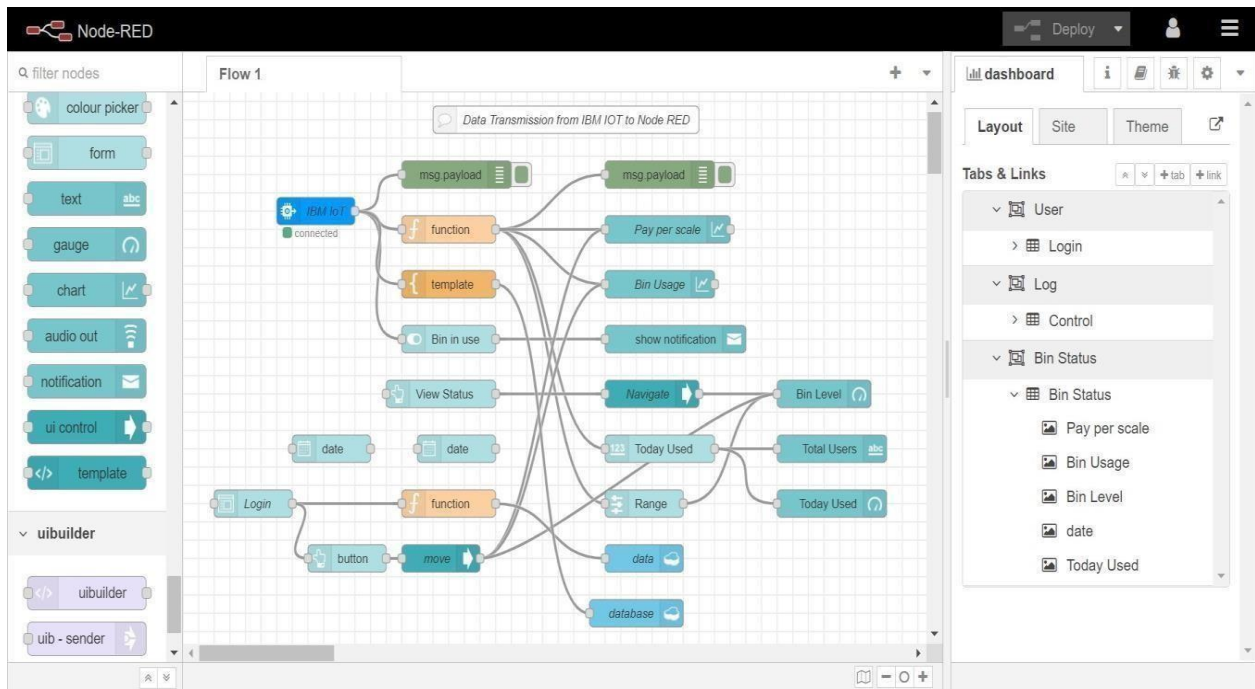


## Delivery of Sprint – 4

Date	10 November 2022
Team ID	PNT2022TMID22857
Project Name	Smart Waste Management for Metropolitan Cities

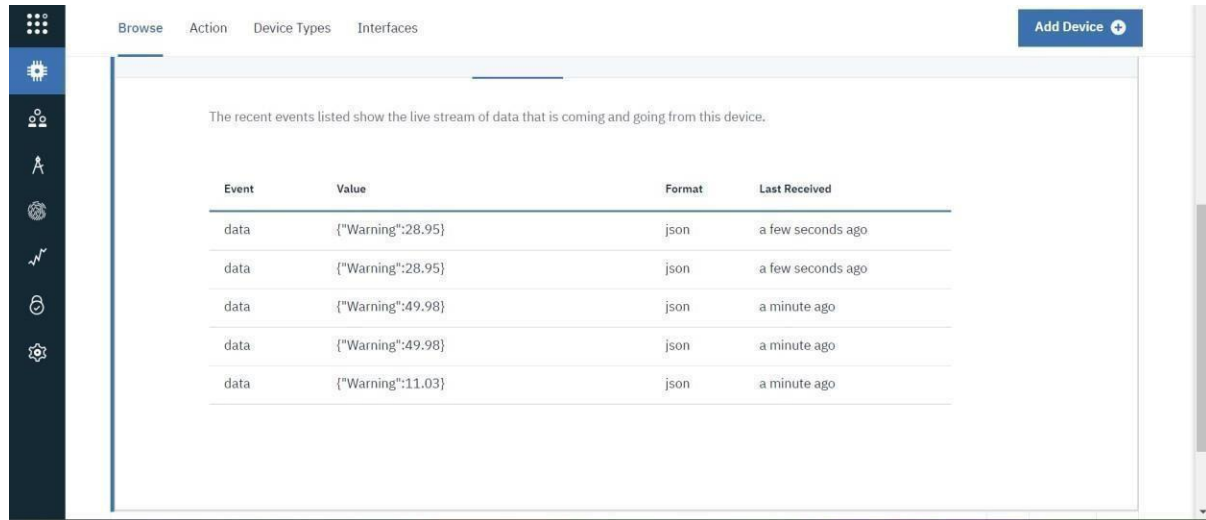
1. Node-RED Connection setup for data transmission from IBM Watson IOT platform to Node-RED dashboard.

