient:Connected successfully: d:6a4pz2:Node_1:12345
Published data Successfully: %s {'temperature': 32, 'humidity': 16}
Published data Successfully: %s {'temperature': 72, 'humidity': 37}
Published data Successfully: %s {'temperature': 46, 'humidity': 94}
Published data Successfully: %s {'temperature': 119, 'humidity': 62}
Published data Successfully: %s {'temperature': 2, 'humidity': 67}
Published data Successfully: %s {'temperature': 18, 'humidity': 23}
Published data Successfully: %s {'temperature': 1, 'humidity': 83}
Published data Successfully: %s {'temperature': 23, 'humidity': 81}
Published data Successfully: %s {'temperature': 49, 'humidity': 86}
Published data Successfully: %s {'temperature': 67, 'humidity': 46}
Published data Successfully: %s {'temperature': 108, 'humidity': 42}
Published data Successfully: %s {'temperature': 101, 'humidity': 61}
Published data Successfully: %s {'temperature': -6, 'humidity': 37}
```

Watson IoT Platform 410719106050@amartintorez.com ID: 6a4pz2

Browse Action Device Types Interfaces Add Device

Search by Device ID Device Simulator

| Device ID | Status       | Device Type | Class ID | Date Added           | Descriptive Location |
|-----------|--------------|-------------|----------|----------------------|----------------------|
| 12345     | Disconnected | Node_1      | Device   | Nov 6, 2022 12:31 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':-11,'humidity':87] | json   | a few seconds ago |
| status | ['temperature':46,'humidity':61]  | json   | a few seconds ago |
| status | ['temperature':56,'humidity':30]  | json   | a few seconds ago |
| status | ['temperature':-3,'humidity':4]   | json   | a few seconds ago |
| status | ['temperature':24,'humidity':3]   | json   | a few seconds ago |

Python code to publish the data to IBM Cloud was implemented successfully