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RND with Application

Application supports the use of Rede Nacional de Dados (RND), the Brazilian automotive standard (which consists of automobile manufacturers and their development partners, the suppliers, and the manufacturers of trailers, body superstructures, and containers). RND has several features that distinguish it from most other EDI standards:

- ✦ It does not use functional groups.
- Each interchange only contains one transaction set.
- ✤ It uses a positional, non-delimited format.
- ✤ It uses looping but not composite elements.

Application automatically installs the appropriate RND build and break (system) maps, which determine the message type and then match it with the appropriate envelope. The RND standards are not installed with the other EDI standards; instead, you use the Map Editor to create a positional format for the RND side of your map that conforms to the RND standard. See *RND Mapping* on page 33.

In addition, support for RND requires you to create inbound and outbound RND envelopes. See *RND Envelopes* on page 6. Application provides two predefined business processes to order the flow of Application activities so you can accomplish your business objectives with RND.

Functionality	Enhancements	Action You Need to Take to Implement RND	
Services	 EDI Deenveloping service enhanced to recognize the RND standard. 	None.	
	 EDI Enveloping service enhanced to recognize the RND standard. 		
	 Generic Deenvelope service enhanced to recognize the RND standard. 		
	 Generic Envelope service enhanced to recognize the RND standard. 		
Envelopes	 Inbound RND envelope wizard added to implement inbound RND. 	Create the appropriate RND envelopes for each message type you	
	 Outbound RND envelope wizard added to implement outbound RND. 	are sending and receiving. See <i>RND Envelopes</i> on page 6.	
	See RND Envelopes on page 6.		
Predefined business processes	 Predefined RND Deenvelope business process added. 	Create a business process or processes and configure the	
	 Predefined RND Envelope business process added. 	appropriate service parameters. See <i>RND Business Processes</i> on page 26.	
	See RND Business Processes on page 26.	P~30 -0.	

This table describes how Application was enhanced to support RND:

Functionality	Enhancements	Action You Need to Take to Implement RND
Map Editor	 RND build and break maps are automatically installed with Application. Ten new IFDs—corresponding to the ten 	Create a map or maps to translate your RND messages. Note: RND maps can be created
	RND message types/transaction sets that are supported—are bundled with the Map Editor and placed by the Map Editor install in a new Sterling Commerce/Map Editor/Samples/IFD/RND folder. See <i>RND Mapping</i> on page 33.	by loading the data formats from the installed IFDs. See <i>RND Mapping</i> on page 33.
Tracking and Correlations	The Application tracking and correlation functionality automatically tracks the RND messages the same way other standards are tracked, and you can search for RND documents using the EDI Correlation search interface.	None.
Reporting	The EDI Translation Details Report allows you to report on RND translation details.	None.

Prerequisite Knowledge

The audience using this software should be familiar with Application and the RND standard.

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

Using RND with Application

To use RND with Application, you must complete the following tasks:

- 1. Create inbound and outbound RND envelopes. See RND Envelopes on page 6.
- 2. Create a business process or processes utilizing one of the predefined RND business processes and configure the appropriate service parameters. See *RND Business Processes* on page 26.
- 3. Create the appropriate RND maps. See *RND Mapping* on page 33.

RND 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 RND with your trading partners.

RND 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 RND Inbound envelope identifies messages that are received by Gentran Integration Suite 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 RND Inbound envelope to configure deenveloping information. See *RNDInbound Envelope* on page 7.
- The RND Outbound envelope identifies messages so that they can be sent to and received by trading partners. You need to configure a RND Outbound envelope to configure enveloping information. See *RNDOutbound Envelope* on page 16.

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

Creating Envelopes

Inbound envelopes define expected header and trailer information for inbound messages. This information helps Gentran Integration Suite 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:

- 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 **RND** 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 *RNDInbound Envelope* on page 7 or *RNDOutbound Envelope* on page 16.

8. Click **Finish** to add the envelope.

Using Base Envelopes

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:

- 1. Create the base envelope, using *Creating Envelopes* on page 6.
- 2. Specify the name and description of a new envelope.
- 3. Identify the base envelope that the new envelope uses.

