

```
openapi: 3.0.0
info:
  version: 0.9.0
  title: Common Account API
  description:
    This specification defines a simple API to access information about bank accounts. The API is supposed to be
    used by customers who want to get information about their accounts such as current balance or transactions.
  termsOfService: ''
  contact:
    email: api@sfti.ch
  license:
    name: Apache 2.0
    url: 'http://www.apache.org/licenses/LICENSE-2.0.html'
servers:
  - url: account.sfti.ch
paths:
  /accounts:
    get:
      tags:
        - Account List
      description: return the list of all accounts accessible for the logged in user
      parameters:
        - in: query
          name: withBalance
          schema:
            type: boolean
          description: if set the balance of the accounts are included in the response
      responses:
        '200':
          description: paginated list of all accounts
          content:
            application/json:
              schema:
                type: object
                properties:
                  accounts:
                    type: array
```

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        items:
          $ref: '#/components/schemas/AccountDetails'
      _links:
        $ref: '#/components/schemas/Links'
/accounts/{account-id}:
  get:
    tags:
      - Account Details
    description: return the accounts details of the requested account
    parameters:
      - in: path
        name: account-id
        required: true
        schema:
          type: string
        description: the account the details are requested
      - in: query
        name: withBalance
        schema:
          type: boolean
        description: if set the balance of the accounts are included in the response
    responses:
      '200':
        description: account details of the requested account
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/AccountDetails'
/accounts/{account-id}/balances:
  get:
    tags:
      - account data of the specified account
    description: account data of the specified account
    parameters:
      - in: path
        name: account-id
        description: the account the details are requested

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    required: true
    schema:
      type: string
responses:
  '200':
    description: account details of the requested account
    content:
      application/json:
        schema:
          type: object
          properties:
            account:
              $ref: '#/components/schemas/AccountReference'
            balances:
              type: array
              items:
                $ref: '#/components/schemas/Balance'
/accounts/{account-id}/transactions:
  get:
    tags:
      - transactions to and from the specified account
    description: transactions to and from the specified account
    parameters:
      - in: path
        name: account-id
        required: true
        schema:
          type: string
        description: the account the details are requested
      - in: query
        name: entryReferenceFrom
        schema:
          type: string
      - in: query
        name: limit
        schema:
          type: integer
```

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- in: query
  name: dateFrom
  schema:
    $ref: '#/components/schemas/Date'
- in: query
  name: dateTo
  schema:
    $ref: '#/components/schemas/Date'
- in: query
  name: bookingStatus
  required: true
  schema:
    type: string
    enum:
      - booked
      - pending
      - both
responses:
  '200':
    description: account details of the requested account
    content:
      application/json:
        schema:
          type: object
          properties:
            account:
              $ref: '#/components/schemas/AccountReference'
            transactions:
              $ref: '#/components/schemas/AccountReport'
            balances:
              type: array
              items:
                $ref: '#/components/schemas/Balance'
            _links:
              $ref: '#/components/schemas/Links'
/accounts/{account-id}/transactions/{resourceId}:
  get:
```

```
tags:
  - details of the specified transaction
description: details of the specified transaction
parameters:
  - in: path
    name: account-id
    required: true
    schema:
      type: string
    description: the account the details are requested
  - in: path
    name: resourceId
    required: true
    schema:
      type: string
responses:
  '200':
    description: account details of the requested account
    content:
      application/json:
        schema:
          type: object
          properties:
            transactionDetails:
              $ref: '#/components/schemas/Transaction'
```

```
# -----
# ----- Models -----
# -----
```

```
components:
  schemas:
    # ---- Account Reference ----
    AccountReference:
      description: Account identifier
      type: object
      properties:
        iban:
          $ref: '#/components/schemas/Iban'
```

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    currency:
      $ref: '#/components/schemas/Currency'
# -----

