

Sterling Standards Library



# Using ASC X12

*Version 8.0*



Sterling Standards Library



# Using ASC X12

*Version 8.0*

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 63.

**Copyright**

This edition applies to Version 8.0.0 of the IBM Sterling Standards Library and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2000, 2011.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

## Chapter 1. Using ASC X12 with the Sterling B2B Integrator . . . . . 1

Use ASC X12 with Sterling B2B Integrator . . . . . 3

## Chapter 2. ASC X12 Business Processes 5

X12Develope Business Process. . . . . 5

Before Using X12Develope . . . . . 12

X12Envelope Business Process . . . . . 12

Before Using the X12Envelope Business Process . . . 15

## Chapter 3. ASC X12 Enveloping

### Overview . . . . . 17

Create an ASC X12 Envelope . . . . . 19

Update An ASC X12 Envelope . . . . . 19

Delete an ASC X12 Envelope . . . . . 20

## Chapter 4. ASC X12 Inbound ISA IEA Envelope Properties, Interchange Level 21

## Chapter 5. ASC X12 Inbound GS GE Envelope Properties, Group Level . . . 25

## Chapter 6. ASC X12 Inbound ST SE Envelope Properties, Transaction Level 29

## Chapter 7. ASC X12 Outbound ISA IEA Envelope Properties, Interchange Level 37

## Chapter 8. ASC X12 Outbound GS GE Envelope Properties, Group Level . . . 45

## Chapter 9. ASC X12 Outbound ST SE Envelope Properties, Transaction Level 49

## Chapter 10. Creating ASC X12 Maps . . 55

ASC X12 Components in the Sterling B2B Integrator

Map Editor . . . . . 55

Using Transaction XREF with ASC X12 . . . . . 56

Create an ASC X12 Map . . . . . 57

## Chapter 11. Search for ASC X12 Correlations . . . . . 59

## Chapter 12. Generate an ASC X12 Report . . . . . 61

## Notices . . . . . 63



---

## Chapter 1. Using ASC X12 with the Sterling B2B Integrator

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 Sterling B2B Integrator supports ASC X12:

Functionality	Details	Action You Need to Take to Implement ASC X12
Services	<ul style="list-style-type: none"><li>• EDI Enveloping service translates messages, determines which business processes need to run to apply EDI envelopes, and starts those business processes.</li><li>• EDI Deenveloping service removes the envelopes from inbound messages.</li></ul>	Configure the EDI Enveloping service in Sterling B2B Integrator Graphic Process Modeler (GPM). <b>Note:</b> 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.
Envelopes	<ul style="list-style-type: none"><li>• Inbound ASC X12 envelope wizards to implement inbound ASC X12.</li><li>• Outbound ASC X12 envelope wizards to implement outbound ASC X12.</li></ul>	<ul style="list-style-type: none"><li>• Create the appropriate ASC X12 envelopes for the ASC X12 messages you are sending and receiving.</li></ul>

Functionality	Details	Action You Need to Take to Implement ASC X12
Predefined business processes	<ul style="list-style-type: none"> <li>• 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. With additional configuration, X12Deenvelope can also reconcile TA1, 997, and 999 reports and generate the interchange TA1 and functional group 997 and 999 acknowledgments.</li> <li>• 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.</li> </ul>	Configure the predefined business processes as necessary.
IBM® Sterling B2B Integrator Map Editor	<ul style="list-style-type: none"> <li>• Sterling B2B Integrator 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.</li> <li>• Properties dialog boxes that enable you to define and modify EDI map components for ASC X12.</li> <li>• 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.</li> <li>• Additional mapping operations as needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Download Sterling B2B Integrator Map Editor.</li> <li>• Create a map or maps to translate your ASC X12 messages.</li> </ul>
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 for Using ASC X12

The audience using this software should be familiar with Sterling B2B Integrator and the ASC X12 standard.

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

---

## Use ASC X12 with Sterling B2B Integrator

### About this task

To use ASC X12 with Sterling B2B Integrator, you must complete the following tasks:

### Procedure

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.



