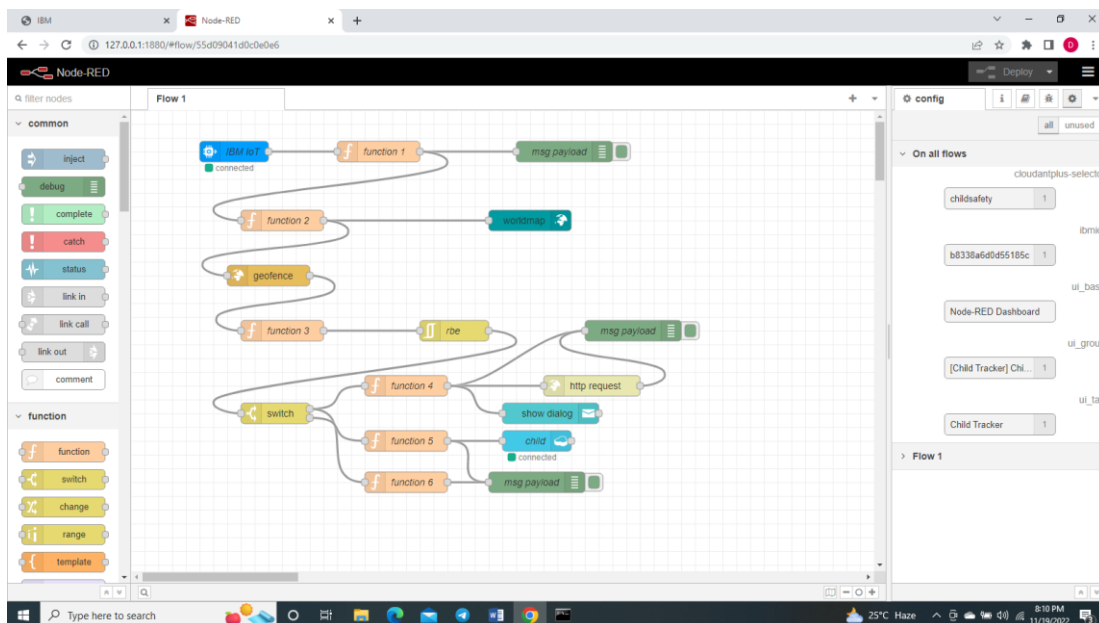


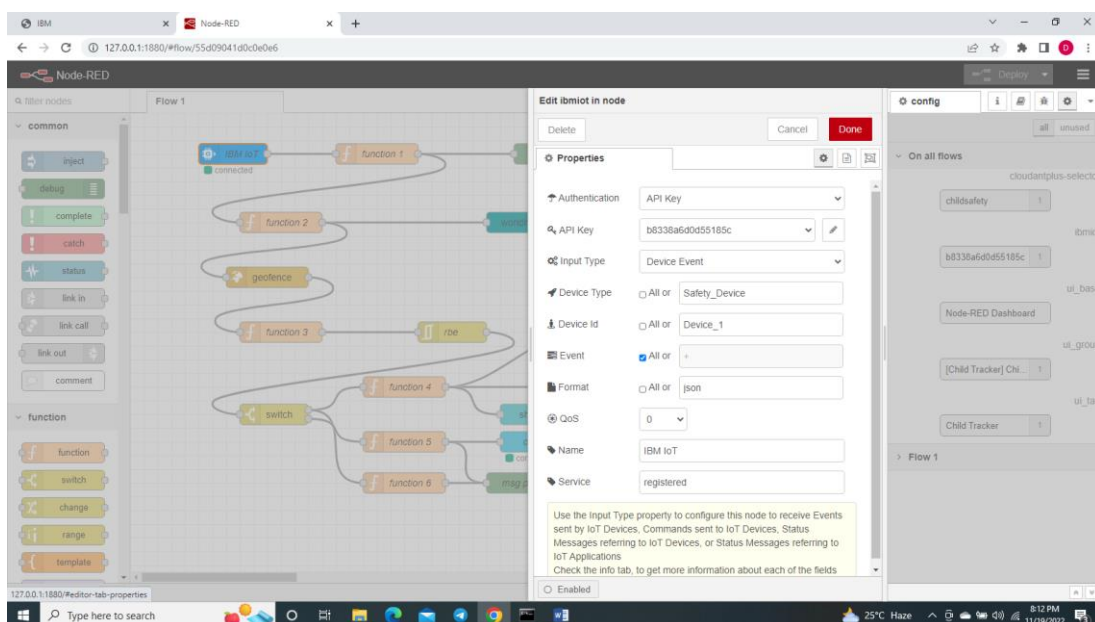
Develop A Web Application Using Node-RED Service

