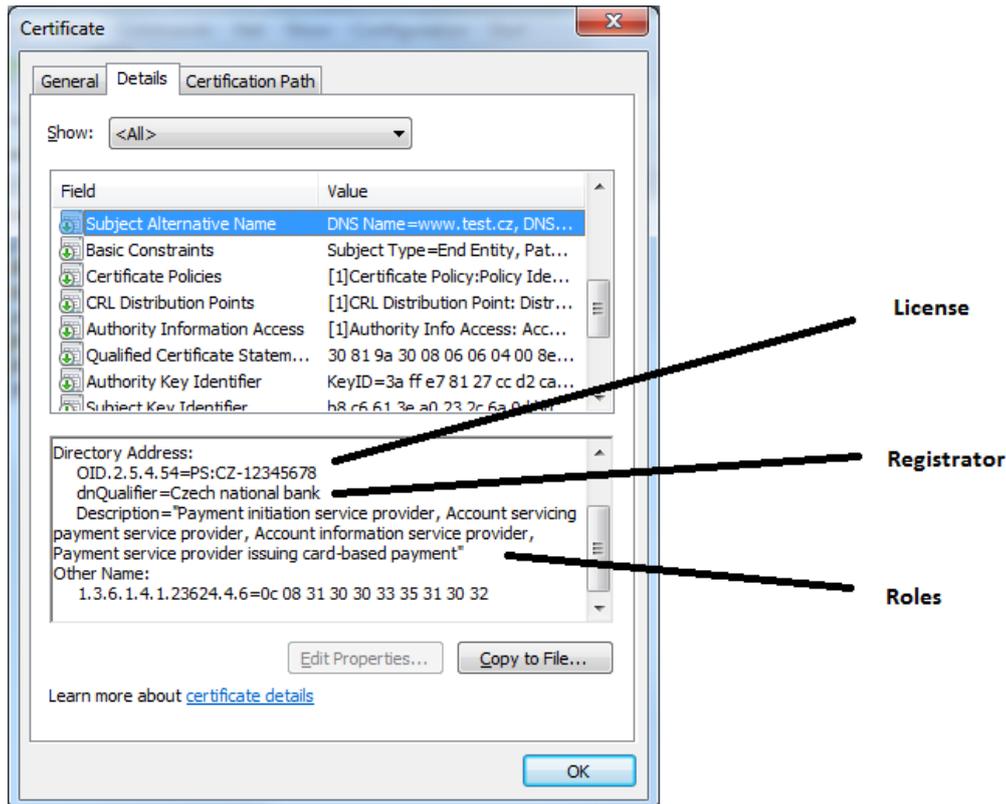


How to call PSD2 API

Prerequisites

- Qualified certificate for PSD2
- Ability to make OAuth2 client credentials grant and authorization code



Registering into developer portal

Use this TPPPublicRegistration API to register your company as a PSD2 Third Party Provider. Registration will result to access to developer portal under user that is allowed to call API's.

Usage:

```
curl -k -X POST --cert EquaTest.pem:aaaa -H "accept: application/json" -H "Content-Type: application/json" "https://api.equabank.cz:32000/tppregistration/1.1.5/tpps" -d @tppRegister.json
```

where tppRegister.json contains your data

```
{
  "tppId": "TR0011",
  "tppName": "TPP name ",
  "password": "xxxxx",
  "email": "email@email.cz",
  "address": "Po přístřeším 87",
  "phoneNumber": "+420 123456787"
}
```

tppld is userName to the developer portal. It cannot contains spaces and do not use underscore and diacritics.

password is password to the identity server with policy pattern: $^((?=. *d)(?=. *[a-z])(?=. *[A-Z])(?=. *[@#\$%\&*])).{0,100}\$$

email is required for confirmation email and notification purposes. You will receive email with confirmation link after successful registration.

address and **phone** number is highly recommended. The administrators of Equabank will try to contact you for security reasons. Wrong information will be reported.

