IBM Sterling Gentran:Server for UNIX
IBM Sterling Gentran:Server for UNIX - Workstation

GENCOD User Guide

Version 6.2

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This edition applies to the 6.2 Version of IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in *Notices* on page N-1.

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Notices

About This Guide

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Welcome

Welcome to the *IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation GENCOD User Guide*. The GENCOD standard was developed by the French National Numbering Organization GENCOD-EAN France. The GENCOD standard is used mainly in France within the retail market by some major retailers and manufacturers.

Who should use this guide

Sterling Gentran:Server supports the GENCOD standard. GENCOD standard users should read this guide to learn about specific procedures for working with the GENCOD standard.

In this guide

This guide contains information and procedures required to translate GENCOD data and set up proper mapping.

Chapter Title	Description
Application Integration: Translating GENCOD Data to Application Data	Inbound processing using incoming GENCOD data. GENCOD data is enveloped with the EDIFACT UNB, UNG, and UNH segments and delimited using EDIFACT separators to enable Sterling Gentran:Server internal processing by the **edifrmat** program. The resulting data is translated to an application format by using conventional Sterling Gentran:Server mapping tools.
Application Integration: Translating Data into GENCOD Data	Application data is translated to GENCOD data (with an EDIFACT UNB, UNG, and UNH envelope and EDIFACT delimiter) using conventional Sterling Gentran:Server mapping tools. The EDIFACT envelope and the delimiter are removed by the **edf2gen** program.
Messages	This lists the messages you might see while translating data to and from the GENCOD standards.

Reference
See the chapter *Running Translation* in the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* for more information about data translation.

Related Publications

Sterling Gentran:Server documentation

This table describes additional documentation for the Sterling Gentran:Server software.

Document	Description
IBM® Sterling Gentran:Server® for UNIX Upgrade and Data Conversion Guide	Instructions for upgrading from previous versions of IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation. Also includes instructions for converting the files that are part of the upgrade.
IBM® Sterling Gentran:Server® for UNIX Installation Checklist	Description of the recommended sequence in which you should install and configure system components.
IBM® Sterling Gentran:Server® for UNIX Getting Started Guide	Instructions for installing the Sterling Gentran:Server software and performing setup tasks, such as setting up security. Instructions for starting and exiting Sterling Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide	Instructions for installing the IBM® Sterling Gentran:Server® for UNIX - Workstation software and performing setup tasks. Instructions for starting and exiting Sterling Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide	Instructions for performing mapping and translation tasks using the Sterling Gentran:Server Application Integration system.
IBM® Sterling Gentran:Server® for UNIX HIPAA Compliance and NCPDP User Guide	Instructions for mapping and translating NCPDP files with the Application Integration system.

Document	Description
IBM® Sterling Gentran:Server® for UNIX VDA User Guide	Instructions for mapping and translating VDA files with the Application Integration system.
IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide	Describes processes, lists command-line commands in alphabetical order, and describes file record layouts and data type formats.
IBM® Sterling Gentran:Server® for UNIX - EC Workbench Data Flow Administration Guide	User instructions for configuring data flows using the Sterling Gentran:Server software.
IBM® Sterling Gentran:Server® for UNIX - Process Control Manager Data Flow Administration Guide	User instructions for configuring data flows using the Sterling Gentran:Server software.
IBM® Sterling Gentran:Server® for UNIX Maintenance and Troubleshooting Guide	Instructions for maintaining your Sterling Gentran:Server installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur.
IBM® Sterling Gentran:Server® for UNIX - Workstation Maintenance and Troubleshooting Guide	Instructions for maintaining your workstation installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur.
IBM® Sterling Gentran:Server® for UNIX with ADD User Guide	Instructions for configuring and using the Advanced Data Distribution system.
IBM® Sterling Gentran:Server® for UNIX XML Translation User Guide	Instructions for mapping and translating XML files with the Application Integration system.

Document	Description
IBM® Sterling Gentran:Server® for UNIX with ADD FTP Daemon User Guide	Instructions for configuring and using the FTP Daemon tool with IBM® Sterling Gentran:Server® for UNIX with ADD.
Online Help	Context-sensitive help screens describing the Sterling Gentran:Server dialog boxes and features. Also includes procedures for using the mapping and translation and the data flow administration software.

Documentation Conventions

Typographic conventions

This table describes the typographic conventions used in this guide.

Convention	Use
Italics	Italic type is used for titles of other manuals and documents and for names of files and file extensions. **Example** *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*
Bold	Bold type is used for program names, for key terms the first time they are used within a chapter, and for characters you enter onto a screen. **Example** A **password** is a set of characters a user must enter to gain access to a system.
<Angle brackets>	Angle brackets indicate variable information, such as a file name that you define. **Example** <scriptname>.scr

Symbols used within syntax statements

This table describes symbols used within syntax statements.

Symbol	Use
< >	Substitute a value for any term that appears within angle brackets. Do not enter angle brackets unless specifically told to do so. **Example** **rm** <filename> means that you should type the name of the file you want to delete.
{ }	Braces indicate a required part of a statement. Do not enter the braces. **Example** {-f <filename>} means you must enter the f parameter followed by a filename.

