Gentran:Server® for UNIX® and Workstation

Mapping and Translation Guide

Version 6.1

Sterling Commerce
An IBM Company

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About This Guide

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Welcome

Welcome to Sterling Commerce's Gentran:Server® for UNIX® and Workstation® Mapping and Translation Guide. This book contains instructions for performing mapping and translation tasks with the Gentran:Server Visual Mapper software. This guide is for both UNIX client/server and Workstation (stand-alone PC) configurations.

Who should use this guide

This guide is for personnel charged with maintaining maps with the Visual Mapper.

UNIX knowledge required

This guide assumes that you are familiar with basic UNIX concepts and commands, including:

- How UNIX identifies users and associates them into groups
- File ownership

Client/PC knowledge required

This book also assumes that you are familiar with basic Windows concepts and commands, including:

- How to navigate and operate within the Windows environment
- How to use DOS commands and the DOS window from within the Windows desktop.

Chapter Contents

This table describes the content of the chapters in this *Mapping and Translation Guide*.

(Continued on next page)

(Contd) Chapter Title	Description
Working With Mapping Instructions	Describes how to create custom mapping instructions to have Gentran:Server perform special operations on data during translation. Provides an exercise demonstrating how to map the relationship between hierarchical loops. Provides descriptions, explanations, and examples of each operator you can use to complete mapping instructions and statements in Gentran:Server. Describes how to create macros and add macros to expressions and other macros.
Troubleshooting Mapping Instructions	Describes the Diagnostics Report and explains how and when to use the report to analyze unexpected results from mapping instructions. Also describes how to use the Sorting Utility to reorder mapping instructions that appear on the correct screen, but need to be reordered within the screen.
Working with Trading Partnerships	Describes the procedures for maintenance of your trading partnership files and records.
Running Translation	Explains how to set up and run inbound and outbound translations from the Translation menu and view a translation summary.
Archiving Data	Explains how to choose the default archiving options and run the archiving program, work with archived data, including reconciling functional acknowledgments, and move archived data with the archive utilities.
Using the Task Scheduler	Contains relevant points about creating batch files or scripts containing the Gentran:Server command-line commands and operating-system commands, how to use the Task Scheduler to specify the date and time you want the batch file or script to run, and important points about running the batch files and scripts.

Related Publications

Gentran:Server documentation

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

Document	Description
Upgrade and Data Conversion Guide	Instructions for upgrading from previous versions of Gentran:Server Workstation and Gentran:Server for UNIX. Also includes instructions for converting the files that are part of the upgrade.
Installation Checklist	Description of the recommended sequence in which you should install and configure system components.
Gentran:Server for UNIX Getting Started Guide	Instructions for installing the Gentran:Server software and performing setup tasks, such as setting up security. Instructions for starting and exiting Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
Gentran:Server Workstation Getting Started Guide	Instructions for installing the Gentran:Server Workstation software and performing setup tasks. Instructions for starting and exiting Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
Application Integration User's Guide	Instructions for performing mapping and translation tasks using the Gentran:Server Application Integration Mapper.
NCPCP User's Guide	Instructions for mapping and translating NCPDP files with the Application Integration system.
XML User's Guide	Instructions for mapping and translating XML files with the Application Integration system. **Note** This guide is provided only if your organization has the Gentran:Server XML translation option. (Continued on next page)

(Contd) Document	Description
ODBC User's Guide	Instructions for mapping and translating ODBC files with the Application Integration system. **Note** This guide is provided only if your organization has the Gentran:Server ODBC translation option.
GENCOD User's Guide	Instructions for mapping and translating GENCOD files with the Application Integration system and the Visual Mapper.
VDA User's Guide	Instructions for mapping and translating VDA files with the Application Integration system and the Visual Mapper.
Technical Reference Guide	Describes processes, lists command-line commands in alphabetical order, and describes file record layouts and data type formats.
Data Flow Administration Guide	User instructions for configuring data flows using the Gentran:Server for UNIX software. **Note** This guide is provided only if you have the Gentran:Server EC Workbench or higher product level.
Maintenance and Troubleshooting Guide	Instructions for maintaining your Gentran:Server installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur.
Online Help	Context-sensitive help screens describing the Gentran:Server dialog boxes for the mapping and translation 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	This typeface is used for titles of other manuals and documents, names of files and file extensions, and to emphasize important information. **Example** *Gentran:Server for UNIX and Workstation Mapping and Translation Guide*
Bold	Bold type is used for program names, key terms the first time they are used within a chapter, and entries you are to make on-screen. **Example** A **password** is a set of characters a user must enter to gain access to a system.

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. (Continued on next page)

(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

Understanding the Basics

Contents

Overview

Introduction

Welcome

Welcome to the Gentran:Server® Visual Mapper EDI mapping and translation software.

Gentran:Server's EDI software enables you to exchange data in standard and non-standard formats with your trading partners. When you send application data, Gentran:Server converts your data into standard EDI formats that can be understood by your trading partners. When you receive data in a standardized format, Gentran:Server translates the data into a format your application can understand.

You use Gentran:Server to describe your applications, edit standards, maintain trading partnership information, and generate translation "maps," which are sets of instructions for translating data.

In this chapter

This chapter contains background information about Gentran:Server that you should know before beginning to use the software.

Key terms

This table describes key terms used in this chapter.

Term	Description
application	The business software generating the business information that you are sending or receiving via EDI.
application description	Your company's description of the records and fields in an ASCII file used for your data.
check box	A square to the left of an option in a dialog. When the option is selected, the square contains an X. You click the check box to change whether the option is selected.
click	The act of quickly pressing and releasing a mouse button.

(Continued on next page)

(Contd) Term	Description
client	The computer in a client/server network that acts as the interface between the user and the server.
client/server	A computer network architecture in which data is stored and processing is performed on the server, which users access through the interface provided on the client.
collapsed view	Within the Visual Mapper, a view that displays all the segments, but hides all the elements, composite elements, and sub-elements.
default	A value that is automatically assigned.
dialog box	An application window through which you enter information into the application.
double-click	The act of quickly pressing and releasing a mouse button twice.
EDI	Electronic Data Interchange. Application-to-application transfer of key business transaction information in a standard format via a computer-to-computer communication link.
EDI standard	A format to regulate syntax, structure, and content of transaction data.
expanded view	Within the Visual Mapper, the view that displays all elements, composite elements, and sub-elements, as well as all segments.
implementation guide	A standard that was modified to meet the requirements of a trading partnership.
map	A file that contains the relationships between: ◗ The segments and elements of a standard EDI document and the data fields in your application, ◗ The segments and elements of two different standards, or ◗ The records and fields of two different applications.
master file	The original, source version of a file.
menu	A list of related commands.

(Continued on next page)

(Contd) Term	Description
menu bar	The row of menu names that runs across the top of a window.
option button	A round button used to select one option from a mutually exclusive set of options.
push-button	A symbol or icon that initiates some action when you click it.
server	The computer in a client/server network that performs the system security, data storage, and major computing tasks.
standard format	A format intelligible to computerized data management systems.
temporary file	A file on the client that Gentran:Server uses during editing and compiling.
text box	A box into which you enter alphanumeric text to provide data needed by Gentran:Server.
trading partner	The company, division, or group with which you are exchanging business data via EDI.
trading partnership	An arrangement to exchange information in a specific document type with a specific trading partner and using a particular standard version.
working file	A file that is stored in the user's working directory on the server while the user has it checked out for editing.
working file directory	The directory created on the server to hold the files that are being edited by a user.

Getting Started

Major Tasks

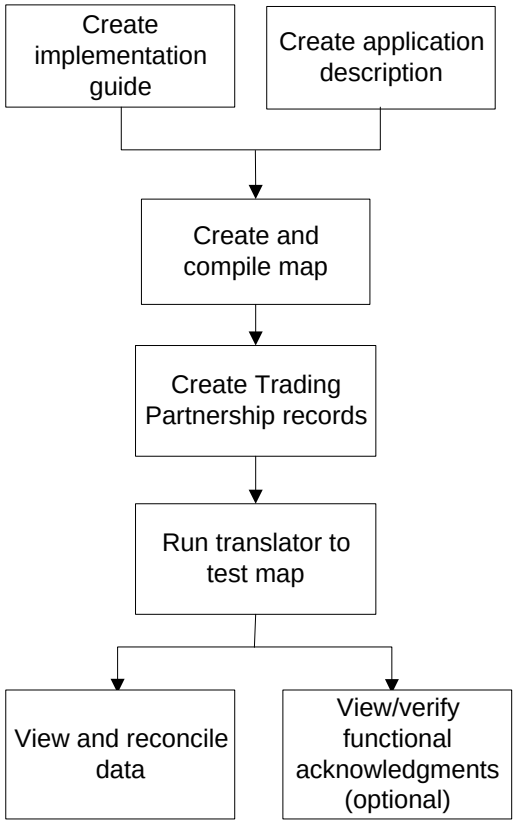
Introduction

This topic provides an overview of the separate tasks required to use Gentran:Server's Visual Mapper to create and test translation maps.

The topic contains a process flow diagram followed by a table listing the individual tasks in the process and where they are discussed in this manual.

Process flow diagram

This process flow diagram illustrates the tasks for using Gentran:Server to create maps and use them to perform EDI translations.



(Continued on next page)

Tasks in using Gentran:Server

This table describes the tasks in using Gentran:Server, and lists where each is discussed.

Task	Description	Discussed in Chapter(s)…
Create the implementation guide	Select an EDI standard or define your implementation guide. Use the Standard/IG Editor to edit the segments and elements.	Working with the Application and Standard/IG Editors and Creating an Implementation Guide or Standard
Create the application description	Use the Application Editor to create an application description. You can edit the records and fields as needed.	Working with the Application and Standard/IG Editors and Defining Application Descriptions for ASCII Files. If you have the ODBC translation option, see Defining Application Descriptions for Databases. (Continuedonnextpage)

Task	Description	Discussed in Chapter(s)...
Create and compile the map	Use either the AutoMapping or the Visual Mapping feature to map your source file to the items in the destination file. Prepare for AutoMapping by setting up value substitutions lists with the Thesaurus Editor. Use the Synonym Editor to create lists of substitute values for source items. Compile the new map to identify invalid instructions, incomplete map groups, and the like. Save the map when it compiles without errors.	Mapping Working with Mapping Instructions Working with Synonym and Thesaurus Lists Working with Synonym and Thesaurus Lists Mapping
Create the Trading Partnership record	Set up your Trading Partnership records. This task correlates the map with the specific transaction type and trading partner(s) for which the map is used. You may want to create a generic Trading Partnership record to enable Gentran:Server to do generic or wildcard translations.	Working with Trading Partnerships
Run the translator	Translate some sample data files to locate potential problems.	Running Translation
View and reconcile data	View the archive records. **Note** You must archive data to use the functional acknowledgment feature.	Archiving Data
View functional acknowledgments	View inbound and outbound functional acknowledgments.	Archiving Data

Specifying Preferred Default Values

The Preferences Dialog Box

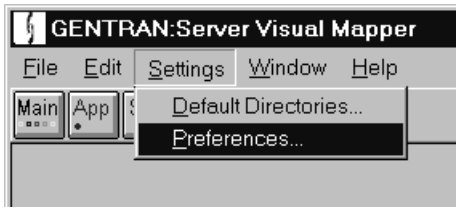
Introduction

You can specify the default values and parameters that you want Gentran:Server Workstation or Gentran:Server for UNIX to use in the current session and at the start of future sessions for the Visual Mapper. To do so, you use the Preferences dialog box.

Comment
The Visual Mapper's default settings match the most common EDI standards and application data formats; you probably will not need to change them. If you constantly have to change data type formats within either the Standard/IG Editor or the Application Editor, the Preferences dialog box enables you to save time by changing the defaults for those data types.

Accessing Preferences

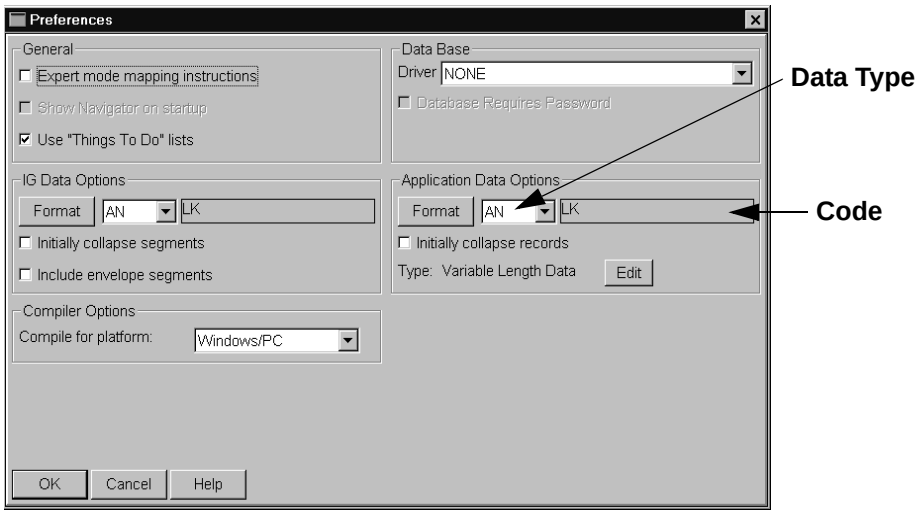
To view the Preferences dialog box, click **Preferences** from the Visual Mapper's **Settings** menu.



(Continued on next page)

The Preferences dialog box

This illustration shows the Preferences dialog box.



Preferences dialog fields and functions

This table describes the Preferences dialog fields and their functions.

Field	Function
General	
Expert mode mapping instructions	Specifies that the Visual Mapper opens in expert mode to allow you to enter mapping instructions directly. **Default set at installation** Standard mode. **Notes** Standard mode leads you through creation of mapping instructions and prevents you from making many common errors. Maps created in expert mode must be edited in expert mode.
Show Navigator on start-up	This option is not available in this release. (Continued on next page)

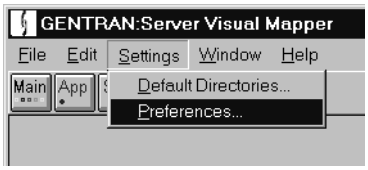
(Contd) Field	Function
Use “Things To Do” lists	Specifies that the Application Editor, Standard/IG Editor, and the Visual Mapper display “To Do” lists upon opening. **Comment** You can always open or close the To Do list once you are in one of those editors. When you access an editor from the Navigator, the To Do list is always displayed initially, regardless of your selection for this check box. **Default set at installation** Display the To Do list.
Data Base (optional feature)	
Driver	Specifies the database driver.
Database Requires Password	Used to indicate that a password is required to access the database.
IG Data Options	
Format	Specifies the format for the selected data type. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of available formats.
Data type box	Specifies the data type for which you want to set a format. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of supported data types. (Continued on next page)

(Contd) Field	Function
Initially collapse segments	Specifies that the Standard/IG Editor opens in collapsed view. **Comment** You can change the view to expanded or collapsed at any time once the editor is open. You can also expand or collapse individual segments or composite elements. **Note** This does not affect the Standard/IG Editor when you open the editor from the Visual Mapper while displaying a map.
Include envelope segments	Specifies to select the **Include Envelope Segments** check box by default when you select the standard or implementation guide to display. **Comment** Whatever the default setting, you have the option of changing that check box when you select the standard or implementation guide.
Application Data Options	
Format	Specifies the format for the selected data type. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of available formats.
Data type box	Specifies the data type for which you want to set a format. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of data types. (Continued on next page)

(Contd) Field	Function
Initially collapse records	Specifies that the Application Editor opens in collapsed view. **Comment** You can change the view to expanded or collapsed at any time once the editor is open. You can also expand or collapse individual records. **Note** This does not affect the Application Editor when you open the editor from the Visual Mapper while displaying a map.
Type	Specifies the type of data length: ◗ Fixed to a specific number of characters. ◗ Variable in length and delimited by unique field separators. This is the default. **Comments** The **Edit** button enables you to change the type from variable to fixed or from fixed to variable. Gentran:Server uses this setting when you generate an application description from an implementation guide.
Compiler Options	
Compile for platform	Specifies the platform for which the compiler creates the mapping table when you use the **Compile** button on the toolbar.

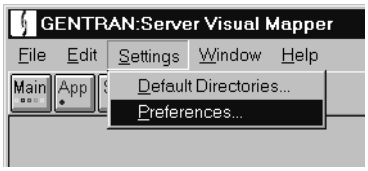
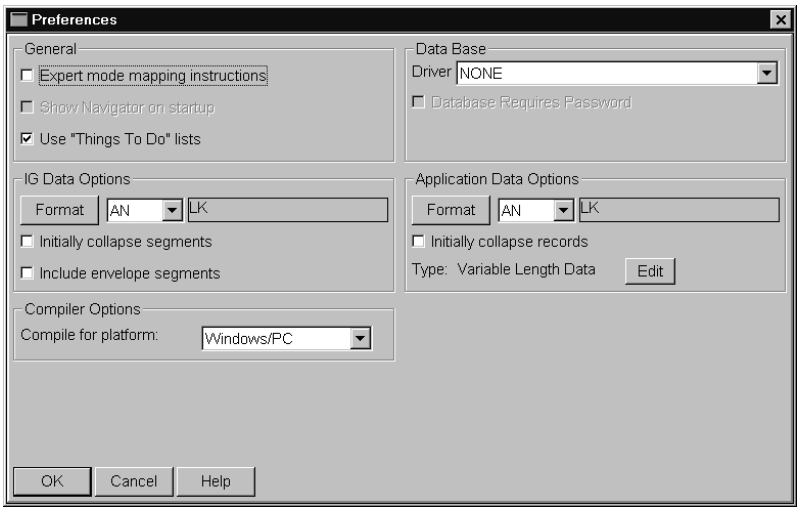
How to Set General Preferences

Use this procedure to change the General settings on the Visual Mapper's Preferences dialog box.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Click Settings on the Visual Mapper's menu bar.</td></tr>
<tr><td>2</td><td colspan="2">Click Preferences from the Settings menu.
 
</td></tr>
<tr><td rowspan="3">3</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN…</td></tr>
<tr><td>Enter mapping instructions directly</td><td>Click Expert mode mapping instructions.</td></tr>
<tr><td>View a To Do list whenever you start an editor</td><td>Click Use “Things To Do” lists.</td></tr>
<tr><td>4</td><td colspan="2">Click OK to save your new default settings.</td></tr>
</table>

How to Set Implementation Guide Options

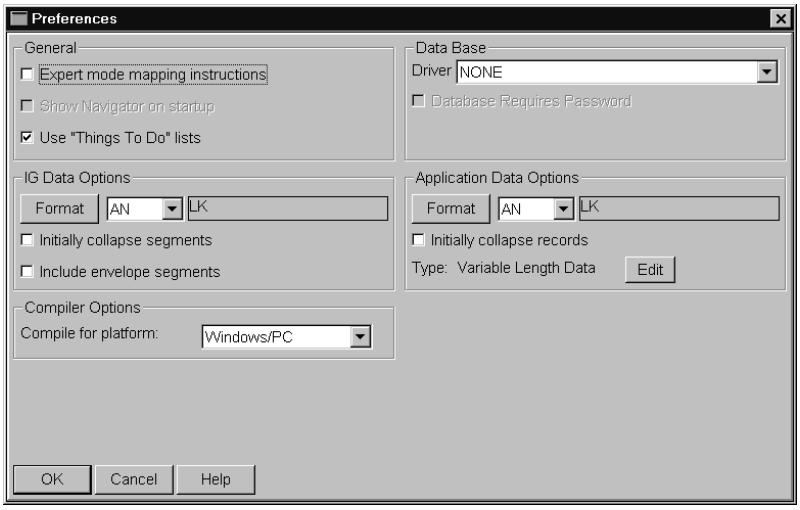
Use this procedure to assign default data formatting codes to data types within the Standard/IG Editor.

Step	Action
1	Click **Settings** on the Visual Mapper's menu bar.
2	Click **Preferences** on the Settings menu.  **System Response** The system displays the Preferences dialog box for the Visual Mapper. 
3	In the **IG Data Options** section, select the type of data you want to format from the drop-down list. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for descriptions of the data types. (Continued on next page)

(Contd) Step	Action
4	Click the **Format** button. **System Response** Gentran:Server displays a dialog box for the selected data type.
5	Enter your formatting choices and then click **OK**. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide*. **System Response** Gentran:Server displays the code for the format you selected in the text box to the right of the **Format** button and the **Data Types** list.
6	Do you want the Standard/IG Editor to open in collapsed view by default? ◗ If YES, click the Initially collapse segments check box. ◗ If NO, continue with the next step.
7	Do you want the Include Envelope Segments check box selected by default when you open a standard or implementation guide? ◗ If YES, click the **Include envelope segments** check box. ◗ If NO, continue with the next step.
8	Click **OK** on the Preferences dialog box to save your new default settings.

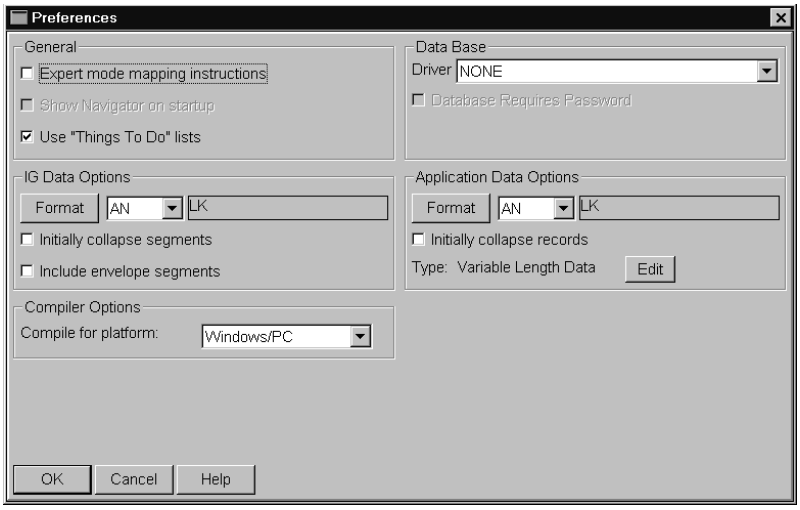
How to Set Database Options

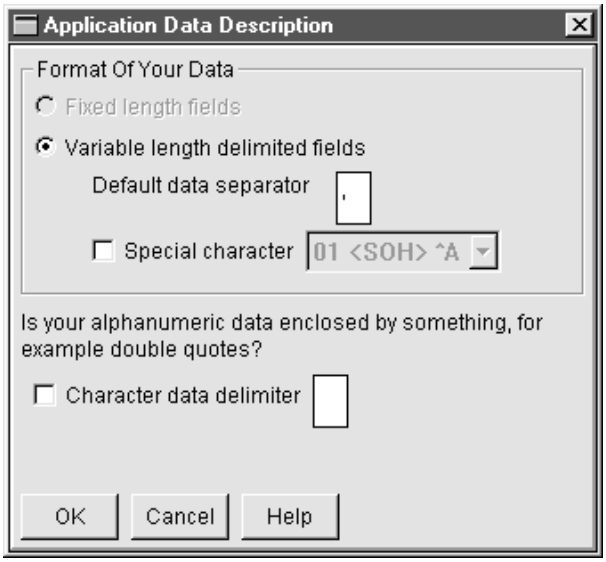
Use this procedure to assign the default database driver to use for ODBC translations.

Step	Action
1	Click **Settings** on the Visual Mapper's menu bar.
2	Click **Preferences** on the **Settings** menu. **System Response** The system displays the Preferences dialog box for the Visual Mapper. 
3	In the **Data Base** section, select the default data base driver from the Driver drop-down list.
4	Is a password required to access the data base? ◗ If YES, click the **Database Requires Password** check box. ◗ If NO, continue with the next step.
5	Click **OK** on the **Preferences** dialog box to save your new default settings.

How to Set Application Data Options

Use this procedure to assign a default formatting code to each type of data that can be passed in a field of an application description.

Step	Action
1	Click **Settings** on the menu bar.
2	Click **Preferences** from the Settings menu. **System Response** The system displays the Preferences dialog box for the Visual Mapper. 
3	In the **Application Data Options** section, select the type of data you want to format from the drop-down list. **Reference** See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for descriptions of the data types.
4	Click the **Format** button. **System Response** Gentran:Server displays a dialog box for the selected data type. (Continued on next page)

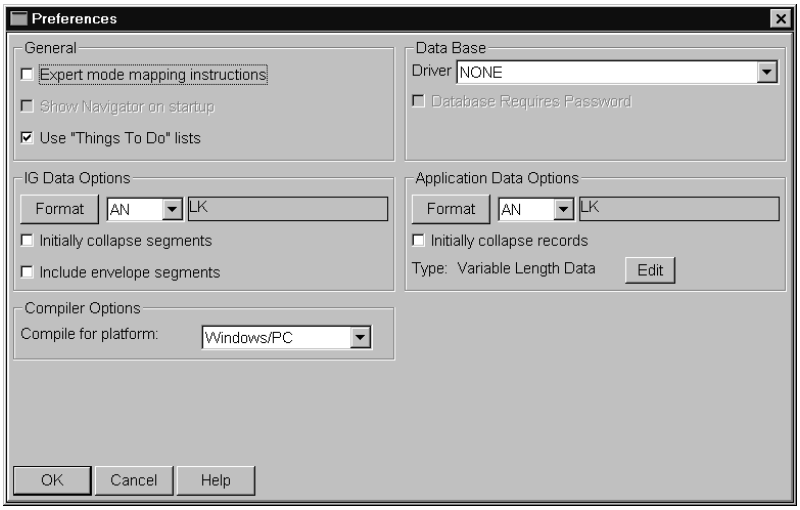
(Contd) Step	Action
5	Enter your formatting choices and then click **OK**. **System Response** Gentran:Server displays the code for the format you selected in the text box to the right of the **Format** button and the **Data Types** list.
6	Do you want the Application Editor to display application files in collapsed view by default? ◗ If YES, click the **Initially collapse records** check box. ◗ If NO, continue with the next step.
7	Do you want to set a default format for your application data? ◗ If YES, continue with Step 8. ◗ If NO, GO TO Step 14.
8	Click **Edit**. **System Response** The system displays the Application Data Description dialog box.  **Note** The Default data separator and Special character options are active only if the current default is variable length. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="4">9</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF your most frequently used applications use…</td><td>THEN…</td></tr>
<tr><td>Fixed length fields</td><td>Click Fixed Length Fields.</td></tr>
<tr><td>Variable length fields</td><td>Click Variable Length Delimited Fields.</td></tr>
<tr><td rowspan="3">10</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you chose…</td><td>THEN…</td></tr>
<tr><td>Fixed Length Fields</td><td>GO TO Step 12.</td></tr>
<tr><td></td><td>Variable Length Delimited Fields</td><td>Continue with Step 11.</td></tr>
<tr><td rowspan="3">11</td><td colspan="2">Use this decision table to enter the default data delimiter character for variable-length fields.</td></tr>
<tr><td>IF you want to use…</td><td>THEN…</td></tr>
<tr><td>A printable character</td><td>Enter the character in the Default Data Separator text box.</td></tr>
<tr><td></td><td>A non-printable character</td><td>Click Special Character and select the hex equivalent of the character from the Special Character list.</td></tr>
<tr><td>12</td><td colspan="2">Does your application use character delimiters for alphanumeric data types?
◗ If YES, click the Character Data Delimiter check box and type the delimiter character into the text box.
◗ If NO, continue with Step 13.
Comment
Any data type can be character delimited. If you click Character Data Delimiter, Gentran:Server expects all AN and ID data type fields to be character-delimited. Some or all of the other data types can have character-delimited values, but it is not required.
(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
13	After making your selections, click **OK**. **System Response** Gentran:Server returns to the Preferences dialog box.
14	Click **OK** to save your changes and exit the dialog box.

How to Set Compiler Options

Use this procedure to set the platform automatically used for the mapping tables created when you use the **Compile** button on the toolbar.

Step	Action
1	Click **Settings** on the Visual Mapper's menu bar.
2	Click **Preferences** on the Settings menu.**System Response** The system displays the Preferences dialog box for the Visual Mapper. 
3	In the **Compiler Options** section, click the arrow on the **Compile for platform** list.
4	Select the platform you want to use. **Comment** You should select the same platform on which translations will be performed.
5	Click **OK** to save your changes and exit the dialog box.

CHAPTER
2

Working with the Application and Standard/IG Editors

Contents

Overview

Introduction

Similarities between editors

The Application Editor and the Standard/IG Editor are similar in structure and function.

In this chapter

This chapter describes the features these two editors have in common and explains how to use the editors.

Key Terms

This table describes the key terms used in this chapter.

Term	Description
application description	A definition of the records and fields in an application file.
Application Editor	The Gentran:Server editor that enables you to define your application data.
attribute	A piece of information about a record, field, segment element, sub-element, or composite element. Each of these items has its own set of attributes. This attribute set may include the item name, minimum and maximum length, data type, and data format.
editor	A tool that enables you to create and maintain specific types of files, such as application descriptions or implementation guides.
composite element	An element composed of two or more sub-elements.
element	A piece of data in a segment (Standards Editor). Elements are analogous to fields in an application description. Elements are variable length fields.
field	A piece of data in a record (Application Editor).

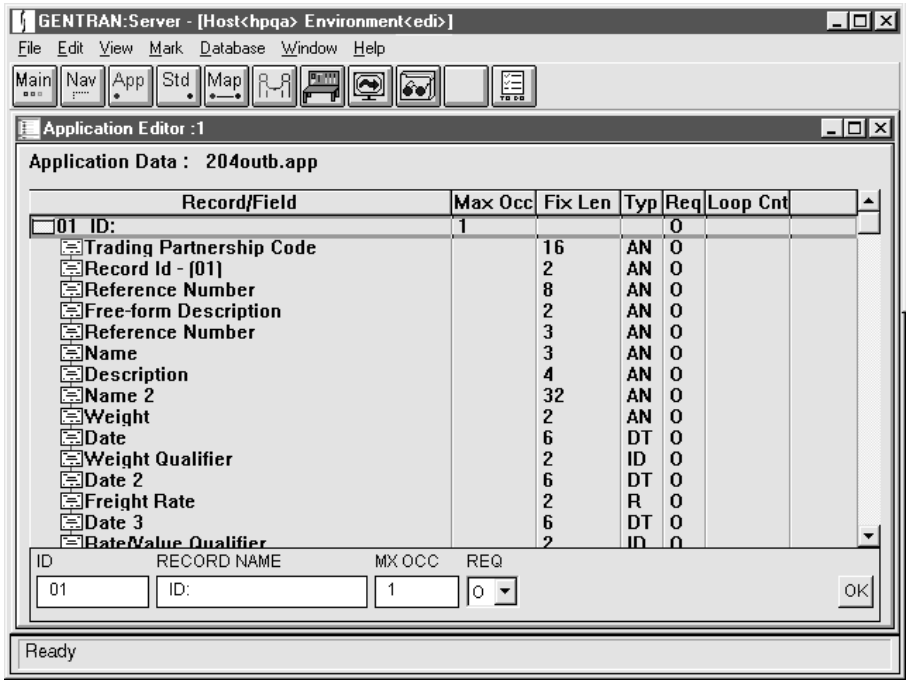
(Continued on next page)

(Contd) Term	Description
implementation guide	A version of an EDI standard version that was edited to meet the requirements of a particular trading partner, or a standard saved as an implementation guide.
loop	A sequence of related segments or records repeated within a transaction set.
mark	Flagging an item in focus for special editing functions such as making a loop or designating a record ID.
record	A defined sequence of related fields (Application Editor).
segment	A defined sequence of related elements (Standards Editor). Segments are analogous to records, which are used in application descriptions.
standard	A major data format model used for EDI (for example, X12, EDIFACT). Includes the rules and guidelines for formatting or structuring electronically transmitted documents.
Standard/IG Editor	The Gentran:Server feature that enables you to edit standards and create implementation guides.
sub-element	An element that is a component of another element.
Visual Mapper	The Gentran:Server graphical tool that enables you to create and modify the rules for translating data from the source format to the destination format.

Editor Examples

Application Editor

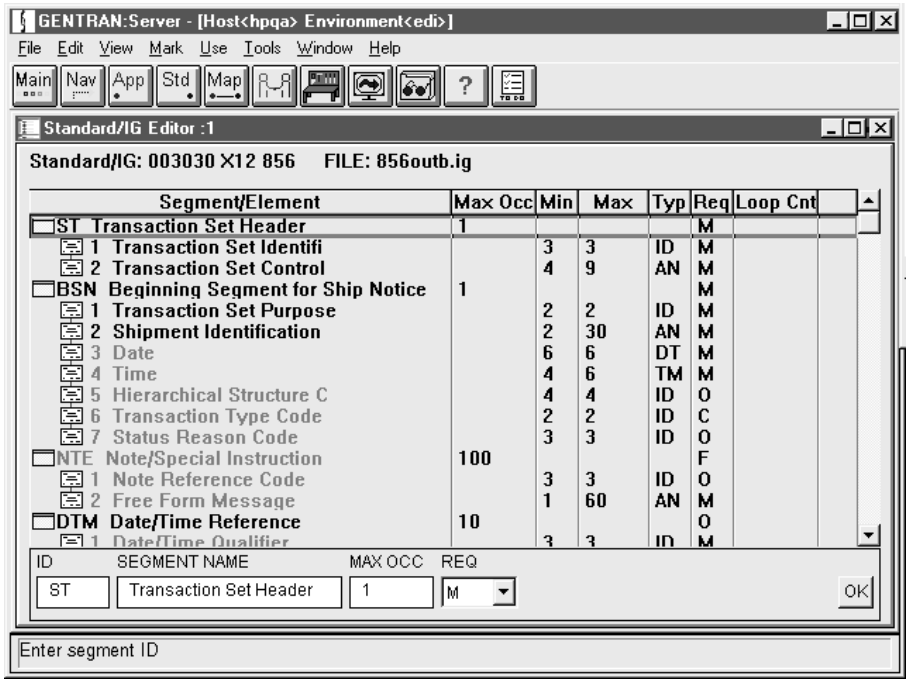
This is an illustration of the Application Editor.



(Continued on next page)

Standard/IG Editor

This is an illustration of the Standard/IG Editor.



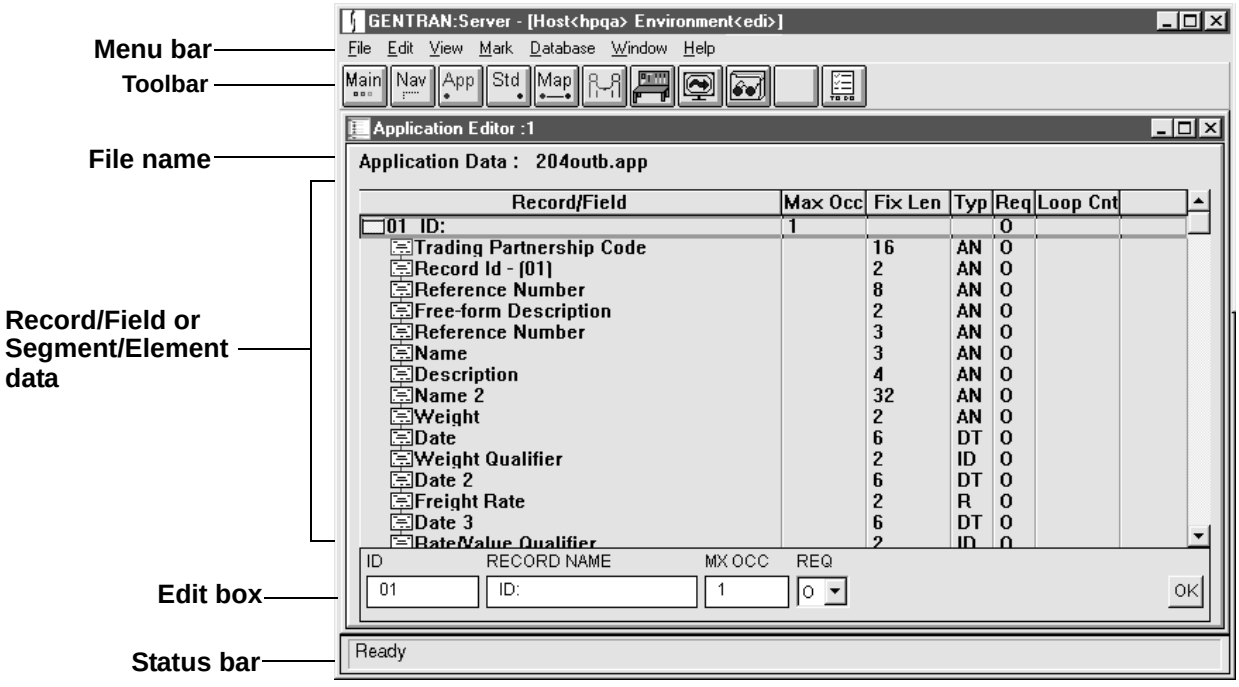
Parts of an Editor Window

Description

The editor window enables you use to create or modify your application description, standard, or implementation guide.

Illustration

This illustration shows the parts of an editor window. In this illustration, we show the Application Editor.



Parts table

This table describes the parts of the editor window.

Name	Function
Menu bar	Opens menus to display commands applicable to the active editor.
Toolbar	Starts another Gentran:Server function. (Continued on next page)

(Contd) Name	Function
File name	Displays the name of the application description, standard, or implementation guide.
Record and field or segment and element data	Displays graphic representations of record and fields or segments and elements and information about them. Enables you to add, delete, copy, and move these items.
Edit Box	Enables you to define the record, field, segment, or element attributes by typing in the edit box and selecting from drop-down lists.
Status bar	Displays a status message, prompt, or toolbar button description.

Editor Symbols

Definition

An editor symbol is a graphical representation of a data item.

Editor symbol table

This table describes the editor symbols.

Symbol	Description
	A record or segment.
	A field or an element or a sub-element that does not have any further sub-elements. In EDIFACT terms, this may be a component element.
	An element with sub-elements that are not displayed. In EDIFACT terms, this symbol represents a composite element.
	An element with displayed sub-elements. In EDIFACT terms, this symbol represents a composite element.
	A loop. The line connecting two or more records or segments indicates the starting and ending items in the loop. Nested loops are indicated by connecting lines that also are nested.

Procedures

How to Open and Close the Editors

Introduction

There are several ways to open and close an editor.

Opening an editor from the Main menu

This table describes the ways to open an editor from the Main menu.

To open the…	Click this button	Or click these options on the File menu
Standard/IG Editor		**New**, then **Implementation Guide** **Open,** then **Implementation Guide**
Application Editor		**New**, then **Application Description** **Open**, then **Application Description**
	System Response The system displays the Open Application dialog box. Click **Create new** to create a new application description or **Open existing record layout file** to open an existing application description. **Reference** See the chapter Working with the Application and Standard/IG Editors in this guide.	

Closing an Editor

To close and editor, click **Close** on the File menu.

System Response
If you have unsaved changes in an open application description, Gentran:Server prompts you to save the changes.

How to Load a File

Introduction

You may load an existing file when the editor is open or closed.

Loading a file when the editor is open

Use this procedure to open an existing application description or implementation guide when the editor is open.

Step	Action
1	Click **Open** on the File menu. **System Response** The system displays the File Open dialog box.
2	Select the appropriate path and file name on the File Open dialog box.
3	Click **Open**.

Loading an application description when the editor is closed

Use this procedure to open an application description when the editor is closed.

Step	Action
1	Click **Open** on the File menu.
2	Click **Application Description** on the Open submenu. **System Response** The system displays the File Open dialog box.
3	Select the path and file name.
4	Click **Open**. **System Response** The system opens the Application Editor and displays the selected file.

(Continued on next page)

Loading an implementation guide when the editor is closed

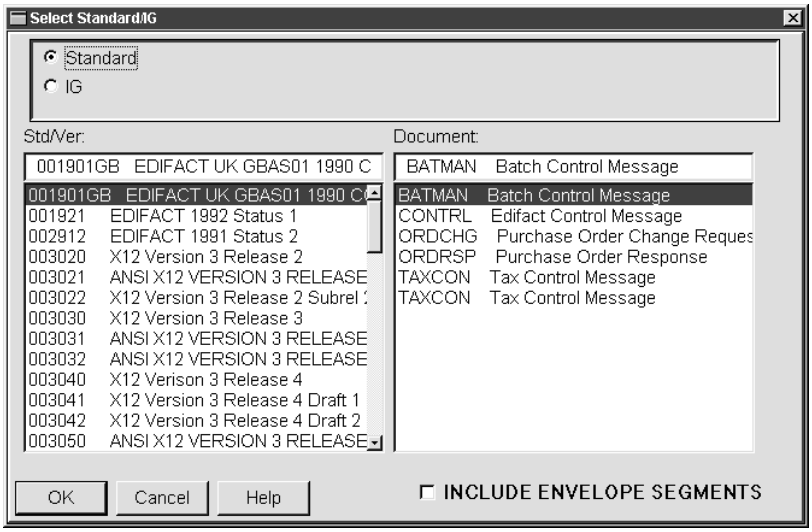
Use this procedure to open an implementation guide when the editor is closed.

Step	Action
1	Click **Open** on the File menu.
2	Click **Implementation Guide** on the Open submenu. **System Response** The system displays the File Open dialog box.
3	Select the path and file name.
4	Click **Open**. **System Response** The system opens the Standard/IG Editor and displays the select file.

(Continued on next page)

Loading a standard when the editor is closed

Use this procedure to open an existing standard when the editor is closed.

Step	Action
1	Click the **Std** button. **System Response** The system displays the Select Standard/IG dialog box.
2	Click **Standard**. **System Response** The system displays a list of standard versions in the left column. The right column displays a list of documents for the selected standard version. 
3	Click the standard and version you are using in the Standard/ Version column.
4	Click the document you want to load in the Document column.
5	Click **OK**. **System Response** Gentran:Server displays the selected file in the Standard/IG Editor.

How to Change the Display View

Introduction

You can view Gentran:Server editor windows in either an expanded view (displaying all records and fields or segments and elements) or a collapsed view (displaying only records or segments). You can expand or collapse a single item or all items displayed in the window.

Default view

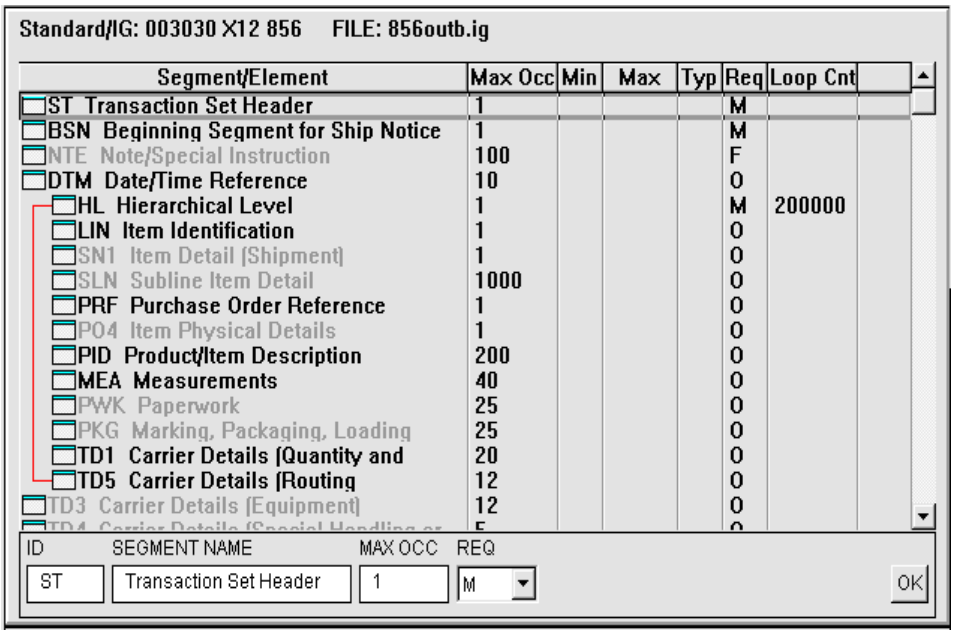
Default values set from the Gentran:Server Main Menu determine whether the editor opens in collapsed view or expanded view. From the Main Menu, click **Preferences** on the Settings menu to view the default values.

Reference

See the Understanding the Basics chapter of this guide.

Collapsed view example

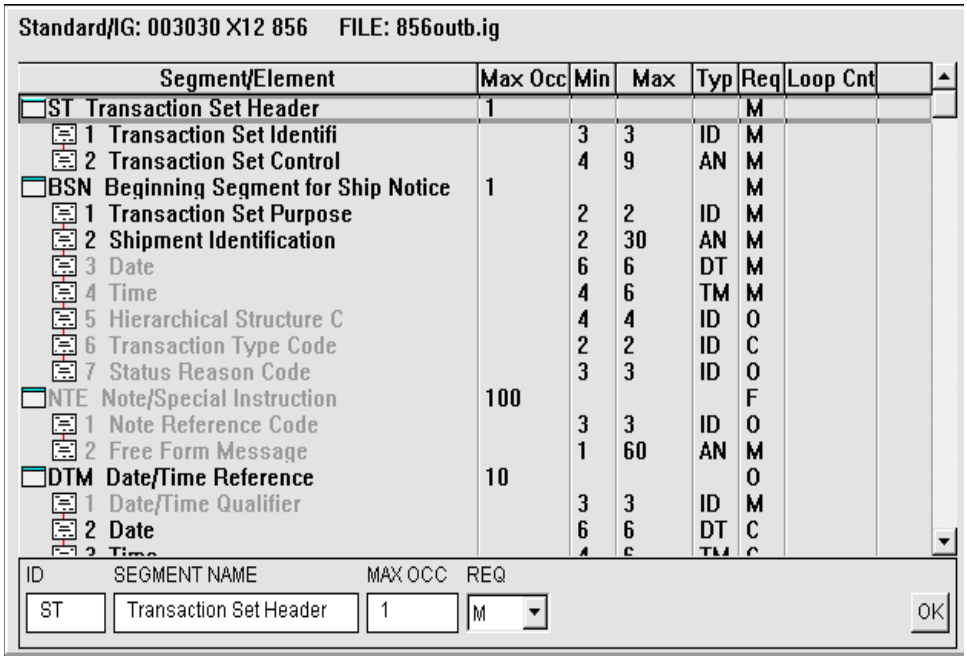
The following illustration shows the collapsed view in the Standard/IG Editor.



(Continued on next page)

Expanded view example

This illustration shows the same file in expanded view. The editor displays the elements of each segment along with their item symbols and attributes.



Expanding and collapsing the view

This table explains how to expand and collapse the view.

IF you want to…	of…	THEN…
Expand the view	A single item	Double-click on the item.
	All items	Click **Expand All** on the View menu.
Collapse the view	A single item	Double-click on the item.
	All items	Click **Collapse All** on the View menu.

How to Edit Data Items

Introduction

In an editor window, you may copy and paste one or more selected items, move one or more selected items to a new location, or add and delete items. To use these editing commands, you must first select or mark the items. When selecting multiple items, they must be consecutive.

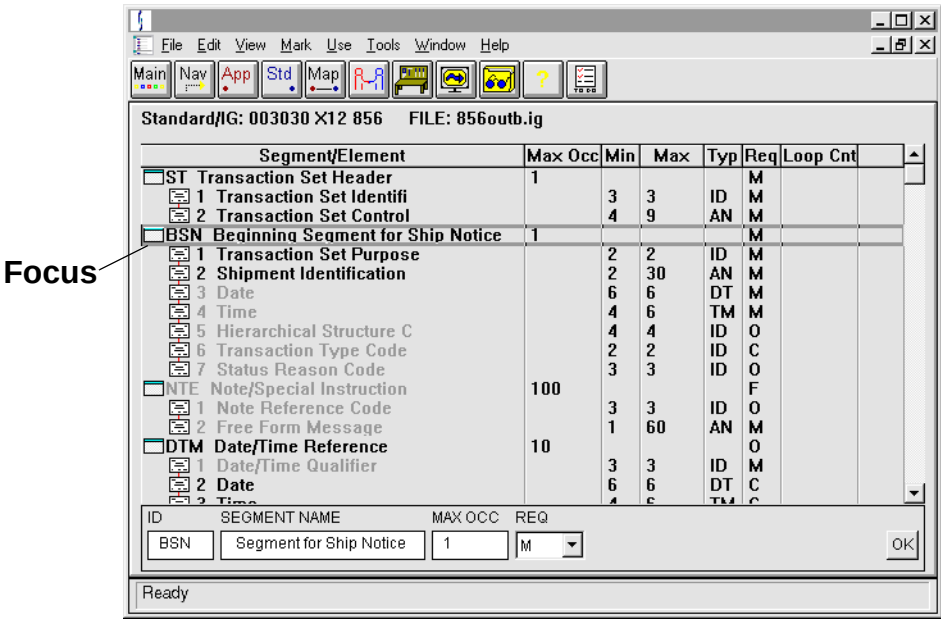
Selecting items

An item line is selected when a dark gray bar appears around it. We refer to this as the **focus**. You can focus on only one line at a time.

There are two ways to move the focus:

- Click on a line to place the focus on it.
- Use the up-arrow and down-arrow keys to move the focus bar.

Example
This illustration shows the focus on a segment.



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Marking items

Before you can cut, copy, or delete an item, you must mark it. To edit several items at once, mark each of the items and then select an editing command.

Marked items appear in blue on your screen. The items remain marked until you unmark them or edit them.

Use this procedure to mark items.

Step	Action
1	Move the focus bar to the line you want to mark.
2	Press F5 or click **Toggle Mark Item** on the Mark menu. **System Response** The system displays the name of the marked item in blue.
3	Repeat Steps 1 and 2 for any consecutive items you want to edit at the same time. (You cannot edit non-adjacent items.) **Comment** You are now ready to select an editing command.

Removing marks

Use this table to remove the mark from an item.

IF you want to unmark…	THEN…
A single item	◗ Move the focus to the line you want to unmark. ◗ Press F5 or click **Toggle Mark/ Unmark** on the Mark menu. **System Response** The system displays the name of the item in dark gray.
All marked items	Click **Clear All Marks** on the Mark menu. **System Response** The system displays the name of the items in dark gray.

(Continued on next page)

Moving items

To move an item or a group of items, you mark, cut, and then paste the item(s) into the new location.

Comments
When you move a record or segment, Gentran:Server also moves all associated fields or elements.

When you cut an item, it remains in the clipboard until you cut or copy another item. As long as the item is in the clipboard, you can paste it to a location in the editor window. You lose the first item from the clipboard once you cut or copy another item.

Use this procedure to move one or more items.

Step	Action
1	Move the focus to an item you want to move.
2	Click **Toggle Marked Item** on the Mark menu.  **System Response** The system displays the name of the marked item in blue.
3	Repeat Steps 1 and 2 to copy adjacent items at the same time. **Comment** You can cut and move only adjacent items at the same time.
4	Click **Cut Marked** on the Edit menu.
5	Move the focus to the line that you want to precede the item(s) you are moving.
6	Click **Paste** on the Edit menu. **System Response** The item(s) appear in the new position.

(Continued on next page)

Copying Items

To copy an item or a group of items, you mark, copy, and then paste the item(s). When you copy a record or segment, Gentran:Server also moves all associated fields or elements.

Comment
When you copy an item, it remains in the clipboard until you cut or copy another item. As long as the item is in the clipboard, you can paste it in a location in the editor window. Once you cut or copy another item, the first item is replaced on the Clipboard.

Use this procedure to copy items.

Step	Action
1	Move the focus to an item you want to copy.
2	Click **Toggle Marked Item** on the Mark menu. **System Response** The system displays the name of the marked item in blue.
3	Repeat Steps 1 and 2 to copy adjacent items at the same time.
4	Click **Copy Marked** on the **Edit** menu.
5	Click the line that you want to precede the copied item(s).
6	Click **Paste** on the Edit menu. **System Response** The copied item(s) appear in the new position.

Adding items

This procedure explains the basic steps to add data items to the file the editor window is displaying.

Reference
For detailed instructions for adding data items, see these chapters in this guide:

- Defining Application Descriptions for ASCII Files
- Creating an Implementation Guide or Standard

(Continued on next page)

Use this procedure to add data items.

Step	Action
1	Move the focus to the line that you want to precede the new item.
2	Select the item type you want to add from the Edit menu. **Comment** When you add a record or segment, Gentran:Server automatically adds one empty field or element as well.
3	Move the focus to the new item and then assign its attributes in the edit box at the bottom of the window. **Reference** For attribute descriptions, see these topics: ◗ How to Add an Element, Composite Element, or Sub-element in the chapter Creating an Implementation Guide or Standard of this guide. ◗ How to Add Records in the chapter Defining Application Descriptions for ASCII Files of this guide. ◗ How to Add Fields in the chapter Defining Application Descriptions for ASCII Files of this guide.
4	Click **OK** to save your changes.

(Continued on next page)

Cutting vs. discarding and deleting

This table describes the differences among cutting, deleting, and discarding items.

When you…	The item is…	And…
Cut	Removed from its position and pasted to the Clipboard	Remains on the Clipboard until you cut or copy another item.
Discard	Retained in the file as an inactive item, appearing in light gray on the editor window **Note** The Visual Mapper does not display discarded items.	Is bypassed by all file processing until you reactivate it.
Delete	Permanently deleted once you save the file	Cannot be recovered.

Cutting items

Use this procedure to cut items.

Step	Action
1	Move the focus to the line you want to cut.
2	Click **Toggle Marked Item** on the Mark menu. **System Response** The system displays the name of the marked item in blue.
3	Click **Cut Marked** on the Edit menu. **System Response** Gentran:Server removes the item from the display and pastes it on the Clipboard. The item remains on the Clipboard until you cut or copy another item.

(Continued on next page)

Discarding items

WARNING

When you discard a segment, Gentran:Server also discards the item's elements.

Do not cut, discard, or delete the ST, CTT, or SE segments. You do not have to map them (make a map group), but they must be present in the map file.

Discard is available only in the Standards Editor

This table explains how to discard items.

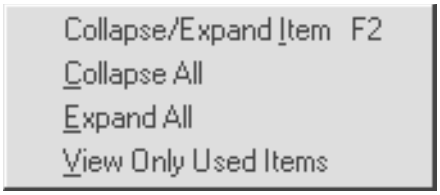
IF you want to discard…	THEN…
A single item	◗ Move the focus to the item to be discarded. ◗ Click **Toggle Usage** on the Use menu. **System Response** The system displays the item line in light gray. **Comment** The Toggle Usage option turns discarding on and off.
Selected items	◗ Move the focus to the first item you want to discard. ◗ Click **Toggle Mark Item** on the Mark menu to mark the item. ◗ Repeat the above steps for each additional adjacent item you want to discard. ◗ Click **Discard Marked** on the Use menu. **Comment** If you have many items to discard, you may discard all items and then activate particular items or groups of items. **Reference** See the topic Activating discarded items in this chapter.
All items	Click **Discard All** on the Use menu.

(Continued on next page)

Viewing discarded items

The **View Only Used Items** option on the View menu enables you to display or hide discarded items in an editor window.

To hide discarded items, click **View Only Used Items** on the View menu. This is a toggle (on/off) command. Therefore, to display all items, including discarded items, cancel the selection for **View Only Used Items**.



Activating discarded items

When you re-activate an item, the line color changes from light gray to black.

If you activate a discarded segment, you also activate all its elements.

Use this table to activate discarded items.

IF you want to activate…	**THEN…**
A single discarded item	◗ Move the focus to the item you want to discard. ◗ Click **Toggle Usage** from the Use menu. **Comment** The Toggle Usage option turns discarding on and off.
Selected discarded items	◗ Move the focus to the first item you want to reactivate. ◗ Click **Toggle Mark Item** on the Mark menu. ◗ Repeat the above steps for each additional item you want to activate. ◗ Click **Use Marked** on the Use menu.
Only the mandatory items	Click **Use All Mandatory** from the Use menu.
All discarded items	Click **Use All** from the Use menu.

(Continued on next page)

Deleting items

Use this procedure to delete items.

Step	Action
1	Move the focus to the line you want to delete. **WARNING** **Once you save your file, you cannot recover deleted items. If you may need the item in the future, discard it instead of deleting it.** **When you delete a record or segment, Gentran:Server also removes the item's fields or elements.** **If you delete a composite element, Gentran:Server deletes the composite element's sub-elements.** **Do not delete or discard the ST, CTT, or SE segments. You do not have to map them (make a map group), but you must make sure they are in the map file.**
2	Click **Toggle Mark Item** on the Mark menu.
3	Repeat Steps 1 and 2 for each additional item you want to delete.
4	Click **Delete Marked** on the Edit menu. **System Response** Gentran:Server displays this confirmation prompt: Permanently delete all marked items? **Comment** If you inadvertently delete an item, you can close the file without saving. This undoes the deletion. Closing without saving also undoes all other changes made since you last saved the file.
5	Click **Yes**.
6	Click **Save** on the File menu to make the changes permanent.

How to Create and Delete Loops

Introduction

Often, a sequence of records or segments is repeated. You can indicate that a sequence of records or segments repeats by grouping them together and defining the group as a **loop**.

If you no longer need the loop, you can do one of the following:

- Dissolve the loop, but keep its component records or segments
- Delete both the loop and its component records or segments at the same time.

How loops are displayed

When you define a sequence of records or segments as a loop, Gentran:Server displays a thin, red line that connects the first and last record.

The **Loop Cnt** column displays the number of times the sequence repeats.

Before you begin

All items in a loop must be sequential. Move records as necessary to make them sequential before you add the loop.

Discarded segments

You must display discarded segments before you create, modify, or delete a loop in the Standard/IG editor.

CAUTION

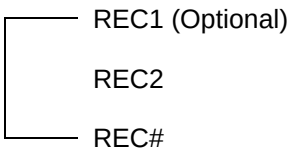
If you do not display discarded items before creating, modifying, or deleting a loop, your map may fail.

(Continued on next page)

Optional Segments

If a segment that begins a loop is optional, then that segment MUST be present in the application file if any of the other segments in the loop are also present.

Example
If you have the following record structure in an application-to-application map, then REC 1 must exist if REC 2 exists:



Adding a loop

Use this procedure to add a loop.

Step	Action
1	Click **Collapse All** on the View menu so that the editor displays only the records or segments. **Note** If you are using the Standard/IG editor, make sure that all items (including unused or discarded items) are displayed. Under the View menu, the **View Only Used Items** option must be unselected (no check mark) to view all items.
2	Move the focus to a record or segment that you want to include in the loop.
3	Click **Toggle Marked Item** on the Mark menu.
4	Repeat Steps 2 and 3 for each item you want in the loop.
5	Click **Make Loop** on the Edit menu. **System Response** Gentran:Server responds by adding the loop markers (red connecting lines) to the records or segments in the loop. The edit box for the first item in the loop includes a text box for the loop count. (Continued on next page)

(Contd) Step	Action
6	Type the number of times the loop repeats in the LP CNT edit box of the first item in the loop. **Comment** This value must be a positive integer between 0 and 99999. The symbol >1 indicates that the number of repetitions varies.
7	Click **OK** to save your changes.

Dissolving the loop association

Use this procedure to remove the loop and keep the records or segments.

Step	Action
1	Move the focus to the first record in the loop. **Note** If you are using the Standard/IG editor, make sure that all items (including unused or discarded items) are displayed. Under the View menu, the **View Only Used Items** option must be unselected (no check mark) to view all items.
2	Click **Remove Loop** on the Edit menu. **System Response** Gentran:Server deletes the loop association and removes the red line.

(Continued on next page)

Deleting the loop and its components

Use this procedure to delete the loop and all the records or segments in the loop.

Step	Action
1	Move the focus to the first item in the loop. **Note** If you are using the Standard/IG editor, make sure that all items (including unused or discarded items) are displayed. Under the View menu, the **View Only Used Items** option must be unselected (no check mark) to view all items.
2	Click **Toggle Mark Item** on the Mark menu. **System Response** The system displays the name of the marked item in blue.
3	Click **Delete Marked** on the Edit menu. **System Response** Gentran:Server displays this confirmation prompt: Permanently delete all marked items? **Caution** You cannot recover deleted items.
4	Click **Yes**. **System Response** Gentran:Server displays a confirmation prompt informing you that deleting the marked item deletes all the items in the loop as well.
5	Click **Yes**. **System Response** Gentran:Server deletes all the items in the loop and the loop markings.

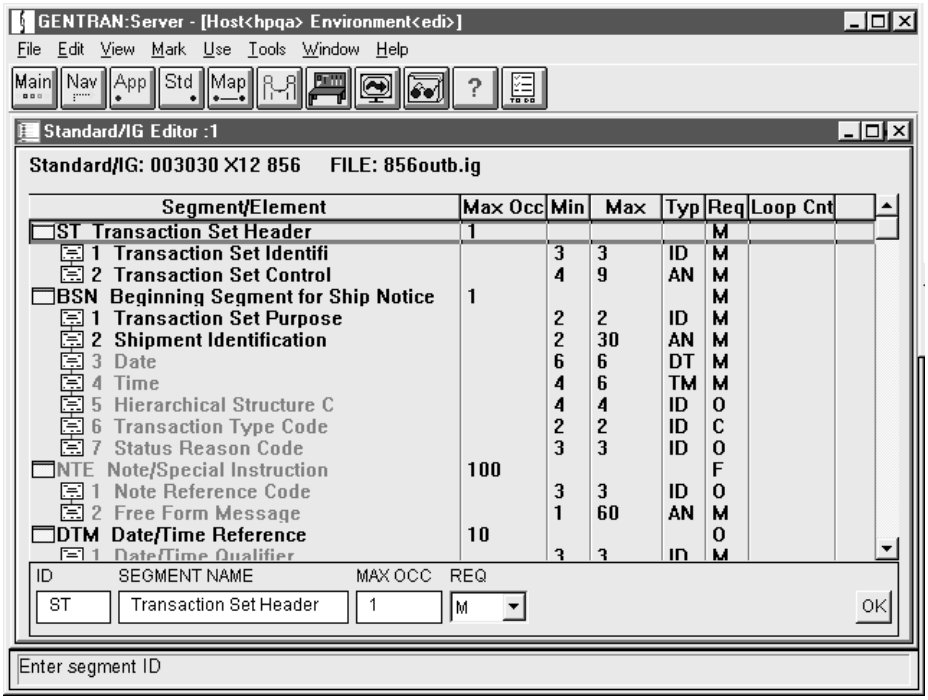
How to Set Item Attributes

What are attributes?

Attributes are the values and identifying information you assign to records, fields, segments, and elements. The editor window displays an item's attributes.

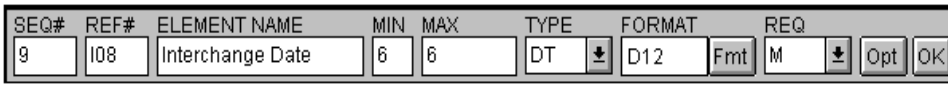
Example

This example shows the attributes of segments and elements in a Standard/IG Editor window. The columns titled Max Occ, Min, Max, Type, Req, and Loop Cnt display the attributes.



Where to set attributes

The edit box at the bottom of an editor window sets the attributes of a file item. When the focus is on an item, the editor displays the item's attributes in the edit box.



(Continued on next page)

How to set attributes

Use this procedure to set or change item attributes.

Step	Action
1	Move the focus to the item. **System Response** The editor displays the item's attributes in the edit box.
2	Enter the values in the edit box and select values from the lists. **References** For definitions of item attributes, see these chapters in this guide: ◗ Defining Application Descriptions for ASCII Files ◗ Creating an Implementation Guide or Standard
3	Click **OK** to save the attribute changes.
4	Click **Save** on the File menu to save the changes.

CHAPTER
3

Defining Application Descriptions for ASCII Files

Contents

Overview

Introduction

In this chapter

You will learn how to create or modify an application description that describes data stored in an ASCII file, and how to use the Standard/IG Editor to create an application description from a standard or implementation guide.

Application documents

An **application document** is a document your business computer application produces or processes. The data that is associated with these documents can be stored in an ASCII file. Your business computer application can be either the *source* of documents you want to send to your trading partners or the *destination* for documents your trading partners send to you.

Example
Your application may produce or process purchase orders, invoices, shipping notices, requests for quotations, or other types of standard business documents that can be transferred electronically.

Application descriptions

To prepare for mapping and translation, you must describe the format of the data in each application document you exchange with your trading partners. The result will be an **application description file**.

Why you need to create application descriptions

You use application descriptions as a source or destination document when you create your translation maps. Recall that a translation map tells Gentran:Server's translator how to convert an inbound document into a format your application understands: EDI standard, implementation guide, or another application. The translation map also tells the system how to convert outbound documents from your application into another format. The application description identifies the data items that your application uses so that you can relate each to a data item in another format.

Output files

You can translate a single ASCII file application description to more than one output file only by using the text database driver.

(Continued on next page)

Key terms

This table lists the key terms used in this chapter.

Term	Description
application description	Your company's description of the records and fields in an ASCII file used for your data.
Application Editor	The Gentran:Server tool that enables you to describe your application data.
attributes	The values you assign to describe a record or field.
data type	The type of information in a field (for example, alphanumeric, binary, numeric, date, time).
delimiter	A symbol used to separate data items in an application file.
field	A discrete piece of data in a record, such as quantity or unit price.
loop	A sequence of related items repeated within a transaction set.
marking	The process of flagging or selecting a field or record with which you want to work.
record	A defined sequence of related fields.
record ID	The field that identifies the record to Gentran:Server.
Trading Partnership Code	The unique code that identifies a Trading Partnership record. The record describes a unique trading partner and document combination. The Trading Partnership Code must have from 1-15 alphanumeric characters. Spaces and special characters are NOT allowed.

Components of an Application Description

Introduction

Application descriptions that describe the data in an ASCII file have two main components:

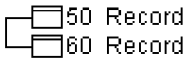
- **Records**—the defined sequence of related fields. Each record consists of one or more items of data. For example, in a purchase order, the record PURCHASE ORDER LINE ITEM contains the several items of data, such as the part name, quantity being ordered, and the unit price.
- **Fields**—the items of data in a record. For example, in the record PURCHASE ORDER LINE ITEM, the fields include **item name**, **quantity**, and **unit price**.

Record loops

Often, a sequence of records in your application data is repeated multiple times. To indicate that a sequence of records repeats or reiterates, you mark the data **loops** within the file.

When you mark a sequence of records as a loop, you will see a thin, red line connecting the first and last record.

Example
This is an example of a loop in the Application Editor.



Record attributes

Attributes are the values you assign to describe a record. Two of the attributes you assign to a record are the record identifier and the record name. Each record must have a unique name. The name can be up to 128 characters in length and can contain any keyboard characters.

(Continued on next page)

Field attributes

In addition to the attributes that you assign to a record, you also assign attributes to describe a field.

Field attributes include:

- Field name
- Data type (for example, binary, numeric, alphanumeric, date/time)
- Data format (for example, left-justified).

The field name must be unique. The name can be up to 128 characters in length and can contain any keyboard characters.

Reference
For a list of the allowable formats for each data type, see Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide*.

Field lengths

Field lengths may be:

- Fixed to a specific number of characters.
- Variable in length and delimited by unique field separators.

The Trading Partnership Code and Record ID

Introduction

If you plan to use the application description as the source document in a map, you must:

- Define a way for Gentran:Server to determine the Trading Partnership Code in the application document
- Designate one field in each record as the record ID.

Comment
If the application description is used as the destination document in a map, you do not need to mark the Trading Partnership Code.

Ways to define the Trading Partnership Code

Identifying the Trading Partnership Code is essential because the code enables Gentran:Server to locate the Trading Partnership file. This file contains the name of the map Gentran:Server uses to translate the data for this trading partner.

There are two ways to define the Trading Partnership Code in an application description:

- Designate one field in the first record as the Trading Partnership Code.
- Define application/Trading Partnership rules that extract values from multiple fields in the first record. Gentran:Server uses the result to determine the Trading Partnership Code.

References
For information about designating one field as the Trading Partnership Code, see Designating a Trading Partnership Code Field and Record ID.

For information about using multiple fields to determine the Trading Partnership Code, see the Defining Trading Partnership Rules for Application Files chapter in this guide.

The record ID

The translator uses the **record ID** field to distinguish the records in a document.

For outbound translation in which the application is the source document, each record must contain a record ID. Record IDs are optional for inbound translation.

Comment
The layout you select for the Trading Partnership Code may affect the field positions you use for the record ID.

Designating a Trading Partnership Code Field and Record ID

The Trading Partnership Code field

You can designate one field as the Trading Partnership Code field in your application description to tell the translator where to look for the Trading Partnership Code.

When you use one field, the position of the record ID may be affected.

Methods of describing

There are two ways to describe the layout of the Trading Partnership Code and record ID layout of your ASCII application data.

Method 1

The Trading Partnership Code is a required field in the first record of a document, and may also appear elsewhere in the data or application description.

The record ID is positioned in any field of each record, but is positioned consistently in the same field for all records of the same type. For example, if the record ID is in field 03 of the first “detail” record, it must be positioned in field 03 of all other “detail” records. In other record types, it may be in a different position.

Example

```
HEADER  0234  12/31/1999  XYZ Company, Inc.  123 Anystreet Howtown  MI 48106 XYZ850OUT           NL
XYZ Company  Payables  Terry Smith  313-222-1234 313-555-8000VN20046-AV NAMEREC                   NL
PONumber0234          Detail       84each          9.95  stainless steel                       NL
PONumber0234          Detail       173dozen        50.00 1043775829       screwdriver           NL
PONumber0234     2                 2257            SU                                           NL
```

In this example,

The record ID = HEADER, NAMEREC, Detail

The Trading Partnership Code = XYZ850OUT.

(Continued on next page)

Method 2

The Trading Partnership Code is in positions 1 through 15 of each record in your application description, and a blank is in position 16. (The code can be less than 15 characters in length, but the unused positions must be padded out with blanks.) The code itself cannot contain spaces or special characters.

A two-digit record ID is in positions 17 and 18 of each record in your application description file, immediately after the Trading Partnership Code. (The record ID is an arbitrary two-digit number from 01 to 99.) You can designate up to 99 different record IDs.

Example

```
XYZ850002040IB   10  PONumber0234 12/31/1999XYZ Company, Inc. 123 Anystreet Howtown  MI 48106   NL
XYZ850002040IB   15  XYZ Company  Payables  Terry Smith  313-222-1234 313-555-8000VN20046-AV    NL
XYZ850002040IB   20  PONumber0234   84each 9.95           stainless steel                      NL
XYZ850002040IB   20  PONumber0234   173dozen   50.00   1043775829  screwdriver                 NL
XYZ850002040IB   30  PONumber0234   2   2257 SUM NL                                             NL
```

In this example,

Record IDs are in the second column.

The Trading Partnership Code = XYZ850002040IB.

CAUTION

If you intend to use the dnld personality intelligent agent to process the application files in Gentran:Server, you must use method 2 and you must set the record ID of the first record in the file to 01.

ASCII File Application Descriptions

Introduction

ASCII files have no explicit structure. In an ASCII file, no record is subordinate to any other record. An ASCII file can be either a sequential or a direct access file. Generally, non-database files are ASCII files.

Identifying ASCII files

In ASCII files, each line is a separate record. The file may contain either variable or fixed-length fields. Variable length fields are separated by delimiters.

ASCII file example

This is an example of an ASCII file.

```
CEPA               863V3R5RVPAVER UYYYYYYY
D863V3R5HBTR001995113001809RV
D863V3R5HBTM45819950629
D863V3R5HBTM09019950701
D863V3R5HBTM09119950930
D863V3R5HLN1N1PV????EP5004
D863V3R5HLN1REF4A4240
D863V3R5HLN1PERCEJAMES J. SIMNICK
D863V3R5HLN1PREF4AV615
D863V3R5HLN1PERAAERNEST C. SCHUTTTE312/856-5620
D863V3R5DLLINLINB850040032895000000
D863V3R5DLLINPIDS VCEPV1
D863V3R5DLLINQTY01 000000000000000GA
D863V3R5DLLINCID60
D863V3R5DLLINMEARGRVP 000000000000000000PS
D863V3R5DLLINMEAAGRVP 000000000000000000PS::G
D863V3R5DLLINMEAAFRVP 000000000000000000PS::G
D863V3R5DLLINMEAAHRVP 000000000000000000PS::G
D863V3R5DLLINLINB850040032895000000
D863V3R5DLLINPIDS VCEPV2
D863V3R5DLLINQTY01 00000308880529GA
D863V3R5DLLINCID60
D863V3R5DLLINMEARGRVP 00000000000000000PS
D863V3R5DLLINMEAAGRVP 00000000000000000PS::G
D863V3R5DLLINMEAAFRVP 00000000000000000PS::G
D863V3R5DLLINMEAAHRVP 00000000000000000PS::G
```

Creating an ASCII Application Description

Application Description Creation Process

Creation process

This table describes the process of creating an application description.

Stage	Description
1	Obtain the data specifications for your application data. You collect and manage your data through application software that is independent of Gentran:Server. Become familiar with the ASCII application file contents before you create or edit the Gentran:Server application descriptions.
2	Create a file that describes the data. Make an application description file containing the records and fields from your application. You create and modify your application description with Gentran:Server's Application Editor. You describe your application once, and tailor it later in the map to meet specific trading partner requirements.
3	Verify that your data size and data types are correct.
4	Specify the correct formatting for the data in the application data fields. **Reference** See the Data Type Formats chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for information about the formats available for each data type.
5	Set up special options, (such as batch total or special delimiting character) as necessary.
6	Create loop structures that reflect your repeating data records. (Continued on next page)

(Contd) Stage	Description
7	Do one of the following: ◗ Mark the field in the first record that contains the Trading Partnership Code and mark the record IDs. ◗ Create Trading Partnership rules for the application description.
8	Save the changes and name the application description. Later, map your application description to an EDI standard, to an implementation guide, or to another application.

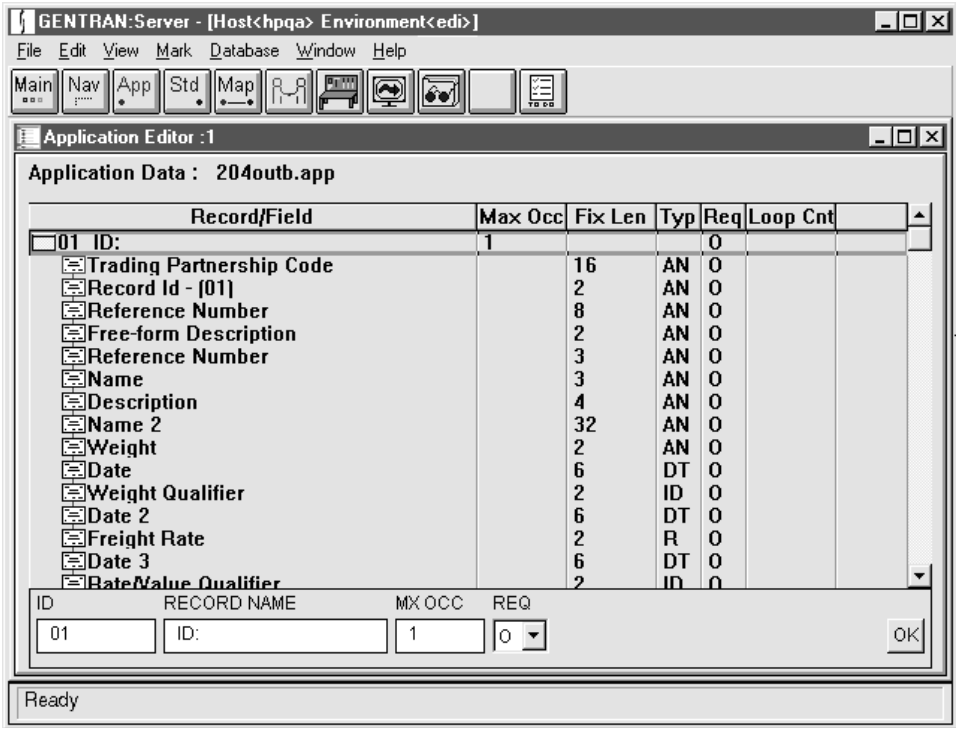
The Application Editor

Introduction

The tool that you use to create and maintain application descriptions is the Application Editor. This tool provides you with a graphic view of the layout of your records and fields. It also enables you to see the loops you have built into your application description to process repeated records of your business data.

Application Editor example

This example shows the Application Editor.



Edit box

(Continued on next page)

Application Editor fields and functions

This table describes the fields and functions of the Application Editor window.

Field	Function
Record/Field	Describes the records and fields.
Max Occ	Indicates the maximum number of times this record can appear in a row.
Min Len	Indicates the minimum field length.
Max Len	Indicates the maximum field length.
Type	Indicates the field's data type (alphanumeric, numeric, date/time, or binary).
Req	Indicates the requirement indicator: ◗ **O for optional:** the presence of the record is at the option of the sending party. ◗ **M for mandatory:** the record must be present. ◗ **C for conditional/relational:** the presence of the record depends on the presence of specific other items.
Loop Cnt	Indicates the number of times this group of records can repeat as a loop.
Delimiter	Indicates the data separator for variable-length data.
Edit box	Modifies the record or field that has the focus.

Deciding How to Create Your Application Description

Methods for creating new application descriptions

There are four ways to create application descriptions:

- Adapt an existing application description
- Create an application description from a standard or implementation guide
- Build an application description from a record layout file
- Manually build an application description

Decision table

Use the following table to determine how to create your application description.

IF you have…	THEN follow the procedure…
An application description that can be adapted for the new application document	How to Adapt an Existing Application Description in this chapter.
A standard or implementation guide from which to base your application description and you want the application description to have variable-length fields	How to Create a Description from a Standard or IG in this chapter.
An ASCII file that specifies some or all of the characteristics needed to describe your application data	How to Build from a Record Layout File in this chapter.
No data or files on which you can base the application description	How to Manually Describe an ASCII File in this chapter.

Procedures

How to Adapt an Existing Application Description

Introduction

The easiest way to create a new application description is to modify an existing application description. This may be an application description created for either another application or for this application. You may have created the original application description earlier or someone else in your organization may have given it to you.

There are two ways you can use an existing application description in the Application Editor as the basis for a new application description:

- **Open and edit an application description**
  If you are using the client/server version of Gentran:Server, the application description is on the UNIX host.

  If you are using the Workstation version of Gentran:Server, the application description must be on your PC.

  Once the application description is open, you may modify it and then save it under a new file name. You must save it in the directory specified for application descriptions.
- **Copy, open, and edit an application description**
  You can also make a copy of an existing application description and then edit the copy. This assures that you will not make any inadvertent changes to the original application description.

Recognizing and locating application descriptions

When you create or edit an application description and save it with the **Save** or **Save As** commands, Gentran:Server gives the file a default file name extension of *.app.*

Gentran:Server automatically stores application descriptions in the directory specified for application descriptions, which was created and named during installation. To learn the name of the directory, select **Location of Files** on the Preferences menu.

(Continued on next page)

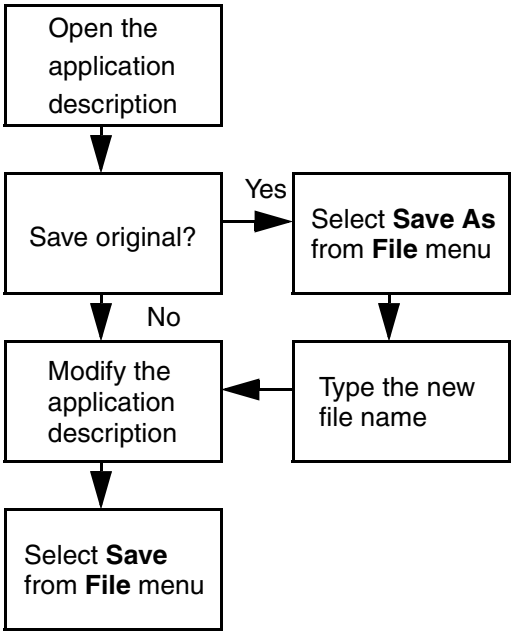
Before you begin

Before you adapt an existing application description:

- Make sure the application description you are using as a base is in the directory specified for application descriptions.
- Know what your record IDs are and where they appear in the application file.

Procedure flow diagram

This diagram shows the flow of work for adapting an existing application description.



(Continued on next page)

Editing an existing application description

Use this procedure to open and edit an existing application description file.

Step	Action
1	Open the Application Editor.
2	Click **Open existing UDF application file** and click **OK**. **CAUTION** **Remember, you must use an ASCII application description to describe non-database application data.** **System Response** The system displays the Open File dialog box. The system automatically selects the directory specified for application descriptions. The **File** list displays all files with the *.app* extension.
3	Select the file name of the application description you want to open and click **OK**. **System Response** Gentran:Server displays the file in the Application Editor window. **Comment** The display shows the names of all records and their current characteristics. It may or may not show the names of all fields and their current characteristics, depending upon whether you selected Collapsed or Expanded as the default view for the Application Editor in the User Setup dialog box.
4	Do you want to save the original application description? ◗ If NO, skip to Step 6. ◗ If YES, click **Save As** on the File menu to copy the file, and continue with Step 5.
5	Type a new file name for the new application description in the **File** box of the Save As dialog box and click **Save**.
6	You are now ready to modify the new application description. GO TO How to Modify an Application Description in this chapter.

How to Create a Description from a Standard or IG

Introduction

You can automatically create an application description from a standard or implementation guide. Because you start with a standard or implementation guide open, you must be in the Standard/IG Editor rather than in the Application Editor. The resulting application description has variable or fixed length fields, depending on the settings in Preferences.

Comment

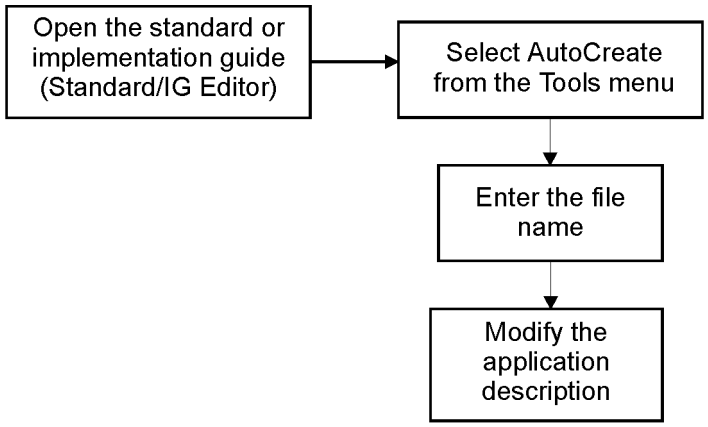
If you are translating from a standard to an application or from an application to a standard, you can automate every part of the EDI mapping process. Use AutoTrim to create an implementation guide from a standard and sample input data, use AutoCreate to create the application description from the implementation guide, and use AutoMap to map the implementation guide and application description.

Before you begin

If you intend to use AutoTrim on a standard to create the implementation guide and then use AutoCreate on the implementation guide to create this application description, you must use **AutoTrim** first. Both the AutoTrim and the AutoCreate commands are found in the Standard/IG Editor.

Procedure flow diagram

This diagram shows the flow of work for creating an application description from an existing standard or implementation guide.



(Continued on next page)

Creating an application description from a standard or IG

Use this procedure to automatically create an application description from a EDI standard or from an implementation guide.

Step	Action
1	Open the Standard/IG Editor and display the standard or implementation guide you want to use. **Comment** This must be the same standard or implementation guide you intend to use in the map that translates to or from the new application description. **Reference** See the chapter Creating an Implementation Guide or Standard for information about selecting, editing, and displaying standards and implementation guides.
2	Click **Tools** on the Standard/IG menu bar.
3	Select **AutoCreate Application Description** on the Tools menu. **System Response** The system displays the Save As dialog box and automatically selects the directory specified for application descriptions and the *.app* extension.
4	Name the new application. **System Response** Gentran:Server creates an application description file consistent with the standard or implementation guide.
5	You are now ready to modify the application description to match the data in your ASCII files. GO TO How to Modify an Application Description in this chapter.

How to Build from a Record Layout File

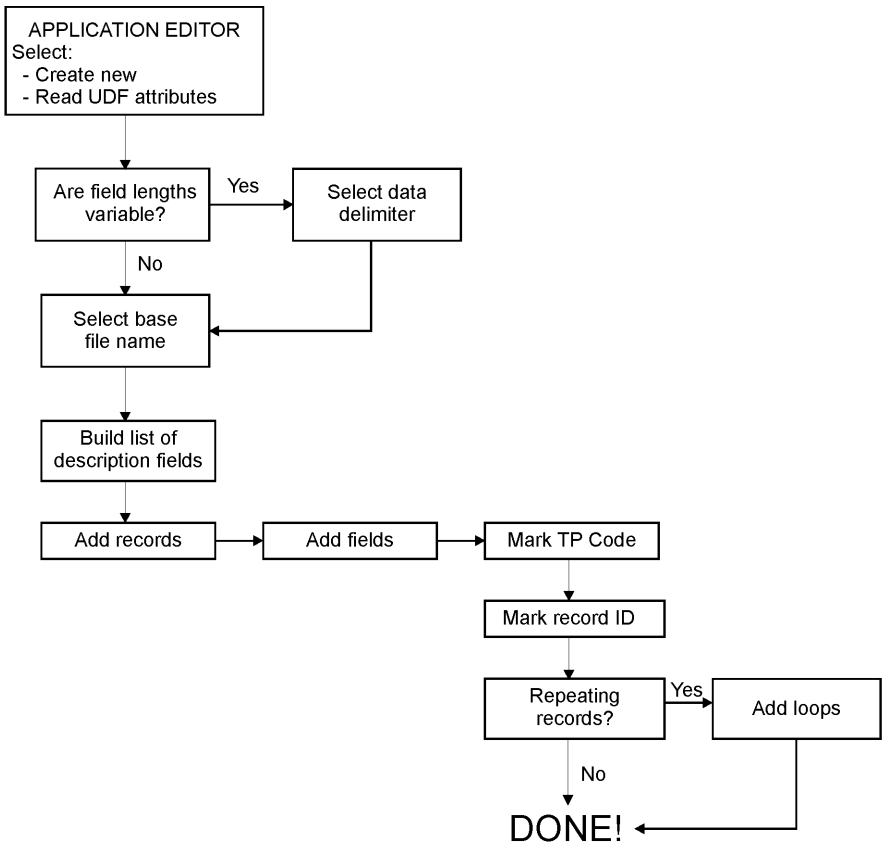
Introduction

A record layout file is an ASCII file that shows the layout of each record in your application. You can automatically build an application description from a record layout file.

Reference
See the Example Record Layout Files chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for example files and information about file requirements.

Procedure flow diagram

This diagram shows the flow of work for building an application description from a record layout file.



(Continued on next page)

Building an application description from an ASCII record layout file

Use this procedure to build an application description from an ASCII record layout file.

<table>
<tr><th>Step</th><th colspan="3">Action</th></tr>
<tr><td>1</td><td colspan="3">Open the Application Editor.</td></tr>
<tr><td>2</td><td colspan="3">Click Create new on the Open Application dialog box.</td></tr>
<tr><td>3</td><td colspan="3">Click Read UDF attributes from a flat file and click OK.

System Response
Gentran:Server displays the Read Application Data Description Layout dialog box.</td></tr>
<tr><td rowspan="4">4</td><td colspan="3">Use this decision table to select the format of your data.</td></tr>
<tr><td>IF field length…</td><td>THEN select…</td><td>AND…</td></tr>
<tr><td>Varies (The same field may have different lengths in different records.)</td><td>Variable length DATA fields</td><td>Continue with Step 5</td></tr>
<tr><td>Is constant (Every line has the same length and the same field has the same length in every record.</td><td>Fixed length DATA fields</td><td>Go to Step 5.</td></tr>
<tr><td>5</td><td colspan="3">In the Filename box, type the path and filename of the file that you want Gentran:Server to use to build the application description, or click the button to the right of the box to select the filename.

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
6	Create an ordered list of the Description Fields in the record layout file: a) Select an attribute from the **Data Field Attributes** list. b) Press the >> button to copy the data field attribute to the Description Fields side. Use the << button to remove a table you copied in error. **Make sure you list the attributes in the order that they appear in the layout file The translator will process the records in the order you specify here.** c) When you have finished moving the items to the Description Fields side, click **OK**. **System Response** Gentran:Server creates an application description file from the fields you selected and displays the Application Editor window.
4	Select a delimiter for the record layout file.
5	Click **OK**. **System Response** Gentran:Server displays the Application Editor for an ASCII file. The window contains records and fields as described in the record layout file.
6	You are now ready to add records to your application description. GO TO How to Add Records in this chapter

How to Manually Describe an ASCII File

Introduction

If you do not have the required data, you can manually build an application description. For an ASCII application, your application description must be in record-and-field format.

Before you begin

Before you manually describe an ASCII file:

- Become familiar with the layout of the application files you want to describe.
- Check the number of field delimiters in your application data. An application description can have only one field delimiter. If the file containing your application data uses two or more different field delimiters, the translator will not translate the data correctly.

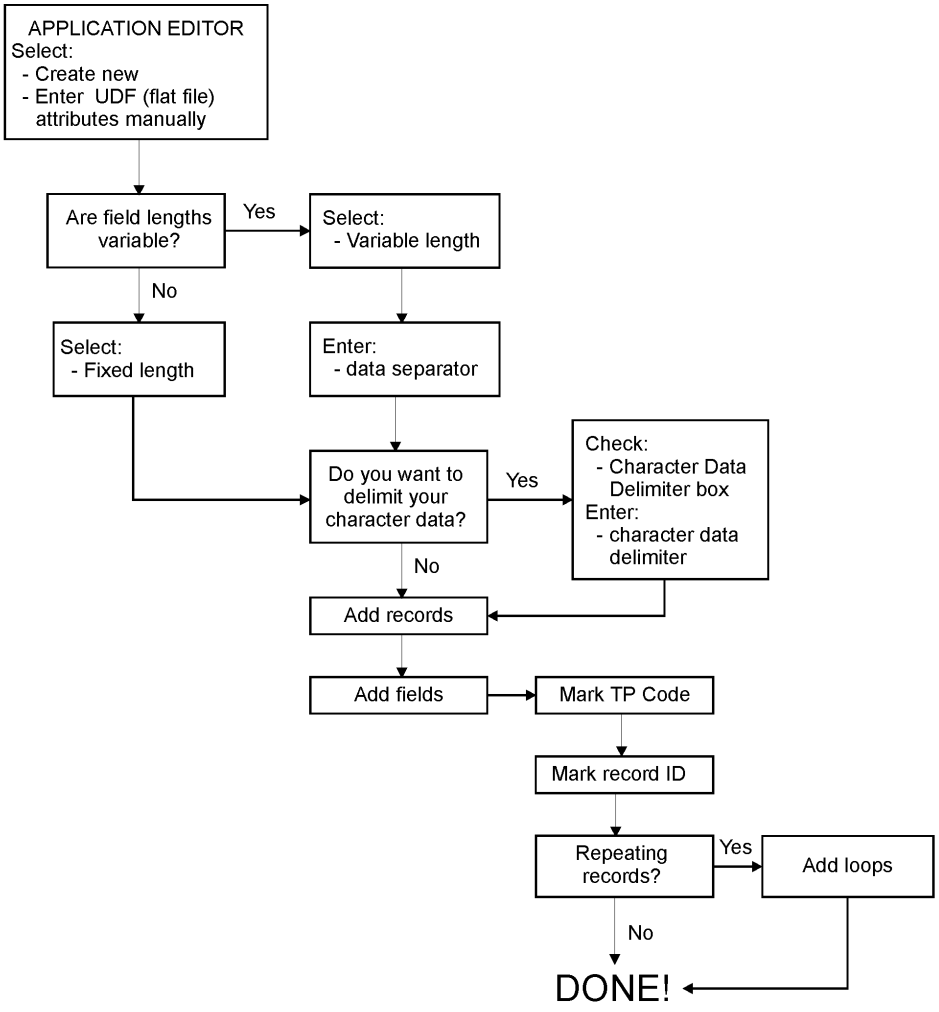
CAUTION

If your application data uses two or more different field delimiters, use your application to modify the data files so that only one field delimiter is used.

(Continued on next page)

Procedure flow diagram

This diagram shows the flow of work for manually describing your application data.



Manually describing an ASCII file

Use this procedure to manually describe an ASCII file.

Step	Action
1	Open the Application Editor.
2	Click **Create new** on the Open Application dialog box. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="3">Action</th></tr>
<tr><td>3</td><td colspan="3">Click Enter UDF (flat file) attributes manually and click OK.

