



Experience the power of IBM IBM IoT Platform

Hands-On Workshop

ATTENTION :
Certaines copies d'écrans
et certains menus ne sont pas à jour

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I. Prerequisites

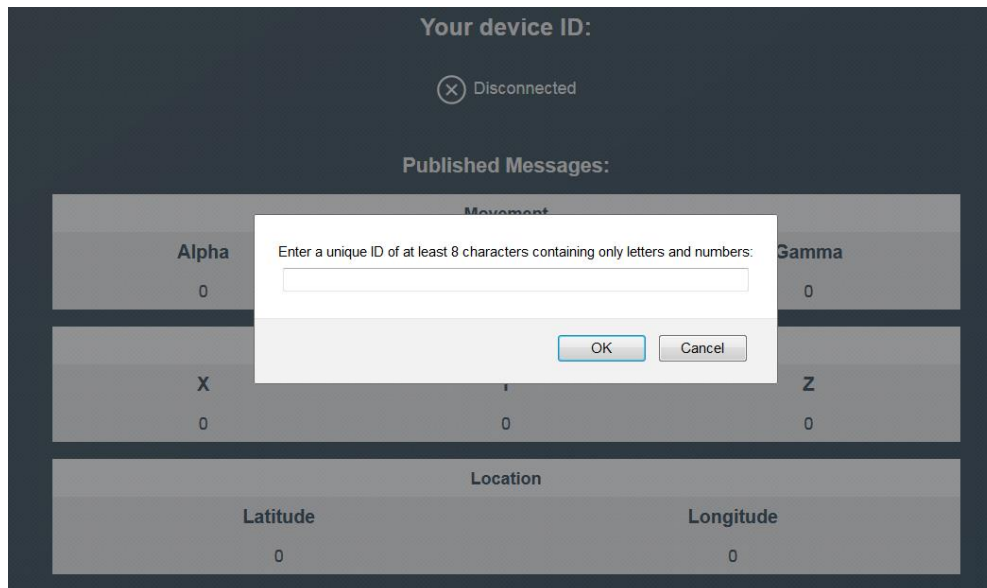
Your IBM Cloud environment must be configured to have the IoT Phone application and the Node-RED Starter depending on your IBM Cloud account constraints.

This has been done during the previous step of the POT.
The result is 1 or 2 applications with associated services:

Name	Group	Location	Offering	Status	Tags
Filter by name or IP address... Filter by group or org... Filter... Filter... Filter... Filter...					
> Devices (0 / 0)					
> VPC Infrastructure (0 / 0)					
> Clusters (0 / 0)					
> Cloud Foundry Apps (2 / 26)					
IoTPhoneHTML5NodeRed	corinne.bacile@fr.ibm.com / POTIoT220...	Frankfurt	Node-RED Starter	Running	---
html5-phone-2019H2POTIoT	corinne.bacile@fr.ibm.com / POTIoT220...	Frankfurt	Cloud Foundry Applications	Running	---
> Cloud Foundry Services (4 / 48)					

II. Explore data coming from the IoTPhone application

- Go to the IoTPhone application (click on the application name) and Click on "Visit App URL" in the first architecture, use the demonstration application in the second architecture
- Open this link on your phone and enter a unique ID:



Let it run 10 second (the time to save the link) and refresh the tab to stop data transfer. The application generates a lot of messages that we don't need now.

- Go back the PC interface, in the IoT Platform service tab, go to Connections, Click on the associated Internet Of Things Platform service

IBM Cloud Catalog Docs Support Manage Search for resource...

Cloud Foundry apps /

IoTStarterCorinneIoTPhone ● Running [Visit App URL](#)

Org: corinne.bacle@fr.ibm.com Location: Frankfurt Space: Base

Filter items

10 Items per page | 1-2 of 2 items

CONNECTION NAME	TYPE
iot-phone-iotf-service	Internet of Things Platform
IoTStarterCorinneIoTPhone-cloudantNoSQLDB	Cloudant NoSQL DB

4. Click on the alias of link:

IBM Cloud Search resources and offerings...

Connections

Resource list /

iot-phone-iotf-service Alias of [Internet of Things Platform-no](#)

Location: Frankfurt Org: corinne.bacle@fr.ibm.com Space: POTIoTH22019

5. Select Manage then Click on “Launch”

IBM Cloud Search resources and offerings... Catalog Docs Support Manage CORINNE B

Manage

Plan

Connections

Resource list /

Internet of Things Platform-no

Resource group: Globale Location: Frankfurt [Add Tags](#)

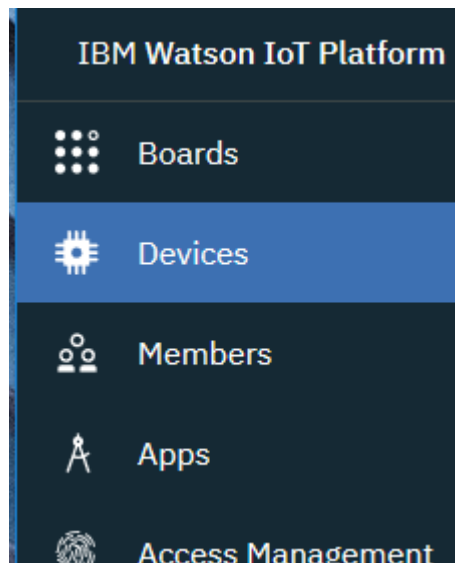
Let's get started with IBM Watson IoT Platform

Securely connect, control, and manage devices. Quickly build IoT applications that analyze data from the physical world.

[Launch](#) [Docs](#)

Tip : use a private web explorer windows in case of problems.

6. On the left, Click on the device icon (second icon) menu:



During the first test you made, a device type “iotphone” and a device were created:

>	<input type="checkbox"/>	EssaiPhoneCorinne	Disconnected	iotphone	Device
---	--------------------------	-------------------	--------------	----------	--------

7. Click to “Browse”

The IoTPhone application automatically create devices and save device credentials in the associated Cloudant service. This application has specific access rights to do so. You will see the device Id you have type on your phone in the previous steps:

IBM Watson IoT Platform



Browse Action Device Types

Browse Devices

👁 All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched using different criteria. To get started, you can add devices by using the Add Device button, or by using API.


<input type="checkbox"/>	Device ID ↕	Device Type ↕	Class ID ↕
6 results			
	CorinneBacle	iotphone	Device
	Telephone1	iotphone	Device

>  EssaiPhoneCorinne  Disconnected **iotphone** Device

III. Use data coming from your IoT SmartPhone

A. Open this link on your smartphone and enter your unique ID:

Your device ID:

 Disconnected

Published Messages:

Movement	
Alpha	Gamma
0	0
X	Z
0	0

Location

Latitude	Longitude
0	0

Enter a unique ID of at least 8 characters containing only letters and numbers:

OK Cancel

B. Notice that your device is recognized as a connected device in the IBM IoT platform (green flag) and events are available in the “Recent Events” tab:

IBM Watson IoT Platform

Browse Action Device Types

using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

<input type="checkbox"/>	Device ID	Device Type	Class ID	Date Added
7 results				
<input type="checkbox"/>	AndroidDevice	Android	Device	Nov 26, 2018 2:52 PM
<input checked="" type="checkbox"/>	CorinneBacle	iotphone	Device	Oct 22, 2018 12:39 PM

Identity Device Information **Recent Events** State Logs

Showing Raw Data | The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
sensorData	{"d":{"id":"CorinneBacle","ts":1543244332...	json	a few seconds ago
sensorData	{"d":{"id":"CorinneBacle","ts":1543244331...	json	a few seconds ago
sensorData	{"d":{"id":"CorinneBacle","ts":1543244331...	json	a few seconds ago

C. Create Physical Interface

This is part of the data management feature of IoT Platform, see

https://www.ibm.com/support/knowledgecenter/SSQP8H/iot/platform/GA_information_management/ga_im_definitions.html for details.

To use Watson™ IoT Platform features such as dashboard, you must create a physical interface to map device data to user friendly properties names, set the data units for the properties, and specify a message type to use with the schema.

- From the main navigation menu, click **Devices**.
- Click **Device Types** and select the device type that you want to create an interface for: iotphone.
- View the device type information and click **Interface**.

IBM Watson IoT Platform

Browse Action **Device Types**

Device Types

This table lists all device types that are defined. You can filter the list and search for the name and description. You can modify and configure existing device types and add new device types.

Name	Description
Android	
iotphone	

iotphone

Identity Device Information Interface

Device Type: iotphone

Date Created: Oct 9, 2018 6:03 PM

Description:

Number of Devices: 31 Connected Devices

- Click **Advanced Flow**.

essaynouveauatype 0 Device

Identity Device Information **Interface**

Simple flow **Advanced Flow**

Device

Physical Interface

Logical Interface

Logical Interface

Logical Interface

Applications

Optional

Advanced Interface Creator

You can use the Advanced Interface Creator to create a physical interface and one or more logical interfaces to add to the device type. The Advanced Interface Creator gives you more control over interface options than the Simple Interface Creator does. You can create a new physical interface or select an existing one from the library.

You must register and connect some devices before you can create interfaces using the From Connected path.

[Register Devices](#)

Create Physical Interface Or Add From Library

- Click **Create Physical Interface**.
- Click **Next** then **Create event Type** to start adding events and properties to the physical interface. (Click **Use last event cache** if the device is not connected).
- Select "sensorData"

Ajouter des types d'événements à l'interface physique

Sélectionnez les événements à partir desquels vous souhaitez choisir les propriétés à ajouter à l'interfac

Utiliser le cache des derniers événements

Gwen0510

<input type="checkbox"/>	Événement	Format	Contenu
<input checked="" type="checkbox"/>	sensorData	json	1 ligne

- Run the device interface (html5 web page) with your device Id, select deviceType then OK.
- Warning : use zom- if the bottom menu is not visible:

Ajouter des types d'événements à l'interface physique

Sélectionnez les événements à partir desquels vous souhaitez choisir les propriétés à ajouter à l'interface.