RNDInbound Envelope

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

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter (for mandatory fields, the wildcard value is an (*) asterisk and for optional fields, the wildcard value is leaving the field blank):

Field or Check Box	Description
*Process ID	Process identifier. Required.
*Transaction Version	Version number of the transaction. Required.
*Transmitter IRF Code	Coded identifier of the supplier number or data sender. Required.
	Note: This parameter enables you to type in a new ID or pick an ID that has already been used. When you start typing an ID, Application returns all matching IDs existing in the system and provide a combo-box from which you can select an ID by double-clicking it. There must be Transmitter IRF Codes in the system for autocomplete to find matches and display a selection list.
*Receiver IRF Code	Coded identifier of the customer number or data source number. Required. Note: This parameter enables you to type in a new ID or pick an ID that has already been used. When you start typing an ID, Application returns all matching IDs existing in the system and provide a combo-box from which you can select an ID by double-clicking it. There must be Receiver IRF Codes in the system for autocomplete to find matches and display a selection list.
Internal Transmitter Code	Internal code used to reference the transmitter. Optional.

Field or Check Box	Description
Internal Receiver Code	Internal code used to reference the receiver. Optional.
Transmitter Name	Name of the sender. Optional.
Receiver Name	Name of the receiver. Optional.
Perform Transmission Control Number Sequence Checking	Compare the sequence of control numbers in the data with the Transmission Control Number parameter for this envelope. Required. Valid values: • Yes (default) • No
Use global control number for Transmission Control Numbers	Whether to use a global control number for the transmission control number. Valid values are Yes (default) and No. Required.
	Displayed only if Use global control number for Transmission Control Numbers is set to No.
Perform Duplicate Control Number Checking	 Determine control number duplications. Required. Valid values: Yes No (default)
	 No (default)
Maximum age of Control Number History Records in days	Maximum days that Gentran Integration Suite should retain a history of control numbers to use for duplication determinations. Valid value is nine standard characters. Optional.
Global Transmission Control Number	Select a global control number with this envelope. Optional.
Primary Name Format	Check boxes to instruct what information to include when generating a name fo a primary global number and finding the correct number to assign based on tha name. Optional.
	Select from:
	 Transmitter IRF Code Receiver IRF Code
	Process ID Transaction Varian
	 Transaction Version Note: If you are using a generated global control number (Use global control number for Transmission Control Numbers is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the firs step is created.

Field or Check Box	Description
First Backup Name Format	The first backup name format to use when generating a global control number. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	 Process ID
	Transaction Version
	Note: If you are using a generated global control number (Use global control number for Transmission Control Numbers is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the firs step is created.
Second Backup Name Format	The second backup name format to use when generating a global control number. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional. Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	 Transaction Version
	Note: If you are using a generated global control number (Use global control number for Transmission Control Numbers is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the first Backup Name.
	 Third, it tries to generate and match the second Backup Name.
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the firs step is created.

Field or Check Box	Description
Local Transmission Control Number	Select a local control number with this envelope. Required. Displayed only if Use global control number for Transmission Control Number s is set to No.
Compliance Check Document	Check the transaction set body for compliance. Required. Valid values are Yes (default) and No.
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). Required. Displayed if Compliance Check Document is set to Yes.
Map Name Mode	How to determine which map to use to perform a compliance check. Required. Valid values are:
	Specify (default)
	Generate from data (this is useful if you want to share across envelopes)
	Displayed if Compliance Check Document is set to Yes.
Map Name	Which map to use to perform a compliance check (if Compliance Check Document set to Yes and Map Name Mode set to Specify). The map must already be checked in to Application. Optional.
Primary Name Format	Check boxes to instruct what information to include when generating a name for the map. Optional. Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.

Field or Check Box	Description
First Backup Name Format	The first backup name format to use when generating a name for the map. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Second Backup Name Format	The second backup name format to use when generating a name for the map. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Generate an error if no matching map is found	Specifies whether to generate an error if no match is found for the specified map. Required. Valid values are Yes (default) and No.

Field or Check Box	Description
On a translation error, determine the Business Process by	How to determine the business process name to use if there were errors in the compliance check. Required. Valid values are:
	 Specify Business Process Name (default)
	 Generate Business Process Name (this is useful if you want to share across envelopes)
Primary Name Format	Check boxes to instruct what information to include when generating a name for the business process after an error. Optional. Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.

