

Sterling Standards Library



# Using VDA

*Version 8.0.3, for Sterling B2B Integrator 5.2.3*



Sterling Standards Library



# Using VDA

*Version 8.0.3, for Sterling B2B Integrator 5.2.3*

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 21.

**Copyright**

This edition applies to the 8.0.3 Version 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. VDA Overview . . . . . 1**

Use VDA with Sterling B2B Integrator . . . . . 3

## **Chapter 2. VDA Envelopes . . . . . 5**

Create Envelopes . . . . . 5

    Use Base Envelopes . . . . . 6

Inbound VDA Envelope . . . . . 6

Outbound VDA Envelope . . . . . 8

## **Chapter 3. VDA Business Processes 13**

    VDAEnvelope Business Process . . . . . 13

    Before Using the VDAEnvelope Business Process 14

    VDAEnvelope Business Process. . . . . 15

## **Chapter 4. VDA Mapping . . . . . 17**

    Open an IFD File to Create a VDA Map . . . . . 18

## **Notices . . . . . 21**



---

## Chapter 1. VDA Overview

Sterling B2B Integrator supports the use of Verband der Automobilindustrie (VDA), the standard for the German Association of the Automotive Industry (which consists of automobile manufacturers and their development partners, the suppliers, and the manufacturers of trailers, body superstructures, and containers). VDA has several features that distinguish it from most other EDI standards:

- It does not use a common set of interchange envelopes for all messages.
- It does not use functional groups.
- It uses a positional, non-delimited format.
- It uses looping but not composite elements.
- It uses a new control number (for the current transmission) and an old control number (for the previous one). As a result, control numbers do not need to be sequential.
- In some messages, it processes date formats differently than other standards.
- It uses a separate message to identify the communications protocol. A message is defined by a four-digit number, which does not appear in the data.
- The header record has eight fields: tag, version, customer, supplier, old transmission number, new transmission number, transmission date, and date reset input.
- Each record begins with a three-byte record ID and a two-byte version number.

The VDA standards are not installed with the other EDI standards; instead, sixteen new *Integrator File Definition* (IFD) files—corresponding to the inbound and outbound formats for the eight VDA message types/transaction sets that Sterling B2B Integrator supports—are bundled with the IBM Sterling B2B Integrator Map Editor and placed by the Sterling B2B Integrator Map Editor install in the **Map Editor - Standards Folder/Map Editor/Samples/IFDs** folder. Additionally, Sterling B2B Integrator automatically installs the appropriate VDA build and break (system) maps, which determine the message type and then match it with the appropriate envelope. You can then create VDA maps to translate your data by loading the appropriate IFD file and creating a map with your specific requirements. See Chapter 4, “VDA Mapping,” on page 17.

In addition, support for VDA requires you to create inbound and outbound VDA envelopes. See Chapter 2, “VDA Envelopes,” on page 5. You must also create a business process or processes to order the flow of the Sterling B2B Integrator activities so you can accomplish your business objectives with VDA.

For more information on the VDA standard, access this web site:

<http://www.vda.de>

For more information on ordering VDA recommendations, access this web site: [http://www.vda.de/de/service/sonstige\\_veroeffentlichungen/index.html](http://www.vda.de/de/service/sonstige_veroeffentlichungen/index.html) and select the **VDA-Empfehlungen** option.

This table describes how Sterling B2B Integrator was enhanced to support VDA:

Functionality	Enhancements	Action You Need to Take to Implement VDA
Services	<ul style="list-style-type: none"> <li>• EDI Deenveloping service enhanced to recognize the VDA standard.</li> <li>• EDI Enveloping service enhanced to recognize the VDA standard.</li> <li>• Generic Deenvelope service enhanced to recognize the VDA standard.</li> <li>• Generic Envelope service enhanced to recognize the VDA standard.</li> </ul>	None.
Envelopes	<ul style="list-style-type: none"> <li>• Inbound VDA envelope wizard added to implement inbound VDA.</li> <li>• Outbound VDA envelope wizard added to implement outbound VDA.</li> </ul> <p>See Chapter 2, “VDA Envelopes,” on page 5.</p>	<p>Create the appropriate VDA envelopes for each message type you are sending and receiving.</p> <p>See Chapter 2, “VDA Envelopes,” on page 5.</p>
Predefined business processes	<ul style="list-style-type: none"> <li>• Predefined VDA Deenvelope business process added.</li> <li>• Predefined VDA Envelope business process added.</li> </ul> <p>See Chapter 3, “VDA Business Processes,” on page 13.</p>	<p>Create a business process or processes and configure the appropriate service parameters.</p> <p>See Chapter 3, “VDA Business Processes,” on page 13.</p>
Sterling B2B Integrator Map Editor	<ul style="list-style-type: none"> <li>• VDA build and break maps are automatically installed with Sterling B2B Integrator.</li> <li>• Sixteen IFDs—corresponding to the inbound and outbound formats for the eight VDA message types/transaction sets that are supported—are bundled with the Sterling B2B Integrator Map Editor and placed by the Sterling B2B Integrator Map Editor install in a new Map Editor - Standards Folder/Map Editor/Samples/IFDs folder.</li> </ul> <p>See Chapter 4, “VDA Mapping,” on page 17.</p>	<p>Create a map or maps to translate your VDA messages. <b>Note:</b> VDA maps can be created by loading the data formats from the installed IFDs.</p> <p>See Chapter 4, “VDA Mapping,” on page 17.</p>

## Prerequisite for Using VDA

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

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



---

## Use VDA with Sterling B2B Integrator

### About this task

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

### Procedure

1. Create inbound and outbound VDA envelopes. See Chapter 2, “VDA Envelopes,” on page 5.
2. Create a business process or processes and configure the appropriate service parameters. See Chapter 3, “VDA Business Processes,” on page 13.
3. Create the appropriate VDA maps. See Chapter 4, “VDA Mapping,” on page 17.



---

## Chapter 2. VDA Envelopes

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 EDI protocol used. Creating document envelopes is necessary to use VDA with your trading partners.

VDA has only one level of envelope, which you must modify appropriately to reflect your information and your trading partner's information. Envelopes specify whether the message is inbound or outbound:

- The **VDA Inbound** envelope identifies messages that are received by IBM Sterling B2B Integrator so they can be properly routed. Inbound envelopes also give you the option to translate messages when you choose to check messages for compliance. By choosing to translate messages from within the envelope, you can reduce message processing time because you do not need to specify a separate Translation service step in the business process. You need to create a VDA Inbound envelope to configure deenveloping information. See “Inbound VDA Envelope” on page 6.
- The **VDA Outbound** envelope identifies messages so that they can be sent to and received by trading partners. You need to configure a VDA Outbound envelope to configure enveloping information. See “Outbound VDA Envelope” on page 8.

When you envelope an outbound VDA message, the VDA header and trailer are created. For an inbound message, the envelope contains the header information (the trailer information is a summary appended to the VDA data).

---

### Create Envelopes

#### About this task

Inbound envelopes define expected header and trailer information for inbound messages. This information helps IBM Sterling B2B Integrator route and process the messages. Outbound envelopes specify information about messages that enables them to be sent to and received by trading partners, and they gather and provide the appropriate data used to create the header.

To create an envelope:

#### Procedure

1. From the Admin Console, select **Trading Partner > Document Envelopes > Envelopes**.
2. Under Create, next to New Envelope, click **Go!**
3. On the Envelope Standards page, select **VDA** and click **Next**.
4. Select the level of envelope you want to create, inbound or outbound, and click **Next**.
5. On the Base Envelope page, do you want this envelope to inherit properties from a base envelope (if available)?
  - If Yes, select a base envelope and click **Next**.

- If No (you want to create a new envelope), select **Not Applicable** 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. See “Inbound VDA Envelope” or “Outbound VDA Envelope” on page 8.
  8. Click **Finish** to add the envelope.

## Use Base Envelopes

### About this task

A *base envelope* is a regular envelope that you use as a starting point to create a new envelope. The base envelope maintains a link to the envelope that inherited its properties. If you modify the base envelope, all related envelopes (those that inherited the base envelope properties) are also changed.

When you create an envelope using a base envelope, everything in the new envelope is the same as in the base envelope, except the envelope name, description, and parameters such as unique identification numbers. If you plan to create many envelopes using base envelopes, do not use the base envelopes in production. You should also be sure to note the envelopes that are related to the base envelopes.