(Contd) Symbol	Use
[ ]	Brackets indicate an optional part of a statement. Do not enter the brackets. **Example** [-f <filename>] means you could type the f parameter followed by a filename, but you are not required to do so.
…	An ellipse indicates that the immediately preceding item can be repeated indefinitely. Do not enter the ellipse. **Example** -e… means that you can repeat -e with other values.
( )	Parentheses should be entered as shown. They are part of the syntax of a statement and are not special symbols. **Example** (n) means that you should type a number enclosed by parentheses.

CHAPTER
1

Application Integration: Translating from a GENCOD Format

Contents

Introduction

The GENCOD format

The GENCOD format is a fixed-format standard without any defined envelope structures outside of the transaction.

How Sterling Gentran:Server handles GENCOD data

Because GENCOD does not have defined envelope structures, you must configure Sterling Gentran:Server to preprocess the GENCOD data, changing it to a format that Sterling Gentran:Server can compliance check. This format also enables Sterling Gentran:Server to create audit records for the data.

Preprocessing consists of wrapping the data in headers and inserting element separators. The program **edifrmat** handles the preprocessing tasks.

Once **edifrmat** has transformed the data, the Sterling Gentran:Server can perform a compliance check and create audit records.

Setting Up for GENCOD Translation

Introduction

This topic provides an overview of the tasks you must perform to set up your system to translate GENCOD data.

Stages in the set-up process

This table lists the stages in the process. This chapter contains information for each of the stages described in this table.

Stage	Description
1	Analyze the format of the incoming GENCOD data. **Reference** See How to Analyze the GENCOD Data.
2	Create the GENCOD map and the Data Definition Format (DDF) file that describes the layout of the GENCOD data. **Reference** See How to Create an Inbound GENCOD Map
3	Create the GENCOD Trading Partnership record. **Reference** See How to Create Inbound GENCOD Trading Partnership Records
4	Configure your system to use the **edifrmat** program to preprocess the GENCOD data. **Reference** See How to Configure for edifrmat Processing
5	Set translation options for GENCOD data. **Reference** See the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* for instructions.

How to Analyze the GENCOD Data

Introduction

Before you can create a GENCOD map, you must analyze the GENCOD format that you want to use in the map. You will use the information you gather to create a Data Definition Format (DDF) file that defines the GENCOD format.

Reference
For more information about Data Definition Format files, see the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.

Procedure

Use this procedure to analyze GENCOD data.

Step	Action
1	Obtain sample data that is in the GENCOD format you will receive from your trading partner.
2	Analyze the sample data to determine the segment and element layouts and field lengths.
3	Determine the kind of data contained in each segment and element.
4	List the map components and layout information for your GENCOD Data Definition Format file.

How to Create an Inbound GENCOD Map

Introduction

After you analyze the GENCOD data you expect to receive from your trading partner, you are ready to create a map that will translate the GENCOD data into another format, such as your application format.

This topic explains how to create a map for translating data from a GENCOD standard format.

Reference
For more detailed instructions about creating maps, see the *Creating a Map* section in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.

The GENCOD DDF file

The input side of your map must be a DDF file that defines the layout of the GENCOD data you expect to receive.

The preprocessing program **edifrmat** uses the layout information in this DDF file to transform and prepare GENCOD data for the translator.

Important naming conventions

For Sterling Gentran:Server to process your GENCOD data, you must use these DDF file naming conventions for GENCOD DDF files, where *mapname* is the name of the map that uses the DDF file.

- Input GENCOD DDF file name = *mapname*_in.ddf
- Output GENCOD DDF file name = *mapname*_out.ddf

Procedure

Use this procedure to create a GENCOD map.

Step	Action
1	Start the Application Integration system.
2	From the File menu, select **New** to start the New Map Wizard.
3	When prompted for the kind of map, select the option that has “Standard” as the input and has the appropriate output file. **Example** If your output file is in an application format, select Standard-to-Application as the kind of map you are creating.

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>4</td><td colspan="2">When prompted for the input format, use this table to determine your next step.</td></tr>
<tr><td></td><td>IF…</td><td>THEN…</td></tr>
<tr><td></td><td>You already have a DDF file that defines the GENCOD format</td><td>Click Load the data format from a saved definition and then click the Browse button to locate the DDF in the file in the File Definitions/Apps directory.
WARNING
The DDF file must be in the Sterling Gentran:Server directory specified for DDF files.</td></tr>
<tr><td></td><td>You do not have a DDF file that defines the GENCOD layout</td><td>Click Create a new data format using the syntax and select Positional from the drop-down list.</td></tr>
<tr><td>5</td><td colspan="2">When prompted for the output format, select the appropriate option.
Reference
See Defining the output format in the How to Create a New Map topic in the IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide if you need more information.</td></tr>
<tr><td>6</td><td colspan="2">Save the map.</td></tr>
<tr><td>7</td><td colspan="2">Did you select Create a new data format (positional) in Step 4?
◗ If YES, continue with Step 8.
◗ If NO, go to Step 9.</td></tr>
</table>

(Contd) Step	Action
8	Define the GENCOD DDF file, name it, and save it. Continue with Step 9. **WARNING** **You must name the file for the map followed by "_in" (*mapname*_in.ddf) and save it to the directory the File Definitions/Apps directory, which contains your Data Definition Format files. If you use a different name or save the file to a different directory, Sterling Gentran:Server cannot process your GENCOD data.** **Reference** For detailed instructions, see the section *Defining a Fixed-Format Application File* in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.
9	Did you select **Create a new data format** in Step 5? ◗ If YES, define the output side of your map. ◗ If NO, continue with Step 9.
10	Structure the map. **Reference** See the *Structuring Your Map* section in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.
11	Save the map.
12	Compile the map to create a translation object.

