



Sandbox API manual

Open and Partner API services

22. 4. 2021

Version 1

CHANGE LOG

Version	Date of effectiveness	Change description
1.1	22.4.2021	Add information about changing access token (API Key) validity period.

CONTENTS

Working with API Service	2
Overview of API Services	3
User Registration	4
Main menu	5
Application Management	5
Application details	6
Generating an API key	6
Re-Generating an API Key	7
Application Connection to API	7
Overview of Application Connection to API	7
API Services Management	8
API Detail	8
API Description	9
Save swagger (in JSON format)	9
Calling the service (API)	9
Description of API attributes	10
Description of attributes in body and response	11

WORKING WITH API SERVICE

The Sandbox version of the API service contains the same API as the production version (same structure, same attributes and their description). The only difference is the return of test (anonymous) data.

To access the service, the user needs to:

1. **Select the service of their choice in the list of services, see [Overview of API Portal Services](#)**
2. **Create an Account at the API Portal, see [User Registration](#)**
3. **Add application (which will make service calls), see [Application Management](#)**
4. **Generate the key to the proclamation of the service, see [Generating API key](#)**

OVERVIEW OF API SERVICES

Overview of services can be displayed at the page <https://www.kb.cz/cs/api> . This is the public part with description of services and information about the current state of services:

- LIVE - complete service, ready to use (this is the production version of the service)
- **SANDBOX** - ready for a trial
- IDEA - collecting ideas for a new service, the service does not yet exist or is in preparation)

KB API SERVICES

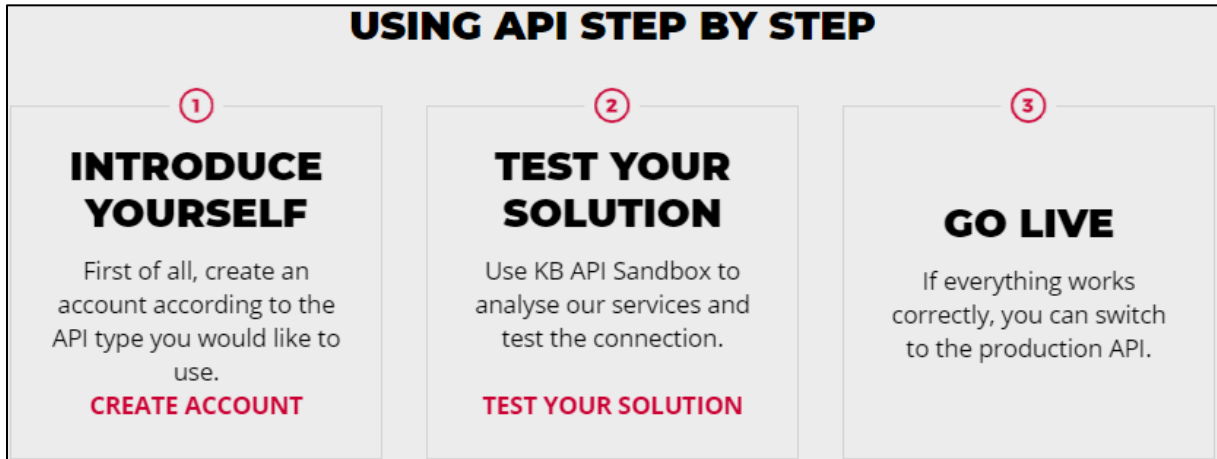
Help us identify other meaningful applications using KB API.
Contact us at api@kb.cz.