Utiliser le cache des derniers événements

Gwen0510

<input type="checkbox"/>	Événement	Format	Contenu
<input checked="" type="checkbox"/>	sensorData	json	1 ligne

Les événements affichés ne sont pas les bons ?
[Importer](#) les ou ajoutez [manuellement](#) ceux que vous voudriez voir

Annuler

Ajouter

Select “Add”

- All properties of the device event are automatically import. The system listens for active events for connected devices of the selected device type.
- Add more properties if you want to test.

Create Physical Interface Editing X

Identity
Event Types and Payload

You can use properties to define the interface behavior and the format of the data that is presented on devices.

Define the Physical Interface + Create event type

Event Type	Event ID	Format
deviceType	deviceType	application/json
Property	Data Type	Required
d	Object	No
id	String	No
ts	Number	No
lat	Number	No
lng	Number	No
ax	Number	No
ay	Number	No
az	Number	No
oa	Number	No
ob	Number	No
og	Number	No

[Add another property](#)

[Add another property](#)


< Done

- Click **Done**. The physical interface is created.

iotphone 1 Device

Identity Device Information **Interface** Editing X

Physical Interface ①

 **iotphone_PI** Draft ✎ 🗑

See Diagram >


Logical Interface 0 ①

Next, add one or more logical interfaces.

+ Create Logical Interface

Or

Add From Library

 A valid logical interface is required.

Activate Done

D. Create Logical Interface

Transform & Cleanse

Use devices schemas and logical interfaces to insulate applications from variability across device types, sensor models, variants and versions

Example: Several different models and brands of temperature sensor represented by a single common logical interface

Celsius temperature as "ambientTemp"

```
{
  "d": {
    "myName": "sensortag",
    "ambientTemp": "30.25",
    "objectTemp": "21.88",
    "humidity": "53.24178",
    "pressure": "1031.17",
    "altitude": "1.43789",
    "accelX": "-0.03",
    "accelY": "0.02",
    "accelZ": "-1.06",
    "gyroX": "-0.85",
    "gyroY": "0.28",
    "gyroZ": "1.30",
    "magX": "46.47",
    "magY": "84.69",
    "magZ": "-45.42",
    "light": "9.49"
  }
}
```

Kelvin temperature as "value"

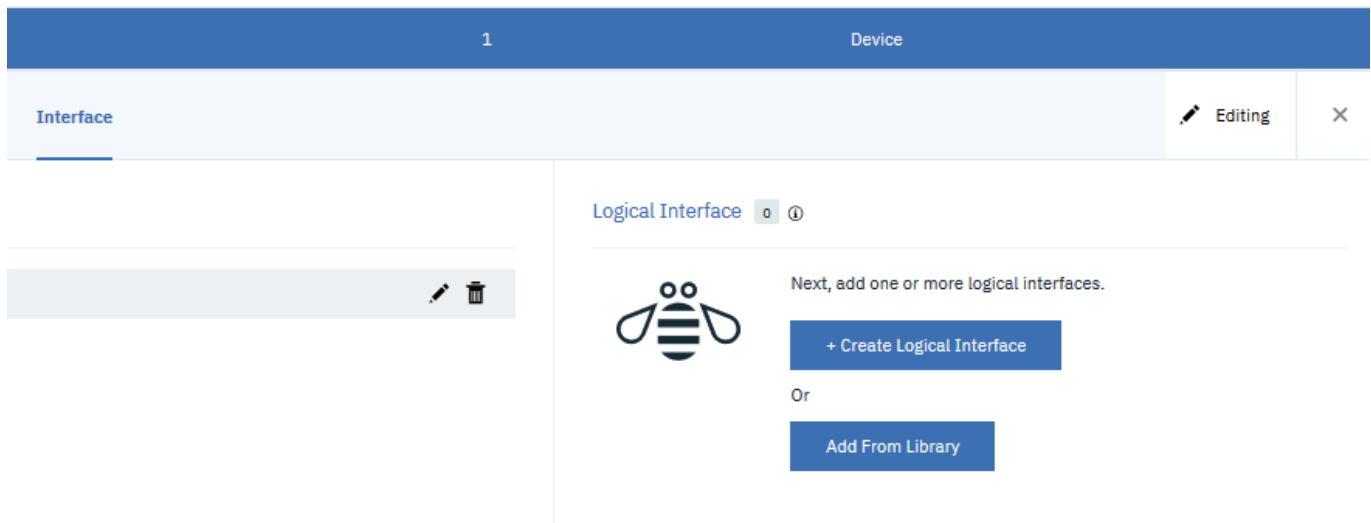
```
{
  "ts": "2017-10-02T08:09:34.310+0000",
  "d": {
    "value": 296.77,
    "time": 1506931831214
  }
}
```

Celsius temperature as "t"

{"t": 18.9}



- In the device type interface, select “**create logical interface**”:



- Select a name
- Click **Next**
- Click **add properties**

Then, using the exact mapping and names :

- Select d => lat , name it **Latitude**
- Select d=> lng, name it **Longitude**
- Select d=> ax, name it **AccelerationX**
- Select d=>ob, name it **OrientationB**

Nb : look at possible mapping calculation directly in the interface.

Edit Logical Interface: iotphone_LI



Identity

State Model

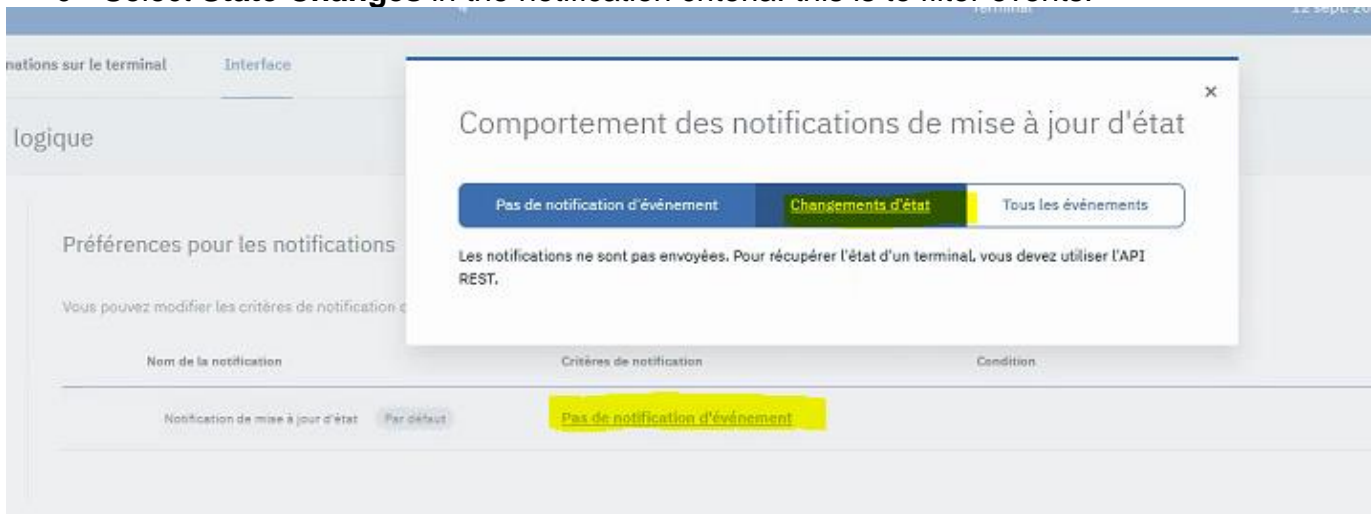
Notification Preference

Use properties to define the mappings between the logical and physical interfaces.

Define the Interface

Property ↕	Mapped Payloads ↕	Data Type ↕	
latitude	lat [sensorData]	Number	👁
longitude	lng [sensorData]	Number	👁
AccelerationX	ax [sensorData]	Number	👁

- Click **next**
- Select **State Changes** in the notification criteria: this is to filter events.



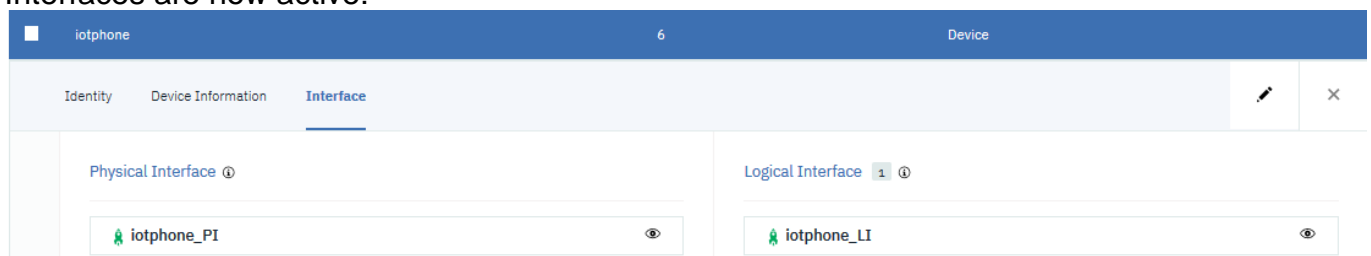
- Click **Apply** then **Done**
- Activate interfaces : Click **Activate** in the Interface, then Deploy and Done

✓ The interfaces are valid, but the device type is not yet deployed.

