

# Welcome to the Sparkassen PSD2 Sandbox

Version 1.2

September 6, 2019

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## Information contained in the downloaded documents

This document is designed to assist you in setting up the XS2A interface. The other files in the download contain documents that explain the use of the interface and provide the parameters required to call the interface.

Also included are interface descriptions in the OpenAPI/Swagger format as well as basic REST client setup with Postman in example.

## **EN\_ReadMe\_vx.x\_YYMMDD.pdf**

This document contains a list of all parameters available in the Sparkassen sandbox with a description of their implementation. The parameters that are described in this document are also used as environment variables in the Postman collections for greater ease of use.

## **EN\_Implementer Options\_vx.x\_YYMMDD.pdf**

The Implementer Options illustrate the scope of the sandbox.

## **EN\_bankcodelist\_vx.x\_YYMMDD.pdf**

This file lists all supported bankcodes for the production environment.

## **Additional Documents**

If there are additional Documents contained in the carepackage, their use is described in a Management Summary at the beginning of the document.

## **OpenAPI or Swagger Files: /swagger/\*.json**

Swagger (<https://swagger.io>) or OpenAPI (<https://swagger.io/docs/specification/about/>) is a description language for specifying REST interfaces. The description contains all the information required for the call, including descriptions, and thereby provides a starting point for human and machine to interact with the specified REST services.

For humans, there are Swagger editors, which generate a superficial interface from the description that enables the interface to be called and also aids usability through the descriptions.

During development, Swagger code generators can be used to generate code for clients or servers from the specifications. In this way development is accelerated and the quality of the software is increased through the consistent quality of the generated code.

The download contains the Swagger documents for the Berlin Group (<https://www.berlingroup.org/nextgenpsd2-downloads>).

## Setup for sandbox access

The following paragraphs describe how to setup client certificates to access our XS2A sandbox. Postman client is used for example, any other REST client like curl or Insomnia need to be setup in a similar way.

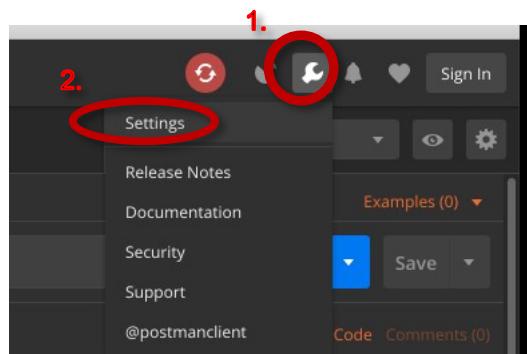
### Setting up client certificates in Postman

One requirement for using the XS2A interface is the use of the client certificate. How to set that up in Postman is described below.

If the client certificate is in the PEM format, the same certificate and key file can be used in Postman and in CURL.

The following explanation is based on:

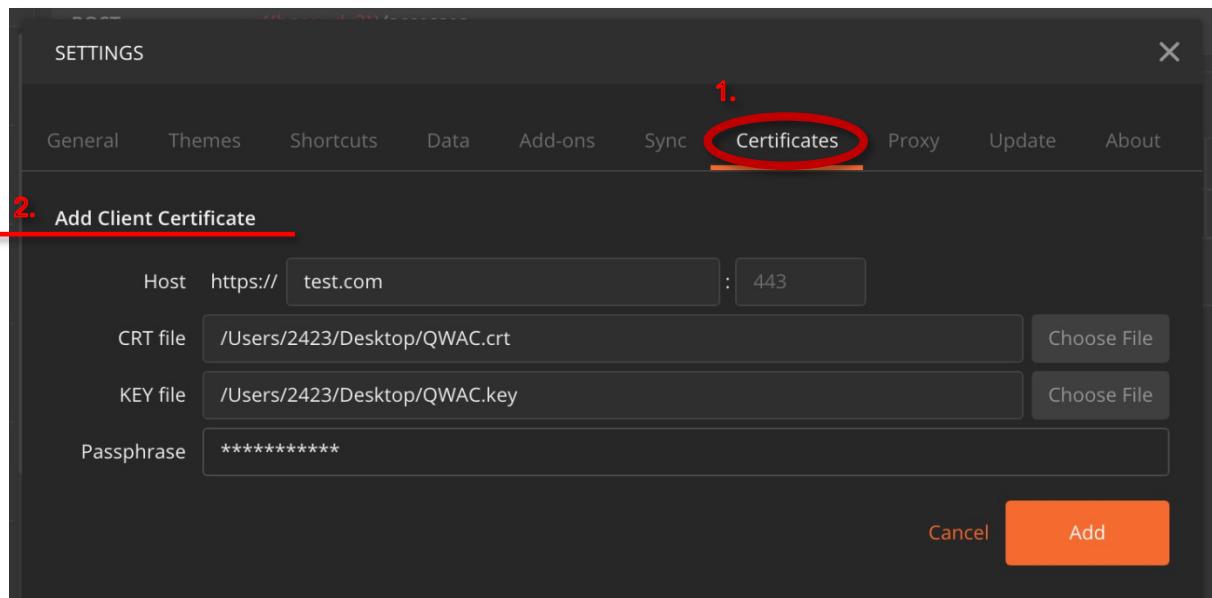
[https://learning.getpostman.com/docs/postman/sending\\_api\\_requests/certificates/](https://learning.getpostman.com/docs/postman/sending_api_requests/certificates/)



Client certificates must be saved in the settings. First click on the *wrench* icon and then select *Settings*.

#### Attention:

If you are executing Redirect Collection “Automatically follow redirects” has to be switched OFF.



Next, enter the data for the certificate under the Certificates tab:

1. Enter the host for which the certificate should be imported and, if necessary, the port number as well.
2. This is the path to the certificate file.
3. This is the path to the key file.
4. Provide the password, if one exists, for the client certificate.

Apply the settings by clicking *Add*.

There is no need to adjust further settings. When Postman sends a request to the host you have entered, the certificate is sent automatically.

In the dialog box shown above, you can also remove the certificate. After saving a certificate, a "Remove" link appears for this purpose.

To check whether the certificate has been sent, the console can be opened with the keyboard shortcut **CMD / CTRL + ALT + C**. After submitting a request, which certificates have been selected and sent will be listed under *Client Certificate*.

## Determining institution-specific URLs as well as available versions

To determine the correct URL for the selected version, use the following request:

Parameter	Value	Description
<b>URL</b>	<code>https://xs2a-sandbox.f-i-apim.de:8444/fixs2a-env/xs2aapi/v1/bc/&lt;BANKLEITZAHL&gt;/versions</code>	Endpoint for retrieving the version. A valid routing number must be transferred.
<b>HTTP Method</b>	GET	The request is made via HTTP GET.

A call with CURL therefore looks like this:

```
curl -X GET https://xs2a-sandbox.f-i-apim.de:8444/fixs2a-env/xs2a-api
/<BANKLEITZAHL>/versions \
--key '/Users/youruser/Desktop/QWAC-KEY.pem' \
--cert '/Users/youruser/Desktop/QWAC.pem'
```

A successful response delivers an HTTP/200 "OK" status code and the following message body:

```
{
  "versions": [
    {
      "name": "v1",
      "href": "https://xs2a-sandbox.f-i-apim.de:8444/fixs2aenv/xs2a-
api/<BANKLEITZAHL>/v1",
      "spec": "1.3.0",
      "revision": "1"
    }
  ]
}
```

It contains detailed information about the available versions and an institution-specific URL. From this point forward, all available role-based features can be used via this URL.