



Getting Started

A step-by-step guide to start using our APIs

PSD2 Compliance Berlin Group - Get Started Guide

- [Introduction](#)
- [Getting Access to Sandboxed API's](#)
 - [Discover API's](#)
 - [Onboarding using a personal account](#)
 - [Step 1 - Register to the portal](#)
 - [Step 2 - Onboarding](#)
 - [Step 3 - Use API's](#)
 - [Creating a new Application](#)
 - [Editing an Application](#)
 - [Generate an API key](#)
 - [Onboarding anonymously](#)
 - [Retrieve the public API key](#)
 - [Sandbox to Live promotion](#)
- [Live API access + Declare your redirect URL's](#)
- [Portal API Marketplace - About our API's](#)
- [Account Information Service - AIS](#)
- [Payment initiation Service - PIS](#)
- [Funds Confirmation Service - CIS/PIIS](#)
- [Signing Basket Service - SBM](#)

Introduction

Welcome to the Sandbox environment for our PSD2 API's!

In this portal, you will find all the necessary documentation to get you started with your developments on our open API's for account information, payment initiation & funds confirmation, in accordance with the PSD2 legislation.

This "Getting Started" guide provides you with a step-by-step guidance on how to start using our sandbox facilities.

The sandbox contains detailed documentation per API and sandboxed API versions that will serve you partly mocked fictitious PSU data, developed to ease your integration with our live PSD2 services. We have taken great care to ensure that the sandboxed versions of our API's mimic our live environment as closely as possible, offering you an excellent development and integration environment for your application(s).

Getting Access to Sandboxed API's

We offer you two separate environments: the Sandbox PSD2 API's and the Live PSD2 API's. Your initial onboarding as TPP takes place on the Sandbox environment. Once you have your application up and running on our Sandbox API's you may request access to the live environment (see next section). If you are interested to start your onboarding on the Sandbox environment, please follow the steps below:

Discover API's

Our API documentation is available publicly, go to the tab '**APIs**' to discover them.



API Catalog

Explore our APIs and see sample responses without writing a single line of code

Find:

▼ Name ascending

🔍 Change view

psd2 - NextGenPSD2 - Account Information

Version | 1.6

psd2 - NextGenPSD2 - Confirmation of funds

Version | 1.4

psd2 - NextGenPSD2 - Consent Management for Confirmation of Funds

Version | 1.4

psd2 - NextGenPSD2 - OAuth2 Server Authorisation

Version | 1.2

psd2 - NextGenPSD2 - OAuth2 Server Token

Version | 1.2

psd2 - NextGenPSD2 - Payment Initiation

Version | 1.5

psd2 - NextGenPSD2 - Signing Basket

Version | 1.3

psd2 - NextGenPSD2 Consent Management for Accounts Information

Version | 1.6

Onboarding using a personal account

The following steps describe how to create a personal account for onboarding, this allows you to define dedicated applications & API keys. Personal onboarding allows us to keep you informed on planned changes and maintenances. In case you prefer to onboard anonymously, then you can skip this chapter and proceed to [Onboarding anonymously](#).

Step 1 - Register to the portal

First of all, you have to Sign Up on the API Portal and create a new account. When you click '**Login In**' on the home screen, the login screen will be opened. In this screen, below the input field for Login name, please click the link "**Create an account**" to navigate to the registration form for new users.

In this registration form, please provide us with the following information :

- Your full name
- Your email address
- A password of your choice
- Confirmation of your chosen password

You are also offered the option of entering an 'Organization code'. This field can be ignored during your initial Sign Up.

Finally, you must agree to the **Terms & Conditions** and **Privacy Policy** before continuing. Then click '**Create an account**'.

Note: Organization code This field is used for creating portal accounts for developers of your organization once your organization has been onboarded. During the onboarding process, you will receive an email containing your 'Organization Code' (see end of Section 2). When you fill in this Organization Code during registration of a new user, that user will automatically be linked to your organization and have access to all the API documentation that your organization has access to.

