



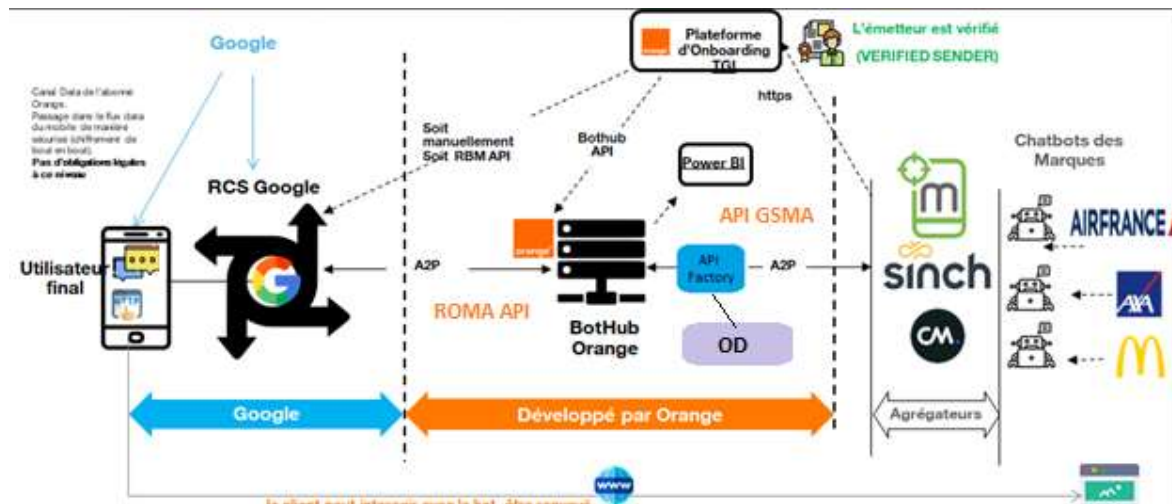
Bothub Integration Bots onboarding

in RCS & GSMA MaaP ecosystem

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1 Global architecture



Bothub is an integration product linking:

- Google RBM Platform (to reach endusers on RCS channel)
- Aggregators,

Bothub also provides:

- Large Direct Marketing campaigns management
- CDRs files
- Optional anonymization of MSISDN for customer billing
- Orange contents hosted to ease bot development
- KPIs
- Google Analytics
- Authentication and authorisation for Bot Management

2 Synthetical view

After having sign a contract with OFR, Aggregators need to follow the following steps:

- interconnect to bothub through Orange Developer (OD) portal
- register a bot with our onboarding portal

2.1 Intercomnection to bothub

Two easy steps:

1/ Open an orange account on Orange developer

<https://developer.orange.com/signin>

2/ Subscribe to Bothub GSMA API

- <https://developer.orange.com/apis/orange-rcs-bothub>

2.2 Onboarding Portal

The onboarding portal is accessible here:

- <https://onboarding-prod.sandbox.idaas.orange.com/public/home>

The onboarding Portal allow you to

- Create an account, reset password, modify your account
- Register a bot on Orange/Google ecosystem
- Test your bot (Invite a tester ; Trig a bot on the device of tester)
- Request the Launch of one of your bots
- View the status of all your bots and manage them
 - * Manage bots: deactivate/activate a bot, edit bot's details, and delete bots...

