

Collateral Data Model and Services 3.0

Document Status

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

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Change Log

|  |  |  |
| --- | --- | --- |
| Version | Date | Changes |
| 0.0.1 |  | * Initial Creation |
| 0.0.2 |  | * Switch to use X-HTTP-METHOD-OVERRIDE standard rather than subMethod non-Standard method for overriding request types. * Create a collateralMessage wrapper for every message to increase ability for infrastructure to serialize the data * Change Create method to accept a list so that it can create multiple collateral at the same time. * Change Delete method to accept a Filter so that it can delete multiple collateral at the same time. * Update Delete method to use DELETE override rather than GET |
| 3.0 | **10/29/2013** | * Versioning and format change with release CUFX 3.0 |
| 3.0 | **12/12/2013** | * Update examples X-API-Version to >=3.0.0 |

Overview of Specification

The Collateral specification describes the services used as part of a new membership application process, for creating, updating, and modifying collateral records.

Any know Errors in the document

|  |  |
| --- | --- |
| **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

System of record

Authoritative data source for information such as the collateral for which this specification will be creating.

Collateral

Collateral is defined as something used to secure a loan. Examples of collateral are a car, boat, or Certificate of Deposit (CD).

# High level use cases

## Use Case 1: Adding a collateral item and associating it to a loan

1

CreateCollateral API

Contains all the details about the collateral

CUFX New Member Application

2

CreateCollateralResponse

Would return the CollateralId that was just created

3

CreateLoan API

Contains collateralList element with the CollateralId

CUFX Core Data Provider

4

Loan Creation Response (CreateLoanAPI) contains confirmation or error

3

Disburse loan funds (DisburseFunds API) loan disbursement information such as printing a check, transfers, cash

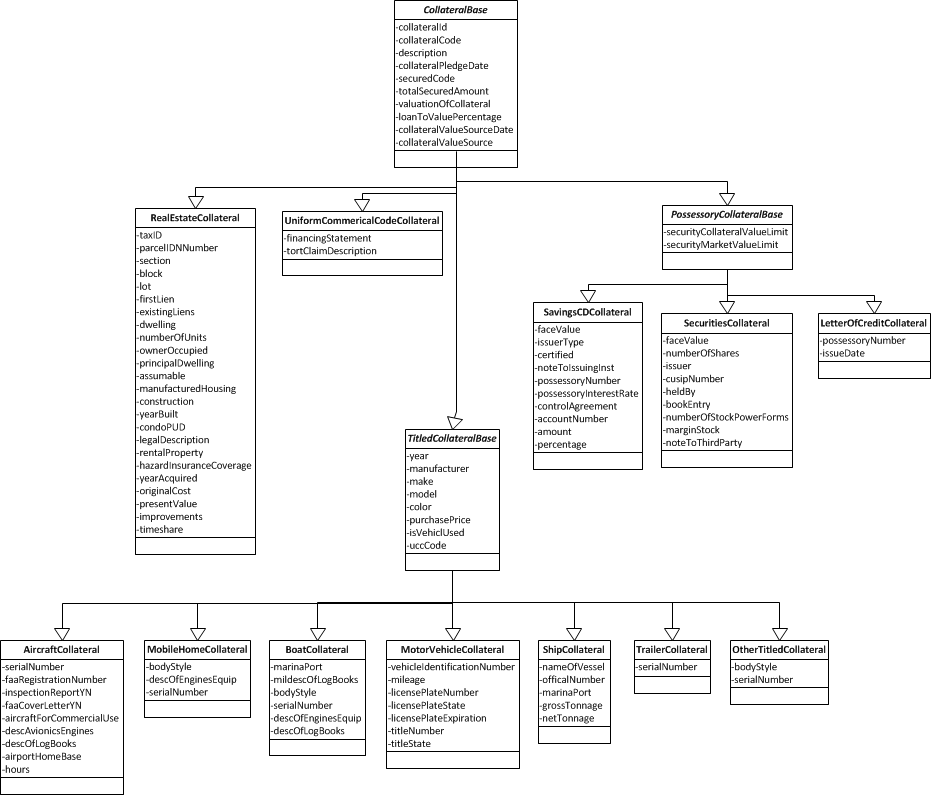
4

Disburse loan funds response (DisburseFunds API) contains confirmation or error

# Data Elements

## Collateral Inheritence Hierarchy

There are many different types of collateral that have many different attributes. To support the various types of collateral, the following inheritance hierarchy was created. Any object that ends with “Base”, is an abstract base type, and cannot be instantiated. For example, you cannot create a PossessoryCollateralBase object, but you can create a SecuritiesCollateral object which inherits from PossessoryCollateralBase.



### CollateralBase

This is an abstract base type which contains fields that are common to all collateral items, such as the collateralId, collateral description, etc.

### TitledCollateralBase

This is an abstract base type which contains fields that are common to all titled goods collateral items, where ownership is evidenced by a title. Examples are an automobile, airplane, boat, etc.