---

## Chapter 2. ASC X12 Business Processes

To help you accomplish your business goals, Sterling B2B Integrator provides two predefined enveloping business processes that are used by Sterling B2B Integrator 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**

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.

With additional configuration, X12Deenvelope can also reconcile TA1, 997, and 999 reports and generate the interchange TA1 and functional group 997 and 999 acknowledgments.

#### **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, Sterling B2B Integrator generates an EDI Compliance Report.

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

<b>Parameter</b>	<b>Default</b>	<b>Description</b>
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 Sterling B2B Integrator.

Parameter	Default	Description
Set onfault processing	False	Onfault processing allows the process to immediately execute Sterling B2B Integrator 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	Sterling B2B Integrator 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.
Use BP Queuing (recommended)	True	Enables business processes to execute in a sequence, to queue business processes such that one executes after one business process ends.
Enable Transaction	False	Select this option to instruct Sterling B2B Integrator 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	You can optionally enter a 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 Sterling B2B Integrator to retain data.
Set the Event Reporting Level to	None	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.

Parameter	Default	Description
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 Sterling B2B Integrator
Deadline Settings	Do not set deadline <b>Note:</b> 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"> <li>• First Notification: Hours and Minutes – Whether to receive notification before a business process deadline.</li> <li>• Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.</li> </ul>
Life Span	System Default  Life Span Days — 2  Life Span Hours — 0  Life Span Type — System Level  Removal Method — Archive	The length of time, in days and hours, to retain the data in Sterling B2B Integrator, 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. Also, you can select if you want Sterling B2B Integrator to archive or purge a business process after its life span is over.

The following BPML code makes up the X12 deenvolving 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>

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

```

```

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

```



```

        <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(@SCIObjID))]" />
                <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. Sterling B2B Integrator generates an EDI Compliance Report that describes the reason that the X12Deenvelope business process could not locate the envelope.

---

## Before Using X12Deenvelope

### About this task

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

### Procedure

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 Sterling B2B Integrator.
- 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 process 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 Sterling B2B Integrator.
Set onfault processing	False	Onfault processing allows the process to immediately execute Sterling B2B Integrator 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	Sterling B2B Integrator 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.
Use BP Queuing (recommended)	True	Enables business processes to execute in a sequence, to queue business processes such that one executes after one business process ends.
Enable Transaction	False	Select this option to instruct Sterling B2B Integrator 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	You can optionally enter a 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 Sterling B2B Integrator to retain data.
Set the Event Reporting Level to	None	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.

Parameter	Default	Description
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 Sterling B2B Integrator
Deadline Settings	Do not set deadline <b>Note:</b> 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"> <li>• First Notification: Hours and Minutes – Whether to receive notification before a business process deadline.</li> <li>• Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.</li> </ul>
Life Span	System Default	The length of time, in days and hours, to retain the data in Sterling B2B Integrator, along with the life span type and removal method. If you select <b>Process Specific</b> , then you can select the number of days and hours for the life span. Also, you can select if you want Sterling B2B Integrator to archive or purge a business process after its life span is over.

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>
  </sequence>
</process>
```

```

<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>
<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

### About this task

Before you use the X12Deenvelope business process, complete the following task:

### Procedure

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



---

## Chapter 3. 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.

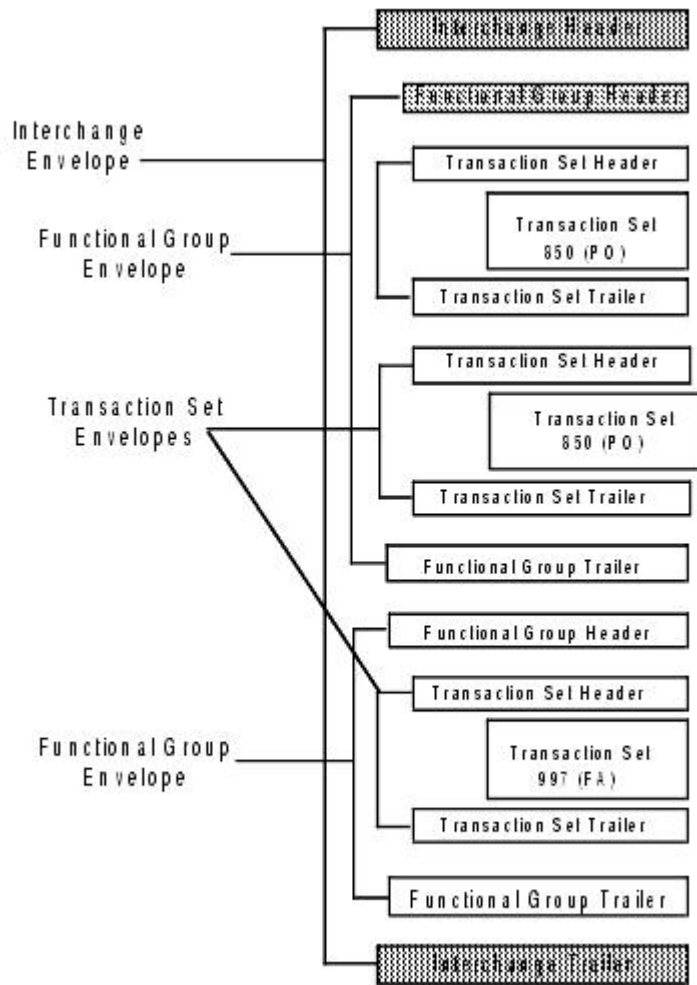
**Note:** You can change the default lifespan by editing the `document.lifespan` property in the `enveloping.properties` file. The document lifespan of the outbound document is automatically reset to zero after the acknowledgement for the document is received or if the user manually accepts the acknowledgement.

### Envelope Structure

Sterling B2B Integrator 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

Sterling B2B Integrator 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 Sterling B2B Integrator 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 Sterling B2B Integrator. 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 Sterling B2B Integrator 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.

---

## Create an ASC X12 Envelope

### About this task

To create a new envelope using the Sterling B2B Integrator:

### Procedure

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.

---

## Update An ASC X12 Envelope

### About this task

Sterling B2B Integrator enables you to modify any information in your envelopes, except the name of the envelope.

To update envelope properties:

### Procedure

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.

---

## Delete an ASC X12 Envelope

### About this task

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

### Procedure

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!**.

---

## Chapter 4. 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
-------	-------------

* <b>Sender ID Qualifier</b>	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.
------------------------------	--

* <b>Sender ID</b>	Coded identifier of the company or division sending the interchange. Valid value is 12 standard characters. Optional.
--------------------	---

* <b>Sender Organization</b>	The sender organization. Valid value is 15 standard characters. Optional.
------------------------------	---

* <b>Receiver ID Qualifier</b>	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.
--------------------------------	---

* <b>Receiver ID</b>	Coded identifier of the company or division receiving the interchange. Valid value is 15 standard characters. Required.
----------------------	---

* <b>Receiver Organization</b>	The receiver organization. Valid value is 15 standard characters. Optional.
--------------------------------	---

* <b>Interchange Control Version Number</b>	Version number of this control interchange. Valid value is five standard characters. Required.
---	--

<b>Use global control number</b>	Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are:
----------------------------------	---

- 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

<b>Specify input file encoding</b>	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.

**Usage Indicator**

Mode of operation mode to use for this envelope. Required.

Valid values are:

- 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:

- 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:

- 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**.

**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:

- 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:

- 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.



---

## Chapter 5. 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
-------	-------------

<b>* Functional ID Code</b>	
-----------------------------	--

	Coded identifier of the functional ID as used in the interchange. Valid value is two standard characters. Required.
--	---

<b>* Application Sender's Code</b>	
------------------------------------	--

	Coded identifier of Sterling B2B Integrator used by the sender. Valid value is 15 standard characters. Required.
--	--

<b>Sender Organization</b>	
----------------------------	--

	The receiver organization. Optional.
--	--------------------------------------

<b>* Application Receiver's Code</b>	
--------------------------------------	--

	Coded identifier of the Sterling B2B Integrator used by the receiver. Valid value is 15 standard characters. Required.
--	--

