

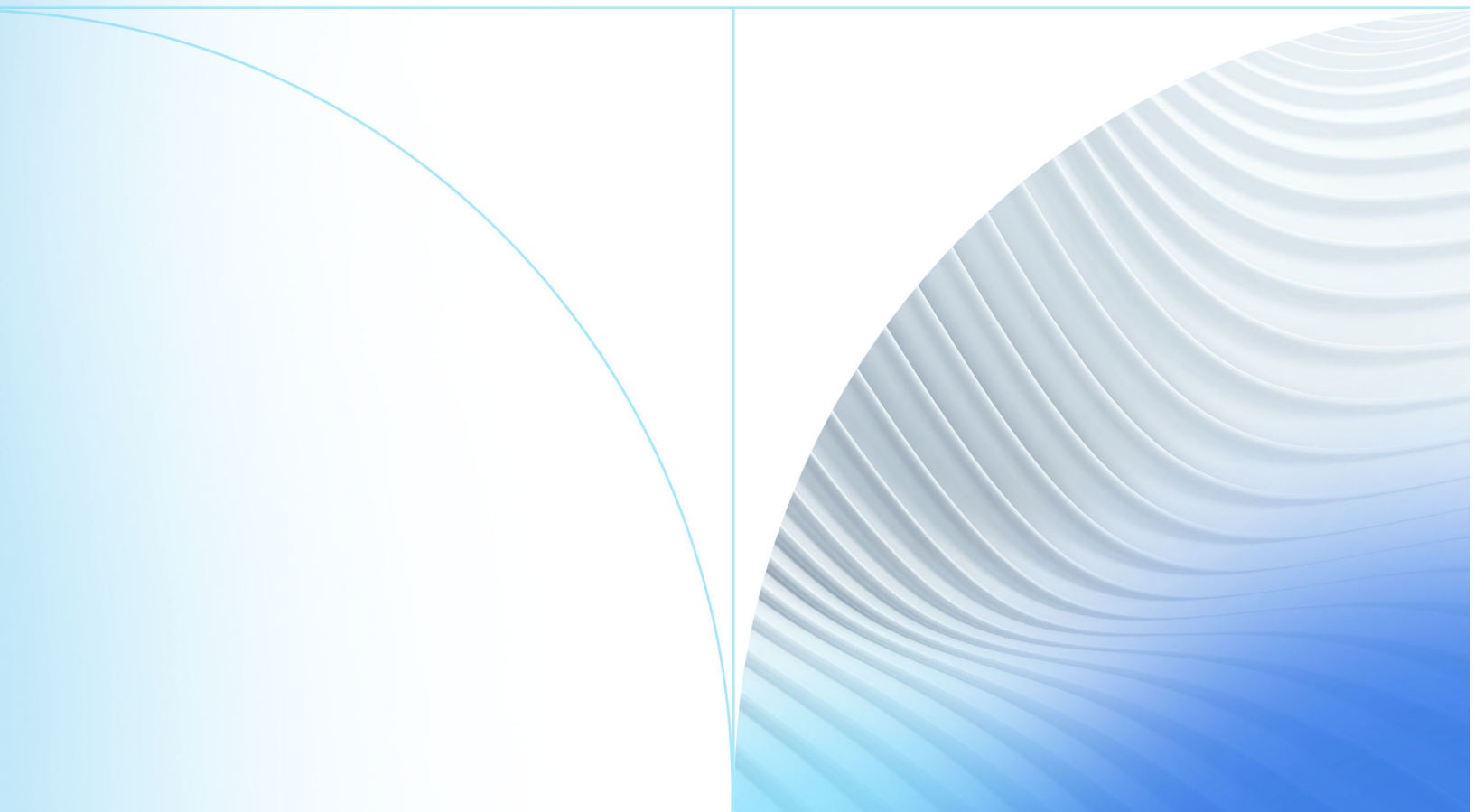


**Operational Enhancement Solutions**

**Release 2021.0**

# **PSCU Adapter API Guide**

04/22/2024



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# Documentation Updates

The following information describes updates made to previously published content.

**CAUTION**

These changes reflect updates to documentation only.

Date	Change Summary
3/11/2021	Original publication.
4/22/2024	Information regarding the <code>SUBSCRIBER_801</code> and <code>LOGIN_103</code> errors was added to the <i>CardAlertSubInq Additional Information</i> topic.

# PSCU Adapter API Guide

This document provides in-depth information describing the PSCU Adapter operations and the error codes associated with each operation.

## General Information About Dates

- Unless otherwise stated, when the day of the month is not provided by PSCU, it is returned as *01*.
- If an invalid date is provided by PSCU, it is returned as *0001-01-01*.
- If the century is not provided by PSCU, it is determined using the following logic:
  - If the *YY* provided by PSCU is 32 years greater than the current year, then *CC* is returned as *19*. Otherwise, *CC* is returned as *20*.
  - For example, the current year is 18 plus 32 makes the threshold 50.  
If the *YY* provided by PSCU is 71, that is greater than 50, so the *CC* is *19*.  
If the *YY* provided by PSCU is 10, that is less than 50, so the *CC* is *20*.

## Additional Information About Behavior

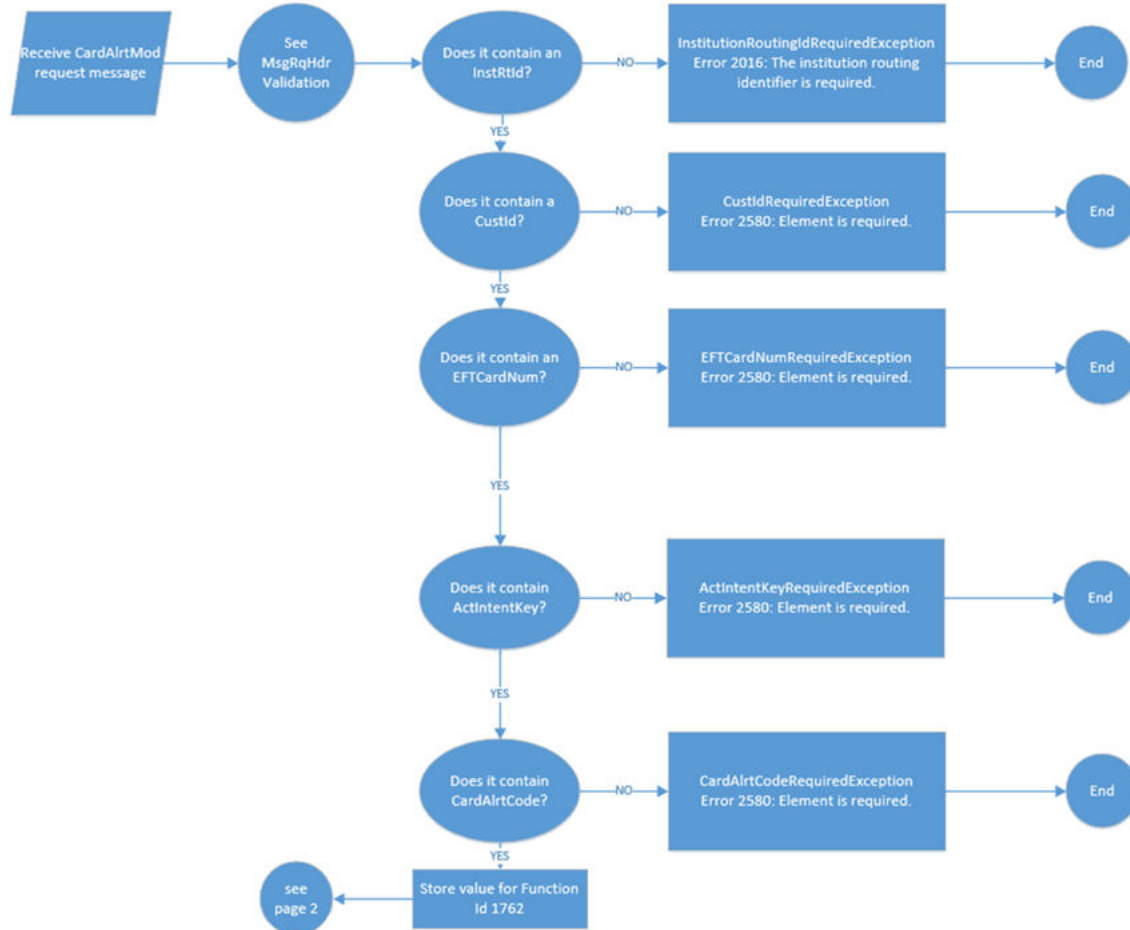
- Unless otherwise stated, there is no support of any attributes that may exist on any of the elements.

For instance, it is expected that requests contain the entire value for the **CrCardAcctId** element and all instances of the Search attribute will be ignored.

- **CrCardAcctId** / **EFTCardNum** must be present and not contain any letters or special characters. Only numbers are accepted.
- **InstitutionRtId** is required.
- All paging of results for search messages is handled by the translation layer and follows EA guidelines.
- All date filtering is handled by the translation layer and follows EA guidelines.
- Elements are mapped from PSCU values to EA defined values as outlined in the Gap Document.
- Inquiries return an **ActIntentKey** and modification messages require the **ActIntentKey**. However, no concurrency handling occurs.

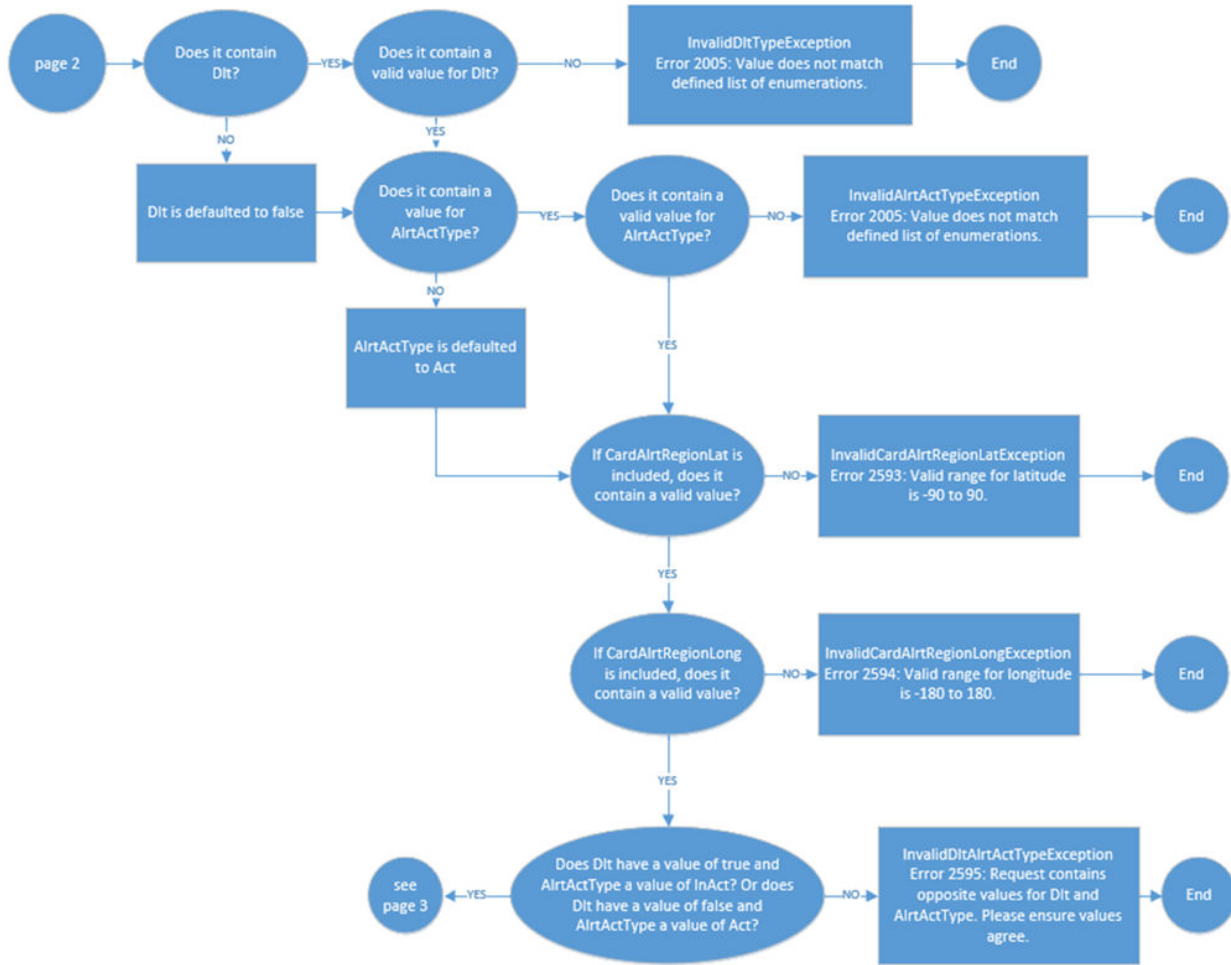
# CardAlrtMod Process

## CardAlrtMod Process Part 1



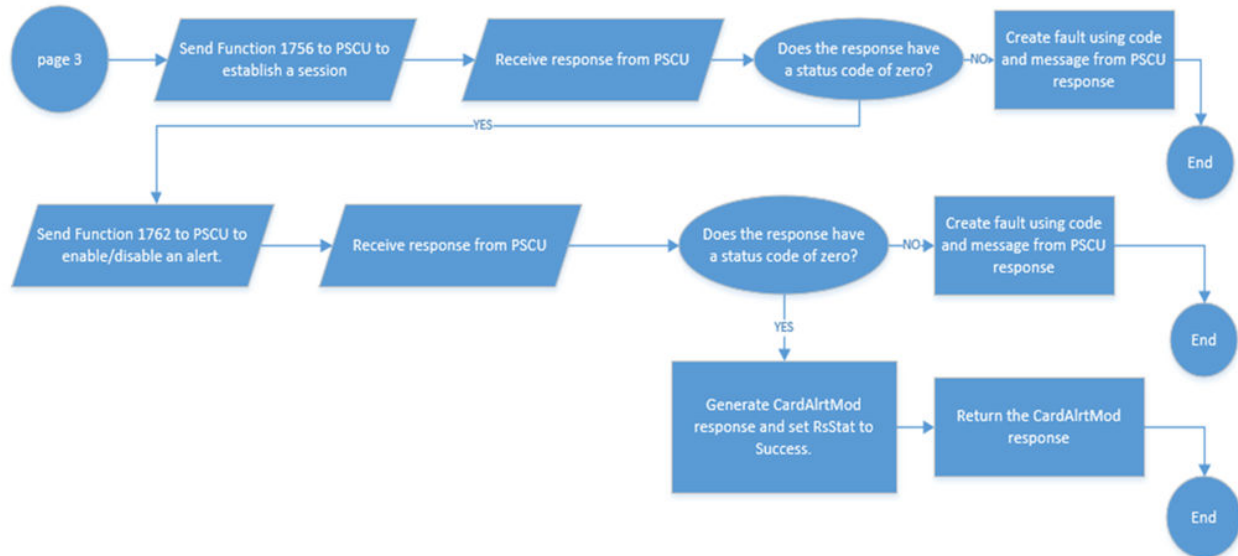
The second part of the process follows.

**CardAirtMod Process Part 2**



The third part of the process follows.

### CardAlrtMod Process Part 3



## CardAlrtMod Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.
2016	The institution routing identifier is required.
2580	Element is required.
2593	Valid range for latitude is -90 to 90.
2594	Valid range for longitude is -180 to 180.
2595	Request contains opposite values for Dlt and AlrtActType. Please ensure values agree.

## CardAlrtMod Additional Information

### Function ID

- Uses Function ID numbers 1756 and 1762.

## Request

- **CustId** is required and has the **ClientId** appended to it when it is sent to PSCU.
- **EFTCardNum**, **ActIntentKey**, and **CardAlrtCode** are required. **CardAlrtCode** must be a defined value.
- **Dlt** and **AlrtActType** work together for enabling/disabling an alert, and they must agree.

**Dlt** of *false* and **AlrtActType** of *Act* enables an alert.

**Dlt** of *true* and **AlrtActType** of *InAct* disables an alert.

If **Dlt** and **AlrtActType** are opposite values, a fault is returned.

- **ActIntentKey** must be the card reference ID, which was returned in the `CardAlrtSubInq`.

## Response

- If either Function ID numbers 1756 or 1762 fail, a fault with the PSCU error code and description is returned.

## Third-Party Specific Behavior Information

- When a subscriber is added, the A030 (alert for all transactions) is automatically enabled.
- If the request contains A06/C06 (spend limit per transaction) or A09/C09 (spend limit - per month) as the **CardAlrtCode** along with the **CardAlrtThldVal**, then the request must also contain a **CardAlrtThldCode** of `[xxx]T01` (where *xxx* is the **CardAlrtCode**).
- The **CardAlrtThldVal** must be in whole dollars. For instance, *50* rather than *50.00*.
- A control (blocked authorizations) is imposed at the account level, regardless of which subscriber enabled the control.

The following behavior is specific to alerts/controls related to region:

- **CardAlrtRegionId** is unique to Ondot and the policy. **CardAlrtRegionUsrDesc** is not unique on any level.
- If the request contains *0* for **CardAlrtRegionId** and a value for **CardAlrtRegionUsrDesc**, region is added to the policy, and Ondot assigns an ID.
- If the request contains **CardAlrtRegionId** that was assigned previously with a different value for **CardAlrtRegionUsrDesc**:
  - If **CardAlrtRegionId** [`JHANull = false`]:
    - If the ID was previously used in the policy and it still exists in the policy, then the information is updated.

- If the ID was used in another policy, the request fails.
  - If **CardAlrtRegionId** [JHANull = true]:
    - If the ID was previously used in the policy and it still exists in the policy, then the information is deleted.
    - If the ID was used in another policy, the request fails.
- If the request contains **CardAlrtRegionId** [JHANull = true]:
  - But there is no value for **CardAlrtRegionId**, then the request fails because both **CardAlrtRegionId** and **CardAlrtRegionUsrDesc** are required.
  - But there is no value for **CardAlrtRegionUsrDesc**, then the request fails because both **CardAlrtRegionId** and **CardAlrtRegionUsrDesc** are required.
- If the request contains **CardAlrtRegionId** [JHANull = true] and the request contains mismatched values for **CardAlrtRegionId** and **CardAlrtRegionUsrDesc**, then the ID is used to delete the region. So, if the region exists, it is deleted. If the region does not exist, the request fails.
- If attempting to add a region but the request contains an existing **CardAlrtRegionId** or **CardAlrtRegionUsrDesc**:
  - If **CardAlrtRegionId** [JHANull = false], then the region is updated if it exists in the policy. Otherwise, the request fails.
  - If **CardAlrtRegionId** [JHANull = true], then the region is deleted if it exists in the policy. Otherwise, the request fails.
- There are no limitations to the number of regions that may be added to a subscriber/card combination.

## Card Alert Modification

Card Alert Modification is a jXchange service designed to provide consumers with the ability to establish EFT card alerts and controls.

### Message Flow

In jXchange, the Card Alert Modification service uses a typical exchange of `MType` messages to allow consumers to establish EFT card alerts and controls.

### Primary Request

The consumer forwards the `CardAlrtModRq_MType` message to the service provider. The message contains the following simple elements:

- **ActIntentKey**
- **AlrtActType**
- **CardAlrtCatType**

- **CardAlrtCode**
- **CardAlrtRegionLat**
- **CardAlrtRegionLong**
- **CardAlrtRegionId**
- **CardAlrtRegionRadius**
- **CardAlrtRegionUsrDesc**
- **CardAlrtThldCode**
- **CardAlrtThldVal**
- **CardAlrtUsrDesc**
- **CustId**
- **Dlt**
- **EFTCardNum**

### Primary Response

The service provider returns the `CardAlrtModRs_MType` message to the consumer. The message contains the following simple element:

- **RsStat**

## Card Alert Modification Behavior

The Card Alert Modification service behavior is as follows.

The Card Alert Modification (`CardAlrtModRq_MType`) root request requires Customer Identification (**CustId**), EFT Card Number (**EFTCardNum**), and Card Alert Code (**CardAlrtCode**).

The Card Alert Modification (`CardAlrtModRq_MType`) optionally includes the following elements:

- Activity Intention Key (**ActIntentKey**)
- Alert Activity Type (**AlrtActType**)
- Card Alert Category Type (**CardAlrtCatType**)
- Card Alert Region Latitude (**CardAlrtRegionLat**)
- Card Alert Region Longitude (**CardAlrtRegionLong**)
- Card Alert Region Radius (**CardAlrtRegionRadius**)
- Card Alert Region User Description (**CardAlrtRegionUsrDesc**)
- Card Alert Threshold Code (**CardAlrtThldCode**)
- Card Alert Threshold Value (**CardAlrtThldVal**)
- Card Alert User Description (**CardAlrtUsrDesc**)
- Delete (**Dlt**)

The Activity Intention Key (**ActIntentKey**) would be cached from the Card Alert Subscription Modification.

The Card Alert Modification (`CardAlrtModRs_MType`) root response returns Response Status (**RsStat**).

The Region parameter is based on establishing the latitude, longitude, and radius in meters of the area that card activity is permitted. Activity outside of the region setting triggers an alert.

For example, setting the region for Springfield, Missouri, the values could be:

```
(CardAlrtRegionLat) 37.189817 (/CardAlrtRegionLat)
(CardAlrtRegionLong) -93.286802 (/CardAlrtRegionLong)
(CardAlrtRegionRadius) 8046.70 (/CardAlrtRegionRadius)
```

## CardAlrtModRq\_MType

`CardAlrtModRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `ErrOvrRdInfoArray_ATpe`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this complex.

#### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

#### AlrtActType

Answers the question: What is the activity status of an alert? Canonical values are:

- *Act*
- *InAct*

#### CardAlrtCatType

Identifies the category as related to an EFT card alert. Canonical values are:

- *Alrt*
- *Cntl*

#### CardAlrtCode

The code assigned to an alert for EFT cards.

**CardAlrtRegionId**

An identifier given to the region related to a card alert.

**CardAlrtRegionLat**

The Geolocation latitude.

**CardAlrtRegionLong**

The Geolocation longitude.

**CardAlrtRegionRadius**

The radius of a region for card alert in meters.

**CardAlrtRegionUsrDesc**

The name given by a user to identify a card alert region.

**CardAlrtThldCode**

The code assigned to thresholds as related to an alert for EFT cards.

**CardAlrtThldVal**

The value as related to thresholds.

**CardAlrtUsrDesc**

A description given to an alert supplied by the user.

**CustId**

The identifier attached to a customer. It includes the *OvrrdInstRtId* attribute.

**Dlt**

The delete element. Canonical values are:

- *false*
- *true*

**EFTCardNum**

The number that is assigned to an EFT card. The card number includes the ISO number.

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

**ErrOvrRdInfoArray\_AType**

`ErrOvrRdInfoArray_AType` is an array `AType` element. This is an array of overrides for faults.

Contains:

- `ErrOvrRd_CType`

## ErrOvrRd\_CType

ErrOvrRd\_CType is a complex CType element. This element is used to override errors created in a previous request. This element is optional.

### Simple Elements

The following simple elements are contained within this complex.

#### BusSvcType

The business service type used to convey certain Add and Mod message handling. The canonical value is *NoValidate*.

#### ErrCode

The error code.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CardAirtModRs\_MType

CardAirtModRs\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

### Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

### MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

### jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## MsgRec\_CType

MsgRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# Card Alert Notification Inquiry

Card Alert Notification Inquiry is a jXchange service designed to provide all the information as related to card alert notification.

## Message Flow

In jXchange, the Card Alert Notification Inquiry service uses a typical exchange of `MType` messages to provide all the information as related to card alert notification.

## Primary Request

The consumer forwards the `CardAlrtNotfInqRq_MType` message to the service provider. The message contains the following simple elements:

- **AlrtId**

The message contains the following complexes:

- `Custom_CType`
- `MsgRqHdr_CType`

## Primary Response

The service provider returns the `CardAlrtNotfInqRs_MType` message to the consumer. The message contains the following simple element:

- **AlrtId**

The message contains the following complexes:

- `CardAlrtNotfInqRec_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

# Card Alert Notification Inquiry Behavior

The Card Alert Notification Inquiry service behavior is as follows.

The Card Alert Notification Inquiry (`CardAlrtNotfInqRq_MType`) root request requires the Alert Identifier (**AlrtId**).

The Card Alert Notification Inquiry (`CardAlrtNotfInqRs_MType`) root response returns Alert Identifier (**AlrtId**) and Card Alert Notification Inquiry record complex (`CardAlrtNotfInqRec_CType`), which contains the following elements:

- Account Identifier Mask (**AcctIdMask**)
- Account Type (**AcctType**)
- Card Alert Category Description (**CardAlrtCatDesc**)
- Card Alert Code (**CardAlrtCode**)
- Card Alert Message (**CardAlrtMsg**)
- Currency Type (**CurrType**)
- Currency Type Symbol (**CurrTypeSymb**)
- Customer Identifier (**CustId**)
- EFT Card Mask Number (**EFTCardMaskNum**)
- EFT Card Type (**EFTCardType**)
- EFT Merchant Country (**EFTMerCntry**)
- EFT Merchant Identifier (**EFTMerId**)
- EFT Merchant State Code (**EFTMerStateCode**)
- EFT Merchant State Province (**EFTMerStatProv**)
- EFT Transaction Amount (**EFTTrnAmt**)
- EFT Transaction Channel Code (**EFTTrnChanCode**)
- EFT Transaction Channel Description (**EFTTrnChanDesc**)
- EFT Transaction Code (**EFTTrnCode**)
- EFT Transaction Description (**EFTTrnDesc**)
- EFT Transaction Processing Time (**EFTTrnProcTime**)
- EFT Transaction Reversal Amount (**EFTTrnRevAmt**)
- EFT Transaction Reversal Time (**EFTTrnRevTime**)
- EFT Transaction Status (**EFTTrnStat**)
- EFT Transaction Status Description (**EFTTrnStatDesc**)
- EFT Transaction Time (**EFTTrnTime**)
- Email Address (**EmailAddr**)
- Exception Reason Code (**ExcRsnCode**)
- Financial Institution Name (**FinInstName**)
- Merchant Business Category Code (**MerBusCatCode**)
- Merchant Business Category Description (**MerBusCatDesc**)
- Merchant City (**MerCity**)
- Merchant Country Type (**MerCntryType**)
- Merchant Name (**MerName**)
- Merchant Postal Code (**MerPostalCode**)
- Phone Number (**PhoneNum**)
- Standard Industry Code (**StdIndustCode**)
- Transaction Time Category (**TrnTimeCat**)

## CardAlrtNotfInqRq\_MType

CardAlrtNotfInqRq\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRqHdr\_CType

### Simple Elements

The following simple element is contained within this complex.

#### AlrtId

The Alert Identification associated with Bill Pay.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

## Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CardAlrtNotfInqRs\_MType

CardAlrtNotfInqRs\_MType is a message MType element.

Contains:

- CardAlrtNotfInqRec\_CType
- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple element is contained within this complex.

#### AlrtId

The Alert Identification associated with Bill Pay.

## CardAlrtNotfInqRec\_CType

CardAlrtNotfInqRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AcctIdMask

The number or character that identifies an account record.

#### AcctType

The number or character that categorizes the **AcctId**.

#### CardAlrtCatDesc

The description of the code as related to a card alert category.

#### CardAlrtCode

The code assigned to an alert for EFT cards.

#### CardAlrtMsg

The free-format message related to a card alert.

#### CurrTypeSymb

The symbol representation for a currency.

#### CurrType

The alphanumeric ISO 4217 currency code.

#### CustId

The identifier attached to a customer. It includes the *OvrrdInstRtId* attribute.

#### EFTCardMaskNum

The number that is assigned to an EFT card. The card number includes the ISO number.

### **EFTCardType**

The classification of the EFT card. Canonical values are:

- *ATM*
- *Credit*
- *Debit*

### **EFTMerCntry**

The country abbreviation from ISO 3166.

### **EFTMerId**

The identification given to EFT card merchant transaction processors.

### **EFTMerStateCode**

The two-character alpha code which represents a state. For example, *MO*.

### **EFTMerStateProv**

The state or province or region.

### **EFTTrnAmt**

The actual amount of the transaction accepted by the provider.

### **EFTTrnChanCode**

The code of the channel used for the EFT transaction.

### **EFTTrnChanDesc**

The description of the channel used for the EFT transaction.

### **EFTTrnCode**

The code that defines the type of EFT transaction.

### **EFTTrnDesc**

The description of the code that defines the type of EFT transaction.

### **EFTTrnProcTimeDt**

The time and date of the transaction.

### **EFTTrnRevAmt**

The actual amount of the transaction accepted by the provider.

### **EftTrnRevTimeDt**

The time and date of the transaction.

### **EFTTrnStatDesc**

The description of the status of the EFT transaction.

### **EFTTrnStat**

The status of the EFT transaction.

**EFTTrnTimeDt**

The time and date of the transaction.

**EmailAddr**

Email address.

**ExcRsnCode**

The code that describes the reason for the exception.

**FinInstName**

The depository financial institution name.

**MerBusCatCode**

The code of the merchant's business category.

**MerBusCatDesc**

The business category description as related to a merchant.

**MerCity**

The city name.

**MerCntryType**

The country abbreviation from ISO 3166.

**MerName**

The name of the merchant that processed the POS transaction.

**MerPostalCode**

The postal code or ZIP code.

**PhoneNum**

The phone number.

**StdIndustCode**

The standard industry code.

**TrnTimeCat**

Answers the question: What is the timing category for transactions? Canonical values are:

- *Immed*
- *Recur*
- *Sched*

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

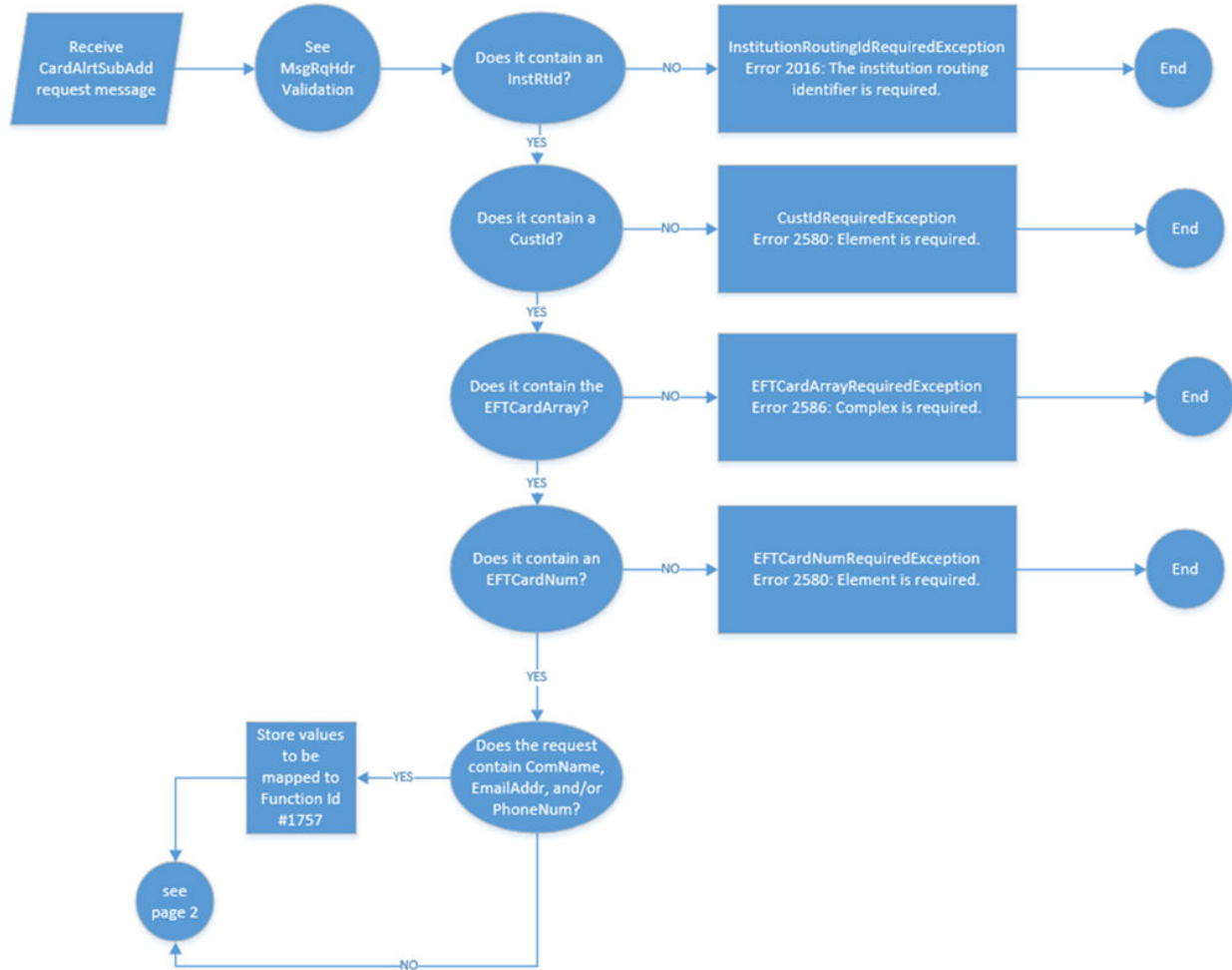
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

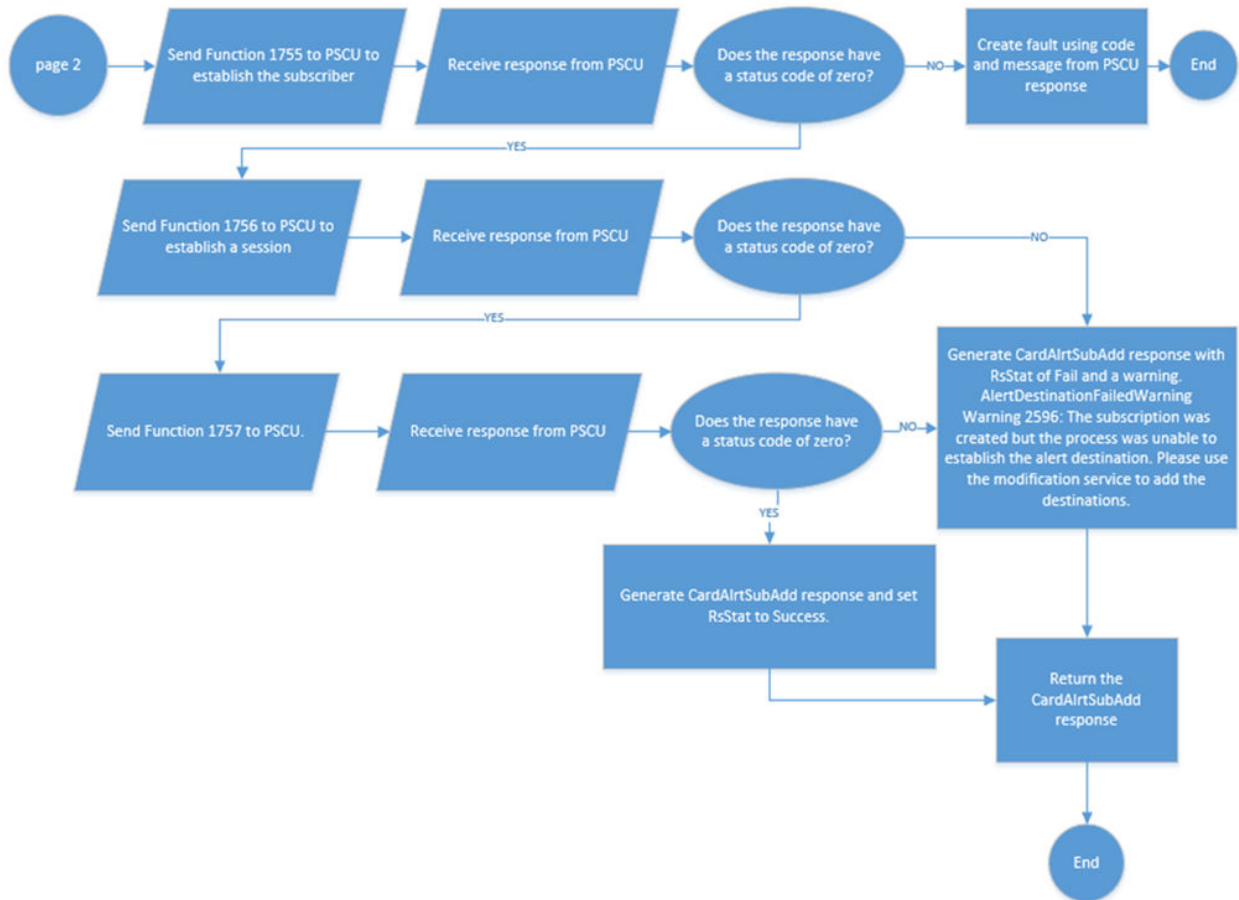
# CardAlrtSubAdd Process

## CardAlrtSubAdd Process Part 1



The second part of the process follows.

