

Account Data and Services 3.3

# Document Status

status: Request for Comment (valid values are < Request for Comment, Preliminary Review, Public Review, Architectural Review, Final Review, Published, Deprecated)

This version: **Assembla**.com. Files Tag = CUFX\_3.3\_RFC\_Active

Previous Version: **Assembla**.com. Files Tag = CUFX\_3.2\_RFC\_Archive

# Authors and Change Log

|  |  |  |
| --- | --- | --- |
| Version | Date | Changes |
| 1.0.00 |  | * Initial Release |
| 1.0.01 |  | * Clarify optional accountTypes and accountIDs parameters. Fixed parameters and resource name to be camel case. Added implied account object. Fixed some heading formatting to correctly format Table-of-Contents. |
| 1.0.02 |  | * Fix accountIDs array data type to array of Ids, credit limit and starting balance to decimal data type, removed edit mask from compounding frequency since it doesn’t apply, |
| 1.0.03 |  | * Updated definition for FI ID * Clarified Positive/Negative values for Balance fields for loan products. |
| 2.0.01 |  | * Updated to use new messageContext, AccountFilter.xsd and Error.xsd |
| 2.0.02 |  | * Merge in PFM services read of account data |
| 2.0.03 |  | * Fix typos in document |
| 2.0.04 |  | * Updated Definitions related to the specification |
| 2.0.05 |  | * Merged AccountDetail info into Account |
| 2.0.06 |  | * Clean up examples to match current XSD. |
| 2.0.07 |  | * Switch to use X-HTTP-METHOD-OVERRIDE standard rather than subMethod non-Standard method for overriding request types. * Create a accountMessage wrapper for every message to increase ability for infrastructure to be serialize the data * Added in page footer with page number |
| 3.0 | **10/22/2013** | * Versioning and format change with release CUFX 3.0 |
| 3.0 | **12/12/2013** | * Update examples X-API-Version to >=3.0.0 |
| 3.0 | **12/18/2013** | * Minor text updates and formatting |
| 3.1 | **07/17/2015** | * Updated to release 3.1 |
| 3.2 | **05/10/2016** | * Updated to release 3.2 |
| 3.3 | **02/15/2017** | * Updated to release 3.3 |

# Overview of Specification

Defines the Account Data object for use by all specifications.

# Any know Errors in the document

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| **Error Description** | Status of Error |
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# Document Conventions

List any document conventions such as what bold and italics mean and how the document is intended to be read.

“Within this specification, the key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" are to be interpreted as described in W3 Working Group (W3C)]. However, for readability, these words do not appear in all uppercase letters in this specification.

At times, this specification recommends good practice for authors and user agents. These recommendations are not normative and conformance with this specification does not depend on their realization. These recommendations contain the expression "We recommend ...", "This specification recommends ...", or some similar wording.”

All formatting in this document utilize Word Styles.

All Citations must utilize Word Citations to automatically show at the end of the document.

All updates after the initial creation must be performed using Tracking Changes turn on and Accepted by the Architecture committee.

# Definitions related to the specification

AccountData

The CUFX Account Data model and Services defines the account data model and Services used by all specifications. Accounts are an abstract summary of loan, share and investment balances at a high level. Any financial product stored in a financial services platform optionally including any transactions associated with that account.

# Data Elements

## Variables used when accessing the account object (but not part of the object)

Refer to Security Services documentation to understand what may be contained the header and processed by security procedures. When accessing the data include **messageContext.xsd** so that the service can determine the scope of the request. Include any filter variables related to the request. See **AccountFilter.xsd.** Note that the fields for filtering for account detail and account are identical.

The filters are used to filter based on associated data type for the account detail such as accounts for an account id, account type, or transaction range. etc.. Combining filters can be used to get list of accounts for a specific relationship, party, etc..

## Account Object attributes

All CUFX fields related to an account are defined in **Account.xsd**. Note that some fields are variable based on the accountType. These variations are defined in **Meta.xsd**. Further definitions for the account will be in the specific product type definition file such as **Loan.xsd** and **Deposit.xsd**. ***Note that Loan.xsd and Deposit.xsd inherit from Account.xsd and therefore all the fields within Account.xsd are available to the Loan.xsd and deposit.xsd as well***.

