

PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

Python Code:

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "0vvv7i",
        "typeId": "987",
        "deviceId": "987_4"
    },
    "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:
    hazardous_gas=random.randint(-20,125)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    pressure=random.randint(-20,125)
    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()
```

Watson Cloud IBM:

The screenshot displays the IBM Watson IoT Platform dashboard. The main view shows a list of recent events for a device with ID 987. The events are listed in a table with columns for Event, Value, and Format. The events are all of type 'event_1' and contain JSON payloads with fields like 'HazardousGas', 'temp', 'hum', and 'pressure'.

A modal window is open on the right side, titled 'Device Type: 987'. It shows the configuration for a new event type. The 'Event type name' is 'event_1'. The 'Schedule' is set to 'Every Minute'. The 'Payload' is a JSON object with the following structure:

```
{
  "HazardousGas": random(0, 100),
  "temp": random(10, 80),
  "hum": random(80, 100),
  "pressure": random(49, 100)
}
```

The modal also includes a 'Send' button and a 'New event type' button. The 'Cancel' and 'Save' buttons are at the bottom right of the modal.