[Home](#)[Log In](#)[APIs](#)[Applications](#)[Help Center](#)[Onboarding](#)

Create an account

Full name:

Email:

This email address will become your 'Login name'

Password:



Confirm password:

Organization code:

(optional)

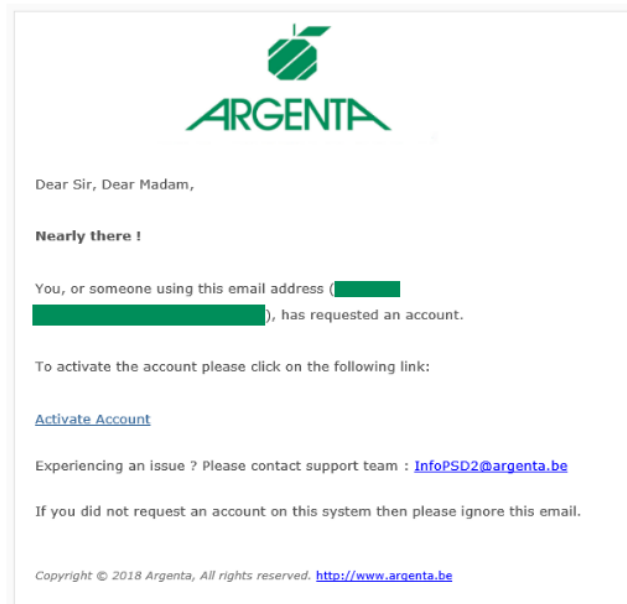
The organization code is only used to connect an additional account to a previously onboarded organization. You can find the organization code in the onboarding confirmation email.

☐ I agree to the [Terms & Conditions](#)

☐ I agree to the [Privacy Policy](#)

Create an account

After clicking **Create an account**, you will receive an email confirming your registration:



Validate your account creation by clicking **Activate Account**. This will direct you to the portal, confirming that your account has been activated.

Message

Your account has been activated. Sign in with the credentials you specified during registration.

Step 2 - Onboarding

After registering your user on the portal, the next step is to onboard your organization. Login with your account on the poartal and navigate to the **Onboarding** tab to register your organization as a Third Party Provider (TPP) in order to gain access to Argenta's API's.

Here you will see the Onboarding Form, where you will have to fill in the following information:

- First Name and Last Name of your Organization's contact person
- The name of your Organization in the field 'Company'
- The contact email address for your Organization
- The contact phone number for your Organization
- The role(s) you want to test: AIS, PIS and/or CIS (will be checked against the roles registered in your eIDAS certificates)

Finally, you will have to upload your **public** eIDAS certificates (both QWAC and QSealC).

Onboarding

Onboarding Form

First Name

Last Name

Company or TPP name

Email *

Phone number

Select public QWAC certificate *

Accepted extensions: cer, crt, cert, pem, p7b, txt

No file chosen

Select public QSealC certificate *

Accepted extensions: cer, crt, cert, pem, p7b, txt

No file chosen

Comment

Enter characters seen in the picture below:



* Mandatory

Once you have filled in all the required fields, you can submit your onboarding request.

Side note: redirect URI registration On our *LIVE* environment, you will also need to declare a set of allowed redirect URL's to which the PSU will be redirected back after signing requests on Argenta side in the OAuth2 redirect flow. In order to facilitate development & testing, Argenta has decided not to enforce this on the Sandboxing environment. Hence it is not necessary to pre-declare your redirect URL's for your client websites and applications on our Sandbox.

Upload status

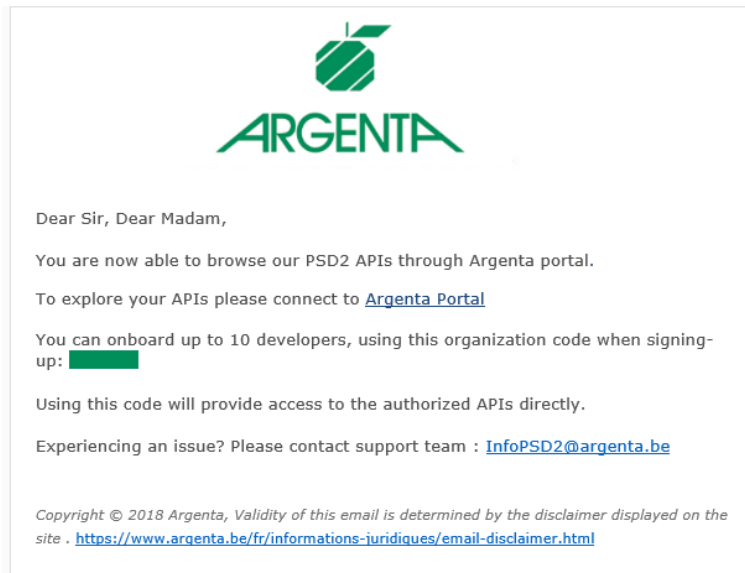
OK

Your information was submitted successfully.

