



Proof Of Technology

IBM Watson Internet of Things

IBM IoT Platform

Initialization for IBM Cloud free account

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Architecture de l'environnement du workshop en binômes



IBM Cloud user 1

Continuous
Delivery

Git

IoT phone
application

Cloudant

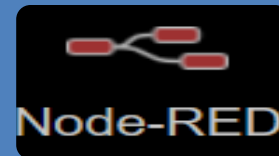
| | | |
|---------------------------|-----------|-------|
| Your device ID: TestPhone | | |
| Connected | | |
| Published Messages: 278 | | |
| Movement | | |
| Alpha | Beta | Gamma |
| 0 | 0 | 0 |
| Acceleration | | |
| X | Y | Z |
| 0 | 0 | 0 |
| Location | | |
| Latitude | Longitude | |
| 0 | 0 | |

IoT
Platform

IBM Cloud user 2

Step 2 & 3 bis

Node-RED
Starter



Cloudant

Watson
services



IBM Cloud account access

Create an IBM Cloud account: <https://cloud.ibm.com/>

(or use your existing one or company account)

This is free: for an unlimited period but for limited number of services

IBM Cloud account configuration

Check your account: create space and resource group if necessary

The screenshot displays the IBM Cloud dashboard. The top navigation bar includes 'IBM Cloud', 'Catalog', 'Docs', 'Support', and 'Manage'. The 'Manage' menu is open, showing options like 'Account', 'Billing and usage', and 'Security'. The 'Account' option is highlighted. Below the dashboard, the 'Cloud Foundry Organizations' page is shown for the user 'corinne.bacle@fr.ibm.com'. The left sidebar contains a list of navigation items, with 'Cloud Foundry Orgs' highlighted. The main content area shows a table of Cloud Foundry Organizations with columns for Name, Region, and Manager.

| Name | Region | Manager |
|----------------------|---------|---------|
| Base | Germany | ✓ |
| Dev | Germany | ✓ |



IBM Cloud account configuration

Go to Cloud Foundry Orgs

Click on your name/email

Check if you have a Space in UK/Germany

Click on « Add a Space », Select a “region” : UK/Germany, add a “Name” : PoT-IoT-Date for example, then “save”

Create a new space

Region

United Kingdom

Name

PoT-IoT-Sep-2020

Cancel

Save

IBM Cloud account configuration

Go to Resource Groups

Check if you have one

If not, create one



IBM Cloud

Account

Account resources

Best practices

Resource groups

Cloud Foundry orgs

Licenses and entitlements

Tags

Dashboards

Account settings

Search resources and offerings...

Catalog Docs Support Manage Corinne Baile's Account

Resource groups

Group resources to organize and assign access to the group. Available for all resources managed by IBM Cloud Identity and Access Management. [Learn more about resource groups.](#)

| Name | ID | Date Created | Actions |
|---------|----------------------------------|-----------------------|---------|
| Default | ec25877185ee4fc3822fadb491867f0a | 05/12/2019 à 12:03:16 | : |

IoTPhone Application User 1

IBM Cloud user 1

Continuous
Delivery

Git

IoT phone
application

Cloudant



IoT
Platform

Go to github

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

Download this documentation :

“Init binomes PoT IBM Watson IoT CPT IBM Cloud
Free 2020H2.pdf”

in directory Documentation



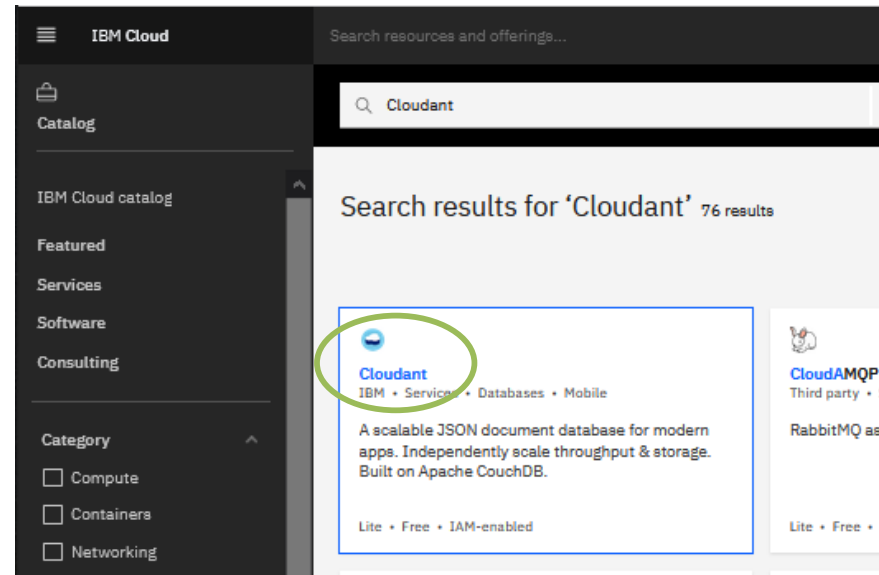
Cloudant service creation



Click on IBM Cloud Catalog




Search and select “Cloudant”



Cloudant service creation

Select your region

Catalog / Services /

 **Cloudant**
Author: IBM

Create About

Select an offering

Cloudant

IBM Cloudant is a fully managed JSON document database that offers independent serverless scaling of throughput capacity and storage.

Lite plan available

Select an environment

Multitenant Dedicated

Your instance will be running securely on environments with shared resources.

Available regions

London

Configure Cloudant instance

Instance name Required

iot-phone-cloudant-cloudantNoSQLDB

Tags

Examples: env:dev, version-1

Authentication method ⓘ

IAM

Plan

Lite

Full functionality for development and evaluation with a set capacity. Only one Lite plan instance per account.

Free - Only in multi-tenant

Standard

Granular control over provisioned throughput capacity allocated. Billing prorated per account.

Starting at \$75.00/month

Enter the instance name :
iot-phone-cloudant-cloudantNoSQLDB

Then click "Create"

Total monthly cost* **Free**
estimated

Create

Add to instance

Cloudant service configuration



Resource list /
iot-phone-cloudant-cloudantNoSQLDB Active [Add tags](#)

Details [Actions...](#)

Manage **Overview** Dashboard Capacity Docs

Service credentials

Launch Dashboard

Click on the iot-phone-cloudant-cloudantNoSQLDB service then Click on Launch Dashboard

Then Create Database

Databases

Database name **Create Database**

Database name : device_credentials

Select: "Non-partitioned"

Create Database

Database name

device_credentials

Partitioning

☐ Partitioned ☒ Non-partitioned

> What is a Partitioned Database?