# ---- Bank Identifier Code BIC ----
Bic:
  type: string
  maxLength: 11
  example: BANKCH10XXX
# -----

# --- Account Types ---
Iban:
  type: string
  example: CH93 0076 2011 6238 5295 7
# -----

# ---- Account Details -----
AccountDetails:
  description: account details, such as currency, balance, etc.
  type: object
  properties:
    resourceId:
      type: string
      maxLength: 35
    iban:
      $ref: '#/components/schemas/Iban'
    currency:
      $ref: '#/components/schemas/Currency'
    name:
      description: internal account name given by bank
      type: string
      maxLength: 35
    product:
      description: product name of the bank for this account
      type: string
      maxLength: 35

```

```
#---- has to be checked -----
cashAccountType:
  description: ExternalCashAccountType1Code ISO 20022
  type: string
# -----
bic:
  $ref: '#/components/schemas/Bic'
linkedAccounts:
  description: in case of pending card transaction the account the card is set up to
  type: string
  maxLength: 70
usage:
  type: string
  maxLength: 140
details:
  type: string
  maxLength: 140
balances:
  type: array
  items:
    $ref: '#/components/schemas/Balance'
#---- not sure if we need this, in TBG one of the links refers to the banks link to the account
_links:
  $ref: '#/components/schemas/Links'
# -----

# ---- Account Report ----
AccountReport:
  type: object
  properties:
    booked:
      type: array
      items:
        $ref: '#/components/schemas/Transaction'
    pending:
      type: array
      items:
```

```
        $ref: '#/components/schemas/Transaction'
    _links:
        $ref: '#/components/schemas/Links'
# -----

# ---- Transaction ----
Transaction:
  type: object
  properties:
    transactionId:
      type: string
    transactionType:
      $ref: '#/components/schemas/TransactionType'
    entryReference:
      type: string
      maxLength: 35
    endToEndId:
      type: string
      maxLength: 35
    mandateID:
      type: string
      maxLength: 35
    checkID:
      type: string
      maxLength: 35
    creditorId:
      type: string
      maxLength: 35
    bookingDate:
      $ref: '#/components/schemas/Date'
    valueDate:
      $ref: '#/components/schemas/Date'
    transactionAmount:
      $ref: '#/components/schemas/Amount'
    exchangeRate:
      type: array
      items:
```



```
    $ref: '#/components/schemas/ExchangeRate'
creditorName:
  type: string
  maxLength: 70
creditorAccount:
  $ref: '#/components/schemas/AccountReference'
ultimateCreditor:
  type: string
  maxLength: 70
debtorName:
  type: string
  maxLength: 70
debtorAccount:
  $ref: '#/components/schemas/AccountReference'
ultimateDebtor:
  type: string
  maxLength: 70
remittanceInformationUnstructured:
  type: string
  maxLength: 140
remittanceInformationStructured:
  type: string
  maxLength: 140
purposeCode:
  type: string
bankTransactionCode:
  type: string
proprietaryBankTransactionCode:
  type: string
_links:
  $ref: '#/components/schemas/Links'
# -----