Date	16 October 2022
Team ID	PNT2022TMID46119
Project Name	IOT BASED SAFETY GADGETS FOR CHILD SAFETY MONITORING AND NOTIFICATIONS

Create Web Application in Node red



IBM IoT Device



Function 1

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow with an 'IBM IoT' node connected to a series of function nodes (function 1 through function 6). The 'Edit function node' panel is open for 'function 1'. The 'Properties' section shows the name 'function 1'. The 'Setup' tab is selected, and the 'On Message' trigger is chosen. The JavaScript code in the editor 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 configuration panel with various settings and a list of flows.

Msg Payload

The screenshot shows the Node-RED web interface. The main workspace displays a flow with an 'IBM IoT' node connected to a series of function nodes (function 1 through function 6). The 'Edit debug node' panel is open for 'msg payload'. The 'Properties' section shows the output 'msg: payload' and the 'To' field is set to 'debug window'. The 'Name' field is set to 'msg payload'. The right sidebar shows the configuration panel with various settings and a list of flows.

Function 2

The screenshot shows the Node-RED web interface in a browser window. The main workspace displays a flow with several function nodes. The 'Edit function node' panel is open for 'function 2'. The 'Properties' section shows the name 'function 2'. The 'Setup' tab is selected, and the 'On Message' trigger is chosen. The JavaScript code in the editor is as follows:

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

The right sidebar shows the 'config' panel with a list of nodes used in the flow, including 'cloudantplus-selector', 'chidsafety', 'ibmiot', 'b8338a6d0d55185c', 'ui_base', 'Node-RED Dashboard', 'ui_group', '[Child Tracker] Chi...', 'ui_tab', and 'Child Tracker'.

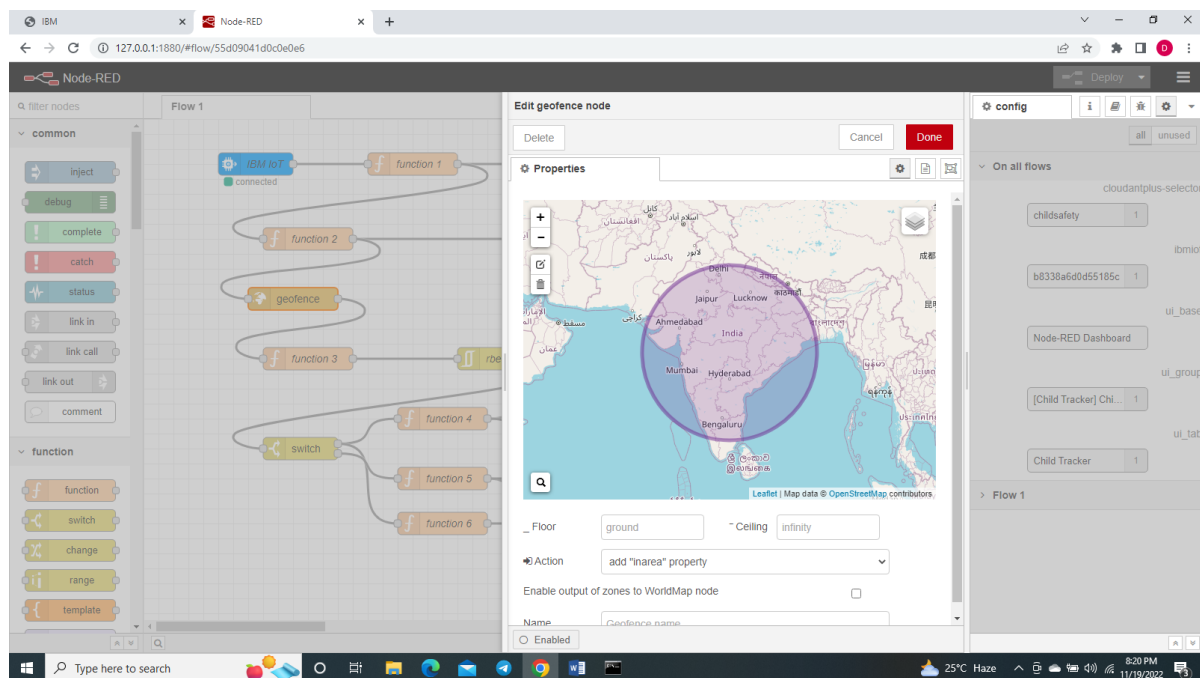
Worldmap

The screenshot shows the Node-RED web interface with the 'Edit worldmap node' panel open. The 'Properties' section is configured as follows:

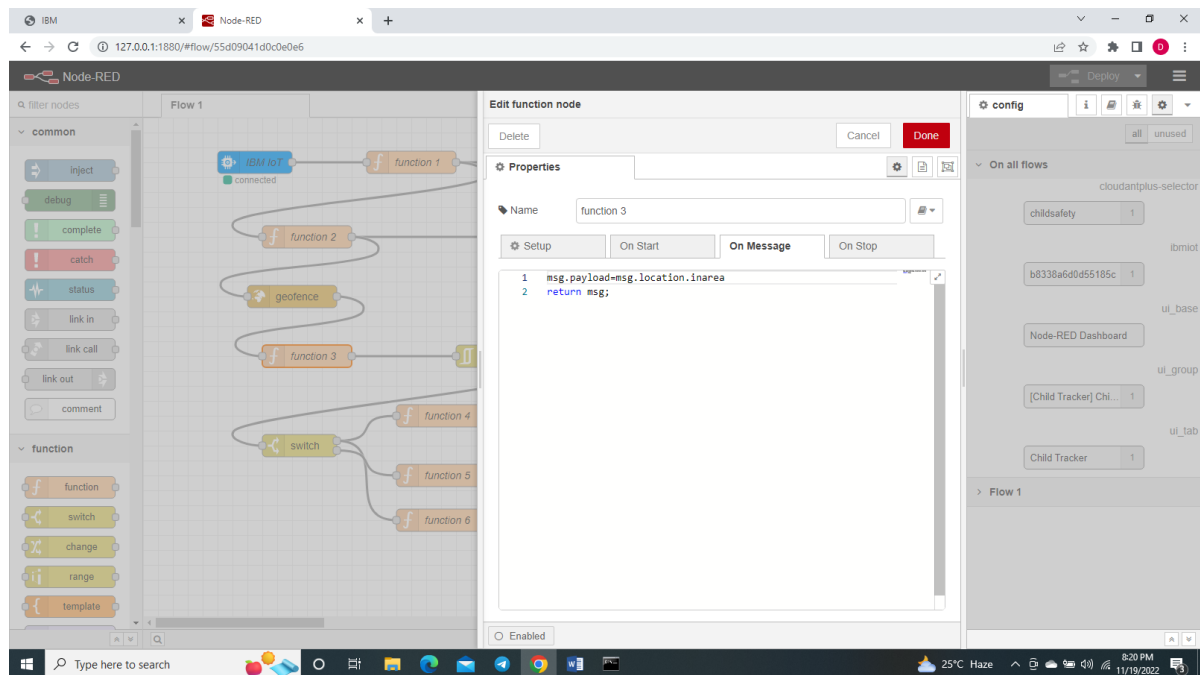
- Group: [Child Tracker] Child safety Map
- Size: auto
- Start: Latitude 20.5937, Longitude 78.9629, Zoom 16
- Map list: 1 selected
- Base map: ESRI Satellite
- Overlays: 5 selected
- Cluster when: zoom level is less than 15
- Max age: Remove markers after 600 seconds
- User menu: Show
- Layer menu: Show
- Lock map: False
- Lock zoom: False
- Auto-pan: Enable
- Right click: Enable
- Co-ordinates: Degrees
- Graticule: Visible

The right sidebar shows the 'config' panel with a list of nodes used in the flow, including 'cloudantplus-selector', 'chidsafety', 'ibmiot', 'b8338a6d0d55185c', 'ui_base', 'Node-RED Dashboard', 'ui_group', '[Child Tracker] Chi...', 'ui_tab', and 'Child Tracker'.