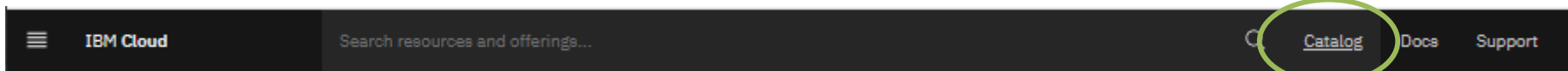
Create

Then "Create"

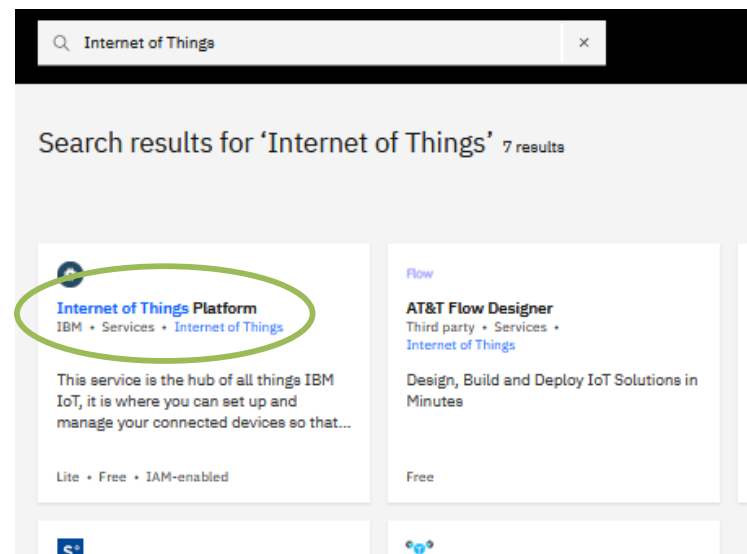
IoT service creation



Click on IBM Cloud Catalog



Search and select "Internet of Things"



IoT service creation



Select your region

Catalog / Services /

Internet of Things Platform

Author: IBM • Date of last update: 09/03/2019 • Docs

Create About

Select a region

Select a region

London

Configure your resource

Service name

iot-phone-iotf-service

Tags ⓘ

Enter the Service name :
iot-phone-iotf-service

Then click “Create”

Total monthly cost* Free estimated

Create

Add to estimate

IoT service configuration



In the new window, click “Launch”

A screenshot of the IBM Cloud console showing the configuration page for the 'iot-phone-iotf-service'. The page has a dark header with the IBM Cloud logo, a search bar, and navigation links for Catalog, Docs, Support, Manage, and a user profile. Below the header, the service name 'iot-phone-iotf-service' is displayed with a green 'Active' status and an 'Add tags' link. A left sidebar contains a 'Manage' section with sub-links for 'Plan' and 'Connections'. The main content area features a large blue icon of a central square with a circle inside, connected to various lines and shapes. To the right of the icon, the heading 'Let's get started with IBM Watson IoT Platform' is followed by a descriptive paragraph. Below this text, there are two buttons: a blue 'Launch' button, which is circled in green, and a grey 'Docs' button.

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Corinne

[Resource list](#) / **iot-phone-iotf-service** Active [Add tags](#)

Manage

- Plan
- Connections

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](#)

IoT service configuration



Select menu “Security” then “Connection Security” then “TLS Optional” then Save

The screenshot shows the IBM Watson IoT Platform interface. On the left is a dark navigation sidebar with the title "IBM Watson IoT Platform". It contains several menu items: "Boards", "Devices", "Members", "Apps", "Access Management", "Usage", "Security", and "Settings". The "Security" item is highlighted with a green oval. The main content area is titled "Policies" and includes a sub-header "Connection Security" with a description "Configure the security level for device connection." and a green edit icon in a square, which is also circled in green. Below this is a section titled "Default Rule" with the instruction "Define the default connection security level to use for all device types that do not have custom rules defined." It features two dropdown menus: "Scope" set to "Default" and "Security Level" set to "TLS Optional", both of which are circled in green. At the bottom of the configuration area are "Cancel" and "Save" buttons, with the "Save" button circled in green.

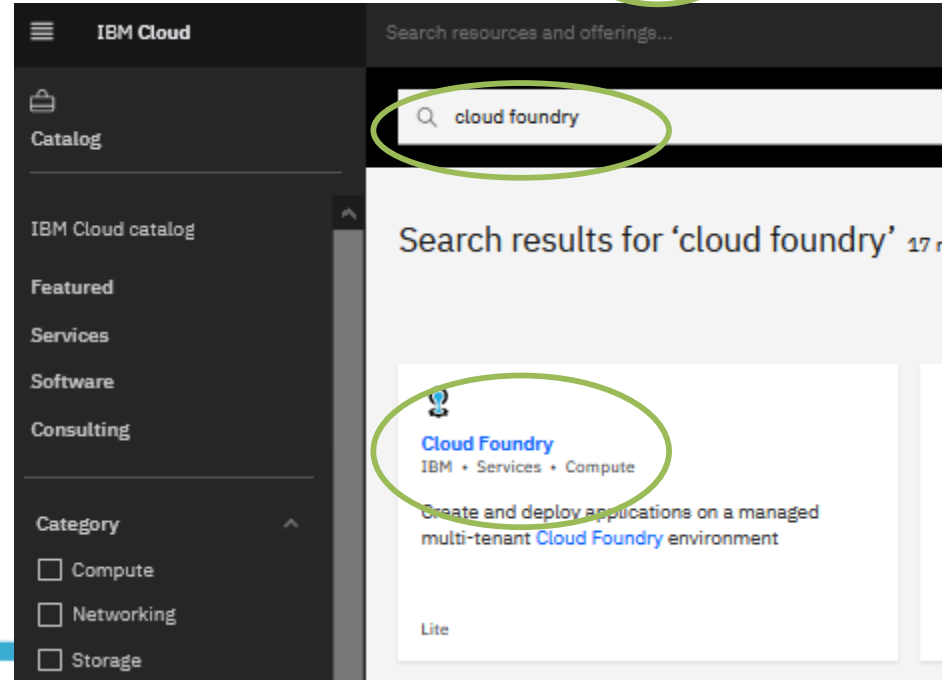
Sample application creation



Click on IBM Cloud Catalog



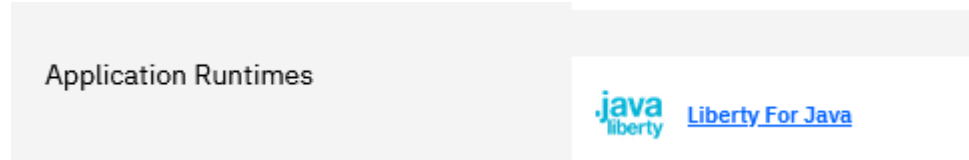
Search and select “cloud foundry”



Sample application connection creation









Click “Liberty For Java”



Select the region
Enter a unique name

Configure your resource

Select a runtime

| | | |
|---|--|---|
|  Liberty for Java™ <input checked="" type="checkbox"/> |  SDK for Node.js™ |  ASP.NET Core |
|  Python Community |  Ruby Community |  Runtime for Swift |

App name

CorinneBacleEssai

Host name

Then “Create”



Sample application connection creation

Go to “Connections”



IBM Cloud Search resources and offerings... Catalog Docs Support Manage Corinne Bacle's Account

Resource list / CorinneBacleEssai Starting Visit App URL Add tags

Getting started Overview Runtime **Connections** Logs API Management

Filter items

| Name | Type |
|------|------|
|------|------|

Create connection +

Select “Create connexion”
Select the IoT service
Select “Next”
Select “Writer” if requested
Then “Connect”
Then “Restage”

Create connection


Search resources...

| | Name |
|----------------------------------|------------------------------------|
| <input checked="" type="radio"/> | iot-phone-cloudant-cloudantNoSQLDB |
| <input type="radio"/> | iot-phone-iotf-service |

Do the same for the Cloudant service.