How to Create Inbound GENCOD Trading Partnership Records

Introduction

To translate from a GENCOD standard format to application data or another format, you need a unique Trading Partnership record for each combination of sender, receiver, GENCOD version, and message type.

Use the following procedures to create a unique Trading Partnership record for each combination of sender, receiver, GENCOD version, and message type:

- Creating an Interchange Organization record
- Creating a Group Organization record
- Creating a Trading Partnership record

Note
The values given in these procedures are specific to Trading Partnership records for inbound data that is in GENCOD format. Some fields (and values) in the dialog boxes are not mentioned in the procedures. Complete these fields as specified by your company's practices.

Creating an Interchange Organization record

This procedure describes how to create an Interchange Organization record.

Step	Action
1	Open the **Trading Partnership Administration**.
2	Click **New** from the File menu.
3	Click **Interchange Organization**. **System Response** The system displays the New Interchange Organization dialog box.

(Contd) Step	Action	
4	Complete the fields using the specified value.	
	Field	**Value**
	Code	Type the organization code.
	Description	Type a description for the Interchange organization.
	Your Interchange ID	Type **GENCOD_RECV** in all capital letters.
	Partner's Interchange ID	Type **GENCOD_SEND** in all capital letters.
5	Click **OK** and continue with the topic Creating a Group Organization record.	

Creating a Group Organization record

This procedure describes how to create a Group Organization record.

Step	Action
1	Open the **Trading Partnership Administration**.
2	Select the Interchange Organization that you want to associate with this Group Organization record.
3	Click **New** on the File menu.
4	Click **Group Organization**. **System Response** The system displays the Group Organization dialog box.

(Contd) Step	Action	
5	Complete the fields using the specified values.	
	Field	**Value**
	Code	Type the organization code.
	Description	Type a description for the Group Organization record.
	Your Group ID	Type the first element in the **100** segment.
	Partner's Group ID	Type the first element in the **221** segment.
6	Click **OK** and continue with the topic Creating a Trading Partnership record.	

Creating a Trading Partnership record

This procedure describes how to create a Trading Partnership record.

Step	Action
1	Open the **Trading Partnership Administration**.
2	Select the Group Organization record that you want to associate with this Trading Partnership.
3	Click **New** on the File menu.
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership dialog box.

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="6">5</td><td colspan="2">Complete the Trading Partnership dialog box using the specified values and then click Next.</td></tr>
<tr><td>Field</td><td>Value</td></tr>
<tr><td>Code</td><td>Type the Trading Partnership code.</td></tr>
<tr><td>Description</td><td>Type a description for the Trading Partnership record.</td></tr>
<tr><td>Translation Type</td><td>Select Standard to Application.</td></tr>
<tr><td>Map name</td><td>Specify the name of the GENCOD map.

Note
You must have the GENCOD input DDF file (mapname_in.ddf) in the File Definition/Apps directory in order to process the data.</td></tr>
<tr><td rowspan="4">6</td><td colspan="2">Complete the Inbound EDI dialog box using the specified values and then click Next.</td></tr>
<tr><td>Field</td><td>Value</td></tr>
<tr><td>Std Ver</td><td>Specify the six-character version.

Note
You can determine the Standard Version from the EDI data that you receive by appending the first element (not counting the Record ID) in the first segment to GEN0.

Example
If the record ID of the first record is 035 and the first element (not counting the Record ID) is 05, then the Standard Version is GEN005.</td></tr>
<tr><td>Document ID</td><td>Specify the three-digit message code. Select one from the list or enter it in the Document ID box.

Note
In your data, the Document ID is the Record ID element in the second message ID segment.</td></tr>
</table>

(Contd) Step	Action
7	Click **Maintain locally** on the Runtime dialog box and then click **Next.**
8	Set the parameters in the Archive dialog box to your specifications and then click **Next**.
9	Clear the setting Create **acknowledgment for inbound document** on the Outbound Acknowledgment dialog box. **Note** GENCOD standards do not support acknowledgments.
10	Click **Finish**.

Reference
See the *Working with Trading Partnerships* chapter in the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* for detailed instructions on creating Trading Partnership records.

How to Configure for edifrmat Processing

Introduction

You must preprocess GENCOD data with the **edifrmat** program before the data is translated. The **edifrmat** program wraps the data in EDIFACT-like headers and inserts element separators. When the data is in this format, Sterling Gentran:Server can archive and perform a compliance check on it.

Running edifrmat

You can:

- Configure your system to run **edifrmat** in a batch file or script, or
- Run edifrmat from the Sterling Gentran:Server Translate menu.

The input file

The file on which you run the **edifrmat** program can contain:

- Multiple message types
- Different Trading Partnership records in the same interchange
- Interchanges that use different standards

If you use Data Flow Administration

If you process inbound GENCOD documents with an inbound Sterling Gentran:Server data manager, you must run **edifrmat** with the “s” parameter. This parameter suppresses new line termination so that the inbound data manager can process the data.

If you do not use Sterling Gentran:Server data managers to route your data, omit the “s” parameter.

Procedure

Use this procedure to configure your system to use the **edifrmat** program to preprocess GENCOD data.