Field or Check Box	Description
First Backup Name Format	The first backup name format to use when generating a name for the business process after an error. system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	 Process ID
	Transaction Version
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	 First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated i steps 1-3, an error is generated.
Second Backup Name Format	The second backup name format to use when generating a name for the business process after an error. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	 First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.

Field or Check Box	Description
Generate an error if no generated business process name exists in the system	Specify whether to generate an error if there is no match to the generated business process name in the system.
	Note: Only displayed if On a translation error, determine the Business Process by is set to Generate Business Process Name.
Business Process List	Select a previously created business process to associate with this envelope. Optional.
	Displayed only if On a translation error, determine the Business Process by is set to Specify Business Process Name.
Determine the Business Process By	How to determine the business process name to use if there were no errors in the compliance check. Required.Valid values are:
	 Specify Business Process Name (default)
	 Generate Business Process Name (this is useful if you want to share across envelopes)
Primary Name Format	Check boxes to instruct what information to include when generating a name for the business process. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	 Process ID
	Transaction Version
	Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.

Field or Check Box	Description
First Backup Name Format	The first backup name format to use when generating a name for the business process. system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Second Backup Name Format	The second backup name format to use when generating a name for the business process. The system allows for two alternatives if the Primary Name Format is not found—checking for the first Backup Name Format and then, if that is not found, checking for the second Backup Name Format. Optional. Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	 Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Generate an error if no generated business process name exists in the system	Specify whether to generate an error if there is no match to the generated business process name in the system. Note: Only displayed if Determine the Business Process by is set to Generate Business Process Name.

Field or Check Box	Description	
Business Process List	Select a previously created business process to associate with this envelope Optional.	
	Displayed only if Determine the Business Process Name is set to Specify business process.	
Extraction Options	Business process data extraction. Required.	
	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. Optional	
Data Extraction Filename	Filename for data extraction. Displayed only if Extraction Options set to Extract to a file system directory. Optional.	
Data Extraction Mailbox	Mailbox for data extraction. Displayed only if Extraction Options set to Extract to a mailbox. Optional.	
Data Extraction Mailbox Message Name	Mailbox message name for data extraction. Displayed only if Extraction Options set to Extract to a mailbox. Optional.	

RNDOutbound Envelope

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

Note: An (*) asterisk indicates that a wildcard value can be used with that parameter:

Field or Check Box	Description	
*Process ID	Process identifier. Required.	
*Transaction Version	Version number of the transaction. Required.	
*Transmitter IRF Code	Coded identifier of the supplier number or data sender. Required.	
	Note: This parameter enables you to type in a new ID or pick an ID that has already been used. When you start typing an ID, Application returns all matching IDs existing in the system and provide a combo-box from which you can select an ID by double-clicking it. There must be Transmitter IRF Codes in the system for autocomplete to find matches and display a selection list.	

Field or Check Box	Description	
*Receiver IRF Code	Coded identifier of the customer number or data source number. Required. Note: This parameter enables you to type in a new ID or pick an ID that has already been used. When you start typing an ID, Application returns all matching IDs existing in the system and provide a combo-box from which you can select an ID by double-clicking it. There must be Receiver IRF Codes in the system for autocomplete to find matches and display a selection list.	
Accepter Lookup Alias	Identifying string used with the Sender ID and the Receiver ID to look up this envelope with the EDI Encoder service. This alias associates a message with the service it requires. Valid value must be at least one limited standard character. Required.	
Internal Transmitter Code	Internal code used to reference the transmitter. Optional.	
Internal Receiver Code	Internal code used to reference the receiver. Optional.	
Transmitter Name	Name of the sender. Optional.	
Receiver Name	Name of the receiver. Optional.	
Use global control number for Transmission Control Numbers	Whether to use a global control number for the transmission control number. Valid values are Yes (default) and No. Required.	
Global Transmission Control Number	Select a global control number with this envelope. Optional.	
Primary Name Format	Check boxes to instruct what information to include when generating a name for a primary global number and finding the correct number to assign based on that name. Optional. Select from:	
	Transmitter IRF Code	
	Receiver IRF Code	
	Process ID	
	Transaction Version	
	Note: If you are using a generated global control number (Use global control number is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:	
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message). 	
	 Second, it tries to generate and match the First Backup Name. 	
	 Third, it tries to generate and match the Second Backup Name. 	
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the first step is created. 	