3 DETAILED STEP BY STEP PROCESS

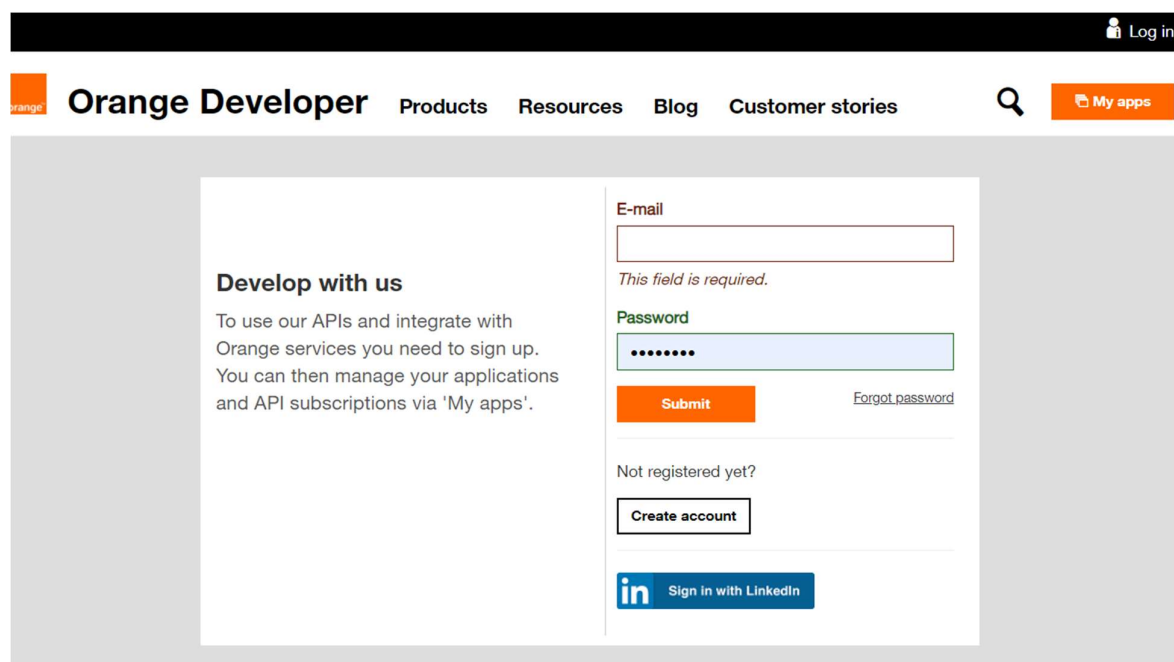
3.1 Create Orange Developer account

You, as an aggregator representative, should have created your developer account: as below with name & dev email pegXXXXXXXX@gmail.com as an example

<https://developer.orange.com/signin>

See also, three tips for using Orange APIs

<https://developer.orange.com/3-tips-for-using-orange-apis/>



The screenshot shows the Orange Developer website's sign-in and sign-up interface. At the top, there is a black navigation bar with a 'Log in' button. Below this is the Orange Developer header with navigation links for Products, Resources, Blog, and Customer stories, along with a search icon and a 'My apps' button. The main content area is divided into two columns. The left column, titled 'Develop with us', contains text explaining the benefits of using Orange APIs and managing applications. The right column contains the sign-in and sign-up forms. The sign-in form includes fields for 'E-mail' and 'Password', a 'Submit' button, and a 'Forgot password' link. Below the sign-in form is a 'Not registered yet?' section with a 'Create account' button. At the bottom of the right column is a 'Sign in with LinkedIn' button.

Develop with us

To use our APIs and integrate with Orange services you need to sign up. You can then manage your applications and API subscriptions via 'My apps'.

E-mail

This field is required.

Password

Submit [Forgot password](#)

Not registered yet?

Create account

in Sign in with LinkedIn

Log in

Orange Developer Products Resources Blog Customer stories

My apps

New account

Complete this form to create your account

First name *

Last name *

E-mail *

Confirm e-mail *

Password *

Country *

Job *

Technical (CTO, Project/IT Manager / Technical Architect...)

☐ I'm an independent

☒ I work for a company

Company name *

Company activity *

Content aggregator

☒ Keep me informed about Orange Developer activities and receive newsletter (You can unsubscribe at anytime)

I'm not a robot

NCAPTCHA Privacy Policy

* Required field

Your personal data is used to manage your user account and to access our various services. To know more about the processing of your personal data, see our [data protection notice](#).

Cancel Submit


Log in

Orange Developer Products Resources Blog Customer stories

My apps

Nearly there, please activate your account using the link sent to 'loig.lemelinier@orange.com' (you may need to check your mailbox's junk folder).

Build your service and co-innovate with Orange



Popular APIs



Orange Money Web payment

Enable your customer to pay for your products through Orange Money on your website or your mobile application.



SMS Africa and Middle East

Send automatic SMS from your digital service in the Orange Middle East & Africa footprint.