Step	Action
1	Make sure that the GENCOD DDF file that describes the data is: ◗ Available to Sterling Gentran:Server ◗ In the File Definition/Apps directory, which is specified for Sterling Gentran:Server DDF files Also, if you use IBM® Sterling Gentran:Server® for UNIX, make sure that you have read permission for the DDF directory.
2	Make sure that you have a Trading Partner record for each combination of sender, receiver, GENCOD version, and message type. **Reference** See the How to Create Inbound GENCOD Trading Partnership Records topic for more information.
3	Do you want to run **edifrmat** in a script or batch file? ◗ If YES, add the command to the file and then go to Step 4. **Note** If you use an inbound data manager to route your data, be sure to include the -s parameter. **Reference** See the *IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide* for a description of the options you can use with **edifrmat**. ◗ If NO, complete the next step.

(Contd) Step	Action
4	Run **edifrmat** and translation manually from the Translate menu. ◗ Select **Translate Documents** from the Translate menu to display the Translate Document dialog box. ◗ To run **edifrmat**, click the **Format inbound document** option. ◗ To set the **edifrmat** parameters, click the **Formatting Options** button to display the Formatting Options dialog box; then select the parameters you want to use. If you use an inbound data manager to route your data, be sure to include the Format GENCOD data (-s) parameter. **Note** If you want to process loops and dates for GENCOD data, then select the **Alternate GENCOD processing of loops and dates (command line option O)** in the Translate Options dialog box. **Reference** See the *Iftran Syntax* topic in the *IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide* for more information.
5	You are now ready to run translation.

How edifrmat Processes GENCOD Data

Introduction

This topic describes how the **edifrmat** program prepares inbound data that is in GENCOD format for translation.

The edifrmat process

This table describes how **edifrmat** processes data that is in GENCOD format to prepare it for translation.

Stage	Description
1	Validates that the document is GENCOD data by looking for a sequence of records specific to GENCOD.
2	Locates the Trading Partner record for the data to determine the map type.
3	Locates the GENCOD *mapname_in.ddf* file in the File Definitions/Apps directory and reads the record layout.
4	Locates the GENCOD standards in the Standards directory.
5	Uses the GENCOD record layout in the DDF file to create and add EDIFACT header and trailer records to the data. ◗ Creates an UNH segment from values in the GENCOD message header segment ◗ Creates UNT segment from values in the GENCOD message trailer segment ◗ Reads the GENCOD Message ID and the interchange control number from these header records and writes them in the UNB/UNG/UNH segments ◗ Reads the GENCOD version number, the number of messages, and the number of segments from these trailer records and writes them in the UNT/UNE/UNZ segments.
6	Re-writes the GENCOD records, using UNOB syntax and inserting element separators. **Note** After Sterling Gentran:Server has completed the compliance check and created audit records for the data, the **lftran** program removes the EDIFACT headers and element separators to prepare the data for the Application Integration translator.

New header and trailer segments

The **edifrmat** program generates EDIFACT header and trailer segments that are not in the GENCOD standard. These EDIFACT segments are generated from the GENCOD header and trailer message segments.

The GENCOD header message segments include the:

- GENCOD Message ID
- Interchange control number (190)
- Number of segments (excluding this segment) in the header (199).

The GENCOD trailer message segments include

- GENCOD Message ID
- Number of messages (including one header and one trailer) in the interchange (191)
- Number of segments (excluding this segment) in the trailer (199)

Note
The number shown in parentheses is the segment ID.

CHAPTER
2

Application Integration: Translating Data into GENCOD Format

Contents

Introduction

Overview

This chapter provides the instructions for translating application data or data in another format into a GENCOD standard format.

How Sterling Gentran:Server handles GENCOD format

GENCOD standard format does not have defined envelope structures. The Sterling Gentran:Server audit and archiving programs require envelope structures in order to recognize the data as EDI data. For this reason, the translation program processes outbound GENCOD data as EDIFACT data.

After translation, you must post-process the data with the **edf2gen** program. This program reformats the data into a GENCOD standard format so that you can send it to your trading partner.

Setting Up for Outbound Translation

Introduction

This topic provides an overview of the tasks you must perform to set up your system to translate data into a GENCOD format that you can send to your trading partner.

Process

This table describes the stages in the process of translating data when the output is a GENCOD standard format.

Step	Description
1	Analyze the format of the outbound GENCOD data. **Reference** See How to Analyze the GENCOD Data.
2	Create the map and the Data Definition Format (DDF) file that describes the layout of the outbound GENCOD data. **Reference** See How to Create an Outbound GENCOD Map.
3	Create the GENCOD Trading Partnership records. **Note** Sterling Gentran:Server requires a special Trading Partnership record for outbound data that is in GENCOD format. **Reference** See How to Create Outbound GENCOD Trading Partnership Records.
4	Set the translation options. **Reference** See How to Set Translation Options for Outbound GENCOD Data.
5	Configure your system to post-process the GENCOD data with the **edf2gen** program. **Reference** See How to Run the edf2gen Program.

How to Analyze the GENCOD Data

Introduction

Before you can create a map to translate data into a GENCOD standard format, you must analyze the GENCOD format that you want to use in the map. You will use the information you gather to create a Data Definition Format (DDF) file that defines the outbound GENCOD format.

Reference

For more information about Data Definition Format files, see the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.

Procedure

Use this procedure to analyze GENCOD data.