<b>Receiver Organization</b>	
------------------------------	--

	The receiver organization. Optional.
--	--------------------------------------

<b>Use global control number</b>	
----------------------------------	--

	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"><li>• Yes, indicates that you want to use a global number and you will be asked to select one that has already been created</li><li>• Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition</li><li>• No, indicates that you will be specifying a control number is owned only by this envelope</li></ul> |
|--|--|

<b>Global Group Control Number</b>	
------------------------------------	--

	Group control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required.
--	---

<b>Primary Name Format</b>	
----------------------------	--

	Used to specify what information to include when generating a Global Number Name.
--	---

- |  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>• Functional ID Code (selected by default)</li><li>• Version, Release, Industry Identifier Code (selected by default)</li><li>• Test Indicator</li></ul> |
|--|--|

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.

- 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.

- 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.

**\* 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.

**Acknowledgement Format**

The format of the acknowledgement to be sent. The valid values are:

- 997
- 999

Required.

**Acknowledgement Detail Level**

Level of detail to send acknowledgements. If you select Segment level, the segment, transaction, and group levels are acknowledged. Optional.

**Send acknowledgement immediately**

Whether to send the acknowledgement immediately on receipt of the message. Valid values are Yes and No (default). Required.

**Acceptor Lookup Alias format for generated 997/999s**

Alias for acceptor lookup for generated 997 acknowledgements. Optional. Valid values are:

- 99X
- 99X\_[group version]
- 99X\_[test indicator]
- 99X\_[group version]\_[test indicator]

**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. 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.

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



---

## Chapter 6. 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
-------	-------------

<b>* Sender ID</b>	
--------------------	--

	Coded identifier of the company or division sending the interchange. Valid value is 12 standard characters. Required.
--	---

<b>Sender Organization</b>	
----------------------------	--

	The sender organization. Optional.
--	------------------------------------

<b>Receiver ID</b>	
--------------------	--

	Coded identifier of the company or division receiving the transaction. Valid value is 12 standard characters. Required.
--	---

<b>* Receiver Organization</b>	
--------------------------------	--

	The receiver organization. Optional.
--	--------------------------------------

<b>* Transaction Set ID Code</b>	
----------------------------------	--

	Coded identifier of transaction set. Optional. Valid value is three standard characters.
--	--

<b>Use global control number</b>	
----------------------------------	--

	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"><li>• Yes, indicates that you want to use a global number and you will be asked to select one that has already been created</li><li>• Yes (and generate name from data), indicates that the global number name will be generated using values from the inbound data or envelope definition</li><li>• No, indicates that you will be specifying a control number is owned only by this envelope</li></ul> |
|--|--|

<b>Global Transaction Set Control Number</b>	
--	--

	Transaction set control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required.
--	---

<b>Primary Name Format</b>	
----------------------------	--

	Used to specify what information to include when generating a Global Number Name.
--	---

- |  |   |
|--|---|
|  | <ul style="list-style-type: none"><li>• Transaction Set ID Code (selected by default)</li><li>• Implementation Convention Reference</li><li>• Version, Release, Industry Identifier Code (selected by default)</li><li>• Test Indicator</li></ul> |
|--|---|

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.

- 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.

- 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.

**\* 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:

- 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.

**Compliance Check Document**

Whether to check the transaction set body for compliance. Valid values are Yes and No. Required.

**Map Name Mode**

Mode in which to specify the map to use to perform a compliance check. Valid values are:

- Specify
- Generate from data

**Compliance Check Map Name**

Which map to use to perform a compliance check. The map must already be checked in. Select the map. Optional.

**Primary Name Format**

Used to specify what information to include when generating a compliance check Map Name. Information includes the following:

- 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. Used when **Map Name Mode** is set to **Generate from data**.

**Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- EDI Standard (selected by default)
- Sender ID (selected by default)
- Receiver ID
- Transaction Set ID Code (selected by default)
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator
- Check all that you want to use in the format.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **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**

Process to follow when non-compliant transactions are encountered. Required.