System Response
Gentran:Server displays the Application Data Description dialog box.</td></tr>
<tr><td rowspan="4">4</td><td colspan="3">Use this decision table to select the format of your data.</td></tr>
<tr><td>IF field length…</td><td>THEN select…</td><td>AND…</td></tr>
<tr><td>Varies</td><td>Variable length DATA fields</td><td>Continue with Step 5</td></tr>
<tr><td>Is constant</td><td>Fixed length DATA fields</td><td>Skip to Step 6.</td></tr>
<tr><td rowspan="3">5</td><td colspan="3">Use this decision table to determine what data separator to use.</td></tr>
<tr><td>IF data separator is…</td><td colspan="2">THEN…</td></tr>
<tr><td>Printable</td><td colspan="2">Type the Default data separator. It may be any printable character: one or more blanks ( ), a comma (,), or an asterisk (*).</td></tr>
<tr><td>Non-printable</td><td colspan="2">Check the Special Character check box and type the HEX equivalent of the non-printable character.</td></tr>
<tr><td>6</td><td colspan="3">If you want to delimit your character data, check the Character Data Delimiter option and type the desired character.

Comment
The delimiter may be a comma (,), an asterisk (*), or one or more blanks ( ). Blanks are not recommended.

You can character delimit any data type.

If you select Character Data Delimiter, all AN and ID data type fields must be character delimited. Values in other data types can be character delimited, but it is not required.

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
7	Click **OK**. **System Response** Gentran:Server displays the Application Editor for an ASCII file. The window contains one record and one field.
8	You are now ready to add records to your application description. GO TO How to Add Records in this chapter.

How to Modify an Application Description

Introduction

After you have created an application description, you may need to modify it.

Before you begin

Make a copy of the application description and modify the copy.

Action table

Use the following table to locate the instructions for modifying, renaming, or deleting your application description.

TO…	FOLLOW the procedure…
Add new records	How to Add Records in this chapter.
Add new fields	How to Add Fields in this chapter.
Mark or unmark the Trading Partnership Code field	How to Mark the Trading Partnership Code Field in this chapter.
Designate data that repeats	How to Add Loops in this chapter.
Change record attributes	How to Change Record Attributes in this chapter.
Change field attributes	How to Change Field Attributes in this chapter.
Change character or field delimiter	How to Change Delimiters in this chapter
Change existing loops	How to Modify Loops in this chapter
Rename an application description	How to Manage Application Descriptions in this chapter
Delete an application description	How to Manage Application Descriptions in this chapter

How to Add Records

Introduction

Records hold fields. Every new application description comes with one record and one field. You may add more records. When you add a new record, Gentran:Server automatically adds one empty field as well.

After you create the first record, you can define up to 799 subsequent records at the same level (the maximum number of records permitted in a map is 800).

Reference
To add fields, see How to Add Fields in this chapter.

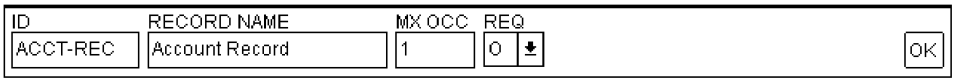
Requirements

These are the record requirements:

- The maximum record size is 6144 bytes. You must have a New Line at the end of each record, and you must include the New Line character in the total record size.
- For outbound translation, you must designate a record ID in each record to enable the translator to identify the record during translation. The record ID may be up to 128 characters in length, can contain any keyboard characters, and must be marked as the record ID. For inbound translation the record ID is optional.

Record edit box

When you add a record, you assign attributes to it. This is the edit box that enables you to assign or change record attributes. Gentran:Server displays the edit box the bottom of the window when the focus is on a record.



(Continued on next page)

Edit box fields, functions, and values

This table describes the fields, functions, and values in the **Record** edit box.

Field	Function	Value
ID	Indicates the unique name or record identifier you assign to label the record. Record identifiers are optional for inbound translation and for database records. For outbound translation, record identifiers are required in the application description.	Alphanumeric characters up to 128 positions in length.
RECORD NAME	Describes this record.	Alphanumeric characters up to 128 positions in length.
MX OCC	Indicates the maximum number of times this record can appear in a row.	A positive integer between 0 and 999999. Alternatively, you can type **>1** to permit an unspecified number of repetitions during translation. The default is 1.
LP CNT	Indicates the number of times this group of records can repeat as a loop. This box is displayed only if the record is the first record in a loop.	A positive integer between 0 and 99999 Alternatively, you can type **>1** to permit an unspecified number of repetitions during translation. The default is 1.

(Continued on next page)

(Contd) Field	Function	Value
REQ	Indicates the conditions under which the item must be present.	One of the following: ◗ **O** (optional): The presence of the item is at the option of the sending party. ◗ **M** (mandatory): The item must be present. ◗ **C** (conditional): The presence of the item depends on the presence of specific other data elements or values.

Adding records

Use this procedure to add records.

Step	Action
1	Move the focus to the line that will *precede* the new record.
2	Click **Add a Record** on the Edit menu. **System Response** Gentran:Server places a generic record in your description file.
3	Move the focus to the new record and complete the fields on the edit box at the bottom of the window: ◗ ID ◗ RECORD NAME ◗ MX OCC ◗ LP CNT (If the record is in a loop.) ◗ REQ **Reference** For functions and values, see Edit box fields, functions, and values in this chapter.
4	Click **OK** to save your changes. (Continued on next page)

(Contd) Step	Action
5	Repeat Steps 1 through 4 until you have added all the records you need.
6	You are now ready to add fields to the records in your application description. GO TO How to Add Fields in this chapter.

How to Add Fields

Introduction

Fields contain the actual information for your application. Whenever you add a record, Gentran:Server includes one empty field. You can add more fields to the record.

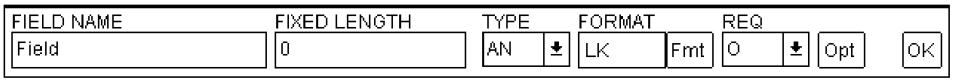
Requirements

For outbound files, the Trading Partnership Code ID field must be in the first record and marked as the Trading Partnership Code, however the Trading Partnership Code ID may appear in other records. Only one field may be marked as the Trading Partnership Code field and that field must be in the first record.

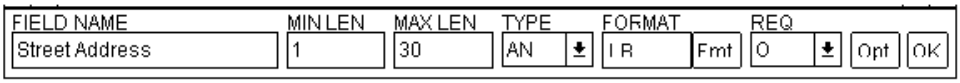
Field edit boxes

When you add a field, you assign its attributes in the edit box. Gentran:Server displays the edit box the bottom of the window when the focus is on a field.

This is the edit box for fixed-length fields.



This is the edit box for variable-length fields.



Default value for a destination field

When you assign attributes to a destination field, you have the option to retain the default value. If you choose to retain the default value, Gentran:Server determines the default value this way:

- When you have multiple source fields mapped to the destination item, Gentran:Server uses the first value received as the default.
- When you have a single source field mapped to a destination item, Gentran:Server uses each new value as the default.
- Gentran:Server places the default value into every repetition of the destination field/element until it encounters a new source value from this field for this destination.

(Continued on next page)

Edit box fields, functions, and values

This table describes the fields in both types of edit boxes.

Field	Function	Value
FIELD NAME	Describes the item	Alphanumeric characters up to 128 positions in length. The default field name is FIELD. If the name contains embedded blanks, the field delimiter must not also be a blank.
FIXED LENGTH	Indicates the field length for data files containing fields that are the same length in every record	Numeric characters not exceeding 6144 bytes.
MIN LEN	Indicates the minimum field length for data file containing variable-length fields preceded and followed by a delimiter character	Numeric characters less than or equal to the maximum field length. The default is 1. Cannot exceed 99 characters.
MAX LEN	Indicates the maximum field length for data file containing variable-length fields preceded and followed by a delimiter character	Numeric characters not exceeding 6144 bytes. The default size is the value in the MIN LEN box. Must be greater than or equal to the minimum length.
TYPE	Indicates the field's data type (alphanumeric, numeric, date/time, or binary). Application field data types default to AN (alphanumeric).	See the Data Type Formats chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for data types.
FORMAT	Indicates the specified format for the data type **Example** Left-justified or right-justified	See the Data Type Formats chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for data type formats. (Continued on next page)

(Contd) Field	Function	Value
REQ	Indicates the conditions under which the item is required.	The values are: ◗ **O for optional** Item presence is at the option of the sending party. ◗ **M for mandatory** Item must be present. ◗ **C for conditional** Item presence depends on the presence of specific other data elements or values. ◗ **X for relational** Item presence depends on (1) presence of other items in its pair or group, (2) the absence of other items in its group, or (3) on the presence of the first item in the group. Item exclusion depends on the presence of another item.
Opt		

Before you begin

Before you add a field, you should add all your records.

(Continued on next page)

Adding a field

Use this procedure to add a field.

Step	Action
1	Move the focus to the line that will *precede* the new field.
2	Click **Edit** on the menu bar.
3	Click **Add a Field** on the Edit menu. **System Response** Gentran:Server places a generic field in your description file.
4	Move the focus to the new field.
5	Type the field attributes in the edit box at the bottom of the window: ◗ FIELD NAME ◗ FIXED LENGTH or MIN and MAX ◗ TYPE ◗ FORMAT ◗ REQ **Reference** For functions and values, see the Edit box fields, functions, and values in this chapter.
6	Do you want to add optional attributes to the field? ◗ If NO, click **OK** to save your changes and then repeat Steps 1 through 8 until you have added all fields. ◗ If YES, click **OPT** and continue with Step 7.
7	If this is a destination document, do you want to retain the default value for a destination field? ◗ If NO, continue with Step 8. **CAUTION** **You cannot retain field values that will be mapped as a literal (for example, a fixed text string, number, or system variable).** ◗ If YES, click **Retain Field Value**. Then, click **OK** to save the value and close the dialog box. (Continued on next page)

(Contd) Step	Action
8	Repeat Steps 1 through 7 until you have added all fields.
9	You are now ready to mark the Trading Partnership Code field. GO TO How to Mark the Trading Partnership Code Field in this chapter.

How to Mark the Trading Partnership Code Field

Introduction

The Trading Partnership Code field in your application description tells the translator where to look for the Trading Partnership Code.

Before you begin

Before you mark the Trading Partnership Code, make sure that the field containing the Trading Partnership Code is in the first record.

Marking the Trading Partnership Code field

Use this procedure to designate a field as the Trading Partnership Code field.

Step	Action
1	In the first record, move the focus to the field that contains the Trading Partnership Code.
2	Click **Mark** on the menu bar.
3	Click **Mark TP Code** on the Mark menu. **System Response** The field symbol changes to red. **Comment** If you marked the wrong field, move the focus to the field you marked, and then select Unmark TP Code from the Mark menu.
4	Edit the field attributes as necessary.
5	Click **Save** on the File menu.
6	You are ready to mark the record ID in your data. GO TO How to Designate the Record ID Field in this chapter.

How to Designate the Record ID Field

Introduction

When you create an application description for outbound translations, you must designate one field in each record as the record ID. The record ID enables the translator to recognize the record.

Comment
This procedure is not necessary for inbound translations.

Marking the record ID field

Use this procedure to designate a field as the record ID.

Step	Action
1	Move the focus to the field you want to mark as the Record ID.
2	Click **Record ID** on the menu bar.
3	Click **Mark field as Record ID** on the Record ID menu. **System Response** The record symbol changes to blue. **Comment** If you marked the wrong field, move the focus to the field marked as the record ID, select Unmark field as Record ID Edit the field attributes as necessary.
4	Click **Save** on the File menu.
5	You are now ready to identify records that repeat in your data. GO TO How to Add Loops in this chapter.

How to Add Loops

Introduction

You can make a loop from existing records by marking them and defining them as a loop.

Before you begin

Before you add a loop, there are two items of information you should know:

- All records in a loop must be sequential and contiguous. Move records as necessary to make them contiguous before you add the loop.
- It is a good idea to collapse the view before making a loop.

Adding a loop

Use this procedure to add a loop.

Step	Action
1	Collapse the view so that only the records show.
2	Move the focus to the first record of the loop and mark it by selecting **Toggle Marked Item** from the Mark menu.
3	Working from top to bottom, move the focus to each record that will be part of the loop and mark it by selecting **Toggle Marked Item** from the Mark menu. **Comment** You may create nested loops (loops within other loops) inside to out.
4	Click **Make Loop** on the Edit menu. **System Response** Gentran:Server adds the loop markers (red connecting lines) to the window display. The edit box for the first record in the loop now includes a box for the loop count. (Continued on next page)

(Contd) Step	Action
5	In the LP CNT edit box, type the number of times the loop repeats. **Comment** This value must be a positive integer between 0 and 99999. Alternatively, you can type >1 to permit an unspecified number of repetitions during translation. If you made a mistake, see the instructions in How to Modify Loops.
6	Click **OK** to save your changes.

Miscellaneous Application Description Tasks

How to Change Record Attributes

Introduction

You may change any attribute of a record. When you make changes to a record in the Application Editor, these changes do not affect any map previously created with the application description.

Changing record attributes

Use this procedure to change record attributes.

Step	Action
1	Move the focus to the record you want to change. **System Response** The system displays the record's attributes in the edit box at the bottom of the window.
2	Type the new value in the edit box (or select a new value from a list).
3	Click **OK** to save the attribute changes.
4	Click **Save** on the File menu.

How to Change Field Attributes

Introduction

You may need to edit fields as part of the process of adapting an application description created for one application for use with another application. Or you may need to make changes to an application description because the data does not translate properly. Finally, you may need to change an application description in order to use it with the same application but with a different standard version.

This section describes how to change field attributes in the Application Editor.

Comment
When you change field attributes in the Application Editor, maps are not affected. If you want to change the field attributes in a map, refer to the instructions in the chapter Mapping.

Changing fixed-length field attributes

Use this procedure to change the attributes of a fixed or variable length field.

Step	Action
1	Move the focus to the field you want to change. **System Response** Gentran:Server displays an edit box at the bottom of the window.
2	Type the new field attribute for any of the following in the edit box at the bottom of the window: ◗ FIELD NAME ◗ FIXED LENGTH (fixed length fields) or MIN LEN and MAX LEN (variable length fields) ◗ TYPE ◗ FORMAT ◗ REQ **Reference** For attribute descriptions, see Field edit boxes in this chapter.
3	Do you want to add optional attributes to the field? ◗ If NO, click **OK** to save your changes and then repeat Steps 1 through 3 until you have made all desired changes to fields. ◗ If YES, click **OPT** and continue with Step 4. (Continued on next page)

(Contd) Step	Action
4	If this is a destination document, do you want to retain the default value for a destination field? ◗ If NO, continue with Step 5. **CAUTION** **You cannot retain field values that will be mapped as a literal (for example, a fixed text string, number, or system variable).** ◗ If YES, click **Retain Field Value**. Then, click **OK** to save the value and close the dialog box.
5	Click **Save** on the File menu.

How to Modify Loops

Changing the loop count

Use this procedure to change the loop count (the number of times the loop repeats).

Step	Action
1	Move the focus to the first record in the loop.
2	In the editing box, move to the LP CNT edit box and replace the existing number with the desired number of repetitions.
3	Click **OK** to save your changes.

Removing loops

You can dissolve the loop association without deleting the records (and, therefore, the fields) in the loop.

Use this procedure to dissolve only the loop association.

Step	Action
1	Move the focus to the first record in the loop.
2	Click **Edit** on the menu bar.
3	Click **Remove Loop** on the Edit menu. **System Response** Gentran:Server permanently deletes only the loop association.

(Continued on next page)

Deleting a loop, its records, and fields

You may want to delete the records in the loop while removing the loop association.

Use this procedure to delete all contents of the loop.

Step	Action
1	Mark the first record in the loop.
2	Click **Edit** on the menu bar.
3	Click **Delete Marked** on the **Edit** menu. **WARNING** **You cannot recover deleted items.** **System Response** Gentran:Server asks you to confirm this action. After you confirm, the system removes all the items in the loop and the loop markings.

How to Change Delimiters

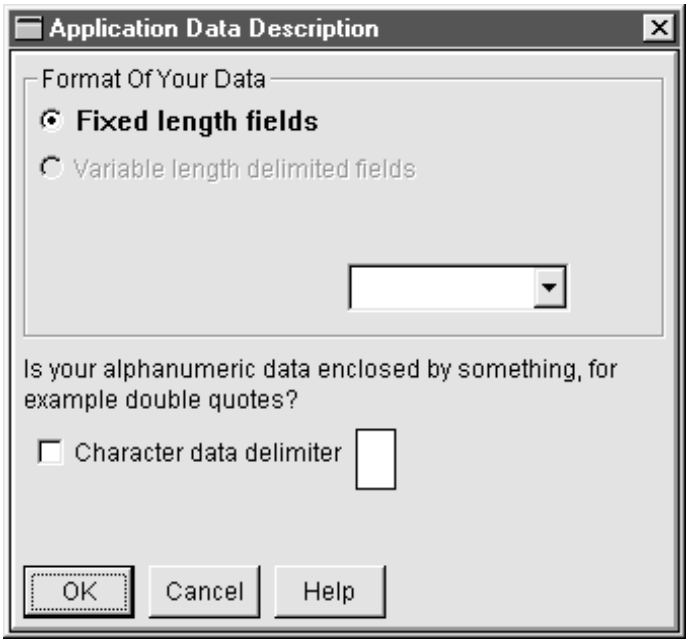
Introduction

Delimiters include character delimiters (for application descriptions with fixed or variable length data) and field delimiters (for application descriptions with variable length data). You can use character delimiters with data of any data type.

You can modify the field delimiter if the application description was originally created for variable length fields and a delimiter specified. (If the application description was created for fixed length fields, recreate the application description for variable length fields and specify the desired delimiter.)

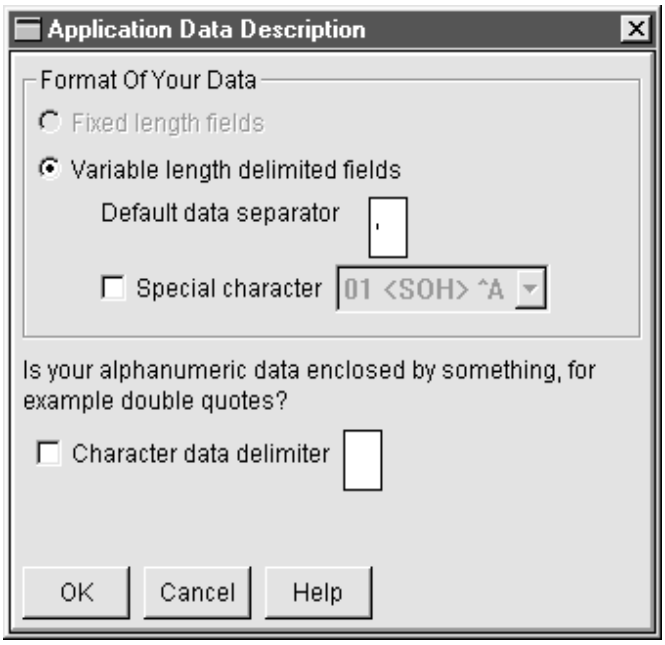
Application Data Description dialog boxes

This dialog box is used to change delimiters for fixed-length fields.



(Continued on next page)

This dialog box is used to change delimiter for variable-length fields.



Changing data delimiters

Use this procedure to change field and character data delimiters.

Step	Action
1	Click **Edit** on the Application Editor menu bar.
2	Click **Change Attributes** on the Edit menu. **System Response** Gentran:Server displays the appropriate dialog box, depending on whether the application description has fixed-length or variable-length fields. The **Field Type** option (i.e., fixed length or variable length) is already selected. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>3</td><td>Use this decision table to determine what delimiter to use
<table>
<tr><th>IF your data length is…</th><th>AND you want…</th><th>THEN…</th></tr>
<tr><td>Variable</td><td>A printable field delimiter</td><td>Type any printable character as the default data separator.</td></tr>
<tr><td>Variable</td><td>A non-printable field delimiter</td><td>Click Special Character and type the HEX equivalent of the non-printable character.</td></tr>
<tr><td>Variable or fixed</td><td>To character delimit one or more data types</td><td>Click Character Data Delimiter and type the desired character data delimiter. The delimiter may be any printable character.</td></tr>
</table>
CAUTION
A single application description should have only one field delimiter. If the ASCII file containing your application data uses two or more different field delimiters, the translator may not correctly translate the data.

Notes
You can character delimit any data type. The delimiter may be a comma (,), an asterisk (*), or one or more blanks ( ). Blanks are not recommended.

If you select Character Data Delimiter, all AN and ID data type fields must be character delimited. Values in other data types can be character delimited, but it is not required.

Reference
See the Data Type Formats chapter in the Gentran:Server for UNIX and Workstation Technical Reference Guide for information about the formats available for each data type.</td></tr>
<tr><td>4</td><td>Click OK.</td></tr>
</table>

How to Manage Application Descriptions

Introduction

If your applications change, you need to maintain your application descriptions. You may need to list all of your application descriptions, rename application descriptions, or even delete them.

Listing application descriptions

Use this procedure to list all the application descriptions in the directory specified for application descriptions.

Step	Action
1	Click **List** on the File menu.
2	Click **Application Description** on the List submenu. **System Response** The system displays the **Application File Listing** box and automatically selects the directory specified for application descriptions. The **File** list displays all files with the *.app* extension.
3	Click **Print** on the Application File Listing dialog box.
4	Click **OK**.

Renaming application descriptions

Use this procedure to rename an application description.

Step	Action
1	Click **Rename** on the **File** menu.
2	Click **Application Description** on the Rename submenu. **System Response** The system displays the **File Rename** dialog box and automatically selects with the directory specified for application descriptions. The **File** list displays all files with the *.app* extension.
3	Select the current file name of the application description you want to rename. (Continued on next page)

(Contd) Step	Action
4	Click **Open** to close the File Rename dialog box and open the File Rename - Save As dialog box.
5	Type the desired name in the **File** field. **WARNING** **The Gentran:Server appm personality data manager for product levels PCM and higher requires both the compiled map (*.tbl file) and the application description file (*.app) as the application description existed at the time the map was compiled. If you delete the application description after creating and compiling a map from it, Gentran:Server appm personality data manager will not work.**
6	Click **OK**.

Deleting application descriptions

You can delete an application description at any time. Deleting the application description does not affect any map(s) already created with that application description. However, you cannot create any new maps with the application description after you have deleted it. Be aware that some Gentran:Server components, such as the appm personality data manager, require the application description for product levels PCM and higher.

Use this procedure to delete an application description.

Step	Action
1	Click **Delete** on the File menu.
2	Click **Application Description** on the Delete menu. **System Response** The system displays the File Delete dialog box and automatically selects the directory specified for application descriptions. The **File** list displays all files with the *.app* extension. (Continued on next page)

(Contd) Step	Action
3	Select the file name of the application description you want to delete. **WARNING** **The Gentran:Server appm personality data manager for product levels PCM and higher requires both the compiled map (*.tbl file) and the application description file (*.app) as the application description existed at the time the map was compiled. If you delete the application description after creating and compiling a map from it, Gentran:Server appm personality data manager will not work.**
4	Click **OK**. **System Response** Gentran:Server prompts you to confirm the deletion and deletes the file after you confirm the deletion.

How to Print an Application Description

Introduction

To verify an application description against the actual ASCII file, it helps to have a print of the application description.

Procedure

Use this procedure to print an application description.

Step	Action	
1	Open or create the desired application description.	
2	Click **Print** on the File menu. **System Response** The system displays the Print Application dialog box.	
3	Use this decision table to determine your next step.	
	IF you wish to print…	**THEN…**
	All records and fields in the application description	Click **Print Records and Fields**.
	Only the records in the application description	Click **Print Records Only**.
4	Click **OK**. **System Response** Gentran:Server sends the application description to the printer you identified in the Print Setup dialog box.	

CHAPTER
4

Defining Application Descriptions for Databases

Contents

Overview

Introduction

Gentran:Server database options

Using a database as a source or destination of data for Gentran:Server is an option provided through the purchase of Sterling Commerce ODBC database drivers. Once you install and configure the database drivers, Gentran:Server can translate to and from your database tables. Contact your Gentran:Server representative for a list of supported databases and hardware platforms.

CAUTION

You must purchase the ODBC option from Sterling Commerce to map and translate data to and from database tables.

In this chapter

In this chapter, you will learn how to create or modify an application description that describes data stored in a database table.

Database application documents

A **database application document** is a table your relational database application produces or processes. This database application is either the *source* of application documents you are sending to your trading partners or the *destination* for application documents your trading partners send to you.

Example
Your database application may contain tables for purchase orders, invoices, shipping notices, requests for quotations, or other types of standard business documents that you can transfer electronically.

Database application descriptions

To prepare for mapping, you must describe the format of the data in each application document exchanged with your trading partners. The result is a **database application description**.

(Continued on next page)

Why you need to create database application descriptions

Database application descriptions are a source or destination document when you create translation maps. A translation map tells Gentran:Server's translator how to convert an inbound document into a format your database application understands. A translation map also tells the translator how to convert outbound documents from your database application into another format: EDI standard, implementation guide, or another application.

The database application description identifies the data items in your database application so that the Gentran:Server translator can relate each to a data item in the new electronic data interchange (EDI) format.

Key terms

This table lists the key terms used in this chapter.

Term	Definition
Application Editor	The Gentran:Server tool that enables you to describe your application data.
attributes	The values you assign to describe a record or field.
database application description	A description of the tables and fields in a database application used to map and translate your data.
database driver	A set of shared libraries that allows Gentran:Server to write data to or read data from database files.
Data Source Name (DSN)	A user-defined name that associates a database location with a particular database driver.
data type	The type of information in a field (for example, alphanumeric, binary, numeric, date, or time).
delimiter	A symbol used to separate variable length data items in an application file.
field	A discrete piece of data in a record, such as quantity or unit price.
join	The linking of fields to connect two database tables to each other. Joins form the relationship for a relational database.
loop	A sequence of related items repeated within a transaction set.

(Continued on next page)

(Contd) Term	Definition
marking	The process of flagging a field that you want to work with.
ODBC	Open Database Connectivity. Microsoft Corporation's® standard for database access methods and tools.
record	A defined sequence of related fields that is derived from a separate table or view in a database.
SQL	Structured Query Language. A language that the database driver uses to provide a standard method for controlling and communicating with a relational database.
SQL Command File (<filename>.SQL)	A set of commands grouped in a file and used to select and extract the data to be translated from the proper database tables.
table	A set of related database fields used to create a record within a database application description.
Trading Partnership Code	The unique code that identifies a Trading Partnership record.

Components of an Application Description

Introduction

Application descriptions that describe the data in a database have two main components: records and fields.

Records

Each record within a database application description corresponds to the related table from a database.

The fields within a database application description record contain the related data fields in the database table.

Example

This example displays the records and fields that a purchase order might contain. Each of the records represents a table in your database. Each of the fields correspond to a field in the database table that forms the Purchase Order Line Item record.

- HEADER (record)
- BILL TO (record)
- PURCHASE ORDER LINE ITEM (record)
- ITEM NAME (field)
- QUANTITY (field)
- UNIT PRICE (field)
- SUMMARY (record)

Record attributes

Attributes are the values you assign to describe a record. Two of the attributes you assign to a record are the record identifier and the record name.

Record identifier

Record identifiers are not required with database application descriptions because each record corresponds to a defined table. Gentran:Server uses the table name to identify the record.

Record name

Each record and table must have a unique name. Record names and table can contain any alphanumeric characters and should describe the record. The record name must match the name of the corresponding table.

Note

Gentran:Server accepts record names up to 128 characters in length, but some databases accept a maximum of only 32 characters for table names. You should check the rules for your database when assigning table names.

(Continued on next page)

Fields attributes

You must assign attributes to describe fields within each record. Field attributes include:

- field name
- data type (for example, binary, numeric, alphanumeric, date/time)
- data format (for example, left-justified).

Reference
For a list of the allowable formats for each data type, see the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide.*

Field length

Field lengths may be:

- Fixed to a specific number of characters
- Variable in length and delimited by unique field separators.

Note
Database applications created by reading in tables are delimited with NULL separators. However, the field lengths for these applications have minimum and maximum values that are equal in value. This means the application is really a fixed-length-field application.

Join statements

Gentran:Server join statements enable you to extract data from the database from two separate tables based on a common field. Data is extracted when the two fields contain matching data.

Reference
For details, see How to Create Database Joins in this chapter.

Database application description rules

The following are rules specific to database applications:

- Each record in a database application description is an exact copy of a database table and must contain at least one field.
- You may only use a particular database table once within a database application description. You may not create multiple records from the same database table.
- All dates in database application descriptions must be a minimum of 10 characters in length and have the format D15 (standard database date format).

(Continued on next page)

Reference
See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for details.

- The maximum table size in Gentran:Server is 6144 bytes.

The Trading Partnership Code

Introduction

If you plan to use a database application description as the source document in a map, you must designate one field in the first record as the Trading Partnership Code.

Comment
If the database application description is used as the destination document in a map, you do not need to mark the Trading Partnership Code.

The Trading Partnership Code field

The **Trading Partnership Code field** in your database application description tells the translator where in the database table to look for the Trading Partnership Code.

This field is essential because the Trading Partnership Code points to the Trading Partnership Record, which in turn determines the map Gentran:Server uses to translate the data.

Example
This is an example of a trading partnership code field in a database table.

Trading Partnership Code = XYZ2850OUTTP

Field Location

The Trading Partnership Code is a required field in the first record of an application document. The TP code can be included elsewhere in the data or application, but must be marked only in the first record.

Field Size

The maximum length of the Trading Partnership Code is 15 characters.

Creating a Database Application Description

Database Application Description Creation Process

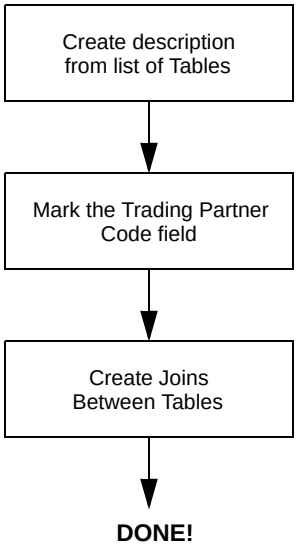
Introduction

This section describes the method for building application descriptions for databases. After all of your database tables are fully defined you can build an application description from those tables.

Automatically building from existing tables

Process flow

This diagram shows the flow of work for building an application description from existing database tables.



The Application Editor

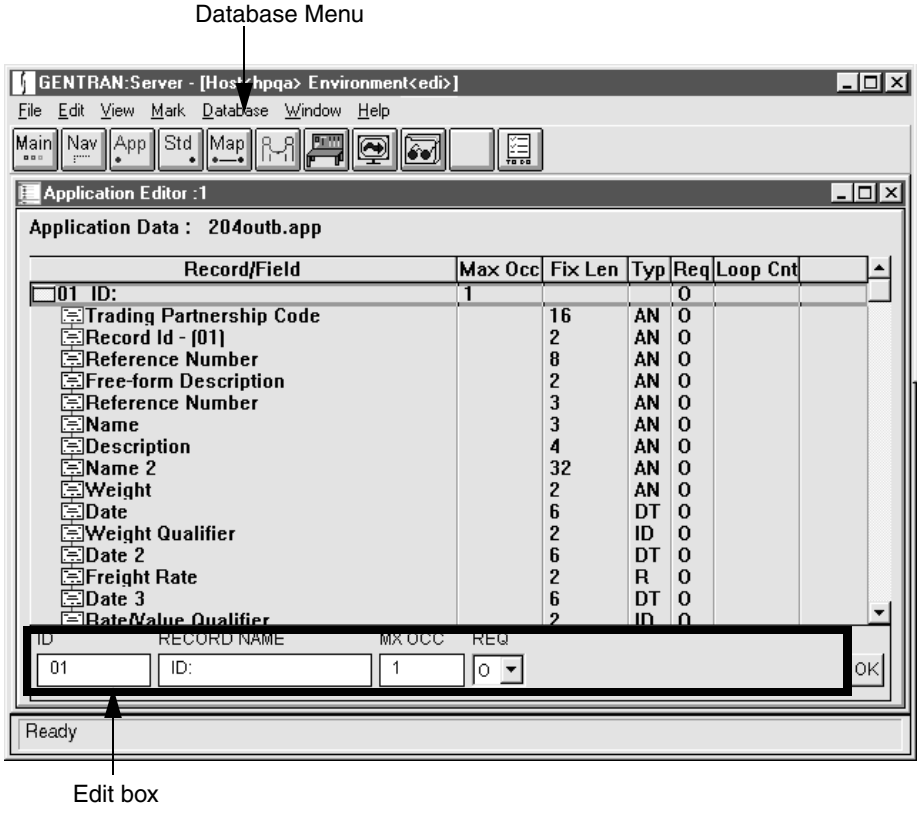
Introduction

The tool that you use to create and maintain database application descriptions is the Application Editor. This tool provides you with a graphic view of the layout of your database application records and fields.

You use the options on the Database menu of the Application Editor to perform most of the work in creating a database application description.

Application Editor example

This illustration shows the Application Editor.



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Application Editor fields and functions

This table describes the fields of the Application Editor window.

WARNING

If you create your database application description from existing database tables, then you *must not* edit any of the fields in the tables or in the application description.

Field	Function
Record/Field	Describes the records and fields and is listed in the data.
Max Occ	Indicates the maximum number of times this record can appear in a row.
Min	Indicates the minimum field length.
Max	Indicates the maximum field length.
Typ	Indicates the field's data type (alphanumeric, numeric, date/time, or binary).
Req	Indicates the requirement indicator: ◗ **O for optional:** the presence of the record is at the option of the sending party. ◗ **M for mandatory:** the record must be present. ◗ **C for conditional/relational:** the presence of the record depends on the presence of specific other items.
Loop Cnt	Indicates the number of times this group of records can repeat as a loop.
Delimiter	Indicates the data separator for variable-length data. Databases always use null (which displays as 0x00) for the delimiter.
Edit box	Modifies the record or field that has the focus.

Before You Begin

This section contains a checklist of the items that must be ready before you can successfully create a database application description file.

Completed	Task
	Make sure that the Sterling Commerce ODBC database drivers are installed and configured.
	On the Preferences menu of the main Application Editor window, select User Setup. Make sure the database group fields are active on the displayed dialog box.

Procedures

How to Build from Existing Database Tables

Introduction

You can build an application description automatically by specifying existing database tables.

Before you begin

Before you perform this procedure, be sure your database tables are completely configured as follows:

- You must assign a unique name to each table and to each field within each table.

  Note
  Gentran:Server accepts record names up to 128 characters in length, but some databases accept a maximum of only 32 characters for record names. You should check the rules for your database when assigning record names.

- The Trading Partnership Code ID *must* be a field in the first table of any application description you will use for outbound translation.

Procedure

Use this procedure to create an application description from existing database tables.

Step	Action
1	Open the Application Editor.
2	Click **Create New** on the Open Application dialog box.
3	Click **Read Database Attributes from Database** and click **OK**. **System Response** If your database requires a login password, the system prompts for a login and displays a list of database tables. (Continued on next page)

(Contd) Step	Action
4	Build an ordered list of tables to be used: ◗ On the **Available Tables** list, select a database table. Press the >> button to copy the table to the Selected Tables side. **Make sure you list the tables in the order in which you want them to be translated, beginning with the table for the first record. The translator will process the records in the order you specify here.** ◗ Use the << button to remove a table copied in error.
5	Click **OK** when you finish moving items to the Selected Table side. **System Response** Gentran:Server creates an application description file from the tables you selected and displays it in the Application Editor window.
6	Set up special options, such as **retain.**
7	You are now ready to identify the Trading Partnership Code field in your database application description. GO TO the topic How to Mark the Trading Partnership Code Field in this chapter.

How to Mark the Trading Partnership Code Field

Introduction

The Trading Partnership Code field in your application description tells the translator where to look for the Trading Partnership Code.

Before you begin

Make sure that the field containing the Trading Partnership Code is in the first record.

Marking the Trading Partnership Code field

Use this procedure to designate a field as the Trading Partnership Code field.

Step	Action
1	Under the first record, move the focus to the field that contains the Trading Partnership Code.
2	Click **Mark** on the menu bar.
3	Click **Mark TP Code** on the Mark menu. **System Response** The field symbol changes to red. **Comment** If you marked the wrong field, move the focus to the field you marked, and then select **Unmark TP Code** from the Mark menu.
4	Click **Save** on the File menu. **System Response** The system saves the file. You are now ready to create database joins. **Reference** See How to Create Database Joins in this chapter for more information about this process.

How to Create Database Joins

Introduction

A join relates one database table to another. Join statements can only join a field within one table to a field in the preceding table.

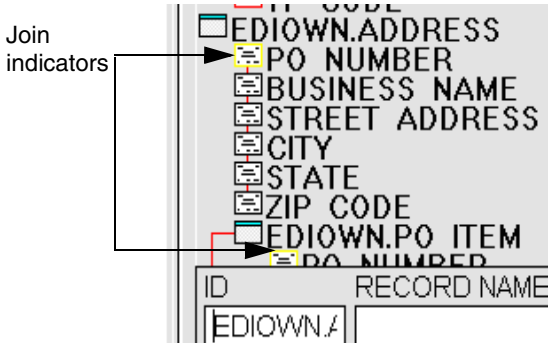
Rules for making joins

Note the following rules for creating joins in Gentran:Server.

- You form a join from one record up to the previous record; you cannot form a join from a record down to the next record.
- You can join a field only once. You *can not* join Field A to both Field B and Field C.

Example

This example shows the joins connecting tables in the database. A thin yellow line around fields indicates a join.



Procedure

Use this procedure to set up join information.

Step	Action
1	Click **Database** on the menu bar.
2	Select **View/Edit Joins** on the Database menu. **System Response** Gentran:Server displays a new edit box at the bottom of the window. (Continued on next page)

(Contd) Step	Action
3	Move the focus to a field in a record to join to the record above it. Select the lowest record you want to join to another and work from the bottom up. **System Response** The **Field Name** box displays the name of the selected field. This must be a field in a record after the first record.
4	Select the name of the Join Record from the list. **Note** This must be a record above the record containing the selected field.
5	Choose the name of the Join Field from the list and click **OK**. **System Response** Gentran:Server displays in yellow the field symbol for the joined field.
6	Repeat Steps 3 through 6 to set up each remaining join.
7	Click **List Joins** on the Database menu to review the joins you established.
8	Click **Save** on the File menu.
9	You are now ready to create the SQL command file to be used with this application definition. GO TO the topic How to Create the SQL Command File in this chapter.

How to Create the SQL Command File

Description

The SQL Command File contains the name of the Data Source Name the translator is to use and the commands that extract or write data to or from the proper database tables.

CAUTION

You must create an SQL Command File before attempting to translate to or from a database application.

Procedure

Use this procedure to create an SQL Command File.

Step	Action		
1	Save and name the application description.		
2	Click **Database** on the menu bar.		
3	Click **Autocreate SQL** file on the Database menu.		
4	Use this decision table to determine your next step.		
	IF…	**AND…**	**THEN…**
	You have saved the file	No errors are detected	Gentran:Server creates the file and gives it an *.sql* extension. Continue with Step 5.
	You have saved the file	Errors are detected	Gentran:Server displays error messages. You must correct the errors before continuing. Go to the Error Messages section.
5	Click **OK**. Your application definition is now ready to use when translating data.		

Miscellaneous Application Description Tasks

How to Manage Application Descriptions

Introduction

Occasionally you may need to list all of your application descriptions, rename application descriptions, or even delete them altogether.

Listing application descriptions

Use this procedure to list all the application descriptions in the directory specified for application descriptions.

Step	Action
1	Click **List** on the File menu.
2	Click **Application Description** on the List submenu. **System Response** Gentran:Server displays the Application File Listing dialog box. The system automatically selects the directory specified for application descriptions and lists all files with the *.app* extension on the **File** list.
3	Click **Print** to print a hardcopy of the list.
4	Click **OK**.

(Continued on next page)

Renaming application descriptions

Use this procedure to rename an application description.

Step	Action
1	Click **Rename** on the File menu.
2	Select **Application Description**. **System Response** Gentran:Server displays the File Rename dialog box. The system automatically selects the directory specified for application descriptions and lists all files with the *.app* extension on the **File** list.
3	Select the current file name of the application description you want to rename.
4	Click **Open** to close the File Rename dialog box and open the File Rename - Save As dialog box.
5	Type the desired file name in the **File** box. **WARNING** **The Gentran:Server appm personality data manager is available for product levels PCM and higher. The appm requires both the compiled map (*.tbl file) and the application description file (*.app) to be unchanged after the map is compiled. If you rename the application description after creating and compiling a map from it, the Gentran:Server appm personality data manager will not work.**
6	Click **Save**.

(Continued on next page)

Deleting application descriptions

You can delete an application description at any time without affecting the map or maps created from it. Be aware that some Gentran:Server components, such as the appm personality data manager, require the application description.

Use this procedure to delete an application description.

Step	Action
1	Click **Delete** on the File menu.
2	Click **Application Description** on the Delete menu. **System Response** Gentran:Server displays the File Delete dialog box. The system selects the directory specified for application descriptions and lists all files with the *.app* extension in the **File** list.
3	Select the file name of the application description you want to delete. **WARNING** **The Gentran:Server appm personality data manager is available for product levels PCM and higher. The appm requires both the compiled map (*.tbl file) and the application description file (*.app) to be unchanged since the map was compiled. If you delete the application description after creating and compiling a map from it, Gentran:Server appm personality data manager will not work.**
4	Click **Open**. **System Response** Gentran:Server prompts you to confirm the deletion. After you confirm the deletion, Gentran:Server deletes the file.

How to Print an Application Description

Printing an application description

Use this procedure to print an application description.

Step	Action	
1	Open the application description you want to print.	
2	Click **Print** on the File menu. **System Response** Gentran:Server displays the Print Application dialog box.	
3	Use this decision table to determine your next step.	
	IF you wish to print…	**THEN…**
	All records and fields in the application description	Select **Print Records** and **Fields**.
	Only the records in the application description	Select **Print Records Only**.
4	Click **OK**. **System Response** Gentran:Server sends the application description to the printer you identified in the Print Setup dialog box.	

CHAPTER
5

Defining Trading Partnership Rules for Application Files

Contents

Overview

Introduction

In this chapter

This chapter explains how to define rules for an application description or a file definition that you want Gentran:Server to use to determine the Trading Partnership Code in a data file.

How your system uses these rules

Gentran:Server uses this method to identify the Trading Partnership Code when the application description or file definition does not have a field marked as the Trading Partnership Code. The system also uses it when you run the **Iftran** translation command with the A [ ] option.

Key terms

This table lists the key terms used in this chapter.

Term	Description
cross reference table	The table that associates identification strings with specific Trading Partnership Codes.
identification string	The value that results from applying a set of Trading Partnership rules to an application document.
Trading Partnership rule	An instruction that specifies the position of the information that you want Gentran:Server to extract from a particular field in an application document. A set of Trading Partnership rules derives an identification string from the document. Gentran:Server uses this string to determine the Trading Partnership Code

Configuration Process

Introduction

You can configure your system to determine the Trading Partnership Code from multiple fields in the first record of an application file. This topic describes the stages in the configuration process.

Stage table

This table describes the stages in the process.

Stage	Description
1	Create a set of Trading Partnership rules that will yield a unique identification string for a specific application description (*.app) or file definition (*.ddf). **Reference** See Defining Trading Partnership Rules for instructions.
2	Add the identification string to the TP Cross Reference table and link it to a Trading Partnership Code. **Reference** See Linking Rules to a Trading Partnership Code for instructions.

Defining Trading Partnership Rules

Overview

Introduction

The first stage in configuring your system to determine the Trading Partnership record from multiple fields is to create a set of Trading Partnership rules for a particular application description or file definition.

In this stage, you:

- Select the application description or file definition to which you want the rules to apply
- Build the rules.

Purpose of Trading Partnership rules

Gentran:Server uses the set of Trading Partnership rules to derive a unique identification string from an application document. Once the system has the identification string, it checks the cross reference table to find the Trading Partnership Code associated with the string.

In this section

This section describes:

- Trading Partnership rules
- How to start the rule-definition process
- How to add a new Trading Partnership rule to a set
- How to display a picture that shows the place of each Trading Partnership rule in the identification string
- How to edit or delete a Trading Partnership rule in a set.

Trading Partnership Rules

Definition

Trading Partnership rules are instructions that specify the field names and positions in an application file that you want to extract from a document to build a unique identification string.

A Trading Partnership rule specifies the position of the information that you want Gentran:Server to extract from a field in an application document. A rule stipulates the:

- Field name
- Position of the characters to be extracted
- Place in the identification string that the extracted characters will occupy

Guidelines for building rules

These are the guidelines for Trading Partnership rules:

- The total number of characters that a set of rules extract to make an identification string cannot exceed 40.
- You can associate multiple string combinations to the same Trading Partner Code as long as each combination is unique.
- The characters extracted to make strings are case sensitive. For example, AyZ is NOT equal to AYZ.
- Leading and trailing spaces are retained. They are placeholders in the string.
- Substrings cannot overlap.

TP Rule table

The system stores the rules you define in a DISAM table named apptptbl.dat/idx. Each record in this table contains the:

- Name of the application description or file definition
- Record ID
- Field name and character-identification information for the rule.

Reference
See the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for the layout of the apptptbl.dat/.idx file.

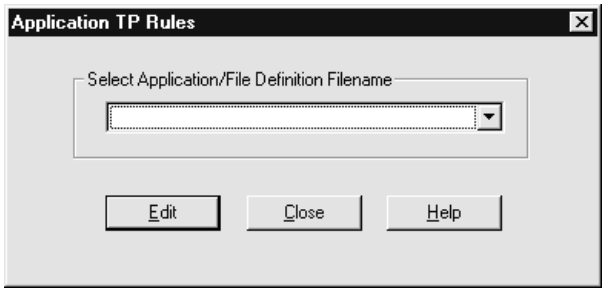
Application TP Rules Dialog Box

Introduction

The Application TP Rules dialog box is used to choose the name of the application description or file definition that describes the layout of the application documents to which the set of Trading Partnership rules apply.

Illustration

This illustration shows the Application TP Rules dialog box.



Fields and functions

This table describes the fields in the Application TP Rules dialog box and their functions.

Field	Function
Select Application/File Definition Filename	Identifies the name of the application description or file definition that describes the records and fields in the application documents that Gentran:Server will process with the set of Trading Partnership rules.
Edit	Displays the Define TP Rules dialog box, which shows the Trading Partnership rules defined for the application description or file definition.
Close	Closes the dialog box.

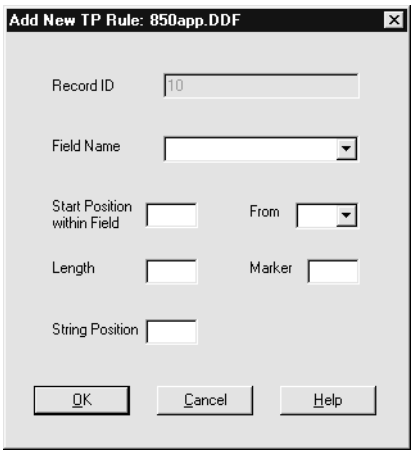
Add New TP Rule Dialog Box

Introduction

The Add New TP Rule dialog box is used to create a new Trading Partnership rule.

Illustration

This illustration shows the Add New TP Rule dialog box.



Fields and functions

This table describes the fields in the Add New TP Rule dialog box and their functions.

Field	Function
Record ID	Displays the record ID value for the first record. Gentran:Server always uses the fields from the first record for Trading Partnership rules.
Field Name	Specifies the name of the field used for this Trading Partnership rule.
Start Position within Field	Designates the position of the beginning character you want to extract from the field.
From	Indicates the side of the field (left or right) you are counting from for the **Start Position within Field** position.

(Continued on next page)

(Contd) Field	Function
Length	Specifies the number of characters you want to extract.
Marker	Designates the character that you want to represent the part of the string that these extracted characters will occupy.
String Position	Indicates the beginning character number in the string that the characters from this rule will occupy.
OK	Saves the Trading Partnership rule to the Application/TP table.
Cancel	Closes the dialog box without saving changes.
Help	Displays the Help text for this dialog box.

Define TP Rules Dialog Box

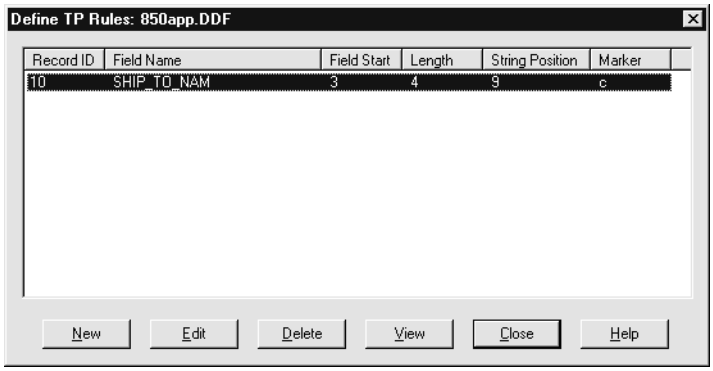
Introduction

The Define TP Rules dialog box is used to:

- Display an existing set of Trading Partnership rules for an application description or a file definition
- Access the Add New TP Rule dialog box
- Delete a Trading Partnership rule from the set
- Modify a Trading Partnership rule
- Access the View TP Rule dialog box to display a graphical representation of the Trading Partnership rules in the identification string.

Illustration

This illustration shows the Define TP Rules dialog box.



Fields and functions

This table describes the fields in the Define TP Rules dialog box and their functions.

Field	Function
Record ID	Displays the record ID value for the first record. Gentran:Server always uses the fields from the first record for Trading Partnership rules.
Field Name	Shows the name of the field used for this Trading Partnership rule.
Field Start	Shows the position of the beginning character to extract from the field.

(Continued on next page)

(Contd) Field	Function
Length	Shows the number of characters to extract from this field.
String Position	Shows the beginning character number in the string that the characters from this rule will occupy.
Marker	Shows the character that represents the part of the string that these extracted characters will occupy. This character is used in the View TP Rule dialog box.
New	Displays the Add New TP Rule dialog box, which is used to create a new Trading Partnership rule.
Edit	Displays the Edit TP Rule dialog box for the selected Trading Partnership rule.
Delete	Deletes the selected Trading Partnership rule.
View	Displays a graphical representation of the Trading Partnership rules that comprise a unique string.
Close	Closes the dialog box.
Help	Displays the Help text for this dialog box.

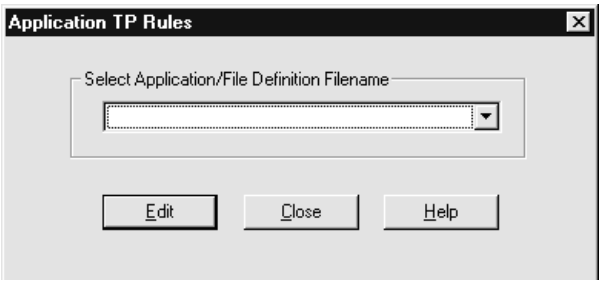
How to Start the Rule-Definition Process

Introduction

This topic describes how to start the rule-definition process by selecting the application description or file definition and opening the Define TP Rules dialog box. You can use this procedure to add, edit, delete, or view a rule.

Procedure

Use this procedure to start the process of defining Trading Partnership rules.

Step	Action
1	Select **Application TP Rules** from the Application File Configuration menu on the Gentran:Server Main window. **System Response** Gentran:Server displays the Application TP Rules dialog box. 
2	Click the drop-down arrow in the Select Application/File Definition Filename box to display a list of application descriptions and file definitions; then click the name of the file to which you want the rules to apply. **Note** Only those files checked into the directory for file definitions and application descriptions are displayed in the drop-down list. (Continued on next page)

(Contd) Step	Action	
3	Click **Edit**. **System Response**	
	IF Gentran:Server…	**THEN the system displays the…**
	Finds a record for the file you selected	Define TP Rules dialog box.
	Does not find a record for the file you selected	Add New TP Rule dialog box
4	GO TO one of the following: How to Add a New Trading Partnership Rule How to Display a Picture of the String How to Edit a Trading Partnership Rule How to Delete a Trading Partnership Rule	

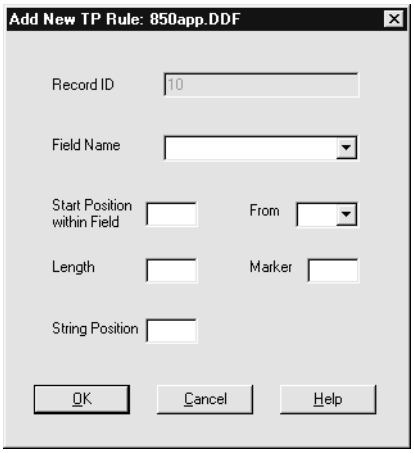
How to Add a New Trading Partnership Rule

Introduction

To add a new Trading Partnership rule, you must enter information into the Add New TP Rule dialog box.

Procedure

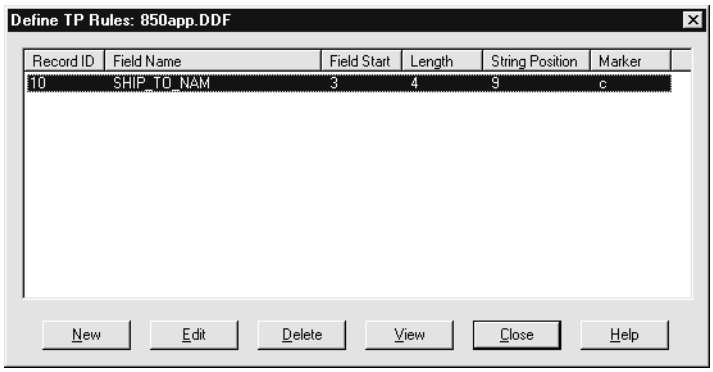
Use this procedure to add a new Trading Partnership rule.

Step	Action
1	Start the rule definition process to display the Define TP Rule dialog box. **Reference** See How to Start the Rule-Definition Process for instructions.
2	Click **New** and continue with the next step. **System Response** Gentran:Server displays the Add New TP Rule dialog box. 
3	From the drop-down list of the **Field Name** box, select the name of the field from which you want to extract characters for the identification string. **Note** The Record ID field is not available for editing because Gentran:Server always uses the fields in the first record of the application document for Trading Partnership information. (Continued on next page)

(Contd) Step	Action
4	Type the position of the beginning character you want to extract from the field into the **Start Position within Field** box. **Example** If you want to begin with the third character in the field, type 3 in the box.
5	In the **From** box, select left or right to indicate the side of the field you are counting from. **Example** If you want to begin with the third character in the field from the left, select **left** from the drop-down box in the **From** field.
6	Type the number of characters you want to extract into the **Length** field. **Example** If you want to extract four characters beginning with the third character in the field from the left, type 4 into the **Length** field.
7	In the **Marker** field, type the character that you want to represent the part of the string that these extracted characters will occupy. **Note** Gentran:Server uses this character in the View TP Rule dialog box, which graphically depicts the position of each Trading Partnership rule in the string.
8	In the **String Position** box, type the beginning character number in the string that the characters from this rule will occupy. **Example** If you want the four characters from this rule to occupy positions 9, 10, 11, and 12 in the string, type 9 in the **String Position** box. (Continued on next page)

(Contd) Step	Action
4	Type the position of the beginning character you want to extract from the field into the **Start Position within Field** box. **Example** If you want to begin with the third character in the field, type 3 in the box.
5	In the **From** box, select left or right to indicate the side of the field you are counting from. **Example** If you want to begin with the third character in the field from the left, select **left** from the drop-down box in the **From** field.
6	Type the number of characters you want to extract into the **Length** field. **Example** If you want to extract four characters beginning with the third character in the field from the left, type 4 into the **Length** field.
7	In the **Marker** field, type the character that you want to represent the part of the string that these extracted characters will occupy. **Note** Gentran:Server uses this character in the View TP Rule dialog box, which graphically depicts the position of each Trading Partnership rule in the string.
8	In the **String Position** box, type the beginning character number in the string that the characters from this rule will occupy. **Example** If you want the four characters from this rule to occupy positions 9, 10, 11, and 12 in the string, type 9 in the **String Position** box. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>9</td><td>Click OK to save the rule.

System Response
Gentran:Server displays the Define TP Rules dialog box. The new rule is displayed.
 
</td></tr>
<tr><td>10</td><td>Select another task.
<table>
<tr><th>IF you want to…</th><th>THEN…</th></tr>
<tr><td>Add another Trading Partnership rule</td><td>Repeat Steps 2 through 9.</td></tr>
<tr><td>View a picture that shows each rule’s place in the unique string</td><td>GO TO How to Display a Picture of the String.</td></tr>
<tr><td>Modify or delete a Trading Partnership rule</td><td>GO TO How to Edit a Trading Partnership Rule.</td></tr>
<tr><td>Add the unique string to the TP cross reference table</td><td>GO TO Linking Rules to a Trading Partnership Code.</td></tr>
</table></td></tr>
</table>

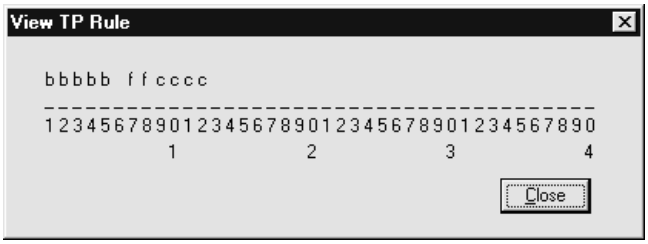
How to Display a Picture of the String

Introduction

This topic explains how to display a graphical representation of the Trading Partnership rules that comprise a unique identification string. In the picture, Gentran:Server uses the marker specified for each Trading Partnership rule to mark the rule's place in the string.

View TP Rule dialog box

This illustration shows an example of an identification string displayed in the View TP Rule dialog box. The set of markers show that this string is comprised of three Trading Partnership rules.



Procedure

Use this procedure to display a graphical representation of the unique string.

Step	Action
1	Open the Define TP Rules dialog box for the application description or file definition. **Reference** See How to Start the Rule-Definition Process for instructions.
2	Click **View** on the Define TP Rules dialog box. **System Response** Gentran:Server displays the View TP Rule dialog box.
3	When you are finished, click **Close** to exit the picture and return to the Define TP Rules dialog box.

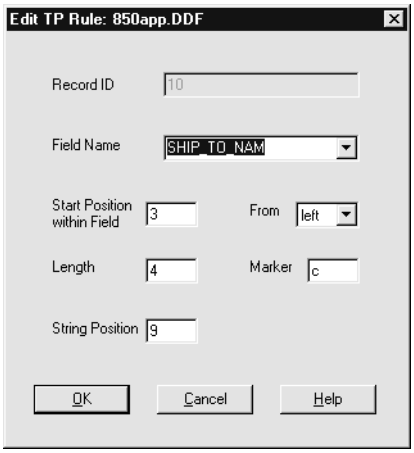
How to Edit a Trading Partnership Rule

Introduction

You can modify a Trading Partnership rule from the Define TP Rules dialog box.

Procedure

Use this procedure to modify an existing Trading Partnership rule.

Step	Action
1	Open the Define TP Rules dialog box for the application description or file definition. **Reference** See How to Start the Rule-Definition Process for instructions.
2	Select the Trading Partnership rule that you want to modify.
3	Click **Edit**. **System Response** Gentran:Server displays the Edit TP Rule dialog box. 
4	Replace the values you want to edit with new values.
5	Click **OK** to save your changes.

How to Delete a Trading Partnership Rule

Introduction

You can delete a Trading Partnership rule from the Define TP Rules dialog box.

Procedure

Use this procedure to delete a Trading Partnership rule.

Step	Action
1	Open the Define TP Rules dialog box for the application description or file definition. **Reference** See How to Start the Rule-Definition Process for instructions.
2	Select the Trading Partnership rule that you want to delete.
3	Click **Delete**. **System Response** Gentran:Server displays the prompt: Do you want to delete this record?
4	Confirm that the rule is the one you want to delete.
5	Is this the rule that you want to delete? ◗ If YES, click **Yes** to delete the rule. ◗ If NO, click No to cancel the action and retain the rule. **System Response** Gentran:Server returns to the Define TP Rules dialog box. The rule you deleted has been removed.

Linking Rules to a Trading Partnership Code

Overview

Introduction

To enable Gentran:Server to determine a Trading Partnership Code from the identification string it extracts from an application file, you build a table that cross-references the string with a Trading Partnership Code.

Guidelines

These are the guidelines for linking strings to Trading Partnership Codes:

- Each identification string built from applying Trading Partnership rules must be unique. You cannot have the same combination of strings point to different Trading Partnership Codes.
- You can link two or more sets of strings to one Trading Partnership Code as long as each string is unique.
- Identification strings are case-sensitive. "AbC" does NOT equal "ABC."
- Leading and trailing spaces are place holders in the string.

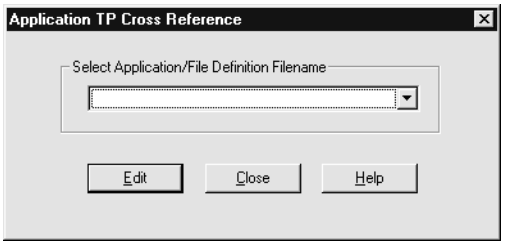
Application TP Cross Reference Dialog Box

Introduction

The Application TP Cross Reference dialog box is used to choose the name of the application description or file definition that describes the layout of the application documents to which the set of Trading Partnership rules apply.

Illustration

This illustration shows the Application TP Cross Reference dialog box.



Fields and functions

This table describes the fields in the Application TP Cross Reference dialog box and their functions.

Field	Function
Select Application/File Definition Filename	Identifies the name of the application description or file definition that describes the records and fields in the application documents that Gentran:Server will process with the set of Trading Partnership rules.
Edit	Displays the Define TP Cross Reference dialog box, which shows the string value and corresponding TP Code.
Close	Closes the dialog box.

Define TP Cross Reference Dialog Box

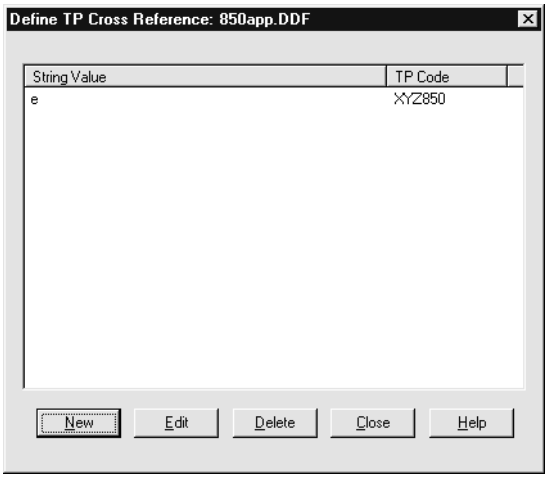
Introduction

The Define TP Cross Reference dialog box is used to

- Display the cross references in the Application TP Cross Reference table
- Access the Add New String and TP Code Cross Reference dialog box
- Modify a cross reference
- Delete a cross reference from the table

Illustration

This illustration shows the Define TP Cross Reference dialog box.



Fields and functions

This table describes the fields in the Define TP Cross Reference dialog box and their functions.

Field	Function
String Value	Indicates the identification string that results from applying a set of Trading Partnership rules to an application document.
TP Code	Indicates the Trading Partnership Code that the system uses when it processes application documents that yield the identification string in the String Value field.

(Continued on next page)

(Contd) Field	Function
New	Displays the Add New String and TP Code Cross Reference dialog box, which is used to create a new cross reference.
Edit	Displays the Edit String and TP Code Cross Reference dialog box for the selected cross reference.
Delete	Deletes the selected cross reference.
Close	Closes the dialog box.
Help	Displays the Help text for this dialog box.

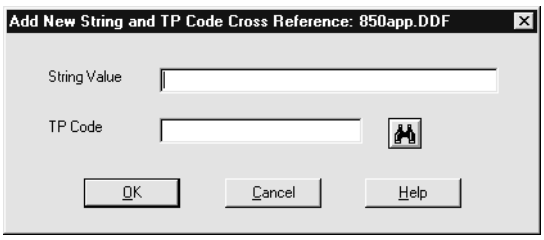
Add New String and TP Code Cross Reference Dialog Box

Introduction

The Add New String and TP Code Cross Reference dialog box is used to create a new cross reference for a string and Trading Partnership Code and add it to the Application TP Cross Reference table.

Illustration

This illustration shows the Add New String and TP Code Cross Reference dialog box.



Fields and functions

This table describes the fields in the Add New String and TP Code Cross Reference dialog box and their functions.

Field	Function
String Value	Specifies the identification string that results from applying a set of Trading Partnership rules to an application document.
TP Code	Specifies the Trading Partnership Code that you want the system to use when it processes application documents that yield the specified identification string.
OK	Saves the String Value and TP Code set to the Application/TP cross reference table.
Cancel	Closes the dialog box without saving changes.
Help	Displays the Help text for this dialog box.

The Application TP Cross Reference Table

Introduction

Gentran:Server stores the information from the TP Cross Reference dialog box in the Application TP Cross Reference table.

Application TP Cross Reference table

The Application TP Cross Reference table links the string values built from the Trading Partnership rules to Trading Partnership Codes.

The Application TP Cross Reference table is a DISAM file named appxref.dat/idx.

Reference
See the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for the layout of the appxref table.

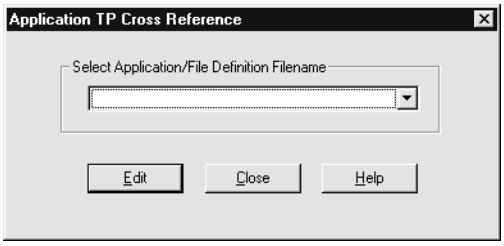
How to Build the Cross Reference Table

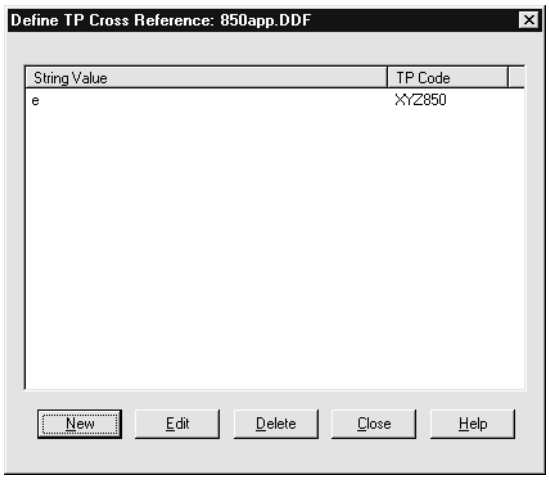
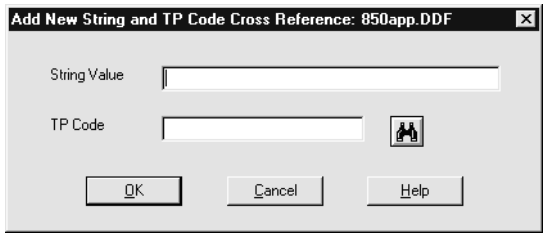
Introduction

To add an entry to the Application TP Cross Reference table, you enter the unique string value and the Trading Partnership Code that you want to associate with the string into the Add New String and TP Code Cross Reference dialog box.

Procedure

Use this procedure to add entries to the Application TP Cross Reference table.

Step	Action
1	Select **Application TP Cross Reference** from the Application File Configuration menu of the Gentran:Server Main window. **System Response** Gentran:Server displays the Application TP Cross Reference dialog box. 
2	Click the drop-down arrow in the Select Application/File Definition Filename box to display a list of application descriptions and file definitions; then click the name of the file to which the Trading Partnership rules apply. **Note** Only files checked into the directory that holds your file definitions and application description files are displayed in the drop-down list. (Continued on next page)

(Contd) Step	Action
3	Click **Edit**. **System Response** Gentran:Server displays the Define TP Cross Reference dialog box. 
4	Click **New**. **System Response** Gentran:Server displays the Add New String and TP Cross Reference dialog box. 
5	In the **String Value** box, type the value that will result when Gentran:Server uses the Trading Partnership rules to extract a string value from an application file. (Continued on next page)

(Contd) Step	Action
6	In the **TP Code** box, type the Trading Partnership Code that you want to associate with the string value. **Tip** To display the Trading Partner Search dialog box, click the search icon (binoculars) next to the TP Code box.
7	Click **OK** to add the cross reference to the Application TP Cross Reference table. **System Response** Gentran:Server displays the new entry in the Define TP Cross Reference dialog box.

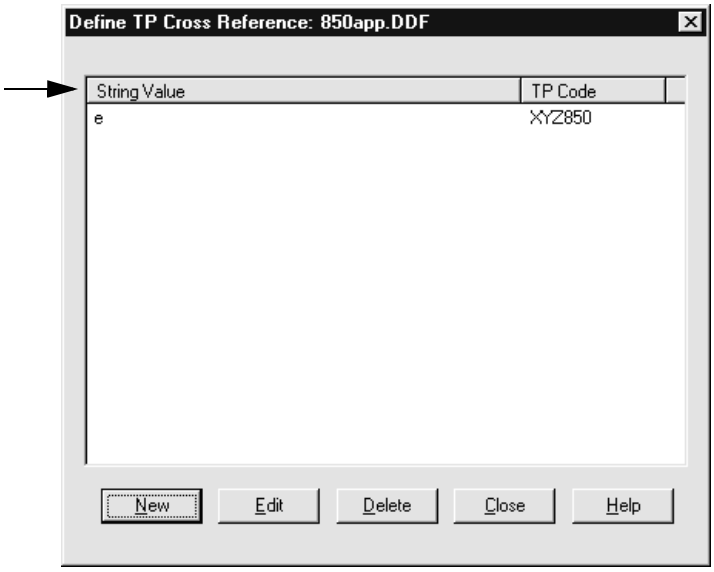
How to Sort the Cross References

Introduction

On the Define TP Cross Reference dialog box, you can sort the cross reference entries by the string value or the Trading Partnership Code, in either ascending order or descending order.

Sorting toggle switches

This illustration shows the location of the sorting toggle switches.



Sorting instructions

To change the sorting order of the cross-reference entries, click the String Value or Trading Partnership Code toggle switch once.

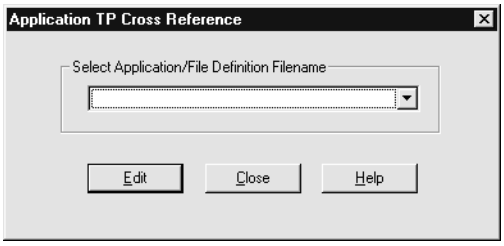
How to Edit a Cross Reference

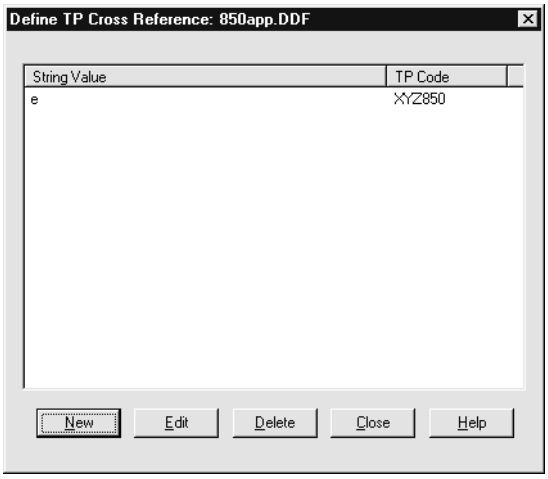
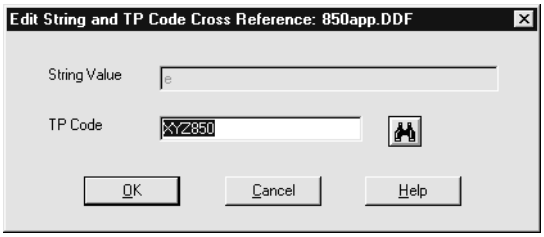
Introduction

To edit an entry in the Application TP Cross Reference table, you open the cross reference from the Define TP Cross Reference dialog box and then change the Trading Partnership Code that is associated with the string.

Procedure

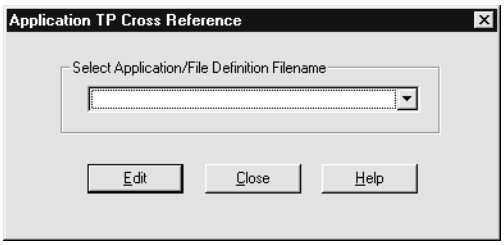
Use this procedure to edit a cross references.

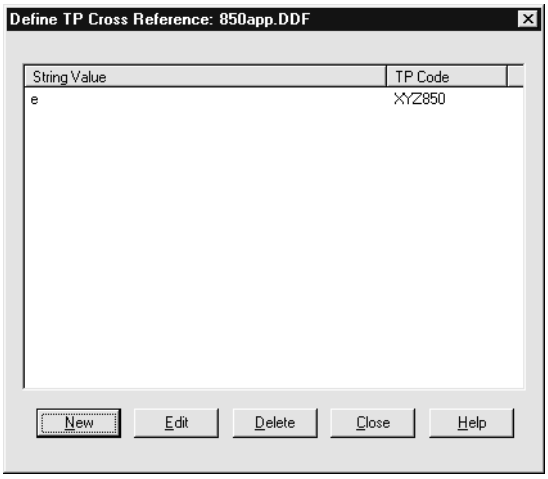
Step	Action
1	Select **Application TP Cross Reference** from the Application File Configuration menu of the Gentran:Server Main window. **System Response** Gentran:Server displays the Application TP Cross Reference Filename dialog box. 
2	Click the drop-down arrow in the Select Application/File Definition Filename box and then click the name of the application description or file definition associated with the cross reference you want to edit. (Continued on next page)

(Contd) Step	Action
3	Click **Edit**. **System Response** Gentran:Server displays the Define TP Cross Reference dialog box. 
4	Select the cross reference that you want to edit and then click **Edit**. **System Response** Gentran:Server displays the Edit String and TP Code Cross Reference dialog box. 
5	In the **TP Code** box, type another Trading Partnership Code or use the search button to choose another Trading Partnership Code.
6	Click **OK** to save your changes. **System Response** Gentran:Server updates the Application TP Cross Reference table (appxref) and displays the modified entry in the Define TP Cross Reference dialog box.

How to Delete a Cross Reference Entry

Procedure Use this procedure to delete an entry from the Application TP Cross Reference table.

Step	Action
1	Select **Application TP Cross Reference** from the Application File Configuration menu of the Gentran:Server Main window. **System Response** Gentran:Server displays the Application TP Cross Reference dialog box. 
2	Click the drop-down arrow in the Select Application/File Definition Filename box; then click the name of the application description or file definition associated with the cross reference. (Continued on next page)

(Contd) Step	Action
3	Click **Edit**. **System Response** Gentran:Server displays the Define TP Cross Reference dialog box. 
4	Select the cross reference that you want to delete.
5	Click **Delete**. **System Response** Gentran:Server displays a confirmation prompt.
6	Is this the cross reference that you want to delete? ◗ If YES, click **Yes** to delete the cross reference. ◗ If NO, click **No** to cancel the action and retain the cross reference. **System Response** Gentran:Server deletes the cross reference from the Application TP Cross Reference table (appxref) and from the Define TP Cross Reference dialog box.

How the System Uses the TP Rules

Process

This table explains how the system uses the Trading Partnership rules with an application file.

Stage	Description
1	Gentran:Server locates the application description or file definition that defines the layout of the application document.
2	Gentran:Server determines that the application description or file definition does not have a field defined as the Trading Partnership Code.
3	Gentran:Server reads the application document and uses the Trading Partnership rules to determine the string value.
4	Gentran:Server compares the string value to entries in the Application TP Cross Reference table to find the 15-character Trading Partnership Code associated with the string value.
5	Gentran:Server locates the Trading Partnership record and uses the information it contains to process the application document.

CHAPTER
6

Creating an Implementation Guide or Standard

Contents

Overview

Introduction

In some cases, your application data or that of your trading partner may not conform precisely to an EDI standard. If that is the case, you can open a copy of a set (a group of segments that represent a common business document) within the specific standard in the Standard/IG Editor and modify the standard as needed.

The modified set is called an **implementation guide (IG)**. When you create a map, the implementation guide serves as either a source or destination document for data translation. The implementation guide describes the segments, elements, and sub-elements so that Gentran:Server's translator can process them correctly.

If you have a sample data file that is representative of your EDI requirements, you can use the Standard/IG Editor's AutoTrim feature to create the implementation guide. AutoTrim compares the data file to a standard and inactivates the segments and elements that are not in the sample file.

You can also use the Standard/IG Editor to create a new standard by copying and modifying an existing one.

In this chapter

In this chapter, you will learn how to create and modify an implementation guide. This chapter also explains how to create a new standard by copying and changing an existing one.

Supported standards

Standards you can modify in Gentran:Server include:

- X12
- X12 subsets (WINS, VICS, UCS, TDCC)
- EDIFACT
- TRADACOMS
- ODETTE.

(Continued on next page)

Key terms

This table describes key terms used in this chapter.

Term	Description
composite element	An element composed of two or more sub-elements.
element	A piece of data in a segment. Elements are analogous to fields in an application description. Elements are variable length fields.
Implementation guide (IG)	A special form of a standard that was edited to meet the requirements of a particular trading partnership.
segment	A defined sequence of related elements. Segments are analogous to records, which are used in application descriptions. A segment begins with a segment ID and ends with a segment terminator.
set	A specific group of segments that represent a common business document. A set contains a set header (for example, ST or UNH) as the first segment and at least one segment in addition to the set trailer (for example, SE or UNT).
simple element	An element that cannot be divided into sub-elements.
standard	A major data format model used for EDI (for example, X12 or EDIFACT). Includes the rules and guidelines for formatting or structuring electronically transmitted documents.
Standard/IG Editor	The Gentran:Server feature that enables you to edit standards and create implementation guides.
sub-element	An element that is a component of another element.

Function keys used when creating an implementation guide

The following function keys are used on the Standard/IG Editor.

Function Key	Usage
F2	Toggles between expanded view and collapsed view.
F3	Toggles between using and discarding items.
F5	Toggles between marking and unmarking an item.

(Continued on next page)

(Contd) Function Key	Usage
F8	Activates all marked discarded items.
SHIFT+F8	Activates all discarded items.
F9	Discards marked items.
SHIFT+F9	Discards all items.
F10	Adds a segment.
F11	Adds an element.
SHIFT+DELETE	Cuts marked items.
SHIFT+INSERT	Copies item(s) from the clipboard to the insertion point.
CTRL+C	Clears all marked items.
CTRL+P	Prints the opened standard or implementation guide.
CTRL+INSERT	Copies marked items to the clipboard.

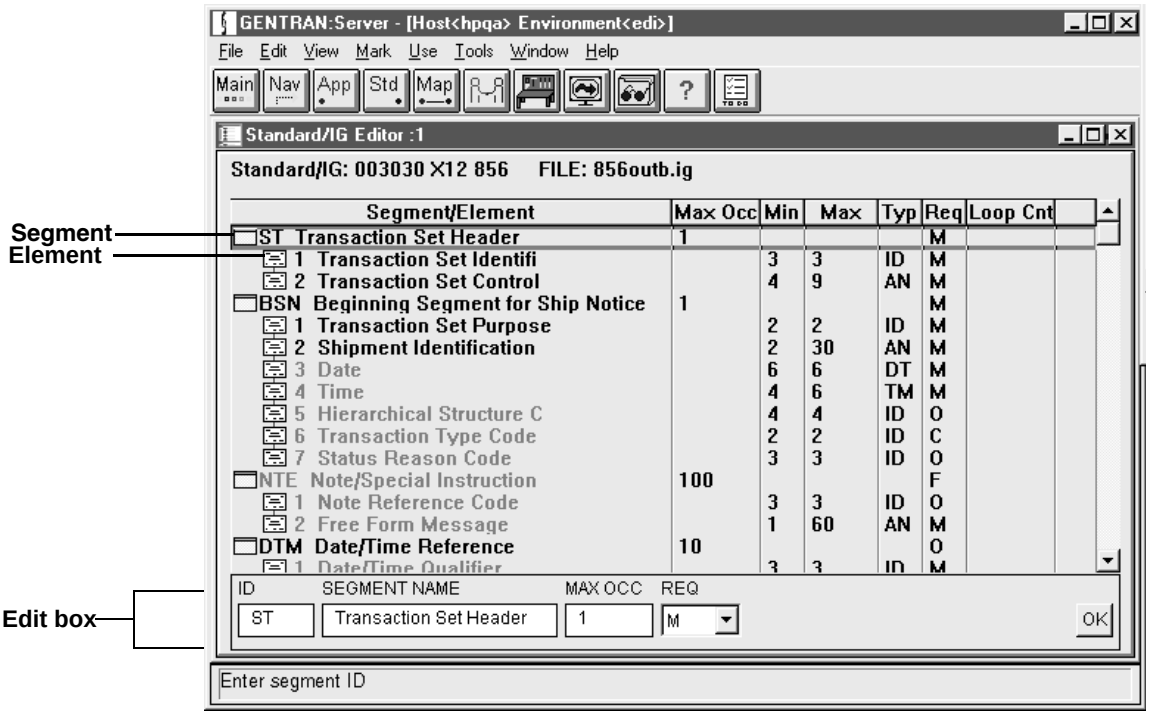
The Standard/IG Editor

Introduction

To create an implementation guide or a new standard, you use the Standard/IG Editor.

Standard/IG Editor window

This illustration shows the Standard/IG Editor window.



(Continued on next page)

Standard/IG Editor fields and functions

This table describes the fields and functions of the Standard/IG Editor window.

Field	Function
Segment/Element	Displays the descriptive label listed in the standards for this segment or element.
Max Occ	Displays the maximum number of times this segment can appear in a row.
Min Len	Displays the minimum element length.
Max Len	Displays the maximum element length.
Type	Displays the element's data type (alphanumeric, numeric, date/time, or binary).
Req	Displays the requirement indicator: ◗ **O for optional:** the presence of the segment is at the option of the sending party. ◗ **M for mandatory:** the segment must be present. ◗ **C for conditional/relational:** the presence of the segment depends on the presence of specific other items.
Loop Cnt	Displays the number of times this group of segments can repeat as a loop.
Edit box	Provides the means to modify the segment or element that has the focus.

Creating an Implementation Guide

The IG Creation Process

Introduction

To create an implementation guide, you:

- Open a copy of a set within a specific standard in the Standard/IG Editor window
- Edit it by adding, deleting or inactivating, and modifying segments and elements.

When you edit and save an edited set, Gentran:Server stores the file as an implementation guide with a default file name extension of *.ig*.

Stage table

This table describes the process of creating an implementation guide.

Stage	Description
1	Determine the required modifications to the standard document that you are exchanging with your trading partner by: ◗ Work with your trading partner to learn what the EDI data needs are. ◗ Become familiar with the standard and with the changes needed to make an implementation guide. ◗ Check the list of standards supported by Gentran:Server.
2	Load a copy of a set within the specified standard into the Standard/IG Editor and modify it to create a custom implementation guide.
3	Make an implementation guide containing the EDI segments and elements that you send to or receive from your trading partner. **Note** If you have a sample file, you can use the AutoTrim feature to simplify the process. (Continued on next page)

(Contd) Stage	Description
4	Verify that your data lengths and types are correct in the implementation guide. **CAUTION** **Gentran:Server cannot correctly translate incorrect data lengths and types.**
5	Set up any special formatting in the implementation guide that you want the translator to use to convert data.
6	Set up special options (batch totals and/or retain field values) in the implementation guide.
7	Modify existing loops and create new loops to reflect repeating data segments in the implementation guide.
8	Save the changes and name the implementation guide.

Later, when you create the map, you can edit the implementation guide for use with a specific trading partner by discarding unused segments and elements and adjusting field values, as necessary.

How to Use AutoTrim to Create an IG from a Standard

Definition

AutoTrim is a Gentran:Server tool that enables you to create an implementation guide by comparing a sample data file to a standard set you specify. This tool examines a transaction set (for example, ST/SE) from the sample file and the standard set you specify and inactivates the segments and elements that are not included in the sample file. The unused items are not permanently deleted, so you can select them later if necessary.

When to use

If you have a sample data file that is representative of your EDI requirements, you can use AutoTrim to create an implementation guide.

AutoTrim procedure

Use this procedure to modify a standard set with AutoTrim.

Step	Action
1	Open the Standard/IG Editor. **System Response** Gentran:Server displays the Select Standard/IG dialog box.
2	On the dialog box, select the name of the standard and the document you want to trim and click **OK**. **System Response** Gentran:Server displays a copy of the set within the selected standard in the Standard/IG Editor.
3	Click **AutoTrim** on the Tools menu.
4	Specify the sample data file that you want to compare to the standard. **System Response** As Gentran:Server compares the sample data to the standard, unused segments and elements turn light gray. These items are discarded.
5	Select **Save As** from the File menu and give the trimmed standard a unique name with the *.ig* extension. The trimmed standard is now an implementation guide.

How to Modify a Standard to Create an IG

Introduction

If you do not have a sample data file similar to your EDI requirements, you can create an implementation guide by opening a standard set in the Standard/IG Editor and modifying it to meet your requirements.

Example
If you remove all the segments about special handling instructions from the X12 version 3030 standard 204 (Motor Carrier Shipment Information) and then save the modified file, you create a new implementation guide. You might name this implementation guide *mcarrier.ig*.

Procedure

Use this procedure to modify a standard to create an implementation guide.

Step	Action
1	Open the Standard/IG Editor. **System Response** Gentran:Server displays the Select Standard/IG dialog box.
2	From the dialog box, select the name of the standard and the document you want to use to create the implementation guide and click **OK**. **System Response** Gentran:Server displays a copy of the set within the specified standard in the Standard/IG Editor window. **Reference** If you want to create a new standard based on an existing one, see Creating a New Standard in this chapter.
3	Click **Save As** on the File menu and enter a unique file name with the *.ig* extension. **System Response** The file is now an implementation guide. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="6">4</td><td colspan="2">Use this table to determine how to modify the file.</td></tr>
<tr><td>IF you want to…</td><td>THEN refer to the topic…</td></tr>
<tr><td>Add or modify segments</td><td>How to Add a Segment in this chapter.</td></tr>
<tr><td>Add or modify elements</td><td>How to Add an Element, Composite Element, or Sub-element in this chapter.</td></tr>
<tr><td>Create or modify loops</td><td>How to Mark Repeating Segments (Loops) in this chapter.</td></tr>
<tr><td>Discard or delete segments or elements</td><td>How to Discard and Delete Segments and Elements in this chapter.</td></tr>
<tr><td>5</td><td colspan="2">Click Save on the File menu to save the implementation guide.</td></tr>
</table>

How to Add a Segment

Introduction

When you need to describe a data group that is not in the standard version set, you need to add a segment.

Comment
When you add a new (empty) segment, the Standard/IG Editor automatically adds one empty element as well.

Segment edit box

This illustration shows the segment edit box. You use this box to assign the segment name and attributes to a new segment.

Segment edit box fields and functions

This table describes the fields and functions of the segment edit box.

Field	Function
ID	Indicates the segment identifier listed in the standard for this segment. The segment identifier consists of two or three uppercase letters and/or digits.
SEGMENT NAME	Indicates the descriptive label listed in the standards for this segment. Can be up to 128 characters in length.
MAX OCC	Indicates the maximum number of times this segment can appear in a row. This value must be a positive integer between 0 and 999999. Alternatively, you can enter '>1' to permit an unspecified number of repetitions during translation. The default is 1. (Continued on next page)

(Contd) Field	Function
LP CNT	Indicates the number of times this group of segments can repeat as a loop. This value must be a positive integer between 0 and 99999. You can also enter '>1' to permit an unspecified number of repetitions during translation. The default is 1. **Note** The system displays this edit box only if the segment is the first segment in a loop.
REQ	Indicates the requirement indicator: ◗ **O for optional:** the presence of the segment is at the option of the sending party. ◗ **M for mandatory:** the segment must be present. ◗ **C for conditional/relational:** the presence of the segment depends on the presence of specific other items. ◗ **F for floating:** this segment is an NTE segment that may appear anywhere in the transaction set between the transaction set header and the transaction set trailer.

Adding a segment

Use this procedure to add a segment to an implementation guide.

Step	Action
1	Move the focus to the line that will *precede* the new segment.
2	Click **Add a Segment** on the Edit menu. **System Response** Gentran:Server places a generic segment in your implementation guide.
3	Enter the attributes you want to assign to this segment in the edit box at the bottom of the window.

(Continued on next page)

(Contd) Step	Action
4	Click **OK** to save your segment changes and move to the next segment or element.
5	Click **Save** on the File menu to save the file.

Changing segment attributes

Use this procedure to change the attributes of a segment in an implementation guide.

Step	Action
1	Move the focus to the element you want to change.
2	Go to the edit box at the bottom of the window.
3	Enter the new value in the edit box (or select a new value from a drop-down list).
4	Click **OK** to save the attribute changes.
5	Click **Save** on the File menu to save the changes to the file.

How to Add an Element, Composite Element, or Sub-element

Definitions

Elements, composite elements, and sub-elements are different units of data. This table defines each term.

Term	Definition
Element	A piece of data in a segment. Invoice numbers, addresses, quantities, and item descriptions are examples of elements.
Composite element	An intermediate unit of information. It consists of two or more component data elements preceded by a data element separator. Each component data element, except the last, is followed by a component element separator. The final component is followed by either the next data element separator or the segment terminator.
Sub-element	A component of a composite element.

Element edit box

This illustration shows the element edit box. You use this edit box to assign the element name and its attributes.

(Continued on next page)

Element edit box fields and functions

This table describes the fields and functions of the element edit box.

Field	Function
SEQ#	Indicates the sequence number showing the position of the item within the segment. This number is assigned by the standard and increments by units greater than 1. You can change this number to any value between 0 and 32760. The value does not affect the order in which the elements are displayed. The default is 1.
REF#	Indicates the data element reference number as listed in the data element dictionary of the published standard.
ELEMENT NAME	Indicates the descriptive label listed in the standard for this element. The element name can be up to 128 characters in length.
MIN	Indicates the minimum element length. The standard assigns a default length for each element, but you can change it. The minimum element length must be less than or equal to the maximum element length. The minimum length of any element cannot exceed 99.
MAX	Indicates the maximum element length. The standard assigns a default length for each element, but you can change it. The minimum element length must be less than or equal to the maximum element length. The maximum length of any element cannot exceed 32760.
TYPE	Indicates the element's data type (for example, alphanumeric, numeric, date/time, or binary. **Note** This attribute is not available for composite elements because they contain sub-elements instead of values. **Reference** For allowable formats for each data type, see the Data Type Formats chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide*. (Continued on next page)

(Contd) Field	Function
FORMAT	Indicates the specified format for the data type (for example, left-justified). The available formats depend on the data type. **Note** This attribute is not available for composite elements because they contain sub-elements instead of values. **References** Click the **FMT** button to display a list of formats for the data type. See Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for information about valid data formats.
FMT push-button	Displays a list of formats appropriate for the data type in the TYPE field.
REQ	Identifies the requirement indicator: ◗ **O for optional:** the presence of the item is at the option of the sending party. ◗ **M for mandatory:** the item must be present. ◗ **C for conditional:** the presence of the item depends on the presence of specific other data elements or values. ◗ **X for relational:** The exclusion of the segment depends on the presence of another segment. The presence of the segment depends on the: — presence of others in its pair or group — absence of other segments in its group — presence of the first segment in the group.
OPT (OPTIONS) push-button	Displays the Options dialog box. This dialog box enables you to use batch totals for certain X12 and UCS documents or define default values for a destination field in a standard document. **Note** This attribute is not available for composite elements because they contain sub-elements instead of values. **Reference** For details about optional attributes, see How to Add Optional Attributes to an Element in this chapter.

(Continued on next page)

Adding an element, composite element, or sub-element

Use this procedure to add an element, composite element, or sub-element.

Step	Action	
1	Move the focus to the line that will *precede* the new element.	
2	Use this decision table to determine your next step.	
	IF you want to add…	**THEN…**
	An element	Click **Add an Element** on the Edit menu. **System Response** Gentran:Server places a generic element in your implementation guide.
	A composite element	Click **Add a Composite Element** on the Edit menu. **System Response** Gentran:Server places a generic composite element in your description file and automatically adds four empty sub-elements.
	A sub-element	Copy one or more existing sub-elements and paste them into the composite element. **Reference** For copying instructions, see the Working with the Application and Standard/IG Editors chapter in this guide.
3	Assign attributes to this element in the edit box at the bottom of the window.	
4	Do you need to redefine the element's data type format to specify how Gentran:Server reads the input (source) data or adjust the format to conform to your application data? ◗ If NO, continue with Step 5. ◗ If YES, Click the **FMT** button to display a list of formats for the data type. Select the data format you want to assign to this element. **Reference** If you need help making choices, click the **Help** push-button. See the chapter Data Type Formats in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for format descriptions. (Continued on next page)	

(Contd) Step	Action
5	Do you need to assign supplemental optional attributes to the element? ◗ If NO, continue with Step 6. ◗ If YES, click the **Opt** push-button.  **System Response** Gentran:Server displays different Option dialog boxes depending on the standard you are using. The X12 and UCS standards give you the option of using batch totals for certain documents, other standards do not. **Reference** How to Add Optional Attributes to an Element for details.
6	Click **OK** to save your changes and move to the next segment, element, composite element, or sub-element. **Reference** If you need to change element attributes, see Changing element attributes in this chapter.

