

Sterling Standards Library

Using ASC X12

Version 5.6

Sterling Commerce
An IBM Company

© Copyright 2009 Sterling Commerce, Inc. All rights reserved.

Contents

Using ASC X12 with the Application	4
ASC X12 Overview	4
Prerequisite Knowledge	5
Using ASC X12 with the Application	6
ASC X12 Business Processes	7
Overview	7
X12Develope Business Process	7
Before Using X12Develope	15
X12Envelope Business Process	15
Before Using the X12Envelope Business Process	18
ASC X12 Enveloping	19
ASC X12 Enveloping Overview	19
Using ASC X12 with the Sterling Community Manager (SCM)	21
Ordering Envelope Answer Blocks in a Partner Program	22
Using Wildcards	23
Wildcards in Developing (Inbound)	23
Wildcards in Enveloping (Outbound)	23
Creating an ASC X12 Envelope	24
Modifying an SCM-Managed ASC X12 Resource	25
Deleting an ASC X12 Envelope	26
ASC X12 Inbound ISA IEA Envelope Properties, Interchange Level	27
ASC X12 Inbound GS GE Envelope Properties, Group Level	30
ASC X12 Inbound ST SE Envelope Properties, Transaction Level	33
ASC X12 Outbound ISA IEA Envelope Properties, Interchange Level	42
ASC X12 Outbound GS GE Envelope Properties, Group Level	49
ASC X12 Outbound ST SE Envelope Properties, Transaction Level	52
Creating ASC X12 Maps	57
Overview	57
ASC X12 Components in the Map Editor	57
Using Transaction XREF with ASC X12	58
Creating an ASC X12 Map	59
Searching for ASC X12 Correlations	61
ASC X12 Reporting	62

Using ASC X12 with the Application

ASC X12 Overview

ASC X12 is an electronic data exchange standard that is used in multiple business domains including finance, government, health care, insurance, transportation, and others.

This table describes how the application supports ASC X12:

Functionality	Details	Action You Need to Take to Implement ASC X12
Services	<ul style="list-style-type: none">◆ EDI Enveloping service translates messages, determines which business processes need to run to apply EDI envelopes, and starts those business processes.◆ EDI Deenveloping service removes the envelopes from inbound messages.	<p>Configure the EDI Enveloping service in the application Graphic Process Modeler (GPM).</p> <p>Note: As a way to help reduce the number of envelopes you need to create and use, the EDI Enveloping and EDI Deenvelope services support use of an asterisk (*) as a wildcard character in mandatory envelope fields for X12. By using wildcards, you can set up one set of envelopes that can be used for multiple trading partners. If certain trading partners have specific requirements, you can still have envelopes that pertain just to them, and the EDI Enveloping service chooses the envelope that is the best match. In other words, the envelope that has the most matches to specific fields in the data (for example Receiver ID, Receiver ID Qualifier), is the one selected.</p>
Envelopes	<ul style="list-style-type: none">◆ Inbound ASC X12 envelope wizards to implement inbound ASC X12.◆ Outbound ASC X12 envelope wizards to implement outbound ASC X12.	<ul style="list-style-type: none">◆ Create the appropriate ASC X12 envelopes for the ASC X12 messages you are sending and receiving.

Functionality	Details	Action You Need to Take to Implement ASC X12
Predefined business processes	<ul style="list-style-type: none"> ◆ X12Deenvelope business process extracts EDI documents from an ASC X12 interchange-level envelope and locates an associated contract, according to the content of the documents. X12Deenvelope then starts the appropriate business process. <p style="margin-left: 20px;">With additional configuration, X12Deenvelope can also reconcile TA1, 997, and 999 reports and generate the interchange TA1 and functional group 997 and 999 acknowledgments.</p> <ul style="list-style-type: none"> ◆ X12Envelope business process applies an ASC X12 envelope to one or more ASC X12 messages and then uses the envelope data to translate and process them. 	Configure the predefined business processes as necessary.
Map Editor	<ul style="list-style-type: none"> ◆ Map Editor wizard enables you to generate a file layout for you using the ASC X12 message that you select. Included in the ASC X12 map are groups, segments, composite elements, and elements that are defined by ASC X12. ◆ Properties dialog boxes that enable you to define and modify EDI map components for ASC X12. ◆ Autolink function automatically creates links between input and output fields that have the same name or business name. This function can be used with any data format. ◆ Additional mapping operations as needed. 	<ul style="list-style-type: none"> ◆ Download Map Editor. ◆ Create a map or maps to translate your ASC X12 messages.
Correlation Search	Search by ASC X12 information.	Use the EDI Correlation search functionality to search for ASC X12 correlation information.
Reports	Report by ASC X12 standard.	Use the EDI Translation Detail report to search for details of inbound and outbound ASC X12 messages and easily create useful reports on your inbound and outbound ASC X12 messaging.

Prerequisite Knowledge

The audience using this software should be familiar with the application and the ASC X12 standard.

Note: This documentation is not intended to explain the ASC X12 standard.

Using ASC X12 with the Application

To use ASC X12 with the application, you must complete the following tasks:

1. Create inbound and outbound ASC X12 envelopes.
2. Use the predefined ASC X12 business processes or create your own business processes.
3. Create any necessary code lists and maintain them as needed.
4. Create your ASC X12 map or maps, linking your proprietary file format to the appropriate ASC X12 message format.
5. To track ASC X12 messages, use the EDI Correlation Search functionality.
6. To report on inbound and outbound ASC X12 message flow, use the EDI Translation Detail report features.

ASC X12 Business Processes

Overview

To help you accomplish your business goals, the application provides two predefined enveloping business processes that are used by the application to implement ASC X12 processing: X12Envelope and X12Deenvelope. These predefined business processes are initiated by services during X12 processing and do not require you to modify them unless you want to reconcile TA1, 997, and 999 reports and generate interchange TA1 and functional group 997 and 999 acknowledgments.

The following table lists business goals for the predefined X12 business processes:

Business Process	Business Goals
X12Deenvelope	<p>Extracts EDI documents from an ASC X12 interchange-level envelope and locates an associated contract, according to the content of the documents. X12Deenvelope then starts the appropriate business process.</p> <p>With additional configuration, X12Deenvelope can also reconcile TA1, 997, and 999 reports and generate the interchange TA1 and functional group 997 and 999 acknowledgments.</p>
X12Envelope	Applies an X12 envelope to one or more X12 messages and then uses the envelope data to translate and process them.

X12Deenvelope Business Process

The EDI Deenvelope business process includes the EDI Deenveloping service to support non-printable characters as EDI delimiters and perform the following steps:

1. Splits documents into interchanges and puts delimiters sent in the ISA (or UNA) into process data.
2. Starts the X12 Deenveloping business processes, as appropriate.

If exceptions occur when running an EDI Deenvelope business process, the application generates an EDI Compliance Report.

This table lists the configuration parameters for the X12Deenvelope business process:

Parameter	Default	Description
Document Tracking	False	When document tracking is enabled for a business process, tracking information is carried with the message throughout the process, and the tracking information is persisted about the message regardless of the persistence level you configured globally for the application.

Parameter	Default	Description
Set onfault processing	False	Onfault processing allows the process to immediately execute the application fault activity specified in the process, even if the process has not yet reached that step in the process. For example, if a process fails at step 3, but the on-fault activity is specified in step 7, if onfault processing is enabled, the process proceeds to the step 7 on-fault rather than halting at step 3.
Set Queue	4	The application enables you to set performance optimizations by queue, defining queue levels to allocate resources. This number indicates the previously allocated queue level that you selected for this business process model for processing.
Enable Async Start Mode	True	Asynchronous initiation is selected by default. Starting business processes asynchronously is recommended. Asynchronous mode is standard application processing, in which the business process is placed in a queue and processed.
Enable Transaction	False	Select this option to instruct the application to treat the entire process as a single transaction so that either all of the steps complete, or, in the event of an error, none of them complete. When an error occurs, no data is committed; data returns to its pre-process state. False indicates that the transaction will not be sent.
Commit all steps when there is error	False	This option enables you to have the business process commit all work to the database, at the time an error is generated. With this option you can either rollback or commit all work prior to the error before the onfault block is called.
Category	N/A	This is the category name to which this business process belongs.
Set the Persistence Level to	System Default	The level of data to retain for generating a status report that describes each step that the business process completes. System default indicates that, for the data, configuration is already defined in the application to retain data.
Set the Event Reporting Level to	Full	The level of event reporting that is retrieved for this business process when it runs. Full specifies to generate events for the business process, including the business process start and end time, start and end times for all services or services running as a result of this business processes, and any resulting errors and exceptions.
Set the Recovery Level to	Manual	The level of recovery for this business process if the business process should halt during execution. Manual requires you to resume or restart the business process manually.
Set the Document Storage to	System Default	The level of document storage for messages that process when the business process runs. System Default specifies to store messages in the file system or database, according to how you configured archiving and purging in the application.

Parameter	Default	Description
Deadline Settings	Do not set deadline Note: To set a deadline you must change it in the business process.	Complete by – The deadline time, in hours and minutes, by which the business process must complete process once it starts. <ul style="list-style-type: none"> ◆ First Notification: Hours and Minutes – Whether to receive notification before a business process deadline. ◆ Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.
Life Span	System Default	The length of time, in days and hours, to retain the data in the application, along with the life span type and removal method. If you select Process Specific , then you can select the number of days and hours for the life span.