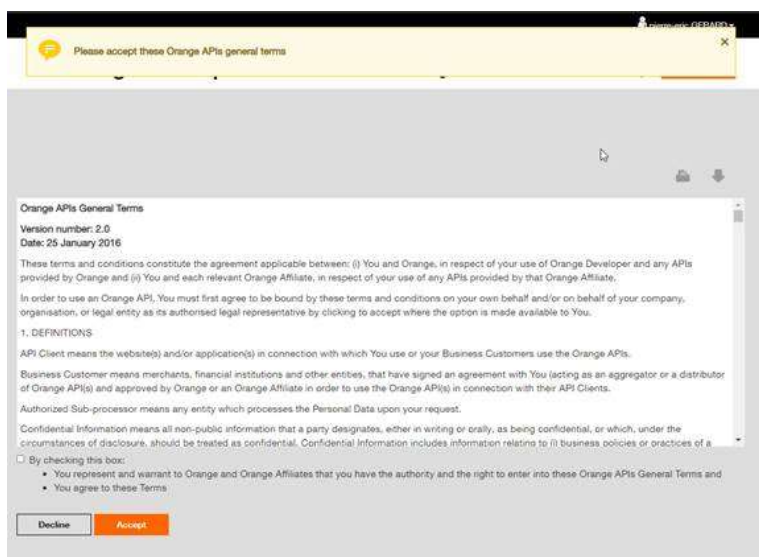
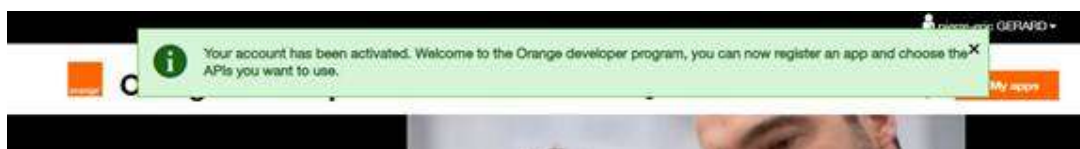
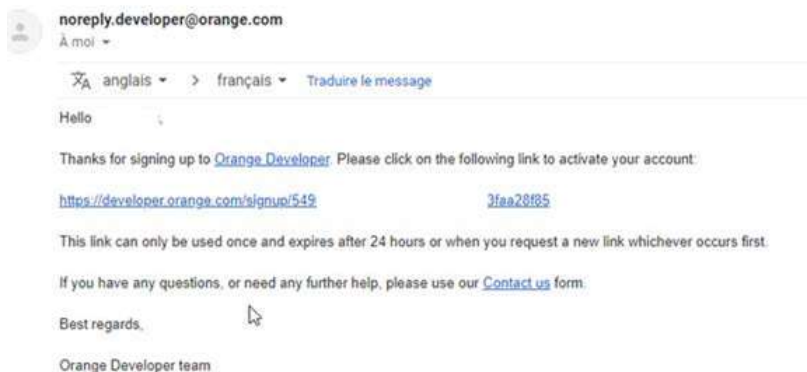


Pay with Orange Bill

Enabling simple purchases of digital services with the Orange mobile account.

The mail you received allows you to activate your orange developer account

Activate your Orange Developer account Boîte de réception x



You should have accepted the Orange terms & conditions



Then, you can create an application, as below example

The screenshot shows the 'My apps' section of the Orange Developer portal. It includes a navigation bar with 'Products', 'Resources', 'Blog', and 'Customer stories'. Below the navigation bar, there's a section titled 'My apps' with a message: 'Register an application now to subscribe to an API or browse the site and come back to register it later'. A four-step process diagram is shown: 1. Create your application, 2. Add and configure APIs, 3. Integrate APIs into your service, and 4. Check your statistics. Below the diagram is the 'Create new application' form. The form has two fields: 'Application name' with a dropdown menu showing 'testapplicationLI' and a checkmark, and 'Description' with a text input field containing 'test' and a checkmark. A 'Create' button is located at the bottom right of the form.

Orange Developer Products Resources Blog Customer stories

My apps

Register an application now to subscribe to an API or browse the site and come back to register it later

1 2 3 4

Create your application Add and configure APIs Integrate APIs into your service Check your statistics

Create new application

Application name testapplicationLI ✓

Description test ✓

Create

The screenshot shows the 'TestAppLoig' details page in the Orange Developer portal. The navigation bar is the same as the previous screenshot. Below the navigation bar, there's a section titled 'My apps > TestAppLoig'. The 'Details' section shows the application name 'TestAppLoig' with an 'Edit' button. Below that, the 'test Aop de Loig' is listed. The 'Application ID' is 'IYUN1sAlpMWqRhLA'. The 'Client ID' is masked with dots, and the 'Client secret' is also masked with dots. The status is 'Pending'. There is a 'Show' button next to the client secret. Below the details section is the 'Subscribed APIs' section, which has an 'Add an API' button. A message states: 'You have not yet subscribed to any APIs for this app. Add an API now to activate your client ID.' At the bottom right, there is a 'Delete app' button.

Orange Developer Products Resources Blog Customer stories

My apps > TestAppLoig

Details

TestAppLoig Edit

test Aop de Loig

Application ID ⓘ IYUN1sAlpMWqRhLA

Client ID ⓘ Status: Pending ● Client secret ⓘ Show

Subscribed APIs + Add an API

You have not yet subscribed to any APIs for this app. Add an API now to activate your client ID.