Result



 **IBM Cloud** Rechercher des ressources et des offres...












Tableau de bord ▾

Récapitulatif des ressources [Tout afficher](#)

5

Resources

- [Cloud Foundry apps](#) ✓ 1
- [Cloud Foundry services](#) 2
- [Services](#) ✓ 2

IoTPhone Application User 1

IBM Cloud user 1

Continuous
Delivery

Git

IoT phone
application

Cloudant



IoT
Platform

Create your own IoT Html 5 Phone application as user 1



See next slides to create your own application

A screenshot of a web application interface with a dark theme. At the top, it says "Your device ID:" followed by a "Disconnected" status with a red X icon. Below this is a "Published Messages:" section. A modal dialog is open in the center, titled "Enter a unique ID of at least 8 characters containing only letters and numbers:". The dialog has a text input field and "OK" and "Cancel" buttons. In the background, there is a table with columns for "Movement" and "Location". The "Movement" section has rows for "Alpha", "X", and "Gamma", each with a value of "0". The "Location" section has columns for "Latitude" and "Longitude", each with a value of "0".

Log in <https://cloud.ibm.com> as **USER 1**

Go to github

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



Search or jump to... Pull requests Issues Marketplace Explore

CorinneBacle / **html5-phone**
forked from ibm-watson-iot/html5-phone

Watch 0 Star 0 Fork 54

Code Pull requests 0 Projects 0 Wiki Security Insights Settings

Branch: master **html5-phone / README.md** Find file Copy path

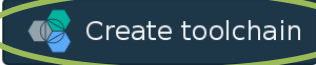
CorinneBacle Update README.md c4bc67d now

5 contributors

6 lines (3 sloc) | 437 Bytes Raw Blame History

iot-html5-phone

This application allows you to use your mobile phone as a test device with IBM Watson IoT Platform. Click the following button to deploy the application to your IBM Cloud environment and provision the appropriate services.

 Create toolchain

Go to the bottom and click Create toolchain

Select Region **Frankfurt** or **London** depending on where you have created your space in the previous steps
Change the application name with a shorter one



IBM Cloud Search resources and offerings... Catalog Docs Support Manage CORINNE BACLE's Account

Toolchains / Create a toolchain /

Déployer vers IBM Cloud : application iot-html5-phone

Une fois que vous avez cliqué sur **Déployer**, votre application est déployée dans IBM Cloud.

Le code de votre application est automatiquement chargé dans un référentiel Git. Chaque fois que vous validez des modifications dans le référentiel, elles sont automatiquement déployées à l'aide d'une chaîne d'outils qui est associée à votre application. Vous pouvez ajouter davantage d'outils à la chaîne d'outils et la partager avec votre équipe. [En savoir plus.](#)

La chaîne d'outils utilise des outils qui font partie du service Continuous Delivery. Si aucune instance de ce service n'existe dans l'organisation sélectionnée, elle est automatiquement ajoutée

Toolchain Name:
POT-Mai-2019-iot-html5-phone

Select Region:
Frankfurt

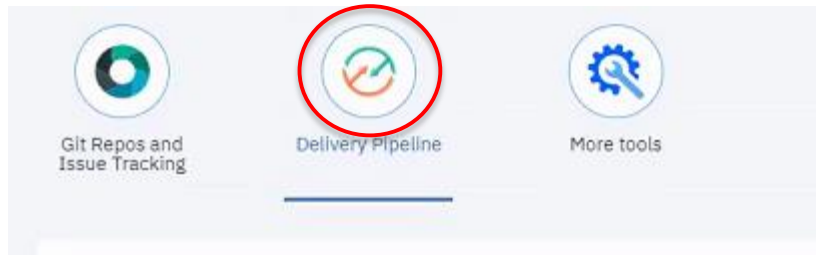
Select a resource group:
Globale

Tool In:
London

[Select Region:](#)

[Select a resource group:](#)

[Select a resource group:](#)





Clé d'API IBM Cloud: ⓘ

Clé d'API IBM Cloud

New +

Create the API Key

The value is required.

Create a new API key with full access

Warning: This will create a new API key that allows anyone who has it the ability to do anything you could do. You can improve your security posture by using the [IAM UI to create a service ID API key](#) that limits access to only what your pipeline requires, and then pasting that into the template UI instead. For more information on API keys and access see the [IAM documentation](#).

| Name | Description |
|--|-------------|
| API Key for html5-phone-20200911P-TECH | |

☐ Save this key in a secrets store for reuse

Cancel

OK

Wait a little to automatically get “Region” filled
Then Select your space
Then Deploy

IBM Cloud API key:

.....



Create +

Region

Organization

Space

Frankfurt

pierre_milcent@fr.ibm.

demoIOT

Toolchains / Create a toolchain /

Déploier vers IBM Cloud : application html5-phone

Create

About

Toolchain Name:

html5-phone-20200911P-TECH

Select Region:

London

Select a resource group:

Default

[Select a CF Organization \(deprecated\)](#)

Tool Integrations



Outils Git Repos and
Issue Tracking



Delivery Pipeline



More tools

Delivery Pipeline automatise le déploiement continu.

Nom de l'application: ⓘ

html5-phone-20200911P-TECH

Clé d'API IBM Cloud: ⓘ

.....



New +



Région

London

Organisation

cocobaacle@yahoo...

Espace

dev

Cancel

Create

Then click “create”



iot-html5-phone-CorinneBacleGermany

✓ **Your app is being created!** Quick start: To watch the pipeline deploy your app, click **Delivery Pipeline**. After the app is de

THINK

Issues

iot-html5-phone-Cori...

✓ Configured

CODE

Git

iot-html5-phone-Cori...

✓ Configured

DELIVER

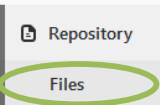
Delivery Pipeline

iot-html5-phone-Cori...