The following BPML code makes up the X12 deenveloping business process:

```
<process name="X12Deenvelope">
  <rule name="gs_exists">
    <condition>GS_I.DONE = 0</condition>
  </rule>

  <rule name="isa_ack">
    <condition>InterchangeAcknowledgmentRequested = 1</condition>
  </rule>

  <rule name="st_exists">
    <condition>ST_I.DONE = 0</condition>
  </rule>

  <rule name="generate_ack">
    <condition>GENERATE_997 = "YES"</condition>
  </rule>

  <rule name="st_ack">
    <condition>TransactionSetIDCode = "997"</condition>
  </rule>

  <rule name="contract">
    <condition>CONTRACT_FOUND = "YES"</condition>
  </rule>
  <sequence>
    <sequence>

      <sequence>
        <operation>
          <participant name="DeenvelopeISA"/>
          <output message="Xout" >
            <assign to="." from="*"></assign>
          </output>
          <input message="Xin" >
            <assign to="." from="*"></assign>
          </input>
        </operation>
      </sequence>
    </sequence>
  </sequence>
</process>
```

```

<onFault code="Interchange-Non-Compliant">
  <choice>
    <select>
      <case ref="isa_ack" activity="generate_ta1"/>
    </select>
    <sequence name="generate_ta1">
      <operation>
        <participant name="GenerateTA1"/>
        <output message="Xout">
          <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
          <assign to="." from="*"></assign>
        </input>
      </operation>
      <operation>
        <participant name="EDIEncoder"/>
        <output message="Xout">
          <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
          <assign to="." from="*"></assign>
        </input>
      </operation>
      <operation>
        <participant name="EnvelopeISA"/>
        <output message="Xout">
          <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
          <assign to="." from="*"></assign>
        </input>
      </operation>
    </sequence>
  </choice>
</onFault>
</sequence>

<sequence>
  <choice>
    <select>
      <case ref="isa_ack" activity="generate_ta1"/>
    </select>

    <sequence name="generate_ta1">
      <operation>
        <participant name="GenerateTA1"/>
        <output message="Xout">
          <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
          <assign to="." from="*"></assign>
        </input>
      </operation>
      <operation>

```

```

    <participant name="EDIEncoder"/>
    <output message="Xout">
      <assign to="." from="*"></assign>
    </output>
    <input message="Xin" >
      <assign to="." from="*"></assign>
    </input>
  </operation>
</operation>
<operation>
  <participant name="EnvelopeISA"/>
  <output message="Xout">
    <assign to="." from="*"></assign>
  </output>
  <input message="Xin" >
    <assign to="." from="*"></assign>
  </input>
</operation>
</sequence>
</choice>
</sequence>

<sequence name="foreach_gs">
  <operation>
    <participant name="ForEachDocument"/>
    <output message="Xout">
      <assign to="." from="*"></assign>
      <assign to="ITERATOR_NAME">GS_I</assign>
      <assign to="DOCUMENT_NAME_PREFIX">GROUP</assign>
    </output>
    <input message="Xin" >
      <assign to="." from="*"></assign>
    </input>
  </operation>

  <choice>
    <select>
      <case ref="gs_exists" activity="process_gs"/>
    </select>

    <sequence name="process_gs">

      <sequence name="deenvelope_gs_st">
        <operation>
          <participant name="DeenvelopeGS"/>
          <output message="Xout" >
            <assign to="." from="*"></assign>
          </output>
          <input message="Xin" >
            <assign to="." from="*"></assign>
          </input>
        </operation>

        <operation>
          <participant name="DeenvelopeST"/>
          <output message="Xout" >

```

```

        <assign to="." from="*"></assign>
    </output>
    <input message="Xin" >
        <assign to="." from="*"></assign>
    </input>
</operation>

<onFault code="Group-Non-Compliant">
    <assign to="BREAK">YES</assign>
</onFault>

<onFault code="Transaction-Non-Compliant">
    <assign to="BREAK">YES</assign>
</onFault>

</sequence>

<choice>
    <select>
        <case ref="generate_ack" activity="generate_997" />
    </select>

    <sequence name="generate_997">
        <operation>
            <participant name="Generate997"/>
            <output message="Xout">
                <assign to="." from="*"></assign>
            </output>
            <input message="Xin" >
                <assign to="." from="*"></assign>
            </input>
        </operation>
        <operation>
            <participant name="EDIEncoder"/>
            <output message="Xout">
                <assign to="." from="*"></assign>
            </output>
            <input message="Xin" >
                <assign to="." from="*"></assign>
            </input>
        </operation>
    </sequence>
</choice>

<sequence name="foreach_st">
    <operation>
        <participant name="ForEachDocument"/>
        <output message="Xout">
            <assign to="." from="*"></assign>
            <assign to="ITERATOR_NAME">ST_I</assign>
            <assign to="DOCUMENT_NAME_PREFIX">$GS_I.NAME</assign>
        </output>
        <input message="Xin" >
            <assign to="." from="*"></assign>
        </input>
    </operation>

```

```

<choice>
  <select>
    <case ref="st_exists" activity="process_st"/>
  </select>

  <sequence name="process_st">

    <sequence name="process_document">
      <choice>
        <select>
          <case ref="st_ack" activity="reconcile_ack" />
        </select>
        <sequence name="reconcile_ack">
          <operation>
            <participant name="Reconcile997" />
            <output message="Xout" >
              <assign to="." from="*"></assign>
            </output>
            <input message="Xin" >
              <assign to="." from="*"></assign>
            </input>
          </operation>
        </sequence>
      </choice>

      <choice>
        <select>
          <case ref="contract" activity="invoke_contract_workflow" />
        </select>
        <sequence name="invoke_contract_workflow">

          <!-- ***** -->
          <!-- Only send to child what is required -->
          <!-- ***** -->
          <operation name="release">
            <participant name="ReleaseService"/>
            <output message="Xout">
              <assign to="TARGET" from="string('message_to_child')"/>
            </output>
            <input message="Xin"/>
          </operation>

          <assign to="message_to_child"
from="/ProcessData/*[not(boolean(@SCIOBJECTID))]" />
          <assign to="message_to_child/PrimaryDocument"
from="PrimaryDocument/@*" />

          <operation>
            <participant name="InvokeBusinessProcessService" />
            <output message="Xout">
              <assign to="INVOKE_MODE">ASYNC</assign>
              <assign to="." from="*"></assign>
            </output>
            <input message="Xin" >
              <assign to="." from="*"></assign>

```

```

        </input>
    </operation>

    </sequence>
</choice>
</sequence>

    <repeat name="repeater" ref="foreach_st"/>
</sequence>
</choice>

</sequence>

    <repeat name="repeater" ref="foreach_gs"/>
</sequence>
</choice>

</sequence>
</sequence>

<sequence>
    <operation>
        <participant name="ReconcileTA1"/>
        <output message="Xout">
            <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
            <assign to="." from="*"></assign>
        </input>
    </operation>
</sequence>

</sequence>
</process>

```

The following scenario shows how the X12Deenvelope business process can deenvelope ASC X12 documents:

1. The File System adapter collects a file from an ASC X12 collection folder and invokes the X12Deenvelope business process.
2. The EDI Deenveloping service determines that the file contains an X12 document and starts the X12Deenvelope business process.
3. The X12Deenvelope business process removes the envelopes to make available the transaction set envelope for the X12 document and determine the next action to perform.
4. For documents with CII Syntax Rule requirements, the X12Deenvelope business process parses the message group and uses the values indicated in the message group header to locate a matching envelope. The envelope then determines the next action to perform.

Note: If the X12Deenvelope business process does not locate a matching envelope, the business process stops. The application generates an EDI Compliance Report that describes the reason that the X12Deenvelope business process could not locate the envelope.

Before Using X12Deenvelope

Before you use the X12Deenvelope business process, you must complete the following tasks:

1. Create the trading profile, including a contract.
2. Create necessary envelopes.
3. Create a business process that initiates the X12Deenvelope business processes.

When creating a business process that enables inbound ST (or UNH) envelopes to translate transactions when running X12Deenvelope business processes, consider the following:

- ◆ Delimiters sent in the ISA or UNA segments are placed into process data in the application.
- ◆ The GPM makes available parameters that represent the delimiters, which you must configure to enable the envelopes to translate transaction.
- ◆ You must create an XPath expression that describes the location of envelopes and apply it to the Translation service.

X12Envelope Business Process

The X12Envelope business process is initiated when it is called by another business process or the EDI Enveloping service.

The X12Envelope business processes performs the following primary activities:

1. Starting with one or more EDI documents, the EDIEnveloping services applies envelope properties at the document level to each document.
2. The X12Envelope service takes one or more transaction sets and applies a functional group envelope.
3. The X12Envelope service takes a functional group and applies the interchange-level envelope and searches for a matching contract.
4. Using the interchange-level envelope data, the service either looks up a contract or runs a business process.

This table lists the configuration parameters for the X12Envelope business process:

Parameter	Default	Description
Document Tracking	False	When document tracking is enabled for a business process, tracking information is carried with the message throughout the process, and the tracking information is persisted about the message regardless of the persistence level you configured globally for the application.
Set onfault processing	False	Onfault processing allows the process to immediately execute the on-fault activity specified in the process, even if the process has not yet reached that step in the process. For example, if a process fails at step 3, but the on-fault activity is specified in step 7, if onfault processing is enabled, the process proceeds to the step 7 on-fault rather than halting at step 3.

Parameter	Default	Description
Set Queue	4	The application enables you to set performance optimizations by queue, defining queue levels to allocate resources. This number indicates that previously allocated queue level that you want for this business process model for processing.
Enable Async Start Mode	True	Asynchronous initiation is selected by default. Starting business processes asynchronously is recommended. Asynchronous mode is standard application processing, in which the business process is placed in a queue and processed.
Enable Transaction	False	Select this option to instruct the application to treat the entire process as a single transaction so that either all of the steps complete, or, in the event of an error, none of them complete. When an error occurs, no data is committed; data returns to its pre-process state. False indicates that the transaction will not be sent.
Commit all steps when there is error	False	This option enables you to have the business process commit all work to the database, at the time an error is generated. With this option you can either rollback or commit all work prior to the error before the onfault block is called.
Category	N/A	This is the category name to which this business process belongs.
Set the Persistence Level to	System Default	The level of data to retain for generating a status report that describes each step that the business process completes. System default indicates that, for the data, configuration is already defined in the application to retain data.
Set the Event Reporting Level to	Full	The level of event reporting that is retrieved for this business process when it runs. Full specifies to generate events for the business process, including the business process start and end time, start and end times for all services or services running as a result of this business processes, and any resulting errors and exceptions.
Set the Recovery Level to	Manual	The level of recovery for this business process if the business process should halt during execution. Manual requires you to resume or restart the business process manually.
Set the Document Storage to	System Default	The level of document storage for messages that process when the business process runs. System Default specifies to store messages in the file system or database, according to how you configured archiving and purging in the application.
Deadline Settings	Do not set deadline Note: To set a deadline you must change it in the business process.	Complete by – The deadline time, in hours and minutes, by which the business process must complete process once it starts. <ul style="list-style-type: none"> ◆ First Notification: Hours and Minutes – Whether to receive notification before a business process deadline. ◆ Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.

Parameter	Default	Description
Life Span	System Default	The length of time, in days and hours, to retain the data in the application, along with the life span type and removal method. If you select Process Specific , then you can select the number of days and hours for the life span.