### CardAlertSubAdd Process Part 2



### CardAlertSubAdd Error Codes

Error Code	Message
2016	The institution routing identifier is required.
2580	Element is required.
2586	Complex is required.
Warning 2596	The subscription was created but the process was unable to establish the alert destination. Please use the modification service to add the destinations.

## CardAlrtSubAdd Additional Information

### Function ID

- Uses Function ID numbers 1755, 1756, and 1757.

### Request

- **CustId** is required and has the **ClientId** appended to it when it is sent to PSCU.
- At least one **EFTCardNum** is required.
- When calling Function ID number 1757, the first **EFTCardNum** is used in the request to PSCU.

### Response

- If Function ID number 1755 fails, a fault with the PSCU error code and description is returned.
- If Function ID number 1756 or 1757 fails, a valid response is returned with a warning that the subscription was created, but the process was unable to establish the alert destination.

### Third-Party Specific Behavior Information

- If the request contains more than one **EFTCardNum** and for any reason not all are added to the subscriber, a *success* is still returned without any notification that some of the card numbers were not added.

## Card Alert Subscription Addition

Card Alert Subscription Addition is a jXchange service designed to provide consumers with the ability to establish EFT card alerts and controls.

### Message Flow

In jXchange, the Card Alert Subscription Addition service uses a typical exchange of *MType* messages to allow consumers to establish EFT card alerts and controls.

### Primary Request

The consumer forwards the `CardAlrtSubAddRq_MType` message to the service provider. The message contains the following simple elements:

- **ComName**
- **CustId**

- **EmailAddr**
- **PhoneNum**

### Primary Response

The service provider returns the `CardAlrtSubAddRs_MType` message to the consumer. The message contains the following simple element:

- **RsStat**

## Card Alert Subscription Addition Behavior

The Card Alert Subscription Addition service behavior is as follows.

The Card Alert Subscription Addition (`CardAlrtSubAddRq_MType`) root request requires a Customer Identification (**CustId**) and EFT Card Array (`EFTCardArray_AType`). The EFT Card Array (`EFTCardArray_AType`) allows users to submit all EFT cards in a single call.

The Card Alert Subscription Addition (`CardAlrtSubAddRq_MType`) optionally includes the Common Name (**ComName**), Email Address (**EmailAddr**), and Phone Number (**PhoneNum**).

The Card Alert Subscription Addition (`CardAlrtSubAddRs_MType`) root response returns Response Status (**RsStat**).

## CardAlrtSubAddRq\_MType

`CardAlrtSubAddRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `EFTCardArray_AType`
- `ErrOvrRdInfoArray_AType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this complex.

#### **ComName**

The common name. This element is the full text line name like John Doe.

#### **CustId**

The identifier attached to a customer. It includes the `OvrrdInstRtId` attribute.

#### **EmailAddr**

Email address.

## PhoneNum

The phone number.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## EFTCardArray\_AType

`EFTCardArray_AType` is an array `AType` element. This is an array of EFT cards.

Contains:

- `EFTCardRec_CType`

## EFTCardRec\_CType

`EFTCardRec_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### EFTCardNum

The number that is assigned to an EFT card. The card number includes the ISO number.

## ErrOvrRdInfoArray\_AType

`ErrOvrRdInfoArray_AType` is an array `AType` element. This is an array of overrides for faults.

Contains:

- `ErrOvrRd_CType`

## ErrOvrRd\_CType

`ErrOvrRd_CType` is a complex `CType` element. This element is used to override errors created in a previous request. This element is optional.

## Simple Elements

The following simple elements are contained within this complex.

### BusSvcType

The business service type used to convey certain Add and Mod message handling. The canonical value is *NoValidate*.

### ErrCode

The error code.

## **MsgRqHdr\_CType**

`MsgRqHdr_CType` is a complex `CType` element. This is the default message request header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuthenProdCred**

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### **AuthenUsrCred\_CType**

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **Security**

Defines the `wsse:Security` SOAP header element per section 4.

#### **jXchangeHdr\_CType**

`jXchangeHdr_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### **AuditWsid**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

## **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **BusCorrelId**

The correlation identification as related to business functions and activities.

## **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

## **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

## **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

## **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

## **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **CardAirtSubAddRs\_MType**

`CardAirtSubAddRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **RsStat**

The status of the response. Canonical values are:

- *fail*
- *SUCCESS*

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

**jXchangeHdr\_CType Deprecation Details****AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

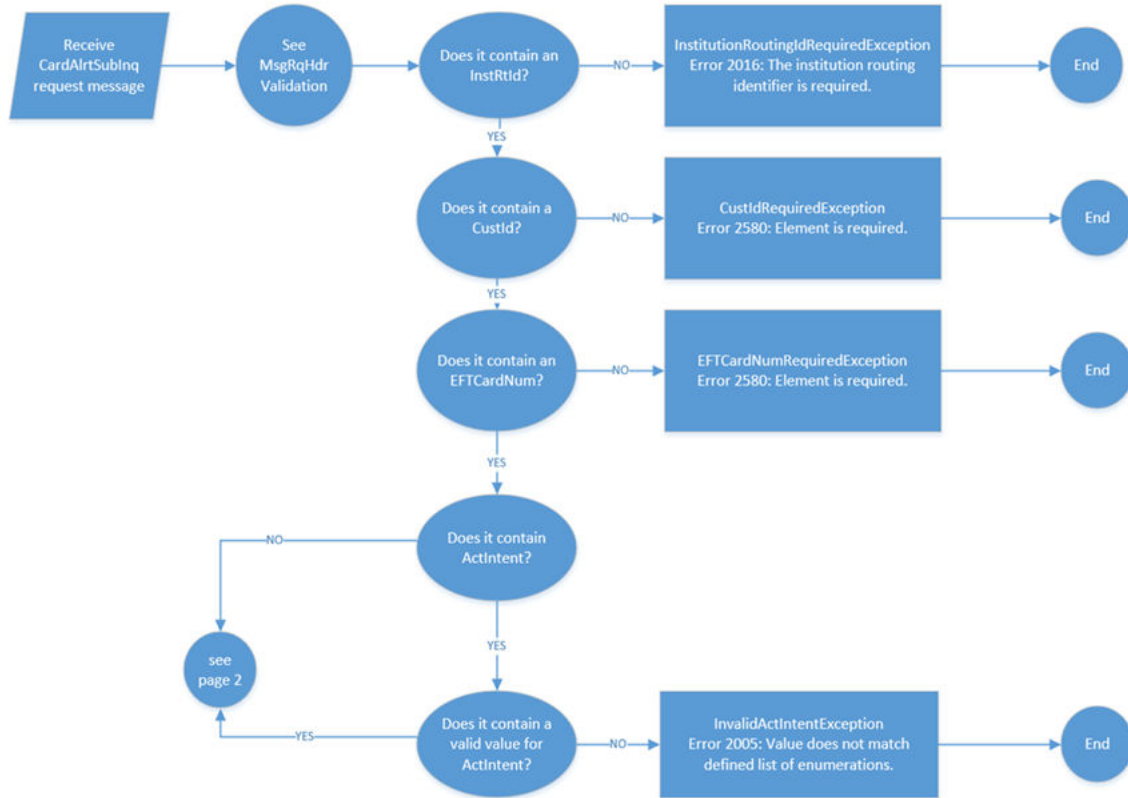
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

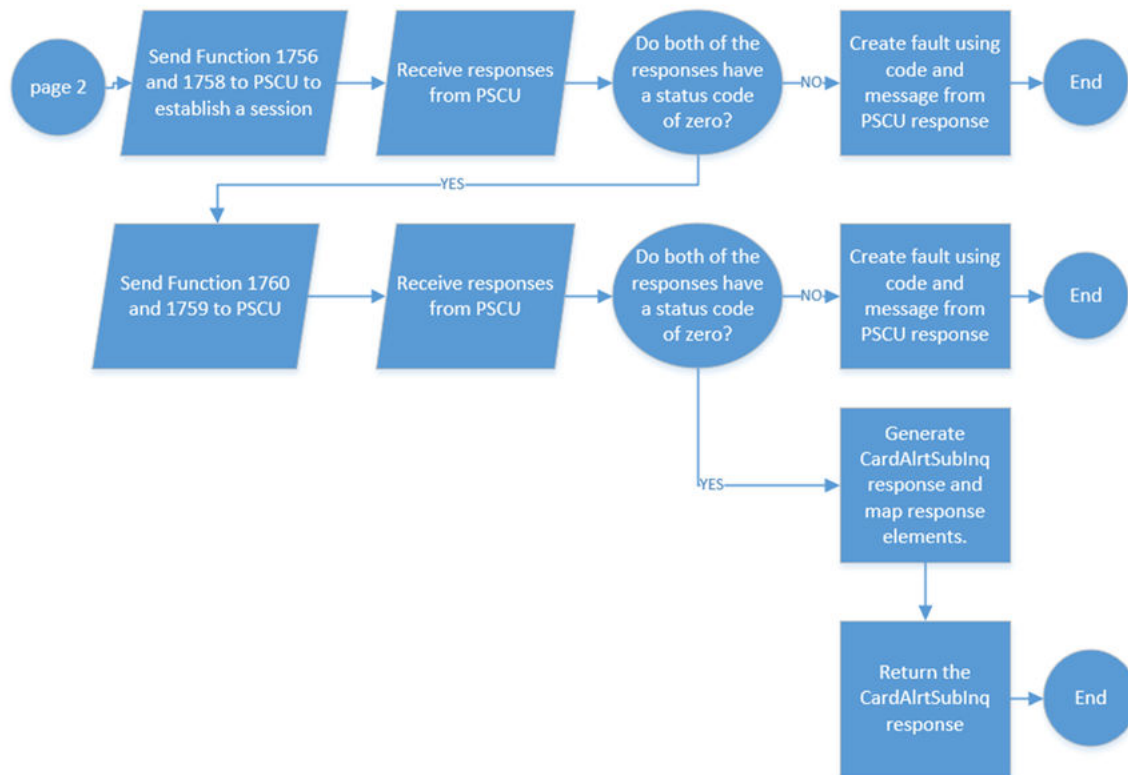
# CardAlrtSubInq Process

## CardAlrtSubInq Process Part 1



The second part of the process follows.

### CardAlertSubInq Process Part 2



## CardAlertSubInq Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.
2016	The institution routing identifier is required.
2580	Element is required.

## CardAlertSubInq Additional Information

### Function ID

- Uses Function ID numbers 1756, 1760, 1759, and 1758.

## Request

- **CustId** is required and has the **ClientId** appended to it when it is sent to PSCU.
- **EFTCardNum** is required.

## Response

- If any of the Function ID numbers 1756, 1760, 1759, or 1758 fail, a fault with the PSCU error code and description is returned.
  - **SUBSCRIBER\_801** or **LOGIN\_103**: These errors are returned when the **<CustID>** in the request does not exist for PSCU/OnDot. These errors indicate that the subscriber was enrolled under a different customer ID or was never previously enrolled.
- While only one **EFTCardNum** is required for the request, the response contains all cards associated with the subscriber.
- The **ActIntentKey** is returned for each card. This is the card reference ID, which is required for the `CardAlrtMod`.
- Handling for **CardAlrtThldArray** for each card/alert combination is as follows:
  - If the response from PSCU contains a value for **CardAlrtThldCode**, a row in the array is created.

If that **CardAlrtThldCode** has a matching **CardAlrtThldDesc**, it is also populated.

```

<CardAlrtCode>A04</CardAlrtCode>
<CardAlrtDesc>Merchant Types</CardAlrtDesc>
<CardAlrtCatType>Alrt</CardAlrtCatType>
<AlrtActType>Act</AlrtActType>
<CardAlrtThldArray>
  <CardAlrtThldRec>
    <CardAlrtThldCode>A04T08</CardAlrtThldCode>
    <CardAlrtThldDesc>Age Restricted</CardAlrtThldDesc>
    <CardAlrtThldActType>Act</CardAlrtThldActType>
  </CardAlrtThldRec>
  <CardAlrtThldRec>
    <CardAlrtThldCode>A04T09</CardAlrtThldCode>
    <CardAlrtThldDesc>Other</CardAlrtThldDesc>
    <CardAlrtThldActType>Act</CardAlrtThldActType>
  </CardAlrtThldRec>
  <CardAlrtThldRec>
    <CardAlrtThldCode>A04T00</CardAlrtThldCode>
    <CardAlrtThldDesc>Department Store</CardAlrtThldDesc>
    <CardAlrtThldActType>InAct</CardAlrtThldActType>
  </CardAlrtThldRec>
</CardAlrtThldArray>

```

If that **CardAlrtThldCode** does not have a matching **CardAlrtThldDesc**, the code appears in the array by itself.

```

<CardAlrtRec>
  <CardAlrtCode>C09</CardAlrtCode>
  <CardAlrtDesc>Spend Limit - Per Month</CardAlrtDesc>
  <CardAlrtCatType>Cntl</CardAlrtCatType>
  <AlrtActType>Act</AlrtActType>
  <CardAlrtThldArray>
    <CardAlrtThldRec>
      <CardAlrtThldCode>C09T01</CardAlrtThldCode>
      <CardAlrtThldVal>100.00</CardAlrtThldVal>
      <CardAlrtThldActType>Act</CardAlrtThldActType>
    </CardAlrtThldRec>
  </CardAlrtThldArray>
</CardAlrtRec>

```

### Third-Party Specific Behavior Information

- The response contains all cards associated with the subscriber, not just those included in the request.

## Card Alert Subscription Inquiry

Card Alert Subscription Inquiry is a jXchange service designed to provide consumers with the ability to establish EFT card alerts and controls.

### Message Flow

In jXchange, the Card Alert Subscription Inquiry service uses a typical exchange of `MType` messages to allow consumers to establish EFT card alerts and controls.

### Primary Request

The consumer forwards the `CardAlrtSubInqRq_MType` message to the service provider. The message contains the following simple elements:

- **ActIntentKey**
- **CustId**
- **EFTCardNum**

### Primary Response

The service provider returns the `CardAlrtSubInqRs_MType` message to the consumer. The message contains the following simple elements:

- **ActIntent**
- **ActIntentKey**
- **CustId**
- **EFTCardNum**

## Card Alert Subscription Inquiry Behavior

The Card Alert Subscription Inquiry service behavior is as follows.

The Card Alert Subscription Inquiry (`CardAlrtSubInqRq_MType`) root request requires Customer Identification (**CustId**) and EFT Card Number (**EFTCardNum**).

The Card Alert Subscription Inquiry (`CardAlrtSubInqRq_MType`) optionally includes the Activity Intention (**ActIntent**).

The Card Alert Subscription Inquiry (`CardAlrtSubInqRs_MType`) root response returns the following elements:

- Customer Identifier (**CustId**)
- EFT Card Number (**EFTCardNum**)
- Activity Intention (**ActIntent**)
- Activity Intention Key (**ActIntentKey**)
- Card Alert Subscription Inquiry complex (`CardAlrtSubInqRec_CType`)

The Card Alert Subscription Inquiry record complex (`CardAlrtSubInqRec_CType`) contains the following elements:

- Common Name (**ComName**)
- Email Address (**EmailAddr**)
- Phone Number (**PhoneNum**)
- Card Alert Subscription Array (`CardAlrtSubArray_AType`)

The Card Alert Subscription Record complex (`CardAlrtSubInqRec_CType`) contains the following elements:

- EFT Card Number (**EFTCardNum**)
- Activity Intention Key (**ActIntentKey**)
- Card Alert Array (`CardAlrtArray_AType`)

The Card Alert Array (`CardAlrtArray_AType`) contains the Card Alert Record complex (`CardAlrtRec_CType`), which contains the following elements:

- Alert Activity Type (**AlrtActType**)
- Card Alert Category Type (**CardAlrtCatType**)
- Card Alert Code (**CardAlrtCode**)
- Card Alert Description (**CardAlrtDesc**)
- Card Alert Region Latitude (**CardAlrtRegionLat**)
- Card Alert Region Longitude (**CardAlrtRegionLong**)
- Card Alert Region Radius (**CardAlrtRegionRadius**)
- Card Alert Region User Description (**CardAlrtRegionUsrDesc**)
- Card Alert Threshold Array (`CardAlrtThldArray_AType`)

The Card Alert Threshold Array (`CardAlrtThldArray_AType`) contains the following elements:

- Card Alert Threshold Code (**CardAlrtThldCode**)
- Card Alert Threshold Description (**CardAlrtThldDesc**)
- Card Alert Threshold Value (**CardAlrtThldVal**)
- Card Alert Threshold Activity Type (**CardAlrtThldActType**)

## CardAlrtSubInqRq\_MType

CardAlrtSubInqRq\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRqHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### ActIntent

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

#### CustId

The identifier attached to a customer. It includes the *OvrrdInstRtid* attribute.

#### EFTCardNum

The number that is assigned to an EFT card. The card number includes the ISO number.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

## AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CardAlrtSubInqRs\_MType

`CardAlrtSubInqRs_MType` is a message `MType` element.

Contains:

- `CardAlrtSubInqRec_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

## Simple Elements

The following simple elements are contained within this complex.

### ActIntent

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

### CustId

The identifier attached to a customer. It includes the *OvrrdInstRtId* attribute.

### EFTCardNum

The number that is assigned to an EFT card. The card number includes the ISO number.

### **CardAlrtSubInqRec\_CType**

`CardAlrtSubInqRec_CType` is a complex `CType` element.

Contains:

- `CardAlrtSubArray_AType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ComName**

The common name. This element is the full text line name like John Doe.

#### **EmailAddr**

Email address.

#### **PhoneNum**

The phone number.

### **CardAlrtSubArray\_AType**

`CardAlrtSubArray_AType` is an array `AType` element. This is an array of EFT card alert subscriptions.

Contains:

- `CardAlrtSubRec_CType`

### **CardAlrtSubRec\_CType**

`CardAlrtSubRec_CType` is a complex `CType` element.

Contains:

- `CardAlrtArray_AType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ActIntentKey**

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

#### **EFTCardNum**

The number that is assigned to an EFT card. The card number includes the ISO number.

`CardAlrtArray_AType`

`CardAlrtArray_AType` is an array `AType` element. This is an array of alerts related to a specific card.

Contains:

- `CardAlrtRec_CType`

`CardAlrtRec_CType`

`CardAlrtRec_CType` is a complex `CType` element.

Contains:

- `CardAlrtThldArray_AType`

## Simple Elements

The following simple elements are contained within this complex.

### **AlrtActType**

Answers the question: What is the activity status of an alert? Canonical values are:

- *Act*
- *InAct*

### **CardAlrtCatType**

Identifies the category as related to an EFT card alert. Canonical values are:

- *Alrt*
- *Cntl*

### **CardAlrtCode**

The code assigned to an alert for EFT cards.

### **CardAlrtDesc**

The description of the code assigned to an alert for EFT cards.

### **CardAlrtRegionId**

An identifier given to the region related to a card alert.

### **CardAlrtRegionLat**

The Geolocation latitude.

### **CardAlrtRegionLong**

The Geolocation longitude.

### **CardAlrtRegionRadius**

The radius of a region for card alert in meters.

## CardAlrtRegionUsrDesc

The name given by a user to identify a card alert region.

CardAlrtThldArray\_AType

CardAlrtThldArray\_AType is an array AType element. This is an array of thresholds related to a specific alert.

Contains:

- CardAlrtThldRec\_CType

CardAlrtThldRec\_CType

CardAlrtThldRec\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### CardAlrtThldActType

What is the activity status of a threshold as related to an alert? Canonical values are:

- Act
- InAct

### CardAlrtThldCode

The code assigned to thresholds as related to an alert for EFT cards.

### CardAlrtThldDesc

The description of the code assigned to thresholds as related to an alert for EFT cards.

### CardAlrtThldVal

The value as related to thresholds.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

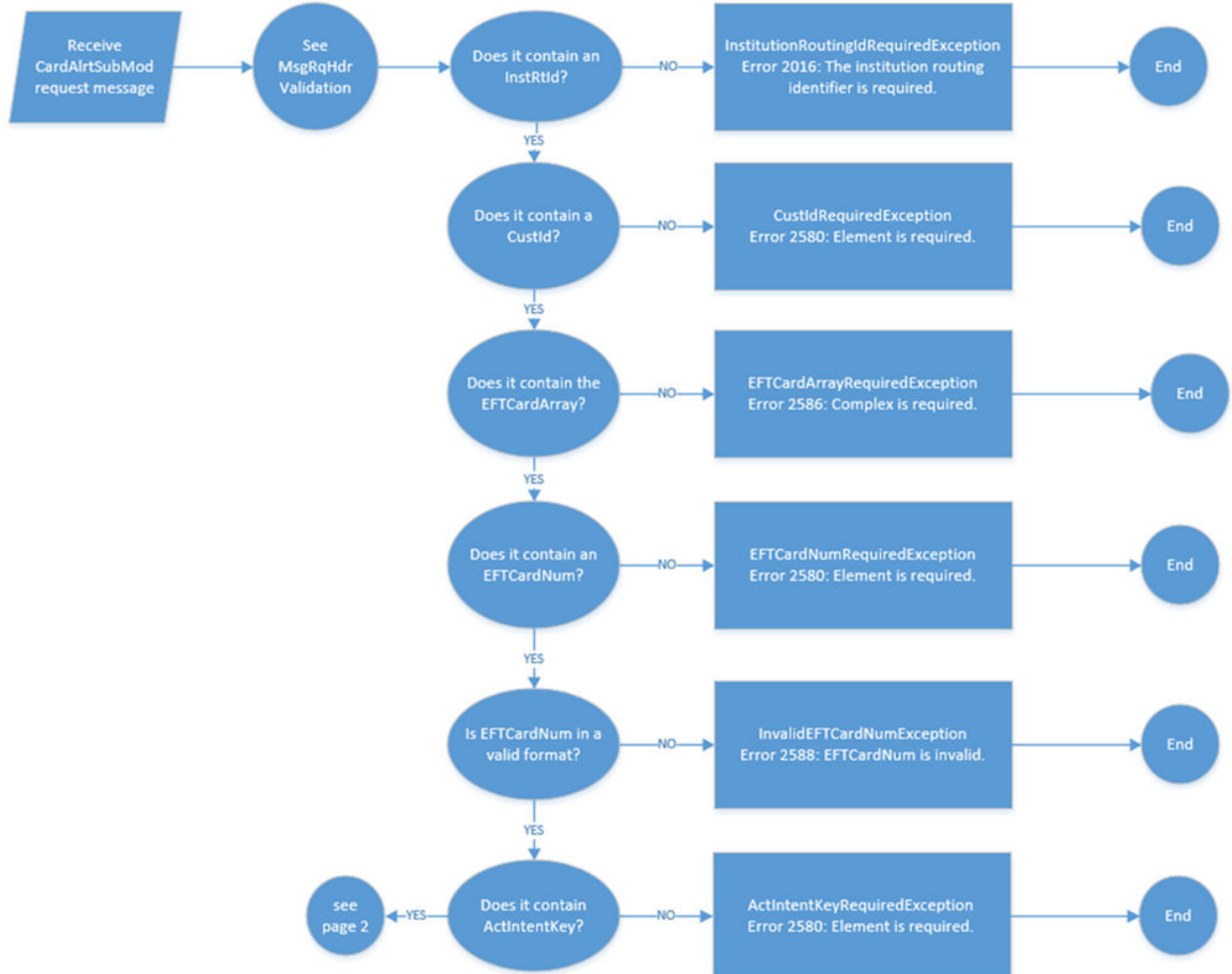
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

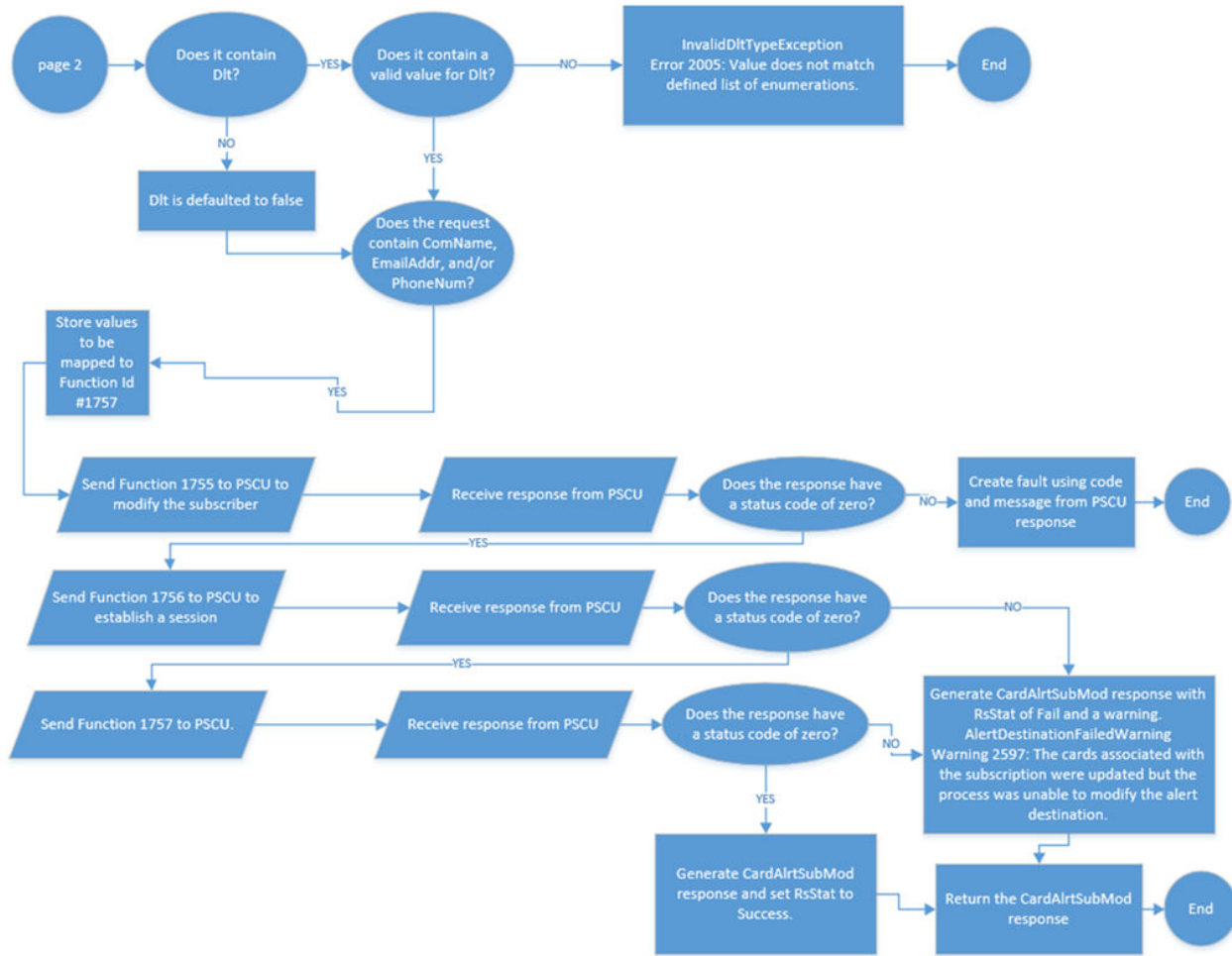
# CardAlrtSubMod Process

## CardAlrtSubMod Process Part 1



The second part of the process follows.

### CardAlrtSubMod Process Part 2



### CardAlrtSubMod Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.
2016	The institution routing identifier is required.
2580	Element is required.
2586	Complex is required.
2588	EFTCardNum is invalid.

Error Code	Message
Warning 2597	The cards associated with the subscription were updated but the process was unable to modify the alert destination.

## CardAlrtSubMod Additional Information

### Function ID

- Uses Function ID numbers 1755, 1756, and 1757.

### Request

- **CustId** is required and has the **ClientId** appended to it when it is sent to PSCU.
- At least one **EFTCardNum** is required.
- When calling Function ID number 1757, the first **EFTCardNum** is used in the request to PSCU.
- **ActIntentKey** is required.
- **DIt** is validated to be *true* or *false*, but no other logic exists. A subscriber must have at least one associated card. The consumer must then disable each alert associated with that card to achieve the result of no alerts.

### Response

- If Function ID number 1755 fails, a fault with the PSCU error code and description is returned.
- If Function ID number 1756 or 1757 fails, a valid response is returned with a warning that the subscription was modified, but the process was unable to modify the alert destination.

### Third-Party Specific Behavior Information

- If the request contains more than one **EFTCardNum** and for any reason not all are added to the subscriber, a *success* is still returned without any notification that some of the card numbers were not added.

## Card Alert Subscription Modification

Card Alert Subscription Modification is a jXchange service designed to provide consumers with the ability to establish EFT card alerts and controls.

### Message Flow

In jXchange, the Card Alert Subscription Modification service uses a typical exchange of `MType` messages to allow consumers to establish EFT card alerts and controls.

### Primary Request

The consumer forwards the `CardAlrtSubModRq_MType` message to the service provider. The message contains the following simple elements:

- **ActIntentKey**
- **ComName**
- **CustId**
- **Dlt**
- **EmailAddr**
- **PhoneNum**

### Primary Response

The service provider returns the `CardAlrtSubModRs_MType` message to the consumer. The message contains the following simple element:

- **RsStat**

## Card Alert Subscription Modification Behavior

The Card Alert Subscription Modification service behavior is as follows.

The Card Alert Subscription Modification (`CardAlrtSubModRq_MType`) root request requires Customer Identification (**CustId**), EFT Card Array (`EFTCardArray_AType`), and Activity Intention Key (**ActIntentKey**).

Use the EFT Card Array (`EFTCardArray_AType`) to set the list of cards. For example, registration exists with cards A, B, and C. The modification request is sent with **EFTCardNum** = A, B, D. This would result in a replaced card list of **A, B, D**.

The Card Alert Subscription Modification (`CardAlrtSubModRq_MType`) optionally includes the Common Name (**ComName**), Email Address (**EmailAddr**), Phone Number (**PhoneNum**), and Delete (**Dlt**).

The Card Alert Subscription Modification (`CardAlrtSubModRs_MType`) root response returns Response Status (**RsStat**).

## CardAlrtSubModRq\_MType

`CardAlrtSubModRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `EFTCardArray_AType`

This array is used to set the list of cards. For example, if a registration exists with cards A, B, and C, the request is sent with **EFTCardNum** = A, B, D. This request results in a replaced card list of `A, B, D`.

- `ErrOvrRdInfoArray_ATpe`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this complex.

#### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

#### ComName

The common name. This element is the full text line name like John Doe.

#### CustId

The identifier attached to a customer. It includes the *OvrrdInstRtId* attribute.

#### Dlt

The delete element. Canonical values are:

- *false*
- *true*

#### EmailAddr

Email address.

#### PhoneNum

The phone number.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## EFTCardArray\_AType

EFTCardArray\_AType is an array AType element. This is an array of EFT cards.

Contains:

- EFTCardRec\_CType

## EFTCardRec\_CType

EFTCardRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### EFTCardNum

The number that is assigned to an EFT card. The card number includes the ISO number.

## ErrOvrRdInfoArray\_AType

ErrOvrRdInfoArray\_AType is an array AType element. This is an array of overrides for faults.

Contains:

- ErrOvrRd\_CType

## ErrOvrRd\_CType

ErrOvrRd\_CType is a complex CType element. This element is used to override errors created in a previous request. This element is optional.

### Simple Elements

The following simple elements are contained within this complex.

#### BusSvcType

The business service type used to convey certain Add and Mod message handling. The canonical value is *NoValidate*.

#### ErrCode

The error code.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType

- `jXchangeHdr_CType`

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

### jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and

the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **CardAlrtSubModRs\_MType**

`CardAlrtSubModRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **RsStat**

The status of the response. Canonical values are:

- *fail*
- *success*

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

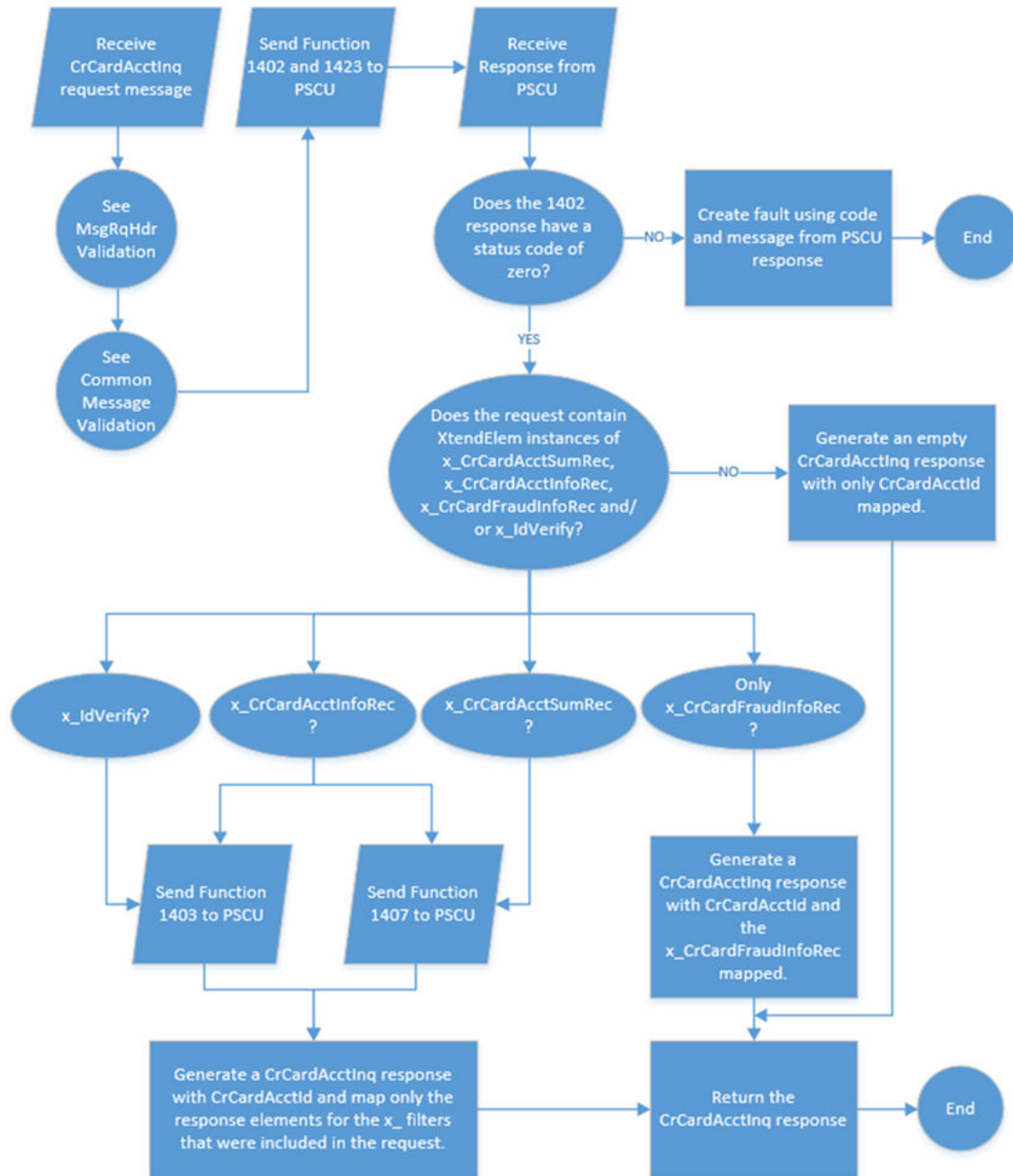
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardAcctInq Process

## CrCardAcctInq Process



## CrCardAcctInq Error Codes

Error Code	Message
1000	Unable to successfully complete requested action due to unexpected system exception.
2016	The institution routing identifier is required.
2581	Incoming request translation failed for {message action} due to configuration.
2582	{message action} is not supported.
2583	The credit card number is invalid.

## CrCardAcctInq Additional Information

### Function ID

- `x_CrCardAcctSumRec` uses Function ID numbers 1402, 1407, and 1423.
- `x_CrCardAcctInfoRec` uses Function ID numbers 1402, 1403, 1407, and 1423.
- `x_CrCardFraudInfoRec` uses Function ID number 1402.
- `x_IdVerify` uses Function ID number 1403.

### Request

- Depending on the array of `x_` elements, only messages that generate results required to fulfill the `x_` requests are sent to PSCU.

### Response

- Data is returned only for the valid `x_` filters received. If no filters are received, or if only invalid filters are received, no data is returned.
- **CrCardExpDt** day of month is set to the last day of the month.
- A fault received for Function ID number 1402 is the only function call that results in a fault being returned to the consumer. Faults received for the other function calls result in a `CrCardAcctInq` response with the data that was returned.
- The rewards result is a combined total of rewards rather than returning each individual reward program.

## Credit Card Account Inquiry

Credit Card Account Inquiry is a jXchange service designed to provide consumers the ability to inquire on the details as related to a credit card.

### Message Flow

In jXchange, the Credit Card Account Inquiry service uses a typical exchange of `MType` messages to provide consumers the ability to inquire on the details as related to a credit card.

