

# How to Smart Accounts



Smart  
Accounts

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## 1. Scope

This document comes in addition to “Smart Accounts - Technical manual for intermediary\_v1” for details regarding especially the functional flow. This document is addressed to Smart FinTech's and Smart Accounts' partners for better understanding over the AIS flow implemented and each bank particularities.

*Please note that the document has been created by Smart FinTech and it cannot be disclosed or redistributed.*



## 2. Glossary

**PSD2** = Payment Service Directive 2, the revised version of the EU directive that was implemented in 2007

**TPP** = Third-Party Provider

**Intermediary/Partner** = The legal entity that integrates with Smart Accounts in order to access its client's account information, with their consent and in their benefit

**X.509** = standard format for public key certificates, digital documents, that securely associate cryptographic key pairs with identities such as organisations, websites or individuals. In order to integrate with Smart Accounts, a TLS server certificate is needed (QWAC-Qualified Website Authentication Certificate)

**PSU** (Payment Services User) = the account's holder that gives his permission to account's information

**AISP** (Account Information Service Provider) = the third-party provider who collects an account holder's information. Smart FinTech is an AISP and also TPP

**AIS** (Account Information Service) = the service that provides the PSU a consolidated view of his finances: bank balance, transaction history from multiple bank accounts

**API** (Application Programming Interface) = Open API is a free-to-use, publicly available APIs (the ones shared by each bank on their developer portal site)

**EBA** (European Banking Authority) = the authority that ensures consistency in regulation and supervision across the European banking sector. For PSD2, they are responsible for issuing Regulatory Technical Standards and guidelines

**SCA** (Strong Customer Authentication) prescribes that authentication should occur using a combination of two factors from the categories:

- Knowledge – "something you know" (password, PIN, etc.)
- Possession – "something you have" (token, smartphone, application)
- Inherence – "something you are" (fingerprint, voice recognition)

**eIDAS** (Electronic Identification, Authentication and Trust Services) = a framework that sets standards for electronic identification and trust services. For PSD2 it's about SCA standards

**SaaS** (Software-as-a-service) = a type of software delivered online that enables users and companies to gain access to applications without the need to install or maintain software locally

**GDPR** (General Data Protection Regulation) = a regulation by which the European Parliament, the European Council and the European Commission intend to strengthen and unify data protection for individuals within the European Union

**Open Banking ecosystem** = refers to all elements that facilitate the operation of Open Banking (enabled by PSD2): API standards, the governance, systems, processes, security and procedures used to support participants

**Decoupled (flow) authentication** = the authentication of the PSU occurs outside of the interaction with the intermediary page (the PSU must log in in the internet banking application to authorise the consent)

**Redirect (flow) authentication** = the authentication of the PSU occurs through a redirect URL in the bank's page where he must complete his internet banking's credential to log in and authorise the consent

**Resource** = term used to also describe the consent

**PF** = personal account (retail)

**PJ** = corporate account (corporate/business)

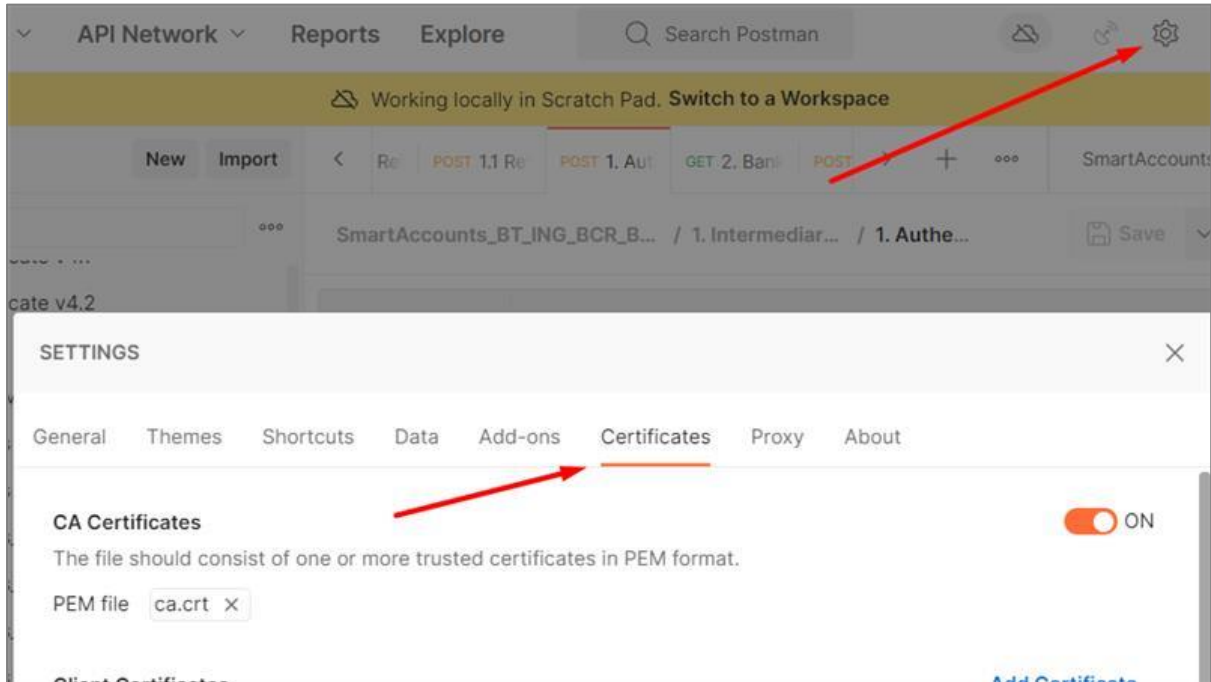
**Sandbox** (environment) = isolated copy of production environment designed for developers to try out APIs. Mimics all interactions with banks' APIs. It returns test (mock) data.

**Production** (environment) = environment used to return live data

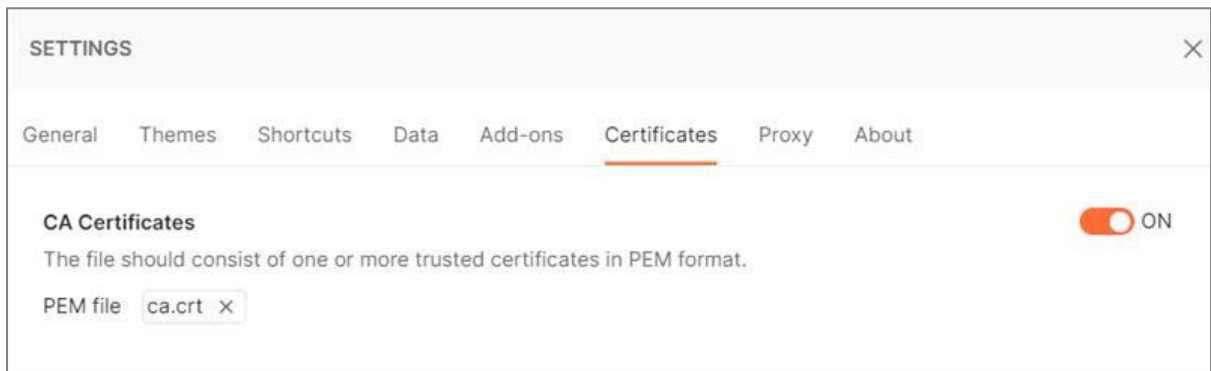
### 3. Postman Setup

The first step in setting up Smart Accounts is to add the related collections, certificates and environments to Postman. For the correct addition, the steps are shown graphically:

1. In the Settings menu, go to the "Certificates" tab



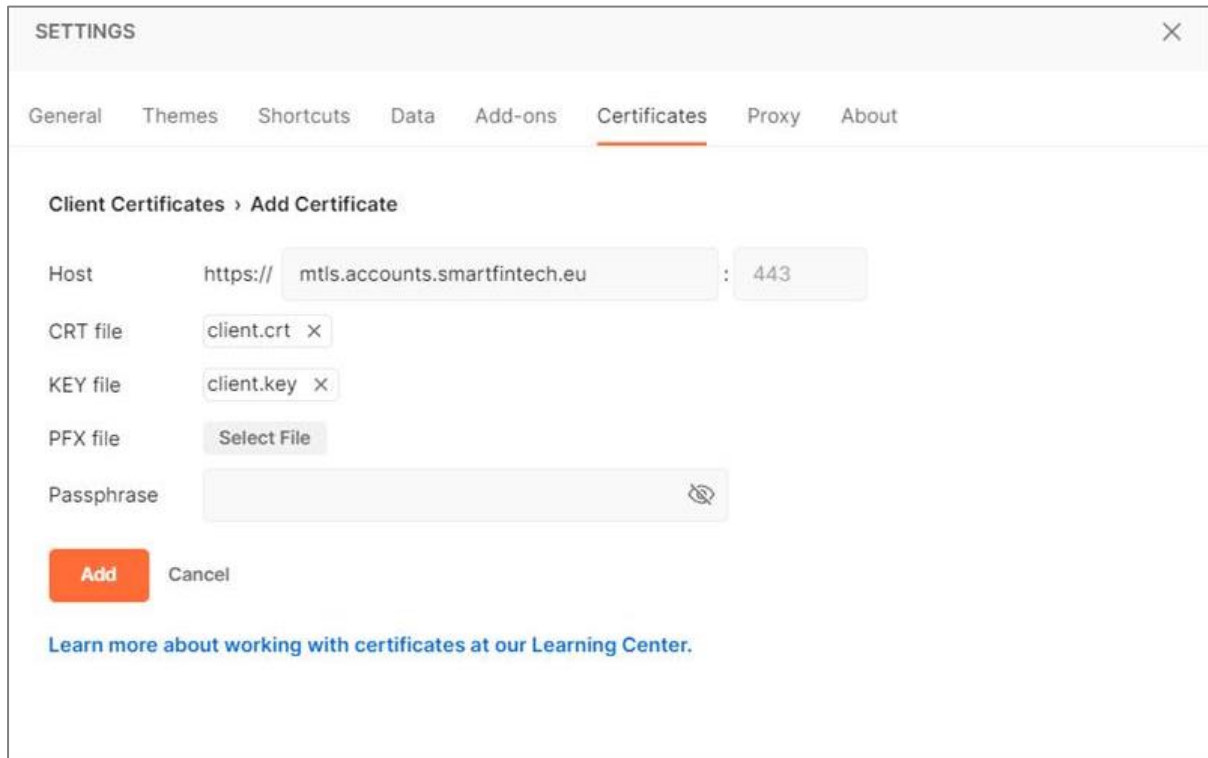
2. Add the file named "ca.crt" into CA Certificates field.



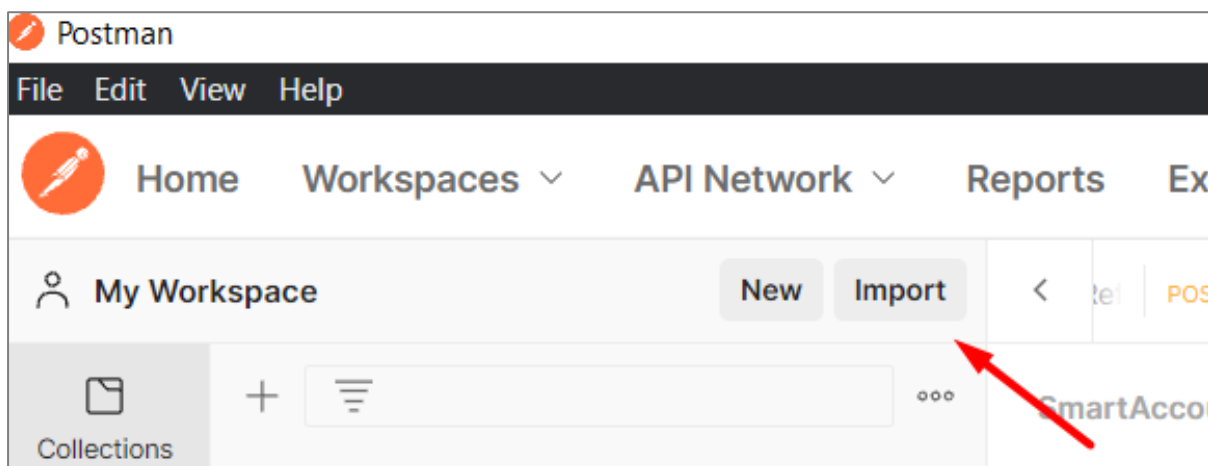
3. Press "Add Certificate", then:

- add the file "client.crt" into "CRT file" field

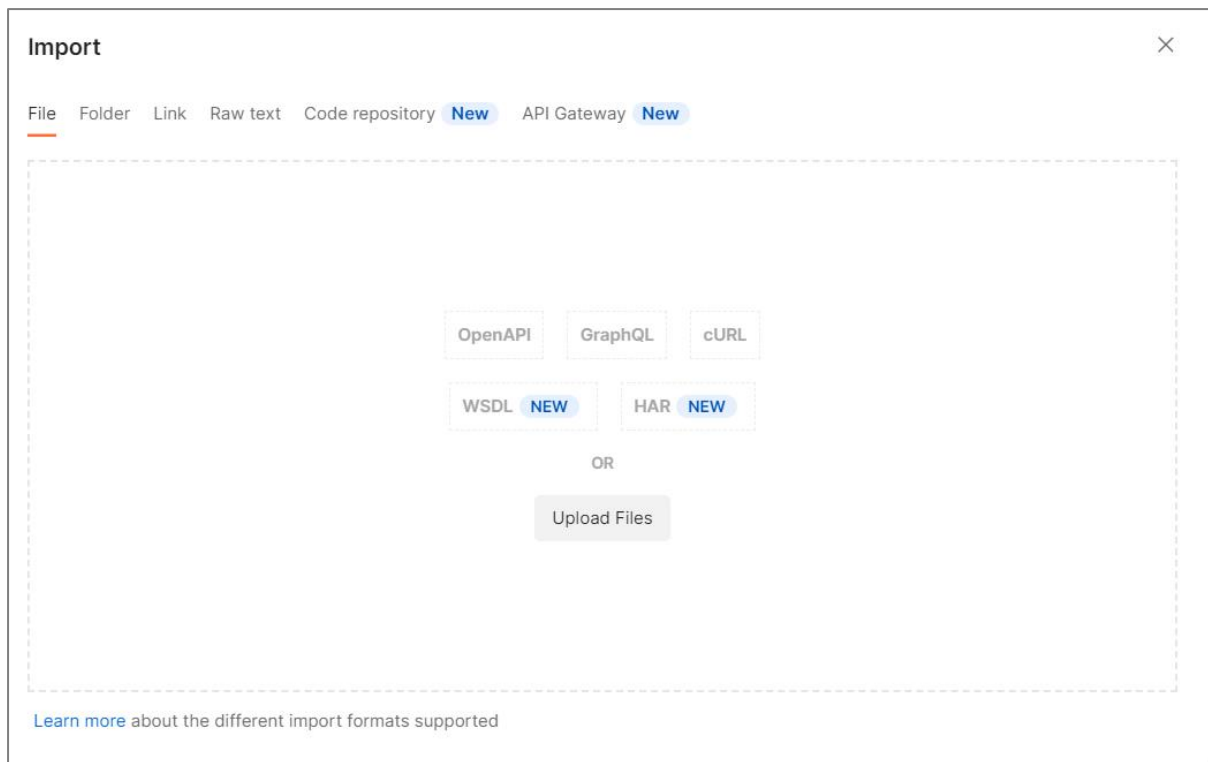
- add the file "client.key" into "Key File" field



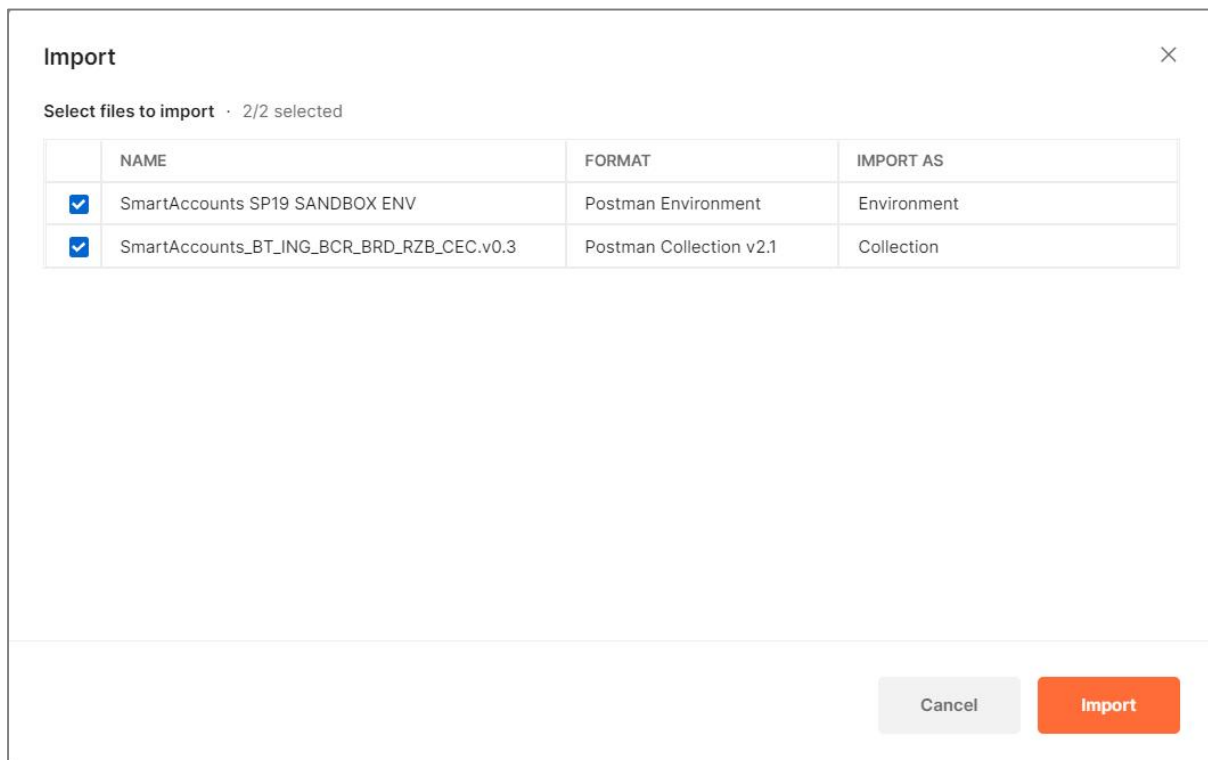
4. Press "Import" in order to add the collection and the environment.



You can drag and drop, or search for the exact path by clicking "Upload Files".



After the environment and collection have been successfully added, click "Import".



## 4. Integrated banks

The list of integrated banks with Smart Accounts (SA):

1. Banca Transilvania (BT) – redirect flow
2. Banca Comerciala Romana (BCR) – redirect flow
3. ING Bank (ING) – redirect flow
4. BRD Groupe Societe Generale (BRD) – decoupled flow
5. Raiffeisen Bank (RZB) – redirect flow
6. CEC Bank (CEC) – redirect flow
7. First Bank (FB) – redirect flow
8. UniCredit Bank (UNC) – redirect flow
9. Revolut (REV) – redirect flow
10. OTP Bank (OTP) – redirect flow
11. Garanti BBVA (GRT) – redirect flow
12. Libra (LIB) – redirect flow

**1. Redirect flow** - the user will be redirected in a webpage (from bank) to authorise the consent.

**2. Decoupled flow** - after "initConsent", the user must independently login and authorise the consent in the internet banking application.

2.1. For BRD with "PSU-ID-Type" = "PF" (personal accounts) the user will have a push notification and must use the code provided via Consent initialisation confirmation mail.

2.2. For BRD with "PSU-ID-Type" = "PJ" (corporate accounts), the user does not have any notification, he must login in the internet banking application and authorise the consent. No code is needed for PJ.

## 5. Account Information Consent flow

### 1. Partner's authentication (API: authenticate/rest/api/token)

Creating a new consent flow will always start with partner's authentication. The partner must successfully authenticate to obtain a pair of access and refresh tokens and the ID of the consent that has been initiated. The pair of access and refresh token must be saved and used for calling the APIs relative to the generated consent ID. **It cannot be used to access information about other consents.**

**The access token expires after 5 minutes, so it must be renewed using the refresh token provided ("POST refreshToken API"). The refresh token expires after 90 days.**

When the "refreshToken" API will be called, a new pair of access and refresh tokens will be generated (API: /authenticate/rest/api/refreshToken).

**In order to access the account's information, the new pair of access and refresh tokens must be used. The previous "refreshToken" is invalidated and it cannot be used anymore.**

In case the "client\_ID" (generated and provided by Smart FinTech) is missing or the x.509 certificate is missing, the authenticate step cannot be finished and an error will be raised. If the certificate has expired or the "client\_ID" is not the correct one, an "Unauthorised" error will be raised. For the rest of technical errors, please check the technical document.

### 2. Get Banks (API: /core/rest/api/banks)

"GET Banks" returns the list of integrated and available banks. Every bank object contains the object "requiredParameters" which includes the parameters "requiresPSUIDType", "requiresPSUID" and "requiresIban". The parameters are boolean type and the value "true" means that the respective parameter should be sent on request.

**All API calls must be made using the "codeBank" specific for each bank, otherwise an error will be raised.**

### 3. Check email (API: core/rest/api/checkPsuEmail)

"CheckEmail" API will check the PSU's email address in Smart Accounts' database. If the email address is already added, then this means that the PSU already has a Smart Accounts account. For this case, the user must be informed that he must accept the Smart Accounts Terms and Conditions.

If the user is not found in Smart Accounts' database, then the user will be informed that there will be an account created in the aforementioned database and he must agree with the Smart Accounts Terms and Conditions. The API's purpose is only to validate if the user must be informed about the Smart Accounts account's creation.

### 4. initConsent - Consent initialisation (core/rest/api/initConsent/{{internalConsentId}})

At this point, the consent can be prepared to be sent to bank for authorisation. In order to initialise a consent, Smart Accounts needs the following information:

## 1. API body:

- **codeBank** – For which **bank** the PSU wants to create a consent
- **periodOfValid** – **the period is with default value = 90 days**. If Smart Accounts receives a different value on this parameter, a "Bad request" error will be raised. After 90 days, the PSU must re-authorise in the bank's page. Please be aware that the re-authorisation in the bank's page will generate a new consent ID so you must keep the evidence of the PSU's consents to match the account information
- **psuEmail** – it is the e-mail address of the PSU this address and it will be used to inform the user about the consent initialisation
- **psuIntermediarId** – is the unique ID associated to the PSU by the TPP
- **redirectURL** – is the page where the PSU will be redirected after he finishes the authorisation phase in the bank's page. It is recommended to be redirect in the partner's page
- **TCaccepted** – must be true, otherwise a "Bad request" error will be raised. It is partner's choice if for each new consent the user must check and agree to the Smart Accounts Terms and Conditions, or it can implement a different way of managing the PSU's T&C agreement

**All the above parameters are mandatory for all banks!**

**Additionally, for RZB and OTP you need to add IBAN and currency on request. These banks have another parameter mandatory:**

- **allAccounts** – with attributes "iban" and "currency"

### *Example of API body without parameter "allAccounts"*

The screenshot shows a REST client interface for a POST request to the endpoint `{{(API_BASE_URI)}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}`. The request body is set to 'raw' and contains the following JSON:

```
1 {
2   .... "codeBank": "BRD",
3   .... "periodOfValid": 90,
4   .... "psuEmail": "aaa.aaaa@mail.com",
5   .... "psuIntermediarId": "123",
6   .... "redirectURL": "https://google.com",
7   .... "TCaccepted": true
8 }
```

### *Example of API body with parameter "allAccounts" (RZB and OTP)*

The screenshot shows a REST client interface for a POST request to the endpoint `{{(API_BASE_URI)}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}`. The request body is set to 'raw' and contains the following JSON:

```
1 {
2   .... "allAccounts": [
3     .... {
4       .... "iban": "R003RZBR0000069999999999",
5       .... "currency": "RON"
6     },
7   ],
8   .... "codeBank": "RZB",
9   .... "periodOfValid": 90,
10  .... "psuEmail": "aaa.aaaa@mail.com",
11  .... "psuIntermediarId": "123",
12  .... "redirectURL": "https://google.com",
13  .... "TCaccepted": true
14 }
```



## 2. API header:

- **Content-Type** – mandatory for all banks
- **PSU-IP-Address – is mandatory and without this information, there is a limitation over the number of API calls that we can make (4 calls maximum per day)**
- **PSU-ID** – it is generated by the bank. Mandatory for BRD, RZB, OTP
- **PSU-ID-Type** – mandatory for:
  - BRD - accepted values are: "PF", "PJ" or "PFA"
  - RZB – accepted value: "PJ" – **only for corporate accounts**. **Do not send PSU-ID-TYPE if you want to initiate a consent for an individual person.**

### ***Consent granularity***

For the following banks, the user can select the list of accounts to grant access for in the bank's page:

- BT
- ING
- CEC
- First Bank
- UNC
- REV
- LIB

### **For the following banks, the user can grant a more granular consent:**

- CEC – the user can choose to grant consent for: accounts and/or balances and/or transactions
- FB – the user can choose to grant consent for: accounts and/or balances and/or transactions
- UNC – the user can choose to grant consent for: account details and/or balances and/or transactions

**For the following banks, the user does not have the option of selecting from a list the accounts to grant access for in the bank's page:**

- BCR
- BRD
- GRT (only login and confirm login from mobile app)

### **For the following banks, the IBAN will be sent on "initConsent":**

- RZB

- OTP

BCR does not have the concept of "consent". If you will check the BCR's developer portal, you will see that there is no consent API defined. BCR considered that the authorisation in the bank's page is enough for gaining access to PSU's account information for 90 days. Smart FinTech has built an "initConsent" and "GetConsent" API to normalise the process for all banks.

ING has the same behaviour as BCR.