The following BPML code makes up the X12Envelope business process:

```
<process name="X12Envelope">

  <rule name="contract">
    <condition>CONTRACT_FOUND = "YES" and WFD_NAME != ""</condition>
  </rule>

  <sequence>
    <sequence>
      <operation>
        <participant name="EnvelopeST" />
        <output message="Xout" >
          <assign to="." from="*"></assign>
        </output>
        <input message="Xin" >
          <assign to="." from="*"></assign>
        </input>
      </operation>
      <onFault code="Translation-Error-Some-Docs">
        <assign to="BREAK">YES</assign>
      </onFault>
      <onFault>
        <operation>
          <participant name="BPExceptionService"/>
          <output message="Xout" >
            <assign to="exceptionCode" from="'Translation Error'"/>
          </output>
          <input message="Xin"/>
        </operation>
      </onFault>
    </sequence>
    <operation>
      <participant name="EnvelopeGS" />
      <output message="Xout" >
        <assign to="." from="*"></assign>
      </output>
      <input message="Xin" >
        <assign to="." from="*"></assign>
      </input>
    </operation>
    <operation>
      <participant name="EnvelopeISA" />
      <output message="Xout" >
        <assign to="." from="*"></assign>
      </output>
      <input message="Xin" >
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>
```

```

</operation>

<choice>
  <select>
    <case ref="contract" activity="invoke_contract_workflow" />
  </select>
  <sequence name="invoke_contract_workflow">
    <operation>
      <participant name="InvokeBusinessProcessService" />
      <output message="Xout">
        <assign to="INVOKE_MODE">ASYNC</assign>
        <assign to="." from="*"></assign>
      </output>
      <input message="Xin" >
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</choice>

</sequence>
</process>

```

Before Using the X12Envelope Business Process

Before you use the X12Develope business process, complete the following task:

1. Create inbound envelopes for your X12 messages.
2. Create outbound envelopes for your X12 messages.

ASC X12 Enveloping

ASC X12 Enveloping Overview

A *document envelope* consists of control information that enables organizations to effectively exchange messages. This information is added in headers and trailers to messages. Document envelopes are specific to the message protocol used. Creating document envelopes is necessary to use ASC X12 with your trading partners.

During the envelope creation process, you need to assign the envelope name, description, and parameters, such as unique identification numbers (control numbers).

Note: Each time a user adds, modifies, or deletes an envelope, the action is logged to create an audit trail based on the user who performed the event.

Each envelope type has a specific properties page for the envelope and other pages that enable you to specify additional requirements for the envelope. Properties for the following envelopes can be found in this documentation:

- ◆ ASC X12 Inbound ISA IEA Envelope Properties, Interchange Level
- ◆ ASC X12 Inbound GS GE Envelope Properties, Group Level
- ◆ ASC X12 Inbound ST SE Envelope Properties, Transaction Level
- ◆ ASC X12 Outbound ISA IEA Envelope Properties, Interchange Level
- ◆ ASC X12 Outbound GS GE Envelope Properties, Group Level
- ◆ ASC X12 Outbound ST SE Envelope Properties, Transaction Level

Document Lifespan

In previous releases, the document lifespan default was zero so that when the workflow expired, all associated documents were purged/archived with the workflow. Now the lifespan for ASC X12 documents awaiting acknowledgement is configurable, and the default is 30 days.

Note: You can change the default lifespan by editing the document.lifespan property in the enveloping.properties file. The document lifespan of the outbound document is automatically reset to zero after the acknowledgement for the document is received or if the user manually accepts the acknowledgement.

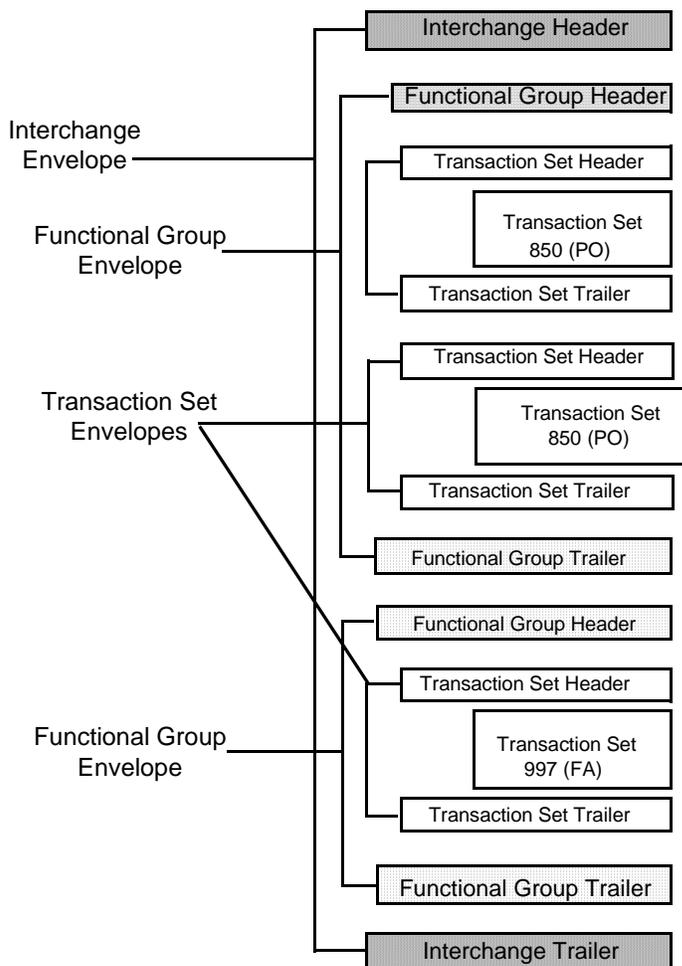
Envelope Structure

The application supports the use of many EDI protocols, including ASC X12. The ASC X12 protocol has three levels of envelopes:

- ◆ Interchange (outermost) – Contains an interchange header and trailer, and all the data sent from one sender to one receiver in the same transmission.
- ◆ Functional group (middle) – Contains a group header and trailer that surrounds a group of transaction sets of the same type.

- ◆ Transaction set (innermost) – Contains the standard message surrounded by a header and trailer record.

This illustration shows the structure for the protocols that have 3 levels of envelopes:



Base Envelopes

The application uses a concept of a *base envelope* as a starting point to create a new envelope. The base envelope maintains a link to the new envelope that inherited its properties. If you modify the base envelope, all related envelopes (that is, ones that inherited the base envelope properties) change, as well.

Note: If you plan to create many envelopes using base envelopes, it is recommended that you do not use the base envelopes in production. You may want to document how your base envelopes are linked to other envelopes.

The default envelope is the version of the document envelope that the application uses. You can specify a default envelope only if there are two or more versions of the same envelope. One version must be selected as the default.

Types of Envelopes

There are many types of envelopes provided in the application. Each envelope is defined by its envelope properties. These predefined enveloping and deenveloping business processes are available for you to incorporate into your own business processes. Envelope parameters specify whether the document is inbound or outbound:

- ◆ *Inbound envelopes* identify documents that come into the application so they can be properly routed. Inbound envelopes also give you the option to translate documents when you choose to check documents for compliance. By choosing to translate documents from within the envelope, you can reduce document processing time because you do not need to specify a separate Translation service step in the business process.
- ◆ *Outbound envelopes* identify documents so that they can be sent to and received by trading partners.

Using ASC X12 with the Sterling Community Manager (SCM)

If you are using the application with the Sterling Community Manager (SCM), please note the following:

- ◆ On the Document Envelopes list page, envelopes that are managed by SCM have [SCM] appended to their names.
- ◆ On the Document Envelopes summary page (that you access by selecting an envelope name from the envelope list), you are notified if the envelope is managed by SCM.
- ◆ You are not permitted to delete any of the versions of an envelope managed by SCM. The only way to delete these envelopes is through SCM.
- ◆ When you attempt to change the version for an envelope managed by SCM, a warning dialog is displayed to indicate that you are updating an SCM resource.
- ◆ You cannot delete SCM-managed resources from the application. For example, you cannot delete an envelope that is managed by SCM from the application.
- ◆ The import report indicates if an Import operation involving an SCM managed envelope fails.
- ◆ When application envelopes are converted to SCM, the naming convention is SCI_Envelope_[standard]_[envelope header tag]_[direction]_[Sponsor|Partner].
- ◆ Only one “next envelope” selection is supported for each envelope. Therefore, two or more agreements that result in conflicting “next envelope” chains will result in a conversion error.
- ◆ If you edit an envelope in the application user interface to chose a different “next envelope,” a conversion error results if an agreement is created or updated using that envelope with a “next envelope” that is different than the envelope selected through the application user interface. In this scenario, any changes you make to the “next envelope” selection through the application user interface cannot be reverted through the execution of a program or update of an agreement in SCM.
- ◆ If you intend a change to the “next envelope” change to be temporary, you must revert it prior to the conversion of a new or updated agreement that uses that envelope, or you will receive a conversion error.
- ◆ If you intend a change to the “next envelope” to be permanent, you must terminate the original partner agreement in SCM. If the envelope changes involve sponsor answers, you may need to execute a new sponsor agreement, create a new partner program that uses the appropriate sponsor display step, and create a new partner agreement.

Examples of a XML tags associated with an inbound X12 interchange questionnaire in OBA.

- ◆ SCI_Envelope_X12_ISA_In_Sponsor
- ◆ SCI_Envelope_X12_ISA_In_Partner

The SCM envelope converter automatically generates the envelope name for each envelope that is defined in the application based on fields used during inbound envelope lookup. Outbound envelopes have a name generation equal to the inbound equivalent. For example, the X12 outbound interchange envelope has a name generation equal to the X12 inbound interchange envelope. In addition to these fields, constant literals are also assigned as prefixes that are different for each envelope. The pattern used in the prefix is as follows:

```
{standard}_{direction}_{envelope start tag}
```

The X12 constant literals that serve as the prefix to the envelope names are as follows:

- ◆ X12_Inbound_ISA_
- ◆ X12_Outbound_ISA_
- ◆ X12_Inbound_GS_
- ◆ X12_Outbound_GS_
- ◆ X12_Inbound_ST_

Note: X12_Outbound_ST_ Envelope names are automatically generated based on a naming convention.

Envelope definitions created in the envelope converter on behalf of SCM are read-only in application (you cannot modify these envelopes).

Ordering Envelope Answer Blocks in a Partner Program

When you order envelope answer blocks in a partner program, you must completely define an envelope with partner and sponsor answer blocks before moving on to define another envelope *at the same level* (at the transaction level, group level, or interchange level). For example, you could define a partner program with two envelopes defined at the same envelope level as follows:

- ◆ ST_810_Partner_Answer_Block
- ◆ ST_810_Sponsor_Answer_Block
- ◆ ST_997_Partner_Answer_Block
- ◆ ST_997_Sponsor_Answer_Block

In the above example, the 810 envelope is completely specified before the 997 envelope is defined.