### PossessoryCollateralBase

This is an abstract base type for collateral for possessory collateral types. Examples are: Deposit Accounts/CD; Securities; Notes; Receipts/Bills; Letters of Credit; Other.

# Collateral Services

## Service Definitions

The Collateral data model and services support Create, Read, Delete, and Update operations against a Collateral item.

### Service Message: ReadCollateral

When provided a collateralFilter, the ReadCollateral service message will return a list of collateral items that match the filter. For example, the collateralFilter when containing an accountId would return all collateral associated to that account.

|  |  |
| --- | --- |
| INPUTS | cufx:collateralMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html) * [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html)Filter |
| Outputs | A collection of [cufx:Collateral](file:///C:\Users\BlockA\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.IE5\YAHI7BTP\Generated%20HTML%20Docs\LoanFilter.html) objects (collateralList) that meet the criteria of the provided the [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html)Filter |
| Return Values | Status 200 if no errors were found. |
| Side Effects | No data is being manipulated, only a lookup is being performed. |
| Dependencies | None. |
| CUFX REST LINK | https://api.dataprovider.com/collateral/ |

REST-JSON Example

The following example illustrates how to return all collateral items on account 12345.

**REQUEST:**

Headers:

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

Accept: application/json

Accept-Charset: utf-8

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

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

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

X-API-Version: >=3.0.0

**POST h**ttps://api.dataprovider.com/collateral

{

collateralMessage:{

"messageContext" : <SeeMessageContext.xsd>,

"collateralFilter" : {

"accountIdList" : [ "12345" ],

}

}

}

### Service Message: CreateCollateral

The CreateCollateral service message will create the collateral record on the host system. To associate the collateral item to a loan, you would need to create or update the loan object and have it contain the collateralId returned from this service call.

|  |  |
| --- | --- |
| INPUTS | cufx:collateralMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\MessageContext.html) * [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html)List |
| Outputs | **cufx:CollateralId** |
| Return Values | HTTP Status of 201 if the collateral was successfully created on the host system, otherwise an Error response (see Error specification). |
| Side Effects | Creates a new collateral record on the core system if successful. |
| Dependencies | The account that this collateral will belong to must already exist. |
| CUFX REST LINK | https://api.dataprovider.com/collateral/ |

REST-JSON Example

**REQUEST:**

Headers:

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

Accept: application/json

Accept-Charset: utf-8

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

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

X-API-Version: >=3.0.0

**POST h**ttps://api.dataprovider.com/collateral

{

collateralMessage:{

"messageContext" : <See MessageContext.xsd>,

"collateralList" : { <See Collateral.xsd> }

}

}

### Service Message: UpdateCollateral

The UpdateCollateral service message is used to update the collateral record on the host system. A valid collateralFilter must be passed in that indicate the collateral or collaterals to be updated.

|  |  |
| --- | --- |
| INPUTS | cufx:collateralMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\MessageContext.html) * [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html) * [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html)Filter |
| Outputs | **cufx:CollateralList** |
| Return Values | HTTP Status of 204 if the collateral was successfully updated on the host system, otherwise an Error response (see Error specification). |
| Side Effects | Updates the existing collateral record on the core system if successful. |
| Dependencies | The account that this collateral item will belong to must already exist. |
| CUFX REST LINK | https://api.dataprovider.com/collateral/ |

REST-JSON Example

**REQUEST:**

Headers:

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

Accept: application/json

Accept-Charset: utf-8

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

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

X-API-Version: >=3.0.0

**PUT h**ttps://api.dataprovider.com/collateral

{

collateralMessage:{

"messageContext" : <See MessageContext.xsd>,

"collateralFilter" : { "collateralIdList" : [ "1234" ] }

"collateralList" : { <See Collateral.xsd> }

}

}

### Service Message: DeleteCollateral

When provided a collateralId, the DeleteCollateral service message will delete the collateral record with the given collateralId.

|  |  |
| --- | --- |
| INPUTS | Cufx:collateralMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html) * [cufx:Collateral](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html)Filter |
| Outputs |  |
| Return Values | Status 200 if the collateral record was deleted, 404 if the collateral was not found. |
| Side Effects | No data is being manipulated, only a lookup is being performed. |
| Dependencies | None. |
| CUFX REST LINK | https://api.dataprovider.com/collateral/ |

REST-JSON Example

The following example illustrates how to delete all collateral items on account 12345.

**REQUEST:**

Headers:

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

Accept: application/json

Accept-Charset: utf-8

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

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

**X-HTTP-Method-Override: DELETE**

X-API-Version: >=3.0.0

**POST h**ttps://api.dataprovider.com/collateral

{

collateralMessage:{

"messageContext" : <SeeMessageContext.xsd>,

"collateralFilter" : {

{ "collateralIdList" : [ "12345" ] }

}

}

}