

PUBLISH DATA TO THE IBM CLOUD

TEAM ID	PNT2022TMID14030
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 organization from drop down in the right top corner.

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

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 SPECIFICATIONS:

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 IoT Watson Platform interface. On the left is a dark sidebar with icons for navigation. The main header includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces', along with an 'Add Device' button. Below the header, a breadcrumb trail shows 'projectid' > 'Connected' > 'project' > 'Device', with the date 'Nov 8, 2022 6:20 PM' and a refresh icon. The 'Recent Events' tab is selected, showing a table of device events. The table has columns for 'Event', 'Value', 'Format', and 'Last Received'. The events are from an 'IoTSensor' and include JSON payloads for 'inst', 'dista', 'alert', and 'temp/humid'. A status message '1 Simulation running' is visible at the bottom right of the table area.

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