Activate

Done

Interfaces are now active:



As a result, you can see the “**State**” of your device, based on Raw Data or logical interfaces:

CorinneBacle

iotphone

Device

Oct 22, 2018 12:39 PM

Identity

Device Information

Recent Events

State

Logs

Interface:

iotphone_LI

Raw Data

iotphone_LI

Event

Last Received

longitude

null

Number

23 minutes ago

latitude

null

Number

23 minutes ago

AccelerationX

-0.32

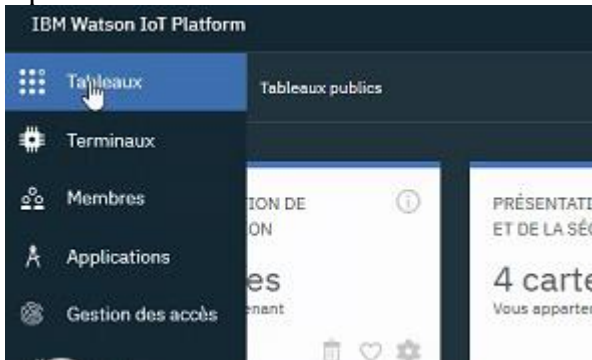
Number

23 minutes ago

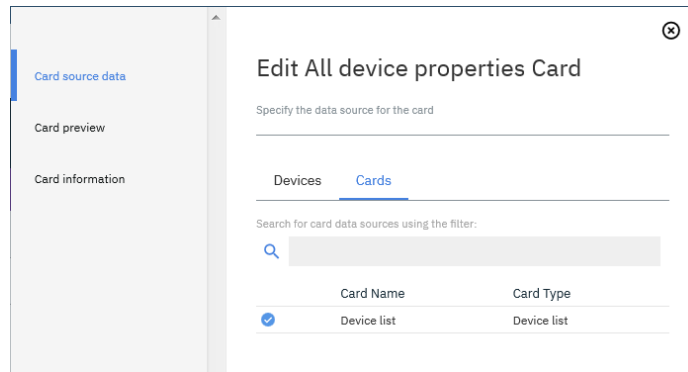
A logical interface can be associated to an API Key to filter data and to control the data format.

E. Visualize in IoT Dashboard

- Open the Dashboard menu:

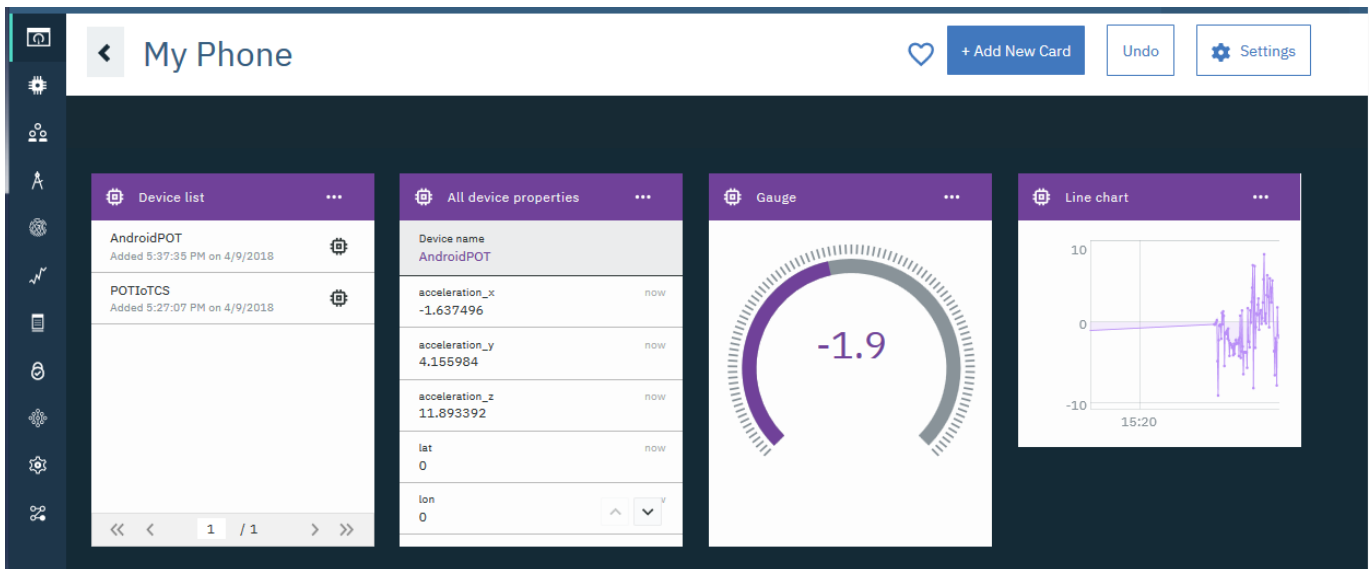


- Create a board to contain the cards for your devices.
 - If the All Boards, page is not already displayed, select **Boards** from the IBM IoT Platform dashboard left menu, and then click **Create New Board**.
 - **Enter a name** for the board (for example, My Phone) and click **Next**.
 - On the next page, click **Create**.
- Click the board that you just created to open it.
- Click **Add New Card**, select **Device List**, add the card.
- Click **Add New Card**, select **All Device Properties**, select Card source data : Cards/Device List, add the card.



In this configuration, to display all properties of a device, you must first select the device in the device list.

Test Gauge, Line Chart etc. The selection of event and device properties is based on the physical interface defined before.



F. Create a board to display location in a map

Create a board and cards to display device data in the IBM IoT Platform dashboard map.

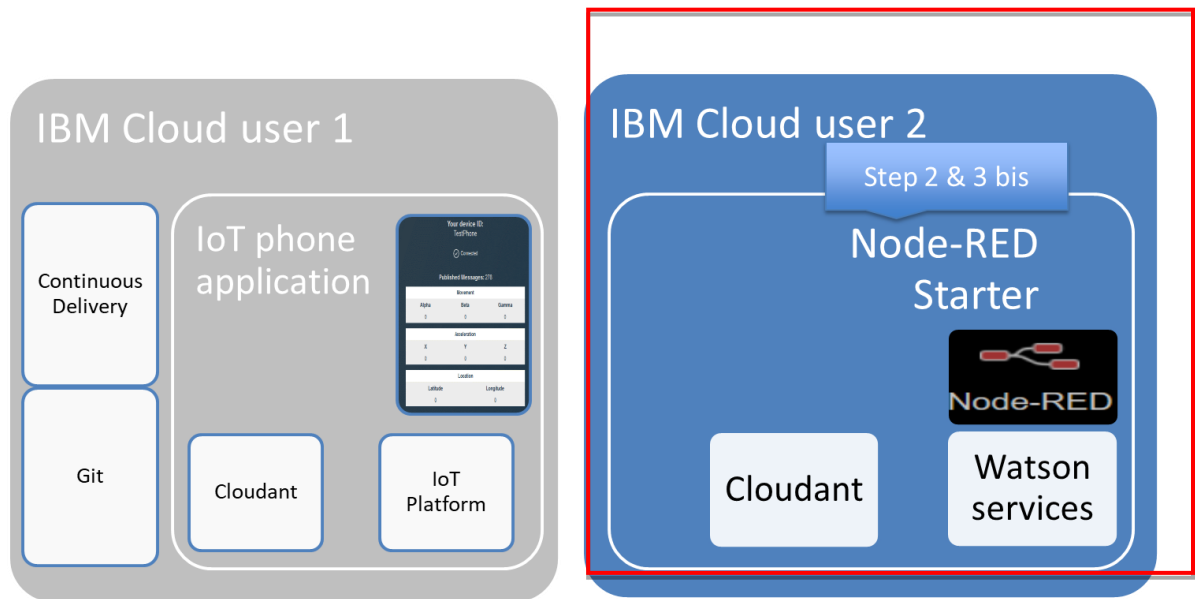
1. Go to your board
2. Click **Add New Card**, and then select the **Device list** card type, which is located in the Devices section / show more (if not done in previous steps).
3. Select your device from the list, then click **Next**.
4. Click **Add New Card**, and then select the **Device Map** card type, which is located in the Devices section / show more.
5. Select your device list from the list, then click **Next**.
6. Select Data point from your device type, for longitude and latitude
7. Click Next
8. In the Card Preview page, select **M** as the size, and click **Next**.
9. In the Card Information page, change the name of the card to **Device Map Location** and click **Submit**. The location card map appears on the dashboard and shows the live latitude and longitude of the device.

IV. Use your NodeRed application to create and generate an alert

A. Visualize in Node-RED

Go back to your application « IBM Cloud User 2 »

1. Go back to your application in IBM Cloud, you are now going to collect your data from your app.



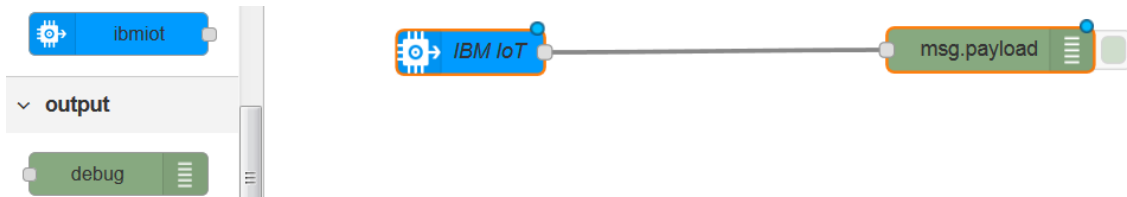
Go back to your Node-RED Starter app overview:

The screenshot shows the IBM Cloud interface for the 'IoTPhoneHTML5NodeRed' application. The top navigation bar includes 'IBM Cloud', a search bar, and links for 'Catalog', 'Docs', 'Support', 'Manage', and the user account 'CORINNE BACLE's Account'. The left sidebar lists navigation options: 'Getting started', 'Overview' (selected), 'Runtime', 'Connections', 'Logs', 'API Management', and 'Autoscaling'. The main content area shows the application is 'Running' with a 'Visit App URL' button. Below this, the 'Runtime' section displays four key metrics:

- BUILDPACK:** Node-RED Starter
- INSTANCES:** 1 (All instances are running, Health is 100%)
- MB MEMORY PER INSTANCE:** 256
- TOTAL MB ALLOCATION:** 256 (7.25 GB still available)

2. Click on Visit App URL to access the Node-RED web editor:
3. Click on “Go to your Node-RED flow editor”

This app you have created in IBM Cloud provides a browser-based editor (Node-RED) that makes it easy to wire together flows that can be deployed to the runtime. In the case of IoT, Node-RED is powerful to quickly test all the possibilities that IBM Cloud offers with different kind of services. Your Node-RED app has a public URL like any web app but there is a way to add a user/password to secure your workspace. Directives are in the annex.