<p>Account Information Service (AIS)</p> <p>LIVE</p> <p>PSD2 SERVICE</p> <p>AIS - Allow the users of your application to view their accounts, balances, and transaction history.</p> <p>DETAILS</p>	<p>Payment Initiation Service (PIS)</p> <p>LIVE</p> <p>PSD2 SERVICE</p> <p>PIS - Allow the users of your application to execute payments from their KB account.</p> <p>DETAILS</p>	<p>Card-based Instrument Service (CIS)</p> <p>LIVE</p> <p>PSD2 SERVICE</p> <p>CIS - Find out whether our client has sufficient account balance to execute a card transaction.</p> <p>DETAILS</p>
<p>Exchange rates</p> <p>LIVE</p> <p>OPEN SERVICE</p> <p>Receive current KB exchange rates.</p> <p>DETAILS</p>	<p>Branches and ATMs</p> <p>LIVE</p> <p>OPEN SERVICE</p> <p>We will find the nearest KB branch or ATM for you.</p> <p>DETAILS</p>	<p>Verification of KB clients' Identity</p> <p>SANDBOX</p> <p>PARTNER SERVICE</p> <p>We will electronically verify our shared client's identity.</p> <p>DETAILS</p>

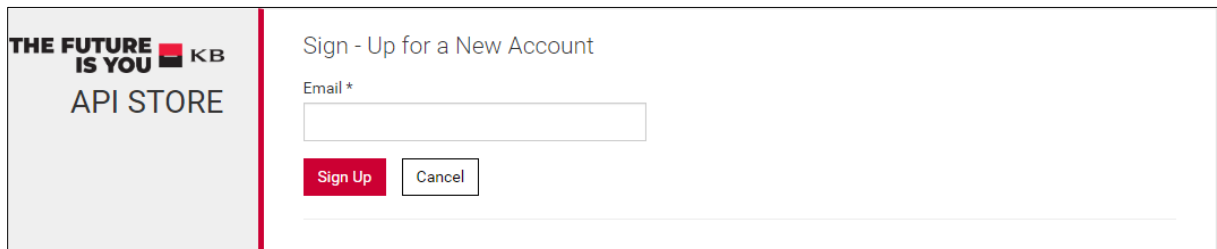
After selecting the service of choice, a detailed description with further information will appear and a link to login / registration.

USER REGISTRATION

To access the service, a registration is required. Registration may be initiated from the detailed description of the selected service at the overview of API services (<https://www.kb.cz/cs/api>; see **CREATE ACCOUNT**).



An email address needs to be filled in for a confirmation link to be sent.



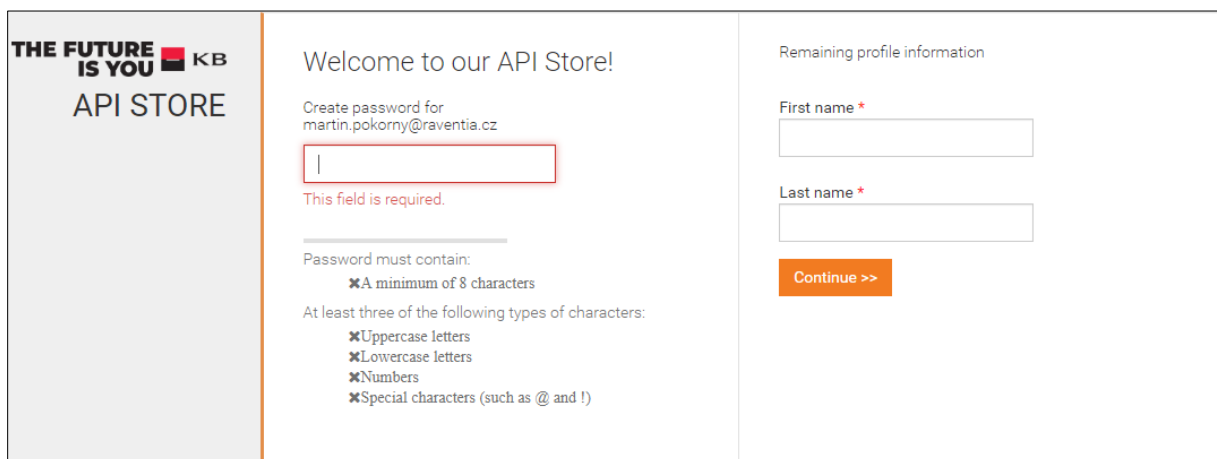
THE FUTURE IS YOU KB API STORE

Sign - Up for a New Account

Email *

Sign Up

Subsequently, the **confirmation link** sent via email notification to the specified address needs to be followed to open a form and **set a password to login** and user information - name and surname.