Delete app

3.2 Subscribe to Orange RCS BotHub API

Click on "Add an API"



My apps > TestAppLoig > Add API

1

Choose an API

2

Terms and conditions

Select an API

Orange RCS BotHub (1.0)

Next

My apps > TestAppLoig > Add API

1

Choose an API

2

Terms and conditions

Orange APIs General Terms of Use

The Orange APIs General Terms govern the use of all our APIs and are accompanied by additional specific terms depending on the Orange APIs you are integrating

THIS AGREEMENT takes effect from date of last signature, and is made between:

1. **Orange SA**, with registered address located at 78 rue Olivier de Serres, 75015 Paris, France, incorporated in France with company registration number 380 129 866 ("**ORANGE**"); and
2. [company] with registered address located at XXX, incorporated in XXX with company registration number XXX ("**company_name**" or "**You**"), together referred to as the "**Parties**" and each individually as a "**Party**".

The Parties hereby agree:

These terms and conditions constitute the agreement applicable between: (i) You and Orange, in respect of your use of Orange Developer and any APIs provided by Orange and (ii) You and each relevant Orange Affiliate, in respect of your use of any APIs provided by that Orange Affiliate.

☒ By checking this box:

- You represent and warrant to Orange and Orange Affiliates that you have the authority and the right to enter into these Orange RCS BotHub API Terms and
- You agree to these Terms

Back

Next

Your application should accept orange RCS Bothub API terms & conditions ///



Access to API 'Orange RCS BotHub' is subject to validation, we will let you know shortly via email whether your access has been granted.



Details

TestAppLoig

test Aop de Loig

[Edit](#)

Application ID ⓘ

IYUN1sAlpMWqRhLA

Client ID ⓘ

Status: Approved ●

Client secret ⓘ


.....

.....

[Show](#)
[Renew](#)

Subscribed APIs

[+ Add an API](#)

Name	Version	Status	Actions
 Orange RCS BotHub	1.0	● Pending	Remove

Your application subscription to Orange RCS Bothub is pending

A BotHub RCS admin – will receive your demand. Once validated, you will received this email and status will be 'approved'

--

De : noreply.developer@orange.com [mailto:noreply.developer@orange.com]

Envoyé : lundi 10 mai 2021 17:27

À : Agregator@mail.com

Objet : Your app's access to Orange RCS BotHub has been approved

Hello Loig,

We're pleased to let you know we've approved your app's ([TestAppLoig](#)) access to Orange RCS BotHub API.

If you have any questions, or need any further help, please use our [Contact us](#) form.

Best regards,

Orange Developer team

--



My apps > TestAppLoig

Details

TestAppLoig

Edit

test Aop de Loig

Application ID ⓘ

IYUN1sAlpMWqRhLA

Client ID ⓘ

Status: Approved ●


Client secret ⓘ

Show

Renew

Subscribed APIs

+ Add an API

Name	Version	Status	Actions
 Orange RCS BotHub	1.0	Approved ●	Remove

The api documentation is accessible here

<https://developer.orange.com/apis/bothub/overview>

Orange RCS BotHub ☆

Orange solution for sending RCS messages using GSMA standard.

1.0

Use this API

Overview

Getting started

API reference

Terms

BotHub

BotHub GSMA interface is a standardized and documented API allowing a bot or a bot platform to connect to an aggregation point or an entry point.

This GSMA API is the Orange proposal to any partner wishing to connect to Orange business messaging infrastructure over RCS.

For more details, you can visit [GSMA FNW.11 specification](#)

BotHub is also capable of providing API for bot triggering, accounting, and content management. Analytics is another function that is of importance since KPI management for any bot maker is key as it provides valuable information on how the bot is behaving. Since Google Analytics (GA) is the solution recommended by the group, BotHub implemented the measurement protocol in order to report info to GA.

<https://developer.orange.com/apis/bothub/api-reference>



Orange RCS BotHub ☆

Orange solution for sending RCS messages using GSMA standard.