Eclipse Orion Web IDE

✓ Configured

- Open Link in New Tab
- Open Link in New Window
- Open Link in New Private Window

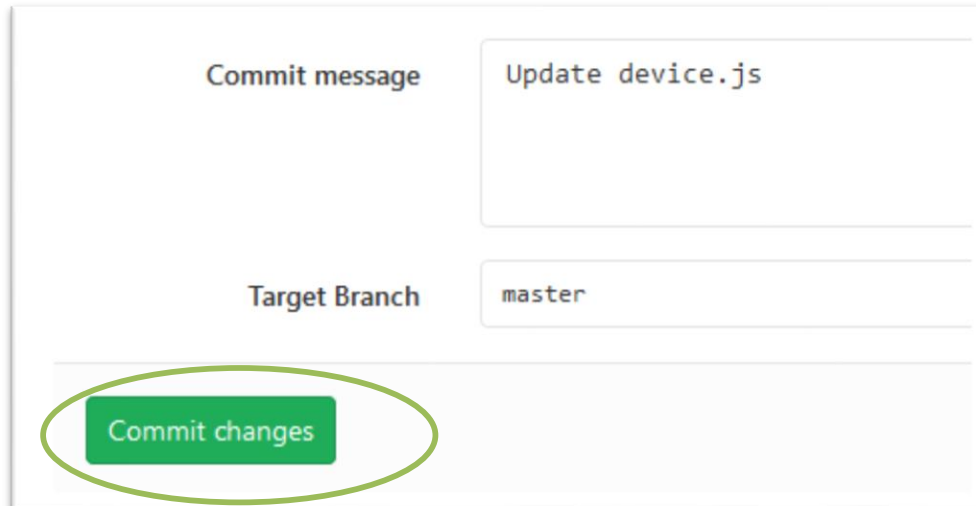


For example change
the prompt message:



```
Write Preview changes
Y master public/js/device.js
57 document.getElementById("gamma").innerHTML = og.toFixed(2);
58 }
59
60 window.msgCount = 0;
61
62 var updatePersonalAllocation = function(position) {
63     window.lat = position.coords.latitude;
64     window.lng = position.coords.longitude;
65     $("#lat").html(window.lat.toFixed(6));
66     $("#lng").html(window.lng.toFixed(6));
67 }
68
69 if (navigator.geolocation) {
70     navigator.geolocation.watchPosition(updatePersonalAllocation);
71 }
72
73 function getId() {
74     window.deviceId = prompt("Enter a unique ID for CBA appli | If at least 8 characters containing only letters and numbers (Warning : it will be
75     if (deviceIdRegex.test(window.deviceId) === true) {
76         console.log("Connecting with device id: " + window.deviceId);
77         $("#deviceId").html(window.deviceId);
78         getDeviceCredentials();
79     }
80 }
```

then in the bottom :



Commit message Update device.js

Target Branch master

Commit changes

Option : changer l'image de fond



Modifier le fichier public/stylesheets/device.css partie body puis background-image

Voir une explication ici:

<http://css.mammothland.net/image-de-fond-background-css.php>

Remplacer

```
body {  
background-image: linear-gradient(to bottom right, #2d3f4a, #1d3649);  
margin: 0;  
padding: 0;  
}
```

Par

```
body {  
color:black; background-color:white;  
background-image:url(images/image_de_fond.png);  
}
```


Et ajouter votre image dans un repertoire images à la racine avec le bon nom.

Toolchains / [iot-html5-phone-CorinneBacleGermany](#)

iot-html5-phone-CorinneBacleGermany

✔ Your app is being created! **Quick start:** To watch the pipeline deploy your app, click **Delivery Pipeline**. After the app is de


THINK



Issues
iot-html5-phone-Cori...

✔ Configured


CODE



Git
iot-html5-phone-Cori...


✔ Configured

DELIVER



Delivery Pipeline
iot-html5-phone-Cori...

✔ Configured



Eclipse Orion Web IDE

✔ Configured




Lost ?
See next slide


See next slide if you have
close the toolchain tab





How to find the toolchain if you have closed the tab:





 IBM Cloud





 Cloud Foundry


 Containers


 Infrastructure


 VMware


 Dashboard


 APIs


 Apple Development New


 Blockchain


 DevOps


 Finance


 Functions

 Integrate

 Mobile

 Security

 Watson

 Web Apps

Toolchains

Resource Group

Cloud Foundry Org

Location

Default

-

London

Q


Filter table...

Name

↑

Tool Integrations


html5-phone-20200911P-TECH



Items per page: 10

1-1 of 1 items

Check deployment status :

 IBM Cloud

Catalog

Docs

Support

Manage

Toolchains / [iot-html5-phone-Cori...](#) / [iot-html5-phone-CorinneBacleGermany](#)


iot-html5-phone-CorinneBacleGermany | Delivery Pipeline

Build Stage


▶ ⚙

STAGE PASSED



LAST INPUT [Git URL](#)

 Last commit by CORINNE BA... 2d ago
[Update @cloudant/cloudant app.js](#)

JOB [View logs and history](#)

 Build Passed 2d ago

LAST EXECUTION RESULT

 Build 3 



>

Deploy Stage


▶ ⚙

STAGE PASSED


LAST INPUT Stage: Build Stage / Job: ...



 Build 3 

JOB [View logs and history](#)

 Deploy Passed 2d ago

LAST EXECUTION RESULT

 [iot-html5-phone-CorinneBacl...](#)
[View console](#)

 Build 3 

Add Stage +

Find the application:

<https://cloud.ibm.com/resources>



Dashboard

Récapitulatif des ressources

Cloud Foundry Apps

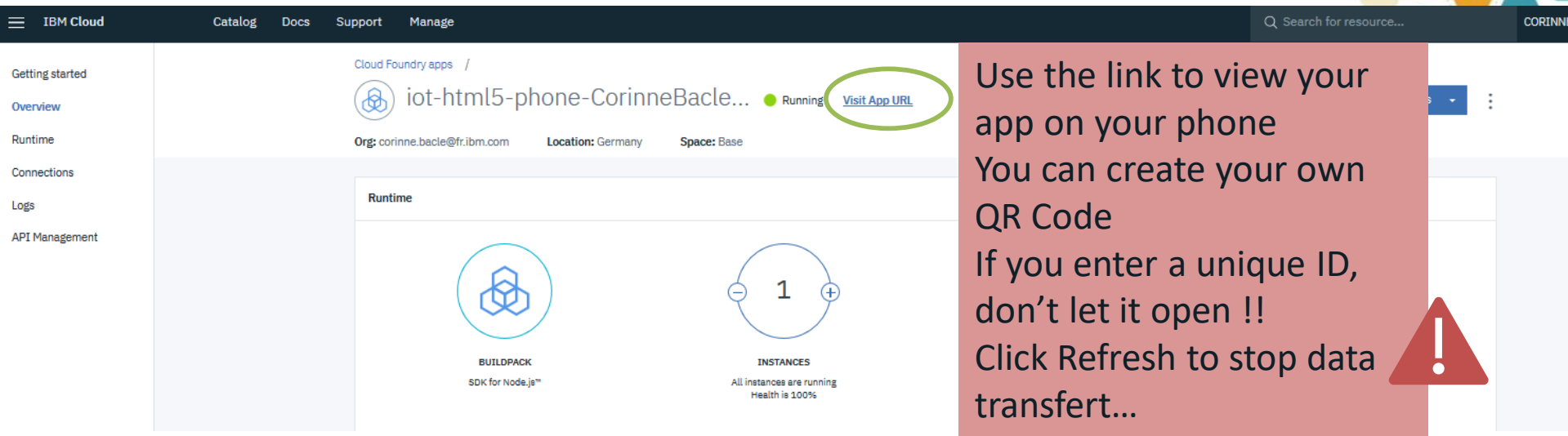
Cloud Foundry Services

Services

Cloud Foundry apps (2)

| | | | | |
|---|--------------------------|--------|----------------------------|---------|
|  CorinneBacleEssai | cocobacle@yahoo.fr / dev | London | Liberty for Java™ | Started |
|  html5-phone-2020091112438895 | cocobacle@yahoo.fr / dev | London | Cloud Foundry applications | Started |

Cloud Foundry services (2)



IBM Cloud

Catalog Docs Support Manage

Search for resource...

