

SPRINT 2

Project Title	Industry-specific intelligent fire management system
Team ID	PNT2022TMID53674
Date	5 NOV 2022

Code for Simulation

```
#IBM Watson IOT Platform
```

```
#pip install wiotp-sdk
```

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "zbskhc",
```

```
        "typeId": "abcd",
```

```
        "deviceId": "12345"
```

```
    },
```

```
    "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:
```

```
    temp=random.randint(-20,125)
```

```
    hum=random.randint(0,100)
```

```
    flame=random.randint(0,50)
```

```
    gas=random.randint(0,100)
```

```
    myData={'temperature':temp, 'humidity':hum,'flame':flame,'gas':gas}
```

```
    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()
```

OUTPUT (IBM IOT Watson)

Connection Details

Q Search by Device ID

Device Simulator

Device ID

Status

Device Type

Class ID

Date Added

Descriptive Location

Added By

Device Class

▼

NT

Disconnected

RaspberryPi

Device

6 Nov 2022 10:41 AM

2019ec0593@svce.ac.in

→

Identity

Device Information

Recent Events

State

Logs

Device ID

NT

Device Type

RaspberryPi

Date Added

6 Nov 2022 10:41 AM

Added By

2019ec0593@svce.ac.in

Connection Status

Disconnected

Last Connected: 12 Nov 2022 11:38 AM

Client Address: 50.31.197.64 Insecure

Duration: a minute

Data Transferred: 1.8 KB

1 Simulation running

Device ID

Status

Device Type

Class ID

Date Added

Descriptive Location

Added By

Device Class

▼

NT

Disconnected

RaspberryPi

Device

6 Nov 2022 10:41 AM

2019ec0593@svce.ac.in

→ ...

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
Status	{"temp":99,"hum":65,"flame":31,"gas":88}	json	a few seconds ago
Status	{"temp":-1,"hum":11,"flame":20,"gas":85}	json	a few seconds ago
Status	{"temp":98,"hum":3,"flame":26,"gas":31}	json	a few seconds ago
Status	{"temp":125,"hum":26,"flame":23,"gas":28}	json	a few seconds ago
Status	{"temp":14,"hum":1,"flame":14,"gas":2}	json	a few seconds ago

1 Simulation running

