

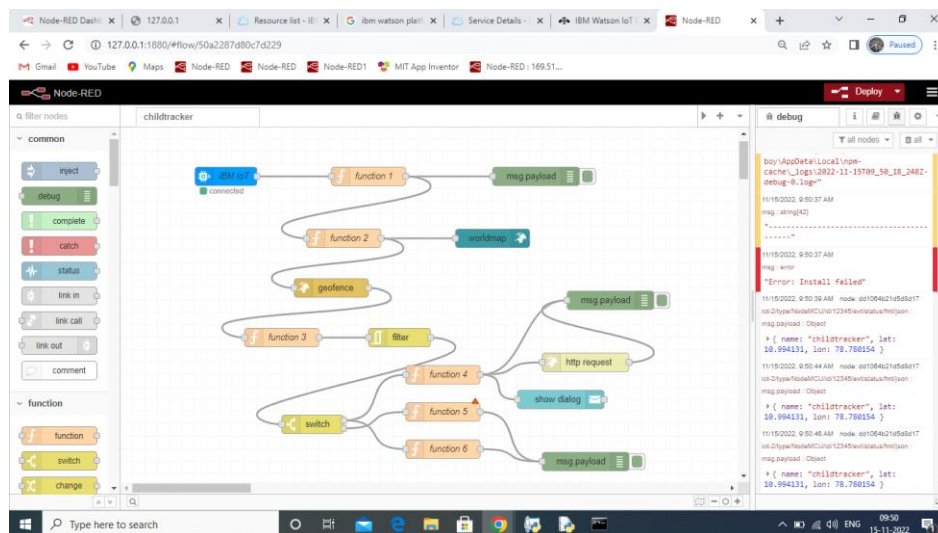
Project Development – Delivery plan sprint-3

IoT Based Safety Gadget for Child Safety Monitoring & Notification

TEAM ID:PNT2022TMID45172

Creating Node-Red service and connecting with IBM cloud

Creating Node-Red service:



Codes in each Node:

Node-RED Dashboard: 127.0.0.1:1880/#flow/50a2287d80c7d229

Node-RED

childtracker

common

function

function 1

function 2

function 3

filter

switch

debug

11/15/2022, 9:51:09 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:09 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:10 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:12 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:17 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:43 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

Edit ibmiot in node

Properties

Authentication: API Key

API Key: e73c4c12dde21fd2

Input Type: Device Event

Device Type: All or +

Device Id: All or device id e.g. ab12cd231a21

Event: All or +

Format: All or json

QoS: 0

Name: IBM IoT

Service: registered

Enabled

Node-RED Dashboard: 127.0.0.1:1880/#flow/50a2287d80c7d229

Node-RED

childtracker

common

function

function 1

function 2

function 3

filter

switch

debug

11/15/2022, 9:51:28 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:31 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:38 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:38 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:51:43 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

Edit function node

Properties

Name: function 1

Setup

On Start

On Message

On Stop

```
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;
```

Node-RED Dashboard: 127.0.0.1:1880/#flow/50a2287d80c7d229

Node-RED

childtracker

common

function

function 1

function 2

function 3

filter

switch

debug

11/15/2022, 9:56:12 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:56:17 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:56:23 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:56:24 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:56:29 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

11/15/2022, 9:56:29 AM node: de1094b21d5d8d17
icid-2typeNodeMCUId/12345ev/status/fmt/json :
msg.payload: Object
{ name: "childtracker", lat: 10.994131, lon: 78.780154 }