CORINNE

Cloud Foundry apps /

iot-html5-phone-CorinneBacle... ● Running [Visit App URL](#)

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

Runtime

BUILDPACK
SDK for Node.js™

INSTANCES
All instances are running
Health is 100%

Use the link to view your app on your phone
You can create your own QR Code
If you enter a unique ID, don't let it open !!
Click Refresh to stop data transfert...



Si vous avez un iPhone : La version IOS ne permet pas d'accéder à l'accéléromètre et au gyroscope depuis Safari de façon simple.

Open the appli on your phone/tablet



Your device ID:

⊗ Disconnected

Published Messages:

| Movement | | |
|--|------|---------|
| Alpha | Beta | Gamma |
| Enter a unique ID for CBA appli of at least 8 characters containing only letters and numbers (Warning : it will be displayed on the dashboard!): | | |
| <input type="text"/> | | |
| OK | | Annuler |

| Location | |
|-----------|-----------|
| Latitude | Longitude |
| 48.784955 | 2.309515 |

You can create your own QR Code
Using a free QR Code generator
If you enter a unique ID, don't let
it open !!
Click Refresh to stop data
transfert...



IBM Cloud

Search resources and offerings...

Catalog Docs Support Manage ▾ Corinne Bacle's Account

Resource list /

html5-phone-20200911124338895 Running [Visit App URL](#) [Add tags](#)

Details [Actions...](#)

Getting started

Overview

Runtime

Connections

Logs

API Management

Autoscaling

Availability Monitoring

Instances [Edit](#)

Health

100%

1/1 instance(s) are running

MB memory per instance

0 192 128

Runtime

SDK for Node.js™

128

Total MB allocation

64 MB still available

Used Free

Runtime cost

Current and estimated cost excludes connected services.

0,00 \$US 0.00

0,00 \$US 0,00

Estimated total for billing period

Connections (2)

- iot-phone-cloudant-cloudantNoSQLDB
- iot-phone-iotf-service

To access your IoTPlatform
Click on the connection
Then See next slide

Connections

Resource list /

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

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



Click on the Alias to access the ressource in the ressource group

Manage

Plan

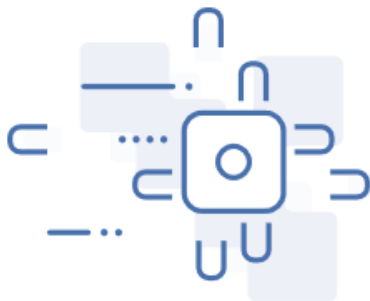
Connections

Resource list /

Internet of Things Platform-no

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

Click on Manage
then on Launch



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



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 on 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 |
|-----------------------------|-----------------|---------------|------------|---------------------|
| 5 results | | | | |
| // <input type="checkbox"/> | CorinneBacle123 | iotphone | Device | Oct 9, 2018 6:03 PM |
| // <input type="checkbox"/> | Telephone1 | iotphone | Device | Oct 9, 2018 6:30 PM |



Configure last event cache feature in the IoT Platform (for all)



PLATFORM

About

Identity

Experimental Features

Last Event Cache

DATA AND DEVICES

Custom Device

Management Packages

Device Simulator

SECURITY

Connection Security

CA Certificates

Last Event Cache

The last event cache (LEC) stores information about the last event a connection sends to the platform. For more information, see the last event cache [documentation](#)

Activate Last Event Cache



Events stored in cache

1 day

7 days

Custom Device Management Packages

Custom device management packages can be uploaded to add new device management packages. Custom device management packages must consist of valid JSON in order to be added. For more details see the custom device management package [documentation](#)

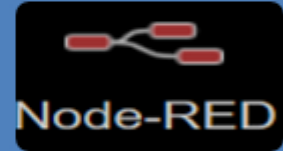
Node-RED

User 2

IBM Cloud user 2

Step 2 & 3 bis

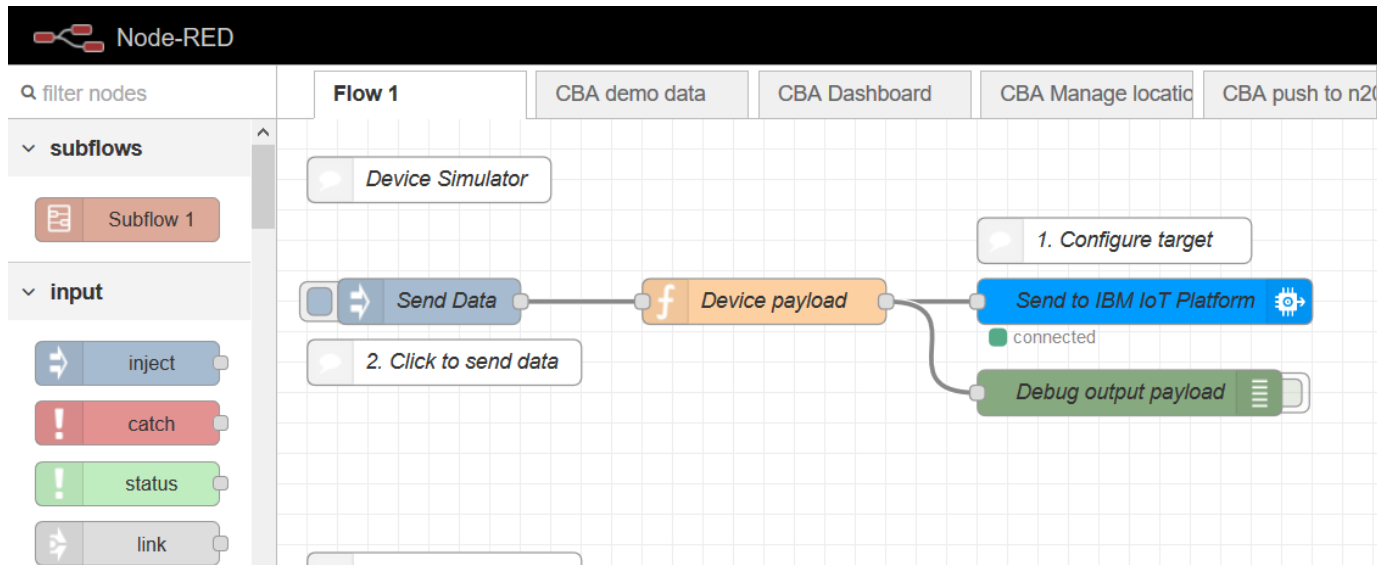
Node-RED
Starter



Cloudbant

Watson
services

Create a NodeRed and link it to your application as user 2



Log in <https://cloud.ibm.com> as **USER 2**

IBM Cloud

Catalog

IBM Cloud catalog

Featured

Services

Software

Consulting

Category

Analytics

Developer Tools

Product

Search resources and offerings...

node-red

Search results for 'node-red' 3 results

Node-RED App

IBM • Software • Developer Tools

Start building your next Node-RED app on IBM Cloud.