You will shortly receive an email from us to confirm your successful onboarding. Onboardings are typically completed within one working day.

[Back to API Portal](#)

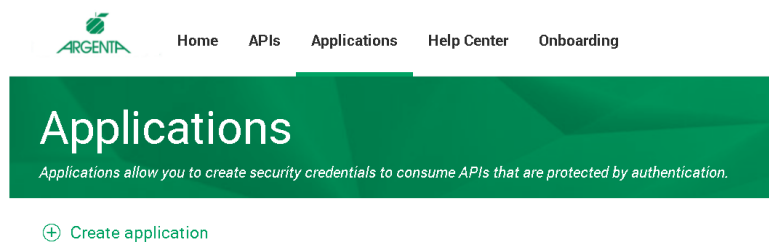
Our operations team will verify your application. Once verified, you will receive an email confirmation with an **Organization code** that you can use to register up to 10 developers. Store this code carefully, as you will need it to create more portal accounts for your organization.



Simply have your developers use this **Organization code** when signing up, and their accounts will automatically be linked to your organization and have access to all relevant API's.

Step 3 - Use API's

In order to use the API's, you have to first create a **new Application** via the *Applications* tab and generate an API key for your application:



A. Creating a new Application

When you click the '**Create application**' button, the Edit Application screen will open. Here you can name your new Application, and select the API's you want to be able to use with this application by checking the "selected" check box (see Implementation Guide).

Important: You must always select 'NextGenPSD2 -Oauth2 Server Authorization' for any application, or you will not be able to sign requests.



← Applications

Create Application

General

Image:



Limit 1MB

Organization: SBOP

Application name*:

Description:

☒ Enable application

Select APIs

10 Show entries

Search:

Account

API Name	Version	Description	Tags	Selected
psd2 - NextGenPSD2 - Account Information	1.6	-		☐
psd2 - NextGenPSD2 Consent Management for Accounts Information	1.6	-		☐

Showing 1 to 2 of 2 entries (filtered from 25 total entries)

Previous 1 Next

Save application

Save and add authentication

Cancel

Create your application by clicking on the button *Save application*.

You will be redirected back to the tab *Applications*, where your newly created application is shown:



Message

Application **My AIS application** was successfully created.



Applications

Applications allow you to create security credentials to consume APIs that are protected by authentication.

+ Create application



My AIS application

Application containing the PSD2 AIS API's to consumer account information services

B. Editing an Application

If you want to edit your application, you can click on your application name on the *Applications* screen. This will take you to the *View Application* screen where you can click on the *Edit application* tab and you will now

see the *Edit Application* screen. You can switch between the *Details*, *Authentication* and *Sharing* tabs to edit the specific information.

 [Home](#) [APIs](#) [Applications](#) [Help Center](#) [Onboarding](#) 

[← Applications](#)

Edit Application: My AIS application

 [Delete application](#)

Details Authentication Sharing

General

Image:



Limit 1MB

Organization : SBGP

Application name*:

Description:

☒ Enable application

Select APIs

API Name	Version	Description	Tags	Selected
psd2 - Next Gen PSD2 - Account Information	 1.6	-		☒
psd2 - Next Gen PSD2 - Confirmation of funds	 1.4	-		☐
psd2 - Next Gen PSD2 -				

C. Generate an API key

In order to use our API's, your application needs an API key. Generate an **API key** by editing the newly created application. Click on the name of the new Application, and then click on 'Edit the application'.