Edit filter node

Properties

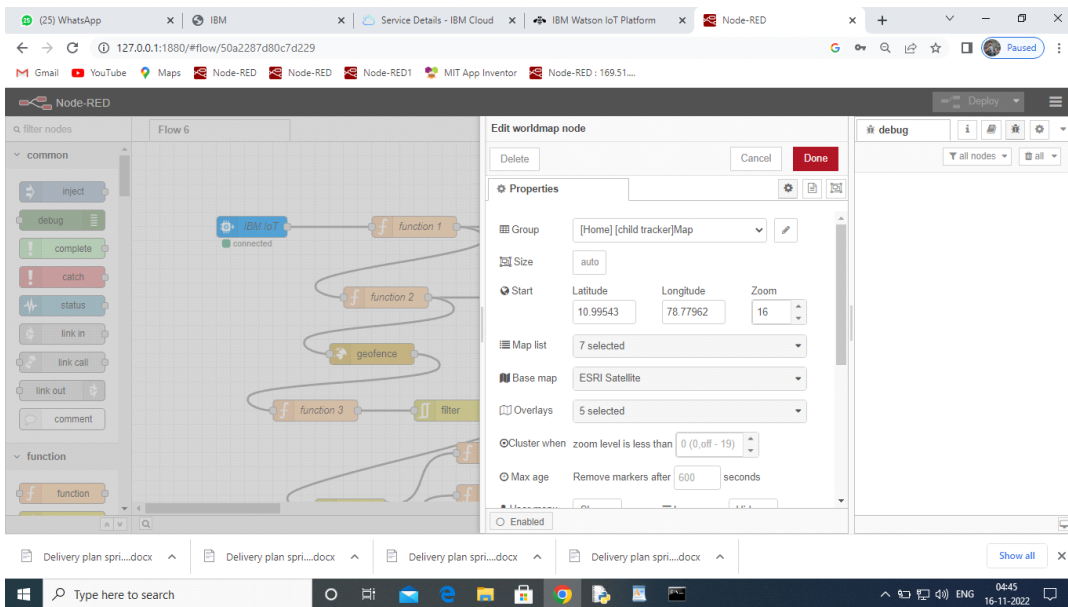
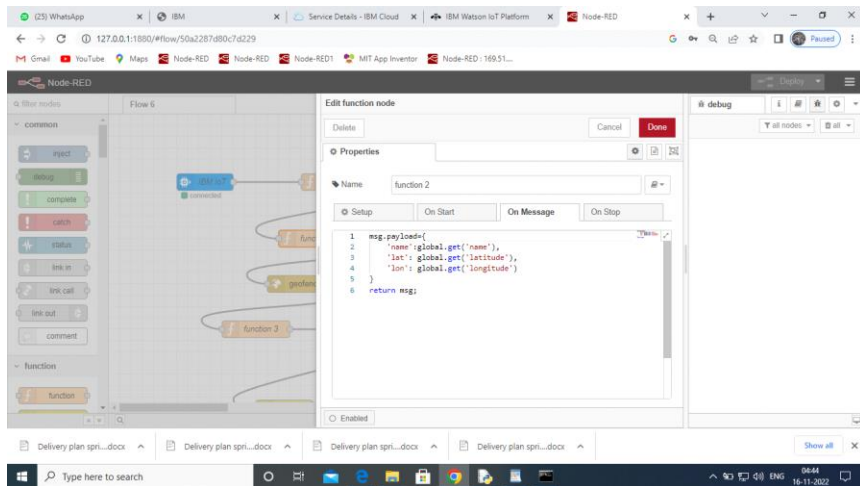
Mode: block unless value changes