Changing element attributes

If your data differs from the standard or if you need to change your data representation, you must change one or more of the assigned element attributes in your implementation guide.

Use this procedure to change the attributes of an element.

Step	Action
1	Open the implementation guide and move the focus to the element you want to change.
2	Go to the edit box at the bottom of the window. 
3	Enter the new value in the edit box (or select a new value from a list).
4	Click **OK** to save the attribute changes.
5	Select **Save** from the File menu to save the changes to the file.

How to Add Optional Attributes to an Element

Introduction

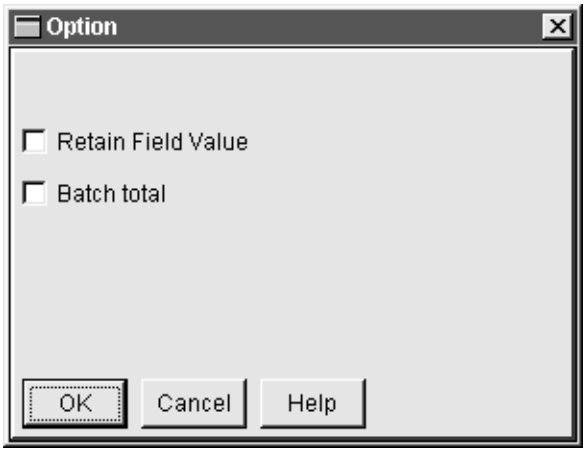
The **Opt** (Options) button on the edit box enables you to assign optional attributes to the element. This button is available only when a simple element or sub-element is selected; it is not available for composite elements.

Option dialog boxes

Gentran:Server displays different Option dialog boxes depending on the standard you are using. The X12 standards give you the option of using batch totals for certain documents, other standards do not.

X12 standards

If you are using X12 standards, Gentran:Server displays the following Option dialog box:



Standards other than X12

If you are using any standard other than X12, Gentran:Server displays only the **Retain Field Value** option.

(Continued on next page)

Option dialog box fields and functions

This table describes the fields and functions of the Option dialog boxes.

Field	Function
Retain Field Value	Defines the default value for a destination field. If you click this box, Gentran:Server does one of the following during translation: ◗ If multiple source elements are mapped to the destination item, Gentran:Server uses the first value received as the default. ◗ If a single source element is mapped to a destination item, Gentran:Server uses each new value as the default. **Note** Gentran:Server places the default value into every repetition of the destination field/element until it encounters a new source value from this element for this destination.
Batch Total	Generates a Functional Group Totals transaction set (X12, 980). The Functional Group Totals transaction set totals the values in the selected elements of all documents in the group or interchange and puts the sum in the Total segment of the 980 (BT1). **Note** Gentran:Server uses this field only for outbound documents with an implementation guide for the destination. **Comment** Batch totals do not have meaning for many document types. Do not click the Batch Total check box unless batch totals are meaningful for the document you are translating.

(Continued on next page)

Adding optional attributes

Use this procedure to retain field values or automatically generate a Functional Group Totals transaction set (X12, 980).

Step	Action		
1	Click the **Opt** button on the element edit box. 		
2	Use this decision table to determine your next step.		
	IF you want to…	**THEN…**	**AND…**
	Define the default value for a destination field (retain field values)	Click **Retain Field Values**.	Continue to step 3.
	Generate a Functional Group Totals transaction set	Click **Batch Total**. **System Response** The three batch total options appear on the dialog box: ◗ B1 - total placed in element BT105 ◗ B2 - total placed in element BT108 ◗ B3 - total placed in element BT111	Select the option that indicates where the total is to be placed, and then continue to step 3.
3	Click **OK** to save the option and close the dialog box.		

How to Mark Repeating Segments (Loops)

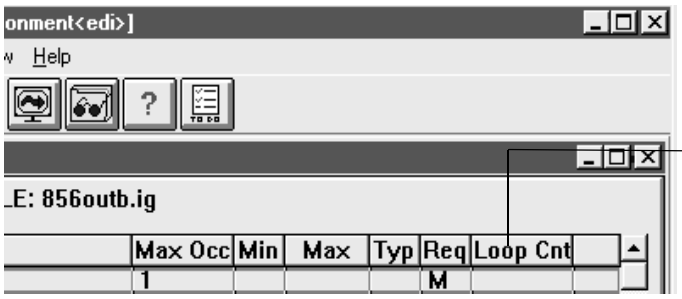
Introduction

Often, your standard set contains a sequence of segments that repeats. Gentran:Server displays segments that repeat as a **loop**, with red lines connecting the first and last segment in the loop. You can modify these loops, and you can add new loops to indicate that another sequence of segments repeats.

Example of a loop

This is an example of a loop in the Standard/IG Editor.

The **Loop Cnt** column of the Standard/IG Editor displays the number of times the sequence repeats.



Shows number of times the loop repeats

Before you begin

Segments in a loop must be contiguous and sequential. Move segments as necessary to make them contiguous.

Note

You can create or change loops only when the Standard/IG Editor is set to Full Access mode. Editing functions are unavailable in View mode.

(Continued on next page)

Adding a loop

Use this procedure to add a loop.

Step	Action
1	Click **Collapse All** on the View menu so that the system displays only segments.
2	Move the focus to each segment that you want to include in the loop and click **Toggle Marked Item** on the Mark menu. You can create loops within other loops (a process referred to as “nesting”). Create the inside loops first; then create the outside loops.
3	Click **Make Loop** on the Edit menu. **System Response** Gentran:Server adds the loop markers (red connecting lines) to the window display. The edit box for the first segment in the loop now includes a box for the loop count.
4	In the **LP CNT** edit box of the first segment in the loop, enter the number of times the loop repeats. **Note** This value must be a positive integer between 0 and 99999. Alternatively, you can enter ‘>1’ to permit an unspecified number of repetitions during translation.
5	Click **OK** to save your changes.

(Continued on next page)

Modifying loops

Use these procedures to modify loops.

IF you want to…	THEN…
Change the number of times the loop repeats	1. Move the focus to the first segment in the loop. 2. In the editing box, move to the LP CNT edit box and replace the existing number with the desired number of repetitions. 3. Click **OK** to save your changes.
Discard an entire loop	1. Mark the first segment in the loop. 2. Click **Discard Marked** on the Use menu. **System Response** All the items in the segment become inactive. The system displays these items in light gray.
Activate a discarded loop	1. Mark the first segment in the discarded loop. 2. Click **Use Marked** on the Use menu. **System Response** All the items in the loop become active. The system displays these items in dark gray.
Dissolve the loop association (but retain the segments that were in the loop)	1. Move the focus to the first segment in the loop. 2. Click **Remove Loop** on the Edit menu. **System Response** The system removes the red loop markings.
Delete an entire loop (including all the segments and elements in the loop)	1. Mark the first segment. 2. Click **Delete Marked** on the Edit menu. 3. Click **YES** in the confirmation dialog box. **System Response** The system removes all the items in the loop and the loop markings. **CAUTION** **You cannot recover deleted items.**

How to Discard and Delete Segments and Elements

Introduction

Your implementation guide may contain segments and elements you do not need. You can either discard (temporarily inactivate) segments and elements or permanently delete them.

The system retains discarded segments or elements in the implementation guide file, but all file processing bypasses them. Discarding is safer than deleting because you can reactivate discarded items if you should need them later. You cannot recover a deleted item.

Cautions

Before you discard or delete an item, observe these cautions:

- Deleting permanently removes items. If you may need the segment or element in the future, discard the item instead of deleting it.
- Do not discard or delete the ST, CTT, or SE segments. It is not necessary to map them (make a map group), but they must be present in the map file.
- Do not discard the beginning or ending segments of a loop.
- If you discard or delete a segment, you also discard or delete all its elements.
- If you discard a composite element, the system retains the sub-elements as discarded. If you delete a composite element, you also delete the sub-elements.

Ways to discard items

There are four ways to discard items:

- Identify items to discard and leave the remaining ones activated.
- Discard all items and then identify items to activate.
- Discard all items and activate all mandatory items.
- Discard a specific item with the **Toggle Usage** switch.

(Continued on next page)

Selecting a method

Use this decision table to select the discarding method that best meets your needs.

IF you need to discard…	THEN…
A few items	Use the **Toggle Usage** switch to discard one item at a time.
Several items	Mark the items to be discarded and discard them all at once.
Most of the items	Discard all items and then activate the items you want to use.
Only the non-mandatory items	Discard all items and then activate all mandatory items.

Discarding segments and elements

Use the procedures in this table to discard segments and elements.

TO discard…	THEN…
A single item	1. Move the focus to the item you want to discard. 2. Click **Toggle Usage** on the Use menu. **Note** The F3 key toggles between discarding and using lines.
Selected items	1. Move the focus to the item you want to discard. 2. Click the **Toggle Mark Item** on the Mark menu to mark the first item you want to discard. 3. Repeat Step 1 for each additional item you want to discard. 4. Click **Discard Marked** on the Use menu.
All items	Click **Discard All** on the Use menu.

(Continued on next page)

Viewing discarded items

The Visual Mapper does not display discarded items.

The Standard/IG Editor displays discarded segments in light gray text. Click **View Only Used Items** to display or hide discarded segments/elements.

TO…	THEN…
Hide discarded items	Click **View Only Used Items** on the View menu.
Display all items, including discarded items	Cancel the **View Only Used Items** selection.

Activating discarded items

When you reactivate an item, the system changes the color of the item from light gray to black.

If you activate a discarded segment, you also activate all its elements. Similarly, if you activate a discarded composite element, you also activate any related discarded sub-elements.

Use the procedures in this table to activate discarded items.

TO activate…	THEN…
A single item	1. Move the focus to the discarded item to be activated. 2. Click **Toggle Usage** on the Use menu. **Note** The F3 key toggles between discarding and using lines.
Selected items	1. Move the focus to the discarded item to be activated. 2. Click **Toggle Mark Item** on the Mark menu to mark the first discarded item you want to activate. 3. Repeat Step 1 for each additional discarded item you want to activate. 4. Click **Use Marked** on the Use menu.
All mandatory items	Click **Use All Mandatory** on the Use menu.
All items	Click **Use All** on the Use menu.

(Continued on next page)

Cutting vs. deleting

It is safer to cut an item with the **Cut** command in the Edit menu than to delete it. When you cut an item, it remains in the clipboard until you cut or copy another item. When you delete an item, it is lost immediately.

If you inadvertently delete an item, you can close the implementation guide without saving it. This restores the deleted item, but it also reverses all other changes made since you last saved the implementation guide.

Deleting segments and elements

Use this procedure to delete a segment, an element, a composite element, or a sub-element.

Step	Action
1	Move the focus on the first item you want to delete.
2	Click **Toggle Mark Item** on the Mark menu.
3	Repeat Steps 1 and 2 for each additional item you want to delete.
4	Click **Delete Marked** on the Edit menu.
5	Click **YES** on the confirmation dialog box.
6	After you delete the items, click **Save** on the File menu. **System Response** The system saves the changes, making them permanent.

Creating a New Standard

Overview

Introduction

Gentran:Server enables you to create a special or modified standard that is not in the standards list by copying an existing one.

You may need to create a new standard if one of your trading partners uses a standard that they have modified for their own needs.

Example
Main Imports, one of your trading partners, uses X12 standard 004020, but has modified it slightly. To translate Main Imports' documents, you need to create and map Main Imports' version of standard 004020. You copy standard 004020 and give the copy a new name (004020MI). You modify 004020MI in the Standard/IG Editor so that it matches Main Imports' version. You then use 004020MI as the source document in a map that you build to translate Main Imports' documents.

New standard added to list of standards

When you create a new standard, Gentran:Server copies all the necessary files to the new standard name you specify and adds the new standard to the standards list, **stdlist.txt**. This enables you to choose the new standard from the Select Standard/IG dialog box just as you would select any other standard.

The Standard Creation Process

Stage table This table describes the process of copying and creating a standard.

Stage	Description
1	Check the list of standards that Gentran:Server supports to determine which standard most closely matches the standard you want to create.
2	Determine the required modifications to the standard.
3	Create the new standard.
4	Modify the standard as needed.
5	Save the changes.
6	Use the new standard as the source or destination in a map.
7	Include the new standard when you create your Trading Partnership records for the Trading Partner who uses the new standard.

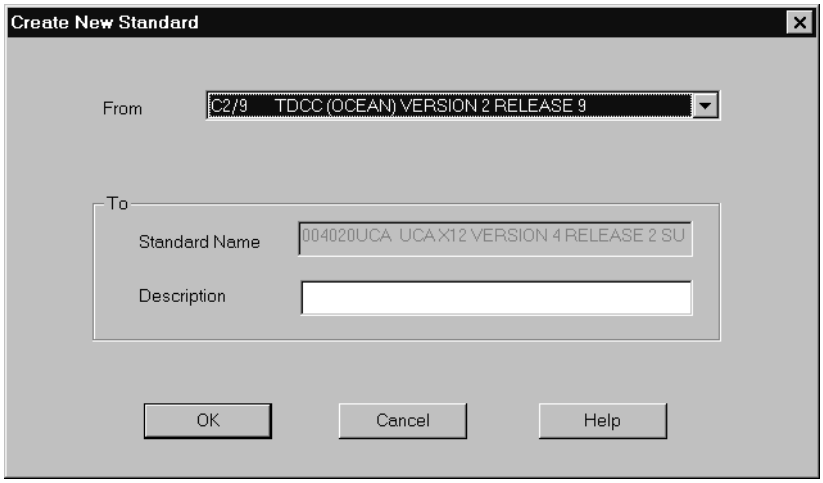
How to Copy and Create a New Standard

Introduction

This topic explains how to create a new standard by copying an existing standard.

The Create New Standard Dialog Box

This illustration shows the Create New Standard dialog box.



Create New Standard dialog box fields and functions

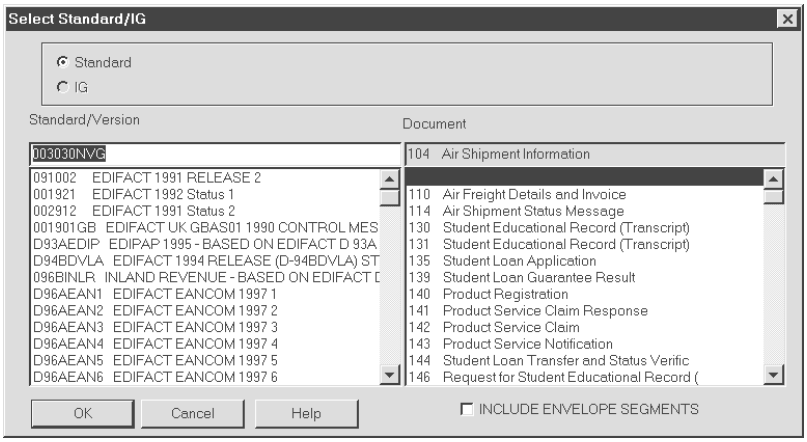
This table describes the fields of the Create New Standard dialog box and their functions.

Field	Function
From	Selects the name of the standard you want to copy.
Standard Name	Displays the name of the new standard. This is the name you entered on the Select Standard/IG dialog box.
Description	Describes the new standard.

(Continued on next page)

Procedure

Use this procedure to create a new standard.

Step	Action
1	Open the Standard/IG Editor. **System Response** Gentran:Server displays the Select Standard/IG dialog box. **Note** You can use this procedure any time the Select Standard/IG dialog box is displayed.
2	Select **Standard**.
3	Select the **Standard/Version** text box and type the name you want to give the new standard.  **System Response** Gentran:Server disables the document selection list. This is because the standard does not exist, so Gentran:Server cannot find any documents for the standard.
4	Click **OK**. **System Response** Gentran:Server displays this prompt: Standard [name] not found. Do you want to create it?
5	Click **Yes.** **System Response** Gentran:Server displays the Create New Standard dialog box. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>6</td><td colspan="2">Select the name of the standard you want to copy from drop-down list.</td></tr>
<tr><td>7</td><td colspan="2">Type a description of the new standard in the Description box.</td></tr>
<tr><td>8</td><td colspan="2">Click OK.

System Response
Gentran:Server copies the standard you selected and adds the name of the new standard to the list of standard names displayed on the Select Standard/IG dialog box.</td></tr>
<tr><td>9</td><td colspan="2">Select the new standard and document from the lists.

System Response
Gentran:Server displays the standard in the Standard/IG Editor.</td></tr>
<tr><td>10</td><td colspan="2">Use this table to modify the file.</td></tr>
<tr><td></td><td>IF you want to…</td><td>THEN refer to the topic…</td></tr>
<tr><td></td><td>Add or modify segments</td><td>How to Add a Segment in this chapter.</td></tr>
<tr><td></td><td>Add or modify elements</td><td>How to Add an Element, Composite Element, or Sub-element in this chapter.</td></tr>
<tr><td></td><td>Create or modify loops</td><td>How to Mark Repeating Segments (Loops) in this chapter.</td></tr>
<tr><td></td><td>Discard or delete segments or elements</td><td>How to Discard and Delete Segments and Elements in this chapter.</td></tr>
<tr><td>11</td><td colspan="2">Click Save on the File menu to save the changes.</td></tr>
</table>

Miscellaneous Procedures

How to Print a Standard or an IG

Introduction

You can print a standard set or implementation guide if you want to compare it with your data or share it with others.

From the Print Standard dialog box, you can print all records and fields or only the records. You can also print discarded items.

Print Standard dialog box

This illustration shows the Print Standard dialog box.

Print Standard fields and functions

This table describes the fields and functions of the Print Standard dialog box.

Field	Function
Print Records and Fields	Prints both records and fields.
Print Records Only	Prints records only.
Print Discarded Items	Prints discarded items in addition to one of the above selections.

(Continued on next page)

Printing a standard or IG

Use this procedure to print a standard or an implementation guide.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Open the desired standard or implementation guide.

Note
You can create a new implementation guide and keep it open if you want to print it.</td></tr>
<tr><td>2</td><td colspan="2">Click Print on the File menu.

System Response
Gentran:Server displays the Print Standard dialog box.</td></tr>
<tr><td rowspan="4">3</td><td colspan="2">Use this decision table to determine your next step.</td></tr>
<tr><td>IF you want to print…</td><td>THEN select…</td></tr>
<tr><td>All segments, elements, and sub-elements</td><td>Print Records and Fields</td></tr>
<tr><td>Only the segments</td><td>Print Records Only</td></tr>
<tr><td>4</td><td colspan="2">Do you want to print discarded items as well as used items?
◗ If NO, continue with Step 5.
◗ If YES, click Print Discarded Items, then continue with Step 5.</td></tr>
<tr><td>5</td><td colspan="2">Click OK.

System Response
Gentran:Server sends the standard or implementation guide to your printer.

Reference
For more information about setting up a default printer, refer to the user’s guides for your operating system.</td></tr>
</table>

CHAPTER
7

Working with Synonym and Thesaurus Lists

Contents

Overview

Introduction

This chapter describes synonym and thesaurus lists and files and how to use the Synonym and Thesaurus Editors to work with them.

Key terms

This table lists the key terms used in this chapter.

Term	Description
AutoMap	The Gentran:Server feature that compares specific source and destination files and creates a map between them based on criteria such as field or element name, record or segment name, and loop structure.
generic synonym list	A synonym list that you can use in any map.
synonym	A substitute value.
Synonym Editor	The Gentran:Server feature that enables you to create or change synonym lists.
synonym list	A list of values that Gentran:Server substitutes for original elements or application field values during translation.
specific synonym list	A synonym list you use in a specific map.
Thesaurus Editor	The Gentran:Server feature that enables you to create or change thesaurus lists.
thesaurus list	A list of element names that you want Gentran:Server to consider a match for the original element name during AutoMapping.

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Generic and specific synonym lists

A synonym list is a data substitution list that Gentran:Server uses during translation. There are two types of synonym lists: specific and generic. The files that make up these lists reside in your map directory.

- You link a specific synonym list to a single map source. This is the only map source affected by that list. The two files that comprise each specific synonym list are named for the map to which they apply: <*mapname*>*.idx* and <*mapname*>*.dat*. The name of each synonym list contained in the file is the same as the source label to which it is attached (for example, S10).
- You can use a generic synonym list in any map. You must assign each generic list a unique name. The generic synonym lists are stored in two files: *generic.idx* and *generic.dat.*

When to use a synonym list

You use a synonym list to direct Gentran:Server to replace a particular source data value with another value during translation. The synonym list is a useful tool if the terminology that the source document uses is different from the terminology that the destination document uses.

For example, you would use a synonym list if your inventory system names a product “#A123XY,” but the shipping papers you send to your trading partner must read “RED BLOCKS.”

Thesaurus lists

A thesaurus list is a list of substitute values that you want Gentran:Server to consider as matches for original names during AutoMapping. You can create and use multiple thesaurus lists, all of which are stored in two files, *thesaurus.idx* and *thesaurus.dat*. These files reside in your map directory.

When to use a thesaurus list

You want to use a thesaurus list when you plan to use the AutoMap feature frequently and many of your source and destination documents use the same cross-references. You must set up the thesaurus list prior to AutoMapping.

Careful use of thesaurus lists can greatly increase the matches found by the AutoMapper, helping to automate and expedite the mapping process.

The List Editors

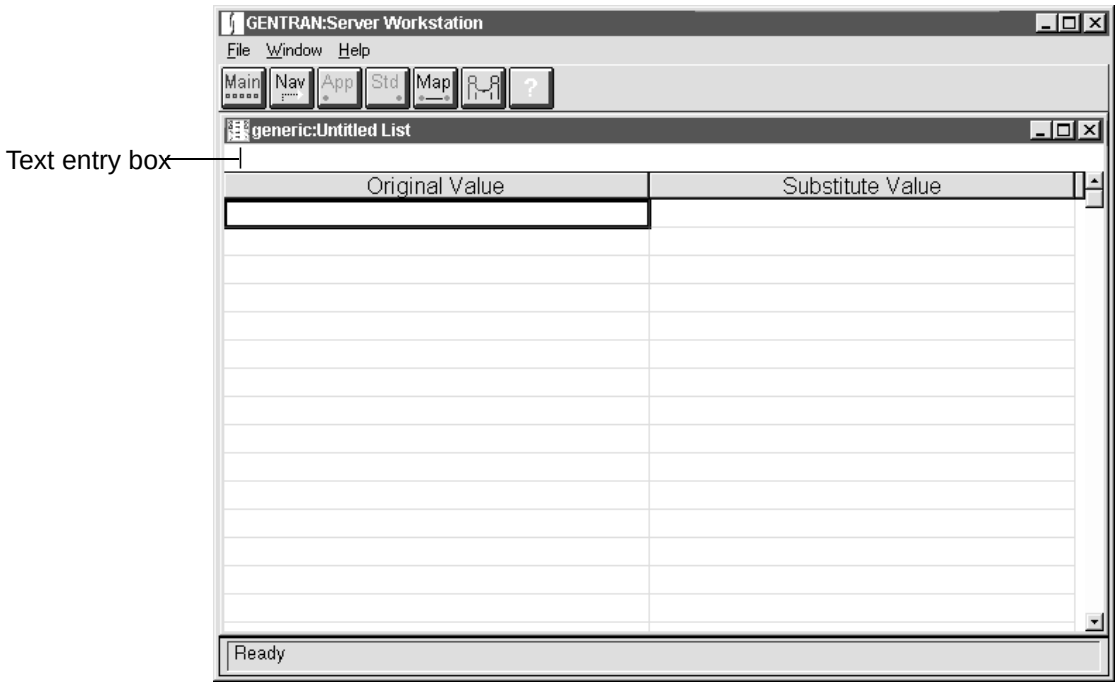
Introduction

The Synonym Editor and the Thesaurus Editor (the list editors) are very similar in structure and use. There are some differences in the way you use the windows, however. Those differences and the purposes of the list editors are discussed later in this chapter.

Note
The list editors can display up to 100,000 entries.

The list editors

This illustration shows the Synonym Editor.



(Continued on next page)

List editor window fields and functions

This table describes the fields and functions of the list editor.

Field	Function
Text entry box	Enables you to enter the original and substitute values. The active (outlined) cell displays the text you enter in this field. You can use the mouse, arrow keys, or TAB and SHIFT-TAB keys to move the focus to a different cell.
Original Value Column	◗ **For synonym lists:** displays the original values for which you want to substitute values during translation. ◗ **For thesaurus lists:** displays the original names for which alternative names exist.
Substitute Value Column	◗ **For synonym lists:** displays the values you want to substitute for the corresponding original values during translation. ◗ **For thesaurus lists:** displays the names that Gentran:Server should consider a match for the corresponding original names during AutoMapping.

How to Work with Generic Synonym Lists

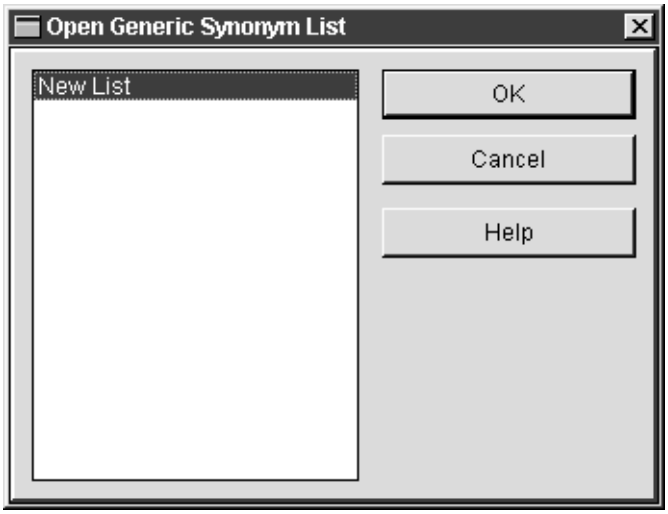
Introduction

Generic synonym lists can be used by any map during translation. This section describes how to create, modify, and delete generic synonym lists.

For example, you might create one generic synonym list for X12 810s and another for X12 850s. Or, you might create one generic synonym list for European maps, a second for North American maps, and a third for Asian maps.

The Open Generic Synonym List dialog box

This illustration shows the Open Generic Synonym List dialog box.



This dialog box displays the name of every existing synonyms list. The example above displays only the New List option as there are no existing lists.

General notes on Synonym lists

You should keep these notes in mind when creating Synonym lists.

- The Synonym Editor is case-sensitive.
- The only printable character that you cannot use in a synonym list entry (either original or substitute) is the pipe (¦) character.
- You can include spaces in a synonym list entry, but not empty cells between entries. Gentran:Server prevents you from entering an empty cell between entries or empty rows between entries

(Continued on next page)

Creating a generic synonym list

Use this procedure to create a generic synonym list.

Step	Action
1	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open Generic Synonym List dialog box.
2	Click **New List** and click **OK**. **System Response** Gentran:Server displays the Synonym Editor dialog box for a generic list. The system automatically locates the focus at the first cell in the **Original Value** column. The cursor is always located in the text box.
3	Enter the source document value that you want to replace during translation.
4	Press TAB to move the focus to the corresponding cell in the Substitute Value column.
5	Enter the value that you want Gentran:Server to use in place of the original value entered in Step 3.
6	Repeat Steps 3 and 4 to build your list. **Note** You can enter up to 100,000 value pairs.
7	Click **Save List** or **Save List As** on the File menu. **System Response** Gentran:Server prompts you to name the list.
8	Type the name you want to assign the list you are creating. **Note** The list name you enter can be any value from 1 to 19 characters in length.
9	Click **OK**.

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Modifying a generic synonym list

Use this procedure to modify a generic synonym list.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Click Synonyms on the Edit menu.

System Response
Gentran:Server displays the Open Generic Synonym List dialog box.</td></tr>
<tr><td>2</td><td colspan="2">Select the list you want to modify and click OK.

System Response
Gentran:Server displays the selected list.</td></tr>
<tr><td>3</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td></td><td>IF you want to…</td><td>THEN...</td></tr>
<tr><td></td><td>Add a synonym</td><td>Press TAB to move the focus to an empty cell in the Original Value column and enter the source document value that you want to replace during translation.

Next, press TAB move the focus to the corresponding cell in the Substitute Value column and enter the value that you want Gentran:Server to use in place of the original.</td></tr>
<tr><td></td><td>Change a value</td><td>Move the focus to the value you want to change and enter the new value.</td></tr>
<tr><td></td><td>Delete a row</td><td>Move the focus to the row you want to delete and press CTRL+R.

Note
You are unable to delete only a source value from a synonym list. Gentran:Server requires that you delete the entire row.</td></tr>
<tr><td>4</td><td colspan="2">Click Save List or Save List As on the File menu.

System Response
Gentran:Server saves your changes. If you click Save List As, Gentran:Server prompts you for a file name.

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
5	Type the name you want to assign the list you are creating. **Note** The list name you enter can be any value from 1 to 19 characters in length.
6	Click **OK**.

Deleting a generic synonym list

Use this procedure to delete a generic synonym list.

Step	Action
1	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open Generic Synonym List dialog box.
2	Select any list and click **OK**. **Note** You do not have to specify the list you want to delete yet. **System Response** Gentran:Server displays the selected list in the Synonym Editor window.
3	Click **Delete List** on the File menu. **System Response** Gentran:Server displays the Delete Synonym List dialog box.
4	Select the synonym list you want to delete and click **OK**. **System Response** Gentran:Server prompts you to confirm the deletion.
5	Click **YES** to confirm the deletion. **System Response** Gentran:Server deletes the synonym list you specified.

How to Work with Specific Synonym Lists

Introduction

A specific synonym list is linked to a single Map file (<*mapname*>*.vmp*) and, if one exists, to the corresponding working map (<*mapname*>*.mas*). You can link a specific synonym list to one or more mapped source items within the selected Map file.

This section describes how to create, modify, and delete specific synonym lists.

Before you begin

Before you can create specific synonym lists, you must create or open a map that contains at least one mapping instruction.

Reference
See the chapter Mapping in this guide for instructions on creating and opening a map.

Creating a specific synonym list

Use this procedure to create a specific synonym list.

Note

- The Synonym Editor is case-sensitive.
- The only printable character that you cannot use in a synonym list entry (either original or substitute) is the pipe (¦) character.
- You can include spaces in a synonym list entry, but not empty cells between entries. Gentran:Server prevents you from entering an empty cell between entries or empty rows between entries.

Step	Action
1	Click **Open** from the File menu and choose the *.vmp* file for which you want to create the specific synonym list. **System Response** Gentran:Server displays the Visual Mapper and the selected map.
2	Click on the mapped source element or application field to which you want to assign substitute values. (Continued on next page)

(Contd) Step	Action
3	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open a Synonym List for Editing dialog box.
4	Click **Synonym List is specific to this map**, then click **OK**. **System Response** Gentran:Server displays the Synonym Editor. **Note** The list is named <*mapname*>*.vmp:*<*label*>, where <*mapname*> is the name of your map and <*label*> is the element label. The system automatically locates the focus at the first cell in the **Original Value** column. The cursor is always located in the text box.
5	Enter the value from the source document that you want Gentran:Server to replace during translation.
6	Press TAB to move the focus to the corresponding cell in the **Substitute Value** column.
7	Enter the value that you want Gentran:Server to use in place of the original value you entered in Step 5.
8	Repeat Steps 5 through 7 to build your list. **Note** You can enter up to 100,000 value pairs.
9	Click **Save List** on the File menu. **System Response** Gentran:Server saves the synonym list and creates mapping instructions for the entered items.
10	Click **Close** on the File menu. **System Response** The system prompts you to automatically change all mappings associated with the selected source to use this synonym list. (Continued on next page)

(Contd) Step	Action	
11	Use this table to determine your next response.	
	If you want to...	**THEN...**
	Change all mappings associated with the selected source to use this synonym list	Click **Yes.**
	Change only the selected mapping to use this synonym list	Click **No.**
	Return to the Visual Mapper without changing any mappings	Click **Cancel.**

Modifying a specific synonym list

Use this procedure to modify a specific synonym list.

Step	Action
1	Click **Open** on File menu and select the *.vmp* file to which the specific synonym list you want to modify is linked. **System Response** Gentran:Server displays the Visual Mapper and the selected map.
2	Click on the source element or application field to which the synonym list is assigned.
3	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open a Synonym List for Editing dialog box. Make sure that the map and label name are correct.
4	Click **Synonym List is specific to this map**, then click **OK**. **System Response** Gentran:Server displays the selected list in the Synonym Editor. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="3">Action</th></tr>
<tr><td>5</td><td colspan="3">Use this table to determine your next step.</td></tr>
<tr><td></td><td>IF you want to…</td><td colspan="2">THEN...</td></tr>
<tr><td></td><td>Add a synonym</td><td colspan="2">Press TAB until the focus selects an empty cell in the Original Value column and enter the source document value that you want to replace during translation.

Next, press TAB to select the corresponding cell in the Substitute Value column and enter the replacement value.</td></tr>
<tr><td></td><td>Change a value</td><td colspan="2">Press TAB until the focus selects the value you want to change and enter the new value.</td></tr>
<tr><td></td><td>Delete a row</td><td colspan="2">Press TAB until the focus selects the row you want to delete and press CTRL-R.</td></tr>
<tr><td>6</td><td colspan="3">Click Save List on the File menu.

System Response
Gentran:Server saves your changes.</td></tr>
<tr><td>7</td><td colspan="3">Click Close on the File menu.

System Response
The system prompts you to automatically change all mappings associated with the selected source to use this synonym list.</td></tr>
<tr><td>8</td><td colspan="3">Use this table to determine your next response.</td></tr>
<tr><td></td><td colspan="2">If you want to...</td><td>THEN...</td></tr>
<tr><td></td><td colspan="2">Change all mappings associated with the selected source to use this synonym list</td><td>Click Yes.</td></tr>
<tr><td></td><td colspan="2">Change only the selected mapping to use this synonym list</td><td>Click No.</td></tr>
<tr><td></td><td colspan="2">Return to the Visual Mapper without changing any mappings</td><td>Click Cancel.</td></tr>
</table>

(Continued on next page)

Deleting the reference to a specific synonym list

Use this procedure to delete the reference to a specific synonym list.

Step	Action
1	Click **Open** on the File menu and choose the *.vmp* or file for which you want to delete the reference to a specific synonym list. **System Response** Gentran:Server displays the Visual Mapper and the selected map.
2	Click on the source element or application field to which the synonym list is assigned.
3	Click the **MI** button on the toolbar. **System Response** Gentran:Server displays the Mapping Instructions window for the element or field.
4	Click on the synonym mapping instruction and press the DELETE key. **System Response** Gentran:Server prompts you to confirm the deletion.
5	Click **YES** to confirm the deletion. **System Response** Gentran:Server deletes the mapping for the specified synonym list.

How to Use a Default Synonym

Introduction

You can designate a value as the default synonym value.

During translation, Gentran:Server uses the default synonym value in the destination document when

- It is unable to satisfy any of the existing substitute conditions
- The source document does not contain the item involved in the substitution.

Using a default synonym

To use a default synonym, you enter an asterisk (*) as the original value and enter the default value you want to use as the substitute value.

Example of using a default synonym value

Assume that you use a mapping instruction that contains this statement:

MAP specific synonym for S01 to D15

This mapping instruction uses this substitute value table.

Original value...	Substitute value...
A123XY	RED BLOCKS
B999ZX	WATERCOLOR SET
*	MISC TOYS

This results of this instruction are:

- If item S01 has the value A123XY, then the system enters RED BLOCKS as item D15.
- If item S01 has the value B999ZX, then the system enters WATERCOLOR SET as item D15.
- If item S01 has a value other than A123XY or B999ZX, the system enters the value MISC TOYS in D15.

Point to remember about using default synonyms

You should remember that if you do not include a default substitute value, then the destination item will be the value of the source item.

How to Use the Audit System Variable

Introduction

If you want to store a special source value in the audit record, you can map one or more source values to a special pre-defined system variable, $USRBUF. Used appropriately, mapping to this variable does not affect the output of your map.

Gentran:Server writes the values for the $USRBUF variable to the User Buffer field in the audit record (edistat.i/o, and edihist.dat/idx).

Reference
See the edistat.i/o, edihist.dat/idx topic in the File Record Layouts chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for the layout of the audit record.

Mapping to the User Buffer field in the Audit record

Use this procedure to write the value of the source item in $USRBUF to the User Buffer field in the audit record.

Step	Action
1	In your map, create a mapping GROUP that includes: ◗ The source item whose value you want to write to the User Buffer field ◗ A destination item. **Note** You can map multiple source fields to $USRBUF. The data of each field is separated by a tilde (~) character. The maximum size is 52 characters. The tildes are counted as part of the data. **CAUTION** **If you map $USRBUF to a destination item to which you are mapping other data, Gentran:Server may create a second copy of the destination item.**
2	Click on the source element or application field to which you want to assign the $USRBUF variable. **Note** Select a destination item that you will not be mapping to. (Continued on next page)

(Contd) Step	Action
3	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open a Synonym List for Editing dialog box.
4	Click **Synonym List is specific to this map**, then click **OK**. **System Response** Gentran:Server displays the Synonym Editor.
5	Create a synonym by typing the wildcard (*) symbol in the Original Value column and **$USRBUF** in the Substitute Value column.
6	Click **Save List** on the File menu. **System Response** Gentran:Server saves the synonym list and creates a mapping instruction similar to this: MAP specific synonym of source S3 to D5
7	Verify that the system created the mapping instruction as follows: ◗ Single-click either the source item or the destination item. ◗ Click the right mouse button and click Mapping Instruction Toolbar to display the Mapping Instructions window. **CAUTION** **The mapping instruction shows a synonym of a source item mapped to a destination item, not to the $USRBUF variable. Do not change this mapping instruction.**

Reference
See the chapter Working with Mapping Instructions in this guide for more information about mapping instructions.

Thesaurus Lists

Introduction

You use Gentran:Server's Thesaurus Editor to create a list of substitute values that you want Gentran:Server to consider a match for the original name during AutoMapping.

Careful use of thesaurus lists can greatly increase the matches found by AutoMap. This helps to automate and expedite the translation process.

Note
You must set up the thesaurus list prior to AutoMapping.

When to use a thesaurus list

You should consider using a thesaurus list when:

- You plan to use AutoMap frequently and many of your source and destination documents use the same cross-references.
- The elements or fields in the source and destination files do not have similar naming conventions.

Example
One element or field may refer to "address" while the corresponding element or field refers to "routing."

Example of using a thesaurus list

You use AutoMap to create a map with an application as the source and an implementation guide as the destination. AutoMap does not match these items:

Source field...	Destination element...
ID Code	Identification Code
Zip	Postal Code

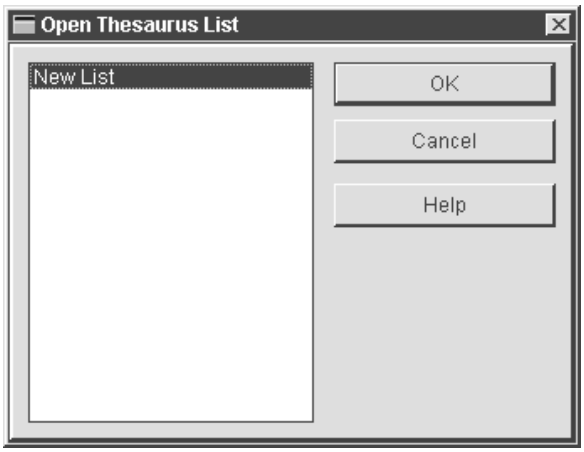
Before running AutoMap again, you create the thesaurus list below. AutoMap is now able to matches those items.

Original value...	Substitute value...
ID Code	Identification Code
Zip	Postal Code

(Continued on next page)

The Open Thesaurus List dialog box

This illustration shows the Open Thesaurus List dialog box.

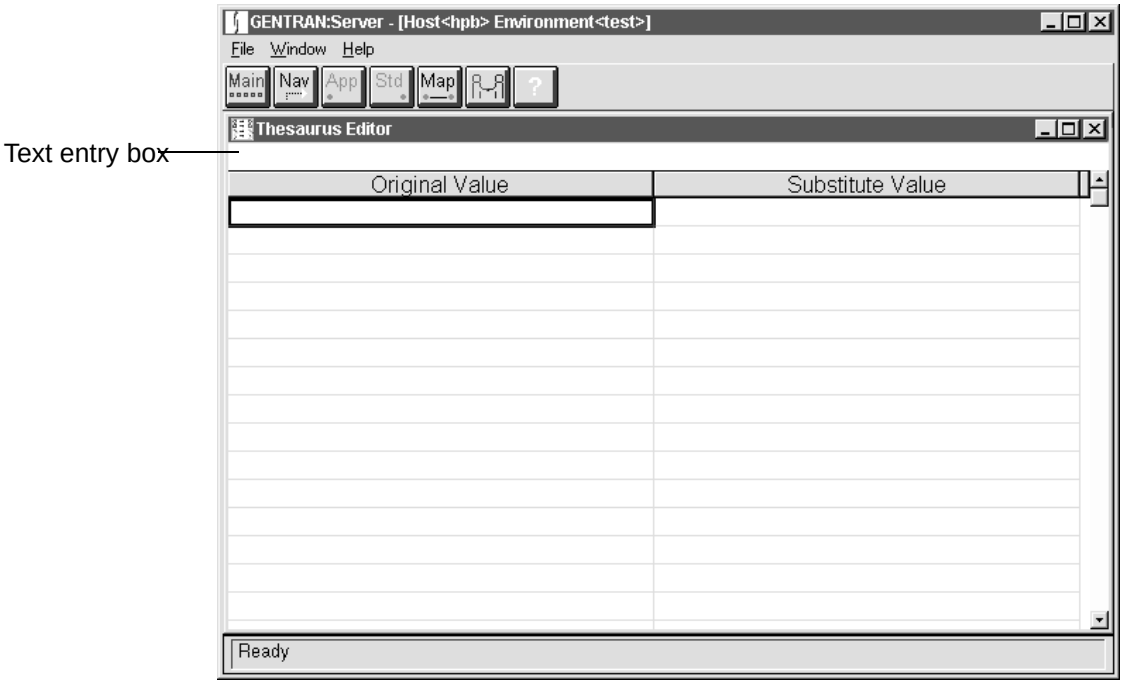


This dialog box will display the name of every existing thesaurus list. The example above displays only the New List option as there are no existing lists.

The Thesaurus Editor window

This illustration shows the Thesaurus Editor.

The Original Value column displays the names of the source items. The Substitute Value column displays the corresponding destination items.



(Continued on next page)

List editor window fields and functions

This table describes the fields and functions of the list editor window.

Field	Function
Text entry box	Enables you to enter the original and substitute values. The text you enter in this field appears in the active cell (outlined). You can use the mouse, arrow keys, or TAB and SHIFT+TAB keys to move the focus.
Original Value Column	◗ **For synonym lists:** displays the original values for which you want to substitute values during translation. ◗ **For thesaurus lists:** displays the original names for which alternative names exist.
Substitute Value Column	◗ **For synonym lists:** displays the values you want to substitute for the corresponding original values during translation. ◗ **For thesaurus lists:** displays the names that Gentran:Server should consider a match for the corresponding original names during AutoMapping.

How to Work with Thesaurus Lists

Introduction

This section describes how to create, modify, and delete thesaurus lists.

General notes on Thesaurus lists

You should keep these notes in mind when creating Thesaurus lists.

- You can use spaces in entries with two or more words. Capitalization does not matter because the Thesaurus Editor is not case-sensitive.
- The only printable character that you cannot use in a thesaurus list entry (either original or substitute) is the pipe (¦) character.
- You can include spaces in a Thesaurus list entry, but not empty cells between entries. Gentran:Server prevents you from entering an empty cell between entries or empty rows between entries.

Creating a thesaurus list

Use this procedure to create a thesaurus list.

Step	Action
1	Click **Thesaurus Entries** on the Edit menu. **System Response** Gentran:Server displays the Open Thesaurus List dialog box.
2	Click **New List** and click **OK**. **System Response** Gentran:Server displays the Thesaurus Editor. The system automatically locates the focus at the first cell in the Original Value column. The cursor is always located in the text box.
3	Enter a record, field, segment, or element name from the source document.
4	Press TAB until the focus selects the corresponding cell in the Substitute Value column.
5	Enter the name that you want Gentran:Server to consider a match for the original name you entered in Step 3. (Continued on next page)

(Contd) Step	Action
6	Repeat Steps 3 - 5 to build your list. **Note** You can enter up to 100,000 value pairs.
7	Click **Save List** or **Save List As** on the File menu. **System Response** Gentran:Server prompts you to name your list.
8	Type the name you want to assign the list you are creating **Note** The list name you enter can be any value from 1 to 19 characters in length.
9	Click **OK**.

Modifying a thesaurus list

Use this procedure to modify a thesaurus list.

Step	Action
1	Click **Thesaurus Entries** on the Edit menu. **System Response** Gentran:Server displays the **Open Thesaurus List** dialog box.
2	Select the list you want to modify and click **OK**. **System Response** Gentran:Server displays the selected list in the Thesaurus Editor. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="5">3</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN...</td></tr>
<tr><td>Add a row</td><td>Press TAB to move the focus to a cell in the Original Value column and enter the source document name that you want to match during automapping.

Next, press TAB to select the corresponding cell in the Substitute Value column and enter the replacement value.</td></tr>
<tr><td>Change the name of an item</td><td>Press TAB to move the focus to the name you want to change and enter the new name.</td></tr>
<tr><td>Delete a row</td><td>Press TAB to move the focus to the row you want to delete and press CTRL+R.</td></tr>
<tr><td>4</td><td colspan="2">Click Save List on the File menu.

System Response
Gentran:Server saves your changes.</td></tr>
</table>

Deleting a thesaurus list

Use this procedure to delete a thesaurus list.

Step	Action
1	Click **Thesaurus Entries** on the Edit menu. **System Response** Gentran:Server displays the Open Thesaurus List dialog box.
2	Select any list and click **OK**. **Note** You do not have to specify the list you want to delete yet. **System Response** Gentran:Server displays the list you selected in the Thesaurus Editor. (Continued on next page)

(Contd) Step	Action
3	Click **Delete List** on the File menu. System Response Gentran:Server displays the Delete Thesaurus List dialog box.
4	Select the thesaurus list you want to delete and click **OK**. **System Response** Gentran:Server prompts you to confirm the deletion.
5	Click **YES** to confirm the deletion. **System Response** Gentran:Server deletes the selected thesaurus list.

How to Convert Flat Files to Synonym Lists

Introduction

In some cases, a trading partner may provide you with a text file containing a list of original values and their synonyms. The file may also include the list name.

Procedure

Follow this procedure to convert a flat file to a Synonym list.

Step	Action
1	Edit the text file, adding or modifying the information as needed. **Note** To retain a copy of the original file, save it under another name before editing the file.
2	Save the edited file as a Synonym file (*.unl*)
3	Use the *synmv* program to load the file to a Synonym table. **Reference** See the heading synmv in the Command Reference chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for more information about this program.

Synonym file structure

Each line of a Synonym file must contain three elements. The elements must be aligned in the following order:

- <List name>

To create a generic Synonym file, use the name of a specific list within the generic file.

To create a specific Synonym file, use the name of the source for the list you are creating.

- Original value
- Replacement value.

Delimit the entries with pipe symbols (¦).

(Continued on next page)

Example
Each line of the edited flat file must have the following structure:

```
<list_name>¦<first_original_value>¦<first_replacement_value>
<list_name>¦<second_original_value>¦<second_replacement_value>
<list_name>¦<third_original_value>¦<third_replacement_value>
```

Saving the edited file

Once you finish editing the text file, save it as a Synonym file. Use these criteria when selecting a name for the new file.

- To create a generic Synonym file, name the file *generic.unl*.
- To create a specific Synonym file, name the file *<mapname>.unl,* where *<mapname>* represents the map that will use this list.

Once you save the text file as a *.unl*, you are ready to load it to a Synonym list.

Reference
See the heading synmv in the Command Reference chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for more information about this program.

CHAPTER
8

Mapping

Contents

Overview

What is a Map?

Introduction

At the heart of the translation process, Gentran:Server translates data from a source document to a destination document. To do this, Gentran:Server needs information about the location of each piece of data (field or element) in your source document relative to its counterpart in the destination document. This collection of information is the **map**. This chapter provides the information you need to create maps for Gentran:Server.

In this chapter

You learn how to use the Visual Mapper to create, edit, and compile maps. This chapter introduces the Visual Mapper and basic map-making techniques.

Special mapping instructions

In many cases, the fields or elements in your source files map directly to fields or elements in the destination file. Sometimes, however, you must give Gentran:Server special mapping instructions to tailor the data. For example, you may want to move the contents of the source field to the destination field only if another source field equals a specific value.

Reference
See the Working with Mapping Instructions chapter in this guide for detailed information on including special mapping instructions.

Key terms

This table lists the key terms used in this chapter.

Term	Description
alphanumeric expression	An expression that results in alphanumeric data. Also called a string expression.
arithmetic expression	An expression that results in numeric data.

(Continued on next page)

(Contd) Term	Description
AutoMap	The Gentran:Server feature that compares specified source and destination files and maps items between them based on criteria such as field or element name, record or segment name, and loop structure.
conditional expression	A complete WHEN expression that may be part of a longer condition.
logical expression	An expression that results in a logical value; either false (=0) or true (not=0).
macro	A set of commands used within Gentran:Server to simplify and organize mapping instructions.
map	A file containing instructions for translating between one standard, implementation guide, or application description data file and another.
Map File	A *<mapname>.vmp* file that contains a defined map.
mapping	The process of associating data fields or elements in your source document to corresponding data fields or elements in your destination document.
mapping condition	Qualifying term used in some mapping instructions to indicate when the mapping part of the instruction should be performed and when it should be ignored. Mapping conditions begin with “When.”
mapping expression	A complete “Map to” expression that may be part of a longer mapping instruction.
mapping GROUP	A specific mapping association between source and destination data.
mapping instruction	A set of information that controls special operations on mapped data during translation.
Mapping Table File	The file that contains the result of compiling a map. The file extension is *.TBL.* (See TBL File)
Working Map File	A *<mapname>.vmp* file containing the working copy of a defined (*<mapname>.vmp*). Gentran:Server creates this file when a user opens a *.vmp* file. (See map file)

(Continued on next page)

(Contd) Term	Description
TBL File	A mapping table file containing the result of compiling a map file. This file is created in the working directory.
Visual Mapper	The Gentran:Server window that enables you to create a map visually. The source document is displayed on the left side of the window and the destination document on the right.

Before you begin mapping

Before you begin creating a map, you must identify the business information you and your trading partner will exchange. This information is usually presented in an implementation guide (IG).

Next, you should plan your map. You must determine how the fields in your source files relate to the fields in the destination files. If you cannot account for each piece of data, you must discuss it with your trading partner.

Consider using a mapping worksheet

Consider using a worksheet as a tool to help you visualize the map. If you attended the Gentran:Server training class, you are familiar with this type of worksheet.

Example
You might use a worksheet divided into three sections:

- One containing columns that describe the source file data
- Another containing columns that describe the destination file data, and
- A third section with columns for any special instructions, qualifiers, or synonym values.

Flow of Work

Introduction

Once you identify the information you want to map, you must decide the method to use to create the map in Gentran:Server. There are two methods for creating maps. You can:

- Map items automatically using AutoMap.
- Create the map manually with the Visual Mapper.

Decision table

Use this table to help you decide whether to create maps using AutoMap or whether to create the map with the Visual Mapper.

IF the documents are...	THEN use...
Similar in structure (the records and fields are named similarly) **Comment** When AutoMapping finishes, you must review the map and make adjustments to the mapped items if necessary.	AutoMap to automatically map items.
The items are named differently in the source and destination documents or you want more control over the mapping of each piece of data	The Visual Mapper to manually map items.

Map creation process

This table describes the process of creating a map.

Stage	Description
1	Create a new map. **Note** You can create a new map manually with the Visual Mapper or use AutoMap. **Result** Gentran:Server creates a map file (<*mapname*>*.vmp*).
2	Edit the map, using the Visual Mapper. (Continued on next page)

(Contd) Stage	Description
3	Save and compile the map. **Result** The map compiler identifies errors, provides a compiler report, and generates a mapping table file (<*mapname*>*.TBL*).
4	Test the map. Using Gentran:Server, test the map by translating data.

Map Files

Introduction

The process of creating and compiling a map creates working copies of two files:

- Map file
- Mapping table file

Map file

When you create a map, Gentran:Server saves the information in a **map file**. You assign the map a name and Gentran:Server adds the file extension *.vmp*.

Example
You create a map and name it INVO123. Gentran:Server creates the map file, *INVO123.vmp*, and stores it in the directory for maps.

Mapping table file

When you compile a map file, Gentran:Server creates a **mapping table file**, which is a form of the map file that the translator can read and understand. The file name for a mapping table file is the map name with a *.TBL* extension.

Example
You compile the *INVO123.vmp*. Gentran:Server creates the mapping table file, *INVO123.TBL*.

Master directory

Gentran:Server stores the map files that it uses to translate data in the **master directory.** Your system administrator specified the path to this directory in the Setup Directories dialog box under the Settings menu.

Working map file

When you create a new map or open an existing map to edit it, Gentran:Server creates a **working map file** for you. The name of the file is the same as your master map file, but it is stored in the working directory.

Gentran:Server Workstation and Gentran:Server for UNIX have different working directories:

- For Gentran:Server Workstation, the working directory is a single folder on the Windows computer.
- For Gentran:Server for UNIX, the working directory is the directory of the user who opens the file, so individual users have their own working directories.

(Continued on next page)

Note
When you approve (Gentran:Server Workstation) or check in a map (Gentran:Server for UNIX), Gentran:Server replaces the original map with a working map. Gentran:Server saves the maps in the master directory, regardless of their original locations.

Working mapping table file

When you compile a working map file, Gentran:Server creates a **working mapping table file**. The name of the file is the same as your working mapping table file, but is stored in the same working or user directory as the *.vmp* file.

Example
You compile the working map file, *INVO123.vmp*. Gentran:Server creates the working mapping table file, *INVO123.TBL*.

Purpose of the Working files

Gentran:Server stores your map files and mapping table files in the working directory until you approve or check them into the master directory. The purpose of the working map file and the working mapping table file is to enable you to make and test changes without overwriting your original map.

You can edit a working map file, compile it, and use the resulting working mapping table file in a translation to test your changes. If the translation does not produce the expected results, you still have your original map file. After you use the new map files successfully, you can replace the original map file with the working map file.

Reference
See the *Gentran:Server for UNIX Getting Started Guide* or *Gentran:Server Workstation Getting Started Guide* for the procedures you will use to move (check in) working map files into the master directory.

Visual Mapper

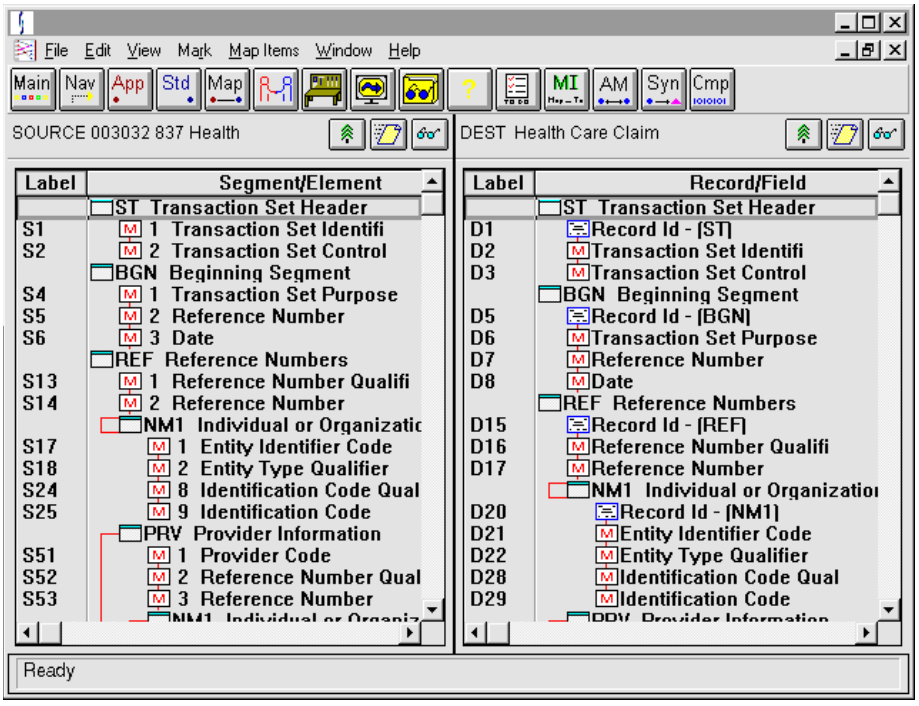
Introduction

The Visual Mapper is a graphical tool that enables you to view the segments and elements within each of the files in a map and easily create mapping GROUPs and mapping instructions.

The Visual Mapper displays the source file on the left side and the destination file on the right.

Visual Mapper window

This illustration shows the Visual Mapper window.



(Continued on next page)

Visual Mapper window fields and functions

This table describes the fields and functions of the Visual Mapper window.

Field	Function
Label	Displays the source and destination labels as assigned by Gentran:Server. Source items are labeled *Snnn,* and Destination items are labeled *Dnnn*. Each item receives a unique label, and labels are sequential. **Note** When you delete an item, the label assigned to that item is also deleted and is not used again.
Record/field or Segment/element	Displays the descriptive label for individual records and fields, or segments and elements.
Tree mode button 	Displays the components of the source and destination files. **Reference** See Visual Mapper Display Modes in this chapter for more information.
Fast-entry mode button 	Displays a dialog box that you can use to quickly enter map assignments. **Reference** See Visual Mapper Display Modes in this chapter for more information.
Mini-report button 	Displays a report that shows each mapping association (mapping GROUPs and the field or element it belongs to) in the map. **Reference** See Visual Mapper Display Modes in this chapter for more information.

(Continued on next page)

Visual Mapper symbols

This table describes the symbols used by the Visual Mapper.

Symbol	Description
	An item that is part of a mapping GROUP. The map mini-report shows all the mapping GROUPs associated with the element or field.
	A destination item that has a hard-coded value (0-to-1 single GROUP).
	A segment or record.
	An element with sub-elements that are not displayed. This symbol represents a composite element.
	An element with sub-elements that are displayed. This symbol represents a composite element.
	A field or an element or sub-element that does not have any further sub-elements.
	A loop. The line connecting two segments indicates the starting and ending items in the loop. Nested loops are indicated by connecting lines that also are nested.

Opening the Visual Mapper

There are several ways to open the Visual Mapper.

- Click the **Map** button on the toolbar. 
- Click **Open/Map** or **New/Map** on the File menu.
- Click **Map** on the Edit menu.

Visual Mapper Display Modes

Introduction

The Visual Mapper has two display modes: tree mode and fast-entry mode. The display of the source and destination descriptions and the method by which you make or edit your map depend on the mode you select.

Mode	Description
Tree mode 	The default Visual Mapper display mode. The illustration in the Visual Mapper topic in this chapter shows the Visual Mapper in tree mode. ◗ The source (“map from”) and destination (“map to”) files are displayed side-by-side, so you can quickly make the mapping GROUPs simply by clicking the items in the window. ◗ In tree mode the map is displayed in its columnar form, which you can collapse or expand so the fields or elements are hidden or displayed.
Fast-entry mode 	Displays a dialog box that enables you to enter the mapped element’s name and attributes in text boxes, so that you work with only those elements you need. **Comment** Optionally, you can specify labels to make a 1-to-1 mapping between the field or element that has the focus and the label you enter. If you know the destination or source label from the label column, you may move the focus to the field or element you want to map and then enter the label (for example, S1, S2, or D1, D2) of the item you want to associate with the field or element.

(Continued on next page)

Decision table

Use this decision table to consider the Visual Mapper display mode in which you want to work.

IF you...	THEN use...
Are new to mapping or you want to see the layout of the source and destination files and their components	Tree mode.
Are very familiar with the source and destination files and you know exactly which components you want to map	Fast-entry mode.
Need to make only a few map associations	Either mode.

Visual Mapper Mini-report

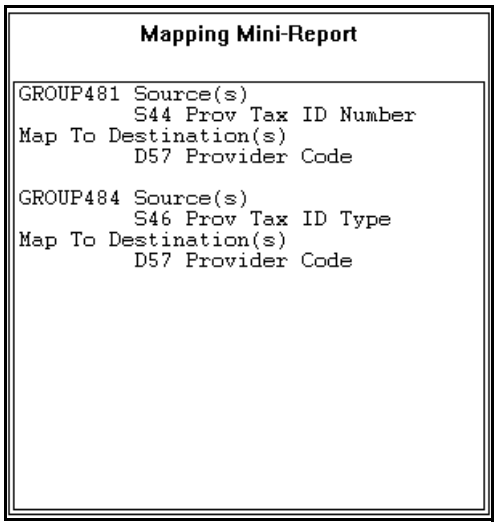
Introduction

The Visual Mapper Mini-Report displays map associations.

By comparing the Mini-Report to mapping GROUPs displayed in tree mode, you can evaluate the map associations in the GROUPs.

Sample Mini-Report

This illustration shows a sample Mapping Mini-Report.



Displaying the Mini-Report

Click the **Visual Mapper Mini-Report** button when you want to see the results of your work in the form of the Mini-Report as illustrated above.

Mapping Concepts

Introduction

To create and work with maps effectively, take a few minutes to become familiar with the concepts described in this section.

Mapping GROUPs

A mapping GROUP is an association between source and destination elements or fields. A mapping GROUP follows one of these patterns:

- One source item to one destination item (1-to-1 relationship)
- Several source items to one destination item (many-to-1 relationship)
- One source item to several destination items (1-to-many relationship)
- Several source items to several destination items (many-to-many relationship)
- No source item to one destination item (0-to1 relationship)

A mapping GROUP must contain at least one destination field or element.

Mapping multiple items

To easily map multiple items, select and mark them by double-clicking the left mouse button and then map them by clicking the right mouse button. You can then apply mapping instructions.

You can also mark items by selecting **Toggle Mark Item** from the Mark menu. You then map them by selecting **Group/New** from the Map Items menu.

Reference
See the Working with Mapping Instructions chapter in this guide for detailed information on including mapping instructions.

Required segments

For X12 standards, your map must contain the ST, CTT, and SE envelope segments. You are not required to map these segments, but they must be present in the standard or implementation guide. You can map the ST segment on an outbound map and the ST and SE segments on an inbound map.

Unmapped segments

The source side of the map must contain all records/segments that appear in the input data file. If Gentran:Server receives a segment not present in the source side of a map file, it issues an “Unexpected Segment” error. You can leave unmapped records/segments in your map if they do not relate to expected output data.

Procedures

How to Start a New Map

Introduction

Gentran:Server displays the New Map dialog box when you open the Visual Mapper to create a new map. You use this dialog box to specify the source and destination files you want to map.

Before you begin

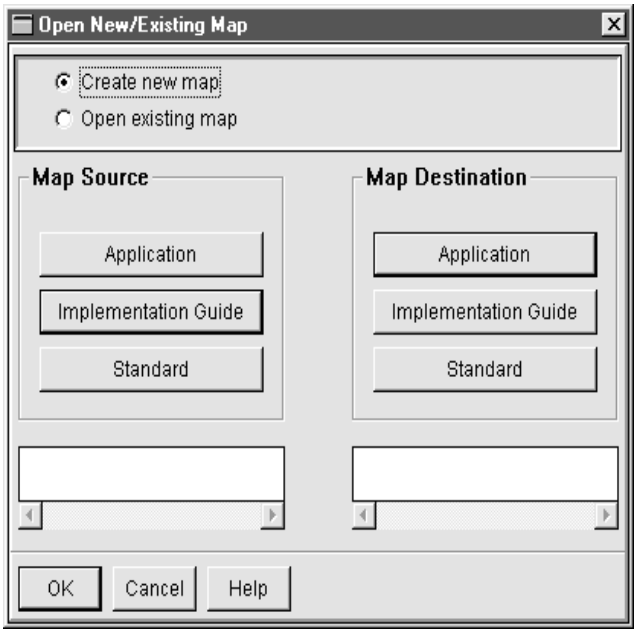
Before you begin mapping, modify the application description, standard, or implementation guide that you will use. To simplify the mapping procedure, remove unnecessary segments, elements, records, and fields.

References

See Mapping Concepts in this chapter and the chapters Defining Application Descriptions for ASCII Files, Defining Application Descriptions for Databases, and Creating an Implementation Guide or Standard in this guide for editing instructions.

New Map dialog box

This illustration shows the New Map dialog box.



(Continued on next page)

Selecting the source and destination files

Use this procedure to select the source and destination files for a new map.

Step	Action
1	Click **File** on the menu bar.
2	Click **New/Map** on the File menu. **System Response** Gentran:Server displays the New Map dialog box.
3	Click the type of source file: ◗ Application ◗ Implementation Guide ◗ Standard. **System Response** Gentran:Server displays a dialog box from which you can choose the file name. **Reference** If you want to create a new standard by copying an existing one, see the Creating a New Standard section in the Creating an Implementation Guide or Standard chapter for information about creating a new standard.
4	Select the file name of the source file. **System Response** The **New Map** dialog box displays the selected file name. **Note** Gentran:Server searches for the file in the directory specified in the **Setup Directories** dialog box for files of that type (application descriptions, implementation guide, or standards).
5	Click the type of destination file: ◗ Application ◗ Implementation Guide ◗ Standard. **System Response** Gentran:Server displays a dialog box from which you can choose the file name. (Continued on next page)

(Contd) Step	Action
6	Select the file name of the destination file. **System Response** The New Map dialog box displays the file name you select. **Note** Gentran:Server searches for the file in the directory specified in the **Setup Directories** dialog box for files of that type (application descriptions, implementation guide, or standards).
7	Click **OK**. **System Response** Gentran:Server creates the map and displays the Visual Mapper window (in tree mode) for the files you selected.
8	Tailor the source information, destination information, or both. **Reference** See How to Tailor Source or Destination Information in this chapter for instructions.

How to Tailor Source or Destination Information

Introduction

You may want to discard or delete segments and elements or records and fields that you are not going to map. You may also want to change the attributes of an element or field, such as the minimum or maximum field length.

You can use the Visual Mapper to make changes to the source information, destination information, or both. You can:

- Change only source or destination information in the map (without changing the source or destination file)
- Change only the source or destination file (without changing the map)
- Change both the source or destination file and source or destination information in the map.

Before you begin

When you edit a map, you can work only with active segments, elements, records, and fields. If you want to work with items you discarded, you must first activate and modify them with the Standard/IG Editor.

Reference
See the Creating an Implementation Guide or Standard chapter in this guide for instructions on editing maps.

If you want to change a map file

If you decide to change the map file, you need to determine whether a working map file exists. If a working map file does exist, you can edit it, compile it to create a working mapping table file, and then use the working mapping table file in a translation to test your changes. If the working mapping table file gives you the results you want, you can then replace the contents of the map file with the working map file.

Reference
See the *Gentran:Server for UNIX Getting Started Guide* or *Gentran:Server Workstation Getting Started Guide* for instructions on checking in working map files.

(Continued on next page)

Decision table

Use this decision table to decide how to edit the source or destination.

IF you want your changes to affect…	THEN edit…
Only the current map or working map	Only the map or working map (but not the source or destination file).
Only future maps	Only the source or destination file (but not the current map file).
Both the current map or working map and future maps	Both the map or working map and the source or destination file.

Editing only the map

Use this procedure to edit only the map or working map file.

Step	Action	
1	Click **File** on the menu bar.	
2	Click **Open** on the File menu.	
3	Click **Map** on the Open submenu.	
4	Use the table below to determine your next response.	
	IF you want to open…	**THEN click…**
	A map file	From Master
	A working map file	From Working
	System Response Gentran:Server then displays the File Open dialog box.	

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td colspan="2">Select the map file (.vmp) you want to edit.

Note
The Visual Mapper allows you to open only one map at a time. If another map is open, Visual Mapper closes it after prompting you to save recent changes.</td></tr>
<tr><td></td><td colspan="2">System Response
Gentran:Server Workstation</td></tr>
<tr><td></td><td>IF you open…</td><td>THEN Gentran:Server…</td></tr>
<tr><td></td><td>A map file, but a working map file exists</td><td>Informs you that a working file exists.

Click OK to open the working file</td></tr>
<tr><td></td><td>A working map file or a map file for which no working map file exists</td><td>Opens a working map file in the Visual Mapper</td></tr>
<tr><td></td><td colspan="2">Gentran:Server for UNIX</td></tr>
<tr><td></td><td>IF you open…</td><td>THEN Gentran:Server…</td></tr>
<tr><td></td><td>A map file, but a working map file exists</td><td>Opens the working map file.</td></tr>
<tr><td></td><td>A working map file or a map file for which no working map file exists</td><td>Prompts you to check out a working copy of the map or open for view only.

Click Working Copy and OK to open the working map file for editing.</td></tr>
<tr><td>6</td><td colspan="2">Make your changes, but do not save the changes in the editor.</td></tr>
<tr><td>7</td><td colspan="2">Click File on the menu bar.</td></tr>
<tr><td>8</td><td colspan="2">Click Close on the File menu.

System Response
The system closes the editor and returns to the Visual Mapper.</td></tr>
<tr><td>9</td><td colspan="2">Click File on the menu bar.</td></tr>
<tr><td>10</td><td colspan="2">Click Save on the File menu.</td></tr>
</table>

(Continued on next page)

(Contd) Step	Action	
11	Use this table to determine your next step.	
	IF you want to create the mapping associations…	**THEN continue with the topic…**
	With AutoMap	How to Create Mapping Associations with AutoMap in this chapter.
	Manually	How to Create Mapping Associations Manually in this chapter.

Editing only the source or destination file

Use this procedure to edit only the source or destination file. The file can be an application description or an implementation guide.

Step	Action
1	Click **File** on the menu bar.
2	Click **Open** on the File menu.
3	Click **Implementation Guide** or **Application Description**. **System Response** Gentran:Server (Client/Server product level and higher) displays a submenu for **Master Directory** or **Working Directory**. Click the appropriate item. Gentran:Server (Workstation product level) displays a list of available items.
4	Select the *.app* or *.ig* file you want to edit. **System Response** The correct editor opens and displays the selected *.app* or *.ig* file. (Continued on next page)

(Contd) Step	Action	
5	Click **Save** on the File menu. **Comment** These changes apply to future maps you create using the edited *.app* or *.ig*, but do not affect existing maps. **Reference** See the chapters Defining Application Descriptions for ASCII Files, Defining Application Descriptions for Databases and Creating an Implementation Guide or Standard in this guide for instructions.	
6	Click **Close** on the File menu.	
7	Use this table to determine your next step.	
	IF you want to create the mapping associations…	**THEN see the topic…**
	With AutoMap	How to Create Mapping Associations with AutoMap in this chapter.
	Manually	How to Create Mapping Associations with AutoMap in this chapter.

Editing both the map and the source or destination files

Use this procedure to edit the map file or working map file as well as the application description or implementation guide file.

Step	Action	
1	Click **File** on the menu bar.	
2	Click **Open** on the File menu.	
3	Click **Map** on the Open submenu.	
4	Use the table below to determine your next response.	
	IF you want to open…	**THEN click…**
	A map file	From Master
	A working map file	From Working
	System Response Gentran:Server then displays the **File Open** dialog box.	

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="5">5</td><td colspan="2">Select the map file (.vmp) you want to edit.

Note
The Visual Mapper allows you to open only one map at a time. If another map is open, Visual Mapper closes it after prompting you to save recent changes.</td></tr>
<tr><td colspan="2">System Response
Gentran:Server Workstation</td></tr>
<tr><td>IF you open…</td><td>THEN Gentran:Server…</td></tr>
<tr><td>A map file, but a working map file exists</td><td>Informs you that a working file exists.

Click OK to open the working file.</td></tr>
<tr><td>A working map file or a map file for which no working map file exists</td><td>Opens a working map file in the Visual Mapper.</td></tr>
<tr><td rowspan="4"></td><td colspan="2">Gentran:Server for UNIX</td></tr>
<tr><td>IF you open…</td><td>THEN Gentran:Server…</td></tr>
<tr><td>A map file, but a working map file exists</td><td>Opens the working map file.</td></tr>
<tr><td>A working map file or a map file for which no working map file exists</td><td>Prompts you to check out a working copy of the map or open for view only.

Click Working Copy and OK to open the working map file for editing.</td></tr>
<tr><td>6</td><td colspan="2">Open the appropriate editor by selecting the standard or application button.

System Response
The editor opens and displays the .app or .ig file for editing.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>7</td><td colspan="2">Using the editor, make your changes to the .app or .ig file.

System Response
The changes are made to the current map as well as the .app or .ig file

References
See the chapters Defining Application Descriptions for ASCII Files and Creating an Implementation Guide or Standard in this guide for editing instructions.</td></tr>
<tr><td>8</td><td colspan="2">Click Save on the File menu to save the changes in the .app or .ig.</td></tr>
<tr><td>9</td><td colspan="2">Click Close on the File menu to close the editor.</td></tr>
<tr><td>10</td><td colspan="2">Click Save on the File menu.

System Response

The system saves your changes in the .vmp.</td></tr>
<tr><td>11</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td></td><td>IF you want to create the mapping associations…</td><td>THEN see the topic…</td></tr>
<tr><td></td><td>With AutoMap</td><td>How to Create Mapping Associations with AutoMap in this chapter.</td></tr>
<tr><td></td><td>Manually</td><td>How to Create Mapping Associations Manually in this chapter.</td></tr>
</table>

How to Create Mapping Associations with AutoMap

Introduction

AutoMap provides a convenient method for creating a new map. It reads the source file, distills the elements that can be mapped to the destination document, and associates the items in the source and destination files.

When determining possible matches, AutoMap considers several criteria, including the following:

- Name of the field or element
- Name of the record or segment containing the item
- Loop structure.

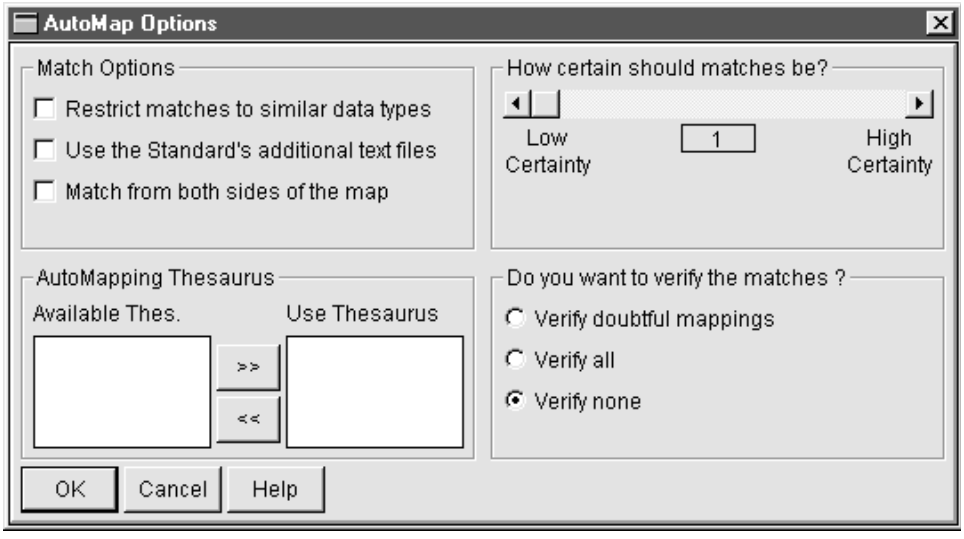
Before you begin

If you plan to use a thesaurus list, you must create the list prior to AutoMapping.

Reference
See the chapter Working with Synonym and Thesaurus Lists in this guide for instructions.

AutoMap Options dialog box

This illustration shows the AutoMap Options dialog box.



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AutoMap Options dialog box fields and functions

This table describes the fields and functions of the AutoMap Options dialog box.

Field	Function
Restrict matches to similar data types	Matches only if the data types are the same (matches AN to AN types, matches R to R types).
Use the Standard's additional text files	Include information from ancillary text files related to the Standard in use.
Match from both sides of the map	AutoMaps two times. Matches source items to destination items and then tries to match unmapped destinations to unmapped source items.
AutoMapping Thesaurus	Uses a thesaurus list to match items. Enables you to select the names of the thesaurus lists that you want Gentran:Server to use when AutoMapping the active map. **Reference** See the chapter Working with Synonym and Thesaurus Lists in this guide for information.
How certain should matches be?	Increases or decreases how exact a match the AutoMapper looks for. Low means a close match; high means the match must be exact.
Do you want to verify the matches?	Displays the following choices: ◗ Verify doubtful mappings ◗ Verify all ◗ Verify none

(Continued on next page)

Using AutoMap to create mapping associations

Use this procedure to create a map using the AutoMap feature.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>12</td><td colspan="2">Click AutoMap on the Map Items menu.

System Response
Gentran:Server displays the AutoMap Options dialog box.</td></tr>
<tr><td>13</td><td colspan="2">Use this decision table to determine which mapping options to use.</td></tr>
<tr><td></td><td>IF you want to…</td><td>THEN use…</td></tr>
<tr><td></td><td>Select one or more ways to match items</td><td>Match options.</td></tr>
<tr><td></td><td>Indicate the degree of certainty you require for matches</td><td>Certainty level.</td></tr>
<tr><td></td><td>Verify matches or suppress verification</td><td>Verify options.</td></tr>
<tr><td></td><td>Select the names of the thesaurus lists that you want Gentran:Server to use when AutoMapping the active map.

A thesaurus contains lists of element names Gentran:Server can use to match items.</td><td>AutoMapping Thesaurus.

Select the name of a thesaurus list in the Available Thes. list and click the Move to Right button (>>) to place the thesaurus in the Use Thesaurus list.

Reference
See the chapter Working with Synonym and Thesaurus Lists in this guide.</td></tr>
<tr><td></td><td colspan="2">Comment
The number of verifications during processing is directly related to the certainty threshold you specify: the more certainty you require the more times you will see the verification messages.

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
14	Click **OK**. **System Response** When the map is completed, Gentran:Server displays a report showing the percent of items mapped. Elements that were mapped display an M symbol. **Example** M 1 Provider Code M 2 Reference Number Qualifi M 3 Reference Number M 4 State or Province Code
15	Use the mini-report to check the results.  Click an element and then click the mini-report button to see its mapping GROUP listing.
16	Edit the map. **Reference** See the topic Editing Maps in this chapter for instructions.

How to Create Mapping Associations Manually

Introduction

Once you have created a new map by selecting the source and destination files, you can create the mapping associations. You can manually create the mapping associations in either tree mode or fast-entry mode.

WARNING

Do not map to control numbers.

Comment
You can use fast-entry mode to enter the source, the destination, or both.

Reference
See Visual Mapper for a discussion of tree mode vs. fast-entry mode.

Creating mapping associations in tree mode

Use this procedure to make a map in tree mode.

Step	Action
1	Mark the source and destination items you want to include in a mapping GROUP. **Marking** To mark items, double-click the source fields or elements and then double-click the destination fields or elements. You can work back and forth between the two sides of the window until you select all the items you want to include in the mapping GROUP. **CAUTION** **You cannot include records and segments in mapping GROUPs.**
2	Click the right mouse button to create the mapping GROUP. **System Response** The items in the mapping GROUP are designated with the M symbol. If the mapping GROUP contains more than two items, Gentran:Server displays the Mapping Instructions window. (Continued on next page)

(Contd) Step	Action
3	If necessary, assign mapping instructions to the mapping GROUPs. To assign mapping instructions to a mapping GROUP, click the **Mapping Instructions** button.  **Comments** ◗ If your mapping GROUP consists of only one source element or field and only one destination element or field, mapping instructions are optional. ◗ If the mapping GROUP contains more than two items, you must specify how Gentran:Server maps the elements or fields by assigning mapping instructions. **System Response** Gentran:Server displays the **Mapping Instructions** window. **Reference** See the Working with Mapping Instructions chapter in this guide for details.
4	Repeat Steps 1 through 3 until you have finished mapping source to destination items.
5	Display the mini-report to verify your map. **Reference** See Visual Mapper Display Modes in this chapter for details on displaying a mini-report.
6	Click **File** on the menu bar.
7	Click **Save** on the File menu to save the map. **System Response** Gentran:Server saves your file with the extension *.vmp*.
8	Edit the map. **Reference** See Editing Maps in this chapter for instructions.

(Continued on next page)

Creating a mapping association in fast-entry mode

Use this procedure to create mapping associations in fast-entry mode.

Step	Action
1	Display the fast-entry text boxes for the source and destination files. ◗ Click **Source/Fast Entry** on the Mode menu. ◗ Click **Destination/Fast Entry** on the Mode menu.
2	Use the fast-entry text boxes to enter information about the mapped items. **Navigational Information** Use the TAB key to move from one box to the next box and the SHIFT+TAB keys to move from one box to the previous box. **Option** To use item labels, click **Use LABELS**.
3	When you are finished, click ENTER to make the mapping GROUP.
4	Repeat Steps 2 and 3 until you finish mapping source to destination items.
5	Return to Tree mode.
6	If necessary, assign mapping instructions to the mapping GROUPs. To assign mapping instructions to a mapping GROUP, click the **Mapping Instructions** button.  **Comment** ◗ If your mapping GROUP consists of only one source element or field and only one destination element or field, mapping instructions are optional. ◗ If the mapping GROUP contains more than two items, you must specify how the elements or fields are to be mapped by assigning mapping instructions. **System Response** Gentran:Server displays the Mapping Instructions window. **Reference** See the Working with Mapping Instructions chapter in this guide for details. (Continued on next page)

(Contd) Step	Action
7	Display the mini-report to verify your map. **Reference** See Visual Mapper in this chapter for details on displaying a mini-report.
8	Click **File** on the menu bar.
9	Click **Save** or **Save As** on the File menu. **System Response** Gentran:Server saves your file with the extension *.vmp*.
10	Edit the map. **Reference** See Editing Maps in this chapter for instructions.

Editing Maps

Introduction

If the layout of your source file has changed, you need to update the Application Description in the map. If the map is not producing the results you want, you must change source or destination information in the map.

You can use the Visual Mapper to edit a map in several ways. You can:

- Edit source or destination information
- Edit source or destination files
- Edit mapping GROUPs
- Edit mapping instructions.

Where to go from here

Use this table to decide which procedure to follow next.

IF you want to edit...	THEN see the topic...
Source or destination information	How to Tailor Source or Destination Information in this chapter.
Mapping GROUPs	How to Edit Mapping GROUPs in this chapter.
Mapping Instructions	Working with Mapping Instructions in this guide.

How to Edit Mapping GROUPs

Introduction

You can use the Visual Mapper to change your mapping GROUPs. You can perform the following changes:

- Add a mapping GROUP
- Delete a mapping GROUP
- Add an item to a mapping GROUP
- Delete an item from a mapping GROUP.

Note
You must compile your map after editing and check in or approve the working file for the changes to take effect during translation.

Displaying the map

To display the map, follow this procedure.

Step	Action	
1	Click **File** on the menu bar.	
2	Click **Open** on the File menu.	
3	Click **Map** on the Open submenu.	
4	Use the table below to determine your next response.	
	IF you want to open…	**THEN click…**
	A map file	From Master
	A working map file	From Working
	System Response Gentran:Server then displays the **File Open** dialog box.	
5	Select the map file (*.vmp*) you want to edit. **Note** The Visual Mapper allows you to open only one map at a time. If another map is open, Visual Mapper closes it after prompting you to save recent changes.	

(Continued on next page)

(Contd) Step	Action	
	System Response Gentran:Server Workstation	
	IF you open…	**THEN Gentran:Server…**
	A map file, but a working map file exists	Informs you that a working file exists. Click **OK** to open the working file
	A working map file or a map file for which no working map file exists	Opens a working map file in the Visual Mapper
	Gentran:Server for UNIX	
	IF you open…	**THEN Gentran:Server…**
	A map file, but a working map file exists	Opens the working map file.
	A working map file or a map file for which no working map file exists	Prompts you to check out a working copy of the map or open for view only. Click **Working Copy** and **OK** to open the working map file for editing.

Adding a mapping GROUP

Use this procedure to add a mapping GROUP.

Step	Action
1	In the source and destination descriptions, double-click the fields or elements you want to include in the mapping GROUP.
2	Click **Make GROUP** on the Map Items menu.

(Continued on next page)

Deleting a mapping GROUP

Use this procedure to delete a mapping GROUP.

Step	Action
1	Examine the map mini-report to find the mapping GROUP that you want to delete.
2	Click the mapping GROUP number you want to delete.
3	Click **Map Items** on the menu bar.
4	Click **Group/Delete** on the Map Items menu. **System Response** Gentran:Server displays a confirmation prompt. **Note** Deleting a mapping GROUP removes the map association; it does not delete the source or destination fields or elements.
5	Click **YES** to confirm the deletion.

Adding an item to a mapping GROUP

Use this procedure to add a field or element to a mapping GROUP.

Step	Action
1	Examine the map mini-report to find the mapping GROUP to which you want to add an item.
2	Click the mapping GROUP.
3	Click **Map Items** on the menu bar.
4	Click **Group/Add Item to GROUP** on the Map Items menu. **System Response** Gentran:Server displays the Add Item to GROUP dialog box.
5	Type the label of the item you want to add and click **OK**.

(Continued on next page)

Deleting an item from a mapping GROUP

Use this procedure to delete a field or element from a mapping GROUP.

Step	Action
1	Click the item you want to delete from a GROUP.
2	Display the mini-report, then click the item in the mini-report.
3	Click **Map Items** on the menu bar.
4	Click **Group/Ungroup** on the Map Items menu. **System Response** Gentran:Server prompts you to confirm the deletion. **Note** Deleting an item from a mapping GROUP removes it from the map association; it does not delete the source or destination field or element.

Recompiling

You must recompile the map any time you make changes to it.

Reference
See Compiling Maps in this chapter for instructions.

Compiling Maps

Introduction

After you create and edit a map, you must compile it before using it to translate data. When you change a map, you must also save and recompile it.

Map files and mapping tables

When you create a map, Gentran:Server creates a map file (*.vmp*). When you compile the map, Gentran:Server creates a Mapping Table (*.TBL*). Gentran:Server uses only the mapping table file during data translation.

When you make changes to the map, Gentran:Server updates only the *.vmp* file. You must recompile in order to update the *.TBL* file.

Working map files and mapping table files

When you compile a map, Gentran:Server creates a working mapping table file (*<mapname>.TBL*) in the working *.TBL* directory.

You should test the working *.TBL* file to be sure it works as intended. When you know the working mapping table is correct, you can replace both the original map file and mapping table file with the working versions.

Reference
See the *Gentran:Server for UNIX Getting Started Guide* or *Gentran:Server Workstation Getting Started Guide* for information.

Choosing to compile for Windows or UNIX platforms

You can compile maps for either Windows or UNIX. If you have both Windows and UNIX versions of Gentran:Server, you can create maps on one platform and compile them for use in translation on the other platform. The list in the **Compile Map** dialog box enables you to choose the platform for which to compile the map.

Use these guidelines when you have a platform choice:

- Compile maps for the platform on which you intend to translate, not the platform used to edit the maps
- You must move the map file or working map file and then compile the map on the destination platform.

(Continued on next page)

How the compiler orders mapping instructions

The map compiler sorts mapping instructions and places them into a default order. This table describes the compiler's sorting process.

Stage	Description
1	The compiler lists all mapping instructions sequentially, starting with the first record/segment and ending with the last record/segment.
2	The compiler looks at the mapping instructions for each source record/segment and arranges them in the order in which to execute them during translation. **Ordering criteria** The compiler uses the following criteria to order the mapping instructions for each source record/segment: ◗ The group number, lowest to highest ◗ The mapping instruction screen order, last to first ◗ Within a mapping instruction screen, the order in which the mapping instructions were encountered ◗ The order of the items in the source record/segment. **Note** If a mapping instruction spans multiple records, the mapping instruction for the first record is not executed until it receives all its source items.

Comment
A map created on versions of Gentran:Server prior to version 1.5 may be executed differently under this version.

Two methods

There are two ways to compile maps:

- Compile the open map from inside the Visual Mapper
- Compile multiple closed maps from the Gentran:Server main window.

(Continued on next page)

Where to go from here

Use this table to decide which procedure to follow next.

IF you want to compile...	THEN see the topic...
Only the open map	How to Compile the Open Map in this chapter.
One or more closed maps	How to Compile Closed Maps in this chapter.

How to Compile the Open Map

Introduction

You can compile the open map from the Visual Mapper.

Compiling the open map

Use this procedure to compile the open map.

Step	Action	
1	Click **File** on the menu bar.	
2	Click **Save** on the File menu to save changes to the map.	
3	Use this table to decide how to compile.	
	IF you want to...	**THEN...**
	Choose the platform	a) Click **Compile Maps** on the File menu to display the Compile Visual Map dialog box. b) Select the platform from the **Compile for platform** list. c) Click **OK**.
	Use the platform set in preferences	Click the **Compile** button on the Visual Mapper toolbar.
	System Response The **Compiler Messages** window opens and displays status, warning, and error messages about the compilation.	
4	Click **OK** to close the **Compiler Messages** window.	

How to Compile Closed Maps

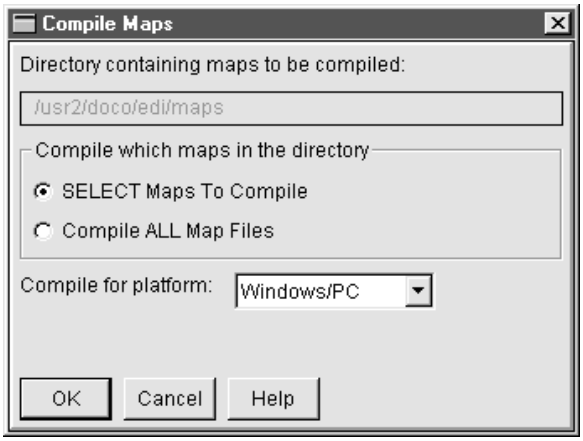
Introduction

You can compile single or multiple closed maps from the Gentran:Server main window. You can compile:

- All maps in a specified directory
- Only the maps you specify.

The Compile Maps dialog box

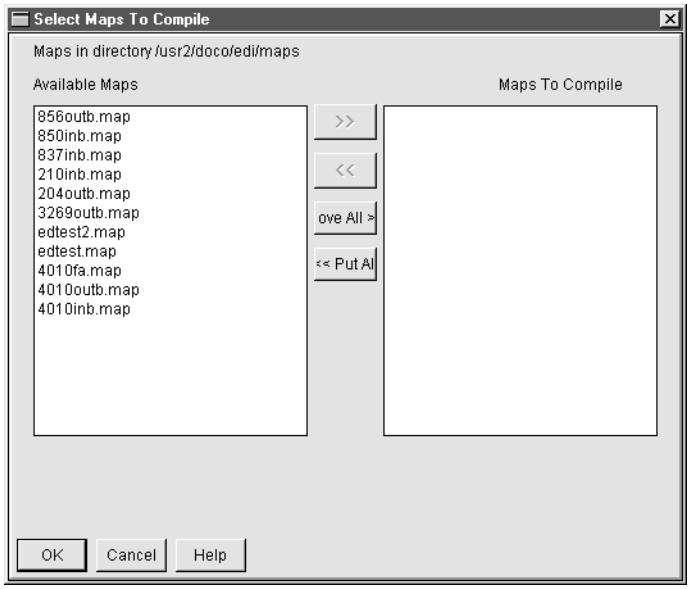
This illustration shows the Compile Maps dialog box.



(Continued on next page)

The Select Maps to Compile dialog box

This illustration shows an example of the Select Maps To Compile dialog box.



Compiling closed maps

Use this procedure to compile closed maps.