4. Then, double click on the IBM IoT node and fill your device id:

Edit ibmiot in node

Cancel

Done

Authentication

Bluemix Service

Input Type

Device Event

Device Type

☒ All or

+

Device Id

☐ All or

myPhone

Event

☒ All or

+

Format

☐ All or

json

QoS

0

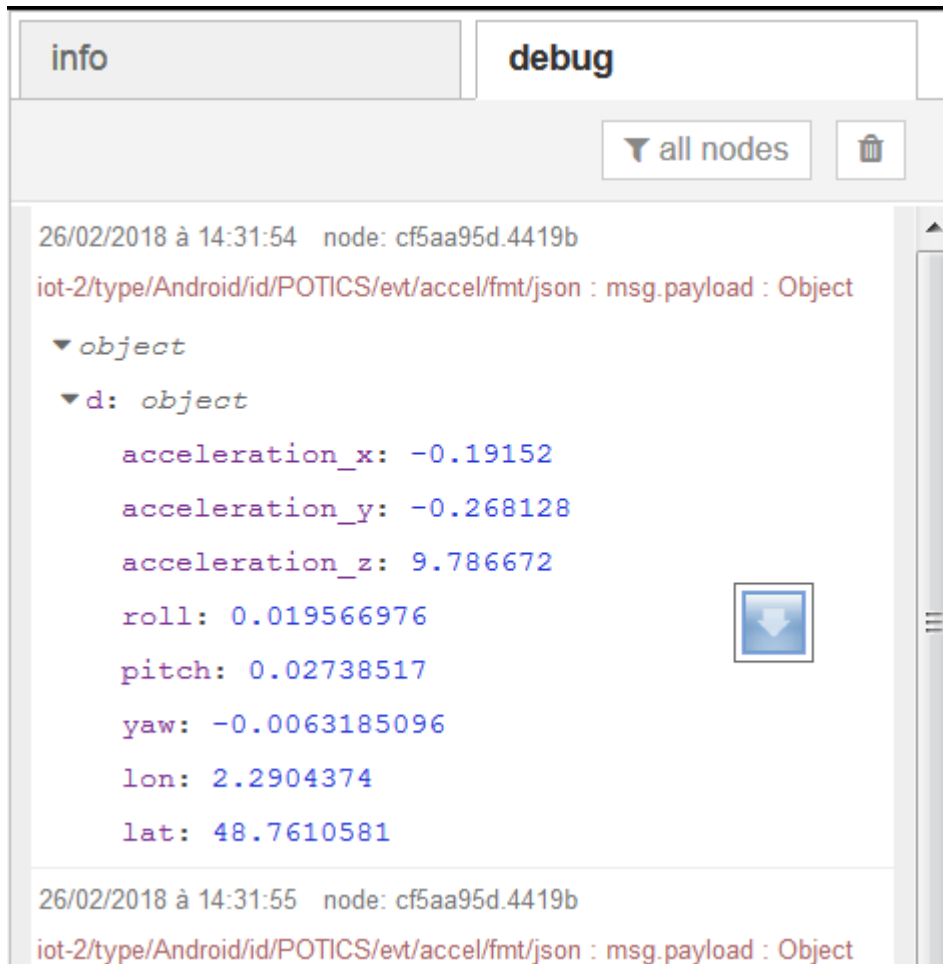
Name

IBM IoT

Use the Input Type property to configure this node to receive Events sent by IoT Devices, Commands sent to IoT Devices, Status Messages referring to IoT Devices, or Status Messages referring to IoT Applications

Check the info tab, to get more information about each of the fields

5. Click “Done” and deploy your app by clicking up and right on the “Deploy” button (The button turns grey which means the flow is deployed)
6. Then select the debug tab to visualize your data:



Node IBM IoT

You are receiving data via MQTT protocol in JSON format.

- Select “Device State Event” in the input type of the IBM IoT Node
- Deploy
- Compare the result in the debug tab
- The “Device State Event” use the logical interface format.
- Close

Add a New Node to Get the Acceleration Value

- Add a function node with the content :
 return {payload:msg.payload.state.AccelerationX};
 (use the format you have defined in the logical interface)

Edit function node

Delete
Cancel
Done

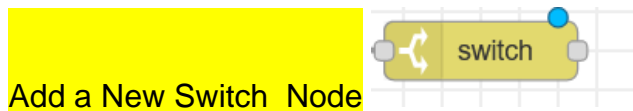
▼ node properties

Name

AccelerationX

Function

```
1 return {payload:msg.payload.state.AccelerationX};
```



- Add a switch function and see screen capture to configure it. don't forget to use numbers.

Edit switch node

Delete
Cancel
Done

Properties

Name

Switch

Property

▼ msg. payload

	<=	▼ 0 ₉ -0.1	→ 1	
	>=	▼ 0 ₉ 0.1	→ 2	
	otherwise	▼	→ 3	

add

checking all rules

☐ recreate message sequences

Appearance

Label

☒ Show

Icon

Port labels

Inputs

1. none

×

Outputs

1. negative

×

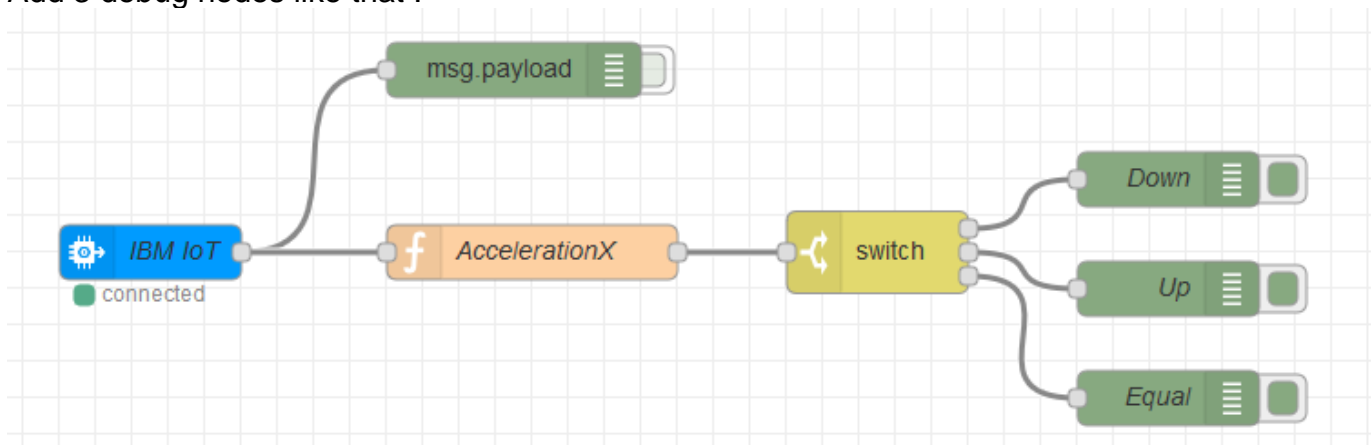
2. positive

×

3. stable

×

- Add 3 debug nodes like that :



- Click Deploy
- Run your app
- See the result in the debug tab

What you have done so far:

- You have created an app in IBM Cloud using the IoT Boilerplate
- You have registered our device in IoT Watson Platform org
- You have connected your smartphone to your IoT Watson platform org
- You have checked that we are receiving the data from the smartphone in your IBM Cloud app

What you will do next :

- Create an alert
- Send a text to create a vocal alert
- Store the data in a Cloudant DB

B. Smartphone interaction with an application: Create an alert

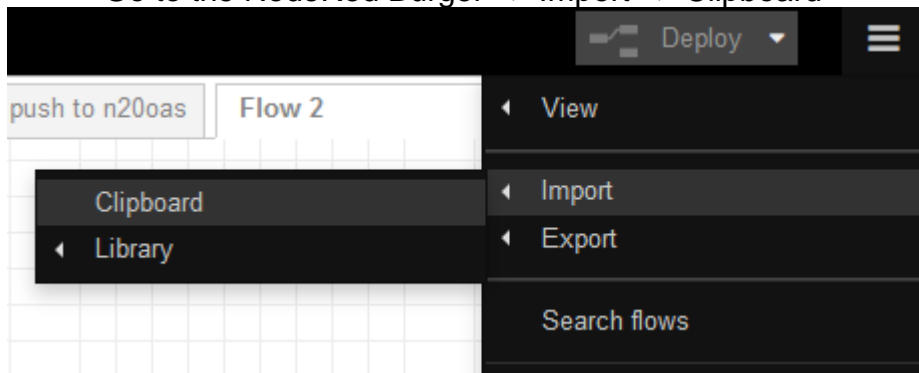
Préparation : aller chercher le fichier CheckFlat.txt dans le repository GitHub