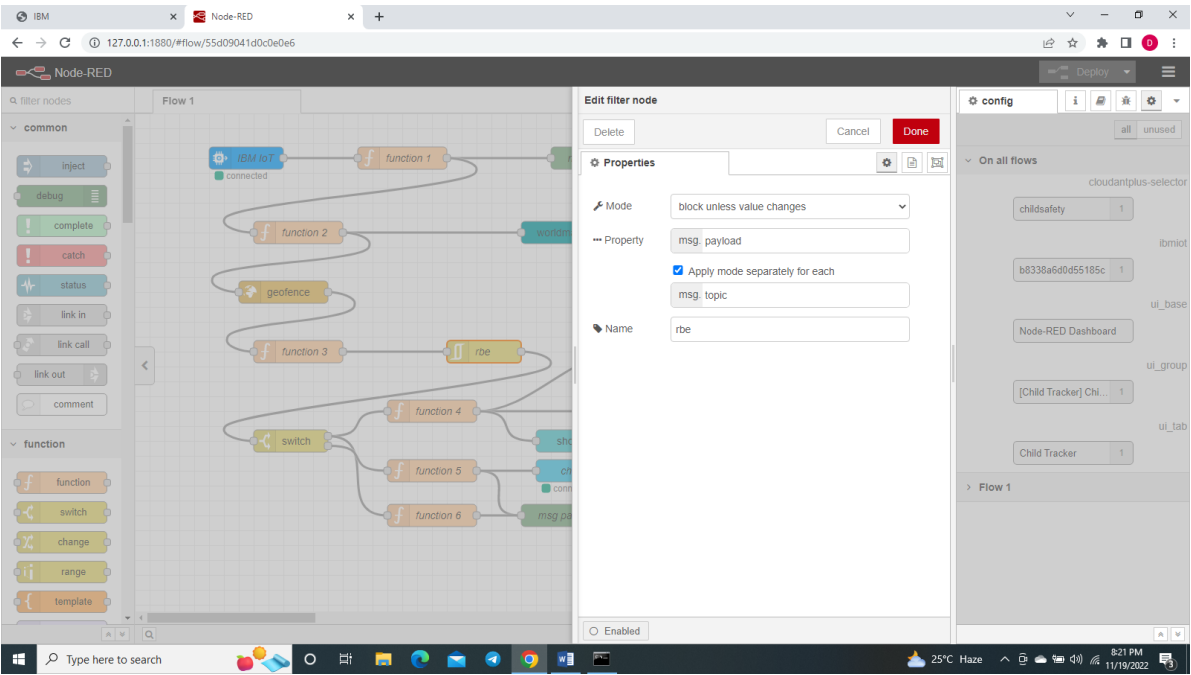
Geofence



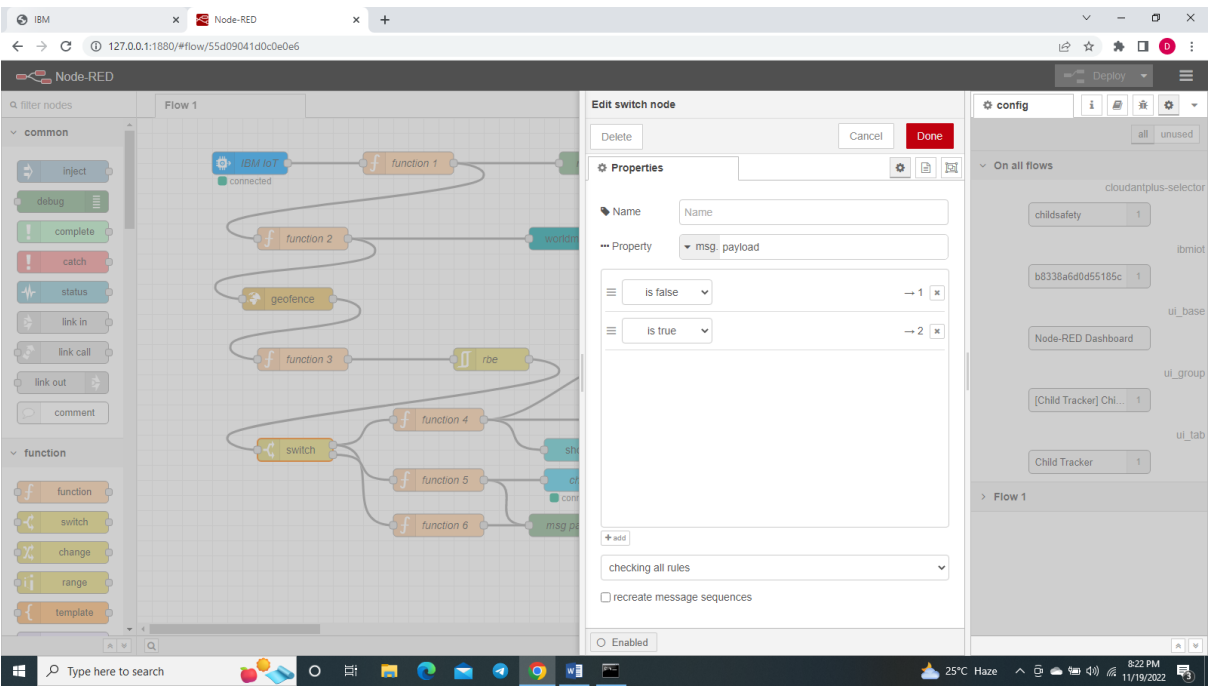
Function 3



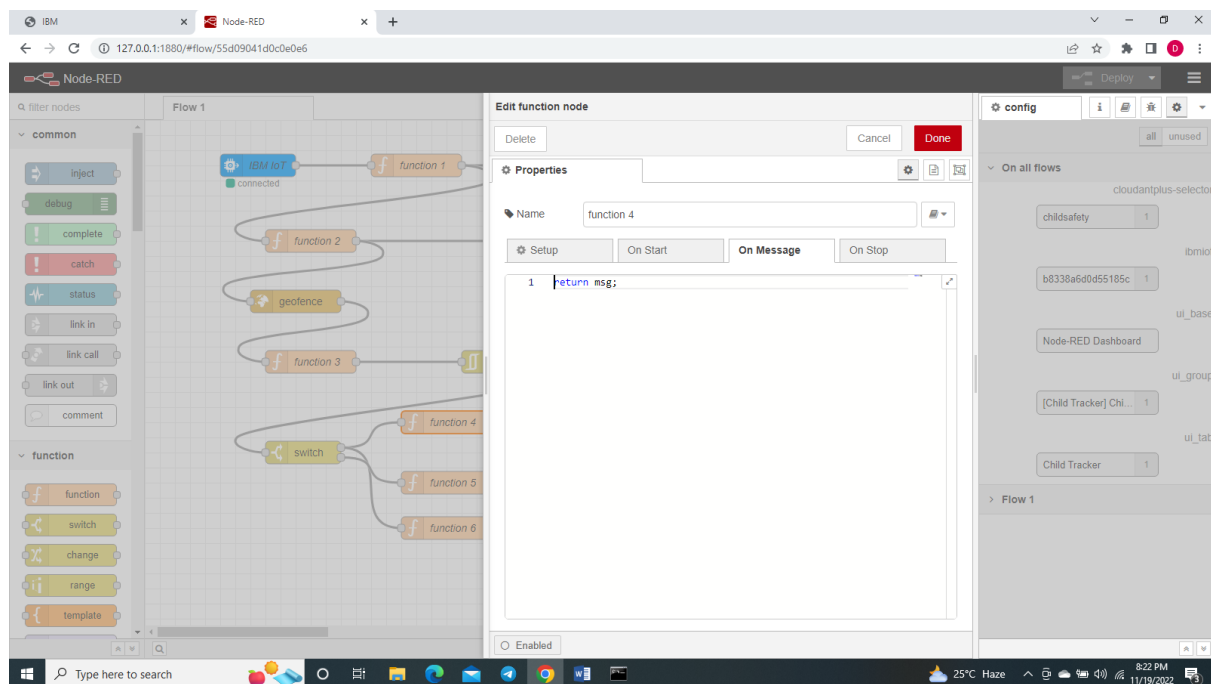
Rbe



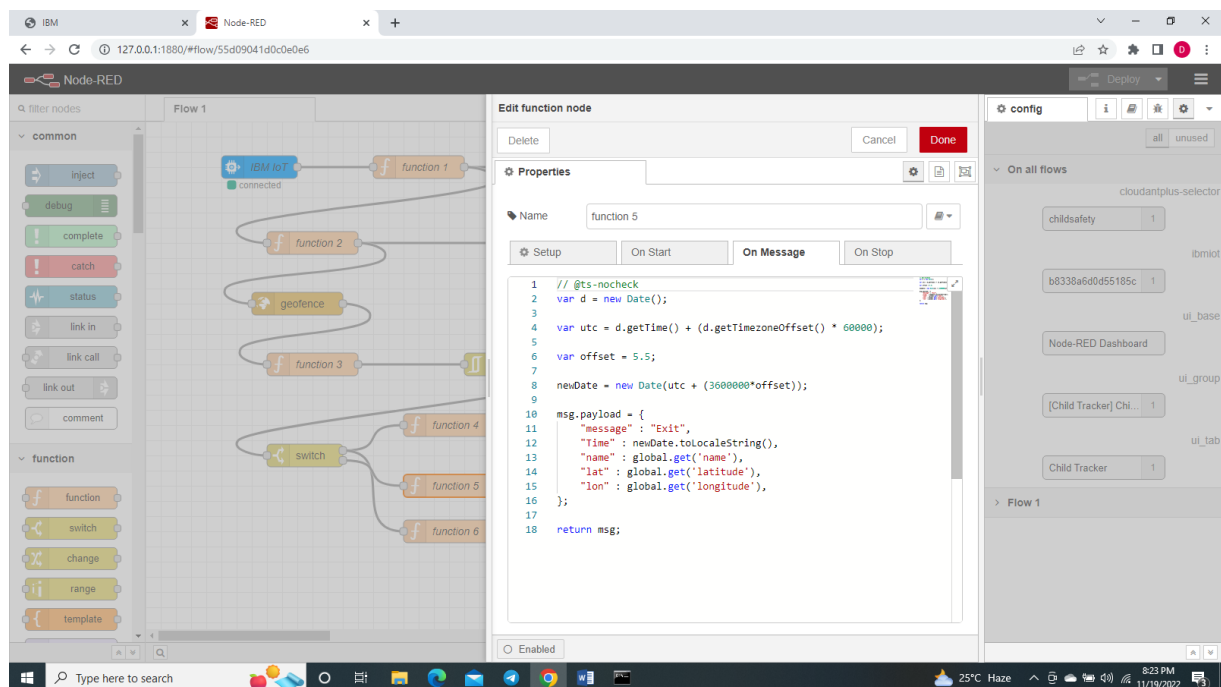
Switch



Function 4



Function 5



Function 6

The screenshot shows the Node-RED web interface in a browser window. The main workspace displays a flow named 'Flow 1' with several nodes: 'IBM IoT' (connected), 'function 1', 'function 2', 'geofence', 'function 3', 'function 4', 'function 5', 'function 6', and a 'switch' node. The 'Edit function node' panel is open for 'function 6'. The 'Properties' tab shows the name 'function 6'. The 'On Message' tab contains the following JavaScript code:

```
1 // @ts-nocheck
2 var d = new Date();
3
4 var utc = d.getTime() + (d.getTimezoneOffset() * 60000);
5
6 var offset = 5.5;
7
8 newDate = new Date(utc + (3600000 * offset));
9
10 msg.payload = {
11   "message": "Entry",
12   "Time": newDate.toLocaleString(),
13   "name": global.get('name'),
14   "lat": global.get('latitude'),
15   "lon": global.get('longitude'),
16 };
17
18 return msg;
```

The right sidebar shows the 'config' panel with a list of nodes used in the flow, including 'cloudantplus-selector', 'chilidsafety', 'ibmiot', 'b8338a6d0d55185c', 'ui_base', 'Node-RED Dashboard', 'ui_group', '[Child Tracker] Chi...', 'ui_tab', and 'Child Tracker'.