Step	Action
1	Obtain sample data that is in the GENCOD format you will send to your trading partner.
2	Analyze the sample data to determine the segment and element layouts and field lengths.
3	Determine the kind of data contained in each segment and element.
4	List the map components and layout information for your GENCOD Data Definition Format file.

How to Create an Outbound GENCOD Map

Introduction

After you analyze the GENCOD format you send to your trading partner, you are ready to create a map that will translate your application (or other formatted) data into a GENCOD standard format.

This topic explains how to create a map for translating data to a GENCOD standard format.

Reference
For more detailed instructions about creating maps, see the *Creating a Map* section in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.

The GENCOD DDF file

The output side of your map must be a DDF file that defines the layout of the GENCOD data you expect to send.

During post-processing, the program **edf2gen** uses the layout information in this DDF file to transform and prepare GENCOD data for sending.

Important naming conventions

For Sterling Gentran:Server to process your GENCOD data, you must use these DDF file naming conventions for GENCOD DDF files, where *mapname* is the name of the map that uses the DDF file.

- Input GENCOD DDF file name = *mapname*_in.ddf
- Output GENCOD DDF file name = *mapname*_out.ddf

Procedure

Use this procedure to create a GENCOD map.

Step	Action
1	Start the Application Integration system.
2	From the File menu, select **New** to start the New Map Wizard.
3	When prompted for the kind of map, select the option that has the appropriate input file and “Standard” as the output. **Example** If your input file is in an application format, select Application-to-Standard as the kind of map you are creating.

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>4</td><td colspan="2">When prompted for the input format, select the appropriate option.

Reference
See the How to Create a New Map topic in the IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide if you need more information.</td></tr>
<tr><td rowspan="3">5</td><td colspan="2">When prompted for the output format, use this table to determine your next step.</td></tr>
<tr><td>IF…</td><td>THEN…</td></tr>
<tr><td>You already have a DDF file that defines the GENCOD format</td><td>Click Load the data format from a saved definition and then click the Browse button to locate the DDF in the file definitions and application descriptions directory.

WARNING
The DDF file must be in the Sterling Gentran:Server directory specified for DDF files.</td></tr>
<tr><td></td><td>You do not have a DDF file that defines the GENCOD layout</td><td>Click Create a new data format using the syntax and select Positional from the drop-down list.</td></tr>
<tr><td>6</td><td colspan="2">Save the map.</td></tr>
<tr><td>7</td><td colspan="2">Did you select Create a new data format in Step 4?
◗ If YES, define the input side of your map.
◗ If NO, continue with Step 8.</td></tr>
<tr><td>8</td><td colspan="2">Did you select Create a new data format (positional) in Step 5?
◗ If YES, continue with Step 9.
◗ If NO, go to Step 10.</td></tr>
</table>

(Contd) Step	Action
9	Define the GENCOD DDF file, name it, and save it. Continue with Step 9. **WARNING** **You must name the file for the map followed by "_out" (*mapname*_out.ddf) and save it to the directory the File Definitions/Apps directory, which contains your Data Definition Format files. If you use a different name or save the file to a different directory, Sterling Gentran:Server cannot process your GENCOD data.** **Reference** For detailed instructions, see the section *Defining a Fixed-Format Application File* in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.
10	Structure the map. **Reference** See the *Structuring Your Map* section in the *Designing your Map* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide*.
11	Save the map.
12	Compile the map to create a translation object.

The Outbound GENCOD Process

Introduction

This topic describes how the Sterling Gentran:Server handles outbound data that is in GENCOD format.

The outbound process

This table describes how Sterling Gentran:Server processes outbound data that is in GENCOD format.

Stage	Description
1	Sterling Gentran:Server checks the **Map Name** field in the Trading Partnership record to determine the name of the translation object.
2	Translates the data.
3	Locates the GENCOD DDF file (*mapname*_out.ddf) in the File Definitions/Apps directory, which is specified for DDF files, and reads the record layout.
4	Uses the GENCOD record layout in the DDF file and the Trading Partnership record to create and add EDIFACT header and trailer records to the data. ◗ Creates an UNH segment from values in the GENCOD message header segment ◗ Creates UNT segment from values in the GENCOD message trailer segment ◗ Reads the GENCOD Message ID and the interchange control number from these header records and writes them in the UNB/UNG/UNH segments ◗ Reads the GENCOD version number, the number of messages, and the number of segments from these trailer records and writes them in the UNT/UNE/UNZ segments ◗ Uses UNOB syntax ◗ Inserts element separators.
5	Sterling Gentran:Server creates audit records for the data.

(Contd) Stage	Description
6	During post-processing, the **edf2gen** program: ◗ Removes the EDIFACT envelope segments ◗ Creates a message segment containing the Receiver ID (100) and a message segment containing the Sender ID (221) ◗ Creates a GENCOD message header segment and replaces the UNH segment ◗ Creates a GENCOD message trailer segment and replaces the UNT segment ◗ Removes the element separators ◗ Terminates the segments with new lines

How to Create Outbound GENCOD Trading Partnership Records

Introduction

This topic explains how to create Trading Partnership records for outbound data that is in GENCOD format.

Use the following procedures to create a Trading Partnership record for outbound GENCOD data:

- Creating an Interchange Organization record
- Creating a Group Organization record
- Creating a Trading Partnership record

Note
The values given in these procedures are specific to Trading Partnership records for outbound data that is in GENCOD format. Some fields (and values) in the dialog boxes are not mentioned in the procedures. Complete these fields as specified by your company's practices.