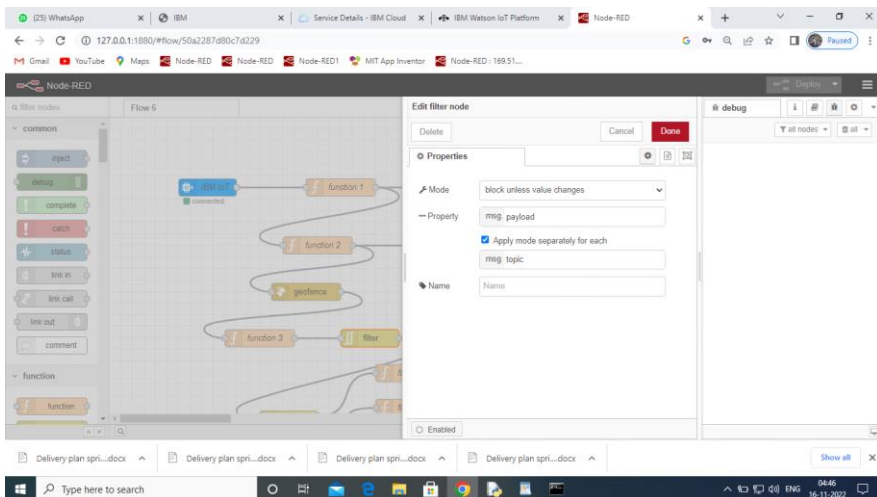
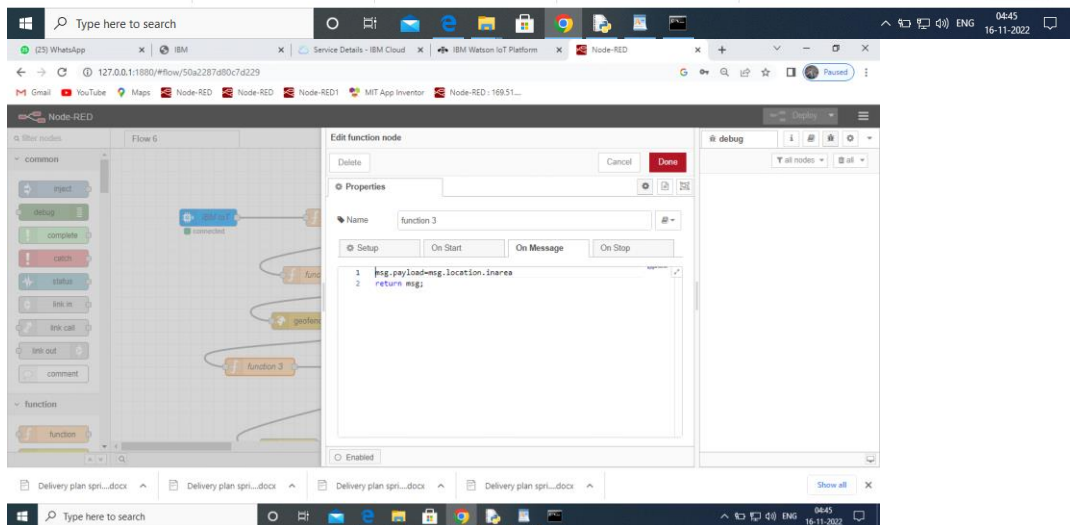
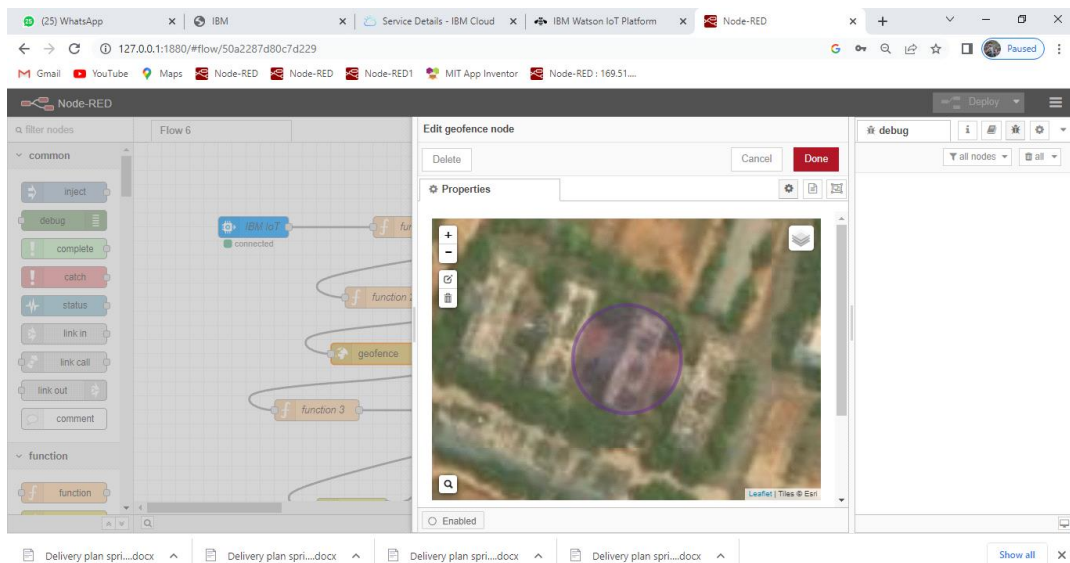
Property: msg.payload

