

## SPRINT-3

### IoT Device – Watson communication

The data from IoT device should reach IBM Cloud

(The data stored in IBM Cloud should be properly integrated with Cloudant DB)

**Browse Devices**

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator: ☐

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	NodeMCU	Device	Nov 14, 2022 7:59 PM	

Items per page: 50 | 1–1 of 1 item

1 of 1 page

**Recent events**

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":11.03}	json	a minute ago

# NODE RED-CLOUDANTDB COMMUNICATION:

The screenshot displays the Node-RED web interface. The top section shows a flow diagram with nodes including 'inject', 'function', 'msg.payload', 'worldmap', 'geofence', 'rbe', 'switch', 'http request', 'show dialog', 'child', and 'msg.payload'. The bottom section shows a Python console output with the following code and results:

```
1 import json
2 import wiotp.sdk.device
3 import time
4
5 myConfig = {
6     "identity": {
7         "orgId": "hj5fmy",
8         "typeId": "NodeMCU",
9         "deviceId": "12345"
10    },
11    "auth": {
12        "token": "12345678"
13    }
14 }
15 client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
16 client.connect()
17
18 while True:
19     name= "Smartbridge"
20     #in area location
21
22     #latitude= 17.4225176
23     #longitude= 78.5458842
24
25     #out area location
26
27     latitude= 17.4219272
28     longitude= 78.5488783
29     myData={'name': name, 'lat':latitude, 'lon':longitude}
30     client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
31     print("Data published to IBM IoT platform: ",myData)
32     time.sleep(5)
33
34 client.disconnect()
35
36
```

The console output shows a series of messages: "Data published to IBM IoT platform:". Below the console, the "Databases" section is visible, showing a table of databases:

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	[Icons]
noderedwjldy20221105	37.4 KB	4	No	[Icons]
sample	59.4 KB	351	No	[Icons]
sensor_data	15.7 KB	90	No	[Icons]

At the bottom, it says "Showing 1-4 of 4 databases. Databases per page 20".

All Documents
+

Query

Permissions

Changes

Design Documents

+

Table
 Metadata
 JSON

[Create Document](#)

	id	key	value
<input type="checkbox"/>	0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{ "rev": "1-cde2dd17c519394df..." }
<input type="checkbox"/>	0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{ "rev": "1-d26c5b40891e136c..." }
<input type="checkbox"/>	0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{ "rev": "1-cde2dd17c519394df..." }
<input type="checkbox"/>	0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{ "rev": "1-f96eb0460bc16cfab0..." }
<input type="checkbox"/>	1a921f21cbe229b86f599acb45...	1a921f21cbe229b86f599acb45...	{ "rev": "1-7226f08794cd47b7c..." }
<input type="checkbox"/>	1a921f21cbe229b86f599acb45...	1a921f21cbe229b86f599acb45...	{ "rev": "1-1bbdd9a985bd56cf9..." }
<input type="checkbox"/>	20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{ "rev": "1-7226f08794cd47b7c..." }
<input type="checkbox"/>	20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{ "rev": "1-3ad288ecd57f039e..." }
<input type="checkbox"/>	20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{ "rev": "1-1bbdd9a985bd56cf9..." }
<input type="checkbox"/>	298ed6fthr9h3b815f5ac7c0d1e...	298ed6fthr9h3b815f5ac7c0d1e...	{ "rev": "1-a07240ffe5307a1b9..." }

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