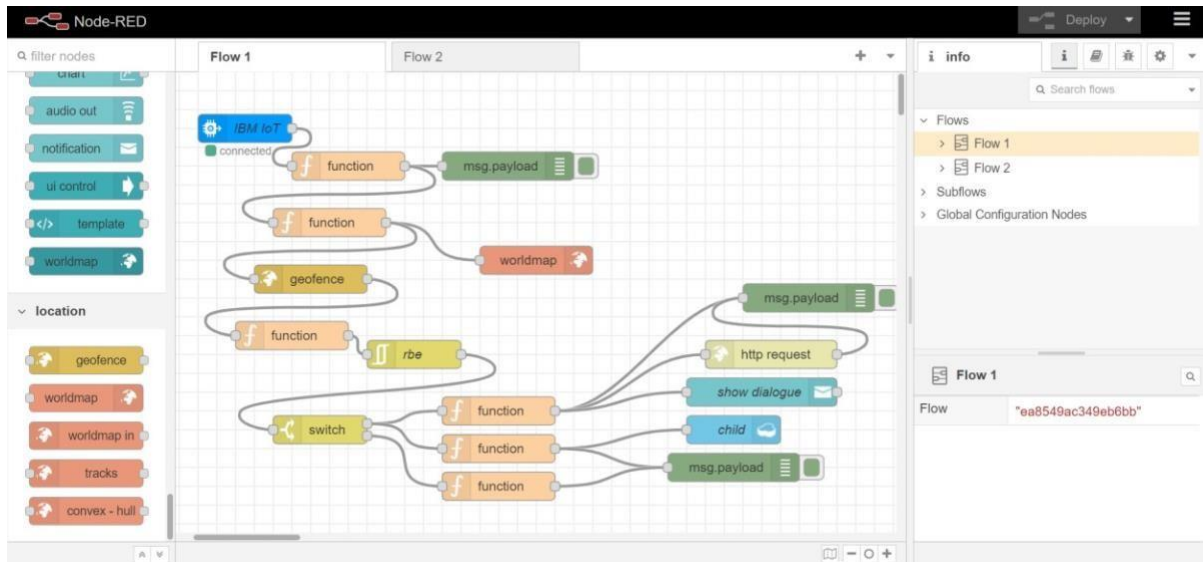


# Sprint 3

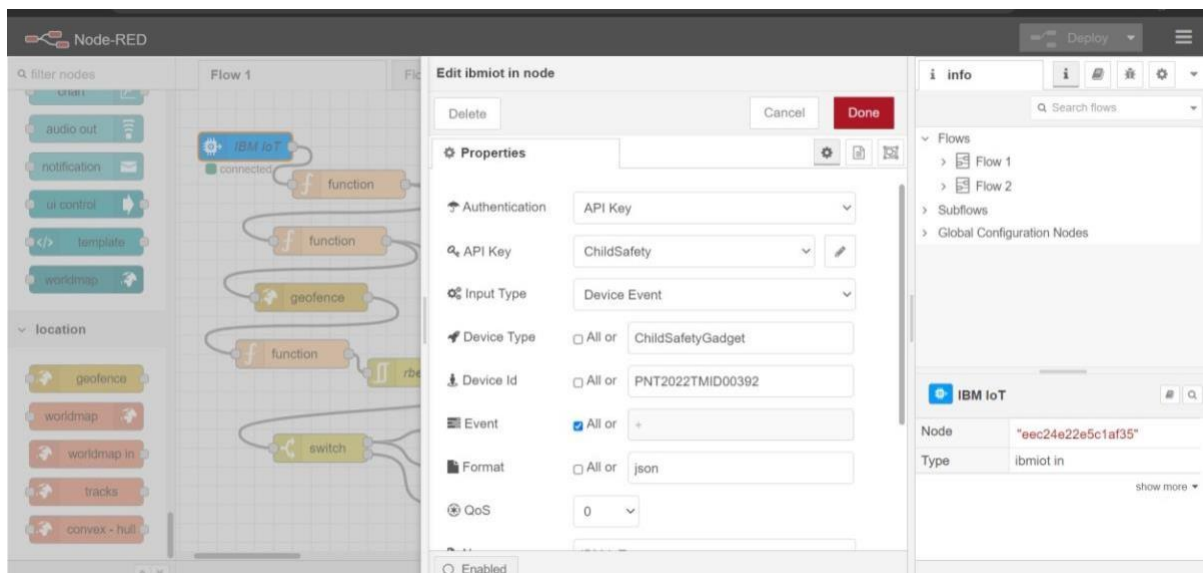
Team ID :PNT2022TMID38195

## NODE – RED

### Connections



### Codes in Node's



Node-RED interface showing the "Edit function node" dialog. The node is named "function" and is currently enabled. The code in the "On Message" tab is as follows:

```
1 var name = msg.payload.name
2 var lat = msg.payload.lat
3 var lon = msg.payload.lon
4 global.set('latitude', lat)
5 global.set('longitude', lon)
6 global.set('name', name)
7 return msg;
```

The right sidebar shows the "info" panel with the node ID "76ec77ccd270c2c7" and type "function".

Node-RED interface showing the "Edit function node" dialog. The node is named "function" and is currently enabled. The code in the "On Message" tab is as follows:

```
1 msg.payload={
2   'name':global.get('name'),
3   'lat':global.get('latitude'),
4   'lon': global.get('longitude')
5 }
6 return msg;
```

The right sidebar shows the "info" panel with the node ID "77b707bf262aa6f4" and type "function".

Node-RED interface showing the "Edit geofence node" dialog. The node is named "geofence" and is currently enabled. The map shows a geofence area (purple circle) centered on a location. The right sidebar shows the "info" panel with the node ID "ee4695a46b4858f1" and type "geofence".

Node-RED interface showing a flow editor and the configuration for a **worldmap** node.

**Flow 1:** The flow starts with an **IBM IoT** node connected to a **connected** node, followed by a **function** node, another **function** node, a **geofence** node, a third **function** node, and finally a **switch** node.

**Edit worldmap node configuration:**

- Start:** Latitude: 17.4219272, Longitude: 78.5400783, Zoom: 16
- Map list:** 1 selected
- Base map:** ESRI Satellite
- Overlays:** 5 selected
- Cluster when:** zoom level is less than 0 (0, off - 19)
- Max age:** Remove markers after 600 seconds
- User menu:** Show
- Layer menu:** Hide
- Lock map:** False