Step	Action
1	Click **Compile Maps** on the Translate menu. **System Response** Gentran:Server displays the Compile Visual Maps dialog box.
2	Select a compiling option to indicate whether you want to compile all map files in the specified directory or only ones you select: ◗ **SELECT Maps To Compile** ◗ **Compile ALL Map Files**
3	From the **Compile for platform** drop-down list, select the platform on which you intend to translate data.
4	Click **OK**. **System Response** The system displays the Select Maps To Compile dialog box. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td colspan="2">Did you select the SELECT Maps To Compile option in Step 2?
◗ If YES, continue with the next step.
◗ If NO, (you selected the Compile ALL Map Files option), Gentran:Server starts compiling the maps. GO TO Step 8.</td></tr>
<tr><td>6</td><td colspan="2">Move the maps you want to compile from the Available Maps column to the Maps to Compile column.</td></tr>
<tr><td></td><td>IF you want to...</td><td>THEN Click...</td></tr>
<tr><td></td><td>Select individual maps</td><td>The maps in the Available Maps column and then click the (>>) button.</td></tr>
<tr><td></td><td>Deselect individual maps</td><td>The maps in the Maps to Compile column and then click the (<<) button.</td></tr>
<tr><td></td><td>Select all maps</td><td>Select All.</td></tr>
<tr><td></td><td>Deselect all maps</td><td>Put All.</td></tr>
<tr><td>7</td><td colspan="2">Click OK.
System Response
The system opens the Compiler Messages window. This window displays status, warning, and error messages about the compilation.</td></tr>
<tr><td>8</td><td colspan="2">Do you want to print the messages in the Compiler Messages window?
◗ If YES, click Print.
◗ If NO, continue with the next step.</td></tr>
<tr><td>9</td><td colspan="2">Click OK to close the Compiler Messages window.</td></tr>
</table>

How to Delete Maps

Introduction

Gentran:Server enables you to delete the map files or working map files you are no longer using.

CAUTION

When you delete a map, Gentran:Server deletes all files comprising the map; the corresponding *.vmp*, *.TBL*, *.idx*, and *.dat* files.

Deleting maps

Use this procedure to delete maps.

Step	Action
1	Click **File** on the menu bar.
2	Click **Delete/Map** on the File menu. **System Response** Gentran:Server displays the File Delete dialog box.
3	From the scroll list, select the name of the map file or working map file you want to delete. **System Response** Gentran:Server displays the file name in the **File Name** text box.
4	Click **Open**. **System Response** Gentran:Server displays a confirmation prompt.
5	Click **Yes** to confirm that you want to delete the file. **System Response** Gentran:Server deletes the following files: ◗ <mapname>.vmp ◗ <*mapname*>*.TBL* (if you have compiled the map) ◗ <*mapname*>*.idx* and <*mapname*>*.dat* files (which contain specific synonym lists, if any).

How to Print a Mapping Report

Introduction

A mapping report provides a printed report that describes how a map was built, and what its source and destination links consist of. Accessed through the Visual Mapper, mapping reports are most useful to troubleshoot incorrect mapping.

Types of mapping reports

The two types of mapping reports are the Mapping Report and the Macros Report. Both types allow users to easily view information contained within a map.

Mapping Report

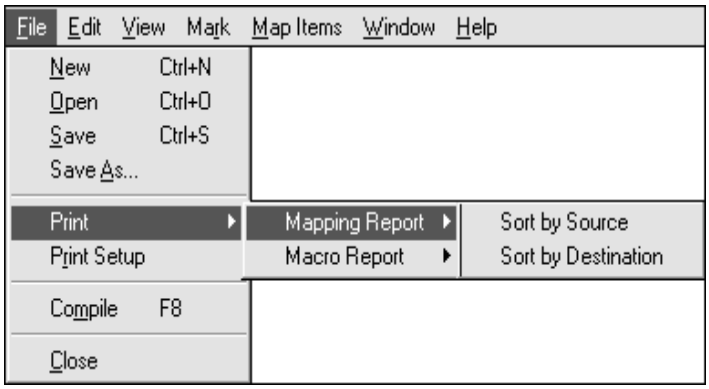
A Mapping Report displays all mapping information. Used more commonly than the Macros Report, a Mapping Report contains information sorted by source or destination and is arranged by field or element headings.

Macros Report

A Macros Report displays mapping information including macros. This report also allows a user to choose to print mapping instructions and discarded items in addition to mapped items.

Print menu diagram

This is an illustration of the Gentran:Server Workstation Print menu. You print both types of mapping reports from this menu.



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Printing a mapping report

Use this procedure to print a mapping report.

Step	Action
1	Open the map you want to print.
2	Click **File** on the menu bar.
3	Click **Print** on the File menu. **System Response** The Print menu displays the following submenus: 
4	Indicate whether you want to print a Mapping Report or a Macros Report.

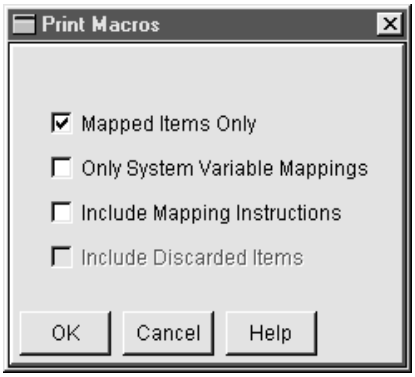
IF you want to print a...	THEN click...
Mapping Report	**Mapping Report**.
Macros Report	**Macros Report**.

System Response
The system displays the **Sort By...** submenu.

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>5</td><td>Indicate whether you want the Mapping Report ordered by source or by destination.
 

<table><tr><th>IF you want to sort the report by...</th><th>THEN Click...</th></tr><tr><td>Source items</td><td>Sort by Source.</td></tr><tr><td>Destination items</td><td>Sort by Destination.</td></tr></table>System Response
If you are printing the Mapping report, Gentran:Server sends the Mapping Report to the default printer and the process is complete.

If you are printing the Macro report, Gentran:Server displays the Print Macros Report dialog box. Continue with Step 6.</td></tr>
<tr><td>6</td><td>From the Print Macros dialog box, select your printing preferences for a Macros Report.
 

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action	
	IF you want to print the...	**THEN Select...**
	Mapped items only	**Mapped Items Only**. **Note** The **Include Discard** option is unavailable if you select **Mapped Items Only**.
	System Variable Mapping items only	**Only System Variable Mappings**. **Note** All other options are unavailable if you select **Only System Variable Mappings**.
	Mapping instructions and the mapped items	**Include Mapping Instructions**.
	Discarded items and the mapped items	**Include Discarded Items**. **Note** The **Include Discarded Items** option is unavailable if you select **Mapped Items Only**.
6	Click **OK**. **System Response** Gentran:Server sends the Macros Report to the default printer.	

(Continued on next page)

Mapping Report fields and functions

This table describes the fields and functions used in a Mapping Report.

Field	Function
DESCRIPTION	Describes the segment/element.
DEST	Indicates a destination item.
FORMAT	Describes the field format.
LEN	Indicates the length of the destination field.
LOOP	Indicates the record ID of the segment positioned at the head of the loop.
M	Indicates whether the record is mandatory (M), optional (O), conditional (C), floating (F), or relational (X).
MAX	Indicates the maximum length of the source field.
MAX U	Indicates the maximum number of times the record can occur within the map (sorted by source). **Note** If the record is positioned at the head of a loop, MAX U indicates the number of times the loop can occur.
MIN	Indicates the minimum length of the source field.
NAME	Indicates the name of the record.
Rec/Fld	Indicates that the record name and field number is part of an application description.
SRC	Indicates a source item.
Seg/Elem	Indicates the segment name and element sequence number is part of an implementation guide.
SEQ	Indicates the application record sequence number.
START	Indicates the character position that the destination field data starts at within the record.
TYP	Indicates the type of data.

(Continued on next page)

Mapping Report example

This diagram illustrates a portion of a Mapping Report.

Note

This report is sorted by the identified field labels (Seg/Elem or Rec/Fld) on the left side of the report.

```
SEQ   M REC ID           LOOP     MAX U DESCRIPTION
SEQ   M REC ID           LOOP     MAX U DESCRIPTION
  SEQ M Seg/Elem SRC TYP FORMAT MIN MAX NAME                    SEQ   M Rec/Fld  DEST  NAME
0001  M ST                           1 Carrier Details
 0001 M ST:1     S1  ID  LK       3   3 TRANSACTION    SET ID
 0001 M ST:2     S2  AN  LK       4   9 TRANS SET   CONTROL NO

0002  M B3                           1 Beginning Segment For
 0002 O B3:1     S4  ID  LK       3   3 TRANSACTION    SET ID    0002 O B3:2     D6    TRANSLATION
                                        MAP S4 TO D6

 0002 M B3:2     S5  AN  LK       1  22 INVOICE       NUMBER     0002 M B3:3     D7    INVOICE
                                        MAP S5 TO D7

 0002 C B3:3     S6  AN  LK       1  30 SHIPMENT ID NUMBER (SID) 0002 C B3:4     D8    SHIPMENT ID
```

Macros Report example

This diagram illustrates a portion of a Macros Report.

Note

This report is sorted by source, as indicated by item S306 in bold type. Macros are referenced to GROUP275.

```
_____________________________________________________________
S306    SE : 002  - TRANS SET    CONTROL NO

    D346    SE : 002  - TRANS SET    CONTROL NO   GROUP398

              MAP S306 TO D43
_____________________________________________________________
************************************************************
Macros for the map:
_____________________________________________________________

     Macros     in GROUP275

        M1
        [  portion of text S4 starting at position 1 for 4 characters ; ]
```

CHAPTER
9

Working with Mapping Instructions

Contents

Mapping Instructions Basics

Overview

Introduction

You can create custom mapping instructions to have Gentran:Server perform special operations on data during translation.

You enter these instructions on the Mapping Instructions dialog box.

Key terms

This table lists the key terms used in this chapter.

Term	Description
alphanumeric expression	An expression that results in alphanumeric data. Also called a string expression.
arithmetic expression	An expression that results in numeric data.
AutoMap	The Gentran:Server feature that compares specified source and destination files and maps items between them based on criteria such as field or element name, record or segment name, and loop structure.
conditional expression	A complete WHEN expression that may be part of a longer condition.
logical expression	An expression that results in a logical value; either false (=0) or true (not=0).
macro	A collection of commands used within Gentran:Server to simplify and organize mapping instructions.
Map File	The *<mapname>.vmp* file containing a defined map.
mapping association	The process of associating data fields or elements in your source document to corresponding data fields or elements in your destination document.

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(Contd) Term	Description
mapping condition	Qualifying term used in some mapping instructions to indicate when the mapping part of the instruction should be performed and when it should be ignored. Mapping conditions begin with WHEN.
mapping expression	A complete “Map to” expression that may be part of a longer mapping instruction.
mapping GROUP	A specific mapping association between source and destination data.
mapping instruction	A set of information that controls special operations on mapped data during translation.
Visual Mapper	The Gentran:Server window on which you create a map. The Visual Mapper displays the source document on the left side of the window and the destination document on the right.

Basic concepts

Keep in mind the following basic concepts.

- Each mapping GROUP can have many mapping instructions.
- Each mapping instruction must contain a mapping expression. It may contain a conditional expression. Both the mapping expression and the conditional expression may contain one or more macros (collections of commands).
- Depending on the kind of operator and values used, the result of an expression can be a numeric value, an alphanumeric string, or a comparison of two items (a true or false evaluation).
- You can also create macros to simplify and organize mapping instructions.

Reference
See the How to Create Macros topic in this chapter for more information on creating and using macros.

(Continued on next page)

Mapping instruction types

This table lists the types of mapping instructions.

Mapping instruction type	Description
condition	Controls when the mapping instruction is applied.
substitution	Replaces a value in the source field or element with another value (synonym).
evaluated expression	Evaluates any valid set of operators, variables, numbers, strings, and/or functions that Gentran:Server can reduce to a single result.

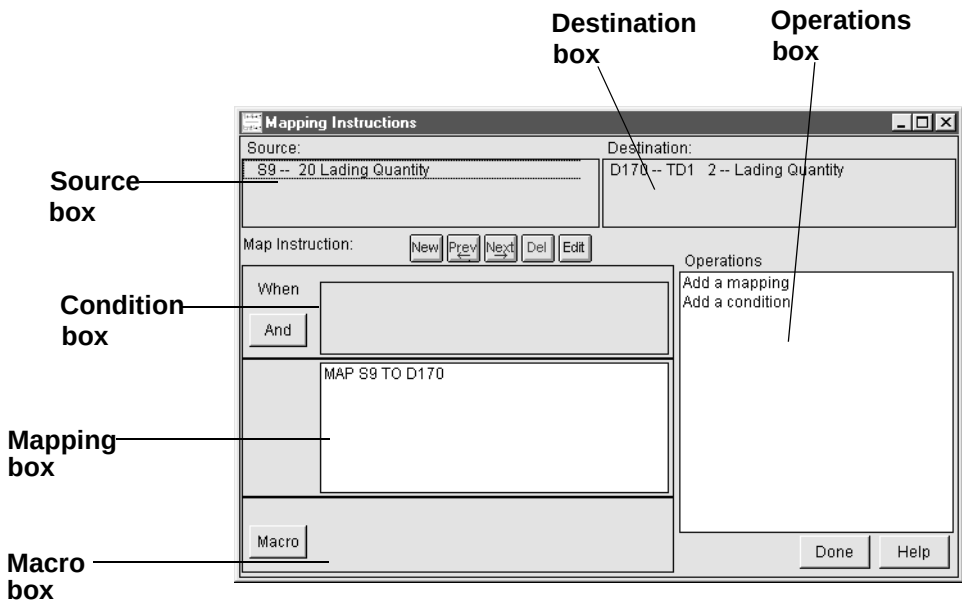
Mapping Instructions Dialog Box

Introduction

The Gentran:Server Mapping Instructions dialog box has everything you need to create mapping instructions for the mapping GROUPs you select.

Mapping Instructions dialog box

This illustration shows the Mapping Instructions dialog box.



Mapping Instructions dialog box fields and functions

This table describes the fields and functions of the Mapping Instructions dialog box.

Field	Function
Source box	Lists the source items in the GROUP.
Destination box	Lists the destination items in the GROUP. **Comment** The source and destination lists indicate the items by label rather than name or ID. They are not in any particular order. (Continued on next page)

(Contd) Field	Function
Mapping Instruction buttons	Activate special features for the mapping instructions. See the next topic for more information.
Condition box	Serves as a place for constructing conditions.
Mapping box	Servers as a place for constructing and displaying mapping instructions for the current mapping GROUP.
Macro box	Serves as a place for constructing a macro. This area is active only when you click **Macro**.
Operations box	Lists operations available in valid syntax. You can select items from the operations lists to enter the mapping instructions. **Reference** See the Using Operators topic in the Mapping chapter of this guide for a list of operators and descriptions of their use.

Mapping Instructions push-buttons

This table describes the Mapping Instructions buttons available.

Button	Function
	Makes a new mapping screen.
	Accesses the previous mapping screen for the GROUP.
	Accesses the next mapping screen for the GROUP.

(Continued on next page)

Button	Function
	Deletes the currently displayed mapping instruction. **Note** ◗ To delete an individual conditional expression, a mapping expression, or a macro, select it and press DELETE. ◗ To delete a part of an expression or macro, click the **Edit** button to go into edit mode, select the part to delete, and press DELETE.
	Permits editing of the current condition or expression.

Opening the Mapping Instructions dialog box

The Mapping Instructions dialog box opens automatically whenever you create a mapping GROUP that contains more that two items. If you want to assign mapping instructions to a one-item mapping GROUP, you can click the Mapping Instructions (MI) button while the focus is on the source item.

Standard and expert entry modes

Gentran:Server provides two levels of proficiency (standard and expert) for working with mapping instructions. You set the mode in the Preferences option of the Settings menu.

- The **standard mode** is the default entry mode. You select statements and values from lists that the Mapping Instructions dialog box displays. This helps ensure that the syntax is correct and that the instructions are meaningful.
- When you work in **expert mode**, you type instructions directly into dialog boxes. You have at hand more extensive expressions and a more powerful syntax, but the potential for making errors is greater.

Comment
If you create a mapping GROUP in expert mode, Gentran:Server automatically places you in expert mode when you begin editing the mapping GROUP.

Rules for Mapping Instructions

Introduction

When including instructions with a mapping GROUP, consider this list of rules.

These rules are assigned to the following categories:

- General rules
- Conditional expressions
- Operations
- Characters
- Macros.

Comment
We recommend that you read all of the rules before you begin creating mapping instructions and refer to them as necessary.

General rules

This section lists some general rules for creating mapping instructions:

- A mapping GROUP can have multiple mapping instructions.
- A mapping instruction can have one or more mapping expressions.
- A mapping expression can contain more than one destination item.
- A single map can contain up to 1,000 system variables.
- A mapping expression can contain more than one source item.

Conditional expressions

This section lists rules that apply to the use of conditional expressions in mapping instructions:

- A mapping instruction can multiple conditional expressions or none at all.
- You can link multiple conditional expressions by ANDs or ORs within the same mapping instruction.
- Gentran:Server completes the parts of a conditional expression enclosed in parentheses first.
- The AND or OR button determines whether multiple conditional expressions are linked by an AND or an OR (click the appropriate button to change from AND to OR or vice versa).
- In expert mode, there can be conditions linked by both ANDs or ORs within the conditional expression.

(Continued on next page)

- In a conditional expression or a mapping expression, Gentran:Server executes all zero-argument or one-argument operations first.
- In a conditional expression or a mapping expression, Gentran:Server executes all two-argument operations after it executes all zero-argument or one-argument operations.
- In a conditional expression or a mapping expression, Gentran:Server executes all other operations after it executes all zero-argument or one-argument operations and two-argument operations.

Comment

The order of execution stated above is the default sort order. You can use the Sorting Utility if you want Gentran:Server to execute the instructions in a different order.

Reference

See the Troubleshooting Mapping Instructions topic in this guide more information about sorting instructions.

Operations

These rules apply to the use of operations in mapping instructions:

- Within the same priority level, multiplication (*) and division (/) operations have a higher priority than addition (+) and subtraction (-) operations.
- Enclose the parts of the expression you want Gentran:Server to execute first in parentheses.
- When two or more mapping expressions use the Sum Over Loop mapping operator and have the same destination, enclose each mapping expression in a separate mapping instruction.
- When two or more mapping instructions with the Sum Over Loop mapping operator have the same destination, Gentran:Server creates a copy of the segment containing the element that receives the sum.
- In expert mode, you can nest all operations as long as the data type returned by the inner operation matches the data type of the argument of the outer operation.

Characters

These rules apply to the use of characters in mapping instructions:

- The maximum length of a single conditional expression, mapping expression, or macro is 499 characters.

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- The following characters are invalid as part of a text string, a synonym list name, a system variable name, and in a mapping expression, a condition, or a macro:
  - Backslash (\)
  - Double quotes (")
  - Single quotes (')
- The following characters are invalid as part of a number or other value in a mapping expression, a condition, or a macro:
  - Backslash (\)
  - Double quotes (")
  - Single quotes (')
  - Pound sign (#)
  - Percent sign (%)
  - Ampersand (&)
  - Apostrophe (')
  - Comma (,)
  - Parentheses (( ))
  - Tilde (~)

Macros

These rules apply to the use of macros in mapping instructions:

- Mapping instructions and conditions can both use macros.
- Macros cannot include any destination label.
- Macros cannot include the commands MAP or MAP TO.
- Only one mapping GROUP can use a specific macro (although you can redefine the same action in macros in two or more mapping GROUPs).
- Two or more mapping expressions or conditional expressions in the same mapping instruction can use the same macro.
- A mapping GROUP can use up to 99 macros.

Instruction Options (Standard Mode)

Introduction

In standard mode, you select statements and values from lists that the Mapping Instructions dialog box displays.

Instruction options table

Use this table to determine which mapping instructions to use.

Use this instruction...	To perform this action...
conditional operations	Describe the conditions under which the mapping(s) apply.
arithmetic operations	Specify one of several mathematical operations.
string operations	Specify one of several character operations.
enter destination	Specify the destination field or element by clicking on the appropriate label. (Labels for destination items begin with ‘D’.)
enter source	Specify the source field or element by clicking on the appropriate label. (Labels for source items begin with ‘S’.)
enter macro	Specify the desired macro by clicking it in the displayed list.
enter name	Open a dialog box into which you type a synonym list name.
enter number	Open a text box into which you type an integer or decimal number.
enter system variable name	Open a text box into which you type the name of a system variable. Naming the system variable automatically creates it.
enter text	Open a text box into which you type characters.

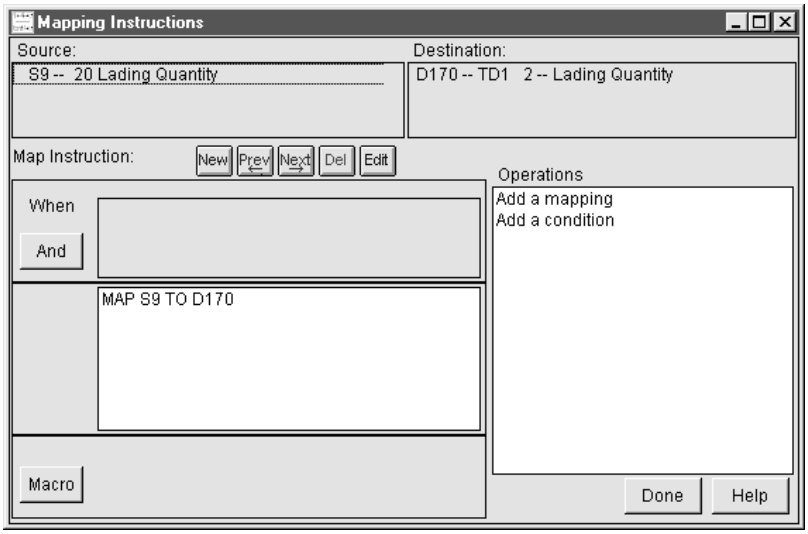
Mapping Instruction Examples

Introduction

This section contains illustrations that show you how Gentran:Server displays mapping instructions and two examples of using mapping instructions to control data translation.

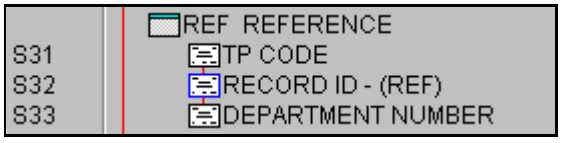
Example illustration

This illustration shows sample mapping instructions as they appear in the Mapping Instructions dialog box.

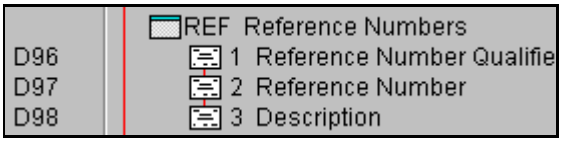


Example 1

In this example, assume you have an application that contains the following record:



You want to map that information to the elements in the following segment in an X12 2040 810 document (invoice):



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You use this map to invoice two different trading partners, and you have a list of department numbers and names (descriptions) for each trading partner, listed by Trading Partnership Code.

TP Code (S31)	Department Number (S33)	Department Name (D98)
SellMore810	10	Accounting
	20	Finance
AlsWows810	9	Accounts Payable
	10	Treasurers Office

Therefore, the mapping GROUP consists of S31, S33, D96, D97, and D98. These are the labels of the fields or elements in the mapping GROUP. The map displays labels to the left of each field or element name. The mapping instructions are:

Mapping instruction	Description
MAP 'DP' TO D96	Defines the Reference Number Qualifier as DP, since this is the code for Department Number used in this element in the 2040 standards. This is not part of the data.
MAP S33 TO D97	Maps the Department Number to the Reference Number.
WHEN S31 equals 'SellMore810' And S33 = 10, MAP 'Accounting' to D98 WHEN S31 equals 'SellMore810' And S33 = 20, MAP 'Finance' to D98	Specifies the correct description for the department number when the Trading Partnership Code is ‘SellMore810’. These mapping instructions define the correct information. Although the user knows this information, it is not in the data.
WHEN S31 equals 'AlsWows810' And S33 = 9, MAP 'Accounts Payable' to D98 WHEN S31 equals 'AlsWows810' And S33 = 10, MAP 'Treasurers Office' to D98	Specifies the correct description for the department when the Trading Partnership Code is ‘AlsWows810’. These mapping instructions define the correct information. Although the user knows this information, it is not in the data.

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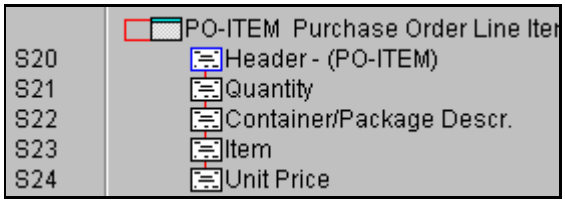
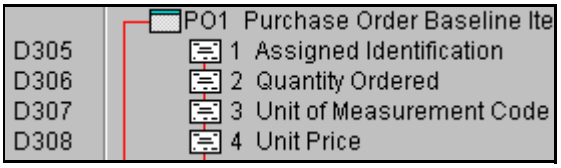
Example 2

In this example, assume you have an application that contains the following record:



You want to map the Quantity field to the Quantity Ordered element. You also want to use the data in the Unit Price field to map the correct value to the Unit Price element in the following segment in an X12 2010 850 document (purchase order):



Mapping the Unit Price value is not as simple as it seems. The seller gives a 10% discount to customers if they buy over 1000 of any particular product. Therefore, the correct unit price for any particular product depends upon the quantity ordered.

The mapping GROUP consists of S21, S24, D306, and D308. The mapping instructions are:

Mapping instructions	Description
MAP S21 TO D306	Maps the Quantity field value to the Quantity Ordered element.
WHEN S21 < 1000, MAP S24 TO D308	Maps the Unit Price field value to the Unit Price element for products ordered in quantities of less than 1000.
WHEN S21 >= 1000, MAP (S24*.90) TO D308	Multiplies the Unit Price field value by .90 (100% - 10%) and maps that value to the Unit Price element for products ordered in quantities of 1000 or more.

System Variables in Mapping Instructions

Introduction

You can use the mapping operator Enter System Variable Name to create your own system variables for use in Gentran:Server and to map to or from them. This option is available in both standard and expert mode.

When you might use system variables

You can use system variables for calculations to increment or combine values. System variables also provide a method for storing data for later or repeated use. This reserves a place in memory to store data that Gentran:Server will use when translating the transaction set.

Example

You may want to save a value received in the first iteration of a loop and use it after other iterations of the loop are complete.

```
WHEN $VARA = 1 MAP $VARA TO $VARB
```

How system variables are created

When you are in standard mode and select the Enter System Variable Name operator, the **Enter System Variable Name** dialog box opens. You then enter the desired variable name and click **OK**.

How system variable values are assigned

You automatically create the system variable when you map or assign a value to it. The system variable retains the value you assign until you change it or the map ends. Each time Gentran:Server begins to translate using a new map, it resets the values of the system variables to null.

The new value overwrites any previous value for the system variable(s). You must use a condition referring to one or more source items if the mapping statement does not include one.

System variable name

You assign the variable name. It must be from two to twenty alphanumeric characters (including the dollar sign).

(Continued on next page)

Dollar sign ($) marks a system variable

A dollar sign ($) precedes the variable name to identify it as a system variable. When creating mapping instructions in standard mode, Gentran:Server automatically adds this dollar sign when you enter the name of the system variable. In expert mode, however, you must remember to type the dollar sign just before the variable name with no intervening spaces.

Sort Mapping Instructions Utility

Introduction

You can use the Sort Mapping Instructions Utility to view and change the order in which Gentran:Server executes mapping instructions set for source records or segments.

When to use the Sort Mapping Instructions Utility

You can use the Sort Mapping Instructions Utility when:

- You need to learn the current order of the mapping instructions for the items in a particular record or segment.
- The mapping instructions in the map use one or more system variables.
- The Diagnostics Report indicates that you need to change the order of the mapping instructions.

Reference
Refer to the chapter Troubleshooting Mapping Instructions in this guide for detailed instructions on using the Diagnostics Report and the Sort Mapping Instructions Utility.

The Default Sort Order

During translation, Gentran:Server executes mapping instructions in the order set during map compilation.

The map compiler first lists all mapping instructions for the first record or segment, then lists all mapping instructions for the next record or segment and so on, until it lists all records or segments.

The map compiler next looks at the mapping instructions for each source record or segment and arranges them in the order in which it will execute them during translation. The map compiler uses the following criteria to order the mapping instructions:

- The group number, lowest to highest
- The mapping instruction screen order, last to first
- Within each mapping instruction screen, the order in which the mapping instructions were encountered
- The order of the items in the source record or segment.

Note
If a mapping instruction spans multiple records, the mapping instruction for the first record is not executed until all source items are received.

Mapping Operators

Using Operators

Introduction

Operators are symbols that denote mathematical operations. These are useful tools for creating special mapping instructions for Gentran:Server to use during translation.

This chapter contains descriptions, explanations, and examples of each operator you can use to complete mapping instructions and statements in Gentran:Server.

The Operators

Use this table to learn more about operators that you can use in Gentran:Server mapping instructions and statements.

Notes

- You can use a system variable in place of a source field or element.
- Shading indicates that the operator is available only in expert mode.

Use this operator...	To perform this action...
+	Add two numbers or values. EXP1 + EXP2 Where: EXP1=Either a source field or element of numeric data type or an arithmetic expression EXP2=Either a source field or element of numeric data type or an arithmetic expression
/	Divide two numbers or values. EXP1 / EXP2 Where: EXP1=Either a source field or element of numeric data type or an arithmetic expression EXP2=Either a source field or element of numeric data type or an arithmetic expression (Continued on next page)

Use this operator...	(Contd) To perform this action...
-	Determine the difference between two numbers or values. EXP1 - EXP2 Where: EXP1=Either a source field or element of numeric data type or an arithmetic expression EXP2=Either a source field or element of numeric data type or an arithmetic expression
*	Multiply two numbers or values. EXP1 * EXP2 Where: EXP1=Either a source field or element of numeric data type or an arithmetic expression EXP2=Either a source field or element of numeric data type or an arithmetic expression
=	Compare two expressions to see if their values are equal. EXP1 = EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition. (Continued on next page)

Use this operator...	(Contd) To perform this action...
<>	Compare two expressions to see if their values are unequal. EXP1 <> EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition.
<=	Determine if the value on the left is either less than or equal to the value on the right. EXP1 <= EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition.
>=	Determine if the value on the left is either greater than or equal to the value on the right. EXP1 >= EXP2 Where: EXP1=Either a source item of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source item of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition. (Continued on next page)

Use this operator...	(Contd) To perform this action...
<	Determine if the value on the left is less than the value on the right. EXP1 < EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition.
>	Determine if the value on the left is greater than the value on the right. EXP1 > EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition.
( )	Specify the order in which operations are performed in mathematical expressions. In nested parenthetical expressions, operations are performed first in the innermost parentheses. **Example** In the following expression, the negative value of S1 is added to the product of S2 and S3: -S1+(S2*S3) In the following expression, the negative of the sum of S1 and S2 is multiplied by S3: -(S1+S2)*S3 (Continued on next page)

Use this operator...	(Contd) To perform this action...
&	Concatenate two strings into one. EXP1 & EXP2 Where: EXP1=Either a source field or element of alphanumeric data type or an alphanumeric expression EXP2=Either a source field or element of alphanumeric data type or an alphanumeric expression **Example** The mapping operation 'ABC' & 'EFG' produces 'ABCEFG'.
all in loop	Evaluate as true if all occurrences of the source field or element in the document contain data that satisfies the expression. all [in loop] ITEM1 such [that] EXP1 Where: ITEM1=A source field or element EXP1=A logical expression **Note** ◗ Text in brackets is optional when in expert mode. ◗ This operation can be used only in a condition.
and	Evaluate two expressions to determine if both of the expressions are true. EXP1 and EXP2 Where: EXP1=A logical expression EXP2=A logical expression **Example** When S11 = 'required' and S12 = 'mandatory' **Note** This operation can be used only in a condition. (Continued on next page)

Use this operator...	(Contd) To perform this action...
count over source loop	Count the number of times that a field or element occurs in the source loop. count [over source loop] ITEM1 Where: ITEM1= A source field or element of alphanumeric data **Note** Text in brackets is optional in expert mode.
data found in	Evaluate as true if the field or element contains data. data found in <ITEM1> Where: ITEM1=A source field or element The mapping operation data found in evaluates as true if the present occurrence of the field or element ITEM1 contains data. **Note** ◗ This operation can be used only in a condition. ◗ Gentran:Server considers an item containing all blanks to not contain data. ◗ Gentran:Server considers an item containing all nulls to contain no data. In implementation guides and variable length application descriptions, two consecutive field delimiters bracket an item containing null data. In a fixed length application description, blanks are used to indicate no data for a field. (Continued on next page)

Use this operator...	(Contd) To perform this action...
decrement date_time	Subtract a specified value from the current date or time item. decrement [date_time] EXP1 by EXP2 Where: EXP1=Either a source field or element with a date-time data type or a date-time expression EXP2=Either a source field or element with a numeric data type or an arithmetic expression The mapping operation decrement date_time subtracts EXP2 from the lowest-order units in EXP1, carrying over to the next higher-order units after all lowest-order units are subtracted. In other words, if the date is in year-month-day format and 500 days are subtracted, the months, and the years will be decreased by an appropriate amount. **Example** The mapping operation decrement [date_time] S1 by 40 Where: S1= 95-05-25 in YY-MM-DD format produces 95-04-15. **Notes** ◗ Text in brackets is optional in expert mode. ◗ This operator does not function for system variables containing dates.
does_not_equal	Compare two expressions to see if they are unequal. EXP1 does_not_equal EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition. (Continued on next page)

Use this operator...	(Contd) To perform this action...
equals	Compare two expressions to see if their values are equal. EXP1 equals EXP2 Where: EXP1=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression EXP2=Either a source field or element of numeric or alphanumeric data type or an arithmetic or alphanumeric expression **Note** This operation can be used only in a condition.
generic synonym of source	Substitute a synonym from a generic synonym list for the value of the source field, element, or system variable. generic [synonym of source] ITEM1 using [the list named] NAME1 Where: ITEM1=A source field or element 'NAME1'=An alphanumeric expression, the value of which is the name of the generic synonym list that specifies the synonym **Note** Text in brackets is optional in expert mode.
greenwich date_time	Provide the Greenwich date and time of the translation process. greenwich [date_time] **Note** Text in brackets is optional in expert mode. (Continued on next page)

Use this operator...	(Contd) To perform this action...
increment date_time	Add a specified value to the current date or time item. increment [date_time] EXP1 by EXP2 Where: EXP1=Either a source field or element with a date-time data type or a date-time expression EXP2=An arithmetic expression The mapping operation increment date_time adds EXP2 to the lowest-order units in EXP1, carrying over to the next higher-order units after the lowest-order units reach a maximum. In other words, if the date is in year-month-day format and 400 days are added, the months, and perhaps even the years will be increased by an appropriate amount. **Example** The mapping operation increment [date_time] S1 BY 15, Where: S1= 95-09-25 in YY-MM-DD format produces 95-10-10. **Note** ◗ In expert mode, text in brackets is optional and you can use a source field or element with a numeric data type instead of an arithmetic expression for EXP2. ◗ This operator does not function for system variables that contain dates. (Continued on next page)

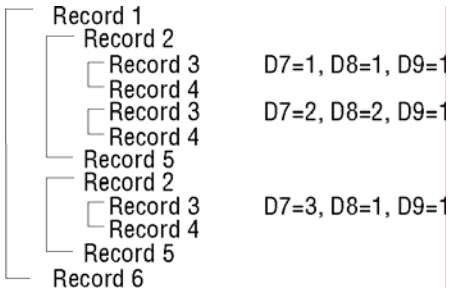
Use this operator...	(Contd) To perform this action...
max value of source loop	Check all occurrences of a particular field or element and determine the maximum (highest) value. max value of source loop EXP1 Where: EXP1=An arithmetic expression that has to contain at least one source field or element **Note** In standard mode, EXP1 must be exactly one source field or element. **Purpose** The purpose of this operator is find the highest value of the source field or element in the document. You can use a combination of fields or elements with this mapping operation. When used with a more complex arithmetic expression, such as max value of source loop (S1 + S2 * S3) the mapping operation calculates the value of each occurrence of (S1 + S2 * S3) and then determines the maximum value. **Example** 4 + 8 * 2 = 24 3 + 4 * 4 = 28 (maximum value of source loop) 2 + 4 * 3 = 18 **Caution** Use this mapping operation only if your data is totally predictable. If one of the values {S1, S2, S3} is missing in a particular iteration of the loop, do not use this mapping operation. Try using system variables instead. (Continued on next page)

Use this operator...	(Contd) To perform this action...
min value of source loop	Check all occurrences of a particular field or element and determine the minimum (lowest) value. min value of source loop EXP1 Where: EXP1=An arithmetic expression that has to contain at least one source field or element **Note** In standard mode, EXP1 must be exactly one source field or element. **Purpose** The purpose of this operator is find the lowest value of the source field or element in the document. You can use a combination of fields or elements with this mapping operation. When used with a more complex arithmetic expression, such as min value of source loop (S1 + S2 * S3) the mapping operation calculates the value of each occurrence of (S1 + S2 * S3) and then determines the lowest value. **Example** 4 + 8 * 2 = 24 3 + 4 * 4 = 28 2 + 4 * 3 = 18 (minimum value of source loop) **Caution** Use this mapping operation only if your data is totally predictable. If one of the values {S1, S2, S3} is missing in a particular iteration of the loop, do not use this mapping operation. Try using system variables instead.
not	Evaluate a term to determine if it is untrue. not EXP1 Where: EXP1=A logical expression **Note** This operation can be used only in a condition. (Continued on next page)

Use this operator...	(Contd) To perform this action...
one in loop	Evaluate as true if at least one occurrence of the source field or element in the document contains data that satisfies the expression. one [in loop] ITEM1 such [that] EXP1 Where: ITEM1=A source field or element EXP1=A logical expression **Note** ◗ Text in brackets is optional in expert mode. ◗ This operation can be used only in a condition.
or	Evaluates two expressions to determine if at least one of the expressions is true. EXP1 or EXP2 Where: EXP1=A logical expression EXP2=A logical expression **Example** When S11 = 'required' or S11 = 'mandatory' **Note** This operation can be used only in a condition.
place	Incorporate a text value into an empty text value at a specified point. place EXP1 beginning [at position] EXP2 Where: EXP1=Either a source field or element with an alphanumeric data type or an alphanumeric expression EXP2=An arithmetic expression The mapping operation place results in alphanumeric data consisting of spaces up to the position specified by EXP2, followed by the characters produced by EXP1. **Example** The mapping operation place 'ABC' beginning at position 4 produces ' ABC'. Where there are three spaces preceding ABC. **Note** Text in brackets is optional in expert mode. (Continued on next page)

Use this operator...	(Contd) To perform this action...
portion of text	Extract a series of alphanumeric characters from a specified value according to the starting position and length specified. portion [of text] EXP1 starting [at position] EXP2 for EXP3 [characters] Where: EXP1=Either a source field or element with an alphanumeric data type or an alphanumeric expression EXP2=An arithmetic expression EXP3=An arithmetic expression This mapping operation produces data consisting of some of the characters of the original data (EXP1). The part returned by this operation starts with the character at the position specified by EXP2 and continues for EXP3 characters. **Example** The mapping operation portion of text 'ABCDE FG' starting at position 3 for 5 characters produces 'CDE F'. **Note** Text in brackets is optional in expert mode. (Continued on next page)

Use this operator...	(Contd) To perform this action...
put	Incorporate a text value into another text value at a specified point. put EXP1 into EXP2 beginning [at position] EXP3 Where: EXP1=Either a source field or element with an alphanumeric data type or an alphanumeric expression EXP2=Either a source field or element with an alphanumeric data type or an alphanumeric expression EXP3=An arithmetic expression The mapping operation put results in alphanumeric data consisting of data produced by EXP2, followed by the characters produced by EXP1 placed starting at the position specified by EXP3. **Example** The mapping operation put 'ABC' into '123' beginning at position 7 produces '123 ABC'. Where there are three spaces between 123 and ABC **Note** Text in brackets is optional in expert mode. (Continued on next page)

Use this operator...	(Contd) To perform this action...
record_count of destination on loop level	Count the number of times that a destination item is repeated in the loop. record_count [of destination on loop level] EXP1 Where: EXP1=An arithmetic expression This operation maps the current number of iterations of the destination item at this point in the translation. If an item is not in a loop, the loop level is 0. The first loop level is 1; the second loop is level 2, etc. After each iteration of a loop, it and all nested loops are reset to level 1. **Example** The following mapping instructions map the number of occurrences in record 3 of D7, D8, and D9: map record_count [of destination on loop level] 1 to D7 map record_count [of destination on loop level] 2 to D8 map record_count [of destination on loop level] 3 to D9 This illustration shows the value mapped to D7, D8, and D9 for the destination loops.  **Note** Text in brackets is optional in expert mode. (Continued on next page)

Use this operator...	(Contd) To perform this action...
source_element	Determine whether the source item is a specific iteration out of a specified number of iterations (for example, second of five, third of six, etc.). source_element ITEM1 is_repetition EXP1 out [of] EXP2 Where: ITEM1=A source field or element EXP1=An arithmetic expression (must be an integer less than or equal to EXP2) EXP2=An arithmetic expression (must be an integer greater than or equal to EXP1) The mapping operation source_element is true whenever ITEM1 is the n*EXP2 + EXP1 iteration, where n is any integer. EXP1 specifies the iteration number within a block (the consecutive repetition of a record/segment). EXP2 specifies the number of records/segments in a block. **Example** For the mapping operation source_element S2 is_repetition 1 out of 3 the condition is true if this is the first of every three iterations of ITEM1. **Note** This operation can only be used in a condition.
spaces	Indicate that the mapping condition is valid if there are only spaces (blanks) in the source item. You can also map spaces to a destination item. **Example** The following condition When S7 = spaces is true if S7 = “ ” and is false if S7 = “Sterl ”. **Note** ◗ Use this When condition when the source or destination item has a data type of AN or ID. ◗ Use the zeros operation when the source or destination item has a data type of N, N*n*, R, or R*n*. (Continued on next page)

Use this operator...	(Contd) To perform this action...
specific synonym of source	Substitute synonyms as entered in the Specific Synonym File for the values of the source field or element. specific [synonym of source] ITEM1 Where: ITEM1=A source field or element **Note** Text in brackets is optional in expert mode.
sum over source loop	Add the values for the source field or element as it iterates in a document. This operator functions only with numeric data types. sum over source loop EXP1 Where: EXP1=An arithmetic expression that has to contain at least one source field or element **Note** In standard mode, EXP1 must be exactly one source field or element. **Purpose** The purpose of this mapping operation is to produce the sum of all the values of the source field or element that occur in the document. **Example 1** sum over source loop S1 S1=3 in first loop. S1= 2 in second loop. S1 = 7 in third loop. Result: 3 + 2 = 5 + 7 = 12 (Continued on next page)

Use this operator...	(Contd) To perform this action...
sum over source loop (contd)	**Example 2** This mapping operation can be used with a more complex arithmetic expression, such as sum over source loop (S1 + S2 * S3) In this case, the operation first calculates the value of the first iteration of (S1 + S2 * S3) and then adds the result to the value calculated from the next iteration of (S1 + S2 * S3), and so on. (S1 + S2 * S3) + (S1 + S2 * S3) + (S1 + S2 * S3) … **Note** If one of the values {S1, S2, S3} is missing in a particular iteration of the loop, Gentran:Server assumes 0 for that value (unless the value is the denominator of a fraction, in which case Gentran:Server assumes a value of 1).
system date_time	Provide the system date and time of the translation, based on the clock of the computer performing the translation.
trading partner	Provide the Trading Partnership Code for mapping. You can use the trading partner operator in the following ways. ◗ For outbound maps that are used for multiple trading partners use trading partner in a condition. For example, When trading partner = XYZ810 MAP S5 to D122 ◗ Map the current trading partner code to a destination field. For example, MAP trading partner to D12 **Note** The system automatically inserts the trading partner code into the first record of the record file layout if you have the code marked on your application description. Use the trading partner operator if you want the trading partner code in subsequent records. (Continued on next page)

Use this operator...	(Contd) To perform this action...
zeros	Indicate that the mapping condition is valid if there are only zeros (00) in the source item. You can also map zeros to a destination item. **Example** The following condition When S9 = zeros is true if S9 = “00000000” and is false if S9 = “00000156”. **Note** ◗ Use this when the source or destination item has a data type of N, N*n*, R, or R*n*. ◗ Use the spaces operation when the source or destination item has a data type of AN or ID.

Working with Macros in Mapping Instructions

Mapping Instructions

Introduction

Mapping instructions can sometimes become intricate and cumbersome. This can make them difficult to read and interpret and slow map correction or maintenance. You can often use macros to simplify and organize mapping instructions.

Macros within mapping instructions

You add macros to the following parts of mapping instructions:

- conditional expressions
- mapping expressions
- other macros.

Example

For example, consider a mapping instruction to map the City field, the State field, and the Zip field on the Address 2 record to the Address Information element on the Address Information segment of an X12 invoice. Assume the following is true of the application:

- The application uses fixed length fields
- City field has 15 positions
- State field has 15 positions
- Zip field has 5 positions
- Blanks fill unused positions.

(Continued on next page)

Example mapping instruction

One possible mapping instruction for the example is:

MAP place S23 beginning at position 1 TO D86 And MAP place S24 beginning at position 16 TO D86 And MAP place S25 beginning at position 31 TO D86

Where S23 = AD2 City

S24 = AD2 State

S25 = AD2 Zip

D86 = N3 Address Information

Adding macros to simplify the example mapping instruction

To reduce the example mapping instruction to a manageable size, you might use macros to map the City, State, and Zip fields to the Address Information element.

First, you would create the following macros:

M1(place S23 beginning at position 1)

M2(put S24 into M1 beginning at position 16)

M3(put S25 into M2 beginning at position 31)

Then, you would create the following mapping instruction:

Map M3 to D86

Where S25 = AD2 Zip

S24 = AD2 State

S23 = AD2 City

D86 = N3 Address Information

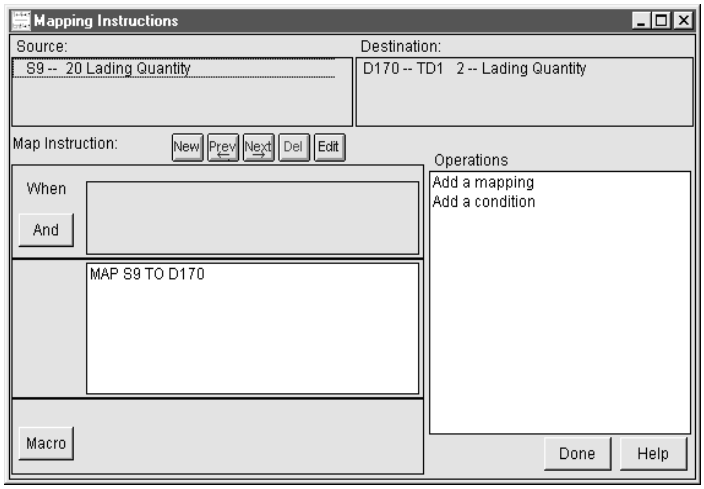
How to Create Macros

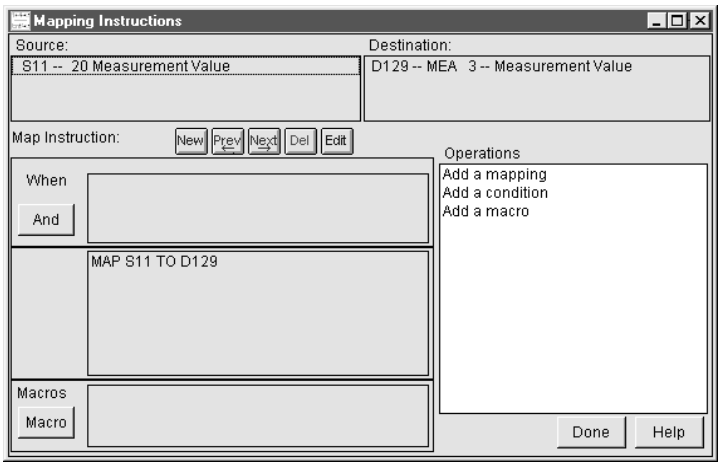
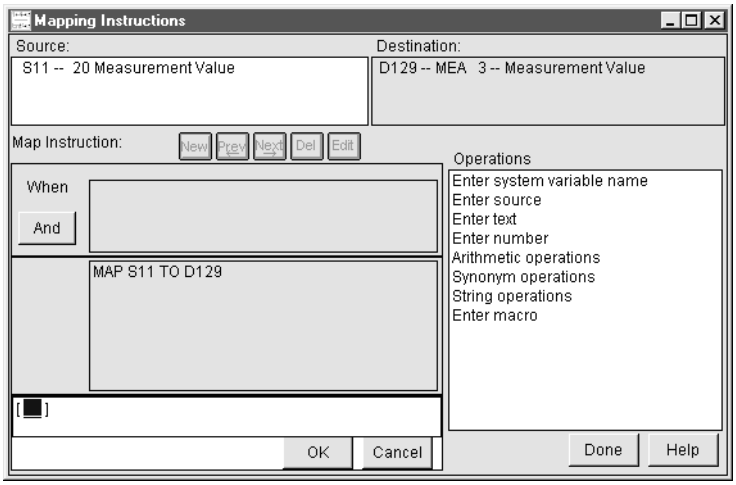
Introduction

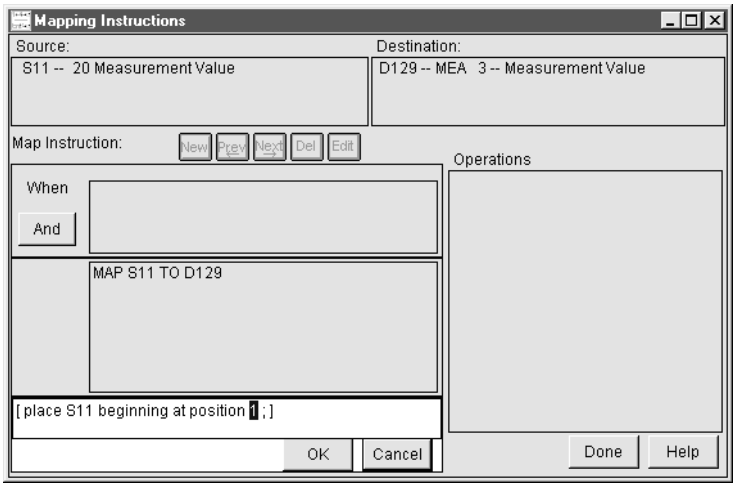
You must create a macro before using it in a mapping instruction. You create Gentran:Server macros using the Mapping Instructions dialog box.

Creating macros

Use this procedure to create macros for use in mapping instructions.

Step	Action
1	Open the Mapping Instructions dialog box.  (Continued on next page)

(Contd) Step	Action
2	Click the **Macro** button. **System Response** Gentran:Server adds the Add a Macro operation to the **Operations** list. 
3	Click **Add a Macro**. **System Response** Gentran:Server displays the macro box.  (Continued on next page)

(Contd) Step	Action
4	Create the macro by putting together operations, constants, and source and destination items as required. **Example** 
5	Click **OK** in the macro box. **System Response** Gentran:Server assigns the macro a label, starting with M1 and incrementing the number for each new macro in a mapping GROUP. The macro is now available for use.

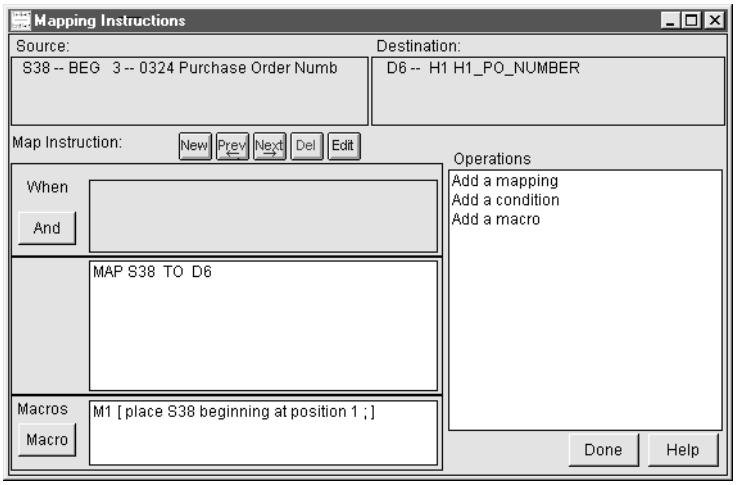
How to Add Macros to Expressions or to Other Macros

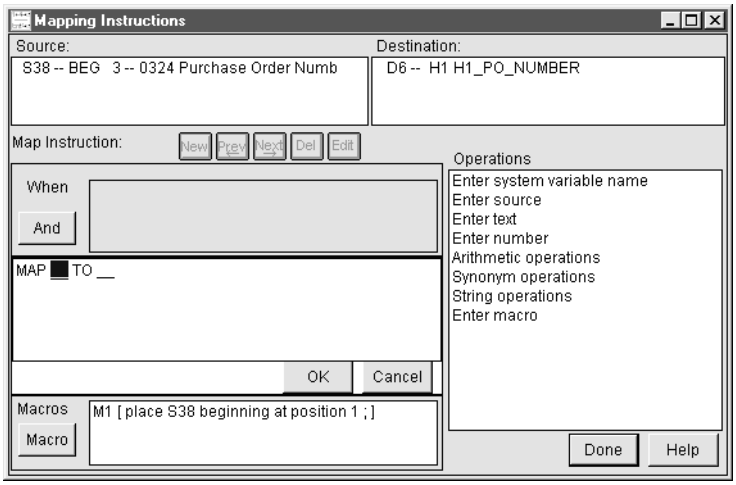
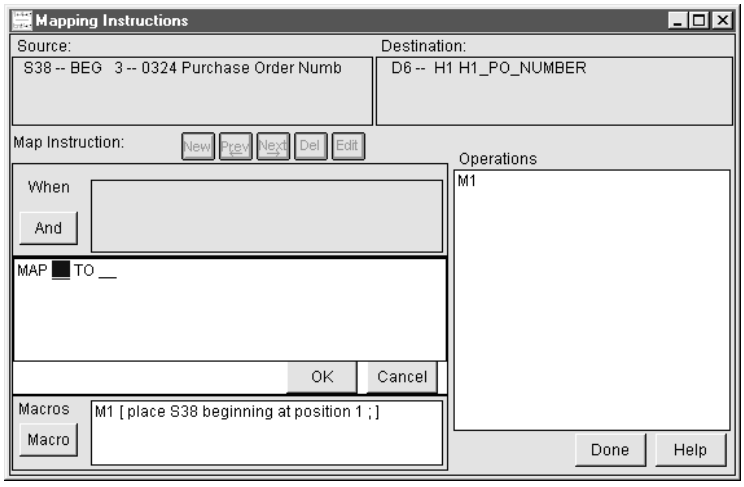
Introduction

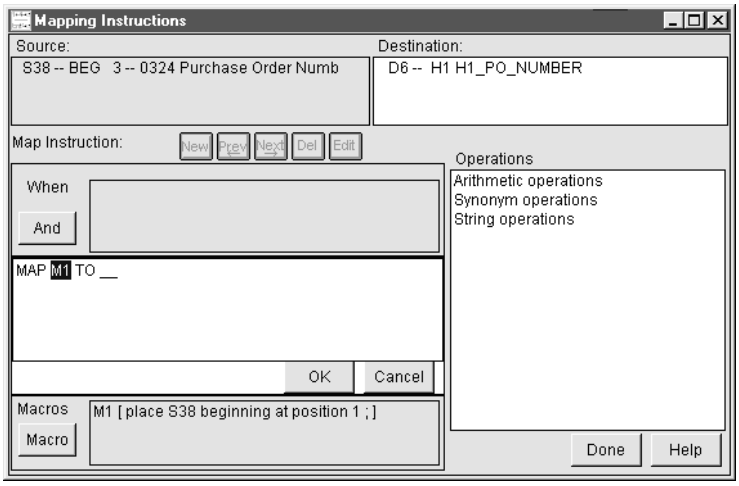
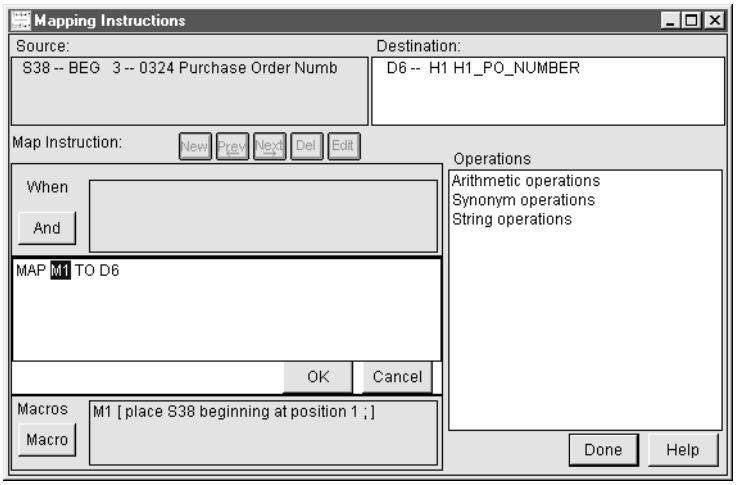
You can use macros in conditional expressions, mapping expressions, and other macros. The process for adding macros is similar whether you are adding the macro to an expression or to another macro. In either case, you must create the macro first.

Adding a macro to a mapping expression

Follow these steps to add a macro to a mapping expression.

Step	Action
1	Open the Mapping Instructions dialog box. **System Response** Gentran:Server displays the available macros in the macro box.  (Continued on next page)

(Contd) Step	Action
2	Click **Add a Mapping** on the **Operations** list. **System Response** Gentran:Server opens the mapping box and selects the underscore after MAP. 
3	Click **Enter Macro** on the **Operations** list. **System Response** Gentran:Server displays a list of all available macros in the **Operations** list.  (Continued on next page)

(Contd) Step	Action
4	In the **Operations** list, click the desired macro. **System Response** Gentran:Server adds the macro label to the mapping expression. 
5	In the **Destination** box, click the desired destination item. The mapping expression is now complete. 
6	Click **OK** in the mapping box.
7	When you have completed the mapping instruction, click **Done**.

Procedures

How to Create Mapping Instructions

Introduction

You use the Mapping Instructions dialog box to assign mapping instructions to a mapping GROUP.

Displaying the Mapping Instructions dialog box

The Mapping Instructions dialog box opens both automatically and manually:

- **For a new mapping GROUP**, Gentran:Server automatically opens the Mapping Instructions dialog box if:
  - The GROUP has more than two source fields or two destination fields in the GROUP
  - The GROUP has no source fields or elements.

If the Mapping Instructions dialog box does not open automatically, click the source item in the mapping GROUP, and then click the Mapping Instructions (**MI**) button.

- **For an existing mapping GROUP**, click the source or destination item in the mapping GROUP, and then click the Mapping Instructions (**MI**) button.

Comment
The mapping instructions that are valid for a selected mapping GROUP vary according to the data types collected into that GROUP. They also vary according to whether you are in standard or expert mode.

About macros

Putting macros together in a sequence is a good way to build complex expressions that contain nested string or numeric manipulations. Gentran:Server assigns a unique label (M1, M2, etc.) to each macro. You can enter the macro's label in any mapping instruction.

Reference
See the Working with Macros in Mapping Instructions section in this chapter for more information on creating and using macros.

(Continued on next page)

Creating instructions

Use this procedure to create mapping instructions for the current mapping GROUP.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Select one of the operations on the Operations list.

Use this decision table to select an operation.</td></tr>
<tr><td></td><td>IF you want to...</td><td>THEN select…</td></tr>
<tr><td></td><td>Create an instruction</td><td>Add a mapping.</td></tr>
<tr><td></td><td>Assign the circumstances in which the mapping instruction will be carried out</td><td>Add a condition.</td></tr>
<tr><td></td><td>Create a set of commands to organize your mapping instructions</td><td>The Macro button, add a macro from the operations list, and then enter the expression in the macro editing box.</td></tr>
<tr><td>2</td><td colspan="2">If you are in standard mode, create mapping instructions by using the TAB key to move from one fill-in area to the next area and the SHIFT+TAB keys to move to the previous areas. You can also click the destination area.

Reference
See the Using Operators section in this chapter for a description of operators you can use in mapping instructions.</td></tr>
<tr><td>3</td><td colspan="2">Fill in the remaining terms until the expression is complete, noting the syntax of the expression as it fills the Mapping Expression line.

Comment
You can complete the terms either by clicking on list items (standard mode) or by typing characters into the text box (expert mode).

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
4	Click the **OK** button to compile the mapping instruction. **System Response** Gentran:Server checks the syntax and validity of the mapping instruction statements. If it detects faulty syntax or illogical operations, it displays a warning message or error message.
5	Click **Done** to exit the Mapping Instructions dialog box. **System Response** If a mapping instruction did not compile properly or was found to be incomplete, Gentran:Server prompts you to indicate whether you want the work saved. Click **Yes** to save the instructions in their current form. Click **No** to discard the invalid instructions.

How to Map Literal Values to System Variables

Introduction

A mapping instruction can have one or more mapping statements, any of which can be literal.

Definition of literal mapping statement

A literal mapping statement maps a constant value (text or numbers) to the destination item.

Example
The following is a literal mapping statement with a system variable in the destination:

```
MAP '1234' TO $SYSTEMVARIABLE
```

You can create a literal mapping statement that maps a constant value to one or more system variables in the destination as long as you use a condition that refers to one or more source items.

Example

```
WHEN data found in S5
```

Comment
When you map a literal value to a system variable, the source and destination items are simply placeholders for that mapping instruction. They are not actually mapped to one another.

(Continued on next page)

Mapping a literal value to a system variable

Use this procedure to create a mapping statement with a system variable as the destination and with a constant as the source.

Note
You can use either standard or expert mode to create a mapping statement with a system variable. This procedure demonstrates the procedure in standard mode.

Step	Action	
1	Double-click the source item(s) you want to use in the condition.	
2	Double-click one or more destination item(s). **Comment** Every mapping GROUP must include at least one destination item, even if you are not mapping anything to that item.	
3	Use this table to decide how to create the mapping instruction.	
	IF you selected...	**THEN...**
	Only one source item and only one destination item	1. Click the right mouse button. 2. Click **Mapping Instruction Toolbar**. **System Response** The Mapping Instructions dialog box opens. This mapping GROUP contains a mapping instruction that maps the source item to the destination item. 3. Click **Del** and then confirm that you want to delete the mapping instruction. **System Response** Gentran:Server deletes the mapping instruction.
	Multiple source items and one or more destination items	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens; it contains no mapping instructions.
4	Click **Add a Condition** on the **Operations** list.	
5	Create the condition, making sure you refer to at least one source item. **Example** WHEN data found in S7 (Continued on next page)	

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>6</td><td colspan="2">Click OK in the condition box.</td></tr>
<tr><td>7</td><td colspan="2">Click Add a Mapping on the Operations list.</td></tr>
<tr><td>8</td><td colspan="2">Use this table to determine how to enter the constant you want to map to the system variable.</td></tr>
<tr><td></td><td>IF you want to enter a…</td><td>THEN…</td></tr>
<tr><td></td><td>Text string</td><td>1. Click Enter Text on the Operations list.

System Response
The system displays the Enter Text dialog box.

2. Type the string.

3. Click OK on the Enter Text dialog box.</td></tr>
<tr><td></td><td>Number</td><td>1. Click Enter Number in the Operations list.

System Response
The system displays the Enter Number dialog box.

2. Enter the number.

3. Click OK on the Enter Number dialog box.</td></tr>
<tr><td>9</td><td colspan="2">Press TAB to move the cursor to the underscore (_) after ‘TO’ in the mapping instruction.</td></tr>
<tr><td>10</td><td colspan="2">Click Enter System Variable Name on the Operations list.

System Response
The system displays the Enter System Variable Name dialog box.</td></tr>
<tr><td>11</td><td colspan="2">Type the name of the system variable.

Comment
The system variable name must be between two and twenty alpha-numeric characters, including the dollar sign ($). In standard mode, you do not need to include the $; Gentran:Server enters it automatically.

(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
12	Click **OK** on the Enter System Variable Name dialog box.
13	Click **OK** in the mapping box.
14	Click **Done**. **System Response** The source and destination items you selected and marked now have 'M' marks on them.

How to Map Source Items to System Variables (1-to-1)

Definition of a 1-to-1 mapping statement

A mapping instruction can have one or more mapping statements, any of which can map a source value (or a function of the source value) to a destination item or one or more system variables. This is a 1-to-1 mapping statement.

Example

This is an example of a 1-to-1 mapping statement with a system variable in the destination:

MAP S15+360 TO $SYSVAR

Creating a 1-to-1 mapping statement

Use this procedure to create a mapping instruction with a system variable as the destination and with a source item (or a function of a source item) as the source.

Note

You can use either standard or expert mode to create a mapping instruction with a system variable. This procedure demonstrates the procedure in standard mode.

Step	Action
1	Double-click the source item whose value you want to map to a system variable.
2	Double-click one or more destination items. **Comment** Every mapping GROUP must include at least one destination item, even if you are not mapping anything to that item.
3	Click the right mouse button to map the items.
4	Click the **Mapping Instructions Toolbar** button. **System Response** The Mapping Instructions dialog box opens. It contains a Gentran:Server generated mapping instruction that maps the source item to the destination item. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td colspan="2">Use this decision table to determine your next action.</td></tr>
<tr><td></td><td>IF you want to...</td><td>THEN...</td></tr>
<tr><td></td><td>Change the mapping instruction that Gentran:Server created</td><td>Continue with Step 6.</td></tr>
<tr><td></td><td>Keep the mapping instruction that Gentran:Server created</td><td>Go to Step 11.</td></tr>
<tr><td>6</td><td colspan="2">Click the mapping instruction to select it.</td></tr>
<tr><td>7</td><td colspan="2">Click Edit on the Mapping Instructions dialog box.</td></tr>
<tr><td>8</td><td colspan="2">Press TAB to move the cursor to the destination item label in the mapping instruction and then press DELETE.</td></tr>
<tr><td>9</td><td colspan="2">Create the system variable you want as the destination.</td></tr>
<tr><td>10</td><td colspan="2">Click Enter System Variable Name on the Operations list.
System Response
The system displays the Enter System Variable Name dialog box.</td></tr>
<tr><td>11</td><td colspan="2">Type the name of the system variable.
Comment
The system variable name must be between two and twenty alpha-numeric characters, including the dollar sign ($). In standard mode, you do not need to include the $; Gentran:Server enters it automatically.</td></tr>
<tr><td>12</td><td colspan="2">Click OK on the Enter System Variable Name dialog box.</td></tr>
<tr><td>13</td><td colspan="2">Click OK in the mapping box.</td></tr>
<tr><td>14</td><td colspan="2">Do you want to create additional mapping instructions?
◗ If yes, repeat from Step 1.
◗ If no, continue with Step 12.</td></tr>
<tr><td>15</td><td colspan="2">Click Done.
System Response
Gentran:Server displays an ‘M’ mark on the selected and marked destination item.</td></tr>
</table>

How to Map Source Items to System Variables (Many-to-1)

Definition

A mapping instruction can have one or more mapping statements, any of which can be many-to-1 mapping statement. A many-to-1 mapping statement maps two or more source values (or functions of the source values) to a destination item or one or more system variables.

Example
This example shows a many-to-1 mapping statement with a system variable in the destination:

```
MAP S5 & S13 &S20 TO $VAR
```

Creating a many-to-1 mapping statement

Use this procedure to create a mapping statement with a system variable as the destination and with two or more source values (or functions of the source values) as the source.

Note
You can use either standard or expert mode to create a mapping statement with a system variable. This procedure demonstrates this procedure in standard mode.

Step	Action
1	Double-click the source item whose value you want to map to a system variable.
2	Repeat Step 1 until you select and mark all of the source items you want to map to system variables.
3	Double-click one or more destination items. **Comment** Every mapping GROUP must include at least one destination item, even if you are not mapping anything to that item.
4	Click the right mouse button to map the items. **System Response** The Mapping Instructions dialog box automatically opens.
5	Click **Add a Mapping** on the **Operations** list. (Continued on next page)

(Contd) Step	Action
6	Create or select the source value you want to map to a system variable, using a system variable and any combination of the source item, operations, or macros.
7	Press TAB to move the cursor to the underscore (_) after 'TO' in the mapping instruction.
8	Click **Enter System Variable Name** on the **Operations** list. **System Response** The Enter System Variable Name dialog box opens.
9	Enter the name of the system variable. **Comment** The system variable name must be from two to twenty alpha-numeric characters, including the dollar sign ($). In standard mode, you need not include the $; Gentran:Server enters it for you.
10	Click **OK** on the Enter System Variable Name dialog box.
11	Click **OK** in the mapping box.
12	Do you want to create additional mapping instructions? ◗ If YES, REPEAT FROM STEP 1. ◗ IF NO, continue with Step 13.
13	Click **Done**. **System Response** The system displays an 'M' mark on the destination item you selected and marked.

How to Map System Variables to Destination Items

Introduction

A source can be one or more system variables. It can also be a function of one or more system variables and one or more source items. In this section, each source is mapped to a destination item.

Source item required

Each mapping instruction must contain a source item or a conditional expression containing one. This tells Gentran:Server what source value signals the point at which the system variable is mapped to the destination item.

Example

```
WHEN S25=18
```

Gentran:Server is able to map the system variable to the destination item at the correct time only if the mapping instruction contains a source item and/or the conditional expression.

You can use one or more macros in the source.

Literal mapping statements

A mapping instruction can have one or more mapping statements, any of which can be literal mapping statements. A literal mapping statement maps text or numbers (a constant value) or one or more system variables to a destination item.

Example
The following is an example of a literal mapping statement with a system variable in the source:

```
MAP $SYSVAR TO D18
```

You can create a literal mapping statement that maps one or more system variables to a destination item by using a condition that refers to one or more source items.

(Continued on next page)

Creating a literal mapping statement

Use this procedure to create a mapping statement with a system variable as the source and a mapping item as the destination.

Note
You can use either standard or expert mode to create a mapping statement with a system variable. This procedure demonstrates the procedure in standard mode.

Step	Action	
1	Double-click one or more source items, including those you want to use in the condition.	
2	Double-click one or more destination items, including the one to which you want to map the system variable. **Comment** Every mapping GROUP must include at least one destination item, even if you are not mapping anything to that item.	
3	Use this table to determine your next action.	
	IF you selected...	**THEN...**
	One source item and one destination item	Continue with Step 4.
	Two or more source items	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens; it contains no mapping instructions. Go to Step 7.
4	Click the right mouse button.	
5	Click the **Mapping Instruction Toolbar** button. **System Response** The system displays the Mapping Instructions dialog box. It contains the Gentran:Server-generated mapping instruction that maps the source item to the destination item.	
6	Click **Del** and then click **Yes** to confirm that you want to delete the mapping instruction. **System Response** Gentran:Server deletes the entire mapping instruction. (Continued on next page)	

(Contd) Step	Action
7	Click **Add a Condition** on the **Operations** list.
8	Create the condition, making sure you refer to at least one source item.
9	Click **OK** on the condition box.
10	Click **Add a Mapping** in the **Operations** list.
11	Click **Enter System Variable Name** on the **Operations** list. **System Response** The system displays the Enter System Variable Name dialog box.
12	Enter the name of the system variable. **Comment** The system variable name must be from two to twenty alpha-numeric characters, including the dollar sign ($). In standard mode, you need not include the $; Gentran:Server enters it for you.
13	Click **OK** in the Enter System Variable Name dialog box.
14	Press TAB to move the cursor to the underscore (_) after 'TO' in the mapping instruction.
15	Click the desired destination item in the destination box.
16	Click **OK** in the mapping box.
17	Click **Done**. **System Response** The system displays 'M' marks on the source and destination items you selected and marked. At this point however, nothing is mapped from the source item(s).

How to Map System Variables to Destination Items (1-to-1)

Definition

A 1-to-1 mapping statement maps a source item or a function of a source item to a destination item. You can create a 1-to-1 mapping statement that maps a function of a source item and one or more system variables to a destination item.

Example

The following is a 1-to-1 mapping statement with a system variable in the source:

```
MAP S5*$SYSTEMVARIABLE TO D45
```

Creating a 1-to-1 mapping statement

Use this procedure to create a mapping statement with a function involving one or more system variables, operators, a source item, and one or more macros as the source, with a mapping item as the destination.

Note

You can use either standard or expert mode to create a mapping statement with a system variable. This procedure demonstrates the procedure in standard mode.

Step	Action
1	Double-click the source item whose value you want as part of the function.
2	Double-click the destination item to which you want to map information.
3	Click the right mouse button to map the two items.
4	Click the **Mapping Instructions Toolbar** button. **System Response** The system displays the **Mapping Instructions** dialog box. The window displays a mapping instruction that maps the source item to the destination item. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td colspan="2">Use this decision table to determine your next action.</td></tr>
<tr><td></td><td>IF you want to...</td><td>THEN...</td></tr>
<tr><td></td><td>Change the mapping instruction that Gentran:Server created</td><td>Continue with Step 6.</td></tr>
<tr><td></td><td>Keep the mapping instruction that Gentran:Server created</td><td>Go to Step 11.</td></tr>
<tr><td>6</td><td colspan="2">Click the mapping instruction to select it.</td></tr>
<tr><td>7</td><td colspan="2">Click Edit in the Mapping Instructions dialog box.</td></tr>
<tr><td>8</td><td colspan="2">Press TAB to move the cursor to the source item label in the mapping instruction to select it and press DELETE.</td></tr>
<tr><td>9</td><td colspan="2">Create or select the source value you want, using a system variable and any combination of the source item, operations, or macros.</td></tr>
<tr><td>10</td><td colspan="2">Click OK in the mapping box.</td></tr>
<tr><td>11</td><td colspan="2">Do you want to create additional mapping instructions?
◗ If YES, repeat from Step 1.
◗ If NO, continue with Step 13.</td></tr>
<tr><td>12</td><td colspan="2">Click Done.
System Response
The system displays ‘M’ marks on the source and destination items you selected and marked. The destination item has a value that is a function of the source item and the system variable mapped to it.</td></tr>
</table>

How to Map Variables to Destination Items (Many-to-1)

Introduction

A mapping instruction can have one or more mapping statements, any of which can map two or more source values to a destination item.

Definition

A many-to-1 mapping statement maps a function of two or more source values and one or more system variables to a destination item.

Example
The following is a many-to-1 mapping statement with a system variable in the source:

MAP S5 & $VAR & S18 TO D12

Creating a many-to-1 mapping statement

Use this procedure to create a mapping statement with a function of a system variable and two or more source values as the source and with a destination item.

Note

While you can use either standard or expert mode. This series of steps demonstrates the procedure in standard mode.

Step	Action
1	Double-click a source item whose value you want as part of the source function.
2	Repeat Step 1 Repeat Step 1 until you select and mark all of the source items you want to map.
3	Double-click the destination item to which you want to map the function.
4	Click the right mouse button to map the items. **System Response** The system displays the Mapping Instructions dialog box.
5	Click **Add a Mapping** on the **Operations** list. (Continued on next page)

(Contd) Step	Action
6	Select or create the function you want to map to the destination item. **Comment** Use any combination of source items in this GROUP, the system variable, operations, and macros.
7	Press TAB to move the cursor to the underscore (_) after 'TO' on the Mapping Instructions dialog box.
8	Click the appropriate mapping item in the destination box.
9	Click **OK** on the Mapping Instructions dialog box.
10	Repeat Steps 5 through 9 until you finish creating all of the mapping statements you want to include in this mapping instruction.
11	Click the **New** button, create any conditions you want, and repeat Steps 5 through 9 until you finish creating any additional mapping instructions you want.
12	Click **Done**. **System Response** The system now displays an "M" mark on the source and destination items you selected and marked. The destination item has a function of the source item and the system variable mapped to it.

How to Map System Variables to System Variables

Introduction

You can use system variables as both the source and destination of a mapping expression. You can also use a function of a system variable as the source and the same system variable as the destination.

You can combine an existing value (a constant or a source value) and one or more operators with a system variable and then map that result to the same system variable.

When no source item is specified

If the mapping statement does not specify a source item, you must enter a conditional expression containing a source item to the left of the mapping expression.

Example

WHEN S11 does_not_equal 'order'

In this example,

WHEN is the conditional expression

S11 is the source item

does_not_equal 'order' is the mapping expression

You use the conditional expression containing a source item to tell Gentran:Server when to change the value of the system variable. Conditional expressions add flexibility to the mapping process.

Example

With a conditional expression, you can increment a system variable every time a certain value is received. Without a conditional expression, Gentran:Server would be unable to determine the correct time to execute the mapping statement.

(Continued on next page)

Same system variable in the source and destination

A mapping instruction can have one or more mapping statements. Any of the mapping statements can have a function of a system variable in the source, and the same system variable in the destination.

Example

MAP $ITERATION+1 TO $ITERATION

Note

You can map a function of a system variable to the same system variable within the same GROUP in which you are mapping the system variable to a destination field, but the system must execute the instructions in the proper order. Gentran:Server must first execute the instruction that maps a function of a system variable to the same system variable. Then, the system can safely execute the second instruction.

You can use the **Sort Mapping Instructions Utility** to sort these instructions so that they execute one before the other.

Reference

See Sort Mapping Instructions Utility in this chapter for information about sorting instructions.

Different system variables in the source and destination

You can use one system variable (or a function of one system variable) in the source and a separate system variable in the destination.

You must use a conditional expression referring to one or more source items if there are no source items in the mapping statement. This tells Gentran:Server when it is to execute the mapping statement.

A mapping instruction can have one or more mapping statements, any of which can have one system variable in the source and a different system variable in the destination.

Example

MAP $SYSTEMVARIABLE TO $VAR

Mapping Instruction Exercise

Overview

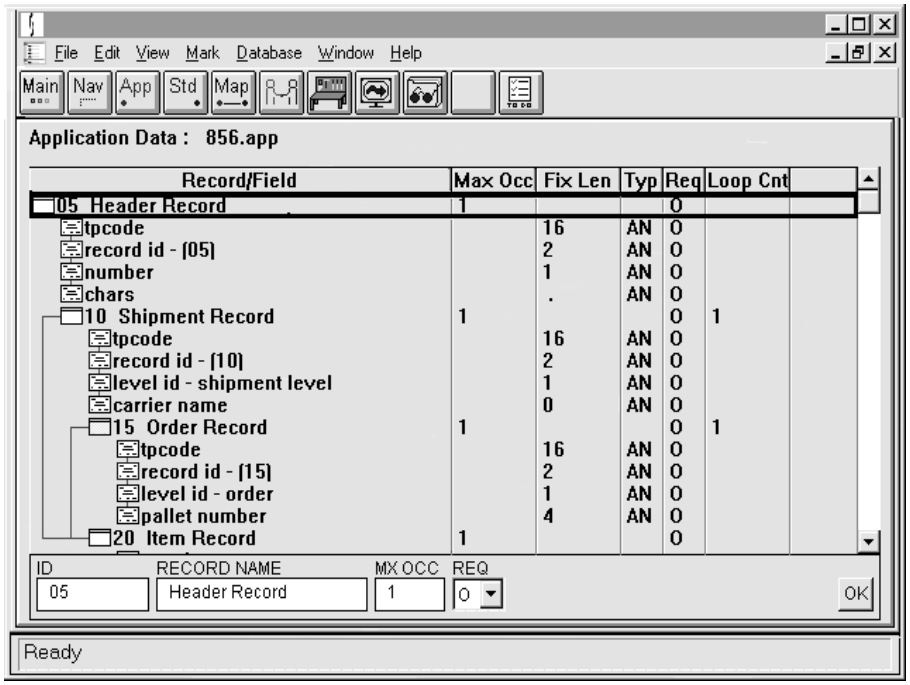
Introduction

The exercise in this chapter demonstrates how to map the relationship between hierarchical loops. Hierarchical loops use loop level segments to represent nested information.

The source and destination used in this exercise

This exercise maps an application file containing a shipping notice to the 856 (Ship Notice/Manifest) document of the 3050 version of the X12 standard.

This illustration shows example records from the application.



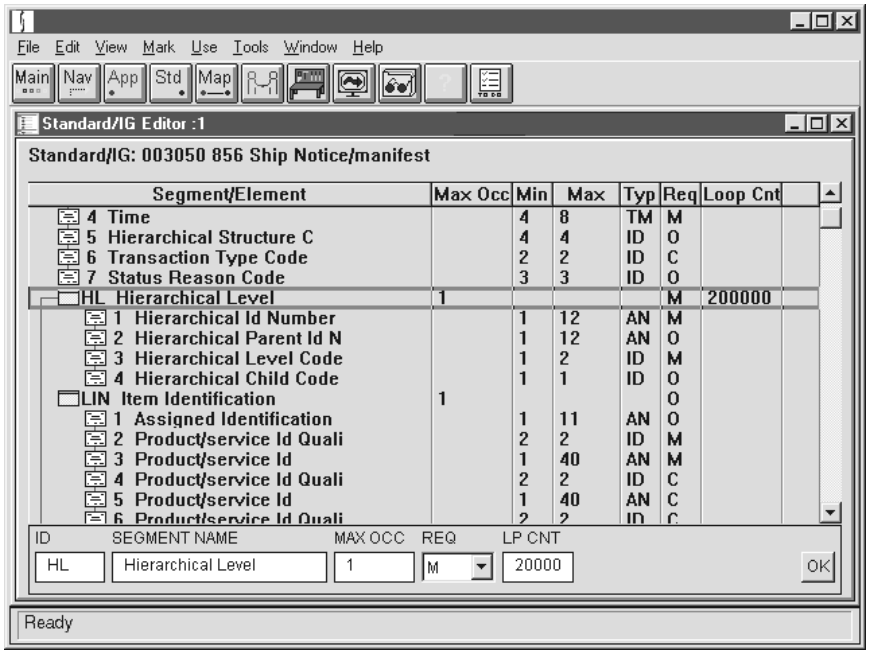
(Continued on next page)

Notice that the hierarchy of the information fields in the application file is as follows:

- The item (I) level items are subordinate to the order (O) level items
- The order (O) level items are subordinate to the shipment (S) level items.

The standard stores this information as hierarchical loops.

This illustration shows part of the standard.



Using system variables to map the relationship between hierarchical loops

Translation of data is source driven. That is, translators (using a map) look to the source document for the information it needs to create the destination data. In cases where you want a mapping to occur without specifying a source item, you can create a condition based on the source data that, when met, triggers the mapping of a value to a destination item.

In the case of this exercise, we create conditions using system variables to trigger translation. We use system variables to map the relationships between hierarchical loops.

(Continued on next page)

Mapping the relationship between the source and the destination

The standard uses hierarchical loops for the items in the application example. Since this is an outbound translation, you must map the hierarchical information from the application to the hierarchical loops in the standard.

The next four procedures step you through the creation of four sets of mapping GROUPs and corresponding mapping instructions.

- The first mapping GROUP creates and initializes the value of the system variable $HL1$HL1.
- The second mapping GROUP maps the shipment-level information.
- The third mapping GROUP maps the order-level information.
- The fourth mapping GROUP maps the item-level information.

Note
By default, the mapping statements you create do not always appear in the order in which you entered them in the Mapping Instructions dialog box. Nor are they necessarily executed in the order in which they appear. The compiler determines the optimum order when it compiles the map. If necessary, you can use the Sort Mapping Instructions Utility to change the execution order.

Reference
See the Sort Mapping Instructions Utility topic in this chapter for more information.

(Continued on next page)

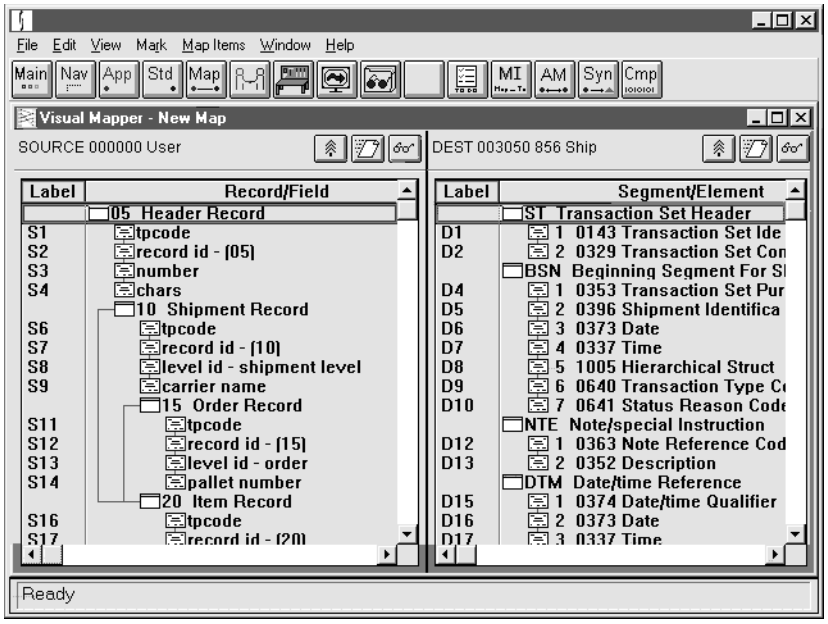
Before you begin this exercise

Using the Visual Mapper, create a map with an application shipping notice matching the illustration below as the source and the X12 version 3050 document 856 (Ship Notice/Manifest) as the destination.

Reference

See the Mapping chapter in this guide for instructions on creating a map.

Example



When you are ready to begin the exercise, see the How to Create the First Mapping GROUP topic in this chapter.

How to Create the First Mapping GROUP

Introduction

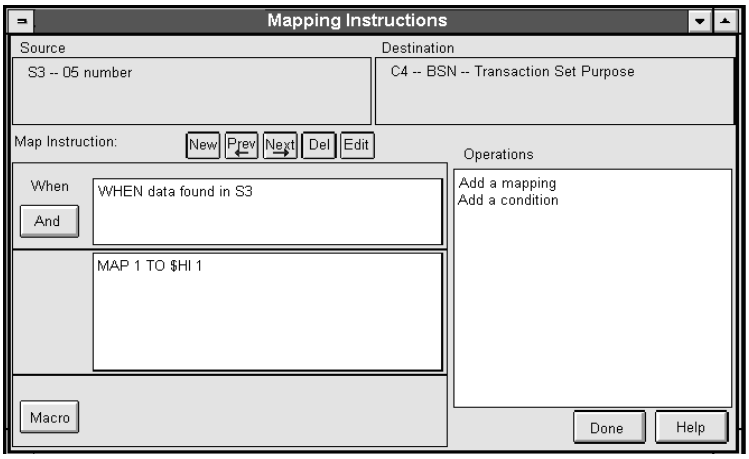
This section steps you through creating the first mapping GROUP of the exercise, which sets up the initial value for the $HL1 system variable.

The system variable $HL1 stores the current value of the hierarchical level ID number.

Creating the mapping GROUP

Use this procedure to create the first mapping GROUP and its mapping instruction.

Step	Action
1	Double-click the following source items: S3 Number S4 Chars
2	Double-click the following destination items: D4 Transaction Set Purpose D5 Shipment Identification
3	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens.
4	Create the condition: WHEN data found in S3 **Comment** You should execute the mapping statement in this mapping instruction only when there is a value in the S3 field (number). This assigns the initial value to the $HL1 system variable at the beginning of translation and before mapping any values from the loop. (Continued on next page)

(Contd) Step	Action
5	Create the mapping statement: MAP 1 TO $HL1 **Comment** You map a '1' to a system variable that you call '$HL1' to store the current hierarchical level ID. Since you are initializing the value of $HL1, which changes during the translation, the current value is 1. You can then use $HL1 in subsequent mapping instructions, incrementing it as necessary. The mapping instruction you create looks like this: 
6	Click **Done** on the Mapping Instructions dialog box.

You are now ready to map the shipment-level information.

See the How to Map the Shipment-level Information topic in this chapter.

How to Map the Shipment-level Information

Introduction

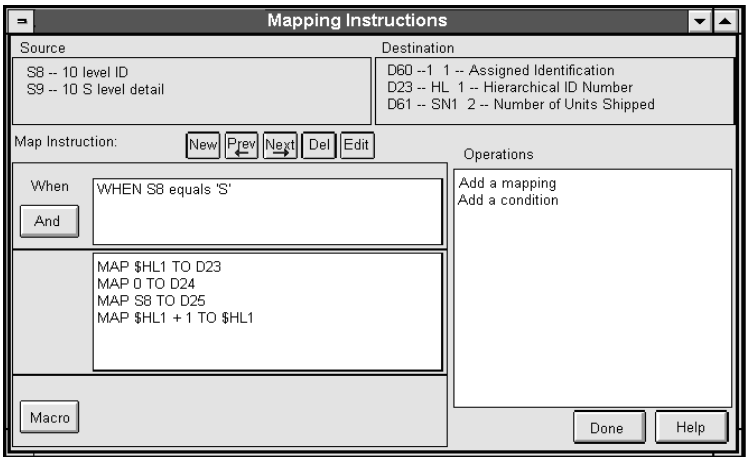
This section steps you through creating the second mapping GROUP of the exercise, which maps the shipment-level information.

Creating the mapping GROUP

Use this procedure to create the second mapping GROUP and compose the mapping instruction.

Step	Action
1	Double-click the following source items: S8 Level ID S9 S Level Detail
2	Double-click the following destination items: D23 Hierarchical ID Number D24 Hierarchical Parent ID Number D25 Hierarchical Level Code D28 Assigned Identification D29 Product/Service ID Qualifier D60 Assigned Identification D61 Number of Units Shipped D98 Purchase Order Number D99 Release Number
3	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens.
4	Create the condition: WHEN S8 equals 'S' **Comment** You should execute the mapping statements in this mapping instruction only when the hierarchical level ID is ‘S’ for shipment. (Continued on next page)

(Contd) Step	Action
5	Create the first mapping statement: MAP $HL1 TO D23 **Comment** You map the current value (1 for the first iteration) of $HL1 to the Hierarchical ID Number because this is the first hierarchical level.
6	Create the second mapping statement: MAP 0 TO D24 **Comment** Because this is the first level of the hierarchical loop, it has no parent; therefore, the hierarchical level parent ID number is '0'.
7	Create the third mapping statement: MAP S8 TO D25 **Comment** The level ID in the record file layout ('S' for this level) is the same as the Hierarchical Level Code in the standard. (Continued on next page)

(Contd) Step	Action
8	Create the fourth mapping statement: MAP $HL1+1 TO $HL1 **Comment** You increment the hierarchical ID number system variable in preparation for mapping the next hierarchical level. The mapping instruction looks like this: 
9	Click **Done** in the **Mapping Instructions** dialog box.

You are now ready to map the order-level information.

See the How to Map the Order-level Information topic in this chapter.

How to Map the Order-level Information

Introduction

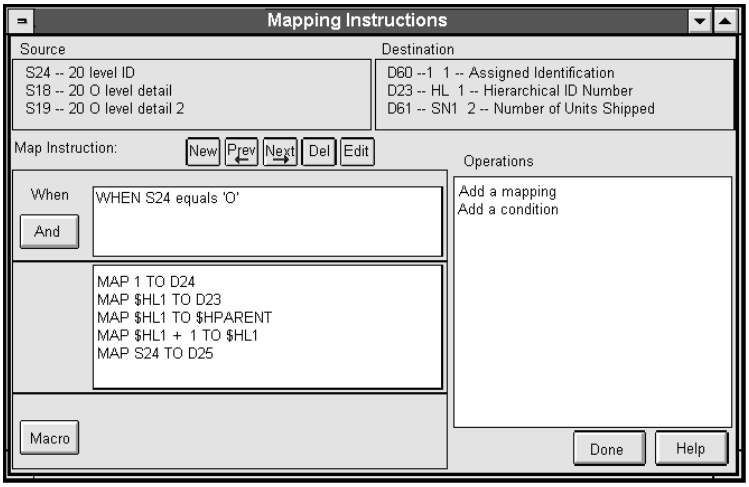
This section contains the instructions for creating the third mapping GROUP of the exercise, which maps the order-level information.

Creating the mapping GROUP

Use this procedure to create the third mapping GROUP and compose the mapping instruction.