1.0

[Use this API](#)
[Overview](#)
[Getting started](#)
[API reference](#)
[Terms](#)

GSMA APIs

[Download](#)

[BASE URL: [/bothub/v1](#), API VERSION: **2.4.5**, HOST: <https://api.orange.com>]

Documentation of GSMA APIs v2.4.5

GSMA : GSMA Controller

[Open/Hide](#) | [List operations](#) | [Expand operations](#)

Monitoring : Monitoring Controller

[Open/Hide](#) | [List operations](#) | [Expand operations](#)

Common errors

[open/close](#)

For incidents/changes :

Customer/aggregator are members of bothub_users@list2.orange.com DL. It provides Production info, such as Changes or incidents on prod

3.3 Register your first bot with Onboarding Portal

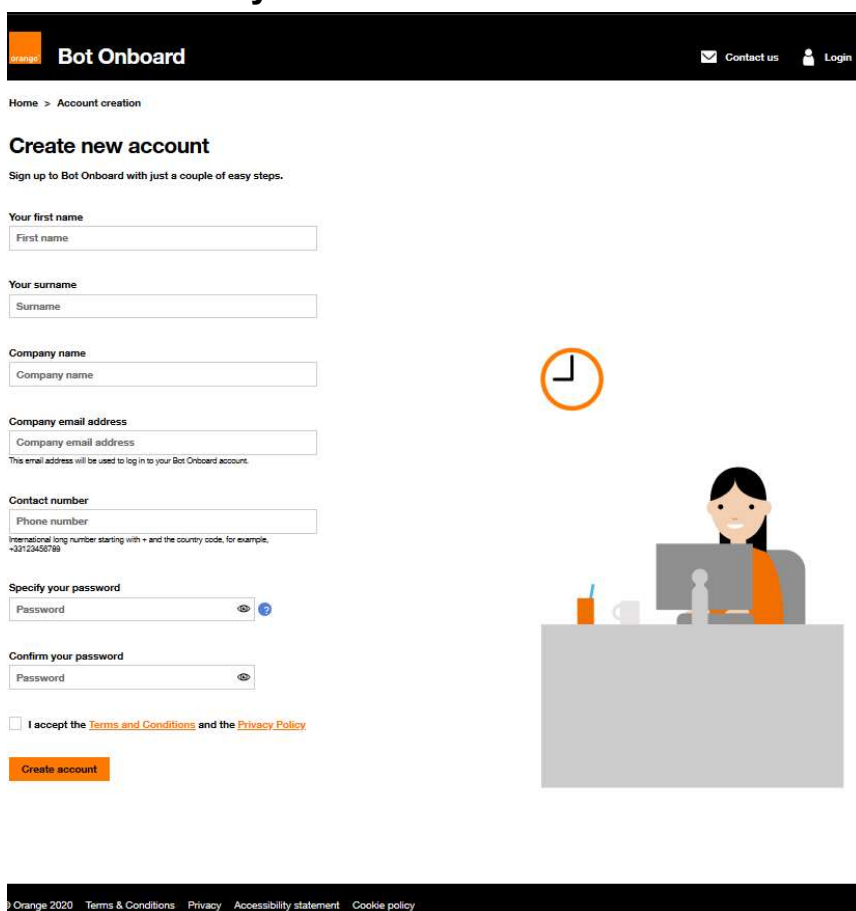
Onboarding portal is accessible here

<https://onboarding-prod.sandbox.idaas.orange.com/public/home>

On boarding video is available here on the internet:

https://drive.google.com/file/d/15IXyk8bD8lV88MESY_yngmM415x2_b9R/view?usp=sharing

3.3.1 Create your account



Home > Account creation

Create new account

Sign up to Bot Onboard with just a couple of easy steps.

Your first name
First name

Your surname
Surname

Company name
Company name

Company email address
Company email address
This email address will be used to log in to your Bot Onboard account.

Contact number
Phone number
International long number starting with + and the country code, for example, +33123456789

Specify your password
Password

Confirm your password
Password

☐ I accept the [Terms and Conditions](#) and the [Privacy Policy](#)

Create account

Orange 2020 [Terms & Conditions](#) [Privacy](#) [Accessibility statement](#) [Cookie policy](#)

3.3.2 Register your bot

Please pay attention to the following fields (that need to be validated in accordance with the Brand), which are mandatory (For France).

- Contact
- Email
- Stop

3.3.3 Orange Validation

Once your bot is registered on the portal, the orange admin will receive an email. Once your bot is register on RBM and on bothub, you will receive an email with the Bothub ID and the private key.

3.3.4 Test of your bot

At this step, you are normally able to make your bot communicate with our whole RCS chain up to your RCS client MSISDN, and develop and test your bot on your side. Orange admin will be able to send to your mobile phone numbers some basic RCS messages, such as

“this is where your agent text lives “; “this is a rich card”, “what do you need help with?”