If the envelope levels differ (for example, group and then interchange) you do not need to completely define the envelope before moving on to define another envelop. In the following example, you can partially define the interchange and then define the group because both envelopes are at different levels (one is an interchange envelope and the other is a group envelope):

- ◆ ISA_Partner_Answer_Block
- ◆ GS_Partner_Answer_Block
- ◆ ISA_Sponsor_Answer_Block
- ◆ GS_Sponsor_Answer_Block

Using Wildcards

As a way to help reduce the number of envelopes you need to create and use, the EDI Enveloping and EDI Deenveloping services support use of an asterisk (*) as a wildcard character in mandatory envelope fields for X12, EDIFACT, SWIFT, CHIPS, FEDWIRE, and ACH-CTX only. For optional fields, the wildcard value is leaving the field blank. With EDI Enveloping, for optional fields, the wildcard value is equivalent to leaving the field blank. If certain trading partners have specific requirements, you can create envelopes that pertain just to them, and the EDI Enveloping service chooses the envelope that is the best match. That is, the envelope that has the most matches to specific fields in the data (for example, Receiver ID and Receiver ID Qualifier), is the one selected.

Wildcards in Deenveloping (Inbound)

The EDI Deenveloping service receives data, parses the headers, and extracts the EDI information from it. The service searches the available envelopes for the closest match to the EDI data.

When setting up enveloping with wildcards, consider the following:

- ◆ The Deenveloping service selects the envelope that matches the EDI data most closely. For example, if an envelope has the same Transaction ID as the incoming data, and another envelope has wildcards in all mandatory fields, the envelope with the matching Transaction ID is used.
- ◆ Sender ID and Receiver ID have priority over other EDI fields. For example, two envelopes are found that have a field that matches one EDI field from the data. One envelope matches the value in the Receiver ID field from the data; the other matches the Transaction ID field. The envelope that has the matching Receiver ID will be selected by the service and used for processing.
- ◆ If no envelopes are found that have an exact match to fields in the EDI data, and an envelope with wildcards does exist, the envelope with wildcards will be used.
- ◆ If multiple envelopes have the same matching information (for example, two envelopes match the Sender ID and Receiver ID exactly) the service ends with an error.
- ◆ The wildcard character is an “all or nothing” parameter. That is, if using asterisk, you cannot enter other characters in the field with it. For example, you can not enter Ma* to match MaxxMart and Madeira Foods.

Wildcards in Enveloping (Outbound)

For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope. You can override wildcards with specific EDI values in outbound processing. You must supply the EDI data to the business process and the data must be in the correct format (that is, name/value pairs).

One option is to use the lightweight JDBC adapter to pull fields in from database tables. Whatever method you choose to retrieve the fields, the results must be given to the Correlation service, which places them into process data. Passing the data to the Correlation service must be the last step in the business process before running the EDI Encoder service. When the EDI Encoding service runs, it uses the same best-match process detailed in the Inbound section to determine which envelope to use. When the EDI Enveloping service runs, any envelope field values set in the Correlation service overrides those values defined in the envelope definition.

When setting up your outbound processing, consider the following:

- ◆ If an envelope field contains a wildcard, you must supply a correlation value for it or the service halts with an error.
- ◆ You can override wildcard values in an envelope by using the Correlation service to pass name/value pairs from the primary document to the EDI Encoder service.
- ◆ If an envelope contains specific values in the Sender ID, Sender ID Qualifier, Receiver ID, or Receiver ID Qualifier fields (that is, values other than a wildcard), the values passed from the Correlation service to the EDI Encoder service do not overwrite the values in the fields.
- ◆ If you are using the same envelope for inbound processing and acknowledgements, supply the Sender ID, Receiver ID, and Qualifiers in the envelope so that they are not overwritten by the correlation values.

Creating an ASC X12 Envelope

You can create an ASC X12 envelope either by using the application or by using Sterling Community Manager (SCM) Integration. See the SCM Integration documentation for more information on creating envelopes using that product.

To create a new envelope using the application:

1. From the **Administration** menu, select **Trading Partner > Document Envelopes > Envelopes**.
2. Under Create, next to New Envelope, click **Go!**
3. On the Envelope Standards page, select **ASC X12** and click **Next**:
4. Select the level of envelope you want to create, including inbound or outbound, and click **Next**.
5. Do one of the following:
 - ◆ To create this envelope from a base envelope, select the Base envelope from the Select Envelope list, and click **Next**.

Note: All the properties are pre-filled but you can update them as needed.

 - ◆ To create a new envelope, select the Not Applicable from the Select Envelope list, and click **Next**.
6. On the Name page, type a unique name for the envelope, and a description or comments, then click **Next**.
7. Complete the properties for the envelope as necessary and click **Next** after each page until you reach the confirm page. Required fields are highlighted in blue.
8. Click **Finish** to add the envelope.
9. Click **Return** to continue.

Updating an ASC X12 Envelope

The application enables you to modify any information in your envelopes, except the name of the envelope.

Note: You can also edit ASC X12 envelopes details from SCM by either terminating the agreement and re-executing the program using Save-As or using the Modify response option in SCM.

To update envelope properties:

1. From the **Administration** menu, select **Trading Partner > Document Envelopes > Envelopes**.
2. Find the envelope using the Search or List function.
3. From the list of envelopes, click **source manager** next to the envelope you want to update.
4. Click **edit** next to the envelope you want to update.
5. Update envelope properties and settings as necessary, clicking **Next** to continue.
6. Click **Finish** to update the envelope.
7. Click **Return** to continue.

Modifying an SCM-Managed ASC X12 Resource

Resources created through SCM are centrally managed by SCM, and you are warned whenever you attempt to modify an SCM-managed ASC X12 resource. Deletion of an SCM Managed ASC X12 resource is not allowed from the application. The application user interface displays the following information to modify an SCM-managed ASC X12 resource:

- ◆ When you click **Go!** next to **List all configurations** in the Trading Partner Configurations page, all the ASC X12 resources that are managed by SCM have the keyword **[SCM]** appended to their names.
- ◆ When you click the name of the ASC X12 resource in the profiles list page, there is a line in the information summary page indicating whether the resource is managed by SCM.
- ◆ When you attempt to edit an ASC X12 resource managed by SCM, a warning dialog box is displayed with the options **OK** or **Cancel** and the following information:

Stop! This partner related data is now managed in Sterling Community Manager. Please change the _____ information in Sterling Community Manager. Changes made directly to Sterling Integrator are temporary and will be overwritten when updates from Sterling Community Manager are absorbed. In case you have a critical need to update it directly, please make sure that later on you make the same update in the Partner _____ information in Sterling Community Manager as soon as possible. Do you still want to proceed and make a temporary change?

Note: Any SCM-managed resource in the application cannot be deleted. The delete option is not displayed in SCM for resources with **[SCM]** tag. The only way that you can delete SCM-managed resources in the application is by deleting the SCM agreements corresponding to the resource update operation that was performed in SCM to create these resources in the application.

Importing and Exporting Envelopes

The Import/Export feature enables you to save time and increase the accuracy of duplicating resources on different systems. This feature enables you to move resources and data between application environments of the same version. The Import/Export feature enables you to:

- ◆ Move from a test application environment to a production application environment.
- ◆ Move resources from one application system to another.

The ability to import and export envelopes means that you can configure resources on one system and then move or copy them to a different system, thereby avoiding having to recreate the resources on each system. Even if you have resources that are going to be slightly different from one system to another, you can export

the resources from one system and import them to a different system, and then make the necessary changes to the resource on the second system.

The Import/Export feature supports several different resource types, including envelopes.

Note: Importing an export file of envelopes always requires a passphrase, even if a passphrase was not required during the export. The passphrase is now required because of the addition of encrypted passwords that apply to some envelopes. When you are prompted for a passphrase for envelopes during the import of envelopes (when you did not use a passphrase when the envelopes were exported), you can supply any value for the passphrase.

Deleting an ASC X12 Envelope

Caution: Before deleting a base envelope, consider the impact on all related envelopes (envelopes that inherited the base envelope properties). You cannot delete an envelope that is managed by SCM through application. To remove a SCM-managed resource, delete the agreement corresponding to the resource from SCM.

To delete an individual envelope or all versions of an envelope:

1. From the **Administration** menu, select **Trading Partner > Document Envelopes > Envelopes**.
2. Find the envelope using the Search or List function.
3. Next to the envelope you want to delete, click **source manager**.
4. In Envelope Source Manager page, do one of the following:

To delete an individual envelope:

- ◆ Next to the version, under Delete, select the check box.
- ◆ Next to Delete Selected Versions, click **Go!**

To delete all versions of this envelope, next to Delete All Versions, click **Go!**

ASC X12 Inbound ISA IEA Envelope Properties, Interchange Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

The following table describes X12 inbound ISA IEA envelope properties at the interchange level:

Field	Description
* Sender ID Qualifier	Coded qualifier of the sender ID as it should appear on the message group header sent to this company or division. Valid value is two standard characters. Optional.
* Sender ID	Coded identifier of the company or division sending the interchange. Valid value is 12 standard characters. This field is mandatory for SCM managed envelopes and Optional for envelopes managed by the application.
* Receiver ID Qualifier	Coded qualifier of the sender ID as it should appear on the message group header received from a company or division. Valid value is two standard characters. Optional.
* Receiver ID	Coded identifier of the company or division receiving the interchange. Valid value is 15 standard characters. Required.
* Interchange Control Version Number	Version number of this control interchange. Valid value is five standard characters. Required.
Use global control number	Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are: <ul style="list-style-type: none"> ◆ Yes, indicates that you want to use a global number and you will be asked to select one that has already been created ◆ Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition ◆ No, indicates that you will be specifying a control number is owned only by this envelope
Specify input file encoding	Whether to specify input file encoding. Valid value is Yes or No (default). Required.
Specify translated document encoding	Coded character encoding specified to translate this message group that includes this header. Valid values are Yes and No (default). Required.

Field	Description
Usage Indicator	Mode of operation mode to use for this envelope. Required. Valid values are: <ul style="list-style-type: none"> ◆ Test ◆ Production (default) ◆ Information ◆ Any Indicator (wildcard)
Perform Control Number Sequence Checking	Whether to compare the sequence of control numbers in the data with the Control Number parameter for this envelope. Valid values are Yes and No (default). Required.
Perform Duplicate Control Number Checking	Whether to determine control number duplications. Valid values are Yes and No (default). Required.
If sequence or duplicate checking, EDI Post Processor should	How the EDI Post Processor should perform sequence and duplicate checking. When multiple interchanges for the same trading partner are processed in parallel, sub-processes for transactions will always be a direct child to the process that did the deenveloping. If the interchange is out of sequence, the post processor re-runs until the time-out is reached. Required. Valid values: <ul style="list-style-type: none"> ◆ Process all interchanges in the EDI Sequence Check Queue (recommended) ◆ Process only the current interchange
Maximum age of Control Number History Records in days	Maximum days to retain a history of control numbers to use for duplication determinations. Valid value is nine standard characters. Optional.
Acceptor Lookup Alias format for generated TA1s	Identifying string used with the sender ID and the receiver ID to look up this envelope with the EDI Encoder service. This alias associates a document with the service it requires. Valid value must be at least one limited standard character. Required.
Retain Enclosing Envelope	Whether to copy the envelope segments (ISA and IEA) into each transaction set extracted from the functional group. Valid values are Yes and No (default). Required.
Primary Name Format	Used to specify what information to include when generating a global control number. Information includes the following: <ul style="list-style-type: none"> ◆ Test Indicator Check Test Indicator if you want to use it in the format. Used when Use global control number is set to Yes (and generate name from the data) .
Global Interchange Control Number	Interchange control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Used when Use global control number is set to Yes .
Local Interchange Control Number	Interchange control reference number used locally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Used when Use global control number is set to No .