Valid values are:

- 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**

Select the HIPAA validation level from the list. Required. Values are:

- 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**

Select a business process that should run with extracted X12 inbound ST/SE messages as the primary document. Required. Valid values are:

- Looking up contract dynamically
- Specifying a contract
- Specifying a business process
- Generating the business process name from the data

**Contract List**

Select a previously created contract to associate with this envelope. Required.

**Business Process List**

Select a business process to run when this envelope is processed. Optional.

**Primary Name Format**

Used to specify what information to include when generating a business process name. Information includes the following:

- 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. Used when **Determine the Business Process by** is set to **Generating the business process name from the data**.

**Backup Name Format**

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:

- 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

Check all that you want to use in the format.

**Backup Name Format**

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:

- 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

Check all that you want to use in the format.

**Backup Name Format**

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:

- EDI Standard (selected by default)
- Sender ID
- Receiver ID
- Transaction Set ID Code
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator

Check all that you want to use in the format.

**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.

**Extraction Options**

Required. Valid values are:

- Determined by a business process
- Extract to a file system directory
- Extract to a mailbox

**Error Business Process Name Mode**

Mode in which to specify a business process to run if an error is encountered. Optional. Valid values are:

- 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.

**Primary Name Format**

Used to specify what information to include when generating a business process name. Information includes the following:



- 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**.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- EDI Standard (selected by default)
- Sender ID
- Receiver ID
- Transaction Set ID Code
- Implementation Convention Reference
- Version, Release, Industry Identifier Code

- Test Indicator

Check all that you want to use in the format.

**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.

**Data Extraction Directory**

Directory for data extraction. Optional.

**Data Extraction Filename**

Filename for data extraction. Optional.

**Data Extraction Mailbox**

Mailbox for data extraction. Required.

**Data Extraction Mailbox Message Name**

Mailbox message name for data extraction. Optional.

**For each document**

Specified in the **Determine Business Process by** parameter. Required. Valid values are:

- Invoke the business process
- Set the business process name in the process data

**Generate an error if no generated business process name or map name exists in the system**

Generate an error message if the translator cannot locate the specified business process name or map name. Valid values are Yes and No. Required.

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

---

## Chapter 7. 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:

- 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.

\* **Sender Organization**

The sender organization. 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.

**\* Receiver Organization**

The receiver organization. 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. Valid values are:

- **Always** - If a correlation override value is provided, always use that value instead of the value in the envelope (except for the Sender ID, Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).
- **Only when the envelope field has a wildcard value (\*)** - Only use correlation override values for fields in the envelope definition that are specified with a wildcard (\*).
- **Never** - Never use correlation overrides.
- **Use the default specified in enveloping.properties** - The enveloping.properties file defines when to use correlation overrides if this choice is selected. The properties file will either define Always, Never, or Only when the envelope field has a wildcard (\*) value. The applicable properties file property is **enveloping.correl\_override\_default.[standard]**. Allowed values are No (which means never), WildcardOnly, or All (which means always, except for the Sender ID, Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).

**Use global control number**

Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are:

- 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**

Interchange control reference number used globally. Select a previously defined number to reference. Valid value is nine standard characters. Required.

**Primary Name Format**

Used to specify what information to include when generating a control number. Information may include the following:

- Test Indicator

Used when **Use global control number** is set to **Yes (and generate name from data)**.

**Local Interchange Control Number**

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**.

**\* Acknowledgement Requested**

Request an acknowledgement that notifies the sender that the receiver has received an interpretable interchange transmission. Valid values are Yes and No. Required.

**Usage Indicator**

Operation mode to use for this envelope. Valid values are:

- Test
- Production
- Information
- Any Indicator (wildcard)

**Acceptor Lookup Alias**

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.

**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. 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.

**\* Acknowledgement overdue after (hours)**

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**.

**\* Acknowledgement overdue after (minutes)**

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**.

**Maximum number of documents per interchange**

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.

**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.

Optional.

#### **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:

- No
- Use smallest transaction limit (default)

**Note:** The **Use smallest transaction limit** setting is specific to the limitation imposed by the standard.

- Specify size limit
- Use global default in `enveloping.properties`

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.