# ---- Transaction Type ----
TransactionType:
  type: string
  pattern: '[A-Z]{3}'
```

enum:

- BNK # Securities Related Item - Bank fees
- BOE # Bill of exchange
- BRF # Brokerage fee
- CAR # Securities Related Item - Corporate Actions Related
- CAS # Securities Related Item - Cash in Lieu
- CHG # Charges and other expenses
- CHK # Cheques
- CLR # Cash letters/Cheques remittance
- CMI # Cash management item - No detail
- CMN # Cash management item - Notional pooling
- CMP # Compensation claims
- CMS # Cash management item - Sweeping
- CMT # Cash management item -Topping
- CMZ # Cash management item - Zero balancing
- COL # Collections (used when entering a principal amount)
- COM # Commission
- CPN # Securities Related Item - Coupon payments
- DCR # Documentary credit (used when entering a principal amount)
- DDT # Direct Debit Item
- DIS # Securities Related Item - Gains disbursement
- DIV # Securities Related Item - Dividends
- EQA # Equivalent amount
- EXT # Securities Related Item - External transfer for own account
- FEX # Foreign exchange
- INT # Interest
- LBX # Lock box
- LDP # Loan deposit
- MAR # Securities Related Item - Margin payments/Receipts
- MAT # Securities Related Item - Maturity
- MGT # Securities Related Item - Management fees
- MSC # Miscellaneous
- NWI # Securities Related Item - New issues distribution
- ODC # Overdraft charge
- OPT # Securities Related Item - Options
- PCH # Securities Related Item - Purchase (including STIF and Time deposits)
- POP # Securities Related Item - Pair-off proceeds

- PRN # Securities Related Item - Principal pay-down/pay-up
- REC # Securities Related Item - Tax reclaim
- RED # Securities Related Item - Redemption/Withdrawal
- RIG # Securities Related Item - Rights
- RTI # Returned item
- SAL # Securities Related Item - Sale (including STIF and Time deposits)
- SEC # Securities (used when entering a principal amount)
- SLE # Securities Related Item - Securities lending related
- STO # Standing order
- STP # Securities Related Item - Stamp duty
- SUB # Securities Related Item - Subscription
- SWP # Securities Related Item - SWAP payment
- TAX # Securities Related Item - Withholding tax payment
- TCK # Travellers cheques
- TCM # Securities Related Item - Tripartite collateral management
- TRA # Securities Related Item - Internal transfer for own account
- TRF # Transfer
- TRN # Securities Related Item - Transaction fee
- UWC # Securities Related Item - Underwriting commission
- VDA # Value date adjustment
- WAR # Securities Related Item - Warrant

---- Balance ----

Balance:

type: object

properties:

balanceAmount:

\$ref: '#/components/schemas/Amount'

balanceType:

\$ref: '#/components/schemas/BalanceType'

lastChangeDateTime:

\$ref: '#/components/schemas/DateTime'

referenceDate:

\$ref: '#/components/schemas/Date'

lastCommittedTransaction:

type: string

```
    maxLength: 35
# -----

# ---- BalanceType ----
BalanceType:
  type: string
  enum:
    - closingBooked
    - expected
    - authorised
    - openingBooked
    - interimAvailable
    - forwardAvailable
# -----

# ---- Currency ----
Currency:
  description: ISO 4217 code
  type: string
  pattern: '[A-Z]{3}'
# -----

# ---- Amount ----
Amount:
  description: amount to be transferred, with currency
  type: object
  required:
    - currency
    - content
  properties:
    currency:
      $ref: '#/components/schemas/Currency'
    content:
      description: amount given with fractional digits, the separator is a dot
      type: string
      pattern: '-?\d{1,14}(\?:\.\d{1,3})?'
```

```
# -----

# ---- Exchange Rate ----
ExchangeRate:
  type: object
  properties:
    currencyFrom:
      $ref: '#/components/schemas/Currency'
    rateFrom:
      type: string
    currencyTo:
      $ref: '#/components/schemas/Currency'
    rateTo:
      type: string
    rateDate:
      $ref: '#/components/schemas/Date'
    rateContract:
      type: string
# -----

# ---- Date Formats
Date:
  type: string
  format: date
  example: 2018-04-13
DateTime:
  type: string
  format: date-time
  example: 2018-04-13T11:11:11Z
# -----

# ---- Links ----
Links:
  description: links returned in the answer of an API call
  type: object
  properties:
    account:
```

```
    type: string
  self:
    type: string
  first:
    type: string
  previous:
    type: string
  next:
    type: string
  last:
    type: string
# -----
```

externalDocs:

```
  description: Find out more about SFTI API specifications
  url: 'https://www.swissfintechinnovations.ch/API-Specifications'
```