 [Home](#) [APIs](#) [Applications](#) [Help Center](#) [Onboarding](#) 

[← Applications](#)

View Application: My AIS application

 [Delete application](#)  [Edit application](#)

Details

General



Name: My AIS application

Description: Application containing the PSD2 AIS API's to consumer account information services

Organization: SBGP

Enabled: Yes

Status: Approved

Created by: Jan Geedts

Created on: 22 Sep 2021

Select APIs

API Name	Version	Description	Actions
psd2 - Next Gen PSD2 - Account Information	 1.6	-	 Actions
psd2 - Next Gen PSD2 -			

Go to tab **Authentication**, click on *API Keys* and then on the *Generate* button.

The screenshot shows the 'Edit Application: My AIS application' page. The top navigation bar includes 'Home', 'APIs', 'Applications', 'Help Center', and 'Onboarding'. The 'Applications' tab is active. The page title is 'Edit Application: My AIS application'. Below the title, there is a 'Delete application' button. The 'Authentication' tab is selected, showing a 'Generate' button and the message 'No API keys defined.'

A new API Key has been generated for your application:

The screenshot shows the 'Edit Application: My AIS application' page after a new API key has been generated. A green message box at the top states 'API Key was successfully created.' Below the message, the 'Authentication' tab is selected, showing a 'Generate' button and a table of generated API keys.

API Key	Javascript Origins	Created	Secret key	Actions
3db904fa-5988-4ae4-9bc1-0f695c1a1b00	*	22 Sep 2021, 07:33 UTC	View	Actions

Congratulations, your application is now ready to start using our Sandboxed API's. Good luck & have fun!

Onboarding anonymously

It is possible to anonymously onboard your organization if it's preferred not to follow the above steps for a personal onboarding. Anonymously onboarded TPP's will use a shared public application and API key.

To initiate anonymous onboarding, click '**Onboarding**' on the home screen. In this screen, please click the link '**Onboard anonymously**' to open the onboarding form.

On this form you will only have to upload your **public** eIDAS certificates (both QWAC and QSealC) and a captcha challenge, all other fields are optional.

However, it is recommended to fill in an email address, as it allows us to inform you when your onboarding has been completed.

Onboarding

Onboard a new TPP

First Name

Last Name

Company or TPP name

Email

Phone number

Select public QWAC certificate *

Accepted extensions: cer, crt, cert, pem, p7b, txt

No file chosen

Select public QSealC certificate *

Accepted extensions: cer, crt, cert, pem, p7b, txt

No file chosen

Comment

Enter characters seen in the picture below:



Onboard

* Mandatory

Once you have filled in all the required fields, you can submit your onboarding request.

Side note: redirect URI registration On our LIVE environment, you will also need to declare a set of allowed redirect URL's to which the PSU will be redirected back after signing requests on Argenta side in the OAuth2 redirect flow. In order to facilitate development & testing, Argenta has decided not to enforce this on the Sandboxing environment. Hence it is not necessary to pre-declare your redirect URL's for your client websites and applications on our Sandbox.

Upload status

OK

Your information was submitted successfully.

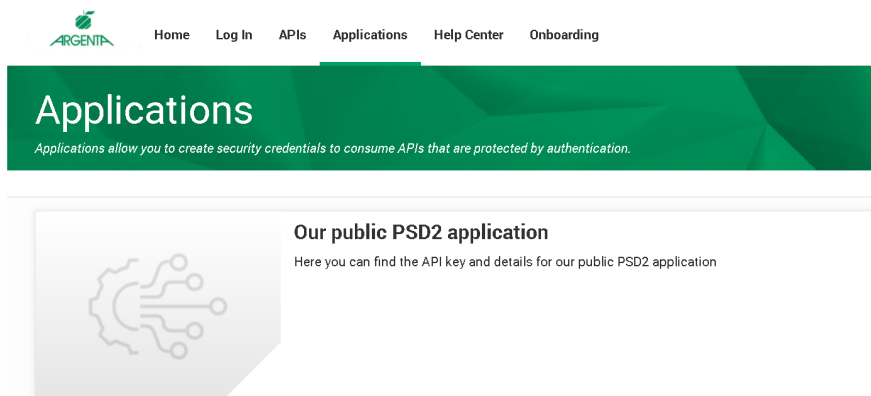
We will process your onboarding request shortly. Onboardings are typically completed within one working day.

