

SPRINT 4

Date	16 November 2022
Team Id	PNT2022TMID36201
Project Name	Smart Waste Management System For Metropolitan Cities

SENDING DATA FROM RASPERRYPI TO IBM CLOUD:

#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {

"identity": {

"orgId": "r1nl13",

"typeId": "SathyaPriya",

"deviceId": "2609"

},

"auth": {

"token": "i5QqQIPGeqAES5iqgy"

```
}  
}
```

```
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()

```
Demo.py - C:\Users\SRI RAJAM\Desktop\Demo.py (3.7.4)
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": "rlnl13",
        "typeId": "SathyaPriya",
        "deviceId": "2609"
    },
    "auth": {
        "token": "i5QqQIPGegAES5iqgy"
    }
}

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

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client.connect()

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    time.sleep(2)
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```

PYTHON CODE:

 Demo.py - C:\Users\SRI RAJAM\Desktop\Demo.py (3.7.4)

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```
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#pip install wiotp-sdk
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    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

OUTPUT:

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help

Published data Successfully: %s ('temperature': 68, 'humidity': 16)
2022-11-19 11:09:28,333 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:35,913 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnl13:SathyaPriya:2609
Published data Successfully: %s ('temperature': 59, 'humidity': 46)
Published data Successfully: %s ('temperature': 48, 'humidity': 86)
Published data Successfully: %s ('temperature': 116, 'humidity': 35)
2022-11-19 11:09:40,653 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:09:48,401 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnl13:SathyaPriya:2609
Published data Successfully: %s ('temperature': 63, 'humidity': 94)
Published data Successfully: %s ('temperature': 72, 'humidity': 56)
Published data Successfully: %s ('temperature': 91, 'humidity': 47)
2022-11-19 11:09:53,728 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-19 11:10:00,012 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:rlnl13:SathyaPriya:2609
Published data Successfully: %s ('temperature': 90, 'humidity': 80)
Published data Successfully: %s ('temperature': -6, 'humidity': 93)
Published data Successfully: %s ('temperature': 117, 'humidity': 78)
Published data Successfully: %s ('temperature': 83, 'humidity': 88)
Published data Successfully: %s ('temperature': 34, 'humidity': 20)
Published data Successfully: %s ('temperature': 25, 'humidity': 48)
Published data Successfully: %s ('temperature': 95, 'humidity': 53)
Published data Successfully: %s ('temperature': 56, 'humidity': 74)
Published data Successfully: %s ('temperature': 27, 'humidity': 11)
Published data Successfully: %s ('temperature': 12, 'humidity': 94)
Published data Successfully: %s ('temperature': 75, 'humidity': 84)
Published data Successfully: %s ('temperature': 123, 'humidity': 75)
Published data Successfully: %s ('temperature': 107, 'humidity': 77)
Published data Successfully: %s ('temperature': 64, 'humidity': 93)
Published data Successfully: %s ('temperature': 9, 'humidity': 97)
Published data Successfully: %s ('temperature': 119, 'humidity': 20)
Published data Successfully: %s ('temperature': -6, 'humidity': 19)
Published data Successfully: %s ('temperature': 55, 'humidity': 94)
Published data Successfully: %s ('temperature': 66, 'humidity': 28)
Published data Successfully: %s ('temperature': 58, 'humidity': 97)
Published data Successfully: %s ('temperature': 93, 'humidity': 61)
Published data Successfully: %s ('temperature': 92, 'humidity': 100)
Published data Successfully: %s ('temperature': 116, 'humidity': 55)
Published data Successfully: %s ('temperature': 13, 'humidity': 63)
Published data Successfully: %s ('temperature': -17, 'humidity': 27)
Published data Successfully: %s ('temperature': -2, 'humidity': 63)
Published data Successfully: %s ('temperature': 52, 'humidity': 6)
Published data Successfully: %s ('temperature': -8, 'humidity': 25)
Published data Successfully: %s ('temperature': 68, 'humidity': 86)

Ln: 117 Col: 116
```

Knowledge Session - ProjectKnowledge Session - Socialwww.google.comService Details - IBM CloudIBM Watson IoT Platform

r1n13.internetofthings.ibmcloud.com/dashboard/devices/drilldown/SathyaPriya2609?returnTo=/devices/browse

110519106021@smartinternz.comID: r1n13

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Device Drilldown - 2609

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

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":105,"humidity":56}	json	a few seconds ago
status	{"temperature":94,"humidity":9}	json	a few seconds ago
status	{"temperature":85,"humidity":0}	json	a few seconds ago
status	{"temperature":21,"humidity":94}	json	a few seconds ago
status	{"temperature":122,"humidity":34}	json	a few seconds ago

State

This table shows a list of data points that are reported

0 Simulations running

28°C Haze

ENG 03:11 PM