

PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

Date	11 NOVEMBER 2022
Team ID	PNT2022TMID12116
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()
```

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colab.research.google.com/drive/1l-tXM2Wny3kzIMeLS27VN6rNvWOK2tly#scrollTo=03ukqydGmGSO

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```
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 04:18:34,031 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@smartinternz.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