Creating an Interchange Organization record

This procedure decribes how to create an Interchange Organization record.

Step	Action
1	Open the **Trading Partnership Administration**.
2	Click **New** from the File menu.
3	Click **Interchange Organization**. **System Response** The system displays the New Interchange Organization dialog box.

(Contd) Step	Action	
4	Complete the fields using the specified value.	
	Field	**Value**
	Code	Type the organization code.
	Description	Type a description for the Interchange organization.
	Your Interchange ID	Type **GENCOD_SEND** in all capital letters.
	Partner's Interchange ID	Type **GENCOD_RECV** in all capital letters.
5	Click **OK** and continue with Creating a Group Organization record.	

Creating a Group Organization record

This procedure describes how to create a Group Organization record.

Step	Action
1	Open the **Trading Partnership Administration**.
2	Select the Interchange Organization that you want to associate with this Group Organization record.
3	Click **New** on the File menu.
4	Click **Group Organization**. **System Response** The system displays the Group Organization dialog box.

(Contd) Step	Action	
5	Complete the fields using the specified values.	
	Field	**Value**
	Code	Type the organization code.
	Description	Type a description for the Group Organization record.
	Your Group ID	Type your EAN Location Code.
	Partner's Group ID	Type your Partner's EAN Location Code. **Note** GENCOD data does not use Group Control Numbers.
6	Click **OK** and continue with the Creating a Trading Partnership record.	

Creating a Trading Partnership record

This procedure describes how to create a Trading Partnership record

Step	Action
1	Open the **Trading Partnership Administration**.
2	Select the Group Organization record that you want to associate with this Trading Partnership.
3	Click **New** on the File menu.
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership dialog box.

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="6">5</td><td colspan="2">Complete the fields using the specified values and the click Next.</td></tr>
<tr><td>Field</td><td>Value</td></tr>
<tr><td>Code</td><td>Type the Trading Partnership code.</td></tr>
<tr><td>Description</td><td>Type a description for the Trading Partnership record.</td></tr>
<tr><td>Translation Type</td><td>Select Application to Standard.</td></tr>
<tr><td>Map name</td><td>Specify the name of the GENCOD translation object (compiled map).</td></tr>
<tr><td>File Definition filename</td><td>Specify the name of the DDF that defines the record layout of the input side of the map (mapname.ddf).

Note
You must have the input DDF (mapname.ddf) and the GENCOD output DDF file (mapname_out.ddf) in the File Definition/Apps directory in order to process the data.</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>6</td><td colspan="2">Complete the Outbound EDI dialog box using the specified values and then click Next.</td></tr>
<tr><td></td><td>Field</td><td>Value</td></tr>
<tr><td></td><td>Standard version</td><td>Select the six-character version.

Note
You can determine the Standard Version from the EDI data that you have by appending the first element (not counting the Segment ID) in the first segment to GEN0.

Example
If the record ID of the first record is 035 and the first element is 01, then the Standard Version is GEN001.</td></tr>
<tr><td></td><td>Document ID</td><td>Specify the three-digit message code. Select one from the list or enter it in the Document ID box.

Note
In your data, the Document ID is the Record ID element in the second message ID segment.</td></tr>
<tr><td></td><td>Element Separator</td><td>Select 1D from the list.</td></tr>
<tr><td></td><td>Component Sub-element Separator</td><td>Select 1F from the list.</td></tr>
<tr><td></td><td>Segment Terminator</td><td>Select 1C from the list.</td></tr>
<tr><td></td><td>Interchange control header</td><td>Follow this procedure from the list.
◗ Select UNB.
◗ Click Edit.
◗ Type UNOB in the Syntax Identifier field.</td></tr>
<tr><td></td><td>Group control header</td><td>Follow this procedure from the list.
◗ Select UNG.
◗ Click Edit.
◗ Type GC in the 0051 Controlling Agency field.</td></tr>
<tr><td>7</td><td colspan="2">Click Maintain locally on the Runtime dialog box and then click Next.</td></tr>
</table>

(Contd) Step	Action
8	Set the parameters in the Archive dialog box to your specifications and then click **Next**.
9	Clear the setting **Expect acknowledgment for outbound document in** on the Inbound Acknowledgment dialog box. **Note** GENCOD standards do not support acknowledgments.
10	Click **Finish**.

Note
See the chapter *Working with Trading Partnerships* in the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* for more information on creating Trading Partnership records.

How to Set Translation Options for Outbound GENCOD Data

Introduction

This section contains instructions for translating application data to GENCOD standards.

Using the Translate Documents dialog box

Follow these guidelines when setting up the Translate Documents dialog box for a translation using GENCOD standards.

Step	Action	
1	Use this table to determine your action.	
	IF the input file contains…	**THEN…**
	GENCOD data only	you may enter a value in the **Override output data file** field of the Translate Documents dialog box to change the identity of the output file.
	Mixed data (GENCOD data and data formatted for other standards)	clear the **Override output data file** so that Sterling Gentran:Server takes the name of the output file from the Trading Partnership record.
2	Clear the **Envelope outbound data** check box. **Note** GENCOD does not use interchange envelopes.	
3	Click **OK**. **System Response** Sterling Gentran:Server runs translation.	

Translating from the command line

Follow these guidelines to translate GENCOD standards from the command line.