Step	Action
1	Double-click the following source items: S18 O Level Detail S19 O Level Detail 2 S24 Level ID
2	Double-click the following destination items: D23 Hierarchical ID Number D24 Hierarchical Parent ID Number D25 Hierarchical Level Code D28 Assigned Identification D29 Product/Service ID Qualifier D60 Assigned Identification D61 Number of Units Shipped D98 Purchase Order Number D99 Release Number
3	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens.
4	Create the condition: WHEN S24 equals 'O' **Comment** You should execute the mapping statements in this mapping instruction only when the hierarchical level ID is ‘O’ for order. (Continued on next page)

(Contd) Step	Action
5	Create the first mapping statement: MAP 1 TO D24 **Comment** You map 1 to the Hierarchical Parent ID Number because the first hierarchical level (shipment) is the parent to the order level.
6	Create the second mapping statement: MAP $HL1 TO D23 **Comment** You map the current value (2 for the first iteration) of $HL1 to the Hierarchical ID Number because this is the second hierarchical level.
7	Create the third mapping statement: $HL1 TO $HPARENT **Comment** You map the current value (2 for the first iteration) of $HL1 to the Hierarchical Parent ID Number because this hierarchical level (order) is the second level and the parent to the next level, item. When you assign a name ($HPARENT) to a system variable, you automatically create it.
8	Create the fourth mapping statement: MAP $HL1+1 TO $HL1 **Comment** You increment the hierarchical ID number system variable in preparation for mapping the next hierarchical level. (Continued on next page)

(Contd) Step	Action
9	Create the fifth mapping statement: MAP S24 TO D25 **Comment** The level ID in the record file layout ('O' for this level) is the same as the Hierarchical Level Code in the standard. The mapping instruction looks like this: 
10	Click **Done** in the Mapping Instructions dialog box.

You are now ready to map the item-level information.

See the How to Map the Item-level Information topic in this chapter.

How to Map the Item-level Information

Introduction

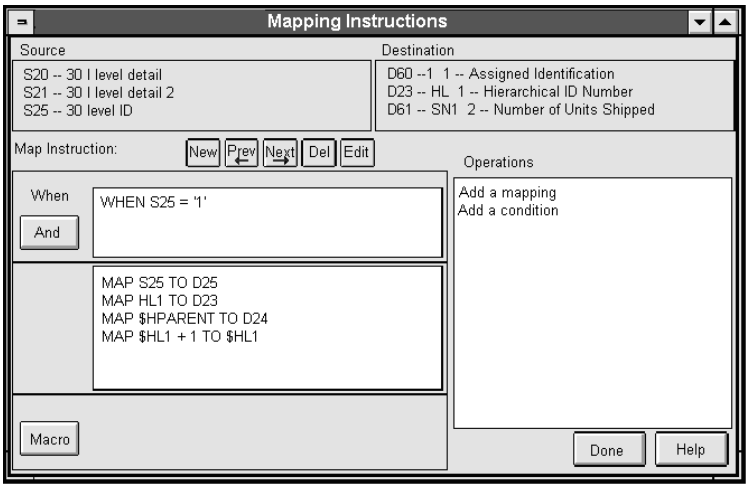
This section steps you through creating the fourth and final mapping GROUP of the exercise, which maps the item-level information.

Creating the mapping GROUP

Use this procedure to create the fourth mapping GROUP and compose the mapping instruction.

Step	Action
1	Double-click the following source items: S20 I Level Detail S21 I Level Detail 2 S25 Level ID
2	Double-click the following destination items: D23 Hierarchical ID Number D24 Hierarchical Parent ID Number D25 Hierarchical Level Code D28 Assigned Identification D29 Product/Service ID Qualifier D60 Assigned Identification D61 Number of Units Shipped D98 Purchase Order Number D99 Release Number
3	Click the right mouse button. **System Response** The Mapping Instructions dialog box opens.
4	Create the condition: WHEN S25 equals 'I' **Comment** You should execute the mapping statements in this mapping instruction only when the hierarchical level ID is 'I' for item. (Continued on next page)

(Contd) Step	Action
5	Create the first mapping statement: MAP S25 TO D25 **Comment** The level ID in the record file layout ('I' for this level) is the same as the Hierarchical Level Code in the standard.
6	Create the second mapping statement: MAP $HL1 TO D23 **Comment** You map the current value (3 for the first iteration) of $HL1 to the Hierarchical ID Number because this is the third hierarchical level.
7	Create the third mapping statement: $HPARENT TO D24 **Comment** You map the current value (2 for the first iteration) of $HPARENT to the hierarchical parent ID number because this hierarchical level (item) is the third level and its parent is the second level, order. (Continued on next page)

(Contd) Step	Action
8	Create the fourth mapping statement: MAP $HL1+1 TO $HL1 **Comment** You increment the hierarchical ID number system variable in preparation for mapping item information in subsequent iterations of the loop. The mapping instruction looks like this: 
9	Click **Done** in the Mapping Instructions dialog box.

Summary

In this exercise you practiced the following mapping techniques:

- Initializing system variables
- Creating many-to-many mapping GROUPs
- Incrementing system variable
- Mapping system variables to destination items
- Mapping multiple hierarchical levels.

CHAPTER
10

Troubleshooting Mapping Instructions

Contents

Overview

Introduction

Troubleshooting mapping instructions is necessary only if maps used in translation produce unexpected results. Gentran:Server provides you with two troubleshooting tools: the Sorting Utility and the Diagnostics report.

This chapter provides the information you need to diagnose and correct a map that produces unexpected results when used in translation.

Key terms

This table lists the key terms used in this chapter.

Term	Description
Map File	The <*mapname*>*.vmp* file containing a defined map.
mapping association	The process of associating data fields or elements in your source document to corresponding data fields or elements in your destination document.
mapping condition	Qualifying term used in some mapping instructions to indicate when the mapping part of the instruction should be performed and when it should be ignored. Mapping conditions begin with “When.”
mapping expression	A complete “Map to” expression that may be part of a longer mapping instruction.
mapping GROUP	A specific mapping association between source and destination data.
mapping instruction	A set of information that controls special operations on mapped data during translation.
Visual Mapper	The Gentran:Server window on which you create a map. The Visual Mapper displays the source document on the left side of the window and the destination document on the right.

Sorting Utility

Overview

Introduction

In this section, we describe how to use the Sorting Utility to reorder mapping instructions that are listed on the correct screen, but must be executed in an order other than the default.

Purpose of the Sorting Utility

The Sorting Utility enables you to view and change the order in which the translator executes mapping instructions. You can change the sort order only for one source record or segment at a time.

The default sort order is usually the optimum order. However, there may be cases in which you need to change the sort order before the translation test will produce the correct results. You use the Sorting Utility to modify the order in which Gentran:Server processes mapping instructions.

What you can do with the Sorting Utility

You can use the Sort Utility only to change the order in which Gentran:Server executes the mapping instructions. To change, add, or delete the actual mapping instructions, you must use the Mapping Instructions window in the Visual Mapper.

Reference
For information about using the Mapping Instructions window, see the Working with Mapping Instructions chapter in this guide.

The Default Sort Order

Introduction

The translator executes mapping instructions in the order set during map compilation. You can use the Sorting Utility to change the execution order of the items in a source record/segment.

The ordering process

This table describes the process that the map compiler uses to determine the execution order of the mapping instructions.

Stage	Description
1	The map compiler first lists all mapping instructions for the first record/segment. It then lists all mapping instructions for the next record/segment. This process continues until the mapping instructions for all records/segments are listed.
2	The map compiler looks at the mapping instructions for each source record/segment and arranges them according to the default order in which the translator will execute them. **Criteria** The map compiler uses the following criteria to order the mapping instructions for each source record/segment: ◗ The group number of the source record, lowest to highest ◗ The Mapping Instruction screen order, last to first ◗ Within a Mapping Instruction screen, the order in which the mapping instructions were entered ◗ The order of the items in the source record/segment. **Comment** If a mapping instruction spans multiple records, then the system executes the mapping instruction for the first record only after receiving all its source items.

When to Use the Sorting Utility

Introduction

Use the Sorting Utility when:

- You need to know the current order of the mapping instructions for the items in a particular record/segment
- You need to know the order in which the translator will use the system variables.
- The Diagnostics Report indicates that you need to reorder some mapping instructions because the output is not what you expected.

Finding the current execution order of the mapping instructions

You can quickly see the order in which the translator executes the mapping instructions for items in a specific record/segment by displaying the Sort Mapping Instructions dialog box for that record/segment.

The **Sort Mapping Instructions** dialog box displays either the default order or, if changes were made, the latest order saved.

The **Sort Mapping Instructions** dialog box may provide the information you need to determine the appropriate sort order. If you need more detailed information, run a Diagnostics Report.

When using system variables

You may need to change the sort order when source fields/elements are referenced by one or more mapping instructions containing system variables.

System variables are very powerful and flexible, allowing you precise control over your output. For this reason, the order in which the translator executes system variables is especially critical.

Example
The following combination of mapping instructions can cause unanticipated results:

```
MAP $sysvar+1 TO $sysvar
MAP $sysvar * S12 TO D32
```

(Continued on next page)

It makes a great deal of difference which of the following Gentran:Server does first:

- Increments the system variable and then maps it to a destination item.

  If the initial value of $sysvar is 2, then incrementing it by one and mapping it to the destination item results in a value of 3 in the first destination item.

- Maps the system variable to a destination item and then increments it.

  If the initial value of $sysvar is 2, then mapping it to the destination item and incrementing it by one results in a value of 2 in the first destination item.

Note
Gentran:Server does not accept system variables used with data types DT or TM.

When the Diagnostics Report indicates reordering is needed

The Diagnostics Report provides details about the value of source items at each point in the translation. If the output file indicates that the translation gives unexpected results, the Diagnostics Report can tell you the point in the translation at which the results first differ from what you expected.

Often, a careful study of the Diagnostics Report will indicate that you can achieve the desired results by reordering the mapping instructions.

How to Open the Sort Mapping Instructions Dialog Box

Introduction

The Sort Mapping Instructions dialog box is available from the Map Items menu of the Visual Mapper.

Before you open the dialog box

If you have made any changes to your map, you must save and compile the map you are using for translation before you open the Sort Mapping Instructions dialog box.

Comment
Use the Gentran:Server Visual Mapper to save the map and start the compiler. For more information about saving and compiling maps with the Visual Mapper, see the Mapping chapter in this guide.

Opening the Sort Mapping Instructions dialog box

Use this procedure to open the Sort Mapping Instructions dialog box.

Step	Procedure
1	In the Visual Mapper, open the map containing the mapping instructions you want to sort. **System Response** When you select a MAP file, Gentran:Server opens a working MAP file.
2	Make the source side of the map the active side by clicking once on that side.
3	Move the focus to the desired source record or segment. (Continued on next page)

(Contd) Step	Procedure
4	Click **Sort Mapping Instructions** on the **Map Items** menu. **System Response** The **Sort Mapping Instructions** dialog box opens and displays all mapping instructions that reference a field/element in the specified source record/segment. Note that this window does not include mapping instructions for fields/elements that are part of another record, even though the fields/elements are part of the mapping group. **Example** For example, you may have a mapping group that contains one or more sources and one or more destinations. The only mapping instructions displayed are those that include the source items contained in the specified record/segment in the conditional expression, the mapping expression, or both. The system does not display any 0-to-1 mapping instructions. These instructions map a literal to a destination without including the source item in either the conditional or the mapping expression.

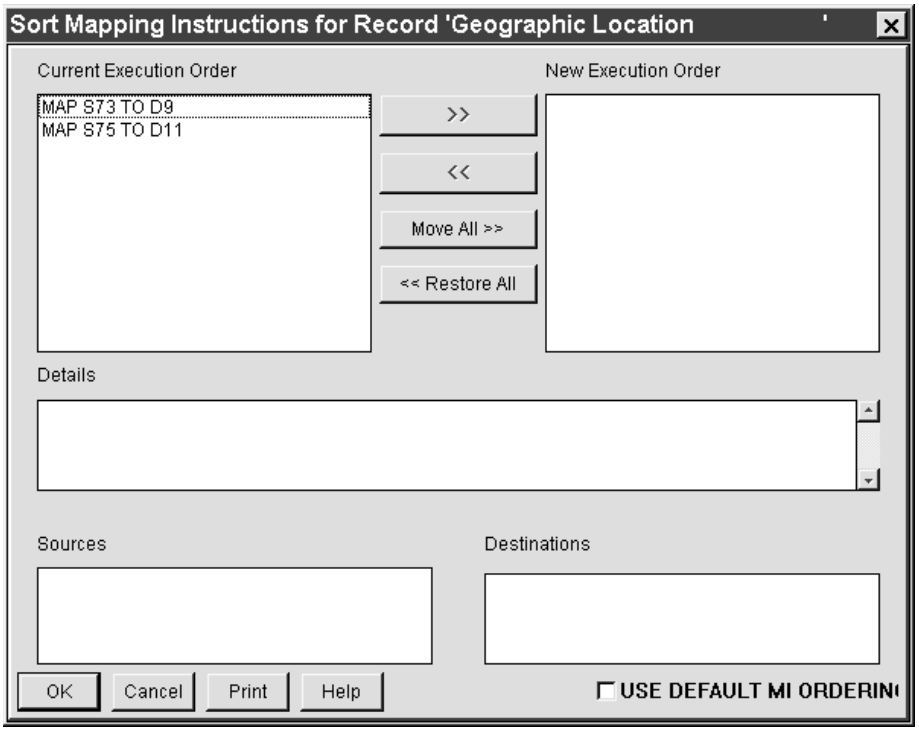
The Sort Mapping Instructions Window

Introduction

The Sort Mapping Instructions dialog box displays the mapping instructions for a single record/segment only. The window does not display instructions for fields in other records/segments that may be part of the same group.

Example

This is the Sort Mapping Instructions dialog box. Note the example mapping instructions in the **Current Execution Order** box.



(Continued on next page)

Parts and function of the Sort Mapping Instructions dialog box

This table describes the parts and functions of the Sort Mapping Instructions dialog box.

Part	Function
Current Execution	Lists all mapping instructions for the specified record/ segment in the current execution order.
New Execution Order	Lists all mapping instructions for the specified record/ segment in the selected execution order.
Details	Displays the complete text of the highlighted mapping instruction.
Sources	Lists all sources in the highlighted mapping instruction.
Destinations	Lists all destinations in the highlighted mapping instruction.
Move to the Right 	Moves the mapping instruction highlighted in the Current Execution box to the position immediately after the mapping instruction highlighted in the New Execution Order box. If no mapping instruction is highlighted in the New Execution Order box, this button moves the mapping instruction to the end of the list in the New Execution Order box. When the New Execution Order box is empty, this button moves the mapping instruction highlighted in the Current Execution box to the top of the New Execution Order box. (Continued on next page)

(Contd) Part	Function
Move to the Left 	Moves the mapping instruction highlighted in the New Execution Order box to the position immediately after the mapping instruction highlighted in the Current Execution box. If no mapping instruction is highlighted in the Current Execution Order box, this button moves the mapping instruction to the end of the list in the Current Execution Order box. When the Current Execution box is empty, this button moves the mapping instruction highlighted in the New Execution Order box to the top of the Current Execution box.
Move All 	Moves all mapping instructions in the Current Execution box to the position immediately after the mapping instruction highlighted in the Current Execution box. When the New Execution Order box is empty, this button moves all the mapping instructions in the Current Execution box to the top of the New Execution Order box. If no mapping instruction in the New Execution Order box is highlighted, this button moves all the mapping instructions in the Current Execution box to immediately after the last mapping instruction in the New Execution Order box.
Restore All 	Moves all the mapping instructions in the New Execution Order box back to the Current Execution box and orders them as they were when you opened the Sort Mapping Instructions window. This may or may not be the default sort order.
Use Default MI Ordering 	Moves all the mapping instructions in the New Execution Order box back to the Current Execution box and puts them in the default sort order. You can also use this function to restore the default sort order for a compiled map. (Continued on next page)

(Contd) Part	Function
Print 	Prints the contents of the Current Execution box and the New Execution Order box.

How to Sort Mapping Instructions

Introduction

This topic describes the procedure for using the Sort Mapping Instructions dialog box to manually sort the mapping instructions for a particular record/segment.

Before you begin

Use this procedure to prepare for manually sorting mapping instructions.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Open the Visual Mapper and then open the working map file or the master MAP file.

Note

If you have a MAP file open, continue with step 2</td></tr>
<tr><td>2</td><td colspan="2">Create a current sort order.

Comment
If you have modified the map since the last time you saved it, you must save it again to create a current sort order.

If you modified the mapping instructions, you must also compile the new version of the map.</td></tr>
<tr><td>3</td><td colspan="2">Use this decision table to determine if you need to recompile the map.</td></tr>
<tr><td></td><td>IF you add mapping instructions that…</td><td>THEN...</td></tr>
<tr><td></td><td>Reference the record or segment that you are sorting in the mapping expression</td><td>Recompile the map.</td></tr>
<tr><td></td><td>Do not reference the record or segment that you are sorting in the mapping expression

Examples
◗ 0-to-1 literal mapping instructions
◗ Mapping instructions that reference other source items
◗ Mapping instructions that reference only system variables in the source</td><td>Do not recompile the map.</td></tr>
</table>

(Continued on next page)

Sorting mapping instructions

Use this procedure to sort the mapping instructions for a source record/segment.

Step	Action
1	Move the focus to the source record/segment referenced in the mapping instructions you want to sort.
2	Click **Sort Mapping Instructions** on the **Map Items** menu. **System Response** The system displays the Sort Mapping Instructions dialog box is displayed on your screen. The **Current Execution** box displays the mapping instructions in the current order. **Hint** Click the Print button to print a list of the mapping instructions.
3	Select the mapping instruction you want to reorder. **System Response** Gentran:Server displays the following information about the selected mapping instruction: ◗ The **Details** box displays the complete mapping instruction. ◗ The **Sources** box lists the source items. ◗ The **Destinations** box lists the destination items. **Comment** The information in the Details, Sources, or Destinations boxes is view only. You cannot edit these values.
4	In the **New Execution Order** box, select the mapping instruction that you want to precede the mapping instruction you are moving. **Comment** If the box is empty or if you want to move the instruction to the last position in the list, skip this step.
5	Click the **Move to the Right** button to move the mapping instruction into the **New Execution Order** box. **System Response** If you did not select a mapping instruction in the New Execution Order box, Gentran:Server moves the mapping instruction to the last position in the list.
6	Repeat Steps 3 through 5 until you reorder all the mapping instructions and move them into the New Execution Order box. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="7">7</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN…</td></tr>
<tr><td>Move a mapping instruction back into the Current Execution box so that you can add one or more mapping instructions before it is in the New Execution Order box</td><td>◗ Select the mapping instruction you want to move.
◗ Select the mapping instruction in the Current Execution box that is to precede the moved mapping instruction.
◗ Click Move to the Left.</td></tr>
<tr><td>Keep the order of all mapping instructions remaining in the Current Execution box</td><td>Click Move All to move them to immediately after the mapping instruction selected in the Current Execution box.</td></tr>
<tr><td>Restore the execution to the order displayed when the Sort Mapping Instructions window opened</td><td>Click Restore All.</td></tr>
<tr><td>Print a list of the mapping instructions in the Current Execution box and the New Execution Order box.</td><td>Click Print.</td></tr>
<tr><td>Quit sorting before all mapping instructions are in the New Execution Order Box</td><td>Click Cancel.
Comment
You lose all changes made since opening the Sort Mapping Instructions window.</td></tr>
<tr><td>8</td><td colspan="2">Click OK.
Note
Remember, you must compile the MAP file to generate the translation table file Gentran:Server uses during translation.</td></tr>
</table>

How to Restore the Default Sort Order

Introduction

You can restore the default sort order of mapping instructions if the changes you made do not produce the desired results or are no longer needed.

Restoring the default sort order

Use this procedure to restore the original sort order:

Step	Action
1	Open the Sort Mapping Instructions dialog box and display the mapping instructions you want to restore to the original sort order.
2	Check **Use Default MI Ordering**. **System Response** Gentran:Server returns all mapping instructions in the Sort Mapping Instructions window to the default order it originally assigned. Gentran:Server also disables the **Move to the Right**, **Move to the Left**, **Move All**, and **Restore All** buttons. **Note** If the mapping instructions were saved previously, the system displays the instructions in the default order only after you compile the new version of the map.
3	Click **OK**.
4	Save and compile the map file.

Sorting Utility Example

Introduction

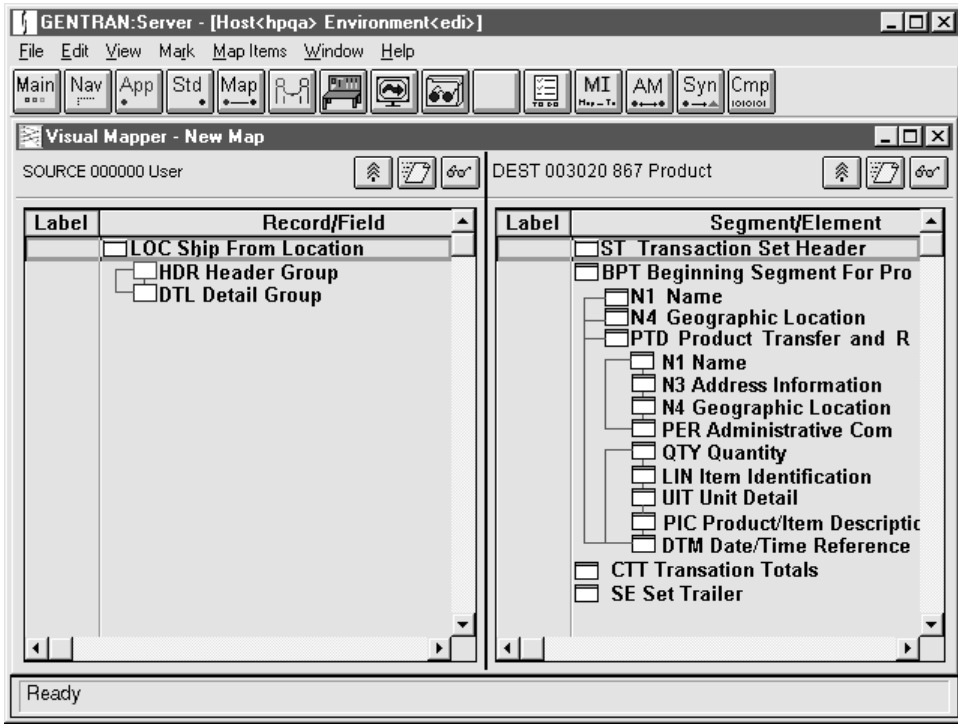
Using the Sorting Utility to change the sort order of mapping instructions is usually the most effective way of correcting the mapping instructions. In some cases, it is the only way to correct the mapping instructions

About this example

This example demonstrates how to use the Sorting Utility to correct a problem by reordering the mapping instructions.

The map

Begin by opening a map. The illustration below shows the map for this example.



(Continued on next page)

Output file

After opening the map, look at the output file. This is the generated outbound EDI for the output file:

```
ISA*00*       *00*       *01*1111111111    *01*2222222222
*961122*1436*U*00200*
GS*PT*1111111111*2222222222*961122*1436*17*X*003020
ST*867*0001
BPT*00*0*960722
N1*SF*Company XYZX
N4*Someplace*CA*94128
PTD*SD
N1*ST*Destination ABCD*91*106008
N3*3080 Scenic Boulevard
N4***95051*US
N4*SANTA CRUZ*CA*95111*US
PER*ZZ**TE*2283331111
PER*ZZ**TE*1112422211
N1*BT*Destination EFGH*91*106008
N3*2456 LAWRENCE EXPRESSWAY
N4*SANTA CLARA*CA
QTY*32*1
LIN**MG*6264401830
UIT*EA*1197
PID*F****Large Things in a box
DTM*011*960715
QTY*32*1
LIN**MG*6264401830
UIT*EA*1197
PID*F****More Things in a box
DTM*011*960715
SE*25*0001
GE*1*17
IEA*1*000000017
```

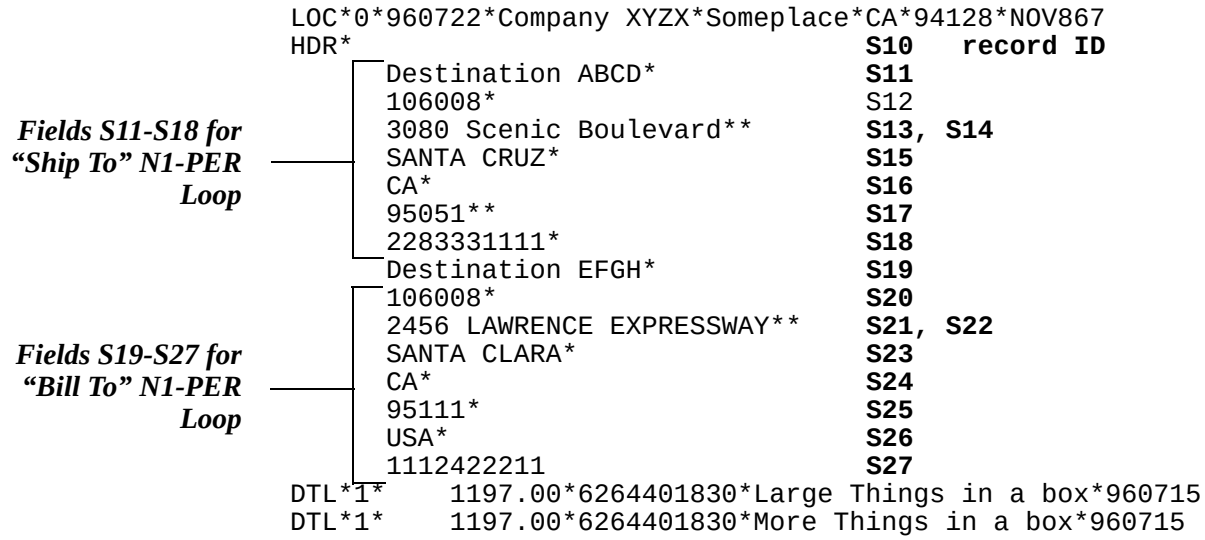
We expected two N1 loops with N1, N3, N4, and PER segments.

(Continued on next page)

Input file

After examining the output file, look at the input file. This is the source Gentran:Server uses with translation.

Normally, all the fields in a record appear on one line. However, we arranged this figure to identify the fields with their source labels.

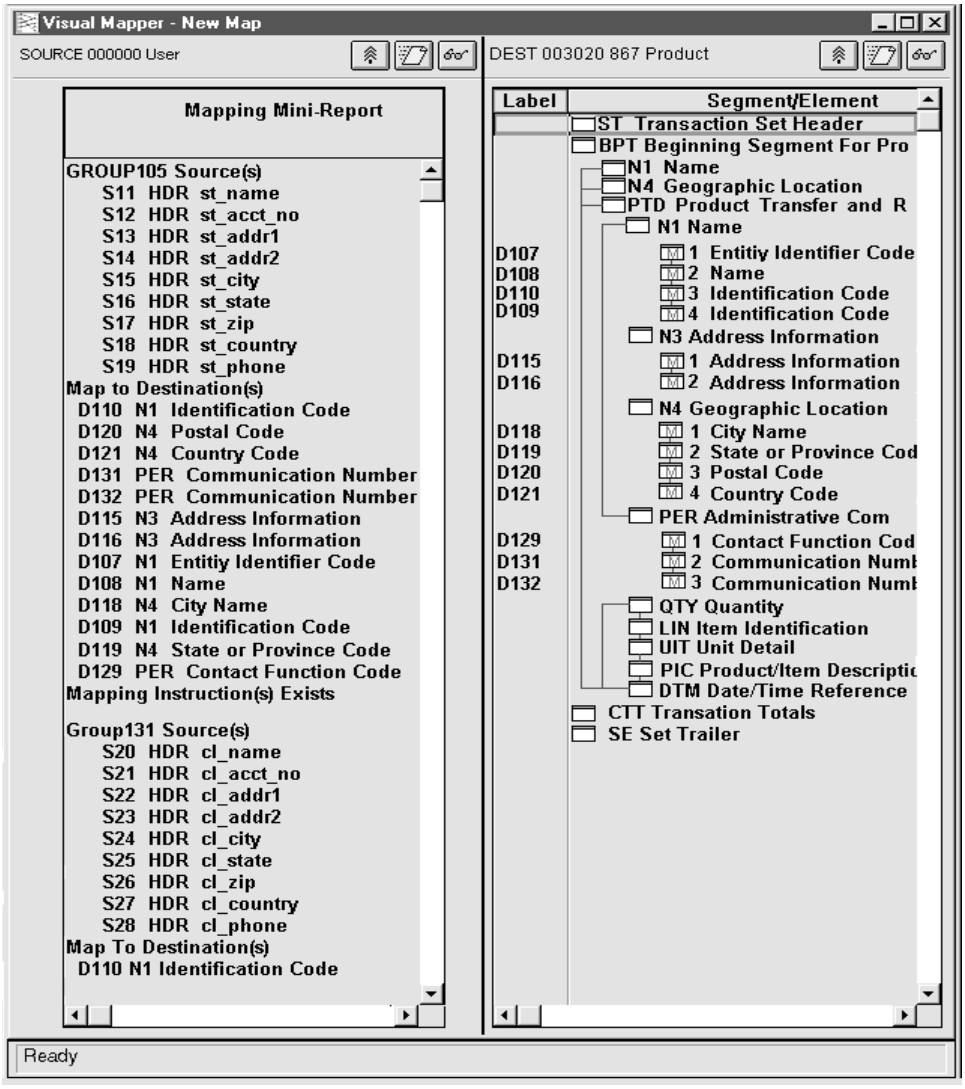


Notice that the data in the HDR record generates the N1 through PER segments and the source data comes from distinctly different fields.

(Continued on next page)

The mini-report

Now check the mapping instructions. To display the following screen, move the focus to the destination field and then click the mini-report button on the source side.



Notice that all the fields in the N1 loop are in two groups: GROUP 105 and GROUP 131.

(Continued on next page)

Mapping instructions

On the Mapping Instructions screens, GROUP 105 for the N1 - ST loop contains three screens. The first screen has these mapping instructions:

```
WHEN data found in S12
MAP ‘91’ TO D109
MAP S14 TO D116
MAP ‘ST’ TO D107
MAP S15 TO D118
MAP S11 TO D108
MAP S16 TO D119
MAP S12 TO D110
MAP S17 TO D120
MAP S13 TO D115
```

The second screen has these mapping instructions:

```
WHEN S12 > ‘0’ AND WHEN not data found in S18
MAP ‘US’ TO D121
```

The third screen has these mapping instructions:

```
WHEN data found in S19
MAP ‘22’ TO D129
MAP S19 TO D132
MAP ‘TE’ TO D131
```

GROUP 131 for the N1 - BT loop contains three screens as well. The first screen has the following mapping instructions:

```
WHEN data found in S21
MAP ‘BT’ TO D107
MAP S23 TO D116
MAP S20 TO D108
MAP S24 TO D118
MAP ‘91’ TO D109
MAP S25 TO D119
MAP S21 TO D110
MAP S26 TO D120
MAP S22 TO D115
```

The second screen has these mapping instructions:

```
WHEN S26 > ‘0’
MAP S27 TO D121
```

(Continued on next page)

The third screen has these mapping instructions:

```
WHEN data found in S28
MAP '22' TO D129
MAP 'TE' TO D131
MAP S28 TO D132
```

The mapping instructions seem correct, but Gentran:Server may not execute them in the expected order. To determine this, run a Diagnostics Report.

Diagnostics Report

To generate the Diagnostics Report, run the outbound translation by using the command line program **Iftran** with the 'd' parameter:

Note
Gentran:Server overwrites the report name and location with each translation.

```
Input File = c:\server\data\input
Table File = c:\server\maps\BEFORE.TBL
------------------------------------------------------------
File Line = 1
Record ID = LOC
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   0                S2   -> D5   BPT    002
003   960722           S3   -> D6   BPT    003
004   Company XYZX     S4   -> D52  N1     002
005   Someplace        S5   -> D62  N4     001
006   CA               S6   -> D63  N4     002
007   94128            S7   -> D64  N4     003
------------------------------------------------------------
File Line = 2
Record ID = HDR
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   HDR              S10  -> D78   PTD    001   Conditional
009   (null)           S18  -> D121  N4     004   Part 2 of 2
003   106008           S12  -> D121  N4     004   Part 1 of 2
010   2283331111       S19  -> D129  PER    001   Conditional
010   2283331111       S19  -> D131  PER    003   Conditional
008   95051            S17  -> D120  N4     003   Conditional
010   2283331111       S19  -> D132  PER    004   Conditional
019   1112422211       S28  -> D129  PER    001   NEW RECORD
019   1112422211       S28  -> D131  PER    003   Conditional
019   1112422211       S28  -> D132  PER    004   Conditional
018   USA              S27  -> D121  N4     004   NEW RECORD
017   95111            S26  -> D120  N4     003   Conditional
003   106008           S12  -> D109  N1     003   Conditional
003   106008           S12  -> D107  N1     001   Conditional
002   Destination ABCD S11  -> D108  N1     002   Conditional
003   106008           S12  -> D110  N1     004   Conditional
004   3080 Scenic Rd   S13  -> D115  N3     001   Conditional
```

Field 010 creates the first PER segment.

Field 019 creates the second PER segment.

Field 003 creates the first N1 segment.

(Continued on next page)

Field 012 creates the second N1 segment.

```
005   (null)           S14  -> D116  N3    002   Conditional
006   SANTA CRUZ       S15  -> D118  N4    001   Conditional
007   CA               S16  -> D119  N4    002   Conditional
012   106008           S21  -> D107  N1    001   NEW RECORD
012   106008           S21  -> D109  N1    003   Conditional
011   Destination EFGH S20  -> D108  N1    002   Conditional
012   106008           S21  -> D110  N1    004   Conditional
013   2456 LAWRENCE EX S22  -> D115  N3    001   Conditional
014   (null)           S23  -> D116  N3    002   Conditional
015   SANTA CLARA      S24  -> D118  N4    001   Conditional
016   CA               S25  -> D119  N4    002   Conditional
-------------------------------------------------------------
File Line = 3
Record ID = DTL
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   1                S31  -> D154 QTY    001   Conditional
002   1                S31  -> D155 QTY    002   Conditional
004   6264401830       S33  -> D160 LIN    003
003       1197.00      S32  -> D191 UIT    002
005   Large Things in  S34  -> D216 PID    005
006   960715           S35  -> D254 DTM    002
-------------------------------------------------------------
File Line = 4
Record ID = DTL
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- ----------
002   1                S31  -> D154 QTY    001   NEW RECORD
002   1                S31  -> D155 QTY    002   Conditional
004   6264401830       S33  -> D160 LIN    003
003       1197.00      S32  -> D191 UIT    002
005   More Things in   S34  -> D216  PID   005
006   960715           S35  -> D254  DTM   002
-------------------------------------------------------------
```

Analysis

Look at the Diagnostics Report section for the input file line 2, input record HDR. In the Record column, you can see that Gentran:Server executes the mapping instruction that maps to the PTD (top of loop) first. Gentran:Server should create the output EDI segments in the following order.

- N1
- N3
- N4
- PER.

(Continued on next page)

Looking at the Record column, you see further down that Gentran:Server creates the output EDI segments in a different order. For this one input record (HDR), create one N1 - PER loop of Ship To information, then another N1 - PER loop of Bill To information. So, Gentran:Server should create the output EDI segments in the following order:

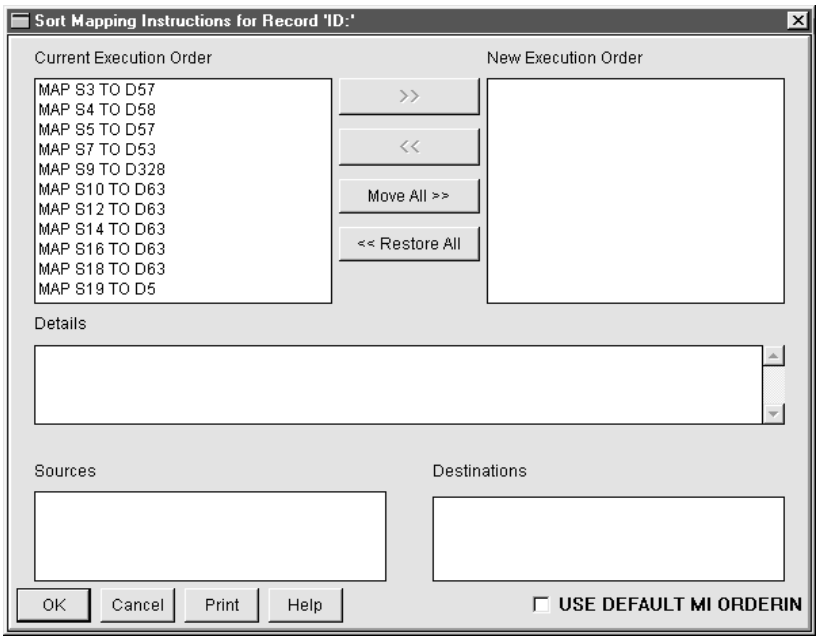
- N1
- N3
- N4
- PER
- N1
- N3
- N4
- PER.

The Diagnostics Report shows that the output includes the data and that it seems as though the mapping conditions were met. However, Gentran:Server is creating the output segments in the wrong order.

Now it is time to use the Sorting Utility to change the order in which Gentran:Server executes the instructions.

Sort Mapping Instructions Dialog Box

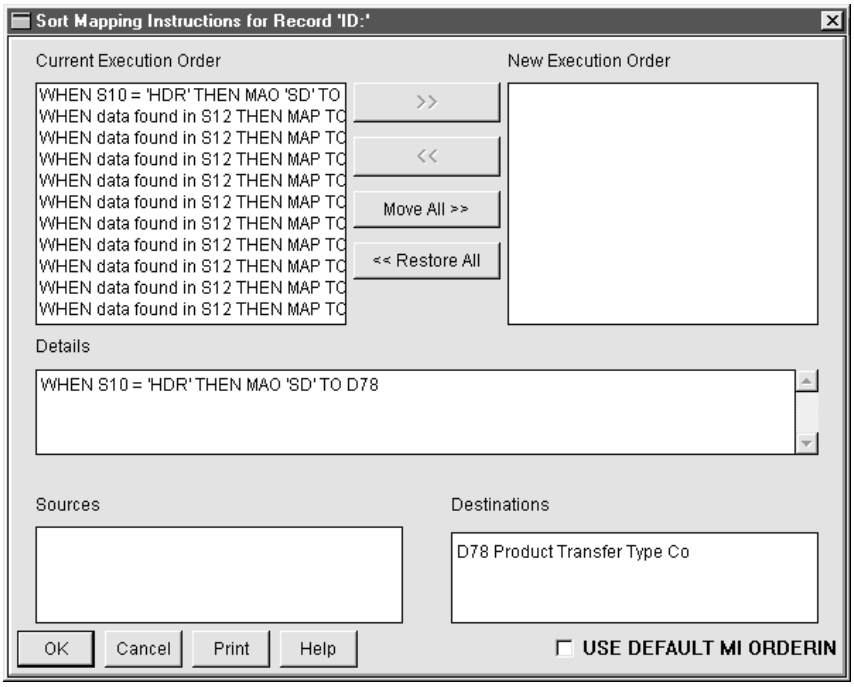
To display the Sort Mapping Instructions dialog box, move the focus to the HDR record and click **Sort Mapping Instructions** on the **Map Items** menu.



(Continued on next page)

Current sort order of mapping instructions

This illustration shows Sort Mapping Instructions dialog box for the HDR record. Notice that the title bar displays the text name of the record, “Header Group.”



Here are the complete mapping instructions in the current order.

```
WHEN S10 = ‘HDR’ THEN MAP ‘SD’ TO D78
WHEN S12 >'0'  AND WHEN not data found in S18  THEN MAP
'US' TO D121
WHEN data found in S19 THEN MAP 'ZZ' TO D129
WHEN data found in S19 THEN MAP 'TE' TO D131
WHEN data found in S12 THEN MAP S17 TO D120
WHEN data found in S19 THEN MAP S19 TO D132
WHEN data found in S28  THEN MAP 'ZZ' TO D129
WHEN data found in S28  THEN MAP 'TE' TO D131
WHEN data found in S28  THEN MAP S28 TO D132
WHEN S26 >'0'  THEN MAP S27  TO D121
WHEN data found in S21  THEN MAP S26 TO D120
WHEN data found in S12  THEN MAP '91' TO D109
WHEN data found in S12  THEN MAP 'ST' TO D107
WHEN data found in S12  THEN MAP S11 TO D108
WHEN data found in S12  THEN MAP S12 TO D110
WHEN data found in S12  THEN MAP S13 TO D115
WHEN data found in S12  THEN MAP S14 TO D116
```

(Continued on next page)

```
WHEN data found in S12  THEN MAP S15 TO D118
WHEN data found in S12  THEN MAP S16 TO D119
WHEN data found in S21  THEN MAP 'BT' TO D107
WHEN data found in S21  THEN MAP '91' TO D109
WHEN data found in S21  THEN MAP S20 TO D108
WHEN data found in S21  THEN MAP S21 TO D110
WHEN data found in S21  THEN MAP S22 TO D115
WHEN data found in S21  THEN MAP S23 TO D116
WHEN data found in S21  THEN MAP S24 TO D118
WHEN data found in S21  THEN MAP S25 TO D119
```

Reordering the mapping instructions

Since the source fields are all in the same input record, order the mapping instructions by the destination fields, placing the earliest first.

Ordering by destination fields

First, identify the instructions that map to each output segment. Put the mapping instructions that create the Ship To N1 - PER loop first, followed by the instructions that create the Bill To loop. The mapping instructions that create each segment must be in the following order: the N1 instructions first, the N3 instructions second, the N4 instructions forth, and the PER instructions last.

Ordering the first mapping instruction to be executed

The mapping to the PTD segment (D78) must occur first because this is the start of the outer loop. Move the mapping instruction “WHEN S10 = ‘HDR’ THEN MAP ‘SD’ TO D78” from the Current Execution list to the New Execution Order list. When this instruction is at the top of the list, the translator executes it first.

Mapping instructions from Ship To fields to N1 segment

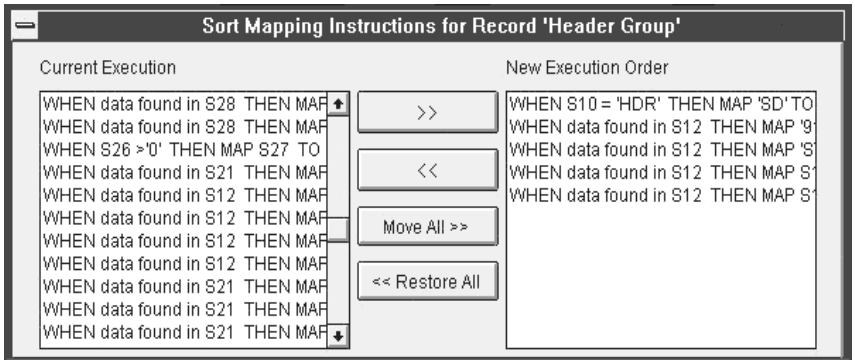
The mapping instructions from the Ship To fields to the N1 segment are:

```
WHEN data found in S12  THEN MAP '91' TO D109
WHEN data found in S12  THEN MAP 'ST' TO D107
WHEN data found in S12  THEN MAP S11 TO D108
WHEN data found in S12  THEN MAP S12 TO D110
```

Select these instructions in the Current Execution box and move them over to the **New Execution Order** box. They now follow the first instruction.

(Continued on next page)

The screen now resembles the illustration below.



The mapping instructions from the Ship To fields to the N3 segment are:

```
WHEN data found in S12  THEN MAP S13 TO D115
WHEN data found in S12  THEN MAP S14 TO D116
```

The mapping instructions from the Ship To fields to the N4 segment are:

```
WHEN data found in S12  THEN MAP S15 TO D118
WHEN data found in S12  THEN MAP S16 TO D119
WHEN data found in S12  THEN MAP S17 TO D120
WHEN S12 >'0'  AND WHEN not data found in S18  THEN MAP
'US' TO D121
```

The mapping instructions from the Ship To fields to the PER segment are:

```
WHEN data found in S19  THEN MAP 'ZZ' TO D129
WHEN data found in S19  THEN MAP 'TE' TO D131
WHEN data found in S19  THEN MAP S19 TO D132
```

Moving remaining instructions

Now move, in order, the mapping instructions to the N3 segment, the N4 segment, and the PER segment. Then follow the same sequence for the mapping instructions from the Bill To fields.

Next, identify the mapping instructions to the N1 segment and move those to the **New Execution Order** box. We follow with the N3, N4, and PER mapping instructions. Once all the mapping instructions are on the **New Execution Order** box, click **OK** to change the old order and save the new one. Finally, save and compile the map file.

(Continued on next page)

Revised results

When using the revised map to run translation, the system produces the following output file.

```
ISA*00*       *00*       *01*1111111111    *01*2222222222
*961125*1621*U*00200
GS*PT*1111111111*2222222222*961125*1621*18*X*003020
ST*867*0001
BPT*00*0*960722
N1*SF*Company XYZX
N4*Someplace*CA*94128
PTD*SD
N1*ST*Destination ABCD*91*106008
N3*3080 Scenic Boulevard
N4*SANTA CRUZ*CA*95051*US
PER*ZZ**TE*2283331111
N1*BT*Destination EFGH*91*106008
N3*2456 LAWRENCE EXPRESSWAY
N4*SANTA CLARA*CA*95111*US
PER*ZZ**TE*1112422211
QTY*32*1
LIN**MG*6264401830
UIT*EA*1197
PID*F****Large Things in a box
DTM*011*960715
QTY*32*1
LIN**MG*6264401830
UIT*EA*1197
PID*F****More Things in a box
DTM*011*960715
SE*24*0001
GE*1*18
IEA*1*000000018
```

We now have two separate N1 - PER loops.

(Continued on next page)

Diagnostics Report

To verify that these are the desired results, generate a new Diagnostics Report. The report shows the new mapping instruction execution order for only the HDR input record.

```
File Line = 2
Record ID = HDR
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   HDR              S10  -> D78  PTD    001   Conditional
003   106008           S12  -> D109 N1     003   Conditional
003   106008           S12  -> D107 N1     001   Conditional
002   Destination ABCD S11  -> D108 N1     002   Conditional
003   106008           S12  -> D110 N1     004   Conditional
004   3080 Scenic Rd   S13  -> D115 N3     001   Conditional
005   (null)           S14  -> D116 N3     002   Conditional
006   SANTA CRUZ       S15  -> D118 N4     001   Conditional
007   CA               S16  -> D119 N4     002   Conditional
008   95051            S17  -> D120 N4     003   Conditional
009   (null)           S18  -> D121 N4     004   Part 2 of 2
003   106008           S12  -> D121 N4     004   Part 1 of 2
010   2283331111       S19  -> D129 PER    001   Conditional
010   2283331111       S19  -> D131 PER    003   Conditional
010   2283331111       S19  -> D132 PER    004   Conditional
012   106008           S21  -> D107 N1     001   NEW RECORD
012   106008           S21  -> D109 N1     003   Conditional
011   Destination EFGH S20  -> D108 N1     002   Conditional
012   106008           S21  -> D110 N1     004   Conditional
013   2456 LAWRENCE EX S22  -> D115 N3     001   Conditional
014   (null)           S23  -> D116 N3     002   Conditional
015   SANTA CLARA      S24  -> D118 N4     001   Conditional
016   CA               S25  -> D119 N4     002   Conditional
017   95111            S26  -> D120 N4     003   Conditional
018   USA              S27  -> D121 N4     004   Conditional
019   1112422211       S28  -> D129 PER    001   Conditional
019   1112422211       S28  -> D131 PER    003   Conditional
019   1112422211       S28  -> D132 PER    004   Conditional
-------------------------------------------------------------
```

This is the first N1-PER loop.

This is the second N1-PER loop.

Notice that for each Ship To and Bill To mappings, Gentran:Server now creates the N1 through PER segments in the proper order and the exercise is finished.

Diagnostic Report

Overview

Introduction

This chapter describes the Diagnostics report and explains how and when to use the report to analyze unexpected results from mapping instructions.

Purpose of the Diagnostics report

The Diagnostics report utility associates each translated source field with all destination fields or system variables that receive part or all of the source field's value. The report also indicates the source of the input value (either the value in the current field, a calculation using the value in the current field, or a system variable) and the current value of the source field.

Comment
Each line of the Diagnostics report indicates the current value of the source field at each point in the translation; a line may not indicate the final value that Gentran:Server writes to the destination. That final value includes the current value and any additions, subtractions, or other modifications dictated by the remainder of the mapping instructions.

Translation tables you can analyze

You can analyze any MAP File translation table (*.tbl*) and generate a Diagnostics report whenever you run a translation.

When to use the Diagnostics Report Utility

Use a Diagnostics report for the following purposes:

- To aid in learning the translation order that Gentran:Server uses. Knowing the translation order can help you learn to write efficient mapping instructions that give the desired translation results.
- To document and track complex mapping instructions that may include system variables or macros.
- To help locate mapping instructions that give unexpected results, such as
  - Extra records/segments
  - Missing fields/elements
  - Unexpected values in fields or elements
- To identify which input record/segment caused the translator to produce unexpected results.

How to Generate a Diagnostics Report

Introduction

There are two ways to generate a Diagnostics report:

- Within Gentran:Server, click **Enable Debugging** on the Translate Inbound/ Outbound Document dialog box.
- On the command line or in a batch file, enter the **Iftran** command with the 'd' parameter.

Preparing to generate a Diagnostics Report

Before generating a Diagnostics report, you must first use the Gentran:Server Visual Mapper to save and compile the map you are using for the translation. Compiling the Map produces the translation table file.

For more information about saving and compiling maps with the Visual Mapper, see the Mapping chapter in this guide.

Generating the report from within Gentran:Server

To generate a Diagnostics Report from within Gentran:Server, follow this procedure.

Step	Action
1	Open Gentran:Server
2	Click **Translate** on the Main menu.
3	Click **Inbound** or **Outbound** on the **Translate** menu.
4	Click **Translation Option** on the Translate Document dialog box.
5	Click **List Segment IDs** in the **Select Options** box.
6	Click **OK**. **System Response** Gentran:Server translates the input file, generates the Diagnostics report, names the report *trans.ord*, and writes it to the Gentran:Server temporary directory.

(Continued on next page)

Generating the report from the command line

To generate a Diagnostics report from the command line, use the **lftran** command line program with the 'd' parameter. The 'd' parameter prompts **lftran** to generate the Diagnostics report after the translation is complete.

UNIX command line example

This is an example of a command-line command in UNIX™.

lftran <input file name> -id

Command Part	Description
<input file name>	Contains the name of the input file (i.e., the file containing the EDI data you are translating)
i	Indicates inbound translation
d	Writes the segment IDs to *xlcntl.err* during translation and writes the Diagnostics report file, *trans.ord*, to the Gentran:Server temporary directory

Reference

For more information about lftran command parameters, see the *Gentran:Server for UNIX and Workstation Technical Reference Guide*.

How to View and Print the Diagnostics Report

Introduction

The Diagnostics report file, *trans.ord*, is an ASCII text file.

On-screen viewing

You can use any text editor to read the report on the screen.

Printing the report

The most effective use of the report comes from reviewing a printed copy.

Use either your text editor's print command or an operating system print command to print the *trans.ord* file. The system stores this file in the Gentran:Server report directory (Workstation product level) or the appropriate user directory (Gentran:Server product level and higher).

How to Use a Diagnostics Report

Before you begin

Before you begin to study the mapping instructions and their results, have the following available:

- A hard copy of the translation output file

  This shows you the translated application or EDI data, in the order in which the translator writes it.
- A hard copy of the Diagnostics report

  This shows you the order in which the translator executes the mapping instructions for a specified source record/segment.
- A hard copy of the input file you are translating

  This shows the source application or EDI data that was translated, in the order in which the translator received it.
- Your computer screen with the Mapping Instructions window open and displaying the mapping instructions of interest.

Analyzing your mapping instructions

Use this table to determine how to analyze your mapping instructions.

IF you want to determine…	THEN…
Whether Gentran:Server translated your input data exactly as you intended	Study the output file. Take note of any output record/segment and field/ element that differs in any way from your expectations.
Why Gentran:Server did not translate your input data as expected	Study the Diagnostics report to find the order the translator used to execute the mapping instructions.
The order in which the translator received the data	Study the input file.
Which mapping instructions translated the input data into the output data	Check the instructions displayed in the Mapping Instructions window.

Comment

You may have to close the Mapping Instructions window to return to the Visual Mapper and select another GROUP of mapping instructions (single record/ segment) for display in the Mapping Instructions window.

How to Read a Diagnostics Report

Introduction

This topic contains a sample Diagnostics report and a table that describes the report's lines and columns.

Sample Diagnostics Report

This is a sample Diagnostics report. For the purpose of printing the report in this guide, the spacing differs from the actual report.

```
Input File = c:\server\data\input
Table File = c:\server\maps\BEFORE.TBL
------------------------------------------------------------
File Line = 1
Record ID = ST
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 2
Record ID = BEG
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
003   AAA96226         S38  -> D82  005    003
008   Z01224D          S43  -> D87  005    005
003   AAA96226         S38  -> D7   001    003
008   Z01224D          S43  -> D51  001    024
------------------------------------------------------------
File Line = 3
Record ID = N1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   PAUL STANLEY     S83  -> D15  001    004   Conditional
------------------------------------------------------------
File Line = 4
Record ID = N2
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 5
Record ID = N3
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   SUPERSTAR FILMS  S90  -> D30  001    005   Conditional
002   1166 ELM ST      S91  -> D31  001    006   Conditional
------------------------------------------------------------
```

(Continued on next page)

```
File Line = 6
Record ID = PO1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   001              S209 -> D84  005    004
002   1                S210 -> D88  005    006
007   911122122        S215 -> D89  005    007   Conditional
007   911122122        S215 -> D90  005    008   Conditional
007   911122122        S215 -> D91  005    009   Conditional
003   EA               S211 -> D92  005    010
-------------------------------------------------------------
File Line = 13
Record ID = SE
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
-------------------------------------------------------------
```

Contents of the Diagnostics report

This table describes the contents of the Diagnostics report.

Column	Description
Input File	Name of the input file.
Table File	Name of the table file, which is the compiled map used to translate the input file.
File Line	Line number of the input file.
Record ID	Identifier of the source record/segment.
Field	Number of the source field/element generating output.
Input	The current value of the source item. This value can be: ◗ The current value of the source field/element. If the source field/element is blank, this value is also blank. If the source field/element is empty or not present in a delimited record, the system displays <null>. ◗ The current value of the system variable. (Continued on next page)

(Contd) Column	Description	
Source	The source field/element you are mapping. This item can be a: ◗ Source field/element label, displayed as an S followed by a number. ◗ System variable name, displayed as a dollar sign ($) followed by a string. ◗ Literal value, such as a date, character string, or number	
Dest	The destination of a mapped source field/element. This item can be: ◗ Destination field/element labels. These begin with D and are followed by a number. ◗ System variable names. These begin with a dollar sign ($).	
Record	User-defined name or label for the record or segment that contains the destination field/element.	
Field	Number of the destination field or element on this line.	
Comment	Description of the mapping for the source field/element:	
	Value	**Meaning**
	NO MAPPINGS	The fields or elements in this source record or segment are empty and did not generate data.
	blank	An unconditional mapping instruction generated the data.
	NEW RECORD*	The source field or element generates a new copy of the destination record or segment.
	Part <N1> of <N2>	The field or element is one of two or more sources used in mapping instructions or conditions. ◗ N1 = the number for this part of the value. ◗ N2 = the total number of parts in the value. (Continued on next page)

(Contd) Column	Description	
	Conditional†	The mapping instruction using the source field or element is conditional and the condition is satisfied.
	Table footnotes If a mapping instruction that uses two or more source values to determine the destination value also generates a new record, the Comment column displays NEW RECORD instead of Conditional or Part <N1> of <N2>. If a conditional mapping instruction uses two or more source values to determine the destination value, the Comment column displays Part <N1> of <N2> instead of Conditional.	

CAUTION

A field/element does not generate output when:

- No mapping instruction uses it as a source item
- The mapping instruction using it as a source item is conditional and the condition is not satisfied.

Within a section (denoted by dashed lines), the information lines are in the order in which Gentran:Server will map them.

Diagnostics Report Example

Introduction

This topic describes a typical situation that you may have with your mapping instructions and shows how you can use a Diagnostics report to understand why the output file data contains an unexpected duplicate record. The example steps you through the process of identifying and correcting a problem in a set of mapping instructions.

About the example

In this example, EDI data was translated to application data. We will look at the input file, the output file, the map, the Diagnostics report, and the mapping instructions.

Input file

First, we look at the source EDI data from the input file to see the order in which the translator received the data.

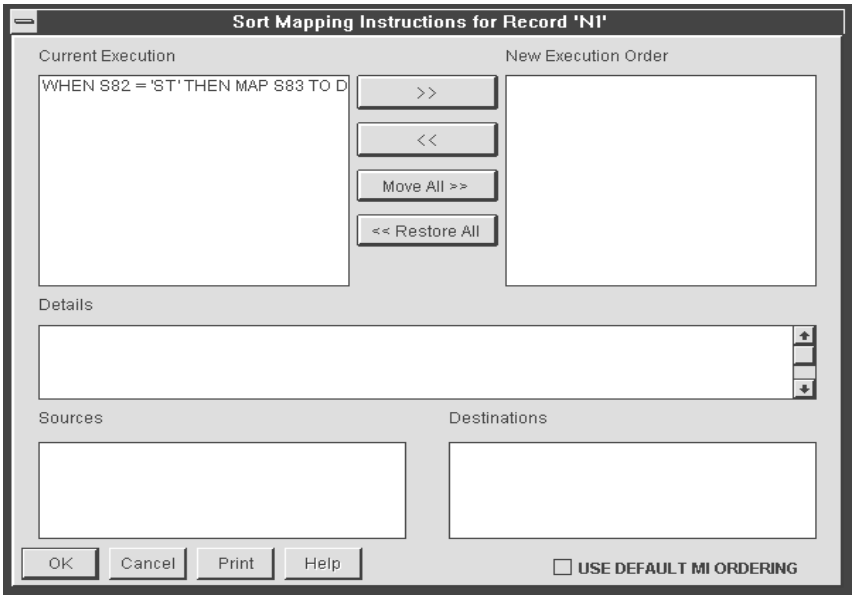
```
ISA*00*          *00*          *01*b             *01*a
*951129*2225*U*00200
GS*PO*b*a*951129*2225*1439*X*002000
ST*850*1439001
BEG*00*SA*AAA96226***951129**Z01224D
N1*ST*PAUL STANLEY*12*9999999999999
N2*XXXZZZ              ORD 01111222
N3*SUPERSTAR FILMS INC.*1166 ELM ST
N3*LOBBY Z*RM 1101
N4*NYC*NY*11136
PO1*001*1*EA*3.75*PZ*IN*911122122*VN*ZXX222
J2X*TI*F*RED VINYL RECORD
CTT*1*1
SE*29*1439001
GE*1*1439
IEA*1*000001438
```

Notice the two N3 segments in a row.

(Continued on next page)

Inbound map

Next, we look at the inbound map that was used to translate the EDI data in the input file.



Using the above map to translate the EDI data in the input file should produce one 001 header record and one 005 detail record.

Output file

Now let's look at the output file. This is the resulting output file for the first 80 columns:

```
00154547   AAA96226  PAUL STANLEY   SUPERSTAR FILMS INC.        1166 ELM ST
00154547                                                        RM 1101
00554547   AAA96226  00001Z01224D
```

Notice that the output file contains two 001 records. To find out why, we generate a Diagnostics report.

(Continued on next page)

Diagnostics report

To generate the Diagnostics report, we run the translation again by entering **lftran** with the 'd' parameter on the command line. Here is the result:

```
Input File = c:\server\data\input
Table File = c:\server\maps\BEFORE.TBL
------------------------------------------------------------
File Line = 1
Record ID = UNKNOWN
------------------------------------------------------------
File Line = 2
Record ID = UNKNOWN
------------------------------------------------------------
File Line = 3
Record ID = ST
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 4
Record ID = BEG
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
003   AAA96226         S38   -> D82  005    003
008   Z01224D          S43   -> D87  005    005
003   AAA96226         S38   -> D7   001    003
008   Z01224D          S43   -> D51  001    024
------------------------------------------------------------
File Line = 5
Record ID = N1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   PAUL STANLEY     S83   -> D15  001    004   Conditional
------------------------------------------------------------
File Line = 6
Record ID = N2
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 7
Record ID = N3
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   SUPERSTAR FILMS  S90   -> D30  001    005   Conditional
002   1166 ELM ST      S91   -> D31  001    006   Conditional
------------------------------------------------------------
File Line = 8
Record ID = N3
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   RM 1101          S91   -> D31  001    006   NEW RECORD
001   LOBBY Z          S90   -> D33  001    007   Conditional
------------------------------------------------------------
File Line = 9
```

Field 003 creates the first 001 record.

Field 002 creates the second 001 record.

(Continued on next page)

```
Record ID = N4
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   NYC               S93  -> D35  001   008   Conditional
002   NY                S94  -> D36  001   009   Conditional
003   11136             S95  -> D38  001   011   Conditional
-------------------------------------------------------------
File Line = 10
Record ID = PO1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   001              S209 -> D84  005    004
002   1                S210 -> D88  005    006
007   911122122        S215 -> D89  005    007   Conditional
007   911122122        S215 -> D90  005    008   Conditional
007   911122122        S215 -> D91  005    009   Conditional
003   EA               S211 -> D92  005    010
-------------------------------------------------------------
File Line = 11
Record ID = J2X
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
003   RED VINYL RECORD S288 -> D97  005    015
-------------------------------------------------------------
File Line = 12
Record ID = CTT
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
-------------------------------------------------------------
File Line = 13
Record ID = SE
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
-------------------------------------------------------------
```

Finding the cause

To find the cause of the extra record, we follow this three-step procedure:

Step	Action
1	Review the Record column to find the identifier of the repeated record.
2	Review the Comment column to see if a mapping instruction generated a NEW RECORD (in this example, the 001 record).
3	If we find a copy of the 001 record with NEW RECORD in the Comment column, check the Record ID for the source record and the source Field column for the field that created the new record

(Continued on next page)

Locating the input file line number

Recall that the File Line numbers in the Diagnostics report refer to the lines in the source file. The line number is based on the records in the source side of the map. In this example, the header segments are included, so the count starts at the ISA record as line 1. (If the ST segment was the first record in the map, then the ST segment would be line 1.)

Here is the input file with the lines numbered:

```
1  ISA*00*          *00*          *01*b              *01*a
   *951129*2225*U*00200
2  GS*PO*b*a*951129*2225*1439*X*002000
3  ST*850*1439001
4  BEG*00*SA*AAA96226***951129**Z01224D
5  N1*ST*PAUL STANLEY*12*9999999999999
6  N2*XXXZZZ            ORD 01111222
7  N3*SUPERSTAR FILMS INC.*1166 ELM ST
8  N3*LOBBY Z*RM 1101
9  N4*NYC*NY*11136
10 PO1*001*1*EA*3.75*PZ*IN*911122122*VN*ZXX222
11 J2X*TI*F*RED VINYL RECORD
12 CTT*1*1
13 SE*29*1439001
14 GE*1*1439
15 IEA*1*000001438
```

Line 8 is the cause of the second 001 record

Locating the cause of the extra record

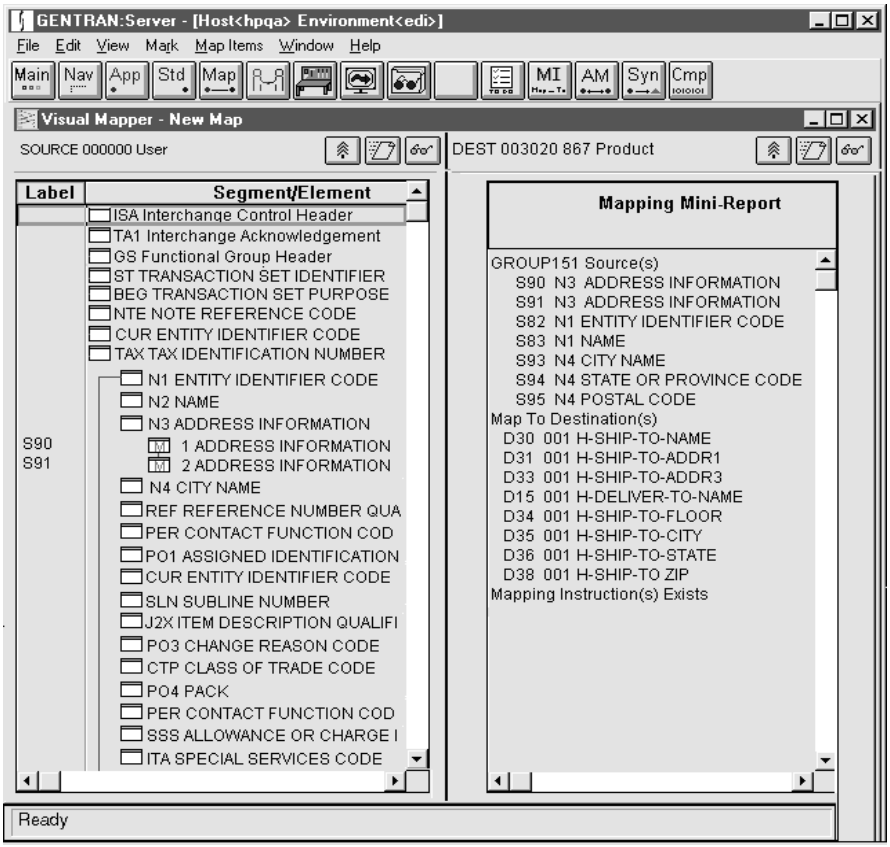
Notice that line 8 in the source file, an N3 segment 02 element, is the cause of the second 001 record. Since we expected only one 001 record, we need to check the mapping instructions associated with the N3 segment 02 element.

(Continued on next page)

Mapping instructions

To begin, we open the map in the Visual Mapper, select the N3 segment 02 element, and then click on the mini-report button (the eyeglasses icon).

Notice that there is only one group.



Examining the mini-report

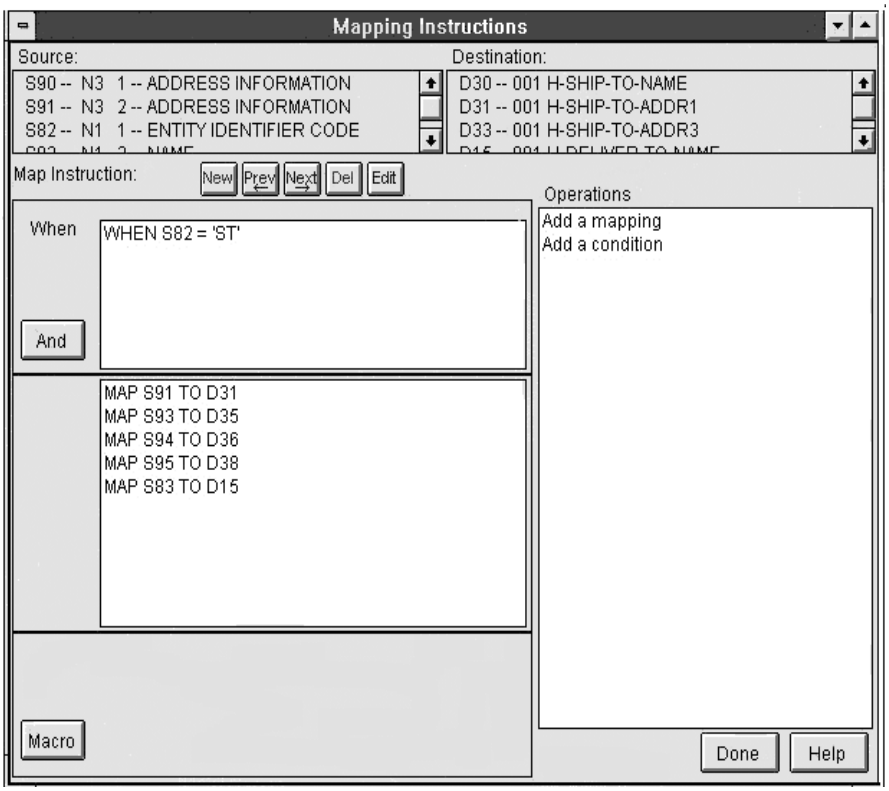
All the elements for the N1 segment through the PER segment loop are in the same group. Notice that the N3 segment 02 element has the item label S91. S91 is part of a GROUP with multiple sources and destinations.

Displaying the mapping instructions for the GROUP

To display the mapping instructions for the GROUP, we place the focus on the GROUP number on the mini-report and then click on the Mapping Instructions (MI) button.

(Continued on next page)

Here is the first screen of mapping instructions.

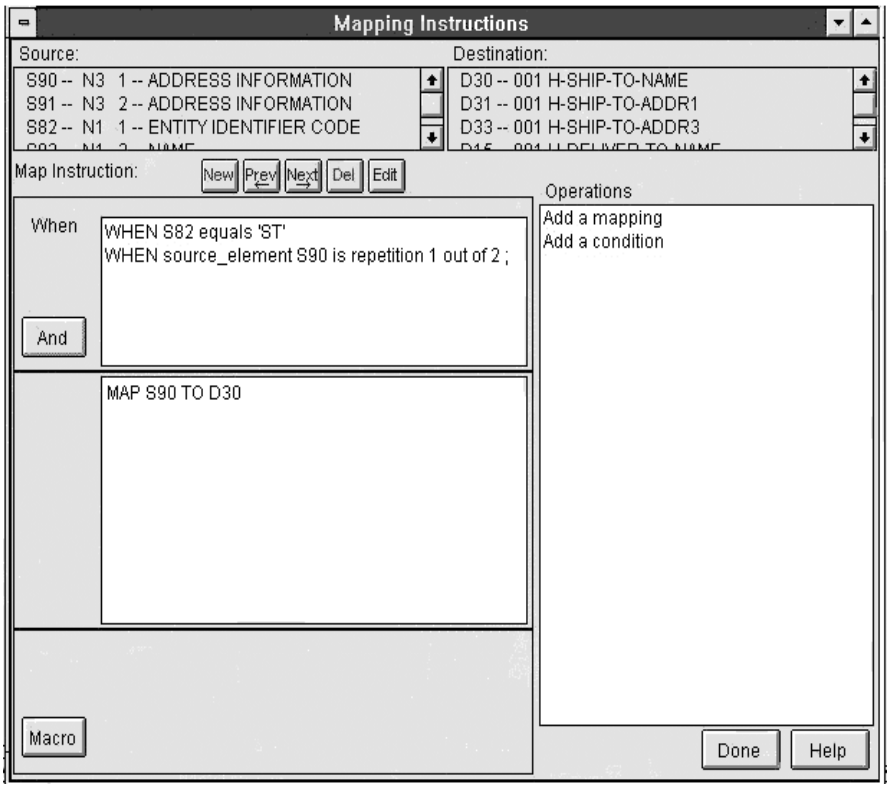


On this screen, we see that S91, the N3 segment 02 element, is mapped to D31 when S82, the N1 segment 01 element, is ST.

(Continued on next page)

Viewing the next screen of mapping instructions

To view the second screen of mapping instructions, we click **Next**.

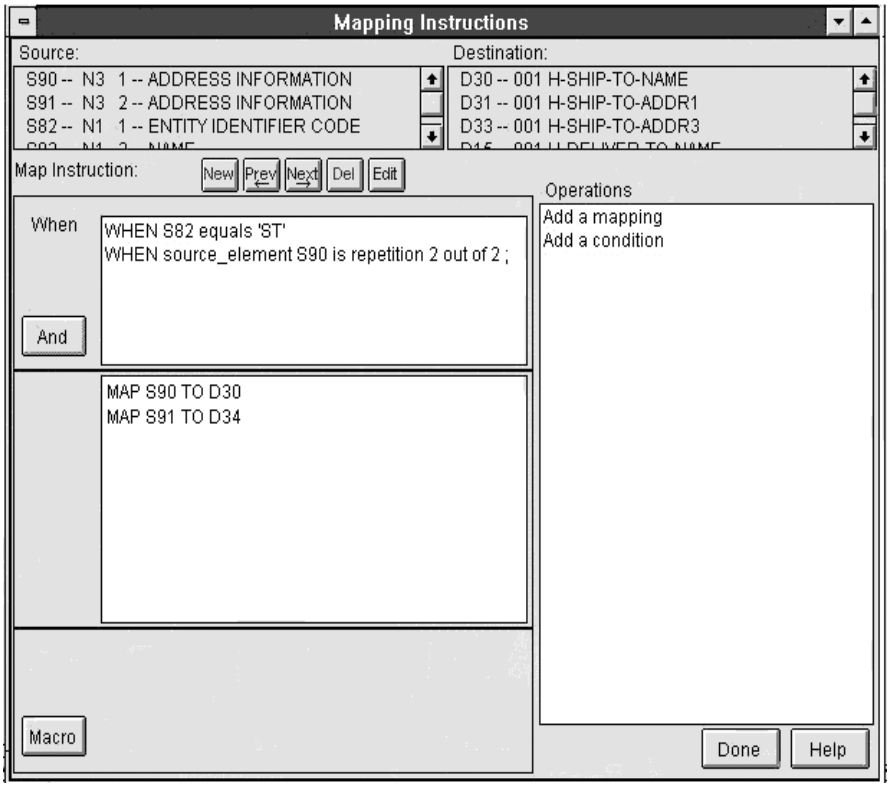


Here, we see that S90, the N3 segment 01 element, is mapped to D30 when the N1 segment 01 element is ST *and* this is the first repetition of the N3 segment.

(Continued on next page)

Viewing the third screen of mapping instructions

We click **Next** again to view the third screen of mapping instructions.



On this last screen, notice that the following happens when the N1 segment 01 element is ST *and* this is the second repetition of the N3 segment:

- S90, the N3 segment 01 element is mapped to D33.
- S91, the N3 segment 02 element, is mapped to D34.

Recall from the first mapping instructions screen that S91 is mapped to D31 when the N1 segment 01 element is ST.

Analysis

In the N1 loop of the input data, the N1 segment 01 element is ST, so the mapping conditions from the first screen are met. We see that there are two N3 segments in the data. In the *trans.ord* file, line 8 contains the second N3 segment the translator processes. This tells us that the N3 segment 02 element caused a second 001 record in the output file.

(Continued on next page)

How the source data was processed

This table describes how the source data was processed.

Stage	Description
1	The compiler evaluated all three of these screens for each source segment that has elements in this group.
2	When the N1 segment with 01 element equal to ST arrived in the data, the translator executed the mapping instructions on the first screen.
3	When the N2 segment arrived in the data, nothing happened because there are no mappings on elements in the N2 segment.
4	When the N3 segment arrived in the data, the 01 element was mapped to D30 from the second screen. The N3 segment 02 element was then mapped to D31 from the first screen, because the N1 segment 01element still equaled ST for this loop.
5	When the second N3 segment appeared in the data, the N3 segment 02 field was mapped from the first screen, because its destination field (D31) came before the others mapped from N3 segment (D33 and D34).
6	The N3 segment 01element was then mapped from the third screen, because this was the second repetition of this segment in the data.
7	The N3 segment 01 element was mapped again, this time to D34, which came from the third screen.
8	The mapping of S91 to D31 was made for each N3 segment for this loop. **Conclusion** This mapping statement should be on the second screen. The mapping of S91 to D31 would occur for the first instance of the N3 segment and the mapping of S91 to D34 would occur for the second N3 segment.

(Continued on next page)

Revising the mapping instructions

This table describes the procedure used to eliminate creation of the extra 001 record.

Step	Action
1	Remove the mapping statement of S91 to D31 from the first screen.
2	Add the mapping statement of S91 to D31 to the second screen.
3	Save and recompile the map.

New output file

Running translation again produced this output file:

```
00154547   AAA96226  PAUL STANLEY   SUPERSTAR FILMS INC. 1166 ELM ST   LOBBY Z
00554547   AAA96226  00001Z01224D
```

This file shows that translation produced one 001 record and one 005 record, which is what we expected.

New results

For additional proof that we have produced the data we want, we generate a new Diagnostics report. Notice that the N3 segment 002 element does not create a second 001 record.

```
Input File = c:\server\data\input
Table File = c:\server\maps\AFTER.TBL
------------------------------------------------------------
File Line = 1
Record ID = UNKNOWN
------------------------------------------------------------
File Line = 2
Record ID = UNKNOWN
------------------------------------------------------------
File Line = 3
Record ID = ST
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 4
Record ID = BEG
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
003   AAA96226         S38   -> D82  005    003
008   Z01224D          S43   -> D87  005    005
003   AAA96226         S38   -> D7   001    003
008   Z01224D          S43   -> D51  001    024
```

(Continued on next page)

```
------------------------------------------------------------
File Line = 5
Record ID = N1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
002   PAUL STANLEY     S83  -> D15  001    004   Conditional
------------------------------------------------------------
File Line = 6
Record ID = N2
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
                                                 NO MAPPINGS
------------------------------------------------------------
File Line = 7
Record ID = N3
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   SUPERSTAR FILMS  S90  -> D30  001    005   Conditional
002   1166 ELM ST      S91  -> D31  001    006   Conditional
------------------------------------------------------------
File Line = 8
Record ID = N3
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   LOBBY Z          S90  -> D33  001    007   Conditional
------------------------------------------------------------
File Line = 9
Record ID = N4
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   NYC              S93  -> D35  001    008   Conditional
002   NY               S94  -> D36  001    009   Conditional
003   11136            S95  -> D38  001    011   Conditional
------------------------------------------------------------
File Line = 10
Record ID = PO1
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
001   001              S209 -> D84  005    004
002   1                S210 -> D88  005    006
007   911122122        S215 -> D89  005    007   Conditional
007   911122122        S215 -> D90  005    008   Conditional
007   911122122        S215 -> D91  005    009   Conditional
003   EA               S211 -> D92  005    010
------------------------------------------------------------
File Line = 11
Record ID = J2X
Field Input (18 chars) Source  Dest Record Field Comment
----- ---------------- ------  ---- ------ ----- -----------
003   RED VINYL RECORD S288 -> D97  005    015
------------------------------------------------------------
```

The N3 segment 002 element does not create a second 001 record.

(Continued on next page)

```
File Line = 12
Record ID = CTT
Field Input (18 chars) Source  Dest Record Field Comment
----- --------------- ------  ---- ------ ----- -----------
                                                NO MAPPINGS
-------------------------------------------------------------
File Line = 13
Record ID = SE
Field Input (18 chars) Source  Dest Record Field Comment
----- --------------- ------  ---- ------ ----- -----------
                                                NO MAPPINGS
-------------------------------------------------------------
```

Suggestions for Using a Diagnostics Report

Introduction

This topic contains suggested steps for using a Diagnostics report in three common mapping situations:

- Extra records/segments
- Missing fields/elements
- Unanticipated data.

Once you identify the cause, use the Mapping Instructions window in the Visual Mapper to modify the mapping instructions, or use the Sorting Utility to reorder the mapping instructions for the source record/segment.

References
For information on using the Mapping Instructions window to add, edit, or delete mapping instructions, see the Mapping chapter in this guide.

For information on using the Sorting Utility, see the Sorting Utility topic in this chapter.

Finding the cause of extra records/ segments

Use this procedure to find the cause of an extra record/segment.

Step	Action
1	Look down the Record column to find instances of the repeated destination record/segment.
2	Whenever you see the identifier of the repeated record/segment, check the Comment column on the same line. **System Response** If the system created a second or subsequent copy of a record/ segment, the Comment column contains NEW RECORD.
3	On the same line, check the source Field column to determine the number of the field/element that actually created the new record/ segment. **System Response** The system displays the Record ID for the source record/segment immediately above the column headings. (Continued on next page)

(Contd) Step	Action
4	Open the map in the Visual Mapper and review the mapping instructions and conditions for the field/element you identified in step 3. Look for: ◗ Multiple mapping instructions to the same destination ◗ Multiple conditions that could be met. If you do not find either of the above items, the cause could be how the mapping instructions were sorted **Reference** For more information about sorting instructions, refer to the topic Sorting Utility in this chapter.

Finding the cause of missing fields/elements

Use this procedure to find the cause of a missing field/element.

Step	Action
1	Review the Record column to find instances of the destination record/segment that is missing a field/element.
2	Check the destination Field column on each line in which a field/element is missing.
3	Record the field number whenever you see the identifier of the record/segment that is missing a field/element. **Note** Recording the field numbers on paper gives you a list against which you can check for missing fields/elements. Remember, that source records/segments are in sequential order on the Diagnostics report but the fields/elements within each source or destination record/segment may not be.
4	Check the Comment column on that same line to determine if the source field/element is creating a new copy of a destination record.
5	If the Comment column contains NEW RECORD, start a separate list of field/element numbers.
6	When you have looked at every destination record/segment of the type missing a field, check the list or lists of field/element numbers for breaks in the sequence. (Continued on next page)

(Contd) Step	Action
7	Find each break in the sequence of field/element numbers in a destination record/segment of the type missing a field
8	From each break forward, look for an instance of a newly created destination record/segment of the type missing a field. Look first in the Record column and then in the Comment column.
9	Look at the mapping instructions, the Diagnostics report, and the input file. You want to determine why the mapping instructions for the source field/element creating the new record were executed before the instructions for the source field/element creating the missing destination field/element. Look for: ◗ Multiple mapping instructions to the same destination ◗ Multiple conditions that could be met. If you do not find either of the above items, the cause could be how the mapping instructions were sorted **Reference** For more information about sorting instructions, refer to the topic Sorting Utility in this chapter.

Finding the cause of unanticipated data

Use this procedure to find the cause of unanticipated data.

Step	Action
1	Review the Record column to find instances of the destination record/segment containing the unanticipated data.
2	For each line on which you see the identifier of the record/segment containing the unanticipated data, check the destination Field column.
3	Check the Input column for each line on which you find an instance of the number for the field/element containing the unanticipated data. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="4">4</td><td colspan="2">Use the following table to determine your next action</td></tr>
<tr><td>If the Input column data is...</td><td>Then...</td></tr>
<tr><td>What you expected to see in the destination field/element</td><td>Continue your review.

Note
This indicates you have not yet found the line containing the source field/element causing the unanticipated data.</td></tr>
<tr><td>Not what you expected to see in the destination field/element</td><td>Continue with step 5.

Note
This may or may not be the source field/element causing unanticipated data.</td></tr>
<tr><td>5</td><td colspan="2">Check the Comment column on the line containing the unexpected data.

Note
The Comment column can contain blanks, Conditional, NEW RECORD, or Part <N1> of <N2>.</td></tr>
<tr><td>6</td><td colspan="2">Open the map in the Visual Mapper.</td></tr>
<tr><td>7</td><td colspan="2">Check the mapping instructions that use the item in the source Field column of the Diagnostics report as the mapping instruction source.

Look for:
◗ Mapping instructions that use a system variable.
◗ Multiple mapping instructions to the same destination
◗ Multiple conditions that could be met.

If you do not find either of the above items, the cause could be how the mapping instructions were sorted

Reference
See the Sorting Utility topic in this chapter for more information about sorting instructions.</td></tr>
</table>

CHAPTER
11

Working with Trading Partnerships

Contents

Overview

Introduction

In this chapter

This chapter describes the procedures for maintaining your Trading Partnership files and records.

Key Terms

This table lists the key terms used in this chapter.

Term	Description
category	A user-definable record that enables you to group Trading Partnerships.
contact record	A record containing the name, address, and telephone numbers of an individual at your trading partner's business.
Group Organization record	A record containing all information specific to a single division or department in your trading partner's organization.
Interchange Organization record	A record containing all information specific to a single company.
Reconciliation ID record	A record containing a set of interchange and group IDs used with functional acknowledgments.
Standard Cross-Reference Table	The Gentran:Server feature that enables you to build a table of standard values. Gentran:Server can use these values to find the Trading Partner record for certain inbound documents.
TRADACOMS record	A record containing all of the supplementary Trading Partnership information for use with TRADACOMS standards.

(Continued on next page)

(Contd) Term	Description
Trading Partner record	One of the records maintained in trading partner files: ◗ Interchange Organization record ◗ Group Organization record ◗ Trading Partnership record ◗ Contact record ◗ Reconciliation ID record ◗ Category record ◗ TRADACOMS record.
Trading Partnership	An arrangement with a specific trading partner to exchange information in a specific document type and using a particular standard version.
Trading Partnership code	A code you define that uniquely identifies a Trading Partnership record.
Trading Partnership record	A record containing information about one of the Trading Partnerships you have established.

Trading Partnership Records

Introduction

Trading Partnership records hold information about your trading partner. Gentran:Server uses the information you define in the Trading Partnership records every time it processes your data. During translation, Gentran:Server inserts the information defined in the Trading Partnership records into the stream of data that you are sending your trading partner. Specifically, Gentran:Server uses this information when building the Interchange envelope, the Group envelope, and the transaction set envelopes.

This section describes all Trading Partnership records and examines the relationships among them.

Understanding Trading Partnership records

Trading Partnership records are those records you maintain with the Trading Partnership Editor. The following records define a trading Partnership:

- Interchange Organization record
- Group Organization record
- Trading Partnership record
- Category record
- Reconciliation ID record
- Contact record
- TRADACOMS record.

The system hierarchically defines the Trading Partner records. At the highest level is the Interchange Organization record. Below the interchange level is the Group Organization record. At the lowest level is the Trading Partnership record.

To translate data in Gentran:Server, you must define each of the following for every document that you want to process:

- One Interchange Organization record
- One Group Organization record
- One Trading Partnership record.

Depending on your organization's needs, you may also define the Category, Reconciliation ID, and Contact, and TRADACOMS records for the Trading Partnership.

(Continued on next page)

Interchange Organization record

The Interchange Organization record contains information that is used when Gentran:Server creates the interchange envelope around your EDI data. Interchange Organization records must be unique for each interchange-level organization. In other words, you must have a separate Interchange Organization record for each interchange-level organization.

Group Organization record

The Group Organization record contains information that Gentran:Server uses when creating the group envelope around your EDI data. You may create multiple group records for a single interchange record.

Group Organization records must be unique for each group-level organization. In other words, there must be a separate Group Organization record for each group-level organization.

Trading Partnership record

The Trading Partnership record contains basic Trading Partnership information such as the Trading Partnership Code, the compiled map (translation object) Gentran:Server will use when translating business documents for this partner, and whether the system will generate an acknowledgment.

Trading Partnership records need not be unique for each Trading Partnership. In other words, two or more trading partnerships can use the same Trading Partnership record.

Category record

The Category record is a record you create that allows you to group trading partnerships according to similarities of interest. You may create up to five category types for use with your trading partnerships.

Reconciliation ID record

The Reconciliation ID record contains Reconciliation IDs for use in functional acknowledgments and CONTRLs. If the Interchange IDs and Group or Application IDs in your functional acknowledgments or CONTRLs are different than those used in the document being acknowledged, you must have a Reconciliation ID record in addition to a Trading Partnership record for each Trading Partnership.

Reconciliation ID records must be unique for each Trading Partnership.

(Continued on next page)

Contact record

You use contact records to store the name, address, and telephone number of a contact at your trading partner's place of business. You can create separate Contact records at the interchange, group, and trading partner level.

Contact records must be unique for each individual with whom you communicate in your trading partner's organization.

TRADACOMS record

You create the TRADACOMS record only when exchanging documents with a trading partner who uses the TRADACOMS standard.

TRADACOMS records must be unique for each Trading Partnership using TRADACOMS standards.

Trading Partnership Administration

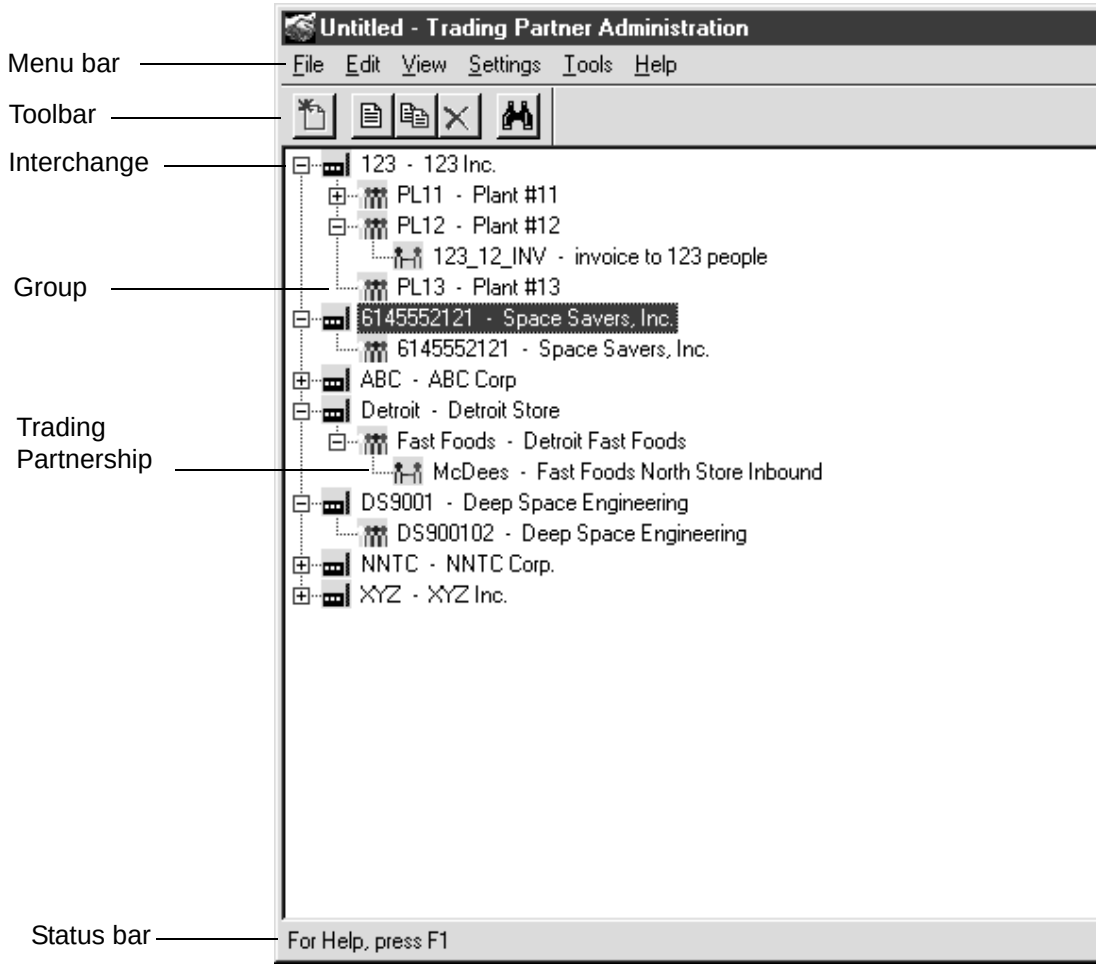
The Trading Partner Administration Explorer

Introduction

You carry out most day-to-day activities involving your Trading Partnership records through the **Trading Partner Administration** explorer.

Trading Partner Administration explorer

This illustration shows an example of the **Trading Partner Administration** explorer for Gentran:Server Workstation.



(Continued on next page)

Host and environment name

In the Gentran:Server for UNIX version, the title bar displays the host name and environment name.

Trading Partner Administration explorer fields and functions

This table describes the fields and functions of the **Trading Partner Administration** explorer window.

Field	Function
Menu bar	Opens menus to display commands.
Toolbar	Starts another function, such as the Save or Delete function.
Interchange	Identifies an Interchange Organization record, which contains all information specific to a single company
Group	Identifies a Group Organization record, which contains all information specific to a single division or department in your trading partner's organization.
Trading Partnership	Identifies a Trading Partnership record, which contains information about one of the trading partnerships you have established.
Status bar	Displays a status message, prompt, or toolbar button description.

Viewing options

The Trading Partnership Administration window has four viewing options:

- No tree
- Trading Partnership records only
- Organization records only
- Entire tree

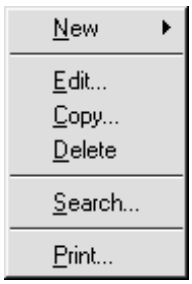
Reference
See the How to Select a Trading Partner View topic in this chapter for information about selecting a viewing option.

(Continued on next page)

Right mouse button

You can click the right mouse button (right-click) to display a shortcut menu to use with **Trading Partnership Administration**.

This illustration shows the shortcut menu that appears when you click the right mouse button.



How to Access Trading Partnership Administration

Opening the Trading Partnership Administration window

Use this procedure to open the **Trading Partnership Administration** window.

Step	Action	
1	Open Gentran:Server.	
2	Click **Edit** on the **Main Menu**.	
3	Click **Trading Partnership** on the **Edit** menu. **System Response**	
	IF…	**THEN…**
	This is the first time anyone has opened Trading Partnership Administration	Gentran:Server displays the Preferences dialog box.
	Your preferences for Trading Partnership Administration have been set	Gentran:Server displays the Trading Partnership Administration window.
4	Use this table to determine your next step.	
	IF Gentran:Server displays the…	**THEN go to…**
	Preferences dialog box.	How to Set TP Administration Preferences in this chapter.
	Trading Partnership Administration window.	How to Select a Trading Partner View in this chapter.