Field or Check Box	Description
First Backup Name Format	The first backup name format to use when generating a global control number. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	 Process ID
	Transaction Version
	Note: If you are using a generated global control number (Use global control number is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the first step is created.
Second Backup Name Format	The second backup name format to use when generating a global control number. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional. Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated global control number (Use global control number is set to Yes (and generate name from data)), Application tries to generate and match the following control numbers:
	 First, it tries to generate and match the control number in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the first Backup Name.
	 Third, it tries to generate and match the second Backup Name.
	 Fourth, if there is not an existing control number that matches the names generated in steps 1-3, a control number with the name assigned in the first step is created.

Field or Check Box	Description	
Local Transmission Control	Select a local control number with this envelope. Required.	
Number	Displayed only if Use global control number for Transmission Control Number s is set to No.	
Translate documents prior to enveloping	Whether to translate the documents prior to enveloping them. Valid values are Yes and No (default). Required.	
Map Name Mode	How to determine which map to use to perform a compliance check. Required. Valid values are:	
	 Specify (default) 	
	• Generate from data (this is useful if you want to share across envelopes)	
	Displayed if Translate documents prior to enveloping is set to Yes.	
Primary Name Format	Check boxes to instruct what information to include when generating a name fo the map. Optional.	
	Select from:	
	Transmitter IRF Code	
	Receiver IRF Code	
	 Process ID 	
	Transaction Version	
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:	
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message). 	
	 Second, it tries to generate and match the First Backup Name. 	
	 Third, it tries to generate and match the Second Backup Name. 	
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated. 	

ield or Check Box Description	
First Backup Name Format	The first backup name format to use when generating a name for the map. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Second Backup Name Format	The second backup name format to use when generating a name for the map. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.
	Select from:
	Transmitter IRF Code
	Receiver IRF Code
	Process ID
	Transaction Version
	Note: If you are using a generated map name (Map Name Mode is set to Generate from data), Application tries to generate and match the following maps:
	 First, it tries to generate and match the map in the primary name format (replacing the values that are selected for the corresponding value in the message).
	 Second, it tries to generate and match the First Backup Name.
	 Third, it tries to generate and match the Second Backup Name.
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.
Generate an error if no matching map is found	Specifies whether to generate an error if no match is found for the specified map. Required. Valid values are Yes (default) and No.

Field or Check Box	Description	
Map Name	Which map to use to perform a compliance check (Map Name Mode set to Specify). The map must already be checked in to Application. Optional.	
Determine the Business Process by	How to determine the business process name to use if there were errors in the compliance check. Required. Valid values are:	
	 Specify Business Process Name (default) 	
	 Generate Business Process Name (this is useful if you want to share across envelopes) 	
Primary Name Format	Check boxes to instruct what information to include when generating a name for the business process after an error. Optional.	
	Select from:	
	Transmitter IRF Code	
	Receiver IRF Code	
	Process ID	
	Transaction Version	
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:	
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).	
	 Second, it tries to generate and match the First Backup Name. 	
	 Third, it tries to generate and match the Second Backup Name. 	
	• Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.	

Field or Check Box	Description		
First Backup Name Format	The first backup name format to use when generating a name for the business process after an error. system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.		
	Select from:		
	 Transmitter IRF Code 		
	Receiver IRF Code		
	Process ID		
	Transaction Version		
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:		
	 First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message). 		
	 Second, it tries to generate and match the First Backup Name. 		
	 Third, it tries to generate and match the Second Backup Name. 		
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated. 		
Second Backup Name Format	The second backup name format to use when generating a name for the business process after an error. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional. Select from:		
	Transmitter IRF Code		
	Receiver IRF Code		
	Process ID		
	Transaction Version		
	Note: If you are using a generated business process (On a translation error, determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:		
	 First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message). 		
	 Second, it tries to generate and match the First Backup Name. 		
	 Third, it tries to generate and match the Second Backup Name. 		
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated. 		