Step	Action	
1	Use this table to determine your action.	
	IF the input file contains…	**THEN…**
	only GENCOD data	you may use the **-f** option to change the identity of the output file.
	Mixed data (GENCOD data and data formatted for other standards)	do not use the -f option. **System Response** Sterling Gentran:Server takes the name of the output file from the Trading Partnership record.
	Note Do not run envelope from the command line. GENCOD does not use interchange envelopes.	

Translating data with Iftran program

Use the **-f** parameter with the **Iftran** command to change the identity of the output file, if the input file contains only GENCOD data.

How to Run the edf2gen Program

Overview

The edf2gen program is a post-processing program that changes the format of translated data into a GENCOD standard format. This topic provides the information you need to run the **edf2gen** program after a GENCOD outbound translation.

When to use

You must call or run the **edf2gen** program after translation and before sending the GENCOD file to the VAN.

Before you begin

Before you start running the edf2gen program, make sure that:

- the .DDF file with the naming convention *mapname*_out.ddf is in the File Definitions/Apps directory
- the Trading Partnership record that you just created is available
- a map is assigned to the Trading Partnership record
- the input file contains only GENCOD data
- an envprim.cfg file exists.

GENCODOUT Interchange record

Sterling Gentran:Server automatically creates the GENCODOUT Interchange Organization record when you run the **edf2gen** program.

Note

The output file parameters you specify in the outbound Trading Partnership record may result in the creation of more than one output file containing only GENCOD data.

Reference

See the How to Set Translation Options for Outbound GENCOD Data topic for more information.

Procedure

Use the following procedure to run the **edf2gen** program and create files containing translated GENCOD data**.**

Step	Action
1	Go to the directory containing the envprim.*cfg* file. The envprim.*cfg* file should be in the Sterling Gentran:Server root directory. **Note** The envprim.cfg file must be in the Sterling Gentran:Server root directory, because the **edf2gen** program does not have a -cp option.
2	Run the **edf2gen** program.

Functions of the edf2gen program

The **edf2gen** program performs the following functions:

- Replaces the UNB/UNG/UNH enveloping structure with GENCOD header and trailer message segments
- Removes any element separators
- Ensures that each segment is terminated with a newline character
- Creates a file that contains your GENCOD data.

CHAPTER
3

Archived Data

Contents

Overview

Overview

Sterling Gentran:Server archives GENCOD files with EDIFACT envelope segments (UNB/UNG/UNH/UNT/UNE/UNZ) and element separators.

This chapter:

- Describes how to interpret the header and trailer segments in an archived file
- Contains references to instructions for correcting and resending data.

Reviewing Archived Data

Introduction

To simplify viewing and archiving, Sterling Gentran:Server archives the EDIFACT enveloping format.

Reviewing archived data

The UNB/UNG/UNH enveloping structure replaces the following header and trailer message segments (the segment IDs are shown in parentheses):

- Header segment containing the GENCOD Message ID and version number (Message ID and version number)
- Header segment containing the interchange control number (190)
- Header segment containing the number of segments (excluding this segment) in the header (199)
- Trailer segment containing the GENCOD Message ID and version number (Message ID and version number)
- Trailer segment containing the number of messages in the interchange (191)
- Trailer segment containing the number of segments (excluding this segment) in the trailer (199)

Note
Sterling Gentran:Server also adds element separators to the data.

Message segments and EDIFACT envelope table

The following table lists the message segments that the EDIFACT enveloping structure replaces.

Message Segment in…	Containing…	With Segment ID
Header	GENCOD Message ID	same as the Message ID
Header	interchange control number	190
Header	number of segments (excluding this segment) in the header	199
Trailer	GENCOD Message ID	same as the Message ID

Message Segment in…	Containing…	With Segment ID
Trailer	number of messages in the interchange	191
Trailer	number of segments (excluding this segment) in the trailer	199

Resending Corrected EDI Data

Introduction

GENCOD standards do not use functional acknowledgements. However, you can correct and resend any data that your Trading Partner informs you is incorrect.

Where to find instructions

See the *Archiving Translation Data* chapter in the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* or the *Archiving Data* chapter in the *IBM® Sterling Gentran:Server® for UNIX Mapping and Translation Guide* for instructions on these topics:

- How to Search for an Archived Document
- How to Extract Archived EDI Documents
- How to Prepare Documents to Resend

Handling interchanges

Use this table to combine interchanges or to insert new line characters after each interchange.

IF you want to…	THEN run the…
Combine interchanges	**envelope** program on the corrected data.
Insert new line characters after each interchange	**edifrmat** program using the **-i** parameter.

Reference
See the *IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide* for details about the **envelope** and **edifrmat** programs.

Appendix

A

Messages

Contents

Introduction

Overview

This appendix lists the messages you might see when translating data using GENCOD standards.

Note
See the *Error Messages* chapter in the *IBM® Sterling Gentran:Server® for UNIX Maintenance and Troubleshooting Guide* or the *System Messages* chapter in the *IBM® Sterling Gentran:Server® for UNIX - Workstation Maintenance and Troubleshooting Guide* for more information on other Sterling Gentran:Server messages.

Tip
If the output file is empty or does not exist, check the *xlcntl.err* file either in the Report/Log directory for Workstation or in the Temp directory for UNIX. All post-processing error messages are stored in these temporary files.