Note
You can also access the Trading Partnership Administration window by clicking the Trading Partnership Maintenance button on the menu bar of the Main Menu.

How to Select a Trading Partner View

Overview

This section explains the four views available in Trading Partnership Administration.

Introduction

You choose a view in Trading Partnership Administration based on these criteria:

- The number of Trading Partnership records you want to display.
- The number of records you maintain.
- Whether you have assigned Interchange and Group Organization codes to your Trading Partnership records.

Four viewing options

This table lists the available views and their functions.

View…	Description…
No Tree	An empty dialog box.
TP Only	A list of Trading Partnership records.
Org Only	A list of all Organization codes. Use when you have a large number of records.
Entire Tree	A complete tree view that includes a list of all Organization and Trading Partner records. Includes records that are not defined for any Organization code.

No Tree

When you select **No Tree** view, the system displays a blank screen.

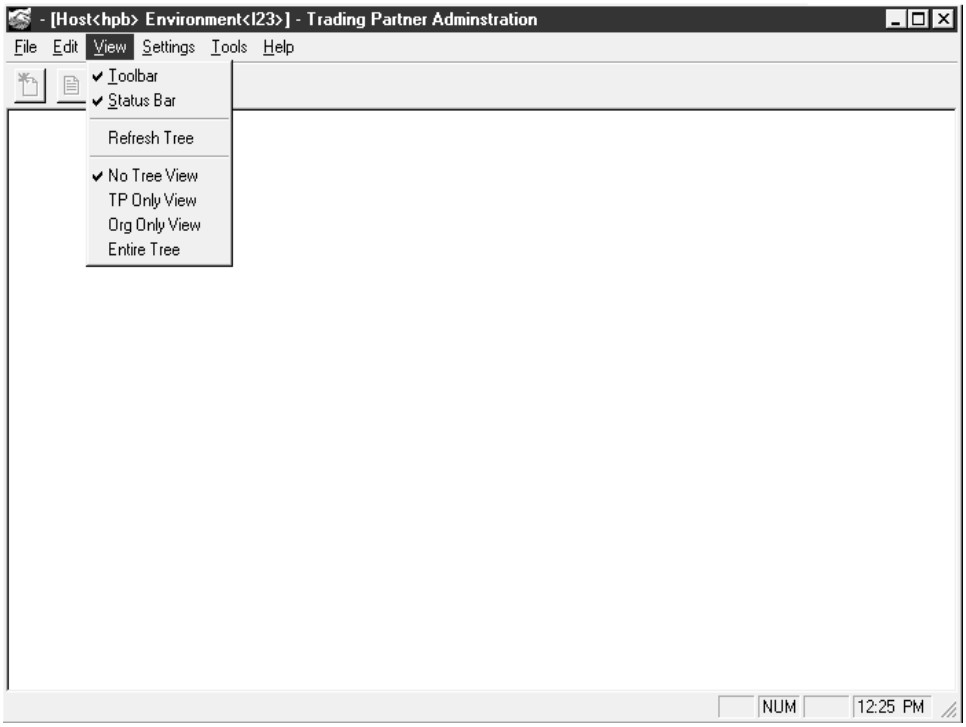
Use this view for these tasks:

- Searching for and editing a single Trading Partnership Record.
- Creating new Interchange Organizations, Group Organizations, and Trading Partnership records.
- Performing all functions quickly.

(Continued on next page)

Illustration

This illustration shows the Trading Partnership Administration using the **No Tree** view.



TP Only

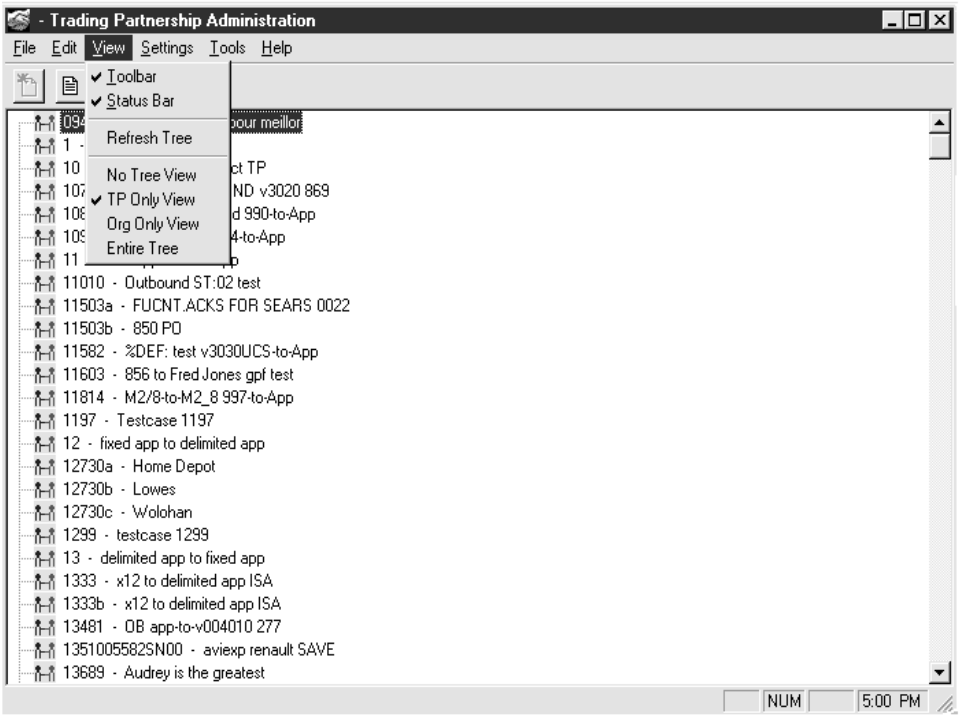
When you select **TP Only** view, the system displays a list of all Trading Partnership records.

Note
The **TP Only** view displays only Trading Partnership records, not Interchange or Group Organization codes.

(Continued on next page)

Illustration

This illustration shows the Trading Partnership Administration using the **TP Only** view.



Org Only

When you select **Org Only** view, the system displays a tree containing all available Interchange Organization codes and those Group Organizations not associated with an Interchange Organization.

Note
Initially, this view does not display the Trading Partnership records.

(Continued on next page)

Procedure

When you select an Interchange Organization code, Trading Partnership Administration expands the tree to display the Group Organizations.

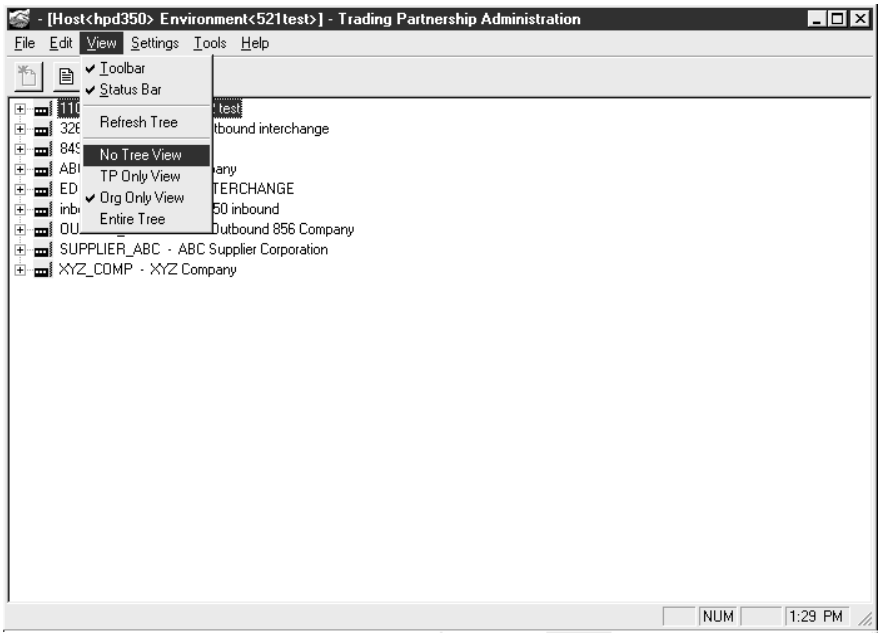
Use this procedure to select a Trading Partnership Record.

Step	Action
1	Click on the appropriate Interchange Organization code to select it.
2	Select the appropriate Group Organization code.
3	Select the Trading Partnership record.

Note
You can use this view to display only those Trading Partnership records that are assigned to an Interchange Organization code.

Illustration

This illustration shows the Trading Partnership Administration using the **Org Only** view.



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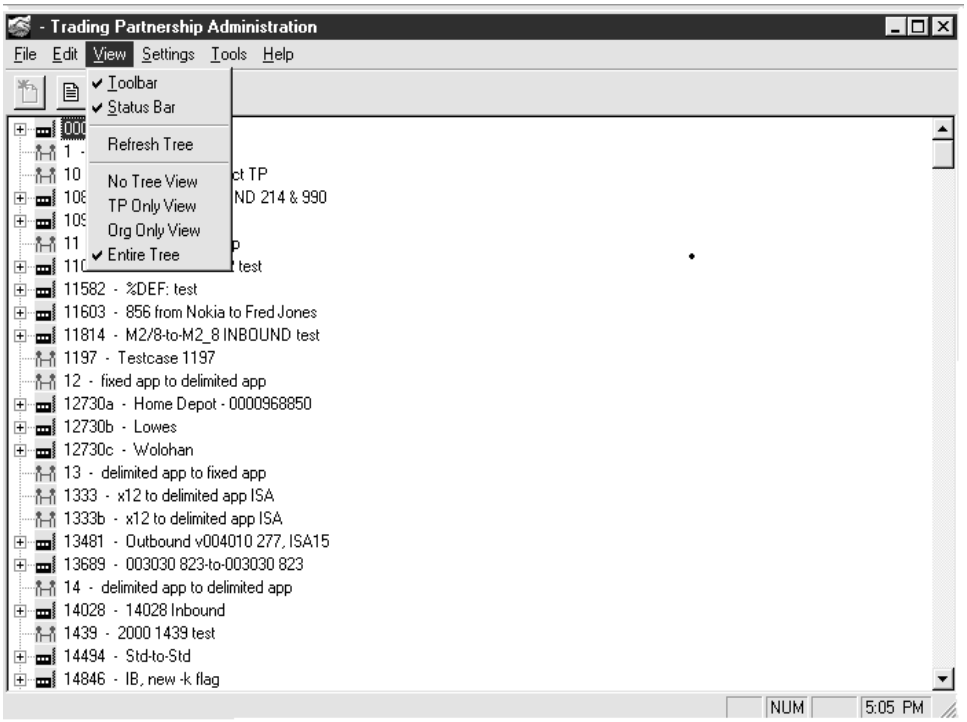
Entire Tree view

When you select the **Entire Tree** view, the system displays all Interchange and Group Organization codes and all Trading Partnership records.

Note
When you select an Interchange Organization code, the system displays the related Group Organization codes. When you select a Group Organization code, the system displays the related Trading Partnership records.

Illustration

This illustration shows the Trading Partnership Administration using the **Entire Tree** view.



How to Set TP Administration Preferences

Overview

The default view of the Trading Partnership Administration window is initially set to **Build Entire Tree.**

Note
You can select another view as the default using the Trading Partnership Administration Preference dialog box by clicking **Preferences** on the **Settings** menu. However, if you are using Gentran:Server for UNIX, the Security Administrator must grant you the authority to change the setting.

Illustration

The illustration shows the Trading Partnership Administration Preferences dialog box.

Setting the default view

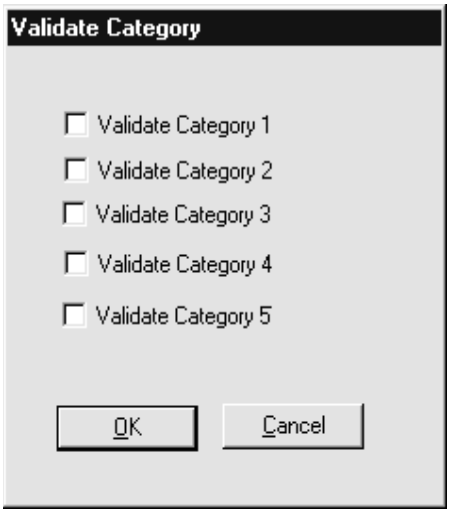
To set another view as the default, change the value of the **Default Trading Partner view** text box by clicking the down arrow and selecting one of the four available views:

- No Tree
- Trading Partnership Tree Only
- Organization Tree Only
- Build Entire Tree

(Continued on next page)

General Settings

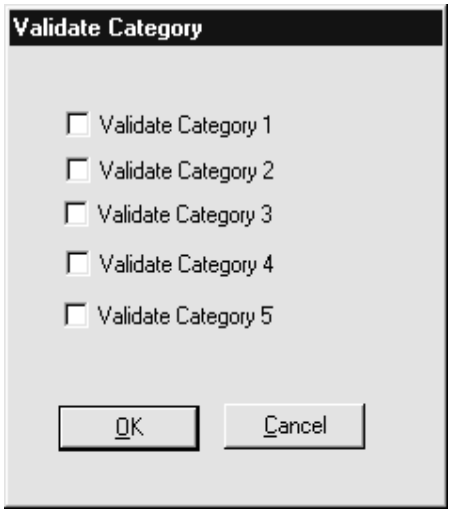
You need to define the General Settings prior to creating and editing the Trading Partnership Record.

Field	Function
Allow same character for element, subelement, and repeating element separators	Disables the warning prompt displayed when the same character is used for element, subelement, and repeating element separators. Also allows the same values.
Validate category values	Validates the selected category against the database. **Note** Check the Validate category values and choose **SELECT** to display five categories. You can verify up to five categories in every Trading Partnership Record. 
Allow Trading Partnership record without map name	Disables the warning displayed whenever you create a Trading Partnership record without assigning a map name to it, allowing you to create a Trading Partnership record without assigning a map name. **Note** If you try to create a Trading Partnership record without assigning it a map name and this option is not selected, the system displays an error message.

(Continued on next page)

Selecting categories to validate

Follow this procedure to display and use the Validate Category dialog box.

Step	Action
1	Select the **Validate category values** option under General Settings.
2	Click **Select.** **System Response** The system displays the **Validate Category Window**. 
3	Select the categories you want to validate.
4	Click **OK.** **System Response** The system returns to the Trading Partnership Administration Preferences dialog box.

How to Set Default Translation Selections

Introduction

You can set default (automatically assigned) translation selections for the Trading Partnership records you create. You set these choices for the type of translation (application-to-standard, application-to-application, etc.).

How the system uses the selections

Once you set default translation selections, Gentran:Server applies these selections to each subsequent Trading Partnership record you create that has the specified translation type. If you do not want a Trading Partnership to use the default settings, you can set them at the Trading Partnership level to override the default selections.

Reference

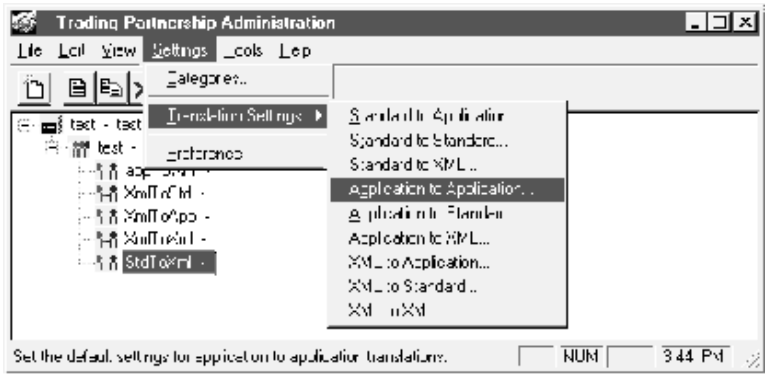
See How to Set Translation Selections for instructions on setting translation selections for a specific Trading Partnership.

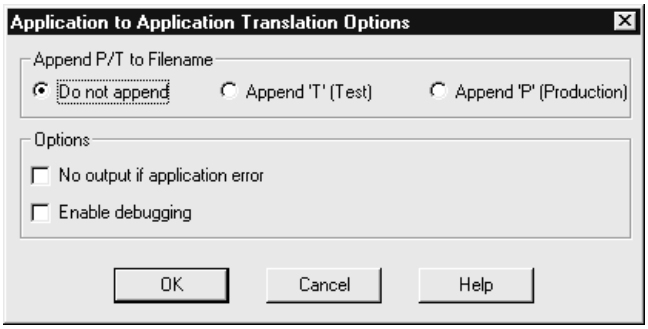
When to use

Use this procedure to set the translation selections that you normally use for one or more specific types of translation.

Procedure

Use this procedure to set default translation selections for a translation type.

Step	Action
1	Click **Translation Settings** from the **Settings** menu.
2	Select the translation type you want to set from the submenu.  (Continued on next page)

(Contd) Step	Action
	System Response The system displays the Translation Options dialog box for the translation type you selected. **Example**  **Reference** See the Translation Options Dialog Boxes topic for descriptions of the translation options.
3	Select the default selections that you want to apply to this type of translation.
4	Click **OK** to save your changes.

How to Search for a Trading Partnership Record

Overview

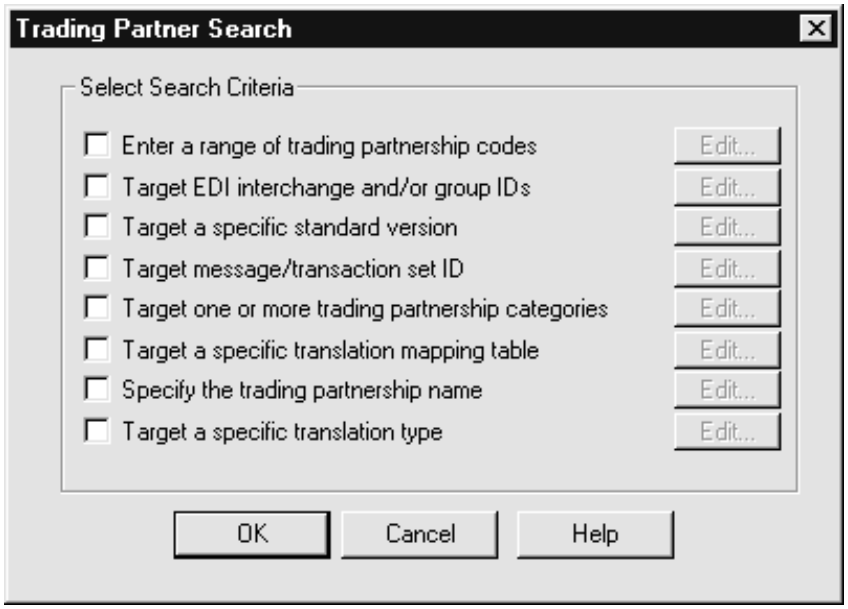
This topic explains how to search for a Trading Partnership record. You can search for Trading Partnership records by ranges of values in various fields. You can also search for specific values such as:

- Interchange or Group IDs
- Organization codes
- Trading Partnership Codes
- Standard versions
- Set IDs, categories, and name.

You enter the search criteria on the Trading Partner Search dialog box. You can run Trading Partner Search on all views except Trading Partner Only view.

Trading Partner Search dialog box example

This illustration shows the Trading Partner Search dialog box.



(Continued on next page)

Fields and functions

This table lists the fields of the Trading Partnership Search dialog box and their functions.

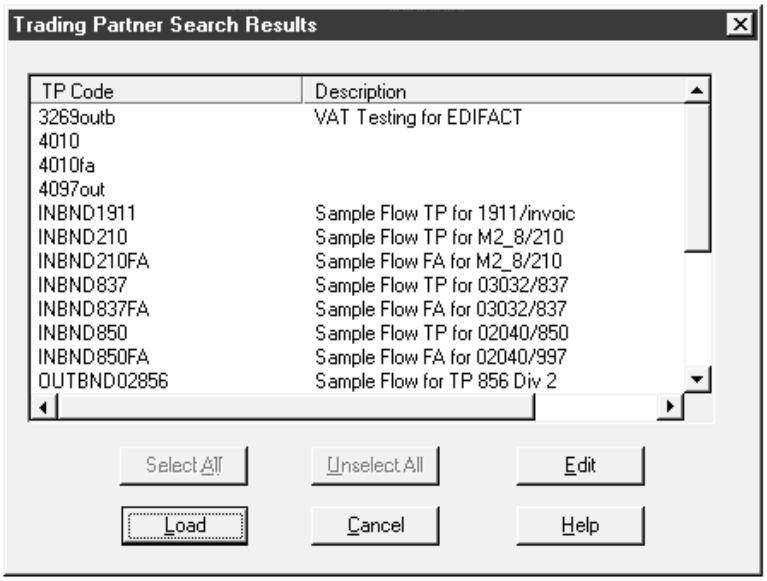
Field	Function
Enter a range of trading partnership codes	Searches for Trading Partnerships with Trading Partnership codes that fall within the specified range.
Target EDI interchange and/ or group IDs	Searches for Trading Partnerships with the interchange or group IDs you specify. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Target a specific standard version	Searches for Trading Partnerships using a specific EDI standard version. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Target message/transaction set ID	Searches for Trading Partnerships with documents that have message or set ID you specify. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Target one or more trading partnership categories	Searches for Trading Partnerships based on a category you have defined.
Target a specific translation mapping table	Searches for Trading Partnerships using a specific compiled map or translation object (TPL table).
Specify the trading partnership name/ description	Searches for a Trading Partnership by name.
Target a specific translation type	Searches for Trading Partnerships using one of the valid translation types. The **Edit** button displays a list of choices.

Note
You can select multiple fields when searching for Trading Partnership records. Each field that you select narrows the search and enables you to focus on a specific Trading Partnership.

(Continued on next page)

Trading Partner Search Results dialog box

After you enter the search criteria, Gentran:Server displays the Trading Partner Search Results dialog box. This dialog box displays a list of all Trading Partnership records that meet the criteria. You then select the record that you want to view or edit from the list. This illustration shows an example of the Trading Partner Search Results dialog box.



Fields and functions

This table lists the fields of the Trading Partner Search Results dialog box and their functions.

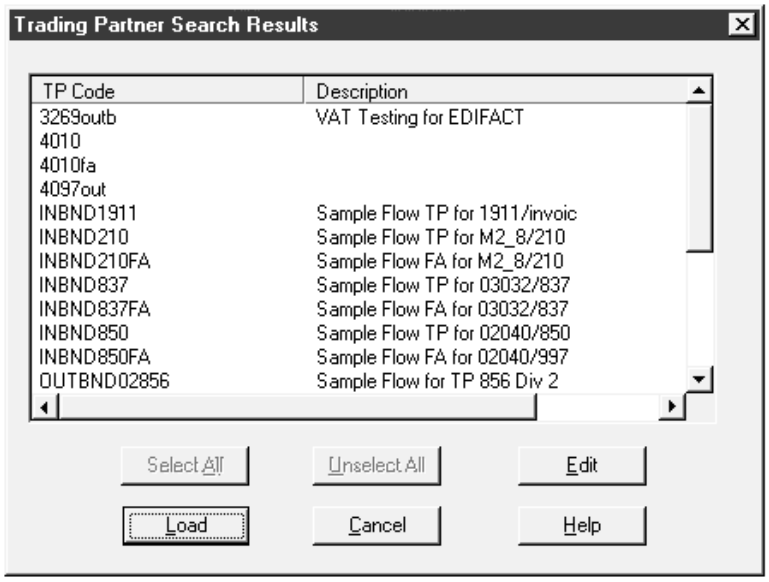
Field	Function
TP Code	Lists the Trading Partnership IDs that match your search criteria.
Description	Displays the Trading Partnership descriptions that match your search criteria.

(Continued on next page)

Procedure

Follow this procedure to search for a Trading Partnership record.

Step	Action
1	Open Trading Partner Administration.
2	Select **Search** from the **Edit** menu or click on the **binocular** icon. **System Response** Trading Partnership Administration displays the Trading Partner Search dialog box. 
3	Select your search criteria by clicking the check box in front of the criteria you want to use.
4	Click the **Edit** button to display a dialog box for entering your search criteria.
5	Do you want to narrow your search by selecting more criteria? ◗ If YES, repeat Steps 3 and 4 to select additional search criteria. ◗ If NO, continue with Step 6. (Continued on next page)

(Contd) Step	Action
6	Click **OK** to search your Trading Partnership records. **System Response** The Trading Partner Search Results dialog box displays the list of records that match your search criteria.  (Continued on next page)

(Contd) Step	Action	
7	Use this table to determine your next step.	
	IF you want to…	**THEN…**
	Select all the Trading Partnerships in the list	Click **Select All**.
	Unselect all the Trading Partnerships in the list	Click **Unselect All**.
	Edit the Trading Partnership record	Select the Trading Partner Code from the list and click **Edit**.
	Display the Interchange code associated with the Trading Partnership record	Select the Trading Partner Code from the list and click **Load**.
	Load a Trading Partner record that is not associated with an Interchange Organization Record to the tree view	Select the Trading Partner Code from the list and click **Load**.
	Close the Trading Partner Search Results dialog box	Click **Cancel**.

The Trading Partnership Editor

Introduction

You use the Trading Partnership Editor to create and maintain your Trading Partnership records. When you create a new Trading Partnership record, the Trading Partnership Editor guides you through the information that you need to define for the type of translation you select. You also use the Trading Partnership Editor to alter and update Trading Partnership information in existing records.

Accessing the Trading Partnership Editor dialog box

Use this procedure to open the **Trading Partnership Editor**.

Step	Action
1	Open the **Trading Partnership Administration** window.
2	Right-click on the Trading Partnership record you want to edit. **System Response** The system displays a menu of available functions.
3	Click **Edit**. **System Response** The system displays the Trading Partnership Editor dialog box.

Trading Partnership Editor tabs

These are the Trading Partnership Editor tabs:

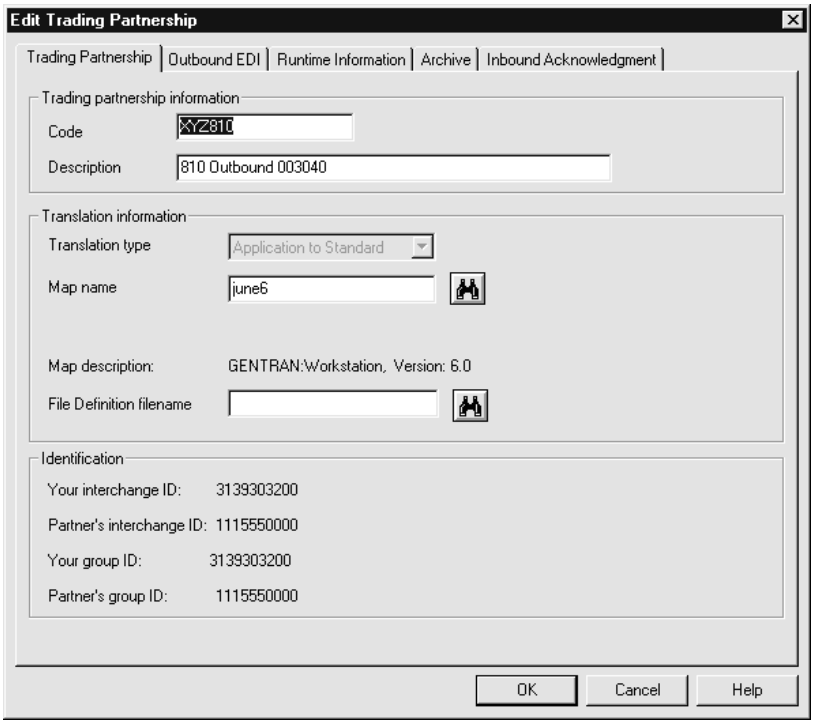
- Trading Partnership
- Inbound EDI Information
- Outbound EDI Information
- Runtime Information
- Archive Information
- Inbound Acknowledgment
- Outbound Acknowledgment
- Categories.

Note
The Trading Partnership Editor displays only the tabs that apply to the Trading Partnership record. You probably will not see all eight tabs for every record.

(Continued on next page)

Trading Partnership tab

This illustration shows an example of the Trading Partnership tab of the Trading Partnership Editor dialog box.



Fields and functions

This table lists the fields of the Trading Partnership tab of the Trading Partnership Editor dialog box and their functions.

Field	Function
Trading Partnership Code	Defines a unique identifier for the Trading Partnership and document combination. The translator uses this code when creating the segment envelope. ◗ Size: 1-15 alphanumeric characters ◗ No spaces or special characters allowed ◗ Suggestion: Use abbreviation of trading partner's name and Set ID (for example, DYNO810).
Trading Partnership Description	Provides a brief description of the Trading Partnership. (maximum of 30 characters)

(Continued on next page)

(Contd) Field	Function
Translation Type	Defines the type of translation for the Trading Partnership. **Note** The **Translation Type** box is view only. You can select a translation type only when creating a new Trading Partnership.
Map Name	Defines the compiled map (translation object) to use when translating data for the Trading Partnership. Only translation objects (TPL files) are valid selections. **Note** To search for a specific compiled map, click the **Map Search** icon to the right of the **Map Name** text box.  **Reference** See the topic How to Choose a Different Map (Translation Object) in this chapter for more information.
Map description	Displays the Gentran:Server product and version used to generate the map.
File Definitions filename	Specifies the file definition (.DDF file) that the map uses if the input file is an application file. If the input file is not an application file, this box is disabled. The browser associated with this box displays all the file definitions that reside in the File Definitions directory. **Note** This field links the Trading Partnership record to the file definition. You must complete this box when the input side of the map is an application format.

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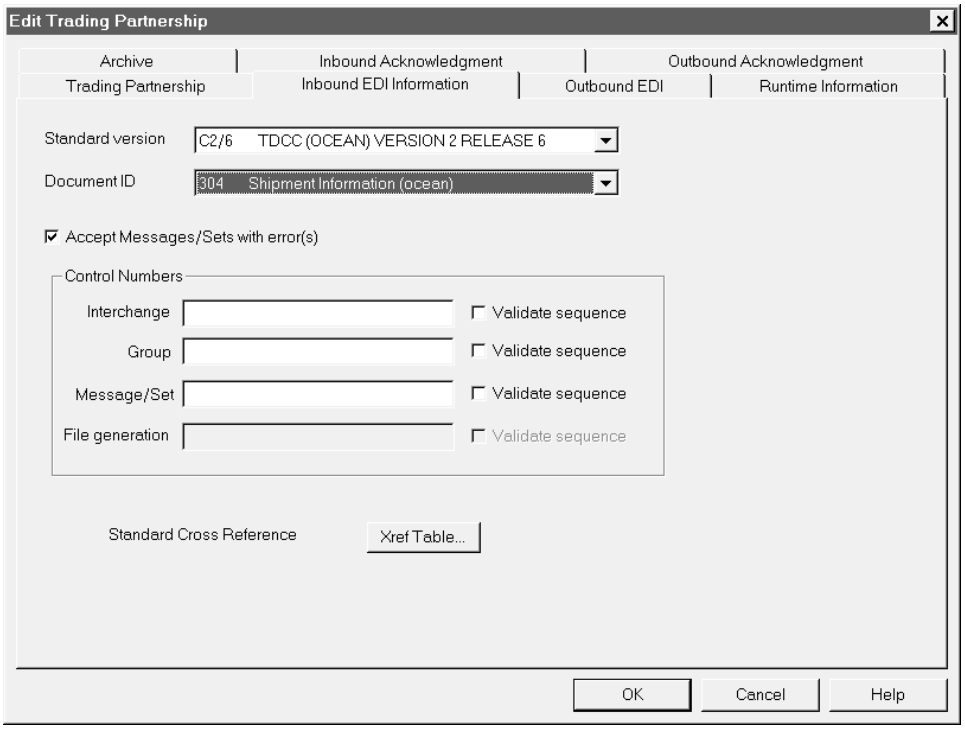
Inbound EDI Information tab

This illustration shows an example of the Inbound EDI Information tab on the Trading Partnership Editor dialog box.



(Continued on next page)

Fields and functions

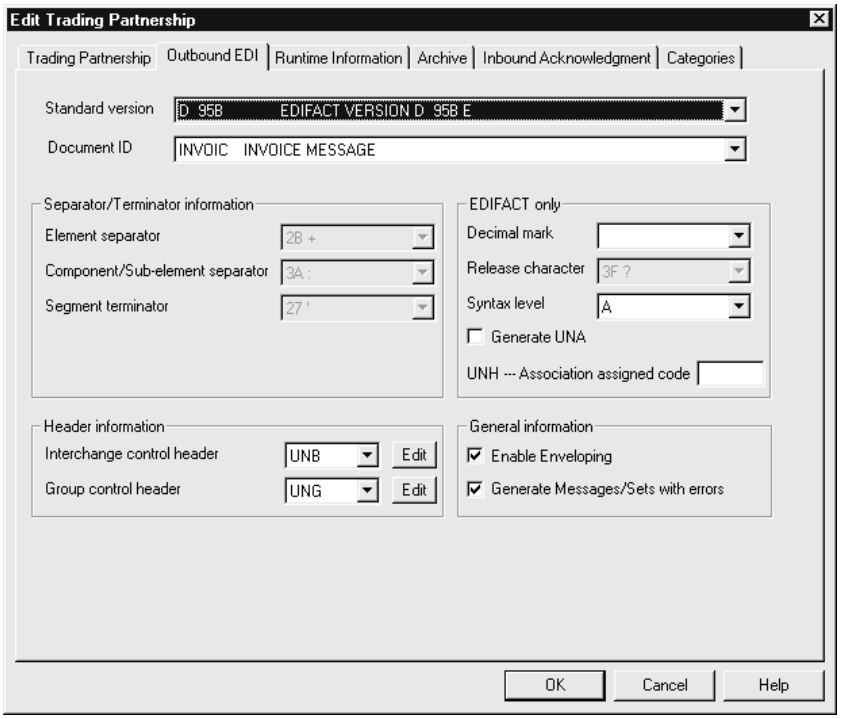
This table lists the fields of the Inbound EDI Information tab of the Trading Partnership Editor dialog box and their functions.

Field	Function
Standard version	Lists the available EDI standards and versions. This is a key field that Gentran:Server uses to identify the Trading Partnership record. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Document ID	Lists the available EDI document types that you may translate. This is a key field that Gentran:Server uses to identify the Trading Partnership record. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Accept Messages/Sets with error(s)	Enables you to accept messages or transaction sets containing compliance errors from your trading partner.
Control Numbers	
Interchange	Initializes the counter used for control numbers for business documents that you receive from your trading partner. **Note** If you click **Maintain globally** on the Runtime Information tab, this field is unavailable.
Validate sequence	Checks the Interchange control numbers to ensure that they are in sequence.
Group	Initializes the counter used for control numbers for business documents that you receive from this trading partner. **Note** If you click **Maintain globally** on the Runtime Information tab, this field is unavailable. (Continued on next page)

(Contd) Field	Function
Validate sequence	Checks the Group control numbers to ensure that they are in sequence.
Message/Set	Initializes the counter used for control numbers for business documents that you receive from this trading partner.
Validate sequence	Checks the Message or Transaction Set control numbers to ensure that they are in sequence.
File generation	Appends a file generation number to the end of the out filename for TRADACOMs standards.
Validate sequence	Checks the File generation control numbers to ensure that they are in sequence.
Xref Table	Displays the Standard Cross Reference dialog box.

Outbound EDI tab

This illustration shows an example of the Outbound EDI tab of the Trading Partnership Editor dialog box.



(Continued on next page)

Fields and functions

This table lists the fields of the Outbound EDI tab of the Trading Partnership Editor dialog box and their functions.

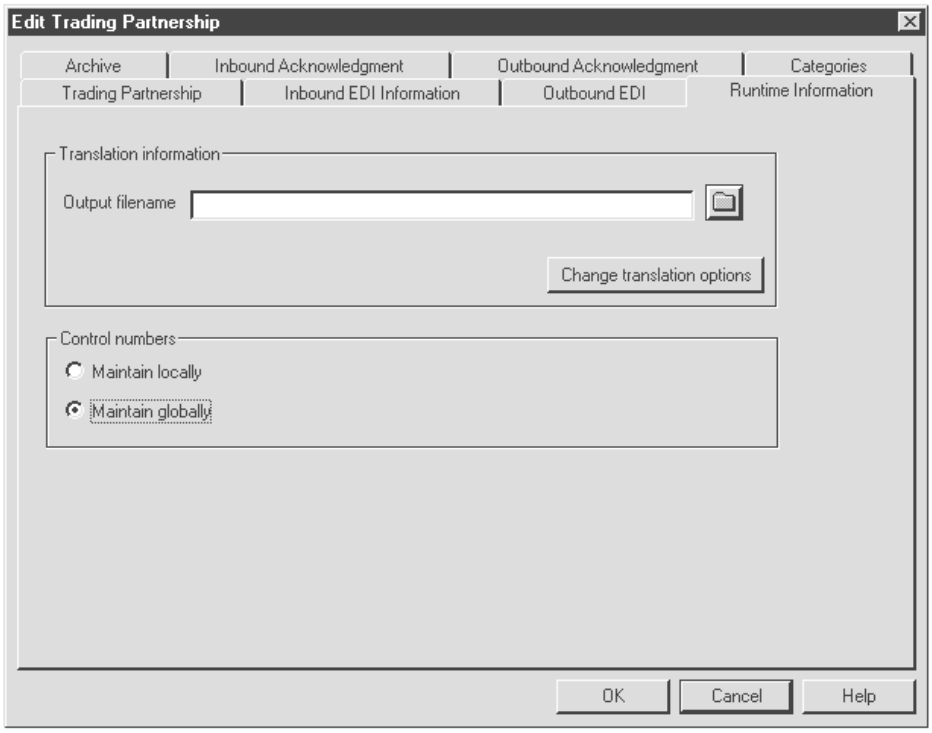
Field	Function
Standard version	Lists the available EDI standards and versions. This is a key field that Gentran:Server uses to identify the Trading Partnership record. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Document ID	Lists the available EDI document types that you may translate. This is a key field that Gentran:Server uses to identify the Trading Partnership record. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Element separator	Defines the character used to separate elements. **Note** You can use the same character for the element and subelement separators if the **Allow same character for element, subelement and repeating element separators** option on the Trading Partnership Administration Preferences dialog box is checked.
Component/sub-element separator	Defines the character used to separate component or sub-elements. **Note** You can use the same character for the element and subelement separators if the **Allow same character for element, subelement and repeating element separators** option on the Trading Partnership Administration Preferences dialog box is checked.
Segment terminator	Defines the character used to indicate the end of a segment. (Continued on next page)

(Contd) Field	Function
Interchange control header	Defines the type of header segment used for the Interchange envelope. **Reference** See the How to Modify the Outbound Envelope Segments topic in this chapter for instructions on editing the elements in the Interchange envelope segment. **Warning** You MUST click **OK** to save your changes or the segment will be blank.
Group control header	Defines the type of group segment Gentran:Server uses for the Functional Group envelope. **Reference** See the How to Modify the Outbound Envelope Segments topic in this chapter for instructions on editing the elements in the group envelope segment.
Decimal mark	Defines the ASCII hexadecimal character that serves as the decimal point in your EDIFACT data.
Release character	Defines the character that allows a separator or terminator to be used as part of the EDIFACT data. **Example** Your element separator is a plus sign (+). The name of your trading partner is Toys+Joys. The release character prevents the translator from incorrectly interpreting the number of elements in this segment by allowing the plus sign to pass through as data and not as an element separator.
Syntax level	Defines the level A or B separators to use in your EDIFACT data.
Generate UNA	Enables you to create an EDIFACT UNA segment with user defined separators.
UNH --- Association assigned code	Defines the value for the UNH 0057 field, which is mandatory for EANCOM.
Enable enveloping	Restricts outbound EDI data to a single interchange's worth of data in a file.
Generate Messages/ Sets with errors	Enables you to create output that contains errors.

(Continued on next page)

Runtime Information tab

This illustration shows an example of the Runtime Information tab of the Trading Partnership Editor dialog box.The options displayed on this tab depend on the type of translation you selected.



Fields and functions

This table lists the fields of the Runtime Information tab of the Trading Partnership Editor dialog box and their functions.

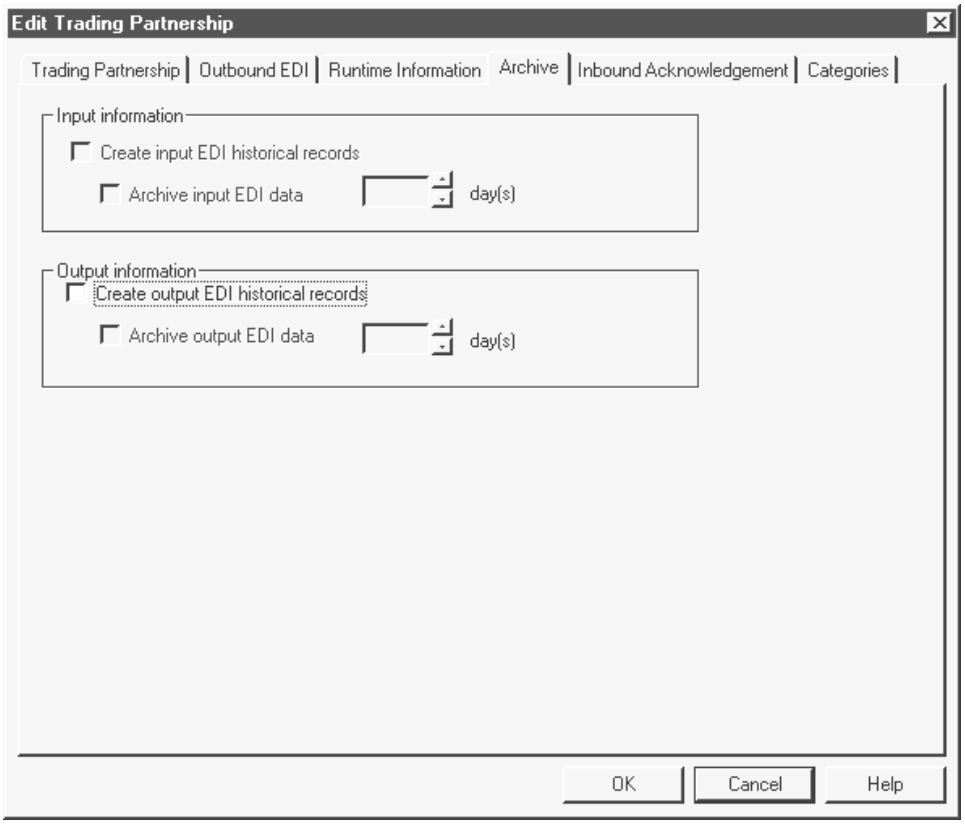
Field	Function
Output filename	Defines the name of the file in which Gentran:Server will store the translated data.
Change translation options	Displays the Translation Options dialog box, which enables you to override (for this Trading Partnership) the default translation option that appends or does not append T or P to the file name.

(Continued on next page)

(Contd) Field	Function
Maintain locally	Enables you to maintain control numbers at the Trading Partnership level. This is the default setting. **Note** The Maintain globally/locally options are displayed when the output file is an EDI standard.
Maintain globally	Enables you to maintain control numbers for an entire organization. **Note** The Maintain globally/locally options are displayed when the output file is an EDI standard.

Archive tab

This illustration shows an example of the Archive tab of the Trading Partnership Editor dialog box.



(Continued on next page)

Fields and functions

This table lists the fields of the Archive tab of the Trading Partnership Editor dialog box and their functions.

Field	Function
Create input EDI historical records	Enables you to store translation status information for inbound EDI data.
Archive input EDI data	Enables you to store both the translation status information for your inbound EDI data as well as the translated data itself.
Day(s)	Selects the number of days to store archived data (up to a maximum of 365 days). **Note** The default is 365 days unless you set another value in the Archive/Retrieval Setup dialog box.
Create output EDI historical records	Enables you to store translation status information for your outbound EDI data.
Archive output EDI data	Enables you to store both the translation status information for your outbound EDI data as well as the translated data itself.
Day(s)	Selects the number of days to store archived data (up to a maximum of 365 days). **Note** The default is 365 days unless you set another value in the Archive/Retrieval Setup dialog box.

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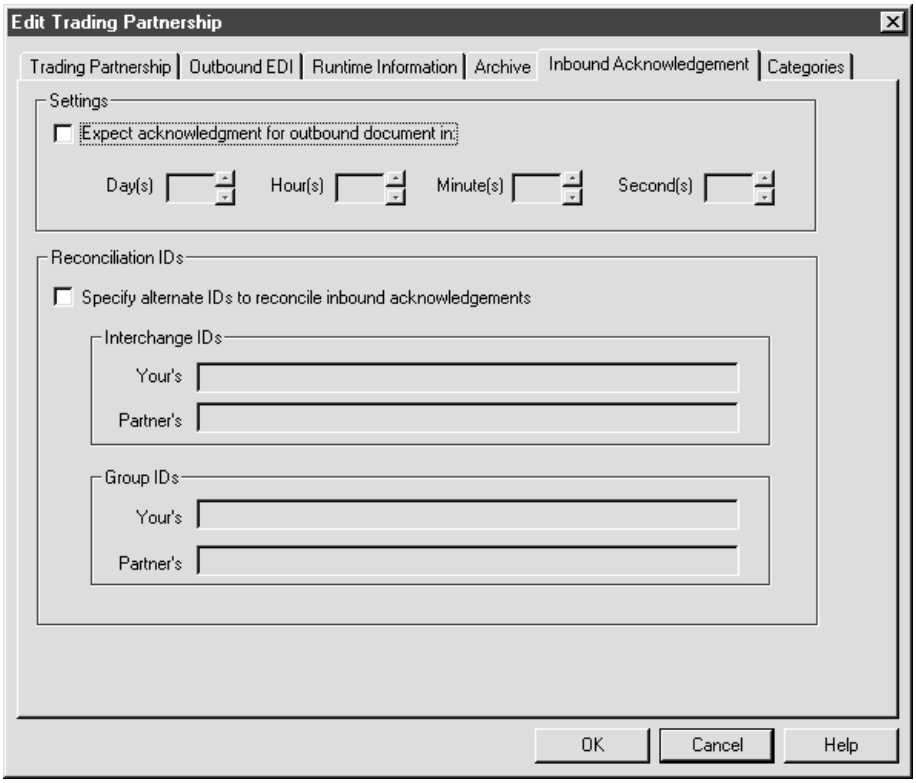
Inbound Acknowledgent tab

This illustration shows an example of the Inbound Acknowledgment tab of the Trading Partnership Editor dialog box.



Fields and functions

This table lists the fields of the Inbound Acknowledgment tab of the Trading Partnership Editor dialog box and their functions.

Field	Function
Settings	
Expect acknowledgment for outbound document in:	Enables you to define a time limit for receipt of an inbound acknowledgment.
Day(s)	Selects the number of days until receipt of an inbound acknowledgment is expected.
Hour(s)	Selects the number of hours until receipt of an inbound acknowledgment is expected.

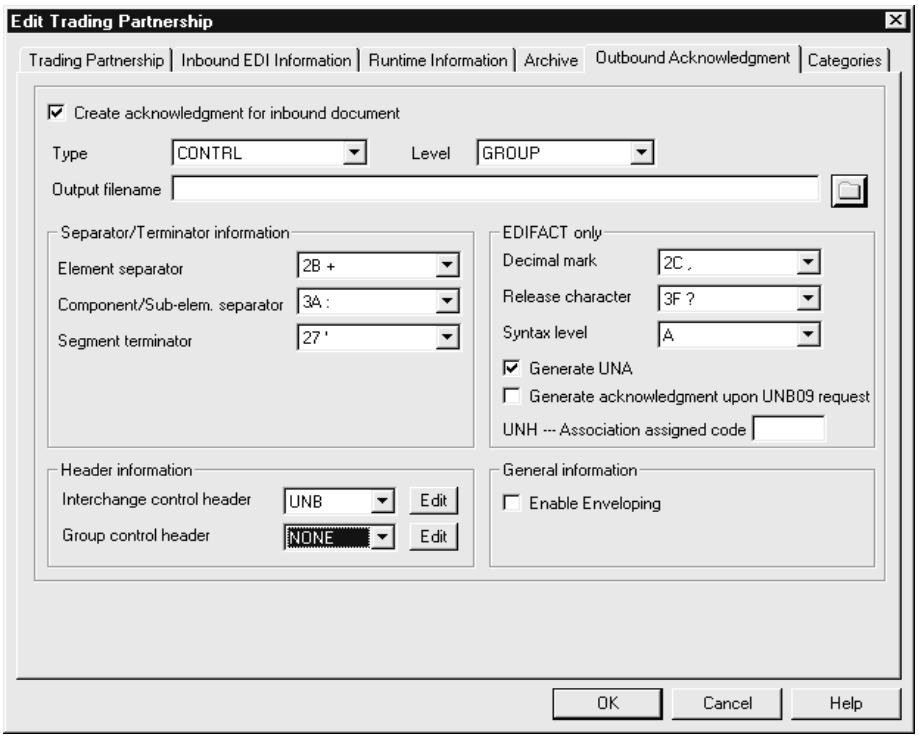
(Continued on next page)

(Contd) Field	Function
Minute(s)	Selects the number of minutes until receipt of an inbound acknowledgment is expected.
Second(s)	Selects the number of seconds until receipt of an inbound acknowledgment is expected.
Specify alternate IDs to reconcile inbound acknowledgments	Enables you to define alternate Interchange and Group IDs to be used when reconciling inbound acknowledgments.
Interchange IDs	
Yours	Defines your alternate Interchange ID. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Partner's	Defines your Trading Partner's alternate Interchange ID. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Group IDs	
Yours	Defines your alternate Group ID. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.
Partner's	Defines your Trading Partner's alternate group ID. **Note** The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for this field.

(Continued on next page)

Outbound Acknowledgment tab

This illustration shows an example of the Outbound Acknowledgment tab of the Trading Partnership Editor dialog box.



Fields and functions

This table lists the fields of the Outbound Acknowledgment tab of the Trading Partnership Editor dialog box and their functions.

Field	Function
Create acknowledgment for inbound document	Tells Gentran:Server to create an acknowledgment for an inbound document.
Type	Defines the type of acknowledgment you will send to your trading partner. **Notes** In an X12 standard document, the type of acknowledgment is either a 997 or 999 acknowledgment. In an EDIFACT standard message, the type of acknowledgment is a CONTRL message. (Continued on next page)

(Contd) Field	Function
Level	Defines the level of detail used in the acknowledgment. ◗ **Group** - your trading partner will receive response information for each group in the interchange envelope. ◗ **Set** - your trading partner will receive response information for each set in the group envelope. ◗ **Segment** - your trading partner will receive response information for each segment contained in the data. **Reference** See the Setting Up Your System to Handle Functional Acknowledgments topic in the Archiving Translation Data chapter in the *Gentran:Server for UNIX and Workstation Mapping and Translation Guide.*
Output filename	Defines the file name of the translated acknowledgment you are sending to your trading partner. **Example** /opt/gentran/data/outbound.997 (Continued on next page)

(Contd) Field	Function
Separator/terminator information	
Element separator	Defines the character used to separate elements. **Notes** You can use the same character for the element and subelement separators if the **Allow same character for element, subelement and repeating element separators** option on the Trading Partnership Administration Preferences dialog box is checked.
Component/Sub-elem. separator	Defines the character used to separate component or sub-elements. **Notes** You can use the same character for the element and subelement separators if the **Allow same character for element, subelement and repeating element separators** option on the Trading Partnership Administration Preferences dialog box is checked.
Segment terminator	Defines the unique character used to indicate the end of a segment.
Header Information	
Interchange control header	Defines the type of header segment used for the Interchange envelope. **Reference** See the How to Modify the Outbound Envelope Segments topic in this chapter for instructions on editing the elements in the Interchange envelope segment.
Group control header	Defines the type of group segment used for the Functional Group envelope. **Reference** See the How to Modify the Outbound Envelope Segments topic in this chapter for instructions on editing the elements in the group envelope segment. (Continued on next page)

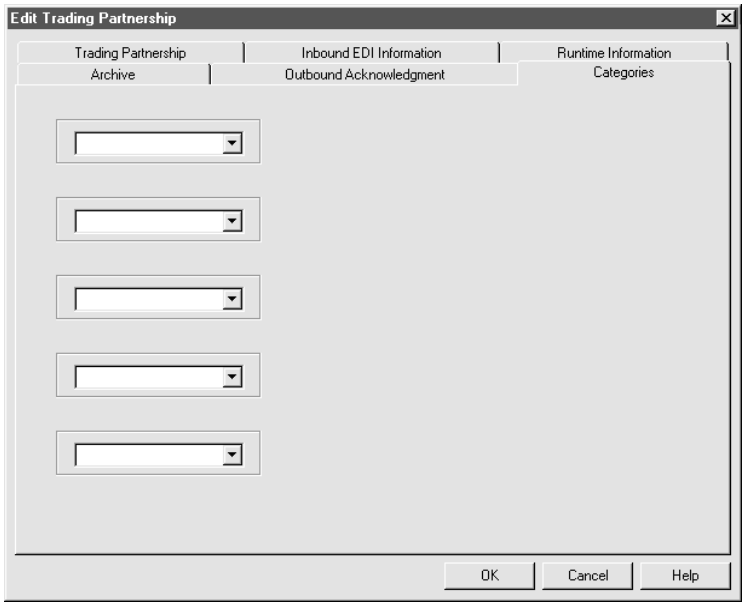
(Contd) Field	Function
EDIFACT only	
Decimal mark	Defines the ASCII/hexadecimal character that serves as the decimal point for EDIFACT data.
Release character	Defines the character used to indicate that what appears to be a separator or terminator is actually part of the EDIFACT data. The release character precedes the defined separator or terminator. **Example** Your element separator is a plus sign (+). The name of your trading partner is Toys+Joys. In order for the name to be interpreted correctly, you need a release character (?) in front of the element separator (Toys?+Joys). The release character prevents the translator from incorrectly interpreting the number of elements in this segment by allowing the plus sign to pass through as data and not to be interpreted as an element separator.
Syntax level	Specifies the EDIFACT syntax level. **Note** The syntax level determines the default value that the system displays in the separator/terminator box. (Continued on next page)

(Contd) Field	Function
Generate UNA	Tells Gentran:Server to create an EDIFACT UNA segment as part of the outbound EDIFACT message. Enables the separator, terminator, and release character boxes so that you can change the values. **Example** The following is an example of a UNA segment. UNA : + , ? _ ’ where the : represents the component separator + represents the element separator , represents the decimal mark _ reserved for repeating elements ? represents the release character ’ represents the segment terminator
Generate acknowledgment based on UNB09	Checks to see if your trading partner requested an acknowledgment. **Note** If the UNB09 element of the inbound document equals 1, then Gentran:Server sends an acknowledgment. If the UNB09 element equals 0, then Gentran:Server does not send an acknowledgment.
UNH --- Association assigned code	Defines the value for the UNH 0057 field, which is mandatory for EANCOM.
General information	
Enable Enveloping	Enables Gentran:Server to place multiple outbound documents in one envelope.

(Continued on next page)

Categories tab

This illustration shows an example of the Categories tab of the Trading Partnership Editor dialog box.



Fields and functions

The fields on the Categories tab are specific to your organization. Each field represents a category type that you can assign to the current Trading Partnership.

You must define the categories on the User Defined Category Types dialog box.

Reference

See the topic How to Create Categories in this chapter for information about defining Trading Partnership category types.

Creating Trading Partnerships

The Flow of Work

Introduction

Gentran:Server supports Trading Partnership records based on the types of translation.

Process

The table describes the process of creating Trading Partnership records.

Stage	Description
1	Create Interchange Organization records. **Reference** See the topic How to Create an Interchange Record in this chapter for instructions on creating Interchange Organization records.
2	Create Group Organization records. **Reference** See the topic How to Create a Group Organization Record in this chapter for instructions on creating Group Organization records.

(Continued on next page)

Using wildcard characters

When you create a Trading Partnership record, you can enter a wildcard indicator into any of the six key fields that the system uses to identify the record. A wildcard indicator instructs Gentran:Server to accept any value for that field during a search for a Trading Partnership record. Wildcard indicators enable you to create more generic Trading Partnership records.

The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for these fields:

- Your Interchange ID
- Your Partner's Interchange ID
- Your Group/Application ID
- Your Partner's Group/Application ID
- Set ID
- Standard Version

Note
You can only use wildcards for the following trading partnership files:

Sending outbound functional acknowledg-ments

When you create a Trading Partnership record, you can specify whether or not to send an outbound functional acknowledgment to your trading partner. The outbound functional acknowledgment notifies your trading partner that you received the data they sent to you.

Reference
See the The Trading Partnership Editor topic for more information on the Outbound Acknowledgment tab fields and their functions.

See How to Specify Outbound Acknowledgments for instructions.

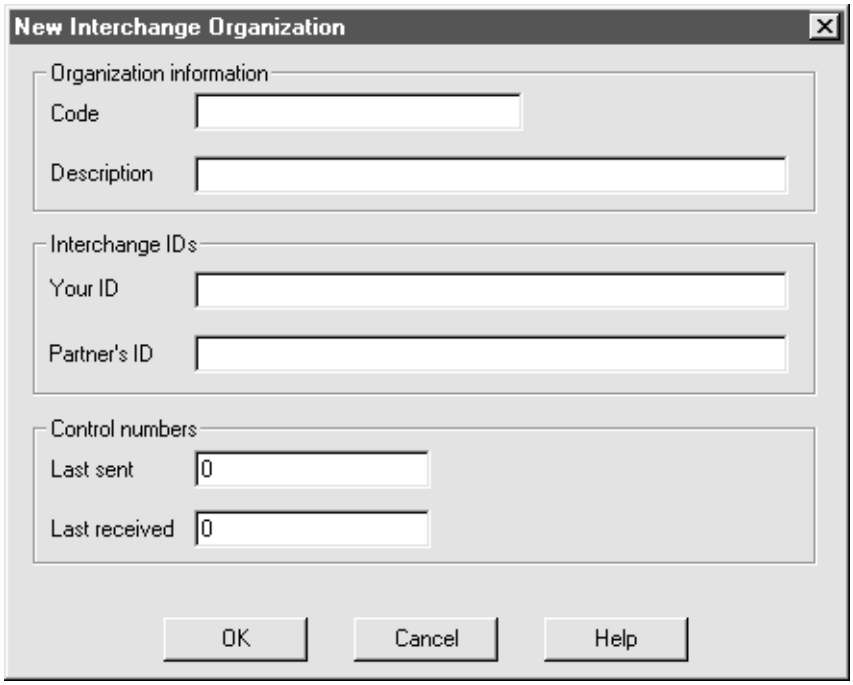
How to Create an Interchange Record

Introduction

The first stage in creating a new Trading Partnership is to create an Interchange Organization record. This record contains the information that uniquely identifies your relationship to this trading partner.

New Interchange Organization dialog box example

This illustration shows an example of the New Interchange Organization dialog box.



Fields and functions

This table describes the fields of the New Interchange Organization dialog box and their functions.

Field	Function
Organization Information	
Code	Defines a unique organization code.
Description	Describes the Interchange Organization.

(Continued on next page)

(Contd) Field	Function
Interchange IDs	
Your Interchange ID	Defines your unique interchange identifier that is inserted into the Interchange envelope when the data is translated.
Partner's Interchange ID	Defines your trading partner's unique interchange identifier that is inserted into the Interchange envelope when the data is translated.
Control Numbers	
Last Sent Control Numbers	Initializes the counter used for control numbers for your business documents. (Outbound only)
Last Received Control Numbers	Initializes the counter used for control numbers for business documents that you receive from this trading partner. (Outbound only)

Note
If you maintain your control numbers globally, the control numbers you specified at the Interchange Organization level will track the documents you exchange with your trading partner.

Procedure

Use this procedure to create an Interchange Organization record.

Step	Action
1	Open the Trading Partnership Administration Explorer.
2	Click **New** from the **File** menu.
3	Click **Interchange Organization**. **System Response** The system displays the New Interchange Organization dialog box. **Reference** See the New Interchange Organization dialog box example in this topic for more information. (Continued on next page)

(Contd) Step	Action
4	Fill in the fields as necessary and click **OK**. **System Response** The system creates and displays a New Interchange Organization record in the Trading Partnership Administration Explorer.
5	GO TO How to Create a Group Organization Record next. **Note** You must create at least one Group Organization record for each Interchange Organization record.

How to Create a Group Organization Record

Introduction

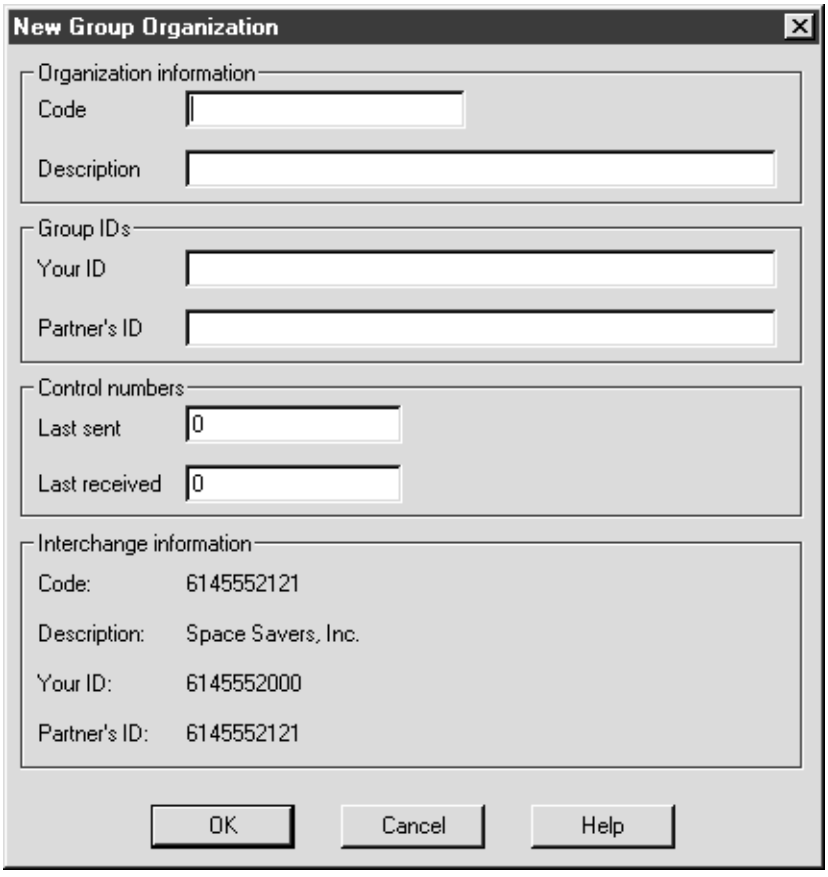
The second stage in creating a new Trading Partnership is to create a Group Organization record. Gentran:Server uses the information that you include in this record to build group-level envelopes during data translation.

You can create multiple group organizations and associate them with a single interchange organization.

You can group many Trading Partnership records under a single Group Organization record. You do not need to create a separate Group Organization record for each Trading Partnership record.

New Group Organization dialog box example

This illustration shows an example of the New Group Organization dialog box.



(Continued on next page)

Fields and functions

This table describes the fields of the New Group Organization dialog box and their functions.

Field	Function
Organization Code	Defines a unique Group Organization code that is inserted into the Group envelope when the data is translated.
Organization Description	Describes the Group Organization.
Your Group ID	Defines your unique group identifier that is inserted into the group envelope when the data is translated.
Partner's Group ID	Defines your trading partner's unique Group identifier that is inserted into the group envelope when the data is translated.
Last Sent Control Numbers	Initializes the counter used for control numbers for your business documents.
Last Received Control Numbers	Initializes the counter used for control numbers for business documents that you receive from this trading partner.

Note
If control numbers are Maintained globally, documents you exchange with a trading partner are tracked by the group control numbers specified at the Group Organization level.

Procedure

Use this procedure to create a Group Organization record.

Step	Action
1	Select the Interchange Organization that you want to associate with this Group Organization record.
2	Click **New** from the **File** menu.

(Continued on next page)

(Contd) Step	Action
3	Click **Group Organization**. **System Response** The system displays the New Group Organization dialog box. **Reference** See the New Group Organization dialog box example in this topic for more information.
4	Fill in the boxes as necessary and click **OK**. **System Response** The system creates and displays a new Group Organization record in the Trading Partnership Administration Explorer.
5	GO TO How to Create a Trading Partnership Recordnext.

How to Create a Trading Partnership Record

Introduction

The final stage in creating a new Trading Partnership is to create a Trading Partnership record. The information you need to provide for a Trading Partnership is based upon the type of translation you intend to perform.

This topic is divided into these subtopics:

- Creating a standard-to-standard Trading Partnership record
- Creating a standard-to-application Trading Partnership record
- Creating an application-to-standard Trading Partnership record
- Creating an application-to-application Trading Partnership record

Note
You use the Trading Partnership Editor to create new Trading Partnership records. When you create new Trading Partnership records, the Trading Partnership Editor collects only the information that pertains to the new Trading Partnership you are creating.

(Continued on next page)

Creating a standard-to-standard Trading Partnership record

Use this procedure to create a Trading Partnership record that is based on a standard-to-standard translation scheme.

Step	Action
1	Open **Trading Partnership Administration**.
2	Select the Group Organization record that you want to associate with this Trading Partnership.
3	Click **New** from the **File** menu.
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership Wizard.
5	Complete the fields on the Trading Partnership dialog box and click **Next**. **Reference** See the Trading Partnership tab topic in this chapter for field descriptions. Note requirements for the Trading Partnership Code.
6	Complete the fields on the Inbound EDI Information dialog box and click **Next**. **References** See the Inbound EDI Information tab topic in this chapter for field descriptions. For information about how to add an entry to the Standard Cross Reference Table, see the How to Add a Record to the Standard Cross Reference Table topic.
7	Complete the fields on the Outbound EDI dialog box and click **Next**. **References** See the Outbound EDI tab in this chapter for field descriptions. See the How to Modify the Outbound Envelope Segmentstopic in this chapter for instructions on editing the interchange or group envelope segments.
8	Complete the fields on the Runtime Information dialog box and click **Next**. **Reference** See the topic Runtime Information tab in this chapter for field descriptions. (Continued on next page)

(Contd) Step	Action
9	Complete the fields on the Archive dialog box and click **Next**. **Reference** See the topic Archive tab in this chapter for field descriptions.
10	Complete the fields on the Inbound Acknowledgment dialog box and click **Next**. **Reference** See the topic Inbound Acknowledgent tab in this chapter for field descriptions.
11	Complete the fields on the Outbound Acknowledgment dialog box and click **Next**. **References** See the topic Outbound Acknowledgment tab in this chapter for field descriptions. See the topic How to Specify Outbound Acknowledgments in this chapter to generate outbound acknowledgments.
12	Select appropriate categories for this Trading Partnership and click the **Finish** button. **Reference** See the topic Categories tab in this chapter for field descriptions. **Note** The Categories dialog box is displayed only if categories are currently defined.

Creating a standard-to-application Trading Partnership record

Use this procedure to create a Trading Partnership record that is based on a standard-to-application translation scheme.

Step	Action
1	Open **Trading Partnership Administration**.
2	Select the Group Organization record that you want to associate with this Trading Partnership.
3	Click **New** from the **File** menu. (Continued on next page)

(Contd) Step	Action
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership wizard.
5	Complete the fields on the Trading Partnership dialog box and click **Next**. **Reference** See the topic Trading Partnership tab in this chapter for field descriptions. Note requirements for the Trading Partnership Code.
6	Complete the fields on the Inbound EDI Information dialog box and click **Next**. **Reference** See the topic Inbound EDI Information tab in this chapter for field descriptions. For information about how to add an entry to the Standard Cross Reference Table, see the How to Add a Record to the Standard Cross Reference Tabletopic.
7	Complete the fields on the Runtime Information dialog box and click **Next**. **Reference** See the topic Runtime Information tab in this chapter for field descriptions.
8	Complete the fields on the Archive dialog box and click **Next**. **Reference** See the topic Archive tab in this chapter for field descriptions.
9	Complete the fields on the Outbound Acknowledgment dialog box and click **Next**. **References** See the topic Outbound Acknowledgment tab in this chapter for field descriptions. See the topic How to Specify Outbound Acknowledgments in this chapter to generate outbound acknowledgments. **System Response** If categories are currently defined, the system displays the Categories dialog box. (Continued on next page)

(Contd) Step	Action
10	If the Categories dialog box is displayed, select appropriate categories for this Trading Partnership. **Reference** See the topic Categories tab topic in this chapter for field descriptions.
11	Click the **Finish** button.

Creating an application-to-standard Trading Partnership record

Use this procedure to create a Trading Partnership record that is based on an application-to-standard translation scheme.

Step	Action
1	Open **Trading Partnership Administration**.
2	Select the Group Organization record that you want to associate with this Trading Partnership.
3	Click **New** from the **File** menu.
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership wizard.
5	Complete the fields on the Trading Partnership dialog box and click **Next**. **Note** You must complete the **File Definitions filename** box. **Reference** See the Trading Partnership tab topic in this chapter for field descriptions. Note requirements for the Trading Partnership Code. (Continued on next page)

(Contd) Step	Action
6	Complete the fields on the Outbound EDI dialog box and click **Next**. **References** See the Outbound EDI tab topic in this chapter for field descriptions. See the How to Modify the Outbound Envelope Segmentstopic in this chapter for instructions on editing the interchange or group envelope segments.
7	Complete the fields on the Runtime Information dialog box and click **Next**. **Reference** See the topic Runtime Information tab in this chapter for field descriptions.
8	Complete the fields on the Archive dialog box and click **Next**. **Reference** See the topic Archive tabin this chapter for field descriptions.
9	Select appropriate categories for this Trading Partnership and click the **Finish** button. **Reference** See the topic Categories tab in this chapter for field descriptions. **Note** The Categories dialog box is displayed only if categories are currently defined.

Creating an application-to-application Trading Partnership record

Use this procedure to create a Trading Partnership record that is based on an application-to-application translation scheme.

Step	Action
1	Open **Trading Partnership Administration**.
2	Select the group organization record that you want to associate with this Trading Partnership.
3	Click **New** from the **File** menu. (Continued on next page)

(Contd) Step	Action
4	Click **Trading Partnership**. **System Response** The system displays the Trading Partnership wizard.
5	Complete the fields on the Trading Partnership dialog box and click **Next**. **Note** You must complete the **File Definitions filename** box. **Reference** See the topic Trading Partnership tab in this chapter for field descriptions. Note requirements for the Trading Partnership Code.
6	Complete the fields on the Runtime Information dialog box and click **Next**. **Reference** See the topic Runtime Information tab in this chapter for field descriptions.
7	Select appropriate categories for this Trading Partnership and click the **Finish** button. **Reference** See the topic Categories tab in this chapter for field descriptions. **Note** The Categories dialog box is displayed only if categories are currently defined.

How to Specify Outbound Acknowledgments

Introduction

This topic explains how to use the Outbound Acknowledgment tab to generate outbound acknowledgments for documents you receive from a trading partner.

When to use

Complete the Outbound Acknowledgment tab when a trading partner requests an acknowledgment in response to a document they sent you.

Generating outbound acknowledgments for X12 documents

Use this procedure to generate outbound acknowledgements for this trading partner.

Step	Action
1	Select the check box **Create acknowledgement for inbound document**.
2	From the **Type** drop-down list, select the type of acknowledgment you are sending to your trading partner.
3	From the **Level** drop-down list, select the appropriate acknowledgment level.
4	Type the path name you want to use for the output file.
5	From the **Element separator** drop-down list, select the element separator.
6	From the **Component/Sub-elem.** drop-down list, select the component or sub-element separator.
7	From the **Segment terminator** drop-down list, select the segment terminator.
8	From the **Interchange control header** drop-down list, select the interchange control header.
9	Accept the default value for the group control header.
10	Do you want to envelope multiple outbound acknowledgments? ◗ If YES, select the **Enable Enveloping** check box and continue with Step 11. ◗ If NO, continue with Step 11.
11	Click **OK** to save your changes.

(Continued on next page)

Generating outbound acknowledgments for EDIFACT message types

Use this procedure to generate outbound acknowledgements for this trading partner.

Step	Action
1	Select the check box **Create acknowledgement for inbound document**.
2	Accept the **CONTRL** default in the Type box.
3	From the **Level** drop-down list, select the appropriate acknowledgment level.
4	Type the path name you want to use for the output file.
5	From the **Decimal mark** drop-down list, select the decimal mark.
6	From the **Syntax level** drop-down list, select the syntax level. **Note** If a syntax level above UNOB is needed, specify syntax level B, then indicate the actual syntax level by clicking **Edit** by the Interchange control header and typing the desired value in the syntax identifier field (UNOC, UNOD…UNOG).
7	Do you want to generate a UNA segment? ◗ If YES, select the **Generate UNA** check box and continue with Step 8. **System Response** The system displays and enables the Element separator, Component/sub-elem. separator, Segment terminator, and release character box. ◗ If NO, continue with Step 13.
8	Do you want to change the Separator/Terminator information? ◗ If YES, continue with the next step. ◗ If NO, GO TO Step 12. (Continued on next page)

(Contd) Step	Action
9	Do you want to change the value of the element separator? ◗ If YES, from the **Element separator** drop-down list, select the Element separator; continue with the next step. ◗ If NO, continue with the next step. **CAUTION** **Checking the Generate UNA box enables the element separator box, so that you can change the default value. Before you change the default value, you must verify that your trading partner can process the new value.**
10	Do you want to change the value of the component or sub-element? ◗ If YES, from the **Component/Sub-elem.** drop-down list, select Component/Sub-elem. separator; continue with the next step. ◗ If NO, continue with the next step. **CAUTION** **Checking the Generate UNA box enables the Component/Sub-elem. box, so that you can change the default value. Before you change the default value, you must verify that your trading partner can process the new value.**
11	Do you want to change the value of the segment terminator? ◗ If YES, from the **Segment terminator** drop-down list, select the Segment terminator; continue with the next step. ◗ If NO, continue with the next step. **CAUTION** **Checking the Generate UNA box enables the Segment terminator box, so that you can change the default value. Before you change the default value, you must verify that your trading partner can process the new value.** (Continued on next page)

(Contd) Step	Action
12	Do you want to change the value of the release character? ◗ If YES, from the **Release character** drop-down list, select the release character; then continue with the next step. ◗ If NO, continue with the next step. **CAUTION** **Checking the Generate UNA box enables the Release character box, so that you can change the default value. Before you change the default value, you must verify that your trading partner can process the new value.**
13	Do you want to generate an acknowledgment based upon the incoming UNB09 value? ◗ If YES, select the **Generate acknowledgment upon UNB09 request** check box and continue with the next step. ◗ If NO, continue with the next step.
14	Do you want to define the value for the UNH 0057 field? ◗ If YES, type the value in the UNH --- Associated assigned code text box; continue with the next step. **Note** The UNH 0057 field is mandatory for EANCOM. ◗ If NO, continue to the next step.
15	From the **Interchange control header** drop-down list, select the Interchange control header.
16	Do you want to accept the default value for the group control header. ◗ If YES, continue with the next step. ◗ If NO, from the Group control header drop-down list, select the group control header value; continue with the next step. **CAUTION** **Before you change the default value, you must verify that your trading partner can process the new value.** (Continued on next page)

(Contd) Step	Action
17	Do you want to envelope multiple outbound acknowledgments? ◗ If YES, select the **Enable Enveloping** check box and continue with the next step. ◗ If NO, continue with the next step.
18	Click **OK** to save your changes.

Using Standard Cross Reference Tables

Overview

Introduction

Some Gentran:Server components, such as the translator, look in the Trading Partnership record to determine which compiled map (translation object) to use for translation. To find the correct Trading Partnership record, Gentran:Server examines each inbound file to determine the six key pieces of information needed to find the Trading Partnership record. These are the six key fields:

- Your Interchange ID
- Trading Partner's Interchange ID
- Your Group ID
- Trading Partner's Group ID
- Document (Set) ID
- Standard Version

Standard version as key field

If the files that a trading partner sends you contain values in the standard version field that Gentran:Server does not recognize, the system cannot find the Trading Partnership record.

Note
Gentran:Server may find the Trading Partnership record if you used a dollar sign ($) as a wildcard indicator for the Standard version field on the Inbound EDI tab of the Trading Partnership record.

Purpose of the Standard Cross Reference Table

The Standard Cross Reference Table is a Gentran:Server feature that enables you to specify the standard version that you want Gentran:Server to use when it finds certain values in the inbound document's standard version fields. Gentran:Server then uses the standard version reference in the table and the other key fields to find the Trading Partnership record.

(Continued on next page)

Example
Your trading partner uses an older version of the EDIFACT standards. The inbound documents this trading partner sends you have 0 in the message release number field and 0 in the release number field. (These are the fields Gentran:Server uses to determine the standard version.) When the translator checks these fields for the standard version, it will try to find a Trading Partnership record for standard version 00000 for the trading partner's Interchange and Group IDs.

You create an entry in the Standard Cross Reference Table. The entry cross references the message release number "0" and release number "0" with standard version 001911. This entry directs the translator to use standard version 001911 in a subsequent search if it cannot find a Trading Partnership record for standard version 00000 in its first search.

Translation types

You can use the Standard Cross Reference Table to locate Trading Partnership records that are based on these translation types:

- Standard-to-application
- Standard-to-standard
- Standard-to-XML (if you have the XML translation option)

Standard Cross Reference Table files

The Gentran:Server installation process installs an empty Standard Cross Reference Table automatically. The files are DISAM files named *xtable.dat* and *xtable.idx*. Gentran:Server stores the files in the directory that holds your Trading Partner files.

Gentran:Server provides load and unload utilities to move the *xtable.dat* and *xtable.idx* files.

Reference
See the Moving Files chapter of the *Gentran:Server for UNIX Maintenance and Troubleshooting Guide* or the Moving Files chapter of the *Gentran:Server Workstation Maintenance and Troubleshooting Guide* for information about the load and unload utilities.

Standard Cross Reference Table entry

You access the table from the Inbound EDI tab of the Trading Partnership record. Each entry you make to the table is unique to the Interchange ID and Group ID of your trading partner. When Gentran:Server checks the table, first it looks for the Interchange ID and Group ID and then for the standard version cross-reference under these IDs.

(Continued on next page)

Standard Cross Reference Table report

Gentran:Server provides the **xtablerpt** command to create a report that shows all the entries in the Standard Cross Reference Table.

Reference

See the Command Reference chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for instructions.

How to Add a Record to the Standard Cross Reference Table

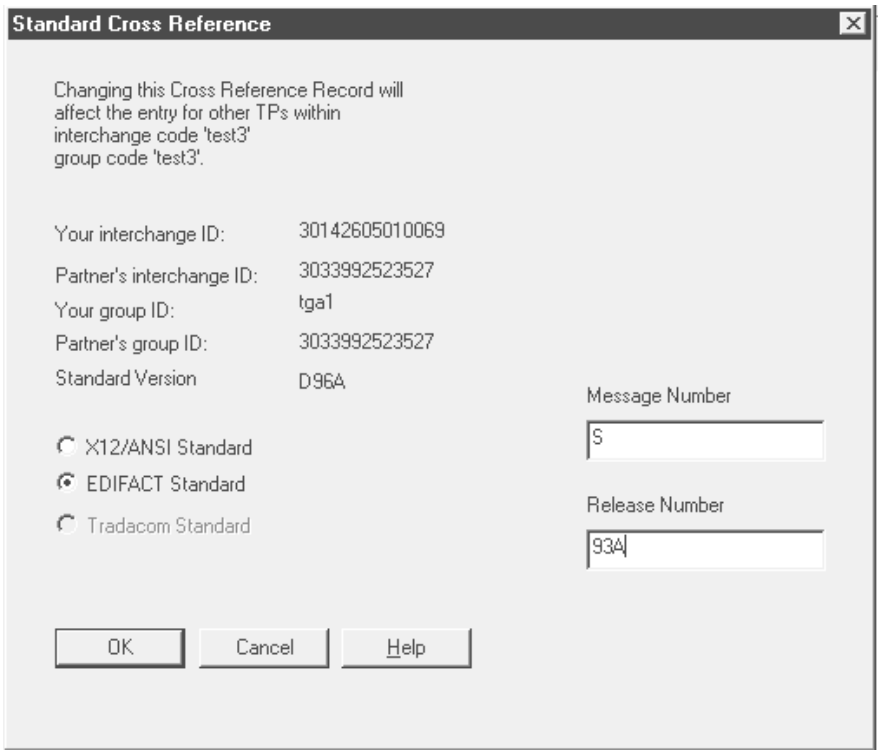
Introduction

A record in the Standard Cross Reference Table connects two standard version values:

- An invalid standard version. This is the value or values that you expect Gentran:Server to extract from the inbound documents from a particular interchange and group ID.
- A valid standard version. This is the standard version that you want Gentran:Server to use as one of the six key fields it uses to find the Trading Partnership record for the interchange and group ID.

Standard Cross Reference dialog box-EDIFACT

This illustration shows the Standard Cross Reference dialog box for an EDIFACT standard.



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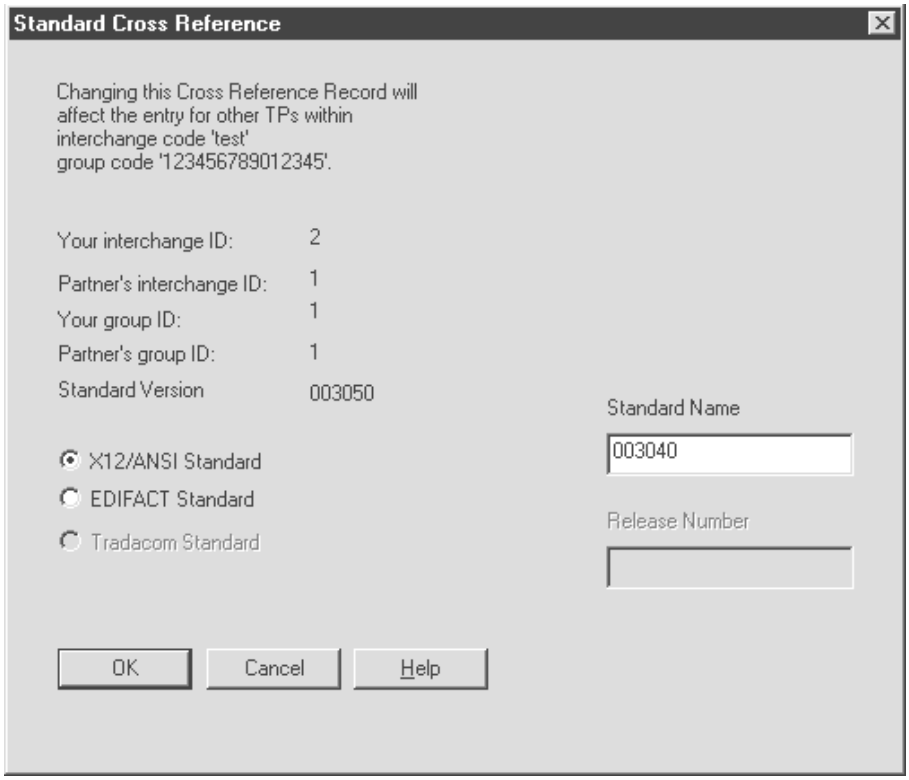
Standard Cross Reference dialog box-X12/ANSI

This illustration shows the Standard Cross Reference dialog box for an X12/ANSI standard.



Fields and functions

This table lists the fields of the Standard Cross Reference dialog box and their functions.

Field	Function
Your interchange ID	Displays your interchange ID
Partner's interchange ID	Displays your trading partner's interchange ID
Your group ID	Displays your group ID.
Partner's group ID	Displays your trading partner's group ID.
Standard Version	Displays the standard version used as a key field to identify this Trading Partnership record. This is the value you selected from the **Standard version** box on the Inbound EDI Information tab.
X12/ANSI Standard	Selects X12/ANSI as the standard type.

(Continued on next page)

(Contd) Field	Function
EDIFACT Standard	Selects EDIFACT as the standard type.
Tradacom Standard	Reserved for future use. Disabled in the current release.
Message number/ Standard Version	**EDIFACT documents** Specifies the value in the inbound document's Message number field. Gentran:Server uses this value and the Release number value to determine the standard version from an inbound document. This is one of the values you are cross-referencing to the valid standard version so that Gentran:Server can find the Trading Partnership record. **X12/ANSI and Tradacom documents** Specifies the value in the inbound document's Standard Version field. Gentran:Server uses this value to determine the standard version from an inbound document. This is the value you are cross-referencing to the valid standard version so that Gentran:Server can find the Trading Partnership record.
Release number	**EDIFACT documents** Specifies the value in the inbound document's Release number field. Gentran:Server uses this value and the Message number value to determine the standard version from an inbound document. This is one of the values you are cross-referencing to the valid standard version so that Gentran:Server can find the Trading Partnership record. **X12/ANSI and Tradacom documents** This field is disabled for these standards.

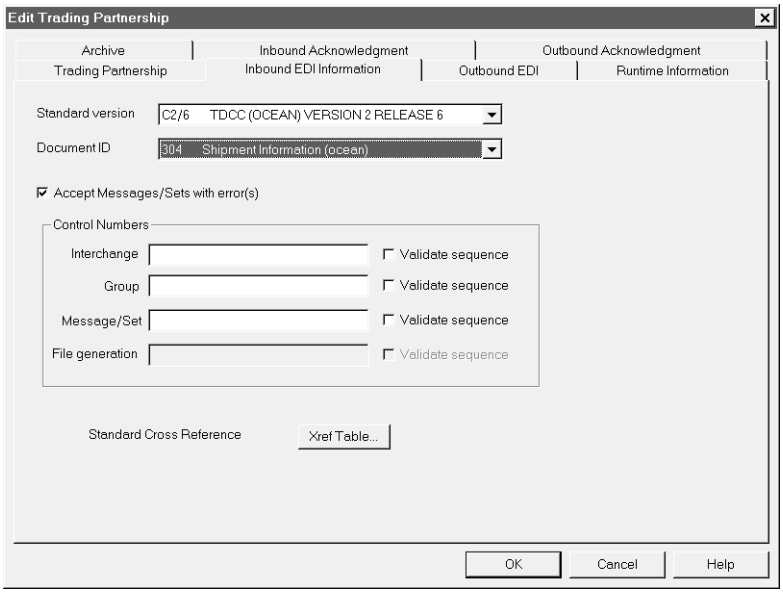
Before you begin

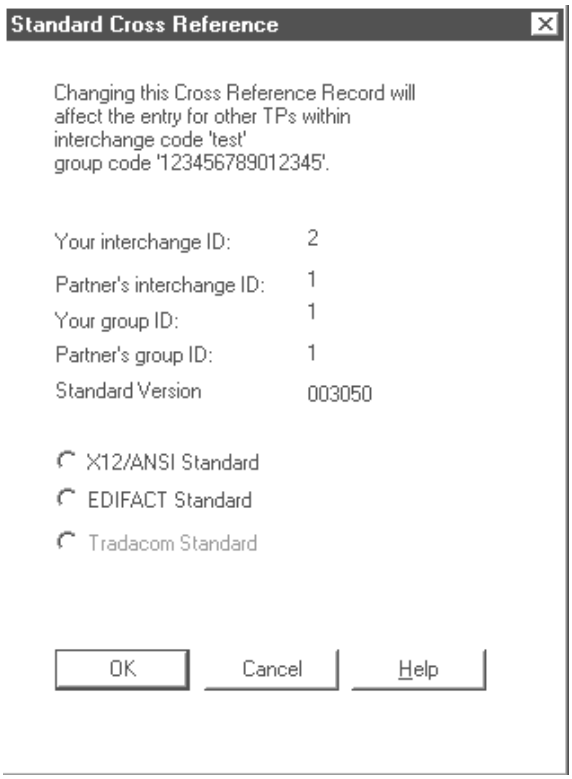
You access the Standard Cross Reference feature from the Inbound EDI tab of the Trading Partnership record. You can add an entry to the table at the time you create the Trading Partnership record or when you edit the record.

(Continued on next page)

Procedure

Use this procedure to add an entry to the Standard Cross Reference Table from an open inbound Trading Partnership record.

Step	Action
1	Click the Inbound EDI Information tab of the Trading Partnership record.  (Continued on next page)

(Contd) Step	Action
2	Click the **Xref Table** button. **System Response** The system displays the Standard Cross Reference dialog box. 
3	Verify that the interchange ID, group ID, and standard version information are correct.
4	Select the type of standard: ◗ X12/ANSI Standard ◗ EDIFACT Standard **System Response** The dialog box expands and displays additional text boxes. (Continued on next page)

(Contd) Step	Action	
5	Use this table to determine your next step.	
	IF the standard type is…	**THEN enter the…**
	X12/ANSI	Value that Gentran:Server will find in the **Standard version** field of the trading partner's inbound documents
	EDIFACT	Values that Gentran:Server will find in the **Message number** and **Release number** fields of the trading partner's inbound documents
6	Click **OK** to add the new entry to the Standard Cross Reference Table.	

Standard Cross Reference Table report

To create a report that shows all the entries in the Standard Cross Reference Table, use the **xtablerpt** command.

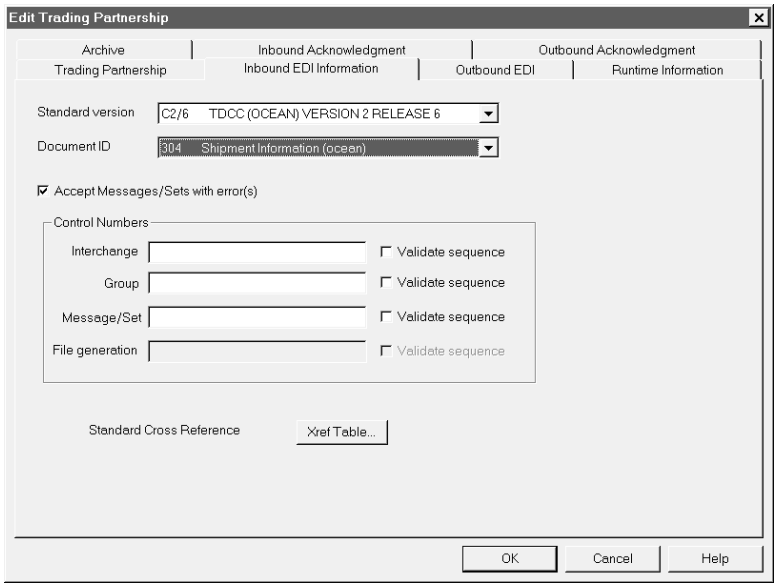
Reference

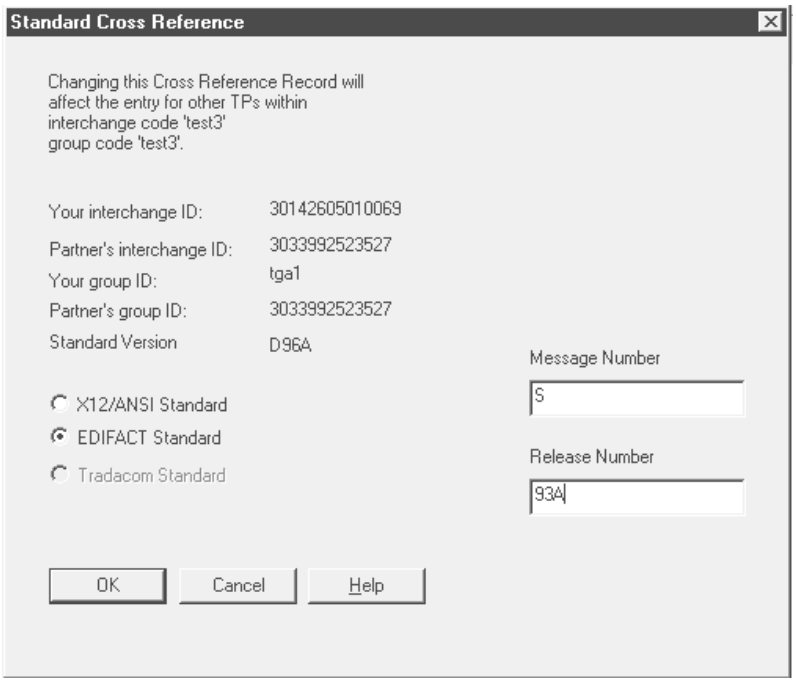
See the Command Reference chapter in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for instructions.

How to Edit a Standard Cross Reference Record

Procedure

Use this procedure to edit a Standard Cross Reference record from an open inbound Trading Partnership record.