[Back to API Portal](#)

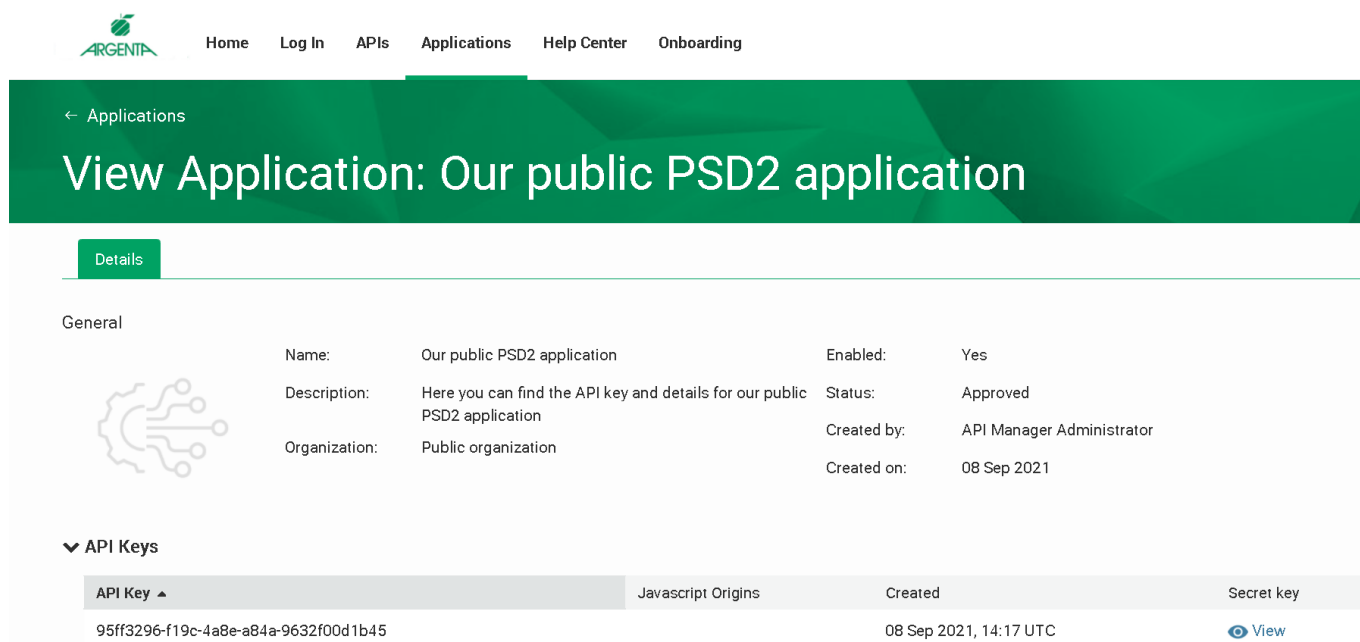
Our operations team will verify your application (typically within one working day). Once verified, you will be able to start using the PSD2 API's, no other action is required.

Retrieve the public API key

In order to use our API's, your application needs an API key. For anonymously onboarded TPP's a public API key is available. To find this public API key, go to tab **Applications**, click on the application named *Our public PSD2 application*:



You will see the public API Key listed in the API Keys on the screen which can be copy/pasted into the headers of your PSD2 requests:



Sandbox to Live promotion

Once you have successfully integrated your application on our Sandbox API's, and you are feeling confident enough to move to the next stage, you can request access to the Live environment. See the next chapter for more information.

Live API access + Declare your redirect URL's

To get LIVE API access, you will have to repeat onboarding procedure as described above, but this time on the Live Portal. Here you will also have the choice to onboard anonymously or create an account to onboard personally. Our live portal can be found on <https://portal.payments.argenta.be>

To use our Live API's, in addition to the information provided in the sandbox, you will also have to register the redirect URL's for your application, which will be used in the **OAuth2.0** flow (see Implementation Guide).