You can get some info & documentation here:

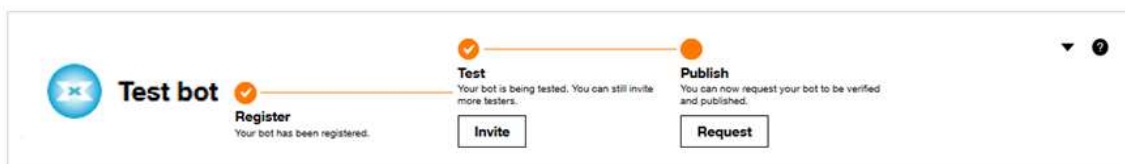
<https://developer.orange.com/apis/bothub/getting-started>

Please, pay attention to the formats used on RCS. To avoid any misunderstanding about billing, we strongly recommend to use a Rich Card as a first Message in all your campaigns (see link below).

<https://developers.google.com/business-communications/rcs-business-messaging/guides/build/messages/send>

3.3.5 Launch your bot & Brand Verification

When your tests are finished, you can ask Orange to publish your bot by clicking “request” button below in the onboarding portal



4 Support- Hot line

In case of support needed, you can contact SSPO (English spoken only)

For Bothub interconnection or to register a bot 5 days / week in business hours

For a Campaign issue : 24h/24H everydays

Name	EDS	Email	Phone	Availability
SSPO Service Desk (SPOC for <u>Agregators</u>)	505010	sspo.cust@orange.com	+40 374 44 1200, option 2	24/7
SSPO ASP	505024	sspo.asp@orange.com	+40 744 44 2798	BH
Escalation path in Business Hours				
Anamaria Holca Front Office Manager	L1	Anamaria.holca@orange.com	+40 747 440 052	BH
Dan Popa SSPO Director	L2	dan1.popa@orange.com	+40 744 44 2721	BH
Escalation path in Non Business Hours				
SSPO On-Call Manager	L1	sspo.oncall.manager@orange.com	+40 374 44 1290	NBH
Dan Popa SSPO Director	L2	dan1.popa@orange.com	+40 744 44 2721	NBH

In case of Billing issue, please send an email to reclamation.payservices@orange.com

5 Annexes

5.1 Tokens management

At the end, Goal is for the aggregator being able to send RCS messages from his bot to any end-user with an RCS compatible device.

Next steps below explain what are the different steps an aggregator / developer consumer of our Bothub API, need to provide, in order to be able to connect & consume, from his application/bot, the Bothub RCS API.

This process involves creating and managing 3 different Tokens:

- API factory or OrangeDeveloper token
- JWT Token
- GSMA Token

Consumer is fully autonomous to create those tokens, and at the end, consumer is able to consume the Bothub RCS API from Postman or CURL.

The process described below is available here:

<https://developer.orange.com/apis/bothub/getting-started> once you subscribed to the API

5.1.1 Generate TokenS – On customer side

The customer or Aggregator needs to make his application capable of communicating with bothub.

API factory is a gateway for bothub. The API factory token is just used for accessing to API factory /Orange Developer. Customer gets a token on API factory that gives him access to Bothub.

3 tokens are needed to be generated for/by the customers/aggregators to consume the APIs on BotHub

- API Factory Token : this token is provided by API factory to give the customer/aggregator access on BotHub APIs
- JWT token: this is the token will be generated by the customers/Aggregators by providing the claims that includes the bot Id, and private key
- GSMA Token: after the customer/aggregator generates the JWT token, this JWT token will be used to call BotHub API to generate the GSMA token.

Explanation of how to generate the tokens is proposed on “getting-started” bothub API page <https://developer.orange.com/apis/bothub/getting-started> , here enclosed :



validated-getting-started-V2.docx

In order to generate those tokens, we provide you with enclosed email information and its enclosed Postman collections.

Orange Admin will send you as a customer/aggregator enclosed email template: It contains the Postman collection



[Orange] [BOT
ONBOARDING] 3-fc

You need to fill in the botID & Private Key orange admin will provide you
It will allow you to develop bots on your side & be autonomous.

