

SOURCE CODE

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PYTHON SCRIPT:

```
import time
import random
#import ibmiotf.application
import ibmiotf.device
import sys

config={
    "org":"phsvnq",
    "type": "CS1",
    "id":"1234",
    "auth-method":"token",
    "auth-token":"123456789"
}
client= ibmiotf.device.Client (config)
client.connect()
def myCommandCallback (cmd):
    a=cmd.data
    if len(a["command"])==0:
        pass
    else:
        print(a["command"])
def pub (data):
    client.publishEvent (event="status", msgFormat="json",data=data, qos=0)
    print("Published data Successfully: %s",data)
while True:
    name= "Childtracker"

    #in area
    #latitude= 9.8796
    #longitude= 78.0810

    #out area
    latitude= 9.95143
    longitude= 78.1158

    data={'name': name, 'lat':latitude,'lon':longitude}
    pub(data)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

NODERED:

IBM IOT:

The screenshot shows the Node-RED interface with the 'Edit ibmiot in node' dialog open. The dialog has a 'Delete' button, 'Cancel', and 'Done' buttons. The 'Properties' section includes:

- Authentication: API Key
- API Key: IBMIOT APIKEY
- 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

The 'info' sidebar on the right shows the 'Flow 1' tree with 'Subflows' and 'Global Configuration Nodes'. Below the tree, the 'IBM IoT' node is selected, showing its Node ID 'cefbaa4f5d4ebd2d' and Type 'ibmiot in'. A tooltip at the bottom right says: 'Hold down ⌘ when you click on a node to also select all of its connected nodes'.

FUNCTIONS:

The screenshot shows the Node-RED interface with the 'Edit function node' dialog open. The dialog has a 'Delete' button, 'Cancel', and 'Done' buttons. The 'Properties' section includes:

- Name: Name
- Setup: On Start, On Message, On Stop

The 'On Message' tab is selected, showing the following JavaScript code:

```
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 'info' sidebar on the right shows the 'Flow 1' tree with 'Subflows' and 'Global Configuration Nodes'. Below the tree, the 'function: df0cab53575ae1b' node is selected, showing its Node ID 'df0cab53575ae1b' and Type 'function'. A tooltip at the bottom right says: '⌘ click and drag on a node port to move all of the attached wires or just the selected one'.

Edit function node

DeleteCancelDone

Properties

NameName

SetupOn StartOn MessageOn Stop

1 msg.payload={

2 'name' : global.get('name'),

3 'lat' : global.get('latitude'),

4 'lon' : global.get('longitude')

5 }

6 return msg;

7

Enabled

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

function: e619a9fc7a09192f

Node"e619a9fc7a09192f"

Typefunction

show more

ctrl-space will toggle the view of this sidebar

Edit function node

DeleteCancelDone

Properties

NameName

SetupOn StartOn MessageOn Stop

1 msg.payload=msg.location.inarea

2 return msg;

Enabled

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

function: 3ae6936c747ed29e

Node"3ae6936c747ed29e"

Typefunction

show more

ctrl-space will toggle the view of this sidebar

Edit function node

Delete

Cancel

Done

Properties

Name

Name

Setup

On Start

On Message

On Stop

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

Enabled

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

function: 0eec21f06f6ceb8d

Node

"0eec21f06f6ceb8d"

Type

function

show more

Enable or disable these tips from the option in the settings

Edit function node

Delete

Cancel

Done

Properties

Name

Name

Setup

On Start

On Message

On Stop

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

Enabled

info

Search flows

Flows

Flow 1

Subflows

Global Configuration Nodes

function: deafe1b76a81661e

Node

"deafe1b76a81661e"

