

Remote Deposit Capture Model 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

Change Log

|  |  |  |
| --- | --- | --- |
| Version | Date | Changes |
| 0.0.1 |  | * Initial Creation |
| 0.0.2 |  | * Updates and added examples |
| 3.0 | **10/29/2013** | * Create a remoteDepositRequestMessage or a remoteDepositPostRequestMessage wrapper for every message to increase ability for infrastructure to serialize the data * Versioning and format change with release CUFX 3.0 |
| 3.0 | **12/16/2013** | * Update examples X-API-Version to >=3.0.0 |
| 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

The Remote Deposit Capture specification describes the services used as part of an offering to allow a user to remotely deposit checks. A typical example is mobile remote deposit capture, where a user will use their device (e.g. iPhone) take a picture of a check, which would then deposit the funds into the users account if accepted. This specification is not limited to mobile remote deposit capture, and could also be used for non-mobile devices as well (e.g. desktop remote deposit capture).

This specification describes the data structures and services for remote deposit capture.

Any know Errors in the document

|  |  |
| --- | --- |
| **Error Description** | Status of Error |
|  |  |

Table of Contents

[Document Conventions 2](#_Toc475006705)

[High level use cases 2](#_Toc475006706)

[Use Case 1: remotely deposit a check 2](#_Toc475006707)

[Use Case: Submit One or More Remote DEposit Requests 3](#_Toc475006708)

[Data Elements 4](#_Toc475006709)

[Remote DEposit Capture Data attributes 4](#_Toc475006710)

[Data Element: RemoteDepositRequestList 4](#_Toc475006711)

[Data Element: RemoteDepositRequest 4](#_Toc475006712)

[Data Element: RemoteDepositResponseList 4](#_Toc475006713)

[Data Element: RemoteDepositResponse 4](#_Toc475006714)

[Data Element: RemoteDepositPostRequestList 4](#_Toc475006715)

[Data Element: RemoteDepositPostRequest 4](#_Toc475006716)

[Data Element: MessageContext 4](#_Toc475006717)

[Remote Deposit Capture Services 5](#_Toc475006718)

[Service Definitions 5](#_Toc475006719)

[Service Message: SubmitRemoteDepositRequests 5](#_Toc475006720)

[Service Message: SubmitRemoteDepositPostRequests 6](#_Toc475006721)

[Bibliography 7](#_Toc475006722)

# 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.

# High level use cases

## Use Case 1: remotely deposit a check

This use case assumes that the calling application has already:

* Authenticated the user in some manner. Assuming that this is within an online banking system, the online banking system would be responsible for authenticating the user.
* The user is already eligible for the remote deposit capture service. We are assuming that the online banking system would have denied the user to this service already if they were not eligible.
* If the third party remote deposit capture service required an initial registration of the user if this is their first time using the service, that this would have already taken place.

## Use Case: Submit One or More Remote DEposit Requests

CUFX Application

1

SubmitRemoteDepositRequest

Contains list of RemoteDepositRequest elements

2

SubmitRemoteDeposit Response

Contains list of RemoteDepositResponse elements

CUFX Remote Deposit Data Provider

3

RemoteDepositPostRequest Request

Contains list of RemoteDepositPost elements

4

RemoteDepositPostResponse Response

Contains list of RemoteDepositPostResponse elements

This use case shows the remote deposit request being made from the CUFX Application (such as the Online Banking system) to the CUFX Remote Deposit Data Provider (such as Vertifi, Bluepoint, etc). Steps 3 and 4 show the remote deposit capture provider submitting a post request to the CUFX application, which not all remote deposit capture providers work in this way or support this. In some cases the remote deposit capture provider will generate an x.9 file and deliver this to your Check21 system for processing.

# Data Elements

## Remote DEposit Capture Data attributes

The following CUFX fields referenced in the services defined below are utilized for remote deposit capture:

### Data Element: RemoteDepositRequestList

A collection or list of one or more RemoteDepositRequest elements. This specification allows for multiple remote deposit capture items to be submitted in one call.

### Data Element: RemoteDepositRequest

The RemoteDepositRequest data element contains all the attributes to submit a remote deposit to a CUFX remote deposit provider (such as Vertifi, BluePoint, etc) for a decision on whether the deposit will be approved and eventually the deposit made into the members account.

