

PYTHON CODE (GAS, TEMPERATURE, HUMIDITY, PRESSURE)

Date	3 NOVEMBER 2022
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Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

PYTHON CODE

```
#IBM Watson IOT Platform
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "yf0dyy ",
        "typeId": "Faraaz ",
        "deviceId": "12345"
    },
    "auth": {
        "token": "VJTDPRX@f&4Vuox8ms "
    }
}

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:

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

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

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

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

```
    myData={'Hazardous Gas':gas, 'Temperature':temp, 'Humidity':hum,  
            'Pressure':pre }
```

```
    client.publishEvent(eventId="status", msgFormat="json",
```

```
    data=myData,qos=0, onPublish=None)
```

```
    print("Published data Successfully: %s",
```

```
    myData)    client.commandCallback    =
```

```
    myCommandCallbacktime.sleep(2)
```

```
client.disconnect()
```

OUTPUT:

The screenshot shows the EdgeX Foundry web interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various functions. The main content area displays a table of devices. The first device, 'Nagarajan', is highlighted. Below the device list, the 'Recent Events' tab is selected, showing a table of events. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. Five events are listed, all with a 'json' format and 'a few seconds ago' timestamp. The events contain JSON data for Hazardous Gas, Temperature, Humidity, and Pressure. At the bottom, a status bar indicates '1 Simulation running'.

Event	Value	Format	Last Received
event_1	{"Hazardous Gas":61,"Temperature":88,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":20,"Temperature":36,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":79,"Temperature":56,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":52,"Temperature":82,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":26,"Temperature":33,"Humidit...	json	a few seconds ago

1 Simulation running

Browse
Action
Device Types
Interfaces

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
event_1	{"Hazardous Gas":57,"Temperature":98,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":3,"Temperature":35,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":69,"Temperature":74,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":85,"Temperature":51,"Humidity":...}	json	a few seconds ago
event_1	{"Hazardous Gas":92,"Temperature":35,"Humidity":...}	json	a few seconds ago

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