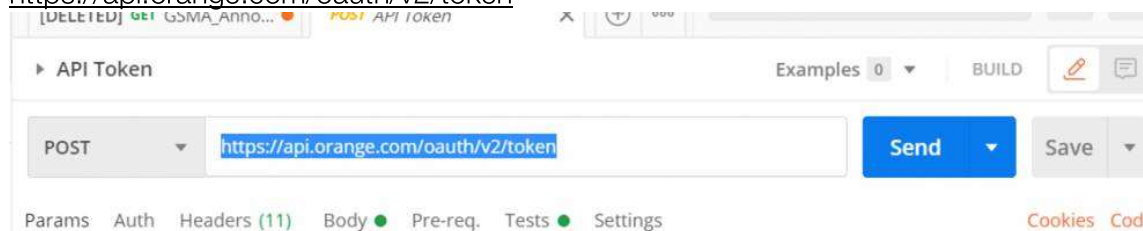
5.1.2 Detailed step by step use case

For example, those below instructions were provided by an orange admin to an aggregator.

As a customer, open POSTMAN

You can find more information related to Postman collections in the GSMA Aggregator collection ZIP file (see above section §5.1), that will help you to fulfill the preconditions to a bot deployment.

In postman provide this Authorization header ODI –API factoryToken as below, to <https://api.orange.com/oauth/v2/token>



Basic	
TH	
Gl	
h	ag==
value:	
	Description

As a Customer you get this information from API factory portal. (it is the previous ODI –API factoryToken - Basic Authorization header)

Details

test Edit

test for CA

Application ID ⓘ
 T ID

Client ID ⓘ Status: Pending Client secret ⓘ Hide

Z eT n

Authorization header ⓘ
 Basic Wj UQ==

Then you need to generate a JWT token with the below information that will allow you to connect from Orange Developer to our bothub API exposition:

▶ Generate JWT Token
 Examples 7
BUILD

POST aggregatorEndpoint/jwtToken Send Save

Params ● Auth Headers (11) Body ● Pre-req. Tests ● Settings

raw JSON Beautify

```

1 {
2   "algo": "RS256",
3   "iss": "t ID",
4   "aud": "https://api.orange.com/bothub/v1/gsma",
5   "scope": "Chatbot message",
6   "duration": "3600",
7   "secret": "Private Key"
8 }

```

Append above info while replacing

"bot ID" by " BOT-ID-THAT-WILL-BE-PROVIDED -BY-ADMIN-ORANGE-TO-YOU "

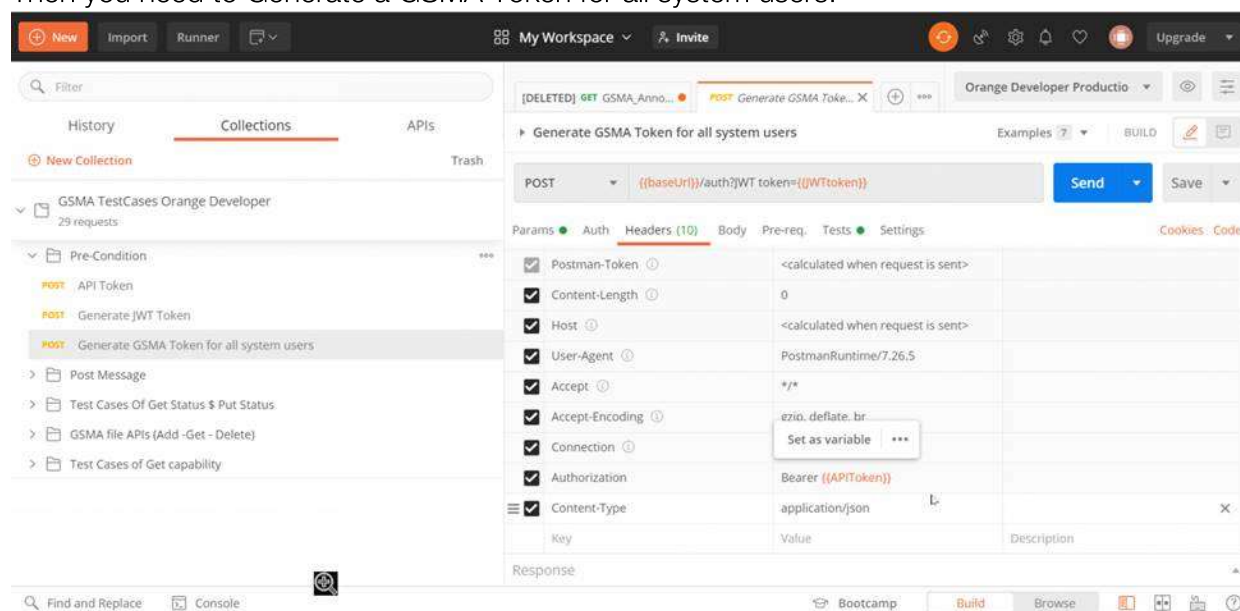
And "Private Key" by

"-----BEGIN PRIVATE KEY-----\ THAT-WILL-BE-PROVIDED -BY-ADMIN-ORANGE-TO-YOU \n-----END PRIVATE KEY-----\n"

For your information, those BotID & Private key were previously generated on ADMIN Orange side on Bothub.