Starter kits • IBM Kubernetes Service • Red Hat OpenShift

node-exporter

Third party • Software • Analytics

Prometheus exporter for hardware and OS metrics exposed by UNIX kernels, with pluggable metric collectors.

Helm charts • IBM Kubernetes Service • Free

Catalogue / Créer une application /

Node-RED

A proposCréer

Détails

Auteur IBM

Mis à jour 2/10/2020

Type Kit de démarrage

Code source

GitHub

Liens utiles

Dispositions

Tutorial

Présentation

This starter kit provides a pre-configured Node-RED to store the application flow configuration. Add se use the IBM Cloud Developer Tools CLI to run an Foundry or a DevOps Pipeline.

Ce kit de démarrage va vous aider

- Generate an application with Node-RED
- Generate an application with files for deploying to
- Connect to provisioned services

Qu'est-ce que le kit inclut ?

Cloudant

Gratuit pour commencer

Afficher la tarification

Commencer



Node-RED

A propos

Créer

Détails de l'application

Nom de l'application

Node RED MDDJR 2020-09-11



Choose a unique name

Acceptez le nom par défaut ou entrez une valeur pouvant comporter jusqu'à 128 caractères.

Groupe de ressources

Default

Tags ⓘ

Exemples: env:dev, version-1

Plateforme

☒ Node.js

Détails du service

Cloudant★



Create

Node RED MDDJR 2020-09-11 [Ajouter des balises](#)

Détails

UTL de l'application

Vous devez d'abord déployer votre application

Source

Télécharger le code



Groupe de ressources

Default

Cible de déploiement

Vous devez d'abord déployer votre application

Créé

9/11/2020

Services

Automatisation du déploiement



Configuration de la distribution continue

La distribution continue n'est pas activée pour cette application. Activez la distribution continue afin d'automatiser les générations, les tests et les déploiements via Delivery Pipeline, GitLab, etc.

Déploiement de votre application



Node RED MDDJR 2020-09-11

☒ Sélectionner la cible de déploiement... ☐ Configurer la chaîne d'outils DevOps...

Automatisation du déploiement

Sélectionnez votre cible de déploiement et configurez votre chaîne d'outils DevOps. Cliquez sur Créer pour créer la chaîne d'outils et démarrer automatiquement le processus de déploiement.

Cible de déploiement



Cloud Foundry

IBM

Déployez et exécutez vos applications sans gérer les serveurs ou les clusters. Un plan Lite est disponible pour un déploiement rapide et facile.

Clé d'API IBM Cloud

Clé d'API IBM Cloud

La valeur est obligatoire.



New



Région

London

Organisation

cocobacle@yahoo.fr

Hôte

node-red-mddjr-2020-09-11

Domaine

eu-gb.mybluemix.r

Annuler

Suivant

○ Sélectionner la cible de déploiement... ● Configurer la chaîne d'outils DevOps

Configurer la chaîne d'outils DevOps

Attribuez un nom à votre chaîne d'outils et sélectionnez la région dans laquelle créer votre chaîne d'outils.

Nom de chaîne d'outils DevOps

NodeREDCBA2020-09-11

Acceptez le nom par défaut ou entrez une valeur pouvant comporter jusqu'à 100 caractères.

Région

Londres

Précédent

Créer

Wait a little
Refresh if necessary

Liste des ressources / Détails de l'application /

Node RED CBA 2020-09-11

Ajouter des balises

Détails

URL de l'application

<https://node-red-cba-2020-09-11.eu-gb.mybluemix.net>

Source

<https://eu-gb.gitcloud.ibm.com/cesabade/NodeREDCBA2020-09-11>

Groupe de ressources

Default

Cible de déploiement

Node RED CBA 2020-09-11

Créé

9/11/2020

Services



Cloudant

[Ouvrir le tableau de bord](#)

[Documentation](#)

Données d'identification

Automatisation du déploiement

Nom

NodeREDCBA2020-09-11

Emplacement

Londres

Intégrations d'outils



Pipelines de distribution

Nom

NodeREDCBA2020-09-11

Statut



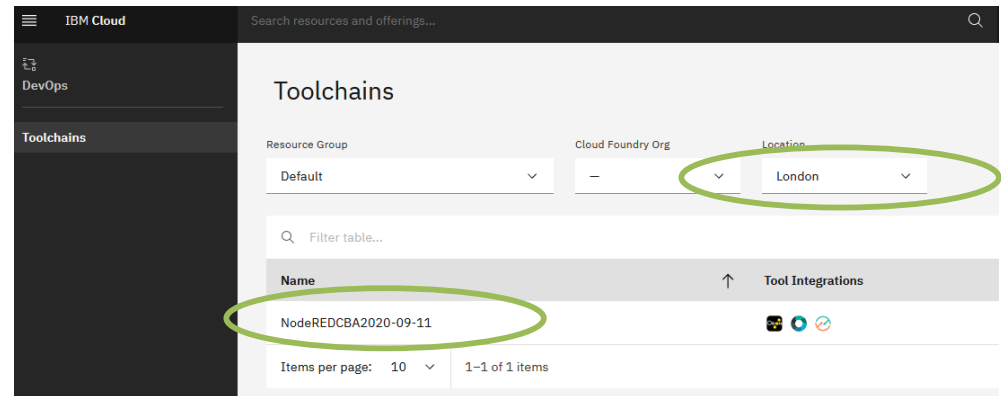
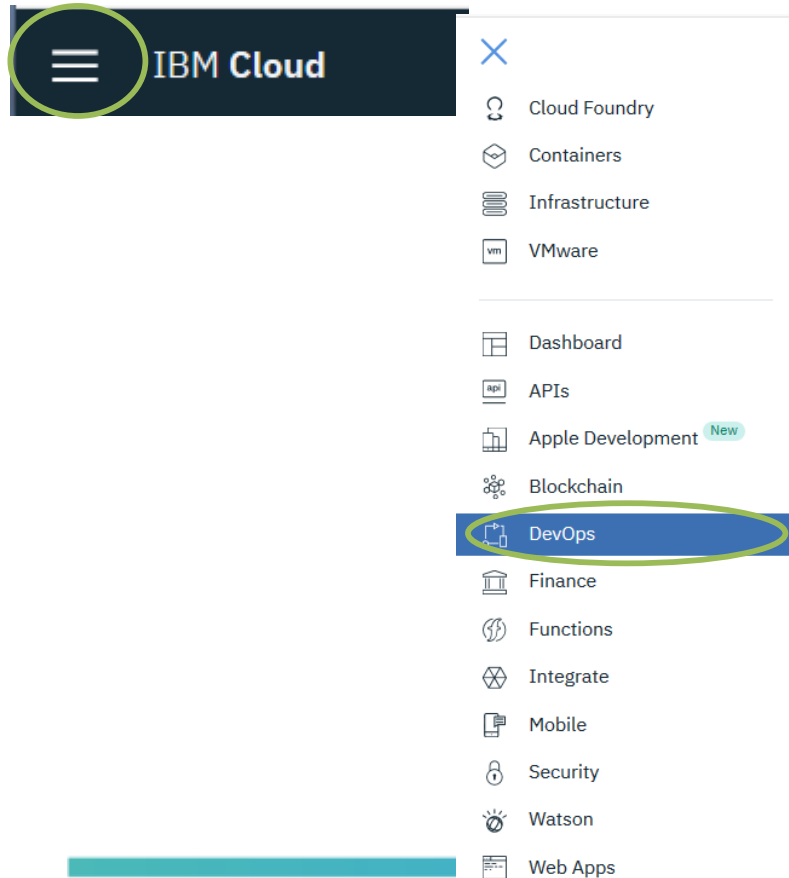
Réussite

Dernière entrée

Dernière validation par IBM Cloud (5 minutes ago)

[Cloner à partir d'un zip](#)

How to find the toolchain if you have closed the tab or if the status is « failed »:



Re deploy if the status is FAILED

Think

Code

Deliver

Issues
NodeREDCBA2020-...