Field	Description
Encoding (input file encoding)	Type of character encoding specified for the input file. Valid value is six standard characters. Optional.
Encoding (translated document encoding)	Type of character encoding specified for the translated document. Valid value is six standard characters. Optional.
Generate an acknowledgement	When an acknowledgement must be generated. Required. Valid values are: <ul style="list-style-type: none"> ◆ Always ◆ Only when requested by input (default) ◆ Never
Handling of non-compliant Interchanges	Process to follow when non-compliant interchanges are encountered. Required. Valid values are: <ul style="list-style-type: none"> ◆ Accept ◆ Reject (default)
Business Process for Non-Compliant Documents	Business process to be used when non-compliant documents are encountered. Optional.

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

ASC X12 Inbound GS GE Envelope Properties, Group Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

The following table describes X12 inbound GS GE envelope properties at the group level:

Field	Description
* Functional ID Code	Coded identifier of the functional ID as used in the interchange. Valid value is two standard characters. Required.
* Application Sender's Code	Coded identifier of the application used by the sender. Valid value is 15 standard characters. Required.
* Application Receiver's Code	Coded identifier of the application used by the receiver. Valid value is 15 standard characters. Required.
Use global control number	Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are: <ul style="list-style-type: none"> ◆ Yes, indicates that you want to use a global number and you will be asked to select one that has already been created ◆ Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition ◆ No, indicates that you will be specifying a control number is owned only by this envelope
Global Group Control Number	Group control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to Yes .
Primary Name Format	Used to specify what information to include when generating a Global Number Name. <ul style="list-style-type: none"> ◆ Functional ID Code (selected by default) ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator Only displayed when Use global control number is set to Yes (and generate name from data) .
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Functional ID Code (selected by default) ◆ Version, Release, Industry Identifier Code ◆ Test Indicator

Field	Description
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Functional ID Code ◆ Version, Release, Industry Identifier Code ◆ Test Indicator
Local Group Control Number	Group control reference number used locally. Select a previously defined number to reference. Required. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to No .
* Responsible Agency Code	Agency responsible for relaying the message group on the sending side. Valid value is alphanumeric code with two standard characters. Required.
* Version, Release, Industry Identifier Code	Version, release, and coded identifier of the industry for this interchange. Valid value is 12 standard characters. Required.
Perform Control Number Sequence Checking	Compare the sequence of control numbers in the data with the Control Number parameter for this envelope. Valid values are Yes and No. Required.
Perform Duplicate Control Number Checking	Whether to determine control number duplications. Valid values are Yes and No. Required.
Maximum age of Control Number History Records in days	Maximum days to retain a history of control numbers to use for duplication determinations. Valid value is nine standard characters. Optional.
Retain Enclosing Envelope	Whether to copy the envelope segments (ISA, GS and GE, IEA) into each transaction set extracted from the functional group. Valid values are Yes and No. Required.
Business Process for Non-Compliant Documents	Business process to be used when non-compliant documents are encountered. Required.
Handling of non-compliant Groups	Process to follow when non-compliant groups are encountered. Valid values are: Accept and Reject. Required.
* Generate an acknowledgement when this group is received	Whether to generate an acknowledgement that notifies the sender that the receiver has received an interpretable group transmission. Valid values are Yes and No. Required.
Acknowledgment Format	The format of the acknowledgement to be sent. The valid values are: <ul style="list-style-type: none"> ◆ 997 ◆ 999 Required.

Field	Description
Acknowledgement Detail Level	<p>Level of detail to send acknowledgements. The options are:</p> <ul style="list-style-type: none"> ◆ Group Level only ◆ Transaction Level ◆ Segment Level ◆ Data Element Level <p>If you select Segment level, the segment, transaction, and group levels are acknowledged. Required.</p>
Send acknowledgement immediately	<p>Whether to send the acknowledgement immediately on receipt of the message. Valid values are Yes and No. Required.</p>
Acceptor Lookup Alias for generated 997/999s	<p>Alias for acceptor lookup for generated 997 or 999 acknowledgements. Optional. Valid values are:</p> <ul style="list-style-type: none"> ◆ 99X ◆ 99X_[group version] ◆ 99X_[test indicator] ◆ 99X_[group version]_[test indicator] <p>Note: If you selected an option other than 997 or 999 for the Inbound Acceptor Lookup Alias for generated 997/999s parameter (inbound interchange envelope), the name of the acceptor lookup alias is generated based on values in the inbound interchange. This allows you to have multiple outbound envelopes for acknowledgements that use different versions and test modes to achieve the appropriate outbound response.</p> <p>For example, if you have two ST outbound 997/999 envelopes with the same Sender ID, Receiver ID, and Acceptor Lookup Alias (because there are two different inbound versions (004010 or 004030) of a particular document), and you change the inbound GS envelope Acceptor Lookup Alias for generated 997/999s to reference 99X_[group version] instead of just 997/999. Then, for the outbound 997/999 ST envelope, the acceptor lookup alias must be entered as 99X_004010.</p>

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

ASC X12 Inbound ST SE Envelope Properties, Transaction Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

The following table describes X12 inbound ST SE envelope properties at the transaction level:

Field	Description
* Sender ID	Coded identifier of the company or division sending the interchange. Valid value is 12 standard characters. Required.
* Receiver ID	Coded identifier of the company or division receiving the transaction. Valid value is 12 standard characters. Required.
* Transaction Set ID Code	Coded identifier of transaction set. Optional. Valid value is three standard characters.
Use global control number	Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are: <ul style="list-style-type: none">◆ Yes, indicates that you want to use a global number and you will be asked to select one that has already been created◆ Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition◆ No, indicates that you will be specifying a control number is owned only by this envelope
Global Transaction Set Control Number	Transaction set control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to Yes .
Primary Name Format	Used to specify what information to include when generating a Global Number Name. <ul style="list-style-type: none">◆ Transaction Set ID Code (selected by default)◆ Implementation Convention Reference◆ Version, Release, Industry Identifier Code (selected by default)◆ Test Indicator Only displayed when Use global control number is set to Yes (and generate name from data) .

Field	Description
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator
Local Transaction Set Control Number	Transaction set control reference number used locally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to No .
* Implementation Convention Reference	Identifier of the implementation convention reference. Valid value is up to 35 standard characters. Optional. Note: When this field is present in the data input, it is used to select an appropriate implementation of a given transaction set definition.
Group Version Release ID Code	Release identifier for this version of the group. Valid value is 12 standard characters. Required.
Test Indicator	Mode of operation mode to use for this envelope. Required. Valid values are: <ul style="list-style-type: none"> ◆ Test ◆ Production ◆ Information ◆ Any Indicator (wildcard)
Perform Control Number Sequence Checking	Compare the sequence of control numbers in the data with the Control Number parameter for this envelope. Valid values are Yes and No. Required.
Perform Duplicate Control Number Checking	Whether to determine control number duplications. Valid values are Yes and No. Required.
Maximum age of Control Number History Records in days	Maximum days to retain a history of control numbers to use for duplication determinations. Valid value is nine standard characters. Optional.
Retain Enclosing Envelope	Whether to copy the envelope segments (ISA and IEA) into each transaction set extracted from the functional group. Valid values are Yes and No. Required.
Batch transactions received within a functional group into one output document	Whether to locate all similar transactions from a functional group into one output document. For example, all invoices would be put into one document. Valid values are Yes and No. Required.

Field	Description
Compliance Check Document	Whether to check the transaction set body for compliance. Valid values are Yes and No. Required.
Map Name Mode	<p>Mode in which to specify the map to use to perform a compliance check. Valid values are:</p> <ul style="list-style-type: none"> ◆ Specify ◆ Generate from data <p>Only displayed if Compliance Check Document is set to Yes.</p>
Compliance Check Map Name	Which map to use to perform a compliance check. The map must already be checked in. Select the map. Optional. Only displayed if Map Name Mode is set to Specify .
Primary Name Format	<p>Used to specify what information to include when generating a compliance check Map Name. Information includes the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator <p>Check all that you want to use in the format. Used when Map Name Mode is set to Generate from data.</p>
Backup Name Format	<p>Used to specify what information to include when generating a compliance check Map Name. The Backup Name Formats are used when a valid map can not be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>

Field	Description
Backup Name Format	<p>Used to specify what information to include when generating a compliance check Map Name. The Backup Name Formats are used when a valid map can not be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID ◆ Receiver ID ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated map name exists in the system	Generate an error message if the translator cannot locate the specified map name. Valid values are Yes and No. Required.
Handling of non-compliant Transactions	<p>Process to follow when non-compliant transactions are encountered. Required. Valid values are:</p> <ul style="list-style-type: none"> ◆ Accept compliant and non-compliant transactions ◆ Accept compliant transactions, reject non-compliant transactions
Translate transactions	Generate transactions according to the standard format from data groups in an EDI system and carry out reverse processing. By choosing to translate documents from within the envelope, you can reduce document processing time because you do not need to specify a separate Translation service step in the business process. Required. Valid values are Yes and No.
Validate translation output	Validate translated output (that is, documents sent to trading partners). Valid values are Yes and No. Required.
Perform HIPAA compliance check	Whether HIPAA compliance is required. Valid values are Yes and No. Required.
HIPAA Validation Level	<p>Select the HIPAA validation level from the list. Required. Values are:</p> <ul style="list-style-type: none"> ◆ Level 4 (including level 1, 2, and 3) ◆ Level 5 (including level 1, 2, 3, and 4) ◆ Level 6 (including level 1, 2, 3, 4, and 5)
Determine the Business Process by	<p>Select a business process that should run with extracted X12 inbound ST/SE messages as the primary document. Required. Valid values are:</p> <ul style="list-style-type: none"> ◆ Looking up contract dynamically ◆ Specifying a contract ◆ Specifying a business process ◆ Generating the business process name from the data

Field	Description
Contract List	Select a previously created contract to associate with this envelope. Required. Only displayed if Determine the Business Process by is set to Specifying a contract .
Business Process List	Select a business process to run when this envelope is processed. Required. Only displayed if Determine the Business Process by is set to Specifying a business process .
Primary Name Format	<p>Used to specify what information to include when generating a business process name. Information includes the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator <p>Check all that you want to use in the format. Used when Determine the Business Process by is set to Generating the business process name from the data.</p>
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>