To use a base envelope:

### Procedure

1. Create the base envelope, using “Create Envelopes” on page 5.
2. Specify the name and description of a new envelope.
3. Identify the base envelope that the new envelope uses.

---

## Inbound VDA Envelope

You only need to create an Inbound VDA envelope if you are receiving inbound VDA messages. However, if you are receiving inbound VDA messages, you need to create a separate Inbound VDA envelope for *each* VDA message type you will be receiving. The following table describes inbound VDA envelope properties:

<b>Field or Check Box</b>	<b>Description</b>
---------------------------	--------------------

<b>Sender ID (or Supplier Number/Data Sender)</b>	Coded identifier of the supplier number or data sender. Valid value is nine standard characters. Required.
---	--

**Note:** As you type, the combo-box returns all IDs saved in the system that match the string or values you are typing.

<b>Receiver ID (or Customer Number/Data Source Number)</b>	Coded identifier of the customer number or data source number. Valid value is nine standard characters. Required.
--	---

**Note:** As you type, the combo-box returns all IDs saved in the system that match the string or values you are typing.

**Message Type**

Transaction message type as determined by the information type in the header of the message group, which includes the message, or determined by the information type in the transaction message. Required.

Valid values are as follows:

- 4905
- 4906
- 4907
- 4908
- 4913
- 4915
- 4927

**Agency**

EDI standard to be used in this envelope. Required.

Valid value is V.

**Version**

Standard version to be used in this envelope. Required.

**Release**

Release number to be used in this envelope. Required.

**Test Flag**

Whether you want the system to treat the messages that you receive from this trading partner as test (T) or production (P).

**Determine the Business Process by**

Displayed only if select BP invocation is set to 'Specify custom business process.'

Valid values:

- Specifying a contract
- Specifying a business process (default)

**Contract List**

Select a previously created contract to associate with this envelope.

Displayed only if **Determine Business Process by** is set to 'Specifying a contract.'

**Business Process List**

Select a previously created business process to associate with this envelope.

Displayed only if **Determine Business Process by** is set to 'Specifying the business process.'

**Maximum age of Control Number History Records in days**

Maximum days that IBM Sterling B2B Integrator should retain a history of control numbers to use for duplication determinations. Valid value is nine standard characters. Optional.

**Compliance Check Document**

Check the transaction set body for compliance. Valid values are Yes (default) and No.

**Compliance Check Map Name**

Which map to use to perform a compliance check (if **Compliance Check Document** set to Yes). The map must already be checked in to Sterling B2B Integrator.

**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 messages from within the envelope, you can reduce message processing time because you do not need to specify a separate Translation service step in the business process. Valid values are Yes and No (default).

**Extraction Options**

Business process data extraction.

Valid values:

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

**Data Extraction Directory**

Directory for data extraction. Displayed only if Extraction Options set to 'Extract to a file system directory'.

**Data Extraction Filename**

Filename for data extraction. Displayed only if Extraction Options set to 'Extract to a file system directory'.

**Data Extraction Mailbox**

Mailbox for data extraction. Displayed only if Extraction Options set to 'Extract to a mailbox'.

**Data Extraction Mailbox Message Name**

Mailbox message name for data extraction. Displayed only if Extraction Options set to 'Extract to a mailbox'.

---

## Outbound VDA Envelope

You only need to create an Outbound VDA envelope if you are sending outbound VDA messages. However, if you are sending outbound VDA messages, you need to create a separate Outbound VDA envelope for *each* VDA message type you will be sending. The following table describes outbound VDA envelope properties:

**Field or Check Box****Description****Sender ID (or Supplier Number/Data Sender)**

Coded identifier of the supplier number or data sender. Valid value is nine standard characters. Required.

**Note:** As you type, the combo-box returns all IDs saved in the system that match the string or values you are typing.

**Receiver ID (or Customer Number/Data Source Number)**

Coded identifier of the customer number or data source number. Valid value is nine standard characters. Required.

**Note:** As you type, the combo-box returns all IDs saved in the system that match the string or values you are typing.

**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 message with the service it requires. Valid value must be at least one limited standard character. Required.

**Message Type**

Transaction message type as determined by the information type in the header of the message group, which includes the message, or determined by the information type in the transaction message. Required.