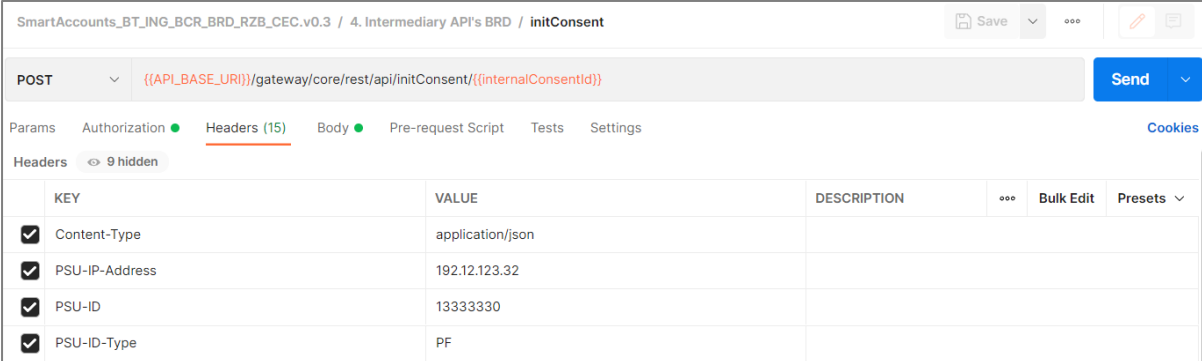
Smart Accounts has created internally the resources "GetConsent" and "GetConsentStatus".

BRD has a decoupled flow - this means that there will be no scaOAuth link returned. For BRD with "PSU-ID-Type" = "PF" (personal account) it will return a code on "consentID" parameter. That code must be used by the PSU to authorise the consent in the bank's internet banking application. After the PSU creates a new consent, he will receive an email from Smart Accounts (the consent initialisation email) and it will also be mentioned the code that he needs to introduce in order to authorise the consent.

We kindly suggest that you let the PSU know beforehand that BRD has a decoupled flow and he must authorise the consent by logging in into the internet banking's page. For BRD PF you must let the PSU know that he needs the code to authorise the consent.

If the "PSU-ID-Type" = "PJ" or "PFA" then the "consentID" will return null/empty. The PJ or PFA have the PSD2 flow implemented in another bank application that doesn't require any one-time password or code. The user is the one that should know which application he uses for that account.

#### ***initConsent request example with BRD decoupled:***



KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> PSU-ID	13333330				
<input checked="" type="checkbox"/> PSU-ID-Type	PF				

#### ***initConsent response example with BRD decoupled:***

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED", (please check GetConsentStatus API for details regarding consent's statuses)
    "consentId": "800000022", (the code needed by user if the "codeBank" is BRD and PSU-ID-Type is "PF". If the "codeBank" is different from BRD or the "codeBank" is BRD and PSU-ID-Type is PJ or PFA then this parameter will be null/empty)
    "_links": {
      "scaOAuth": {
        "href": null (for BRD will be null. If "codeBank" is different from BRD, then here will be sent
```

the link for consent authorisation of the consent)

```
    }  
  }  
}
```

### ***Creating multiple consents for the same user profile***

Regarding **Banca Transilvania**, there is allowed a maximum of one consent per PSU and per bank's profile. If the user has a personal account and two business accounts, he will have 3 profiles: one per each business account and one per personal account. For this case, the user can have maximum 3 consents, one per each profile. In the bank's page, the PSU will have an additional screen where he can choose the profile and after that continue with the authorisation process. If the user will create a new consent for a profile that already has a valid consent, then the previous one will be invalidated by the bank and the user will have access only for the most recent consent created.

Regarding **BRD**, if the user is trying to initiate a consent for a profile that already has a valid consent, he will receive an error. The user must first delete the consent from the internet banking application and then he will be allowed to create another consent.

### ***Creating multiple consents for the same PSU and the same bank account***

The following banks allow maximum one consent per PSU per bank. If the user gives consent for an account which already has a valid consent, then the bank will invalidate the older consent and the user will have access only for the most recent consent created:

- BT
- RZB
- CEC
- UNC
- LIB
- OTP

For the following banks, the user can have multiple valid consents at the same time. We kindly suggest letting the user know (or even restrict) that is not recommendable to have multiple consents at the same time.

- ING
- BCR
- FB
- REV
- GRT

## **5. Get Consent** (/core/rest/api/consent/{bank\_name}/{internalConsentId})

The purpose of this API is to check the consent details and the list of available accounts. The list of available accounts means the list of accounts for which the user has granted access through the authorised consent.

1. For the following banks, the API response **will return the list of the selected accounts** by PSU and the **parameter "availableAccounts" will be null**:

- BT
- ING
- BRD (when PSU-ID-Type = PJ/PFA)
- RZB
- FB
- UNC
- OTP
- LIB

*GetConsent response example:*

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO00BACX0000000000000000"
          "currency": "RON" (only for RZB and LIB)
        }
      ],
      "balances": [
        {
          "iban": "RO00BACX0000000000000000"
          "currency": "RON" (only for RZB and LIB)
        }
      ],
      "transactions": [
        {
          "iban": "RO00BACX0000000000000000"
          "currency": "RON" (only for RZB and LIB)
        }
      ],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": 4,
    "lastActionDate": "2023-02-02",
    "validUntil": "2023-05-02",
    "recurringIndicator": true, (if "false", it means the respective consent is a one-time consent so it
    can be used to call the API's resource only once). For the moment, SmartAccounts
    makes the initConsent calls with default value set as "true" (required by bank)
    "combinedServiceIndicator": null, (only LIB implemented – flag present in Account Information
    Consent Request which allows the use of consentId in the subsequent Payment
    Initiation Request. It is relevant where account information services are needed
    within a payment initiation)
    "creationDate": null
  }
}
```

2. For the following banks, the API response **will NOT return the list of the selected accounts by PSU and the parameter "availableAccounts" will be null**:
  - CEC – if only an account is selected, then its IBAN will appear in "accounts", "balances" and "transactions"
  - REV

*GetConsent response example:*

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": null,
    "lastActionDate": "2023-02-08",
    "validUntil": "2023-05-08",
    "recurringIndicator": null,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

3. For the following banks, the API response **will NOT return the list of the selected accounts by PSU and the parameter "availableAccounts" will have the value "allAccounts"**:
  - BCR
  - BRD (PSU-ID-Type = PF)
  - GRT

*GetConsent response example:*

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": "allAccounts"
    },
    "consentStatus": "Valid",
    "frequencyPerDay": 4,
    "lastActionDate": "2023-02-02",
    "validUntil": "2023-05-02",
    "recurringIndicator": true,
  }
}
```

```

        "combinedServiceIndicator": null,
        "creationDate": null
    }
}

```

## 6. Get Consent Status

(core/rest/api/consent/{{bank\_name}}/{{internalConsentId}}/status)

This API will return the status of the consent sent on request. The status can also be checked on Get Consent API.

The list of possible statuses, according to Berlin Group Implementation Guidelines:

Status name	Description
<b>received</b>	<b>The consent data have been received and are technically correct. The data is not authorised yet.</b>
rejected	The consent data have been rejected e.g. since no successful authorisation has taken place.
partiallyAuthorised	The consent is due to a multi-level authorisation, some but not all mandated authorisations have been performed yet.
<b>valid</b>	<b>The consent is accepted and valid for GET account data calls and others as specified in the consent object.</b>
<b>revokedByPsu</b>	<b>The consent has been revoked by the PSU towards the ASPSP.</b>
<b>expired</b>	<b>The consent expired.</b>
<b>terminatedByTpp</b>	<b>The corresponding TPP has terminated the consent by applying the DELETE method to the consent resource.</b>

\*The bold statuses are the ones we have encountered in production environment tests, until now.

### **GetConsentStatus response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "Valid"
  }
}

```

The bank's name must be according to the "codeBanks" from Get Banks, otherwise an error will be raised. **Validation performed on all resource APIs: If the bank's name and "internalConsentId" are not the same as the ones from "initConsent", an error will be raised.**

## 7. Get Accounts (core/rest/api/accounts/{{bank\_name}}/{{internalConsentId}})

Returns a list of payment accounts to which an account access has been granted through the "initConsent" endpoint by the PSU. Parameter "PSU-IP-Address" is mandatory on API headers.

### Example of GetAccounts headers



KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

### GetAccounts response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "K13RONCRT0060214301", (resourceID is needed to call the next resource APIs)
      "iban": "RO98BTRLRONCRT0ABCDEFghi",
      "currency": "RON",
      "name": "Cont de disponibil", (name of the account. For ING, REV and LIB it will be the same as owner's name. Detailed at each bank)
      "product": "Cont de disponibil", (Product name of the bank for this account, proprietary definition)
      "cashAccountType": "CurrentAccount", (ExternalCashAccountType1Code from ISO 20022)
      "status": null, (not available for all banks. Represents account's status – can be "enabled", "deleted", "blocked")
      "bic": null,
      "accountOfficerDescription": null, (only for LIB)
      "openingDate": null, (only for LIB)
      "customerSector": null, (only for LIB)
      "customerType": null, (only for LIB)
      "accountUsage": null, (only for LIB)
      "workingBalance": null, (only for LIB)
      "onlineActualBalance": null, (only for LIB)
      "balances": [
        {
          "balanceAmount": {
            "currency": "RON",
            "amount": 485.55
          },
          "balanceType": "expected", (described after the response example)
          "referenceDate": null, (indicates the date of the balance)
          "creditLimitIncluded": "false", ( indicates if the credit limit of corresponding
```

```

        account is included in the calculation of the balance, were applicable)
        "creditDebitIndicator": null
    },
    {
        "balanceAmount": {
            "currency": "RON",
            "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": null,
        "creditLimitIncluded": "true",
        "creditDebitIndicator": null
    }
],
"sortCodeAccountNumber": null
}
]
}

```

"balanceType" – The following balance types are defined:

1. **"closingBooked"**: Balance of the account at the end of the pre-agreed account reporting period. It is the sum of the opening booked balance at the beginning of the period and all entries booked to the account during the pre-agreed account reporting period.

*For card-accounts*, this is composed of

- invoiced, but not yet paid entries

2. **"expected"**: Balance composed of booked entries and pending items known at the time of calculation, which projects the end of day balance if everything is booked on the account and no other entry is posted.

*For card accounts*, this is composed of

- invoiced, but not yet paid entries,
- not yet invoiced but already booked entries and
- pending items (not yet booked)

3. **"authorised"**: The expected balance together with the value of a pre-approved credit line the ASPSP makes permanently available to the user.

*For card-accounts*:

- "money to spend with the value of a pre-approved credit limit on the card account"
4. **"openingBooked"**: Book balance of the account at the beginning of the account reporting period. It always equals the closing book balance from the previous report
  5. **"interimAvailable"**: Available balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified



For card-accounts, this is composed of

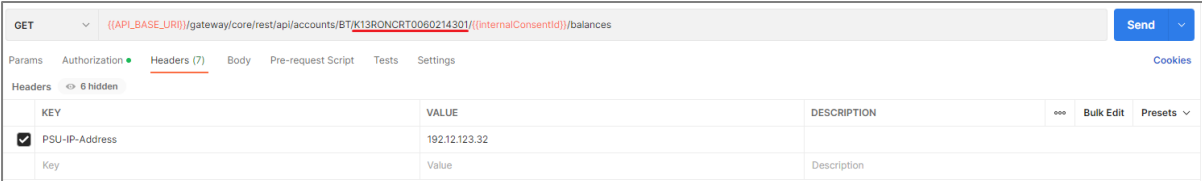
- invoiced, but not yet paid entries,
  - not yet invoiced but already booked entries
6. **"forwardAvailable"**: Forward available balance of money that is at the disposal of the account owner on the date specified
  7. **"nonInvoiced"**: Only for card accounts, to be checked yet

## 8. Get Balances

(core/rest/api/accounts/{bankName}/{resourceId}/{internalConsentId}/balances)

Balance can be checked for each account - "resourceId" from GetAccounts must be sent. Parameter "PSU-IP-Address" is mandatory on API headers.

### Example of GetBalances headers



KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

### GetBalances response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi",
      "bban": "BARC12345612345678", (only for RZB)
      "currency": null (is null only for BT, FB, REV, OTP, LIB)
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-03",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null,
        "lastChangeDateTime": null, (This data element might be used to indicate e.g. with the
          expected or booked balance that no action is known on the account, which is not
          yet booked)
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```

```

    },
    {
      "balanceAmount": {
        "currency": "RON",
        "amount": 485.55
      },
      "balanceType": "expected",
      "referenceDate": "2023-02-03",
      "creditLimitIncluded": "true",
      "creditDebitIndicator": null,
      "lastChangeDateTime": null,
      "lastCommittedTransaction": null,
      "transactionStatus": null
    }
  ]
}

```

## 9. Get Transactions

(/core/rest/api/accounts/{bankName}/{resourceId}/{internalConsentId}/transactions)

The transactions for each account can be obtained ("resourceId" must be completed from GetAccounts).

Currently, the transactions can be obtained for the last 90 days.

**Parameter "PSU-IP-Address" is mandatory on API headers.**

The following parameters are requested:

Parameter	BT	BCR	ING	BRD	RZB	CEC	FB	UNC	REV	OTP	LIB	GRT
bookingStatus	M	M	N.R.	M	M	M	M	M	M	M	N.R.	M
dateFrom	M	M	M	M	M	M	M	M	M	M	M	M
dateTo	M	M	M	M	M	M	M	M	M	M	M	M

\* M – mandatory

\* N.R. – not requested

For Banca Transilvania, the "bookingDate" and "valueDate" have different values for PF and for PJ accounts. For PJ accounts, the "bookingDate" and "valueDate" are completed also with the payment initiation date. But when searching the transactions, if the payment initiation date is different from processing date, then it must be searched after processing date. The same behaviour is in the internet banking application.

Banks which have pagination will send on API response the parameter "next". When "next" has a value, then this means that another page with transactions is available. Furthermore, when "next" is null, then no other page with transactions is available.

If you want to move to the next page with transactions, then you should send on header the "next" parameter and its value (link).

**Please note** that "next" parameter is correlated with "dateFrom" and "dateTo" and any API call will raise an error if that period is changed. This means that if you want to retrieve transactions from other period, then you should make a new GetTransactions call with the new values for "dateFrom" and "dateTo" so that "next" could work with the new period.

**Transactions are sent either bulk or with pagination, as following:**

Bank	How the transactions are sent
BT	100 transactions / page
BCR	Bulk
CEC	Bulk
BRD	200 transactions / page
ING	20 transactions / page
REV	50 transactions / page
UNC	400 transactions / page
RZB	50 transactions / page
OTP	Bulk
LIB	Bulk
FB	Bulk
GRT	Bulk

**GetTransactions response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi",
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "fbced129e8384109ae2023020522000000012", (null
            only for BRD and UNC)
          "entryReference": null,
          "endToEndId": null, (Unique transaction reference given by the initiator of the
            transaction)
          "bookingDate": "2023-02-05", (processing date. AS-IS: all banks except BT will
            sort transactions after bookingDate.)
          "valueDate": "2023-02-05", (initiation date. AS-IS: only BT sort transactions after
            valueDate)
          "executionDateTime": null, (only for ING)
          "transactionAmount": {
            "currency": "RON",
            "amount": 1200.19
          },
        },
      ],
    },
  },
}
```

```

    "transactionType": null,
    "exchangeRate": [], (object can be null depending on transaction's type)
    "creditorName": "Dan Popescu", (it can be null depending on transaction's type)
    "creditorAccount": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    }, (it can be null depending on transaction's type)
    "debtorName": "Dana Popescu", (it can be null depending on transaction's type)
    "debtorAccount": {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    }, (it can be null depending on transaction's type)
    "remittanceInformationUnstructured": "Merchant reference 202302
0522000000012", (MAX 140 TEXT – different transaction's details from core banking. It will be different from bank
to bank and depends on transaction's type. REV does not send it)
    "proprietaryBankTransactionCode": null, (code or description attributed by
the bank regarding transaction's type)
    "additionalInformation": null, (only for BCR and REV. For BCR it shows an
integer and for REV it shows information similar with the one from parameter
"remittanceInformationUnstructured")
    "transactionStatus": null, (only for REV)
    "creditDebitIndicator": null (only for REV)
  },
  {transaction no. 2, 3, etc.}
],
"pending": [],
"links": null
},
"balances": []
}
}

```

## 10. GetTransactionDetails

(/core/rest/api/accounts/{bankName}/{resourceId}/{internalConsentId}/transactions/{transactionId}/details)

This API returns the same information as GetTransactions but only for a specific transaction (you must complete the "transactionId" and "resourceId"). Parameter "PSU-IP-Address" is mandatory on API headers.

Only BT, BCR, CEC and GRT have implemented this API.

### Example of GetTransactionDetails headers

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

\* **Red underline – "resourceId"**

\* **Green underline – "transactionId"**

**GetTransactionDetails response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "transactionId": "fbced119e8384109ae2019111122000000011",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2019-07-28",
    "valueDate": "2019-07-28",
    "transactionAmount": {
      "currency": "RON",
      "amount": 1100.2
    },
    "transactionType": null,
    "creditorName": "Dan Popescu",
    "creditorAccount": {
      "iban": "RO98BTRLRONCRT0ABCDEFGHI"
    },
    "debtorName": "Dana Popescu",
    "debtorAccount": {
      "iban": "RO98BTRLEURCRT0ABCDEFGHI"
    },
    "remittanceInformationUnstructured": "Merchant reference 201907282100000001",
    "executionDateTime": null
  }
}
```

## 11. GetAccountDetails

(/core/rest/api/accounts/{bankName}/{resourceId}/{internalConsentId}/details)

This API is used to obtain account details for a specific account, not for all accounts. ING doesn't provide this API. You must complete the "transactionId". Parameter "PSU-IP-Address" is mandatory on API headers.

Only ING did not implement this API.

### Example of GetAccountDetails headers

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

**GetAccountDetails response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "K13RONCRT0060214301",
    "iban": "RO98BTRLRONCRT0ABCDEFGHI",
    "currency": "RON",
    "name": "Cont de disponibil",
    "product": "Cont de disponibil",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-06",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null
      },
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-06",
        "creditLimitIncluded": "true",
        "creditDebitIndicator": null
      }
    ],
    "sortCodeAccountNumber": null
  }
}

```

## 12. DeleteConsent

This API can be used to revoke access given through a consent. Parameter "PSU-IP-Address" is mandatory on API headers.

### Example of DeleteConsent headers

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

#### **DeleteConsent response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

After calling the API DeleteConsent, any other called API will response with the following structure:

```
{
  "status": 401,
  "messageStatus": "Unauthorized",
  "moreDetails": {
    "text": "TerminatedByTpp"
  }
}
```







**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://apistorebt.ro/mga/sps/oauth/oauth20/authorize?state=eyJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiaWxnIjoiaWwiY3R5IjoiaSldUIn0..8NZgOhkz1NK3-XxGPFdhfA.AaoYUSht0QRA8od2wnF0XGSJ2V8jqctcU0G8ol6GI70JKaTk63dww6lc4fEKhhYpW1QZgwcAk b65DVVVFjun96N78acNBaVmwJSL0ACC42-MeNFsul3dxHebiSEHTIQqSTjjs9YzKhYRNAYwhEmpCE8iaDQcoeZDePjrFdK4CXcSKFvI_ai_fah91wJwe0ie6RNvw0o7ziLre1JKFXTYLvgzEmtG1kHJfDMg1AxZiUbarJC0PAjPbT6LCDbvQSIBt008I9Trw65qsW18FpJ6ZhZi0Ivn5SmUsAN4te6jLGDRYa9-UejYdo-sZoOI4yyErmhuTF46IveP5R71MLXa6OUHk7Z0bOfs39mC6nxycsweVP4EAOTcGis3p7UNz61QjyVAXwFULUZq2TSrAbVRg1Y3EtsCHyJJYjqB4rcsboWmE8rPuhNJ6fRhbec2YuUYCJeZgnRCNPkrUfCDElNEpBqAvg4HHMcLgwxMU1aG0byf5poiXPRTTuT35N3wXPJoGVS1mmFJ7OBoC8MsgvYt_8pwnWqCO5Os81eJuuqYi7-MrAjdPVA4XFzqCyMBR9tM1ZE8QlrVqwdke70__DzrSVED4IE3Idqyopw2VfEc5sjaW-RpyKeqqql8R1cJMjekPzbXJi0NwHyLZZOJmjFdtGhYKBgrOvUF17VJy6H0Dgt56yi8FITXY6BOim95EylXFZz_JHzC3UH8Kyssw3I46PLsruG7YcfPzMzs4G7hoYcX9P3Hgb1f8SCs3U0sAAAsfMJ1aVLq6EMuS0hitXR6a90sE0a5gsejbyQDWY7VUFB6-GudcTafUV1xL8faE01gM-WzvfPrPZbLO-VoSjh2WV5n2YBtg17N7rM5eI93SK1IHYWLVLxKroes-2ZTrLxNJGf4-s_9Fx-SryW3eu6zi5s746epMt7sTStz1ihvdf2eG4qKBWdp5JyPpb4cm3xAutRWcMzVbW6HqrRsSWZLroX9ZchQPf g6fawpoMTf34qIdBHxBWF3AzYjKjH4QkWOQJ5qH-iWLRTSqdN7AMoQyvn4xHh7lpE_HYAkKqzLB3FThErSOpoMR6m-92EHfFCOqkCF5TNH_rcKrawzfaMsTw.FFV_ZGJQ2AiEgNVd4V6_jQ&response_type=code&client_id=a36732b0-b710-4a14-813a-88d0e3f3383a&redirect_uri=https://api.sandboxaccounts.smartfintech.eu/gateway/core/rest/api/confirmation&scope=AIS:aic5d3c1e29ed16714bbf488red&code_challenge=J1rlcleIUkGzSU6qbUTL0-JMUgLf_XQ1N3Jn8Dmci3w&code_challenge_method=S256&nonce=nonce_1655297699218"
      }
    }
  }
}
```



# Authentication

Choose the login method



LOGIN

[I forgot my NeoBT password](#)



# Authentication

Choose the login method

  
123  
\*\*\*

For sure, check the first 2 digits again. They're the same? If they are not identical, do not add the code and call us at 0264 308 028.


**Add the code received via SMS:**

-

BACK



CONTINUE

0264 308028 • [contact@btrl.ro](mailto:contact@btrl.ro)



Through the Third Party Payment Services Provider platform **SmartAccounts DEMO** you are going to view the IBANs, account balance and transaction history for 90 days, from your following payment accounts opened with BT:

**Select accounts**

 <b>Current account</b>	RO988TRLRONCRT0ABCDEFGHI
 <b>Current account</b>	RO988TRLEURCRT0ABCDEFGHI

**Select all accounts**

If you are an individual customer, please note that your personal data regarding the accounts' IBANs, balance and transaction history will be processed by BT and will be disclosed to the Third Party Payment Services Provider.

[RETURN TO TPP](#)

After selecting accounts and pressing "RETURN TO TPP", thus authorising the consent for selected account(s), PSU or developer will be redirected to the established page.

### 3. GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 5. GetConsent

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/BT/({internalConsentId})` [Send](#)

Params Authorization ● Headers (9) Body Pre-request Script Tests Settings [Cookies](#)

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO988TRLRONCRT0ABCDEFGHI"
        }
      ]
    }
  }
}
```

```

    },
    {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    }
  ],
  "balances": [
    {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    },
    {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    }
  ],
  "transactions": [
    {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    },
    {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    }
  ],
  "availableAccounts": null
},
"consentStatus": "valid",
"frequencyPerDay": 4,
"lastActionDate": "2023-02-07",
"validUntil": "2023-03-09",
"recurringIndicator": true,
"combinedServiceIndicator": null,
"creationDate": null
}
}

```

#### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 6. GetConsentStatus

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/BT/{{internalConsentId}}/status` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {

```

```

    "consentStatus": "valid"
  }
}

```

## 5. GetAccounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 7. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BT/{{internalConsentId}}` Send

Params Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "K13RONCRT0060214301",
      "iban": "RO98BTRLRONCRT0ABCDEFGHI",
      "currency": "RON",
      "name": "Cont de disponibil",
      "product": "Cont de disponibil",
      "cashAccountType": "CurrentAccount",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [
        {
          "balanceAmount": {
            "currency": "RON",
            "amount": 485.55
          },
          "balanceType": "expected",
          "referenceDate": null,
          "creditLimitIncluded": "false",
          "creditDebitIndicator": null
        },
        {
          "balanceAmount": {
            "currency": "RON",
            "amount": 485.55
          }
        }
      ]
    }
  ]
}

```

```

        },
        "balanceType": "expected",
        "referenceDate": null,
        "creditLimitIncluded": "true",
        "creditDebitIndicator": null
    }
],
"sortCodeAccountNumber": null
},
{
    "resourceId": "K13EURCRT0060214301",
    "iban": "RO98BTRLEURCRT0ABCDEFghi",
    "currency": "EUR",
    "name": "Cont de disponibil",
    "product": "Cont de disponibil",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
        {
            "balanceAmount": {
                "currency": "EUR",
                "amount": 1156.51
            },
            "balanceType": "expected",
            "referenceDate": null,
            "creditLimitIncluded": "false",
            "creditDebitIndicator": null
        },
        {
            "balanceAmount": {
                "currency": "EUR",
                "amount": 1156.51
            },
            "balanceType": "expected",
            "referenceDate": null,
            "creditLimitIncluded": "true",
            "creditDebitIndicator": null
        }
    ],
    "sortCodeAccountNumber": null
}
]
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 8. GetBalances

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BT/K13RONCRT0060214301/{{internalConsentId}}/balances` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			x
Key	Value	Description		

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO98BTRLRONCRT0ABCDEFGHI"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-07",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      },
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-07",
        "creditLimitIncluded": "true",
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```



## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 9. GetTransactions

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/BT/K13RONCRT0060214301/{{(internalConsentId)}}/transactions?bookingStatus=booked&dateFro...` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
<input checked="" type="checkbox"/> next	<code>{{(next_page)}}</code>			x
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 1. Intermediary API's BT / 9. GetTransactions

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/BT/K13RONCRT0060214301/{{(internalConsentId)}}/transactions?bookingStatus=booked&dateFrom` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> bookingStatus	booked		
<input checked="" type="checkbox"/> dateFrom	2023-02-06		
<input checked="" type="checkbox"/> dateTo	2023-02-07		
Key	Value	Description	

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 9. GetTransactions

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/BT/K13RONCRT0060214301/{{(internalConsentId)}}/transactions?bookingStatus=booked&dateFro...` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

```

1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7   postman.setEnvironmentVariable("next_page", null);
8 }

```

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO98BTRLRONCRT0ABCDEFGHI"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "fbced129e8384109ae202302062200000012",
          "entryReference": null,
          "endToEndId": null,