Pour rappel : <https://github.com/CorinneBacle/html5-phone>

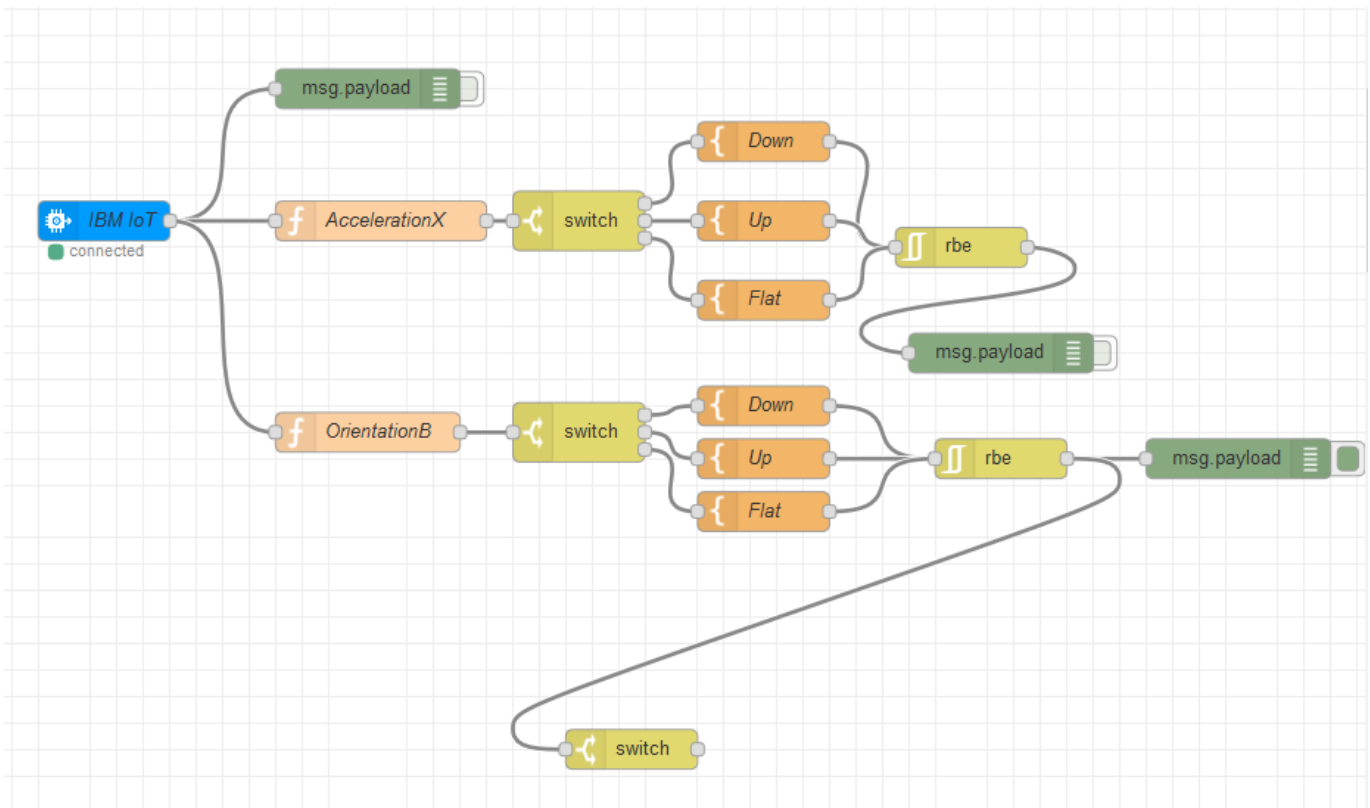
Répertoire Node-Red-Text

1. Import in a new flow the content of the file named: CheckFlat.txt

- Open the txt file
- Select all then copy to the clipboard
- Go to the NodeRed Burger => Import => Clipboard



- Select “in a new flow” => the txt import in a new flow, so not necessary to create a new flow first
- Past your clipboard content
- Click Import
- Then deploy
- Result

**TIPS :**

- Penser à reconfigurer l'authentification sur le nœud IBM IOT
- Refaire également les debugs

-
- Run your web interface
- See the result in the debug tab

2. Use the Watson Text To Speech service to alert when the phone is flat

You are now going to use the Text To Speech service to play an audio alert in a web page using a web socket.

IBM CLOUD / user1

- Go back to IBM Cloud and click on the “Connections” tab:

The screenshot shows the IBM Cloud console for a Cloud Foundry application named "PoT ICS mockup". The application is in a "Running" state. The left sidebar contains navigation links: Getting started, Overview (selected), Runtime, Connections, Logs, Monitoring, and API Management. The main content area displays the following information:

- Org:** spasija.taseva@fr.ibm.com
- Location:** eu-gb
- Space:** Demo Hursley RTI
- Buildpack:** Internet of Things Platform Starter
- Instances:** 1 (All instances are running, Health is 100%)
- MB Memory per Instance:** 256
- Total MB Allocation:** 256 (6.75 GB still available)
- Connections (2):**
 - PoT ICS mockup-cloudantNoSQLDB
 - PoT ICS mockup-iotf-service
- Runtime cost:** 0,00 \$US (Current charges for billing period and Estimated total for billing period (Feb 1, 2018 - Feb 28, 2018))

- Click on Catalog:

The screenshot shows the "Connections" tab for the "PoT ICS mockup" application. The left sidebar is the same as the previous screenshot. The main content area displays a table of connections:

CONNECTION NAME	TYPE
PoT ICS mockup-cloudantNoSQLDB	Cloudant NoSQL DB
PoT ICS mockup-iotf-service	Internet of Things Platform

There is a "Create connection" button in the top right corner of the connections list.

- And search for "Text to Speech"

The screenshot shows the IBM Cloud console search results for "Text to Speech". The left sidebar contains a list of categories under "All Categories (1)": Infrastructure (Compute, Storage, Network, Security, Containers, VMware), Platform (1) (Boilerplates, APIs, Application Services, Blockchain, Cloud Foundry Apps), and Watson. The main content area displays the search results for "Text to Speech" under the "Watson" category. The results show a card for "Text to Speech" with the description "Synthesizes natural-sounding speech from text." and a "Create" button.

- Click on Create

Text to Speech

Auteur : IBM • Date de la dernière mise à jour : 09/10/2020 • [Documentation](#) • [Documentation des API](#)

Créer A propos de

Sélectionner une région

Sélectionner une région

Londres

Sélectionner un plan de tarification

Les prix affichés n'incluent pas les taxes. Les tarifs mensuels affichés sont valables pour le pays ou la région : [Etats-Unis](#)

Plan	Fonctions	Tarification
Simplifié	10 000 caractères par mois	Gratuit

L'abonnement Simplifié vous permet de commencer gratuitement avec 10 000 caractères par mois. En passant à un abonnement payant, vous pourrez accéder à des fonctionnalités de personnalisation.

Récapitulatif

Text to Speech **Gratuit**

Région: Londres
Plan: Simplifié
Nom du service: Text to Speech-60
Groupe de ressources: Default

Créer

Ajouter à l'estimation

- You will have all the explanation how to use this service:

Watson /

Text to Speech-rr

Location: United Kingdom Org: spasija.taseva@fr.ibm.com Space: Demo Hursley RTI

Getting started tutorial

Last Updated: 2017-10-20 | [Edit in GitHub](#)

The IBM® Text to Speech service converts written text to natural-sounding speech to provide speech-synthesis capabilities for applications. This cURL-based tutorial can help you get started quickly with the service. The examples show you how to call the service's `POST` and `GET /v1/synthesize` methods to request an audio stream.

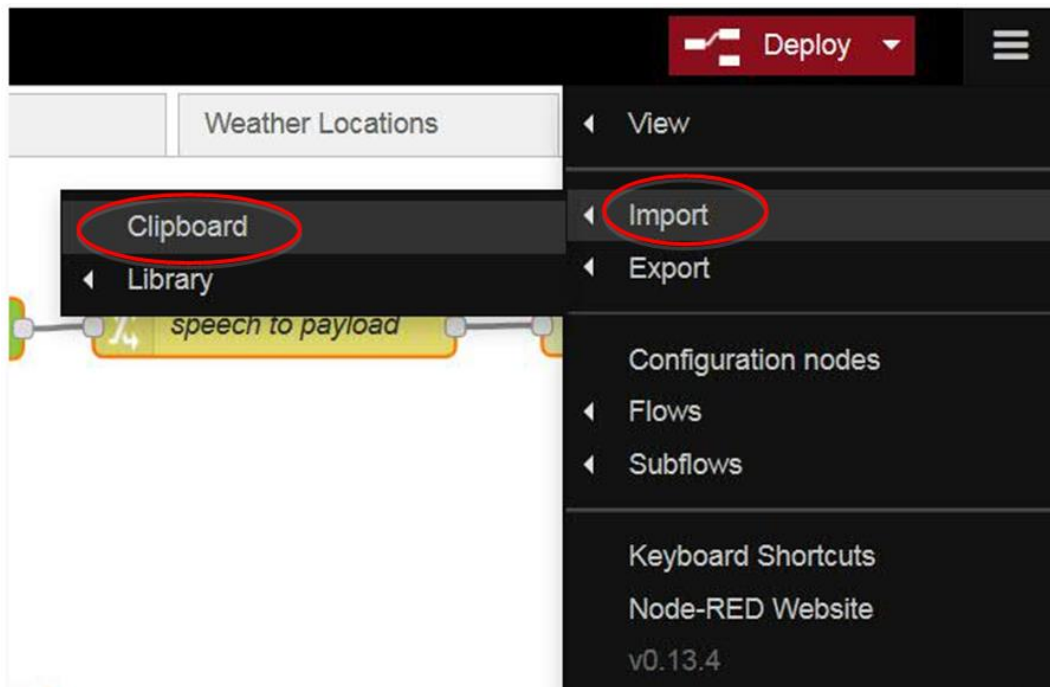
Before you begin

- Create an instance of the service:
 - If you're seeing this, you created your service instance. Now get your credentials.
- Create a project from a service:
 - Go to the Watson Developer Console [Services](#) page.
 - Select Text to Speech, click **Add Services**, and either sign up for a free IBM Cloud account or log in.
 - Type `text-to-speech-tutorial` as the project name and click **Create Project**.
- Copy the credentials to authenticate to your service instance:

- Go to Service Credentials
- Click New Credential
- Select Auto Generate
- Select View credentials and keep it in a separate file for the next phase.

