

Introduction

The introduction of the Payment Services Directive, more commonly known as PSD2, establishes new requirements for Account Servicing Payment Service Providers (ASPSP) that hold payment service accounts of payment service users (PSUs). The Directive forces the banks to open their infrastructure and expose payment account data to third parties providers (e-commerce, other banks, etc.), upon client' request.

Third-party payment providers (TPPs) may offer the following services:

- **Account Access Services:** An online service that collects and aggregates customer data to provide cross-banking data aggregation and build a better experience for PSUs;

These services can be offered by TPPs thanks to the PSD2 Application Programming Interface (API), provided by KBL, which let the TPPs get access to PSUs account information. This document presents a summary of technical specifications.

API Technical Specifications - Summary

KBL API is based on the model and standards of **Version 1.3 of NextGenPSD2** Framework of the Berlin Group. It offers a modern, open, harmonised and interoperable set of APIs as the safest and most efficient way to provide data securely.

The NextGenPSD2 Framework reduces XS2A (access-to-account) complexity and costs, addresses the problem of multiple competing standards in Europe and, aligned with the goals of the Euro Retail Payments Board, enables European banking customers to benefit from innovative products and services ('Banking as a Service') by granting TPPs safe and secure (authenticated and authorised) access to their bank accounts and financial data.

Berlin Group is proposing three different models to provide PSU credentials to the API out of which the Redirect Flow is by far the most flexible and provides support for any type of strong customer authentication method already used by the ASPSP. All APIs provide support for the Redirect Flow.

Not every message defined in this API definition is necessary for all approaches.

Furthermore this API definition does not differ between methods which are mandatory, conditional, or optional.

Therefore for a particular implementation of a Berlin Group PSD2 compliant API it is only necessary to support a certain subset of the methods defined in this API definition.

Some General Remarks Related to this version of the OpenAPI

Specification:

- **This API definition is based on the Implementation Guidelines of the Berlin Group PSD2 API.**
- **This API definition contains the REST-API for requests from the TPP to the ASPSP.**
- According to the OpenAPI-Specification [<https://github.com/OAI/OpenAPI-Specification/blob/master/versions/3.0.1.md>]:

"If in is "header" and the name field is "Accept", "Content-Type" or "Authorization", the parameter definition SHALL be ignored."

The element "Accept" will not be defined in this file at any place.

The elements "Content-Type" and "Authorization" are implicitly defined by the OpenApi tags "content" and "security".

- Overview
- GET /v1/accounts
- GET /v1/accounts/{account-id}



- GET /v1/accounts/{account-id}/balances
- GET /v1/accounts/{account-id}/transactions/
- GET /v1/accounts/{account-id}/transactions/{resourceId}
- POST /v1/consents
- DELETE /v1/consents/{consentId}
- GET /v1/consents/{consentId}
- GET /v1/consents/{consentId}/authorisations
- POST /v1/consents/{consentId}/authorisations
- GET /v1/consents/{consentId}/authorisations/{authorisationId}
- PUT /v1/consents/{consentId}/authorisations/{authorisationId}
- GET /v1/consents/{consentId}/status
- Definitions

Connecting to the API

TPPs wishing to use the PSD2 API to access KBL customers' payment accounts, given that the client consent has been obtained, can authenticate themselves via this portal.

Only authenticated TPPs with authorised access will be able to access customer payment accounts.

The screenshot shows the registration page for the KBL API Developer Portal. At the top, it says "Register and try our free PSD2 APIs for licensed Third Party Providers" with a button to "EXPLORE API DOCUMENTATION". Below this, there are two main sections: "Sign up" and "Explore our APIs". The "Sign up" section contains four steps: 1. Register in the API Portal, 2. Go through the API documentation, 3. Make sure you have the required local license, and 4. Log in to the developer's portal. The "Explore our APIs" section encourages users to look at API products and find APIs to construct an application. At the bottom, there is a button to "EXPLORE API DOCUMENTATION" and the text "Go ahead! Start building with our APIs today!".

The screenshot shows the sign-up form for the KBL API Developer Portal. The form is titled "API Developer Portal Sign up" and "Sign up with KBL Luxembourg Catalog User Registry". It contains five input fields, each with a red asterisk indicating it is required: "Username", "Email address", "First Name", "Last Name", and "Consumer organization". Each field is represented by a light blue rectangular box.

Glossary

API	Application Programming Interface
ASPSP	Account Servicing Payment Service Provider
Berlin Group	Institution that defines open and common scheme independent standards
PSD2	Revised Payment Services Directive (EU 2015/2366, also known as PSD2) which comes into full effect on 14 September 2019
PSU	Payment service user
TPP	Term commonly used in PSD2-related communication to designate globally the account information service providers (AISPs), payment initiation service providers (PISPs) and payment service providers issuing card-based payment instruments (CBPIIs)