### Data Element: RemoteDepositResponseList

A collection or list of one or more RemoteDepositResponse elements. This specification allows for multiple remote deposit capture items to be submitted in one call. There should be a response for each remote deposit request item in the original request.

### Data Element: RemoteDepositResponse

The RemoteDepositResponse data element contains attributes pertaining to a request to remotely deposit an item. This includes information such as the status of the remotely deposited item (such as Approved, Under Review, Denied), as well as information on why an item was reject, such as poor image quality, over deposit limit, etc.

### Data Element: RemoteDepositPostRequestList

A collection or list of one or more RemoteDepositPostRequest elements. This specification allows for multiple remote deposit capture items to be posted in one call.

### Data Element: RemoteDepositPostRequest

The RemoteDepositPost data element contains all the attributes for posting the funds to an account for a previously remotely deposited item that was approved. This includes attributes such as the posting amount.

### Data Element: MessageContext

Like many of the other CUFX service, a MessageContext object must be passed for each request. Refer to the Security Services documentation for more information.

# Remote Deposit Capture Services

## Service Definitions

The remote deposit capture services support a Request/Response model for submit remote deposit capture requests.

### Service Message: SubmitRemoteDepositRequests

One or more remote deposit request elements can be submitted at a time using the SubmitRemoteDepositRequests service.

|  |  |
| --- | --- |
| INPUTS | cufx:remoteDepositRequestMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html) * [cufx:RemoteDepositRequestList](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html) |
| Outputs | A [cufx:RemoteDepositResponseList](file:///C:\Users\BlockA\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.IE5\YAHI7BTP\Generated%20HTML%20Docs\LoanFilter.html) element that contains a response for each submitted remote deposit request item. |
| Return Values | Status 200 if no errors were found. |
| Side Effects | Remotely deposited items posted to the vendor for approval or review. |
| Dependencies | None. |
| CUFX REST LINK | https://api.dataprovider.com/remotedeposit/ |

REST-JSON Example

The following example illustrates how to submit two remote deposit requests.

**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: >=3.3.0

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

{

“remoteDepositRequestMessage”: {

"messageContext" : <SeeMessageContext.xsd>,

"remoteDepositRequestList" : {

"remoteDepositPostRequest": [

{

"routingTransitNumber": "123345",

"amount": {

"value": 12.34,

"currencyCode": 145

},

"accountId": "1234",

"reference": "ref1234",

"contact": <...See contact XSD...>,

"mode": “Production”

},

{

{

"routingTransitNumber": "23453",

"amount": {

"value": 72.34,

"currencyCode": 145

},

"accountId": "1234",

"reference": "ref1235",

"contact": <...See contact XSD...>,

"mode": “Production”

}

]

} }

### Service Message: SubmitRemoteDepositPostRequests

Once a remotely deposit item is accepted, the SubmitRemoteDepositPostRequest could be used to request that the funds now be remotely deposited to the members account.

One or more remote deposit request elements can be submitted at a time using the SubmitRemoteDepositRequests service.

|  |  |
| --- | --- |
| INPUTS | cufx:remoteDepositPostRequestMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html) * [cufx:RemoteDepositPostRequestList](file:///\\files2\users\CMarjaniemi\Projects\CUFX\Generated%20HTML%20Docs\Loan.html) |
| Outputs | A [cufx:RemoteDepositPostResponseList](file:///C:\Users\BlockA\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.IE5\YAHI7BTP\Generated%20HTML%20Docs\LoanFilter.html) element that contains a response for each submitted remote deposit post request item. |
| Return Values | Status 200 if no errors were found. |
| Side Effects | The funds will be posted into the member’s account, usually by taking it from a General Ledger account. |
| Dependencies | None. |
| CUFX REST LINK | https://api.dataprovider.com/remotedeposit/ |

REST-JSON Example

The following example illustrates how to submit two remote deposit post requests.

**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: >=3.3.0

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

{

“remoteDepositPostRequestMessage”: {

"messageContext" : <SeeMessageContext.xsd>,

"remoteDepositPostRequest": [

{

"routingTransitNumber": "123345",

"amount": {

"value": 12.34,

"currencyCode": 145

},

"accountId": "1234",

"reference": " ref1234",

"mode": “Production”

},

{

"routingTransitNumber": "routingTransitNumber1",

"amount": {

"value": 1.0,

"currencyCode": 145

},

"accountId": "1234",

"reference": " ref1235",

"mode": “Production”

}

]

}

}

# Bibliography

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