Note: Fields not listed in the calling specification are not to be returned to the calling specification. i.e. If the field transaction type is not listed in the calling specification, then do not return the data field to alleviate issues with unexpected information and bloat of information being returned to light weight applications.

# Services

## account

To READ high level account and transaction data **ONLY**, clients access the Account Data services. To fully interact with an account, the ***loan or deposit services*** should be used.

* Specifications depend on the Security service for single-sign-on and/or authentication.

## Overview

|  |  |
| --- | --- |
| Definition | Collection of services to read an account or its transactions |
| Overview of Capabilities | Read an account. The following scenarios may exist. The account may be connected to an existing relationship and parties and may contain transactions. |
| Dependencies | Security Services, messageContext |
| Sample CUFX REST LINK | https://api.dataprovider.com/account |
| CUFX SOAP LINK |  |
| CUFX WaDL LINK |  |

## Party Resource based create, read, update, delete services

|  |  |
| --- | --- |
| INPUTS | Cufx:AccountMessage.xsd which includes   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html).xsd * cufx:AccountFilter.xsd (for read) |
| Outputs | cufx:Account.xsd |
| Return Values | cufx: Error.xsd |
| Side Effects | Read has no side effects |
| Dependencies | Security Services for authentication and security. |
| Fields used | **Message Headers** : See security services  **messageContext**: See messageContext.xsd  **Filters**: See AccountFilter.xsd  **Attributes: account : See Account.xsd** |
| Testing Procedures for Certification | Access the CUFX account data test service and verify that test data is returned appropriately. |

### Service Message: Get account with transactions

### REST-JSON READ REQUEST-RESPONSE

Clients submit an account data request to the Data Provider’s URL. For all CUFX RESTful-JSON requests, the client must set the appropriate headers. This example does not include all fields and is for example only.

REQUEST:

Headers:

**<security related header parameters... see Security Services>**

Accept: application/json

Accept-Charset: utf-8

Accept-Language: en-us (IANA – language codes)( (W3C))

Content-type: application/json; charset=utf-8

**X-HTTP-Method-Override: GET**

X-API-Version: >=3.3.0

**POST** <https://api.dataprovider.com/account>

{

“accountMessage”:{

“messageContext”: { <see messageContext.xsd> },

“accountFilter”: { <see AccountFilter.xsd for complete list of filters>

“accountIdList”:[

”8481235348415asdf5435434”

],

       “transactionStartDateTime”: “2013-01-01”,

       “transactionEndDateTime”: “2013-01-31”

}

}

}

The Data Provider responds to requests with a JSON-formatted message:

**RESPONSE:**

Headers:

Status Code: 200 Ok

Content-type: application/json; charset=utf-8

Content-Language: en-us

**Payload:**

{

“accountList”: [

{

“accountId”: “8481235348415asdf5435434”,

“description”: “Electronic Checking”,

“type”: “Checking”,

“subtype”:”70”,

“openDate”:”2010-01-31”,

“accountNickname”:”Saving up for my car fund”,

“micrAccountNumber”:”130000031334353421”,

“branch”:”Homestead”,

“actualBalance”:{“value”:1355.00},

“availableBalance”: {“value”:1350.00,“currencyCode”:”USD”},

“minimumBalance”:{“value”:1000.00,“currencyCode”:”USD”},

“rateType”:”Fixed”,

“soureCode”:”promotion”,

“partyIdList”:[

”01343534343”,

”3534135343”

],

“customData” : [

{“name”:”LoyaltyPointsBalance”,

“value”:”15003”}

],

“meta”: {

“apy”:”1.540”,

},

“transactionList”: [

{

“id”: “159126196sk916334”,

“type”: “Debit”,

“amount”:{“value”:35.34,”currencyCode”:”GBP”},

“description”: “Harrah’s Dept. Store”,

“dateTimePosted”: “2013-01-28T11:03Z”,

“status”:”Posted”,

“merchantCategoryCode”:”151532”,

“source”:”PinPurchase”,

“customData” : [

{“name”:”LoyaltyPoints”,

“value”:”13”}

],

]

}, …

]

}

# General Error handling For All Services

Refer to latest CUFX documentation *Error Mapping*.

# Bibliography

W3C. (n.d.). *Key words for use in RFCs to Indicate Requirement Levels [RFC2119].* Retrieved Sept. 8th, 2011, from W3C.