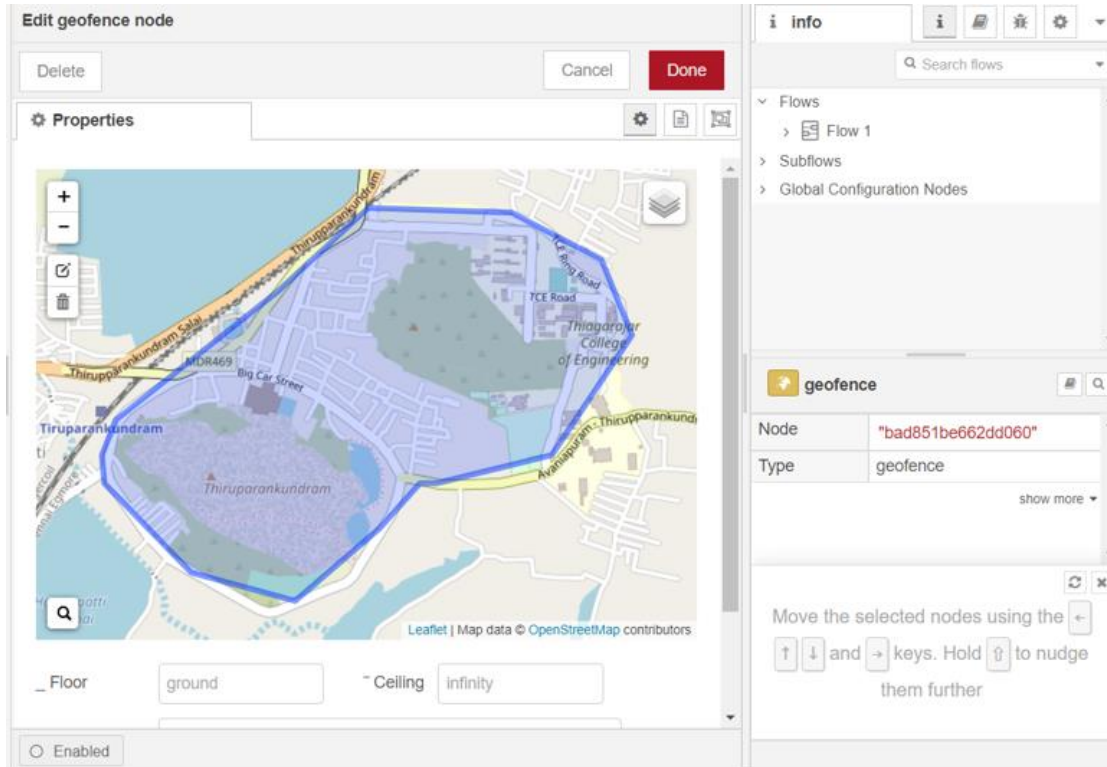
Type

function

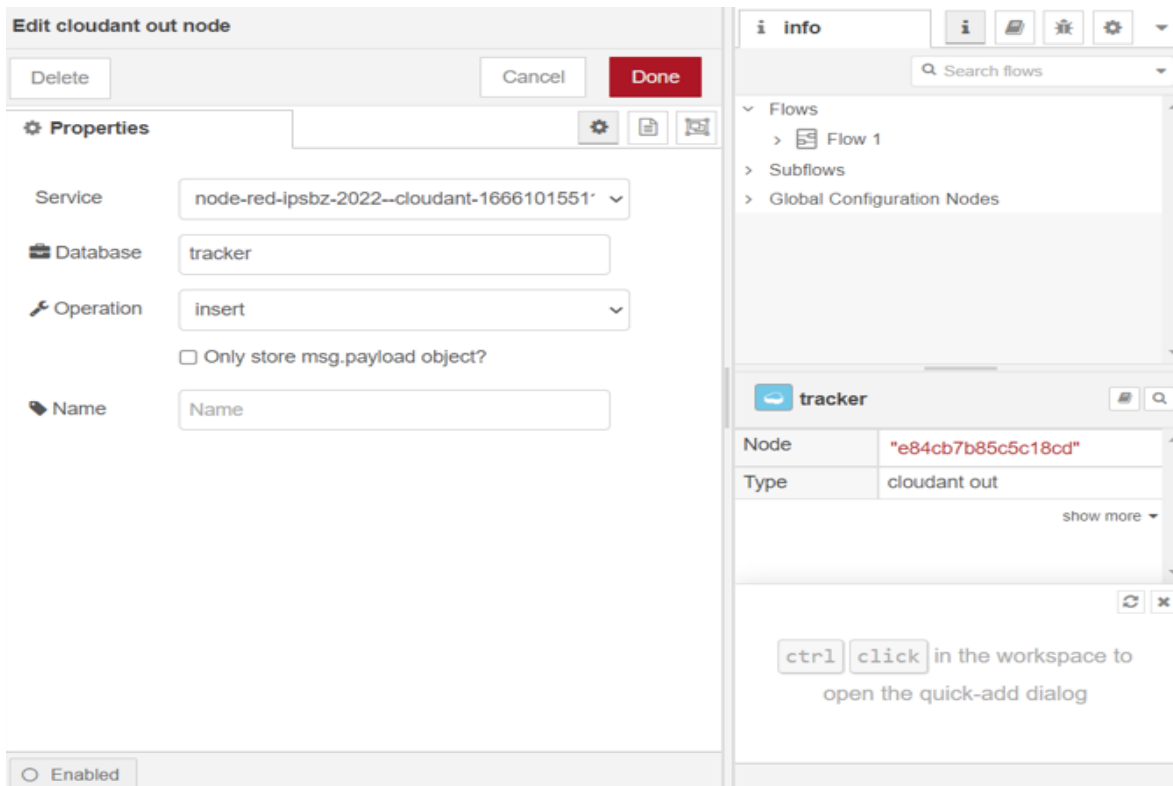
show more

You can confirm your changes in the node edit tray with **ctrl-enter** or cancel them with **ctrl-escape**

GEOFENCE:



CLOUDANT:



WORLDMAP NODE:

Edit worldmap node

Delete

Cancel

Done

⚙ Properties

Group

[ChildTracker] Map

✎

Size

auto

Start

Latitude

9.8795

Longitude

78.0810

Zoom

1 - 18

Map list

7 selected

▼

Base map

OpenStreetMap Greyscale

▼

Overlays

5 selected

▼

Cluster when

zoom level is less than

0 (0, off - 19)

▲▼

Max age

Remove markers after

600

seconds

User menu

Hide

▼

Layer menu

Hide

▼

Lock map

False

▼

Lock zoom

False

▼

Enabled

i Info

i

📄

🔍

⚙

▼

🔍 Search flows

▼

Flows

▶

Flow 1

Subflows

Global Configuration Nodes

worldmap

📄

🔍

Node

"8cef7429c18e85b8"

Type

ui_worldmap

show more

▼

🔄

✕

Switch flow tabs with

ctrl-[

and

ctrl-]

SWITCH NODE:

Edit switch node

DeleteCancelDone

⚙️ Properties

NameName

Propertymsg.payload

is false→ 1x

is true→ 2x

+ add

checking all rules

☐ recreate message sequences

Enabled

info

Search flows

Flows

- Flow 1

Subflows

Global Configuration Nodes

switch

Node	"e20523194ac68b8e"