Git
NodeREDCBA2020-...

Delivery Pipeline
NodeREDCBA2020-...

Toolchains / NodeREDCBA2020-09-11 / NodeREDCBA2020-09-11 /

NodeREDCBA2020-09-11 | Delivery Pipeline

Build Stage

STAGE PASSED

LAST INPUT

Git URL

Last commit by Corinne Bacle 3m ago
Update device.js

JOB

Build

Passed now

LAST EXECUTION RESULT

Build 2

Deploy Stage

STAGE FAILED

LAST INPUT

Stage: Build Stage / Job: B...

Build 2

JOB


Deploy

Failed now

LAST EXECUTION RESULT


No results

Open the Node-RED application

 IBM Cloud

Search resources and offerings...

Resource list /

Node RED CBA 2020-09-11 Running [Visit App URL](#) Add tags 

Getting started

Overview

Runtime

Connections

Logs

Instances

Health

100%

1/1 instance(s) are running

Welcome to your new Node-RED instance on IBM Cloud

We know you're eager to start wiring up your flows, but first there are a couple of tasks you should do:

- Secure your Node-RED editor
- Learn how to install additional nodes

Secure your Node-RED editor

☐ Secure your editor so only authorised users can access it

☒ *Not recommended:* Allow anyone to access the editor and make changes

Your editor will not be secured. Anyone with the URL will be able to access your flows, data and bound services.

☒ Tick this box to confirm you want your editor to be insecure



Previous

Next

Node-RED

Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it

Go to your Node-RED flow editor

Store the link !!

Install IoT nodes

The screenshot shows the Node-RED web interface. On the left, a dark sidebar contains a menu with the following items: View, Import, Export, Search flows, Configuration nodes, Flows, Subflows, **Manage palette** (highlighted with a green circle), and Settings. Above the menu is a 'Deploy' button and a hamburger menu icon (three horizontal lines, also highlighted with a green circle). The main workspace is divided into three panes: 'View' (top), 'Keyboard' (middle), and 'Palette' (bottom). The 'Nodes' tab is selected in the top pane, and the 'Install' button in the top right of this pane is highlighted with an orange circle. The search bar in the 'Nodes' pane contains the text 'wiot'. Below the search bar, a list of nodes is displayed, each with an 'install' button highlighted by a green circle:

- node-red-contrib-ibm-wiotp-device-ops**
A collection of Node-RED nodes that can perform a wide range of device and gateway operations on the Watson IoT platform
0.1.3 2 years ago
- node-red-contrib-ibm-watson-iot**
Connect to IBM Watson Internet of Things Platform as a Device or Gateway
0.2.8 2 years, 9 months ago
- node-red-dashboard**
A set of dashboard nodes for Node-RED
2.17.1 1 week ago
- node-red-contrib-scx-ibmiotapp**
IoT Application Node-RED node for the Registered and Quickstart flows in IBM Watson IoT Platform
0.0.49 1 year, 9 months ago

Result

▼ input

Watson IoT

ibmiot in

▼ output

OpenWhisk

Watson IoT

ibmiot out

▼ Watson IoT

device manager

device type manager

▼ dashboard

button

dropdown

slider

text input

numeric

colour picker

switch

date picker

form

notification

gauge

chart

text

audio out

template

ui control



Create a first flow then deploy



Node-RED

filter nodes

common

inject

debug

complete

Flow 1

timestamp

msg.payload

Deploy

info

Information

| | |
|--------|------------------|
| Flow | "400886c4.9ae3f" |
| Name | Flow 1 |
| Status | Enabled |

Description

The screenshot shows the Node-RED web interface. On the left, a palette of nodes is visible under the 'common' tab, including 'inject', 'debug', and 'complete'. The main workspace, titled 'Flow 1', contains a flow with three nodes: 'inject', 'timestamp', and 'msg.payload'. The 'inject' node is connected to the 'timestamp' node, which is then connected to the 'msg.payload' node. A blue line also connects the 'complete' node to the 'msg.payload' node. On the right, a sidebar shows the 'info' tab with a table of flow information. The 'Deploy' button in the top right corner is highlighted with a green circle.

Connect the Node-RED to the IoT platform service of the user 1 html 5 application



IBM Cloud user 1

Continuous
Delivery

Git

IoT phone
application

Cloudant

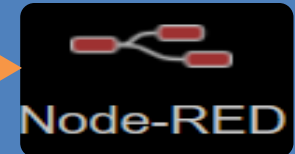
| | | |
|---------------------------|-----------|-------|
| Your device ID: TestPhone | | |
| Connected | | |
| Published Messages: 278 | | |
| Movement | | |
| Alpha | Beta | Gamma |
| 0 | 0 | 0 |
| Acceleration | | |
| X | Y | Z |
| 0 | 0 | 0 |
| Location | | |
| Latitude | Longitude | |
| 0 | 0 | |

IoT
Platform

IBM Cloud user 2

Step 2 & 3 bis

Node-RED
Starter



Cloudant

Watson
services



As a User 1 : create API key

Go to the IoT platform service





IBM Cloud Catalog Docs Support Manage CORINNE BACLE's Acc...

Getting started Overview Runtime

Cloud Foundry apps / IoTStarterIoTPhone Running [Visit App URL](#) Routes

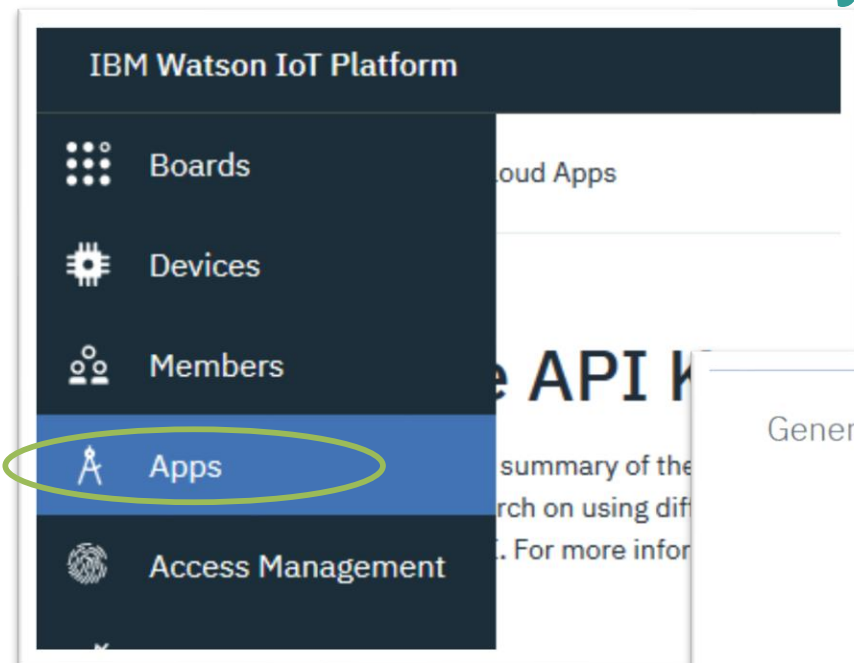
Org: corinne.bacle@fr.ibm.com Location: Germany Space: Base