Field or Check Box	Description	
Generate an error if no generated business process name exists in		
the system	Note: Only displayed if On a translation error, determine the Business Process by is set to Generate Business Process Name.	
Business Process List	Select a previously created business process to associate with this envelope. Optional.	
	Displayed only if On a translation error, determine the Business Process by is set to Specify Business Process Name.	
Determine the Business Process By	How to determine the business process name to use if there were no errors in the compliance check. Required.Valid values are:	
	 Specify Business Process Name (default) 	
	 Generate Business Process Name (this is useful if you want to share across envelopes) 	
Primary Name Format	Check boxes to instruct what information to include when generating a name for the business process. Optional.	
	Select from:	
	Transmitter IRF Code	
	Receiver IRF Code	
	 Process ID 	
	Transaction Version	
	Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:	
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).	
	 Second, it tries to generate and match the First Backup Name. 	
	 Third, it tries to generate and match the Second Backup Name. 	
	• Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated.	

Field or Check Box	Description		
First Backup Name Format	The first backup name format to use when generating a name for the business process. system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional.		
	Select from:		
	Transmitter IRF Code		
	Receiver IRF Code		
	Process ID		
	Transaction Version		
	Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:		
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).		
	 Second, it tries to generate and match the First Backup Name. 		
	 Third, it tries to generate and match the Second Backup Name. 		
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated. 		
Second Backup Name Format	The second backup name format to use when generating a name for the business process. The system allows for two alternatives if the Primary Name Format is not found—checking for the First Backup Name Format and then, if that is not found, checking for the Second Backup Name Format. Optional. Select from:		
	Transmitter IRF Code		
	Receiver IRF Code		
	Process ID		
	Transaction Version		
	Note: If you are using a generated business process (Determine the Business Process by is set to Generate from data), Application tries to generate and match the following business process names:		
	• First, it tries to generate and match the business process in the primary name format (replacing the values that are selected for the corresponding value in the message).		
	 Second, it tries to generate and match the First Backup Name. 		
	 Third, it tries to generate and match the Second Backup Name. 		
	 Fourth, if there is not an existing map that matches the names generated in steps 1-3, an error is generated. 		
Generate an error if no generated business process name exists in the system	 Specify whether to generate an error if there is no match to the generated business process name in the system. Note: Only displayed if Determine the Business Process by is set to Generate Business Process Name. 		

Field or Check Box	Description	
Business Process List	Select a previously created business process to associate with this envelope. Optional.	
	Displayed only if Determine Business Process by is set to Specify business process.	
Extraction Options	Business process data extraction. Required.	
	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. Optional	
Data Extraction Filename	Filename for data extraction. Displayed only if Extraction Options set to Extract to a file system directory. Optional.	
Data Extraction Mailbox	Mailbox for data extraction. Displayed only if Extraction Options set to Extract to a mailbox. Optional.	
Data Extraction Mailbox Message Name	Mailbox message name for data extraction. Displayed only if Extraction Options set to Extract to a mailbox. Optional.	

RND Business Processes

To use RND with Application, you need to create a business process or processes that uses one of the predefined business processes described in this section, and configure the following parameters, which should match what you configured in the RND envelope:

- Process ID (for inbound only)
- Sender ID (for inbound and outbound)
- Receiver ID (for inbound and outbound)
- ✦ Accepter Lookup Alias (for outbound only)

To help you accomplish your business goals, Application provides two predefined business processes which are used by Application to implement RND processing: RNDEnvelope and RNDDeenvelope. These predefined business processes are initiated by other processes/services during RND processing and do not require you to modify them.

Business Process	Business Goals	For more information, see
RNDDeenvelope	Extracts RND message types from an EDI message and starts the appropriate business process, according to the content of the envelopes.	<i>RNDDeenvelope Business Process</i> on page 26
RNDEnvelope	Applies a RND envelope to one or more RND message types and then uses the envelope data to start the appropriate business process.	RNDEnvelope Business Process on page 29

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

RNDDeenvelope Business Process

The RNDDeenvelope business process is used to deenvelope RND data. A typical scenario is one in which RND data must be received from a trading partner. The data must be deenveloped to extract identifying batch and interchange data, and the RNDDeenvelope business process helps to provide the deenveloping services.

