Standards Translation Service

The following table provides an overview of the Standards Translation service:

System name	Standards Translation Type
Graphical Process Modeler (GPM) categories	All Services, Translation
Description	Performs translation of the primary document using a specified map, and replaces the primary document with the result of the translation. This service sets correlations to enable EDI tracking and document repair for the standards used with the application.
Business usage	Performs translation of the primary document within business processes.
Usage example	You want to take positional data from your order system and translate it to variable-length-delimited data so that it can be read by your billing system.
	Use the Map Editor to create a map that will translate the incoming data from positional data to variable-length-delimited data. Write a business process that will put the data into the primary document, then start the Standards Translation service. Using the map you created, the service translates the data from positional data to variable-length-delimited, and replaces the old data with newly translated data in the primary document.
Preconfigured?	There is a configuration of the service delivered with the application, but you must configure parameters for it in the GPM.
Requires third party files?	No
Platform availability	All supported application platforms
Related services	No
Application requirements	The map specified in the map_name parameter must be registered with the application and activated. If either of these conditions is not met then the translation will not be performed.
Initiates business processes?	No
Invocation	Runs as part of a business process.

Business process context considerations	The Standards Translation service looks for the following parameters in the business process context. If the service finds them, it uses them during translations where either the input or output is EDI:
	◆ edi_output_tag_delimeter
	◆ edi_output_segment_delimeter
	◆ edi_output_element_delimeter
	◆ edi_output_sub_element_delimeter
	◆ edi_output_repeating_element_delimeter
	◆ edi_output_release_character
	◆ edi_output_decimal_separator
	◆ edi_input_tag_delimeter
	◆ edi_input_segment_delimeter
	◆ edi_input_element_delimeter
	◆ edi_input_sub_element_delimeter
	◆ edi_input_repeating_element_delimeter
	◆ edi_input_release_character
	◆ edi_input_decimal_separator
Returned status values	◆ Success – Translation was successful.
	◆ Error – Errors were encountered during translation or translation could not be performed. See the Translator report contained in the Business Process Context Status report for further detail.
Restrictions	No
Persistence level	None
Testing considerations	The best way to test is within a simple business process where the Standards Translation service is the only operation. After the business process runs, verify the output in the application, and review the translator report for detail on what occurred during the translation.

How the Standards Translation Service Works

The Standards Translation service translates data in the following file formats and sets correlations to enable EDI tracking and document repair:

✦ Electronic data interchange (EDI)

✦ Positional

✦ Variable-length-delimited

✦ Extensible Markup Language (XML)

✦ Structured Query Language (SQL)

✦ Japanese Center for Informatization of Industry (CII)

Note: If the input document character encoding is specified in the application, it overrides the encoding specified in the map. The output document content type and character encoding are set based on the information contained in the map.

The Standards Translation service creates a translation report.

Implementing the Standards Translation Service

To implement the Standards Translation service, complete the following tasks:

1. Activate your license for the Standards Translation service. See *An Overview of Implementing Services*.

2. If you are using a map that has a database on the output side, you must set up a connection to the database that contains the tables you want to access. See *Setting Up a Connection to an External Database*.

3. Create a Standards Translation service configuration. See *Creating a Service Configuration*.

4. Configure the Standards Translation service. See *Configuring the Standards Translation Service* on page 22.

5. Use the Standards Translation service in a business process.

Configuring the Standards Translation Service

To configure the Standards Translation service, you must specify settings for the following fields in the GPM:

Field	Description
Config	Name of the service configuration.
edi_input_decimal_separator	Character used to indicate the decimal point on the input side.
edi_input_element_delimiter	Character used to delimit elements (fields) on the input side.
edi_input_release_character	Character used to quote elements (fields) that contain the delimiter on the input side.
edi_input_repeating_element_delimiter	Character used to delimit repeating elements on the input side.
edi_input_segment_delimiter	Character used to delimit segments on the input side.
edi_input_sub_element_delimiter	Character used to delimit sub-elements on the input side.
edi_input_tag_delimiter	Character used to delimit tags on the input side.
edi_output_decimal_separator	Character used to indicate the decimal point on the output side.
edi_output_element_delimiter	Character used to delimit elements (fields) on the output side.
edi_output_release_character	Character used to quote elements (fields) that contain the delimiter on the output side.
edi_output_repeating_element_delimiter	Character used to delimit repeating elements on the output side.