```

```

    "bookingDate": "2023-02-06",
    "valueDate": "2023-02-06",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 1200.19
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": "Dan Popescu",
    "creditorAccount": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    },
    "debtorName": "Dana Popescu",
    "debtorAccount": {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    },
    "remittanceInformationUnstructured": "Merchant reference 202302
0622000000012",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  },
  {
    "transactionId": "fbced139e8384109ae2023020622000000013",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2023-02-06",
    "valueDate": "2023-02-06",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 1300.18
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": "Dan Popescu",
    "creditorAccount": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    },
    "debtorName": "Dana Popescu",
    "debtorAccount": {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    },
    "remittanceInformationUnstructured": "Merchant reference 202302
0622000000013",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
}

```

```

    },
    "pending": [],
    "links": {
      "next": {
        "href": "aHR0cHM6Ly9tdGxzLmFwaS5zbWFydHBnLmVlL3NtYXJ0ZmludGVjaC
9zYW5kYm94L3BzZDItYWlzcC92MS9hY2NvdW50cy9CVC9LMTNST05DUlQwMDYwMjE0MzAxL3RyYW5zYW50a
W9ucz9kYXRlRnJvbT0yMDIzLTAxLTA2JmRhdGVUbnz0yMDIzLTAyLTA3JmJvb2tpbmdTdGF0dXM9Ym9va2Vk
JnJlY29yZHNQZlZlPTI="
      }
    }
  },
  "balances": []
}
}
}

```

## 8. GetTransactionsDetails

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "transactionId": "fbced119e8384109ae2019111122000000011",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2019-07-28",
    "valueDate": "2019-07-28",
    "transactionAmount": {
      "currency": "RON",
      "amount": 1100.2
    },
    "transactionType": null,
    "creditorName": "Dan Popescu",
    "creditorAccount": {
      "iban": "RO98BTRLRONCRT0ABCDEFghi"
    },
    "debtorName": "Dana Popescu",
    "debtorAccount": {
      "iban": "RO98BTRLEURCRT0ABCDEFghi"
    }
  }
}

```

```

    "remittanceInformationUnstructured": "Merchant reference 201907282100000001
1",
    "executionDateTime": null
}
}

```

## 9. GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 11. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BT/K13RONCRT0060214301/{{internalConsentId}}/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "K13RONCRT0060214301",
    "iban": "RO98BTRLRONCRT0ABCDEFghi",
    "currency": "RON",
    "name": "Cont de disponibil",
    "product": "Cont de disponibil",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 485.55
        },
        "balanceType": "expected",
        "referenceDate": "2023-02-07",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null
      },
      {
        "balanceAmount": {

```

```

        "currency": "RON",
        "amount": 485.55
    },
    "balanceType": "expected",
    "referenceDate": "2023-02-07",
    "creditLimitIncluded": "true",
    "creditDebitIndicator": null
}
],
"sortCodeAccountNumber": null
}
}
}

```

## 10. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 12 DeleteConsent

DELETE `{{API_BASE_URI}}/gateway/core/rest/api/deleteConsent/BT/{{internalConsentId}}` Send

Params Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
}

```

## 11. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 1. Intermediary API's BT / 11 RefreshToken

POST `{{MTLS_BASE_URI}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (10) Body ● Pre-request Script Tests ● Settings Cookies

Headers 8 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{internalConsentId}}				
<input checked="" type="checkbox"/> access_token	{{access_token}}				
Key	Value	Description			



```

6Imh0dHA6Ly9rZXljbG9hay1hcHAtc2VydmljZTo4MDgwL2F1dGgvcmVhbG1zL3NtYXJ0YWNjb3VudHMiLC
JzdWlIiOiJjNjFjODc1MC01MTNkLTQxNGYtOGQ5Ny1mZDY3NjMwYzdkZGUiLCJ0eXAiOiJPZmZsaW51IiwiaY
XpwIjoiaGVzdGNSaWVudHYxIiwic2Vzc2lvd19zdGF0ZSI6IjQ3NjM1MDNiLTAzYjYtNDI3Yi04ZGFhLWNk
NjBkZWVMTcxNSIsInNjb3BlIjoic21hcnRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjEwMzgxMiJ9.Ge
1I6-6j_zt1JYFTqrPTMnR4LWv42h4Ops33MMsZMuQ"
}
}

```

In case the "accessToken" expires, the response will have the following structure:

```

{
  "status": 401,
  "messageStatus": "Unauthorized",
  "moreDetails": {
    "text": "Invalid access token"
  }
}

```

## 2. ING Bank – Flow

### 1. Authenticate

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 1. Authenticate

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/token}` Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> client_id	<code>{{client_id-partner}}</code>			
<input type="checkbox"/> client_secret	<code>{{client_secret-partner}}</code>			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 1. Authenticate

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/token}` Send

Params Authorization Headers (9) Body Pre-request Script **Tests** Settings Cookies

```

1 var jsonData = JSON.parse(responseBody);
2 postman.setEnvironmentVariable("access_token", jsonData.payload.access_token);
3 postman.setEnvironmentVariable("refresh_token", jsonData.payload.refresh_token);
4 postman.setEnvironmentVariable("internalConsentId", jsonData.payload.internalConsentId);

```

*Response:*

```

{
  "status": 200,
  "messageStatus": "SUCCESS",
  "payload": {
    "internalConsentId": 101686,

```

```

    "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICI4alhJWS
1YbUhFQ0I0NkZBckhZSzsU0QndGYXFiMi1NUUF4SEJXYmlxb2ZJIn0.eyJleHAiOjE2NTUyOTg3MzcsImld
CI6MTY1NTI5ODQzNywianRpIjoizTU4ZmFlYTAtNmIyNC00ODBmLTk1ZDYtY2JmZWQxMmUwYWY4IiwiaXNz
IjoiaHR0cDovL2tleWNSb2FrLWFwcC1zZXJ2aWN1OjgwODAvYXV0aC9yZWZfSbXMc21hcnRhY2NvdW50cyI
sImF1ZCI6ImFjY291bnQlLCJzdWIiOiI2NmE2ZTIyMC1lOWE0LTQ2M2ItYWVmZi1mOTc4MTU2NDc3ZDZMiLC
J0eXAiOiJCZWFZYXZiLCJhenAiOiJ0ZXN0Y2xpZW50djEiLCJzZXNzaW9uX3N0YXR1IjoianNTFiN2E3ZDAtY
jE0YS00YjhhLWE4YzEtMzI1MmFkZjYxMGQwIiwiaWF0IjoiMSIsImFsbG93ZWQtb3JpZ2lucyI6WyIvKiJd
LCJyZWZfSbV9hY2Nlc3MiOncicm9sZXMiOlsib2ZmbGluZV9hY2Nlc3MiLCJlbWFFfYXV0aG9yaXphdGlvbiJ
dfSwicmVzb3VyY2VfYWNjZXNzIjpw7InRlc3RjbGllbnR2MSI6eyJyb2xlcYI6WyJlbWFFfHJvdGJvdGlvbi
JdfSwiYWNjb3VudCI6eyJyb2xlcYI6WyJtYW5hZ2UyYWNjb3VudCI6Im1hbmFnZS1hY2NvdW50LWxpbmtzI
iwidmldy1wcm9maWx1I119fSwic2NvcGUiOiJzbWFFdGFjY291bnRzX2NvbnNlbnRfaWRfY2xhaW06MTAx
Njg2Iiwic21hcnRhY2NvdW50c19jb25zZW50X2lkX2NsYWltIjoimTAxNjg2IiwiaWF0IjoiJ0ZXN
0Y2xpZW50djEiLCJjbGllbnRlbnR3N0IjoimTAuMC4yNDguMzIiLCJlbWFFfYXV0aG9yaXphdGlvbiJzZWZlcnJlZ
F91c2VybmFtZSI6InNlcnZpY2UyYWNjb3VudCI0ZXN0Y2xpZW50djEiLCJjbGllbnRBZGRyZ
XNzIjoimTAuMC4yNDguMzIiQ.cCvndmaj7wK0ARsf5qeliL4hzt8iJHlGcJcD8QG-
XlrqVc49RjiBavdQL89uAr6026jBLOY4bavNlqhlbuVjfte9fIaz5XKTaz2I8QpplrxQ1wG95dZDD4GKXPz
3plaRCFOWnHXVeznXg5rEZqn9iQvOatOpXctZe8D8XDoXh-
ZmN9TCdE2oCGujk25uOmrDc6GdFsoutzd2L0ry4LqtAbsyXfFNJL6SiVFE1htHk47idnTxixX-
WjlnyuMbVtMnuIKmV6ORbTR8SL26VocS5oey2I1B6wBLfMCxyPMRlxZ-_fYxmrcGu9T-
rdHXOIxoDyFqFHMio8xRjNNCigAIg",
    "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICI3OWNhY
2RmMik1MjMk3LTQ0YWIyYjY5Ni05NTc0ODRmYTU2ZDYifQ.eyJleHAiOjE2NjMwNzQ0MzcsImldCI6MTY1N
TI5ODQzNywianRpIjoizjczNjZkNjAtMmIzOC00NjhjLTkzZjMtMzU4MjglODg4MmIiX2IiwiaXNzIjoiaHR0
cDovL2tleWNSb2FrLWFwcC1zZXJ2aWN1OjgwODAvYXV0aC9yZWZfSbXMc21hcnRhY2NvdW50cyIsImF1ZCI6
Imh0dHA6Ly9rZXljbG9hay1hcHAte2VydmljZTo4MDgwL2F1dGgvcmlzL3NtYXJ0YWNjb3VudHMiLC
JzdWIiOiI2NmE2ZTIyMC1lOWE0LTQ2M2ItYWVmZi1mOTc4MTU2NDc3ZDZMiLCJ0eXAiOiJpZmZsaW51IiwiaWF0
IjoiJ0ZXN0Y2xpZW50djEiLCJjbGllbnRlbnR3N0IjoimTAuMC4yNDguMzIiQXpWjoidGVzdGNSaWVudHYxIiwic2Vzc2l
vb19zdGF0ZSI6IjUxYjdhN2QwLWlIXNGEtNGI4ZC1hOGMxLTM5
NTJhZGY2MTBkMCI6InNjb3BlIjoic21hcnRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjEwMTY4NiJ9.Gp
713_BnvYKaegI4H4R0741Mg7IZdJXBjZGKaOFFW6A"
  }
}

```

## 2. initConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 4. InitConsent

POST `{{(API_BASE_URI)}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}` Send

Params Authorization ● Headers (12) ● Body ● Pre-request Script Tests Settings Cookies

Headers 👁 9 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input type="checkbox"/>					
Key	Value	Description			





**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://api.sandboxaccounts.smartfintech.eu/gateway/core/rest/api/authorization?internalConsentId=101686&bankRedirectUri=https://myaccount.sandbox.ing.com/granting/2e79dfe2-64f4-4274-abfb-fa5b06f804e4?state%3DZx1KcmFXUw1PaU14TVdFNv16VmlaaTB6Tm1VeUxUUXhaRF10T1RVek1DMDJORFJsTldFeE56ZGtNelFpTENKaGJHY21PaUpTVXpJMU5pSjkuZx1KbGVIQWlPakUyTlRVek1ESXdORGtzSW1saGRDSTZNVFkxTlRjNU9EUTBPU3dpY3lJNklrRkpVeUlzSW1NaU9pSXlaVGM1WkdabE1pMDJOR1kwTFRRReU56UXRZV0ptWWkxbV1UVmlNRFPtT0RBMFPuUWlmUS50R3dFTTdXRdJNWU1ELUhBdGdJWjVYNEctX3p0WXA3Y2FmQzhDX01TLUowOFczXzNpUjNVd2pyeWtaVEFOMDhLdjhoa3lnVUNOb1F5d1NhTlBCV0Y1LUhidGFMMHRBdnhWcC1zWghWZ05QdGZxeEo4NV15Q1RNZnowQmx3NTR6eHBKSjVZMHBNT2VrOHUxRGVYeWVQMWFibTlHNkZWdGxLWkVFEkI5LXJGVFpGSVlrcjZaT0VMM0xCeHJCelVEY2pYWldTWmRfNURyejdyc3BrVFZYOTZwWWIzMTR4c0FFTk1RVjhXaXVxS2xRcmQ1bW9Mzm9Id2ZmTkNVZW1UTWY0SjBXdmTIVjRNNkVxZDY5NFRyTndJajFORlcxVXBMcHFOYnpjT0NSZDNsLXo5U1JPUVRqWD1qZG1oYWR2cGNATk5YmKvHN1J3Z2UxYW51a2RPNUlhQ2c%3D%26client_id%3D5ca1able-c0ca-c01a-cafe-154deadbea75%26redirect_uri%3Dhttps://api.sandboxaccounts.smartfintech.eu/gateway/core/rest/api/confirmation%26scope%3Dpayment-accounts:balances:view%20payment-accounts:transactions:view%26response_type%3Dcode"
      }
    }
  }
}

```

**2.1 initCosentin SANDBOX – the example below shows how the developer will interact with bank's internet banking application**

**Welcome to your bank**

Country of your ING account

ING Romania ▼

Cancel Next

**With this permission you allow**

- View balance information for a payment account
- View transaction information for a payment account

**Test profiles**

Please select test profile

Popescu Corina  
payment-accounts:balances:view  
payment-accounts:transactions:view

A Van Dijk  
payment-accounts:balances:view  
payment-accounts:transactions:view

Alice and Bob  
payment-accounts:balances:view  
payment-accounts:transactions:view

Jane Doe  
payment-accounts:balances:view  
payment-accounts:transactions:view

John Doe  
payment-accounts:balances:view  
payment-accounts:transactions:view

Peter Smith  
payment-accounts:balances:view  
payment-accounts:transactions:view


Sarah Smith  
payment-accounts:balances:view  
payment-accounts:transactions:view


W Van Dijk  
payment-accounts:balances:view  
payment-accounts:transactions:view

Cancel Next

After selecting accounts and pressing "NEXT", thus authorising the consent for selected account, developer will be redirected to the established page.

2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application

 Verifică întotdeauna că adresa de internet începe cu <https://myaccount.ing.com>

 Prima dată când folosești contul tău Home'Bank altundeva? Stai fără griji, vei fi asistat pas cu pas pentru configurarea contului.


## Bine ai venit! Intra în contul tău ING

- ING Home'Bank  
 ING Business

Nume utilizator Home'Bank


Parola Home'Bank

Login

 Ai nevoie de ajutor? Sună la [031 406 24 64](tel:0314062464)



## Acordă acces

 Permisuniunea de a accesa anumite conturi de plată va fi valabilă pentru 90 zile.



Ești pe cale să permiți SMART FINTECH S.R.L. accesul la:

- Tranzacții anterioare
- Soldul contului tău

Selectează cont(uri)

Co  
RO

Co  
RO

Co  
RO

Renunță

Continuă

Dai acces SMART FINTECH S.R.L. la tranzactiile tale anterioare, soldul contului tau, pana la 10.05.2023. Pentru contul(urile) RO1

### Un ultim pas de securitate

**i** Completează codul primit prin SMS pe numărul de telefon asociat contului tău de Home'Bank.

Cod primit prin SMS

**Aprobă**
**Renunță**

☎ Nu ai primit SMS-ul sau ai întrebări? Sună la [031 406 24 64](tel:0314062464)

After inserting the code received via SMS and pressing "Aprobă", thus authorising the consent for selected account(s), PSU will be redirected to the established page.

### 3. GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 5. GetConsent Save

**GET** {{API\_BASE\_URI}}/gateway/core/rest/api/consent/ING/{{internalConsentId}} Send

Params Authorization ● **Headers (9)** Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

	KEY	VALUE	DESCRIPTION		Bulk Edit	Presets
<input checked="" type="checkbox"/>	PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/>	Content-Type	application/json				×
	Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": "allAccounts"
    },
    "consentStatus": "Valid",
    "frequencyPerDay": 4,
    "lastActionDate": "2023-02-07",
    "validUntil": "2023-05-07",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

```
}  
}
```

#### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 6. GetConsentStatus

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/ING/{{internalConsentId}}/status` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{  
  "status": 200,  
  "messageStatus": "Success",  
  "payload": {  
    "consentStatus": "Valid"  
  }  
}
```

#### 5. GetAccounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 7. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/ING/{{internalConsentId}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{  
  "status": 200,  
  "messageStatus": "Success",  
  "payload": [  
    {  
      "resourceId": "37608c1d-4d6a-40a2-850c-2462f2e26e80",  
      "iban": "RO44INGB0000999908767270",  
      "currency": "RON",  
      "name": "Popescu Corina",  
      "product": "Compte Courante",  
      "cashAccountType": null,  
      "status": null,  
      "bic": null,  
    }  
  ]  
}
```

```

        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    },
    {
        "resourceId": "1e19978f-b07c-4018-960f-0150bcefd317",
        "iban": "",
        "currency": "EUR",
        "name": "Popescu Corina",
        "product": "Compte Courante",
        "cashAccountType": null,
        "status": null,
        "bic": null,
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    }
]
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 8. GetBalances

GET `{{(APL_BASE_URI)}}/gateway/core/rest/api/accounts/ING/1e19978f-b07c-4018-960f-0150bcefd317/!(internalConsentId)/balances` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "",

```

```

        "currency": "EUR"
    },
    "balances": [
        {
            "balanceAmount": {
                "currency": "EUR",
                "amount": 1073.86
            },
            "balanceType": "expected",
            "referenceDate": null,
            "creditLimitIncluded": null,
            "creditDebitIndicator": null,
            "lastChangeDateTime": "2019-02-22 09:16:54",
            "lastCommittedTransaction": null,
            "transactionStatus": null
        }
    ]
}
}
}

```

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 9. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/ING/37608c1d-4d6a-40a2-850c-2462f2e26e80/{{internalConsentId}}/transactions?dateFrom=2...` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
<input checked="" type="checkbox"/> next	{{next_page}}			x
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 9. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/ING/37608c1d-4d6a-40a2-850c-2462f2e26e80/{{internalConsentId}}/transactions?dateFrom=2...` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> dateFrom	2022-05-10		
<input checked="" type="checkbox"/> dateTo	2022-05-12		x
Key	Value	Description	

```

SmartAccounts_BT_ING_BCR_BRD_RZB_CEC.v0.3 / 2. Intermediary API's ING / 9. GetTransactions
GET {{API_BASE_URI}}/gateway/core/rest/api/accounts/ING/37608c1d-4d6a-40a2-850c-2462f2e26e80/{{internalConsentId}}/transactions?dateFrom=2... Send
Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies
1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7   postman.setEnvironmentVariable("next_page", null);
8 }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO44INGB0000999908767270",
      "currency": "RON"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "1225",
          "endToEndId": "NOTPROVIDED",
          "bookingDate": "2021-03-30",
          "valueDate": null,
          "transactionAmount": {
            "currency": "RON",
            "amount": -100.0
          },
          "transactionType": "Cash withdrawal",
          "exchangeRate": [],
          "creditorName": null,
          "creditorAccount": {
            "iban": null
          },
          "debtorName": "",
          "debtorAccount": {
            "iban": ""
          },
          "remittanceInformationUnstructured": "Unstructured remittance information example",
          "proprietaryBankTransactionCode": null,
          "additionalInformation": null
        }
      ],
      "pending": [],
      "links": null
    }
  }
}

```



}

## 8. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 10 DeleteConsent

DELETE `{{(API_BASE_URI)}/gateway/core/rest/api/deleteConsent/ING/{{(internalConsentId)}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

## 9. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Headers 8 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	<code>{{(internalConsentId)}}</code>			
<input checked="" type="checkbox"/> access_token	<code>{{(access_token)}}</code>			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 2. Intermediary API's ING / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	Text <code>{{(refresh_token)}}</code>		x
<input checked="" type="checkbox"/> client_id	<code>{{(client_id-partner)}}</code>		
Key	Value	Description	





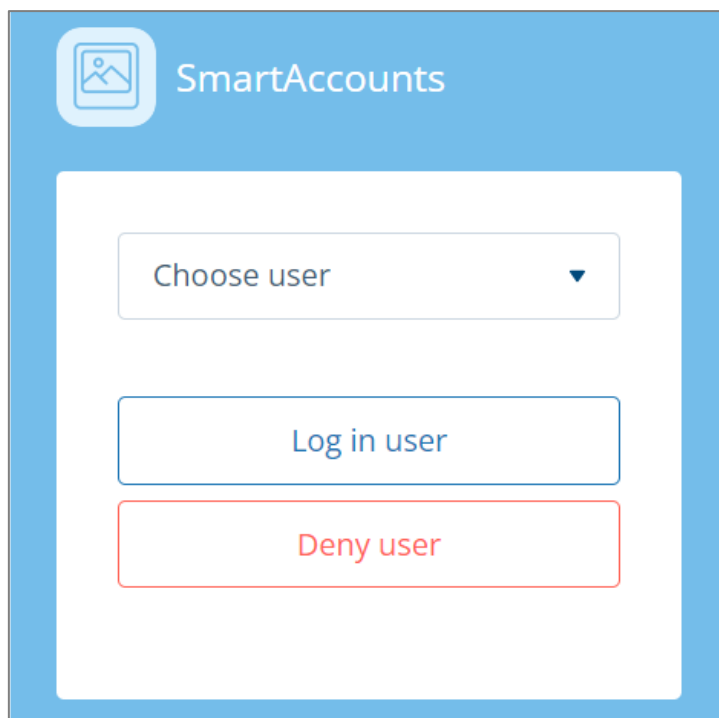


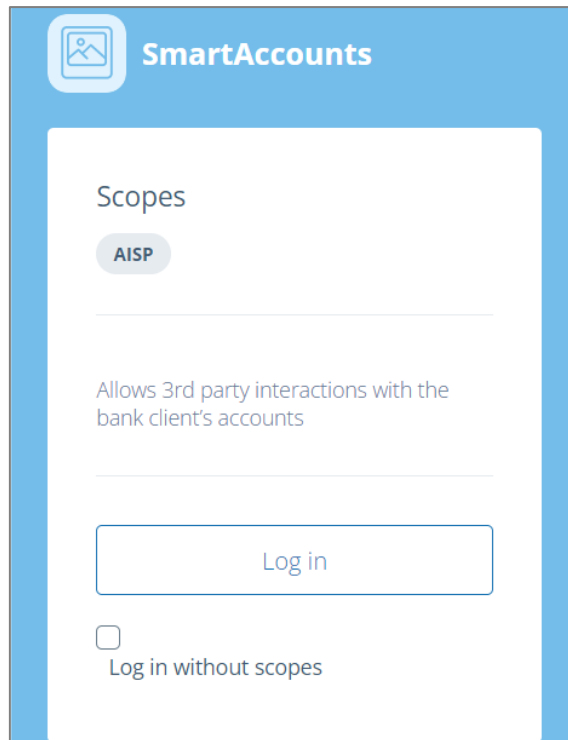
```

"scaOAuth": {
  "href": "https://webapi.developers.erstegroup.com/api/bcr/sandbox/v
1/sandbox-
idp/auth?state=eyJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiYWxnIjoizGlyIiwiY3R5IjoisldUIIn0..7nG
E09UoFJ5d_Ll828va8g._6ErnUP9ELZxVYru8XABYOwrhXYIBriMWdxN7anLyjd8QtREVRztjsAWuzKElsS
kk6b4y5P0OGcc4oHWz01365JrghPGF-m2-f_wY-ql4-
FIJkkbORnUTCtb5qplaJoPMGRk6dJIEBh4tcSCVn--FCn7WdVtQ-
z51I9myvu3tW9sEy7P4kCfb5whfb5Djm-5fxTkBlS-2_hHravEx5uSzUIorKf9RT1B3hRuYBv3qMaRS-
pZz069XL2BUuDoduR3Zmeh7eKyN_PqH6dQEBZ5YBTqo_65-bsMyqe4ds1Q2qB7SjcvrWVWXDuqss1_-
TM590i_ae_mmjKrJjjhXvZzMowleZemgnJXN8mdjkJfB127bSUiO24a3uf9PAifPnR4pdN1L_6X-
VaSYAGmXOaIE8SXvVpYGYgZxtOAPDVaP15MCxCEcAyDoxtK_vE7jyJwptvb5T4kjpgU8uug5EQQKwiv9mQ6h
RLb8tqdDtyanaTkPDeiupAhVhtO5nwsa62n447BPGDxaKLqwl3lWobR65vqZBYaRu4kQlXKYTtmp4eEZlh
5hlyq8DEiliD9gKOGj-zLL4_gjA0z84IxA_Kvr8q9hquNUVBw7sybzqQ9HjYo0-
MIPkczD6WTy7uaLvaQWXJIhROVu548aNRqnLAN6pBPjnh1snKRI21TQ1Ut3EsJMzHtrcM8JqcliO2TR5twj
c0irm5OI9jle7lAKXbK6dvIwI5kop5QHT3oJfLo2vzvOn84msezc80Iui2vC7AiPjZ1Puh4XrCOSW8huzj_
nMp9eXLUTwbp8SnB2sA4846KrnLUhWsH2e8ERYTYc4LkSckTTa36gj9mN0Q6s0E_KAlqaaAwd-
mNzHeGmN1qFp_oWdcsjgIxelHuxfZ2-kif0nVMhxP_rIGFF28vThZMv-
qOrUZMhxAkgkMYrzab5Sm0wRRi4c-s61yf5Vl0-9QTZ2PUGPV2rx15Cs_RMdG6QlilqILONW639KmmHK_W-
JL9xvK9TDBT0EU4QjLW2RQvekjEvUX2mpqwBBhrNSoIUiSUVkQKJQ5c6JttvnyHvY.nsx2R5KPQ6kvbQBj4
SviVw&response_type=code&client_id=abf79a52-9aed-47c6-be5d-
fb6b96e63a13&redirect_uri=https://api.sandboxaccounts.smartfintech.eu/gateway/core/
rest/api/confirmation&scope=AISP&access_type=offline&transactionId=e10e5683-49e1-
44bf-eb6b-1e3b70243ecd"
  }
}
}
}

```

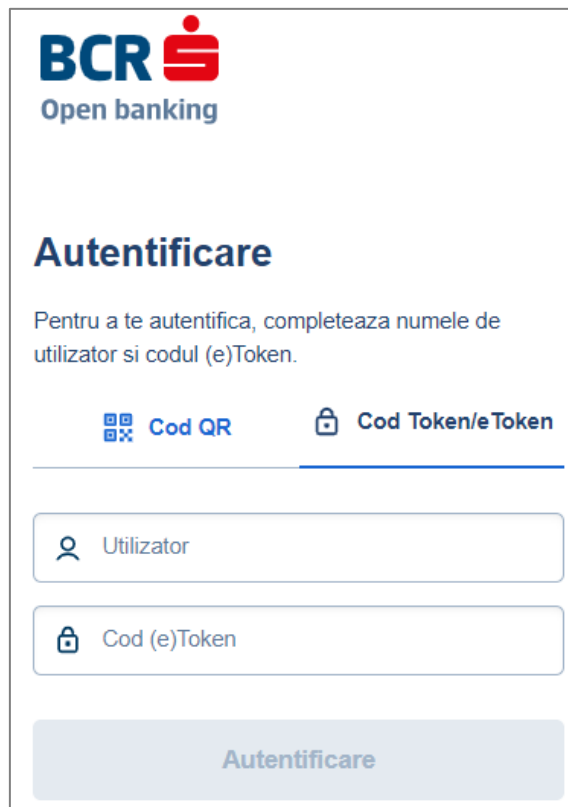
2.1 initCosentin SANDBOX – the example below shows how the developer will interact with bank's internet banking application





After pressing "Log in", thus authorising the consent for all available accounts (see information below regarding BCR concept of consent), developer will be redirected to the established page.