Step	Action
1	Click the Inbound EDI Information tab of the Trading Partnership record.  (Continued on next page)

(Contd) Step	Action
2	Click the **Xref Table** button. **System Response** The system displays the Standard Cross Reference dialog box. 
3	Modify the record.
4	Click **OK** to save your changes to the Standard Cross Reference Table.

How to Delete a Standard Cross Reference Record

Introduction

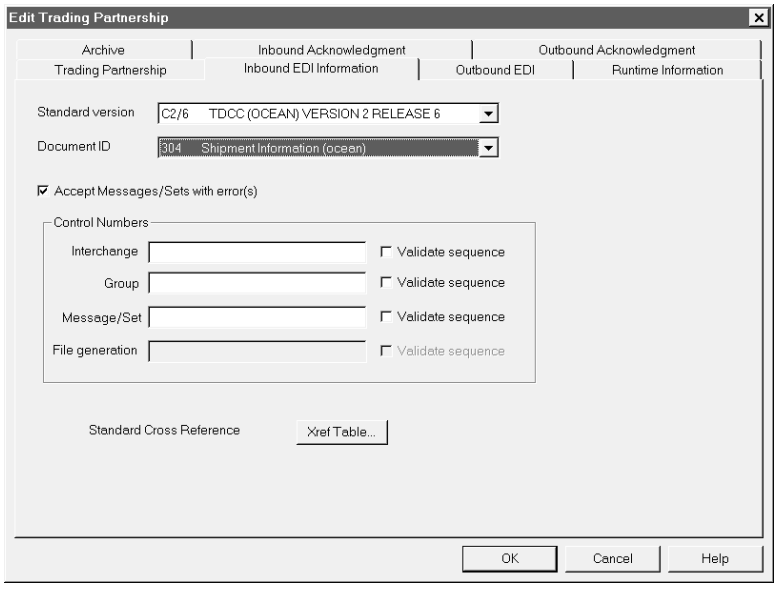
This topic explains how to delete a Standard Cross Reference record.

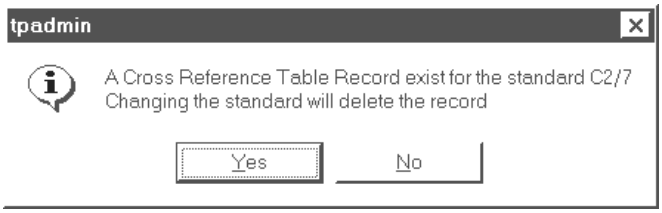
CAUTION

Gentran:Server maintains Standard Cross Reference records at the Group Organization level. When you delete a Standard Cross Reference record for one Trading Partnership in a specific Group Organization, you delete the Standard Cross Reference record for every Trading Partnership in the Group Organization.

Procedure

Use this procedure to delete a Standard Cross Reference record from an open inbound Trading Partnership record.

Step	Action
1	Click the Inbound EDI Information tab of the Trading Partnership record.  (Continued on next page)

(Contd) Step	Action
2	Select a different standard version from the **Standard version** drop-down box. **System Response** The system displays a prompt to delete the cross reference record. 
3	Click **Yes**. **System Response** The system displays the Inbound EDI tab.
4	Click **OK** to save your changes to the Trading Partnership record.

Creating Optional Records

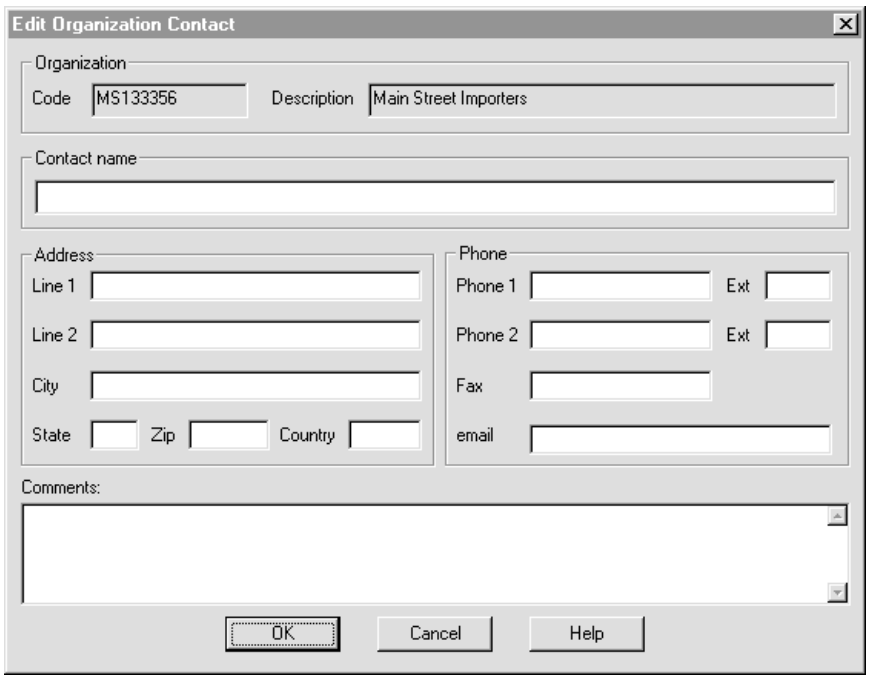
Overview

Introduction	Contact records and Category records are optional Trading Partnership records.
Contact records	Contact records are used to hold names, addresses, and phone numbers of the people you communicate with in your trading partner's organization.
Category records	The category feature enables you to group your Trading Partner records by common category. It is a flexible feature that you can use organize your Trading Partner records in your own way.

Edit Organization Contact Dialog Box

Edit Organization Contact dialog box example

This illustration shows an example of the Edit Organization Contact dialog box.



Fields and functions

This table describes the fields of the Organization Contact dialog box and their functions.

Field	Function
Contact Name	Defines the name of the person to contact.
Address Line 1	Defines the street address of the contact.
Address Line 2	Defines a second street address (room or mail stop) of the contact.
City	Defines the city.
State	Defines the state or province (2 characters).
Zip	Defines the zip code.

(Continued on next page)

(Contd) Field	Function
Country	Defines the country.
Phone 1	Defines a phone number and extension.
Phone 2	Defines a second phone number and extension.
Fax	Defines the fax number of the contact.
Email	Defines the e-mail address of the contact.
Comments	Provides a method to record additional information about this contact.

How to Create Contact Records

Introduction

Use Contact records to maintain information about personnel in your trading partner's organization. You can create unique contact records at interchange organization, group organization, and Trading Partnership levels.

Procedure

Use this procedure to create a new Contact record.

Step	Action
1	Open the Trading Partnership Administration explorer window.
2	Select the Interchange Organization, Group Organization, or the Trading Partnership record to which you want to add contact information.
3	Click **Contact** from the **Edit** menu. **System Response** The system displays the Edit Organization Contact dialog box. **Reference** See the Edit Organization Contact Dialog Box in this topic for more information.
4	Fill in the fields as necessary and click **OK**.

How to Create Categories

Introduction

It is often useful to group Trading Partner records by common category. After you define categories, you can use them as selection criteria for viewing, changing, or deleting Trading Partnership records.

You define the categories according to similarities of interest. You may define up to five category types. After you define categories, the category types appear on the Trading Partnership editor's Categories tab.

Example

You create a category called INDUSTRY so that you can group trading partners by industry. Next, you create values for different types of industries, such as retail, manufacturing, or warehousing. You then use these values to locate relevant records when you need to search for a particular group of Trading Partnerships.

Procedure

Use this procedure to define Trading Partnership category types.

Step	Action
1	Click **Categories…** from the **Settings** menu. **System Response** The system displays the User Defined Category Types dialog box.
2	Enter the following information for each category you are setting up: ◗ Category—The prompt that you want to appear on the Partnership Categories dialog box. ◗ Value—Appropriate values for each category.
3	Click **OK** to save your categories.

Modifying Trading Partnership Records

Overview

In this section

This section explains how to:

- Edit Trading Partnership records
- Modify outbound envelope segments
- Choose a different map for a Trading Partnership record
- Delete a Trading Partnership record
- Print Trading Partnership records
- Change the translation option for a Trading Partnership record.

About file locking in UNIX version

In Gentran:Server for UNIX, the Security subsystem locks Trading Partnership records when you open them for editing. When a file is locked, Gentran:Server:

- Prevents you from opening it in another session when you run multiple sessions on your desktop.
- Stops another user from opening the file for editing and displays a message to let the user know that the file is not available for editing, but does allow the user to view the file.

Gentran:Server locks these Trading Partnership files:

- Trading Partner record
- Group Organization record
- Interchange Organization record

Gentran:Server does not lock these files; so, you must take care not to edit the same file in a parallel session or on another desktop.

- Files edited in the File Browser
- Trading Partnership Category files
- Trading Partnership Contact files.

Note
If the same file is edited in two different parallel sessions, the last changes saved overwrite earlier changes from another session.

How to Edit Trading Partnership Records

Introduction

This topic explains how to edit a Trading Partnership record.

Procedure

Use this procedure to edit Trading Partnership records.

Step	Action
1	Open Trading Partnership Administration and display the Trading Partnership records.
2	Select the Trading Partnership that you want to modify.
3	Right-click and select **Edit** from the menu. **System Response** If the Trading Partnership record is not being used by another user or process, the system displays the Trading Partnership record.
4	Click the tab that contains the information you want to change.
5	Modify the Trading Partnership record and click **OK**.

Reference

If you need to search for the record you want to edit, see the topic How to Search for a Trading Partnership Recordin this chapter.

How to Modify the Outbound Envelope Segments

Introduction

You can modify the values of the elements in the interchange and group envelope segments that Gentran:Server inserts in the envelope segments of a Trading Partnership's:

- Outbound EDI documents
- Outbound Functional Acknowledgments.

Standards compliance

The elements in the interchange and group envelope segments depend on the standard, the standard version, or (for EDIFACT) the syntax level. Gentran:Server bases the options it displays for the elements on the information you specify.

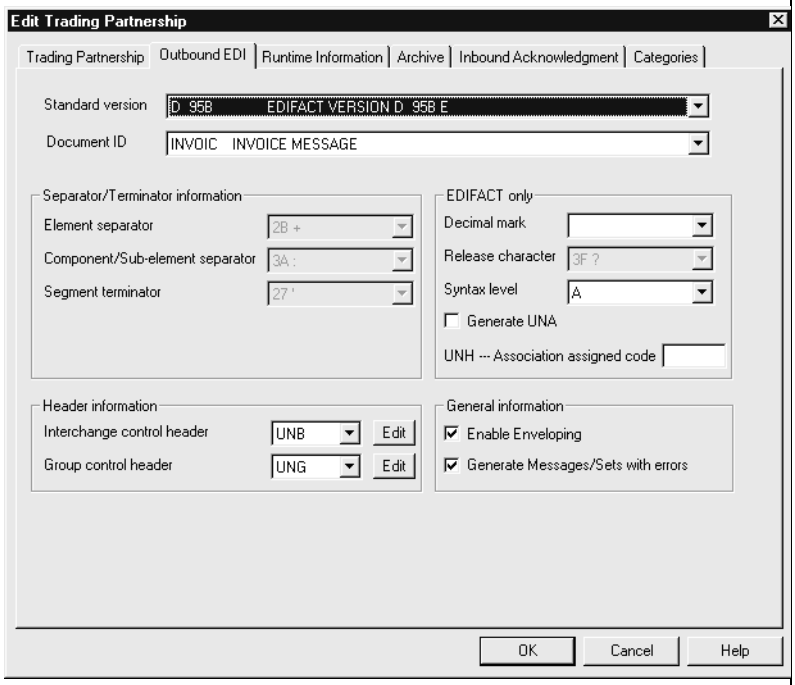
Example 1
If you specify X12/ANSI standard version 4020 and later, Gentran:Server displays "Repeating Element Separator" and a drop-down list of valid values for element ISA11 on the Interchange Information dialog box. For standard versions prior to 4020, Gentran:Server displays "Interchange Standards ID" in the ISA11 element field.

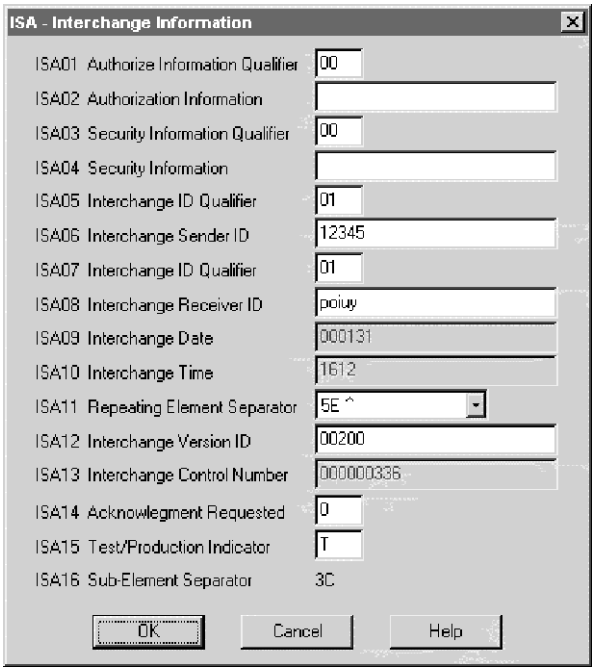
Example 2
If you specify UN/EDIFACT Syntax Version 4 for UNB element 0002 on the Interchange Header Information dialog box, Gentran:Server shows an 8-digit format (for example, 19991129) for element 0017, Date of Preparation, on the UNB and UNG dialog boxes.

(Continued on next page)

Modifying the envelope segments for outbound EDI documents

Use this procedure to modify the envelope segments of outbound EDI documents for a Trading Partnership.

Step	Action
1	Open the Trading Partnership record that you want to modify. **Reference** See How to Search for a Trading Partnership Recordor How to Edit Trading Partnership Records for instructions on opening Trading Partnership records.
2	Click the Outbound EDI tab.  (Continued on next page)

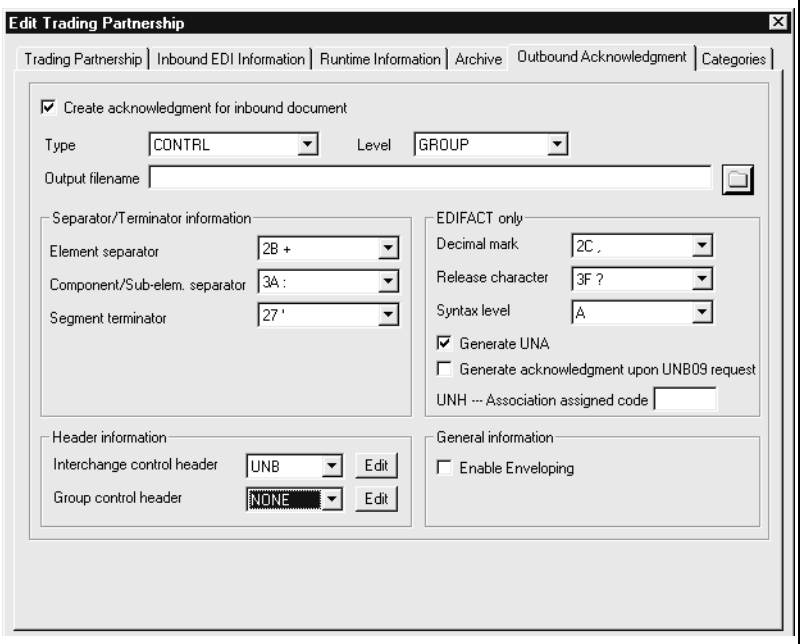
(Contd) Step	Action
3	Click the **Edit** button of the **Interchange control header** or **Group control header** field. **System Response** The system displays the Information dialog box for the segment you selected from the drop-down box. The standard version and EDIFACT syntax level determine which elements are displayed on the dialog box. This illustration is for the ISA envelope segment for X12/ANSI standard version 4020. 
4	Modify the element or elements you want to change. **Reference** See your Standards documentation for the element definitions of the interchange and group control header segments. (Continued on next page)

(Contd) Step	Action
5	Click **OK**. **Warning** You MUST click **OK** on this dialog box to save your changes. **System Response** The system displays the Outbound EDI tab.
6	Click **OK** to save your changes. **Warning** You MUST click **OK** on the Outbound EDI tab to save your changes to the envelope segment.

Modifying the envelope segments for outbound Functional Acknowledg-ments

Use this procedure to modify the envelope segments of outbound functional acknowledgments for a Trading Partnership record.

Step	Action
1	Open the Trading Partnership record that you want to modify. **Reference** See How to Search for a Trading Partnership Recordor How to Edit Trading Partnership Records for instructions on opening Trading Partnership records. (Continued on next page)

(Contd) Step	Action
2	Click the Outbound Acknowledgment tab. 
3	Click the **Edit** button of the **Interchange control header** or **Group control header** field. **System Response** The system displays the Information dialog box for the segment
4	Modify the element or elements you want to change. **Reference** See your Standards documentation for the element definitions of the interchange and group control header segments.
5	Click **OK**. **System Response** The system displays the Outbound Acknowledgment tab.
6	Click **OK** to save your changes. **Warning** You MUST click **OK** on the Outbound Acknowledgment tab to save your changes to the envelope segment.

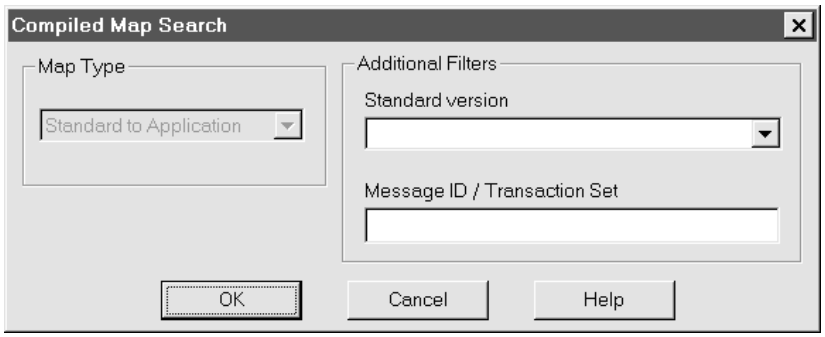
How to Choose a Different Map (Translation Object)

Introduction

When working with your Trading Partnership records, you may want to change the compiled map (translation object) you use to translate data. To locate a compiled map, you enter the search criteria into the Compiled Map Search dialog box.

Compiled Map Search dialog box

This illustration shows the Compiled Map Search dialog box. You access this dialog box via the Trading Partnership tab of the Trading Partner Editor.



Note
You can search only for maps that match the type you selected on the Trading Partnership tab of the Trading Partnership Editor.

Fields and functions

This table describes the fields of the Compiled Map Search dialog box and their functions.

Field	Function
Map type	Selects the type of compiled map (translation object) to search for. **Notes** If you selected a translation type on the Trading Partnership tab, then this field is already selected when you open the Map Search dialog box. If you did not specify a Translation type on the Trading Partnership dialog box, the Compiled Map Search dialog box displays “All” in this field. (Continued on next page)

(Contd) Field	Function
Standard version	Selects a specific EDI standard version.
Message ID / Transaction Set	Select a specific EDI document or transaction set.

Procedure

Use this procedure to search for the compiled map (translation object) you want to use for a specific Trading Partnership.

Step	Action
1	Open the Trading Partnership Administration explorer window.
2	Select the Trading Partnership record you want to modify.
3	Select the Trading Partnership tab.
4	Click the binoculars icon next to the Map name box. **System Response** The system displays the Compiled Map Search dialog box.
5	Complete the search fields and click **OK**. **System Response** The system displays Map Search Results dialog box, which displays a list of the compiled maps that match the criteria you entered.
6	Select the compiled map (translation object) you want to use with the Trading Partnership and then click **OK**. **System Response** The system replaces the map name specified on the Trading Partnership tab with the map you selected.

How to Delete Trading Partner Records

Introduction

This topic describes the procedure for deleting Interchange Organization, Group Organization, and Trading Partnership records.

Caution
When you delete an Interchange Organization record, you also delete all Group Organization and Trading Partnership records in that Interchange Organization.

When you delete a Group Organization record, you also delete all Trading Partnership records in that Group Organization.

Procedure

Use this procedure to completely remove Trading Partner records from Gentran:Server.

Step	Action		
1	Open the Trading Partner Administration explorer.		
2	Use this table to determine your next step.		
	IF you want to delete…	**THEN select the…**	**AND click…**
	an Interchange Organization record	interchange	**Delete** from the **Edit** menu.
	a Group Organization record	group	**Delete** from the **Edit** menu.
	a Trading Partnership record	Trading Partnership	**Delete** from the **Edit** menu.
	System Response The system asks you to confirm your intention to delete this item.		
3	Click **OK** to confirm the deletion.		

How to Print Trading Partnership Reports

Introduction

This topic describes how to print Trading Partnership records.

When to use

Use this procedure when you want to:

- Review the information that you defined in a Trading Partnership
- Check for errors
- Provide Trading Partnership information to other individuals or organizations.

Procedure

Use this procedure to print a Trading Partnership record.

Step	Action
1	Open the Trading Partner Administration Explorer.
2	Select the Interchange Organization, Group Organization, or Trading Partner record that you want to print.
3	Click **Print** from the **File** Menu. **System Response** Gentran:Server displays the Trading Partnership Print dialog box.
4	Click **OK** to print the selected record.

Translation Options Dialog Boxes

Introduction

This topic describes the Translation Options dialog boxes for the various types of translation (standard-to-application, standard-to-standard, etc.).

You can use these dialog boxes to set particular default translation options for your Trading Partnership records, or to set options for an individual Trading Partnership record.

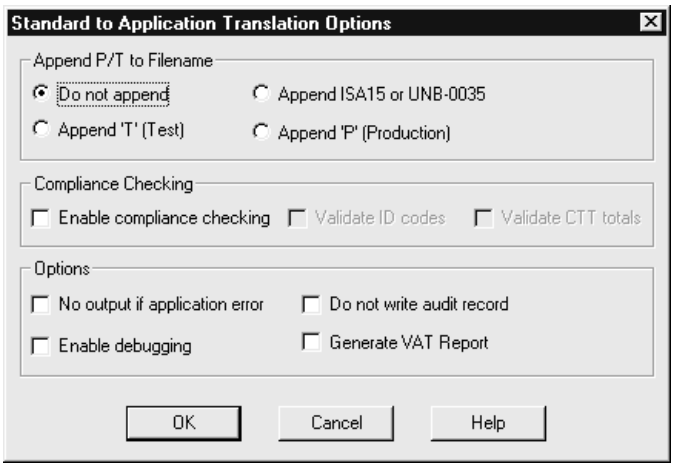
Reference

To set default translation options for one or more translation types, see How to Set Default Translation Selections.

To set translation options for an individual Trading Partnership, see How to Set Translation Selections.

Standard to Application Translation Options dialog box

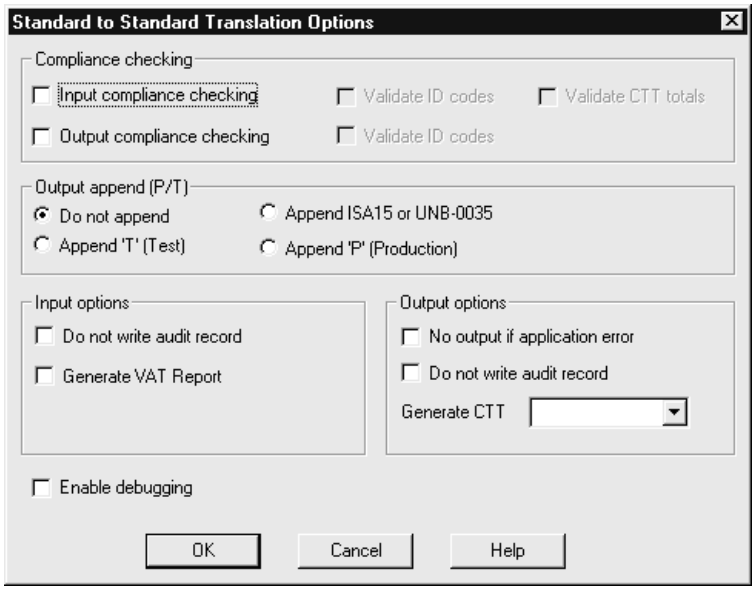
This illustration shows the Standard to Application Translation Options dialog box.



(Continued on next page)

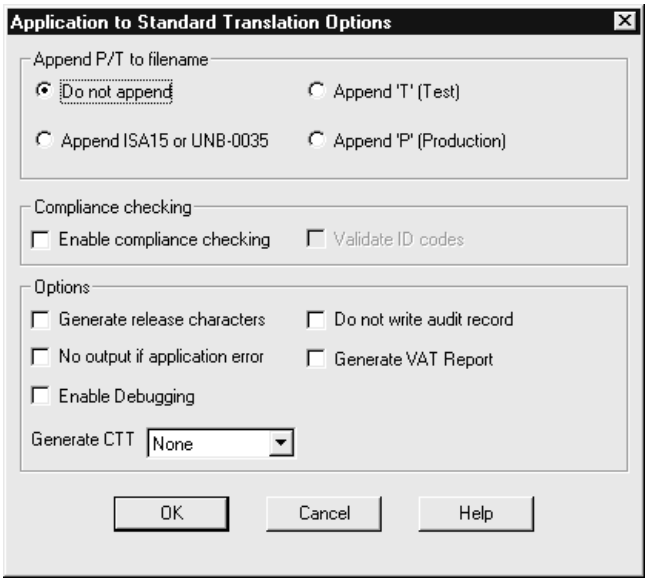
Standard to Standard Translation Options dialog box

This illustration shows the Standard to Standard Translation Options dialog box.



Application to Standard Translation Options dialog box

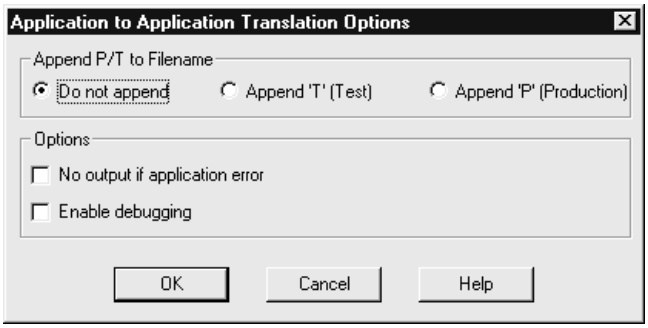
This illustration shows the Application to Standard Translation Options dialog box.



(Continued on next page)

Application to Application Translation Options dialog box

This illustration shows the Application to Application Translation Options dialog box.



(Continued on next page)

Fields and functions

This table describes all the possible fields of the Translation Options dialog box and their functions. The available values to choose from within the Options and Compliance checking sections of the Translation Options dialog box depend upon the type of translation selected and the type of map file used.

Field	Function
Input Compliance checking	Checks the incoming data for compliance to EDI standard versions. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
Output compliance checking	Checks the outgoing data for compliance to EDI standard versions. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
Do not append	Does not append a test or production flag to the end of the file name.
Append 'T' (Test)	Appends the letter T to the end of the file name to mark it as a test file.
Append 'P' (Production)	Appends the letter P to the end of the file name to mark it as a production file.
Append ISA15 or UNB-0035	Appends the value of ISA15 or UNB0035 to the end of the file name.
Generate release characters	Generates the character that allows a separator or terminator to be used as part of the EDIFACT data. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type. (Continued on next page)

(Contd) Field	Function
Enable Compliance Checking	Checks EDI data for compliance against the EDI Standard .CND file and the map. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
Validate ID codes	Validates the ID codes from the EDI data against the .CDS standard file. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
Validate CTT totals	Checks the incoming data for valid CTT totals. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
No output if application error	Does not generate an output file if there are errors in the application. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.
Enable debugging	Lists the segment IDs to screen during translation and generates the Diagnostics Report.
Do not write audit record	Stops the translator from writing an audit record.
Generate VAT Report	Saves EDIFACT VAT information from TAXCON messages.
Generate CTT	Generates the CTT outbound segment. **Note** This translation option is available only when you are translating data with a Visual Mapper (*.vmp) map file type.

How to Set Translation Selections

Introduction

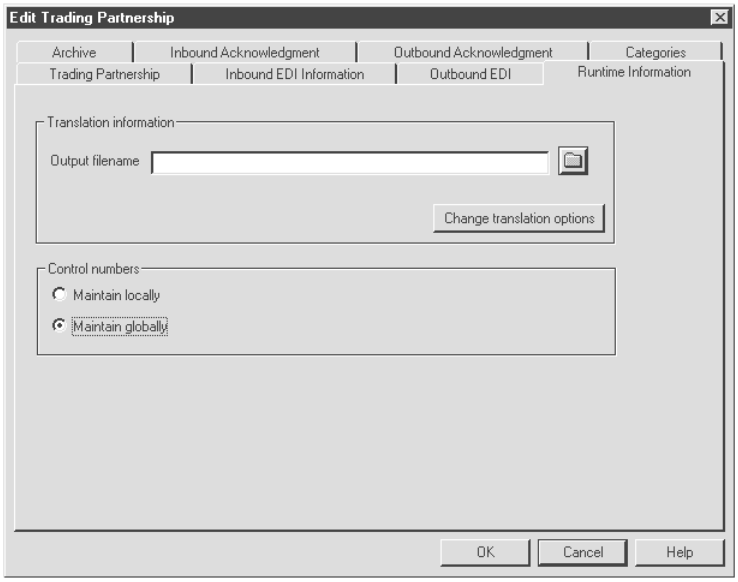
This topic explains how to set certain translation selections for a specific Trading Partnership.

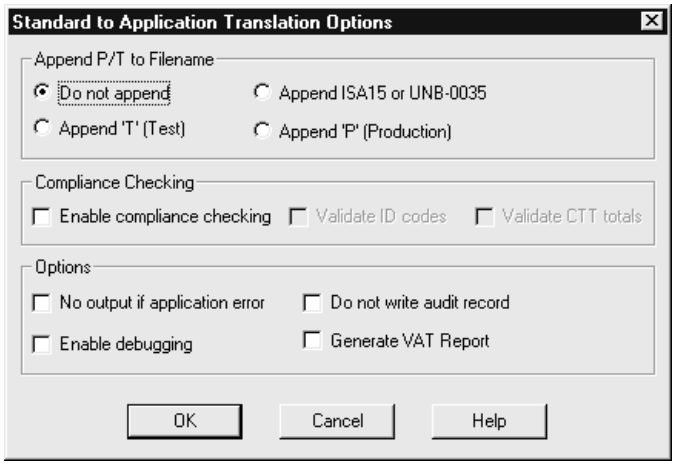
Note
The selections you choose in the Trading Partnership record override any default selections you may have set.

Reference
See How to Set Default Translation Selections for instructions on setting translation selections that your system automatically assigns when you create a new Trading Partnership record for a specific translation type.

Procedure

Use this procedure to set default translation selections for a translation type.

Step	Action
1	Open the Trading Partnership record that you want to change.
2	Click the Runtime Information tab.  **Reference** See the topic The Trading Partnership Editorin this chapter for more information on the Runtime Information tab. (Continued on next page)

(Contd) Step	Action
3	Click the **Change translation options** button. **System Response** The system displays the Translation Options dialog box for the translation type selected for this Trading Partnership record. **Example**  **Note** The selections on the dialog box depend on the type of translation.
4	Select the default selections that you want to apply to this type of translation.
5	Click **OK** to save your changes.

Making Mass Changes

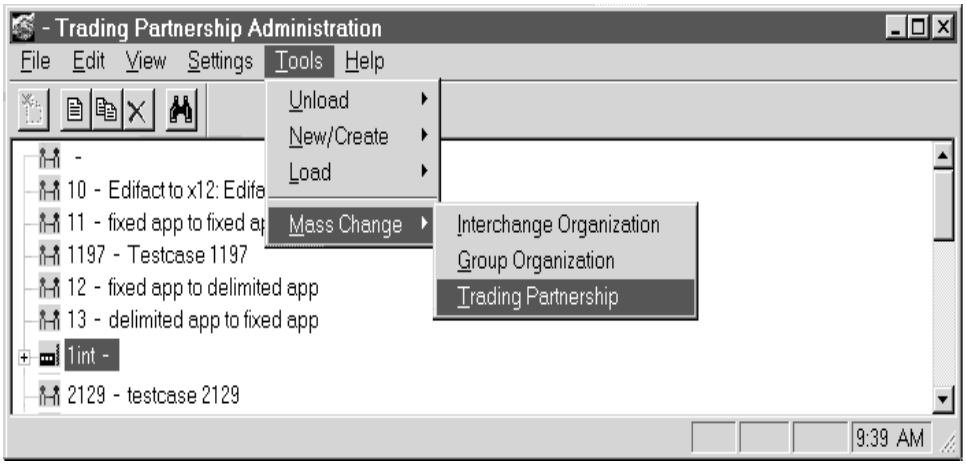
The Mass Change Facility

Introduction

You use the Mass Change facility to modify multiple Interchange Organization, Group Organization, or Trading Partnership records at a time. The Mass Change facility is accessed from the Trading Partnership Administration window.

The access path for Mass Change

This illustration shows an example of how to access the Mass Change facility from Trading Partnership Administration.



How to access Mass Change

Use this procedure to access the Mass Change facility.

Step	Action
1	Open Trading Partnership Administration.
2	Click the Interchange, Group, or Trading Partnership record you want to modify.
3	Click **Tools** on the menu bar.
4	Click **Mass Change** on the **Tools** menu.

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>5</td><td colspan="2">Use this table to determine your next action.</td></tr>
<tr><td></td><td>To change...</td><td>Click...</td></tr>
<tr><td></td><td>An Interchange Organization record</td><td>Interchange Organization</td></tr>
<tr><td></td><td>A Group Organization record</td><td>Group Organization</td></tr>
<tr><td></td><td>A Trading Partnership record</td><td>Trading Partnership</td></tr>
<tr><td></td><td colspan="2">System Response
The TP Mass Change facility then displays the dialog box appropriate for the item you selected.

Reference
See the following topics in this chapter for more information about the different TP Mass Change options:
◗ How to Change Interchange Organization Records
◗ How to Change Group Organization Records
◗ How to Change Trading Partnership Records</td></tr>
</table>

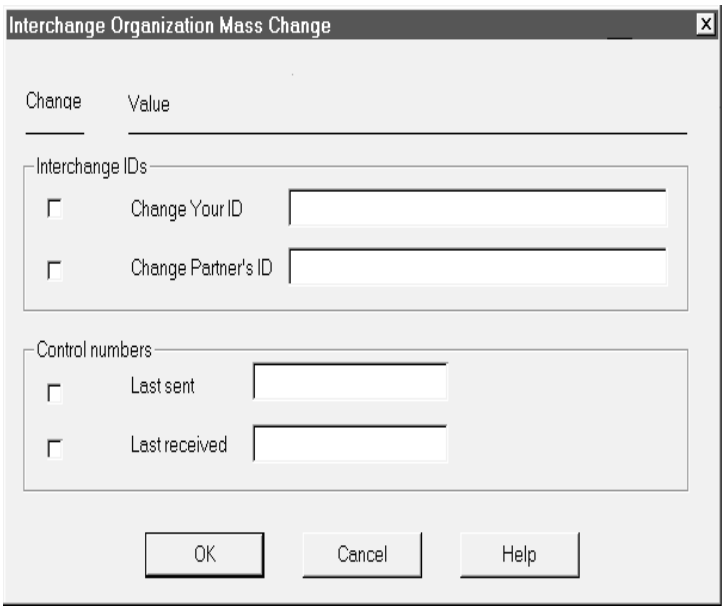
How to Change Interchange Organization Records

Introduction

Changes to Interchange Organization records can be necessary in certain circumstances. You can use Mass Change to modify some or all of your Interchange Organization records at once, rather than one at a time.

The Interchange Organization Mass Change dialog box

This illustration shows an example of the Interchange Organization Mass Change dialog box.



Fields and functions

This table lists the fields of the Interchange Organization Mass Change dialog box and their functions.

Field	Function
Interchange IDs	
Change Your ID	Indicates that you are changing your interchange ID to the identifier you type in the box.
Change Partner's ID	Indicates that you are changing your trading partner's interchange ID to the identifier you type in the box.

(Continued on next page)

(Contd) Field	Function
Control numbers	
Last sent	Initializes the counter used for control numbers for your business documents.
Last received	Initializes the counter used for control numbers for business documents that you receive from this trading partner.
OK	Saves the changes you made on this dialog box.
Cancel	Closes this dialog box without saving your changes.

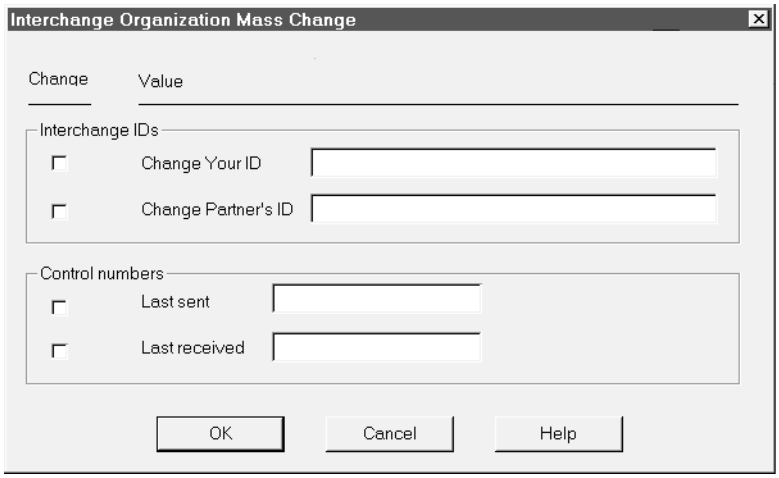
How to change multiple Interchange Organization records

Use this procedure to change multiple Interchange Organization records at one time.

Step	Action
1	Open Trading Partnership Administration.
2	Click **Tools** on the menu bar.
3	Click **Mass Change** on the **Tools** menu. (Continued on next page)

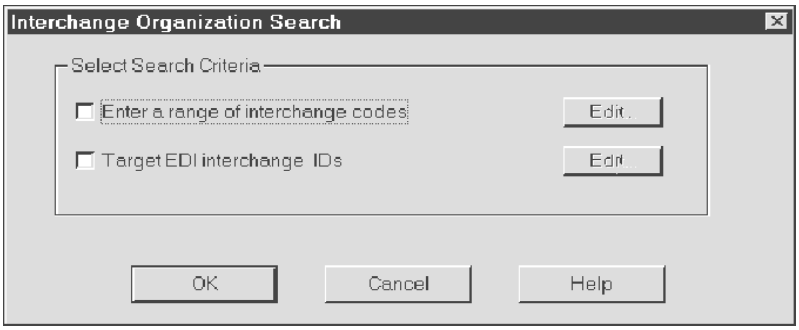
<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>4</td><td>Click Interchange Organization on the Mass Change menu.

System Response
The TP Mass Change facility then displays the Interchange Organization Mass Change dialog box.

 
</td></tr>
<tr><td>5</td><td>Use the table below to determine your next action
<table>
<tr><td>If you want to change...</td><td>Then click the check box for...</td></tr>
<tr><td>Your ID</td><td>Change Your ID and enter a new value into the text box</td></tr>
<tr><td>A Partner’s ID</td><td>Change Partner’s ID and enter a new value into the text box</td></tr>
<tr><td>The last control number sent</td><td>Last sent and enter a new value in to the text box.</td></tr>
<tr><td>The last control number received</td><td>Last received and enter a new value into the text box.</td></tr>
</table>
WARNING
If you click the check box for an item but do not enter a new value, the system will delete the existing value for that item.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>6</td><td>Click OK.

System Response
The system displays the Interchange Organization Search dialog box.
 
</td></tr>
<tr><td>7</td><td>Use the table below to select the search criteria.
<table>
<tr><th>If you want to search a...</th><th>Then click the...</th></tr>
<tr><td>Range of Interchange IDs</td><td>Enter Range option.</td></tr>
<tr><td>Single Interchange ID</td><td>Target EDI Interchange ID option.</td></tr>
</table></td></tr>
<tr><td>8</td><td>Click Edit.

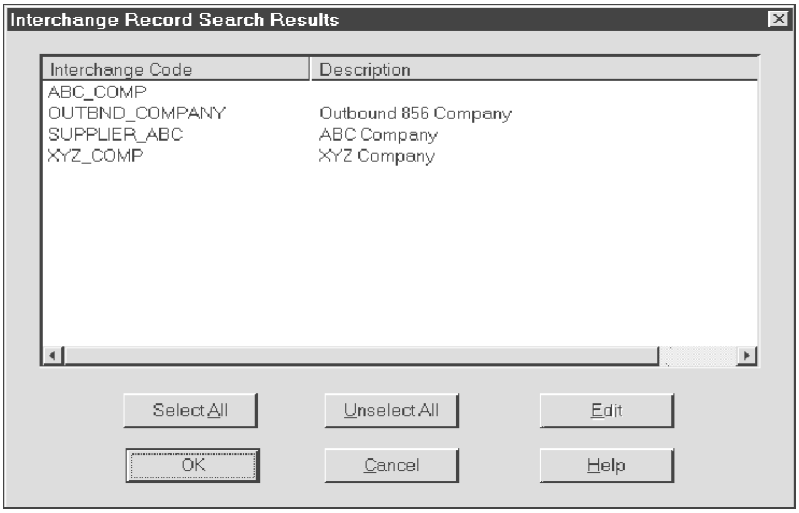
System Response
The system prompts for a range of Interchange IDs or a specific ID, depending on your selection in Step 5.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>9</td><td>Enter the Start and End codes or the specific ID(s) of the Interchange(s) you want to search and click OK.

System Response

The system then searches for and displays a list of records matching the code or codes entered

 
</td></tr>
<tr><td>10</td><td>Use the table below to select the Interchange ID or IDs to which you want to apply the changes.
<table>
<tr><th>To select...</th><th>Do this...</th></tr>
<tr><td>A single ID</td><td>Click the ID, then click OK.</td></tr>
<tr><td>All IDs displayed</td><td>Click Select All, then click OK.</td></tr>
<tr><td>Multiple items</td><td>Hold the CTRL key down and click each ID you want to select. Then, release the CTRL key and click OK.</td></tr>
<tr><td colspan="2">System Response
The system prompts you to confirm the requested changes.</td></tr>
</table></td></tr>
<tr><td>11</td><td>Click Yes.

System Response
The system then changes the selected Interchange Organization records, creates a log file (masschange.log), and returns to Trading Partnership Administration.</td></tr>
</table>

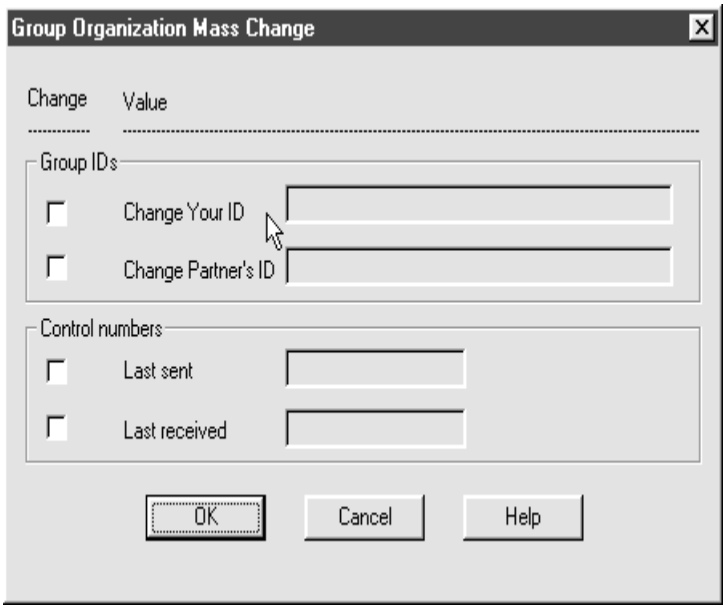
How to Change Group Organization Records

Introduction

Changes to Group Organization records are not common, but they can be necessary in certain circumstances. You can use the TP Mass Change facility to change some or all of your Group Organization records at once, rather than one at a time.

The Group Organization dialog box

This illustration shows an example of the Group Organization Mass Change dialog box.



How to change multiple Group Organization records

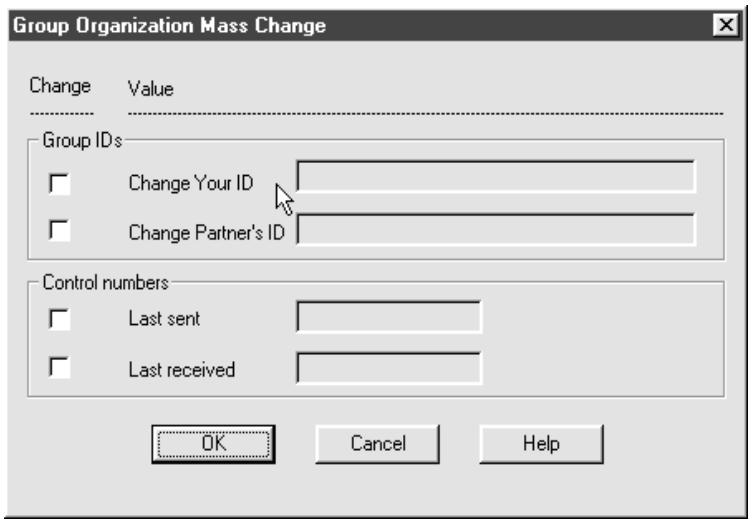
Use this procedure to change multiple Group Organization records at one time.

Step	Action
1	Open Trading Partnership Administration.
2	Click **Tools** on the menu bar.
3	Click **Mass Change** on the **Tools** menu.

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>4</td><td>Click Group Organization on the Mass Change menu.

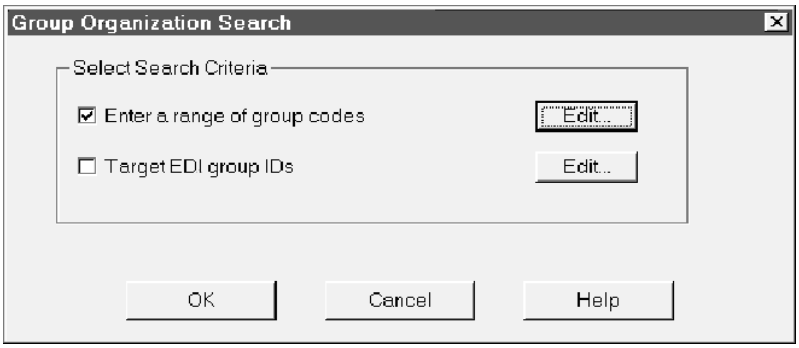
System Response
The TP Mass Change facility then displays the Group Organization Mass Change dialog box.

 
</td></tr>
<tr><td>5</td><td>Use the table below to determine your next action
<table>
<tr><th>If you want to change...</th><th>Then click the check box for...</th></tr>
<tr><td>Your ID</td><td>Change Your ID and enter a new value into the text box.</td></tr>
<tr><td>A Partner’s ID</td><td>Change Partner’s ID and enter a new value into the text box.</td></tr>
<tr><td>The last control number sent</td><td>Last sent and enter a new value in to the text box.</td></tr>
<tr><td>The last control number received</td><td>Last received and enter a new value into the text box.</td></tr>
</table>
WARNING
If you click the check box for an item but do not enter a new value, the system will delete the existing value for that item.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>6</td><td>Click OK.

System Response
The system displays the Group Organization Search dialog box.

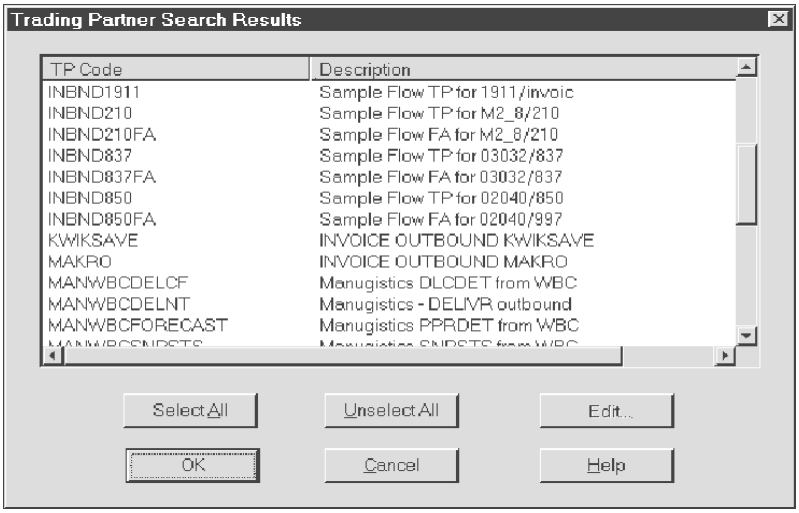
 
</td></tr>
<tr><td>7</td><td>Use the table below to select the search criteria.
<table>
<tr><th>If you want to search a...</th><th>Then click...</th></tr>
<tr><td>Range of Group IDs</td><td>Enter Range.</td></tr>
<tr><td>Single Group ID</td><td>Target EDI Group ID.</td></tr>
</table></td></tr>
<tr><td>8</td><td>Click Edit.

System Response
The system prompts for a range of Group IDs or a specific ID, depending on your selection in Step 1.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>9</td><td>Enter the Start and End codes or the specific ID(s) of the Groups you want to search and click OK.

System Response
The system then searches for and displays a list of records matching the code or codes entered.

 
</td></tr>
<tr><td>10</td><td>Use the table below to select the Group ID or IDs to which you want to apply the changes.
<table>
<tr><th>To select...</th><th>Do this...</th></tr>
<tr><td>A single ID</td><td>Click the ID, then click OK.</td></tr>
<tr><td>All IDs displayed</td><td>Click ALL, then click OK.</td></tr>
<tr><td>Multiple items</td><td>Hold the CTRL key down and click each ID you want to select. Then, release the CTRL key and click OK.</td></tr>
<tr><td colspan="2">System Response
The system prompts you to confirm the requested changes.</td></tr>
</table></td></tr>
<tr><td>11</td><td>Click Yes.

System Response
The system then changes the selected records, creates a log file (masschange.log), and returns to Trading Partnership Administration.</td></tr>
</table>

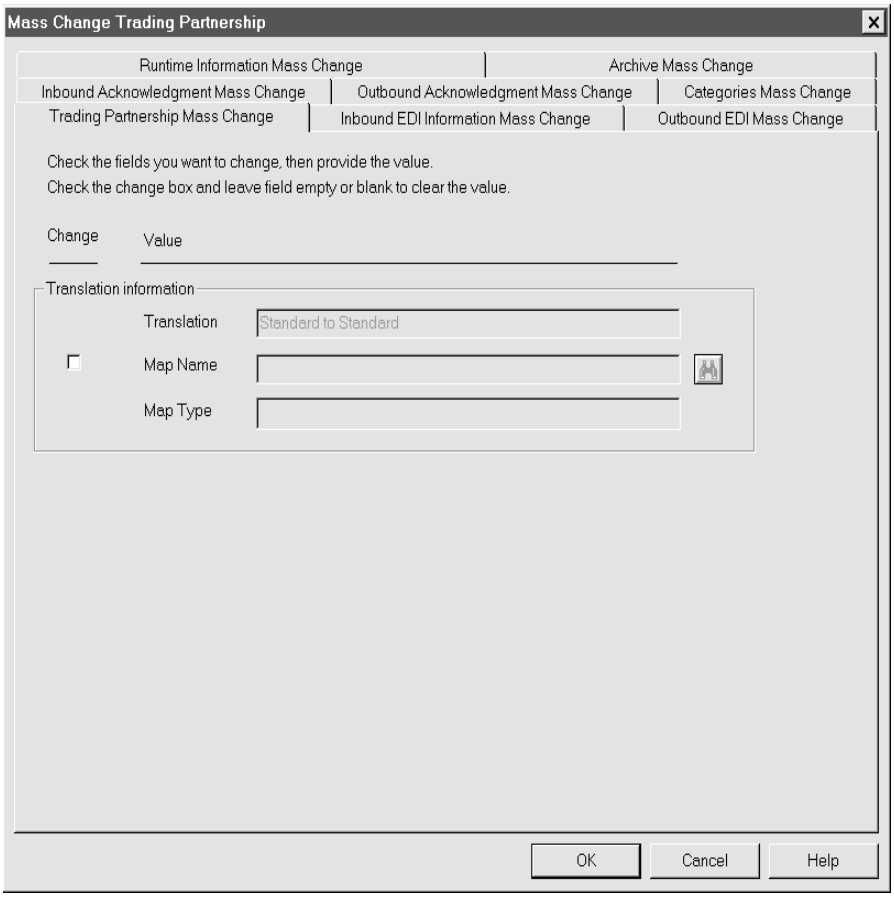
How to Change Trading Partnership Records

Introduction

The Mass Change facility uses a dialog box very similar to the one used to create new Trading Partnership records. The difference is a check box located to the left of items on the dialog box. You can use Mass Change to modify only those items that have a corresponding check box.

The Mass Change Trading Partnership dialog box

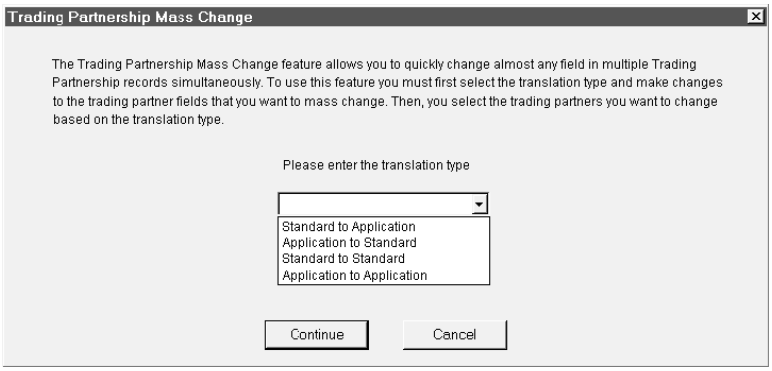
This illustration shows an example of the Trading Partnership Mass Change dialog box.

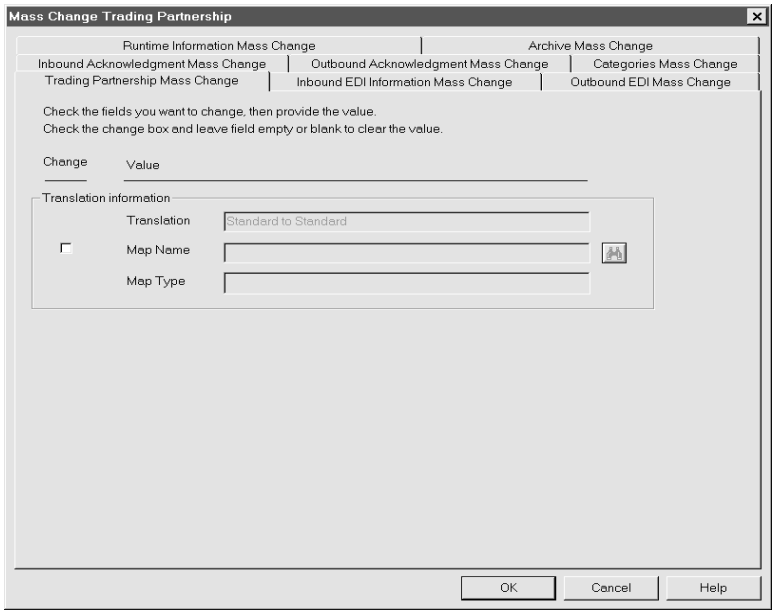


(Continued on next page)

How to Access the Mass Change Trading Partnership dialog box

Use this procedure to open the Mass Change Trading Partnership dialog box.

Step	Action
1	Open the Trading Partnership Administration window.
2	Click **Tools** on the menu bar.
3	Click **Mass Change** on the **Tools** menu. **System Response** The system displays a submenu of record types.
4	Click **Trading Partnership** on the **Mass Change** menu. **System Response** The system displays an introductory dialog box to the Trading Partnership Mass Change function.  (Continued on next page)

(Contd) Step	Action
5	Click or enter the translation type of the Trading Partnership records you want to change.
6	Click **Continue**. **System Response** The system then displays the Mass Change Trading Partnership dialog box.  You are now ready to select the values you want to change. **Reference** See the procedure under the topic Modifying Trading Partnership Records for more information about selecting values to change.

(Continued on next page)

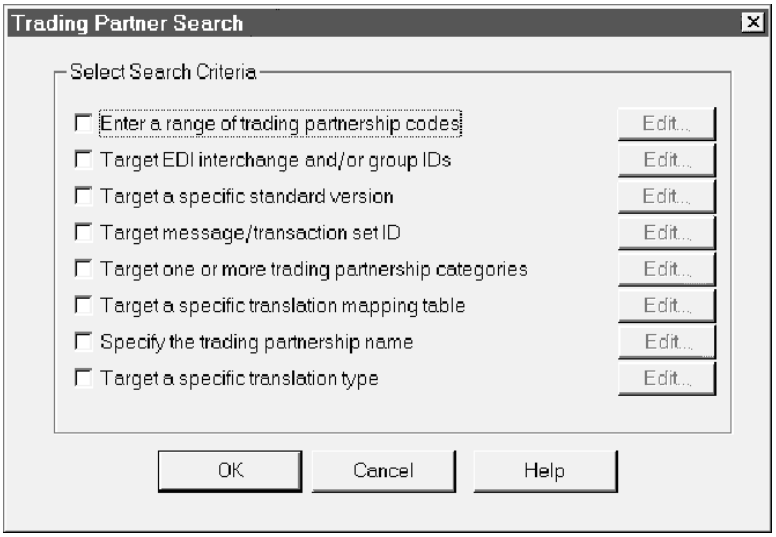
How to change Trading Partnership records

Use this procedure to change multiple Trading Partnership records at one time.

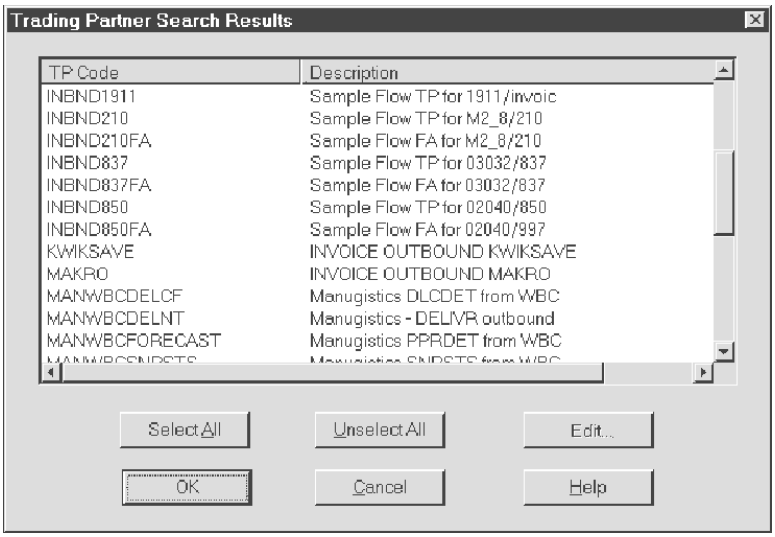
Note
This procedure begins with the Trading Partnership Mass Change dialog box active.

Reference
See How to Access the Mass Change Trading Partnership dialog box for more information about activating this dialog box.

Step	Action
1	Click the tab containing the information you want to change.
2	Click the first item you want to change and enter the new value. **Warning** If you click the check box for an item but do not enter a new value, the system will delete the existing value for that item. **Note** Some items have an Edit button to the right of the text box. Click the **Edit** button to display a dialog box listing additional items that you can change. You can then click the items you want to change and enter the appropriate values. Click **OK** when you are ready to return to the previous screen or dialog box.
3	Repeat Steps 5 and 6 until you finish marking all of the items you want to change. (Continued on next page)

(Contd) Step	Action
4	Click **OK**. **System Response** The system displays the Trading Partnership Search dialog box. 
5	Click the check box of the selection criteria you want to use, then click the associated **Edit** button. **System Response** The system displays a secondary selection dialog box for the chosen criteria.
6	On the secondary dialog box, click the criteria you want to use and, where required, enter the value of the criteria. **Example** If you chose to select based on a range of numbers, you must enter a beginning and ending value. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>7</td><td>Click OK.

System Response
The system displays the Trading Partner Search Results dialog box.
 
</td></tr>
<tr><td>8</td><td>Use the table below to select the Trading Partners to which you want to apply the changes.
<table>
<tr><th>To select...</th><th>Do this...</th></tr>
<tr><td>A single Trading Partner</td><td>Click the Trading Partner, then click OK.</td></tr>
<tr><td>All Trading Partners displayed</td><td>Click Select All, then click OK.</td></tr>
<tr><td>Multiple items</td><td>Hold the CTRL key down and click each Trading Partner you want to select. Then, release CTRL and click OK.</td></tr>
</table>
System Response
The system prompts you to confirm the requested changes.</td></tr>
<tr><td>9</td><td>Click Yes.

System Response
The system then changes the selected records, creates a log file (masschange.log), and returns to Trading Partnership Administration.</td></tr>
</table>

CHAPTER
12

Running Translation

Contents

Overview

Introduction

In this chapter

This chapter covers running translation from the Translate menu.

This chapter explains:

- Inbound and outbound translation
- The Translate Menu
- The Translation process
- How to envelope output data that is in a standard format
- How to set up and run translations from the Translate menu
- How to view a translation summary.

Running translation from a script or batch file

To run translation automatically, include the lftran command in a batch file or script.

To run translations on a schedule, enter the lftran translation command and the appropriate parameters into a batch file or script, and then run the batch file or script in an unattended mode via the Task Scheduler.

References
For information about using the Task Scheduler to run batch files and scripts, see the chapter Using the Task Scheduler in this guide.

For information about the lftran command, see the chapter Command Reference in the *Gentran:Server for UNIX and Workstation Technical Reference Guide*.

About translation

Data translation is the primary function of Gentran:Server. Data translation takes business data in one computer-readable form and transforms it into another form.

During translation Gentran:Server executes the instructions defined in the:

- Translation object or compiled map
- Trading Partnership record
- Translation batch file, script, or translation dialog boxes.

(Continued on next page)

Setting translation options

You can set translation options in several ways:

- Set default translation options for a particular type of translation in Trading Partnership Administration
- Set specific translation options for a particular Trading Partnership record. These override any default settings.
- Set options for a specific input file when you run translation from the Translate menu. These override any other settings.

Key terms

This table describes key terms used in this chapter.

Term	Description
archive	The process of copying and saving EDI data that has been processed.
audit record	A temporary audit file named *edistat.i* or *edistat.o*, created during translation, which contains the directory path and file name for the EDI data received or generated. The record does not contain the actual EDI data.
data file	The file that contains the inbound or outbound data.
envelope	The process of combining like interchanges.
functional acknowledgment (FA)	The standard transaction set used to acknowledge receipt of a transmission. The functional acknowledgment tells you if a document was received and processed by your trading partner and whether it contained EDI standard compliance errors. Likewise, the functional acknowledgment you send to your trading partner relays the same information to them.
historical record	The index files named *edihist.dat* and *edihist.idx* that store the location of the archived EDI data. The files are built from the audit records that translation produces. Together, they are the permanent audit file.
history audit directory	The EDI History Audit (*hisaud*) directory used to store permanent history files.

(Continued on next page)

(Contd) Term	Description
inbound translation	A translation in which the input format of the source document is either an EDI standard format or an XML format that you use to exchange documents with a trading partner. **Note** Inbound translation using an XML format is available only if you have the XML translation option.
outbound translation	A translation in which the input format of your source document is either an application format or an XML format that you defined for your internal application documents. **Note** Inbound translation using an XML format is available only if you have the XML translation option.
reconciliation	The process of viewing functional acknowledgments, viewing data with the status of Errors, and correcting the EDI data.
status audit directory	The EDI Status Audit directory (stataud) used to store temporary audit files (*edistat.i* and *edistat.o*) and the history audit data.
Trading Partnership Code	A user-defined code that uniquely identifies a Trading Partnership record.
translation	The conversion of data from one format to another.

Inbound and Outbound Translation

Introduction

Translation is either inbound or outbound. The dialog boxes, translation objects, and options you use during translation differ for each type of translation.

Inbound translation

In an inbound translation, the source or input document is in a data transmission format. The data transmission format can either be an EDI standard or, if you have the XML translation option, an XML format that your trading partner uses to send you documents. These are the types of maps normally used in inbound translation:

- Standard-to-standard
- Standard-to-application

XML translation option

If your trading partner sends you files in XML format and you have the XML translation option, you can also run these types of inbound translation.

- Standard-to-XML (if you have the XML translation option)
- XML-to-application (if you receive the XML input documents from your trading partner)
- XML-to-XML (if you receive the XML input documents from your trading partner)
- XML-to-standard (if you receive the XML input documents from your trading partner)

ODBC translation option

If you have the ODBC translation option, you can define the output application file as an ODBC database format.

For example:

- Standard-to-application (ODBC)

(Continued on next page)

Outbound translation

In an outbound translation, the source or input document is in a data format that you use for your internal applications. The input format of the source documents is either an application format or, if you have the XML translation option, an XML format that you defined for your internal application documents. These are the types of maps normally used in outbound translation:

- Application-to-application
- Application-to-standard

XML translation option

If you have the XML translation option, you can also run these types of outbound translations

- Application-to-XML
- XML-to-standard (if you send the output documents to your trading partner)
- XML-to-XML (if you send the output documents to your trading partner)

ODBC translation option

If you have the ODBC translation option, you can define the input application file as an ODBC database format.

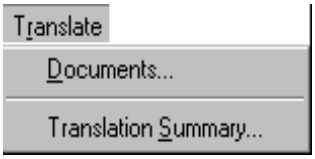
For example:

- Application (ODBC)-to-standard
- Application (ODBC)-to-XML

The Translate Menu

Translate menu

This illustration shows the **Translate** menu.



Translation menu options and functions

This table describes the options of the **Translate** menu and their functions.

Option	Function
Documents	Translates both input data files that are coming in to your system and input files that are leaving your system. Inbound data files are in a standard format and are usually translated to your application format. Outbound data files are usually in your application format and are usually translated into an EDI standard format. **Note** If you have the XML translation option, then your inbound data files can also be in XML format and translated into an XML format.
Translation Summary	Displays selected information about translations.

The Translation Process

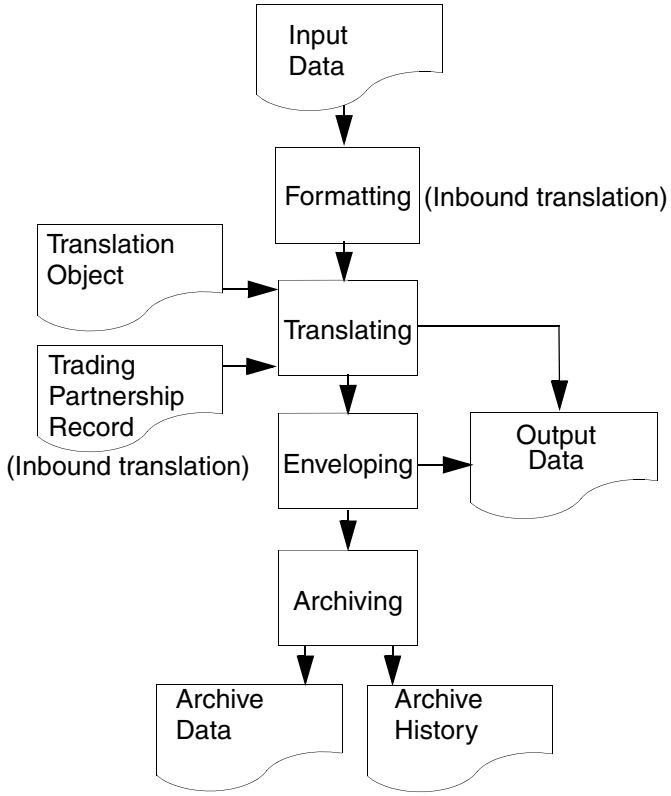
Introduction

This topic describes the Gentran:Server data translation process. You can use translation to:

- Test a translation object (compiled map)
- Convert data to send to a trading partner
- Convert data received from a trading partner.

Translation process flow

This illustration shows the translation process flow if all options are used.



(Continued on next page)

Example: Inbound translation process stages

This example describes the typical stages in the default inbound translation process for X12 data that is being translated to application data.

Stage	Description
1	Gentran:Server determines the Trading Partnership Code.
2	Gentran:Server reads the Trading Partnership record.
3	Gentran:Server determines whether outbound acknowledgments are required. ◗ If YES, the system generates a Trading Partnership enveloping signature that includes an ACK component for each transaction set and then continues with Stage 4. ◗ If NO, the system continues with Stage 4.
4	The system translates the sets, generates the functional acknowledgments (if required), and generates the output data.
5	The system generates the inbound EDI audit record for the set (if your system is configured to archive EDI data) and then continues with the next stage.
6	Are there more sets to process? ◗ If YES, repeat Stages 1 through 5. ◗ If NO, continue with Stage 7.
7	Gentran:Server locks the Trading Partnership record.
8	Gentran:Server: ◗ Generates the interchange, group, and set headers ◗ Replaces the enveloping signature with the generated headers.
9	Gentran:Server generates the outbound audit records for the functional acknowledgments.
10	Gentran:Server unlocks the Trading Partnership records.

(Continued on next page)

Example: Outbound translation process stages

This table describes the typical stages in the default outbound translation process for an application-to-standard translation.

Stage	Description
1	Gentran:Server determines the Trading Partnership Code.
2	Gentran:Server reads the Trading Partnership record.
3	Gentran:Server generates a Trading Partnership enveloping signature for the transaction set.
4	Gentran:Server translates the set and generates the output data, which includes the enveloping signature.
5	Are there more sets to process? ◗ If YES, repeat Stages 1 through 4. ◗ If NO, continue with Stage 6.
6	Gentran:Server uses the Trading Partnership enveloping signature to find and lock the Trading Partnership records.
7	Gentran:Server generates the interchange, group, and set headers.
8	Are the header segments mapped? ◗ If YES, merge the mapped header with the one generated in Stage 7 and then continue with Stage 9. ◗ If NO, continue with Stage 9.
9	Gentran:Server uses the enveloping signature to envelope the output data.
10	Gentran:Server updates the control numbers in the Trading Partnership records.
11	Gentran:Server generates the outbound audit records.
12	Gentran:Server unlocks the Trading Partnership records.

Enveloping Outbound Data

EDI Envelopes

Envelope segments

The EDI transaction sets and functional acknowledgments that you send to a trading partner must include envelope segments. The purpose of an envelope is to ensure that the sender and receiver of the transactions are properly identified and routed properly.

Each envelope level contains two data segments:

- A header segment to identify the beginning of the envelope
- A trailer segment to signal its end.

Levels

There are three possible levels of envelopes:

- Interchange envelope
- Group envelope
- Transaction set envelope

The interchange and transaction set envelopes are mandatory for all standards. The group envelope is optional (or not used at all) for many EDI standards.

One interchange envelope can contain multiple groups. One group can contain multiple transaction sets of the same type.

Interchange envelope

The interchange envelope is the outer envelope. The header segment usually contains data elements that specify who the sending party is and the final destination.

Example
The ISA segment is an interchange envelope segment for the ASC X12 standard.

(Continued on next page)

Group envelope

The group envelope is the second-level envelope.

The group header segment begins a group. Within the group segments are data fields that identify the type of transactions contained in the group, the sender and receiver's application IDs, the transmission date, control number, and other standard reference data.

Example
The GS segment is the functional group envelope segment for the ASC X12 standard.

Transaction set envelope

Each transaction is surrounded by a transaction envelope. All detail segments are stored in between the transaction set header and trailer segments.

Example
The ST segment is the transaction envelope for ASC X12 standard.

Location of Enveloping Information

Introduction

Gentran:Server builds the interchange, group, and transaction set envelopes from information defined in specific Trading Partnership records. During the enveloping process, Gentran:Server inserts the envelope information into the stream of data that you are sending your trading partner.

Record/envelope information table

This table shows the records that Gentran:Server uses to envelope outbound EDI data and lists the type of enveloping information each record contains.

Record	Enveloping Information
Interchange Organization record	◗ Your unique interchange identifiers, which are inserted into the Interchange envelope. ◗ Your trading partner's unique interchange identifiers, which are inserted into the Interchange envelope. ◗ The counter used for control numbers for your outbound business documents. ◗ The counter used for control numbers for inbound business documents that you receive from this trading partner.
Group Organization record	◗ A unique Group Organization code that is inserted into the Functional Group envelope. ◗ Your unique group identifier that is inserted into the Functional Group envelope. ◗ Your trading partner's unique Group identifier that is inserted into the Group envelope. ◗ The counter used for control numbers for your business documents. ◗ The counter used for control numbers for inbound business documents that you receive from this trading partner. (Continued on next page)

(Contd) Record	Enveloping Information
Outbound EDI tab of the Trading Partnership record	◗ The type of header segment used for the Interchange envelope. ◗ The type of group segment used for the Functional Group envelope.
Outbound Acknowledgment tab of the Trading Partnership record	◗ The type of header segment used for the Interchange envelope. ◗ The type of group segment used for the Functional Group envelope. ◗ The check box that turns the envelope program for outbound acknowledgments on and off.

Reference
See the How to Modify the Outbound Envelope Segments topic in this chapter for instructions on editing the elements in the Interchange envelope segment.

Enveloping Options

Introduction

You have two options for enveloping your outbound EDI data:

- Envelope transactions as part of the translation process
- Collect output transactions and delay enveloping until a later time

Setting enveloping options

You set enveloping options in the **lftran** command:

- In a translation script or batch file, or
- From the Translation Options dialog box if you run translation in attended mode from the Translate menu

Reference

See Setting Enveloping Options in a Script or Batch File or Setting Envelope Options from the Translate Menu.

Enveloping during translation

This table shows the stages in the enveloping process.

Stage	Description
1	The translator determines that the translation output will be in an EDI standard format.
2	During translation, the **lftran** program adds an envelope signature line to the beginning of each set and generates an output file.
3	The **lftran** program uses the envelope signature lines in the output file to locate and lock the appropriate Trading Partnerships records.
4	If lftran is unable to lock the Trading Partnership records, it produces a lock file. • If the translation output does not include functional acknowledgments, the sets that were not enveloped are written to boxout.lok in the temp directory. • If the translation output includes functional acknowledgments, the sets and functional acknowledgments that were not enveloped are written to sigout.lok in the temp directory. (Continued on next page)

(Contd) Stage	Description
5	The **lftran** program uses the envelope signature and the information in the Trading Partnership records to generate interchange, group, and set header segments.
6	If lftran encounters an error (other than a lock) that prevents it from generating the envelope segments, it produces an error file. ◗ If the translation output does not include functional acknowledgments, the sets that were not enveloped are written to boxout.err in the temp directory. ◗ If the translation output includes functional acknowledgments, the sets and functional acknowledgments that were not enveloped are written to sigout.err in the temp directory.
7	If the header segments are mapped, the system merges the mapped header with the generated header segment.
8	The system: ◗ Uses the header and trailer segments to envelope the data in the outbound EDI file ◗ Generates the audit record ◗ Updates the control numbers in the Trading Partnership records.
9	The system releases the locked Trading Partnership records.
10	The system looks for more sets. If it finds more sets, it repeats the process. If it does not find any more sets to translate, the translation process stops. **Note** The translation scripts supplied with Gentran:Server include commands to save *.lok files so that you can reprocess them. **Reference** For solutions on processing the sigout.lok file, see the readme file and supplementary white papers for this release of Gentran:Server.

(Continued on next page)

Delayed enveloping

This table shows the stages in the delayed enveloping process.

Stage	Description
1	The translator determines that the translation output will be in an EDI standard format.
2	The **lftran** program runs with the H0 option to add a delayed envelope signature line to the beginning of each set in the output data. The program does not add envelope segments to the output data. **Note** The lftran program can run many times throughout the day.
3	The system collects the output data.
4	The **lftran** program runs with the H1 option at a later time, usually according to a schedule. The program processes the collected output data, using the envelope signature lines to locate and lock the appropriate Trading Partnerships records.
5	If lftran is unable to lock the Trading Partnership records, it produces a lock file. The system writes the sets and functional acknowledgments that were not enveloped to sigout.lok in the temp directory.
6	The **lftran** program uses the envelope signature and the information in the Trading Partnership records to generate interchange, group, and set header segments.
7	If lftran encounters an error that prevents it from generating the envelope segments, it produces an error file. The system writes the sets and functional acknowledgments that were not enveloped to sigout.err in the temp directory.
8	If the header segments are mapped, the system merges the mapped header with the generated header segments. (Continued on next page)

(Contd) Stage	Description
9	The system: ◗ Uses the header and trailer segments to envelope the data in the outbound EDI file ◗ Generates the audit record ◗ Updates the control numbers in the Trading Partnership records.
10	The system releases the Trading Partnership records and waits for the next translation and enveloping cycle. **Note** The translation scripts supplied with Gentran:Server produce a boxout.lok file. If you want to reprocess the sets in this file, you must modify the translation script to re-route the file. **Reference** For solutions on processing the sigout.lok file, see the readme file and supplementary white papers for this release of Gentran:Server.

Setting Enveloping Options in a Script or Batch File

Introduction

In production mode, you will probably run the **Iftran** command with translation and enveloping options in a script or batch file.

Settings for the translation script

This table describes the Iftran option you must set in your script or batch file.

IF you want to…	THEN…
Envelope the EDI transaction sets during translation	Do not set an enveloping option in **Iftran**, because this is the default enveloping action.
Collect translated files to envelope later (delay enveloping)	Configure your system to run the **Iftran** program twice: ◗ First with the H0 option to generate the output file with the signature lines. You can run this option throughout the day. ◗ Later with the H1 option to lock the Trading Partnership records, generate the envelope segments from the signature lines in the collected output files, and then envelope all the collected data.

Handling the Iftran output

The translation scripts supplied with Gentran:Server produce a boxout.lok file. If you want to reprocess the sets in this file, you must modify the translation script to re-route the file through the translation and enveloping process.

For solutions on processing the sigout.lok file, see the readme file and supplementary white papers for this release of Gentran:Server.

Combining like interchange envelopes

If you want to combine like interchange envelope segments into one interchange envelope segment after translation, you must include the **envelope** command in a batch file or script. However, if you are translating with the H1 option and the input files are organized by Trading Partnership code, you can omit the **envelope** command.

Reference
See the description of the **envelope** command in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for details.

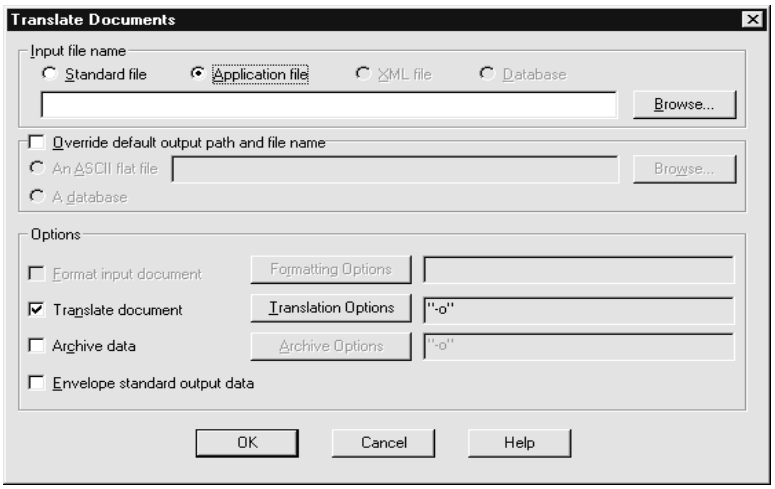
Setting Envelope Options from the Translate Menu

Introduction

If you run translation from the Translate menu, you can set the envelope options along with other translation selections on the Translation Options dialog box.

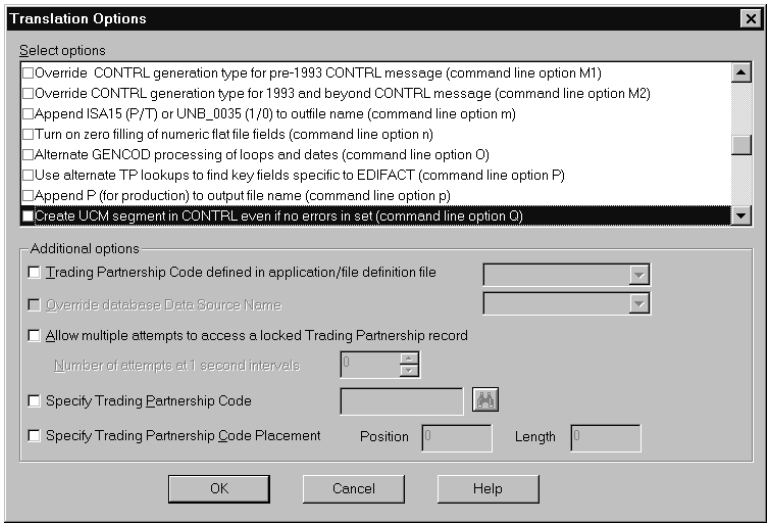
Procedure

Use this procedure to set enveloping options from the Translate menu.

Step	Action
1	Click **Documents** on the **Translate** menu. **System Response** Gentran:Server displays the Translate Documents dialog box.  **Reference** See The Translate Documents Dialog Box for a description of the fields on this dialog box.
2	Select the type of input file. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>3</td><td>Select Translate document and then click the Translation Options button.

System Response
Gentran:Server displays the Translation Options dialog box.

Reference
See The Translation Options Dialog Box for a description of the fields on this dialog box.</td></tr>
<tr><td>4</td><td>Select the enveloping options.
<table>
<tr><th>IF you want to…</th><th>THEN…</th></tr>
<tr><td>Envelope the EDI transaction sets now</td><td>Do not select an enveloping option.</td></tr>
<tr><td>Collect translated files to envelope later</td><td>Select the H0 option to generate an output file that has Trading Partnership signatures.</td></tr>
<tr><td>Envelope collected output files so that the EDI transactions are ready to send</td><td>Select the H1 option to lock the Trading Partnership records and then generate the envelope segments from the signatures in the output files.

(Continued on next page)</td></tr>
</table></td></tr>
</table>

(Contd) Step	Action
5	Are you running the H1 option with data produced from the H0 option? ◗ If YES, continue with the next step. ◗ If NO, go to Step 7.
6	Do you want to combine like interchanges into a single interchange immediately after translation? ◗ If YES, click the **Envelope standard output data** check box to enable the **envelope** program. ◗ If NO, continue with the next step. **Reference** See the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for information about the envelope command.
7	Select the other translation options that you want the system to use for this translation; then click **OK** to save your changes and return to the Translate Documents dialog box. **CAUTION** **If you set the translation options both here and in the Trading Partnership record, Gentran:Server uses those set in the Trading Partnership record if it finds a conflict. If you set nonconflicting options in both places, the lftran program uses both sets of options.**
8	Set any remaining options you want to use for this translation on the Translate Documents dialog box and then click **OK** to start translation.

Setting Up Translation

Introduction

Before you begin

Before you can run a translation in Gentran:Server, you need to be sure that all of the input files for the process are available. Those files include:

- Translation object or compiled map
- Trading partnership records
- Input data file

References

This table provides reference information for the items listed.

For...	See...
Procedures for creating a Trading Partnership record for outbound translation	Working with Trading Partnerships in this guide.
Procedures for creating a Trading Partnership record	Working with Trading Partnerships in this guide.

The Translate Documents Dialog Box

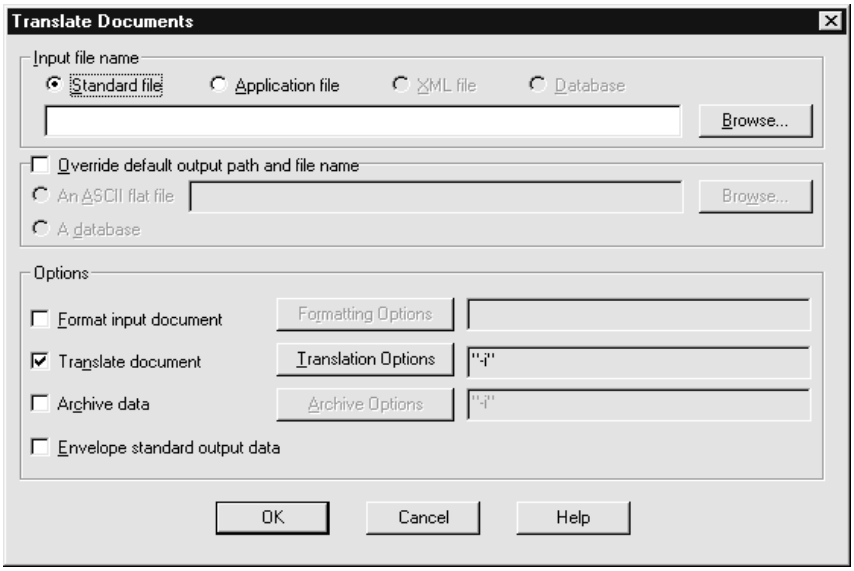
Introduction

This topic describes the Translate Documents dialog box. The Translate Documents dialog box enables you to:

- Select the input file you want to translate
- Set formatting options for the input document
- Set translation options for the input document
- Set archiving options
- Enable enveloping when the output file is in a standard format.

Illustration

This illustration shows the Translate Documents dialog box for an input document in a standard format.



Note

The Translate Documents dialog box retains the parameter settings from the last translation performed.

(Continued on next page)

Fields and functions

This table describes the Translate Documents dialog box and their functions. The available options depend upon the type of input file selected.

Field	Function
Input file name	
Standard file	Specifies that the input file is in an EDI standard file format (inbound).
Application file	Specifies that the input file is in an application file format (outbound).
XML File	Specifies that the input file is in XML file format. **Note** This option is enabled only if you have the Gentran:Server XML translation option.
Database	Specifies that the input file is in a database format.
Input file name box	Used to enter the path and name of the file you want to translate. **Notes** Do not enter environmental variables in this field. You can use the **Browse** button to locate the file.
Browse	Opens a search dialog box, which enables you to browse the folders to locate the input file name.
Override default output path and file name	Overrides the default location to store the translated data. The default location is specified in the Trading Partnership record. **Note** You should not enter environmental variables in this field.
An ASCII flat file	Writes the result of the translation to an ASCII flat file when this option and the **Override default output path and filename** is selected.
A database	Writes the result of the translation to a database file when this option and the **Override default output path and filename** is selected.

(Continued on next page)

(Contd) Field	Function
File name box	When the **An ASCII flat file** option is selected, this box enables you to enter the file and directory where you want Gentran:Server to store the translated data.
Browse	Opens a search dialog box, which enables you to browse the folders to locate the ASCII flat file or database file.
Options	
Format input document	Prepares the inbound EDI data for translation by replacing segment terminators with newline characters. **Notes** Formatting is required for inbound EDI translation. This option is not available if you specified that the input file is in XML format.
Formatting Options	Displays the Formatting Options dialog box to allow you to fully control the formatting process. **Notes** This option is not available if you specified that the input file is in XML format. **Reference** See the Formatting Options dialog box topic.
Translate document	Runs the translation process on the input file. When not checked, you can format, envelope, or archive previously translated data. (Continued on next page)

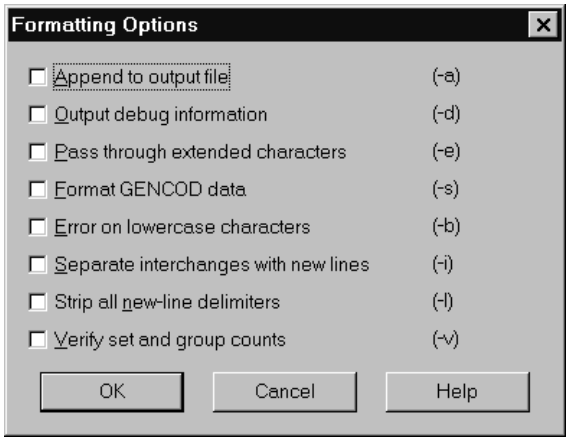
(Contd) Field	Function
Translation Options	Displays the Translation Options dialog box, which enables you to choose from many command line translation options. **Note** The system displays the default translation options in the box next to this button. **References** See The Translation Options Dialog Box topic. See the **lftran** topic in the Command Reference chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of all options.
Archive Data	Archives the EDI data and the status. **Note** To use the functional acknowledgment features, you must archive the data with each translation. This option is not available if you specified that the input file is in XML format.
	(Continued on next page)

(Contd) Field	Function
Archive Options	Displays the Archive Options dialog box, which enables you to choose **ediarc** command line options for the archiving inbound translation. **Notes** The system displays the default archive options in the box next to this button. This option is not available if you specified that the input file is in XML format. **Reference** See The Archive Options Dialog Box topic.
Envelope standard output data	Combines like interchanges for outbound functional acknowledgments created during an inbound translation. Combines like interchanges into one envelope during outbound translation. **Notes** This option is not available if you specified that the input file is in XML format. You can use delayed enveloping instead of this option.

The Formatting Options Dialog Box

Formatting Options dialog box

This illustration shows the Formatting Options dialog box. This dialog box controls how the input file is reformatted for output



Formatting Options fields and functions

This table describes the fields in the Formatting Options dialog box and their functions.

Note
The letters in parentheses are the **edifrmat** command line parameters that correspond to the description for each check box

Field	Function
Append to output file	Appends the results of the format process to previous output instead of overwriting the output.
Output debug information	Creates a list to help resolve issues you are having with inbound translation. The list shows the sets and segments you are translating and is stored in *edifrmat.log* under the reports directory. (Continued on next page)

(Contd) Field	Function
Pass through extended characters	Leaves unchanged any extended ASCII characters found in the input file. **Comment** If you do not check this option, **edifrmat** changes all extended ASCII characters to blanks.
Format GENCOD data	Retains original segment terminator instead of substituting new line terminator. Used for routing EDIFACT, GENCOD, or VDA data with product levels Gentran:Server with PCM or higher. **Note** The translator requires new line terminated data. This option is used only with data managers to route data that uses segment terminators.
Error on lowercase characters	Generates an error when lowercase characters are found within the input file.
Separate interchanges with newlines	Places newline characters between interchanges within the input data.
Strip all new-line delimiters	Removes all newline characters from the input file.
Verify set and group counts	Verifies the set and group counts found in the incoming data. The set count is compared to the number contained in the group trailer (for example, in the GE or UNE segments). The group count is compared to the number contained in the interchange trailer (for example, in the IEA, EG, ICE, or UNZ segments).

The Translation Options Dialog Box

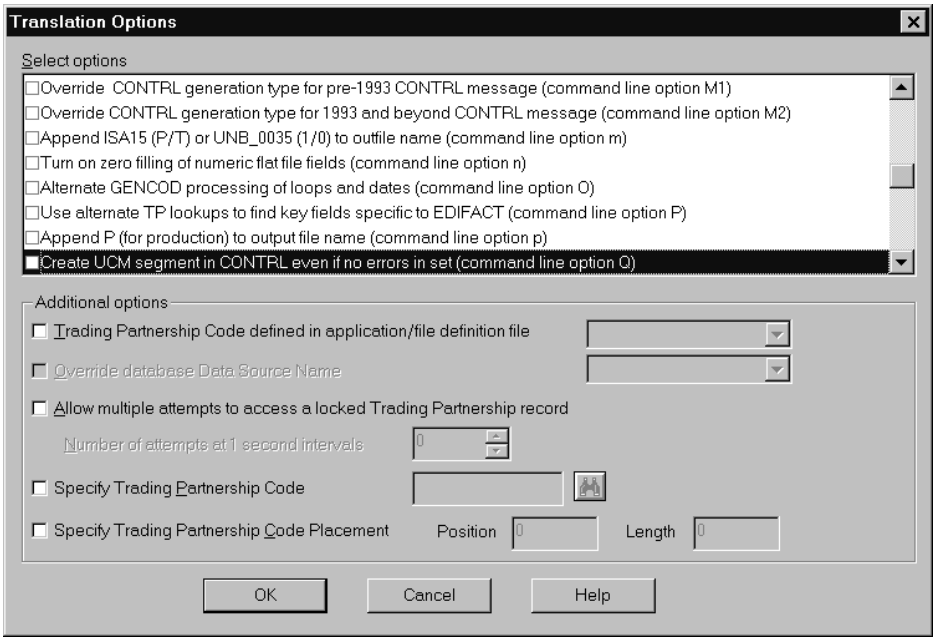
Setting translation options

If you want to use the same translation options for all your Trading Partnerships, you can set translation options as parameters on the translation command. If you want to use different translation options for some Trading Partnerships, set up translation options in the Trading Partnership record. (See Working with Trading Partnerships in this guide.) If you set translation options in both places, the program uses both sets of options unless they conflict. If some options conflict, Gentran:Server uses those set in the Translation Options dialog box.