#### **Invoke Business Process for Each Interchange**

Whether a business process is invoked for each interchange generated. Valid values are Yes and No (default). Required.

**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.

#### **Maximum Interchange Size**

Specify the maximum size of each individual interchange. Required.

**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.

**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.

**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.

**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.

**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:

- 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.

**Contract List**

Select a previously created contract to associate with this envelope. Optional.

**Primary Name Format**

Used to specify what information to include when generating a business process. Information includes the following:

- 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**.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- 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



Check all that you want to use in the format.

### **Backup Name Format**

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:

- EDI Standard (selected by default)
- Sender ID Code Qualifier
- Sender ID
- Receiver ID Code Qualifier
- Receiver ID
- Transaction Set ID Code
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator

Check all that you want to use in the format.

### **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**

The extraction options to use. Required. Valid values are:

- Determined by a business process
- Extract to a file system directory
- Extract to a mailbox

### **Data Extraction Directory**

Directory for data extraction. Optional.

### **Data Extraction Filename**

Filename for data extraction. Optional.

### **Data Extraction Mailbox**

Mailbox for data extraction. Optional.

### **Data Extraction Mailbox Message Name**

Mailbox message name for data extraction. Optional.

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



---

## Chapter 8. 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
-------	-------------

<b>Next Envelope</b>	
----------------------	--

Envelope to apply after this envelope. Optional.

<b>Create Next Envelope</b>	
-----------------------------	--

Allows you to create the GS envelope to be used as the next envelope in the set. Optional.

<b>* Functional ID Code</b>	
-----------------------------	--

Coded identifier of the functional ID as used in the interchange. Valid value is two standard characters. Required.

<b>* Application Sender's Code</b>	
------------------------------------	--

Coded identifier of the Sterling B2B Integrator used by the sender. Valid value is 15 standard characters. Required.

<b>* Sender Organization</b>	
------------------------------	--

The sender organization. Valid value is 15 standard characters. Optional.

<b>* Application Receiver's Code</b>	
--------------------------------------	--

Coded identifier of the Sterling B2B Integrator used by the receiver. Valid value is 15 standard characters. Required.

<b>* Receiver Organization</b>	
--------------------------------	--

The receiver organization. Valid value is 15 standard characters. Optional.

<b>Use Correlation Overrides</b>	
----------------------------------	--

Whether to use correlation overrides. Required. Valid values are:

- **Always** - If a correlation override value is provided, always use that value instead of the value in the envelope (except for the Sender ID,

Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).

- **Only when the envelope field has a wildcard value (\*)** - Only use correlation override values for fields in the envelope definition that are specified with a wildcard (\*).
- **Never** - Never use correlation overrides.
- **Use the default specified in enveloping.properties** - The enveloping.properties file defines when to use correlation overrides if this choice is selected. The properties file will either define Always, Never, or Only when the envelope field has a wildcard (\*) value. The applicable properties file property is **enveloping.correl\_override\_default.[standard]**. Allowed values are No (which means never), WildcardOnly, or All (which means always, except for the Sender ID, Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).

#### **Use global control number**

Whether this envelope definition must use a global transaction set number to uniquely identify message group headers. Valid values are:

- 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.

#### **Primary Name Format**

Used to specify what information to include when generating a control number. Information may include some or all of the following:

- Functional ID code (selected by default)
- Version, Release, Industry Identifier Code (selected by default)
- Test indicator

Check all that you want to use in the format. Used when **Use Control Number** is set to **Yes (and generate name from data)**.

#### **Backup Name Format**

Used to specify what information to include when generating a control number. The Backup Name Formats are used when a valid control number cannot be determined from the Primary Name Format. Information may include some or all of the following:

- Functional ID code (selected by default)
- Version, Release, Industry Identifier Code
- Test indicator

Check all that you want to use in the format.

#### **Backup Name Format**

Used to specify what information to include when generating a control

number. The Backup Name Formats are used when a valid control number cannot be determined from the Primary Name Format. Information may include some or all of the following:

- Functional ID code
- Version, Release, Industry Identifier Code
- Test indicator

Check all that you want to use in the format.