2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application



After choosing the way of the authentication and pressing "Autenticare", thus authorising the consent for all available accounts (see information below regarding BCR concept of consent), PSU will be redirected to the established page.

### 3. GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 5. GetConsent

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/consent/BCR/{{(internalConsentId)}}` Send

Params Authorization ● **Headers (9)** Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": "allAccounts"
    },
    "consentStatus": "Valid",
    "frequencyPerDay": 4,
    "lastActionDate": "2023-02-07",
    "validUntil": "2023-05-07",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 6. GetConsentStatus

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/consent/BCR/{{(internalConsentId)}}/status` Send

Params Authorization ● **Headers (9)** Body Pre-request Script Tests Settings Cookies

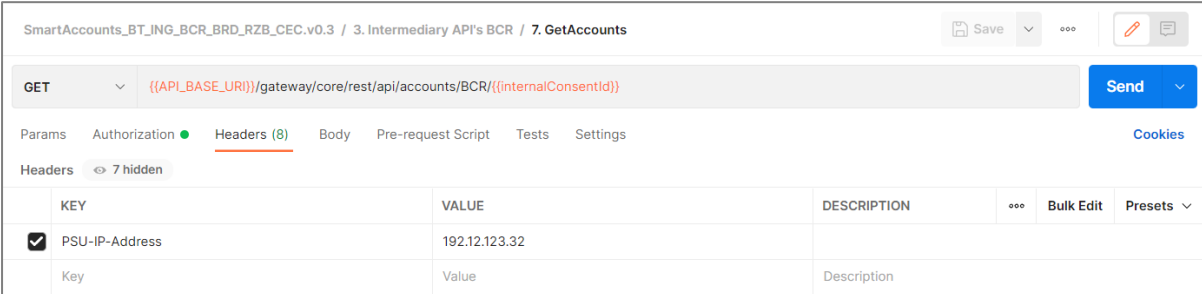
Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "Valid"
  }
}
```

## 5. GetAccounts



SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 7. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BCR/{{internalConsentId}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "11e07590-27d4-409e-914b-c248fb945b11",
      "iban": "RO77RNCB0002000000010001",
      "currency": "EUR",
      "name": "Peter Pan",
      "product": null,
      "cashAccountType": "CACC",
      "status": "enabled",
      "bic": "RORNCBROB0XXX",
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    },
    {
      "resourceId": "62b91e9a-3074-11e9-b210-d663bd873d93",
      "iban": "RO50RNCB0002000000010002",
      "currency": "EUR",
      "name": "My current account",
    }
  ]
}
```



```

        "product": null,
        "cashAccountType": "CACC",
        "status": "enabled",
        "bic": "RORNCBROB0XXX",
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    }
}
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 8. GetBalances

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/BCR/62b91e9a-3074-11e9-b210-d663bd873d93/((internalConsentId))/balances` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO50RNCB0002000000010002"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 400.0
        },
        "balanceType": "closingBooked",
        "referenceDate": "2017-11-21",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}

```

```

    ]
  }
}

```

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 9. GetTransactions

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/BCR/62b91e9a-3074-11e9-b210-d663bd873d93/{{(internalConsentId)}}/transactions?bookingSta...` **Send**

Params ● Authorization ● **Headers (8)** Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/>	PSU-IP-Address	192.12.123.32				
	Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 9. GetTransactions

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/BCR/62b91e9a-3074-11e9-b210-d663bd873d93/{{(internalConsentId)}}/transactions?bookingSta...` **Send**

Params ● Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	bookingStatus	booked			
<input checked="" type="checkbox"/>	dateFrom	2022-05-05			
<input checked="" type="checkbox"/>	dateTo	2022-05-15			
	Key	Value	Description		

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO50RNCB0002000000010002",
      "currency": "EUR"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "trx3",
          "entryReference": null,
          "endToEndId": "End to End identification3",
          "bookingDate": "2018-10-02",
          "valueDate": "2018-10-02",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "EUR",
            "amount": -1000.5
          },
          "transactionType": null,

```

```

    "exchangeRate": [],
    "creditorName": "The Hulk",
    "creditorAccount": {
      "iban": "AT108809156711523429"
    },
    "debtorName": "Frodo",
    "debtorAccount": {
      "iban": "RO50RNCB0002000000010002"
    },
    "remittanceInformationUnstructured": "Credit Transfer",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  },
  {
    "transactionId": "W100000000000707",
    "entryReference": null,
    "endToEndId": "19RQDEXNN1S1",
    "bookingDate": "2023-01-11",
    "valueDate": "2023-01-11",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "EUR",
      "amount": -0.01
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": "Rncbro benf",
    "creditorAccount": {
      "iban": "RO23RNCB0002000000010003"
    },
    "debtorName": null,
    "debtorAccount": {
      "iban": "RO50RNCB0002000000010002"
    },
    "remittanceInformationUnstructured": "19RQDEXNM6WY",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
],
  "pending": [],
  "links": null
},
"balances": []
}
}

```

## 8. GetTransactionsDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 10. GetTransactionDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BCR/62b91e9a-3074-11e9-b210-d663bd873d93/{{internalConsentId}}/transactions/trx3/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "transactionId": "trx3",
    "entryReference": null,
    "endToEndId": "End to End identification3",
    "bookingDate": "2018-10-02",
    "valueDate": "2018-10-02",
    "transactionAmount": {
      "currency": "EUR",
      "amount": -1000.5
    },
    "transactionType": null,
    "creditorName": "The Hulk",
    "creditorAccount": {
      "iban": "AT108809156711523429"
    },
    "debtorName": "Frodo",
    "debtorAccount": {
      "iban": "RO50RNCB0002000000010002"
    },
    "remittanceInformationUnstructured": "Credit Transfer",
    "executionDateTime": null
  }
}
```

## 9. GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 3. Intermediary API's BCR / 11. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BCR/11e07590-27d4-409e-914b-c248fb945b11/{{internalConsentId}}/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "11e07590-27d4-409e-914b-c248fb945b11",
    "iban": "RO77RNCB0002000000010001",
    "currency": "EUR",
    "name": "Peter Pan",
    "product": null,
    "cashAccountType": "CACC",
    "status": "enabled",
    "bic": "RORNCBROB0XXX",
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}
```

**10. DeleteConsent**

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```









## 2. initConsent

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> Content-Type	application/json	
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
<input type="checkbox"/> PSU-ID	13333330	
<input type="checkbox"/> PSU-ID-Type	PF	
<input checked="" type="checkbox"/> PSU-ID	31111111	
<input checked="" type="checkbox"/> PSU-ID-Type	PJ	
Key	Value	Description

```
1 {
2   "codeBank": "BRD",
3   "periodOfValid": 90,
4   "psuEmail": "bogdan.gurita@itsmartsystems.eu",
5   "psuIntermediarId": "123",
6   "redirectURL": "https://google.com",
7   "TCaccepted": true
8 }
```

The user needs to have "PSU-ID" and "PSU-ID-Type" checked on headers ("PSU-ID-Type" = "PJ" in this case).

By being decoupled, the user the authentication of the PSU occurs outside of the interaction with the intermediary page (the PSU must log in in the internet banking application to authorise the consent).

The PSU should know which internet banking application should be used to authorise the consent.

*Response:*

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": null
      }
    }
  }
}
```

### 3. GetConsent

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO11BRDE111SV11111111111"
        }
      ],
      "balances": [
        {
          "iban": "RO11BRDE111SV11111111111"
        },
        {
          "iban": "RO11BRDE111SV11111112222",
          "currency": "RON"
        },
        {
          "iban": "RO22BRDE222SV22222222222"
        }
      ],
      "transactions": [
        {
          "iban": "RO11BRDE111SV11111111111"
        }
      ],
      "availableAccounts": null
    },
    "consentStatus": "received",
    "frequencyPerDay": 4,
    "lastActionDate": "2019-03-01",
    "validUntil": "2019-05-01",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

#### 4. GetConsentStatus

The screenshot shows a REST client interface for the endpoint `GET {{(API_BASE_URI)}}/gateway/core/rest/api/consent/BRD/{{(internalConsentId)}}/status`. The interface includes tabs for Params, Authorization, Headers (8), Body, Pre-request Script, Tests, and Settings. The Headers tab is active, showing a table with the following data:

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "received"
  }
}
```

#### 5. GetAccounts

The screenshot shows a REST client interface for the endpoint `GET {{(API_BASE_URI)}}/gateway/core/rest/api/accounts/BRD/{{(internalConsentId)}}`. The interface includes tabs for Params, Authorization, Headers (7), Body, Pre-request Script, Tests, and Settings. The Headers tab is active, showing a table with the following data:

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "46MS",
      "iban": "R011BRDE111SV1111111111",
      "currency": "EUR",
      "name": null,
      "product": null,
      "cashAccountType": null,
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
    }
  ]
}
```

```

        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    },
    {
        "resourceId": "46NB",
        "iban": "RO22BRDE222SV2222222222",
        "currency": "RON",
        "name": null,
        "product": null,
        "cashAccountType": null,
        "status": null,
        "bic": null,
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    }
]
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 4. Intermediary API's BRD / 8. GetBalances

GET `{{APL_BASE_URI}}/gateway/core/rest/api/accounts/BRD/RO47BRDE410SV047474100/{{internalConsentId}}/balances` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {},
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": -229959.14
        }
      }
    ]
  }
}

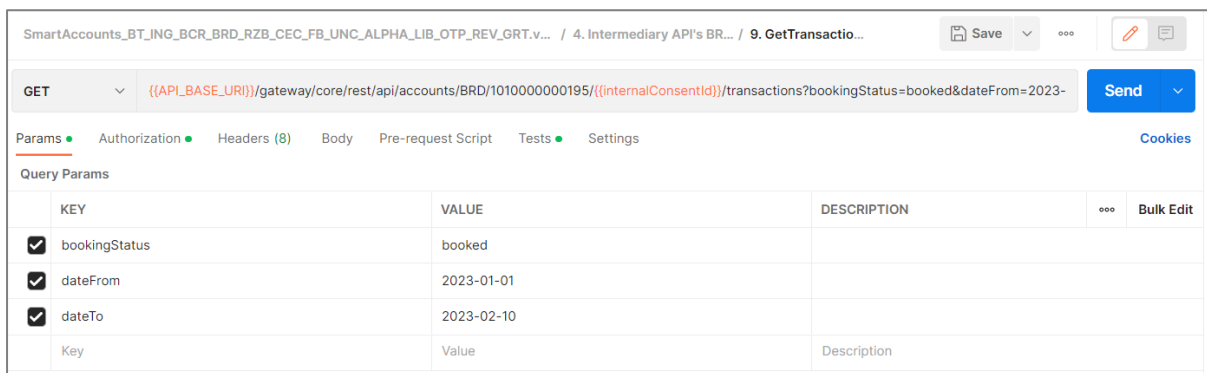
```

```

    },
    "balanceType": "",
    "referenceDate": "2013-05-26",
    "creditLimitIncluded": null,
    "creditDebitIndicator": null,
    "lastChangeDateTime": null,
    "lastCommittedTransaction": null,
    "transactionStatus": null
  }
}
]
}
}
}

```

## 7. GetTransactions



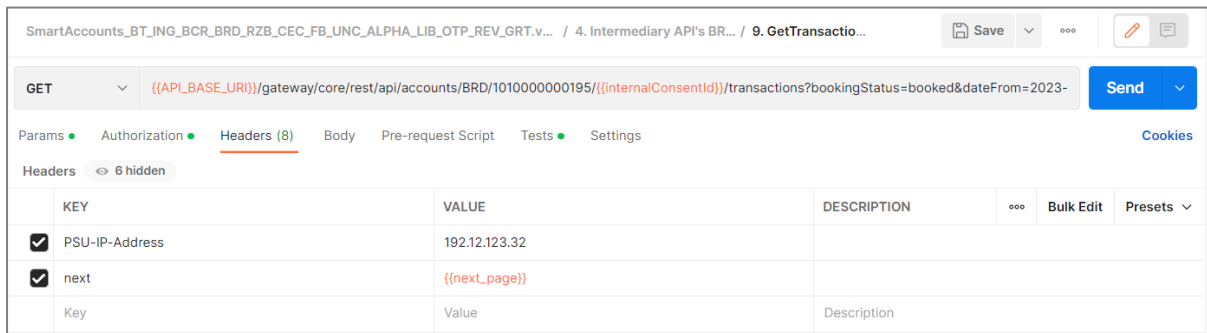
SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 4. Intermediary API's BR... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/1010000000195/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2023-` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> bookingStatus	booked	
<input checked="" type="checkbox"/> dateFrom	2023-01-01	
<input checked="" type="checkbox"/> dateTo	2023-02-10	
Key	Value	Description



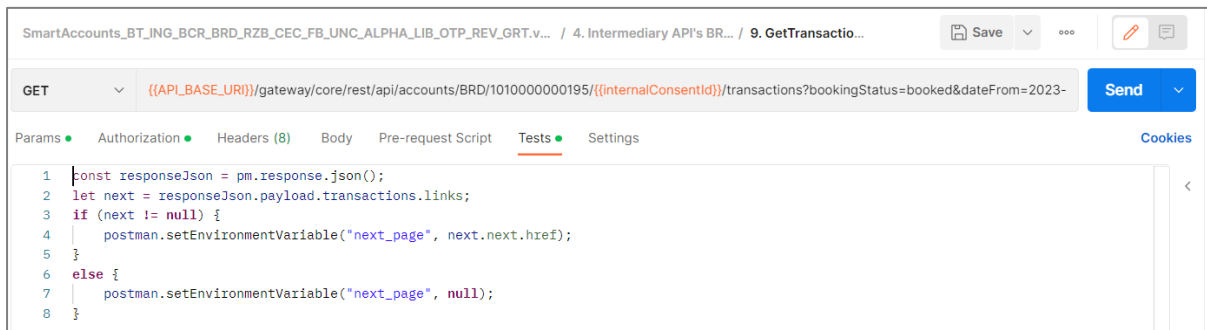
SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 4. Intermediary API's BR... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/1010000000195/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2023-` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Headers  6 hidden

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
<input checked="" type="checkbox"/> next	<code>{{next_page}}</code>	
Key	Value	Description



SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 4. Intermediary API's BR... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/1010000000195/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2023-` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

```

1 | const responseJson = pm.response.json();
2 | let next = responseJson.payload.transactions.links;
3 | if (next != null) {
4 |   | postman.setEnvironmentVariable("next_page", next.next.href);
5 | }
6 | else {
7 |   | postman.setEnvironmentVariable("next_page", null);
8 | }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",

```

```

"payload": {
  "account": {
    "iban": "RO12BRDE12SV123455601001",
    "currency": "RON"
  },
  "transactions": {
    "booked": [
      {
        "transactionId": null,
        "entryReference": null,
        "endToEndId": null,
        "bookingDate": "2022-08-01",
        "valueDate": "2022-08-01",
        "executionDateTime": null,
        "transactionAmount": {
          "currency": "RON",
          "amount": -1275.01
        },
        "transactionType": null,
        "exchangeRate": [],
        "creditorName": null,
        "creditorAccount": {
          "iban": "RO76BRDE010SV12345710100"
        },
        "debtorName": null,
        "debtorAccount": {
          "iban": "RO12BRDE12SV123455601001"
        },
        "remittanceInformationUnstructured": "TRFOPH2022081114453,Tr.Cr
edit-Plata,303011008,BENEFICIAR PLATA,CUI/CNP1234567,DETALII-PLATA-DETALII-PLATA,-
DETALII",
        "proprietaryBankTransactionCode": "Tr.Credit-Plata",
        "additionalInformation": null,
        "smartRemittance": null,
        "transactionStatus": null,
        "creditDebitIndicator": null
      },
      {
        "transactionId": null,
        "entryReference": null,
        "endToEndId": null,
        "bookingDate": "2022-08-02",
        "valueDate": "2022-08-02",
        "executionDateTime": null,
        "transactionAmount": {
          "currency": "RON",
          "amount": -10000.0
        },
        "transactionType": null,
        "exchangeRate": [],
        "creditorName": null,

```

```

        "creditorAccount": {
            "iban": null
        },
        "debtorName": null,
        "debtorAccount": {
            "iban": "RO12BRDE12SV123455601001"
        },
        "remittanceInformationUnstructured": "TRFOP433695436645465656,U
tiliz POS B pl,MAGAZIN ALBA-
IULIA,Card nr 427398*****6523 (V,BD) (DETINATOR CARD) MAGAZ,IN ALBA-IULIA",
        "proprietaryBankTransactionCode": "Utiliz POS B pl",
        "additionalInformation": null,
        "smartRemittance": null,
        "transactionStatus": null,
        "creditDebitIndicator": null
    }
},
    "pending": [],
    "links": null
},
    "balances": []
}
}
}

```

## 8. GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 4. Intermediary API's B... / 10. GetAccountDeta...

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/BRD/RO47BRDE410SV047474100/{{(internalConsentId)}/details}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
    "status": 200,
    "messageStatus": "Success",
    "payload": {
        "resourceId": "46MS",
        "iban": "RO11BRDE111SV11111111111",
        "currency": "EUR",
        "name": null,
        "product": null,
        "cashAccountType": null,
        "status": null,
        "bic": null,
        "accountOfficerDescription": null,
        "openingDate": null,
    }
}

```

```

    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}

```

## 9. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 4. Intermediary API's BRD / 11 DeleteConsent

DELETE `{{(API_BASE_URI)}}/gateway/core/rest/api/deleteConsent/BRD/{{(internalConsentId)}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}

```

## 10. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 4. Intermediary API's BRD / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{(internalConsentId)}}			
<input checked="" type="checkbox"/> access_token	{{(access_token)}}			
Key	Value	Description		





```
XpwIjoidGVzdGNsaWVudHYxIiwic2Vzc2lvd19zdGF0ZSI6ImM3NjYzMWUxLWUyNjEtNDQzOS05MmIwLTc4
MzNmMjk1NzIxMiIsInNjb3B1Ijoic21hcnRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjExNjUwNCJ9.aJ
3ESKGu_vfrUz1Im1jY6vqjeDD6OpCHz172UjYjyow"
  }
}
```

In case the "accessToken" expires, the response will have the following structure:

```
{
  "status": 401,
  "messageStatus": "Unauthorized",
  "moreDetails": {
    "text": "Invalid access token"
  }
}
```

## 5. BRD PF (individuals) - Flow

### 1. Authenticate

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> client_id	{{(client_id-partner)}}			
Key	Value	Description		

*Response:*

```
{
  "status": 200,
  "messageStatus": "SUCCESS",
  "payload": {
    "internalConsentId": 101672,
    "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXLTQ0OTUwImVudW50c19jb25zZW50X2lkX2NsYWltOjExNjUwNCJ9.aJ3ESKGu_vfrUz1Im1jY6vqjeDD6OpCHz172UjYjyow"
  }
}
```

```

ByZWZlcnJlZlF91c2VybmFtZSI6InNlcnZpY2UtYWNjb3VudC10ZXN0Y2xpZW50djEiLCJjbGllbnRBZGRyZ
XNzIjoiMTAuMC4yNDguMzIifQ.BDF-
7K7V_nTlBiilj5pWkcRFwBw69KZZostlXVUNNjGGmGfGinUUTpfmJMqCbtLaNTURhYzrSYDlkcUJTJ7oKk1f
4MQpKR7W3GvEwJnoJ7Pp6fw1R17TewMQ9QBAGgBlxfk8iAVx0CiRv9TvJ_IvmkgTAI-
XB03tyrFZQn0xbg7kWmVFJx_iG-g5W93qCGETynoVEnMJEeqsUDXLi6xa3_QATcF8L8FN0v-
NVX9TvYorEC_XJl6LmkItkhiBK_6klvyZSV9R2kjE_nkqSbio9kv31KwG9Wg-
NuK2pwiqE1feQ_VIRpKm_H8eDDCcFlLlFfVvIUdXbZQY59E7g-bBQQ",
    "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpzZW50L3RhdDA6ICI3OWNhY
2RmMikmKj3LTQ0YWIyYjY5Ni05NTc0ODRmYTU2ZDYifQ.eyJleHAiOjE2NjMwNjE0OTUsImhhdCI6MTY1N
TI5MzU5NSwianRpIjoiMmNhMGUyZjUtMzY2My00NzkWLFlnMmEtODlmNjM0MmE2ZDVjIiwiaXNzIjoiYHR0
cDovL2tleWNSb2FrLWFwcC1zZXJ2aWN1OjgwODAvYXV0aC9yZWZsbXMvc21hcnRhY2NvdW50cyIsImF1ZCI6
Imh0dHA6Ly9rZXljbG9hay1hcHAtc2Vydm1jZTo4MDgwL2FlZGgvcmVhbG1zL3NtYXJ0YWNjb3VudHMhLC
JzdWIiOiI2NmE2ZTIyMC1lOWE0LTQ2M2ItYWVmZi1mOTc4MTU2NDc3ZDMiLCJ0eXAiOiJPZmZsaW51IiwiaY
XpwIjoidGVzdGNSaWVudHYxIiwic2VzIjoiY2VzZGF0ZSI6ImM4NjFjYjYwQxLTZlYTktNGUwZC1hNDBmLWVj
OWM3NjBmMDMxMSIsInNjb3BlIjoiY21hcnRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjEwMTY3MiJ9.xk
NqUCnOezXs1fFzdbmcDN5CT97ubfoXg4fmlwQN0Hk"
  }
}

```

## 2. initConsent

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> PSU-ID	13333330				
<input checked="" type="checkbox"/> PSU-ID-Type	PF				
<input type="checkbox"/> PSU-ID	31111111				
<input type="checkbox"/> PSU-ID-Type	PJ				

```

1  {
2  ... "codeBank": "BRD",
3  ... "periodOfValid": 90,
4  ... "psuEmail": "monica.rotaru@itsmartsystems.eu",
5  ... "psuIntermediarId": "123",
6  ... "redirectURL": "https://google.com",
7  ... "TCaccepted": true
8  }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
}

```

```

"payload": {
  "consentStatus": "RECEIVED",
  "consentId": "800000022",
  "_links": {
    "scaOAuth": {
      "href": null
    }
  }
}
}
}

```

The user needs to have "PSU-ID" and "PSU-ID-Type" checked on headers ("PSU-ID-Type" = "PF" in this case).

By being decoupled, the user the authentication of the PSU occurs outside of the interaction with the intermediary page (the PSU must log in in the internet banking application to authorise the consent).

The PSU should know which internet banking application should be used to authorise the consent.