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

- 1. You create a business process that calls the EDI Deenveloping service.
- 2. The EDI Deenveloping service parses the whole message and checks it for compliance so it can be further processed by Application.
- 3. Passes the RND messages to the RNDDeenvelope business process. The Generic Deenvelope service runs as a subprocess.

4. The RNDDeenvelope business process looks up the envelope, based on the data found in the header.

Note: For this envelope to be used, the Transmitter IRF Code, Receiver IRF Code, and Process ID in your envelope definition must match the parameters in the incoming data.

- 5. The envelope specifies what to do with the deenveloped messages.
- 6. Starts the Invoke Business Process service or a subprocess service to initiate the appropriate business process to handle each deenveloped message.

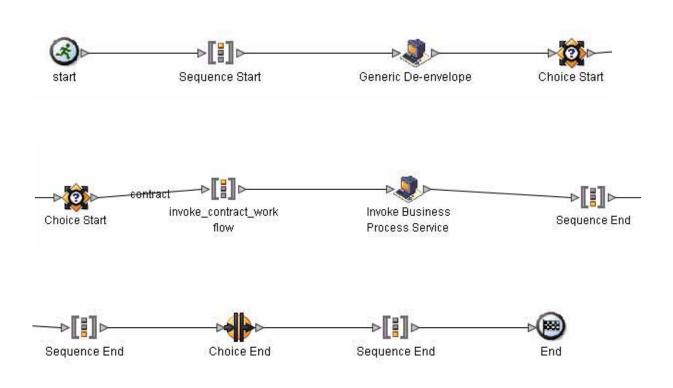
If exceptions occur when running an EDI Deenveloping business process, Application generates an EDI Compliance Report.

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 Application.
Set onfault processing	False	Onfault processing allows the process to immediately execute the on-fault activity specified in the process, even if the process has not yet reached that step in the process. For example, if a process fails at step 3, but the on-fault activity is specified in step 7, if onfault processing is enabled, the process proceeds to the step 7 on-fault rather than halting at step 3.
Queue	4	Application enables you to set performance optimizations by queue, defining queue levels to allocate resources. This number indicates the previously allocated queue level that you want for this business process model for processing.
Persistence Level	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 Application to retain data.
Recovery Level	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.
Document Storage Type	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 Application.
Life Span	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 Application, along with the life span type and removal method.

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

Parameter	Default	Description
Complete by Deadline	None Available Note: To set a deadline you	Complete by – The deadline time, in hours and minutes, by which the business process must complete process once it starts.
	must change it in the	 First Notification: Hours and Minutes – Whether to receive notification before a business process deadline.
	business process.	 Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.
Event Reporting Level	None	The level of event reporting that is retrieved for this business process when it runs. None specifies not to generate any reports.

The following figure shows the business process model in the GPM, which makes up the RND Deenvelope business process:



The following BPML code makes up the RNDDeenvelope business process:

```
<process name="RNDDeenvelope">
<rule name="contract">
<condition>CONTRACT_FOUND = "YES"</condition>
</rule>
```

```
<sequence>
    <operation>
      <participant name="DeenvelopeGeneric" />
      <output message="Xout" >
        <assign to="map_name">BrkIrnd</assign>
        <assign to="RunInValidationMode">false</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 RNDDeenvelope Business Process

Before you use the RNDDeenvelope business process, you must create a RND inbound envelope for each RND message type that you are receiving. See *RNDInbound Envelope* on page 7.

RNDEnvelope Business Process

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

A typical scenario is one in which RND 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 RNDEnvelope business process helps to provide these enveloping services.

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

1. You create a business process that calls the EDI Encoder service.

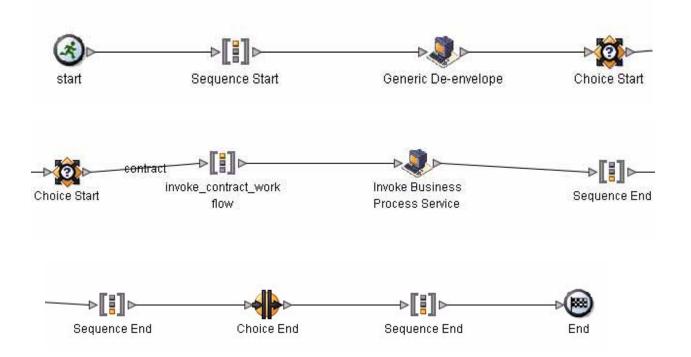
- 2. The EDI Encoder service calls the EDI Enveloping service, either in immediate or deferred mode, depending on what you specify.
- 3. The EDI Enveloping service starts the RNDEnvelope business process (which runs the Generic Envelope service as a subprocess to extract the name of the business process).
- 4. The RNDEnvelope 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.

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 Application.
Set onfault processing	False	Onfault processing allows the process to immediately execute the on-fault activity specified in the process, even if the process has not yet reached that step in the process.
		For example, if a process fails at step 3, but the on-fault activity is specified in step 7, if onfault processing is enabled, the process proceeds to the step 7 on-fault rather than halting at step 3.
Queue	4	Application enables you to set performance optimizations by queue, defining queue levels to allocate resources. This number indicates that previously allocated queue level that you want for this business process model for processing.
Persistence Level	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 Application to retain data.
Recovery Level	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.
Document Storage Type	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 Application.
Life Span	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 Application, along with the life span type and removal method.

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

Parameter	Default	Description
Complete by Deadline	None Available Note: To set a deadline you must change it in the business process.	Complete by – The deadline time, in hours and minutes, by which the business process must complete process once it starts.
		 First Notification: Hours and Minutes – Whether to receive notification before a business process deadline.
		 Second Notification: Hours and Minutes – Whether to receive another notification before a business process deadline.
Event Reporting Level	None	The level of event reporting that is retrieved for this business process when it runs. None specifies not to generate any reports.

The following figure shows the business process model in the GPM, which makes up the RND Envelope business process:



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

```
<process name="RNDEnvelope">
<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>
```

Before Using the RNDEnvelope Business Process

Before you use the RNDEnvelope business process, you must create a RND outbound envelope for each RND message type that you are sending. See *RNDOutbound Envelope* on page 16.

RND Mapping

This documentation assumes that you are familiar with mapping concepts and with the Application Map Editor.

The RND standards are not installed with the other EDI standards; instead, ten new *Integrator File Definition* (IFD) files—corresponding to the ten RND message types/transaction sets that Application supports—are bundled with the Map Editor and placed by the Map Editor install in the **Sterling Commerce/Map Editor/Samples/IFDs** folder.

IFD is a Sterling Commerce 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 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 Application to raise a compliance error if the code is not found in the Use Code code list, Application saves the standard rule and the associated code list.

Application automatically installs the appropriate RND build and break (system) maps, which determine the message type and then match it with the appropriate envelope. The RND standards are not installed with the other EDI standards; instead, you use the Map Editor to create a positional format for the RND side of your map that conforms to the RND standard.

RND Message Type	IFD File Name
RND Message Type 1	RND001
RND Message Type 2	RND002
RND Message Type 3	RND003
RND Message Type 4	RND004
RND Message Type 5	RND005
RND Message Type 6	RND006
RND Message Type 7	RND007
RND Message Type 8	RND008
RND Message Type 10	RND010
RND Message Type 12	RND012

Application supports the following RND message types:

Creating an RND Map

You can create RND maps by loading the appropriate IFD file and creating a map to translate your RND data. The IFD is a Sterling Commerce 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 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 Application to raise a compliance error if the code is not found in the Use Code code list, Application saves the standard rule and the associated code list.

Opening an IFD File to Create a RND Map

Application 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, Application 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:

- **Caution:** 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.
- 1. In the 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 RND messages, you typically open the IFD file on the Output side of the map; for inbound RND messages, you typically open the IFD file on the Input side of the map.

If you already used Application 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 RND 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 **Sterling Commerce/Map Editor/Samples/IFDs/RND** folder.

- 3. Click **Open** to open the selected IFD file into the map.
- 4. In the 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 .mxl 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.