10 Items per page | 1-2 of 2 items

| CONNECTION NAME | TYPE |
|--|-----------------------------|
|  IoTStarterIoTPhone-cloudantNoSQLDB | Cloudant NoSQL DB |
|  IoTStarterIoTPhone-iotf-service | Internet of Things Platform |

Go to your IoT Platform service

Create an API Key



Generate API Key

Information ☒ Permissions ☐

The application will have access for the following role:

Role

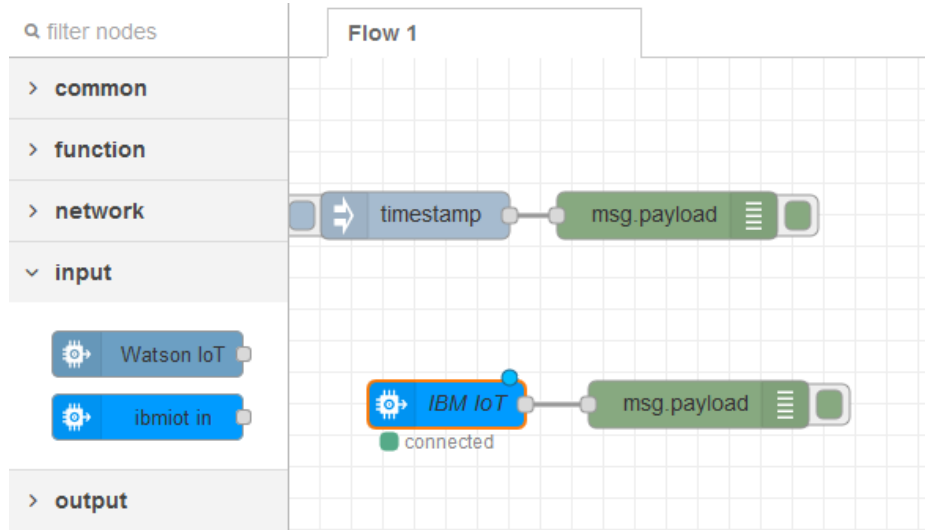
For more information about roles, see [User, application, and gateway roles](#).

[Back](#) [Generate Key](#)



Save the API Key, Authentication Token in a file

As a User 2: connect Node-RED



Create an IBM IoT node linked to a debug node

Open the IBM IoT node

Create the API key (pencil on the right of the API Key attribute) to define the configuration:

Edit ibmiot in node > Add new ibmiot config node

Cancel Add

Properties

Name User1IoTPhone

API Key a-eqbwt6-ysbfjqidgt

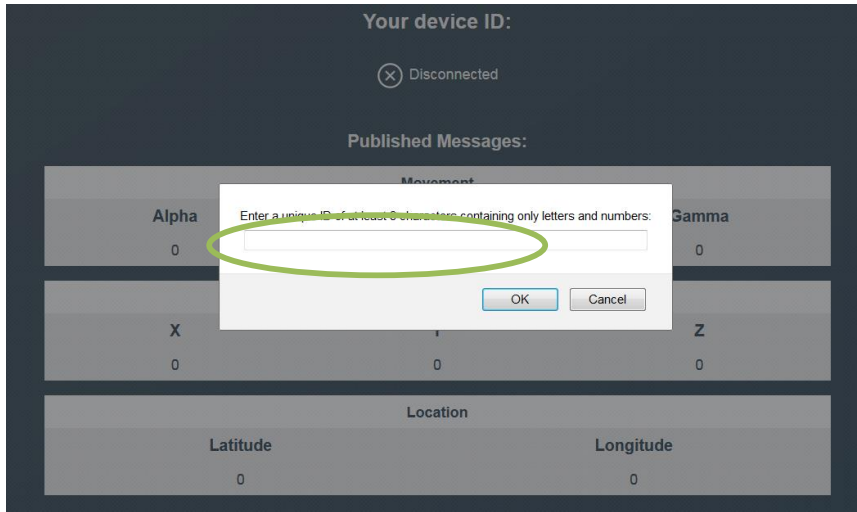
API Token

Server-Name eqbwt6.messaging.internetofthings.ibmcloud.com

Scalable ☐ Application ID

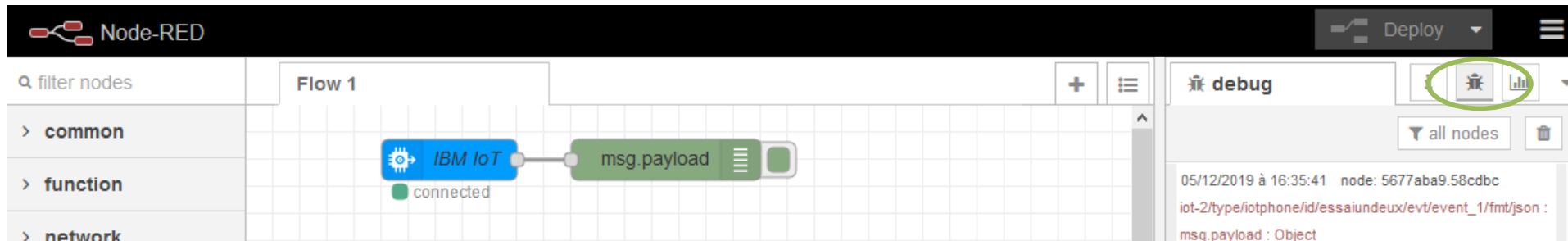
Keep Alive 60 Seconds ☒ Use Clean Session

Check the configuration with the IoT Phone app:



<= Open the phone app
Enter a unique ID

Check the debug tab of the Node-RED to see messages:



POT IBM Watson IoT Platform lab

- I. Prerequisites
- II. Explore data coming from the IoTPhone application
- III. Use data coming from your IoT SmartPhone
- IV. Use your NodeRed application to create and generate an alert
- V. Create a dashboard application in Node-RED





Ressources

Découvrez comment Watson IoT peut vous aider à exploiter le potentiel de vos objets connectés.

ibm.com/iot

Tester

https://ibm.biz/try_iot

DeveloperWorks

<https://www.ibm.com/developerworks/learn/iot/>

<https://developer.ibm.com/recipes/>

<https://developer.ibm.com/iotfoundation/>

Watson IoT Academy

<https://www.iot-academy.info/>