⇒ Get and keep the response as a JWTtoken

Then you need to Generate a GSMA Token for all system users:



⇒ Put in there as {baseUrl} <https://api.orange.com/bothub/v1> and for {JWTtoken} the one u previously got.

This request returns the GSMA access token that will be used in sending messages or events.

When done, you will have all the capability to make your bot communicate with our whole RCS chain up to your RCS client MSISDN.

6 Glossary

API factory is the previous name for Orange Developer

Bothub: is a group Platform that sits between Google RCS's world and any bot Platform that wishes to send RCS bots to Orange customers. It manages the API interface between Google's RCS world (RBM in particular) and bot platforms/developers. BotHub GSMA interface is a standardized and documented API allowing a bot or a bot platform to connect to an aggregation point or an entry point.

This GSMA API is the Orange proposal to any partner wishing to connect to Orange business messaging infrastructure over RCS.

BotHub is also capable of providing API for bot triggering, accounting, and content management.

Analytics is another function that is of importance since KPI management for any bot maker is key as it provides valuable information on how the bot is behaving.

CDR call detail record https://en.wikipedia.org/wiki/Call_detail_record . Bothub CDR & google statistics are different (google's are kept 30days)

GSMA : Global System for Mobile Communications, originally Groupe Spécial Mobile is an industry organisation that represents the interests of mobile network operators worldwide. More than 750 mobile operators are full GSMA members. See also *MaaP Chatbot API*

https://www.gsma.com/futurenetworks/wp-content/uploads/2017/11/FNW.11_v1.0.pdf

IMI International Mobile Subscriber Identity

https://en.wikipedia.org/wiki/International_mobile_subscriber_identity

Jibe: <https://jibe.google.com/> Google's Jibe Cloud platform is an implementation of the RCS Universal Profile, designed to help carriers launch RCS quickly and scale easily

MSISDN Mobile Station ISDN Number <https://en.wikipedia.org/wiki/MSISDN>

MNO Mobile Network Operator

OAuth API secured access delegation protocol <https://en.wikipedia.org/wiki/OAuth> allows to a website to consume API exposed from a source site with credentials from this source website.

OD & ODI Orange Developer <https://developer.orange.com/products> & OrangeDeveloper Internal are API portals Orange group exposes to external & internal customers/application consumers

POSTBACK <https://en.wikipedia.org/wiki/Postback>

In web development, a postback is an HTTP POST to the same page that the form is on. In other words, the contents of the form are POSTed back to the same URL as the form.[1]

Postbacks are commonly seen in edit forms, where the user introduces information in a form and hits "save" or "submit", causing a postback. The server then refreshes the same page using the information it has just received.

Postman: API development tool use to build, test and modify APIs. Can provide many HTTP requests, save environments for alter use, convert API towards code in multiple languages.

RCS https://en.wikipedia.org/wiki/Rich_Communication_Services

Rich Communication Services (RCS)[1] is a communication protocol between mobile telephone carriers and between phone and carrier, aiming at replacing SMS messages with a text-message system that is richer, provides phonebook polling (for service discovery), and can transmit in-call multimedia. It is part of broader IP Multimedia Subsystem.

RCS Business Messaging (RBM) [FROM WIKIPEDIA] is the B2C (A2P in telecoms terminology) version of RCS. This is supposed to be an answer to 3rd party messaging apps (or OTTs) absorbing mobile operators' messaging traffic and associated revenues. While RCS is designed to win back Person-to-Person (P2P) traffic, RBM is intended to retain and grow this A2P traffic. RCS offers "rich" features similar to those of messaging apps, but delivered (in theory) via the preloaded SMS messaging app - for example Google Messages or Samsung Messages. By making these features available in a B2C setting, RBM is expected attract marketing and customer service spend from enterprises, thanks to improved customer engagement and interactive features that facilitate new use cases. This was the primary reason for the development of RCS by the GSMA.

RBM includes features not available to ordinary users, including predefined quick-reply suggestions, rich cards, carousels, and branding. This last feature is intended to increase consumer confidence

RBM documentation <https://developers.google.com/business-communications/rcs-business-messaging>

7 Example of UML diagram for GSMA to RBM flows for a POST message