Valid values are as follows:

- 4905
- 4906
- 4907
- 4908
- 4913
- 4915
- 4927

**Sub Suppliers**

Identification number that is assigned to sub-suppliers.

**Sales Tax ID Number (Receiver)**

Identification number of the national tax office for the recipient. This field is mandatory for delivery of goods within the European Union. Data entries are left-justified.

**Sales Tax ID Number (Sender)**

Identification number of the national tax office for the sender. This field is mandatory for delivery of goods within the European Union. Data entries are left-justified.

**Comp. Reg. Number**

Identification of the National Register of Business Names (Commercial Register) for the supplier. This field is mandatory for some European countries or regions.

**Carrier Number**

Carrier data number of VDA message. If relevant, the contents of this field are identical to the contents of the field in record type 712, position 13.

**Warehouse Keeper Code**

Code that identifies the person who created the message. Valid value is one standard character.

**Transmission Purpose Code**

Code identifying the purpose of the transmission. Valid value is two standard characters.

**Payment Date (YYMMDD)**

Date of payment. Format is YYMMDD.

**Payment Indication Number**

Number indicating payment was made.

**Map Name**

Map used (if any) to translate documents.

**Validate Translation Input**

Enables input-side validation to be turned off. Valid values are Yes (default) and No.

**Validate Translation Output**

Enables output-side validation to be turned off. Valid values are Yes (default) and No.

**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 for SNRF Sender Reference**

Whether a global control number is used for the SNRF sender reference. Valid values are Yes (default) and No.

**SNRF Sender Reference**

Identifier for the SNRF sender selected from list. Used only if **Use global control number for SNRF Sender Reference** 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.VDA.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
- Specify size limit
- Use global 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 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 (bytes)**

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 456 bytes based on the header and trailer size for VDA standard.

#### **Encode Document**

Whether the message must be character encoded. Valid values are Yes and No (default).

#### **Encoding**

Type of character encoding for the message group that includes this header. Optional; used only if **Encode Document** is set to 'Yes.'

#### **Determine the Business Process by**

Displayed only if select BP invocation set to 'Specify custom business process.'

Valid values:

- Specifying a contract
- Specifying a business process (default)

**Contract List**

Select a previously created contract to associate with this envelope.

Displayed only if **Determine Business Process by** set to 'Specifying a contract.'

**Business Process List**

Select a previously created business process to associate with this envelope.

Displayed only if **Determine Business Process by** set to 'Specifying the business process.'

**Extraction Options**

Business process data extraction.

Valid values:

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

**Data Extraction Directory**

Directory for data extraction. Displayed only if Extraction Options set to 'Extract to a file system directory'.

**Data Extraction Filename**

Filename for data extraction. Displayed only if Extraction Options set to 'Extract to a file system directory'.

**Data Extraction Mailbox**

Mailbox for data extraction. Displayed only if Extraction Options set to 'Extract to a mailbox'.

**Data Extraction Mailbox Message Name**

Mailbox message name for data extraction. Displayed only if Extraction Options set to 'Extract to a mailbox'.

---

## Chapter 3. VDA Business Processes

To use VDA with Sterling B2B Integrator, you need to create a business process or processes and configure the following parameters, which should match what you configured in the VDA envelope:

- Sender ID
- Receiver ID
- Lookup Alias

To help you accomplish your business goals, Sterling B2B Integrator provides two predefined business processes, which are used by Sterling B2B Integrator to implement VDA processing: VDAEnvelope and VDADevelope. These predefined business processes are initiated by other processes/services during VDA processing and do not require you to modify them.

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

Business Process	Business Goals	For more information, see
VDADevelope	Extracts VDA message types from an EDI message and locates an associated contract, according to the content of the envelopes.	“VDADevelope Business Process”
VDAEnvelope	Applies a VDA envelope to one or more VDA message types and then uses the envelope data to locate the associated contract and start the appropriate business process.	“VDAEnvelope Business Process” on page 15

---

### VDADevelope Business Process

The VDADevelope business process is used to develope VDA data. A typical scenario is one in which VDA data must be received from a trading partner. The data must be develope to extract identifying batch and interchange data, and the VDADevelope business process helps to provide the developing services.