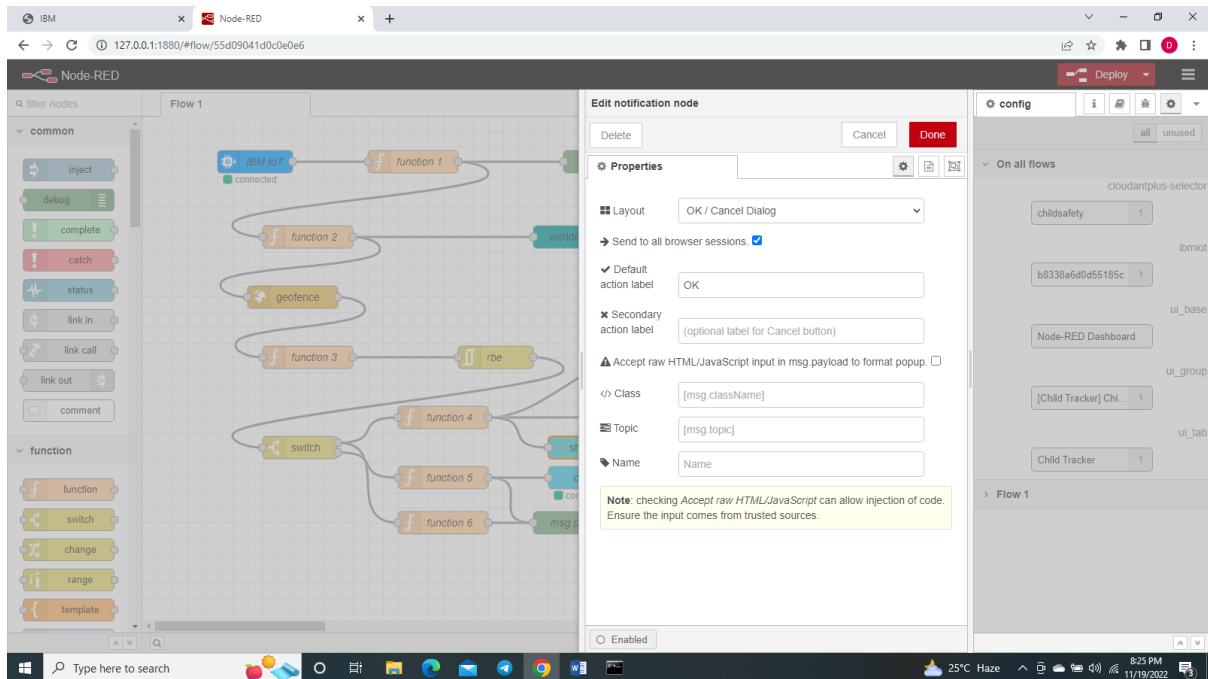
HTTP request

The screenshot shows the Node-RED web interface in a browser window. The main workspace displays the same flow as the previous image. The 'Edit http request node' panel is open. The 'Properties' tab shows the following configuration:

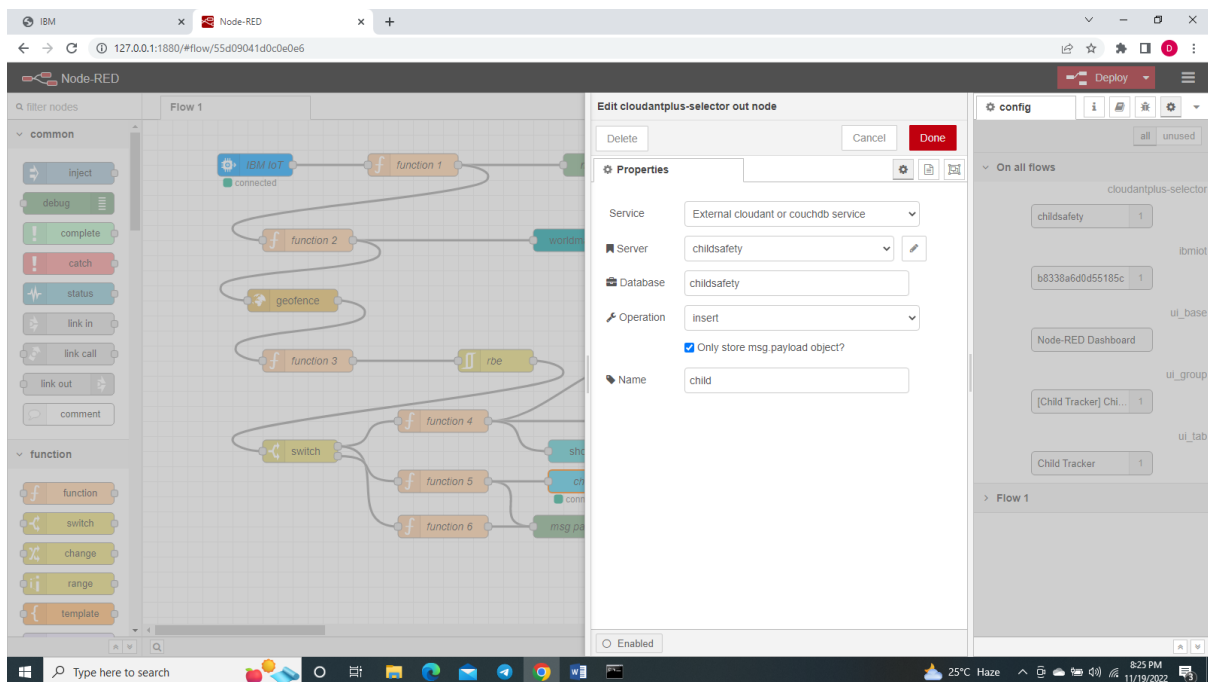
- Method: GET
- URL: <https://www.fast2sms.com/dev/bulkV2?authorization>
- Payload: Ignore
- ☐ Enable secure (SSL/TLS) connection
- ☐ Use authentication
- ☐ Enable connection keep-alive
- ☐ Use proxy
- ☐ Only send non-2xx responses to Catch node
- ☐ Disable strict HTTP parsing
- Return: a UTF-8 string
- Headers: (empty)