How to convert cert.pfx to cert.pem

```
openssl.exe pkcs12 -in EquaTest.pfx -out EquaTest.pem -clcerts
```

Errors

http error	Error message	Description
403	User xxxx already exists in the system. Please use a different username.	Chosen tppld has been already registered. Try a different one.
400	The certificate is missing valid metadata	The certificate does not meet the expectations (see the prerequisites).
400	Some of following parameters is missing in JSON request: tppld or password or tppName or email or phoneNumber	The JSON in the body is not valid or complete.
400	The name should contain character '_'	
403	Unable to process registration. The TPP has been already registered under a different tppld: xxx	A different user with provided certificate is already registered.
200	User has been already registered. No changes	

	has been done.	
403	The TPP has been already registered	
500	Unable to register user - internal error - contact support please	Internal error.
500	Unable to set roles	Internal error.

Creating the application

Open page <https://developers.equa.cz> and sign in to the developer portal. Please note that **sign-up** creates user that is **not able to call API!**

The screenshot shows the Equa bank developer portal interface. At the top, there is a navigation bar with 'Equa bank' on the left and 'Sign-up' and 'Sign In' buttons on the right. Below the navigation bar is a sidebar with 'APPLICATIONS' and 'ANALYTICS' sections. The main content area is titled 'APIs' and displays a grid of API cards. Each card includes an icon, the API name, version, and the user role.

API Name	Version	User Role
AISPGetAccounts	2.0.2	admin
AISPGetBalance	2.0.2	admin
AISPGetTransactions	2.0.2	admin
CISP	2.0.2	admin
PaymentServices	2.0.2	admin
TPPPublicRegistration	1.1.9	Pavel Kahle

Go to the Applications and create your application. (You can use the default application, however the application name will be displayed on consent page to the end users).

Pay attention that application name cannot contain whitespaces!

Per Token Quota field allows you to assign an API request quota per access token. Allocated quota will be shared among all the subscribed APIs of the application. You can leave the unlimited value.

Description is up to you, but it will not be displayed to the end users.

Entry CallbackURL for OAuth2 implicit and authorization grant code purposes. Please that Password grant is useless, client credentials can be used in certain situations only (e.g payment initiate).

Then push Generate keys button to obtain clientId (consumerKey) and clientSecret (consumerSecret).

Equa bank

APPLICATIONS APPLICATION LIST EDIT

APIS ANALYTICS

Kbelik

Details Production Keys Sandbox Keys Subscriptions

No Keys Found
No keys are generated for this type in this application.

Grant Types
The application can use the following grant types to generate Access Tokens. Based on the application requirement, you can enable or disable grant types for this application.

- Refresh Token
- IWA-NTLM
- SAML2
- Client Credential
- Implicit
- Code
- Password

Callback URL
https://knedlik.neco/callback

Scopes
No Scopes Found..

Access token validity period
3600 Seconds

Generate keys

Equa bank

APPLICATIONS APPLICATION LIST EDIT

APIS ANALYTICS

Kbelik

Details Production Keys Sandbox Keys Subscriptions

Show Keys

Consumer Key
.....

Consumer Secret
.....

Grant Types
The application can use the following grant types to generate Access Tokens. Based on the application requirement, you can enable or disable grant types for this application.

- Refresh Token
- IWA-NTLM
- SAML2
- Client Credential
- Implicit
- Code
- Password

Callback URL
https://knedlik.neco/callback

Update

The usage of clientId and clientSecret generated on sandbox tab means that mock of backends and authentication server is used.

API Subscription

The application has to be subscribed to API in order to be API callable with tokens that has been created by using clientId and clientSecret.

The screenshot shows the Equa bank API console interface. At the top, there is a navigation bar with 'EQUA BANK' on the left and a user profile icon labeled 'TRO009' on the right. Below the navigation bar, there is a sidebar with 'APPLICATIONS' and 'ANALYTICS' options. The main content area displays the details for the 'AISPGetAccounts - 2.0.2' API. The details include: Version: 2.0.2, By: admin, Updated: 09/Jan/2018 17:25:23 PM UTC, and Status: PUBLISHED. There are two red circles highlighting the 'Applications' dropdown menu (set to 'Kbelik') and the 'Subscribe' button. Below the details, there are tabs for 'Overview', 'API Console', 'Documentation', and 'SDKs'. The 'Overview' tab is active, showing 'Production and Sandbox Endpoints' with two URLs: 'https://kube-minion1.dev1.equabank.loc:32000/aisp/accounts/2.0.2' and 'https://kube-minion1.dev1.equabank.loc:32000/aisp/accounts/'. A 'Description' section below states: 'Equabank open API for AISP (Account Information Service Provider)'.

Wait for a while

The current situation required administrator assistance to set up authentication to your profile.