The VDADevelope business process is initiated as part of the following inbound process flow:

1. You create a business process that calls the EDI Developing service.
2. The EDI Developing service parses the whole message and compliance checks it so it can be further processed by Sterling B2B Integrator.
3. Passes the VDA messages to the VDADevelope business process. The Generic Develope service runs as a subprocess.
4. The VDADevelope business process looks up the envelope, based on the data found in the header.
5. The envelope specifies what to do with the develope messages.

6. Starts the Invoke Business Process service or a subprocess service to initiate the appropriate business process to handle each deenveloped message.

If exceptions occur when running an EDI Deenveloping business process, Sterling B2B Integrator generates an EDI Compliance Report.

The following BPML code makes up the VDADeenvelope business process:

```
<<process name="VDADeenvelope">
  <rule name="contract">
    <condition>CONTRACT_FOUND = "YES"</condition>
  </rule>
  <sequence>
    <operation>
      <participant name="DeenvelopeGeneric" />
      <output message="Xout" >
        <assign to="map_name">BrkIvda</assign>
        <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 VDADeenvelope Business Process

### About this task

Before you use the VDADeenvelope business process, you must complete the following task:

### Procedure

Create a VDA inbound envelope for each VDA message type that you are receiving. See "Outbound VDA Envelope" on page 8.

---

## VDAEnvelope Business Process

The VDAEnvelope business process is initiated when it is called by another business process. The VDAEnvelope business process envelopes the VDA messages contained in the business process context with outbound VDA envelopes that you have pre-configured. You must have created one outbound VDA envelope for each VDA message type that you are sending.

A typical scenario is one in which VDA data must be sent to a trading partner. To prepare for this, the data must be enveloped to provide identifying batch and interchange data. The VDAEnvelope business process helps to provide these enveloping services.

The VDAEnvelope business process is initiated as part of the following outbound process flow:

1. You create a business process that calls the EDI Encoder service.
2. The EDI Encoder service calls the EDI Enveloping service, either in immediate or deferred mode, depending on what you specify.
3. The EDI Enveloping service starts the VDAEnvelope business process (which runs the Generic Envelope service as a subprocess to extract the name of the business process).
4. The VDAEnvelope business process searches the envelope definition to retrieve information to envelope each message.

**Note:** The Sender ID, Receiver ID, and Lookup Alias in your Outbound Envelope definition must match the parameters that you define for this outbound business process.

The following BPML code makes up the VDA Envelope business process:

```
<process name="VDAEnvelope">
  <rule name="contract">
    <condition>CONTRACT_FOUND = "YES"</condition>
  </rule>
  <sequence>
    <operation>
      <participant name="EnvelopeGeneric" />
      <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>
```

