

Publish Data to IBM cloud

Team ID	PNT2022TMID31031
Project Name	Smart waste management system for metropolitan cities

Steps:

Step 1: Open python idle.

Step 2: Type the program.

Step 3: Then click on the file and save the document.

Step 4: Then click on run and run the module.

Step 5: Output will be appeared in the idle window.

Python code:

```
import time
```

```
import sys
```

```
import ibmiotf.device
```

```
import random
```

```
organization="gpx238"
```

```
deviceType="NodeMCU"
```

```
deviceId="123456"
```

```
authMethod="token"
```

```
authToken="12345678"
```

```
try:
```

```
    deviceOptions={"org": organization,"type": deviceType,"id": deviceId,"auth-method":  
authMethod,"auth-token": authToken}
```

```
    deviceCli=ibmiotf.device.Client(deviceOptions)
```

```
except Exception as e:
```

```
    print("caught exception connecting device:%s" % str(e))
```

```
    sys.exit()
```

```

deviceCli.connect()
while True:
    #in data
    latitude=11.7345;
    longitude=78.2020;

    #out data
    #latitude=12.7345;
    #longitude=79.2020;

    data={'latitude':latitude,'longitude':longitude}
    def myOnPublishCallback():
        print("published latitude=%d" %latitude,"longitude=%d" %longitude,"to ibm
watson")

success=deviceCli.publishEvent("IotSensor","json",data,qos=0,on_publish=myOnPublishCal
lback)
    if not success:
        print("Not connected to IoT")
        time.sleep(3)
deviceCli.disconnect()

```

```
File Edit Format Run Options Window Help
import time
import sys
import ibmiotf.device
import random

organization="gpx238"
deviceType="NodeMCU"
deviceId="123456"
authMethod="token"
authToken="12345678"

try:
    deviceOptions={"org": organization,"type": deviceType,"id": deviceId,"auth-method": authMethod,"auth-token": authToken}
    deviceCli=ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("caught exception connecting device:%s" % str(e))
    sys.exit()

deviceCli.connect()
while True:
    #in data
    latitude=11.7345;
    longitude=78.2020;

    #out data
    #latitude=12.7345;
    #longitude=79.2020;

    data={"latitude":latitude,"longitude":longitude}
    def myOnPublishCallback():
        print("published latitude=%d" %latitude,"longitude=%d" %longitude,"to ibm watson")

    success=deviceCli.publishEvent("IoTSensor","json",data,qos=0,on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoTF")
    time.sleep(3)
deviceCli.disconnect()
```

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[illegible]

Output screen (Data published)