

PUBLISH DATA TO THE IBM CLOUD

TEAM ID	PNT2022TMID14066
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 SPECIFIATIONS:

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

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```
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 dashboard. The browser address bar shows the URL `2s7yy7.internetofthings.ibmcloud.com/dashboard/devices/browse`. The dashboard header includes the IBM Watson IoT Platform logo, a user profile with email `211419106012@smartinternz.com` and ID `2s7yy7`, and a navigation menu with options: **Browse**, **Action**, **Device Types**, and **Interfaces**. A blue **Add Device** button is located in the top right corner.

The main content area shows details for a specific device. At the top, there's a status bar with a dropdown arrow, a square icon, the text **projectid**, a green **Connected** status, the text **project**, **Device**, the timestamp **Nov 8, 2022 6:20 PM**, and a three-dot menu icon. Below this, there are tabs for **Identity**, **Device Information**, **Recent Events** (which is active), **State**, and **Logs**. A close button (X) is on the right of the tabs.

Under the **Recent Events** tab, a message states: "The recent events listed show the live stream of data that is coming and going from this device." Below this message is a table with the following data:

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"}		

At the bottom of the events section, a status indicator shows **1 Simulation running**. The Windows taskbar at the very bottom shows the date as 13-11-2022 and the time as 16:37.