### Primary Request

The consumer forwards the `CrCardAcctInqRq_MType` message to the service provider. The message contains the following simple element:

- **CrCardAcctId**

### Primary Response

The service provider returns the `CrCardAcctInqRs_MType` message to the consumer. The message contains the following simple element:

- **CrCardAcctId**

## Credit Card Account Inquiry Behavior

The Credit Card Account Inquiry root request message (`CrCardAcctInqRq_MType`) requires a valid Credit Card Account Identification (`CrCardAcctId`). The root request optionally includes the Include Extended Element Array (`IncXtendElemArray_AType`). However, failure to submit a named complex results in an empty response.

The Credit Card Account Inquiry root response message (`CrCardAcctInqRs_MType`) echoes back the request element. The response returns the following:

- Extended Credit Card Account Information Record (`x_CrCardAcctInfoRec_CType`)
- Extended Credit Card Account Summary Record (`x_CrCardAcctSumRec_CType`)
- Extended Credit Card Fraud Information Record (`x_CrCardFraudInfoRec_CType`)
- Extended Identification Verification complex (`x_IdVerify_CType`)

The Extended Credit Card Account Summary Record complex (`x_CrCardAcctSumRec_CType`) delivers a scaled-down version of a complete inquiry to allow the consumer to provide a quick view of common elements. The Extended Credit Card Account Summary Record (`x_CrCardAcctSumRec_CType`) encapsulates the following:

- Account Status (**AcctStat**)
- Account Status Description (**AcctStatDesc**)
- Available Credit (**AvailCr**)
- Credit Card Product Description (**CrCardProdDesc**)
- Current Balance (**CurBal**)
- Last Payment Amount (**LastPmtAmt**)
- Last Payment Date (**LastPmtDt**)
- Last Statement Balance (**LastStmntBal**)
- Last Statement Date (**LastStmntDt**)
- Line of Credit Limit (**LOCLmt**)
- Minimum Payment Amount (**MinPmtAmt**)
- Next Pay Date (**NxtPayDt**)
- Redeemable Reward Points Balance (**RedeemRewPtBal**)

The Extended Credit Card Account Information Record complex (`x_CrCardAcctInfoRec_CType`) encapsulates all the same elements included in the Extended Credit Card Account Summary record complex (`x_CrCardAcctSumRec_CType`) plus the following:

- Credit Card Account Information Record complex (`CrCardAcctInfoRec_CType`)
- Credit Card Activity Description (**CrCardActDesc**)
- Credit Card Limit Update Description (**CrCardLmtUpdDesc**)
- Credit Life Company Description (**CrLifeCompDesc**)
- Last Limit Update Date (**LastLmtUpdDt**)
- Line of Credit Status Description (**LOCStatDesc**)
- Opening Date (**OpenDt**)
- Past Due Days (**PastDueDays**)

The Credit Card Account Information Record complex (`CrCardAcctInfoRec_CType`) encapsulates all the same elements included in the Extended Credit Card Account Summary record complex (`x_CrCardAcctSumRec_CType`) plus the following:

- Email Array (`EmailArray_AType`)
- Phone Array (`PhoneArray_AType`)
- User Definition Information Array (`UserDefInfoArray_AType`)
- Annual Percentage Rate (**AnnPctRate**)
- Cash Advance Annual Percentage Rate (**CashAdvAnnPctRate**)
- Credit Card Activity Code (**CrCardActCode**)
- Credit Card Expiration Date (**CrCardExpDt**)
- Credit Card Issued Number (**CrCardIssuedNum**)
- Credit Card Limit Update Code (**CrCardLmtUpdCode**)

- Credit Life Company Code (**CrLifeCompCode**)
- Embossed Name (**EmbosName**)
- Interest Paid Year-to-Date (**IntPaidYTD**)
- Last Credit Card Order Date (**LastCrCardOrderDt**)
- Line of Credit Limit Maintenance Date (**LOCLmtMainDt**)
- Line of Credit Status (**LOCStat**)
- Past Due Amount (**PastDueAmt**)
- Previous Line of Credit Limit (**PrevLOCLmt**)
- Secondary Embossed Name (**SecdEmbosName**)
- Statement Cycle (**StmtCycle**)

The Extended Credit Card Fraud Information Record complex (`x_CrCardFraudInfoRec_CType`) encapsulates the Fraud Plan Description (**FraudPlanDesc**) and Credit Card Fraud Information Record complex (`CrCardFraudInfoRec_CType`).

The Credit Card Fraud Information Record complex (`CrCardFraudInfoRec_CType`) encapsulates the following elements:

- Fraud Plan Code (**FraudPlanCode**)
- Fraud Score (**FraudScore**)
- Fraud Score Date (**FraudScoreDt**)
- Fraud Suspect Date (**FraudSusDt**)
- Fraud Suspended Plan Code (**FraudSuspPlanCode**)
- Fraud Suspended Plan Suspended End Date (**FraudSuspPlanSuspEndDt**)
- Fraud Suspended Plan Suspended Start Date (**FraudSuspPlanSuspStartDt**)

## CrCardAcctInqRq\_MType

`CrCardAcctInqRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `IncXtendElemArray_AType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## IncXtendElemArray\_AType

IncXtendElemArray\_AType is an array AType element. This is an array that lists x\_ elements by name, which are to be included in the response.

Contains:

- IncXtendElemInfo\_CType

## IncXtendElemInfo\_CType

IncXtendElemInfo\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### XtendElem

Included extended elements. The consumer would ask by name for x\_ prefix elements to be included in the response.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardAcctInqRs\_MType

`CrCardAcctInqRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`
- `x_CrCardAcctInfoRec_CType`
- `x_CrCardAcctSumRec_CType`
- `x_CrCardFraudInfoRec_CType`
- `x_IdVerify_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

#### MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

## **x\_CrCardAcctInfoRec\_CType**

`x_CrCardAcctInfoRec_CType` is a complex `CType` element.

Contains:

- `AuthUsrCrCardArray_AType`
- `CrCardAcctInfoRec_CType`
- `CrCardRwrInqArray_AType`
- `Custom_CType`

## Simple Elements

The following simple elements are contained within this complex.

### **AcctStatDesc**

The account status description.

### **AvailCr**

The available credit.

### **CrCardActDesc**

The description of the code that defines the state of the activation of a credit card.

### **CrCardLmtUpdDesc**

The description of the code that defines the reason the credit card limit was updated.

### **CrCardPgmName**

The program name as related to a credit card.

### **CrLifeCompDesc**

The description of the code that references the credit life insurance company.

### **CurBal**

The current balance.

### **LastLmtUpdDt**

The date the last time a credit limit was updated.

### **LOCStatDesc**

The description of the status of the line of credit.

### **OpenDt**

The date opened.

### **OrgIssueCrCardAcctId**

The number or character that identifies an account record.

### **PastDueDays**

The number of days a loan is past due.

### **ReIssueCrCardAcctId**

The number or character that identifies an account record.

### **AuthUsrCrCardArray\_AType**

`AuthUsrCrCardArray_AType` is an array `AType` element. This is an array of credit card aliases and authorized users.

Contains:

- `AuthUsrCrCardRec_CType`

## AuthUsrCrCardRec\_CType

x\_CrCardAcctInfoRec\_CType is a complex CType element.

Contains:

- AuthUsrName references PersonName\_CType
- Custom\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AliasCrCardId

The number or character that identifies an account record.

#### AuthUsrCrCardType

The type of alias/authorized user's credit card. Canonical values are:

- *Prim*
- *Secd*
- *Auth*

#### Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

#### AuthUsrName

PersonName\_CType is a complex CType element. It contains name information. This complex is optional.

AuthUsrName references PersonName\_CType.

Contains:

- X\_PersonName

### Simple Elements

The following simple elements are contained within this complex.

#### ComName

The common name. This element is the full text line name like John Doe.

#### FirstName

The first name.

#### LastName

The last name.

### **MiddleName**

The middle name.

X\_PersonName\_CType

x\_PersonName\_CType is a complex CType element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AbbName**

An abbreviated individual's or entity's name.

#### **LegalName**

Used by entities like trusts, or businesses in the case where an individual is doing business as a company, or when the legal name is different than the ComName.

#### **NameSuffix**

The name suffix. For examples, Jr. or MD.

#### **SalName**

A full text line name which is used in mailings. For example, Mr. and Mrs. John Doe.

#### **TitlePrefix**

The title prefix. Examples: Mr. or Mrs.

### **CrCardAcctInfoRec\_CType**

CrCardAcctInfoRec\_CType is a complex CType element.

Contains:

- Custom\_CType
- EmailArray\_AType
- PhoneArray\_AType
- UserDefInfoArray\_AType

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AcctStat**

The account status.

#### **AnnPctRate**

The annual percentage rate (APR).

#### **CashAdvAnnPctRate**

The annual percentage rate (APR).

**CrCardActCode**

The code that defines the state of the activation of a credit card.

**CrCardExpDt**

The expiration date.

**CrCardIssuedNum**

The number of credit cards issued.

**CrCardLmtUpdCode**

The code that defines the reason the credit limit was updated.

**CrCardProdDesc**

The description of the credit card product.

**CrLifeCompCode**

The code that references the credit life insurance company.

**EmbosName**

The name that is embossed on the EFT card.

**IntPaidYTD**

The interest paid year-to-date.

**LastCrCardOrderDt**

The last date that a credit card was ordered.

**LastPmtAmt**

The last payment amount.

**LastPmtDt**

The last payment date.

**LastStmntBal**

The last statement balance.

**LastStmntDt**

The last statement date.

**LOCLmtMainDt**

The last maintenance date.

**LOCLmt**

The line of credit limit.

**LOCStat**

The status of the line of credit.

**MinPmtAmt**

The minimum payment amount.

**NxtPayDt**

The next payment date.

**PastDueAmt**

The past due amount.

**PrevLOCLmt**

The previous line of credit limit.

**RemMinPmtAmt**

The remaining minimum payment amount.

**SecdEmbosName**

The secondary name that could be embossed on the EFT card.

**StmtCycle**

The statement cycle.

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

**EmailArray\_AType**

`EmailArray_AType` is an array `AType` element. This is an array used to define email contact information.

Contains:

- `EmailInfo_CType`

`EmailInfo_CType`

`EmailInfo_CType` is a complex `CType` element. This element is optional.

**Simple Elements**

The following simple elements are contained within this complex.

**EmailAddr**

Email address.

**EmailType**

Email type. Examples: Home, Work, Statement, Notice. Canonical values are:

- *Prim*
- *Secd*
- *OLB*

**EmailType** is a hybrid open enumeration.

## PhoneArray\_AType

PhoneArray\_AType is an array AType element. This array contains one or more PhoneInfo\_CType complexes to define phone contact information. This array is optional.

Contains:

- PhoneInfo\_CType

## PhoneInfo\_CType

PhoneInfo\_CType is a complex CType element. It contains basic phone contact information. This complex is optional.

Contains:

- MobPhoneInfo\_CType

## Simple Elements

The following simple elements are contained within this complex.

### ConEndTime

The Greenwich Mean time when contact availability ends.

### ConStartTime

The Greenwich Mean time when contact availability starts.

### PhoneExt

The phone extension.

### PhoneNumDsp

Phone Number Display, based on format codes which may include special formatting. Examples include:

- (XXX)XXX-XXXX
- XXX-XXX-XXXX
- XXX/XXX/XXXX
- XXX.XXX.XXXX
- XXX-XXX-XXXXXX
- XXXXX-XXX-XXX-XXXX

### PhoneNum

The phone number.

### PhoneTime

Best phone usage time, day, or evening.

### PhoneType

Phone type examples are: home, work, fax, cell. Canonical values are:

- *Home*
- *SecdHome*
- *Bus*
- *SecdBus*
- *HomeCell*
- *BusCell*
- *PersonalCell*
- *HomeFax*
- *BusFax*
- *SecdBusCell*

**PhoneType** is a hybrid open enumeration.

### UserDefInfoArray\_AType

`UserDefInfoArray_AType` is an array `AType` element. This is an array of `UserDefInfo` simple elements used to describe user-defined information.

Contains:

- `UserDefInfo_CType`

`UserDefInfo_CType`

`UserDefInfo_CType` is a complex `CType` element.

### Simple Elements

The following simple elements are contained within this complex.

#### OvrrdInstRtId

Describes the institution routing number or bank number/location used to override the *InstRtId* found in a message header.

#### UserDefCode

The code that represents the answer to the `UserDefTxt`.

#### UserDefDesc

The description of what the `UserDefCode` represents.

#### UserDefDt

A date field that has a relationship with the `UserDefTxt` or `UserDefCode`.

#### UserDefInfo1

Additional information that may accompany any of the user supplied codes.

#### UserDefInfo2

Additional information that may accompany any of the user supplied codes.

### **UserDefInfo3**

Additional information that may accompany any of the user supplied codes.

### **UserDefTxt**

User Defined Text is part of a matched pair array that describes the proceeding elements.

### **CrCardRwrInqArray\_AType**

`CrCardRwrInqArray_AType` is an array `AType` element. This is an array of reward values for inquiry.

Contains:

- `CrCardRwrInqRec_CType`

### **CrCardRwrInqRec\_CType**

`CrCardRwrInqRec_CType` is a complex `CType` element.

Contains:

- `Custom_CType`
- `RwrPtCatArray_AType`
- `RwrPtExpArray_AType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **RedeemRwrPtAmt**

The number of reward points that have been redeemed.

#### **RwrProdDesc**

The description or name given to a rewards product.

#### **RwrPtAccrAmt**

The number of reward points that have accrued but are not yet available.

#### **RwrPtEarnLTD**

The number of reward points that have been earned life-to-date.

#### **RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

#### **RwrPtExpDt**

The date the reward points are due to expire.

#### **RwrPtRedeemLTD**

The number of reward points that have been redeemed life-to-date.

`Custom_CType`

`Custom_CType` is a complex `CType` element.

This element is optional.

`RwrPtCatArray_AType`

`RwrPtCatArray_AType` is an array `AType` element. This is an array of reward point categories.

Contains:

- `RwrPtCatRec_CType`

`RwrPtCatRec_CType`

`RwrPtCatRec_MType` is a complex `CType` element.

Contains:

- `Custom_CType`

## Simple Elements

The following simple elements are contained within this message.

### **RwrPtCatType**

The category as related to reward points. Canonical values are:

- *Adj*
- *Earn*
- *Forfeit*
- *TradeIn*
- *TradeOut*
- *Redeem*

### **RwrPtCycleAmt**

The amount of reward points.

### **RwrPtDailyAmt**

The amount of reward points.

### **RwrPtLTDAmt**

The amount of reward points.

### **RwrPtMTDAmt**

The amount of reward points.

### **RwrPtPrevCycleAmt**

The amount of reward points.

### **RwrPtQTDAmt**

The amount of reward points.

### **RwrPtYTDamt**

The amount of reward points.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

RwrPtExpArray\_AType

RwrPtExpArray\_AType is an array AType element. This is an array of reward expiration dates and amounts.

Contains:

- RwrPtExpRec\_CType

RwrPtExpRec\_CType

RwrPtExpRec\_MType is a complex CType element.

Contains:

- Custom\_CType

## **Simple Elements**

The following simple elements are contained within this message.

### **RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

### **RwrPtExpDt**

The date the reward points are due to expire.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

### **Custom\_CType**

Custom\_CType is a complex CType element.

This element is optional.

### **x\_CrCardAcctSumRec\_CType**

x\_CrCardAcctSumRec\_CType is a complex CType element.

Contains:

- AuthUsrCrCardArray\_AType

- CrCardRwrdrInqArray\_AType
- Custom\_CType

## Simple Elements

The following simple elements are contained within this complex.

### **AcctStatDesc**

The account status description.

### **AcctStat**

The account status.

### **AvailCr**

The available credit.

### **CrCardProdDesc**

The description of the credit card product.

### **CurBal**

The current balance.

### **LastPmtAmt**

The last payment amount.

### **LastPmtDt**

The last payment date.

### **LastStmntBal**

The last statement balance.

### **LastStmntDt**

The last statement date.

### **LOCLmt**

The line of credit limit.

### **MinPmtAmt**

The minimum payment amount.

### **NxtPayDt**

The next payment date.

### **RemMinPmtAmt**

The remaining minimum payment amount.

## **AuthUsrCrCardArray\_AType**

AuthUsrCrCardArray\_AType is an array AType element. This is an array of credit card aliases and authorized users.

Contains:

- `AuthUsrCrCardRec_CType`

### `AuthUsrCrCardRec_CType`

`x_CrCardAcctInfoRec_CType` is a complex `CType` element.

Contains:

- `AuthUsrName` references `PersonName_CType`
- `Custom_CType`

### Simple Elements

The following simple elements are contained within this complex.

#### **AliasCrCardId**

The number or character that identifies an account record.

#### **AuthUsrCrCardType**

The type of alias/authorized user's credit card. Canonical values are:

- *Prim*
- *Secd*
- *Auth*

`Custom_CType`

`Custom_CType` is a complex `CType` element.

This element is optional.

`AuthUsrName`

`PersonName_CType` is a complex `CType` element. It contains name information. This complex is optional.

`AuthUsrName` references `PersonName_CType`.

Contains:

- `X_PersonName`

### Simple Elements

The following simple elements are contained within this complex.

#### **ComName**

The common name. This element is the full text line name like John Doe.

#### **FirstName**

The first name.

#### **LastName**

The last name.

### **MiddleName**

The middle name.

X\_PersonName\_CType

x\_PersonName\_CType is a complex CType element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **AbbName**

An abbreviated individual's or entity's name.

### **LegalName**

Used by entities like trusts, or businesses in the case where an individual is doing business as a company, or when the legal name is different than the ComName.

### **NameSuffix**

The name suffix. For examples, Jr. or MD.

### **SalName**

A full text line name which is used in mailings. For example, Mr. and Mrs. John Doe.

### **TitlePrefix**

The title prefix. Examples: Mr. or Mrs.

## **CrCardRwrInqArray\_AType**

CrCardRwrInqArray\_AType is an array AType element. This is an array of reward values for inquiry.

Contains:

- CrCardRwrInqRec\_CType

## **CrCardRwrInqRec\_CType**

CrCardRwrInqRec\_CType is a complex CType element.

Contains:

- Custom\_CType
- RwrPtCatArray\_AType
- RwrPtExpArray\_AType

## **Simple Elements**

The following simple elements are contained within this complex.

### **RedeemRwrPtAmt**

The number of reward points that have been redeemed.

#### **RwrProdDesc**

The description or name given to a rewards product.

#### **RwrPtAccrAmt**

The number of reward points that have accrued but are not yet available.

#### **RwrPtEarnLTD**

The number of reward points that have been earned life-to-date.

#### **RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

#### **RwrPtExpDt**

The date the reward points are due to expire.

#### **RwrPtRedeemLTD**

The number of reward points that have been redeemed life-to-date.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

RwrPtCatArray\_AType

RwrPtCatArray\_AType is an array AType element. This is an array of reward point categories.

Contains:

- RwrPtCatRec\_CType

RwrPtCatRec\_CType

RwrPtCatRec\_MType is a complex CType element.

Contains:

- Custom\_CType

### **Simple Elements**

The following simple elements are contained within this message.

#### **RwrPtCatType**

The category as related to reward points. Canonical values are:

- *Adj*
- *Earn*
- *Forfeit*

- *TradeIn*
- *TradeOut*
- *Redeem*

### **RwrPtCycleAmt**

The amount of reward points.

### **RwrPtDailyAmt**

The amount of reward points.

### **RwrPtLTDAmt**

The amount of reward points.

### **RwrPtMTDAmt**

The amount of reward points.

### **RwrPtPrevCycleAmt**

The amount of reward points.

### **RwrPtQTDamt**

The amount of reward points.

### **RwrPtYTDamt**

The amount of reward points.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

RwrPtExpArray\_AType

RwrPtExpArray\_AType is an array AType element. This is an array of reward expiration dates and amounts.

Contains:

- RwrPtExpRec\_CType

RwrPtExpRec\_CType

RwrPtExpRec\_MType is a complex CType element.

Contains:

- Custom\_CType

## **Simple Elements**

The following simple elements are contained within this message.

### **RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

### **RwrnPtExpDt**

The date the reward points are due to expire.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

### **Custom\_CType**

Custom\_CType is a complex CType element.

This element is optional.

### **x\_CrCardFraudInfoRec\_CType**

x\_CrCardFraudInfoRec\_CType is a complex CType element.

Contains:

- CrCardFraudInfoRec\_CType
- Custom\_CType

### **Simple Elements**

The following simple elements are contained within this complex.

#### **FraudPlanDesc**

The description of the code that defines the plan to use for a fraud suspect.

#### **CrCardFraudInfoRec\_CType**

CrCardFraudInfoRec\_CType is a complex CType element.

Contains:

- Custom\_CType

### **Simple Elements**

The following simple elements are contained within this complex.

#### **FraudPlanCode**

The code that defines the plan to use for a fraud suspect.

#### **FraudScoreDt**

The date a score was given for a possible fraud.

#### **FraudScore**

The score given for a possible fraud.

#### **FraudSusDt**

The date that fraud activity could have occurred.

### **FraudSuspPlanCode**

The code that defines the plan to use for a fraud suspect.

### **FraudSuspPlanSuspEndDt**

The end date that a score was given for possible fraud.

### **FraudSuspPlanSuspStartDt**

The start date that a score was given for possible fraud.

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

### **x\_IdVerify\_CType**

`x_IdVerify_CType` is a complex `CType` element.

Contains:

- `IdVerifyArray_AType`

### **IdVerifyArray\_AType**

`IdVerifyArray_AType` is an array `AType` element. This is an array of simple elements used to define identification of verification values.

Contains:

- `IdVerify_CType`

### **IdVerify\_CType**

`IdVerify_CType` is a complex `CType` element. This element contains basic identification verification information and is optional.

Contains:

- `IdVerifyQueryArray_AType`

## **Simple Elements**

The following simple elements are contained within this complex.

### **IdIssueBy**

The individual that issued the identification value `IdVerifyId`.

## **IdVerifyBy**

The individual that verified the authenticity of the identification value `IdVerifyId`.

## **IdVerifyCode**

The identification code that is used to authenticate the customer.

## **IdVerifyDesc**

The description of the identification code that is used to authenticate the customer.

## **IdVerifyVal**

The identification value that is used to authenticate the customer.

`IdVerifyQueryArray_AType`

`IdVerifyQueryArray_AType` is an array `AType` element. This array includes identification query/questions and their respective values for customer/account verification.

Contains:

- `IdVerifyQueryInfo_CType`

`IdVerifyQueryInfo_CType`

`IdVerifyQueryInfo_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **IdVerifyQuery**

A description of the query/question that could be used for customer/account identification purposes. Canonical values are:

- *ConDt*
- *DocType*
- *ExpDt*
- *IssDt*
- *IssLoc*
- *IssState*
- *VerifId*

### **IdVerifyQueryVal**

A value that corresponds with the description of the query/question `IdVerifyId` that could be used for customer/account identification purposes.

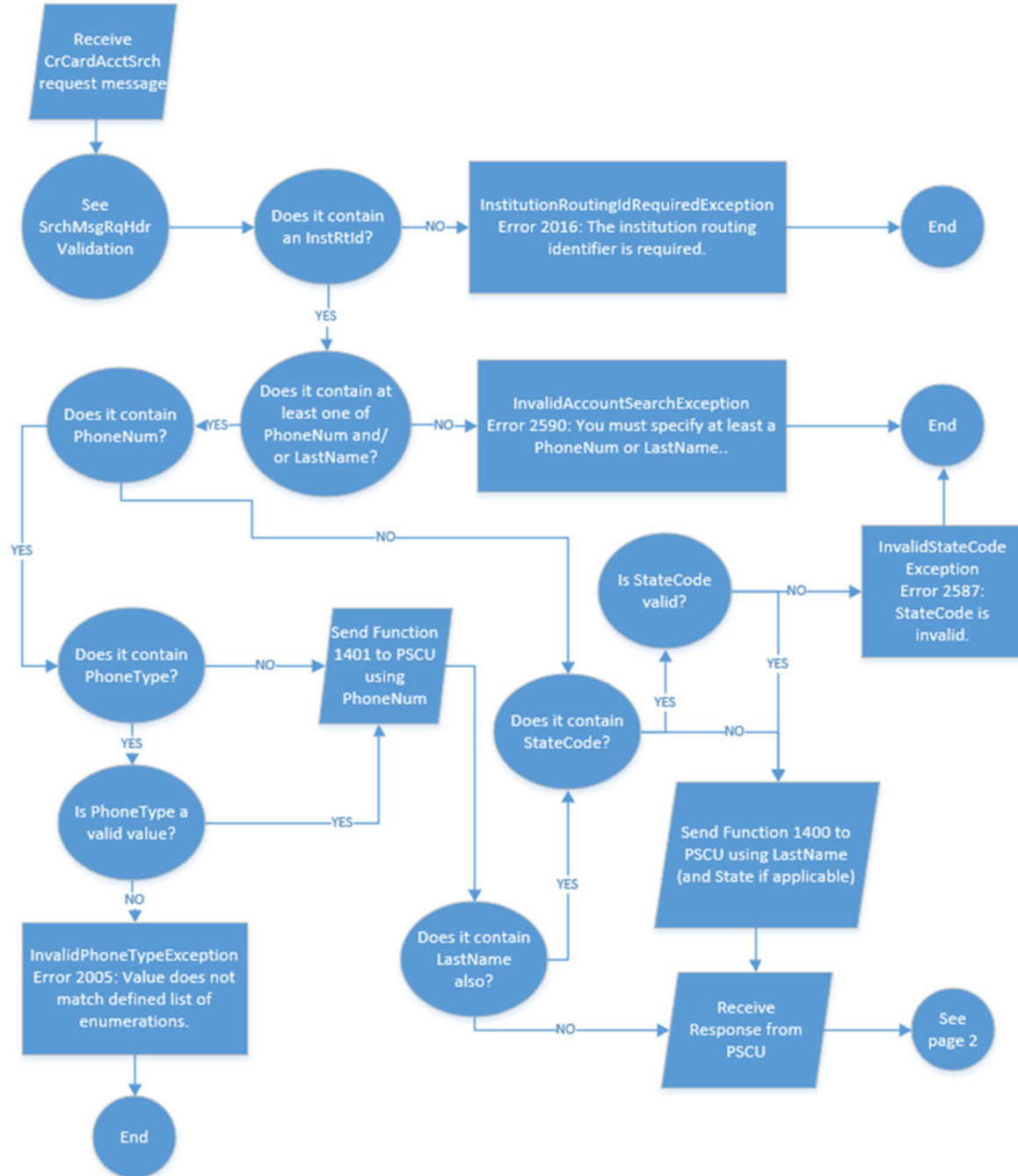
### **IdVerifyQueryDataType**

Identifies what type of attributes corresponds with the `IdVerifyQueryVal`.  
Canonical values are:

- *Decimal*
- *Dt*
- *Integer*
- *String*

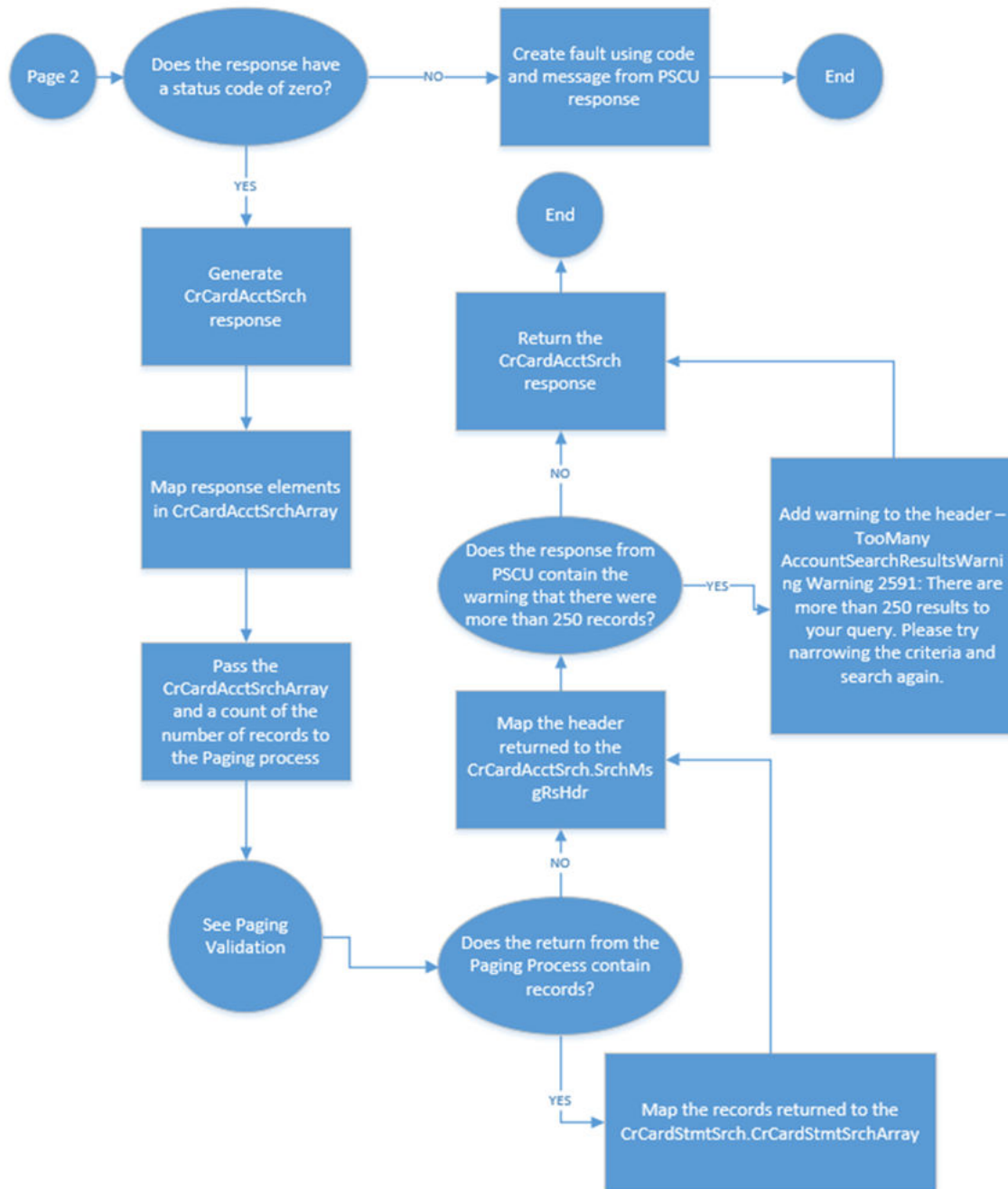
# CrCardAcctSrch Process

## CrCardAcctSrch Process Part 1



The second part of the process follows.

**CrCardAcctSrch Process Part 2**



## CrCardAcctSrch Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.
2016	The institution routing identifier is required.
2587	StateCode is invalid.
2590	You must specify at least a PhoneNum or LastName.
Warning 2591	There are more than 250 results to your query. Please try narrowing the criteria and search again.

## CrCardAcctSrch Additional Information

### Function ID

- Uses Function ID number 1400 when **LastName** is not null nor absent and **PhoneNum** is null or absent.
- Uses Function ID number 1401 when **PhoneNum** is not null nor absent.

### Request

- Either **LastName** and/or **PhoneNum** is required. If the request does not contain a value for either, a fault is returned.
- **PhoneType** must be either *bus* or *home*. Any other value is invalid, and if used, a fault is returned. If a type is not included, the request to PSCU includes both *bus* and *home*.
- If **State** is included, it is sent to PSCU as a further filter for the results.

### Response

- If both **LastName** and **PhoneNum** were included in the request, then Function ID number 1401 by **PhoneNum** is used. The translation layer removes records where the **EmbosName** or **SecdEmbosName** do not match the **LastName** submitted in the request.
- If the response from PSCU indicates that there were more than 250 accounts that matched the search criteria, a warning is returned:

- Error Code: 2591
- Error Message: *There are more than 250 results to your query. Please try narrowing the criteria and search again.*

## Credit Card Account Search

Credit Card Account Search is a jXchange service designed to allow a consumer to search for credit card accounts.

### Message Flow

In jXchange, the Credit Card Account Search service uses a typical exchange of `MType` messages to allow a consumer to search for credit card accounts.

### Primary Request

The consumer forwards the `CrCardAcctSrchrq_MType` message to the service provider. The message contains the following simple elements:

- **LastName**
- **PhoneNum**
- **PhoneType**
- **StateCode**

### Primary Response

The service provider returns the `CrCardAcctSrchrS_MType` message to the consumer. The message contains the following simple elements:

- **LastName**
- **PhoneNum**
- **PhoneType**
- **StateCode**

## Credit Card Account Search Behavior

The Credit Card Account Search service behavior is as follows.

The Credit Card Account Search root request (`CrCardAcctSrchrq_MType`) optionally includes the Last Name (**LastName**), Phone Number (**PhoneNum**), State Code (**StateCode**), and Phone Type (**PhoneType**).

The Last Name (**LastName**) and/or Phone Number (**PhoneNum**) are optional but at least one is required.

The Last Name (**LastName**) and Phone Number (**PhoneNum**) have an [and] relationship when both are part of the request.

The State Code (**StateCode**) is an additional filter.

The Phone Type (**PhoneType**) is only valid when a Phone Number (**PhoneNum**) is included in the request. The Phone Number (**PhoneNum**) searches business and home phones when the Phone Type (**PhoneType**) is null or absent from the request.

The Last Name (**LastName**) and Phone Number (**PhoneNum**) do not support wild-card searches. The only Search Type (**SrchType**) supported is *Exact*.

The Credit Card Account Search root response (`CrCardAcctSrchrRs_MType`) echoes back the Last Name (**LastName**), Phone Number (**PhoneNum**), State Code (**StateCode**), and Phone Type (**PhoneType**).

The Credit Card Account Search root response (`CrCardAcctSrchrRs_MType`) contains the Credit Card Account Search Array (`CrCardAcctSrchrArray_AType`), which contains the Credit Card Account Search Record (`CrCardAcctSrchrRec_CType`). The Credit Card Account Search Record contains the following elements:

- Account Status (**AcctStat**)
- Account Status Description (**AcctStatDesc**)
- City (**City**)
- Credit Card Account Identifier (**CrCardAcctId**)
- Embossed Name (**EmbosName**)
- Line of Credit Status (**LOCStat**)
- Line of Credit Status Description (**LOCStatDesc**)
- Postal Code (**PostalCode**)
- Secondary Embossed Name (**SecdEmbosName**)
- State Code (**StateCode**)

The standard search message header tenets are applicable.

The standard search message tenets are applicable.

## CrCardAcctSrchrRq\_MType

`CrCardAcctSrchrRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `SrchMsgRqHdr_CType`

## Simple Elements

The following simple elements are contained within this message.

### NOTE

The supported **PhoneType** canonical values are *Home* and *Bus*.

### LastName

The last name.

### PhoneNum

The phone number.

### PhoneType

Phone type examples are: home, work, fax, cell. Canonical values are:

- *Home*
- *SecdHome*
- *Bus*
- *SecdBus*
- *HomeCell*
- *BusCell*
- *PersonalCell*
- *HomeFax*
- *BusFax*
- *SecdBusCell*

**PhoneType** is a hybrid open enumeration.

### StateCode

The two-character alpha code which represents a state. For example, *MO*.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## SrchMsgRqHdr\_CType

`SrchMsgRqHdr_CType` is a complex `CType` element. This is a standard request message header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### Cursor

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

### MaxRec

The maximum number of records when multiple records are returned.

### AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

### jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

## ValidConsumProd

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

## WorkflowCorrelId

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardAcctSrchrRs\_MType

`CrCardAcctSrchrRs_MType` is a message `MType` element.

Contains:

- `CrCardAcctSrchrArray_AType`
- `Custom_CType`
- `SrchMsgRsHdr_CType`

## Simple Elements

The following simple elements are contained within this message.

### LastName

The last name.

### PhoneNum

The phone number.

### PhoneType

Phone type examples are: home, work, fax, cell. Canonical values are:

- *Home*

- *SecdHome*
- *Bus*
- *SecdBus*
- *HomeCell*
- *BusCell*
- *PersonalCell*
- *HomeFax*
- *BusFax*
- *SecdBusCell*

**PhoneType** is a hybrid open enumeration.

### **StateCode**

The two-character alpha code which represents a state. For example, *MO*.

### **CrCardAcctSrchArray\_AType**

`CrCardAcctSrchArray_AType` is an array `AType` element. This is an array of responses for credit card account searches.

Contains:

- `CrCardAcctSrchRec_CType`

### **CrCardAcctSrchRec\_CType**

`CrCardAcctSrchRec_MType` is a complex `CType` element.

Contains:

- `Custom_CType`

### **Simple Elements**

The following simple elements are contained within this message.

#### **AcctStatDesc**

The account status description.

#### **AcctStat**

The account status.

#### **City**

The city name.

#### **CrCardAcctId**

The number or character that identifies an account record.

#### **EmbosName**

The name that is embossed on the EFT card.

**LOCStatDesc**

The description of the status of the line of credit.

**LOCStat**

The status of the line of credit.

**PostalCode**

The postal code or ZIP code.

