

PUBLISH DATA TO THE IBM CLOUD

TEAM ID	PNT2022TMID00923
PROJECT NAME	Signs with Smart Connectivity for Better Road Safety

STEPS TO PUBLISH DATA TO IBM CLOUD:

STEP-1: Sign in to the created IBM IoT platform.

STEP-2: Select organisation from drop down in the right top corner.

STEP-3: Click on to add device and enter the device type and device id.


STEP-4: Click next until you get the device credentials which are the device type, device id, authentication method and authentication token.

STEP-5: Enter all those credentials in the python code and import ibmiotf.application and ibmiotf.device libraries.

STEP-6: Create data in json format and enter syntax that pushes the data to IBM IoT platform

STEP-7: The data is displayed in the corresponding device under the RECENT EVENTS tab.

CODE SPECIFICTIONS:

 PROJECTFINALDND.py - D:\1ibm\PROJECTFINALDND.py (3.7.0)

File Edit Format Run Options Window Help

```
import requests #importing a library
import json
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys
```

```
# watson device details
```

```
organization = "2s7yy7"
devicetype = "project"
deviceId = "projectid"
authMethod= "token"
authToken= "projecttoken"
```

```
Temp= data['main']['temp']
Humd= data['main']['humidity']
data= {'temp':Temp, 'humid':Humd}
dist=random.randint(0,20)
dis={'dista':dist}
```

```
success=deviceCli.publishEvent ("IoTSensor","json",insta,qos=0,on_publish= myOnPublishCallback)
success=deviceCli.publishEvent ("IoTSensor","json",data,qos=0,on_publish= myOnPublishCallback)
success=deviceCli.publishEvent ("IoTSensor","json",warn,qos=0,on_publish= myOnPublishCallback)
success=deviceCli.publishEvent ("IoTSensor","json",dis,qos=0,on_publish= myOnPublishCallback)
```

IBM IoT WATSON PLATFORM:

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various platform features. The main content area shows a device named 'projectid' with a status of 'Connected'. Below this, the 'Recent Events' tab is selected, displaying a table of live data events. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. The events are from an 'IoTSensor' and include data points like 'inst', 'dista', 'alert', 'temp', and 'humid'. A status message at the bottom of the events table indicates '1 Simulation running'. The bottom of the screen shows a Windows taskbar with various application icons and system information like temperature and time.

IBM Watson IoT Platform

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Browse Action Device Types Interfaces

projectid Connected project Device Nov 8, 2022 6:20 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
IoTSensor	{"inst": "stop"}	json	a few seconds ago
IoTSensor	{"dista": 4}	json	a few seconds ago
IoTSensor	{"alert": "PLEASE SLOW DOWN!!!!!!!"}	json	a few seconds ago
IoTSensor	{"temp": 300.14, "humid": 89}	json	a few seconds ago
IoTSensor	{"inst": "stop"}		

1 Simulation running

28°C Cloudy

16:37 13-11-2022