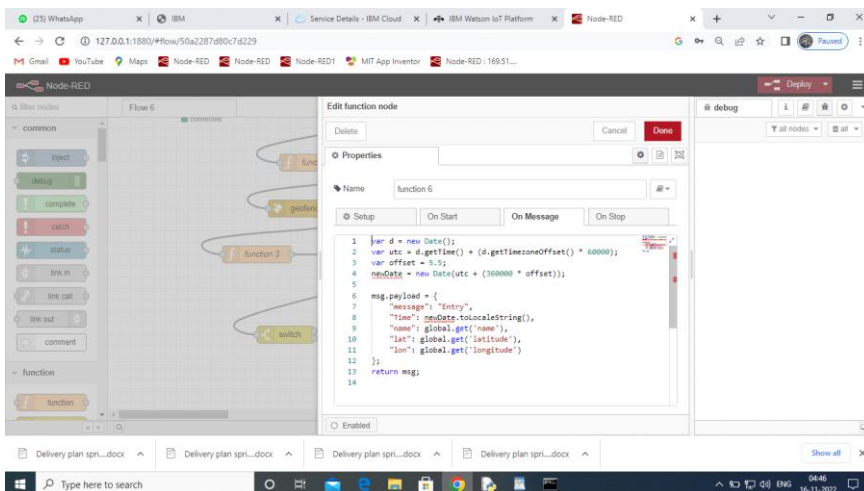
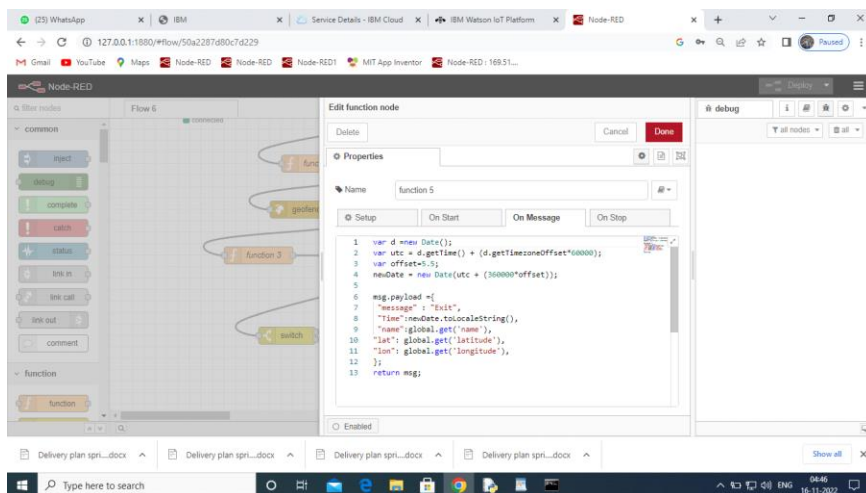
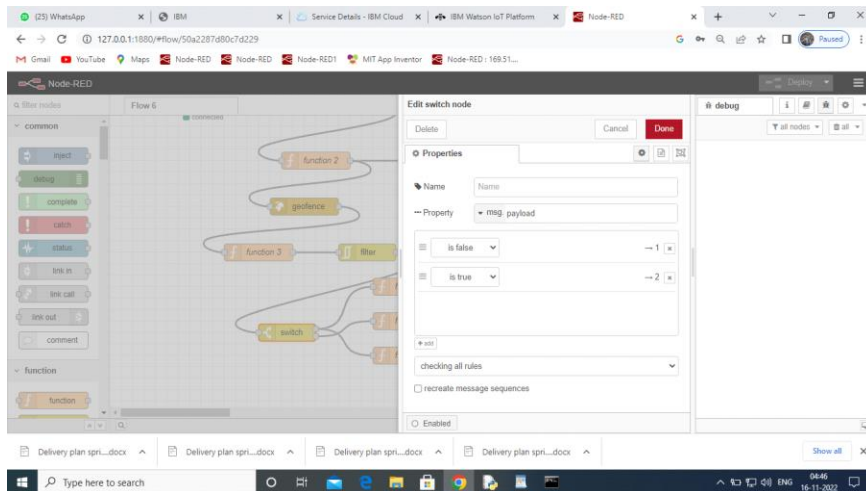
Apply mode separately for each: msg.topic

Name: Name

Enabled







Node-RED interface showing a flow with nodes: inject, debug, complete, catch, status, link in, link call, link out, comment, function, function 2, geofence, function 3, filter, switch, and function. The 'Edit http request node' dialog is open, showing properties: Method (GET), URL (https://www.fast2sms.com/dashboard/sms/bulk), Payload (Ignore), and Return (a UTF-8 string). The 'debug' panel is also visible.

