

Publish Data to the IBM Cloud

Team ID	PNT2022TMID08778
Project Name	Smart Waste Management System For Metropolitan Cities

PYTHON SCRIPT

```
#IBM Watson IoT Platform
#pip install wiop-sdk
import ibmiotf.application
import ibmiotf.device

import time
import random

myConfig = {
    "clientId": "gizpe4",
    "orgId": "nodeemo",
    "deviceId": "000123",
    "auth": {
        "token": "screenPjGafz0FFtKs"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    s=cmd.data['command']

client = wiop.sdk.device.BesicClientConfig(myConfig, logHandlers=None)
client.connect()

while True:
    temp=random.randint(-25,125)
    hum=random.randint(0,100)
    myData={"temperature":temp, "humidity":hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, publishOn=client)
    print("Published data successfully: %s" % myData)
    client.commandCallback = myCommandCallback
    time.sleep(1)
client.disconnect()
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

Python 3.7.4 (tags/v3.7.4:009359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>>

RESTART: C:\Python\Python37\Python8Script.py

2022-11-04 18:04:52,909 ibmiotf.device.Client INFO Connected successfully: d:dlauhi:SWMS:6032

Published Temperature = 73 C Humidity = 97 % to IBM Watson
Published Temperature = 25 C Humidity = 45 % to IBM Watson
Published Temperature = 22 C Humidity = 38 % to IBM Watson
Published Temperature = 38 C Humidity = 23 % to IBM Watson
Published Temperature = 62 C Humidity = 82 % to IBM Watson
Published Temperature = 36 C Humidity = 54 % to IBM Watson
Published Temperature = 93 C Humidity = 73 % to IBM Watson
Published Temperature = 25 C Humidity = 57 % to IBM Watson
Published Temperature = 67 C Humidity = 26 % to IBM Watson
Published Temperature = 98 C Humidity = 100 % to IBM Watson
Published Temperature = 92 C Humidity = 54 % to IBM Watson
Published Temperature = 6 C Humidity = 55 % to IBM Watson
Published Temperature = 97 C Humidity = 57 % to IBM Watson
Published Temperature = 64 C Humidity = 70 % to IBM Watson
Published Temperature = 38 C Humidity = 14 % to IBM Watson
Published Temperature = 6 C Humidity = 49 % to IBM Watson
Published Temperature = 59 C Humidity = 73 % to IBM Watson
Published Temperature = 57 C Humidity = 20 % to IBM Watson
Published Temperature = 3 C Humidity = 42 % to IBM Watson
Published Temperature = 19 C Humidity = 42 % to IBM Watson
Published Temperature = 68 C Humidity = 19 % to IBM Watson
Published Temperature = 10 C Humidity = 14 % to IBM Watson
Published Temperature = 32 C Humidity = 67 % to IBM Watson

OUTPUT:

DATA IN IBM CLOUD PLATFORM:

The screenshot shows the AWS IoT console interface. At the top, there's a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. Below this, a header bar indicates the selected device is 'M022', which is 'Connected' and of type '3cTMS'. The main content area is titled 'Recent Events' and shows a message: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table of recent events.

Event	Value	Format	Last Received
3cTSensor	("temp":206,"Humid":149)	json	a few seconds ago
3cTSensor	("temp":211,"Humid":150)	json	a few seconds ago
3cTSensor	("temp":201,"Humid":161)	json	a few seconds ago
3cTSensor	("temp":205,"Humid":179)	json	a few seconds ago
3cTSensor	("temp":216,"Humid":190)	json	a few seconds ago