Field	Description
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated business process name exists in the system	<p>Generate an error message if the translator cannot locate the specified business process name. Valid values are Yes and No. Required.</p>
Extraction Options	<p>Required. Valid values are:</p> <ul style="list-style-type: none"> ◆ Determined by a business process ◆ Extract to a file system directory ◆ Extract to a mailbox
Error Business Process Name Mode	<p>Mode in which to specify a business process to run if an error is encountered. Optional. Valid values are:</p> <ul style="list-style-type: none"> ◆ Specify ◆ Generate from data <p>Only displayed if Extraction Options is set to Determined by a business process.</p>
Business Process for Non-Compliant Documents	<p>Business process to be used when non-compliant documents are encountered. Optional. Only displayed when Error Business Process Name Mode is set to Specify.</p>

Field	Description
Primary Name Format	<p>Used to specify what information to include when generating a business process name. Information includes the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator <p>Check all that you want to use in the format. Only displayed when Error Business Process Name Mode is set to Generate from data.</p>
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated business process name exists in the system	<p>Generate an error message if the translator cannot locate the specified business process name. Valid values are Yes and No. Required.</p>

Field	Description
Data Extraction Directory	Directory for data extraction. Optional. Only displayed if Extraction Options is set to Extract to a file system directory .
Data Extraction Filename	Filename for data extraction. Optional. Only displayed if Extraction Options is set to Extract to a file system directory .
Data Extraction Mailbox	Mailbox for data extraction. Required. Only displayed if Extraction Options is set to Extract to a mailbox .
Data Extraction Mailbox Message Name	Mailbox message name for data extraction. Optional. Only displayed if Extraction Options is set to Extract to a mailbox .
For each document	Specified in the Determine Business Process by parameter. Required. Valid values are: <ul style="list-style-type: none"> ◆ Invoke the business process ◆ Set the business process name in the process data
Error Business Process Name Mode	Mode in which to specify a business process to run if an error is encountered. Optional. Valid values are: <ul style="list-style-type: none"> ◆ Specify ◆ Generate from data Only displayed if Extraction Options is set to Determined by a business process .
Business Process for Non-Compliant Documents	Business process to be used when non-compliant documents are encountered. Optional. Only displayed when Error Business Process Name Mode is set to Specify .
Primary Name Format	Used to specify what information to include when generating a business process name. Information includes the following: <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator Check all that you want to use in the format. Only displayed when Error Business Process Name Mode is set to Generate from data .

Field	Description
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Backup Name Format	<p>Used to specify what information to include when generating a business process name. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated business process name exists in the system	Generate an error message if the translator cannot locate the specified business process name. Valid values are Yes and No. Required.

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

ASC X12 Outbound ISA IEA Envelope Properties, Interchange Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

The following table describes X12 outbound ISA IEA envelope properties at the interchange level:

Field	Description
* Authorization Information Qualifier	Coded information qualifier of the authorization level associated with this interchange. Valid value is two standard characters. Required.
* Authorization Information	Coded authorization level associated with this interchange. Valid value is two standard characters. Optional.
* Security Information Qualifier	Coded security qualifier of the authorization level associated with this interchange. Valid value is 10 standard characters. Required.
* Security Information	Coded security level associated with this interchange. Valid value is ten standard characters. Optional.
What values should be used in the Authorization and Security information field when enveloping acknowledgements	Specify which values should be used in the Authorization and Security information field when envelope acknowledgement is performed. Valid values are: <ul style="list-style-type: none"> ◆ None (leave empty) ◆ Values specified in this envelope (default) ◆ Values from the inbound interchange
* Sender ID Qualifier	Coded qualifier of the sender ID as it should appear on the message group header sent to this company or division. Valid value is four standard characters. Required.
* Sender ID	Coded identifier of the company or division sending the interchange. Valid value is 15 standard characters. Optional.
* Receiver ID Qualifier	Coded qualifier of the receiver ID as it should appear on the message group header sent to this company or division. Valid value is two standard characters. Optional.
* Receiver ID	Coded identifier of the company or division receiving the interchange. Valid value is 15 standard characters. Optional.
* Interchange Control Standards Identifier Repetition Separator versions 403 and above	Specify the character used to separate repeated elements. Required.
* Interchange Control Version Number	Version number of this control interchange. Valid value is five standard characters. Required.
Use correlation overrides	Whether to use correlation overrides. Required.

Field	Description
Use global control number	<p>Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are:</p> <ul style="list-style-type: none"> ◆ Yes, indicates that you want to use a global number and you will be asked to select one that has already been created ◆ Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition ◆ No, indicates that you will be specifying a control number is owned only by this envelope
Global Interchange Control Number	<p>Interchange control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to Yes.</p>
Primary Name Format	<p>Used to specify what information to include when generating a control number. Information may include the following:</p> <ul style="list-style-type: none"> ◆ Test Indicator <p>Check all that you want to use in the format. Only displayed when Use global control number is set to Yes (and generate name from data).</p>
Local Interchange Control Number	<p>Interchange control reference number used locally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to No.</p>
* Acknowledgement Requested	<p>Request an acknowledgement that notifies the sender that the receiver has received an interpretable interchange transmission. Valid values are Yes and No. Required.</p>
Usage Indicator	<p>Operation mode to use for this envelope. Valid values are:</p> <ul style="list-style-type: none"> ◆ Test ◆ Production ◆ Information ◆ Any Indicator (wildcard)

Field	Description
Acceptor Lookup Alias	<p>Identifying string used with the sender ID and the receiver ID to look up this envelope with the EDI Encoder service for TA1 processing. This alias associates a document with the service it requires. Valid value must match specified format on inbound ISA envelope. Default is "TA1." Required.</p> <p>Note: If you selected an option other than 997 or 999 for the Inbound Acceptor Lookup Alias for generated 997/999s parameter (inbound interchange envelope), the name of the acceptor lookup alias is generated based on values in the inbound interchange. This allows you to have multiple outbound envelopes for acknowledgements that use different versions and test modes to achieve the appropriate outbound response.</p> <p>For example, if you have two ST outbound 997/999 envelopes with the same Sender ID, Receiver ID, and Acceptor Lookup Alias (because there are two different inbound versions (004010 or 004030) of a particular document), and you change the inbound GS envelope Acceptor Lookup Alias for generated 997/999s to reference 99X_[group version] instead of just 997 or 999. Then, for the outbound 997/999 ST envelope, the acceptor lookup alias must be entered as 99X_004010.</p>
* Acknowledgement overdue after (hours)	<p>Amount of time, in hours, within which you must receive an acknowledgement. Valid value is four numeric characters. Optional. Only displayed if Acknowledgement Requested is set to Yes.</p>
* Acknowledgement overdue after (minutes)	<p>Amount of time, in minutes, within which you must receive an acknowledgement. Valid value is four numeric characters. Optional. Only displayed if Acknowledgement Requested is set to Yes.</p>
Maximum number of documents per interchange	<p>Specify the Maximum number of documents per interchange. If you do not specify a value or if you specify zero, the system will not check for maximum documents per interchange. If you specify a value greater than zero, only that number of documents (or less) will be included in an interchange. This parameter can work in conjunction with the Limit Interchange Size parameter to limit the number of documents per interchange and also limit the size of the interchange. This may result in less than the maximum number of documents depending upon the size limit you impose.</p> <p>Note: You can also specify the maximum number of documents per interchange globally without having to change all existing envelope definitions by modifying the enveloping.EDIFACT.MaxDocsPerInterchange property in the enveloping.properties file by uncommenting this line (by removing the #) and then specifying a value greater than zero. See the Property Files documentation for more information on changing properties. Note that anything specified in the envelope definition will override the global value specified in the enveloping.properties file. Additionally, any correlation overrides will override the value specified in the envelope definition and the enveloping.properties file.</p> <p>Optional.</p>

Field	Description
Limit Interchange Size	<p>Maximum size allowed for an interchange before a single interchange is split into multiple interchanges that are each under the maximum size limitation.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> ◆ No ◆ Use smallest transaction limit (default) <p>Note: The Use smallest transaction limit setting is specific to the limitation imposed by the standard.</p> <ul style="list-style-type: none"> ◆ Specify size limit ◆ Use global default in enveloping.properties <p>Required.</p> <p>Note: If you select Use transaction set default in enveloping.properties, you need to specify the size limit directly (in the Maximum Interchange Size parameter) or by setting properties in the enveloping.properties property file, which contains a property for each supported standard and more specific properties for each message type (for example, 810 and 850 for the ASC X12 standard) that can override the standard property.</p>
Invoke Business Process for Each Interchange	<p>Whether a business process is invoked for each interchange generated. Valid values are Yes and No (default). Required.</p> <p>Note: If Invoke Business Process for Each Interchange is set to No, the service places the name of the business process specified in the envelope into process data using the key WFD_NAME. This business process is then invoked by the Invoke Business Process Service. If Invoke Business Process For Each Interchange is set to Yes, the service directly bootstraps an instance of the business process specified in the envelope, and does not set WFD_NAME in process data.</p>
Maximum Interchange Size	<p>Specify the maximum size of each individual interchange. Required.</p> <p>Note: Only displayed if you selected Specify size limit for the Limit Interchange Size parameter. If you choose to specify a maximum value, the value you specify is checked to make sure it is at least 249 bytes based on the header and trailer size for X12 standard.</p> <p>Note: For performance reasons, the size is estimated for some components of the interchange (for example, control numbers) when determining the size. For this reason, the actual enforced size limit is slightly smaller than the value you specify.</p>
Data Element Separator	EDI delimiter to use to separate elements. Required.
Segment Terminator	EDI delimiter to use to indicate the end of segments. Required.
Component Element Separator	EDI delimiter to use to separate components. Required.
Release Character	Character to use to release an EDI delimiter. Required.
Stream Segments	Whether to stream segments or insert an end-of-line character after each segment record. Valid values are Yes (stream segments—do not insert the end-of-line character after each segment record) and No (default—insert the end-of-line character after each segment record). Required.

Field	Description
Encode Document	Whether to specify character encoding for the document. Required. Valid values are Yes and No.
Encoding	Type of character encoding specified for the message group that includes this header. Valid value is six standard characters. Optional. Only displayed if Encode Document is set to Yes .
Determine the Business Process by	Select a business process that should run with extracted X12 outbound ISA/IEA messages as the primary document. Required. Valid values are: <ul style="list-style-type: none"> ◆ Looking up contract dynamically ◆ Specifying a contract ◆ Specifying a business process ◆ Generating the business process name from the data
Business Process List	Select a business process to run when this envelope is processed. Optional. Only displayed when Determine the Business Process by is set to Specifying a business process .
Contract List	Select a previously created contract to associate with this envelope. Optional. Only displayed when Determine the Business Process by is set to Specifying a contract
Primary Name Format	Used to specify what information to include when generating a business process. Information includes the following: <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID Code Qualifier (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator Check all that you want to use in the format. Only displayed when Determine the Business Process by is set to Generating the business process name from the data .