Message conventions

The messages are first in numerical order and then in alphabetical order. Each message consists of four pieces of information:

- **Message type** – The kind of message.
- **Program module** – The part of Sterling Gentran:Server issuing the message.
- **Explanation** – Possible reasons for the error or warning, or a detailed discussion of the type of information presented.
- **Your action** – What you need to do to continue processing and protect your data.

Message types

This table describes the different types of messages.

Type	Description
An error message	An error indicates that Sterling Gentran:Server is unable to perform this process or stopped performing the current process.
A warning message	A warning alerts you to a possible problem, but allows processing to continue.

Type	Description
A prompt	A prompt requests additional information that Sterling Gentran:Server needs in order to continue the process.
An informational message	An informational message provides information about, or the status of the last process just completed

System Messages

In this appendix

This section lists numbered messages in order by the number. The **edifrmt** program writes the messages into the *edifrmat.log* file. The edf2gen program writes into the *xlcntl.err* file.

000 EDI Interchanges found: <number>/Total Segments Written: <number>

Message Type: Informational

Program Module: **edifrmat**

Explanation
The **edifrmat** program checked the input file and found the specified number of EDI interchanges. It wrote the specified number of segments to the output file.

Your Action
No action necessary.

000 Input file: <file name>/Output file: <file name>

Message Type: Informational

Program Module:edf2gen

Explanation
The **edf2gen** program read the indicated input file and wrote results to the indicated output file.

Your Action
No action necessary.

000 Preparing GENCOD data for translation

Message Type: Informational

Program Module: edifrmat

Explanation
The **edifrmat** program has checked the input file and found GENCOD data. It will replace the GENCOD header and trailer segments with UNB envelope structures and insert element separators.

Your Action
No action necessary.

087 Error <error type> intorg file, isrw: <ISAM error code>

Message Type: Error

Program Module: edf2gen

Explanation
Sterling Gentran:Server was unable to locate the GENCOD Organization record containing the Interchange Organization Code GENCODOUT. This record was not in the Organization file in the directory specified for trading partner files.

Your Action
Create the GENCOD Organization record and run the **edf2gen** program.

IF you have…	**THEN…**
Created the GENCOD Organization record	Verify that the Interchange Organization Code is correct. It should be GENCODOUT in all uppercase letters.
Created the record and entered the correct Interchange Organization Code	Open the **Location of Files** dialog box from the Sterling Gentran:Server **Preferences** menu. Check to see that you are specifying the correct directory for the trading partner files that use the GENCOD standards.

088 Invalid element separator

Message Type: Error

Program Module: edf2gen

Explanation
The **edf2gen** program found that the element separator in the data file is not consistent with the syntax identifier you specified.

Your Action
Set the element separator in the Outbound Information dialog box **1D** and the syntax identifier in the UNB Interchange information dialog box to **UNOB**.

346 Trading Partner record not found.

Message Type: Error

Program Module: edifrmat, edf2gen

Explanation Sterling Gentran:Server was unable to locate the Trading Partnership record identified in the message.

Your Action
Create the Trading Partnership record.

366 Unexpected Record: <first 19 characters of record>/ Record Number <record number>

Message Type: Error

Program Module: edifrmat, edf2gen

Explanation
The **edifrmat** program is unable to identify a segment in the GENCOD record. The segment may:

- Have a segment ID that does not match any segment in the standard or implementation guide.
- Be a defined segment that is not expected in the current sequence. This can occur when there are incorrect or missing loop markers. The **edifrmat** program is unable to ignore incomplete segments, so this error stops processing data.

Your Action
Notify your trading partner of the problem and have them send corrected GENCOD data.

380 Failed to open file: <file name and path>

Message Type: Error

Program Module: edf2gen

Explanation

The **edf2gen** program was unable to open or process the file containing translated data because:

- The file does not exist the directory indicated.
- Sterling Gentran:Server does not have the correct permissions for the file or the directory.

Your Action
Check the file and directory path specified in the message. Use this table to determine your action.

IF…	THEN…
The file is in the wrong directory	Move the file into the directory specified for Trading Partnership files.
You are unable to find the file	Open the **Location of Files** dialog box from the Sterling Gentran:Server **Preferences** menu. Change the directory specified for Trading Partner files to the one containing the Organization file with the GENCOD Organization record.
The file is in the correct directory	Check the permissions and, if necessary, change them.

This table describes what happens when the GENCOD standard requirements are not met.

IF GENCOD standard versions…	THEN…	AND you should…
Are not available to Sterling Gentran:Server and edifrmat	The edifrmat program writes the data to *edifrmat.not*, writes an error message to *xlcntl.err*, and prevents translation.	Copy the directory that contains the GENCOD standard files to the location that edifrmat expects to find it.
In the directory specified for Sterling Gentran:Server standards do not provide read permission	The edifrmat program writes the data to *edifrmat.not*, writes an error message to *xlcntl.err*, and prevents translation.	Either change the permissions or have the system administrator change them for you.
Are not in the directory specified for Sterling Gentran:Server standards	The edifrmat program writes the data to *edifrmat.not*, writes an error message to *xlcntl.err*, and prevents translation.	Move the appropriate GENCOD standard files into the directory specified for Sterling Gentran:Server standards.

386 Record layout table in .ddf could not be read.

Message Type: Error

Program Module: edifrmat, edf2gen

Explanation
The edifrmt and edf2gen programs could not read the record layout table in the .ddf because:

- There is not enough memory.
- A segment is missing.
- The file could not be opened.

Your Action
Provide or correct the .ddf file.

CHAPTER
N

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