THE FUTURE IS YOU KB API STORE

Welcome to our API Store!

Create password for martin.pokorny@raventia.cz

This field is required.

Password must contain:

- ✖ A minimum of 8 characters

At least three of the following types of characters:

- ✖ Uppercase letters
- ✖ Lowercase letters
- ✖ Numbers
- ✖ Special characters (such as @ and !)

Remaining profile information

First name *

Last name *

Continue >>

After confirmation, a user profile will be created and the user will be redirected to an overview of the API.

MAIN MENU



The main menu contains:

- APIS - API sandbox overview (sandbox versions of all the API, regardless of the API type)
- APPLICATIONS - application management, see [Application Management \(APPLICATION\)](#)
- *Information on the logged-in user* - user login (email), logout option

APPLICATION MANAGEMENT

This concerns third party applications that consume the exposed API (could be a web application, mobile application, etc.).

Application Management enables:

- Add / create a new application (**ADD APPLICATION**); i.e. creation of a new application needs application name (unique and required parameter) and optionally description of the application
- Display application detail (**VIEW**); see [Application Detail](#)
- Change the name and description of the application (**EDIT**); i.e. the name and description of the application can be changed; application name is unique
- Remove application (**DELETE**); i.e. this operation removes application and the application links to the API
- Generating an API Key, see [Generating API Key](#)
- Connecting an application to API (**SUBSCRIBE**), see [Application Connection to API](#)



Name	Workflow Status	Subscriptions	Actions
DefaultApplication	ACTIVE	1	VIEW EDIT DELETE
LoremipsumApplication	INACTIVE	1	VIEW EDIT DELETE

APPLICATION DETAILS

The application detail contains:

1. DETAILS - information about the application – application status (always APPROVED) and any desired description of the application
2. SANDBOX KEYS - generating sandbox key
3. SUBSCRIPTION - overview of which APIs a particular application is connected to, see [Overview of Application Links to API](#)

Details	Sandbox Keys	Subscriptions
	Status	APPROVED
	Description	Popis aplikace.

GENERATING AN API KEY

Sandbox key is used to test the service / API (i.e. to call the sandbox version of the service). This key can call all sandbox APIs linked to the particular application (see [Application Connection to API](#)).

Only one sandbox key may be generated for a particular application.

The generation itself is initiated by the **GENERATE KEYS** option).

Details	Sandbox Keys	Subscriptions		
<p>No Keys Found No keys are generated for this type in this application.</p>				
<p>Access token validity period</p> <table border="1"><tr><td><input type="text" value="3600"/></td><td>Seconds</td></tr></table> <p>Generate keys</p>			<input type="text" value="3600"/>	Seconds
<input type="text" value="3600"/>	Seconds			

NOTE: Access token validity period can be changed – default value is 3600 s. For unlimited validity set “-1”.

RE-GENERATING AN API KEY

If an existing API key needs to be re-generated, it is possible to select **REGENERATE**.

Generate a Test Access Token

Access Token

.....

Above token has a unlimited validity period.

APPLICATION CONNECTION TO API

Linking the application with the API forms a condition for calling the API. The application can be interconnect in the detail of the selected API. In the *Applications* item, it is possible to select the desired application and create a link by selecting the **SUBSCRIBE** option.

Contact-Request-Sandbox - v1

✓

Version: v1

Updated: 30/Jul/2019 06:14:21 AM PDT

Status: PUBLISHED

Applications

DefaultApplication ▾

Tiers

Unlimited ▾

OVERVIEW OF APPLICATION CONNECTION TO API

The overview of to which API the selected application is connected can be viewed in detail of the selected application (option **SUBSCRIPTIONS**).

DefaultApplication

Details
Sandbox Keys
Subscriptions

i null

null

Q Filter by ...