### 3. GET Consent

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": "allAccounts"
    },
    "consentStatus": "received",
    "frequencyPerDay": 4,
    "lastActionDate": null,
    "validUntil": "2019-09-14",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
  }
}

```

```

        "creationDate": null
    }
}

```

#### 4. GET ConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 5. GetConsentStatus

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/BRD/{{internalConsentId}}/status` Send

Params Authorization ● Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "received"
  }
}

```

#### 5. GET Accounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 6. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/{{internalConsentId}}` Send

Params Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "1010000000195",
      "iban": "RO47BRDE410SV047474100",
      "currency": "RON",
      "name": "Contul meu in RON",
      "product": null,
      "cashAccountType": null,
      "status": "Activ",
    }
  ]
}

```

```

        "bic": null,
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    },
    {
        "resourceId": "1010000000285",
        "iban": "RO46BRDE410SV046464100",
        "currency": "EUR",
        "name": "Contul meu in EUR",
        "product": null,
        "cashAccountType": null,
        "status": "Activ",
        "bic": null,
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    }
]
}

```

## 6. GET Balances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 7. GetBalances

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/RO47BRDE410SV047474100/{{internalConsentId}}/balances` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO47BRDE410SV047474100",

```

```

        "currency": "RON"
    },
    "balances": [
        {
            "balanceAmount": {
                "currency": "RON",
                "amount": 2020.55
            },
            "balanceType": "expected",
            "referenceDate": null,
            "creditLimitIncluded": "true",
            "creditDebitIndicator": null,
            "lastChangeDateTime": "2019-01-12 03:32:07",
            "lastCommittedTransaction": null,
            "transactionStatus": null
        }
    ]
}
}
}

```

## 7. GET Transactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 8. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/1010000000195/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2022-05-20&dateTo=2022-06-10` Send

Params ● Authorization ● Headers (9) Body Pre-request Script Tests ● Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> bookingStatus	booked			
<input checked="" type="checkbox"/> dateFrom	2022-05-20			
<input checked="" type="checkbox"/> dateTo	2022-06-10			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 8. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/1010000000195/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2022-05-20&dateTo=2022-06-10` Send

Params ● Authorization ● Headers (9) Body Pre-request Script Tests ● Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> next	<code>{{next_page}}</code>				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {

```

```

"account": {
  "iban": "RO47BRDE410SV04747474100",
  "currency": "RON"
},
"transactions": {
  "booked": [
    {
      "transactionId": null,
      "entryReference": null,
      "endToEndId": null,
      "bookingDate": "2019-01-13",
      "valueDate": "2019-01-12",
      "executionDateTime": null,
      "transactionAmount": {
        "currency": "EUR",
        "amount": -5.67
      },
      "transactionType": null,
      "exchangeRate": [
        {
          "currencyFrom": "RON",
          "rateFrom": 4.7234,
          "currencyTo": "EUR",
          "rateDate": "2019-01-13"
        }
      ],
      "creditorName": null,
      "creditorAccount": {
        "iban": "RO46BRDE410SV04646464100"
      },
      "debtorName": null,
      "debtorAccount": {
        "iban": null
      },
      "remittanceInformationUnstructured": "TEST 1",
      "proprietaryBankTransactionCode": "Plata pentru alta sucursala
BRD",
      "additionalInformation": null,
      "transactionStatus": null,
      "creditDebitIndicator": null
    },
    {
      "transactionId": null,
      "entryReference": null,
      "endToEndId": null,
      "bookingDate": "2019-01-12",
      "valueDate": "2019-01-12",
      "executionDateTime": null,
      "transactionAmount": {
        "currency": "RON",
        "amount": 343.01
      }
    }
  ]
}

```



```

    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": null,
    "creditorAccount": {
      "iban": null
    },
    },
    "debtorName": "NUME PRENUME TEST",
    "debtorAccount": {
      "iban": "RO48BRDE410SV04848484100"
    },
    "remittanceInformationUnstructured": "TEST 2",
    "proprietaryBankTransactionCode": "Incasare aceeasi sucursala B
RD",

    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
],
"pending": [],
"links": {
  "next": {
    "href": "aHR0cHM6Ly9yZ3cuNWRmNC1iZTQ0YTY1ZC51ds1kZS5hcG1jb25uZW
N0LmFwcGRvbWVpbi5jbG91ZC9zbWFydGZpbnRlY2Zvc2FuZGJveC9wc2QyLWFpc3AvdjEvYWNjb3VudHMvQ
lJELzEwMTAwMDAwMDAwOTUvdHJhbnNhY3Rpb25zP2RhdGVGcm9tPTIwMjMtMDEtMDEmZGF0ZVRvPTIwMjMt
MDItMDgmcVjb3Jkc1BlclBhZ2U9MjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAwMjAw
="
  }
}
},
"balances": []
}
}

```

## 8. GET Accounts Details

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 10. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/BRD/RO47BRDE410SV047474100/{{internalConsentId}}/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {

```

```

    "resourceId": "1010000000195",
    "iban": "RO75BRDE380SV01999963800",
    "currency": "RON",
    "name": "account alias 2",
    "product": null,
    "cashAccountType": null,
    "status": "enabled",
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}

```

## 9. Delete Consent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 11 DeleteConsent

DELETE `{{(API_BASE_URI)}}/gateway/core/rest/api/deleteConsent/BRD/{{(internalConsentId)}}` Send

Params Authorization **Headers (8)** Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}

```

## 10. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 4. Intermediary API's BRD / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization **Headers (10)** Body **Pre-request Script** Tests Settings Cookies

Headers 8 hidden


KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{(internalConsentId)}}				
<input checked="" type="checkbox"/> access_token	{{(access_token)}}				
Key	Value	Description			











### Raiffeisen Online (XS2A via TPP)


Consent Details

<b>TPP Application Name:</b>	SmartAccounts DEV
<b>Access:</b>	<b>Accounts (list of accounts):</b> <ul style="list-style-type: none"> <li>• R003RZBR0000069999999999</li> </ul> <b>Balances (list of accounts with balances):</b> <ul style="list-style-type: none"> <li>• R003RZBR0000069999999999</li> </ul> <b>Transactions (list of accounts with transaction history):</b> <ul style="list-style-type: none"> <li>• R003RZBR0000069999999999</li> </ul>
<b>Recurring/One-time consent:</b>	Recurring
<b>Valid until:</b>	2023-05-08T23:59:00Z
<b>Frequency per day:</b>	4

[Approve](#)

After pressing "Approve", thus authorising the consent for all available accounts, developer will be redirected to the established page.

## 2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application



Banking așa cum trebuie

### Te rugam sa te autentifici

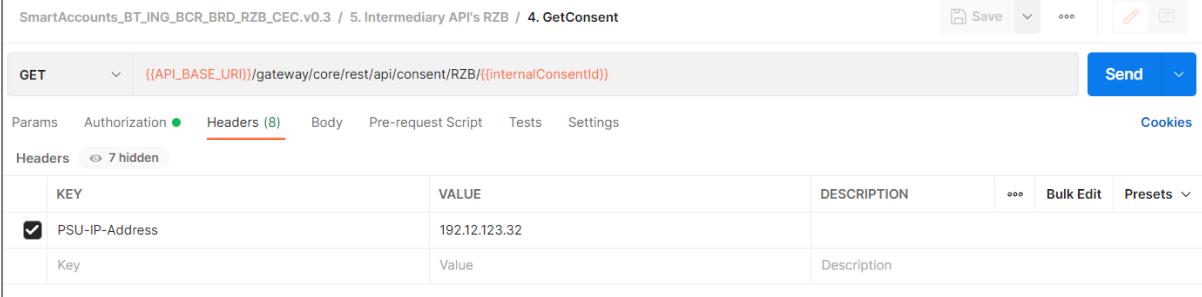
RO
EN

👁️

Autentificare >

After completing fields "Cod utilizator" and "Cod de autentificare" and pressing "Autentificare", thus authorising the consent for all available accounts, PSU will be redirected to the established page.

### 3. GET Consent



The screenshot shows a REST client interface with the following details:

- URL: `{{API_BASE_URI}}/gateway/core/rest/api/consent/RZB/{{internalConsentId}}`
- Method: GET
- Active Tab: Headers (8)
- Header List:

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

*Response:*

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO03RZBR0000069999999999",
          "currency": "RON"
        }
      ],
      "balances": [
        {
          "iban": "RO03RZBR0000069999999999",
          "currency": "RON"
        }
      ],
      "transactions": [
        {
          "iban": "RO03RZBR0000069999999999",
          "currency": "RON"
        }
      ],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": 4,
    "lastActionDate": "2023-02-08",
    "validUntil": "2023-05-08",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```



#### 4. GET Consent Status

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 5. GetConsentStatus

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/RZB/{{internalConsentId}}/status` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}
```

#### 5. GET Accounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 6. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/RZB/{{internalConsentId}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "add9bbec99be99999eb9999999d99999",
      "iban": "R003RZBR0000069999999999",
      "currency": "RON",
      "name": "My current account",
      "product": "Current Account",
      "cashAccountType": "CACC",
      "status": "enabled",
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
    }
  ]
}
```

```

    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 15000.36
        },
        "balanceType": "expected",
        "referenceDate": "2018-04-02",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null
      }
    ],
    "sortCodeAccountNumber": null
  }
]
}

```

## 6. GET Balances

The screenshot shows a REST client interface for a GET request. The URL is `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/RZB/9999f999a999999d9999da99e999d999/((internalConsentId))/balances`. The interface includes tabs for Params, Authorization, Headers (8), Body, Pre-request Script, Tests, and Settings. A table for Query Params is visible below the tabs.

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO03RZBR0000069999999999",
      "bban": "9999999999",
      "currency": "RON"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 15000.36
        },
        "balanceType": "expected",
        "referenceDate": "2018-04-02",
        "creditLimitIncluded": null,

```



```

        "currency": "RON",
        "amount": 120.34
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": null,
    "creditorAccount": {
        "iban": null
    },
    "debtorName": "Test Transaction",
    "debtorAccount": {
        "iban": " RO46RZBR0000069899999985"
    },
    "remittanceInformationUnstructured": "CLARITY",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
},
{
    "transactionId": "NotProvided",
    "entryReference": null,
    "endToEndId": "",
    "bookingDate": "2023-01-05",
    "valueDate": null,
    "executionDateTime": null,
    "transactionAmount": {
        "currency": "RON",
        "amount": -10001.0
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": null,
    "creditorAccount": {
        "iban": null
    },
    "debtorName": null,
    "debtorAccount": {
        "iban": null
    },
    "remittanceInformationUnstructured": "r002",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
}
],
"pending": [],
"links": null
},
"balances": []

```

```
}  
}
```

## 8. GET Accounts Details

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 10. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/RZB/9999f999a999999d9999da99e999d999/({internalConsentId})/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{  
  "status": 200,  
  "messageStatus": "Success",  
  "payload": {  
    "resourceId": "add9bbec99be999999eb9999999d99999",  
    "iban": "RO03RZBR0000069999999999",  
    "currency": "RON",  
    "name": "My current account",  
    "product": "Current Account",  
    "cashAccountType": "CACC",  
    "status": "enabled",  
    "bic": null,  
    "accountOfficerDescription": null,  
    "openingDate": null,  
    "customerSector": null,  
    "customerType": null,  
    "accountUsage": null,  
    "workingBalance": null,  
    "onlineActualBalance": null,  
    "balances": [  
      {  
        "balanceAmount": {  
          "currency": "RON",  
          "amount": 15000.36  
        },  
        "balanceType": "expected",  
        "referenceDate": "2018-04-02",  
        "creditLimitIncluded": null,  
        "creditDebitIndicator": null  
      }  
    ],  
    "sortCodeAccountNumber": null  
  }  
}
```

## 9. Delete Consent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 11 DeleteConsent

DELETE `{{(API_BASE_URI)}/gateway/core/rest/api/deleteConsent/RZB/{{(internalConsentId)}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

## 10. Refresh Token

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Headers 8 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{(internalConsentId}}				
<input checked="" type="checkbox"/> access_token	{{(access_token}}				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 5. Intermediary API's RZB / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	{{(refresh_token}}			
<input checked="" type="checkbox"/> client_id	{{(client_id-partner}}			
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "SUCCESS",
  "payload": {

```







## 2. initConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / **initConsent**

POST `{{(API_BASE_URI)}}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}` **Send**

Params Authorization Headers (11) Body Pre-request Script Tests Settings Cookies

Headers 9 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / **initConsent**

POST `{{(API_BASE_URI)}}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}` **Send**

Params Authorization Headers (11) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```

1  {
2    "codeBank": "CEC",
3    "periodOfValid": -90,
4    "psuEmail": "monica.rotaru@itsmartsystems.eu",
5    "psuIntermediarId": "123",
6    "redirectURL": "https://google.com",
7    "TCaccepted": true
8  }

```

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://api-test.cec.ro/cec/tpp/oauthcec/oauth2/authorize?state=ZXlKbGJtTWlPaUpCTVRJNFwSkRMVWhUTWpVMk1pd2lZV3huSWpvaVpHbHlJaXdpcWtNSU1qb2lTbGRVSW4wLi5aaVdtWHQ3bmg2Q2J4OTNrd3AxSDJRLjJDT0Q1VDVqd0ZXX1pJNEpIbUx5MUZLRlNycjViTWdTawZSRWpWRVRhRGtmOU11NWxaay1uUnk4RWRidldoS0RYV2FwcW1LQzVfNTJrZTI0YWVodFdzcWJHwmlJOUNLVUhnRHppeUpBTWmWmkk1WTJ2VU9GaX1ja01EVlpTb2ExTVVzWW15M3F4MV15eDVoZ2RwZHFtUcxbW9iYyJiWmdpYzYwMjBNODhLsjNDb0t3cWdGVVd6cThFbWhIdDhIRWx5ZE92dUE5ZnpXOF15eTV6OFN4eTh3ej1EWEpDdnVYTHE2eDFOaTlCakJWd2E3ZFZ0UzZzVU1NX2pQS0FhSWdvd0dKY2Jac091Szlure9nOTdPRjRocDFVcnpGWVFTeHphRzNLQ1ZjUnJ0UHFmczNjcjdYVZpUk44YndpybUkwZkR5M3lCcFAyVzJXm1RncVEwb0I4bDdjdlY4dHBobFl1VmJsYzdlTnYtcX16cHZncX10U2ROYS13YWVmdWRRaTz0T01Tz0FRVzJmMF9GQ1drV01UVWk0dndoeT1sMnRqcDl0MV9GUEwY2xqUmxc0IyUnJ6OTR0LUg4cKnrMkF5TDQ5bTRfV1c5dVFnZ0pWMW9jZ2lqbC1KTUU5TUhlQWIzbHVtZG5UTHVkcHZTQ01tWnlmSldeX2ZzR051STdBQWtHVXZrN1VBYjdxYkcdWjJWVjh2RHNodDJaalU5VVR3R0ZYtk1QQ0Jmb1NHckRFTGYyWUtmOW5QVFJleFZHNjBLamE2RUJ1RFhndG1LUEZzNVVg4cUtpVDNHQWhjRjBodndkaVR1aG5xdEVE M1k4dnJ4YVYVfqcUJkMW9EQTVzUfNVMG10Y1V0RTNLUkJEVmlSaWdRMmNCTzJ6Yk1HaFZlWTkxVTBtOFNkR3Z0dExraEJGQXB1cVdNVUhh5SjRjJdElTT1AyenNSZf4N3h1MHFpRTJkekI3WWJlTDFrOghCNEZ2bnhmeU51SENzUVJsOVExTFJlVz1qbX1BaGRPMFVYU1VOR2dyRk51c1E2UHFoUj1SU01DREptOTRTNG1rNGlubTQ2b2JKR

```

```
VFCMV9Gdn1UXzBuMmxpekFLdjb6NU5peEQtb0hDS1JEVnBaaVNINTFQaWxXXzAxYnJWLvhTT2V2bzVLTk1S
Q09jcmNNX3I5aEtXQWdjV05wem5zQ2FORm9PdUliX3UtYzIzRkRBNTI3REhPblM0a1N5ZlBjam9nSudCcW4
zQWREUEFswEtsQ0hNcndHQy1sVnQzQTlRbmRUSlhZTHBlSm1SbUFiVFg5bEE2Yk4yTDFuNnE1ZE44VV8wdW
dnSjBOVEFvV0MtZEYwcEZIOW0ySnhWRHdfWGtfekpGb292aTRaQ1FuLVZKRXP1VnVJZGpuMkNybjBSQVhoS
ERtQ113TzhXSmZFdk1GVjdJNnFCU1F5SszZHZE1aR2VNUddMR19wUVJXcHc4ajB1QXBGaXdfAXVmN0tESzE1
dlgwY2FSWEdekSW56Y212cXVsb2swVEZScF82WFJHY1ZTdmFfYXZPQ1NBc2k0R3hvQVhVQXdXOEVIY1FDZnh
BUkhpVy0zSkloRGpXc0kuNHJxc1VqVGJrTGJrTjBMSkzVSXZ6dw&response_type=code&client_id=55
01752f-a17a-45b1-8fe4-
c241bae0f73f&redirect_uri=https://api.sandboxaccounts.smartfintech.eu/gateway/core/
rest/api/confirmation&scope=AIS:dcafe57e-eca7-11ec-8283-
0a0800270000&code_challenge=7LOaXFoz3012CEnUkWekNcCVmRBwslk5YK6nMg2Fbts&code_challe
nge_method=S256"
    }
  }
}
```

**CEC Bank**

## CEC Bank - Authorization Platform

User CEOnline  
testceapi

Cod acces  
.....

**Log in**

Introduceti Numele dvs de utilizator din aplicatia CEOnline si Codul de acces generat de dispozitivul de autentificare.

## Solicitare acord accesare conturi

Bine ati venit, **testcecap**

Aplicatia **SmartAccounts TEST** SOLICITA permisiunea de a accesa conturile dvs. deschise la CEC Bank cu scopul :

AIS Vizualizare date conturi

Selecteaza / Deselecteaza tot

### Conturi

- RO42CECEQW9898bON9993644
- RO49CECER79292bON8883343
- RO12CECER792R8Ueb8883338
- RO03CECER792R7SXV6635199
- RO46CECEQW93R8Ueb9357561

### Balante

- RO42CECEQW9898bON9993644
- RO49CECER79292bON8883343
- RO12CECER792R8Ueb8883338
- RO03CECER792R7SXV6635199
- RO46CECEQW93R8Ueb9357561

### Tranzactii

- RO42CECEQW9898bON9993644
- RO49CECER79292bON8883343
- RO12CECER792R8Ueb8883338
- RO03CECER792R7SXV6635199
- RO46CECEQW93R8Ueb9357561

Actionati [Permit Acces!] daca sunteti de acord sau [Nu sunt de acord!] daca nu sunteti de acord.

Apasand Permit Acces! veti fi redirectat la adresa

<https://api.sandboxaccounts.smartfintech.eu/gateway/core/rest/api/confirmation>.

**Nu sunt de acord!**

**Permit Acces!**

After selecting at least one account and type of consent, and pressing "Permit access!", thus authorising the consent based on granularity (which account, balances and transactions), PSU or developer will be redirected to the established page.

### 3. GET Consent

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": null,
    "lastActionDate": "2023-02-08",
    "validUntil": "2023-05-09",
    "recurringIndicator": false,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

### 4. GET Consent Status

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}
```

```
}
}
```

## 5. GET Accounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 6. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/CEC/{{internalConsentId}}` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "207940324",
      "iban": "RO26CECER999T4ecT8982492",
      "currency": "USD",
      "name": "410.21147840.207940324.USD",
      "product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - USD",
      "cashAccountType": "CurrentAccount",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [
        {
          "balanceAmount": {
            "currency": "USD",
            "amount": 0.0
          },
          "balanceType": "closingBooked",
          "referenceDate": null,
          "creditLimitIncluded": null,
          "creditDebitIndicator": null
        }
      ],
      "sortCodeAccountNumber": null
    }
  ],
}
```

```

"resourceId": "25511978",
"iban": "RO42CECEQW9898bON9993644",
"currency": "RON",
"name": "421642",
"product": "Cont curent - persoane fizice - LEI",
"cashAccountType": "CurrentAccount",
"status": null,
"bic": null,
"accountOfficerDescription": null,
"openingDate": null,
"customerSector": null,
"customerType": null,
"accountUsage": null,
"workingBalance": null,
"onlineActualBalance": null,
"balances": [
  {
    "balanceAmount": {
      "currency": "RON",
      "amount": -32289.31
    },
    "balanceType": "closingBooked",
    "referenceDate": null,
    "creditLimitIncluded": null,
    "creditDebitIndicator": null
  }
],
"sortCodeAccountNumber": null
},
{
"resourceId": "207940308",
"iban": "RO83CECER999b2XeV8982495",
"currency": "HUF",
"name": "410.21147840.207940308.HUF",
"product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - HUF",
"cashAccountType": "CurrentAccount",
"status": null,
"bic": null,
"accountOfficerDescription": null,
"openingDate": null,
"customerSector": null,
"customerType": null,
"accountUsage": null,
"workingBalance": null,
"onlineActualBalance": null,
"balances": [
  {
    "balanceAmount": {
      "currency": "HUF",
      "amount": 0.0
    },
  },

```

```

        "balanceType": "closingBooked",
        "referenceDate": null,
        "creditLimitIncluded": null,
        "creditDebitIndicator": null
    }
],
"sortCodeAccountNumber": null
},
{
    "resourceId": "100249515",
    "iban": "RO49CECER79292bON8883343",
    "currency": "RON",
    "name": "411.469952.2227767.RON",
    "product": "Cont curent - persoane fizice - LEI",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
        {
            "balanceAmount": {
                "currency": "RON",
                "amount": 0.0
            },
            "balanceType": "closingBooked",
            "referenceDate": null,
            "creditLimitIncluded": null,
            "creditDebitIndicator": null
        }
    ],
    "sortCodeAccountNumber": null
},
{
    "resourceId": "100249740",
    "iban": "RO12CECER792R8Ueb8883338",
    "currency": "EUR",
    "name": "411.469952.2227772.EUR",
    "product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - EURO"

    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,

```

```

"customerType": null,
"accountUsage": null,
"workingBalance": null,
"onlineActualBalance": null,
"balances": [
  {
    "balanceAmount": {
      "currency": "EUR",
      "amount": -41.15
    },
    "balanceType": "closingBooked",
    "referenceDate": null,
    "creditLimitIncluded": null,
    "creditDebitIndicator": null
  }
],
"sortCodeAccountNumber": null
},
{
  "resourceId": "201415500",
  "iban": "RO03CECER792R7SXV6635199",
  "currency": "CHF",
  "name": "421.469952.4475900.CHF",
  "product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - CHF",
  "cashAccountType": "CurrentAccount",
  "status": null,
  "bic": null,
  "accountOfficerDescription": null,
  "openingDate": null,
  "customerSector": null,
  "customerType": null,
  "accountUsage": null,
  "workingBalance": null,
  "onlineActualBalance": null,
  "balances": [
    {
      "balanceAmount": {
        "currency": "CHF",
        "amount": 0.0
      },
      "balanceType": "closingBooked",
      "referenceDate": null,
      "creditLimitIncluded": null,
      "creditDebitIndicator": null
    }
  ],
  "sortCodeAccountNumber": null
},
{
  "resourceId": "33909743",
  "iban": "RO46CECEQW93R8Ueb9357561",

```



```

    "currency": "EUR",
    "name": "031.88924.753549.EUR",
    "product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - EURO"

    ,

    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
        {
            "balanceAmount": {
                "currency": "EUR",
                "amount": 0.0
            },
            "balanceType": "closingBooked",
            "referenceDate": null,
            "creditLimitIncluded": null,
            "creditDebitIndicator": null
        }
    ],
    "sortCodeAccountNumber": null
},
{
    "resourceId": "207940306",
    "iban": "RO33CECER999R9WRP8982497",
    "currency": "GBP",
    "name": "410.21147840.207940306.GBP",
    "product": "Cont curent - pers. fizice REZIDENTE si NEREZIDENTE - GBP",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
        {
            "balanceAmount": {
                "currency": "GBP",
                "amount": 0.0
            },
            "balanceType": "closingBooked",

```

```

        "referenceDate": null,
        "creditLimitIncluded": null,
        "creditDebitIndicator": null
    }
  ],
  "sortCodeAccountNumber": null
},
{
  "resourceId": "2641063123453605",
  "iban": "RO87CECES999164899997299",
  "currency": "RON",
  "name": "4243XXXXXXXXX1287",
  "product": "VISA Debit - Staff",
  "cashAccountType": "CurrentAccount",
  "status": null,
  "bic": null,
  "accountOfficerDescription": null,
  "openingDate": null,
  "customerSector": null,
  "customerType": null,
  "accountUsage": null,
  "workingBalance": null,
  "onlineActualBalance": null,
  "balances": [
    {
      "balanceAmount": {
        "currency": "RON",
        "amount": 1242.01
      },
      "balanceType": "closingBooked",
      "referenceDate": null,
      "creditLimitIncluded": null,
      "creditDebitIndicator": null
    }
  ],
  "sortCodeAccountNumber": null
}
]
}
}

```

## 6. GET Balances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 7. GetBalances Save ▼ ⋮ ✎ 🗨

**GET** ▼ {{API\_BASE\_URI}}/gateway/core/rest/api/accounts/CEC/25511978/{{internalConsentId}}/balances Send ▼

Params ● Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	⋮	Bulk Edit
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO42CECEQW9898bON9993644",
      "currency": "RON"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": -32289.31
        },
        "balanceType": "closingBooked",
        "referenceDate": "2023-02-08",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```

## 7. GET Transactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 8. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/CEC/25511978/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2022-04-10` Send

Params ● Authorization ● Headers (10) Body ● Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> bookingStatus	booked			
<input checked="" type="checkbox"/> dateFrom	2022-04-10			
<input checked="" type="checkbox"/> dateTo	2022-05-12			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 8. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/CEC/25511978/{{internalConsentId}}/transactions?bookingStatus=booked&dateFrom=2022-03-10` Send

Params ● Authorization ● Headers (10) Body ● Pre-request Script Tests Settings Cookies

Headers 9 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO42CECEQW9898bON9993644"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "1250649778",
          "entryReference": null,
          "endToEndId": null,
          "bookingDate": "2023-02-07",
          "valueDate": "2023-02-07",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "RON",
            "amount": 39.35
          },
          "transactionType": null,
          "exchangeRate": [],
          "creditorName": null,
          "creditorAccount": {
            "iban": null
          },
          "debtorName": null,
          "debtorAccount": {
            "iban": null
          },
          "remittanceInformationUnstructured": "Tupunuru vyrqmunt - qsopu
ryru solt turytor",
          "proprietaryBankTransactionCode": null,
          "additionalInformation": null,
          "transactionStatus": null,
          "creditDebitIndicator": null
        },
        {
          "transactionId": "896970683",
          "entryReference": null,
          "endToEndId": null,
          "bookingDate": null,
          "valueDate": "2022-09-27",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "RON",
            "amount": 130.5
          },
          "transactionType": null,
          "exchangeRate": [],

```

```

        "creditorName": null,
        "creditorAccount": {
            "iban": null
        },
        "debtorName": "",
        "debtorAccount": {
            "iban": ""
        },
        "remittanceInformationUnstructured": "teste dbron",
        "proprietaryBankTransactionCode": null,
        "additionalInformation": null,
        "transactionStatus": null,
        "creditDebitIndicator": null
    }
},
"pending": [],
"links": null
},
"balances": []
}
}

```

## 8. GET Transaction Details

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 9. GetTransactionDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/CEC/25511978/{{internalConsentId}}/transactions/1227476280/details` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "transactionId": "1227476280",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2022-03-10",
    "valueDate": "2022-03-10",
    "transactionAmount": {
      "currency": "RON",
      "amount": -18.55
    },
    "transactionType": null,
    "creditorName": null,
    "creditorAccount": {

```

```

        "iban": null
    },
    "debtorName": null,
    "debtorAccount": {
        "iban": null
    },
    "remittanceInformationUnstructured": "Sqpytqlyzqru torqntq-
Qsxytqru torqntq nutq lq ssqtuntq tyn sont surunt puntru sontrqstul nr 894414336",
    "executionDateTime": null
}
}

```

## 9. GET Accounts Details

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC.v0.3 / 6. Intermediary API's CEC / 10. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/CEC/25511978/{{internalConsentId}}/details` Send

Params Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "25511978",
    "iban": "RO42CECEQW9898bON9993644",
    "currency": "RON",
    "name": "421642",
    "product": "Cont curent - persoane fizice - LEI",
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": -32289.31
        },
        "balanceType": "closingBooked",

```









SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 7. Intermediary API's FB / 4. InitConsent

POST `{{(API_BASE_URI)}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

Headers 8 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 7. Intermediary API's FB / 4. InitConsent

POST `{{(API_BASE_URI)}/gateway/core/rest/api/initConsent/{{(internalConsentId)}}` Send

Params Authorization Headers (10) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautiful

```

1  {
2    "codeBank": "FB",
3    "periodOfValid": 90,
4    "psuEmail": "aaa.aaaa@mail.com",
5    "psuIntermediarId": "123",
6    "redirectURL": "https://google.com",
7    "Taccepted": true
8  }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://dev.firstbank.ro/openbanking/services/startAuthorize?state=eyJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiaWwXnIjoizGlyIiwiaWY3R5IjoisldUIn0..MitgkVop-kLwbY8pw9gQRA.fOvZg0ka5h-a5bTFQOS3o8r3AAFBAaEu4TmwVQ1PPP628_SST09FBzSi3DpATTSQxivZixRdxBPln0fPsQO6rxylKPTbwxZqsLTYXkCyX61Ei8f12GNs3m37r_IgnaWeRz_8cBRTBdbSqlrA0Ts4WNhdC2ExQnQoR8iixfxUtfaJKFS5Pcil7dALV3UtFviuPvZAP2NZTs-AHaD58qiOCiILjP6OU1B8u_2yTzv5D_sJFDVfvujRdDqUa6KK13j_vutPwYinAq4HOV-RwqiDBOunWxm-ZHGzP5GcaWIsJvWIV6k3Q32UP_xTGid8G63RaFnGJvkkBk7DHTkWbSvBtQoWJLQapwKK4Z-kEbHuA1nLJbWvdizOuqCumev10GhVGEiG8nPxQzX6K6npqKPiU0gLKPZa1PSuKgPff4FauPqjreLkOBsAW-AzbWGNQUnlXF8m4vPhs8-dqe40j20kV7QNx29c7nS-zPAHnhYbheOe-NBDBNnmnUIyrcPvy0NXUurMFVYd1ROz3W--Tbwf3dIcQcp_43Fd3KEaCmuW_03louTKF5UV8ysEpoCL9Uf94s1kNN13_OEbaRBfdF035T3_8t3eK81Ff-f4oKCA1tFb1_v8OP4KYDIE_-i4K8H2VSVpLs_oPIokdkW91xGoo_m5bAvY94rhz7MN384heXdVXIUto8VO6-vrzRpuK6sZyGikS-hOpk4Dc15FC642HbG4mVORx7I9v0XdAB0hHaoJY1DjdYgcWF116bywPrBT6tc4y9eNDEpgN-70No05IMK5S4xyhtox9fEA2x432CS9WrvLojWvxm2ZhS9EglJZxN18PG7Cw2kZDmdbSI-exY2uqkOHTUk9ZDHLRhgieZl0jXXuOXpMLZ3tdZwAk_V-f1ZMLioww-EGXp2Pbyh3dxRku9UL-GSx1EysCp8T3o0qsorXvD9px4GR4UXmUaavqMy0hEbOweXG-A3YWqmZ00wAhAtWmD-

```

```

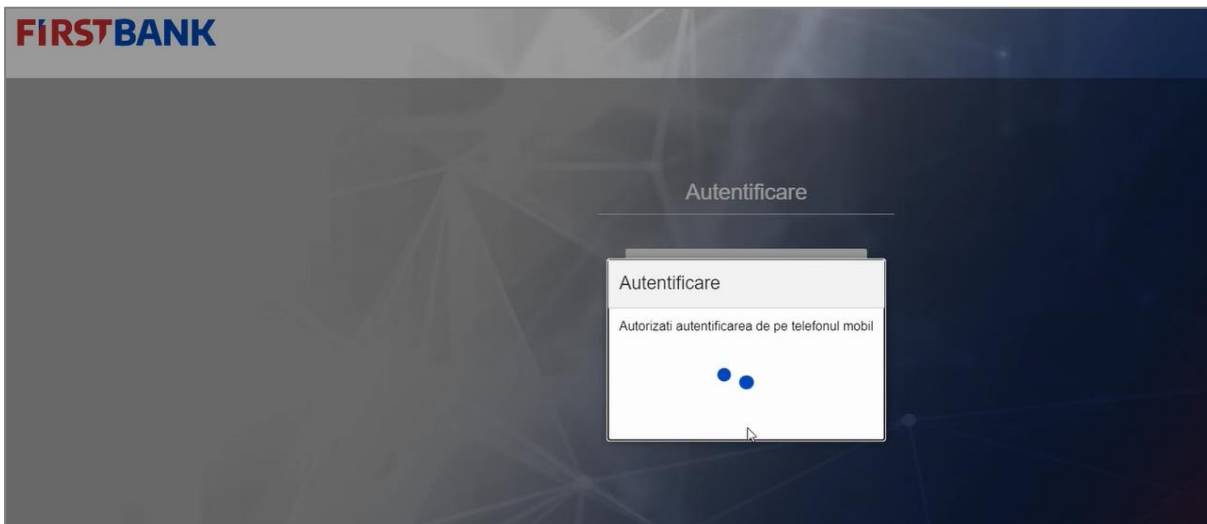
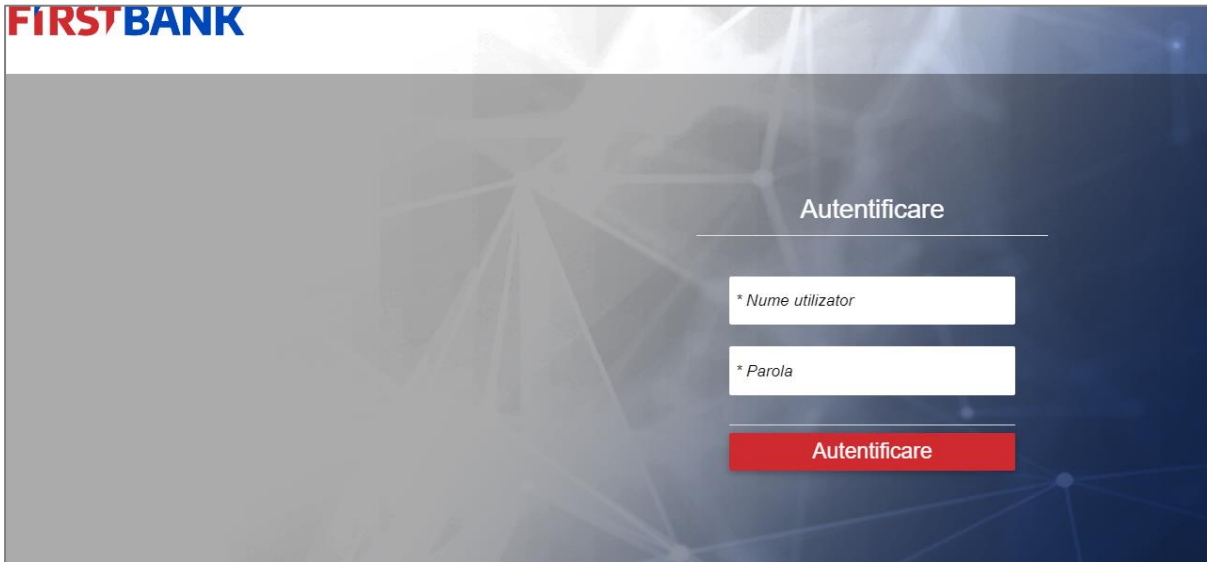
rXxL0Z6aVzHzOuY2yteg6Cjf2cLV6oZnY2gSrTzkzTVKD1v7TmDgWkzwxjgRk24yuqqPwNHJESnHdqL2HBE
7xb-
HfiPAbAgT.rXDPDwzja4AU5LaCcs_Stg&response_type=code&client_id=toMRlUX5q2anHb2PYevLI
CNB7xxmUFjv&scope=transactions_balances_accounts&consent_id=0e7a00c4-cdd3-4bc9-
af13-5abbd1104e42"
    }
  }
}

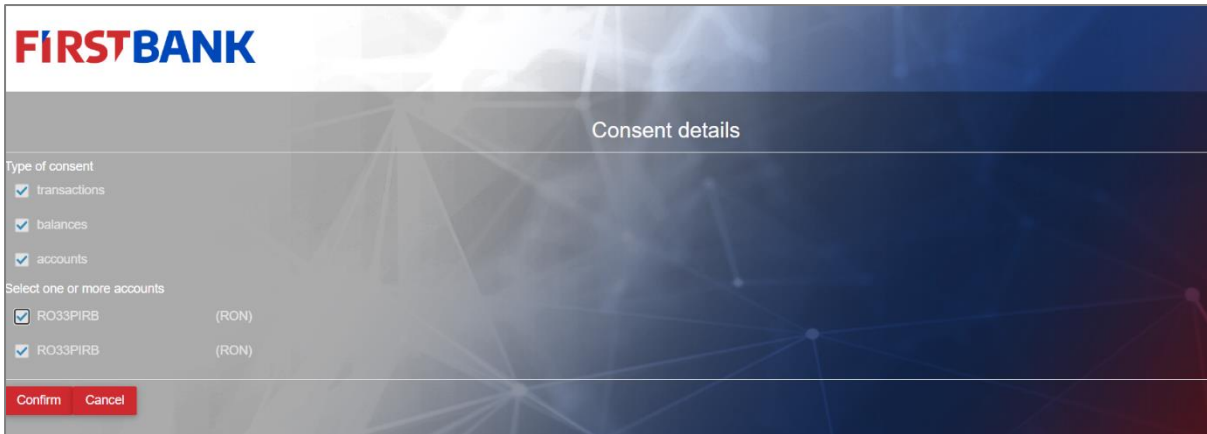
```

## 2.1 initCosentin SANDBOX – the example below shows how the developer will interact with bank's internet banking application

After selecting at least one account and type of consent, and pressing "Confirm", thus authorising the consent based on granularity (which account, balances and transactions), developer will be redirected to the established page.

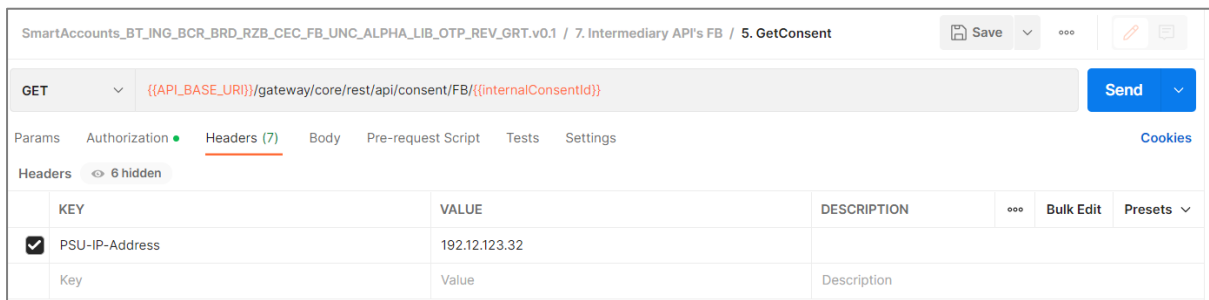
2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application





After selecting at least one account and type of consent, and pressing "Confirm", thus authorising the consent based on granularity (which account, balances and transactions), PSU will be redirected to the established page.

### 3. GetConsent



#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO33PIRB42191A4819001000"
        },
        {
          "iban": "RO33PIRB42191A4819001001"
        }
      ],
      "balances": [
        {
          "iban": "RO33PIRB42191A4819001000"
        },
        {
          "iban": "RO33PIRB42191A4819001001"
        }
      ]
    }
  }
}
```

```

    "transactions": [
      {
        "iban": "RO33PIRB42191A4819001000"
      },
      {
        "iban": "RO33PIRB42191A4819001001"
      }
    ],
    "availableAccounts": null
  },
  "consentStatus": "valid",
  "frequencyPerDay": 4,
  "lastActionDate": "2023-02-08",
  "validUntil": "2023-05-08",
  "recurringIndicator": true,
  "combinedServiceIndicator": null,
  "creationDate": null
}
}

```

#### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 7. Intermediary API's ... / 6. GetConsentStat...

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/FB/{{internalConsentId}}/status` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}

```

#### 5. GetAccounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 7. Intermediary API's FB / 7. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/FB/{{internalConsentId}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "276c8330-37ed-4b76-9789-c0278c4570d0",
      "iban": "RO33PIRB42191A4819001000",
      "currency": "RON",
      "name": "Popescu Ion",
      "product": null,
      "cashAccountType": "*",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    },
    {
      "resourceId": "aca299c1-8a75-4fd7-b280-1d663bfbfc3e",
      "iban": "RO33PIRB42191A4819001001",
      "currency": "RON",
      "name": "Popescu Ion",
      "product": null,
      "cashAccountType": "*",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    }
  ]
}
```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 7. Intermediary API's FB / 8. GetBalances

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/FB/a1b1db08-b881-44d9-b5ce-9c8880c71314/{{internalConsentId}}/balances` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO33PIRB42191A4819001000"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 163079.18
        },
        "balanceType": "closingBooked",
        "referenceDate": "2018-05-11",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 7. Intermediary API's FB / 8. GetTransactions

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/FB/a1b1db08-b881-44d9-b5ce-9c8880c71314/{{internalConsentId}}/transactions?bookingStatu: ...` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> next	{{next_page}}				
Key	Value	Description			



GET ▼ `{{(API_BASE_URI)}}gateway/core/rest/api/accounts/FB/a1b1db08-b881-44d9-b5ce-9c8880c71314/{{(internalConsentId)}}/transactions?bookingStatus:...` Send ▼

Params ● Authorization ● Headers (8) Body Pre-request Script Tests ● Settings Cookies

Query Params

<input type="checkbox"/>	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	bookingStatus	booked			
<input checked="" type="checkbox"/>	dateFrom	2023-01-01			
<input checked="" type="checkbox"/>	dateTo	2023-02-08			
	Key	Value	Description		

GET ▼ `{{(API_BASE_URI)}}gateway/core/rest/api/accounts/FB/a1b1db08-b881-44d9-b5ce-9c8880c71314/{{(internalConsentId)}}/transactions?bookingStatus:...` Send ▼

Params ● Authorization ● Headers (8) Body Pre-request Script Tests ● Settings Cookies

```

1 | const responseJson = pm.response.json();
2 | let next = responseJson.payload.transactions.links;
3 | if (next != null) {
4 |   postman.setEnvironmentVariable("next_page", next.next.href);
5 | }
6 | else {
7 |   postman.setEnvironmentVariable("next_page", null);
8 | }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO33PIRB42191A4819001000"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "201074847",
          "entryReference": null,
          "endToEndId": null,
          "bookingDate": "2018-05-10",
          "valueDate": "2018-05-10",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "RON",
            "amount": 56.0
          },
          "transactionType": null,
          "exchangeRate": [],
          "creditorName": "POPESCU ION",
          "creditorAccount": {
            "iban": "RO33PIRB42191A4819001000"
          },
          "debtorName": null,
          "debtorAccount": {
            "iban": null
          }
        }
      ]
    }
  }
}

```

```

    "remittanceInformationUnstructured": "Internet Transfer to POP
ESCU ION",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  },
  {
    "transactionId": "201074892",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2018-05-10",
    "valueDate": "2018-05-10",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 11.0
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": "POPESCU ION",
    "creditorAccount": {
      "iban": "RO33PIRB42191A4819001000"
    },
    "debtorName": null,
    "debtorAccount": {
      "iban": null
    },
    "remittanceInformationUnstructured": "Trs To: Popescu Ion",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
],
"pending": [],
"links": null
},
"balances": []
}
}
}

```

## 8. GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 7. Intermediary API's ... / 10. GetAccountDeta...

GET `{{(APL_BASE_URI)}}/gateway/core/rest/api/accounts/FB/a1b1db08-b881-44d9-b5ce-9c8880c71314/{{(internalConsentId)}}/details` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "a1b1db08-b881-44d9-b5ce-9c8880c71314",
    "iban": "RO33PIRB42191A4819001000",
    "currency": "RON",
    "name": "Popescu Ion",
    "product": null,
    "cashAccountType": "*",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}
```

**9. DeleteConsent**

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```







## 2. initConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 4. InitConsent

POST `{{API_BASE_URI}}/gateway/core/rest/api/initConsent/{{internalConsentId}}` Send

Params Authorization Headers (11) Body Pre-request Script Tests Settings Cookies

Headers 8 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/> PSU-ID-Type	ALL				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 4. InitConsent

POST `{{API_BASE_URI}}/gateway/core/rest/api/initConsent/{{internalConsentId}}` Send

Params Authorization Headers (11) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```

1  {
2  ... "codeBank": "UNC",
3  ... "periodOfValid": 90,
4  ... "psuEmail": "aaa.aaaa@itsmartsystems.eu",
5  ... "psuIntermediarId": "324567",
6  ... "redirectURL": "https://google.com",
7  ... "Tcaccepted": true
8  }

```

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://authorization.api-sandbox.unicredit.eu:8403/sandbox/psd2/bg/hydrogen/h014/loginPSD2_BG.html?consentId=2163b89f-de7e-422d-a074-6f75b65077bd&correlationId=B3L1GB&authorisationId=2163b89f-de7e-422d-a074-6f75b65077bd&country=RO&state=ZX1KbGJtTW1PaUpCTVRJNFewSkRMVWhUTWpVMklpd2lZV3huSWpvaVpHbHlJbjAuLm4zdWNiVWk8wbkw3UWpHM1JLtk1VvKEuRmJkZXFGc09GTGhSLThTazRLbFlNdTFwRE1MRDlJTWRtOUFTTRkFMNDBYb2RRZkM1NkRra25Rb1hyOE5zZ00zUjV5WDQyMnF5Y0E0ZDV0bE12NXJMbmlhNjBYbGlqNm1ZR2tLcXN0TEN4TFpYNHBmb2czZ3ZxRTg5TFZ6U0U9kz1QubVpoe191WjhlcGRvZnFMX1M0WXo3UQ=="
      }
    }
  }
}

```

2.1 initCosentin SANDBOX – the example below shows how the developer will interact with bank's internet banking application

UniCredit

## Sign in with your UniCredit Credentials

Username

Password

SIGN IN

UniCredit

## Sign in with your UniCredit Credentials

01PSDZTest

\*\*\*\*\*

SIGN IN

UniCredit

## GRANT YOUR CONSENTS

Select all Accounts    Select all Balances    Select all Transactions

#	Account	Currency	Accounts	Balance	Transactions
1	RO32BACX0000000515979310	RON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	RO53BACX0000000515979320	EUR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	RO60BACX0000000515979000	RON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

GRANT CONSENTS

After selecting at least one account and type of consent, and pressing "GRANT CONSENTS", thus authorising the consent based on granularity (which account, balances and transactions), developer will be redirected to the established page.

2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application



# Bine ai venit!

Nume utilizator

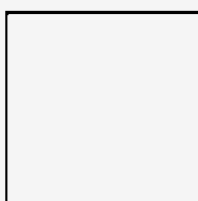
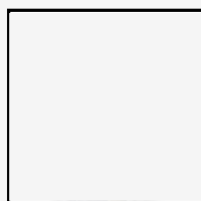
*Introduceți numele de utilizator*

Această valoare este necesară

**CONTINUĂ**

## SELECTEAZĂ IMAGINEA DE SECURITATE

Accesezi aplicația de pe un browser sau un computer nou, așa că te rugăm să ne confirmi imaginea de securitate. Ți reamintim că imaginea de securitate apare în meniul de setări, tab-ul de securitate.



**SELECTEAZĂ**

Imaginea de securitate pe care o alegi va întări securitatea aplicației Online Banking. Mai multe detalii găsiți în acest document.

Dacă întâmpini probleme, te rugăm să ne contactezi la:

**Telefon**

+40 21 200 2020 (apel tarif normal în rețeaua fixa Telekom Romania)  
(interior 1116 or 11232)

**E-mail**

BusinessNet: [businessnet@unicredit.ro](mailto:businessnet@unicredit.ro)



SA

[SCHIMBĂ NUME UTILIZATOR](#)

Cod de securitate

*Introduceți parola*

Această valoare este necesară

ACCESARE

Account Information Service Consent



Consent ID

Current status

Received

Expiration date

01.05.2023

TPP Name

SMART FINTECH S.R.L.

Country registration number

Country of registration

RO

TPP National Competent Authority

NBR

Permissions and accounts <sup>1</sup>

Account Details



Select all

08 1002 | SAVINGS ACCOUNT | RON

08 1000 | CURRENT ACCOUNT | RON

Account Balances



Select all

02 | SAVINGS ACCOUNT | RON

02 | CURRENT ACCOUNT | RON

Account Transactions



Select all

| SAVINGS ACCOUNT | RON

| CURRENT ACCOUNT | RON

With this new consent any other consent offered to the same account information service provider, if it

After selecting at least one account and type of consent, and authorising the consent based on granularity (which account, balances and transactions), PSU will be redirected to the established page.

### 3. GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 5. GetConsent

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/UNC/({internalConsentId})` Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO32BACX0000000515979310"
        },
        {
          "iban": "RO53BACX0000000515979320"
        },
        {
          "iban": "RO60BACX0000000515979000"
        }
      ],
      "balances": [
        {
          "iban": "RO32BACX0000000515979310"
        },
        {
          "iban": "RO53BACX0000000515979320"
        },
        {
          "iban": "RO60BACX0000000515979000"
        }
      ],
      "transactions": [
        {
          "iban": "RO32BACX0000000515979310"
        },
        {
          "iban": "RO53BACX0000000515979320"
        }
      ]
    }
  }
}
```

```

    },
    {
      "iban": "RO60BACX0000000515979000"
    }
  ],
  "availableAccounts": null
},
"consentStatus": "valid",
"frequencyPerDay": 4,
"lastActionDate": "2023-02-08",
"validUntil": "2023-05-08",
"recurringIndicator": true,
"combinedServiceIndicator": null,
"creationDate": null
}
}
}

```

#### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 8. Intermediary API's U... / 6. GetConsentStat...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/consent/UNC/{{(internalConsentId)}}/status` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}

```

#### 5. GetAccounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 7. GetAccounts

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/UNC/{{(internalConsentId)}}/UNC/{{(internalConsentId)}}/status` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "RO32BACX0000000515979310",
      "iban": "RO32BACX0000000515979310",
      "currency": "RON",
      "name": "RON Acc for 01PSD2Test",
      "product": "RBN",
      "cashAccountType": "CACC",
      "status": "enabled",
      "bic": "BACXROBUXXX",
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    },
    {
      "resourceId": "RO53BACX0000000515979320",
      "iban": "RO53BACX0000000515979320",
      "currency": "EUR",
      "name": "EUR Acc for 01PSD2Test",
      "product": "RBN",
      "cashAccountType": "CACC",
      "status": "blocked",
      "bic": "BACXROBUXXX",
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    },
    {
      "resourceId": "RO60BACX0000000515979000",
      "iban": "RO60BACX0000000515979000",
      "currency": "RON",
      "name": "RON Acc for 01PSD2Test",
      "product": "RBN",
      "cashAccountType": "CACC",
      "status": "enabled",
```

```

        "bic": "BACXROBUXXX",
        "accountOfficerDescription": null,
        "openingDate": null,
        "customerSector": null,
        "customerType": null,
        "accountUsage": null,
        "workingBalance": null,
        "onlineActualBalance": null,
        "balances": [],
        "sortCodeAccountNumber": null
    }
}
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 8. GetBalances

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/UNC/RO32BACX0000000515979310/{{internalConsentId}}/balances` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO32BACX0000000515979310",
      "currency": "RON"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 4500.16
        },
        "balanceType": "expected",
        "referenceDate": null,
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}

```

}

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 8. Intermediary API's UN... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/UNC/RO32BACX0000000515979310/{{(internalConsentId)}}/transactions?bookingStatus=booked&d` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> next	<code>{{(next_page)}}</code>				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 8. Intermediary API's UN... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/UNC/RO32BACX0000000515979310/{{(internalConsentId)}}/transactions?bookingStatus=booked&d` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> bookingStatus	booked			
<input checked="" type="checkbox"/> dateFrom	2022-08-18			
<input checked="" type="checkbox"/> dateTo	2022-08-18			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 8. Intermediary API's UN... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/UNC/RO32BACX0000000515979310/{{(internalConsentId)}}/transactions?bookingStatus=booked&d` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

```
1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7   postman.setEnvironmentVariable("next_page", null);
8 }
```

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO32BACX0000000515979310",
      "currency": "RON"
    },
    "transactions": {
```

```

        "booked": [],
        "pending": [],
        "links": null
    },
    "balances": []
}
}

```

## 8. GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 8. Intermediary API's U... / 10. GetAccountDeta...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/UNC/RO32BACX0000000515979310/{{internalConsentId}}/details` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "RO32BACX0000000515979310",
    "iban": "RO32BACX0000000515979310",
    "currency": "RON",
    "name": "RON Acc for 01PSD2Test",
    "product": "RBN",
    "cashAccountType": "CACC",
    "status": "enabled",
    "bic": "BACXROBUXXX",
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}
}

```



## 9. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 11 DeleteConsent

DELETE `{{(API_BASE_URI)}}gateway/core/rest/api/deleteConsent/UNC/{{(internalConsentId)}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

## 10. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	<code>{{(internalConsentId)}}</code>			
<input checked="" type="checkbox"/> access_token	<code>{{(access_token)}}</code>			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 8. Intermediary API's UNC / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	<code>{{(refresh_token)}}</code>		
<input checked="" type="checkbox"/> client_id	<code>{{(client_id-partner)}}</code>		
Key	Value	Description	









# Sign in to Revolut

To authorise SmartAccounts Sandbox

Personal  Business

Code

Sign in to your Revolut account. The payment or account information request will be initiated by the Revolut entity with which you have your account. If you'd like to find out more about which Revolut entity you receive services from, or if you have any other questions, get in touch using our in-app chat feature. You can also get more info on [our help page](#).

## Enter your Revolut app passcode

Please confirm that you own the account associated with number +44

• • • •

1	2	3
4	5	6
7	8	9
	0	

<

## Enter 6 digit code

Code  
451-390

If you have not got the code for 2 minutes. [Try again](#)




Continue

<

## Accounts access request

Authorise **SmartAccounts Sandbox** to read your accounts information. Permission will expire on 8 May 2023 (in 89 days).

Choose accounts

	GBP · British Pound	£982,060	<input checked="" type="checkbox"/>
	EUR · Euro	€1,000,000	<input checked="" type="checkbox"/>
	USD · United States...	\$1,000,000	<input checked="" type="checkbox"/>

Info I'm providing [Show](#)

Authorise



## Access granted

You will be now redirected back to SmartAccounts Sandbox

After selecting accounts and pressing "Authorise", thus authorising the consent for selected account(s) developer will be redirected to the established page.

2.2 initCosent in PROD – the example below shows how the PSU will interact with bank's internet banking application

## Sign in to Revolut

To authorise

Personal

Business



Switch to Personal account  
Continue in Revolut



Sign in to your Revolut account. The payment or account information request will be initiated by the Revolut entity with which you have your account. If you'd like to find out more about which Revolut entity you receive services from, or if you have any other questions, get in touch using our in-app chat feature. You can also get more info on [our help page](#).



# Log in to Revolut

Phone number      Email


+40      Phone number

Lost access to phone number

Continue

Don't have an account?

