

Product Service Request 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)

This version: **Assembla**.com. Files Tag = CUFX\_3.0\_RFC\_Active

Previous Version: **Assembla**.com. Files Tag = CUFX\_3.0\_RFC\_Archive

# Authors and Change Log

|  |  |  |
| --- | --- | --- |
| Version | Date | Changes |
| 0.0.01 |  | * Initial Creation |
| 0.0.02 |  | * Removed required Yes/No field in data dictionary and moved to service * Fix type of Fulfillment Note |
| 0.0.03 |  | * Cleaned up formatting * Added leads and lead collection * Added filters definitions for the service * Added party details * Reformatted services for above changes |
| 0.0.4 |  | * Remove definitions and moved to lead.xsd * Remove definitions for message context fields and include reference to messageContext.xsd * Add leadFilter.xsd for filtering * Remove hyperlink in service definition |
| 0.0.5 |  | * Replace error definitions with references to error documentation and Error.xsd * Add delete and update examples. * Fix messageContext brackets. |
| 0.0.6 |  | * Change plural to List form |
| 0.0.7 |  | * Add contact and party id’s in the standalone response for create. |
| 0.0.8 |  | * Updated Overview of Specification |
| 0.0.9 |  | * Changed XSD filenames to PascalCase |
| 0.1.0 |  | * Changed from lead to Product Service Request * Add ability to relate to an account * Add ability to have a question on service * Updated structures to new productServiceRequest tiered structure |
| 0.1.1 |  | * Clarify specification overview |
| 0.1.2 |  | * Released for comments |
| 0.1.3 |  | * Included secureMessageId as list, updated some annotations to be more descriptive. Added verbiage about use of product service request. |
| 3.0 | **10/29/2013** | * Switch to use X-HTTP-METHOD-OVERRIDE standard rather than subMethod non-Standard method for overriding request types. * Create a productServiceRequestMessage wrapper for every message to increase ability for infrastructure to serialize the data * Versioning and format with release CUFX 3.0 |
| 3.0 | **12/16/2013** | * Update examples X-API-Version to >=3.0.0 |

# Overview of Specification

This CUFX Product Service Request Data and Services specification enables an application to submit details about products and services that the party is interested in that go beyond a loan or deposit product. Product or Service requests are pre- stage information requests to help internal staff identify additional products and services that a party has requested. A product request might be an Investment account that the party is interested in but can’t be supported through the Deposit services. A service request example is requesting a box of checks, or stopping payment on a check, notification that a card has been lost, etc. This entity can be standalone (in the case of a CRM like system) or related to party, account, contact and relationship data previously created on an account. See capabilities for the service for more details. In addition, the status of the events and tasks related to fulfillment of the request(s) can be accessed via this service.

# 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

PRODUCT SERVICE REQUEST

An existing or potential party is interested in a product, products, service or services or just has a question on a product or service. The request can have several statuses as to the progress of the request since it may take several steps to complete the request(s)

# Data Elements

## Filters used when accessing the product service request data

Refer to Security Services documentation to understand what may be contained in 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. Refer to recent CUFX messageContext Data and CUFX Security Services for use of MessageContext.xsd. Include any filter variables related to the request. See **ProductServiceRequestFilter.xsd**

## ProductServiceRequest Data attributes

Refer to repository **ProductServiceRequest.xsd** for attribute definitions of the productServiceRequest object.

# ProductServiceRequest Services

## Overview

|  |  |
| --- | --- |
| Definition | Collection of services to manage a productServiceRequest |
| Overview of Capabilities | Create, read, update and delete a productServiceRequest. The following scenarios may exist. The productServiceRequest may be connected to an existing party, relationship and contact. In addition, a productServiceRequest may exist without an existing party, relationship or contact. The productServiceRequest if created without connection to existing party, account, contact or relationship could be converted to be connected to an existing party, account, contact and relationship or aid in creating party, account, contact or relationship within the endpoint system. If created without connection to existing party, etc. then it might be sent to a CRM system for follow up with the contact. Thus the reason for the two different examples. In addition, the status of the events related to fulfillment of the request(s) can be accessed via this service.  The Product Service Request service is of a generic nature. This service can be used as a catch all for processes that are not explicitly outlined with other services. This service is engineered to support a wide variety of generic business processes. An example of a business process that does not have a dedicated service, but could be supported by the product service request is disputing a charge. You could use the Product Service Request service to support disputing an invalid debit charge, stopping a check, or stopping a range of checks. |
| Dependencies | Party , contact, and relationship data and services |
| Sample CUFX REST LINK | (connected version: related to existing relationship)  https://api.dataprovider.com/productServiceRequest/  or  (stand-alone version: CRM type of a system)  https://api.**crm**dataprovider.com/productServiceRequest/ |
| CUFX SOAP LINK |  |
| CUFX WaDL LINK |  |