API Name	Subscription Tier	Status	Actions
<div style="display: flex; align-items: center;"> <div> <p>Client-Identity-Sandbox - v1</p> <p>PUBLISHED</p> </div> </div>	Unlimited	UNBLOCKED	<input type="button" value="Unsubscribe"/>

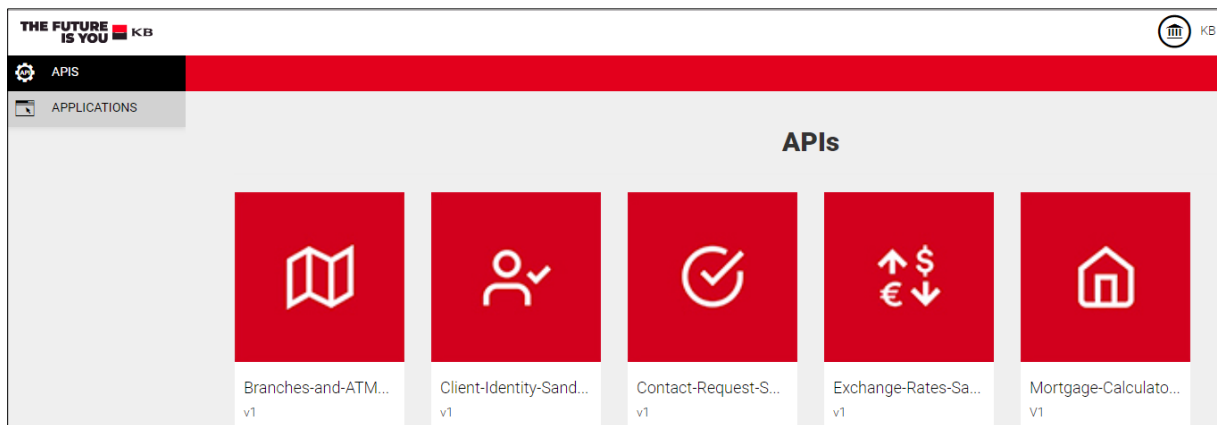
Show 10 entries Showing 1 to 1 of 1 entries 1

API SERVICES MANAGEMENT

All services (Sandbox API) are available in a single overview (not divided into sections). List of APIs can be viewed by selecting APIS. After selecting the desired API, its detail is shown, see [API Detail](#) . Each service (each API) has a separate "tile" (application).

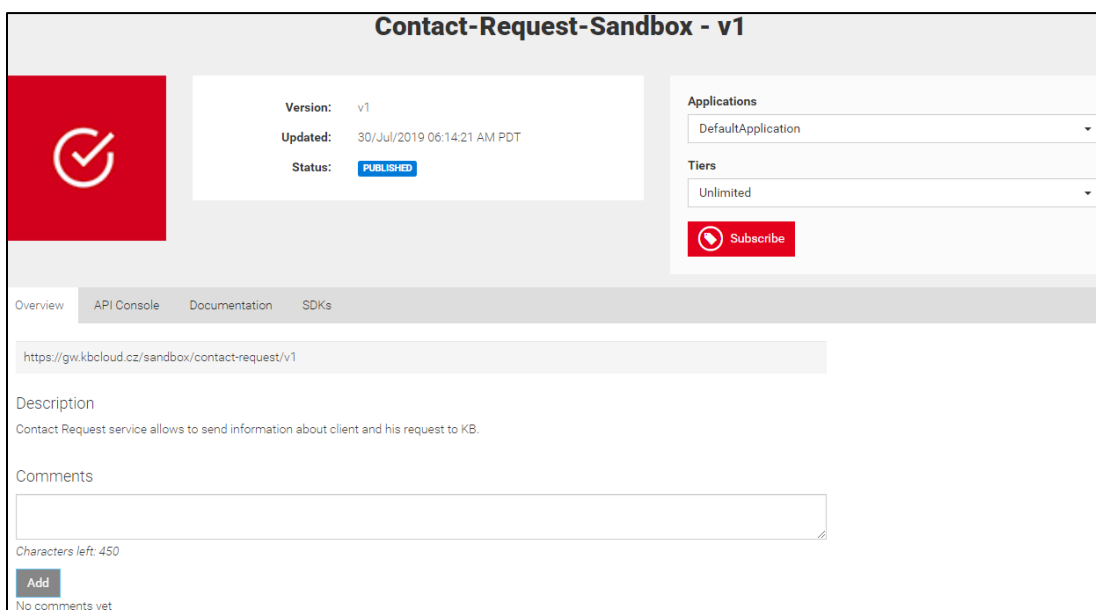
For each application, it is possible:

- to display detail of service of detail description
- to display description of the API (in the Open API 3.0.0 format)
- to display additional documentation to the particular service



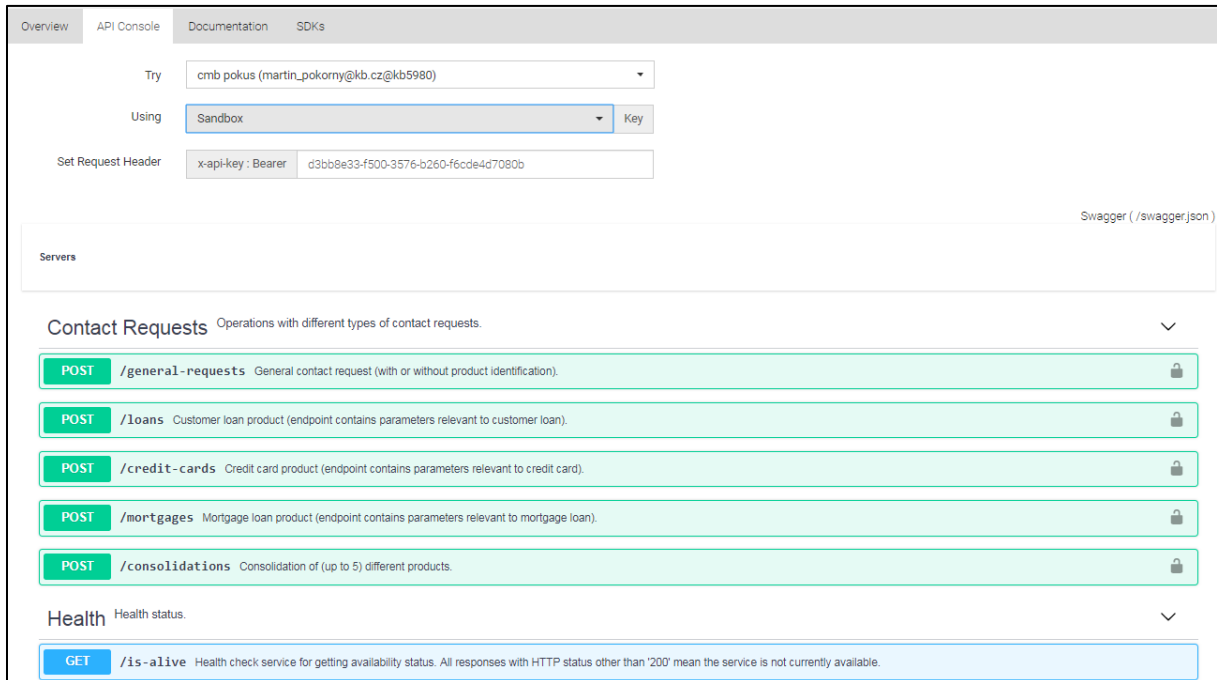
API DETAIL

API Detail provides information about the API service - API service version, date of API service addition, API service status (always PUBLISHED), url of endpoints (OVERVIEW section), API description in the Open API 3.0.0 format (section API CONSOLE), documentation to API (if needed, all the necessary information is given in the description of the API - API CONSOLE section).



API DESCRIPTION

This section contains the possibility of calling API and the description of API services itself.



Swagger (/swagger.json)

Contact Requests Operations with different types of contact requests.

- POST** /general-requests General contact request (with or without product identification).
- POST** /loans Customer loan product (endpoint contains parameters relevant to customer loan).
- POST** /credit-cards Credit card product (endpoint contains parameters relevant to credit card).
- POST** /mortgages Mortgage loan product (endpoint contains parameters relevant to mortgage loan).
- POST** /consolidations Consolidation of (up to 5) different products.