Sign up



Log in with QR code

Scan this code with your phone camera to log in instantly. Revolut app version 8.93 or higher is required

After inserting phone number, PSU will be redirected into a page where Revolut account passcode must be inserted (not card's PIN).

←

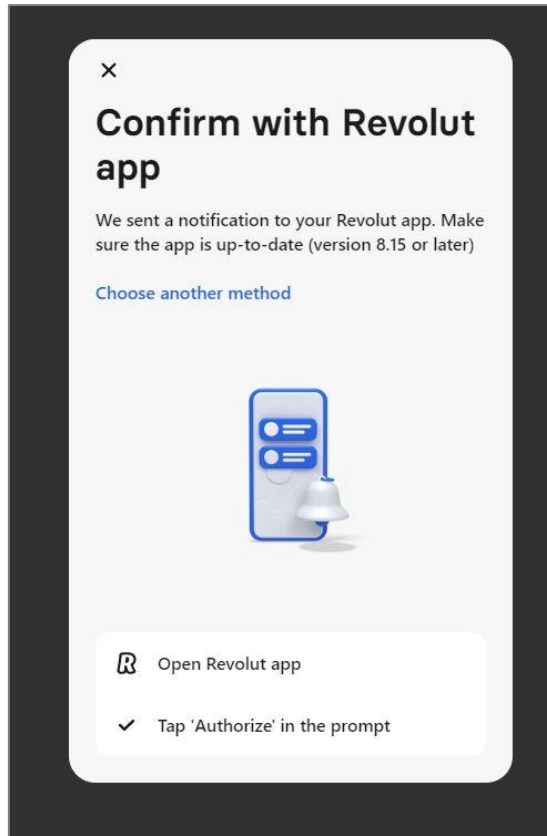
## Enter passcode

....|

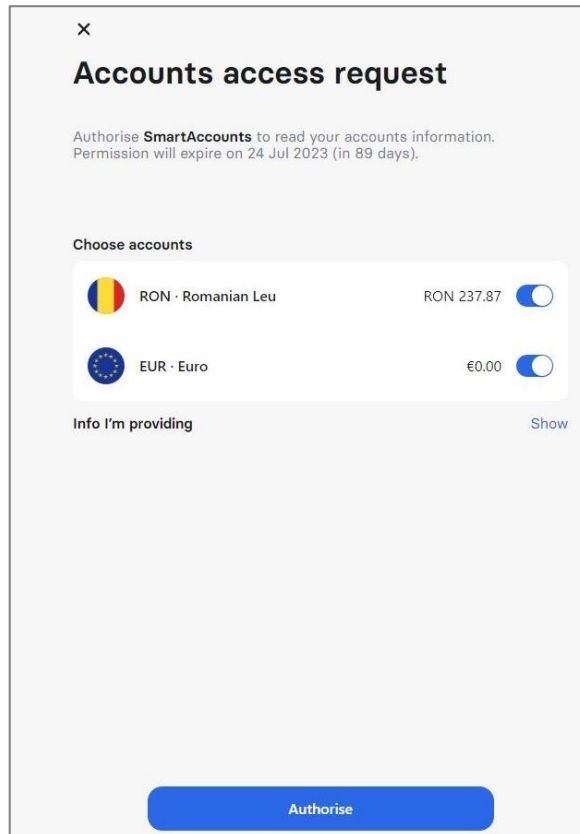
Only digits are allowed

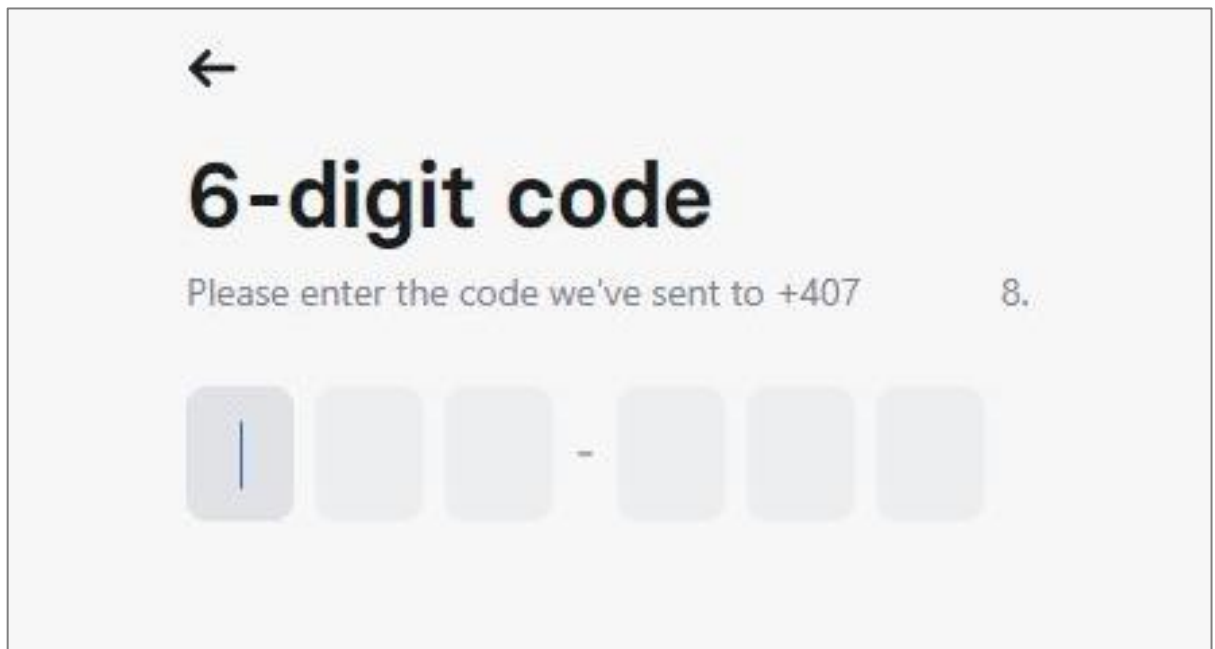
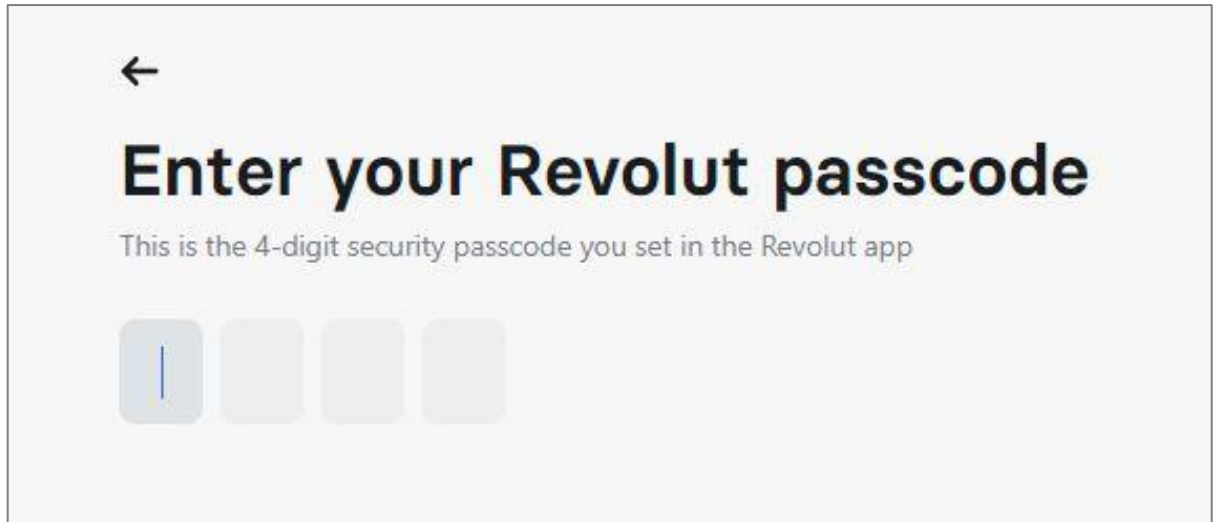
Forgot your passcode?

Continue



After tapping "Authorize" in the prompt from Revolut APP, PSU will be redirected into the web page below.





After inserting SMS code, PSU will be redirected to the established page.

### 3. GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 12. Intermediary API's REV / 5. GetConsent Save ... Send

GET ▼ `{{API_BASE_URI}}/gateway/core/rest/api/consent/REV/{{internalConsentId}}` Send ▼

Params Authorization ● Headers (8) Body Pre-request Script Tests Settings Cookies

Headers ↔ 6 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/>	PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/>	Content-Type	application/json				
	Key	Value	Description			

*Response:*

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": null,
    "lastActionDate": "2023-02-08",
    "validUntil": "2023-05-08",
    "recurringIndicator": null,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}

```

#### 4. GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 12. Intermediary API's R... / 6. GetConsentStat...

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/REV/{{internalConsentId}}/status` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}

```

#### 5. GetAccounts

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 12. Intermediary API's REV / 7. GetAccounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/REV/{{internalConsentId}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "b66af2e5-9dcf-4520-9fd2-12a451ae4309",
      "iban": null,
      "currency": "GBP",
      "name": "Jan Smith",
      "product": null,
      "cashAccountType": "CurrentAccount",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": "60424981765417"
    },
    {
      "resourceId": "1452fe59-464b-4aa4-9d8c-68172271bf7e",
      "iban": "DK2377733760723902",
      "currency": "EUR",
      "name": "Jan Smith",
      "product": null,
      "cashAccountType": "CurrentAccount",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    },
    {
      "resourceId": "fb42d579-437e-4115-8829-40b0eca04001",
      "iban": "DK6705166603207318",
      "currency": "USD",
      "name": "Jan Smith",
      "product": null,
      "cashAccountType": "CurrentAccount",
      "status": null,
    }
  ]
}
```

```

    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
]
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 12. Intermediary API's REV / 8. GetBalances

GET `{{(APL_BASE_URI)}}gateway/core/rest/api/accounts/REV/fb42d579-437e-4115-8829-40b0eca04001/((internalConsentId))/balances` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {},
    "balances": [
      {
        "balanceAmount": {
          "currency": "USD",
          "amount": 1000000.0
        },
        "balanceType": "InterimAvailable",
        "referenceDate": "2020-08-24",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}

```

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 12. Intermediary API's R... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/REV/b66af2e5-9dcf-4520-9fd2-12a451ae4309/{{(internalConsentId)}}/transactions?bookingStatus=` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Headers  6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
<input checked="" type="checkbox"/> next	{{(next_page)}}				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 12. Intermediary API's R... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/REV/b66af2e5-9dcf-4520-9fd2-12a451ae4309/{{(internalConsentId)}}/transactions?bookingStatus=` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> bookingStatus	booked			
<input checked="" type="checkbox"/> dateFrom	2022-12-09			
<input checked="" type="checkbox"/> dateTo	2023-02-08			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 12. Intermediary API's R... / 9. GetTransactio...

GET `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/REV/b66af2e5-9dcf-4520-9fd2-12a451ae4309/{{(internalConsentId)}}/transactions?bookingStatus=` Send

Params • Authorization • Headers (8) Body Pre-request Script Tests • Settings Cookies

```
1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4 |   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7 |   postman.setEnvironmentVariable("next_page", null);
8 }
```

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {},
    "transactions": {
      "booked": [],
      "pending": [
        {
          "transactionId": "63b8295a-355e-a081-8b28-e645cc07a0d3",
          "entryReference": null,
          "endToEndId": null,

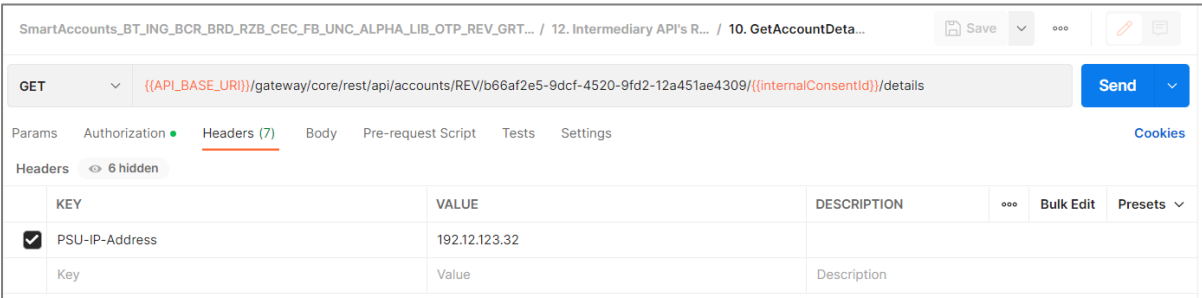
```

```

        "bookingDate": "2023-01-06",
        "valueDate": null,
        "executionDateTime": null,
        "transactionAmount": {
            "currency": "GBP",
            "amount": 50.0
        },
        "transactionType": null,
        "exchangeRate": [],
        "creditorName": null,
        "creditorAccount": {
            "iban": null
        },
        "debtorName": null,
        "debtorAccount": {
            "iban": null
        },
        "remittanceInformationUnstructured": null,
        "proprietaryBankTransactionCode": "TRANSFER",
        "additionalInformation": "To ReceiverCo ReceiverRef",
        "transactionStatus": "Pending",
        "creditDebitIndicator": "Debit"
    }
],
    "links": null
},
    "balances": []
}
}

```

## 8. GetAccountDetails



SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 12. Intermediary API's R... / 10. GetAccountDeta...

GET `{{(API_BASE_URI)}}gateway/core/rest/api/accounts/REV/b66af2e5-9dcf-4520-9fd2-12a451ae4309/{{(internalConsentId)}}/details` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
    "status": 200,
    "messageStatus": "Success",
    "payload": {
        "resourceId": "b66af2e5-9dcf-4520-9fd2-12a451ae4309",
        "iban": null,
        "currency": "GBP",
        "name": null,
    }
}

```



```

    "product": null,
    "cashAccountType": "CurrentAccount",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}

```

## 9. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 12. Intermediary API's RE... / 11 DeleteConse...

DELETE `{{API_BASE_URI}}/gateway/core/rest/api/deleteConsent/REV/{{internalConsentId}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}

```

## 10. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 12. Intermediary API's REV / 11 RefreshToken

POST `{{MTLS_BASE_URI}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{internalConsentId}}				
<input checked="" type="checkbox"/> access_token	{{access_token}}				
Key	Value	Description			









**Response:**

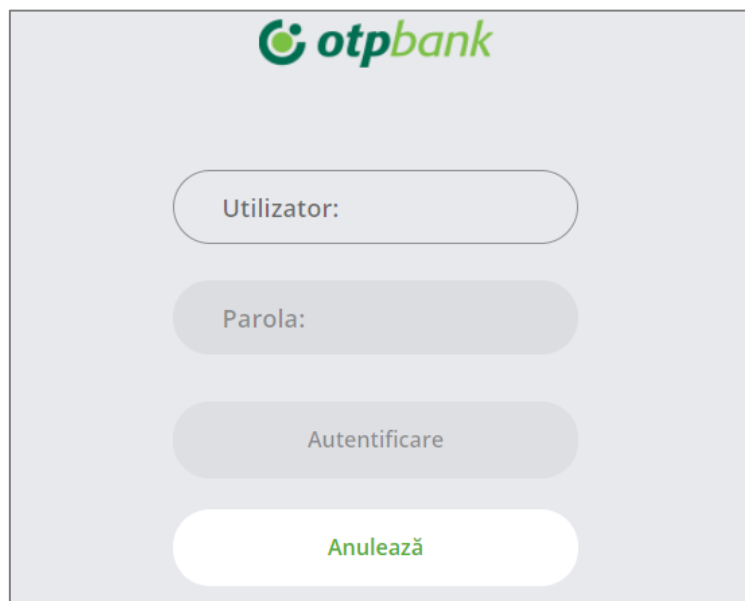
```


{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://api.sandboxaccounts.smartfintech.eu/gateway/core/rest/api/confirmation?lang=en&state=QU1TJk9UUCZhyTA5NjNmMy1hNzAxLTQ4MjAtMmVlNC1mNGFjMTg3Nj1jM2UmaHR0cHM6Ly9zbWVydHBnLWh1Yi5wcm9kLmNvbS5zZbWFydGZpbmRlY2g="
      }
    }
  }
}

```

2.3 initCosent in SANDBOX – in SANDBOX environment OTP does not redirect into front-end

2.4 initConsent in PROD – in PROD environment OTP redirects into front-end. The example below shows how the PSU will interact with bank's internet banking application.





**AGREEMENT.CONFIRM\_LOADER\_INFO**

✓ 04  
RC
RON

---

Valabil până la

09.05.2023

Accesari pe zi:

4

**Anulează**

After completing fields "Utilizator:" and "Parola:", and pressing "Autentificare", thus authorising the consent, PSU or developer will be redirected to the established page.

### 3 GetConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 11. Intermediary API's OTP / 5. GetConsent

GET
{{API\_BASE\_URI}}/gateway/core/rest/api/consent/OTP/{{internalConsentId}}
Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

	KEY	VALUE	DESCRIPTION		Bulk Edit	Presets
<input checked="" type="checkbox"/>	PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/>	Content-Type	application/json				
	Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
```

```

    "access": {
      "accounts": [],
      "balances": [
        {
          "iban": "RO770TPV116000XXXXXXRO01"
        },
        {
          "iban": "RO340TPV116000XXXXXXEU01"
        }
      ],
      "transactions": [
        {
          "iban": "RO770TPV116000XXXXXXRO01"
        },
        {
          "iban": "RO340TPV116000XXXXXXEU01"
        }
      ],
      "availableAccounts": null
    },
    "consentStatus": "valid",
    "frequencyPerDay": null,
    "lastActionDate": null,
    "validUntil": "2021-01-30",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}

```

#### 4 GetConsentStatus

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT... / 11. Intermediary API's O... / 6. GetConsentStat...

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/OTP/{{internalConsentId}}/status` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}

```

## 5 GetAccounts

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "XO45XS",
      "iban": "RO77OTPV116000XXXXXXRO01",
      "currency": "RON",
      "name": "77-RO01",
      "product": null,
      "cashAccountType": "Cont curent",
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [
        {
          "balanceAmount": {
            "currency": "RON",
            "amount": 42665.74
          },
          "balanceType": "interimBooked",
          "referenceDate": null,
          "creditLimitIncluded": null,
          "creditDebitIndicator": null
        },
        {
          "balanceAmount": {
            "currency": "RON",
            "amount": 42638.84
          }
        }
      ]
    }
  ]
}
```



```

        "balanceType": "interimAvailable",
        "referenceDate": null,
        "creditLimitIncluded": null,
        "creditDebitIndicator": null
    }
],
"sortCodeAccountNumber": null
},
{
    "resourceId": "83XISG",
    "iban": "RO090TPV300000XXXXXXHU01",
    "currency": "HUF",
    "name": "09-HU01",
    "product": null,
    "cashAccountType": "Cont curent",
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
        {
            "balanceAmount": {
                "currency": "HUF",
                "amount": 0.0
            },
            "balanceType": "interimBooked",
            "referenceDate": null,
            "creditLimitIncluded": null,
            "creditDebitIndicator": null
        },
        {
            "balanceAmount": {
                "currency": "HUF",
                "amount": 0.0
            },
            "balanceType": "interimAvailable",
            "referenceDate": null,
            "creditLimitIncluded": null,
            "creditDebitIndicator": null
        }
    ],
    "sortCodeAccountNumber": null
}
]
}

```

## 6 GetBalances

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO77OTPV116000XXXXXXRO01"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 4551.39
        },
        "balanceType": "interimBooked",
        "referenceDate": null,
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      },
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 4551.39
        },
        "balanceType": "interimAvailable",
        "referenceDate": null,
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": null,
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```

## 7 GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_R... / 11. Intermediary API's... / 9. GetTransact...

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/OTP/XO45XS/{{(internalConsentId)}}/transactions?dateFrom=2022-08-01&dateTo=2` Send

Params • Authorization • Headers (7) Body Pre-request Script Tests • Settings Cookies

Headers 6 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/>	PSU-IP-Address	192.12.123.32				
	Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_R... / 11. Intermediary API's... / 9. GetTransact...

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/OTP/XO45XS/{{(internalConsentId)}}/transactions?dateFrom=2022-08-01&dateTo=2` Send

Params • Authorization • Headers (7) Body Pre-request Script Tests • Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	dateFrom	2022-08-01			
<input checked="" type="checkbox"/>	dateTo	2022-08-20			
<input checked="" type="checkbox"/>	bookingStatus	booked			
	Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_R... / 11. Intermediary API's... / 9. GetTransact...

GET `{{(API_BASE_URI)}/gateway/core/rest/api/accounts/OTP/XO45XS/{{(internalConsentId)}}/transactions?dateFrom=2022-08-01&dateTo=2` Send

Params • Authorization • Headers (7) Body Pre-request Script Tests • Settings Cookies

```

1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7   postman.setEnvironmentVariable("next_page", null);
8 }

```

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {},
    "transactions": {
      "booked": [
        {
          "transactionId": "120963140",
          "entryReference": null,
          "endToEndId": null,
          "bookingDate": "2017-12-18",

```

```

    "valueDate": "2017-12-18",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 40.0
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": null,
    "creditorAccount": {
      "iban": null
    },
    "debtorName": "internal",
    "debtorAccount": {
      "iban": ""
    },
    "remittanceInformationUnstructured": "Depunere numerar: dep num
//447428373/MOLNAR ROBERT MOLNAR ROBERT",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  },
  {
    "transactionId": "144007637",
    "entryReference": null,
    "endToEndId": null,
    "bookingDate": "2018-05-22",
    "valueDate": "2018-05-22",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 1235.0
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": null,
    "creditorAccount": {
      "iban": null
    },
    "debtorName": "internal",
    "debtorAccount": {
      "iban": ""
    },
    "remittanceInformationUnstructured": "Incasare OP-
22313534/STRATOLYTICS SRL : SALAR 2018 Aprilie",
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
}

```

```

    ],
    "pending": [],
    "links": null
  },
  "balances": []
}
}

```

## 8 GetAccountDetails

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 11. Intermediary API's OTP / 10. GetAccountDetails

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/OTP/XO45XS/{{internalConsentId}}/details` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "XO45XS",
    "iban": "RO770TPV116000XXXXXXRO01",
    "currency": "RON",
    "name": "CurrentRO1",
    "product": null,
    "cashAccountType": null,
    "status": null,
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}
}

```

## 9 DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 11. Intermediary API's OTP / 11 DeleteConsent

DELETE `{{(API_BASE_URI)}}/gateway/core/rest/api/deleteConsent/OTP/{{(internalConsentId)}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

## 10 RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 11. Intermediary API's OTP / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	<code>{{(internalConsentId)}}</code>			
<input checked="" type="checkbox"/> access_token	<code>{{(access_token)}}</code>			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 11. Intermediary API's OTP / 1.1 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

none
  form-data
  x-www-form-urlencoded
  raw
  binary
  GraphQL

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	<code>{{(refresh_token)}}</code>		
<input checked="" type="checkbox"/> client_id	<code>{{(client_id-partner)}}</code>		
Key	Value	Description	












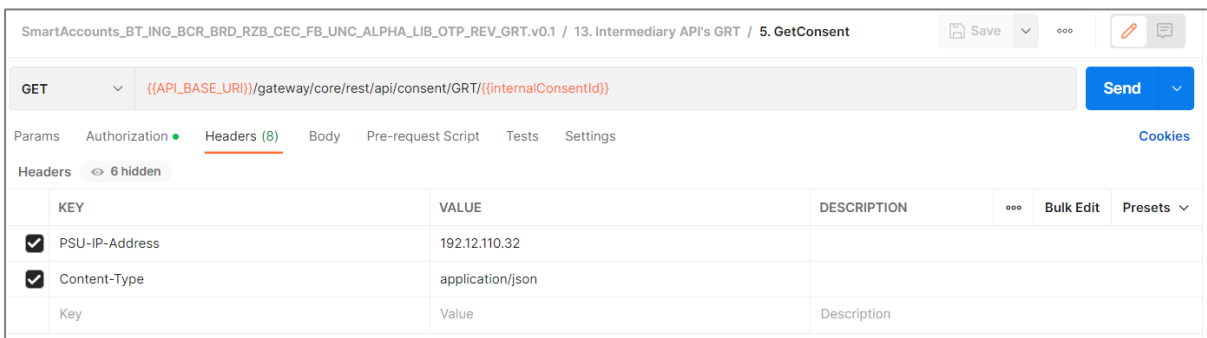
Name and surname	LUCIAN
Last login date	16/02/2023 14:18
Login method	Login via Mobile Notification
Mobile Device	Samsung · 16/02/2023 14:18
Session information	TACTICAL 16/02/2023 14:19:32 Google Chrome

 To approve the mobile notification **39** seconds left.

[SEND NOTIFICATION AGAIN](#)

After approving mobile notification, PSU will be redirected to the established page.

### 3. GetConsent



SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 13. Intermediary API's GRT / 5. GetConsent

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/GRT/{{internalConsentId}}` [Send](#)

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Headers [6 hidden](#)

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [],
      "balances": [],
      "transactions": [],
      "availableAccounts": "allAccounts"
    },
    "consentStatus": "valid",
    "frequencyPerDay": 3,
    "lastActionDate": null,
    "validUntil": "2019-10-10",
    "recurringIndicator": true,
    "combinedServiceIndicator": null,
    "creationDate": null
  }
}
```

#### 4. GetConsentStatus

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "valid"
  }
}
```

#### 5. GetAccounts

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "Uk8yMlVHQkkwMDAwMDEyMDEyNzI4Uk90",
      "iban": "RO22UGBI0000012012728RON",
      "currency": "RON",
      "name": "RON Account",
      "product": null,
      "cashAccountType": "CACC",
      "status": "enabled",
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
    }
  ]
}
```

```

"workingBalance": null,
"onlineActualBalance": null,
"balances": [
  {
    "balanceAmount": {
      "currency": "RON",
      "amount": 0.26
    },
    "balanceType": "openingBooked",
    "referenceDate": "2019-02-23",
    "creditLimitIncluded": "false",
    "creditDebitIndicator": null
  }
],
"sortCodeAccountNumber": null
},
{
  "resourceId": "Uk80NFVHQkkwMDAwMDEyMDMOMzEyUk90",
  "iban": "RO44UGBI0000012034312RON",
  "currency": "RON",
  "name": "RON Account",
  "product": null,
  "cashAccountType": "CACC",
  "status": "enabled",
  "bic": null,
  "accountOfficerDescription": null,
  "openingDate": null,
  "customerSector": null,
  "customerType": null,
  "accountUsage": null,
  "workingBalance": null,
  "onlineActualBalance": null,
  "balances": [
    {
      "balanceAmount": {
        "currency": "RON",
        "amount": 3.0
      },
      "balanceType": "openingBooked",
      "referenceDate": "2017-12-22",
      "creditLimitIncluded": "false",
      "creditDebitIndicator": null
    }
  ],
  "sortCodeAccountNumber": null
}
]
}