77





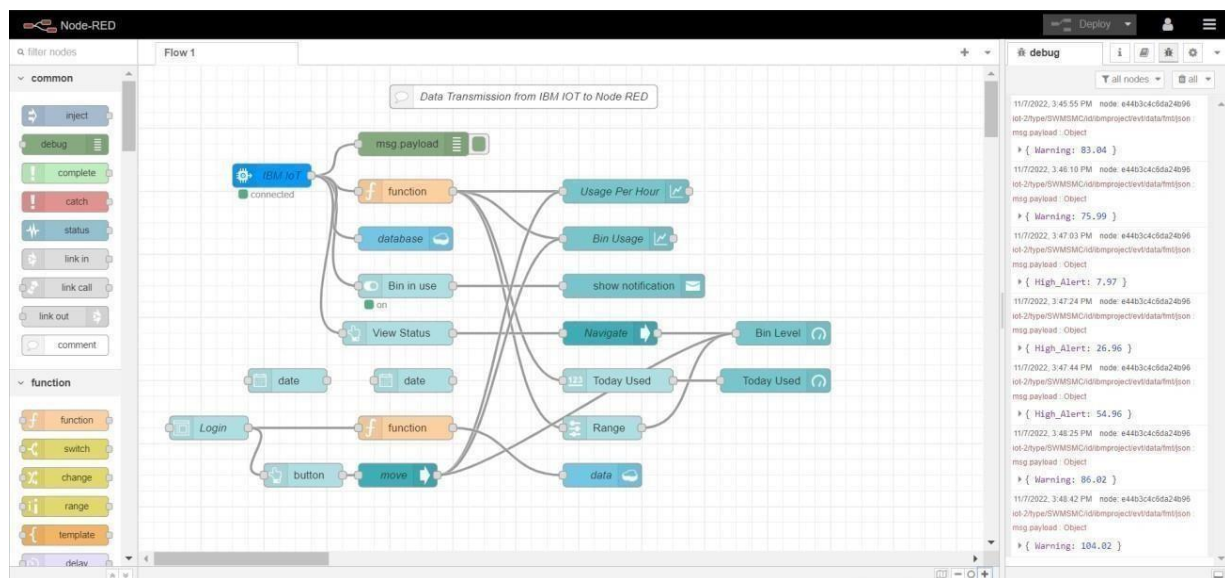
### 3. Data transfer to Watson IOT platform.



The screenshot shows the IBM Watson IoT Platform interface. At the top, there are tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A blue 'Add Device' button is in the top right. Below the tabs, 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 columns: 'Event', 'Value', 'Format', and 'Last Received'.

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

### 4. Data transfer from IBM Watson IOT platform and wokwi to Node red.



## 5 . Storing database in IBM cloudant DB.

The screenshot shows the IBM Cloudant Databases interface. At the top, there's a header with the title "Databases", a "Database name" dropdown, a "Create Database" button, and icons for JSON, a book, and a bell. Below the header, there's a section titled "Your Databases" containing a table with the following data:

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	[Icons for edit, lock, delete]
noderedwjlidy20221105	37.4 KB	4	No	[Icons for edit, lock, delete]
sample	59.4 KB	351	No	[Icons for edit, lock, delete]
sensor_data	15.7 KB	90	No	[Icons for edit, lock, delete]

At the bottom of the interface, it says "Showing 1-4 of 4 databases." and "Databases per page: 20". There's also a "Log Out" button in the bottom left corner.

The screenshot shows the IBM Cloudant interface for the "sensor\_data" database. The left sidebar has a "sensor\_data" header and a menu with "All Documents", "Query", "Permissions", "Changes", and "Design Documents". The main area shows a list of documents in a table format. The table has three columns: "id", "key", and "value". The "value" column contains JSON documents. The first document is:

```
{ "rev": "1-cde2dd17c519394df..." }
```

The second document is:

```
{ "rev": "1-d26c5b40891e13c6c..." }
```

The third document is:

```
{ "rev": "1-cde2dd17c519394df..." }
```

The fourth document is:

```
{ "rev": "1-f96eb0460bc16cfab0..." }
```

The fifth document is:

```
{ "rev": "1-7226f08794cd47b7c..." }
```

The sixth document is:

```
{ "rev": "1-1bbdd9a985bd56cf9..." }
```

The seventh document is:

```
{ "rev": "1-7226f08794cd47b7c..." }
```

The eighth document is:

```
{ "rev": "1-3ad288ecad57f039e..." }
```

The ninth document is:

```
{ "rev": "1-1bbdd9a985bd56cf9..." }
```

The tenth document is:

```
{ "rev": "1-4e7240f6e5307a1h9..." }
```

At the bottom, it says "Showing document 1 - 20." and "Documents per page: 20". There's also a "Log Out" button in the bottom left corner.

## 6. Data is stored in JSON format

↔

sensor\_data > 0198213c192cb2c244cc2433f1802b91

{ } JSON

Save Changes Cancel

Upload Attachment Clone Document Delete

1- {

2    "\_id": "0198213c192cb2c244cc2433f1802b91",

3    "\_rev": "1-cde2dd17c519394dfcb774738c495f8b",

4    "topic": "iot-2/type/SWMSMC/id/ibmproject/evt/data/fmt/json",

5    "payload": {

6      "Warning!": "244.97left"

7    },

8    "deviceId": "ibmproject",

9    "deviceType": "SWMSMC",

10   "eventType": "data",

11   "format": "json"

12 }

Log Out

## 7. Web UI

Log

Log

Bin Status

Control

Bin in use

Range

Today Used

date

VIEW STATUS

Log

Control

Bin in use

Range

Today Used

date

VIEW STATUS