- Lock zoom:** False
- Enabled:** ☐

**Info panel:**

- Flows:** Flow 1, Flow 2, Subflows, Global Configuration Nodes
- worldmap node:** Node ID: "5ed11e914b5614ea", Type: worldmap
- Description:** The map can be found [here](#).

Node-RED interface showing a flow editor and the configuration for a **switch** node.

**Flow 1:** The flow starts with an **IBM IoT** node connected to a **connected** node, followed by a **function** node, another **function** node, a **geofence** node, a third **function** node, and finally a **switch** node.

**Edit switch node configuration:**

- Name:** Name
- Property:** msg.payload
- Rules:**
  - is false → 1
  - is true → 2
- add:** + add
- checking all rules:** ☐
- recreate message sequences:** ☐
- Enabled:** ☐

**Info panel:**

- Flows:** Flow 1, Flow 2, Subflows, Global Configuration Nodes
- switch node:** Node ID: "16b63596382b4cc6", Type: switch
- Description:** show more

Node-RED

Deploy

filter nodes

Flow 1

IBM IoT

connected

audio out

notification

ui control

template

worldmap

location

geofence

worldmap

worldmap in

tracks

convex-hull

Edit function node

Delete

Cancel

Done

Properties

Name

Setup

On Start

On Message

On Stop

```
1 msg.payload=msg.location.inarea
2 return msg;
```

info

Search flows

Flows

- Flow 1
- Flow 2
- Subflows
- Global Configuration Nodes

function: 3585a4ac8098085f

Node "3585a4ac8098085f"

Type function

show more

Enabled

Node-RED

Deploy

filter nodes

Flow 1

IBM IoT

connected

audio out

notification

ui control

template

worldmap

location

geofence

worldmap

worldmap in

tracks

convex-hull

Edit function node

Delete

Cancel

Done

Properties

Name

Setup

On Start

On Message

On Stop

```
1 var d= new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5 msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11 };
12 return msg;
```

info

Search flows

Flows

- Flow 1
- Flow 2
- Subflows
- Global Configuration Nodes

function: 322663c3205cc798

Node "322663c3205cc798"