```
        </input>
      </operation>
    </sequence>
  </choice>

</sequence>
</process>
```

## **Before Using the VDAEnvelope Business Process**

Before you use the VDAEnvelope business process, you must complete the following task:

1. Create a VDA outbound envelope for each VDA message type that you are sending. See “Inbound VDA Envelope” on page 6.

---

## Chapter 4. VDA Mapping

This documentation assumes that you are familiar with mapping concepts and with the Sterling B2B Integrator Map Editor.

The VDA standards are not installed with the other EDI standards; instead, sixteen new *Integrator File Definition* (IFD) files—corresponding to the inbound and outbound formats for the eight VDA message types/transaction sets that Sterling B2B Integrator supports—are bundled with the Sterling B2B Integrator Map Editor and placed by the Sterling B2B Integrator Map Editor install in the **Map Editor - Standards Folder/Map Editor/Samples/IFDs** folder. Additionally, Sterling B2B Integrator automatically installs the appropriate VDA build and break (system) maps, which determine the message type and then match it with the appropriate envelope.

IFD is a IBM format that contains a binary description of the input or output side of a source map and has the file extension .ifd. IFD files include the hierarchical and looping structure of the data, the map objects (groups, records, fields) and their attributes (for example, names, descriptions, data types). An IFD file can be loaded (imported) or created (for export) from the Sterling B2B Integrator Map Editor.

**Note:** IFD files do not contain standard or extended rules, links, or any other map information unrelated to the data format. The one exception is the Use Code code lists. If the map references a Use Code standard rule and instructs Sterling B2B Integrator to raise a compliance error if the code is not found in the Use Code code list, Sterling B2B Integrator saves the standard rule and the associated code list.

Sterling B2B Integrator supports the following VDA message types:

**Note:** The CDA version of a specified message type is indicated by the name of the IFD file. For example, the name of the file **4905\_ED4\_0496\_inbound.IFD** specifies that the file contains the inbound VDA structure of VDA message type 4905 of edition 4.

### VDA Message Type IFD File Names

#### 4905

- 4905\_ED3\_1088\_inbound.IFD
- 4905\_ED3\_1088\_outbound.IFD
- 4905\_ED4\_0496\_inbound.IFD
- 4905\_ED4\_0496\_outbound.IFD

#### 4906

- 4906\_ED2\_0593\_inbound.IFD
- 4906\_ED2\_0593\_outbound.IFD

#### 4907

- 4907\_ED2\_0893\_inbound.IFD
- 4907\_ED2\_0893\_outbound.IFD

#### 4908

- 4908\_ED3\_0596\_inbound.IFD
- 4908\_ED3\_0596\_outbound.IFD

#### 4913

- 4913\_ED1\_1094\_inbound.IFD
- 4913\_ED1\_1094\_outbound.IFD

#### 4915

- 4915\_ED1\_1189\_inbound.IFD
- 4915\_ED1\_1189\_outbound.IFD

#### 4927

- 4927\_ED1\_0293\_inbound.IFD
- 4927\_ED1\_0293\_outbound.IFD

You can create VDA maps by loading the appropriate IFD file and creating a map to translate your VDA data. The IFD is an IBM format that contains an XML-formatted description of the input or output side of a source map and has the file extension .IFD. An IFD file includes the hierarchical and looping structure of the data, the map objects (groups, records, fields) and their attributes (for example, names, descriptions, data types). An IFD file can be loaded (imported) or created (for export) from the Sterling B2B Integrator Map Editor.

**Note:** An IFD file does not contain standard or extended rules, links, or any other map information unrelated to the data format. The one exception to this injunction is the Use Code code lists. If the map references a Use Code standard rule and instructs Sterling B2B Integrator to raise a compliance error if the code is not found in the Use Code code list, Sterling B2B Integrator saves the standard rule and the associated code list.

---

## Open an IFD File to Create a VDA Map

### About this task

Sterling B2B Integrator Map Editor enables you to open, or import, an IFD file in two ways—when you create a new map, and when you open an IFD file into one side of an existing map. Either way, using an IFD file provides you with a quick way to create either side of a map.

When you create a new map, the New Map wizard enables you to select an IFD file to use as the basis for the input or output side of the map.

When you open an IFD file, Sterling B2B Integrator assigns acceptable defaults if attributes are not included. For example, if a value is not specified for Minimum Length, a value of zero is assigned.

To open an IFD file into an existing map:

**Note:** Opening an IFD file into an existing map replaces the selected side of the map. After you open an IFD file into a map, you cannot undo the operation.

### Procedure

1. In the Sterling B2B Integrator Map Editor, right-click the **data format** icon on the side of the map where you want to open the IFD file and select **Open File Definition** from the shortcut menu.



If you are creating a map for outbound VDA messages, you typically open the IFD file on the Output side of the map; for inbound VDA messages, you typically open the IFD file on the Input side of the map.

If you already used Sterling B2B Integrator Map Editor to create that side of the map, you are prompted with a message that warns you that the existing file format will be replaced. Click **Yes** to continue.

2. Browse to locate the IFD file for the VDA message type you are using. Be sure you select the IFD corresponding to the appropriate direction for the message type (that is, inbound or outbound).

The IFD files are installed in the **Map Editor - Standards Folder/Map Editor/Samples/IFDs** folder.

3. Click **Open** to open the selected IFD file into the map.
4. In the Sterling B2B Integrator Map Editor, select **File > Save** to save the map. Do not use spaces or apostrophes in the map name. The map is automatically saved as a .xml file; to save a map as a .map file, select **File > Save As** and then select **Source Maps (\*.map)** from the **Save as type** list.
5. Create the other side of the map, create links, standard rules, and extended rules to map data between the two sides of the map, and complete and compile the map.



---

## 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.*

*1623-14, Shimotsuruma, Yamato-shi*

*Kanagawa 242-8502 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.

Licensees 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 2011. Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2011.

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

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





Printed in USA