

## PYTHON SCRIPT TO PUBLISH DATA TO IBM CLOUD

Date	09 November 2022
Team ID	PNT2022TMID42278
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IOT
Maximum marks	8 Marks

PYTHON CODE:

```
#IBM Watson IOT Platform
```

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

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

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "n89sjt",
```

```
        "typeId": "Suren",
```

```
        "deviceId": "046"
```

```
    },
```

```
    "auth": {
```

```
        "token": "surenthiran06"
```

```
    }
```

```
}
```

```
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()
```

PYTHON CODE:

```
pythonscript.py - D:/Suren IBM projects/pythonscript.py (3.9.6)
File Edit Format Run Options Window Help

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

myConfig = {
    "identity": {
        "orgId": "n89sjt",
        "typeId": "Suren",
        "deviceId": "046"
    },
    "auth": {
        "token": "surenthiran06"
    }
}

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()
|
```

PYTHON OUTPUT:

```
"IDLE Shell 3.9.6"
File Edit Shell Debug Options Window Help

Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/Suren IBM projects/pythonscript.py =====
2022-11-09 20:11:59,061 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:n89sjt:Suren:046
Published data Successfully: %s ('temperature': 79, 'humidity': 52)
Published data Successfully: %s ('temperature': -3, 'humidity': 53)
Published data Successfully: %s ('temperature': 22, 'humidity': 55)
Published data Successfully: %s ('temperature': 91, 'humidity': 18)
Published data Successfully: %s ('temperature': 5, 'humidity': 18)
Published data Successfully: %s ('temperature': 99, 'humidity': 0)
Published data Successfully: %s ('temperature': 70, 'humidity': 12)
Published data Successfully: %s ('temperature': 107, 'humidity': 57)
Published data Successfully: %s ('temperature': 4, 'humidity': 33)
Published data Successfully: %s ('temperature': 80, 'humidity': 71)
Published data Successfully: %s ('temperature': -1, 'humidity': 22)
Published data Successfully: %s ('temperature': -4, 'humidity': 75)
Published data Successfully: %s ('temperature': 89, 'humidity': 21)
Published data Successfully: %s ('temperature': 103, 'humidity': 2)
Published data Successfully: %s ('temperature': 123, 'humidity': 72)
Published data Successfully: %s ('temperature': -5, 'humidity': 52)
Published data Successfully: %s ('temperature': 83, 'humidity': 99)
Published data Successfully: %s ('temperature': 120, 'humidity': 59)
Published data Successfully: %s ('temperature': 25, 'humidity': 13)
Published data Successfully: %s ('temperature': 101, 'humidity': 39)
Published data Successfully: %s ('temperature': 124, 'humidity': 69)
Published data Successfully: %s ('temperature': 74, 'humidity': 0)
Published data Successfully: %s ('temperature': 39, 'humidity': 79)
Published data Successfully: %s ('temperature': 10, 'humidity': 41)
|
```