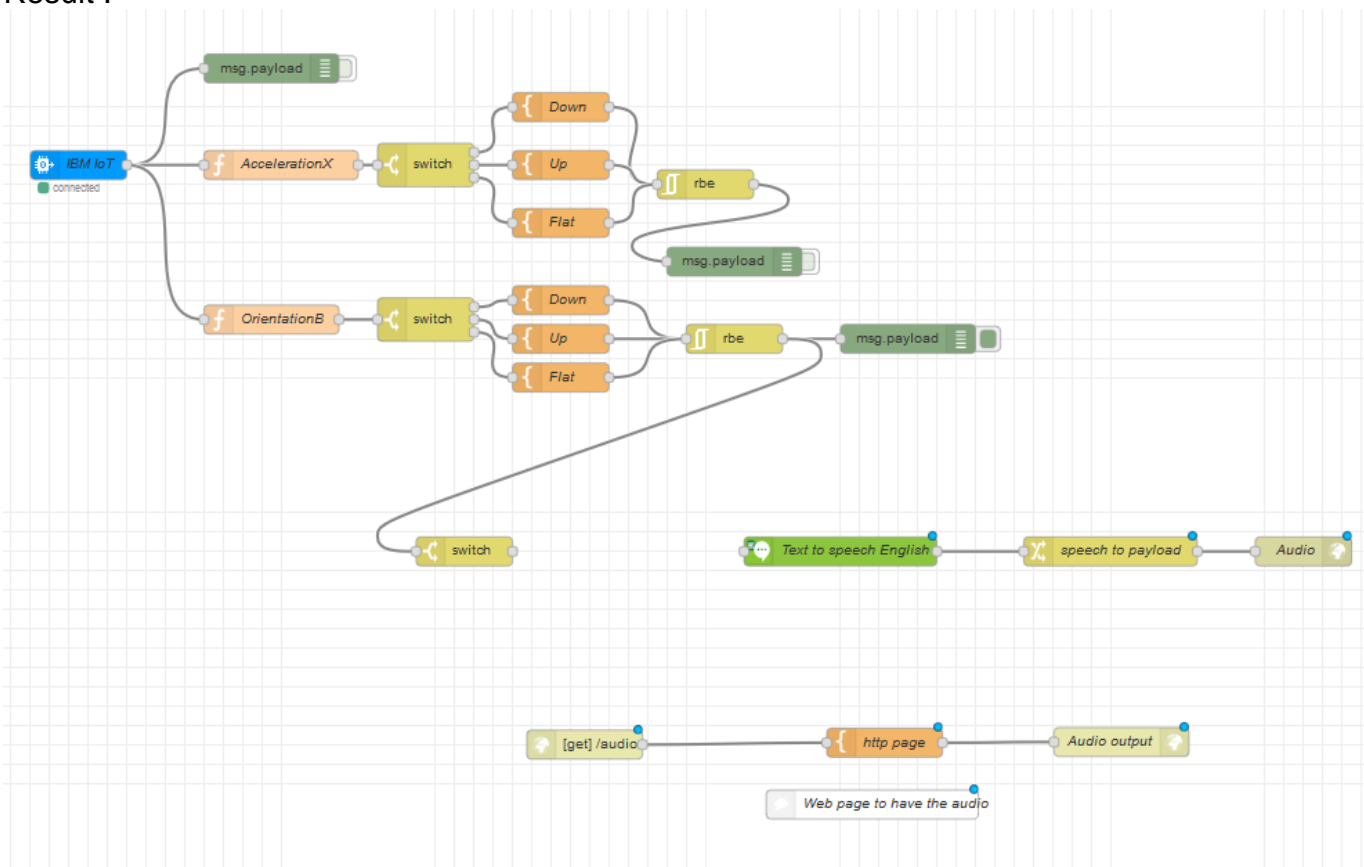
Note : in case of problem, stop then start the application again.

- Go to your NodeRed application
- Import



- Import in the current flow the content of the file named: **TextToSpeechNodered.txt**

Note ; if it create a new flow, cut and past it to the current flow before any deployment.
Result :



- Add a template between the switch and the text to speech with a text like :
"Hey the phone is {{payload}} now, good job!"
- Change the switch node to have == Flat

- Connect the switch node to the function and the function node to the text to speech
- Edit the Text to Speech node, add the API Key you have saved before in a separate file, add the service endpoint and select your language:

Edit text to speech node

Delete Cancel Done

▼ node properties

This feature is not available for the Bluemix Lite plan. Please upgrade to a paid plan to activate this feature: <https://console.bluemix.net/catalog/services/text-to-speech>

Name Text to speech English

Username Username

Password Password

API Key

☐ Use Default Service Endpoint

Service Endpoint <https://stream-fra.watsonplatform.net/text-to-speech/api>

Language UK English ▼

Voice Kate ▼

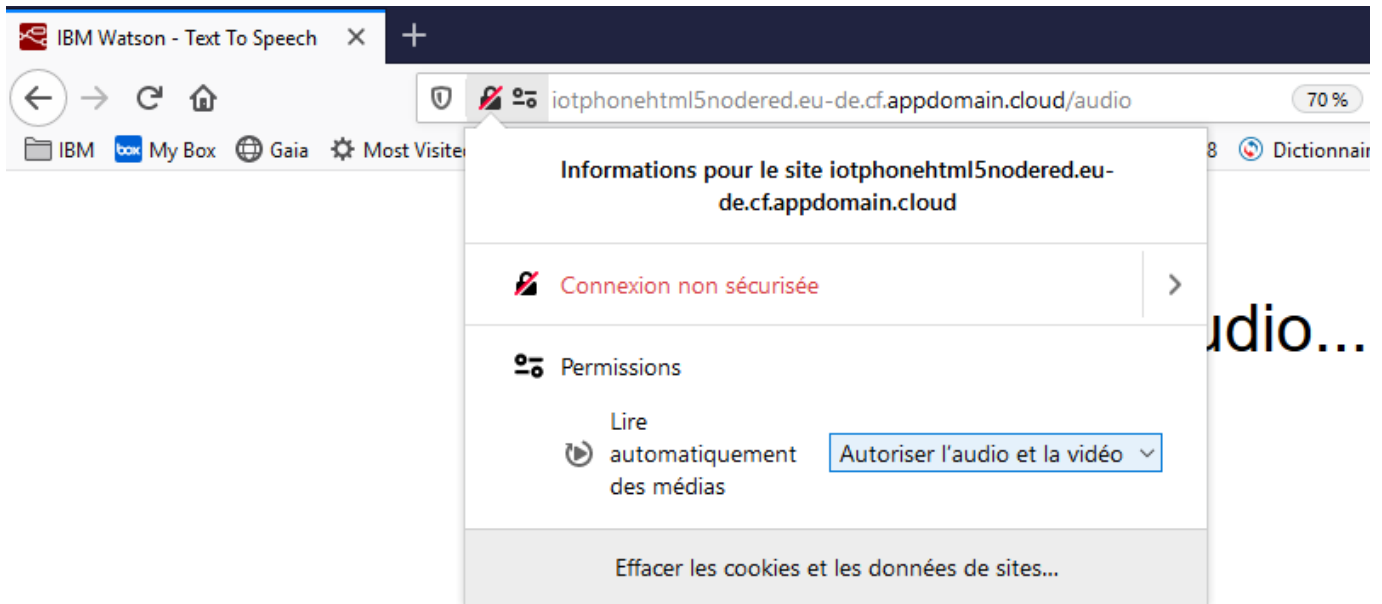
Format WAV ▼

☐ Place output on msg.payload

- For test you can add an Debug node after IOT input node.
 - Click to **Deploy**.
 - Browse [url from nodered for your applicationname.cloud] /audio
- N.B: url from nodered without 's' for http://**
- Turn your laptop volume up.

Waiting for audio...

- Try to have your phone flat. Then verify the audio result.
- In case of problem : check permissions:

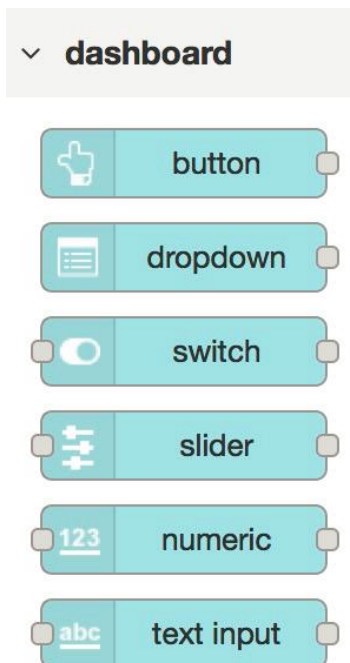


V. Create a dashboard application in Node-RED

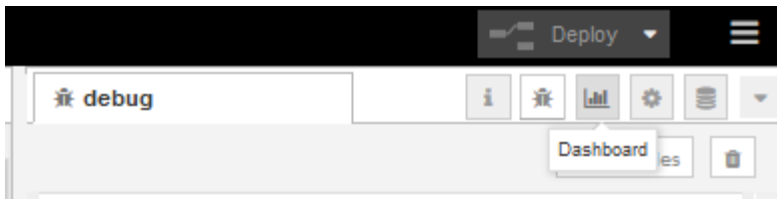
A. Node-RED Dashboarding capability:

We need it to be able to display elements in the next step

1. Note dashboard nodes on the palette:



2. Note also that there is a **dashboard** tab in the right-hand sidebar:

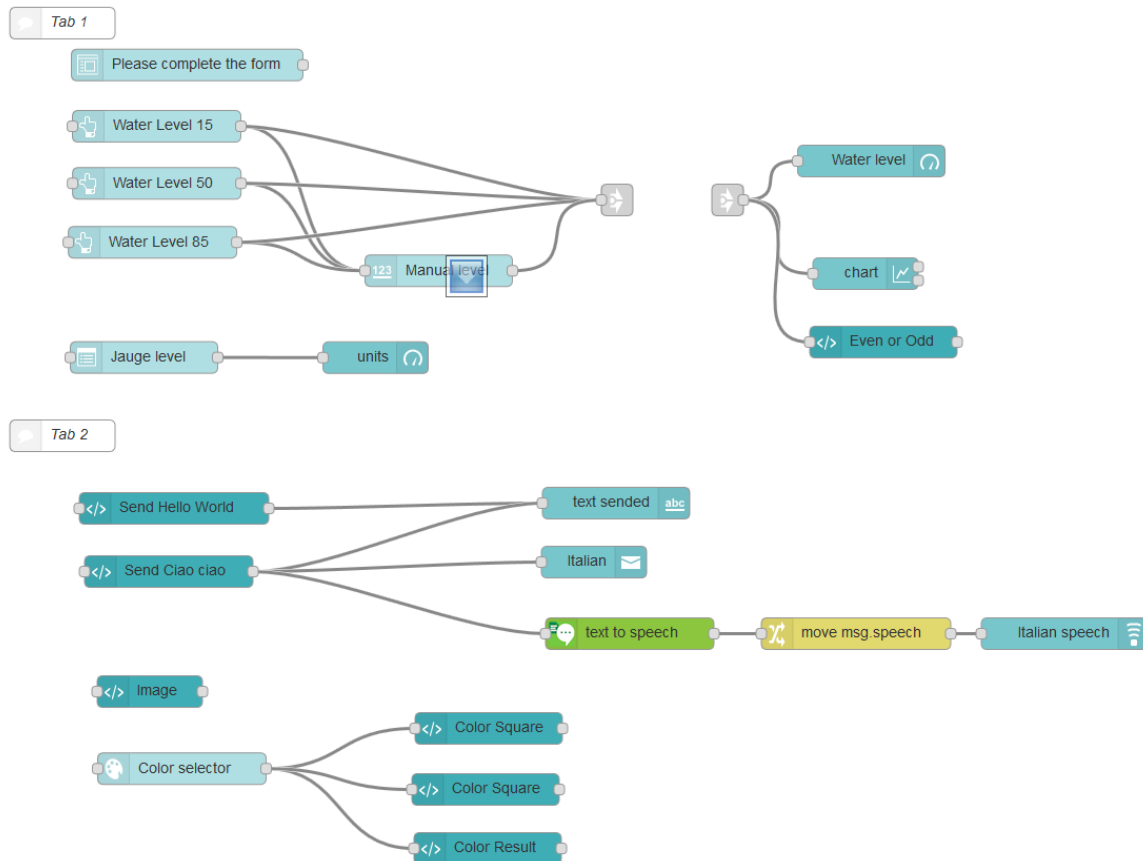


TIP: This dashboard tab may be used to add new tabs, menus etc to the visualization dashboard. There are also two available themes by default – light and dark.

B. Create a simple Node-RED Dashboard:

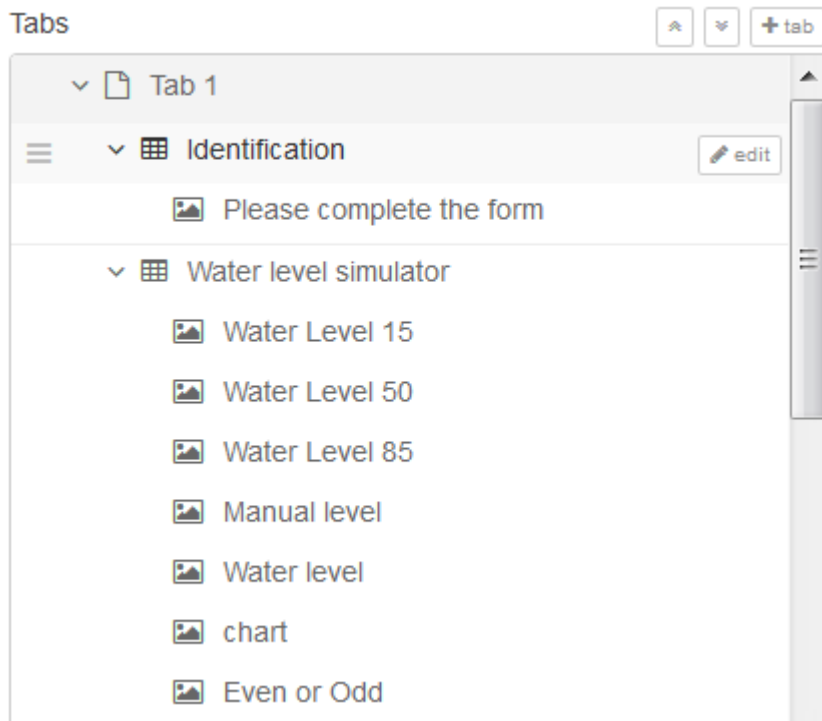
Please import in a new Node-RED tab the file named: NodeRED Dashboard Sample.txt

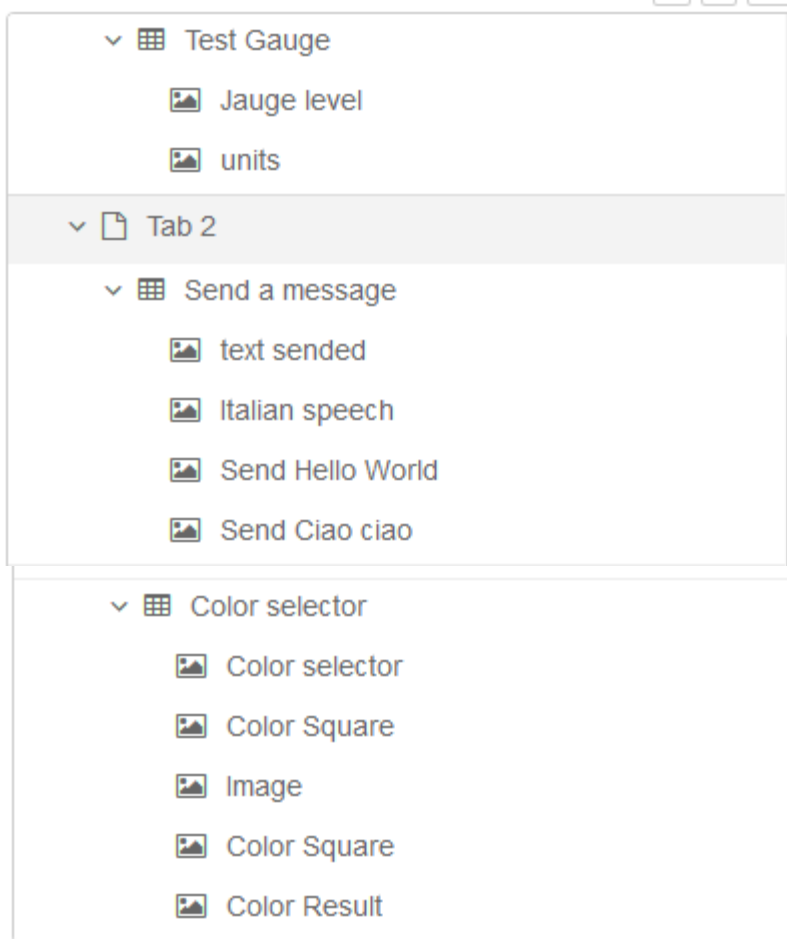
1. Result in Node-RED:



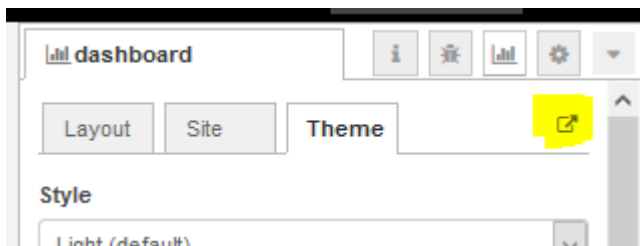
Configure the TextToSpeech with the API key. Keep it in Italian.