**SecdEmbosName**

The secondary name that could be embossed on the EFT card.

**StateCode**

The two-character alpha code which represents a state. For example, *MO*.

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

**SrchMsgRsHdr\_CType**

`SrchMsgRsHdr_CType` is a complex `CType` element. It searches specific message response headers.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

**Simple Elements**

The following simple elements are contained within this complex.

**Cursor**

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

**MoreRec**

Indicates if there are more records that could be returned. Canonical values are:

- *false*
- *true*

**SentRec**

The number of records sent in the response.

**TotRec**

Indicates the total records the request selected, which could be larger than `MaxRec`.

**jXchangeHdr\_CType**

`jXchangeHdr_CType` is a complex `CType` element.

**Simple Elements**

The following simple elements are contained within this complex.

**AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

**AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

**AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

## **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

## **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

## **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

## **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

## **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

## **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the

service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

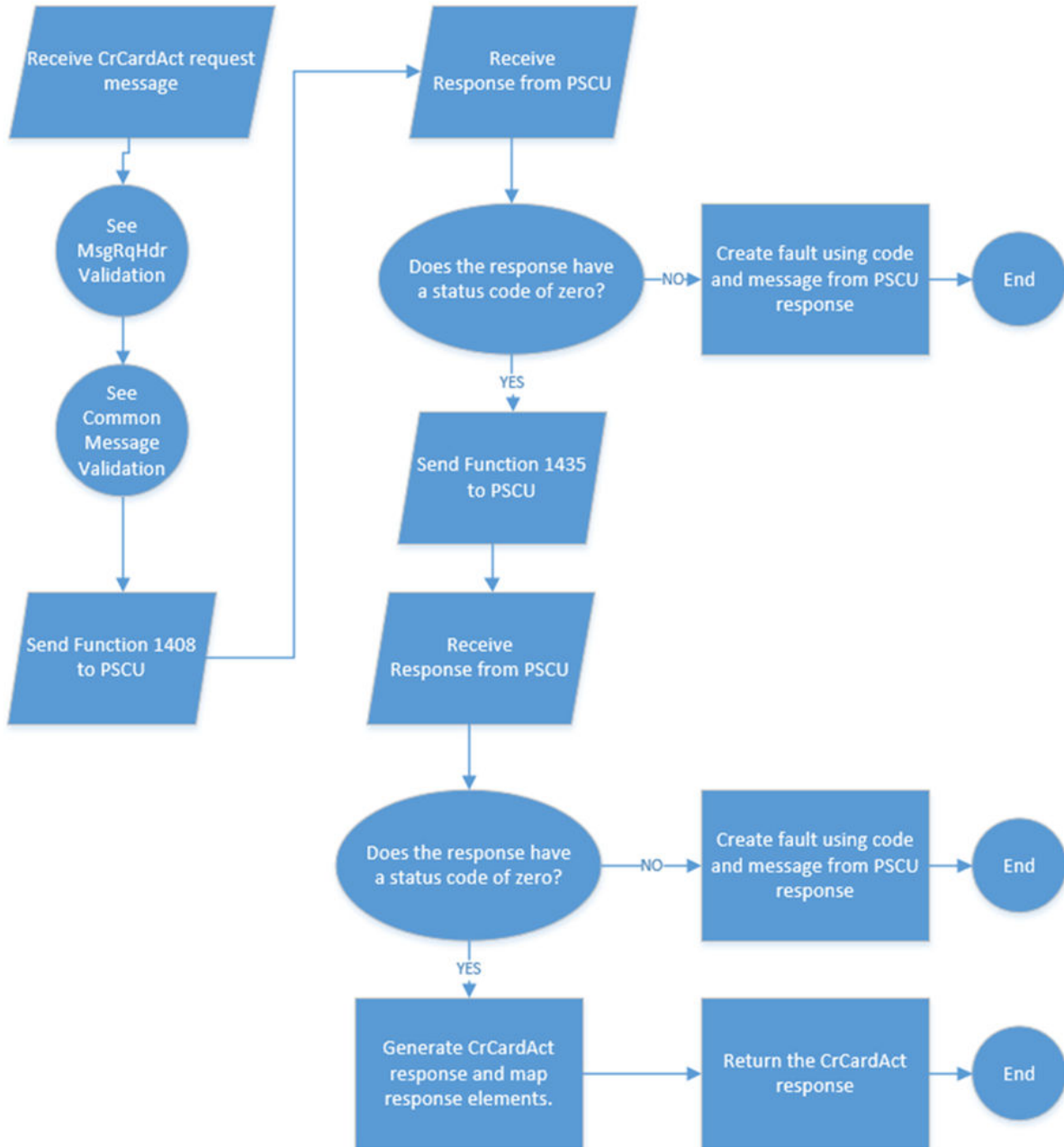
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardAct Process

## CrCardAct Process



## CrCardAct Additional Information

### Function ID

- Uses Function ID numbers 1408 and 1435.

### Request

- Function ID number 1408 is sent first to determine if changing the card's activation is allowed. If successful, Function ID number 1435 is sent to process the activation.

## Credit Card Activation

Credit Card Activation is a jXchange service designed to allow a consumer to activate an issued credit card.

### Message Flow

In jXchange, the Payment Hub Credit Transfer Addition service uses a typical exchange of `MType` messages to allow a consumer to activate an issued credit card.

### Primary Request

The consumer forwards the `CrCardActRq_MType` message to the service provider. The message contains the following simple element:

- **CrCardAcctId**

### Primary Response

The service provider returns the `CrCardAct_MType` message to the consumer. The message contains the following simple element:

- **RsStat**

## Credit Card Activation Behavior

The Credit Card Activation service behavior is as follows.

The Credit Card Activation root request message (`CrCardActRq_MType`) requires a valid Credit Card Account Identifier (**CrCardAcctId**). The Credit Card Activation root response message (`CrCardActRs_MType`) returns the Response Status (**RsStat**).

## CrCardActRq\_MType

CrCardActRq\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRqHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## **jXchangeHdr\_CType**

`jXchangeHdr_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### **AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### **BusCorrelId**

The correlation identification as related to business functions and activities.

#### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

#### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

## **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

## **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

## **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

## **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

## **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardActRs\_MType

CrCardActRs\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

### Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

### MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

### jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## MsgRec\_CType

MsgRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

## CrCardAutoPayAdd Error Codes

Error Code	Message
2585	String was not recognized as a valid DateTime.
2602	The amount is required if the CrCardAutoPayType is SpecificAmt.
2603	The account type must be a checking or savings account code.
2604	The auto payment was created but the process was unable to establish the schedule.
2605	When InfiniteSchedType is false, AutoPayStartDt and AutoPayEndDt are required.

## Credit Card Auto Pay Addition

Credit Card Auto Pay Addition is a jXchange service designed to allow a consumer to add credit card automatic and reoccurring payments.

### Message Flow

In jXchange, the Credit Card Auto Pay Addition service uses a typical exchange of `MType` messages to allow a consumer to add credit card automatic and reoccurring payments.

### Primary Request

The consumer forwards the `CrCardAutoPayAddRq_MType` message to the service provider.

The message contains the following simple element:

- **CrCardAcctId**

The message contains the following complex elements:

- `CrCardAutoPayRec_CType`
- `CrCardPaySchedRec_CType`
- `Custom_CType`

- `MsgRqHdr_CType`

## Primary Response

The service provider returns the `CrCardAutoPayAddRs_MType` message to the consumer.

The message contains the following simple element:

- **RsStat**

The message contains the following complex elements:

- `Custom_CType`
- `MsgRsHdr_CType`

## Credit Card Auto Pay Addition Behavior

Credit Card Auto Pay Addition is a jXchange service designed to allow a consumer to add credit card automatic and reoccurring payments.

The Credit Card Auto Pay Addition service behavior is as follows.

Credit Card Auto Pay Addition root request (`CrCardAutoPayAddRq_MType`) requires Credit Card Account Identifier (**CrCardAcctId**) and Credit Card Auto Pay Record (`CrCardAutoPayRec_CType`).

The Credit Card Auto Pay Addition root request (`CrCardAutoPayAddRq_MType`) optionally includes Credit Card Pay Scheduled Record (`CrCardPaySchedRec_CType`).

The Credit Card Auto Pay Record complex (`CrCardAutoPayRec_CType`) contains the Account Identifier (**AcctId**), Account Type (**AcctType**), Amount (**Amt**), Credit Card Auto Pay Type (**CrCardAutoPayType**), and Institution Routing Identifier (**InstRtId**).

The Credit Card Pay Schedule record complex (`CrCardPaySchedRec_CType`) contains the Auto Pay Start Date (**AutoPayStartDt**), Auto Pay End Date (**AutoPayEndDt**), and Infinite Schedule Type (**InfiniteSchedType**).

The Credit Card Auto Pay Addition root response (`CrCardAutoPayAddRs_MType`) includes the Response Status (**RsStat**).

## CrCardAutoPayAddRq\_MType

`CrCardAutoPayAddRq_MType` is a message `MType` element.

Contains:

- `CrCardAutoPayRec_CType`
- `CrCardPaySchedRec_CType`
- `Custom_CType`

- `MsgRqHdr_CType`

## Simple Elements

The following simple element is contained within this message.

### **CrCardAcctId**

The number or character that identifies an account record.

## **CrCardAutoPayRec\_CType**

`CrCardAutoPayRec_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### **AcctId**

The number or character that identifies an account record.

### **AcctType**

The number or character that categorizes the **AcctId**.

### **Amt**

The amount or quantity.

### **CrCardAutoPayType**

The type of credit card automatic payment. Canonical values are:

- *MinPmtAmt*
- *Oth*
- *SpecificAmt*
- *StmtBal*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## CrCardPaySchedRec\_CType

CrCardPaySchedRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AutoPayEndDt

The date that designates the ending point for date selections.

#### AutoPayStartDt

The date that designates the starting point for date selections.

#### InfiniteSchedType

Notes if the schedule does not have a start and end date and is on auto payment until notified otherwise.

- *True*
- *False*

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardAutoPayAddRs\_MType

`CrCardAutoPayAddRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`

### Simple Elements

The following simple element is contained within this message.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# Credit Card Auto Pay Inquiry

Credit Card Auto Pay Inquiry is a jXchange service designed to allow a consumer to inquire on credit card automatic and reoccurring payments.

## Message Flow

In jXchange, the Credit Card Auto Pay Inquiry service uses a typical exchange of `MType` messages to allow a consumer to inquire on credit card automatic and reoccurring payments.

## Primary Request

The consumer forwards the `CrCardAutoPayInqRq_MType` message to the service provider.

The message contains the following simple elements:

- **ActIntent**
- **CrCardAcctId**

The message contains the following complex elements:

- `Custom_CType`
- `MsgRqHdr_CType`

## Primary Response

The service provider returns the `CrCardAutoPayInqRs_MType` message to the consumer.

The message contains the following simple elements:

- **ActIntent**
- **ActIntentKey**

The message contains the following complex elements:

- `CrCardAutoPayInqRec_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

## Credit Card Auto Pay Inquiry Behavior

Credit Card Auto Pay Inquiry is a jXchange service designed to allow a consumer to inquire on credit card automatic and recurring payments.

The Credit Card Auto Pay Inquiry service behavior is as follows.

The Credit Card Auto Pay Inquiry root request (`CrCardAutoPayInqRq_MType`) requires the Credit Card Account Identifier (**CrCardAcctId**).

The Credit Card Auto Pay Inquiry root request (`CrCardAutoPayInqRq_MType`) optionally includes the Activity Intention (**ActIntent**).

The Credit Card Auto Pay Inquiry root response (`CrCardAutoPayInqRs_MType`) includes the Credit Card Auto Pay Inquiry Record complex (`CrCardAutoPayInqRec_CType`), Activity Intention (**ActIntent**), and Activity Intention Key (**ActIntentKey**).

The Credit Card Auto Pay Inquiry Record complex (`CrCardAutoPayInqRec_CType`) contains the following elements:

- Account Identifier (**AcctId**)
- Account Type (**AcctType**)
- Amount (**Amt**)
- Credit Card Auto Pay Type (**CrCardAutoPayType**)
- Institution Routing Identifier (**InstRtId**)
- Auto Pay Start Date (**AutoPayStartDt**)
- Auto Pay End Date (**AutoPayEndDt**)
- Auto Pay Enrollment Date (**AutoPayEnrollDt**)
- Auto Pay Status (**AutoPayStat**)

## CrCardAutoPayInqRq\_MType

`CrCardAutoPayInqRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### **ActIntent**

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

### **CrCardAcctId**

The number or character that identifies an account record.

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## **MsgRqHdr\_CType**

`MsgRqHdr_CType` is a complex `CType` element. This is the default message request header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuthenProdCred**

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### **AuthenUsrCred\_CType**

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **Security**

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

### Simple Elements

The following simple elements are contained within this complex.

#### **AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### **AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### **BusCorrelId**

The correlation identification as related to business functions and activities.

#### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

#### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardAutoPayInqRs\_MType

CrCardAutoPayInqRs\_MType is a message MType element.

Contains:

- CrCardAutoPayInqRec\_CType
- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### ActIntent

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

#### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

## CrCardAutoPayInqRec\_CType

CrCardAutoPayInqRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AcctId

The number or character that identifies an account record.

#### AcctType

The number or character that categorizes the **AcctId**.

#### Amt

The amount or quantity.

#### AutoPayEndDt

The date that designates the ending point for date selections.

#### AutoPayEnrollDt

The enrollment date.

### **AutoPayStartDt**

The date that designates the starting point for date selections.

### **AutoPayStat**

The status of the automatic payment. Canonical values are:

- *Act*
- *Susp*

### **CrCardAutoPayType**

The type of credit card automatic payment. Canonical values are:

- *MinPmtAmt*
- *Oth*
- *SpecificAmt*
- *StmntBal*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## **MsgRsHdr\_CType**

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtId

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

MsgRecInfoArray\_AType is an array AType element. This is an array of messages that can be returned in a response.

Contains:

- MsgRec\_CType

## **MsgRec\_CType**

MsgRec\_CType is a complex CType element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardAutoPayMod Error Codes

Error Code	Message
2602	The amount is required if the CrCardAutoPayType is SpecificAmt.
2603	The account type must be a checking or savings account code.

## Credit Card Auto Pay Modification

Credit Card Auto Pay Modification is a jXchange service designed to allow a consumer to modify credit card automatic and reoccurring payments.

### Message Flow

In jXchange, the Credit Card Auto Pay Modification service uses a typical exchange of `MType` messages to allow a consumer to modify credit card automatic and reoccurring payments.

### Primary Request

The consumer forwards the `CrCardAutoPayModRq_MType` message to the service provider.

The message contains the following simple elements:

- **ActIntentKey**
- **CrCardAcctId**
- **DIt**

The message contains the following complex elements:

- `CrCardAutoPayRec_CType`
- `Custom_CType`
- `MsgRqHdr_CType`

### Primary Response

The service provider returns the `CrCardAutoPayModRs_MType` message to the consumer.

The message contains the following simple element:

- **RsStat**

The message contains the following complex elements:

- `Custom_CType`
- `MsgRsHdr_CType`

## Credit Card Auto Pay Modification Behavior

Credit Card Auto Pay Modification is a jXchange service designed to allow a consumer to modify credit card automatic and recurring payments.

The Credit Card Auto Pay Modification service behavior is as follows.

The Credit Card Auto Pay Modification root request (`CrCardAutoPayModRq_MType`) requires the Credit Card Account Identifier (**CrCardAcctId**) and Activity Intention Key (**ActIntentKey**).

The Credit Card Auto Pay Modification root request (`CrCardAutoPayModRq_MType`) optionally includes the Credit Card Auto Pay Record (`CrCardAutoPayRec_CType`) and Delete (**DIt**).

The Credit Card Auto Pay Modification root response (`CrCardAutoPayModRs_MType`) includes the Response Status (**RsStat**).

## CrCardAutoPayModRq\_MType

`CrCardAutoPayModRq_MType` is a message `MType` element.

Contains:

- `CrCardAutoPayRec_CType`
- `Custom_CType`
- `MsgRqHdr_CType`

## Simple Elements

The following simple elements are contained within this message.

### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

### CrCardAcctId

The number or character that identifies an account record.

### DIt

The delete element. Canonical values are:

- *false*
- *true*

## CrCardAutoPayRec\_CType

CrCardAutoPayRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AcctId

The number or character that identifies an account record.

#### AcctType

The number or character that categorizes the **AcctId**.

#### Amt

The amount or quantity.

#### CrCardAutoPayType

The type of credit card automatic payment. Canonical values are:

- *MinPmtAmt*
- *Oth*
- *SpecificAmt*
- *StmtBal*

#### InstRtId

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

### jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **CrCardAutoPayModRs\_MType**

`CrCardAutoPayModRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`

### **Simple Elements**

The following simple element is contained within this message.

#### **RsStat**

The status of the response. Canonical values are:

- *fail*
- *success*

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# Credit Card Order Addition

Credit Card Order Addition is a jXchange service designed to allow a consumer to order a replacement for a damaged credit card.

## Message Flow

In jXchange, the Credit Card Order Addition service uses a typical exchange of `MType` messages to allow a consumer to order a replacement for a damaged credit card.

## Primary Request

The consumer forwards the `CrCardOrderAddRq_MType` message to the service provider.

The message contains the following simple element:

- **CrCardAcctId**

The message contains the following complex elements:

- `CrCardOrderRec_CType`
- `Custom_CType`
- `MsgRqHdr_CType`

## Primary Response

The service provider returns the `CrCardOrderAddRs_MType` message to the consumer.

The message contains the following simple elements:

- **CrCardProdDesc**
- **EmbosName**
- **RsStat**
- **SeedEmbosName**

The message contains the following complex elements:

- `Addr_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

## Credit Card Order Addition Behavior

The Credit Card Order Addition service allows consumers to order replacements for damaged credit cards.

The Credit Card Order Addition service behavior is as follows.

The Credit Card Order Addition root request (`CrCardOrderAddRq_MType`) requires the Credit Card Account Identifier (**CrCardAcctId**) and Credit Card Order Record complex (`CrCardOrderRec_CType`).

The Credit Card Order Record complex (`CrCardOrderAdd_CType`) contains the Embossed Name Type (**EmbosNameType**), Embossed Name (**EmbosName**), Fee Order Type (**FeeOrderType**) (subject to Institution settings), and Card Production Type (**CardProdType**).

The Credit Card Order Add root response (`CrCardOrderAddRs_MType`) includes the Credit Card Product Description (**CrCardProdDesc**), Embossed Name (**EmbosName**), Secondary Embossed Name (**SecdEmbosName**), Address (`Addr_CType`), and Response Status (**RsStat**).

## CrCardOrderAddRq\_MType

`CrCardOrderAddRq_MType` is a message `MType` element.

Contains:

- `CrCardOrderRec_CType`
- `Custom_CType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple element is contained within this message.

#### **RsStat**

The status of the response. Canonical values are:

- *fail*
- *success*

## CrCardOrderRec\_CType

CrCardOrderRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### CardProdType

The details of how the card reorder is processed by the card producer. Canonical values are:

- *3rdDay*
- *Ovrngt*
- *Std*

#### EmbosName

The name that is embossed on the EFT card.

#### EmbosNameType

Who does the embossed name represent? Canonical values are:

- *AuthUsr*
- *Prim*
- *PrimSecd*
- *Secd*

#### FeeOrderType

Should a fee be charged for the card order? Canonical values are:

- *True*
- *False*

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- *AuthenUsrCred\_CType*
- *jXchangeHdr\_CType*

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

### jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the

service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

## WorkflowCorrelId

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardOrderAddRs\_MType

`CrCardOrderAddRs_MType` is a message `MType` element.

Contains:

- `Addr_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardProdDesc

The description of the credit card product.

#### EmbosName

The name that is embossed on the EFT card.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *SUCCESS*

#### SecdEmbosName

The secondary name that could be embossed on the EFT card.

## Addr\_CType

Addr\_CType is a complex CType element containing address information. This element is optional.

Contains:

- FreeFormAddr\_AType

### Simple Elements

The following simple elements are contained within this complex.

#### BusAddr

Answers the question: Is this a business address? Y states it is a business address.

#### City

The city name.

#### Cntry

The country name.

#### CntryType

The country abbreviation from ISO 3166.

#### County

The county name.

#### DivryPt

The delivery point added to the ZIP code.

#### FornAddr

Is this address a foreign address? Y states it is a foreign address.

#### InvAddr

Is this address invalid? Y states mail has been returned from this address.

#### PostalCode

The postal code or ZIP code.

#### StateCode

The two-character alpha code which represents a state. For example, MO.

#### StateProv

The state or province or region.

#### StreetAddr1

The street address.

## StreetAddr2

The second line of street address.

## StreetAddr3

The third line of street address.

## FreeFormAddr\_AType

FreeFormAddr\_AType is an array AType element. This is an array of free form address lines 1–11 in a printable/usable form.

Contains:

- AddrLineInfo\_CType

## AddrLineInfo\_CType

AddrLineInfo\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AddrLine

Free-form element of address lines 1–11 in a printable/usable form, generally not separated.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### **AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

MsgRec\_CType is a complex CType element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

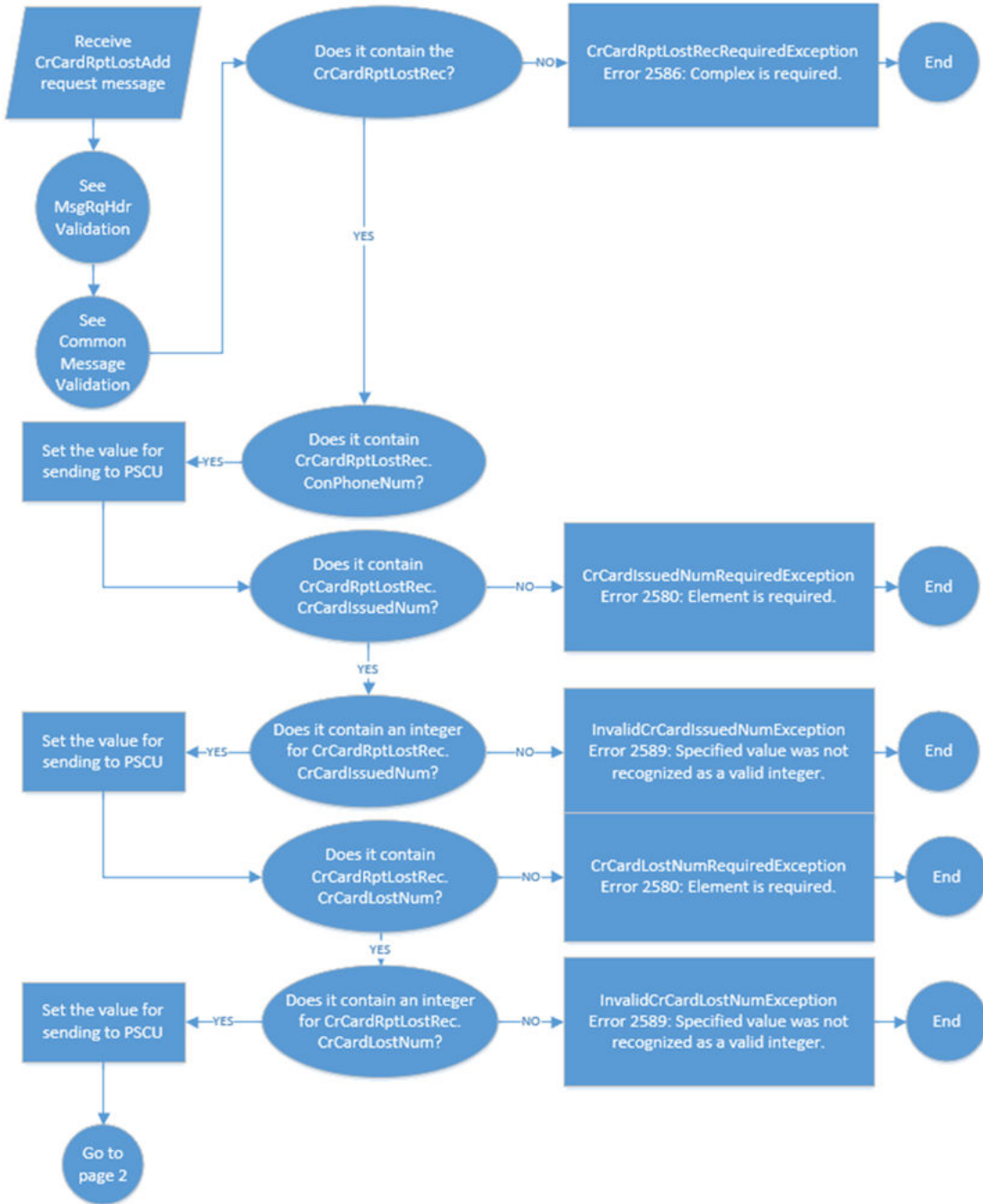
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardRptLostAdd Process

## CrCardRptLostAdd Process Part 1



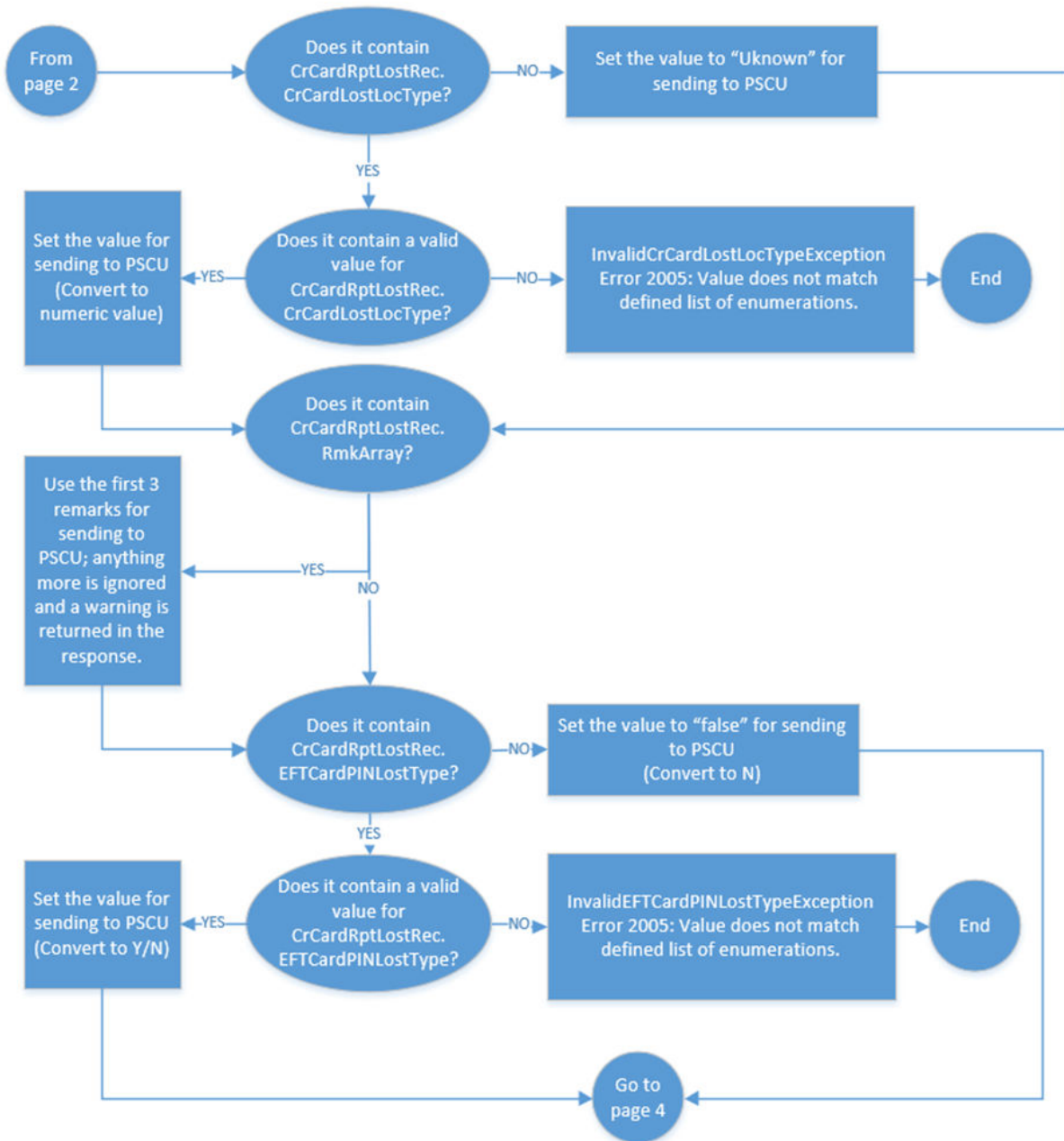
The second part of the process follows.

**CrCardRptLostAdd Process Part 2**



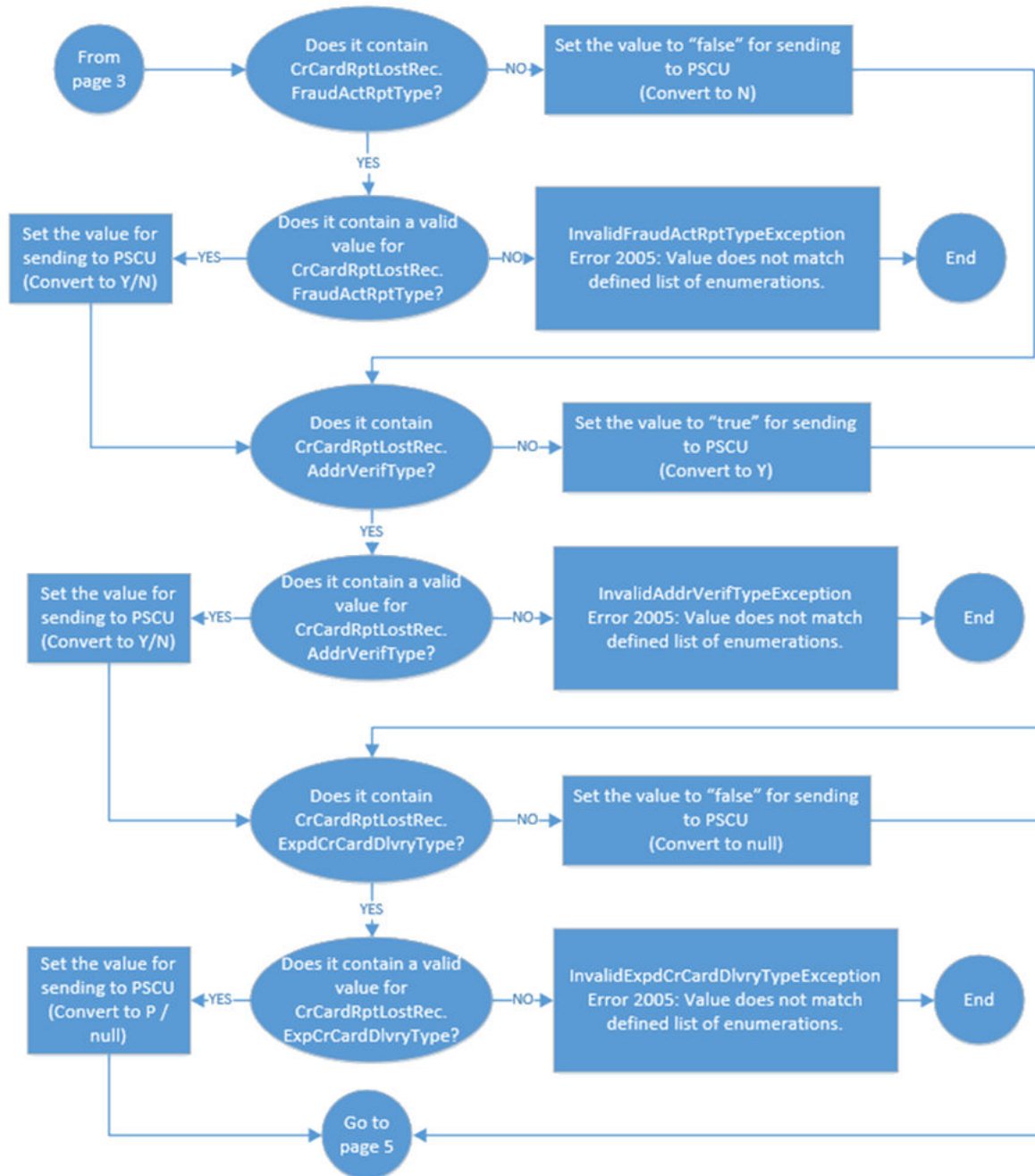
The third part of the process follows.

**CrCardRptLostAdd Process Part 3**



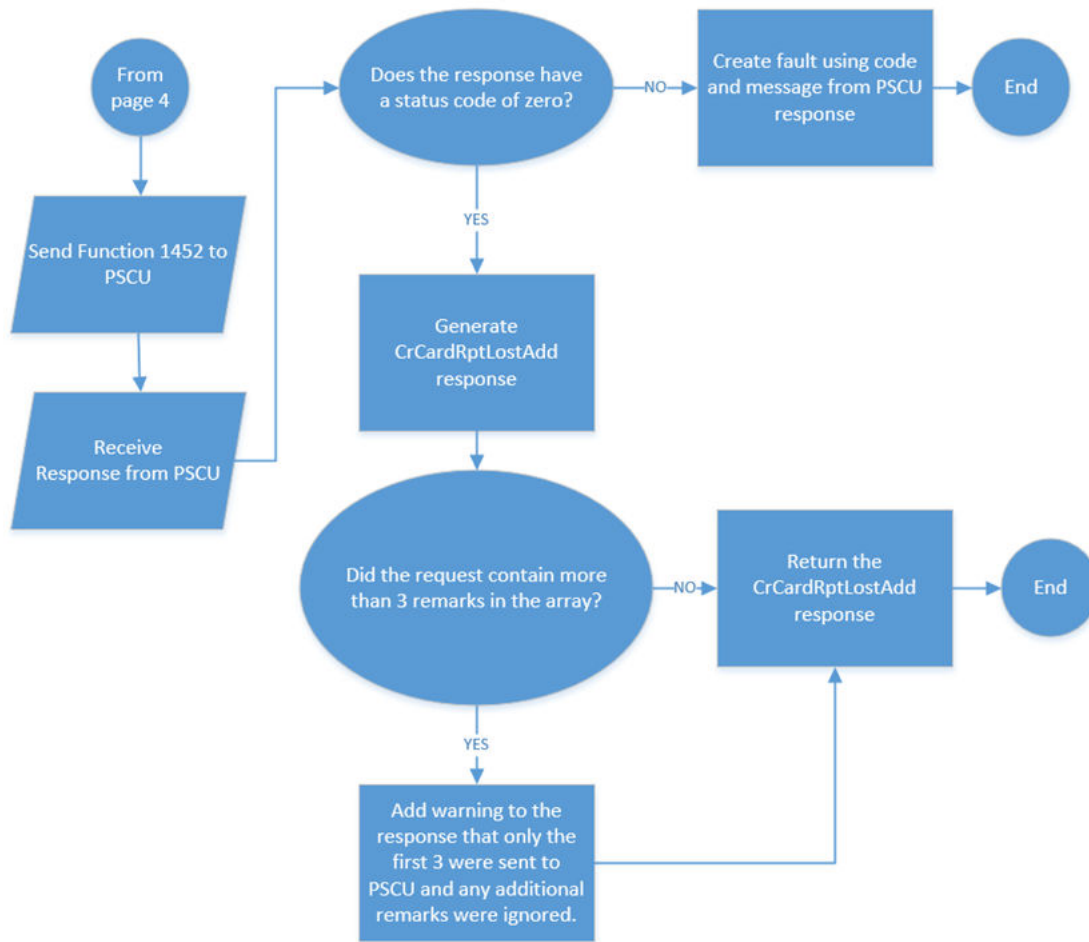
The fourth part of the process follows.

**CrCardRptLostAdd Process Part 4**



The fifth part of the process follows.

**CrCardRptLostAdd Process Part 5**



**CrCardRptLostAdd Error Codes**

Error Code	Message
2005	Value does not match defined list of enumerations.
2580	Element is required.
2585	String was not recognized as a valid DateTime.
2586	Complex is required.
2587	StateCode is invalid.

Error Code	Message
2589	Specified value was not recognized as a valid integer.

## CrCardRptLostAdd Additional Information

### Function ID

- Uses Function ID number 1452.

### Request

- `CrCardRptLostRec` must be present and must contain valid values for **CrCardIssuedNum**, **CrCardLostNum**, **LossStateCode**, and **CrCardLostDt**.
- No validation is performed for **ConPhoneNum**.
- **CrCardExpDt** is optional. If included, the date is validated to ensure that it is a valid date.
- **CrCardLostLocType**, **EFTCardPINLostType**, **FraudActRptType**, **AddrVerifType**, and **ExpdCrCardDivryType** are optional and have default values. If they are included with a value, that value is validated.
- `RmkArray` is optional. If included, the first three instances of `RmkArray` are sent to PSCU. The others are ignored.

### Response

- If the request contained more than three **RmkInfo** instances inside the `RmkArray`, a warning is returned stating that only the first three were used and all others were ignored.