**Local Group Control Number**

Group control reference number used locally. Select a previously defined number to reference. Valid value is nine standard characters. Required. Used when **Use 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.

**Acknowledgement Format**

The format of the acknowledgement to be received. The valid values are:

- 997
- 999
- 997 or 999

Required.

\* **Acknowledgement overdue time (hours)**

Amount of time, in hours, within which you must receive an acknowledgement. Valid value is four numeric characters. Optional.

\* **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.



---

## Chapter 9. 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
-------	-------------

<b>Next Envelope</b>	Envelope to apply after this envelope. Optional.
----------------------	--

<b>Create Next Envelope</b>	Allows you to create the GS envelope to be used as the next envelope in the set. Optional.
-----------------------------	--

<b>Sender ID Qualifier</b>	Qualifier used in envelope lookup by EDI Encoder. Optional.
----------------------------	---

<b>Sender ID</b>	Coded identifier of the company or division sending the transaction. Valid value is 15 standard characters. Required.
------------------	---

<b>* Sender Organization</b>	The sender organization. Optional.
------------------------------	------------------------------------

<b>Receiver ID Qualifier</b>	Qualifier used in envelope lookup by EDI Encoder. Optional.
------------------------------	---

<b>Receiver ID</b>	Coded identifier of the company or division receiving the transaction. Valid value is 15 standard characters. Required.
--------------------	---

<b>* Receiver Organization</b>	The receiver organization. Optional.
--------------------------------	--------------------------------------

<b>* Transaction Set ID Code</b>	Code identifier of the transaction set. Valid value is three standard characters. Required.
----------------------------------	---

### Use Correlation Overrides

Whether to use correlation overrides. Required. Valid values are:

- **Always** - If a correlation override value is provided, always use that value instead of the value in the envelope (except for the Sender ID, Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).
- **Only when the envelope field has a wildcard value (\*)** - Only use correlation override values for fields in the envelope definition that are specified with a wildcard (\*).
- **Never** - Never use correlation overrides.
- **Use the default specified in enveloping.properties** - The enveloping.properties file defines when to use correlation overrides if this choice is selected. The properties file will either define Always, Never, or Only when the envelope field has a wildcard (\*) value. The applicable properties file property is **enveloping.correl\_override\_default.[standard]**. Allowed values are No (which means never), WildcardOnly, or All (which means always, except for the Sender ID, Receiver ID, and Sender/Receiver Qualifier fields, which must have a \* in the envelope definition to use the correlation override value).

### Control number handling

Specify how to handle control numbers. Required. Valid values are:

- Global (default)
- Global (and generate name from data)
- Local
- Always start at 1

### 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**.

### Primary Name Format

Used to specify what information to include when generating a control number. Information includes the following:

- 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. Used when **Control number handling** is set to **Global (and generate name from data)**.

### Backup Name Format

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:

- Transaction Set ID Code (selected by default)
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator



Check all that you want to use in the format. Used when **Control number handling** is set to **Global (and generate name from data)**.

#### **Backup Name Format**

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:

- Transaction Set ID Code
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator

Check all that you want to use in the format. Used when **Control number handling** is set to **Global (and generate name from data)**

#### **Local Transaction Set Control Number**

Transaction set reference used locally. Select a previously defined global transaction set control reference. Valid value is nine standard characters. Required.

#### **\* 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.

#### **Acceptor 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 Acceptor 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).

#### **HIPAA Validation Level**

Select the HIPAA validation level from the list. Required. Values are:

- 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)

#### **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:

- 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.

#### **Maximum Interchange Size**

Specify the maximum size of each individual interchange. Required.

**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.

**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.

#### **Map Name Mode**

Mode in which to specify the map to use to perform a compliance check. Required. Valid values are:

- Specify
- Generate from data

#### **Map Name**

Select the map to be used to perform a compliance check. The map must already be checked in. Optional. Only displayed when **Map Name Mode** is set to **Specify**.

