

PUBLISH DATA TO THE IBM CLOUD

Date	09 November 2022
Team Id	PNT2022TMID14695
Title	Hazardous Area Monitoring for Industrial Plant using IoT

Python Code

```
watson.py - C:\Users\91887\AppData\Local\Programs\Python\Python310\watson.py (3.10.0)
File Edit Format Run Options Window Help

import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

organization = "3lhmfj"
deviceType = "efgh"
deviceId = "56789"
authMethod = "use-token-auth"
authToken = "123456789 "

def myCommandCallback(cmd):
    print("Command received: %s" %cmd.data['command'])
    status = cmd.data['command']
    if status=="lighton":
        print("led is on")
    else:
        print("led is off")

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:
    temp=random.randint(0,100)
    humd=random.randint(0,100)
    data={"temp":temp, 'Humid': humd}
    def myOnPublishCallback():
        print("Published Temperature = %s C" % temp, "Humidity= %s %" % humd, "to IBM Watson")

    success=deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not Connected to IoT")
    time.sleep(1)

    deviceCli.commandCallback=myCommandCallback

deviceCli.disconnect()
```

Generated Values

Published Temperature = 12 C Humidity:10
Published Temperature = 0 C Humidity:79
Published Temperature = 95 C Humidity:56
Published Temperature = 91 C Humidity:64
Published Temperature = 25 C Humidity:78
Published Temperature = 24 C Humidity:69
Published Temperature = 92 C Humidity:50
Published Temperature = 75 C Humidity:45
Published Temperature = 44 C Humidity:9
Published Temperature = 59 C Humidity:44
Published Temperature = 67 C Humidity:12
Published Temperature = 0 C Humidity:31
Published Temperature = 3 C Humidity:21
Published Temperature = 32 C Humidity:8
Published Temperature = 7 C Humidity:90
Published Temperature = 71 C Humidity:42
Published Temperature = 99 C Humidity:76
Published Temperature = 97 C Humidity:45
Published Temperature = 10 C Humidity:95
Published Temperature = 19 C Humidity:19
Published Temperature = 95 C Humidity:13
Published Temperature = 11 C Humidity:57
Published Temperature = 70 C Humidity:86
Published Temperature = 54 C Humidity:81
Published Temperature = 59 C Humidity:8
Published Temperature = 35 C Humidity:11
Published Temperature = 39 C Humidity:42
Published Temperature = 17 C Humidity:85
Published Temperature = 69 C Humidity:46
Published Temperature = 40 C Humidity:29
Published Temperature = 90 C Humidity:90
Published Temperature = 64 C Humidity:41
Published Temperature = 70 C Humidity:81
Published Temperature = 17 C Humidity:89
Published Temperature = 20 C Humidity:58
Published Temperature = 63 C Humidity:65
Published Temperature = 60 C Humidity:82
Published Temperature = 87 C Humidity:1
Published Temperature = 58 C Humidity:37
Published Temperature = 70 C Humidity:85
Published Temperature = 90 C Humidity:43
Published Temperature = 58 C Humidity:0

Publishing the value to IBM cloud

IBM Watson IoT Platform

prtyadharshini.sb.2019.it@rajalakshmi.edu.in

10: 38wed

Browse

Action

Device Types

Interfaces

Search by Device ID

Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	abcd	Device	18 Nov 2022 23:06	
56789	Connected	efgh	Device	19 Nov 2022 08:42	

Identity

Device Information

Recent Events

State

Logs

Device ID

Device Type

Date Added

Added By

Connection Status

56789

efgh

19 Nov 2022 08:42

prtyadharshini.sb.2019.it@rajalakshmi.edu.in

Connected
Connection Time: 19 Nov 2022 09:37
Client Address: 50.31.197.64 Insecure

Items per page 50

1-2 of 2 items

1 of 1 page