## Credit Card Report Lost Addition

Credit Card Report Lost Addition is a jXchange service designed to allow a consumer to report that a credit card was lost or stolen.

### Message Flow

In jXchange, the Credit Card Report Lost Addition service uses a typical exchange of `MType` messages to allow a consumer to report that a credit card was lost or stolen.

## Primary Request

The consumer forwards the `CrCardRptLostAddRq_MType` message to the service provider. The message contains the following simple element:

- **CrCardAcctId**

## Primary Response

The service provider returns the `CrCardRptLostAddRs_MType` message to the consumer. The message contains the following simple element:

- **RsStat**

## Credit Card Report Lost Addition Behavior

The Credit Card Report Lost Addition service behavior is as follows:

The Credit Card Report Lost Addition root request message (`CrCardRptLostAddRq_MType`) requires a valid Credit Card Account Identifier (**CrCardAcctId**) and Credit Card Report Lost Record complex (`CrCardRptLostRec_CType`).

The Credit Card Report Lost Record complex (`CrCardRptLostRec_CType`) contains required elements Credit Card Issued Number (**CrCardIssuedNum**), Credit Card Lost Number (**CrCardLostNum**), Loss State Code (**LossStateCode**) (ISO 3166-2 Enumerations), and Credit Card Lost Date (**CrCardLostDt**).

The Credit Card Report Lost Record complex (`CrCardRptLostRec_CType`) contains the following optional elements:

- Contact Phone Number (**ConPhoneNum**)
- Credit Card Expiration Date (**CrCardExpDt**)
- Credit Card Lost Location Type (**CrCardLostLocType**)
- Remark Array (`RmkArray_AType`)
- EFT Card PIN Lost Type (**EFTCardPINLostType**)
- Fraud Activity Reporting Type (**FraudActRptType**)
- Address Verification Type (**AddrVerifType**)
- Expedited Credit Card Delivery Type (**ExpdCrCardDivryType**)

The Credit Card Report Lost Addition root response message (`CrCardRptLostAddRs_MType`) returns the Response Status (**RsStat**).

The Lost State Code (**LossStateCode**) can default to the cardholder's state residence when reported outside of the U.S.

The Credit Card Account Inquiry (`CrCardAcctInqRq_MType`) should be called to pre-fill the elements Credit Card Issued Number (**CrCardIssuedNum**), Credit Card Expiration Date (**CrCardExpDt**), and Contact Phone Number (**ConPhoneNum**).

The standard addition message tenets are applicable.

Adhere to the tenets for fault reporting.

Adhere to the tenets related to the correlation identifications.

## CrCardRptLostAddRq\_MType

`CrCardRptLostAddRq_MType` is a message `MType` element.

Contains:

- `CrCardRptLostRec_CType`
- `Custom_CType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### CrCardRptLostRec\_CType

`CrCardRptLostRec_CType` is a complex `CType` element.

Contains:

- `Custom_CType`
- `RmkArray` references `Rmk_AType`

### Simple Elements

The following simple elements are contained within this message.

#### AddrVerifType

Was the address verified? Canonical values are:

- *True*
- *False*

#### ConPhoneNum

The phone number.

#### CrCardExpDt

The expiration date.

### **CrCardIssuedNum**

The number of credit cards issued.

### **CrCardLostDt**

The date the card was lost.

### **CrCardLostLocType**

The lost location for a credit card. Canonical values are:

- *Auto*
- *Bar*
- *Home*
- *Hotel*
- *Off*
- *Rural*
- *Store*
- *Unknown*

### **CrCardLostNum**

The number of credit cards issued.

### **EFTCardPINLostType**

Answers the question: has the EFT card PIN ID reported lost? Canonical values are:

- *True*
- *False*

### **ExpdCrCardDivryType**

Should the credit card delivery be expedited? Canonical values are:

- *True*
- *False*

### **FraudActRptType**

Has fraud activity been reported? Canonical values are:

- *True*
- *False*

### **LossStateCode**

The 2 alpha long code which represents a state. For example, *MO*.

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## RmkArray

Rmk\_AType is an array AType element. This is an array of application or user remarks in free form text.

RmkArray references Rmk\_AType

Contains:

- RmkInfo\_CType

## RmkInfo\_CType

RmkInfo\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### Rmk

Application or user remarks free-form text.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardRptLostAddRs\_MType

`CrCardRptLostAddRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

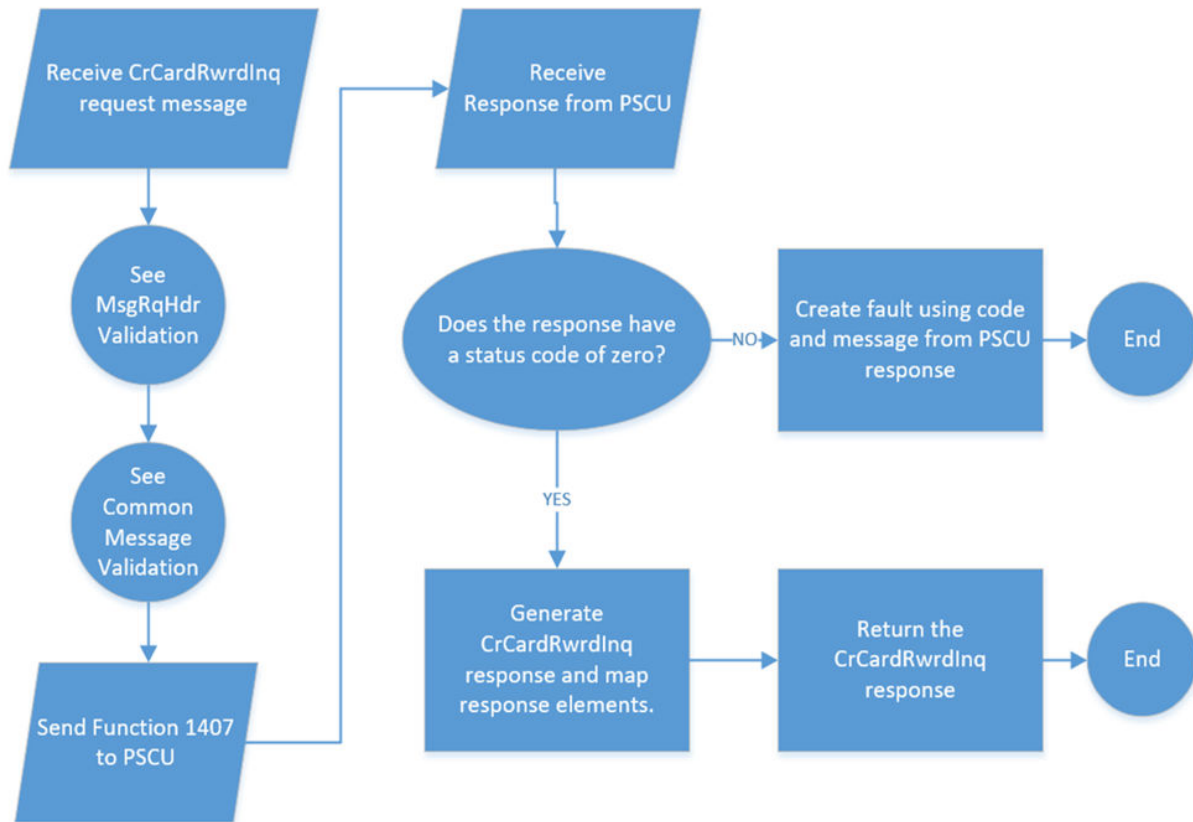
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardRwrDInq Process

## CrCardRwrDInq Process



## CrCardRwrDInq Additional Information

### Function ID

- Uses Function ID number 1407.

### Request

- Outside of the common validation for **CrCardAcctId**, all other validation is performed by PSCU.

### Response

- **RwrDptExpDt** day of the month is set to the last day of the month.
- If an invalid month is received from PSCU, **RwrDptExpDt** is 0001-01-01.

- The rewards result is a combined total of rewards rather than returning each individual reward program.

## Credit Card Reward Inquiry

Credit Card Reward Inquiry is a jXchange service designed to provide consumers the ability to obtain details as related to a credit card rewards program.

### Message Flow

In jXchange, the Credit Card Reward Inquiry service uses a typical exchange of `MType` messages to provide consumers the ability to obtain details as related to a credit card rewards program.

### Primary Request

The consumer forwards the `CrCardRwrInqRq_MType` message to the service provider. The message contains the following simple element:

- **CrCardAcctId**

### Primary Response

The service provider returns the `CrCardRwrInqRs_MType` message to the consumer. The message contains the following simple element:

- **CrCardAcctId**

## Credit Card Reward Inquiry Behavior

The Credit Card Reward Inquiry root request message (`CrCardRwrInqRq_MType`) requires a valid Credit Card Account Identification (**CrCardAcctId**).

The Credit Card Reward Inquiry Response (`CrCardRwrInqRs_MType`) echoes back the Credit Card Account Identification (**CrCardAcctId**). It returns the Credit Card Reward Inquiry Array (`CrCardRwrInqArray_AType`), which encapsulates the Credit Card Reward Inquiry Record complex (`CrCardRwrInqRec_CType`), which encapsulates the following:

- Redeemed Reward Point Amount (**RedeemRwrPtAmt**)
- Reward Points Accrued Amount (**RwrPtAccrAmt**)
- Reward Points Earned Life to Date (**RwrPtEarnLTD**)
- Reward Points Expired Amount (**RwrPtExpAmt**)
- Reward Points Expired Date (**RwrPtExpDt**)
- Reward Points Redeemed Life to Date (**RwrPtRedeemLTD**)

- Reward Product Description (**RwrProdDesc**)

## CrCardRwrInqRq\_MType

CrCardRwrInqRq\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRqHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

#### MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

## Security

Defines the wsse:Security SOAP header element per section 4.

### jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardRwrInqRs\_MType

CrCardRwrInqRs\_MType is a message MType element.

Contains:

- CrCardRwrInqArray\_AType
- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

## CrCardRwrInqArray\_AType

CrCardRwrInqArray\_AType is an array AType element. This is an array of reward values for inquiry.

Contains:

- CrCardRwrInqRec\_CType

## CrCardRwrInqRec\_CType

CrCardRwrInqRec\_CType is a complex CType element.

Contains:

- Custom\_CType
- RwrPtCatArray\_AType
- RwrPtExpArray\_AType

### Simple Elements

The following simple elements are contained within this complex.

#### RedeemRwrPtAmt

The number of reward points that have been redeemed.

#### RwrProdDesc

The description or name given to a rewards product.

#### RwrPtAccrAmt

The number of reward points that have accrued but are not yet available.

#### RwrPtEarnLTD

The number of reward points that have been earned life-to-date.

### **RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

### **RwrPtExpDt**

The date the reward points are due to expire.

### **RwrPtRedeemLTD**

The number of reward points that have been redeemed life-to-date.

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

### **RwrPtCatArray\_AType**

`RwrPtCatArray_AType` is an array `AType` element. This is an array of reward point categories.

Contains:

- `RwrPtCatRec_CType`

### **RwrPtCatRec\_CType**

`RwrPtCatRec_MType` is a complex `CType` element.

Contains:

- `Custom_CType`

## **Simple Elements**

The following simple elements are contained within this message.

### **RwrPtCatType**

The category as related to reward points. Canonical values are:

- *Adj*
- *Earn*
- *Forfeit*
- *TradeIn*
- *TradeOut*
- *Redeem*

### **RwrPtCycleAmt**

The amount of reward points.

### **RwrPtDailyAmt**

The amount of reward points.

**RwrPtLTDAmt**

The amount of reward points.

**RwrPtMTDAmt**

The amount of reward points.

**RwrPtPrevCycleAmt**

The amount of reward points.

**RwrPtQTDamt**

The amount of reward points.

**RwrPtYTDamt**

The amount of reward points.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

**RwrPtExpArray\_AType**

RwrPtExpArray\_AType is an array AType element. This is an array of reward expiration dates and amounts.

Contains:

- RwrPtExpRec\_CType

RwrPtExpRec\_CType

RwrPtExpRec\_MType is a complex CType element.

Contains:

- Custom\_CType

**Simple Elements**

The following simple elements are contained within this message.

**RwrPtExpAmt**

The number of reward points that are scheduled for expiration.

**RwrPtExpDt**

The date the reward points are due to expire.

Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

**jXchangeHdr\_CType Deprecation Details****AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

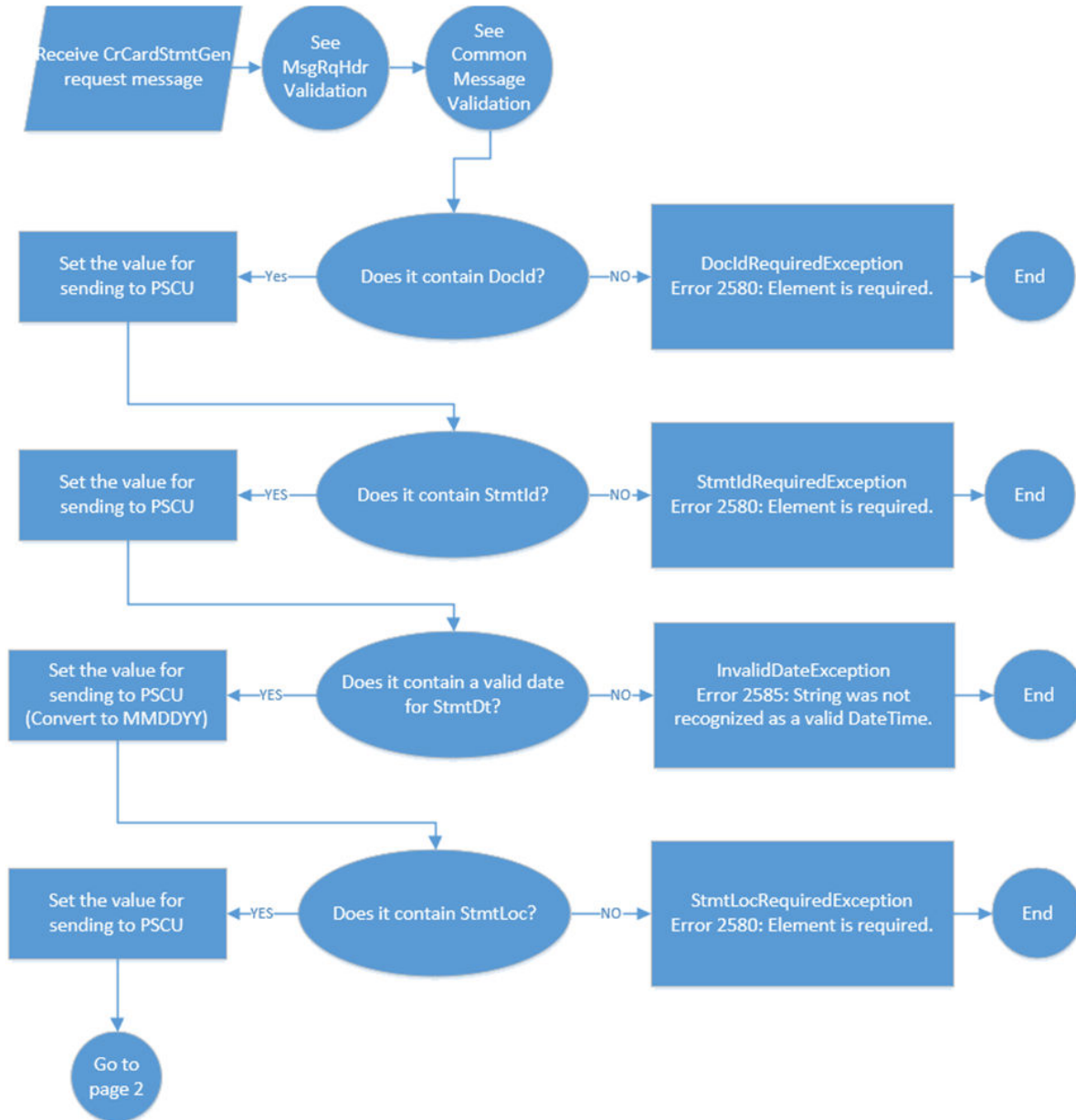
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

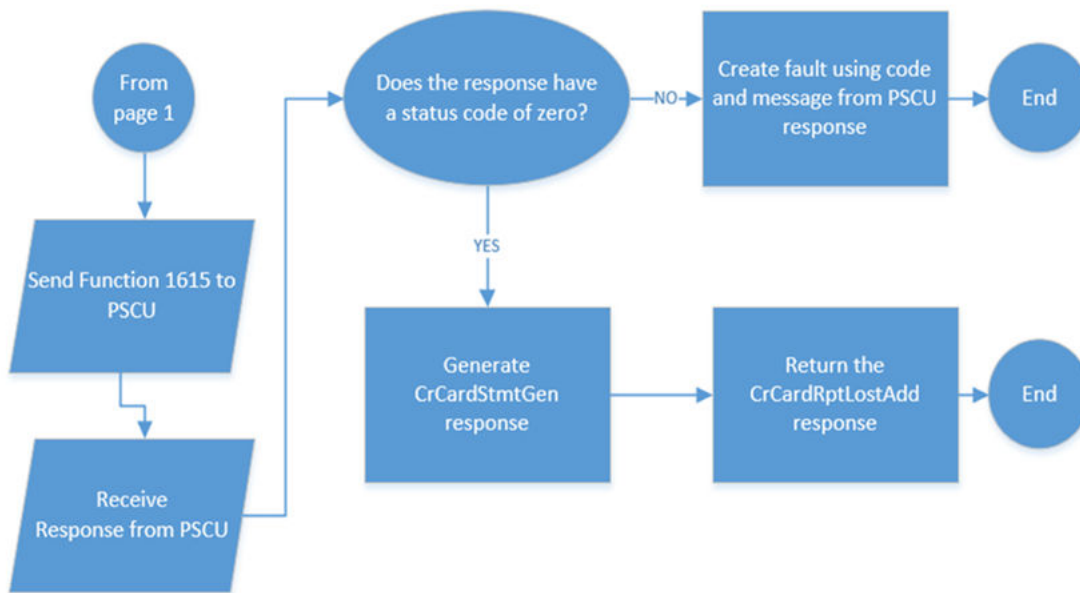
# CrCardStmtGen Process

## CrCardStmtGen Process Part 1



The second part of the process follows.

### CrCardStmtGen Process Part 2



## CrCardStmtGen Error Codes

Error Code	Message
2580	Element is required.
2585	String was not recognized as a valid DateTime.

## CrCardStmtGen Additional Information

### Function ID

- Uses Function ID number 1615.

### Request

- **DocId**, **StmtId**, and **StmtLoc** are all required. **StmtDt** is also required and must be a valid date. No other validation is performed by the translation layer.

### Response

- **StmtImg** is returned as a base64Binary.

## Credit Card Statement Generated

Credit Card Statement Generated is a jXchange service designed to allow a consumer to obtain a list of available credit card statements and import a PDF version of the statement.

### Message Flow

In jXchange, the Credit Card Statement Generated service uses a typical exchange of `MType` messages to allow a consumer to obtain a list of available credit card statements and import a PDF version of the statement.

### Primary Request

The consumer forwards the `CrCardStmntGenRq_MType` message to the service provider. The message contains the following simple elements:

- **CrCardAcctId**
- **DocId**
- **StmntDt**
- **StmntId**
- **StmntLoc**

### Primary Response

The service provider returns the `CrCardStmntGenRs_MType` message to the consumer. The message contains the following simple elements:

- **CrCardAcctId**
- **DocId**
- **StmntDt**
- **StmntId**
- **StmntImg**
- **StmntLoc**

## Credit Card Statement Generated Behavior

The Credit Card Statement Generated service behavior is as follows.

The Credit Card Statement Generated root request message (`CrCardStmntGenRq_MType`) requires a valid Credit Card Account Identification (**CrCardAcctId**), Document Identifier (**DocId**), Statement Identifier (**StmntId**), Statement Date (**StmntDt**), and Statement Location (**StmntLoc**).

The Credit Card Statement Generated root response message (`CrCardStmntGenRs_MType`) echoes back the request element.

The Statement Image (**StmntImg**) is the base64 binary object of the PDF statement.

## CrCardStmntGenRq\_MType

`CrCardStmntGenRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRqHdr_CType` references `SrchMsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### DocId

Document name, number, or other identifying value.

#### StmntDt

Statement Date.

#### StmntId

The identification for a specific statement of an account on a specific date.

#### StmntLoc

URL where a statement is located, if created.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRqHdr\_CType

`MsgRqHdr_CType` is a complex `CType` element. This is the default message request header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

### jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType`

package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **CrCardStmtGenRs\_MType**

`CrCardStmtGenRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr` references `SrchMsgRsHdr_CType`

### **Simple Elements**

The following simple elements are contained within this message.

#### **CrCardAcctId**

The number or character that identifies an account record.

#### **DocId**

Document name, number, or other identifying value.

#### **StmtImg**

The document image.

#### **StmtDt**

Statement Date.

#### **StmtId**

The identification for a specific statement of an account on a specific date.

#### **StmtLoc**

URL where a statement is located, if created.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

**jXchangeHdr\_CType Deprecation Details****AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

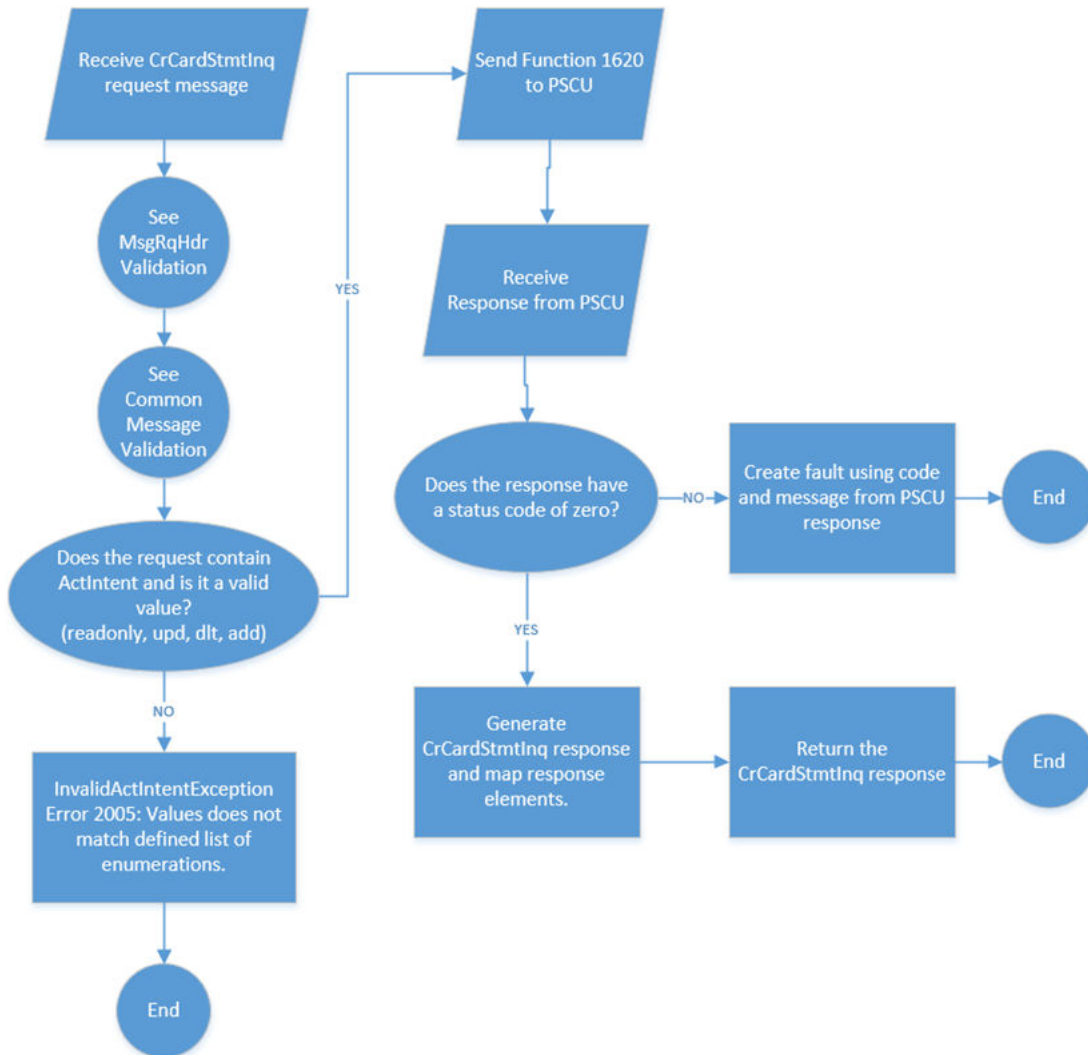
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardStmntInq Process

## CrCardStmntInq Process



## CrCardStmntInq Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.

## CrCardStmtInq Additional Information

### Function ID

- Uses Function ID number 1620.

### Request

- Not currently supported.

### Response

- Not currently supported.

## Credit Card Statement Inquiry

Credit Card Statement Inquiry is a jXchange service designed to allow consumers to inquire on credit card statement settings.

### Message Flow

In jXchange, the Credit Card Statement Inquiry service uses a typical exchange of `MType` messages to allow consumers to inquire on credit card statement settings.

### Primary Request

The consumer forwards the `CrCardStmtInqRq_MType` message to the service provider. The message contains the following elements:

- **ActIntent**
- **CrCardAcctId**
- `Custom_Ctype`
- `MsgRqHdr_CType`

### Primary Response

The service provider returns the `CrCardStmtInqRs_MType` message to the consumer. The message contains the following elements:

- **ActIntent**
- **ActIntentKey**
- `CrCardStmtInqRec_CType`
- `Custom_Ctype`
- `MsgRsHdr_CType`

## Credit Card Statement Inquiry Behavior

The Credit Card Statement Inquiry service behavior is as follows.

The Credit Card Statement Inquiry root request message (`CrCardStmntInqRq_MType`) requires a valid Credit Card Account Identifier (**CrCardAcctId**).

The Credit Card Statement Inquiry root request message (`CrCardStmntInqRq_MType`) optionally includes the Activity Intention (**ActIntent**).

The Credit Card Statement Inquiry root response message (`CrCardStmntInqRs_MType`) returns the Credit Card Statement Inquiry Record complex (`CrCardStmntInqRec_CType`) which contains the Credit Card Statement Information Record complex (`CrCardStmntInfoRec_CType`), **FinInstCrCardStmntType**, Activity Intention (**ActIntent**), and Activity Intention Key (**ActIntentKey**).

The **FinInstCrCardStmntType** allows the consuming application to sell electronic statement enrollment if the financial institution offers electronic statements.

Standard inquiry message tenets are applicable.

Adhere to the tenets for fault reporting.

Adhere to the tenets related to the correlation identifications.

Adhere to the tenets related to the concurrency models.

## CrCardStmntInqRq\_MType

`CrCardStmntInqRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### ActIntent

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

## CrCardAcctId

The number or character that identifies an account record.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the wsse:Security SOAP header element per section 4.

### jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### **AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **CrCardStmtInqRs\_MType**

`CrCardStmtInqRs_MType` is a message `MType` element.

Contains:

- `CrCardStmtInqRec_CType`
- `Custom_CType`
- `MsgRsHdr_CType`

## Simple Elements

The following simple elements are contained within this message.

### ActIntent

Conveys the consumer intention for a subsequent operation for the data set included in the response. Canonical values are:

- *Dlt*
- *ReadOnly*
- *Upd*

The default value is *ReadOnly*.

### ActIntentKey

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

## CrCardStmtInqRec\_CType

`CrCardStmtInqRec_CType` is a complex `CType` element.

Contains:

- `CrCardStmtInfoRec_CType`
- `Custom_CType`

## Simple Elements

The following simple elements are contained within this complex.

### FinInstCrCardStmtType

The financial institution's credit card statement marketing type. Canonical values are:

- *ElecOnly*
- *PaperAndElec*
- *PaperOnly*
- *PaperOrElec*

## CrCardStmtInfoRec\_CType

`CrCardStmtInfoRec_CType` is a complex `CType` element.

Contains:

- `Custom_CType`
- `EmailArray_AType`

## Simple Elements

The following simple elements are contained within this complex.

### CrCardStmntStatType

The credit card statement status type. Canonical values are:

- *Elec*
- *Paper*
- *PaperElec*

### CrCardStmntType

The credit card statement type. Canonical values are:

- *Elec*
- *Paper*

### Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

### EmailArray\_AType

`EmailArray_AType` is an array `AType` element. This is an array used to define email contact information.

Contains:

- `EmailInfo_CType`

### EmailInfo\_CType

`EmailInfo_CType` is a complex `CType` element. This element is optional.

## Simple Elements

The following simple elements are contained within this complex.

### EmailAddr

Email address.

### EmailType

Email type. Examples: Home, Work, Statement, Notice. Canonical values are:

- *Prim*
- *Secd*
- *OLB*

**EmailType** is a hybrid open enumeration.

## Custom\_CType

`Custom_CType` is a complex CType element.

This element is optional.

## Custom\_CType

`Custom_CType` is a complex CType element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex CType element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the

user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### MsgRecInfoArray\_AType

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### MsgRec\_CType

`MsgRec_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### ErrCat

The Soap Header Fault error category.

### ErrCode

The error code.

### ErrDesc

The Soap Header Fault error description.

### ErrElem

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### ErrElemVal

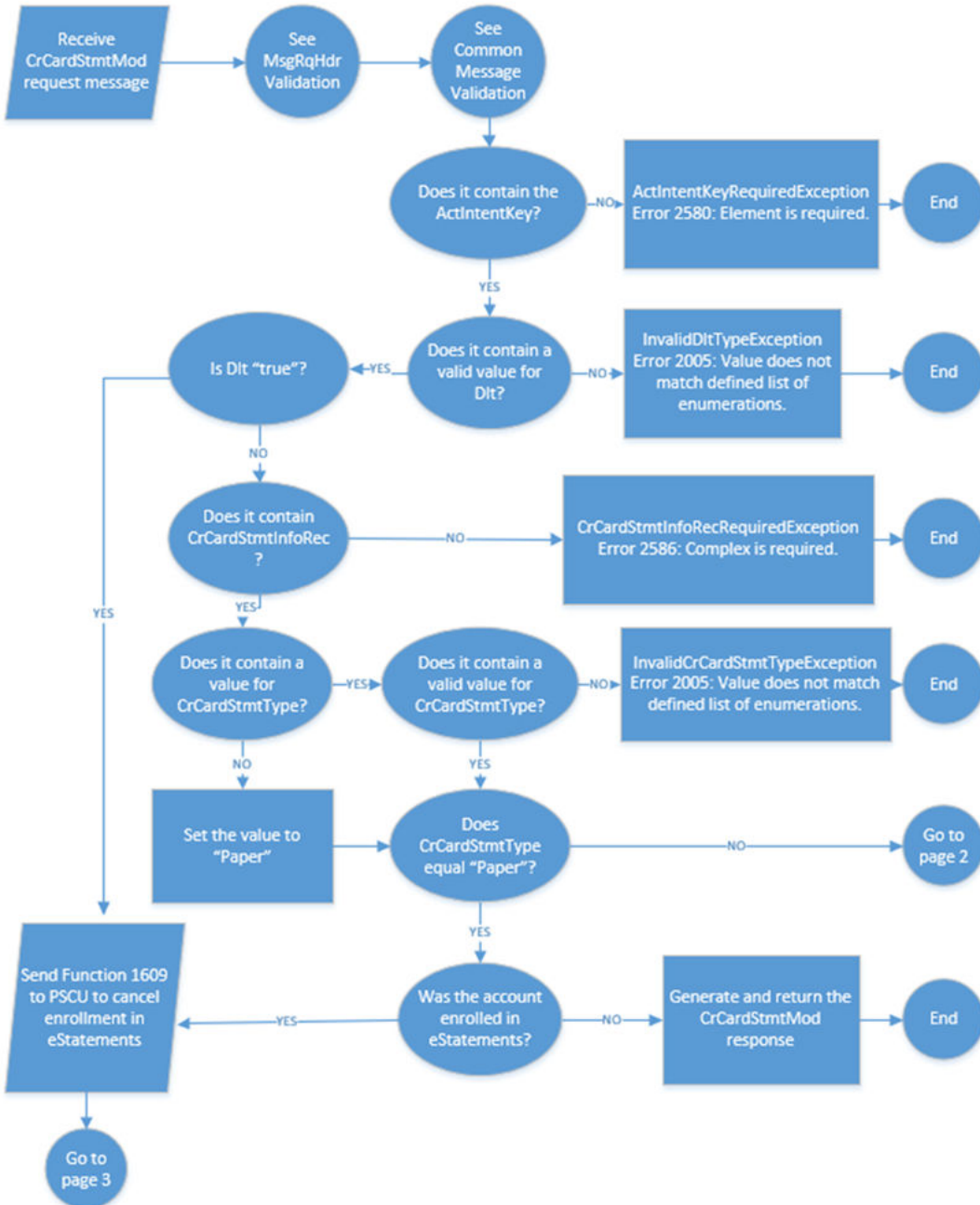
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### ErrLoc

The Soap Header Fault error location. This is typically the program that generated the error condition.

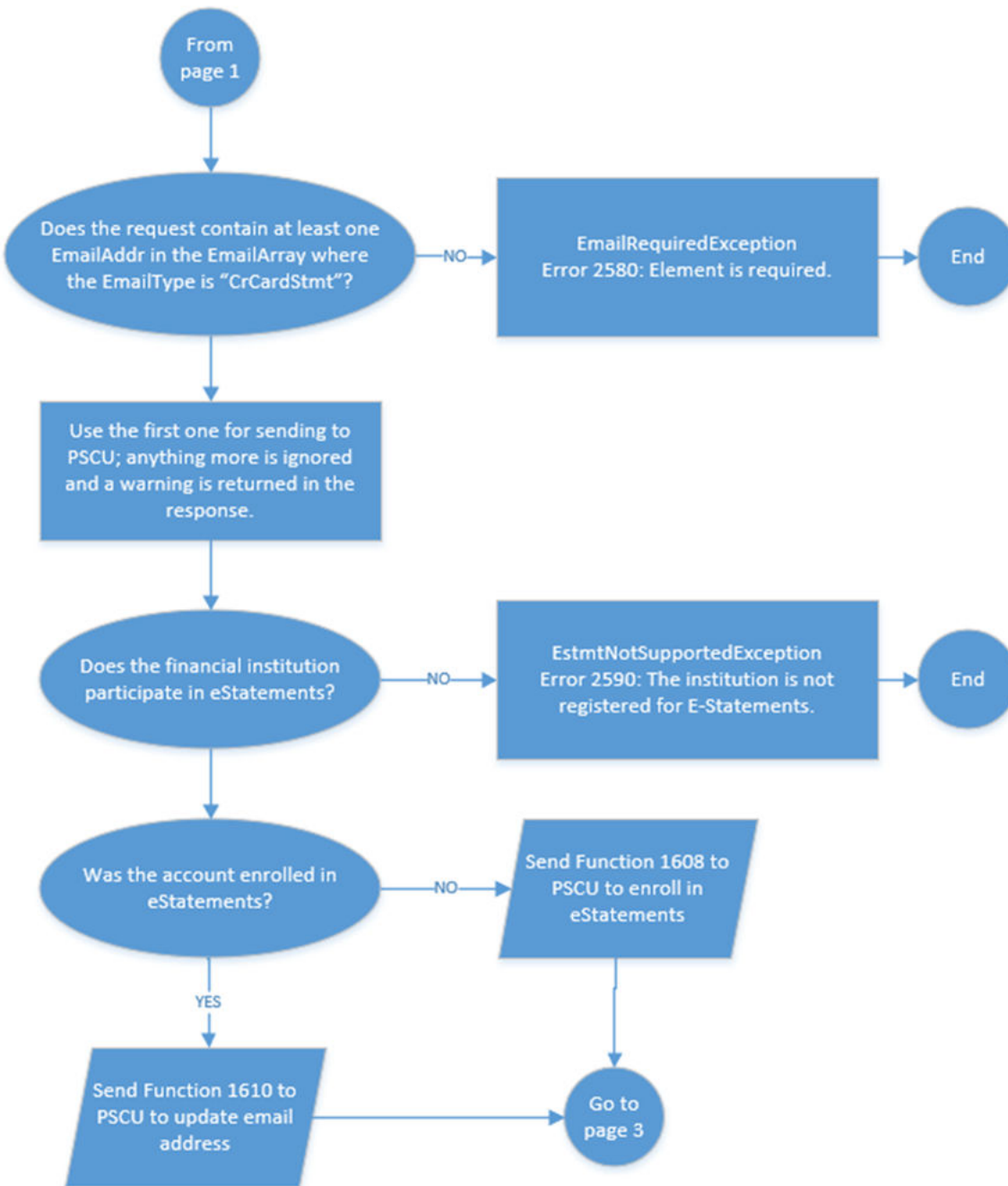
# CrCardStmtMod Process

## CrCardStmtMod Process Part 1



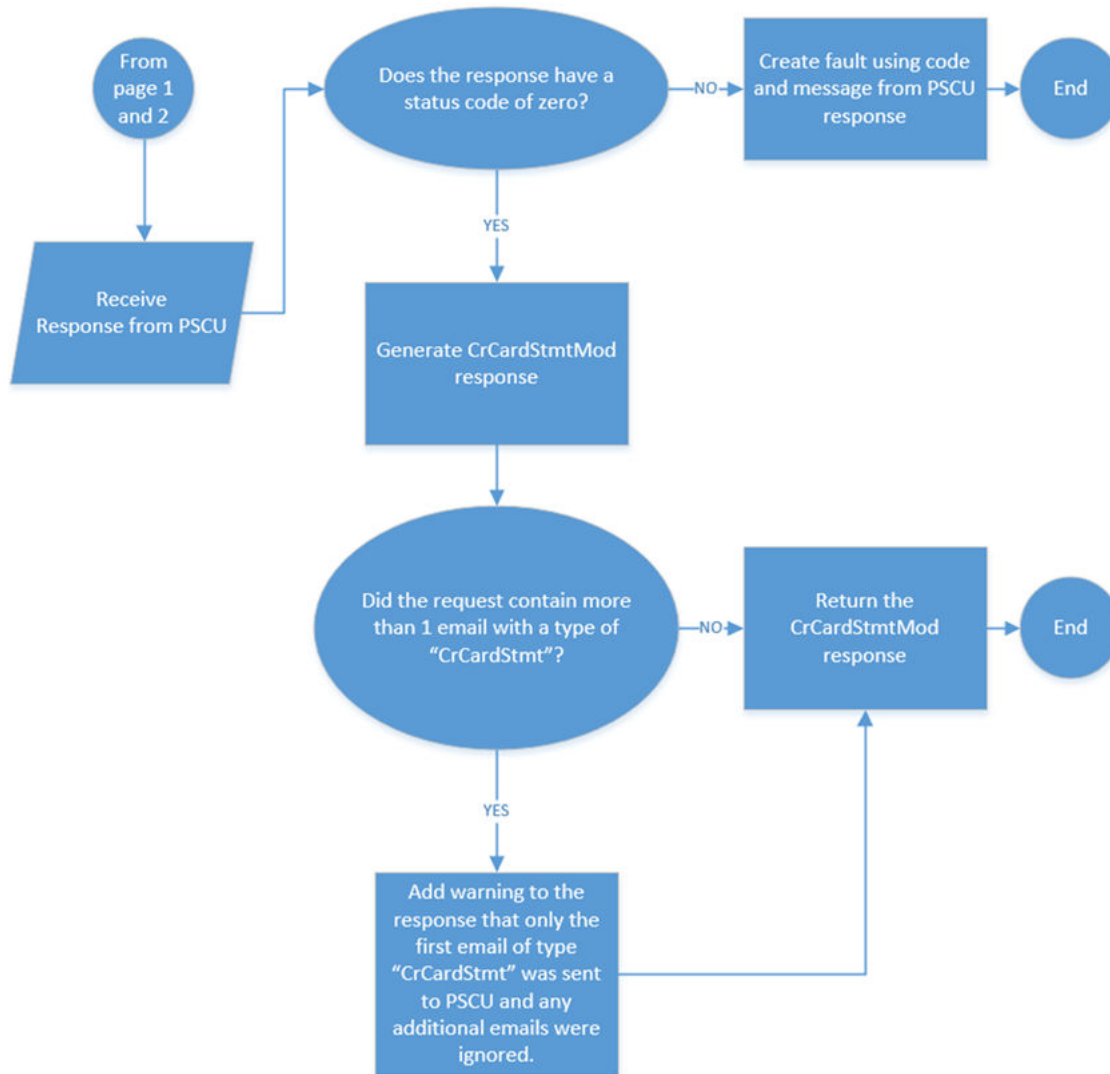
The second part of the process follows.