Health Health status.

- GET** /is-alive Health check service for getting availability status. All responses with HTTP status other than '200' mean the service is not currently available.

SAVE SWAGGER (IN JSON FORMAT)

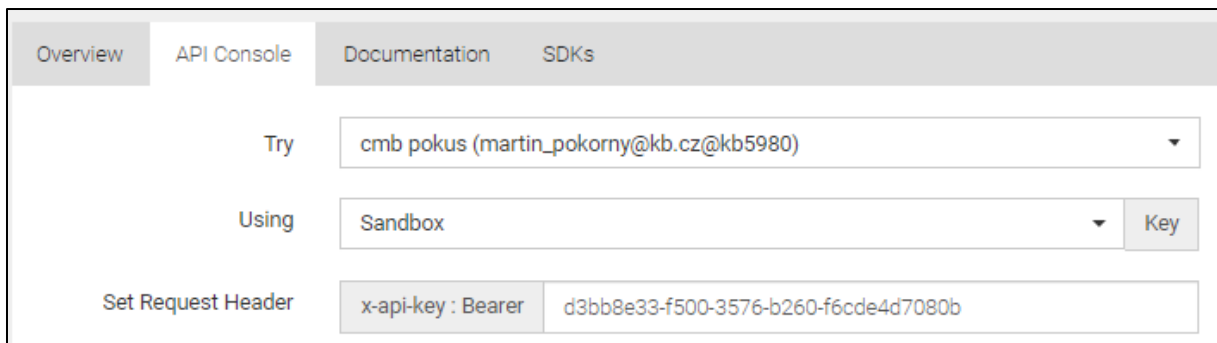
Swagger is possible to save by link *Swagger (/swagger.json)*.



Swagger (/swagger.json)

CALLING THE SERVICE (API)

Under the *Try* item, it is possible to select an application which has been linked to the appropriate API, under the *using* item, it is possible to choose the API key.

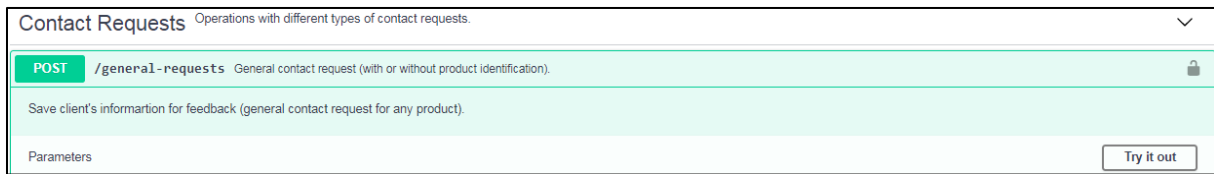


Try: cmb pokus (martin_pokorny@kb.cz@kb5980)

Using: Sandbox Key

Set Request Header: x-api-key: Bearer d3bb8e33-f500-3576-b260-f6cde4d7080b

The call on API itself is triggered by the option TRY IT OUT (for entering input values).



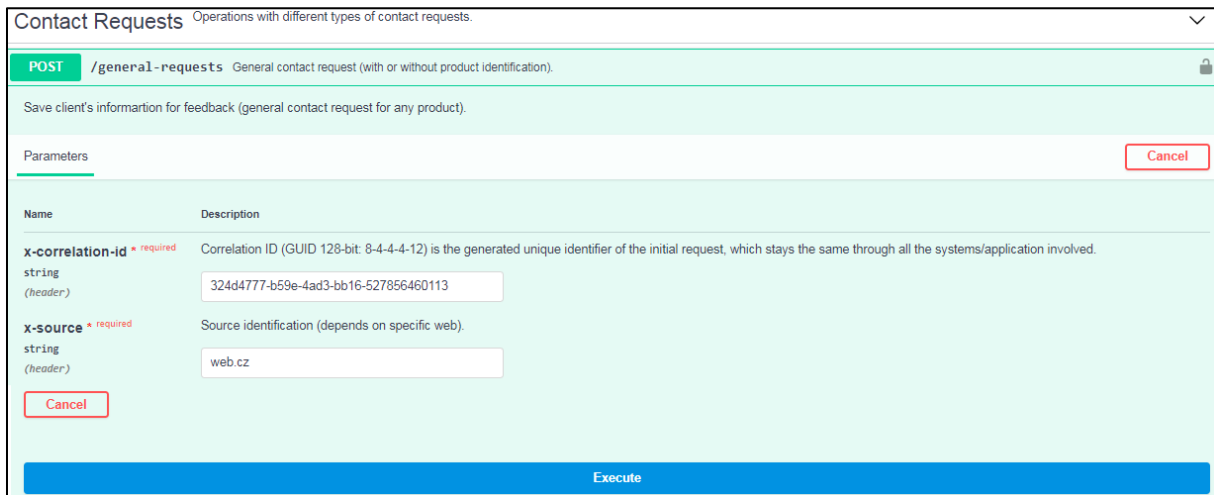
Contact Requests Operations with different types of contact requests.