Field	Description
Backup Name Format	<p>Used to specify what information to include when generating a business process. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID Code Qualifier (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Backup Name Format	<p>Used to specify what information to include when generating a business process. The Backup Name Formats are used when a valid business process cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID Code Qualifier ◆ Receiver ID ◆ Transaction Set ID Code ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated business process name exists in the system	Whether to generate an error if the specified business process name does not exist in the system. Valid values are Yes (default) and No. Required.
Extraction Options	<p>The extraction options to use. Required. Valid values are:</p> <ul style="list-style-type: none"> ◆ Determined by a business process ◆ Extract to a file system directory ◆ Extract to a mailbox
Data Extraction Directory	Directory for data extraction. Optional. Only displayed when Extraction Options is set to Extract to a file system directory .

Field	Description
Data Extraction Filename	Filename for data extraction. Optional. Only displayed when Extraction Options is set to Extract to a file system directory .
Data Extraction Mailbox	Mailbox for data extraction. Optional. Only displayed when Extraction Options is set to Extract to a mailbox .
Data Extraction Mailbox Message Name	Mailbox message name for data extraction. Optional. Only displayed when Extraction Options is set to Extract to a mailbox .

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

ASC X12 Outbound GS GE Envelope Properties, Group Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

GS/GE outbound envelopes use pointers to select next envelope. If the envelopes are not exported/imported as a set, the pointers may fail. Pointer names include a reference to the server on which the envelope was created. Therefore, if Envelope set (ST, GS, ISA) is created on **machine1** and then exported and imported into **machine2**, the pointer names (Envelope ID) reference **machine1**. If the envelope set is deleted and recreated on **machine2** using the same Sender ID and Receiver ID, and so forth, the pointer name (Envelope ID) of these envelopes now reference **machine2**. If just one envelope, for example the GS envelope, is then imported back to **machine2**, it will be added as a version of the original envelope under the original Envelope ID, but the pointer to the next envelope to use now points to an envelope ID that does not exist on **machine1**.

The following table describes X12 outbound GS GE envelope properties at the group level:

Field	Description
Next Envelope	Envelope to apply after this envelope. Optional.
Create Next Envelope	Allows you to create the GS envelope to be used as the next envelope in the set. Optional.
* Functional ID Code	Coded identifier of the functional ID as used in the interchange. Valid value is two standard characters. Required.
* Application Sender's Code	Coded identifier of the application used by the sender. Valid value is 15 standard characters. Required.
* Application Receiver's Code	Coded identifier of the application used by the receiver. Valid value is 15 standard characters. Required.
Use Correlation Overrides	Whether to use correlation overrides. Required. Valid values are: <ul style="list-style-type: none">◆ Never◆ Only when the envelope field has a wildcard value (*)◆ Always◆ Use the default specified in enveloping.properties
Use global control number	Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are: <ul style="list-style-type: none">◆ Yes, indicates that you want to use a global number and you will be asked to select one that has already been created◆ Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition◆ No, indicates that you will be specifying a control number is owned only by this envelope

Field	Description
Global Group Control Number	Group control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to Yes .
Primary Name Format	Used to specify what information to include when generating a Global Number Name. <ul style="list-style-type: none"> ◆ Functional ID Code (selected by default) ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator Only displayed when Use global control number is set to Yes (and generate name from data) .
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Functional ID Code (selected by default) ◆ Version, Release, Industry Identifier Code ◆ Test Indicator
Backup Name Format	Used to specify what information to include when generating a Global Number Name. The Backup Name Formats are used when a valid name can not be determined from the Primary Name Format. <ul style="list-style-type: none"> ◆ Functional ID Code ◆ Version, Release, Industry Identifier Code ◆ Test Indicator
Local Group Control Number	Group control reference number used locally. Select a previously defined number to reference. Required. Valid value is nine standard characters. Required. Only displayed when Use global control number is set to No .
* Responsible Agency Code	Agency responsible for relaying the message group on the sending side. Valid value is alphanumeric code with two standard characters. Required.
* Version, Release, Industry Identifier Code	Combination of the version and release number and code identifier of the industry of this control interchange. Valid value is 12 standard characters. Required.
Expect an acknowledgement for this functional group	Whether you expect an acknowledgement that notifies the receiver has received an interpretable functional group. Valid values are Yes (default) and No. Required.
Acknowledgment Format	The format of the acknowledgement to be received. The valid values are: <ul style="list-style-type: none"> ◆ 997 ◆ 999 ◆ 997 or 999 Required.
* Acknowledgement overdue after (hours)	Amount of time, in hours, within which you must receive an acknowledgement. Valid value is four numeric characters. Optional.

Field	Description
* Acknowledgement overdue after (minutes)	Amount of time, in minutes, within which you must receive an acknowledgement. Valid value is four numeric characters. Optional.

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

ASC X12 Outbound ST SE Envelope Properties, Transaction Level

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (the wildcard value is an (*) asterisk). For Inbound envelopes, a wildcard value in the envelope matches any value in the input document, while an empty value in the envelope matches only an empty value in the input document. For Outbound envelopes, a wildcard value is equivalent to an empty value in the envelope.

ST SE outbound envelopes use pointers to select next envelope. If the envelopes are not exported/imported as a set, the pointers may fail. Pointer names include a reference to the server on which the envelope was created. Therefore, if Envelope set (ST, GS, ISA) is created on **machine1** and then exported and imported into **machine2**, the pointer names (Envelope ID) reference **machine1**. If the envelope set is deleted and recreated on **machine2** using the same Sender ID and Receiver ID, and so forth, the pointer name (Envelope ID) of these envelopes now reference **machine2**. If just one envelope, for example the GS envelope, is then imported back to **machine2**, it will be added as a version of the original envelope under the original Envelope ID, but the pointer to the next envelope to use now points to an envelope ID that does not exist on **machine1**.

The following table describes X12 outbound ST SE envelope properties at the transaction level:

Field	Description
Next Envelope	Envelope to apply after this envelope. Optional.
Create Next Envelope	Allows you to create the GS envelope to be used as the next envelope in the set. Optional.
Use Correlation Overrides	Whether to use correlation overrides. Required. <ul style="list-style-type: none">◆ Never - Do not ever use correlation overrides for an enveloped document◆ Only when the envelope field has a wildcard value (*) - Use correlation overrides if the document that is enveloped has outbound envelope correlations set (in this scenario, the correlation overrides are only used for fields for which the envelope definition is defined as a wildcard (**))◆ Always - Use correlation overrides if a document that is enveloped has outbound envelope correlations set, regardless of the value configured in the envelope definition.◆ Use the default specified in enveloping.properties - If the enveloped document has outbound envelope correlations configured, use the value set in enveloping.properties.
Sender ID Qualifier	Qualifier used in envelope lookup by EDI Encoder. Optional.
Sender ID	Coded identifier of the company or division sending the transaction. Valid value is 15 standard characters. Required.
Receiver ID Qualifier	Qualifier used in envelope lookup by EDI Encoder. Optional.
Receiver ID	Coded identifier of the company or division receiving the transaction. Valid value is 15 standard characters. Required.

Field	Description
* Transaction Set ID Code	Code identifier of the transaction set. Valid value is three standard characters. Required.
Control number handling	Specify how to handle control numbers. Required. Valid values are: <ul style="list-style-type: none"> ◆ Global (default) ◆ Global (and generate name from data) ◆ Local ◆ Always start at 1
* Implementation Convention Reference (versions 4012 and above):	Identifier of the implementation convention reference. Valid value is up to 35 standard characters. Optional. Note: When this field is present in the data input, it is used to select an appropriate implementation of a given transaction set definition.
Accepter Lookup Alias	Identifying string used with the sender ID and the receiver ID to look up this envelope with the EDI Encoder service. This alias associates a document with the service it requires. Valid value must be at least one limited standard character. Required. Note: For 997 or 999 documents, the ALA format must be entered in the format as defined by the Inbound GS/GE envelope. For example, if an inbound 004030 document is received and the Accepter Lookup Alias for generated 997/999s is set to use 99X_[group version] format, then the ALA must be entered as 99X_004030.
Perform HIPAA Compliance Check	Is Level 4 compliance required. Required. Valid values are Yes or No (default).
Limit Interchange Size	Maximum size allowed for an interchange before a single interchange is split into multiple interchanges that are each under the maximum size limitation. Valid values are: <ul style="list-style-type: none"> ◆ No ◆ Specify size limit ◆ Use transaction set default in enveloping.properties (default) Required. Note: If you select Use transaction set default in enveloping.properties , you need to specify the size limit directly (in the Maximum Interchange Size parameter) or by setting properties in the enveloping.properties property file, which contains a property for each supported standard and more specific properties for each message type (for example, 810 and 850 for the ASC X12 standard) that can override the standard property.
Global Transaction Set Control Number	Transaction set control reference used globally. Select a previously defined global transaction set control reference. Valid value is nine standard characters. Required. Only displayed when Control number handling is set to Global .

Field	Description
Primary Name Format	<p>Used to specify what information to include when generating a control number. Information includes the following:</p> <ul style="list-style-type: none"> ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator <p>Check all that you want to use in the format. Used when Control number handling is set to Global (and generate name from data).</p>
Backup Name Format	<p>Used to specify what information to include when generating control number information. The Backup Name Formats are used when a valid control number cannot be determined from the Primary Name Format. Information includes the following:</p> <ul style="list-style-type: none"> ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format. Used when Control number handling is set to Global (and generate name from data).</p>
Backup Name Format	<p>Used to specify what information to include when generating control number information. The Backup Name Formats are used when a valid control number cannot be determined from the Primary Name Format. Information includes the following:</p> <ul style="list-style-type: none"> ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format. Used when Control number handling is set to Global (and generate name from data).</p>
Local Transaction Set Control Number	<p>Transaction set reference used locally. Select a previously defined global transaction set control reference. Valid value is nine standard characters. Required. Only displayed when Control number handling is set to Local.</p>
HIPAA Validation Level	<p>Select the HIPAA validation level from the list. Required. Values are:</p> <ul style="list-style-type: none"> ◆ Level 4 (including level 1, 2, and 3) ◆ Level 5 (including level 1, 2, 3, and 4) ◆ Level 6 (including level 1, 2, 3, 4, and 5)