### CrCardStmtMod Process Part 2



The third part of the process follows.

**CrCardStmtMod Process Part 3**



**CrCardStmtMod Error Codes**

<b>Error Code</b>	<b>Message</b>
2005	Value does not match defined list of enumerations.
2580	Element is required.
2586	Complex is required.

Error Code	Message
2590	The institution is not registered for E-Statements.

## CrCardStmtMod Additional Information

### Function ID

- Uses Function ID numbers 1608, 1609, 1610, and 1620.

### Request

- Not currently supported.

### Response

- Not currently supported.

## Credit Card Statement Modification

Credit Card Statement Modification is a jXchange service designed to allow consumers to modify credit card statement settings.

### Message Flow

In jXchange, the Credit Card Statement Modification service uses a typical exchange of `MType` messages to allow consumers to modify credit card statement settings.

### Primary Request

The consumer forwards the `CrCardStmtModRq_MType` message to the service provider. The message contains the following elements:

- **ActIntentKey**
- **CrCardAcctId**
- `Custom_CType`
- **Dit**
- `MsgRqHdr_CType`

### Primary Response

The service provider returns the `CrCardStmtModRs_MType` message to the consumer. The message contains the following elements:

- Custom\_CType
- MsgRsHdr\_CType
- **RsStat**

## Credit Card Statement Modification Behavior

The Credit Card Statement Modification service behavior is as follows.

The Credit Card Statement Modification root request message (`CrCardStmntModRq_MType`) requires a valid Credit Card Account Identifier (**CrCardAcctId**) and Activity Intention Key (**ActIntentKey**).

The Credit Card Statement Modification root request message (`CrCardStmntModRq_MType`) optionally includes the Credit Card Statement Information Record complex (`CrCardStmntInfoRec_CType`) and Delete (**Dlt**).

The Credit Card Statement Information Record complex (`CrCardStmntInfoRec_CType`) contains the elements Credit Card Statement Type (**CrCardStmntType**), Email Array (`EmailArray_AType`), and Credit Card Statement Status Type (**CrCardStmntStatType**).

The Credit Card Statement Modification root response message (`CrCardStmntModRs_MType`) returns the Response Status (**RsSt**).

Use the modification service for enrolling to electronic statements and unenrolling from electronic statements.

A request with `<CrCardStmntType>Elec</CrCardStmntType>` conveys to the provider to enroll the card holder into electronic statements if they receive paper statements.

A request with `<Dlt>true</Dlt>` or `<CrCardStmntType>Paper</CrCardStmntType>` conveys to the provider to unenroll a card holder from electronic statements.

The standard modification message tenets are applicable.

Adhere to the tenets for fault reporting.

Adhere to the tenets related to the correlation identifications.

Adhere to the tenets related to the JHA Null attribute.

Adhere to the tenets related to the concurrency models.

## CrCardStmntModRq\_MType

`CrCardStmntModRq_MType` is a message `MType` element.

Contains:

- `CrCardStmntInfoRec_CType`
- `Custom_CType`

- `MsgRqHdr_CType`

## Simple Elements

The following simple elements are contained within this message.

### **ActIntentKey**

The service provider key that is delivered to the consumer, to be submitted in a subsequent modification operation.

### **CrCardAcctId**

The number or character that identifies an account record.

### **Dlt**

The delete element. Canonical values are:

- *false*
- *true*

## **CrCardStmtInfoRec\_CType**

`CrCardStmtInfoRec_CType` is a complex `CType` element.

Contains:

- `Custom_CType`
- `EmailArray_AType`

## Simple Elements

The following simple elements are contained within this complex.

### **CrCardStmtStatType**

The credit card statement status type. Canonical values are:

- *Elec*
- *Paper*
- *PaperElec*

### **CrCardStmtType**

The credit card statement type. Canonical values are:

- *Elec*
- *Paper*

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## EmailArray\_AType

EmailArray\_AType is an array AType element. This is an array used to define email contact information.

Contains:

- EmailInfo\_CType

## EmailInfo\_CType

EmailInfo\_CType is a complex CType element. This element is optional.

## Simple Elements

The following simple elements are contained within this complex.

### EmailAddr

Email address.

### EmailType

Email type. Examples: Home, Work, Statement, Notice. Canonical values are:

- *Prim*
- *Secd*
- *OLB*

**EmailType** is a hybrid open enumeration.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

## Simple Elements

The following simple elements are contained within this complex.

### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the `wsse:Security` SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardStmtModRs\_MType

`CrCardStmtModRs_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `MsgRsHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

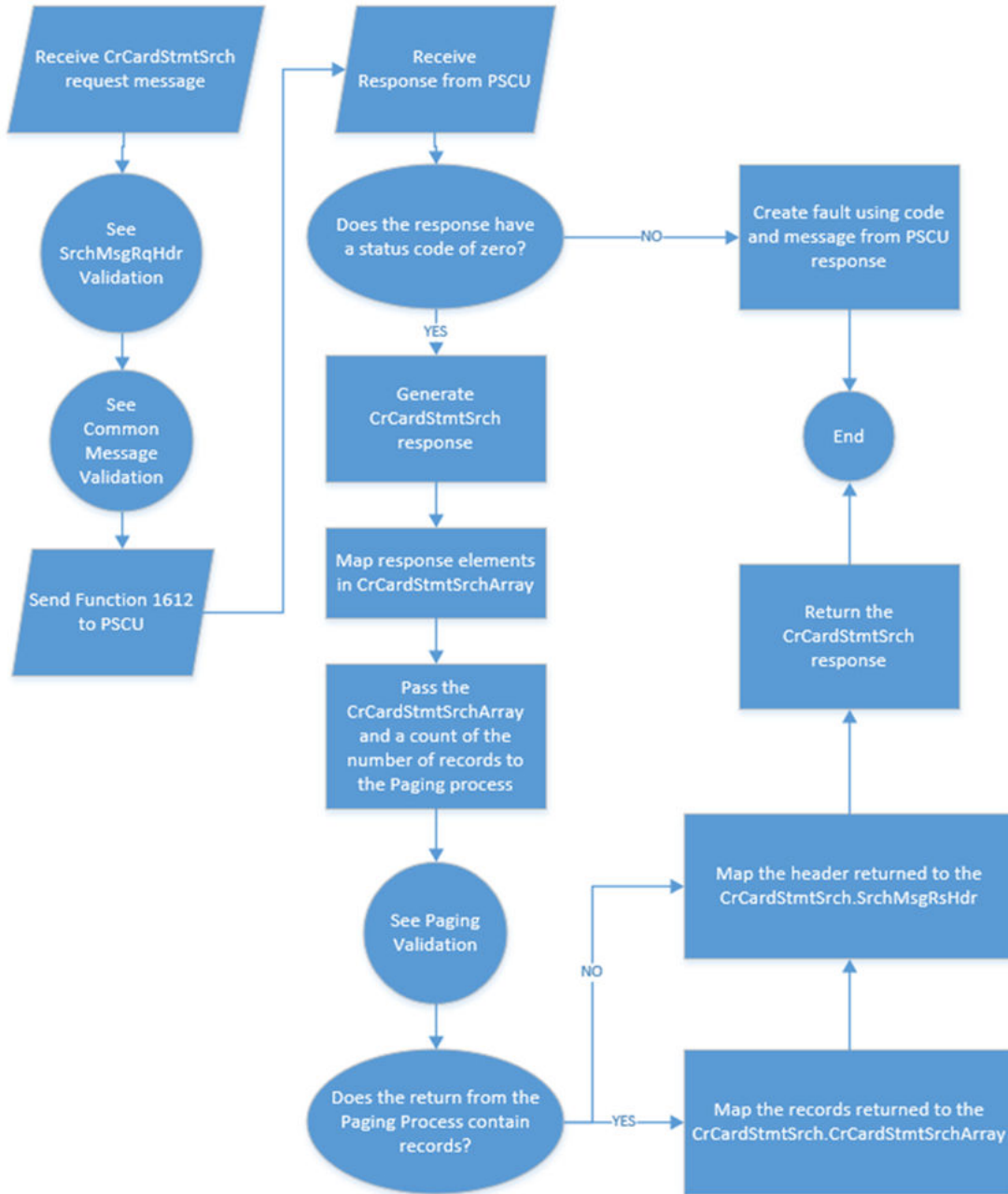
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# CrCardStmntSrch Process

## CrCardStmntSrch Process



# CrCardStmtSrch Additional Information

## Function ID

- Uses Function ID number 1612.

## Credit Card Statement Search

Credit Card Statement Search is a jXchange service designed to allow a consumer to obtain a list of available credit card statements and import a PDF version of the statement.

## Message Flow

In jXchange, the Credit Card Statement Search service uses a typical exchange of `MType` messages to allow a consumer to obtain a list of available credit card statements and import a PDF version of the statement.

## Primary Request

The consumer forwards the `CrCardStmtSrchRq_MType` message to the service provider. The message contains the following simple element:

- **CrCardAcctId**

## Primary Response

The service provider returns the `CrCardStmtSrchRs_MType` message to the consumer. The message contains the following simple element:

- **CrCardAcctId**

## Credit Card Statement Search Behavior

Credit Card Statement Search service behavior is as follows.

The Credit Card Statement Search root request message (`CrCardStmtSrchRq_MType`) requires a valid Credit Card Account Identification (**CrCardAcctId**). The Credit Card Statement Search root response message (`CrCardStmtSrchRs_MType`) echoes back the request element. It contains Credit Card Statement Search Array (`CrCardStmtSrchArray_AType`) which contains the Credit Card Statement Search Record complex (`CrCardStmtSrchRec_CType`).

The Credit Card Statement Search Record complex (`CrCardStmtSrchRec_CType`) contains the Document Identifier (**DocId**), Statement Identifier (**StmtId**), Statement Date (**StmtDt**), and Statement Location (**StmtLoc**). These elements would be cached

by the consumer to be used for a subsequent message to obtain a PDF version of a specific statement.

The standard search message tenets are applicable.

Adhere to the tenets for fault reporting.

Adhere to the tenets related to the correlation identifications.

## CrCardStmtSrchrq\_MType

CrCardStmtSrchrq\_MType is a message MType element.

Contains:

- Custom\_CType
- SrchrMsgRqHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

#### SrchrMsgRqHdr\_CType

SrchrMsgRqHdr\_CType is a complex CType element. This is a standard request message header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

#### Cursor

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

### **MaxRec**

The maximum number of records when multiple records are returned.

### **AuthenUsrCred\_CType**

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **Security**

Defines the `wsse:Security` SOAP header element per section 4.

### **jXchangeHdr\_CType**

`jXchangeHdr_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### **AuditWsid**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the

user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardStmtSrchRs\_MType

`CrCardStmtSrchRs_MType` is a message `MType` element.

Contains:

- `CrCardStmtSrchArray_AType`
- `Custom_CType`
- `SrchMsgRsHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

## CrCardStmtSrchArray\_AType

`CrCardStmtSrchArray_AType` is an array `AType` element. This is an array of responses for credit card statement searches.

Contains:

- `CrCardStmtSrchRec_CType`

### CrCardStmtSrchRec\_CType

`CrCardStmtSrchRec_CType` is a complex `CType` element.

Contains:

- `Custom_CType`

## Simple Elements

The following simple elements are contained within this message.

### **DocId**

Document name, number, or other identifying value.

### **StmtDt**

Statement Date.

### **StmtId**

The identification for a specific statement of an account on a specific date.

### **StmtLoc**

URL where a statement is located, if created.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## SrchMsgRsHdr\_CType

`SrchMsgRsHdr_CType` is a complex `CType` element. It searches specific message response headers.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## Simple Elements

The following simple elements are contained within this complex.

### **Cursor**

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

### **MoreRec**

Indicates if there are more records that could be returned. Canonical values are:

- *false*

- *true*

### **SentRec**

The number of records sent in the response.

### **TotRec**

Indicates the total records the request selected, which could be larger than `MaxRec`.

## **jXchangeHdr\_CType**

`jXchangeHdr_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **AuditUsrId**

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### **AuditWsid**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### **BusCorrelId**

The correlation identification as related to business functions and activities.

#### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

#### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

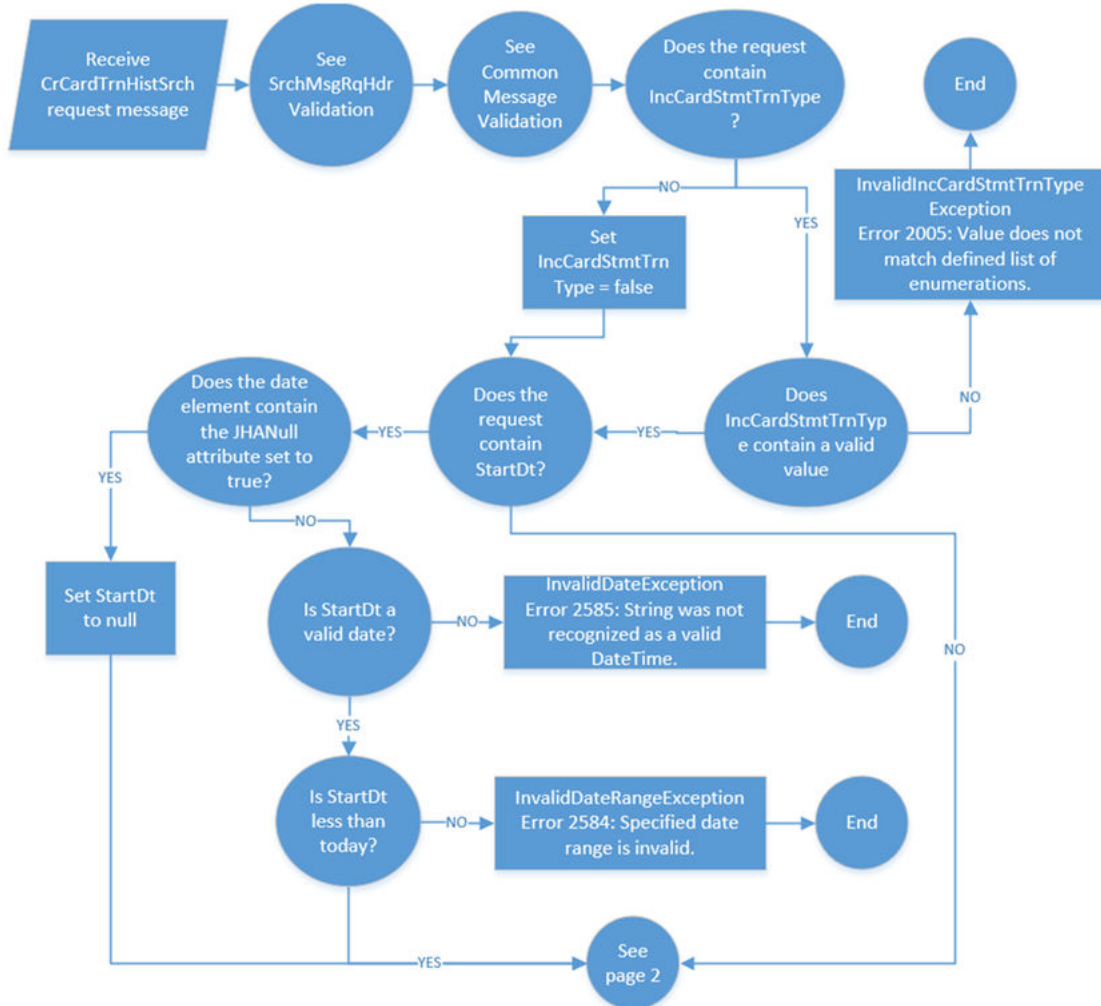
The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

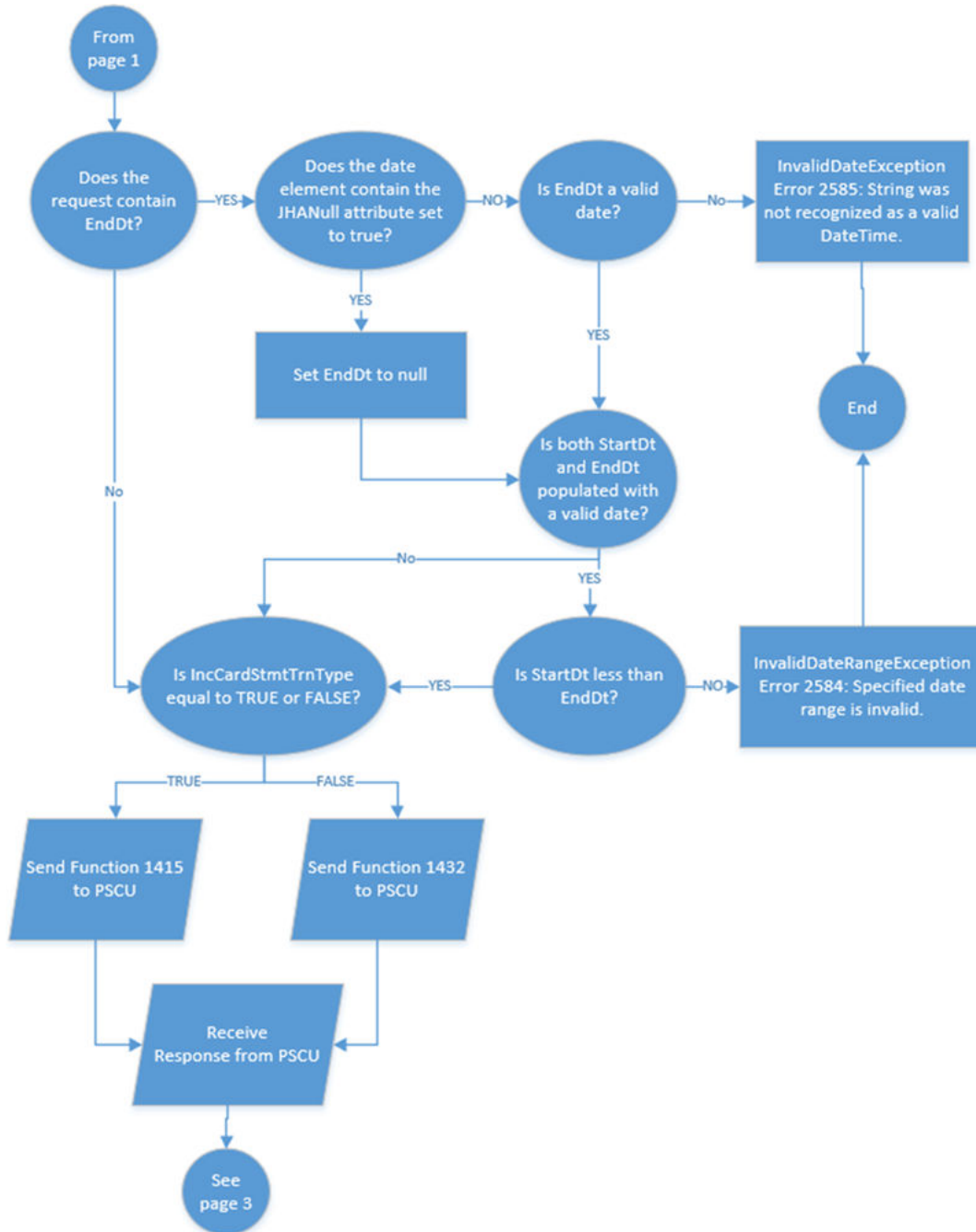
# CrCardTrnHistSrch Process

## CrCardTrnHistSrch Process Part 1



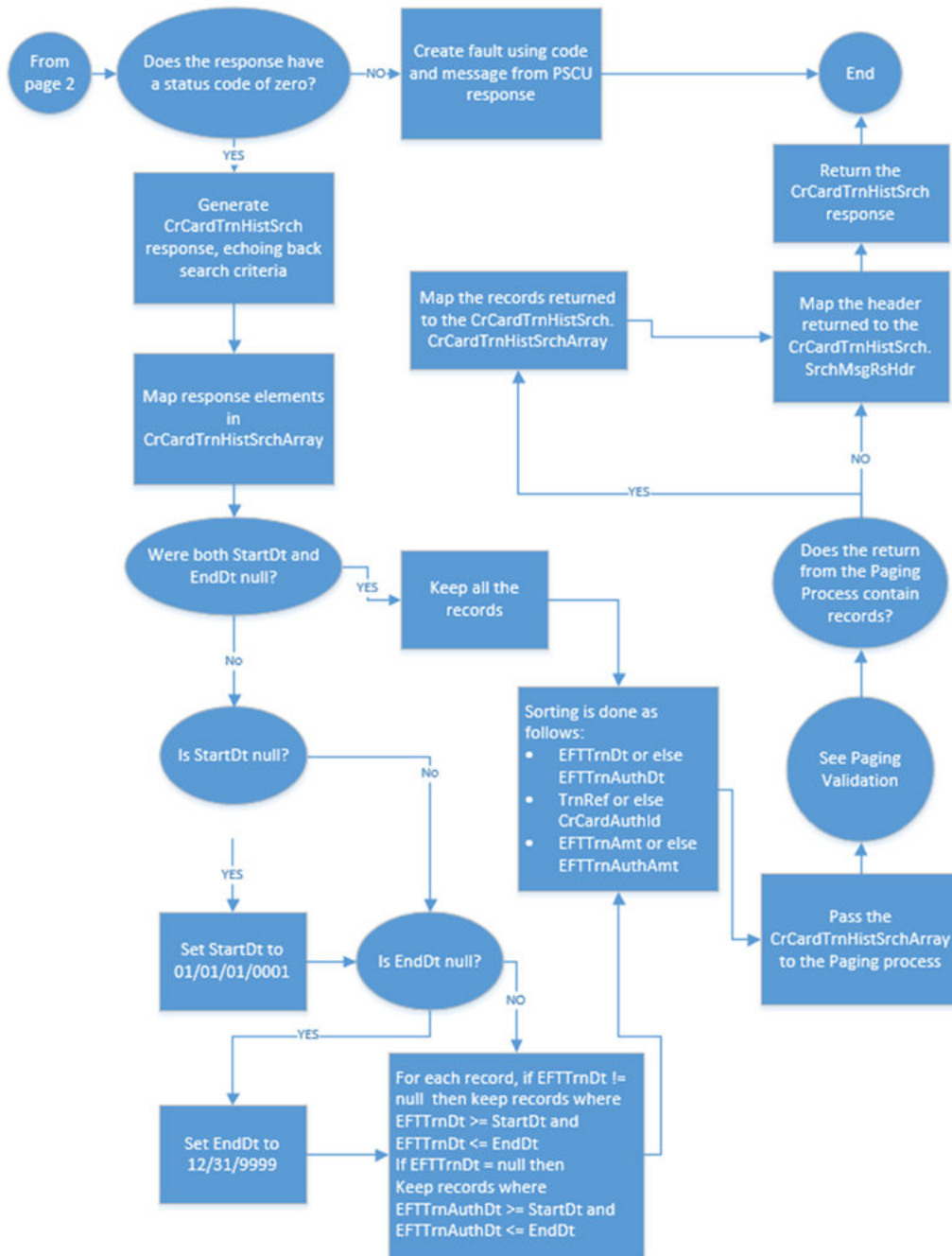
The second part of the process follows.

### CrCardTrnHistSrch Process Part 2



The third part of the process follows.

### CrCardTrnHistSrch Process Part 3



## CrCardTrnHistSrch Error Codes

Error Code	Message
2005	Value does not match defined list of enumerations.
2584	Specified date range is invalid.
2585	String was not recognized as a valid DateTime.

## CrCardTrnHistSrch Additional Information

### Function ID

- If **IncCardStmtTrnType** is *true*, then Function ID number 1432 is used. Otherwise, Function ID number 1415 is used.

### Request

- If **StartDt** and/or **EndDt** contain the JHANull attribute with a value of *true*, then that date filter is not used to narrow the search results.

### Response

- Transactions are sorted by date descending then by **CrCardAuthId/TrnRef**. If dates are equal and **CrCardAuthId/TrnRef** are null or empty, sort is inconsistent.
- Authorized transactions that have been aged are excluded from the response.

## Credit Card Transaction History Search

Credit Card Transaction History Search is a jXchange service designed to provide consumers the ability to inquire on the transaction history for a credit card.

### Message Flow

In jXchange, the Credit Card Transaction History Search service uses a typical exchange of `MType` messages to provide consumers the ability to inquire on the transaction history for a credit card.

### Primary Request

The consumer forwards the `CrCardTrnHistSrchRq_MType` message to the service provider. The message contains the following simple elements:

- **CrCardAcctId**
- **EndDt**
- **IncCardStmtTrnType**
- **StartDt**

### Primary Response

The service provider returns the `CrCardTrnHistSrchRs_MType` message to the consumer. The message contains the following simple elements:

- **CrCardAcctId**
- **EndDt**
- **IncCardStmtTrnType**
- **StartDt**

## Credit Card Transaction History Search Behavior

The Credit Card Transaction Search root request message (`CrCardTrnHistSrchRq_MType`) requires a valid Credit Card Account Identification (**CrCardAcctId**). The root request optionally includes the Include Card Statement Transaction Type (**IncCardStmtTrnType**), Start Date (**StartDt**), and End Date (**EndDt**).

The Include Card Statement Transaction Type (**IncCardStmtTrnType**) has the canonical values *false* and *true*. The value **IncCardStmtTrnType=true** conveys to the service provider to include transactions that have been reported on a statement.

The Transaction History Search Start Date (**StartDt**) and Transaction History End Date (**EndDate**) are compared to element EFT Transaction Date (**EFTTrnDt**). The EFT Transaction Authorization Date (**EFTTrnAuthDt**) is used for the compare when the EFT Transaction Date (**EFTTrnDt**) is absent/null.

A consumer request with a Start Date (**StartDt**) but without an End Date (**EndDate**) returns all the qualified Transaction History records with a date equal to and greater than the EFT Transaction Date (**EFTTrnDt**) or EFT Transaction Authorization Date (**EFTTrnAuthDt**).

A consumer request with an End Date (**EndDt**) but without a Start Date (**StartDt**) returns all the qualified Transaction History records with a date equal to and less than the EFT Transaction Date (**EFTTrnDt**) or EFT Transaction Authorization Date (**EFTTrnAuthDt**).

A consumer request with a Start Date (**StartDt**) and an End Date (**EndDt**) returns all the qualified Transaction History records with a date equal to and greater than the EFT Transaction Date (**EFTTrnDt**) or EFT Transaction Authorization Date (**EFTTrnAuthDt**) and a date equal to and less than the EFT Transaction Date (**EFTTrnDt**) or EFT Transaction Authorization Date (**EFTTrnAuthDt**).

The Credit Card Transaction Search root response message (`CrCardTrnHistSrchRs_MType`) echoes back the request element and Credit Card Transaction History Search Array (`CrCardTrnHistSrchArray_AType`), which encapsulates the Credit Card Transaction History Search Record complex (`CrCardTrnHistSrchRec_CType`).

The Credit Card Transaction History Search Record complex (`CrCardTrnHistSrchRec_CType`) encapsulates the following:

- Credit Card Authorization Identifier (**CrCardAuthId**)
- Credit Card Transaction Status Type (**CrCardTrnStatType**)
- EFT Card Capture Type (**EFTCardCapType**)
- EFT Description (**EFTDesc**)
- EFT Merchant Identifier (**EFTMerId**)
- EFT Merchant State Code (**EFTMerStateCode**)
- EFT Transaction Amount (**EFTTrnAmt**)
- EFT Transaction Authorization Amount (**EFTTrnAuthAmt**)
- EFT Transaction Authorization Date (**EFTTrnAuthDt**)
- EFT Transaction Code (**EFTTrnCode**)
- EFT Transaction Date (**EFTTrnDt**)
- EFT Transaction Description (**EFTTrnDesc**)
- EFT Transaction Processing Date (**EFTTrnProcDt**)
- Exception Reason Code (**ExcRsnCode**)
- Exception Reason Description (**ExcRsnDesc**)
- Merchant Business Category Description (**MerBusCatDesc**)
- Merchant City (**MerCity**)
- Merchant Name (**MerName**)
- Merchant Postal Code (**MerPostalCode**)
- Transaction Reference (**TrnRef**)

## CrCardTrnHistSrchRq\_MType

`CrCardTrnHistSrchRq_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `SrchMsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

### **EndDt**

The date that designates the ending point for date selections.

### **IncCardStmtTrnType**

Answers the question: Include the card transactions that have been reported on a statement? Canonical values are:

- *false*
- *true*

### **StartDt**

The date that designates the starting point for date selections.

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## **SrchMsgRqHdr\_CType**

`SrchMsgRqHdr_CType` is a complex `CType` element. This is a standard request message header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

## **Simple Elements**

The following simple elements are contained within this complex.

### **AuthenProdCred**

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

### **Cursor**

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

### **MaxRec**

The maximum number of records when multiple records are returned.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtld**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardTrnHistSrchrRs\_MType

`CrCardTrnHistSrchrRs_MType` is a message `MType` element.

Contains:

- `CrCardTrnHistSrchrArray_AType`
- `Custom_CType`
- `SrchMsgRsHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### CrCardAcctId

The number or character that identifies an account record.

#### EndDt

The date that designates the ending point for date selections.

#### IncCardStmtTrnType

Answers the question: Include the card transactions that have been reported on a statement? Canonical values are:

- *false*
- *true*

#### StartDt

The date that designates the starting point for date selections.

## CrCardTrnHistSrchrArray\_AType

`CrCardTrnHistSrchrArray_AType` is an array `AType` element. This is an array of responses for account history and credit card transaction history search.

Contains:

- `CrCardTrnHistSrchrRec_CType`

## CrCardTrnHistSrchRec\_CType

CrCardTrnHistSrchRec\_CType is a complex CType element.

Contains:

- Custom\_CType

## Simple Elements

The following simple elements are contained within this complex.

### AliasCrCardId

The number or character that identifies an account record.

### CrCardAuthId

The credit card identifier provided for transaction authorization.

### CrCardTrnStatType

The status of the credit card transactions. Canonical values are:

- *Auth*
- *Post* (default)

### EFTCardCapType

What process was used to capture the EFT card data? Canonical values are:

- *BarCode*
- *CertMagRead*
- *ChipRead*
- *ElecMer*
- *FallbackMagRead*
- *Keyed*
- *MagRead*
- *NFCChipRead*
- *NFCMagRead*
- *OCR*
- *Trak*
- *UnCertChipRead*

### EftDesc

A free-format description that further defines pertinent information about the transactions. Often associated with electronic transaction types.

### EFTMerId

The identification given to EFT card merchant transaction processors.

### EFTMerStateCode

The two-character alpha code which represents a state. For example, *MO*.

**EFTTrnAmt**

The actual amount of the transaction accepted by the provider.

**EFTTrnAuthAmt**

The amount for which an EFT transaction was authorized.

**EFTTrnAuthDt**

The date an EFT transaction was authorized.

**EFTTrnCode**

The code that defines the type of EFT transaction.

**EFTTrnDesc**

The description of the code that defines the type of EFT transaction.

**EFTTrnDt**

The date of the transaction.

**EFTTrnProcDt**

The date the transaction application provider processed the transaction.

**ExcRsnCode**

The code that describes the reason for the exception.

**ExcRsnDesc**

The description of the code that describes the reason for the exception.

**MerBusCatDesc**

The business category description as related to a merchant.

**MerCity**

The city name.

**MerName**

The name of the merchant that processed the POS transaction.

**MerPostalCode**

The postal code or ZIP code.

**TrnRef**

An application's transactional reference that provides guidance as to the source.

**Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## Custom\_CType

`Custom_CType` is a complex `CType` element.

This element is optional.

## SrchMsgRsHdr\_CType

`SrchMsgRsHdr_CType` is a complex `CType` element. It searches specific message response headers.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## Simple Elements

The following simple elements are contained within this complex.

### Cursor

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

### MoreRec

Indicates if there are more records that could be returned. Canonical values are:

- *false*
- *true*

### SentRec

The number of records sent in the response.

### TotRec

Indicates the total records the request selected, which could be larger than `MaxRec`.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### **AuditWsid**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## MsgRec\_CType

MsgRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# Credit Card Transaction Addition

Credit Card Transaction Addition is a jXchange service designed to allow consumers to enter a credit card transaction.

## Message Flow

In jXchange, the Credit Card Transaction Addition service uses a typical exchange of `MType` messages to allow consumers to enter a credit card transaction.

## Primary Request

The consumer forwards the `CrCardTrnAddRq_MType` message to the service provider. The message contains the following simple elements:

- **CrCardAcctId**
- **CrCardTrnType**

## Primary Response

The service provider returns the `CrCardTrnAddRs_MType` message to the consumer. The message contains the following simple element:

- **RsStat**
- **TrnRcptId**

# Credit Card Transaction Addition Behavior

The Credit Card Transaction Addition service behavior is as follows.

The Credit Card Transaction Addition root request message (`CrCardTrnAddRq_MType`) requires a valid Credit Card Account Identification (**CrCardAcctId**) and Credit Card Transaction Type (**CrCardTrnType**). The canonical values for Credit Card Transaction type (**CrCardTrnType**) are *Pmt*, *CashAdv*, and *Sale*. The root request optionally includes the Error Override Information Array (`ErrOvrRdInfoArray_AType`).

The Debit Account Identifier (**DrAcctId**) and Transaction Receipt Identifier (**TrnRcptId**) are part of a documented choice statement where both are optional but at least one is required. The Debit Account Identifier (**DrAcctId**) is used when both are present.

The Credit Card Payment Information Record complex (`CrCardPmtInfoRec_CType`) and Credit Card Advance Information Record complex (`CrCardAdvInfoRec_CType`) constitute a documented choice statement where both complexes are optional but

one is required depending on the Credit Card Transaction Type (**CrCardTrnType**) element value.

The Credit Card Payment Information Record complex (`CrCardPmtInfoRec_CType`) contains the Amount (**Amt**), Debit Routing Number (**DrRtNum**), Debit Account Identifier (**DrAcctId**), and Debit Account Type (**DrAcctType**). The Debit Routing Number (**DrRtNum**) is optional and could be used to determine if the debiting account is on-us or not on-us.

The Credit Card Advance Information Record complex (`CrCardAdvInfoRec_CType`) contains Amount (**Amt**), EFT Card Expiration Date (**EFTCardExpDt**), and Merchant Account Identifier (**MerAcctId**) which are all required. The EFT Description (**EFTDesc**) is included optionally.

The Credit Card Transaction Addition Response (`CrCardTrnAddRs_MType`) returns the Response Status (**RsStat**) and the Transaction Receipt Identifier (**TrnRcptId**).

The standard addition message tenets are applicable.

Adhere to the tenets for fault reporting.

Adhere to the tenets related to the correlation identifications.

## CrCardTrnAddRq\_MType

`CrCardTrnAddRq_MType` is a message `MType` element.

Contains:

- `CrCardAdvInfoRec_CType`
- `CrCardPmtInfoRec_CType`
- `Custom_CType`
- `ErrOvrRdInfoArray_AType`
- `MsgRqHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### **CrCardAcctId**

The number or character that identifies an account record.

#### **CrCardTrnType**

Defines the type of credit card transaction. Canonical Values are:

- *Pmt*

- *CashAdv*
- *Sale*

## CrCardAdvInfoRec\_CType

CrCardAdvInfoRec\_CType is a complex CType element.

Contains:

- Custom\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### Amt

The amount or quantity.

#### EftDesc

A free-format description that further defines pertinent information about the transactions. Often associated with electronic transaction types.

#### EFTCardExpDt

The expiration date given to an EFT card.

#### MerAcctId

The number or character that identifies an account record.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## CrCardPmtInfoRec\_CType

CrCardPmtInfoRec\_CType is a complex CType element.

Contains:

- Custom\_CType

### Simple Elements

#### NOTE

Only one of **DrAcctId** or **TrnRcptID** can occur. If both choices are provided, **DrAcctId** overrides **TrnRcptID**.

The following simple elements are contained within this complex.

#### Amt

The amount or quantity.

### **DrAcctId**

The debit account number.

### **DrAcctType**

The debit account type.

### **DrRtNum**

The routing and transit number of the debit account's bank for the ACH item.

#### **NOTE**

As of 01-01-2023, **DrRtNum** is deprecated and replaced with **FinInstRtId**.

### **EffDt**

The date assigned to transactions when it is different from the posting date.

### **FinInstRtId**

The financial institution's routing and transit identification.

### **LdgrBalAmt**

Amount that should be applied to the ledger balance of the account.

### **TrnRcptId**

The receipt provided for a successful transaction entry.

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

## **ErrOvrRdInfoArray\_AType**

`ErrOvrRdInfoArray_AType` is an array `AType` element. This is an array of overrides for faults.

Contains:

- `ErrOvrRd_CType`

## ErrOvrRd\_CType

ErrOvrRd\_CType is a complex CType element. This element is used to override errors created in a previous request. This element is optional.

### Simple Elements

The following simple elements are contained within this complex.

#### BusSvcType

The business service type used to convey certain Add and Mod message handling. The canonical value is *NoValidate*.

#### ErrCode

The error code.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

#### AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

AuthenUsrCred\_CType is a complex CType element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

### Simple Elements

The following simple elements are contained within this complex.

#### Security

Defines the wsse:Security SOAP header element per section 4.

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtId

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## CrCardTrnAddRs\_MType

CrCardTrnAddRs\_MType is a message MType element.

Contains:

- Custom\_CType
- MsgRsHdr\_CType

### Simple Elements

The following simple elements are contained within this message.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

#### TrnRcptId

The receipt provided for a successful transaction entry.

## Custom\_CType

Custom\_CType is a complex CType element.

This element is optional.

## MsgRsHdr\_CType

MsgRsHdr\_CType is a complex CType element. This is the default message response header.

Contains:

- jXchangeHdr\_CType
- MsgRecInfoArray\_AType

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### **AuditWsId**

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

MsgRec\_CType is a complex CType element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **ErrCat**

The Soap Header Fault error category.

#### **ErrCode**

The error code.

#### **ErrDesc**

The Soap Header Fault error description.

#### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

#### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

#### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

# PingAll Additional Information

## Function ID

- This message has no corresponding Function ID number at PSCU. This message is not sent outside of the translation layer. The translation layer simply echoes back the message without knowing whether the services at PSCU are available.

## PingAll

PingAll is a jXchange service designed to allow a consumer to take advantage of functionality related to the specific release installed at a Financial Institution (FI) site.

## Message Flow

In jXchange, the PingAll service uses a typical exchange of `MType` messages to provide consumers the ability to take advantage of functionality related to the specific release installed at an FI.

## Primary Request

The consumer forwards the `PingAllRq_MType` message to the service provider.

The message contains the following simple elements:

- **IncNonProdEnv**
- **InstRtId**
- **PingRq**
- **PrvdFamName**
- **SvcPrvdName**

## Primary Response

The service provider returns the `PingAllRs_MType` message to the consumer.

The message contains the following array:

- `PingAllArray_AType`

## Ping All Behavior

The Ping All service behavior is as follows.

`PingAll` is an aggregate service, meaning that users can submit a single request to receive an array of all providers supported via jX at the specified financial institution.

The `PingAll` message response returns the Service Provider Version for each of the providers.

## **PingAllRq\_MType**

`PingAllRq_MType` is a message `MType` element.

This is a common ping request to all service providers for checking, testing, and keeping alive.

### **Simple Elements**

The following simple elements are contained within this message.

#### **IncNonProdEnv**

Answers the question: Should financial institutions' non-production environments be included in the response? Canonical values are:

- *false*
- *true*

#### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

#### **PingRq**

Generic text for the ping request.

#### **PrvdFamName**

The category or group that the event owner is associated with. Canonical values are:

- *BillPay*
- *CardServices*
- *CkImg*
- *Core*
- *CrCardServices*
- *CRM*
- *DocImg*
- *Fraud*

- *HumanCapMgmt*
- *IMS*
- *JES*
- *NotServices*
- *OLB*
- *PltFm*
- *PmtServices*
- *TellerSys*
- *UsrInterface*
- *Wires*
- *VR*

### **SvcPrvdName**

The message service providers. Canonical values are:

- *4Sight*
- *AES*
- *AlrtCenter*
- *Argo*
- *BrdCst*
- *BSA*
- *CIF2020*
- *CoreDir*
- *Cruise*
- *DirectLineIntlWires*
- *DirectLineWires*
- *EEMS*
- *EL*
- *ENS*
- *Episys*
- *EPS*
- *ERMS*
- *EWf*
- *iPay*
- *iTalk*
- *JHAEnterCRM*
- *JHAPayCenter*
- *jXchange*
- *MFA*

- *NetTeller*
- *ODI*
- *OnBoardDep*
- *OnBoardLn*
- *Passport*
- *PmtProcSols*
- *Silhouette*
- *SilverLake*
- *Synapsys*
- *Synergy*
- *TimeTrack*
- *TP\_CSPI*
- *TP\_FISTBS*
- *TP\_HylandOnBase*
- *TP\_IMM*
- *TP\_Symantec*
- *TP\_Verafin*
- *Vertex*
- *Vertex*
- *YellowHammer*
- *YHRTFD*

## **PingAllRs\_MType**

`PingAllRs_MType` is a message `MType` element.

This is a common ping response to all service providers which echoes back the string sent in the `PingAllRq_MType`.

Contains:

- `PingAllArray_AType`

## **PingAllArray\_AType**

`PingAllArray_AType` is an array `AType` element. This is an array of ping responses from service providers.

Contains:

- `PingAllInfoRec_CType`

## PingAllInfoRec\_CType

PingAllInfoRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### FinInstName

The depository financial institution name.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtId

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

#### PingRs

String echoed back from the `PingRq`. The element value contains *Error* when the `PingRq` to a service provider is not successful. Canonical values are:

- *Error*

#### PrvdFamName

The category or group that the event owner is associated with. Canonical values are:

- *BillPay*
- *CardServices*
- *CkImg*
- *Core*
- *CrCardServices*
- *CRM*
- *DocImg*
- *Fraud*
- *HumanCapMgmt*

- *IMS*
- *JES*
- *NotServices*
- *OLB*
- *PltFm*
- *PmtServices*
- *TellerSys*
- *UsrInterface*
- *Wires*
- *VR*

### **SvcProdVer**

The product version structure is representative of major version, minor version, and build number. The service provider version must be populated with a standard format: *YYYY.Point\_Release.Compatibility\_Patch*

An example of a service provider version: *2016.01.07*.

### **SvcPrvdName**

The message service providers. Canonical values are:

- *4Sight*
- *AES*
- *AlrtCenter*
- *Argo*
- *BrdCst*
- *BSA*
- *CIF2020*
- *CoreDir*
- *Cruise*
- *DirectLineIntlWires*
- *DirectLineWires*
- *EEMS*
- *EL*
- *ENS*
- *Episys*
- *EPS*
- *ERMS*
- *EWF*
- *iPay*

- *iTalk*
- *JHAEnterCRM*
- *JHAPayCenter*
- *jXchange*
- *MFA*
- *NetTeller*
- *ODI*
- *OnBoardDep*
- *OnBoardLn*
- *Passport*
- *PmtProcSols*
- *Silhouette*
- *SilverLake*
- *Synapsys*
- *Synergy*
- *TimeTrack*
- *TP\_CSPI*
- *TP\_FISTBS*
- *TP\_HylandOnBase*
- *TP\_IMM*
- *TP\_Symantec*
- *TP\_Verafin*
- *Vertex*
- *Vertex*
- *YellowHammer*
- *YHRTFD*

# SAMLTokenCrt Process

Go here to read more information in the EI&S Knowledgebase about the [SAMLTokenCrt/Translator Process Flow](#).

## NOTE

The `SAMLTokenCrt` does not use the PSCU provider in Service Gateway. `SAMLTokenCrt` uses a provider called SSO SAML Generator. If you plan to use `SAMLTokenCrt`, you need to configure the SSO SAML Generator provider in the jXchange Management Console.

## SAML Token Create

SAML Token Create is a jXchange service designed to allow consumers to request SAML tokens specific to their requirements.

### Message Flow

In jXchange, the SAML Token Create service uses a typical exchange of `MType` messages to allow consumers to request SAML tokens specific to their requirements.

### Primary Request

The consumer forwards the `SAMLTokenCrtRq_MType` message to the service provider. The message contains the following simple element:

- **RelyingPartyName**

The message contains the following complex:

- `MsgRqHdr_CType`

The message contains the following arrays:

- `AttributeArray_AType`
- `ErrOvrRdInfoArray_AType`

### Primary Response

The service provider returns the `SAMLTokenCrtRs_MType` message to the consumer. The message contains the following simple elements:

- **AuthenUsrBinaryCred**
- **RsStat**

The message contains the following complex:

- `MsgRsHdr_CType`

## SAML Token Create Behavior

The SAML Token Create service behavior is as follows.

The SAML Token Create root request (`SAMLTokenCrt_MType`) requires Relying Party Name (**RelyingPartyName**) and Attribute Array (`AttributeArray_AType`), which contains Attribute Name (**AttributeName**) and Attribute Value (**AttributeVal**). Attribute Name (**AttributeName**) would typically be in the form of a URL. For example, the token claims format could be: *http://schemas.jackhenry.com/ims/2010/identity/claims/account*.

The Attribute Value (**AttributeVal**) can contain enterprise-standardized identifiers followed by a space. The Enterprise identifiers (pan | tin) are standards. This format is a standard protocol that is used in other standard token communications (for example, Authorization header). The SAML Token Create root response (`SAMLTokenCrt_MType`) returns Authentication User Binary Credential (**AuthenUsrBinaryCred**).

The service provider only returns an encrypted SAML token.

## SAMLTokenCrtRq\_MType

`SAMLTokenCrtRq_MType` is a message `MType` element.

Contains:

- `AttributeArray_AType`
- `ErrOvrRdInfoArray_AType`
- `MsgRqHdr_CType`

## Simple Elements

The following simple element is contained within this message.

### RelyingPartyName

The system entity that receives and accepts information from another system entity.

### AttributeArray\_AType

`AttributeArray_AType` is an array `AType` element. This is an array of attributes for a SAML token.

Contains:

- `AttributeRec_CType`

## AttributeRec\_CType

AttributeRec\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AttributeName

The name of a name value pair.

#### AttributeVal

The value of a name value pair.

## ErrOvrRdInfoArray\_AType

ErrOvrRdInfoArray\_AType is an array AType element. This is an array of overrides for faults.

Contains:

- ErrOvrRd\_CType

## ErrOvrRd\_CType

ErrOvrRd\_CType is a complex CType element. This element is used to override errors created in a previous request. This element is optional.

### Simple Elements

The following simple elements are contained within this complex.

#### BusSvcType

The business service type used to convey certain Add and Mod message handling. The canonical value is *NoValidate*.

#### ErrCode

The error code.

## MsgRqHdr\_CType

MsgRqHdr\_CType is a complex CType element. This is the default message request header.

Contains:

- AuthenUsrCred\_CType
- jXchangeHdr\_CType

### Simple Elements

The following simple elements are contained within this complex.

## AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

**BusCorrelId**

The correlation identification as related to business functions and activities.

**ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

**ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

**InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

**InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

**jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

**JxVer**

Contains the version jXchange is running for the Soap Header Fault.

**ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

**ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

**WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## jXchangeHdr\_CType Deprecation Details

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## SAMLTokenCrtRs\_MType

`SAMLTokenCrtRs_MType` is a message `MType` element.

Contains:

- `MsgRsHdr_CType`

### Simple Elements

The following simple elements are contained within this message.

#### AuthenUsrBinaryCred

The authentication user credential in a binary format.

#### RsStat

The status of the response. Canonical values are:

- *fail*
- *success*

## MsgRsHdr\_CType

`MsgRsHdr_CType` is a complex `CType` element. This is the default message response header.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

## jXchangeHdr\_CType

jXchangeHdr\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### AuditUsrid

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

#### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

#### AuthenUsrid

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrid** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

#### BusCorrelId

The correlation identification as related to business functions and activities.

#### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

#### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

#### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

#### InstRtid

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

## **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

## SvcDictSrch Additional Information

### Function ID

- Like the `Ping` operation, this operation is fulfilled by the translation layer. No call is made to PSCU.

### Request

- **SvcDictName** is required and must be a valid value. Otherwise, a fault is returned.
- **SvcDictType** is required and must be a valid value. Otherwise, a fault is returned.
- Any values in **ElemName** and `SvcDictFilterArray` are ignored.
- Filtering of the response using the `IncXtendElemArray` occurs using the standard process.

### Response

- The translation layer generates the appropriate response given the **SvcDictName** and **SvcDictType** combination received.
- The standard paging process is used.

## Service Dictionary Search

Service Dictionary Search is a jXchange messaging service designed to provide consumers a service that can convey a service provider's elements XSD path, requirements, default values, open enumerated canonical values, help/knowledge content, and fault codes per operation.

### Message Flow

In jXchange, the Service Dictionary Search service uses a typical exchange of `MType` messages to provide consumers a service that can convey a service provider's elements XSD path, requirements, default values, open enumerated canonical values, help/knowledge content, and fault codes per operation.

### Primary Request

The third-party consumer forwards the `SvcDictSrchRq_MType` message to the service provider.

The message contains the following simple elements:

- **ElemName**

- **SvcDictName**
- **SvcDictType**

The message contains the following complex element:

- `SrchMsgRqHdr_CType`

The message contains the followings arrays:

- `IncXtendElemArray_AType`
- `SvcDictFilterArray_AType`

The **SvcDictName** and **SvcDictType** are required elements. The **ElemName** element and `SvcDictFilterArray_AType` array are optional. The `IncXtendElemArray_AType` requires submission for the consumer to be returned the service provider's field information and service provider error array.

### Primary Response

The service provider returns the `SvcDictSrchrRs_MType` message to the consumer.

The message contains the following simple elements:

- **SvcDictName**
- **SvcDictType**

The message contains the following complex elements:

- `Custom_CType`
- `SrchMsgRsHdr_CType`

The message contains the following arrays:

- `SvcDictFilterArray_AType`
- `SvcDictInfoArray_AType`
- `x_SvcPrvdErrArray_AType`

The response is an echo of the request. The `x_SvcPrvdErrArray_AType` included in the root response provides the consumer with all the fault/errors that can exist for the named **SvcDictName** submitted in the request.

### Service Dictionary Search Behavior

The `SvcDictSrchrRq_MType` request message requires valid **SvcDictName** and **SvcDictType** elements. The **SvcDictName** canonical values represent the operations that can be queried. The canonical values are separated by the Third Party Consumer operations and the JHA Consumer operations. The canonical values could be phased in as adopted by Service Providers. The **SvcDictType** element

canonical values are Request **~Rq~** and Response **~Rs~**. The request includes the optional element **ElemName**, so that a consumer could query for the values as related to a specific child node. When **ElemName** is populated, it can also carry the Override Institution Routing Identifier attribute **OvrrdInstRtId** to indicate to the service provider the consumer's intent to gather information about a bank-specific client's information. When **ElemName** is left blank, the consumer is requesting information about the entire service. The Service Dictionary Filter Information Complex `SvcDictFilterInfo_CType` can be decorated with **OvrrdInstRtId** to convey to the service provider the bank number for which this information should be returned.

The request includes the optional array `SvcDictFilterArray_AType`, which includes the `SvcDictFilterInfo_CType`. The `SvcDictFilterInfo_CType` complex contains the **SvcDictFilterCode** and **SvcDictFilterVal** elements. These two elements present a matched pair that provides canonical value(s) that allows a consumer to restrict a query for specific values that have a correlation to an operation. For example, a submission for Account Addition (`<SvcDictName>AcctAdd</SvcDictName>`) could include the dictionary values related to a specific product code (`<SvcDictFilterCode>ProdCode</SvcDictFilterCode>` and `<SvcDictFilterVal>~product code data value~</SvcDictFilterVal>`). However, a consumer would need to query for the valid product codes by means of the Service Dictionary in order to make a subsequent call that included the product code as a filter on the request.

The request includes the `IncXtendElemArray_AType` array, which requires submission for the consumer to be returned the Service Providers Field Information and Service Provider Error Array.

The `SvcDictSrchRs_MType` response message echoes back the request: the **SvcDictName** element and `SvcDictFilterArray_AType` array. The `x_SvcPrvdErrArray_AType` array included at the root response provides the consumer with all of the fault/errors that can exist for the named **SvcDictName** submitted in the request. The `SvcDictSrchRs_MType` response message contains the `SvcDictInfoArray_AType` and `x_SvcPrvdErrArray_AType` arrays.

The `SvcDictInfoArray_AType` array includes the `SvcDictInfoRec_CType` complex. The `x_SvcPrvdErrArray_AType` array includes the `SvcPrvdErrInfo_CType` complex. The `SvcDictInfoRec_CType` complex includes the child nodes that define the elements and related information to the element as related to the requested operation. The `SvcDictInfoRec_CType` complex includes the Include Extended complexes for `x_SvcPrvdFldInfo_CType` complex and `x_SvcPrvdErrArray_AType` array. The `x_SvcPrvdFldInfo_CType` complex provides the consumer with an element's source of record for a Service Provider. The `x_SvcPrvdErrArray_AType` array provides the consumer with the potential fault/errors conditions that can exist for the named element included by the `SvcDictInfoRec_CType` complex. The `SvcDictInfoRec_CType`

complex includes `ElemCanocArray_AType` array, which provides the consumer with an element's open enumerated canonical values. The `ElemCanocArray_AType` array includes the `ElemCanocRec_CType` complex, which provides the consumer with the match pair element canonical values and descriptions. The `ElemCanocRec_CType` complex includes the `CanocValInfoArray_AType` array, which permits a Service Provider to deliver any pertinent details related to the canonical value(s). The standard search message header tenets are applicable.

## SvcDictSrchrq\_MType

`SvcDictSrchrq_MType` is a message `MType` element.

Contains:

- `IncXtendElem_AType`
- `SrchMsgRqHdr_CType`
- `SvcDictFilterArray_AType`

### Simple Elements

The following simple elements are contained within this message.

#### ElemName

The name provided to an element. It includes the `OvrrdInstRtId` attribute.

#### SvcDictName

The name of the service to obtain data dictionary definitions. Canonical values are:

- `LnPltfmAppInq`
- `PltfmAppInq`
- `PltfmAppSrchr`
- `WireTrnAddValidate`
- `AcctAdd`
- `AcctAddValidate`
- `AcctAnlysAdd`
- `AcctAnlysInq`
- `AcctAnlysMod`
- `AcctAnlysTrnAdd`
- `AcctBallInq`
- `AcctBenfAdd`
- `AcctBenfInq`
- `AcctBenfMod`

- *AcctCombStmtAdd*
- *AcctCombStmtInq*
- *AcctCombStmtMod*
- *AcctExcTrnInq*
- *AcctExcTrnSrch*
- *AcctHistSrch*
- *AcctIdGen*
- *AcctInq*
- *AcctIntRateInq*
- *AcctMemoPostSrch*
- *AcctMod*
- *AcctNSFTrnInq*
- *AcctNSFTrnMod*
- *AcctProdOvrrdAdd*
- *AcctProdOvrrdInq*
- *AcctProdOvrrdMod*
- *AcctProtInq*
- *AcctSrch*
- *AcctSweepAdd*
- *AcctSweepInq*
- *AcctSweepMod*
- *ACHCompMultInq*
- *ACHCompSrch*
- *ACHFileAdd*
- *ACHFileInq*
- *ACHFileMod*
- *ACHPndSrch*
- *ACHTrnAddeSrch*
- *ACHTrnSrch*
- *AddrAdd*
- *AddrInq*
- *AddrMod*
- *AddrSrch*
- *BilPayChanInq*
- *BilPayPayeeAdd*
- *BilPayPayeeInq*
- *BilPayPayeeMod*

- *BilPayPayeeSrch*
- *BilPayPmtHistInq*
- *BilPayPmtHistSrch*
- *BilPaySchedPmtAdd*
- *BilPaySchedPmtApprv*
- *BilPaySchedPmtInq*
- *BilPaySchedPmtMod*
- *BilPaySchedPmtSrch*
- *BilPaySubAdd*
- *BilPaySubConsmCustInq*
- *BilPaySubInq*
- *BilPaySubMod*
- *BilPaySubSrch*
- *BrdCstSrch*
- *ChkImgInq*
- *ChkImgStmtGen*
- *ChkImgStmtGenInq*
- *ChkImgStmtSrch*
- *ColAdd*
- *Collnq*
- *CollatTrackAdd*
- *CollatTrackAddValidate*
- *CollatTrackItemInq*
- *CollatTrackMod*
- *CollatTrackSrch*
- *ColMod*
- *ColSrch*
- *CrBurInfoAddValidate*
- *CRBurInfoInq*
- *CrBurInfoMod*
- *CrCardTrnAdd*
- *CredPollnq*
- *CRMClientRelDataInq*
- *CRMClientRelDataMod*
- *CRMProspInq*
- *CurBurInfoAdd*
- *CustAcctRelInq*

- *CustAdd*
- *CustCollatSrch*
- *CustIncmlnq*
- *CustInfoMsglnq*
- *Custlnq*
- *CustMod*
- *CustMsgAdd*
- *CustMsglnq*
- *CustMsgMod*
- *CustMsgSrch*
- *CustRelAdd*
- *CustRellnq*
- *CustRelMod*
- *CustSrch*
- *DocElecSigAdd*
- *DocImgMod*
- *EDPPPpersonProdDictlnq*
- *EDPPPpersonProdMod*
- *EDPPPpersonSrch*
- *EFTCardAcctIdAdd*
- *EFTCardAdd*
- *EFTCardAddrSrch*
- *EFTCardAddValidate*
- *EFTCardBlkTrnlnq*
- *EFTCardBlkTrnSrch*
- *EFTCardFileMainSrch*
- *EFTCardImgIdAdd*
- *EFTCardImgIdMod*
- *EFTCardImgIdSrch*
- *EFTCardlnq*
- *EFTCardMod*
- *EFTCardMsgAdd*
- *EFTCardMsgMod*
- *EFTCardMsgSrch*
- *EFTCardOrderAdd*
- *EFTCardPINMod*
- *EFTCardPINModInit*

- *EFTCardSrch*
- *EFTCardTrnHistSrch*
- *EFTCardUsrQuthInq*
- *ElecDocInq*
- *EmplAppAdd*
- *EmplJobInqTrnSetItemSrch*
- *EmplJobSrch*
- *EscrwAdd*
- *EscrwAddValidate*
- *EscrwInq*
- *EscrwMod*
- *FASB91Add*
- *FASB91AddValidate*
- *FASB91Mod*
- *FASB91Srch*
- *FileMainSrch*
- *FinInstInfoInq*
- *GLAcctInq*
- *GLAcctSrch*
- *GLReconRptGen*
- *IdVerifyAdd*
- *IdVerifyMod*
- *InstRtId*
- *IntnetFinInstAcctIdAdd*
- *IntnetFinInstAcctIdAddValidate*
- *IntnetFinInstIdAcctAccessInq*
- *IntnetFinInstIdAdd*
- *IntnetFinInstIdAddValidate*
- *IntnetFinInstIdFileMainSrch*
- *IntnetFinInstIdInq*
- *IntnetFinInstIdMod*
- *IntnetFinInstIdPINMod*
- *IntnetFinInstIdUsrInq*
- *IntnetFinInstIdUsrMod*
- *IntRateSrch*
- *IntYieldInq*
- *LnAcctAdd*

- *LnAcctAddValidate*
- *LnAcctMod*
- *LnAppRgtrAdd*
- *LnAppRgtrAddValidate*
- *LnAppRgtrMod*
- *LnAppRgtrSrch*
- *LnBilSrch*
- *LnFeePrtcpAdd*
- *LnFeePrtcpInq*
- *LnFeePrtcpMod*
- *LnFeePrtcpSrch*
- *LnFeeSrch*
- *LnLiabInq*
- *LnPayoffInq*
- *LnPltfrmAppAdd*
- *LnPltfrmProdSrch*
- *LnPmtExt*
- *LnPmtSchedAdd*
- *LnPmtSchedAddValidate*
- *LnPmtSchedInq*
- *LnPmtSchedMod*
- *LnPrtcpInq*
- *LnRateSchedInq*
- *LnRateSchedMod*
- *LnRateSchedSrch*
- *LnRegLTVInq*
- *LnRen*
- *LnSvcInq*
- *LnUnitInq*
- *LnUnitSrch*
- *LOCAcctInq*
- *LOCAcctSrch*
- *LOCAdd*
- *LOCAddValidate*
- *LOCCConstInProcAdd*
- *LOCCConstInProcInq*
- *LOCCConstInProcMod*

- *LOCConstInProcSrch*
- *LOCMod*
- *LOCSrch*
- *LogSrch*
- *LtrofCrInq*
- *MFAActRiskInq*
- *MFAOOBValidate*
- *MFAOTPCredGen*
- *MFAOTPCredValidate*
- *MFAQnAPollInq*
- *MFASecdRiskInq*
- *MFATokenAdd*
- *MFATokenInq*
- *MFATokenMod*
- *MFATokenPINMod*
- *MFATokenTempPswdInq*
- *MFATokenUsrAdd*
- *MFATokenUsrInq*
- *MFATokenUsrMod*
- *MFATokenValidate*
- *MFAUsrConsmCredAdd*
- *MFAUsrConsmCredInq*
- *MFAUsrConsmCredMod*
- *MFAUsrConsmCredSrch*
- *MFAUsrQnAAdd*
- *MFAUsrQnAInq*
- *MFAUsrQnAMod*
- *MFAUsrQnAMod*
- *MFAUsrQnAValidate*
- *MFAWaterMarkSrch*
- *MLLMasterRelAdd*
- *MLLMasterRelInq*
- *MLLMasterRelMod*
- *MLLRelSrch*
- *MLLTrancheRelAdd*
- *MLLTrancheRelInq*
- *MLLTranchRelMod*

- *NSFHistSrch*
- *ODISvcCred*
- *ODPrvlgHistSrch*
- *OFACSrch*
- *PersonNameMod*
- *PingAll*
- *PltfmAppAdd*
- *PltfmProdInq*
- *PltfmStatInq*
- *PltfmStatInq*
- *PltfmStatMod*
- *PosPayItemInq*
- *PosPayItemInq*
- *PosPayItemMod*
- *PromoXferAdd*
- *PromoXferInq*
- *PromoXferMod*
- *PromoXferSrch*
- *PubWorkflowSrch*
- *RealEstatePropAdd*
- *RealEstatePropMod*
- *RealEstatePropSrch*
- *RelaEstatePropAddValidate*
- *SafeDepBoxSrch*
- *SafeDepPmtAdd*
- *SafeDepPmtMod*
- *StopChkAdd*
- *StopChkAddValidate*
- *StopChkCan*
- *StopChkInq*
- *StopChkMod*
- *StopChkSrch*
- *SvcDictSrch*
- *SvcFeeSrch*
- *SvcFeeTrnAdd*
- *SvcFeeTrnInq*
- *SvcFeeTrnMod*

- *TaxPlnAcctSrch*
- *TaxPlnAdd*
- *TaxPlnAddValidate*
- *TaxPlnBenfAdd*
- *TaxPlnBenfAddValidate*
- *TaxPlnBenfInq*
- *TaxPlnBenfMod*
- *TaxPlnBenfSrch*
- *TaxPlnInq*
- *TaxPlnMod*
- *TaxPlnSrch*
- *TellerCurrTrnAdd*
- *TellerCurrTrnInq*
- *TellerCurrTrnMod*
- *TellerCurrTrnSrch*
- *TellerCustSrch*
- *TellerDrwMod*
- *TellerNonCustAdd*
- *TellerNonCustInq*
- *TellernonCustMod*
- *TellerTrnAdd*
- *TellerTrnInq*
- *TellerTrnMod*
- *TellerTrnSrch*
- *TimeDepRenOvrrd*
- *TimeDepRenOvrrdInq*
- *TrnAdd*
- *TrnAddValidate*
- *TrnMod*
- *UsrConsmCredAdd*
- *UsrConsmCredMod*
- *UsrEnrollInq*
- *UsrOperInq*
- *WireComplInq*
- *WireCompSrch*
- *WireHistSrch*
- *WireTrnInq*

- *WireTrnInq*
- *WorkflowInstcStart*
- *XferAdd*
- *XferAddValidate*
- *XferMod*
- *XferSrcDestSrch*
- *XferSrch*

### **SvcDictType**

The type of service dictionary operation type. Canonical values are:

- *Rq*
- *Rs*

### **IncXtendElemArray\_AType**

`IncXtendElemArray_AType` is an array `AType` element. This is an array that lists `x_` elements by name, which are to be included in the response.

Contains:

- `IncXtendElemInfo_CType`

### **IncXtendElemInfo\_CType**

`IncXtendElemInfo_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **XtendElem**

Included extended elements. The consumer would ask by name for `x_` prefix elements to be included in the response.

### **SrchMsgRqHdr\_CType**

`SrchMsgRqHdr_CType` is a complex `CType` element. This is a standard request message header.

Contains:

- `AuthenUsrCred_CType`
- `jXchangeHdr_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

## AuthenProdCred

Authentication of the Consumer Product Credentials in the form of a WS Security element that contains a single SAML V2.0 Assertion.

## Cursor

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

## MaxRec

The maximum number of records when multiple records are returned.

## AuthenUsrCred\_CType

`AuthenUsrCred_CType` is a complex `CType` element. This element represents authentication of the end-user credentials in the form of a WS **Security** element that contains a single SAML V2.0 Assertion.

## Simple Elements

The following simple elements are contained within this complex.

### Security

Defines the `wsse:Security` SOAP header element per section 4.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsid

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was

added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **BusCorrelId**

The correlation identification as related to business functions and activities.

### **ConsumerName**

The name of the service consumer (business name) for the Soap Header Fault.

### **ConsumerProd**

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### **InstEnv**

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

## **SvcDictFilterArray\_AType**

`SvcDictFilterArray_AType` is an array `AType` element. It is an array of filters that is available for the Service Dictionary service.

Contains:

- `SvcDictFilterInfo_CType`

## **SvcDictFilterInfo\_CType**

`SvcDictFilterInfo_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **OvrrdInstRtId**

Describes the institution routing number or bank number/location used to override the `InstRtId` found in a message header.

### **SvcDictFilterCode**

Filters that can be used to provide the consumer a means to define the specific dictionary values for a specific service. Canonical values are:

- `AcctAdd`:

- *AcctId*
- *AcctType*
- *BrCode*
- *ProdCode*
- *RegionCode*
- *AcctSweepAdd*
  - *AcctId*
  - *AcctType*
- *BilPaySubInq:*
  - *MobPrvdCod*
- *BilPaySubMod:*
  - *MobPrvdCod*
- *CollatTrackAdd:*
  - *AcctId*
  - *AcctType*
  - *CollatCode*
  - *CollatDoc*
  - *CollatDocCode*
  - *CollatItem*
  - *CustId*
- *CRMActAdd:*
  - *CRMActType*
  - *OffInstRtId*
- *CRMActInq:*
  - *CRMActType*
- *CRMActMod:*
  - *CRMActType*
  - *OffInstRtId*
- *CRMEventAdd:*
  - *CRMEventType*
  - *CustId*
  - *EventCatCode*
  - *EventCatDesc*
  - *EventOffCode*

- *EventPrivType*
- *OffInstRtId*
- *TaxId*
- **CRMEventInq:**
  - *CRMEventType*
- **CRMEventMod:**
  - *CRMEventType*
  - *CRMEventId*
  - *CustId*
  - *EventCatCode*
  - *EventCatDesc*
  - *EventOffCode*
  - *EventPrivType*
  - *OffInstRtId*
  - *TaxId*
- **CRMReferAdd:**
  - *CustId*
  - *EventPrivType*
  - *OffInstRtId*
  - *ReferOffCode*
  - *TaxId*
- **CRMReferMod:**
  - *EventPrivType*
  - *OffInstRtId*
  - *ReferId*
  - *ReferOffCode*
- **CustRelAdd**
  - *RelAcctType*
- **CustRelMod**
  - *RelAcctType*
- **DocImgAdd:**
  - *DocImgIdxType*
- **EscrwAdd:**
  - *AcctType*

- *EscrwTypeCode*
- *FASB91Add:*
  - *AcctId*
  - *AcctType*
  - *FASB91Cat*
- *LnAppRgtrAdd:*
  - *AppDt*
- *LnAppRgtrAddValidate:*
  - *AppDt*
- *LnAppRgtrMod:*
  - *AppDt*
- *LnFeeAdd:*
  - *AcctId*
  - *AcctType*
  - *LnFeeCode*
- *LnUnitAdd*
  - *AcctId*
  - *AcctType*
- *LobbyQueAdd:*
  - *BrCode*
- *StopChkAdd:*
  - *AcctId*
  - *AcctType*
  - *ProdCode*
  - *StopHldType*
- *TaxPlnAdd:*
  - *PlnCode*
- *TrnAdd:*
  - *AcctType*
  - *BrCode*
- *WireTmpItAdd:*
  - *WireAcctId*
  - *WireAcctType*
- *XferAdd:*

- *FromAcctId*
- *FromAcctType*
- *ToAcctId*
- *ToAcctType*
- *XferType*

### **SvcDictFilterVal**

The values that correlate with the Service Dictionary filter canonical values.

## **SvcDictSrchrS\_MType**

`SvcDictSrchrS_MType` is a message `MType` element.

Contains:

- `Custom_CType`
- `SrchMsgRsHdr_CType`
- `SvcDictFilterArray_AType`
- `SvcDictInfoArray_AType`
- `x_SvcPrvdErrArray_AType`

### **Simple Elements**

The following simple elements are contained within this message.

#### **SvcDictName**

The name of the service to obtain data dictionary definitions. Canonical values are:

- *LnPltfmApplnq*
- *PltfmApplnq*
- *PltfmAppSrchr*
- *WireTrnAddValidate*
- *AcctAdd*
- *AcctAddValidate*
- *AcctAnlysAdd*
- *AcctAnlysInq*
- *AcctAnlysMod*
- *AcctAnlysTrnAdd*
- *AcctBallnq*
- *AcctBenfAdd*
- *AcctBenfInq*
- *AcctBenfMod*

- *AcctCombStmntAdd*
- *AcctCombStmntInq*
- *AcctCombStmntMod*
- *AcctExcTrnInq*
- *AcctExcTrnSrch*
- *AcctHistSrch*
- *AcctIdGen*
- *AcctInq*
- *AcctIntRateInq*
- *AcctMemoPostSrch*
- *AcctMod*
- *AcctNSFTrnInq*
- *AcctNSFTrnMod*
- *AcctProdOvrrdAdd*
- *AcctProdOvrrdInq*
- *AcctProdOvrrdMod*
- *AcctProtInq*
- *AcctSrch*
- *AcctSweepAdd*
- *AcctSweepInq*
- *AcctSweepMod*
- *ACHCompMultilInq*
- *ACHCompSrch*
- *ACHFileAdd*
- *ACHFileInq*
- *ACHFileMod*
- *ACHPndSrch*
- *ACHTrnAddeSrch*
- *ACHTrnSrch*
- *AddrAdd*
- *AddrInq*
- *AddrMod*
- *AddrSrch*
- *BilPayChanInq*
- *BilPayPayeeAdd*
- *BilPayPayeeInq*
- *BilPayPayeeMod*

- *BilPayPayeeSrch*
- *BilPayPmtHistInq*
- *BilPayPmtHistSrch*
- *BilPaySchedPmtAdd*
- *BilPaySchedPmtApprv*
- *BilPaySchedPmtInq*
- *BilPaySchedPmtMod*
- *BilPaySchedPmtSrch*
- *BilPaySubAdd*
- *BilPaySubConsmCustInq*
- *BilPaySubInq*
- *BilPaySubMod*
- *BilPaySubSrch*
- *BrdCstSrch*
- *ChkImgInq*
- *ChkImgStmtGen*
- *ChkImgStmtGenInq*
- *ChkImgStmtSrch*
- *ColAdd*
- *Collnq*
- *CollatTrackAdd*
- *CollatTrackAddValidate*
- *CollatTrackItemInq*
- *CollatTrackMod*
- *CollatTrackSrch*
- *ColMod*
- *ColSrch*
- *CrBurInfoAddValidate*
- *CRBurInfoInq*
- *CrBurInfoMod*
- *CrCardTrnAdd*
- *CredPollnq*
- *CRMClientRelDataInq*
- *CRMClientRelDataMod*
- *CRMProspInq*
- *CurBurInfoAdd*
- *CustAcctRelInq*

- *CustAdd*
- *CustCollatSrch*
- *CustIncmlnq*
- *CustInfoMsglnq*
- *Custlnq*
- *CustMod*
- *CustMsgAdd*
- *CustMsglnq*
- *CustMsgMod*
- *CustMsgSrch*
- *CustRelAdd*
- *CustRellnq*
- *CustRelMod*
- *CustSrch*
- *DocElecSigAdd*
- *DocImgMod*
- *EDPPPpersonProdDictlnq*
- *EDPPPpersonProdMod*
- *EDPPPpersonSrch*
- *EFTCardAcctIdAdd*
- *EFTCardAdd*
- *EFTCardAddrSrch*
- *EFTCardAddValidate*
- *EFTCardBlkTrnlnq*
- *EFTCardBlkTrnSrch*
- *EFTCardFileMainSrch*
- *EFTCardImgIdAdd*
- *EFTCardImgIdMod*
- *EFTCardImgIdSrch*
- *EFTCardlnq*
- *EFTCardMod*
- *EFTCardMsgAdd*
- *EFTCardMsgMod*
- *EFTCardMsgSrch*
- *EFTCardOrderAdd*
- *EFTCardPINMod*
- *EFTCardPINModInit*

- *EFTCardSrch*
- *EFTCardTrnHistSrch*
- *EFTCardUsrQuthInq*
- *ElecDocInq*
- *EmplAppAdd*
- *EmplJobInqTrnSetItemSrch*
- *EmplJobSrch*
- *EscrwAdd*
- *EscrwAddValidate*
- *EscrwInq*
- *EscrwMod*
- *FASB91Add*
- *FASB91AddValidate*
- *FASB91Mod*
- *FASB91Srch*
- *FileMainSrch*
- *FinInstInfoInq*
- *GLAcctInq*
- *GLAcctSrch*
- *GLReconRptGen*
- *IdVerifyAdd*
- *IdVerifyMod*
- *InstRtId*
- *IntnetFinInstAcctIdAdd*
- *IntnetFinInstAcctIdAddValidate*
- *IntnetFinInstIdAcctAccessInq*
- *IntnetFinInstIdAdd*
- *IntnetFinInstIdAddValidate*
- *IntnetFinInstIdFileMainSrch*
- *IntnetFinInstIdInq*
- *IntnetFinInstIdMod*
- *IntnetFinInstIdPINMod*
- *IntnetFinInstIdUsrInq*
- *IntnetFinInstIdUsrMod*
- *IntRateSrch*
- *IntYieldInq*
- *LnAcctAdd*

- *LnAcctAddValidate*
- *LnAcctMod*
- *LnAppRgtrAdd*
- *LnAppRgtrAddValidate*
- *LnAppRgtrMod*
- *LnAppRgtrSrch*
- *LnBilSrch*
- *LnFeePrtcpAdd*
- *LnFeePrtcpInq*
- *LnFeePrtcpMod*
- *LnFeePrtcpSrch*
- *LnFeeSrch*
- *LnLiabInq*
- *LnPayoffInq*
- *LnPltfrmAppAdd*
- *LnPltfrmProdSrch*
- *LnPmtExt*
- *LnPmtSchedAdd*
- *LnPmtSchedAddValidate*
- *LnPmtSchedInq*
- *LnPmtSchedMod*
- *LnPrtcpInq*
- *LnRateSchedInq*
- *LnRateSchedMod*
- *LnRateSchedSrch*
- *LnRegLTVInq*
- *LnRen*
- *LnSvcInq*
- *LnUnitInq*
- *LnUnitSrch*
- *LOCAcctInq*
- *LOCAcctSrch*
- *LOCAdd*
- *LOCAddValidate*
- *LOCCConstInProcAdd*
- *LOCCConstInProcInq*
- *LOCCConstInProcMod*

- *LOCConstInProcSrch*
- *LOCMod*
- *LOCSrch*
- *LogSrch*
- *LtrofCrInq*
- *MFAActRiskInq*
- *MFAOOBValidate*
- *MFAOTPCredGen*
- *MFAOTPCredValidate*
- *MFAQnAPollInq*
- *MFASecdRiskInq*
- *MFATokenAdd*
- *MFATokenInq*
- *MFATokenMod*
- *MFATokenPINMod*
- *MFATokenTempPswdInq*
- *MFATokenUsrAdd*
- *MFATokenUsrInq*
- *MFATokenUsrMod*
- *MFATokenValidate*
- *MFAUsrConsmCredAdd*
- *MFAUsrConsmCredInq*
- *MFAUsrConsmCredMod*
- *MFAUsrConsmCredSrch*
- *MFAUsrQnAAdd*
- *MFAUsrQnAInq*
- *MFAUsrQnAMod*
- *MFAUsrQnAMod*
- *MFAUsrQnAValidate*
- *MFAWaterMarkSrch*
- *MLLMasterRelAdd*
- *MLLMasterRelInq*
- *MLLMasterRelMod*
- *MLLRelSrch*
- *MLLTrancheRelAdd*
- *MLLTrancheRelInq*
- *MLLTranchRelMod*

- *NSFHistSrch*
- *ODISvcCred*
- *ODPrvlgHistSrch*
- *OFACSrch*
- *PersonNameMod*
- *PingAll*
- *PltfmAppAdd*
- *PltfmProdInq*
- *PltfmStatInq*
- *PltfmStatInq*
- *PltfmStatMod*
- *PosPayItemInq*
- *PosPayItemInq*
- *PosPayItemMod*
- *PromoXferAdd*
- *PromoXferInq*
- *PromoXferMod*
- *PromoXferSrch*
- *PubWorkflowSrch*
- *RealEstatePropAdd*
- *RealEstatePropMod*
- *RealEstatePropSrch*
- *RelaEstatePropAddValidate*
- *SafeDepBoxSrch*
- *SafeDepPmtAdd*
- *SafeDepPmtMod*
- *StopChkAdd*
- *StopChkAddValidate*
- *StopChkCan*
- *StopChkInq*
- *StopChkMod*
- *StopChkSrch*
- *SvcDictSrch*
- *SvcFeeSrch*
- *SvcFeeTrnAdd*
- *SvcFeeTrnInq*
- *SvcFeeTrnMod*

- *TaxPlnAcctSrch*
- *TaxPlnAdd*
- *TaxPlnAddValidate*
- *TaxPlnBenfAdd*
- *TaxPlnBenfAddValidate*
- *TaxPlnBenfInq*
- *TaxPlnBenfMod*
- *TaxPlnBenfSrch*
- *TaxPlnInq*
- *TaxPlnMod*
- *TaxPlnSrch*
- *TellerCurrTrnAdd*
- *TellerCurrTrnInq*
- *TellerCurrTrnMod*
- *TellerCurrTrnSrch*
- *TellerCustSrch*
- *TellerDrwMod*
- *TellerNonCustAdd*
- *TellerNonCustInq*
- *TellernonCustMod*
- *TellerTrnAdd*
- *TellerTrnInq*
- *TellerTrnMod*
- *TellerTrnSrch*
- *TimeDepRenOvrrd*
- *TimeDepRenOvrrdInq*
- *TrnAdd*
- *TrnAddValidate*
- *TrnMod*
- *UsrConsmCredAdd*
- *UsrConsmCredMod*
- *UsrEnrollInq*
- *UsrOperInq*
- *WireComplnq*
- *WireCompSrch*
- *WireHistSrch*
- *WireTrnInq*

- *WireTrnInq*
- *WorkflowInstcStart*
- *XferAdd*
- *XferAddValidate*
- *XferMod*
- *XferSrcDestSrch*
- *XferSrch*

### **SvcDictType**

The type of service dictionary operation type. Canonical values are:

- *Rq*
- *Rs*

### **Custom\_CType**

`Custom_CType` is a complex `CType` element.

This element is optional.

### **SrchMsgRsHdr\_CType**

`SrchMsgRsHdr_CType` is a complex `CType` element. It searches specific message response headers.

Contains:

- `jXchangeHdr_CType`
- `MsgRecInfoArray_AType`

### **Simple Elements**

The following simple elements are contained within this complex.

#### **Cursor**

The state information that allows the next call to understand where it left off when returning multiple records and allowing a subsequent call to retrieve more records.

#### **MoreRec**

Indicates if there are more records that could be returned. Canonical values are:

- *false*
- *true*

#### **SentRec**

The number of records sent in the response.

## TotRec

Indicates the total records the request selected, which could be larger than `MaxRec`.

## jXchangeHdr\_CType

`jXchangeHdr_CType` is a complex `CType` element.

## Simple Elements

The following simple elements are contained within this complex.

### AuditUsrId

The user ID that the consumer would like written in the audit as performing the requested service. It varies, but it could be the same as the user ID. It is not used to authenticate. It is used to audit the Soap Header Fault.

### AuditWsId

The workstation ID that the consumer would like written in the audit as performing the requested service for the Soap Header Fault. It varies, but it could be the same as the user ID.

### AuthenUsrId

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType` package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### BusCorrelId

The correlation identification as related to business functions and activities.

### ConsumerName

The name of the service consumer (business name) for the Soap Header Fault.

### ConsumerProd

The name of the product which is consuming the service (business product name) for the Soap Header Fault.

### InstEnv

An identification provided by the consumer that defines the environment in which the institution is operating. Canonical values are:

- *Prod*

### **InstRtId**

The identification of the entity of the submitted message. A financial institution entity uses the routing transit or nine-digit number assigned to financial institutions for routing as assigned by the American Bankers Association. Any leading zeros must be provided for a complete routing and transit number. A non-financial institution entity should use a mutually agreed upon identification that must contain at least one non-integer character. The canonical value is *JHA*.

The element is required in all message requests.

### **jXLogTrackingId**

An identification provided by jXchange to be able to trace the request and response of a message from the third-party gateway, internal gateway, and service provider for the Soap Header Fault.

### **JxVer**

Contains the version jXchange is running for the Soap Header Fault.

### **ValidConsmName**

The consumer name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table. The canonical value is: *JHA*.

### **ValidConsmProd**

The consumer product name that can be validated by enterprise governance. The canonical values are managed in a consumer/product enterprise table.

### **WorkflowCorrelId**

The correlation identification as related to workflow functions and activities.

## **jXchangeHdr\_CType Deprecation Details**

### **AuthenUsrId**

The user ID which the consumer would like the service provider to authenticate with for the Soap Header Fault. It is a user ID that the provider understands.

This element deprecates in accordance with XSD contract tenets. Effective date: 2017-01-01. The new complex element for user authentication credentials was added to both the Search Message Request Header `SrchMsgRqHdr_CType` and the Message Request Header `MsgRqHdr_CType`. **AuthenUsrId** is ignored by the service providers when the authentication user credentials `AuthenUsrCred_CType`

package is delivered. The expectation is that the password credentials and the user name token are provided in the authentication user credential complex element in accordance with the standards established by WS-Security.

### **MsgRecInfoArray\_AType**

`MsgRecInfoArray_AType` is an array `AType` element. This is an array of messages that can be returned in a response.

Contains:

- `MsgRec_CType`

### **MsgRec\_CType**

`MsgRec_CType` is a complex `CType` element.

## **Simple Elements**

The following simple elements are contained within this complex.

### **ErrCat**

The Soap Header Fault error category.

### **ErrCode**

The error code.

### **ErrDesc**

The Soap Header Fault error description.

### **ErrElem**

The Soap Header Fault when an error or fault occurs. This optional element contains the element which is causing the error condition.

### **ErrElemVal**

The Soap Header Fault when an error or fault occurs. This optional element contains the value of the element which is causing the error condition.

### **ErrLoc**

The Soap Header Fault error location. This is typically the program that generated the error condition.

### **SvcDictFilterArray\_AType**

`SvcDictFilterArray_AType` is an array `AType` element. It is an array of filters that is available for the Service Dictionary service.

Contains:

- `SvcDictFilterInfo_CType`

## SvcDictFilterInfo\_CType

SvcDictFilterInfo\_CType is a complex CType element.

### Simple Elements

The following simple elements are contained within this complex.

#### OvrrdInstRtld

Describes the institution routing number or bank number/location used to override the *InstRtld* found in a message header.

#### SvcDictFilterCode

Filters that can be used to provide the consumer a means to define the specific dictionary values for a specific service. Canonical values are:

- *AcctAdd*:
  - *AcctId*
  - *AcctType*
  - *BrCode*
  - *ProdCode*
  - *RegionCode*
- *AcctSweepAdd*
  - *AcctId*
  - *AcctType*
- *BilPaySubInq*:
  - *MobPrvdCod*
- *BilPaySubMod*:
  - *MobPrvdCod*
- *CollatTrackAdd*:
  - *AcctId*
  - *AcctType*
  - *CollatCode*
  - *CollatDoc*
  - *CollatDocCode*
  - *CollatItem*
  - *CustId*
- *CRMActAdd*:
  - *CRMActType*

- *OffInstRtId*
- **CRMActInq:**
  - *CRMActType*
- **CRMActMod:**
  - *CRMActType*
  - *OffInstRtId*
- **CRMEventAdd:**
  - *CRMEventType*
  - *CustId*
  - *EventCatCode*
  - *EventCatDesc*
  - *EventOffCode*
  - *EventPrivType*
  - *OffInstRtId*
  - *TaxId*
- **CRMEventInq:**
  - *CRMEventType*
- **CRMEventMod:**
  - *CRMEventType*
  - *CRMEventId*
  - *CustId*
  - *EventCatCode*
  - *EventCatDesc*
  - *EventOffCode*
  - *EventPrivType*
  - *OffInstRtId*
  - *TaxId*
- **CRMReferAdd:**
  - *CustId*
  - *EventPrivType*
  - *OffInstRtId*
  - *ReferOffCode*
  - *TaxId*
- **CRMReferMod:**
  - *EventPrivType*

- *OffInstRtId*
- *ReferId*
- *ReferOffCode*
- *CustRelAdd*
  - *RelAcctType*
- *CustRelMod*
  - *RelAcctType*
- *DocImgAdd:*
  - *DocImglDxType*
- *EscrwAdd:*
  - *AcctType*
  - *EscrwTypeCode*
- *FASB91Add:*
  - *AcctId*
  - *AcctType*
  - *FASB91Cat*
- *LnAppRgtrAdd:*
  - *AppDt*
- *LnAppRgtrAddValidate:*
  - *AppDt*
- *LnAppRgtrMod:*
  - *AppDt*
- *LnFeeAdd:*
  - *AcctId*
  - *AcctType*
  - *LnFeeCode*
- *LnUnitAdd*
  - *AcctId*
  - *AcctType*
- *LobbyQueAdd:*
  - *BrCode*
- *StopChkAdd:*
  - *AcctId*

- *AcctType*
- *ProdCode*
- *StopHldType*
- *TaxPlnAdd:*
  - *PlnCode*
- *TrnAdd:*
  - *AcctType*
  - *BrCode*
- *WireTmpItAdd:*
  - *WireAcctId*
  - *WireAcctType*
- *XferAdd:*
  - *FromAcctId*
  - *FromAcctType*
  - *ToAcctId*
  - *ToAcctType*
  - *XferType*

### **SvcDictFilterVal**

The values that correlate with the Service Dictionary filter canonical values.

### **SvcDictInfoArray\_AType**

`SvcDictInfoArray_AType` is an array `AType` element. This is an array of dictionary information for a specific service.

Contains:

- `SvcDictInfoRec_CType`

### **SvcDictInfoRec\_CType**

`SvcDictInfoRec_CType` is a complex `CType` element.

Contains:

- `ElemCanocArray_AType`
- `x_SvcPrvdErrArray_AType`
- `x_SvcPrvdFldInfo_CType`

### **Simple Elements**

The following simple elements are contained within this complex.

**ElemCanocType**

The service provider's canonical type. Canonical values are:

- *Closed*
- *NA*
- *Open*

The default is *NA*.

**ElemDftDt**

The date default of the element when it is not delivered in a payload.

**ElemDft**

The data default of the element when it is not delivered in a payload.

**ElemHelpInfo**

Help content that could include behavior or any important information that might be advantageous to a consumer.

**ElemHighRngDt**

The highest value from the service provider's known data set for a date element.

**ElemHighRngVal**

The highest value from the service provider's known data set for the element.

**ElemInstHelpInfo**

The help and knowledge base information for a specific installation.

**ElemLowRngDt**

The lowest value from the service provider's known data set for a date element.

**ElemLowRngVal**

The lowest value from the service provider's known data set for the element.

**ElemName**

The name provided to an element. It includes the *OvrrdInstRtId* attribute.

**ElemPath**

The path of the element.

**ElemReq**

If the element is required. Canonical values are:

- *false*
- *true*

## ElemCanocArray\_AType

ElemCanocArray\_AType is an array AType element. This is an array of canonical values as related to a specific element.

Contains:

- ElemCanocRec\_CType

## ElemCanocRec\_CType

ElemCanocRec\_CType is a complex CType element.

Contains:

- CanocValInfoArray\_AType

## Simple Elements

The following simple elements are contained within this complex.

### ElemCanocVal

The canonical value for a specific element.

### ElemCanocValDesc

The description of the canonical value for a specific element.

## CanocValInfoArray\_AType

CanocValInfoArray\_AType is an array AType element. This is an array of information for each service provider canonical value.

Contains:

- CanocValInfo\_CType

## CanocValInfo\_CType

CanocValInfo\_CType is a complex CType element.

## Simple Elements

The following simple elements are contained within this complex.

### CanocValDetail

Any service provider's important details related to the canonical value.

### CanocValTxt

Any service provider's text related to the canonical value.

## x\_SvcPrvdErrArray\_AType

x\_SvcPrvdErrArray\_AType is an array AType element. This is an array of errors, faults, and/or warnings that could be returned for a specific element.

Contains:

- `SvcPrvdErrInfo_CType`

`SvcPrvdErrInfo_CType`

`SvcPrvdErrInfo_CType` is a complex `CType` element.

### Simple Elements

The following simple elements are contained within this complex.

#### **SvcPrvdErrCat**

The Soap Header Fault error category.

#### **SvcPrvdErrCode**

The Soap Header Fault error code.

#### **SvcPrvdErrDesc**

The Soap Header Fault error description.

#### **SvcPrvdRegEx**

The service provider's pattern that would generate the error code as expressed as a regular expression. The pattern consists of constants and operators as defined by the formal language theory in a regular expression.

`x_SvcPrvdFldInfo_CType`

`x_SvcPrvdFldInfo_CType` is a complex `CType` element.

### Simple Elements

The following simple elements are contained within this complex.

#### **SvcPrvdFldDecPosit**

The service provider's database source field decimal positions.

#### **SvcPrvdFldDesc**

The service provider's database source field description.

#### **SvcPrvdFldLen**

The service provider's database source field length.

#### **SvcPrvdFldName**

The service provider's database source field name.

#### **SvcPrvdFldType**

The service provider's database source field type. Canonical values are:

- *Date*
- *Dec*
- *Ink*

- *String*
- *Time*
- *URI*

### **SvcPrvdTblName**

The service provider's database source table name.

### **x\_SvcPrvdErrArray\_AType**

`x_SvcPrvdErrArray_AType` is an array `AType` element. This is an array of errors, faults, and/or warnings that could be returned for a specific element.

Contains:

- `SvcPrvdErrInfo_CType`

### **SvcPrvdErrInfo\_CType**

`SvcPrvdErrInfo_CType` is a complex `CType` element.

### **Simple Elements**

The following simple elements are contained within this complex.

#### **SvcPrvdErrCat**

The Soap Header Fault error category.

#### **SvcPrvdErrCode**

The Soap Header Fault error code.

#### **SvcPrvdErrDesc**

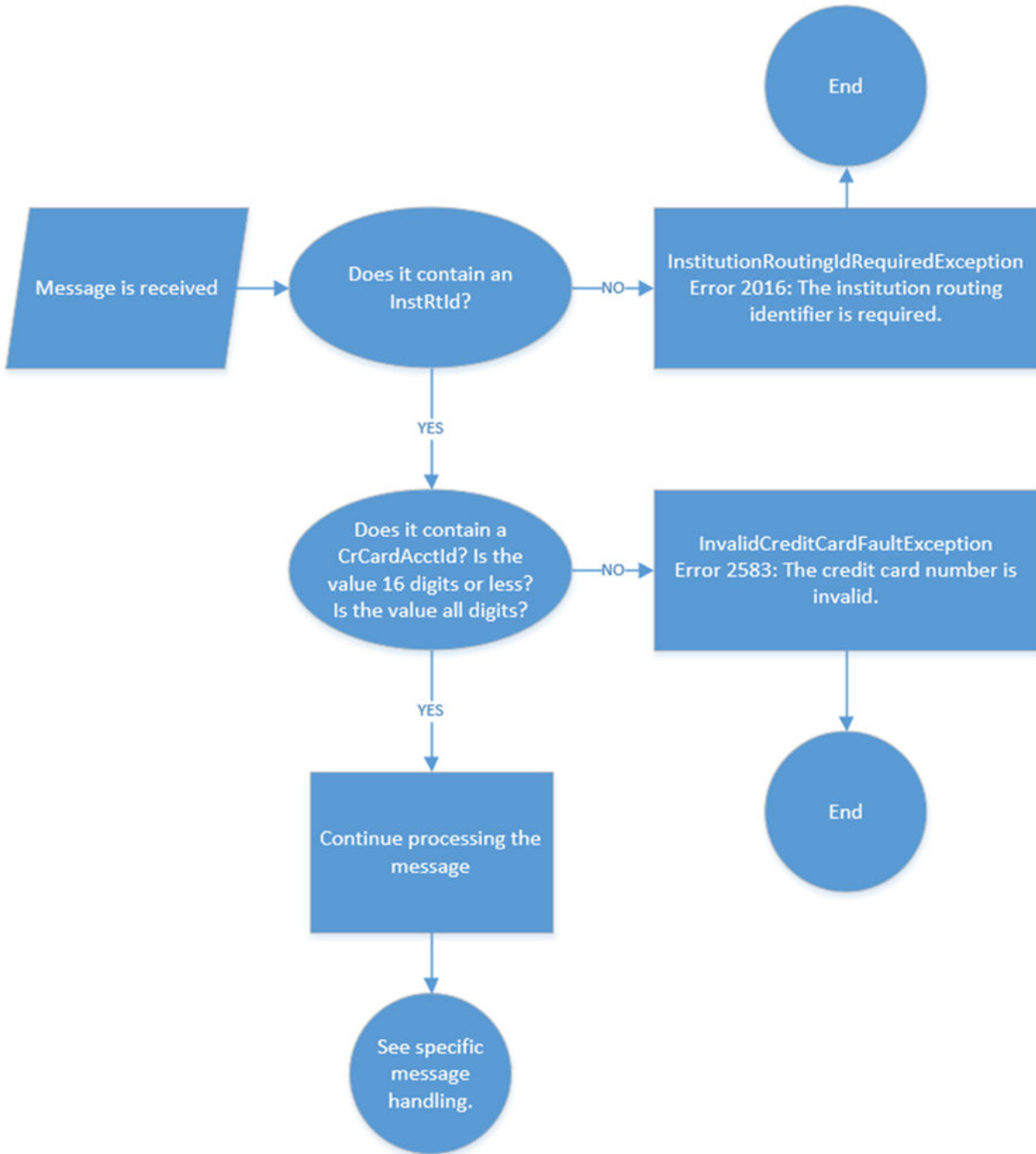
The Soap Header Fault error description.

#### **SvcPrvdRegEx**

The service provider's pattern that would generate the error code as expressed as a regular expression. The pattern consists of constants and operators as defined by the formal language theory in a regular expression.

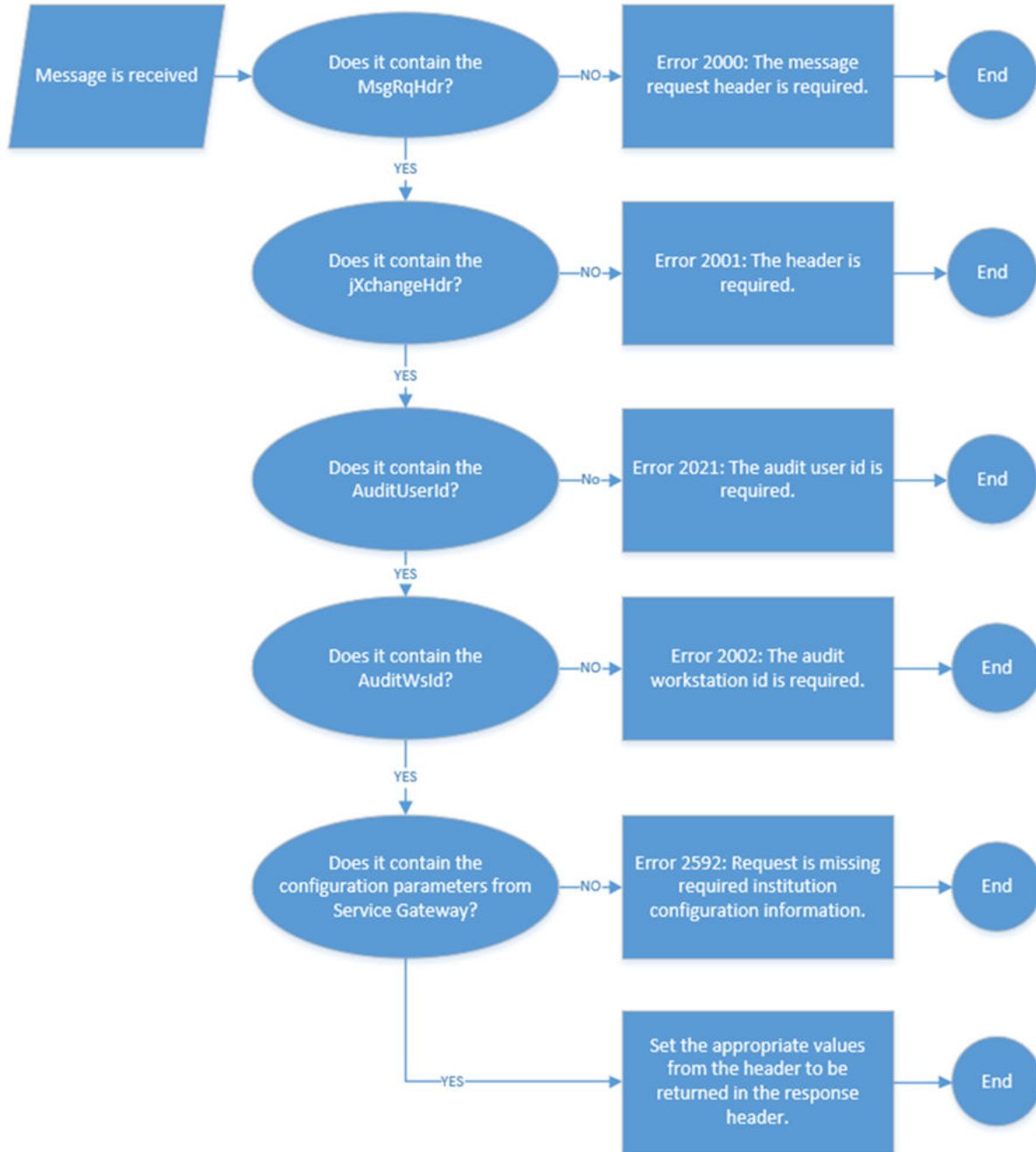
# Common Message Validation Process

## Common Message Validation Process



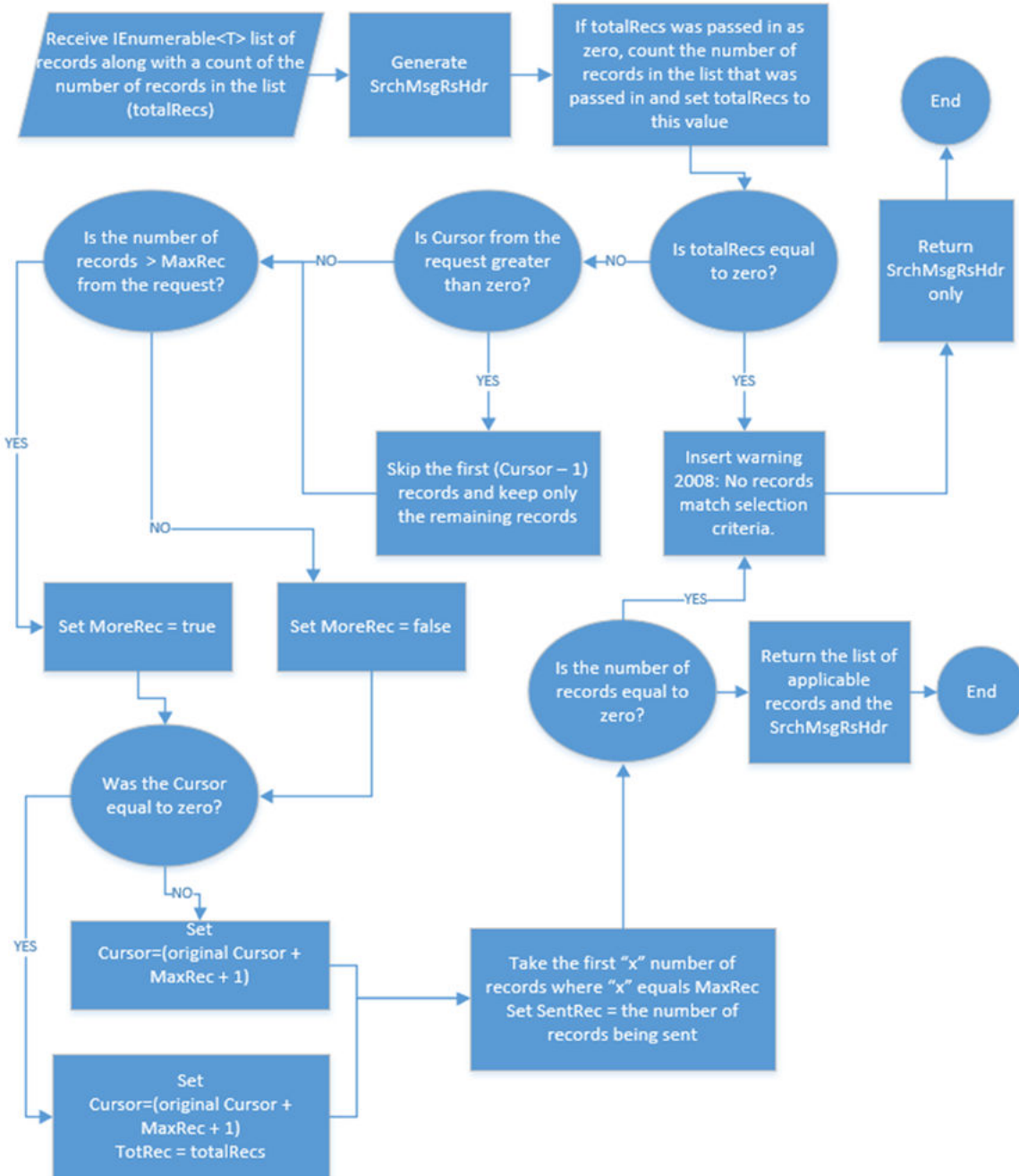
# MsgRqHdrValidation Process

## MsgRqHdrValidation Process



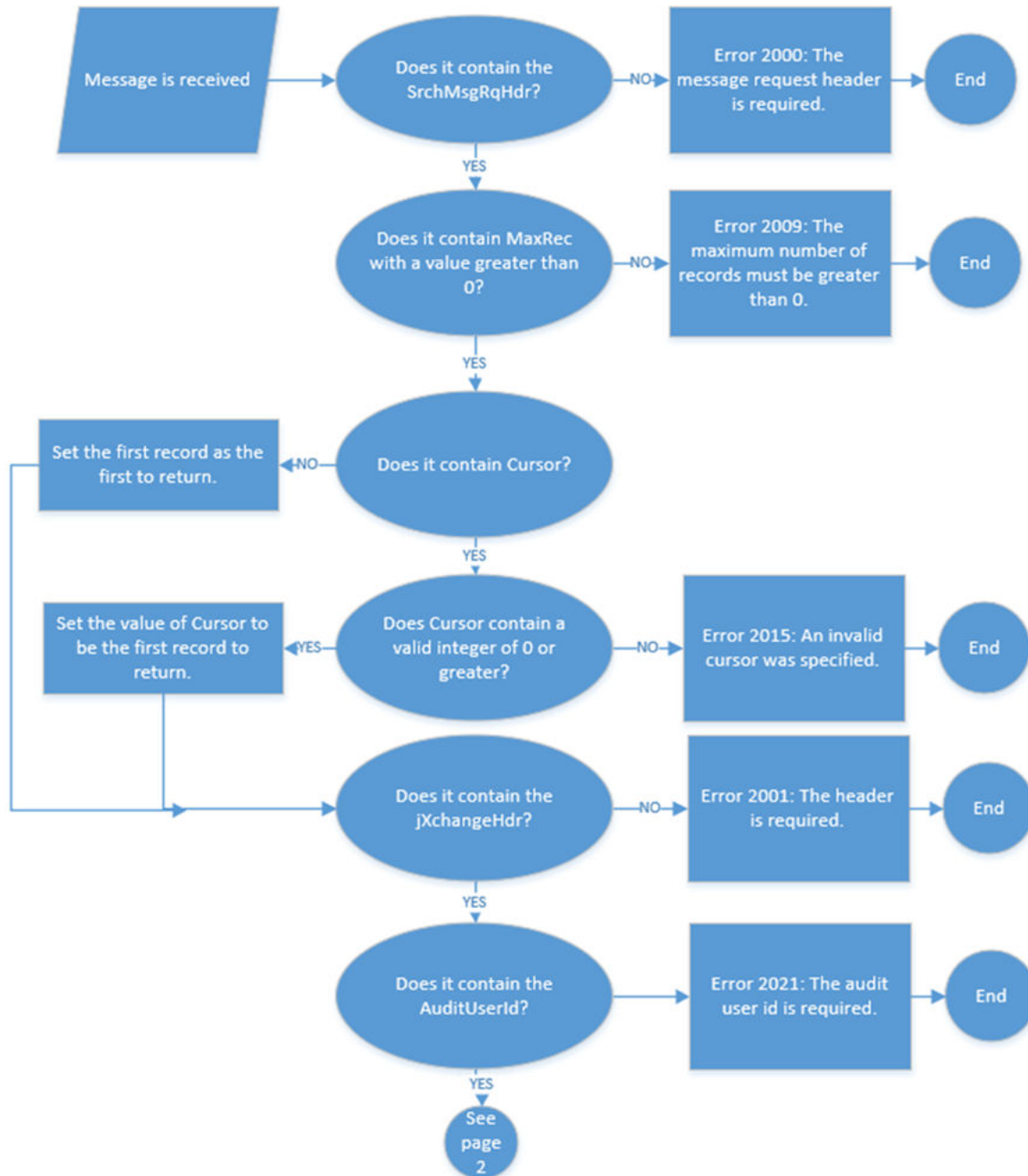
# PagingValidation Process

## PagingValidation Process



# SrchMsgRqHdrValidation Process

## SrchMsgRqHdrValidation Process Part 1



The second part of the process follows.

**SrchMsgRqHdrValidation Process Part 2**