#### **Primary Name Format**

Used to specify what information to include when generating a map name. Information includes the following:

- 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 **Map Name Mode** is set to **Generate from data**.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format

#### **Backup Name Format**

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:

- EDI Standard (selected by default)
- Sender ID Code Qualifier
- Sender ID (selected by default)
- Receiver ID Code Qualifier
- Receiver ID
- Transaction Set ID Code (selected by default)
- Implementation Convention Reference
- Version, Release, Industry Identifier Code
- Test Indicator

Check all that you want to use in the format.

#### **Backup Name Format**

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:

- 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

Check all that you want to use in the format.

#### **Generate an error if no generated map name exists in the system**

Generate an error message if it cannot locate the specified map name. Optional. Valid values are Yes and No.

#### **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.

---

## Chapter 10. Creating ASC X12 Maps

The Sterling B2B Integrator 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 Sterling B2B Integrator 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 Sterling B2B Integrator Map Editor component to use it.




Sterling B2B Integrator 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 Sterling B2B Integrator Map Editor.

---

### ASC X12 Components in the Sterling B2B Integrator Map Editor

The following table lists the components that make up the ASC X12 layout in the Sterling B2B Integrator Map Editor, the icons that represent the components, and descriptions of the components.

Component	Icon	Description
ASC X12 root element		The <i>ASC X12 root element</i> represents the message that Sterling B2B Integrator 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 Sterling B2B Integrator 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>
Segment		<p>An <i>ASC X12 segment</i> contains a field tag (in Sterling B2B Integrator 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><b>Note:</b> If an ASC X12 segment occurs more than once in a map, it is identified by its name &lt;ID&gt;. The second and subsequent occurrences are identified by &lt;ID&gt;:n, where n is the number of the occurrence in the map.</p>

Component	Icon	Description
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 Sterling B2B Integrator 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 Sterling B2B Integrator Map Editor to represent ASC X12 fields and components contain useful and discrete information.</p> <p><b>Note:</b> If an element occurs more than once in a map it is identified by its name &lt;ID&gt;. The second and subsequent occurrences are identified by &lt;ID&gt;:n, where n 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

### About this task

If you need the ability to cross-reference the Sterling B2B Integrator data to generated transaction, perform the following:

### Procedure

1. The Sterling B2B Integrator 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.

---

## Create an ASC X12 Map

### About this task

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:

### Procedure

1. From the Sterling B2B Integrator 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 **IBM Sterling B2B 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 IBM Sterling Standards for EDI 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 Sterling Standards for EDI database (the default is **IBM Sterling B2B 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 Sterling Standards for EDI 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 Sterling Standards for EDI database (the default is **IBM Sterling B2B 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 Sterling B2B Integrator Map Editor displays the new map.
18. In the Sterling B2B Integrator 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 Sterling B2B Integrator Map Editor verifies that you have the Microsoft XML Core Services (MSXML) 4.0 installed on the same computer as Sterling B2B Integrator Map Editor. If you do not have the Microsoft XML Core Services (MSXML) 4.0 installed, the Sterling B2B Integrator Map Editor cannot save or load .xml source files.



---



## Chapter 11. Search for ASC X12 Correlations

### About this task

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. Sterling B2B Integrator 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:

### Procedure

1. From the **Administration** menu, select **Business Process > Monitor > 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 ASC X12 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.



---

## Chapter 12. Generate an ASC X12 Report

### About this task

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:

### Procedure

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.



---

## Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing*

*IBM Corporation*

*North Castle Drive*

*Armonk, NY 10504-1785*

*U.S.A.*

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing*

*Legal and Intellectual Property Law*

*IBM Japan Ltd.*

*19-21, Nihonbashi-Hakozakicho, Chuo-ku*

*Tokyo 103-8510, Japan*

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:**

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be

incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licenses of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Corporation*

*J46A/G4*

*555 Bailey Avenue*

*San Jose, CA 95141-1003*

*U.S.A.*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2014. Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2014.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

#### **Trademarks**

IBM, the IBM logo, and [ibm.com](http://www.ibm.com)<sup>®</sup> are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise®, Gentran®, Gentran®:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce®, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.







Printed in USA