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

|  |  |
| --- | --- |
| INPUTS | cufx:productServiceRequestMessage (which includes)   * [cufx:MessageContext](file:///\\files2\users\CMarjaniemi\Projects\CUFX\MessageContext.html) * cufx:productServiceRequestFilter (for read, update, delete) * cufx:productServiceRequest (for create, update) |
| Outputs | cufx:productServiceRequest (for create, read, update) |
| Return Values | Error response (see Error specification) |
| Side Effects | Creation of productServiceRequest, update of existing productServiceRequest, or deletion of productServiceRequest. Read has no side effects. |
| Dependencies | Security Services for authentication and security. |
| Fields used | **Message Headers** : See security services  **messageContext**: See MessageContext.xsd  **Filters**: productServiceRequestFilter.xsd  **Attributes:** productServiceRequestList**: See ProductServiceRequestList.xsd** |

### REST-JSON CREATE ProductServiceRequest

This example shows where the relationship is known and the contact is already known.

**Required**: messageContext, at least one productOfInterest, source

**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.datasource.com/productServiceRequest

{

“productServiceRequestMessage”:{

“messageContext”: { <see MessageContext.xsd>

},

“productServiceRequestList”: [

{

“requestList”:

[

{“requestItem”:[{“productOfInterest”:”Mortgage”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestNoteList”:[

{“noteText”:”Need to talk ASAP!”

“noteCreator”:”John Bell”

}

],

“requestRelatedTo”:{

{“contactIdList”:[ ”164879984” ]

},

“activityList”:[

{“activityName”:”Create Mortgage App”,

“activityStatus”:”New”,

“creator”:”SysId3534”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“activityNoteList”:[

“noteText”:”High Priority Request”

“noteCreator”:”SysId3534”

]

}

]

}

],

“secureMessageList”:[

{“secureMessageId”:”2346532664”}],

“documentList”:{[

{“documentId”:”234454756345”}],

},

“source”:”Website”,

“status”:”New”,

“createDateTime”:”2013-03-28T1:31Z”,

“productServiceRequestRelatedTo”:{

“contactIdList”: [ ”12345” ],

“relationshipIdList”: [ ”105949495” ],

}

“productServiceRequestNoteList”:[

{“noteText”:”I heard you are awesome!”

“noteCreator”:”John Bell”

}

]

}

]

}

}

**RESPONSE:**

Headers:

Status Code: 200 Ok

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

Content-Language: en-us

{

“productServiceRequestList”: [

{

“productServiceRequestId”:”1514asd4151230a”,

“requestList”:

[

{“requestId”:”159609633”,

“requestItem”:[{“productOfInterest”:”Mortgage”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestNoteList”:[

{“noteText”:”Need to talk ASAP!”

“noteCreator”:”John Bell”

}

],

“requestRelatedTo”:{ “contactIdList”: [ ”164879984” ] },

“activityList”:[

{“activityId”:”54578353496a3534”,

“activityName”:”Create Mortgage App”,

“activityStatus”:”New”,

“creator”:”SysId3534”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“activityNoteList”:[

“noteText”:”High Priority Request”

“noteCreator”:”SysId3534”

]

}

]

},

“secureMessageList”:[

{“secureMessageId”:”2346532664”}],

“documentList”:{[

{“documentId”:”234454756345”}],

},

],

“source”:”Website”,

“status”:”New”,

“createDateTime”:”2013-03-28T1:31Z”,

“productServiceRequestRelatedTo”:{

“contactIdList”: [ ”12345” ],

“relationshipIdList”: [ ”105949495” ],

}

“productServiceRequestNoteList”:[

{“noteText”:”I heard you are awesome!”

“noteCreator”:”John Bell”

}

]

}

]

}

### REST-JSON READ ProductServiceRequest Example

**Required**: messageContext and at least one filter criteria in the productServiceRequestFilter object.

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.datasource.com/productServiceRequest

{

“productServiceRequestMessage”:{

“messageContext”: { <see MessageContext.xsd>

},

“productServiceRequestFilter”: {

“relationshipIdList”:[ ”105949495” ]

}

}

}

**RESPONSE:**

Headers:

Status Code: 200 Ok

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

Content-Language: en-us

{

“productServiceRequestList”: [

{

“productServiceRequestId”:”1514asd4151230a”,

“requestList”:

[

{“requestId”:”159609633”,

“requestItem”:[{“productOfInterest”:”Mortgage”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestNoteList”:[

{“noteText”:”Need to talk ASAP!”

“noteCreator”:”John Bell”

}

],

“requestRelatedTo”:{ [“contactIdList”: ”164879984” ] },

“activityList”:[

{“activityId”:”54578353496a3534”,

“activityName”:”Create Mortgage App”,

“activityStatus”:”New”,

“creator”:”SysId3534”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“activityNoteList”:[

“noteText”:”High Priority Request”

“noteCreator”:”SysId3534”

]

},

“secureMessageList”:[

{“secureMessageId”:”2346532664”}],

“documentList”:{[

{“documentId”:”234454756345”}],

]

}

],

“source”:”Website”,

“status”:”New”,

“createDateTime”:”2013-03-28T1:31Z”,

“productServiceRequestRelatedTo”:{

“contactIdList”: [ ”12345” ],

“relationshipIdList”: [ ”105949495” ],

}

“productServiceRequestNoteList”:[

{“noteText”:”I heard you are awesome!”