```

## 6. GetBalances

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 13. Intermediary API's GRT / 8. GetBalances

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/GRT/Uk8yMIVHQkkwMDAwMDEyMDEyNzI4Uk9O/({internalConsentId})/balances` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 0.26
        },
        "balanceType": "openingBooked",
        "referenceDate": "2019-02-23",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null,
        "lastChangeDateTime": "2019-02-23-04.37.26.177236",
        "lastCommittedTransaction": null,
        "transactionStatus": null
      }
    ]
  }
}
```

## 7. GetTransactions

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 13. Intermediary API's G... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/GRT/Uk8yMIVHQkkwMDAwMDEyMDEyNzI4Uk9O/({internalConsentId})/transactions?dateFrom=20` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32			
Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 13. Intermediary API's G... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/GRT/Uk8yMIVHQkkwMDAwMDEyMDEyNzI4Uk9O/{{internalConsentId}}/transactions?dateFrom=20` Send

Params • Authorization • Headers (7) Body Pre-request Script Tests • Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	dateFrom	2023-01-01			
<input checked="" type="checkbox"/>	dateTo	2023-02-09			
<input checked="" type="checkbox"/>	bookingStatus	booked			
	Key	Value	Description		

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 13. Intermediary API's G... / 9. GetTransactio...

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/GRT/Uk8yMIVHQkkwMDAwMDEyMDEyNzI4Uk9O/{{internalConsentId}}/transactions?dateFrom=20` Send

Params • Authorization • Headers (7) Body Pre-request Script Tests • Settings Cookies

```

1 const responseJson = pm.response.json();
2 let next = responseJson.payload.transactions.links;
3 if (next != null) {
4   postman.setEnvironmentVariable("next_page", next.next.href);
5 }
6 else {
7   postman.setEnvironmentVariable("next_page", null);
8 }

```

**Response:**

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "20190126083235988627",
          "entryReference": "2019-01-26-08.32.35.983153",
          "endToEndId": null,
          "bookingDate": "2019-01-26",
          "valueDate": "2019-01-28",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "RON",
            "amount": 1.0
          },
          "transactionType": null,
          "exchangeRate": [],
          "creditorName": "Creditor Name",
          "creditorAccount": {
            "iban": "RO22UGBI0000012012728RON"
          }
        }
      ]
    }
  }
}

```

```

    },
    "debtorName": "Debtor Name",
    "debtorAccount": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "remittanceInformationUnstructured": null,
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "smartRemittance": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  },
  {
    "transactionId": "20190223043726177236",
    "entryReference": "2019-02-23-04.37.26.173240",
    "endToEndId": null,
    "bookingDate": "2019-02-23",
    "valueDate": "2019-02-25",
    "executionDateTime": null,
    "transactionAmount": {
      "currency": "RON",
      "amount": 1.0
    },
    "transactionType": null,
    "exchangeRate": [],
    "creditorName": "Creditor Name",
    "creditorAccount": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "debtorName": "Debtor Name",
    "debtorAccount": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "remittanceInformationUnstructured": null,
    "proprietaryBankTransactionCode": null,
    "additionalInformation": null,
    "smartRemittance": null,
    "transactionStatus": null,
    "creditDebitIndicator": null
  }
],
"pending": [],
"links": null
},
"balances": [
  {
    "balanceAmount": {
      "currency": "RON",
      "amount": 0.26
    },
    "balanceType": "openingBooked",

```



```

        "referenceDate": "2019-02-23",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null,
        "lastChangeDateTime": "2019-02-23-04.37.26.177236",
        "lastCommittedTransaction": "2019-02-23-04.37.26.173240",
        "transactionStatus": null
    }
}
}
}

```

## 8. GetTransactionsDetails

The screenshot shows a REST client interface with the following details:

- Method:** GET
- URL:** `{{(APL_BASE_URI)}}/gateway/core/rest/api/accounts/GRT/Uk8yMIVHQkwMDAwMDEyMDEyNzI4Uk9O/((InternalConsentId))/transactions/20190126083`
- Headers (7):**

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32	
Key	Value	Description

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "transactionId": "20190126083235988627",
    "entryReference": "2019-01-26-08.32.35.983153",
    "endToEndId": null,
    "bookingDate": "2019-01-26",
    "valueDate": "2019-09-23",
    "transactionAmount": {
      "currency": "RON",
      "amount": 1.0
    },
    "transactionType": null,
    "creditorName": "Creditor Name",
    "creditorAccount": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "debtorName": "Debtor NAME",
    "debtorAccount": {
      "iban": "RO22UGBI0000012012728RON"
    },
    "remittanceInformationUnstructured": null,
    "executionDateTime": null
  }
}

```

## 9. GetAccountDetails

The screenshot shows a REST client interface with the following details:

- Method: GET
- URL: `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/GRT/Uk8yMlVHQkkwMDAwMDEyMDEyNzI4Uk9O/{{(internalConsentId)}}/details`
- Headers (7):
  - PSU-IP-Address: 192.12.123.32
  - Key: Value

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "Uk8yMlVHQkkwMDAwMDEyMDEyNzI4Uk9O",
    "iban": "RO22UGBI0000012012728RON",
    "currency": "RON",
    "name": "Main Account",
    "product": null,
    "cashAccountType": "CACC",
    "status": "enabled",
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 0.26
        },
        "balanceType": "openingBooked",
        "referenceDate": "2019-02-23",
        "creditLimitIncluded": "false",
        "creditDebitIndicator": null
      }
    ],
    "sortCodeAccountNumber": null
  }
}
```

## 10. DeleteConsent

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v... / 13. Intermediary API's G... / 12 DeleteConse...

DELETE `{{(API_BASE_URI)}}/gateway/core/rest/api/deleteConsent/GRT/{{(internalConsentId)}}` Send

Params Authorization **Headers (7)** Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}
```

## 11. RefreshToken

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 13. Intermediary API's GRT / 11 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization **Headers (9)** Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{(internalConsentId)}}				
<input checked="" type="checkbox"/> access_token	{{(access_token)}}				
Key	Value	Description			

SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 13. Intermediary API's GRT / 11 RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Cookies

none
  form-data
  x-www-form-urlencoded
  raw
  binary
  GraphQL

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	{{(refresh_token)}}			
<input checked="" type="checkbox"/> client_id	{{(client_id-partner)}}			
Key	Value	Description		





```

XpwIjoidGVzdGNsaWVudHYxIiwic2Vzc2lubl9zdGF0ZSI6IjE5ZDFkN2NhLTUzMzktNDVhZmQyLWl0
MzEwZmZmMjVmZCIsInNjb3B1Ijoic2lhcncRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjExODM1MiJ9.
_w
cB94x8cWuMgqNwPqjZ-2ECAZ7ITK--aFMpedQHfCc"
}
}

```

## 2. initConsent

The screenshot shows a REST client interface with the following details:

- Method:** POST
- URL:** {{(API\_BASE\_URI)}}/gateway/core/rest/api/initConsent/({internalConsentId})
- Headers (11):**

Key	Value	Description
Content-Type	application/json	
PSU-IP-Address	192.12.110.32	
PSU-ID-Type	ALL	
Key	Value	Description

The screenshot shows the 'Body' tab of the REST client interface with the following details:

- Method:** POST
- URL:** {{(API\_BASE\_URI)}}/gateway/core/rest/api/initConsent/({internalConsentId})
- Body Type:** raw
- Body Content:**

```

1 {
2   "codeBank": "LIB",
3   "periodOfValid": 90,
4   "psuEmail": "aaaa@itsmartsystems.eu",
5   "psuIntermediarId": "324567",
6   "redirectURL": "https://google.com",
7   "TAccepted": true
8 }

```


### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "RECEIVED",
    "consentId": null,
    "_links": {
      "scaOAuth": {
        "href": "https://api.sandboxaccounts.smartfintech.eu/gateway/core/r
est/api/authorization?internalConsentId=118352&bankRedirectUri=https://is-
test.librabank.ro:9443/oauth2/authorize?state%3DeyJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiYWx
nIjoizGlyIiwic2Vzc2lubl9zdGF0ZSI6IjE5ZDFkN2NhLTUzMzktNDVhZmQyLWl0MzEwZmZmMjVmZCIsInNjb3B1Ijoic2lhcncRhY2NvdW50c19jb25zZW50X2lkX2NsYWltOjExODM1MiJ9.
_wcB94x8cWuMgqNwPqjZ-2ECAZ7ITK--aFMpedQHfCc"

```




**LIBRA** 

**i** Smartaccounts solicita acces la conturile tale.

Selecteaza conturile pentru care oferi acces:

**Selectati toate**

<input checked="" type="checkbox"/> RO20BREL Cont online business	<b>978.43 RON</b>
Permisuni acces informatii cont: IBAN Sold Tranzactii	
<input checked="" type="checkbox"/> RO51 Cont Online Cont Online	<b>1.000001E7 RON</b>
Permisuni acces informatii cont: IBAN Sold Tranzactii	

**LIBRA** 


**i** Ati oferit acces la:

RO20BREL RON
Permisuni acces informatii cont: <input checked="" type="checkbox"/> IBAN <input checked="" type="checkbox"/> Sold <input checked="" type="checkbox"/> Tranzactii
RO51BREL RON
Permisuni acces informatii cont: <input checked="" type="checkbox"/> IBAN <input checked="" type="checkbox"/> Sold <input checked="" type="checkbox"/> Tranzactii

After selecting accounts and pressing "Continua", thus authorising the consent for selected account, developer will be redirected to the established page.



2.2 initConsent in PROD – the example below shows how the PSU will interact with bank's internet banking application

**LIBRA**  INTERNET BANK

**Conectare la Libra Internet Bank**

Id utilizator / Alias

Parola

Renunta Login

**LIBRA**  INTERNET BANK

**Smart Fintech solicita acces la conturile tale.**

Selecteaza conturile pentru care oferi acces:

**Selectati toate**

RO  
Cont Curent Persoane Fizice 42 RON

Permisuni acces informatii cont:  
IBAN Sold Tranzactii

Renunta Continua

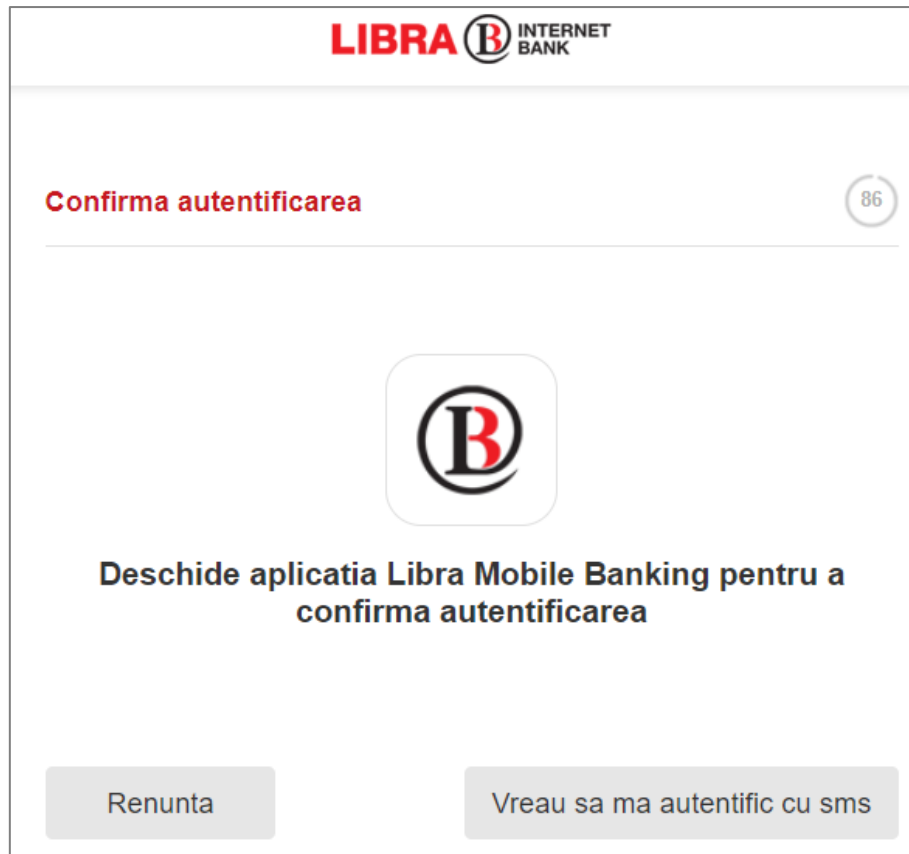
**LIBRA**  INTERNET BANK

**Ati oferit acces la:**

RO3 100  
RON

Permisuni acces informatii cont:  
 IBAN  Sold  Tranzactii

Continua



### 3. GET Consent

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

#### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "access": {
      "accounts": [
        {
          "iban": "RO00BREL0000000000000000",
          "currency": "RON"
        }
      ],
      "balances": [
        {
          "iban": "RO00BREL0000000000000000",

```

```

        "currency": "RON"
    }
  ],
  "transactions": [
    {
      "iban": "RO00BREL0000000000000000",
      "currency": "RON"
    }
  ],
  "availableAccounts": null
},
"consentStatus": "valid",
"frequencyPerDay": 4,
"lastActionDate": "2023-04-05",
"validUntil": "2023-07-03",
"recurringIndicator": true,
"combinedServiceIndicator": false,
"creationDate": null
}
}

```

#### 4. GET ConsentStatus

GET `{{API_BASE_URI}}/gateway/core/rest/api/consent/LIB/{{internalConsentId}}/status` Send

Params Authorization **Headers (7)** Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.110.32				
Key	Value	Description			

#### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "consentStatus": "VALID"
  }
}

```

#### 5. GET Accounts

GET `{{API_BASE_URI}}/gateway/core/rest/api/accounts/LIB/{{internalConsentId}}` Send

Params Authorization **Headers (7)** Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": [
    {
      "resourceId": "1000000000000",
      "iban": "RO00BREL0000000000000000",
      "currency": "RON",
      "name": "ABC S.R.L.",
      "product": "ABC S.R.L.",
      "cashAccountType": null,
      "status": null,
      "bic": null,
      "accountOfficerDescription": null,
      "openingDate": null,
      "customerSector": null,
      "customerType": null,
      "accountUsage": null,
      "workingBalance": null,
      "onlineActualBalance": null,
      "balances": [],
      "sortCodeAccountNumber": null
    }
  ]
}
```

## 6. GET Balances



Key	Value	Description	⋮	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO00BREL0000000000000000"
    },
    "balances": [
      {
        "balanceAmount": {
          "currency": "RON",
          "amount": 978.43
        }
      }
    ]
  }
}
```

```

        "balanceType": "expected",
        "referenceDate": "2023-04-05",
        "creditLimitIncluded": null,
        "creditDebitIndicator": null,
        "lastChangeDateTime": "2023-04-05 09:59:12",
        "lastCommittedTransaction": null,
        "transactionStatus": null
    }
}
}
}

```

## 7. GET Transactions

The screenshot shows a REST client interface with a GET request to the endpoint: `{{(API_BASE_URI)}}/gateway/core/rest/api/accounts/LIB/1000000000000/{{(internalConsentId)}}/transactions?dateFrom=2023-02-01&dateTo=2023-0...`. The 'Query Params' section is active, displaying a table with the following data:

Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/> dateFrom	2023-02-01			
<input checked="" type="checkbox"/> dateTo	2023-04-05			
Key	Value	Description		

The screenshot shows the same REST client interface with the 'Headers' section active. It displays a table with the following data:

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "account": {
      "iban": "RO00BREL0000000000000000"
    },
    "transactions": {
      "booked": [
        {
          "transactionId": "FT000000ZPVZ",
          "entryReference": null,
          "endToEndId": null,
          "bookingDate": "2023-01-27",
          "valueDate": "2023-01-27",
          "executionDateTime": null,
          "transactionAmount": {
            "currency": "RON",

```

```

        "amount": -4.0
      },
      "transactionType": null,
      "exchangeRate": [],
      "creditorName": null,
      "creditorAccount": {},
      "debtorName": null,
      "debtorAccount": {},
      "remittanceInformationUnstructured": "Speze transfer",
      "proprietaryBankTransactionCode": null,
      "merchantDetails": null,
      "additionalInformation": null,
      "smartRemittance": null,
      "transactionStatus": null,
      "creditDebitIndicator": null
    }
  ],
  "pending": [],
  "links": null
},
"balances": []
}
}

```

## 8. GET Accounts Details

The screenshot shows a REST client interface with the following details:

- Method:** GET
- URL:** `{{API_BASE_URI}}/gateway/core/rest/api/accounts/LIB/1000000000000/{{internalConsentId}}/details`
- Headers (7):**

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "resourceId": "1000000000000",
    "iban": "RO00BREL0000000000000000",
    "currency": "RON",
    "name": "account alias 2",
    "product": null,
    "cashAccountType": null,
    "status": "enabled",
    "bic": null,
    "accountOfficerDescription": null,
    "openingDate": null,
    "customerSector": null,
    "customerType": null,
  }
}

```

```

    "accountUsage": null,
    "workingBalance": null,
    "onlineActualBalance": null,
    "balances": [],
    "sortCodeAccountNumber": null
  }
}

```

## 9. Delete Consent

DELETED `{{(API_BASE_URI)}}/gateway/core/rest/api/deleteConsent/LIB/{{(internalConsentId)}}` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> PSU-IP-Address	192.12.123.32				
Key	Value	Description			

### Response:

```

{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "message": "Consent has been successfully revoked"
  }
}

```

## 10. RefreshToken

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

Headers 7 hidden

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> internalConsentId	{{(internalConsentId)}}				
<input checked="" type="checkbox"/> access_token	{{(access_token)}}				
Key	Value	Description			

POST `{{(MTLS_BASE_URI)}}/gateway/authenticate/rest/api/refreshToken` Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/> refresh_token	{{(refresh_token)}}			
<input checked="" type="checkbox"/> client_id	{{(client_id-partner)}}			
Key	Value	Description		

### Response:

```

{
  "status": 200,

```

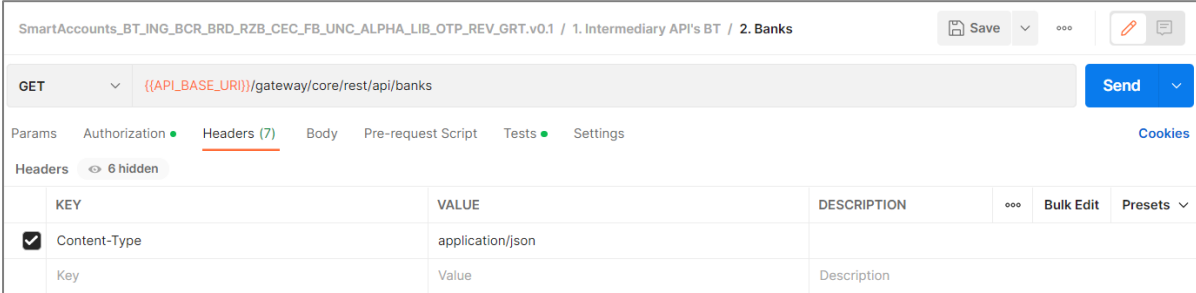




## 7. Generic APIs (available in all banks' flows)

For every bank there will be a GET "Banks" and a POST "CheckEmail" calls. These APIs can be called after the authentication of the TPP – (POST) "Authenticate".

### 1. Banks



SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 1. Intermediary API's BT / 2. Banks

GET `{{(APL_BASE_URI)}}gateway/core/rest/api/banks` Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Content-Type	application/json				
Key	Value	Description			

*Response:*

```
{
  "id": 1,
  "code": "BT",
  "name": "Banca Transilvania",
  "logo": "...",
  "active": true,
  "bic": "BTRL",
  "requiredParameters": {
    "requiresPSUIDType": false,
    "requiresPSUID": false,
    "requiresIban": false
  }
},
{
  "id": 2,
  "code": "ING",
  "name": "ING Bank",
  "logo": "...",
  "active": true,
  "bic": "INGB",
  "requiredParameters": {
    "requiresPSUIDType": false,
    "requiresPSUID": false,
    "requiresIban": false
  }
},
{
  "id": 3,
  "code": "BRD",
  "name": "BRD Group Societe Generale",
```

```

    "logo": "...",
    "active": true,
    "bic": "BRDE",
    "requiredParameters": {
      "requiresPSUIDType": true,
      "requiresPSUID": true,
      "requiresIban": false
    }
  },
  {
    "id": 4,
    "code": "BCR",
    "name": "BCR Bank",
    "logo": "...",
    "active": true,
    "bic": "RNCB",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 5,
    "code": "RZB",
    "name": "Raiffeisen Bank SA",
    "logo": "...",
    "active": true,
    "bic": "RZBR",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": true,
      "requiresIban": true
    }
  },
  {
    "id": 6,
    "code": "CEC",
    "name": "CEC Bank SA",
    "logo": "...",
    "active": true,
    "bic": "CECE",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 7,
    "code": "FB",

```

```

    "name": "First Bank SA",
    "logo": "...",
    "active": true,
    "bic": "PIRB",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 8,
    "code": "UNC",
    "name": "UniCredit Bank SA",
    "logo": "...",
    "active": true,
    "bic": "BACX",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 9,
    "code": "ALPH",
    "name": "Alpha Bank",
    "logo": "...",
    "active": true,
    "bic": "BUCU",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 10,
    "code": "LIB",
    "name": "Libra Bank",
    "logo": "...",
    "active": true,
    "bic": "BREL",
    "requiredParameters": {
      "requiresPSUIDType": false,
      "requiresPSUID": false,
      "requiresIban": false
    }
  },
  {
    "id": 11,

```

```

"code": "REV",
"name": "Revolut LTD",
"logo": "...",
"active": true,
"bic": "REVO",
"requiredParameters": {
  "requiresPSUIDType": false,
  "requiresPSUID": false,
  "requiresIban": false
}
},
{
  "id": 12,
  "code": "OTP",
  "name": "OTP Bank",
  "logo": "...",
  "active": true,
  "bic": "...",
  "requiredParameters": {
    "requiresPSUIDType": false,
    "requiresPSUID": true,
    "requiresIban": true
  }
},
{
  "id": 13,
  "code": "GRT",
  "name": "Garanti Bank",
  "logo": "...",
  "active": true,
  "bic": "...",
  "requiredParameters": {
    "requiresPSUIDType": false,
    "requiresPSUID": false,
    "requiresIban": false
  }
}
}

```

## 2. CheckEmail

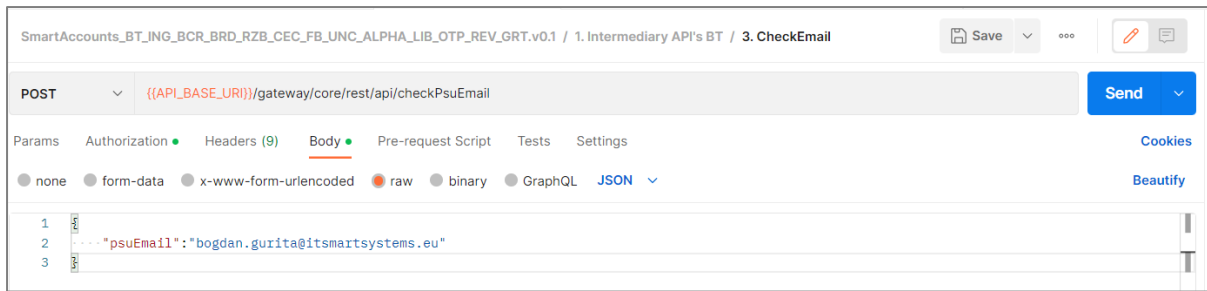
SmartAccounts\_BT\_ING\_BCR\_BRD\_RZB\_CEC\_FB\_UNC\_ALPHA\_LIB\_OTP\_REV\_GRT.v0.1 / 1. Intermediary API's BT / 3. CheckEmail Save v ... ✎ 🗨

**POST** v {{API\_BASE\_URI}}/gateway/core/rest/api/checkPsuEmail Send v

Params • Authorization • **Headers (9)** • Body • Pre-request Script • Tests • Settings Cookies

Headers 👁 8 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets <span style="font-size: 0.8em;">v</span>
<input checked="" type="checkbox"/>	Content-Type	application/json				
	Key	Value	Description			



**Response:**

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "existingAccount": true,
    "message": "Sunt de acord cu Termenii si Conditile Smart Fintech",
    "t&c": "https://www.smartfintech.eu/terms-and-conditions-for-smart-accounts"
  }
}
```

The "false" response should have the following structure:

```
{
  "status": 200,
  "messageStatus": "Success",
  "payload": {
    "existingAccount": false,
    "message": "Sunt de acord cu Termenii si Conditile Smart Fintech si cu crearea unui cont utilizand adresa de email bogdan.gurita@itsmartsystems.eu",
    "t&c": "https://www.smartfintech.eu/terms-and-conditions-for-smart-accounts"
  }
}
```

## 8. Error mapping & handling linked to a consent's status

Each bank raises a different error and with different error messages (or even responds with success) on every API when a consent is not valid.

When a consent expired, was overwritten, or deleted from bank's app (where applicable):

**Error group #1:** GetConsent and GetConsentStatus will all respond as following:

```
{
  "status": 401,
  "messageStatus": "Unauthorized",
  "source": "Bank",
  "moreDetails": {
    "text": "UNAUTHORIZED" OR "EXPIRED" OR "TERMINATEDBYTPP" OR "REVOKEDBYPSU"
  }
}
```

**Error group #2:** GetAccounts, GetBalances, GetTransactions, GetAccountDetails and GetTransactionDetails, DeleteConsent will all respond as following:

```
{
  "status": 401,
  "messageStatus": "Unauthorized",
  "source": "Bank",
  "moreDetails": {
    "text": "UNAUTHORIZED" OR "EXPIRED"
  }
}
```

When you receive errors mentioned for APIs in **Error group #2** (moreDetails.text: "UNAUTHORIZED" / "EXPIRED" / "TERMINATEDBYTPP" / "REVOKEDBYPSU") coupled with errors mentioned for APIs in **Error group #1** (moreDetails.text: "UNAUTHORIZED" / "EXPIRED"), then this means that a new consent must be initiated because the previous consent is not valid anymore.