More specifically, please follow the same steps as described in the previous section:

1. Discover API's
2. Register to the Live portal

Remark: *This step is to be skipped in case of anonymous onboarding.*

3. Onboarding for Live environment *On our live environment, you will need to additionally declare one or more redirect URL's for callback to your application or website, after the user has successfully performed the authorization for a consent or payment request. On our live environment, the form is extended with an extra field where you can specify these URL's. If you need a change of redirect URL's after your initial onboarding, please send your request to infoPSD2@argenta.be*
4. Use API's
 - In case of personal onboarding:
 - Create a new Application for the Live environment
 - Generate a unique API key for your Live environment application
 - In case of anonymous onboarding:
 - Retrieve and use the public API key

Portal API Marketplace - About our API's

The design of our API's is in accordance with the international Berlin Group NextGenPSD2 standard, [version 1.3](#), and offers the following functionalities :

- Account Information Service
- Payment Initiation Service
- Funds Confirmation Service
- Signing Basket Service

Several approaches are described in this standard to perform Strong Customer Authentication (**SCA**). In our first version, the only supported version is the **OAuth2.0 Redirect SCA approach** (for Authentication/Authorization of the customer). In this flow the customer will be redirected from your application to either our signing page or our signing app, where they can enter their credentials and authenticate your request. The sandbox features a redirect to a mocked authentication page, allowing you to test the redirect flow freely.

Important to note: *while we follow the Berlin Group NextGenPSD2 v1.3 specifications, our current implementation features a few deviances from this standard:*

- An **API Key** is used in all API calls and must be put in the header "**apiKey**".
- While it is possible to register the **consent frequency** chosen by a customer via the "Establish Consent Process", the registered value is not yet taken into account.
- **Recurring Consent.** The consent is valid during the life of the access_token and/or refresh token. No re-issuing of the token on the same consent with an additional SCA is possible for the moment.
- **Sessions:** Combination of AIS and PIS Services in a session is not supported for the moment.
- **Basket Resources :** Only payments resources can be used. The consent resources are not yet supported.

Account Information Service - AIS

With our PSD2 AIS API's you as a TPP will have the possibility to retrieve the account information for your customers' accounts at our bank. Account information is only accessible after the customer has registered his explicit consent. The following information will be available in our API's:

- List of authorized accounts
- Product information for each of the authorized accounts
- Balance information for each authorized account
- Transaction information for each authorized account (only booked)

In order to register a consent, the customer must provide the account number(s) to the TPP, and the TPP will then send the list of authorized accounts via the consent API (cfr. NextGenPSD2 standard : "*Consent Request on Dedicated Accounts*").

After authentication of the customer, the TPP will receive an OAuth2 access token needed to retrieve the customer account information.

Payment initiation Service - PIS

With our PSD2 API's you as a TPP will have the possibility to initiate payment for your customers on accounts held at our bank.

The customer must provide all information related to the payment initiation and the TPP can use our API to forward this information. If the syntax of the payment is correct, the TPP will receive a positive answer with the payment resource identifier.

The TPP must redirect the customer to the authentication server to perform an SCA and the payment will be initiated directly after.

Funds Confirmation Service - CIS/PIIS

Note: Confirmation of funds Consent

Implementation of the PIISP/CIS consent has been developed in accordance with the international Berlin Group NextGenPSD2 Extended Service : [version 2.0](#).

With our PSD2 API's you as a TPP will have the possibility to request a confirmation of funds. Confirmation of funds is only accessible after the customer has registered his explicit consent.

In order to register a consent, the customer must provide the account number(s) (in IBAN/BBAN format) to the TPP, and the TPP will then send the list of authorized accounts via the consent API.

After authentication of the customer, the TPP will receive an OAuth2 **access_token** needed to request a confirmation of funds.

Signing Basket Service - SBM

With our PSD2 API's you as a TPP will have the possibility to sign several resources (only payments for now) one time (only one SCA will be required for all resources).

The TPP can propose to the customer to initiate several payments, when all required payments are initiated, the TPP will have the possibility to group them and use our API to create a basket that will include all the payment resources.

Once the basket resource is created, the TPP will receive the resource identifier and as it is done for the authorisation of a consent or a payment, the TPP must redirect the customer to the authentication server to perform a SCA.

The cancellation of a basket is also managed if no authorisations have already been initiated.

Note: Explicit authorisation

With the signing-basket feature, the TPP will have to choose between the authorisation via a basket or via the payment itself. Indeed, if a payment is initiated to be put on a basket, this payment can't be signed alone.