

PUBLISH DATA TO IBM CLOUD

DATE	15 Nov 2022
TEAM ID	PNT2022TMID09823
PROJECT NAME	Signs with Smart Connectivity for Better Road Safety

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```
import paho.mqtt.client as paho
import time
import random

def on_publish(client, userdata, mid):
    print("Publish the data ")

client = paho.Client()
client.on_publish = on_publish
client.connect('broker.Mqttdashboard.com', 1883)
client.loop_start()
while True:
    temp = random.randint(1,30)
    (rc,mid)=client.publish('iottopic',str(temp),qos=1)
    print(temp)
    time.sleep(10)
```

Command Prompt - python publish.py

```
C:\Users\USER>python publish.py
```

```
15
```

```
Publish the data
```

```
4
```

```
Publish the data
```

```
█
```

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```
import paho.mqtt.client as paho
def on_subscribe(client,usrdata,mid,grated_qos):
    print("subscribe:" + str(mid) +str(granted_qos))

def on_message(client, usrdata,msg):
    print(msg.topic + " " + str(msg.qos) + str(msg.payload))

client=paho.Client()
client.on_subscribe = on_subscribe
client.connect('broker.mqttdashboard.com', 1883)
client.subscribe('iottopic',qos=1)
client.loop_forever()
```

OUTPUT:

```
Command Prompt - python publish.py

C:\Users\USER>python publish.py
15
Publish the data
4
Publish the data
9
Publish the data
1
Publish the data
9
Publish the data
24
Publish the data
16
Publish the data
11
Publish the data
13
Publish the data
```

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RISK AND SECURITY
OVERVIEW



4 Cards

Owned by you



Boards shared with you

1 Simulation running



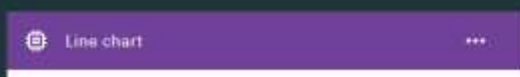
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Settings



1 Simulation running

CODE:

```
#IBM Watson IOT Platform
```

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

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

```
#pip install requests
```

```
import requests, json
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "6q4xt1",
```

```
        "typeId": "buggy",
```

```
        "deviceId": "11235"
```

```
    },
```

```
    "auth": {
```

```
        "token": "o*Mt9ULS)lqtziq1A7"
```

```
    }
```

```
}
```

```
def myCommandCallback(cmd):
```

```
    Date 15 November 2022
```

```
    Team ID PNT2022TMID40472
```

```
    Project Name Sign with smart Connectivity for better Road
```

```
    safety
```

```
    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()
```

```
cityName = input("\nEnter the City Name: ")

while True:

#Get Weather data from any city


#Getting weather apiKey from Openweathermap
apiKey="d3bcb2501b7fa0ed5ea247df2c8f6969"


#The url provides the weather data about the city

url =" https://api.openweathermap.org/data/2.5/weather?q="+
cityName + "&appid="+ apiKey + "&units=metric"

response = requests.get(url)

data =response.json()


temp=data["main"]["temp"]
hum=data['main']['humidity']

myData={'temperature':temp, 'humidity':hum}

client.publishEvent(eventId="status", msgFormat="json",
data=myData, qos=0, onPublish=None)

print("Published data Successfully: ", myData)

client.commandCallback = myCommandCallback

time.sleep(2)

client.disconnect()

cityName = input("\nEnter the City Name: ")

while True:

#Get Weather data from any city


#Getting weather apiKey from Openweathermap
apiKey="d3bcb2501b7fa0ed5ea247df2c8f6969”
```

```
#The url provides the weather data about the city

url =" https://api.openweathermap.org/data/2.5/weather?q="+
cityName + "&appid="+ apiKey + "&units=metric"

response = requests.get(url)
data =response.json()

temp=data["main"]["temp"]
hum=data['main']['humidity']
myData={'temperature':temp, 'humidity':hum}
client.publishEvent(eventId="status", msgFormat="json",
data=myData, qos=0, onPublish=None)

print("Published data Successfully: ", myData)
client.commandCallback = myCommandCallback

time.sleep(2)

client.disconnect()
```