

PUBLISH PYTHON

Date	16 Nov 2022
Team ID	PNT2022TMID14391
Project Name	Industry - specific intelligent management system

```
python.py - C:/Users/HP/Desktop/python.py (3.7.0)
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": "s8ovlq",
        "typeId": "abcd",
        "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()
```

```
*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/HP/Desktop/python.py =====
2022-11-15 18:27:44,495 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:s8ov1q:abcd:12345Published data Successfully: %s
{'temperature': 54, 'humidity': 51}
Published data Successfully: %s {'temperature': 34, 'humidity': 53}
Published data Successfully: %s {'temperature': 29, 'humidity': 53}
Published data Successfully: %s {'temperature': 102, 'humidity': 54}
Published data Successfully: %s {'temperature': -3, 'humidity': 62}
Published data Successfully: %s {'temperature': 85, 'humidity': 92}
Published data Successfully: %s {'temperature': 33, 'humidity': 7}
Published data Successfully: %s {'temperature': 20, 'humidity': 74}
Published data Successfully: %s {'temperature': -5, 'humidity': 5}
Published data Successfully: %s {'temperature': 112, 'humidity': 81}
Published data Successfully: %s {'temperature': 58, 'humidity': 5}
Published data Successfully: %s {'temperature': 53, 'humidity': 99}
Published data Successfully: %s {'temperature': 48, 'humidity': 40}
|
```

code

```
import time
import sys

import ibmiotf.application
import ibmiotf.device

import random

# Provide your IBM Watson Device Credentials
organization = "s8ov1q"
deviceType = "abcd"
deviceId = "12345"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status = cmd.data['command']

    if status == "lighton":
        print("led is on")
    elif status == "lightoff":
        print("led is off")
    else:
        print("please send proper command")

try:
```

```
        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "authmethod":  
authMethod, "auth-token": authToken}        deviceCli = ibmiotf.device.Client(deviceOptions)
```

```
#.....
```

```
except Exception as e:
```

```
    print("Caught exception connecting device: %s" % str(e))        sys.exit()
```

```
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type  
"greeting" 10 times deviceCli.connect()
```

```
while True:
```

```
    #Get Sensor Data from DHT11
```

```
    temp=random.randint(90,110)
```

```
    Humid=random.randint(60,100)
```

```
    data = { 'temp' : temp, 'Humid': Humid }
```

```
    #print data
```

```
    def myOnPublishCallback():
```

```
        print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "to IBM  
Watson")
```

```
        success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,  
on_publish=myOnPublishCallback)
```

```
        if not success:        print("Not  
connected to IoT")        time.sleep(10)
```

```
        deviceCli.commandCallback = myCommandCallback
```

```
# Disconnect the device and application from the cloud
```

```
deviceCli.disconnect()
```