POST /general-requests General contact request (with or without product identification).

Save client's information for feedback (general contact request for any product).

Parameters Try it out

And the EXECUTE option (after initiation).



Contact Requests Operations with different types of contact requests.

POST /general-requests General contact request (with or without product identification).

Save client's information for feedback (general contact request for any product).

Parameters Cancel

Name	Description
x-correlation-id * required string (header)	Correlation ID (GUID 128-bit: 8-4-4-12) is the generated unique identifier of the initial request, which stays the same through all the systems/application involved. <input type="text" value="324d4777-b59e-4ad3-bb16-527856460113"/>
x-source * required string (header)	Source identification (depends on specific web). <input type="text" value="web.cz"/>

Cancel

Execute

If the key to call the API is not generated, see chapter [Generating API key](#) .

DESCRIPTION OF API ATTRIBUTES

The actual description of the attributes is designed in the format of Open API 3.0.0, each attribute is given a detailed description and example.



Parameters Try it out

Name	Description
x-correlation-id * required string (header)	Correlation ID (GUID 128-bit: 8-4-4-12) is the generated unique identifier of the initial request, which stays the same through all the systems/application involved.
x-source * required string (header)	Source identification (depends on specific web).

Request body **required** application/json

Example Value | Schema

```

{
  "firstName": "Jiří",
  "lastName": "Novák",
  "phoneNumber": "+420777123456",
  "email": "jiri.novak@gmail.com",
  "note": "example",
  "language": "CZ",
  "contactDateTime": {
    "asap": true,
    "dateTimeFrom": "2019-07-11T10:29:12.506Z",
    "dateTimeTo": "2019-07-11T10:29:12.506Z"
  },
  "productType": "LOAN"
}
    
```

Swagger saved by link (see [Save swagger \(in JSON format\)](#)) contains header for sending API key.

Header is in securitySchemes section:

securitySchemes:

default:

type: apiKey

in: header

name: **x-api-key**

description: Access Token that is generated in Api Manager

DESCRIPTION OF ATTRIBUTES IN BODY AND RESPONSE

The attribute description itself may be displayed by switching to the *Schema* option.

Example ValueSchema

```

CreditCardRequest {
  firstName string
    maximum: 20
    example: Jiří
    Client's identification (first name).

  lastName string
    maximum: 20
    example: Novák
    Client's identification (last name).

  phoneNumber* string
    pattern: ^\+?d{12}$
    example: +420777123456
    Client's phone number for feedback (with or without telephone numbering plan).

  email string
    maximum: 60
    pattern: ^([A-Za-z0-9_!-\.])+\@([A-Za-z0-9_!-\.])+\.[A-Za-z]{2,4}$
    example: jiri.novak@gmail.com
    Client's email for feedback.

  note string
    maximum: 150
    example: example
    Any custom text or additional product identification (i.e. in case of investment product, you can fill a specific investment fund name/identification).

  language string
    example: CZ
    default: CZ
    Language (i.e. CZ/EN)

    Enum:
    > Array [ 2 ]

  contactDateTime ContactDateTime > {...}
  productParameters CardProductParameters > {...}
}

```