Type function

show more

Enabled

Node-RED

filter nodes

Flow 1

IBM IoT

connected

audio out

notification

ui control

template

worldmap

location

geofence

worldmap in

worldmap in

tracks

convex - hull

Edit function node

Delete Cancel Done

Properties

Name

Setup On Start On Message On Stop

```
1 var d= new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5- msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11- };
12 return msg;
```

Enabled

info

Search flows

Flows

- Flow 1
- Flow 2
- Subflows
- Global Configuration Nodes

function: dfef78abe1ae2fd4

Node "dfef78abe1ae2fd4"

Type function

show more

Node-RED

filter nodes

Flow 1

IBM IoT

connected

audio out

notification

ui control

template

worldmap

location

geofence

worldmap in

worldmap in

tracks

convex - hull

Edit function node

Delete Cancel Done

Properties

Name

Setup On Start On Message On Stop

```
1 var d= new Date();
2 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
3 var offset = 5.5; // This is the offset for UTC+3, in your case (UTC+1
4 newDate = new Date(utc + (3600000*offset));
5- msg.payload = {
6   "message": "Entry",
7   "Time": newDate.toLocaleString(),
8   "name": global.get('name'),
9   "lat": global.get('latitude'),
10  "lon": global.get('longitude')
11- };
12 return msg;
```

Enabled

info

Search flows

Flows

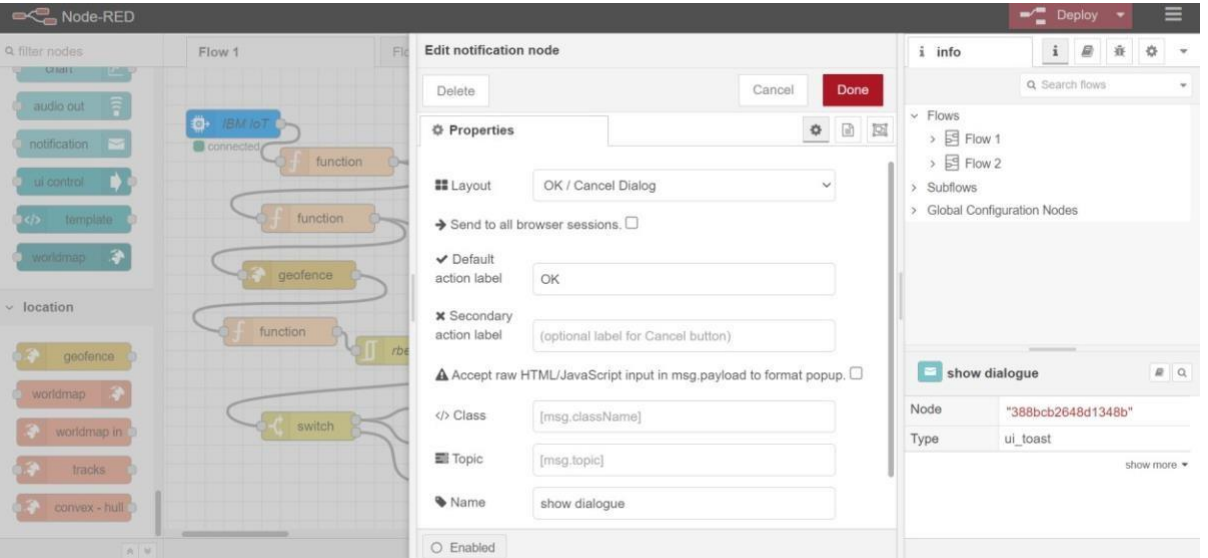
- Flow 1
- Flow 2
- Subflows
- Global Configuration Nodes

function: 36df960d0bd4f874

Node "36df960d0bd4f874"

Type function

show more





Node-RED

Flow 1

filter nodes

- target
- audio out
- notification
- ui control
- template
- worldmap

location

- geofence
- worldmap
- worldmap in
- tracks
- convex - hull

connected

function

geofence

function

switch

child

cloudant out node

Delete Cancel Done

Properties

Service Cloudant-pn-99850

Database noderedapqzh20221108

Operation insert

☐ Only store msg.payload object?

Name child

Enabled

info

Search flows

Flows

- Flow 1
- Flow 2
- Subflows
- Global Configuration Nodes

child

Node "7f199a311bbfac36"

Type cloudant out

show more