“noteCreator”:”John Bell”

}

]

}

]

}

### REST-JSON UPDATE ProductServiceRequest Example

**Required**: messageContext and at least one productServiceRequestId in the productServiceRequestFilter

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.datasource.com/productServiceRequest

{

“productServiceRequestMessage”:{

“messageContext”: { <see MessageContext.xsd>

},

“productServiceRequestFilter”: {

“productServiceRequestIdList”:[ ”1514asd4151230a” ]

},

“productServiceRequestList”: [

{ “**productServiceRequestId**”:”1514asd4151230a”

“status”:”InDiscussion”

“productServiceRequestNoteList”:[

{“noteText”:”Interested in a $100,000 Mortgage!”

“noteCreator”:”UserId353434”

}

]

}

]

}

}

**RESPONSE:**

Headers:

Status Code: 200 Ok

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

Content-Language: en-us

{

“productServiceRequestList”: [

{

“productServiceRequestId”:”1514asd4151230a”,

“requestList”:

[

{“requestId”:”159609633”,

“requestItem”:[{“productOfInterest”:”Mortgage”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestNoteList”:[

{“noteText”:”Need to talk ASAP!”

“noteCreator”:”John Bell”

}

],

“requestRelatedTo”: { “contactIdList”: [ ”164879984” ] },

“activityList”:[

{“activityId”:”54578353496a3534”,

“activityName”:”Create Mortgage App”,

“activityStatus”:”New”,

“creator”:”SysId3534”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“activityNoteList”:[

“noteText”:”High Priority Request”

“noteCreator”:”SysId3534”

]

}

]

}

],

“source”:”Website”,

“status”:”InDiscussion”,

“createDateTime”:”2013-03-28T1:31Z”,

“productServiceRequestRelatedTo”:{

“contactIdList”:[ ”12345” ],

“relationshipIdList”:[ ”105949495” ]

}

“productServiceRequestNoteList”:[

{“noteText”:”I heard you are awesome!”

“noteCreator”:”John Bell”

},

{“noteText”:”Interested in a $100,000 Mortgage!”

“noteCreator”:”UserId353434”

}

]

}

]

}

### REST-JSON DELETE ProductServiceRequest Example

**Required**: messageContext and at least one productServiceRequestId in the productServiceRequestFilter

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

**PUT h**ttps://api.datasource.com/productServiceRequest

{

“productServiceRequestMessage”:{

“messageContext”: { <see MessageContext.xsd>

},

“productServiceRequestFilter”: {

“relationshipIdList”:[ ”105949495” ]

}

}

}

**RESPONSE:**

Headers:

Status Code: 200 Ok

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

Content-Language: en-us

### REST-JSON CREATE ProductServiceRequest (crm style submission)

This example shows where the relationship is UNKNOWN therefore contact is also unknown. For example, this is hitting a data source other than the core end-point that might queue up similar requests for information, products and services that are not ready to be submitted to a final end-point for the information.

**Required**: messageContext and at least one lead in the productServiceRequestList collection and at least one productOfInterest, source.

**REQUEST:**

Headers:

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.crmdatasource.com/productServiceRequest

{

“productServiceRequestList”: [

{

“requestList”:

[

{“requestItem”:[{“question”:”What are your mortgage rates?”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestRelatedTo”:{

“partyList”:

[

{

{“entity”:{

“individual”:{

formattedName:”Tom Thumb”

}

},

“contactList:[

{“type”:”PHONE”,

“phone”:{

“type”:”WORK”,

“number”:”1-847-555-1212”

“planFormat”:”NANP”

}

},

{“type”:”EMAIL”,

“email”:{

“type”:”HOME”,

“address”:”tt@cufx.org”

}

}

]

}

],

},

“source”:”Website”,

“status”:”New”,

]

}

]

}

**RESPONSE:**

Headers:

Status Code: 200 Ok

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

Content-Language: en-us

{

“productServiceRequestList”: [

{

“productServiceRequestId”:”1514asd4151230a”,

“requestList”:

[

{“requestItem”:[{“question”:”What are your mortgage rates?”}],

“requestStatus”:”New”,

“requestedDateTime”:”2013-03-28T11:31Z”,

“dueDateTime”:”2013-03-29T11:31Z”,

“requestRelatedTo”:{

“partyList”:

[

{

“partyId”:”13534”,

{“entity”:{

“individual”:{

formattedName:”Tom Thumb”

}

},

“contactList:[

{“contactId”:”38322”,

“type”:”PHONE”,

“phone”:{

“type”:”WORK”,

“number”:”1-847-555-1212”

“planFormat”:”NANP”

}

},

{“type”:”EMAIL”,

“email”:{

“type”:”HOME”,

“address”:”tt@cufx.org”

}

}

]

}

],

},

“source”:”Website”,

“status”:”New”,

]

}

]

}

# 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.