The right sidebar shows the 'config' panel with a list of nodes used in the flow, including 'cloudantplus-selector', 'chilidsafety', 'ibmiot', 'b8338a6d0d55185c', 'ui_base', 'Node-RED Dashboard', 'ui_group', '[Child Tracker] Chi...', 'ui_tab', and 'Child Tracker'.

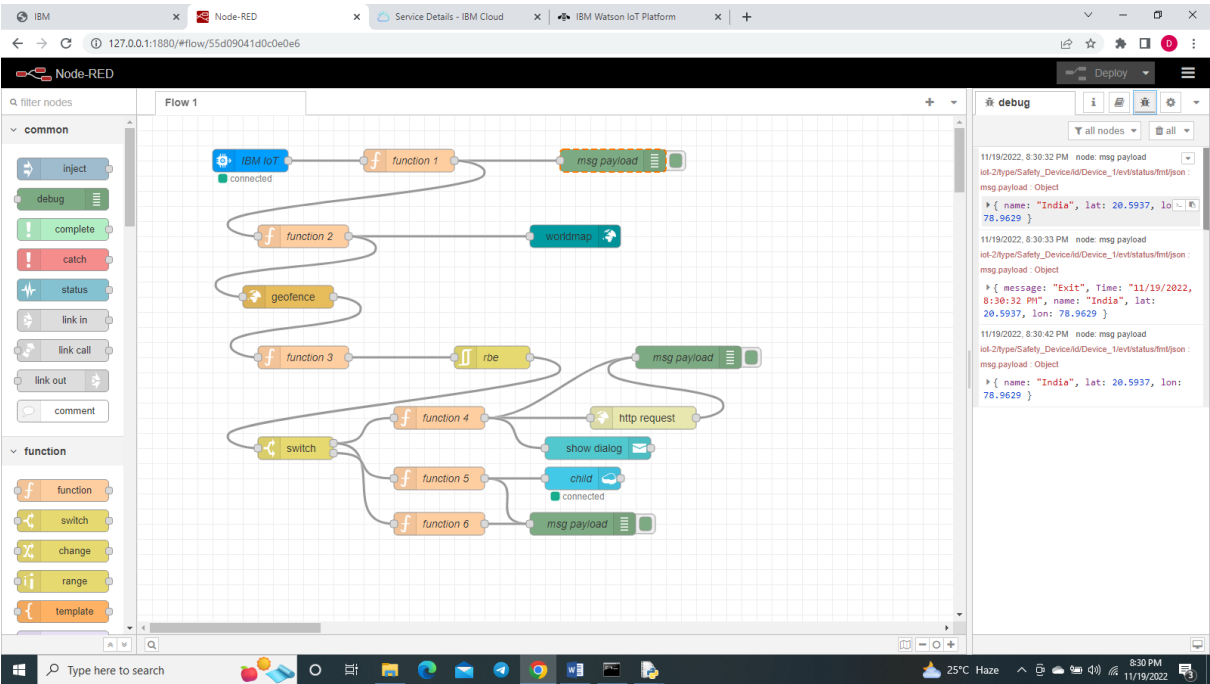
Show Dialog



Child



Node red output



Child Tracking