Field	Description
Maximum Interchange Size (bytes)	<p>Specify the maximum size of each individual interchange. Required.</p> <p>Note: Only displayed if you selected Specify size limit for the Limit Interchange Size parameter. If you choose to specify a maximum value, the value you specify is checked to make sure it is at least 249 bytes based on the header and trailer size for X12 standard.</p> <p>Note: For performance reasons, the size is estimated for some components of the interchange (for example, control numbers) when determining the size. For this reason, the actual enforced size limit is slightly smaller than the value you specify.</p>
Map Name Mode	<p>Mode in which to specify the map to use to perform a compliance check. Required. Valid values are:</p> <ul style="list-style-type: none"> ◆ Specify ◆ Generate from data
Map Name	<p>Select the map to be used to perform a compliance check. The map must already be checked in. Optional.</p>
Primary Name Format	<p>Used to specify what information to include when generating a map name. Information includes the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID Code Qualifier (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code (selected by default) ◆ Test Indicator <p>Check all that you want to use in the format. Only displayed when Map Name Mode is set to Generate from data.</p>

Field	Description
Backup Name Format	<p>Used to specify what information to include when generating a map name. The Backup Name Formats are used when a valid map name cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier (selected by default) ◆ Sender ID (selected by default) ◆ Receiver ID Code Qualifier (selected by default) ◆ Receiver ID (selected by default) ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Backup Name Format	<p>Used to specify what information to include when generating a map name. The Backup Name Formats are used when a valid map name cannot be determined from the Primary Name Format. Information may include some or all of the following:</p> <ul style="list-style-type: none"> ◆ EDI Standard (selected by default) ◆ Sender ID Code Qualifier ◆ Sender ID ◆ Receiver ID Code Qualifier ◆ Receiver ID ◆ Transaction Set ID Code (selected by default) ◆ Implementation Convention Reference ◆ Version, Release, Industry Identifier Code ◆ Test Indicator <p>Check all that you want to use in the format.</p>
Generate an error if no generated map name exists in the system	Whether to generate an error if the specified map name does not exist in the system. Valid values are Yes (default) and No. Required.
Validate translation input	Whether to validate the translation input. Valid values are Yes or No. Required.
Validate translation output	Whether to validate the translation output. Valid values are Yes or No. Required.

In the Confirm page, verify your configuration and click **Finish** to save the envelope settings.

Creating ASC X12 Maps

Overview

The Map Editor enables you to map ASC X12 documents, and generates a file layout for you using the components and message types that you select. The Map Editor-generated ASC X12 map consists of groups, records, composites, and fields that are comparable to parameters that are defined by ASC X12.

Note: You need to download the Map Editor component to use it.

Map Editor allows you to modify the map components by using the Deactivate, Promote, Split, Copy, Cut, and Paste functions.

You can create a map for all ASC X12 Standards Release messages loaded into the standards database through the Map Editor.

ASC X12 Components in the Map Editor

The following table lists the components that make up the ASC X12 layout in the Map Editor, the icons that represent the components, and descriptions of the components. For information about adding a map component to a layout, see *Map Editor Basics*.

Component	Icon	Description
ASC X12 root element		The <i>ASC X12 root element</i> represents the message that the application is mapping. At the ASC X12 file root element, you define the message type and encoding. It is a group and can contain groups and records.
Group		<p>A <i>group</i> is a looping structure that contains a sequence or an implicit group of repeating field tags (in Map Editor a group is related segments and groups that repeat in sequence until either the group data ends, or the maximum number of times that the loop is permitted to repeat is exhausted).</p> <p>A group that is subordinate to another group is a subgroup (and corresponds to a nested looping structure, a loop within a loop).</p> <p>When a group contains an extended rule or a standard rule, an asterisk appears to the right of the group icon.</p>

Component	Icon	Description
Segment		<p>An ASC X12 <i>segment</i> contains a field tag (in Map Editor, an ASC X12 segment is a group of related elements or composite data elements that combine to communicate useful data). An ASC X12 segment can occur once or can repeat multiple times.</p> <p>Note: If an ASC X12 segment occurs more than once in a map, it is identified by its name <ID>. The second and subsequent occurrences are identified by <ID>:<i>n</i>, where <i>n</i> is the number of the occurrence in the map.</p>
Element		<p>An <i>element</i> is a field or a group of ASC X12 components (the smallest piece of information defined by the standard) that define an ASC X12 element. An element can have different meanings depending on the context. In other data formats in the Map Editor, an element is not considered to have useful meaning except in the larger context of the segment that contains it. However, elements used in the Map Editor to represent ASC X12 fields and components contain useful and discrete information.</p> <p>Note: If an element occurs more than once in a map it is identified by its name <ID>. The second and subsequent occurrences are identified by <ID>:<i>n</i>, where <i>n</i> is the number of the occurrence in the map.</p> <p>A <i>repeating element</i> is an element with the ability to loop (occur more than once) within a particular ASC X12 segment. To enable a single element to repeat multiple times within an ASC X12 element, the occurrence of the element must be separated by a start and end delimiter. The use of start and end delimiters help the translator determine where elements and components are defined within a field tag.</p> <p>When a field has a link performed against it, a red check mark appears over the element icon.</p> <p>When a field contains an extended rule or a standard rule, an asterisk appears to the right of the element icon.</p>

Using Transaction XREF with ASC X12

If you need the ability to cross-reference the application data to generated transaction, perform the following:

1. The Map Editor uses the **TransactionCrossReferenceTable**, with possible values SenderID, ReceiverID, MessageType, Identifier.
2. The translator populates these values during translation.
3. After each round of translation completes, the EDI Enveloping service can query for the values. When it performs the enveloping, it will locate the standard-specific values for the same four parameters.
4. Based on these two sets of values for identifiers (application specific and standard specific), the EDI Enveloping service populates a TransactionCrossReferenceTable
5. You can build a custom application that queries this table to uniquely link an application file and generate an ASC X12 transaction.

Creating an ASC X12 Map

When you create a new map, you can either manually create an EDI layout or you can use a wizard that creates a layout for you based on an EDI standard. The wizard saves you time and effort and minimizes the risk of having an invalid standard format.

Note: If the map you are creating contains greater than 20,000 objects, you will receive a message noting that this map contains a very large number of objects. For best performance, it is recommended that you consider whether any unnecessary objects in the map can be removed, do not expand the entire object tree—expand only the section of the tree you are currently mapping, consider using the **Show links to or from the currently selected element** option instead of the **Show links to or from all visible elements** option, and save the map using the .MAP file format (using the Save As function).

To create an ASC X12 map:

1. From the Map Editor **File** menu, select **New**.
2. In the **New Map Wizard**, complete the questions in the first window and click **Next**.

Note: Be sure that **Sterling Integrator** is selected in the **What kind of map are you creating** list.

3. If you are translating from ASC X12, in the Input Format window select the **Create a New Data Format Using this Syntax** option.
4. Then, select **Delimited EDI** and click **Customize**. If you are translating from another format, select that format and continue to the next page of the wizard.
5. If you want to use a HIPAA transaction, select the **HIPAA transaction** check box and click **Next**. Otherwise, just click **Next**.
6. If you want to import code lists from the database, select the **Import code list** check box and click **Next**. Otherwise, just click **Next**.

Note: If you select the **Import code list** check box, a Use Code standard rule is created on fields for which the element name matches a code list table name.

7. Select the ODBC data source that contains the EDI standards database (the default is **Sterling Integrator Standards**) and click **Next**.
8. Select the standards agency (**[X] X12** for ASC X12), the version of the standard, and the transaction set you want to use and click **Next**.
9. Click **Finish** to load the transaction set.
10. Click **Next** to select the Output Format.
11. If you are translating to ASC X12, in the Output Format window (select the **Create a New Data Format Using this Syntax** option).
12. Then, select **Delimited EDI** and click **Customize**. If you are translating from another format, select that format and continue to the next page of the wizard.
13. If you want to use a HIPAA transaction, select the **HIPAA transaction** check box and click **Next**. Otherwise, just click **Next**.
14. If you want to import code lists from the database, select the **Import code list** check box and click **Next**. Otherwise, just click **Next**.

Note: If you select the **Import code list** check box, a Use Code standard rule is created on fields for which the element name matches a code list table name.

15. Select the ODBC data source that contains the EDI standards database (the default is **Sterling Integrator Standards**) and click **Next**.

16. Select the standards agency (**[X] X12** for ASC X12), the version of the standard, and the transaction set you want to use and click **Next**.

17. Click **Finish** to load the transaction set. The Map Editor displays the new map in the Map Editor window.

18. In the Map Editor, select **File > Save** to save the map. Do not use spaces or apostrophes in the map name.

Note: To compile the map, select **File > Compile**. A progress dialog box displays and updates during the compilation process. If the map contains a large number of objects, you may be prompted that you should save the map in .MAP format.

19. To save a map as a .map file, select **File > Save As** and then select **Source Maps (*.map)** from the Save as type list.

Note: Prior to opening an .xml (XML-formatted) file, the Map Editor verifies that you have the Microsoft XML Core Services (MSXML) 4.0 installed on the same computer as Map Editor. If you do not have the Microsoft XML Core Services (MSXML) 4.0 installed, the Map Editor cannot save or load .xml source files.

Searching for ASC X12 Correlations

Correlation data, often called correlations, is defined as specific pieces of data that you may need to review in the process of monitoring, tracking, and troubleshooting your activities. These data items are defined by type and value. These type-value pairs are known as name-value pairs, and are a powerful tool you can use to record and search for business process- and document-specific data. The application has some predefined correlations and enables you to define more so that you can easily and efficiently monitor and track your activities, such as ASC X12 message flow.

To search for ASC X12 correlations:

1. From the **Administration** menu, select **Business Process > Advanced Search > EDI Correlation**.
2. In the Search Option area, specify any combination of the following search criteria, as appropriate. To search for ASC X12 messages, in the **Interchange Level Options Standard** box, type **ASC X12**.
3. Click **Go!** to display the EDI correlation records that match your search criteria.
4. In the EDI Correlation Interchange Results page, click  **info** in the Detail column for the AS2 interchange for which you want to view details.
5. In the EDI Correlation Interchange/Group/Transaction Detail Results page, click  **info** to the right of Document Correlations for additional information about the ASC X12 messages.

ASC X12 Reporting

The EDI Translation Detail report enables you to access EDI data (for a particular standard like ASC X12) for a specified time period. It further allows you to organize the report by selecting criteria such as direction of the transmission, sender and receiver identifier, envelope name, unique identifier for the envelope level, EDI standard used, and translation success or failure, among other parameters. This report allows you to quickly and easily access information about EDI translation through the system.

To run a report containing details on inbound/outbound ASC X12 messages:

1. From the **Operations** menu, select **Reports**.
2. Use the Report Configuration wizard to create a new **EDI Transaction Detail** report.
3. On the **Detail Filtering** page in the **Standard** parameter, clear the checkboxes for all standards *except* **ASC X12**.
4. Filter by any other desired criteria and click **Finish** at the end of the Report Configuration Wizard to generate the report.