Type	switch

show more

Export the selected nodes, or the current tab with `ctrl-e`

DEBUG NODE:

Edit debug node

DeleteCancelDone

⚙️ Properties

Outputmsg.payload

To

- ☐ debug window
- ☐ system console
- ☐ node status (32 characters)

NameName

Enabled

info

Search flows

Flows

- Flow 1

Subflows

Global Configuration Nodes

msg.payload

Node	"e871fc9118467379"
Type	debug

show more

Dragging a node onto a wire will splice it into the link

NOTIFICATION NODE:

Edit notification node

Delete

Cancel

Done

⚙ Properties

⚙

📄

🔗

🗑 Layout

OK / Cancel Dialog

▼

➔ Send to all browser sessions.

☒

✓ Default action label

OK

✕ Secondary action label

Cancel

⚠ Accept raw HTML/JavaScript input in msg.payload to format popup.

☐

</> Class

[msg.className]

📄 Topic

[msg.topic]

🔑 Name

Name

Note: checking *Accept raw HTML/JavaScript* can allow injection of code. Ensure the input comes from trusted sources.

☐ Enabled

i Info

i

📄

🔍

⚙

▼

🔍 Search flows

▼

Flows

> Flow 1

> Subflows

> Global Configuration Nodes

📧 show dialog

🔍

🔍

Node

"e137e2b1c05fcf69"

Type

ui_toast

show more

▼

🔄

✕

Hold down

⌘

 when you

click

 on a node to also select all of its connected nodes