2. Configure the dashboard:

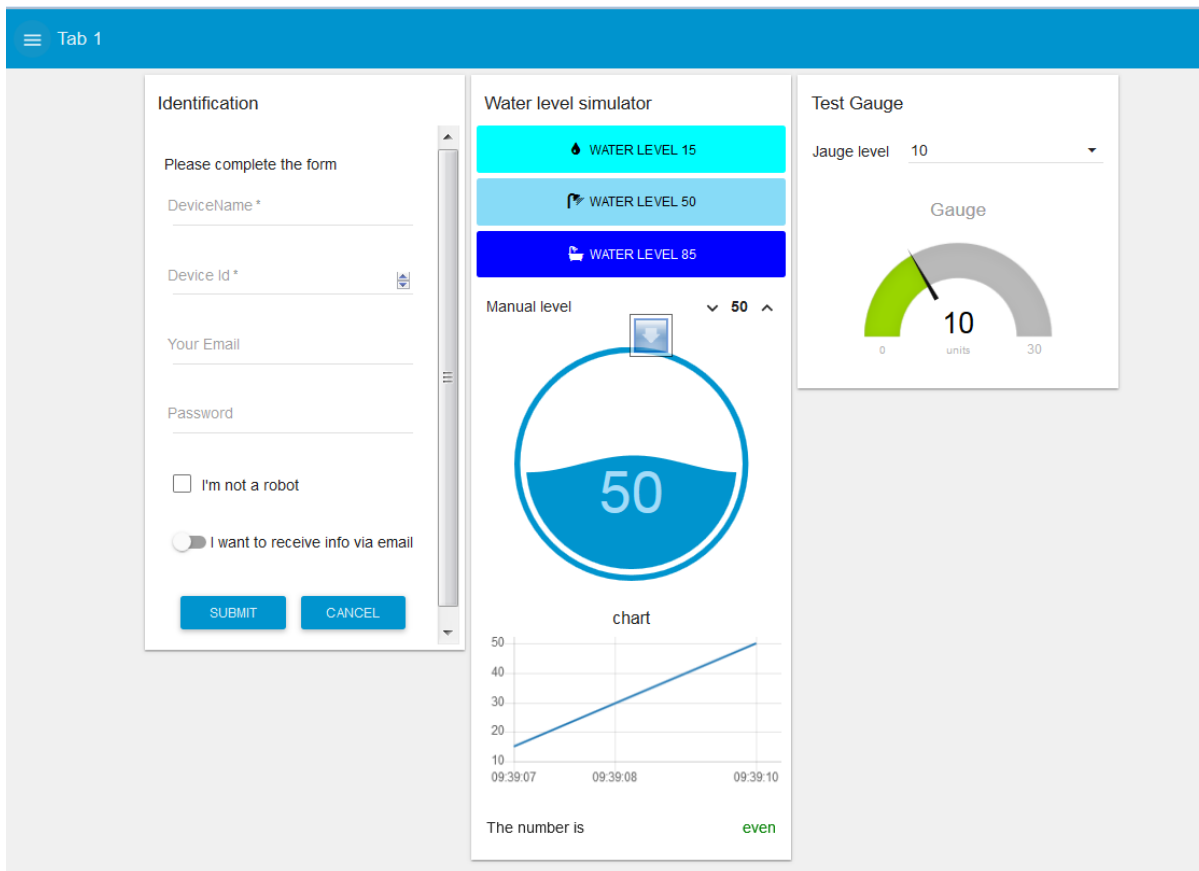




3. Open the dashboard :



4. Result in the dashboard:



Tab 2

Send a message

text sended

Ciao ciao

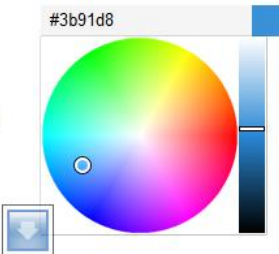
CLICK ME TO SEND A HELLO WORLD


CLICK ME TO SEND A CIAO CIAO

Color selector

#3b91d8

Colour picket





The result is

HERE IT IS

Home

Identification

Please complete the form

DeviceName *

Device Id *

112354456

Your Email

Password

☐ I'm not a robot
 ☐ I want to receive info via email

SUBMIT

CANCEL

Water level simulator

WATER LEVEL 15

WATER LEVEL 50


WATER LEVEL 85

Manual level

50

50

chart

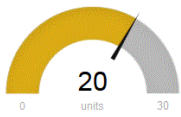


Test Gauge

Gauge level

20

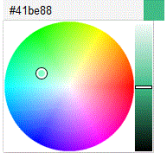
Gauge



Color selector

#41be98

Colour picket



Dark Theme

Water level simulator

WATER LEVEL 15

WATER LEVEL 50

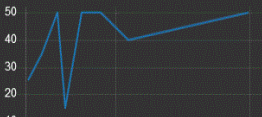
WATER LEVEL 85

Manual level

50

50

chart

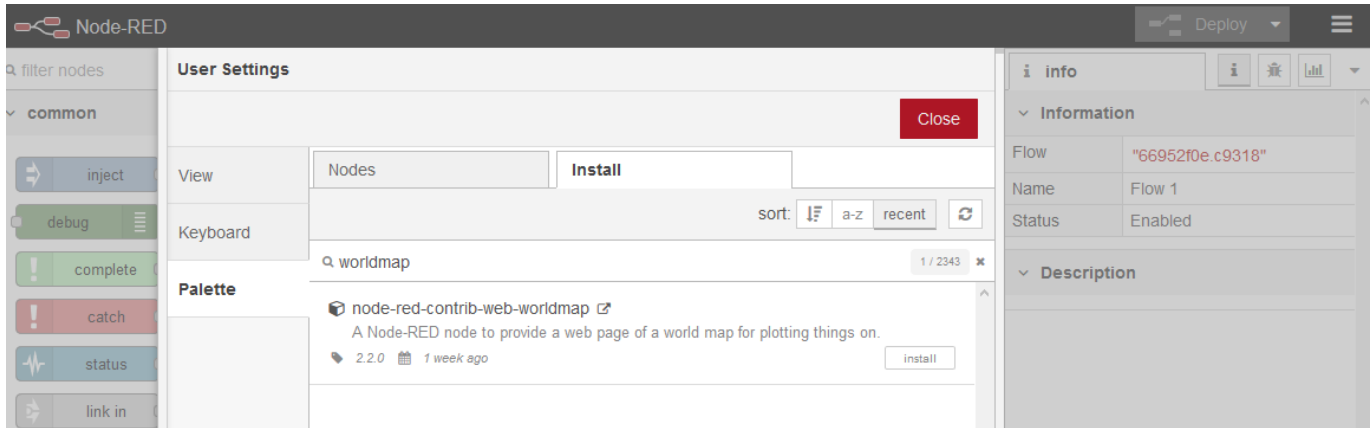


Light Theme

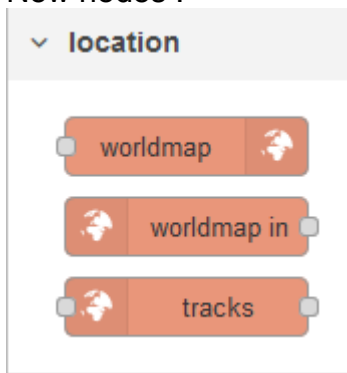
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C. Test worldmap

Add the worldmap palette:



New nodes :



<https://<YourAppName>.eu-gb.cf.appdomain.cloud/worldmap/> (see the link in the information of worldmap nodes.

Readme is available here: <https://www.npmjs.com/package/node-red-contrib-web-worldmap>

D. Create a dashboard to edit device meta data, display a map and display messages

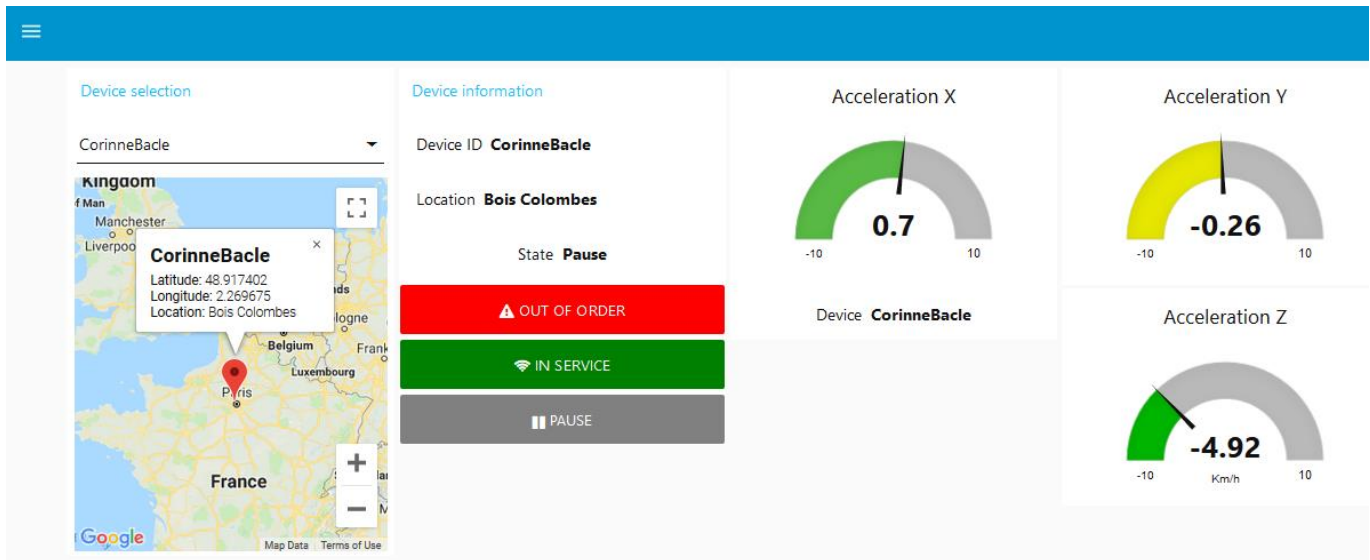
Please import in a new Node-RED tab the file named: NodeRED Dashboard Device Edition.txt in a new tab.

Mettre à jour la partie fonction Status en metadata et dans le format information
Mettre à jour pour utiliser WorldMap de NodeRed

Update device manager nodes to select your device type if needed (iotphone).

In the IoT Platform, edit the device descriptive location of your iotphone device, and add metadata :

```
{
  "status": "0",
  "longitude": 2.269675,
  "latitude": 48.917402
}
```

E. Use metadata to create a dashboard to display devices in a table and in a map

Please import in a new Node-RED tab the file named: NodeRED Dashboard Device table.txt
 Update device manager nodes to select your device type if needed (Android).
 In the IoT Platform, edit the device descriptive location of your **Android** device, and add metadata

```
{
  "status": "0",
  "longitude": 2.269675,
  "latitude": 48.917402,
  "transmission_status": 0
}
```

You can add more Android devices with different latitude/longitude and transmission-status to 0 or 1 or 2 to test the result.

Update the second buildHtml node with your googlemap API key.
 Result:

≡ Devices

Device	Device Location	Longitude	Latitude	Status
POTIoTCS	Ici			0
ThePhone	Tour Eiffel	48.858093	2.294694	1

REFRESH

CLEAR