Delivery plan spri...docx

Node-RED interface showing a flow with nodes: inject, debug, complete, catch, status, link in, link call, link out, comment, function, function 2, geofence, function 3, filter, switch, and function. The 'Edit notification node' dialog is open, showing properties: Layout (OK / Cancel Dialog), Send to all browser sessions (checked), Default action label (OK), Secondary action label (optional label for Cancel button), and Class (msg.className). The 'debug' panel is also visible.

Delivery plan spri...docx

Node-RED

Deploy

Q filter nodes

Flow 1

common

inject

debug

complete

catch

status

link in

link call

link out

comment

function

function

switch

change

range

IBM IoT

connected

function

function

worldmap

connected 0

geofence

function

rbe

http request

msg.payload

switch

function

show dialog

Child

function

msg.payload

Edit cloudant out node

Delete

Cancel

Done

Properties

Service

External cloudant or couchdb service

Server

https://93dc87d4-df75-4ee1-a851-2026

Database

childsafetydb

Operation

insert

Only store msg.payload object?

Name

Child

Enabled

The top screenshot shows the 'Browse API Keys' page in the IBM Watson IoT Platform. It lists two API keys:

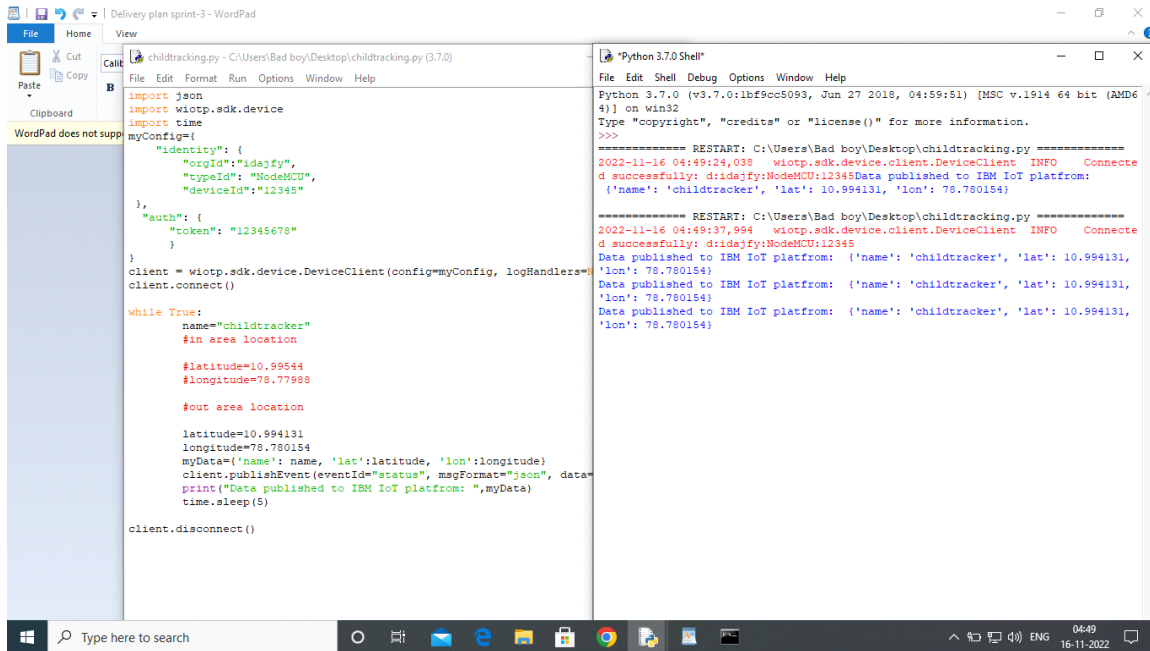
Key	Description	Role	Expires
a-idaify-issb4ps9yz	node red link	Device Application	-
a-idaify-wcp7r1df6	-	Standard Application	-

The bottom screenshot shows the details for the 'a-idaify-issb4ps9yz' key:

Key	Description	Last Edited By	Expires
a-idaify-issb4ps9yz	node red link	achudhan.ece19@mamcet.com	Never

Connecting with IBM Cloud: Using IBM IOT node through the API key

Transferring values from Python Code:



Node-Red:

