DTCC DRAFT Web Services Inforce Transaction Implementation Guide

Version 0.03- Last Updated August 23, 2012
Based on the ACORD Life and Annuity Standards v 2.22
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1 INTRODUCTION

The purpose of this guide is to explain how the DTCC Web Service Inforce Transaction process works and the messages supporting it. Accompanying this guide are several other related files. These include:
- DTCC Web Services Technical Guide
- DTCC Inforce Transaction XML Schemas and WSDL files
- ACORD Life and Annuity Standard public schemas v2.22 For more information contact ACORD at Life@acord.org. The public standards are available on their website at www.acord.org.

1.1 Process Overview

A withdrawal (ACORD 105 message) is a one time full or partial redemption of funds from an insurance contract.

An arrangement (ACORD 107 message) is a one time change to a service feature on an insurance contract. Arrangements can consist of the following transactions:

Phase 1
- Systematic Withdrawal

Phase 2
- Dollar Cost Averaging
- Special Dollar Cost Averaging
- Automatic Payment
- Asset Allocation
- Asset Rebalancing
- Interest Crediting
- Standing Allocation

The process begins in the environment of the distributor or order entry vendor.

The process begins with a Values inquiry transaction. Depending on the distributor/solution provider system, a Values inquiry may be triggered either at the time the contract is selected or when the transaction is selected. The distributor will transmit a Values inquiry transaction via DTCC to the Carrier. The Carrier will then respond to the request immediately (real-time) with applicable information. Once information is received back by the Distributor, the firm can update the contract information that the agent will use to determine whether to initiate a withdrawal or arrangement.

The distributor/solution provider will integrate Values inquiry, along with product profile information and position and values information into their application system based on its own implementation requirements. Distributors may implement solutions that differ in areas including levels of automation timing requirements, and limitations for data updates.

Following the Values inquiry, the agent may choose to request a withdrawal payment quote prior to submitting a withdrawal message. The Withdrawal Quote (ACORD TXLife 212, subtype 21208) is a subset of the regular values inquiry message. This would be used prior to sending a Withdrawal (105) message.
Following the Value Inquiry transactions, the agent may initiate an inforce transaction transaction.

- Recognizing that different distributors will support different levels of automation in their application system with regard to allowable and required information, at least the information required in the Inforce Transaction Request per the DTCC Inforce Transaction Implementation Guide is expected to be included.
- Since this initiative results from distributor suitability and compliance requirements, each distributor may require additional information to be provided by the Agent.

The distributor’s system is expected to validate the Agent’s data entry in accordance with carrier and distributor transaction requirements. This process may include validation of data in accordance with product rules, generic transfer rules and distributor requirements. Rules will be based on the product profile and positions information that the distributor receives in their normal process.

Once the Agent has submitted the transaction, the distributor may evaluate the transaction for suitability and compliance or forward the transaction immediately to the carrier. It is the distributor’s decision whether the compliance check will be done prior to transmitting a transaction or on the back-end.

- If the distributor determines the transaction should not be sent to the carrier, the distributor will perform the required actions (such as notifying the Agent).
  - The carrier will never know of the proposed transaction that was rejected by the distributor.
- For those messages that the distributor decides should be sent to the carrier, the distributor will create the transaction.
  - Some distributors may send the transaction to the carrier in “real time” (i.e. immediately) and some may “batch” transfers together and submit at a certain point during the day. For Distributors that will batch transactions internally, they will still be required to send as single transactions to DTCC.

The IFT web service will expect transactions to be received as single transactions. A TXLife Wrapper will have a single transaction.

DTCC will perform industry defined edits and assuming the transaction passes DTCC edits, it will be sent to the Carrier. Once the transaction request is sent to the carrier, the carrier will perform immediate or “real time” validation on the content of the request. This validation may involve consideration of transaction integrity that can be evaluated before fund prices are available and the actual transaction is processed by the carrier’s administration system in overnight batch cycle. The validation that may occur includes edits such as: the policy exists, the Agent was pre-authorized by the owner for the transaction, the amount being requested from the source fund(s) can be removed, the destination funds are valid, etc. The level of validation that is performed during the day will be determined by each carrier and possibly “trading partner agreement.”

Regardless of the complexity of validation, after receiving the original request, the carrier will create a response message if there is failure within the pre-cycle validation.

- If the transaction meets initial validation requirements and the carrier accepts the request, the carrier will queue the transaction for processing on their administration system for that night’s cycle and will send a pending response back on the same day.
- If the transaction does not meet initial validation requirements, the carrier will create a response indicating that they have rejected the transaction for reasons included in the response message. It is likely but not required that the Carrier will save the transaction for archival and research purposes, but it will not be queued for processing. Distributors will be expected to submit a new in-good-order request to correct the problem if so desired.

After the response is created, the carrier will immediately send it to the DTCC. The response will include the original TransactionRefGUID so the distributor/solutions provider can match the original request to the
carrier’s response. Presuming the response passes DTCC edits, it will be passed to the distributor/solution provider.

After the transaction is processed in the nightly batch cycle, the carrier will send a response to the message indicating whether the transaction processing was successful or that it failed. This is also known as the Day 2 confirm. The response message will include the original TransRefGuid so the distributor can match the original request to both responses. The second day response message will not be sent via web services. It will be sent in a batch mode using XML.

- If the transaction was successful, a “success’ status will be returned. Transaction details and resulting fund values/units will not be provided in the Day 2 response since this information is expected to be provided within daily Financial Activity Reporting (FAR) files if so desired.
- If the transaction was not successful, a “Failure” status will be returned with the reason(s) why the transaction failed. Note that the transaction will NOT be reprocessed by the carrier. Distributors will be expected to submit a new in-good-order request (with a new Trans Ref Guid) to correct the problem if so desired.
  o Example – Source fund drops below minimum due to market conditions
  o Conflict occurs with another transaction submitted occurs after pre-edit check occurred.
- If the transaction was not processed by the Carrier due to an internal issue, but the Carrier expects to correct the problem and process, a “pending” status will be returned. The Carrier will continue to send a pending status each day until the transaction is either processed or failed. Note: DTCC will allow the transaction to be open for 5 business days. A TransRefGuid that is more than 5 business days old will be rejected by DTCC.

Cancellations
After a transaction is initiated by the Agent, they may decide to cancel the transaction within the same market day. If the distributor has not yet sent the original request to the carrier, they will not send the Cancel request to the carrier.

If the original request has been sent to the carrier earlier that day and the market is still open, the distributor will create a Cancel request.

Assuming the cancellation request passes the DTCC edits, the transaction will be sent to the carrier.

When the carrier receives the request to cancel the original transaction, the carrier will evaluate the original request and determine if it can be processed. The carrier will either:

- Remove the transaction from the queue to be processed and create a “success” response message indicating the cancellation transaction was successful, OR
- Create a “failure” response message to indicate the transaction could not be cancelled with the applicable reject reason code.

The Response transaction will be sent by the carrier to the DTCC. Assuming the transaction passes DTCC edits, the transaction will be sent to the distributor.
Note: Carrier also has the capability to reject a cancellation confirmation back to the distributor. The flow shows the case in which the Carrier agrees to cancel the original transaction.
1.2 Technical Requirements

Refer to DTCC Technical Guide for connectivity instructions, including SOAP Wrapper details.

1.2.1 Security

1.2.1.1 Transport level security

All companies using this functionality will be participants of DTCC. DTCC provides each participant with communications infrastructure through the SMART network. (see …. For more information on the SMART network). The SMART network will provide for router level encryption.
1.3 IFT - Basic message level choreography

Inforce Transaction Work Flow Diagram

1. Sender transmits message request to DTCC.
2. DTCC synchronously sends a receipt message response back to Sender. This occurs prior to Receiver edit validations. If message fails DTCC edits, DTCC sends a notification of failure message back to sender and process ends.
3. Based on Step 2 (passing edit), DTCC sends message request to Receiver. This response provide intial information on whether the message can be processed (Day 1 Response).
4. Receiver synchronously sends a receipt message response back to DTCC. This response provide intial information on whether the message can be processed (Day 1 Response).
4a. If Response message fails DTCC edits, DTCC sends a notification of failure message back to Receiver and process ends. At same time Sender receives Failure response message indicating Receiver failed DTCC edits (Step 5).
5. Based on Step 4 (passing edits), DTCC sends message response to Sender.
6. Sender synchronously sends a receipt message response back to DTCC and process ends. Note, Step 6 is optional. DTCC will not process the step 6 message and does not require it. Only needed it Sender needs to send it to complete its realtime call.
Inforce Transaction – Day 1 – Distributor initiated Transaction

1) Transaction Message(s) are sent from Distributor to DTCC.
2) If transaction does not pass DTCC edit process, message is returned to Distributor with Edit Reject information.
3) If transaction passes DTCC edit process, transaction is forwarded to Carrier.
4) If transaction does not reach Carrier due to connectivity issues, the transaction is returned to the Distributor indicating a failure to connect. DTCC will try 3 times to connect before returning transaction.
5) Response transaction message(s) are sent from Carrier to DTCC.
6) If Response passes DTCC edit process; transaction is forwarded to Distributor.
7) If Response transaction does not pass DTCC edit process, message is returned to Carrier with Edit Reject information (this is the resendRequest WSDL operation).
8) If transaction does not get replied to by Carrier, the Distributor will receive a Connection Time out response from DTCC.
9) If Response transaction does not pass DTCC edit process; DTCC will create a properly constructed response message with an “unknown” status and a reject reason of “Carrier message did not pass DTCC edits”.

Pending Response Not Received by the Distributor
There are two reasons a response would not be received by a Distributor:
1. Edit Reject
2. Connectivity Failure

If Distributor does not get a response message in a time period determined by the Distributor, the Distributor will notify the agent that the confirm was not received and the agent should contact Carrier for status.

Once the Carrier responds, to the transaction, the real-time call is complete. In edit reject situations, the Carrier may choose to contact the Distributor or the Distributor may have a process in place to call the Carrier because the response was never received. In a connectivity failure situation, the Carrier assumes the response was processed. DTCC will not provide the Carrier with a connectivity failure response. The Distributor will have to contact the Carrier directly to find out the status.
Carrier Response Transaction – Accept or Reject – Day 2 – After Batch Processing Confirm

Carrier Day 2 Response will be sent in a batched file. The data will be sent using XML technology. Files will be sent using datatrak and received via autoroute. Web services will not be used to send the day 2 transaction.

1) Day 2 Response transaction message(s) are sent from Carrier to DTCC
2) If Day 2 passes DTCC edit process, transaction is forwarded to Distributor.
3) – If Day 2 Response transaction does not pass DTCC edit process, message is returned to Carrier with Edit Reject information.

DTCC will send all good order transactions and reject back only transactions that were NIGO. Carrier is expected to resend failed transactions.

DTCC will store transaction for 5 days by TransRefGuid, so Carriers can, if needed send second confirm past day 2 if a system issue arises.

Output Cycles for Day 2 Confirm will be at 7am and 1 pm ET.
**IFT Cancellation**

Distributor sends cancellation notice using the TransType of the original Request messages, which also includes the original TransRefGuid and Transaction Mode set to cancel “TransMode=6”. See data dictionary for more detail on structure of Cancellation message.

A Cancellation request results in one of two scenarios:
- On Cancellation Success – The message is closed and the Distributor, DTCC and Carrier receive no further transactions. Each is responsible for ‘closing’ out their messages.
- On Cancellation Failure – The original Request proceeds and will ultimately (next day) result in a Success or Failure confirmation message.

1) Cancellation transaction message(s) are sent from Distributor to DTCC
2) If Cancellation transaction passes DTCC edit process, transaction is forwarded to Carrier.
3a) If Cancellation transaction does not pass DTCC edit process, message is returned to Distributor with Edit Reject information.
3b) If Cancellation transaction does not reach Carrier due to connectivity issues, the transaction is returned to the Distributor indicating a failure to connect. DTCC will try 3 times to connect before returning transaction.
4) Cancellation Response transaction message(s) are sent from Carrier to DTCC
5) If Cancellation Response passes DTCC edit process, transaction is forwarded to Distributor.
6a) – If Cancellation Response transaction does not pass DTCC edit process, message is returned to Carrier with Edit Reject information.

Distributor must time stamp cancellation message with current date and a time prior to 4pm ET for the cancellation to be accepted by DTCC.
1.4 Values Inquiry Transaction (212)

In order to support a contract snapshot, firms will need to develop an inquiry message using ACORD XML that will be used in conjunction with the fund transfer process. **Values inquiry is expected to be utilized prior to the first inforce transaction attempt of a specific contract. If a Carrier rejects a request on day 1, then an agent may attempt a second one for the same contract without the distributor initiating a redundant values inquiry. DTCC will not validate that a values inquiry is sent prior to transactions.**

**Values Inquiry will include, but not limited to:**

**For Fund Transfers:**
- Current Funds that owner is invested in
- Available Funds restricted from fund transfers
- Funds available for fund transfers
  - Note: Fund no longer available in the product any longer should **not** be sent in the Values Inquiry message.

**Fund Transfer Rules for Values Inquiry:**
- Carriers should only send funds in Values Inquiry that are in the PPfA
  - If a Carrier sends a fund in the Values Inquiry that is not in the PPfA, it will be assumed by the Distributor that this was done in error and will prompt a phone call to the Carrier to address the issue.
- If a Carrier sends Values Inquiry that is missing a fund that is in the PPfA, it will be assumed by the Distributor that the fund is not available in the product and will not include in its list of available funds on the distributor front-end.

If Values Inquiry Response indicates a policy restriction, there is no need to send sub accounts.

This will enable distributors to get all the information upfront in the Values Inquiry instead of comparing the Value Inquiry to the PPfA to figure out the available funds.

**Withdrawals:**
- Current Funds that owner is invested in
- Available Funds restricted from withdrawals

See Data Dictionary for a complete list of field allowed within the Values Inquiry message.

Values Inquiry should include all arrangements currently active on the contract.
1.5 ACORD Insurance Standards

These messages are based on the ACORD Life and Annuity Standards. ACORD provides an open insurance industry XML vocabulary which defines a common, consistent view of insurance information. All messages herein are based on the ACORD Life Standards Data Model. This means every message regardless of sender and/or receiver (or systems) and regardless of process all share a consistent means of describing like data – a fund is always a fund (sub account actually) and is always formatted and defined the same. This consistency reduces translation effort (and errors) and insures that all participants in the insurance value chain can share a common understanding as well as view of insurance data.

For more information contact ACORD at Life@acord.org. The public standards are available on their website at www.acord.org.

1.6 ACORD Product Profile for Annuities (PPfA)

This process relies on the ACORD Product Profile for Annuities message (PPfA), more formally known as a Policy Product for an annuity. The PPfA message provides richly detailed product rules including which funds (subaccounts) are available and other contract provisions. It is assumed that the information from the PPfA is available for this Fund Transfer process; however it is received and kept current before this process begins. See the ACORD Product Profile for Annuity Implementation Guide for details.

Specifically the PPfA provides for the Fund Transfer details of all funds/sub accounts available for the policy.

Carriers may be required to update current PPfA’s to add transaction specific rules.

1.7 POV Requirements

Not defined yet

1.8 DTCC Hours of Operation

Requests Monday to Friday – 7am to 7pm ET
Cancel Requests Monday to Friday – 7am to 7pm ET
Confirmations Monday to Friday – 7 am to 7:30pm ET
Cancel Confirmations Monday to Friday – 7 am to 7:30pm ET

Carrier gets an extra half hour in the pm to confirm last minute transactions.

Any transmissions outside of the days and times listed will be rejected by DTCC.
1.9 Early Market Close Days

Early market close days are considered any day that the New York Stock Exchange (NYSE) closes earlier than its regular close time of 4pm ET. An early market close can be a scheduled early market close (such as the day after Thanksgiving) or an unscheduled early close due to an unforeseen event.

DTCC will not change its schedule on early market close days. Distributors and Carrier must integrate early market close days into their procedures.

On early market close days, Distributors are expected to not send a transaction after the scheduled close time. However, if a Distributor does not prevent a transaction from being sent after the early market close time, DTCC will not reject and send to the Carrier. In addition, on early market close days, Carriers may start their end of the day process early. Therefore, it is recommended that distributors do not send transactions later than 3 hours after early market close.

Carriers will need to have systems in place to reject the transaction or pend the transaction until next business day depending on the internal procedures in place.
1.10 Day 2 Confirm

**Datatrak**

Test – 46163  
Production - 26163  

Only Carriers need to setup Datatrak. Distributors will not submit Day 2 confirms.

**Autoroute - Both Carrier and Distributors need to be setup up for autoroute.**

Test – 02980163  
Production - 02340163  

Both Carriers and Distributors will need to be setup for Autoroute. Distributors need it to receive files and Carriers need it for edit rejects sent back to them.

**Cycles**

Cycle 1 – 7am ET  
Cycle 2 – 1pm ET

**Fund Transfer Day “2” Confirmation Status Scenarios:**

**Scenario 1**: Request Received and Processed Properly  
Result Code = 1 (SUCCESS) – No Follow-up Required

**Scenario 2**: Request Received and Failed in Batch Cycle due to rule violation  
Result Code = 5 (FAILURE) – No Follow-up Required

**Scenario 3**: Request Received and Failed in Batch Cycle due Carrier Cycle issue  
Result Code = 4 (RECDPENDINFO)  
Result Info Code = 600 (UNABLEATTHISTIME)  

*Carrier to Follow-up with Broker after Second Failed Attempt to process Fund Transfer*
Note to Carriers:
A Day 2 Confirm cannot be sent the same day you receive a transaction request. It must be sent, at minimum, the next business day. If you send the confirm same day, DTCC will reject it.

1.11 Agent Authorizations

Carriers and Distributors should make sure they are in agreement that with definition of electronic authorizations prior to implementing.
2 ACORD STANDARD MESSAGE DETAILS

2.1 ACORD XML Message Structure Overview

The ACORD Life and Annuity Standards are built first on a common data model. All specific insurance business processes, aka messages, are then defined using the life data model, with only those elements necessary are used. All messages however will always define a given element in the same way, thus promoting reuse, consistency and a common vocabulary for describing insurance concepts. When looking at only a specific message the design of the message may seem un-optimal, and indeed it most likely is. This is due to the greater objective of always having insurance concepts modeled in the same consistent method regardless of process or message. For more information contact ACORD at Life@acord.org. The public standards are available on their website at www.acord.org.

2.1.1 Basic Message Construct

Every message begins with a message or transaction ‘header’. It defines the transaction type and transaction level information like date & time, etc. Its’ basic form is…

TXLife
   TXLifeRequest
       TransRefGUID
       OLife (specific message business data)

And then the response comes back as…

TXLife
   TXLifeResponse
       TransRefGUID ← Matching the GUID of the original request
       TransResult ← Location of success or failure and details
       OLife (specific message business data)

Each message then has a specific set of expected business data to accompany or be returned in a request or response message. The basic form for the messages here (a subset of the overall ACORD Life Data Model) is…

OLife
   Holding – (one per message)
       Policy
           Life or Annuity (one per policy)
           Investment (one per policy)
           SubAccount (one per fund)
   Party – (one for each entity in the message; e.g. Distributor, Agent, Owner, Annuitant, etc.)
       Person or Organization
       Producer (either an individual or a distributor)
### 2.2 Message Transaction Catalog

The following message transaction are part of this Fund Transfer Service, each are documented in the tables and examples which follow in this guide. You'll notice they are all of the general message type “Fund Transfer” or TXLife Transaction Type = “102”, but there are seven possible specific message transactions you may send or receive.

<table>
<thead>
<tr>
<th>Request (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement)</th>
<th>This is the initial message to begin or initiate a request. It is required to begin the process/request. It is sent from the requestor (Distributor) to the Receiver – first DTCC then after validation to the Carrier.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement)</td>
<td>This is a response used by Carriers on day 1 when the transaction passes the pre-batch edit rules in the Carrier system. The Carrier expects to process the transaction during the nightly batch cycle. This response may be used by Carriers on day 2 if a transaction previously indicated as pending on the day 1 confirms were not processed that night due to internal Carrier issues that need to be fixed. Pending should only be sent on day 2 if the Carrier expects to process the transaction within a short period of time.</td>
</tr>
<tr>
<td>(102 – Fund Transfer, 105- Withdrawal, 107 Arrangement) - Success</td>
<td>This is the normal expected response back from the carrier on minimum day 2 (after nightly batch cycle), through the DTCC, indicating a previous Request has processed successful and is complete.</td>
</tr>
<tr>
<td>Response (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement) - Failure</td>
<td>This response may come from two possible sources. When from the DTCC it is an immediate indication that the request was ill-formed and failed some DTCC validation edit. This is documented in the response (detailed below). This response may also come from the carrier indicating a failure of the message during their processing. Again details of why it failed are documented in the response message (detailed below).</td>
</tr>
<tr>
<td>Request (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement) – Cancellation</td>
<td>This is an optional message to cancel a previously requested Request Message. It is ONLY valid PRIOR to receiving a Success message and should only be sent before the carrier has begun processing their pending requests – generally this would always be same day.</td>
</tr>
<tr>
<td>Response (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement) – Cancellation Success</td>
<td>This is the response to a cancellation request acknowledging that the cancellation was successful and no fund transaction took place. It is as if the original request did not occur.</td>
</tr>
<tr>
<td>Response (102 – Fund Transfer, 105- Withdrawal, 107 Arrangement) – Cancellation Failure</td>
<td>This is the response to a cancellation request indicating that the carrier could not cancel. The receiver should then also receive either a success or failure to the original Request and the cancel is in essence ignored.</td>
</tr>
<tr>
<td>Values Inquiry Request (212)</td>
<td>This is a request from a distributor for updated contract information.</td>
</tr>
<tr>
<td>Values Inquiry Response (212)</td>
<td>This is a response from a carrier of the updated contract information.</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Day 2 Response</td>
<td>This a response on second business that provides final confirmation of transaction.</td>
</tr>
</tbody>
</table>

### 3 CHANGE LOG

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/19/11</td>
<td>v.01</td>
<td>Initial draft</td>
</tr>
<tr>
<td>12/1/11</td>
<td>v.02</td>
<td>Updated</td>
</tr>
<tr>
<td>08/3/12</td>
<td>v.03</td>
<td>Changed Day 2 output cycle 2 from 9 am to 1 pm</td>
</tr>
</tbody>
</table>