Field	Description
edi_output_segment_delimiter	Character used to delimit segments on the output side.
edi_output_sub_element_delimiter	Character used to delimit sub-elements on the output side.
edi_output_tag_delimiter	Character used to delimit tags on the output side.
exhaust_input	Whether to execute the map until the Standards Translation service has translated all of the input. Valid values are Yes and No. **Note:** If your map design is faulty (that is, if the data structure does not match the layout of the map), the data in the input file cannot be properly processed. If a segment is present in the input file it must be defined and active in the map and in the proper sequence. When the translator reads a segment, it tries to match it to the records in the map based on their tag values. If exhaust_input is set to "Yes" the translator attempts to match each segment in the input file to a segment in the map, until it reaches the end of the input file. Conversely, if exhaust_input is set to "No," the translator does not re-invoke the map to continue processing the remaining data in the input file.
map_name	Name of the map used for translation. The map must already be checked in to the application and enabled. **Note:** The Standards Translation service must be configured so the map_name parameter does not override what is specified in process data when performing document repair. See *Business Process Example for Resending a Document* on page 25 for more information. Additionally, you must specify an existing map that is already checked in to the application, or the Standards Translation service generates a null pointer exception when the map it attempts to load doesn't exists.
output_report_to_process_data	Whether to output the report to process data. Valid values are: ◆ Yes: Output the report to process data. ◆ No: Do no output the report to process data.
output_to_process_data	Whether the output of the translation should be placed in the process data tree. The output must be XML. Valid values are Yes and No.
useStreams	Whether to support large files (streaming mode). Valid values are Yes (default), No, and blank (which uses default). The default was changed with release 4.1.1, patch 1973. In versions previous to that, the service did not use document streaming by default.
validate_input	Validates the input to the input side of the map. Valid values are Yes and No.
validate_input_against_dtd	Validates the input to the DTD specified in the input document. Valid values are No validation, Validate using a DTD, and Validate using an XML schema.

Field	Description
validate_output	Validates the output to the output side of the map. Valid values are Yes and No.

Parameters Passed Through the Business Process Only

The following parameters can be passed through the business process using an Assign statement. Note that these parameters are not available through the GPM.

Parameter	Description
FromSchema	Used to enable manipulation of a database schema prefix within the SQL Table/View or SQL Statement of a map. This parameter is required when overriding schema names within one or more SQL Statement fields.
	If the FromSchema and ToSchema parameters are not supplied, then no schema name substitution is performed.
	Note: The schema search/replace is case-sensitive.

Parameter	Description
ToSchema	Used to enable manipulation of a database schema prefix within the SQL Table/View or SQL Statement of a map.
	Note: The schema search/replace is case-sensitive.
	If the FromSchema and ToSchema parameters are not supplied, then no schema name substitution is performed.
	If the ToSchema parameter is supplied and contains a non-empty value, then any matching schema names are changed at translation time to use the supplied ToSchema schema value as follows:
	◆ For a SQL Statement, only schema names that match the FromSchema value will be substituted. The FromSchema parameter is required—otherwise, no schema values are substituted. To match and substitute more than one value pair, the FromSchema and ToSchema parameter strings can be delimited with an @ sign. For example:
	`FromSchema="from1@from2"`
	`ToSchema="to1@to2"`
	In this example, any schema names matching "from1" are changed to "to1," and any schema names matching "from2" are changed to "to2."
	For convenience, you can supply fewer ToSchema fragments than FromSchema fragments, and when there is no corresponding ToSchema fragment, the last fragment in the ToSchema string is used. For example:
	`FromSchema="from1@from2@from3"`
	`ToSchema="to"`
	In this example, any schema names matching "from1," "from2," or "from3" will be changed to "to."
	◆ For a SQL Table/View, the FromSchema parameter is optional. If it is not supplied, all schema names are changed to the supplied ToSchema value. If it is supplied, the substitution occurs in the same way as it does for a SQL Statement. If the translator property **sql.driver.useIdentifierQuoteString** is set to True within customer_overrides.properties, then matching and substitution occurs with quoted schema names.
	◆ If the ToSchema parameter is supplied but is empty (equal to "" (two double quotation marks) or '' (two single quotation marks)), then any matching schema names contained in the map are removed at translation time.

Business Process Example for Resending a Document

When you will be repairing/resending a document, you must configure the Standards Translation service so the **map_name** parameter does not override what is specified in process data when performing document repair. Therefore, you should configure your Standards Translation service business process to look like the following for this scenario:

```
...
 <output message="Xout">
    <assign to="map_name">PosToTransactionReportRequest</assign>
    <assign to="." from="*"></assign>
 </output>
 ...
```

The resend functionality will then add a map_name parameter to process data, which will reference the pass-through map. This map name must be picked up by the Standards Translation service so it is important to amend your BPML so process data can override the parameter that is defined for the service.