Note
Gentran:Server saves the options from the last run. You do not have to enter them again for subsequent runs unless you want to make additional changes.

Translation Options dialog box

This illustration shows the Translation Options dialog box. This illustration is for inbound translation. The available options are different for outbound translation.



(Continued on next page)

Translation Options fields and functions

This table describes the fields of the Translation Options dialog box and their functions.

Field	Function
Select Options	Enables you to select parameters for the translation process. **Reference** See the table in the Select Options list topic in the online help system for a description of the available choices.
Trading Partnership Code defined in application/file definition file	Enables you to specify the application file or file definition that defines the location of the Trading Partnership code in the data you are translating. For outbound translation only.
Override database Data Source Name	For Visual Mapper only, enables you to replace the ODBC DSN used to create the application file with the one you want to use for the current translation. **Note** Your Gentran:Server system must have the optional ODBC translation capabilities.
Allow multiple attempts to access a locked Trading Partnership record	Sets the number of attempts Gentran:Server can make to access a locked Trading Partnership record. If the file is still locked after the specified number of attempts, the translation process fails.
Number of attempts at 1 second intervals	Sets the number of lock attempts.
Specify Trading Partnership Code	Specifies the Trading Partnership Code to be passed to the translator during translation. Use this option when the Trading Partnership Code is not present in the application data and the entire file can be translated using one Trading Partnership Code and one map. For outbound translation only.
Specify Trading Partnership Code placement	Specifies the location of the Trading Partnership Code within the input file. For outbound translation only.

(Continued on next page)

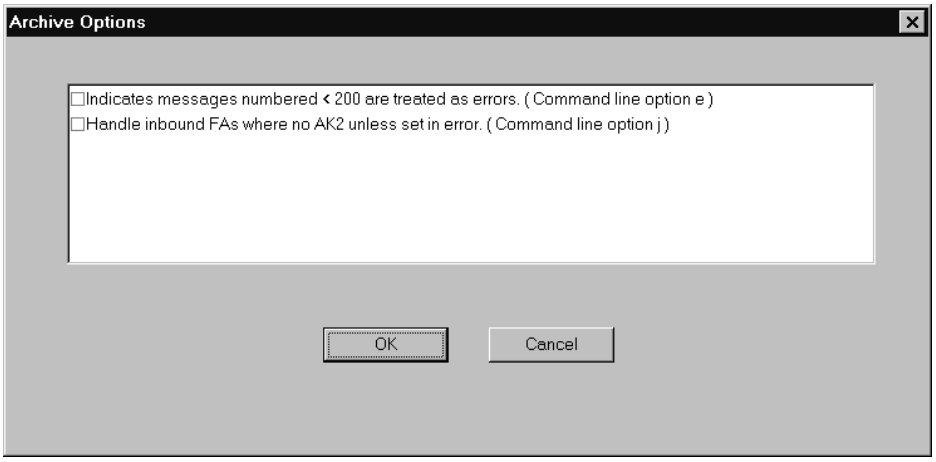
Select Options list

For a complete and current description of the choices available in the Select Options list, view the **Select Options list** topic in the online help system.

The Archive Options Dialog Box

Archive Options dialog box

This illustration shows the Archive Options dialog box. This dialog box controls how the input file is archived



Archive Options fields and functions

The options listed on this dialog box are based on the type of input file. The **ediarc** command line parameter is listed in parentheses for each option.

Reference

See the Command Reference chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for a list of the **ediarc** parameters and variables.

Running Inbound and Outbound Translation

How to Run Inbound Translation

Introduction

This topic explains how to run an inbound translation from the Translate menu.

Note
You must be using a map with either an EDI standard or, if you have the XML translation option, XML as the format of the source document.

Multiple sessions

If you have Gentran:Server for UNIX and are running multiple sessions of the client, you can run translation in only one client session for each host and environment combination. You can translate documents in more than one parallel session as long as each session is for a different host and environment combination.

If you attempt to translate documents when another session that is logged in to the same host and environment is already translating, Gentran:Server displays a message to let you know that the process is currently running and asks that you try again later.

If you have Gentran:Server Workstation and are running multiple sessions on your desktop, you can run translation in only one session.

Procedure

Use this procedure to perform an inbound translation from the Translate menu.

Step	Action
1	Click **Documents** on the Translate menu. **System Response** Gentran:Server displays the Translate Documents dialog box. **Note** The Translate Documents dialog box retains the parameter settings from the last translation performed. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>2</td><td>Select the type of input file:
◗ Standard base file
◗ XML file (available only if you have the XML translation option)</td></tr>
<tr><td>3</td><td>Use one of the following methods to specify the input file name.
◗ Enter the full path and file name into the text box.
◗ Click Browse to display the Translation Input File dialog box, browse through the directories and select a file name, and then click OK.</td></tr>
<tr><td>4</td><td>Use this table to decide your next step.
<table>
<tr><th>IF you want to…</th><th>AND…</th><th>THEN…</th></tr>
<tr><td>Store the data in the location specified in the Trading Partnership record</td><td>The input file is in EDI Standard format</td><td>GO TO Step 7.</td></tr>
<tr><td>Store the data in the location specified in the Trading Partnership record</td><td>The input file is in XML format
Note
The XML format is available only if you have the XML translation option.</td><td>GO TO Step 8.</td></tr>
<tr><td>Store the data in a different location</td><td>The output file is an ASCII flat file format</td><td>GO TO Step 5.</td></tr>
<tr><td>Store the data in a different location</td><td>The output file is a database file</td><td>GO TO Step 6.</td></tr>
</table></td></tr>
<tr><td>5</td><td>Click Override default output path and filename and then select the ASCII flat file option. Enter the full path and file name of the ASCII flat file into the text box.
Note
You can also click Browse to display the Translation Output File dialog box to select a file name.</td></tr>
<tr><td>6</td><td>Click Override default output path and filename and then click the database option.
(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
7	Do you want to format the input file? ◗ If YES, select **Format input document,** click the **Formatting Options** button, and select the options you want to use. **Reference** See The Translation Options Dialog Box topic for descriptions of the options. **Comments** This step is recommended for all X12 data. You must run the formatting process if you run the translation process. ◗ If NO, continue with the next step.
8	Do you want to set translation options for the input file? ◗ If YES, select **Translate document** and click the **Translation Options** button to display the Translation Options dialog box. Set the translation options you want to use; click **OK** to return to the Translate Documents dialog box. ◗ If NO, continue with the next step.
9	Do you want to archive the EDI data? ◗ If YES, continue with the next step ◗ If NO, continue with the Step 11.
10	Select **Archive Data** and then click the **Archive Options** button to select the archiving options you want to use.
11	Is the input file in XML format? ◗ If YES,GO TO Step 13. ◗ If NO, continue with Step 12. **Note** The XML format is available only if you have the XML translation option.
12	Do you want to combine like interchanges for outbound Functional Acknowledgments created during an inbound translation? ◗ If YES, select **Envelope standard output data**. ◗ If NO, continue with the next step. (Continued on next page)

(Contd) Step	Action
13	Click **OK** to run the selected processes. **System Response** Gentran:Server translates the inbound data file, stores the resulting data in the appropriate file(s), and displays a process log.
14	Check the process logs for errors. **System Response** Gentran:Server places all the transaction sets that were processed without error into your output file. **Process logs** The process logs are in the rpt directory. ◗ The *boxin.err* log contains data with compliance errors. ◗ The *dtLog.err* file contains the error codes and their descriptions of errors pertaining to data transformation. ◗ The *xlcntl.err* log contains errors and related information pertaining to Trading Partnership records and files used during translation. ◗ The *edifrmat.not* file contains non-EDI characters that appeared before the Interchange header or after the Interchange trailer. ◗ The *edistat.irr* file contains archiving errors for inbound EDI data. ◗ The *edistat.orr* file contains archiving errors for outbound acknowledgments.

After translation

Once you are sure the translation object translates the data correctly, you can check in the map and translation object.

How to Run Outbound Translation

Introduction

This topic explains how to run an outbound translation from the **Translate** menu.

Notes
For outbound translation, you must be using a map with either an application or, if you have the XML translation option, an XML file as the source document.

Multiple sessions

If you have Gentran:Server for UNIX and are running multiple sessions of the client, you can run translation in only one client session for each host and environment combination. You can translate documents in more than one parallel session as long as each session is for a different host and environment combination.

If you attempt to translate documents when another session that is logged in to the same host and environment is already translating, Gentran:Server displays a message to let you know that the process is currently running and asks that you try again later.

If you have Gentran:Server Workstation and are running multiple sessions on your desktop, you can run translation in only one session.

Procedure

Use this procedure to run an outbound translation.

Step	Action
1	Click **Documents** on the Translate menu. **System Response** Gentran:Server displays the Translate Documents dialog box. **Note** The Translate Documents dialog box retains the parameter settings from the last translation performed.
2	Select the type of input file: ◗ Application file ◗ XML file (available if you have the XML translation option) ◗ Database (available if you have the ODBC translation option) (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>3</td><td colspan="2">Use one of the following methods to specify the input file name.
◗ Enter the full path and file name into the text box.
◗ Click Browse to display the Translation Input File dialog box. Browse through the directories and select a file name. Click Open.

System Response
The path and file name display in the input file name text box.</td></tr>
<tr><td>4</td><td colspan="2">Use this table to decide your next step.</td></tr>
<tr><td></td><td>IF you want to…</td><td>THEN…</td></tr>
<tr><td></td><td>Store the data in the location specified in the Trading Partnership record</td><td>Skip to step 5.</td></tr>
<tr><td></td><td>Store the data in a different location</td><td>Click Override default output path and filename and then click either the ASCII flat file or database option. If you select ASCII flat file, enter the full path and file name into the text box.

Notes
You can also click Browse to display the Translation Output File dialog box to select a file name.

You must have the ODBC translation option to use the database option.</td></tr>
<tr><td>5</td><td colspan="2">Do you want to set translation options for the input file?
◗ If YES, click the Translate document option and then click the Translation Options button to set the translation options you want to use.

Continue with Step 6.
◗ If NO, GO TO Step 7.

(Continued on next page)</td></tr>
</table>

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td rowspan="6">6</td><td colspan="2">Use this table to determine how to indicate on the Translation Options dialog box the location of the Trading Partnership Code.</td></tr>
<tr><td>IF the Trading Partnership Code is…</td><td>THEN…</td></tr>
<tr><td>In the first 16 positions of each record in the input data file</td><td>The translator can find the Trading Partnership Code. Go to Step 7.</td></tr>
<tr><td>The same for all of the data in the input file</td><td>Click Specify Trading Partnership Code and then click the binoculars symbol (Browse button) to select the Trading Partnership code.</td></tr>
<tr><td>Marked in the first record of the file definition</td><td>Click Trading Partnership Code defined in Application/File Definition and then select the file that describes its position from the drop-down list.

Note
When you specify a file definition and translate with the A option, the file definition should either have a field in the first record named TPCODE to mark the Trading Partner Code field, or have application/Trading Partnership rules defined to determine the Trading Partner Code. The name is case-sensitive.</td></tr>
<tr><td>Not marked in the file definition</td><td>Click Specify Trading Partnership Code Placement and then complete the Position and Length boxes to point to the position within the input data.</td></tr>
<tr><td>7</td><td colspan="2">Do you want to archive the EDI data?
◗ If YES, select Archive Data and then click the Archive Options button to select the archiving options you want to use.
◗ If NO, continue with the next step.
(Continued on next page)</td></tr>
</table>

(Contd) Step	Action
8	Do you want to combine like interchanges into a single interchange? ◗ If YES, select **Envelope standard output data**. ◗ If NO, continue with the next step.
9	Click **OK** to start the translation. **System Response** Gentran:Server translates the data file, stores the resulting data in the appropriate file(s), and displays a process log.
10	Check the process log for errors. **System Response** Gentran:Server places all the transaction sets that were processed without error into your output file. **Process logs** The process logs are in the rpt directory. ◗ The *boxout.err* log contains data with compliance errors. ◗ The *dtLog.err* file contains the error codes and the descriptions of errors pertaining to data transformation. ◗ The *xlcntl.err* log contains errors and related information pertaining to Trading Partnership records and files used during translation. ◗ The *edifrmat.not* file contains non-EDI characters that appeared before the Interchange header or after the Interchange trailer. ◗ The *edistat.irr* file contains archiving errors for inbound EDI data. ◗ The *edistat.orr* file contains archiving errors for outbound acknowledgments.

After translation

If you used the archive feature during translation, you can correct any errors in the archived file and send the data again. See Archiving Data in this guide for instructions.

After testing a translation object

Once you are sure the translation object translates the input file correctly, you can check in the map and translation object.

How to Modify the Outbound Envelope Segments

Introduction

You can modify the values of the elements in the interchange and group envelope segments that Gentran:Server inserts in the envelope segments of a Trading Partnership's:

- Outbound EDI documents
- Outbound Functional Acknowledgments.

Standards compliance

The elements in the interchange and group envelope segments depend on the standard, the standard version, or (for EDIFACT) the syntax level. Gentran:Server bases the options it displays for the elements on the information you specify.

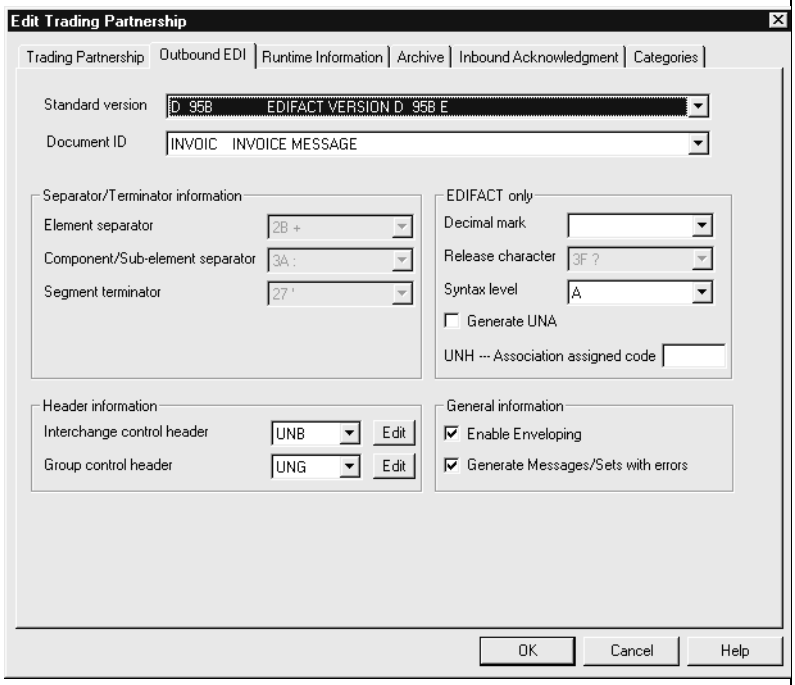
Example 1
If you specify X12/ANSI standard version 4020 and later, Gentran:Server displays "Repeating Element Separator" and a drop-down list of valid values for element ISA11 on the Interchange Information dialog box. For standard versions prior to 4020, Gentran:Server displays "Interchange Standards ID" in the ISA11 element field.

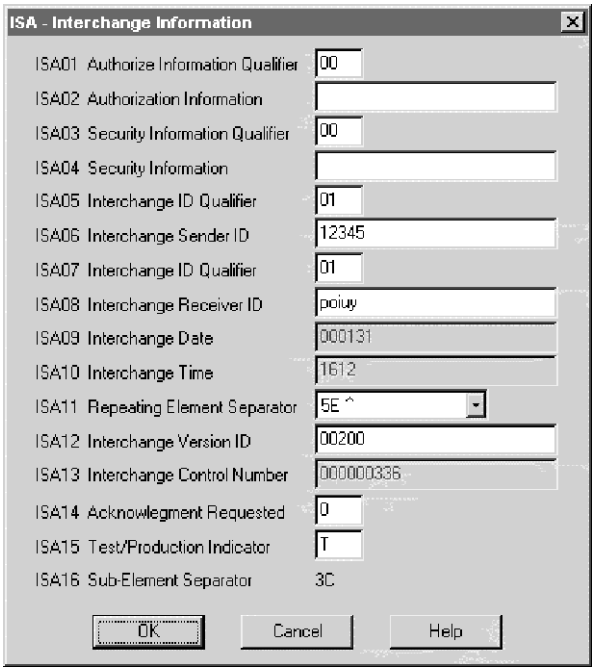
Example 2
If you specify UN/EDIFACT Syntax Version 4 for UNB element 0002 on the Interchange Header Information dialog box, Gentran:Server shows an 8-digit format (for example, 19991129) for element 0017, Date of Preparation, on the UNB and UNG dialog boxes.

(Continued on next page)

Modifying the envelope segments for outbound EDI documents

Use this procedure to modify the envelope segments of outbound EDI documents for a Trading Partnership.

Step	Action
1	Open the Trading Partnership record that you want to modify. **Reference** See How to Search for a Trading Partnership Record or How to Edit Trading Partnership Records for instructions on opening Trading Partnership records.
2	Click the Outbound EDI tab.  (Continued on next page)

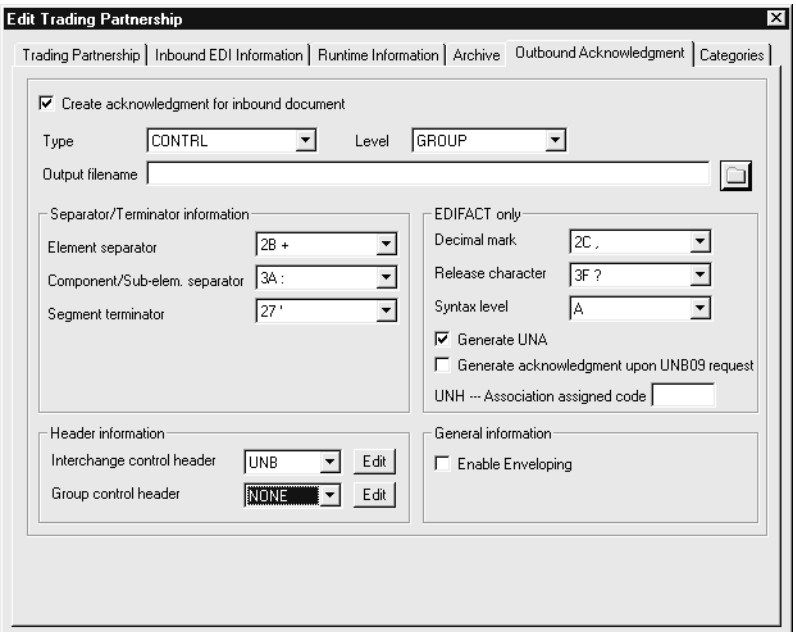
(Contd) Step	Action
3	Click the **Edit** button of the **Interchange control header** or **Group control header** field. **System Response** The system displays the Information dialog box for the segment you selected from the drop-down box. The standard version and EDIFACT syntax level determine which elements are displayed on the dialog box. This illustration is for the ISA envelope segment for X12/ANSI standard version 4020. 
4	Modify the element or elements you want to change. **Reference** See your Standards documentation for the element definitions of the interchange and group control header segments. (Continued on next page)

(Contd) Step	Action
5	Click **OK**. **Warning** You MUST click **OK** on this dialog box to save your changes. **System Response** The system displays the Outbound EDI tab.
6	Click **OK** to save your changes. **Warning** You MUST click **OK** on the Outbound EDI tab to save your changes to the envelope segment.

(Continued on next page)

Modifying the envelope segments for outbound Functional Acknowledg-ments

Use this procedure to modify the envelope segments of outbound functional acknowledgments for a Trading Partnership record.

Step	Action
1	Open the Trading Partnership record that you want to modify. **Reference** See How to Search for a Trading Partnership Record or How to Edit Trading Partnership Records for instructions on opening Trading Partnership records.
2	Click the Outbound Acknowledgment tab. 
3	Click the **Edit** button of the **Interchange control header** or **Group control header** field. **System Response** The system displays the Information dialog box for the segment
4	Modify the element or elements you want to change. **Reference** See your Standards documentation for the element definitions of the interchange and group control header segments. (Continued on next page)

(Contd) Step	Action
5	Click **OK**. **System Response** The system displays the Outbound Acknowledgment tab.
6	Click **OK** to save your changes. **Warning** You MUST click **OK** on the Outbound Acknowledgment tab to save your changes to the envelope segment.

Generating a Translation Summary

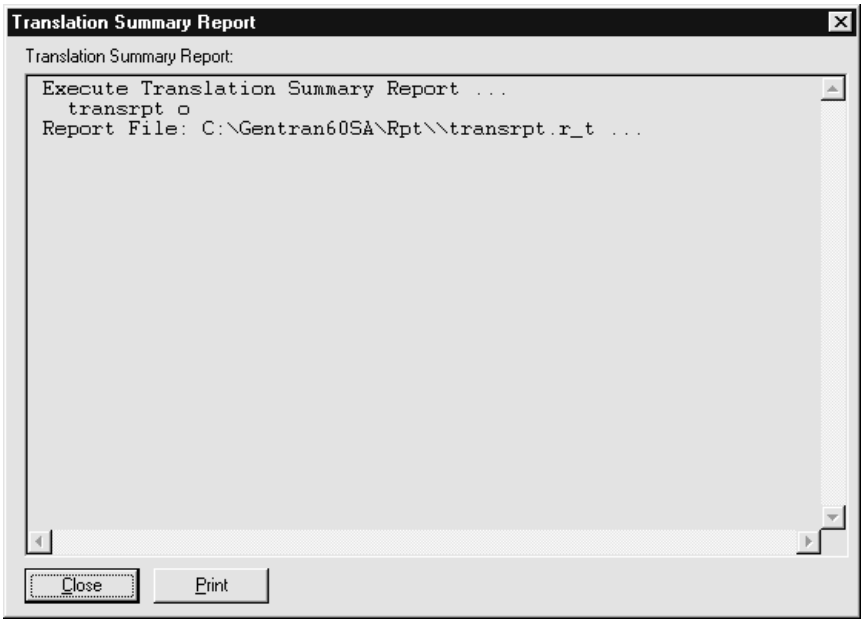
Translation Summary Report

Introduction

If you archive your translation data, you can generate a Translation Summary of data about selected translations.

Translation Summary

This illustration shows an example Translation Summary.



(Continued on next page)

Translation Summary contents

The Translation Summary contains the following information for the selected interchanges, one functional group to a line:

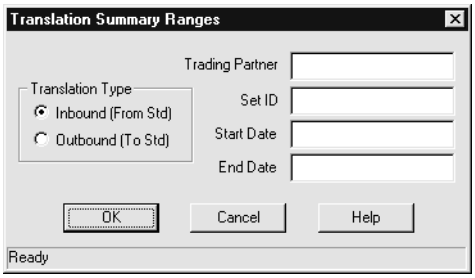
- Trading Partnership Code
- Trading partner's Interchange ID for this interchange
- Interchange control number
- Group control number
- Set ID
- Translation date
- Number of sets translated
- Number of characters translated

The summary also shows grand totals for the number of sets and the number of characters.

Translation Summary Ranges Dialog Box

Illustration

This illustration shows the Translation Summary Ranges dialog box.



Fields and functions

This table describes the fields of the Translation Summary Ranges dialog box and their functions.

Field	Function
Inbound (From Std)	Specifies that the summary will include only inbound translations.
Outbound (To Std)	Specifies that the summary will include only outbound translations.
Trading Partner	Specifies the Trading Partner Code for which to display translations. **Comment** If you enter a Trading Partner Code, do not specify a Set ID.
Set ID	Specifies the Translation Set ID for which to display translations. **Comment** If you leave this field blank, all sets are included. If you enter a Set ID, do not specify a Trading Partner Code. (Continued on next page)

(Contd) Field	Function
Start Date	Specifies the earliest date for which to display translations. **Comment** If you leave this field blank, all translations are included back to the earliest one.
End Date	Specifies the last date for which to display translations. **Comment** If you leave this field blank, all translations are included up to the most recent.

How to Generate a Translation Summary

Procedure Use this procedure to generate a Translation Summary.

Step	Action	
1	Click **Translation Summary** from the Translate menu. **System Response** The Translation Summary Ranges dialog box appears.	
2	Click either **Inbound** or **Outbound**.	
3	Use this table to specify the translations to include in the report.	
	IF you want to include…	**THEN…**
	Translations from only one particular Trading Partnership	Enter the Trading Partner Code.
	Translations of only one particular document	Enter the Set ID.
	Translations after a particular date	Enter the Starting Date.
	Translations up to a particular date	Enter the Ending Date.
4	Click **OK**. **System Response** Gentran:Server displays the Translation Summary. If Gentran:Server finds no data to report, it creates an empty file and displays a report containing only a title. If Gentran:Server finds data, you can scroll from left to right and from top to bottom as necessary to see the entire report.	
5	Do you want to print the Translation Summary? ◗ If YES, click **Print**. ◗ If NO, continue with next step.	
6	Click **Close** to close the Translation Summary dialog box.	

CHAPTER
13

Archiving Data

Contents

Overview

Introduction

About archiving

The Gentran:Server archiving feature for EDI translation enables you to store a copy of inbound and outbound EDI document status information that is created during translation, and the actual EDI documents. Through the archive setup windows, you choose the types of records to be archived.

Once data is archived, you can:

- Examine archived inbound and outbound data
- Edit the archived outbound data
- Extract archived outbound data and prepare it to resend it to the trading partner
- Reconcile functional acknowledgments
- Move data to media or to another machine.

In this chapter

This chapter shows you how to:

- Choose the default archiving options and run the archiving program
- Work with archived data, including reconciling functional acknowledgments
- Move archived data with the archive utilities.

Key terms

This table describes key terms used in this chapter.

Term	Description
archive	The process of copying and saving EDI data that has been processed.
data file	The file that contains the inbound or outbound data.
EDI History Audit directory	The directory used to store permanent history files and EDI data.
EDI Status Audit directory	The directory used to store temporary translation audit files (*edistat.i* and *edistat.o*).

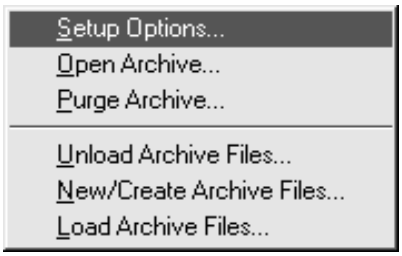
(Continued on next page)

(Contd) Term	Description
ediarc	The Gentran:Server program that controls archiving.
functional acknowledgment (FA)	The standard transaction set used to acknowledge receipt of a transmission. The functional acknowledgment tells you if a document you sent was received and processed by your trading partner. It also can tell you if your document contained EDI standards compliance errors.
historical record	The index files named *edihist.dat* and *edihist.idx* that store the location of the archived data. The files are built from the temporary translation audit files. Together, they form the permanent audit file.
reconciliation	The process of viewing functional acknowledgments, viewing data with certain statuses, such as Error, Late, or Waiting, and correcting the EDI data.
status record	A temporary audit file named *edistat.i* or *edistat.o*, created during translation, which includes the directory path and file name for the EDI data received or generated. The record does not contain the actual EDI data.

The Archive Menu

Archive menu

This illustration shows the **Archive** menu.



Archive menu options and functions

This table describes the options of the **Archive** menu and their functions.

Option	Function
Setup Options	Sets the archive and retrieval system defaults for EDI translation, which may be overridden by the Trading Partnership Record.
Open Archive	Accesses archived EDI data for viewing, editing, or extracting.
Purge Archive	Removes EDI historical records and stored data that is older than the retention period.
Unload Archive Files	Creates an ASCII file (*edihist.unl*) from the contents of an EDI historical file. You can then move the ASCII file to another machine or to media.
New/Create Archive Files	Creates two historical files named *eidhist.dat* and *edihist.idx*. These files are used to prepare for moving archived data from another machine or from media. You populate these files by archiving EDI data or by loading an ASCII file created from the contents of an Archive historical file.
Load Archive Files	Loads the EDI historical files (*edihist.dat/.idx*) from ASCII file data (*edihist.unl*).

The Archive Process

Introduction

The **ediarc** program controls archiving for EDI translation data. Archiving begins when the translation process produces status records. The subsequent stages in the process depend on how you set up archiving for your system.

Archiving process

This table describes the archive process when all archiving options are activated.

Stage	Description
1	During translation, Gentran:Server creates temporary audit files named *edistat.i* (inbound) and *edistat.o* (outbound) and places them in the EDI Status Audit directory. For each set translated, these audit files include pointers to the directory path and file name for the EDI data received or generated.
2	If you configure your archiving system to save historical records, **ediarc** posts the status records to the historical files, *edihist.dat* and *edihist.idx*, which reside in the EDI History Audit directory.
3	If you configure your archiving system to save EDI data files, **ediarc** checks the archive switches in the Trading Partnership record to determine which sets to archive and their purge dates. **ediarc** then copies the EDI data files into a directory hierarchy in the EDI History Audit directory. **Reference** See the topic How archived files are named in this chapter.
4	If functional acknowledgments were created during the translation, **ediarc** posts their status to the *edihist.idx* and *edihist.dat* files and copies the EDI data file to the EDI History Audit directory.
5	If the data was archived successfully, Gentran:Server deletes the temporary status records *edistat.i* and *edistat.o*. If an error occurred during archiving, the temporary files are kept for debugging under the names *edistat.irr* and *edistat.orr*.
6	Gentran:Server writes error messages to the file *xlcntl.err*, which is in the wrktemp subdirectory under the directory specified for User Files.

(Continued on next page)

How archived files are named

The file name format for archived files is as follows:

edihist\yyyy\mm\dd\hh\nnnnnnnn.ext

Where:

- "edihist" represents the name of the EDI History directory.
- "yyyy\mm\dd\hh" represents the year, month, day, and hour the data was translated.
- "nnnnnnnn" is the system-generated 8-character file name.
- ".ext" represents the file name extension.
  - If you do not select a data compression utility during setup, the extension is *.arc*.
  - If you select a data compression utility during setup, the extension is determined by the compression utility. (*.zip* for Pkzip files, *.z* for packed, and *.Z* for compressed.)

Example

Assume that the EDI History Audit directory is named *edihist*. The data file was translated on January 3, 1997, at 11 a.m. and compressed with Pkzip.

Ediarc copies the file and names it:

edihist\1997\01\03\11\00000001.zip

Setting Up EDI Translation Archiving

Introduction

About this section

This section explains how to set up your archiving system. It contains these topics:

- Specifying the audit directories
- Choosing EDI archive options
- Selecting a data compression utility.

Before you begin

To ensure the accuracy of archiving and functional acknowledgment reconciliation, you must have unique control numbers across all documents for a trading partner. This is because the archiving program does not archive duplicate records; if two different records have the same control numbers, the archiving program rejects the second as a duplicate.

The best way to ensure unique control numbers is to use Organization records and maintain control numbers globally. This causes Gentran:Server to automatically assign unique, sequential control numbers to all documents for a single trading partner.

Reference

See How to Create a Group Organization Record in this guide for information about using Organization records.

WARNING

If you do not use Organization records and maintain control numbers globally, you must check each Trading Partnership record with the same Interchange IDs and edit the control numbers. Add a unique, sequential prefix (for example, 1, 2, 3, ..., *n*) to each control number so the control numbers are unique.

How to Specify the Translation Audit Directories

Introduction

How your organization specifies the EDI translation audit directories depends on whether you are running Gentran:Server for UNIX (client/server) or the Gentran:Server Workstation version.

Decision table for Creating Audit Directories

Use this decision table to determine the number and types of audit directories you need to create for the different versions of Gentran:Server.

IF you work in a...	THEN create...
Single-user environment in which one user runs translation and archives data	One audit directory that serves as both the EDI Status Audit directory and the EDI History Audit directory.
Multi-user environment in which several users create maps, but only one user runs translation and archives data	One audit directory that serves as both the EDI Status Audit directory and the EDI History Audit directory.
Multi-user environment in which several users run translation and archive data	One EDI History Audit directory that is the same for all users. A private EDI Status Audit directory for each user.

Audit directories for the UNIX version

If you are running Gentran:Server for UNIX, your system Security Administrator specified the EDI Status and EDI History Audit directories on the host when your security file was established. Check with your Security Administrator to make sure these directory paths are in place before you run **ediarc**.

The EDI Status Audit directory is your working directory. The EDI History Audit directory stores the path and file name to every archived file.

You can view the paths to these directories by selecting Setup Directories from the Settings menu, but you cannot change the paths. The Security Administrator can change the paths with the Security Administration software installed on the UNIX host.

Reference
See the *Gentran:Server for UNIX Maintenance and Troubleshooting Guide* or the *Gentran:Server Workstation Maintenance and Troubleshooting Guide* for more information.

Audit directories for the Workstation version

The Workstation version provides for two types of audit directories:

- EDI Status Audit stores your audit files, *edistat.o* and *edistat.i,* temporarily.
- EDI History Audit stores the full path and file name to every archived file.

If you are running the Workstation version of Gentran:Server, you must designate the paths to these directories before you run **ediarc**.

How to specify the audit directories in the Workstation version

Use this procedure to specify the audit directories in the Workstation version.

Step	Action
1	Click **Settings** on the menu bar.
2	Click **Setup Directories** on the **Settings** menu. **System Response** Gentran:Server displays the Setup Directories dialog box.
3	Type the full path name for the EDI Status Audit directory in the **EDI Status Audit** box; then type the full path name for the EDI History Audit directory in the **EDI History Audit** box.
4	Click **OK** to save your changes.

Archive/Retrieval Setup Dialog Box

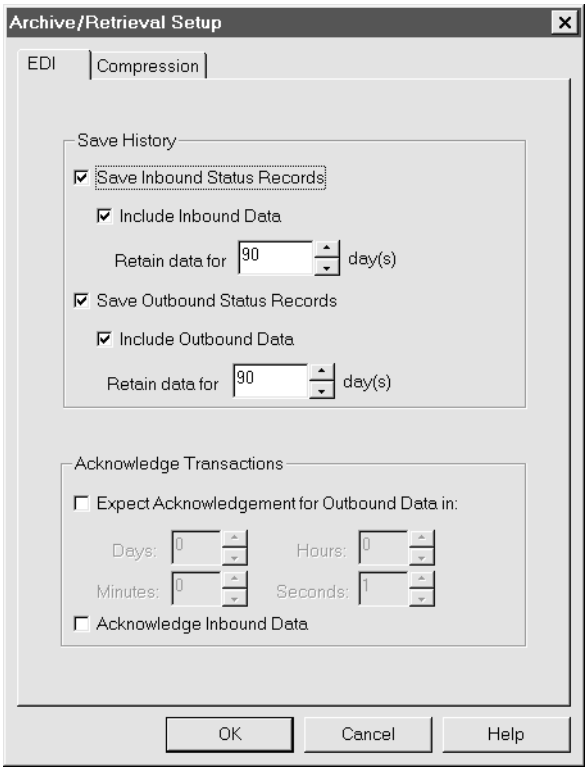
Introduction

The Archive/Retrieval Setup dialog box is used to set the archiving options for EDI translation data and to select a data compression utility to compress your archived data. The dialog box has two tabs:

- EDI tab
- Compression tab

EDI tab

This illustration shows the EDI tab.



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EDI tab fields and functions

This table describes the EDI tab fields and their functions.

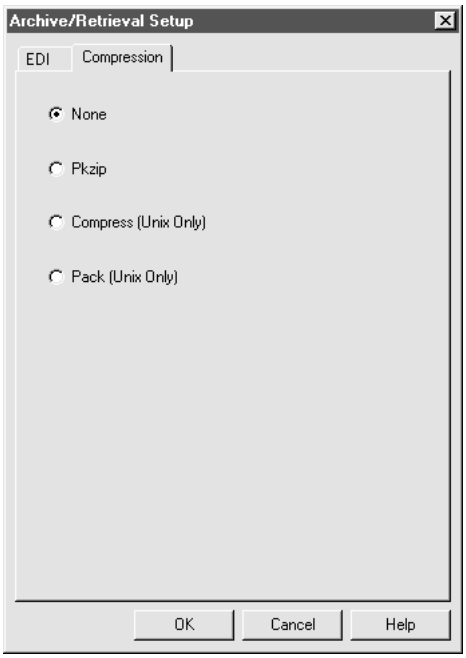
Field	Function
Save History	
Save Inbound Status Records	Archives inbound EDI status records by converting them to historical records and adding them to the permanent audit history files, *edihist.dat* and *edihist.idx*.
Include Inbound Data	Archives inbound data files.
Retain data for ___ days	Sets the minimum number of days after which inbound data files are eligible for purging. After this number of days, the inbound data files and the associated historical records i the permanent audit file are eligible for purging.
Save Outbound Status Records	Archives outbound status records by converting them to historical records and adding them to the permanent audit files, *edihist.dat* and *edihist.idx*.
Include Outbound Data	Archives outbound data files.
Retain data for __days	Sets the minimum number of days outbound data files are kept. After this number of days, the outbound data files and associated historical records in the permanent audit file are eligible for purging.
Acknowledge Transactions	
Expect Acknowledgment for Outbound Data in	Signals system to expect acknowledgments for outbound data in the specified days, hours, minutes, and seconds.
Days	Sets the number of days in which to expect acknowledgment for outbound data.
Hours	Sets the number of hours in which to expect acknowledgment for outbound data.
Minutes	Sets the number of minutes in which to expect acknowledgment for outbound data.

(Continued on next page)

(Contd) Field	Function
Seconds	Sets the number of seconds in which to expect acknowledgment for outbound data.
Acknowledge Inbound Data	Causes the system to send acknowledgments to trading partners when it receives inbound data.

Compression tab

This illustration shows the Compression tab on the Archive/Retrieval Setup dialog box.



Compression tab fields and functions

This table describes the fields of the Compression tab and their functions.

Field	Function
None	Indicates whether compression is on or off.
Pkzip (Workstation Only)	Specifies PKWARE's PKZIP as the compression utility. You must include PKZIP in your PATH statement.

(Continued on next page)

(Contd) Field	Function
Compress (Unix Only)	Specifies Compress as the compression utility. Compress is available on every UNIX system.
Pack (Unix Only)	Specifies Pack as the compression utility. Pack is available only on some UNIX systems and compresses data tighter than Compress.

How to Set EDI Translation Archiving Options

Introduction

To set up EDI translation archiving and retrieval options to fit your business needs, you begin by selecting **Setup Options** from the **Archive** menu to display the Archive/Retrieval window. You use the EDI tab on this window to choose the records you want the system to archive.

Archiving options

On the EDI tab, you choose to have the system perform one or more of the following tasks:

- Create status records *(edistat.i* and *edistat.o*)
- Archive inbound status records, outbound status records, or both (create the *edihist.dat* and *edihist.idx* files from the *edistat.i* and *edistat.o* records)
- Archive inbound data files, outbound data files, or both
- Keep data files for a specified number of days
- Look for functional acknowledgments for outbound data in a specified number of days, hours, minutes, and seconds
- Acknowledge inbound data files.

Option dependencies

Archiving starts with the creation of status records, *edistat.o* and *edistat.i*, during translation. These status records are eventually posted to *edihist.dat* and *edihist.idx*, the historical records. The historical records store the location of the archived data. Therefore, to archive and retrieve data files, you must activate both the status record and historical record option.

Where default settings are stored

The Archive/Retrieval system default settings for EDI translation are stored in the configuration file *arcopt.cfg*. This file is in the edihist directory of each environment.

(Continued on next page)

Relationship to Trading Partnership record

Gentran:Server uses the EDI Archiving settings as default settings when you set up a new Trading Partnership record, but enables you to override them for any Trading Partnership record.

To determine which records to archive during processing, Gentran:Server checks the archive options of the Trading Partnership record.

Reference
See How to Create a Trading Partnership Record in this guide for information.

Selecting archiving options

Use this procedure to select the default archiving and retrieval options for your system.

Step	Action
1	Click **Setup Options** on the **Archive** menu. **System Response** Gentran:Server displays the EDI tab on the Archive/Retrieval Setup dialog box.
2	Click **inbound** and/or **outbound** in the **Save History** section to select the type of status records you want to save. You may select both types. **Example** To archive inbound status records, click **Save Inbound Status Records**. **System Response** The **Include Data** field for the type of status record you selected becomes available.
3	Do you want to archive the data as well as the status record? ◗ If YES, click **Include Inbound Data** or **Include Outbound Data** and type the number of days to keep the data in the Retain data for ___ day(s) field. ◗ If NO, continue with Step 5. (Continued on next page)

(Contd) Step	Action
4	Do you want your system to expect functional acknowledgments for outbound data? ◗ If YES, click **Expect Ack for Outbound Data in** and type the number of days, minutes, hours and seconds. ◗ If NO, continue with Step 6. **Comment** When you create a new Trading Partnership, Gentran:Server uses the choice you make in this step as the default setting.
5	Do you want to acknowledge inbound data? ◗ If YES, click **Acknowledge Inbound Data** and then continue with the next step. ◗ If NO, continue with Step 6. **Comment** When you create a new Trading Partnership, Gentran:Server uses the choice you make in this step as the default setting.
6	Click **OK** to save the settings.

How to Select a Data Compression Utility

Introduction

Archived data can consume large amounts of disk space. To help control disk space, you may use a compression utility to reduce the size of your archived documents.

Before you begin

Gentran:Server does not include compression utilities. If you want to compress your archived data, you must have installed one of the compression utilities that Gentran:Server supports:

- Pkzip
- Compress
- Pack

Important note
After the utility is installed, you must add the utility to your user path.

How compression works

When you select a compression utility, Gentran:Server records your selection in a configuration file. During archiving, Gentran:Server checks this file to determine which compression utility to use and then starts the compression utility.

File extensions of compressed data

These are the file extensions for compressed and non-compressed data:

Utility	File Extension
Pkzip	.zip
Pack	.z
Compress	.Z
Not compressed	.arc

(Continued on next page)

Selecting a compression utility

Use this procedure to select a compression utility.

Step	Action
1	Click **Setup Options** from the **Archive** menu. **System Response** Gentran:Server displays the EDI tab of the Archive/Retrieval Setup dialog box.
2	Select the Compression tab.
3	Select the compression utility you have installed.
4	Click **OK** to save your selection.

Changing the compression utility

You may choose a different compression utility at any time or turn compression off. If you choose a different utility, Gentran:Server uses the new selection from the point at which you made the change; it does not change previously compressed data.

How to Run the Archive Program

Introduction

You can start **ediarc**, the program that controls EDI translation archiving, from:

- The command line
- A batch file or script you run from the Task Scheduler
- The **Archive Data** option on the Translate Outbound Documents and Translate Inbound Documents dialog boxes.

When to archive data

The best time to archive EDI translation data is immediately after all inbound and outbound translations, before the data file is purged or moved.

WARNING

To prevent loss of data, make sure that you run the archive program before you delete or move a data file.

Starting ediarc from a batch file or script

You may run **ediarc** from a UNIX or DOS batch file and use the Task Scheduler to run **ediarc** on a schedule.

Reference

See the chapter Using the Task Scheduler in this guide for information about using the Task Scheduler.

(Continued on next page)

Starting ediarc from the command line

Use this procedure to start **ediarc** from the command line.

Step	Action
1	Go to the UNIX command line.
2	Type the **ediarc** command, a space, parameter to indicate inbound or outbound, a space, the -cp parameter, and the full path to the configuration file, *envprim.cfg*. Then press ENTER. **Command statement** ediarc -i/o -cp[configuration path] **Example: UNIX version** ediarc -i -cp[configuration path] **Example: Workstation version** ediarc -o -cp[configuration path] **System Response** If you configured your archiving system to save EDI data files, **ediarc**: ◗ Checks the archive switches in the Trading Partnership record to determine which sets to archive and their locations ◗ Copies the EDI data files into a directory hierarchy in the EDI History Audit directory ◗ Posts the *edistat.i* and/or *edistat.o* record to the permanent audit history files, *edihist.dat* and *edihist.idx* ◗ Deletes the *edistat.i* and/or *edistat.o* record.

Reference

See Command Reference in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for more information about the **ediarc** command.

How to Use the Audit System Variable

Introduction

If you want to store a special source value in the audit record, you can map one or more source values to a special pre-defined system variable, $USRBUF. Mapping to this variable does not affect the output of your map.

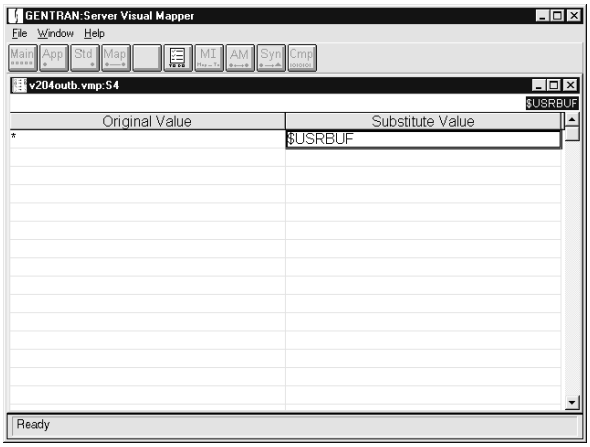
Gentran:Server writes the values for the $USRBUF variable to the User Buffer field in the audit record (edistat.i/o, and edihist.dat/idx).

Reference
See the edistat.i/o, edihist.dat/idx topic in the File Record Layouts chapter of the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for the layout of the audit record.

Mapping to the User Buffer field in the Audit record

Use this procedure to write the value of the source item in $USRBUF to the User Buffer field in the audit record.

Step	Action
1	In your map, create a mapping GROUP that includes: ◗ The source item whose value you want to write to the User Buffer field ◗ A destination item. **CAUTION** **If you map $USRBUF to a destination item to which you are mapping other data, Gentran:Server may create a second copy of the destination item.**
2	Click on the source element or application field to which you want to assign the $USRBUF variable. **Note** Select an item that you will not be mapping to.
3	Click **Synonyms** on the Edit menu. **System Response** Gentran:Server displays the Open a Synonym List for Editing dialog box. (Continued on next page)

(Contd) Step	Action
4	Click **Synonym List is specific to this map**, then click **OK**. **System Response** Gentran:Server displays the Synonym Editor.
5	Create a synonym by typing the wildcard (*) symbol in the Original Value column and **$USRBUF** in the Substitute Value column. 
6	Click **Save List** on the File menu. **System Response** Gentran:Server saves the synonym list and creates a mapping instruction similar to this: MAP specific synonym of source S3 to D5
7	Verify that the system created the mapping instruction as follows: ◗ Double-click the source item. ◗ Double-click the destination item. ◗ Click the right mouse button and click Mapping Instruction Toolbar to display the Mapping Instructions window. **CAUTION** **The mapping instruction shows a synonym of a source item mapped to a destination item, not to the $USRBUF variable. Do not change this mapping instruction.**

Reference
See the chapter Working with Mapping Instructions in this guide for more information about mapping instructions.

Working with Archived Data

Introduction

In this section

This section explains how to retrieve and work with archived EDI translation data. It includes these topics:

- How to search for archived information
- How to view information about archived data
- How to view and reconcile functional acknowledgment errors
- How to extract archived documents (for resending to a trading partner or for editing)
- How to purge data.

Relationship of topics

You must conduct a search for archived information before you can view archived data, reconcile functional acknowledgments, or extract archived documents so that you can resend them or edit them.

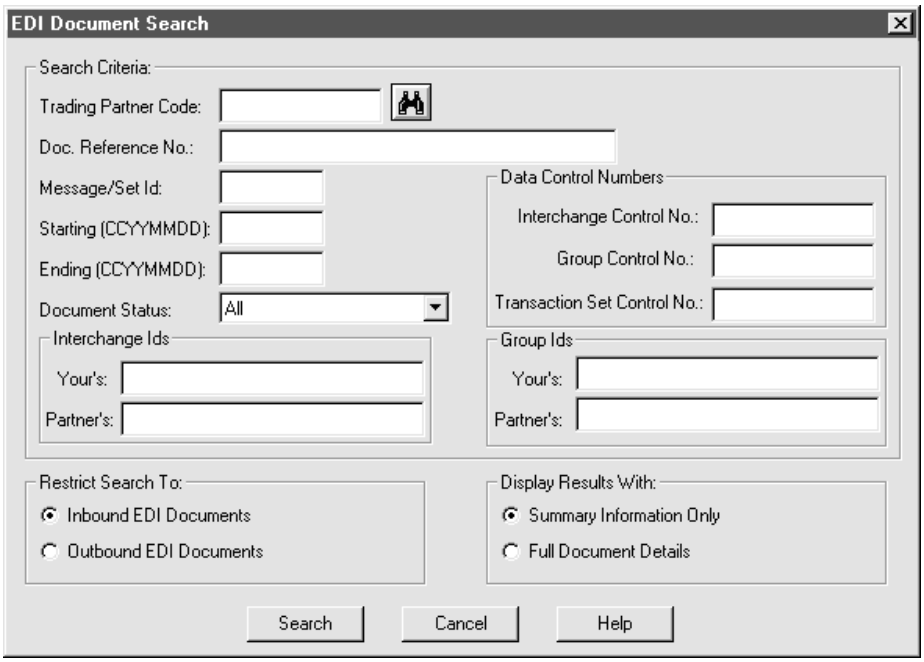
How to Search for an Archived Document

Introduction

Before you can view or retrieve archived EDI translation data, you must first search for the records and files by entering search criteria on the EDI Document Search dialog box.

EDI Document Search dialog box

This illustration shows the EDI Document Search dialog box.



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EDI Document Search fields and functions

This table describes the fields on the EDI Document Search dialog box and their functions.

Field	Function
Trading Partner Code	Specifies the Trading Partner Code to use in the search. To search for a Trading Partner Code, click the binoculars icon to display the Trading Partner Search dialog box.
Doc. Reference No.	Specifies the document reference number to search for, if the data came from Gentran:Server product level PCM or higher. Leave this field blank if you are searching for documents that came from Gentran:Server Workstation.
Message/Set ID	Specifies the message or set ID to use in the search (such as 104 Air Shipment Information or BANSTA Banking Status Message). Leave blank to view all sets.
Starting (CCYYMMDD)	Specifies the first translation date to use in the search. Leave blank to see a range of archived data that begins with the earliest translation date in the file.
Ending (CCYYMMDD)	Specifies the last translation date to use in the search. This field defaults to the current date.
Document status	Specifies the functional acknowledgment status for documents with a functional acknowledgment.
Interchange IDs	
Yours	Specifies your company's interchange ID.
Partner's	Specifies your trading partner's interchange ID.
Data Control Numbers	
Interchange Control No.	Specifies the interchange control number to use in the search.
Group Control No.	Specifies the group control number to use in the search.
Transaction Set Control No.	Specifies the transaction set control number to use in the search.

(Continued on next page)

(Contd) Field	Function
Restrict Search To	
Inbound EDI Documents	Selects Inbound EDI Document as the type of documents to search.
Outbound EDI Documents	Selects Outbound EDI Document as the type of documents to search.
Display Results With	
Summary Information Only	Selects collapsed mode as the display mode. **Reference** For information about display modes, see the How to View Set-Level Information topic.
Full Document Details	Selects expanded mode as the display mode. **Reference** For information about display modes, see the How to View Set-Level Information topic.
Search	Starts the search.
Cancel	Cancels the search request.

Searching for EDI Documents

Use this procedure to search for an EDI document or documents.

Step	Action
1	Click **Open Archive** on the **Archive** menu. **System Response** The system displays the EDI Document Search dialog box.
2	Type the search criteria for the document or documents. **Reference** For field descriptions, see the EDI Document Search fields and functions topic in this chapter. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>3</td><td colspan="2">Click Search.

System Response
Gentran:Server finds records in the edihist.dat and edihist.idx files that match the search criteria and displays the results on the Document Search Results window.

If you select Summary Information only, the window displays the first record for each interchange/group combination that meets the search criteria. If you select Full Document details, the window displays a list of all records that meet the search criteria.</td></tr>
<tr><td rowspan="5">4</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN go to…</td></tr>
<tr><td>Sort the search results by TP Code, Interchange Date, or another column</td><td>How to Sort Document Search Results in this chapter.</td></tr>
<tr><td>View record information</td><td>How to View Set-Level Information in this chapter.</td></tr>
<tr><td>View functional acknowledgment errors or change a document’s status</td><td>How to View Functional Acknowledgment Errors in this chapter.</td></tr>
<tr><td>Extract data to:
◗ View it
◗ Edit it and prepare it to resend to your trading partner</td><td>How to Extract Archived EDI Documents in this chapter.</td></tr>
</table>

How to Sort Document Search Results

Introduction

When you search for an archived document, the results displayed on the Document Search Results dialog box are sorted by the trading partner's interchange ID. This topic explains how to change the sorting order.

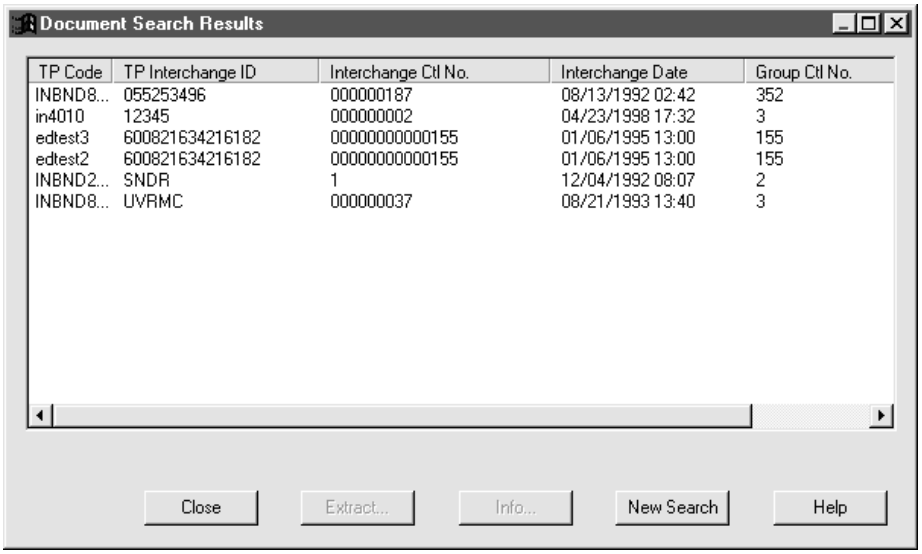
View modes

You can view Gentran:Server document search results in two modes:

- Summary Information Only, which displays only the first records for each interchange/group combination that meet the search criteria
- Full Document Details (expanded), which displays all the records that meet the search criteria.

Document Search Results dialog box

This illustration shows the Document Search Results dialog box in full document detail (expanded) mode.



(Continued on next page)

Document Search Results fields and functions

This table describes the fields on the Document Search Results dialog box and their functions.

Field	Function
TP Code	Displays the Trading Partner Code associated with the record.
TP Interchange ID	Displays the trading partner's interchange ID.
Interchange Ctl No.	Displays the interchange control number associated with the record.
Interchange Date	Displays the date and time of the interchange.
Group Ctl No.	Displays the Group Control Number associated with the record.
No. of Sets	Displays the number of transaction sets in the record.
Close	Closes the Document Search Results dialog box.
Extract	Starts the data extraction process. **Reference** See How to Extract Archived EDI Documents for instructions.
Info...	Displays information about the selected record. If the selection is a transaction set, the system displays the history window for the record. If the selection is a group, the system displays the Group Information window. **Reference** See How to View Set-Level Information for instructions.
New Search	Displays the EDI Document Search dialog box, which enables you to start a new search.
Help	Displays help text for the Document Search Results dialog box.

(Continued on next page)

Sorting search results

Use this procedure to change the sorting order of the records displayed on the Document Search Results dialog box.

<table>
<tr><th>Step</th><th colspan="2">Action</th></tr>
<tr><td>1</td><td colspan="2">Conduct a document search by following the instructions in the How to Search for an Archived Document topic.

System Response
Gentran:Server displays the Document Search Results window in either summary mode or expanded mode.</td></tr>
<tr><td>2</td><td colspan="2">Click on the column header that you want to use to sort the records.

System Response
The system sorts the records in ascending order of the column you selected.</td></tr>
<tr><td>3</td><td colspan="2">Do you want to sort the records in reverse order?
◗ If YES, click the same column header again.
◗ If NO, continue with Step 4.

Note
Each subsequent click on a header reverses the sorting order, toggling between ascending and descending order.</td></tr>
<tr><td rowspan="5">4</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN…</td></tr>
<tr><td>Extract archived data</td><td>See How to Extract Archived EDI Documents in this chapter.</td></tr>
<tr><td>View archived data</td><td>See How to View Set-Level Information in this chapter.</td></tr>
<tr><td>Start a new search</td><td>Click New Search.</td></tr>
<tr><td>Close the Document Search Results dialog box</td><td>Click Close.</td></tr>
</table>

How to View Set-Level Information

Introduction

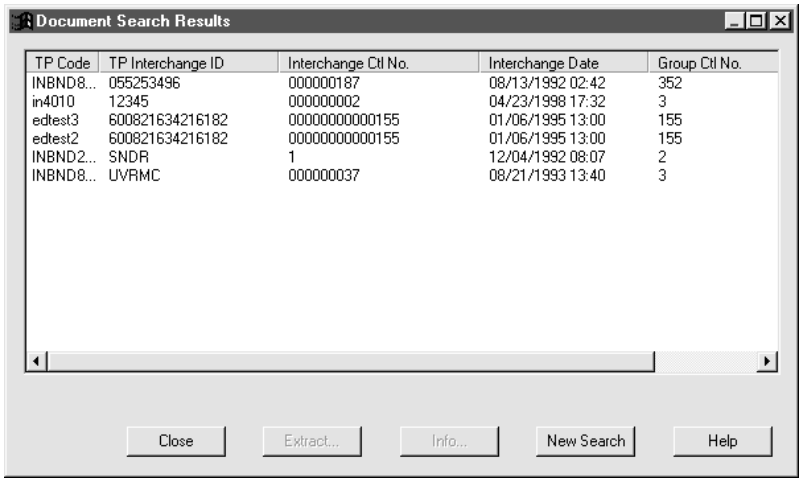
You can view this information about archived data at the set-level:

- Identification
- Translation
- Processing
- Archive
- Acknowledgment

Reference
To view information at the group level, see How to View Group Information in this chapter.

Viewing set-level information

Use this procedure to view archived EDI translation data at the set level.

Step	Action
1	Conduct a document search in Full Document Details (expanded) mode by following the instructions in the How to Search for an Archived Document topic. **System Response** Gentran:Server displays the Document Search Results window. **Example**  (Continued on next page)

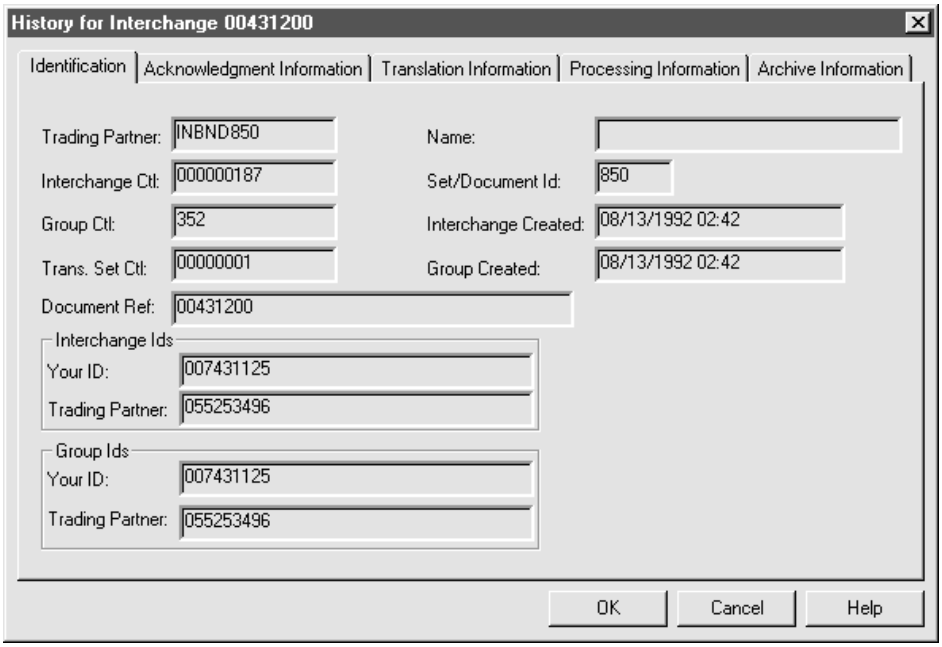
<table>
<tr><th>(Contd)
(Contd)</th><th colspan="2">Action</th></tr>
<tr><td>2</td><td colspan="2">Move the focus to the record you want to view and then click Info.

System Response
Gentran:Server displays the history window for the selected record.</td></tr>
<tr><td>3</td><td colspan="2">Click the tab for the type of information you want to see.</td></tr>
<tr><td></td><td>Tab</td><td>Description</td></tr>
<tr><td></td><td>Identification</td><td>The basic information used to identify the document, such as the Trading Partner Code, control numbers, document reference number, and the interchange and group IDs.</td></tr>
<tr><td></td><td>Acknowledgment Information</td><td>Information about a functional acknowledgment transaction, such as the date and time the functional acknowledgment was received, the document status, message type, and error data.</td></tr>
<tr><td></td><td>Translation information</td><td>Information about the transaction, such as the date and time, status, result, segment terminator, and number of segments and characters.</td></tr>
<tr><td></td><td>Processing Information</td><td>The date after which the document is eligible for purging.</td></tr>
<tr><td></td><td>Archive Information</td><td>The file name of the archived file, the archive directory path to the file, and (if you are viewing set information) a number that tells you where the set starts in the data file.</td></tr>
</table>

(Continued on next page)

Identification tab

This illustration shows the Identification tab.



Identification tab fields and functions table

This table describes the Identification tab fields and their functions.

Field	Function
Trading Partner	Specifies the Trading Partner code.
Interchange Ctl	Specifies the document's interchange control number.
Group Ctl	Specifies the document's group control number.
Trans. Set Ctl	Specifies the document's transaction set control number.
Document Ref	Specifies the document reference number (only if from Gentran:Server product level PCM and higher).
Name	Specifies the trading partner's name.
Set/document ID	Specifies the set or document identifier.
Interchange created	Specifies the date and time the interchange was translated.
Group created	Specifies the date and time the group was translated.

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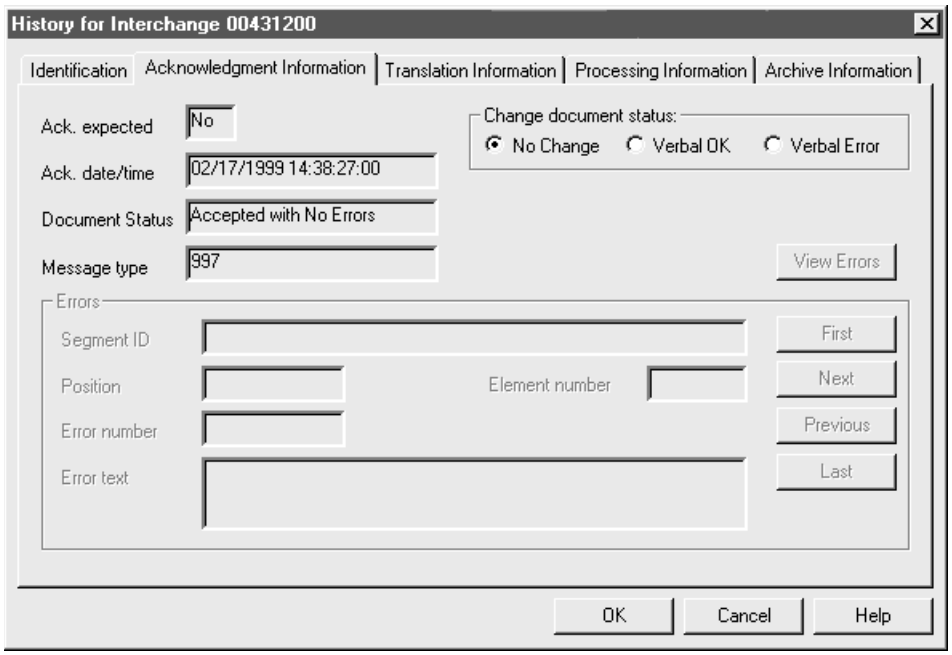
Acknowledgment Information tab

This illustration shows the Acknowledgment Information tab.



Acknowledgment Information tab fields and functions table

This table describes the Acknowledgment Information tab fields and their functions.

Field	Function
Ack. expected	Indicates whether a functional acknowledgment is expected. Yes indicates one is expected. No indicates that a functional acknowledgment is not expected.
Ack. date/time	Specifies the date and time at which the functional acknowledgment was expected.
Document Status	Specifies the document status. Valid responses include Accepted with No Errors, Partially Accepted with Errors, Rejected, and Waiting.
Message type	Specifies the transaction type: 997, 999, or CONTRL.

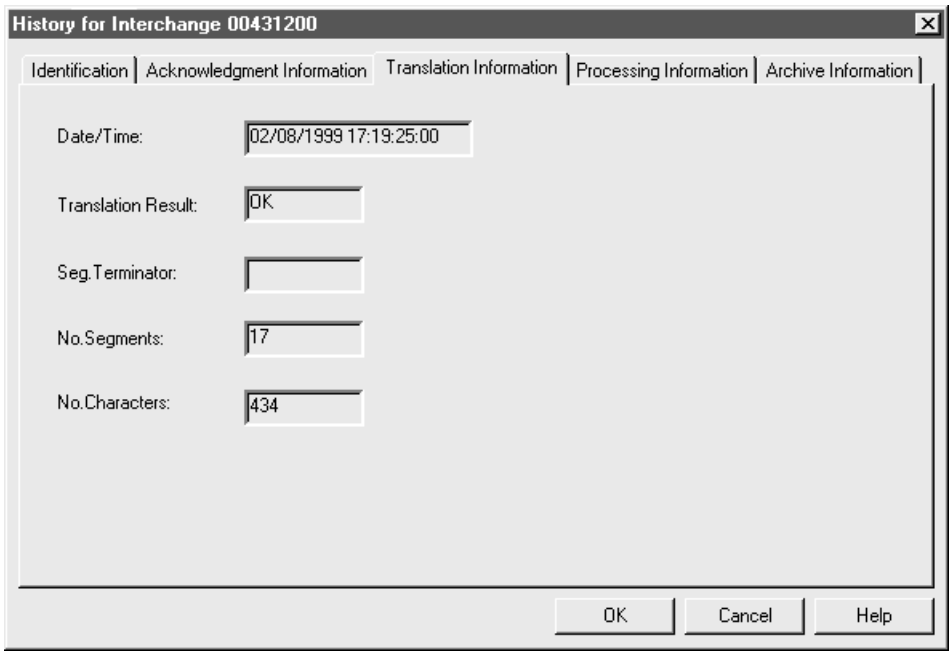
(Continued on next page)

(Contd) Field	Function
Change document status	Indicates whether the Document Status field is updated when the functional acknowledgment is verbal. ◗ Verbal OK - A verbal acknowledgment arrived; no errors in document ◗ Verbal Error - A verbal acknowledgment arrived; document contains errors
View Errors	Indicates whether the system extracts a functional acknowledgment record from the archive and displays the related error information in the Errors section of the window
First	Prompts the system to display information about the first error in the archive
Next	Prompts the system to display information about the next error in the archive
Previous	Prompts the system to display information about the previous error in the archive
Last	Prompts the system to display information about the last error in the archive
Errors	Prompts the system to display information about an error. The type of information displayed depends on the type of error. **Example** If the error is at the segment level, the Errors section displays the Segment ID in addition to the Error Number and Error Text.

(Continued on next page)

Translation Information tab

This illustration shows the Translation Information tab.



Translation Information tab fields and functions table

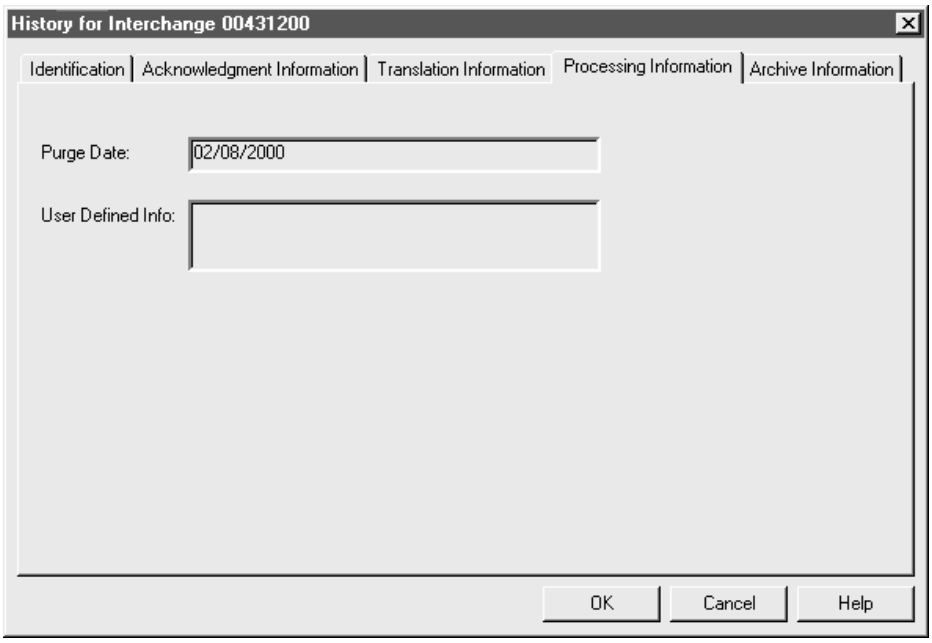
This table describes the Translation Information tab fields and their functions.

Field	Function
Date/time	Specifies the translation date and time.
Translation Result	Indicates the status of translation, such as “OK” or an error type number.
Seg. Terminator	Specifies the character used to separate segments.
No. Segments	Specifies the number of segments in the set.
No. Characters	Specifies the number of characters in the set.

(Continued on next page)

Processing Information tab

This illustration shows the Processing Information tab.



Processing Information tab fields and functions table

This table describes the Processing Information tab fields and their functions.

Field	Function
Purge Date	Specifies the date on which the document is eligible for purging.
User Defined Info	Currently unused. Reserved for future use.

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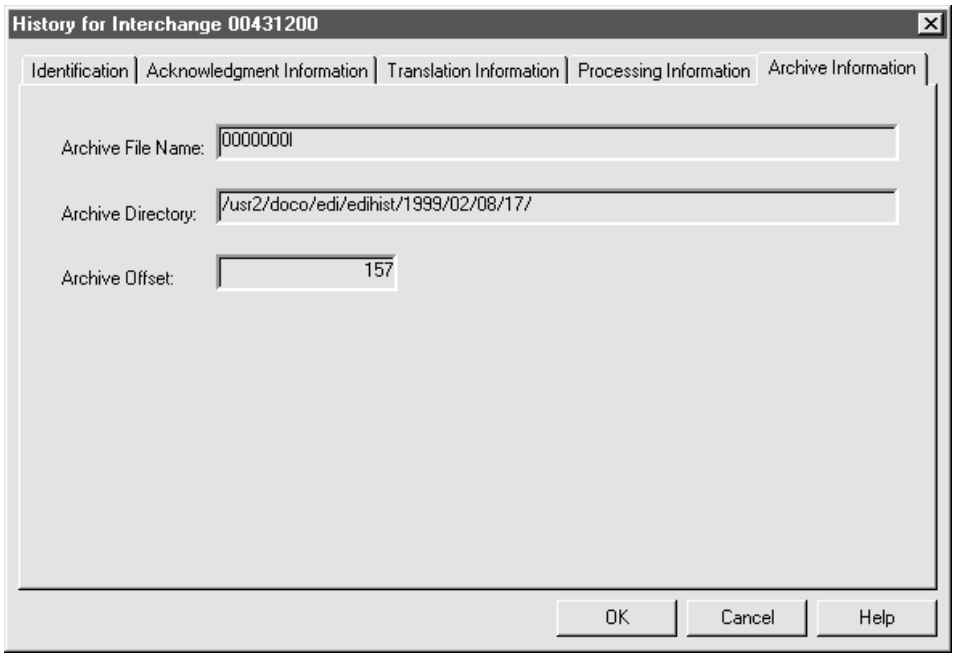
Archive Information tab

This illustration shows the Archive Information tab.



Archive Information tab fields and functions table

This table describes the Archive Information tab fields and their functions.

Field	Function
Archive File Name	Specifies the archived file.
Archive Directory	Specifies the archive directory.
Archive Offset	If you are viewing information for a set, this field Specifies the number that indicates where the set starts in the data file. The EDI Extract program uses this information to extract the archived data.

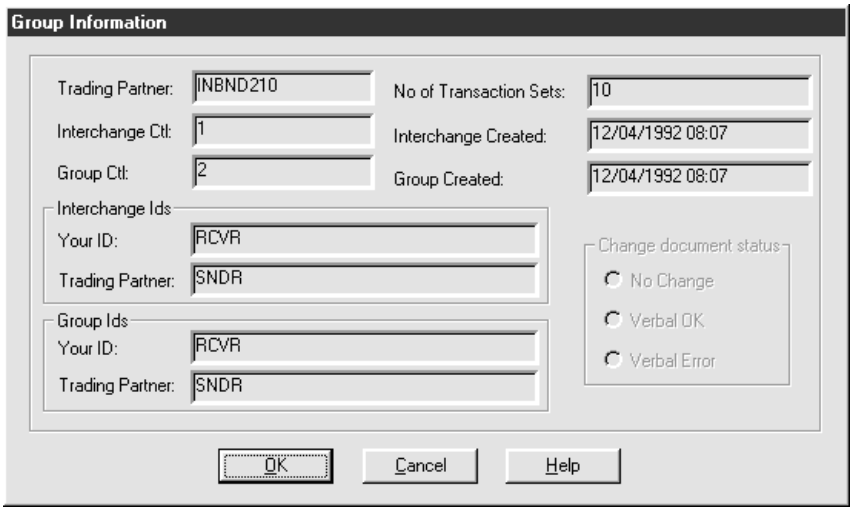
How to View Group Information

Introduction

The Group Information dialog box displays basic information used to identify a document. You can access this dialog box from the Document Search Results dialog box.

Group Information dialog box

This illustration shows the Group Information dialog box.



Group Information dialog box fields and functions

This table describes the Group Information fields and their functions.

Field	Function
Trading Partner	Displays the Trading Partner code.
Interchange Ctl	Displays the document's interchange control number.
Group Ctl	Displays the document's group control number.
Interchange created	Displays the date and time the interchange was translated.
Group created	Displays the date and time the group was translated.
Interchange IDs	Displays your interchange ID and your trading partner's interchange ID.

(Continued on next page)

(Contd) Field	Function
Group IDs	Displays your group ID and your trading partner's group ID.
No. of Transaction Sets	Displays the number of transaction sets in this Group document.
Change doc. status	Updates the Document Status field for all transaction sets in this group when the functional acknowledgment is expected. ◗ Verbal OK - A verbal acknowledgment arrived. No errors in document. ◗ Verbal Error - A verbal acknowledgment arrived. Document contains errors. **Note** This field is disabled for inbound documents.

Viewing group information

Use this procedure to view group information.

Step	Action
1	Conduct a document search (in Summary mode) by following the instructions in the How to Search for an Archived Document topic. **System Response** Gentran:Server displays the Document Search Results window.
2	Move the focus to the group-level record you want to view and then click **Info**. **System Response** Gentran:Server displays the Group Information window.
3	Do you want to set the status for all transaction sets in this group to Verbal Ok or Verbal Error? ◗ If YES, continue with Step 4. ◗ If NO, go to Step 6. (Continued on next page)

(Contd) Step	Action
4	Select the new status from the **Change document status** choices and then click **OK** to save your changes. **Note** If you try to change document status on a group for which an acknowledgment was not expected, the system ignores the status change. **System Response** Gentran:Server displays a confirmation prompt.
5	Click **Yes** to confirm your changes.
6	Click **Cancel** to close the Group Information dialog box. **System Response** Gentran:Server returns to the Document Search Results dialog box.

Reconciling Functional Acknowledgments (FAs)

Overview

Definitions

A **functional acknowledgment** (FA) that you receive is an inbound document that contains the status of outbound data you sent to a trading partner.

A **functional acknowledgment** that you send is an outbound document in response to a document you received from a trading partner.

Purpose

The purpose of functional acknowledgments is to provide you with:

- The status of a sent or received document (rejected, accepted, or accepted with errors).
- The information necessary to reconcile the historical records maintained in *edihist.dat*.
- Error information related to a sent or received document.

Types of FAs

This table lists the types of functional acknowledgments and describes each type.

- The receiving company uses one of these functional acknowledgment transaction sets to communicate the results of a transmission back to the sending company.
- For each functional group sent, the acknowledgment details what transactions were received and if there were any segment or data element syntax errors according to the related standard.

Type	Description
997	The X12 functional acknowledgment transaction set.
999	The UCS functional acknowledgment transaction set.
CONTRL	The Edifact and Odette functional acknowledgment transaction set.

(Continued on next page)

(Contd) Type	Description
Network	For TRADACOMS-formatted messages only, Gentran:Server can receive and reconcile both IBM® and INS® network acknowledgments.

Functional acknowledgment levels

Functional acknowledgments are always associated with a transaction group (a collection of transactions).

The functional acknowledgments that Gentran:Server handles have three different levels of detail:

- **Group**, which indicates if a group of like documents contained errors
- **Set**, which indicates if an individual transaction set contained errors
- **Segment/Element**, which indicates the exact segment and element containing an error.

Control numbers in a functional acknowledgment

The archiving program does not archive duplicate records, so if two different records have the same control numbers, the archiving program rejects the second as a duplicate. See the Setting Up EDI Translation Archiving topic.

Reconciliation

If you send or receive functional acknowledgments, you need to reconcile errors regularly.

The process of reconciling functional acknowledgments is similar to the process of reconciling your bank statement: you review the status of documents that you have sent and received, and then resolve any discrepancies.

You must archive EDI data (including any functional acknowledgments) after each translation to use the functional acknowledgment reconciliation feature.

Setting Up Your System to Handle Functional Acknowledgments

Introduction

You must request functional acknowledgments from your trading partner before sending EDI data. If you receive documents from a trading partner, you should ask if they want functional acknowledgments from you and at what level they want to receive them.

Configuring your system

To configure your system to send acknowledgments to all trading partners when you receive inbound data, select the **Acknowledge Inbound Data** option on the EDI tab of the Archive/Retrieval window.

To configure your system to expect acknowledgments from all trading partners for outbound data, complete the **Expect Ack for Outbound Data in** option on the EDI tab of the Archive/Retrieval window.

References

See the EDI tab for a description of the acknowledgment options.

Configuring a Trading Partnership record

You can configure the functional acknowledgment settings at the Trading Partnership level. These settings override your system settings for the individual trading partner.

To configure your system to send acknowledgments to a specific trading partner when you receive inbound data from that trading partner, select the **Create acknowledgment for inbound document** option from the Outbound Acknowledgment tab of the Edit Trading Partnership dialog box.

To configure your system to expect acknowledgments from a specific trading partner for outbound data, complete the **Expect acknowledgment for outbound document in** option on the Inbound Acknowledgment tab of the Edit Trading Partnership dialog box.

Reference

See Inbound Acknowledgent tab for a description of the inbound document acknowledgment options on this tab of the Edit Trading Partnership dialog box.

See Outbound Acknowledgment tab for a description of the outbound document acknowledgment options on this tab of the Edit Trading Partnership dialog box.

Reconciliation Process

Stage table This table describes the reconciliation process.

<table>
<tr><th>Stage</th><th colspan="2">Description</th></tr>
<tr><td>1</td><td colspan="2">When you receive a functional acknowledgment from a trading partner, the reconciliation program collects these items:
Sender’s Interchange ID
Receiver’s Interchange ID
Sender’s Group/Application ID
Receiver’s Group/Application ID
Group control number
Set/message control number
Set/Message ID.</td></tr>
<tr><td rowspan="3">2</td><td colspan="2">Gentran:Server searches the files edihist.dat and edihist.idx for a record that matches the acknowledgment.</td></tr>
<tr><td>IF a match is…</td><td>THEN Gentran:Server…</td></tr>
<tr><td>Found</td><td>Reconciles the functional acknowledgment and assigns the appropriate status to the document. Valid responses include Accepted with No Errors, Partially Accepted with Errors, or Rejected.</td></tr>
<tr><td></td><td>Not found</td><td>Reports a reconciliation error in the xlcntl.err file.
Note
The inability to find a match may be because the original document was not archived, the original document was purged, or a problem exists with the functional acknowledgment.
(Continued on next page)</td></tr>
</table>

(Contd) Stage	Description
3	Click **View Errors** on the Acknowledgment Information tab of the document history window. **System Response** Gentran:Server retrieves the first functional acknowledgment error associated with the selected document. The system then displays information about the error in the Errors section of the tab. The tab has scroll buttons that enable you to view other errors associated with the document.

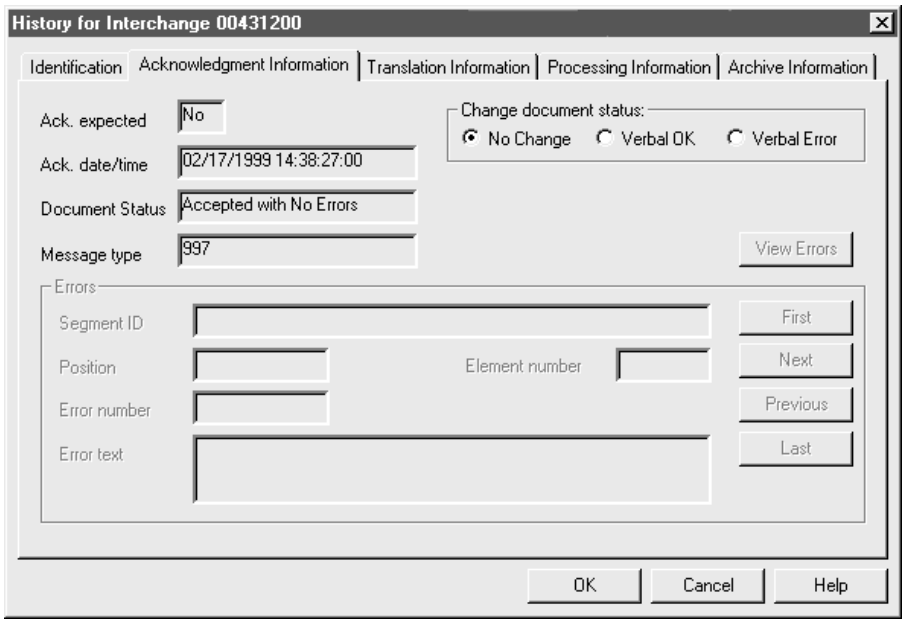
How to View Functional Acknowledgment Errors

Introduction

You view functional acknowledgment information, including error information, on the Acknowledgment Information tab of the document history window.

Acknowledgment Information tab

This illustration shows the Acknowledgment Information tab.



Procedure

Use this procedure to view functional acknowledgment errors for a document.

Step	Action
1	Display the document history window by following the procedure in the Viewing set-level information topic.
2	Click the Acknowledgment Information tab. (Continued on next page)

(Contd) Step	Action
3	Click **View Errors**. **Note** This button is disabled if the received functional acknowledgment was at the group or set level. **System Response** Gentran:Server displays information about the first functional acknowledgment error associated with the document in the **Errors** box.
4	To scroll through information about other errors for this document, click **Next**, **Previous**, and/or **Last**.

How to Change the Document Status

Introduction

If you receive a verbal acknowledgment, you can change the status of an outbound document to “Verbal OK” or “Verbal Errors” from the:

- Document Search Results window
- Acknowledgment Information tab of the document history window
- Group Information window.

You can change the status of:

- All transaction sets in a group from either the Document Search Results window or the Group Information window
- Individual transaction sets from either the Document Search Results window or the Acknowledgment Information tab.

Using the Document Search Results window

Use this procedure to enter a verbal acknowledgment from the Document Search Results window. You can change the status of all transaction sets in a group or the status of individual transaction sets.

Step	Action
1	Conduct a search for outbound documents by following the instructions in the How to Search for an Archived Document topic. **System Response** Gentran:Server displays the Document Search Results window.
2	Move the focus to the record for which you want to enter a verbal acknowledge status and right-click. **System Response** Gentran:Server displays a popup window. **Note** At the group level, the **Set Verbal Error** and **Set Verbal OK** items are always enabled in the popup window. At the set level, if the current status is either Set Verbal Error or Set Verbal OK, the current status is disabled in the popup menu. If the current status is Not Expected, both items are enabled. (Continued on next page)

(Contd) Step	Action
3	Select the new status from the menu. ◗ **Verbal OK** - A verbal acknowledgment arrived; no errors in document ◗ **Verbal Error** - A verbal acknowledgment arrived; document contains errors **CAUTION** **If the record is a group-level entry, the system will apply the status you select to all transaction sets in this group.** **System Response** Gentran:Server displays the Change status confirmation dialog box.
4	Click **Yes** to confirm the change in status.

Using the Acknowledgment Information tab

Use this procedure to change the status of an individual transaction set in an outbound document.

Step	Action
1	Display the document history window for an outbound transaction set by following the procedure in the How to View Set-Level Information topic.
2	Click the Acknowledgment Information tab.
3	Select the new document status by clicking on one of the following options in the Change Doc. Status section of the tab: ◗ **Verbal OK** - A verbal acknowledgment arrived; no errors in document ◗ **Verbal Error** - A verbal acknowledgment arrived; document contains errors **System Response** Gentran:Server displays a confirmation dialog box.
4	Click **Yes** to save your changes. **System Response** Gentran:Server applies the status you selected and displays the Document Search Results dialog box.

(Continued on next page)

Using the Group Information window

Use this procedure to enter a verbal acknowledgment for all transaction sets in a group from the Group Information window.

Step	Action
1	Conduct a search for outbound documents by following the instructions in the How to Search for an Archived Document topic. **System Response** Gentran:Server displays the Document Search Results window.
2	Move the focus to the group-level record you want to view and click **Info**. **System Response** Gentran:Server displays the Group Information window.
3	Select the new status from the Change document status choices. ◗ **Verbal OK** - A verbal acknowledgment arrived; no errors in document ◗ **Verbal Error** - A verbal acknowledgment arrived; document contains errors
4	Click **OK** to save your changes. **System Response** Gentran:Server displays the Change status confirmation dialog box.
5	Click **Yes** to confirm the changes. **System Response** Gentran:Server applies the status you selected to all transaction sets in this group and displays the Document Search Results dialog box.

EDI errors

When you reconcile outbound documents, you may want to correct errors in the EDI data and resend the document to your trading partner.

Reference
See the Editing an archived EDI document in this chapter.

Miscellaneous Procedures

How to Extract Archived EDI Documents

Introduction

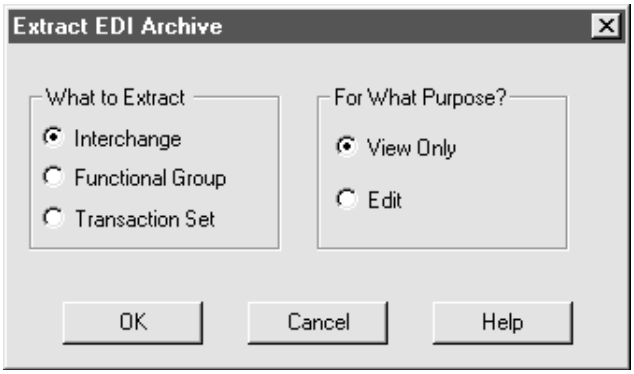
There are three reasons to extract archived EDI translation data files:

- View the data
- Edit erroneous EDI data and prepare it to send it to your trading partner
- Prepare EDI data that your trading partner did not receive so that you can resend it.

The Extract EDI Archive tab enables you to extract archived documents.

Extract EDI Archive dialog box

This illustration shows the Extract EDI Archive dialog box.



Extract EDI Archive fields and functions table

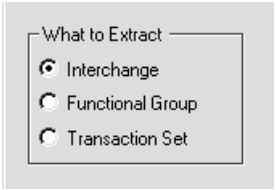
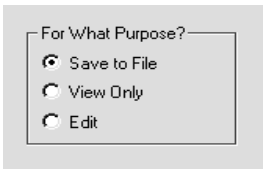
This table describes the **Extract EDI Archive** fields and their functions.

Field	Function
What to extract	Specifies the type of data to extract.
Interchange	Prompts the system to select interchange data.
Functional Group	Prompts the system to select functional group data.
Transaction set	Prompts the system to select transaction set data.
	(Continued on next page)

(Contd) Field	Function
For what purpose	Indicates the reason for extracting the data.
View only	Prompts the system to extract data only for viewing.
Edit	Specifies that the extracted data will be edited.

Extracting archived data

Use this procedure to extract archived data.

Step	Action
1	Conduct a document search for the document you want to extract. **Reference** See How to Search for an Archived Document in this chapter.
2	Place the focus on the record you want to extract and then click **Extract**. **System Response** Gentran:Server displays the Extract EDI Archive dialog box.
3	In the What to Extract area, click the type of data to extract: **Interchange**, **Functional Group**, or **Transaction Set**. 
4	In the **For What Purpose** section, click the reason for extracting the data.  (Continued on next page)

(Contd) Step	Action	
5	Click **OK**. **System Response**	
	IF you selected…	**THEN…**
	View only	The system displays the archived document in the File Browser so that you can view it.
	Edit	The system displays the archived document in the File Browser so that you can edit it. To continue, see How to Prepare Documents to Resend in this chapter.

How to Prepare Documents to Resend

Introduction

The resend program repackages archived outbound or inbound data so that you can send it. The program replaces new lines with character terminators and increments the control numbers to those you specify.

Resending Outbound Data

You can edit archived outbound data that contains errors and then send the corrected data to your trading partner. In this case, you want to increment the control numbers so that the archiving program does not reject the document as a duplicate.

You may also resend archived outbound data that your trading partner never received. In this case, you may use the same control numbers as the original document.

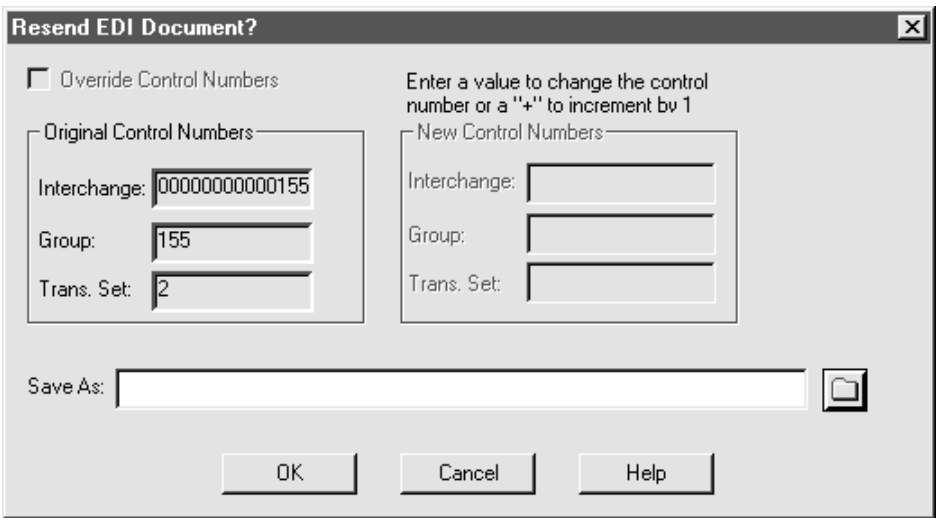
Resending Inbound Data

You may also resend inbound data. This data is saved as a newline-terminated file. The **Override Control Numbers** option is unavailable when you are resending inbound data.

When resending inbound data, you must use the File Browser to edit the control numbers before saving the file. This prevents the duplication of audit records in the archive when you retranslate the file inbound.

Resend EDI Document dialog box

This illustration shows the Resend EDI Document dialog box.



(Continued on next page)

Resend EDI Document dialog box fields and functions

This table describes the fields of the Resend EDI Document dialog box and their functions.

Field	Function
Override Control Numbers	Prompts the system to activate the New Control Numbers fields.
Original Control Numbers	
Interchange	Specifies the current interchange control number of the archived data.
Group	Specifies the current group control number of the archived data.
Trans. Set	Specifies the current transaction set control number of the archived data.
New Control Numbers **Note** You must increment the original control numbers to archive new, corrected data.	
Interchange	Defines the new interchange control number.
Group	Defines the new group control number.
Trans. Set	Defines the new transaction set control number.
Save as	Defines a file name for a copy of the archived data.

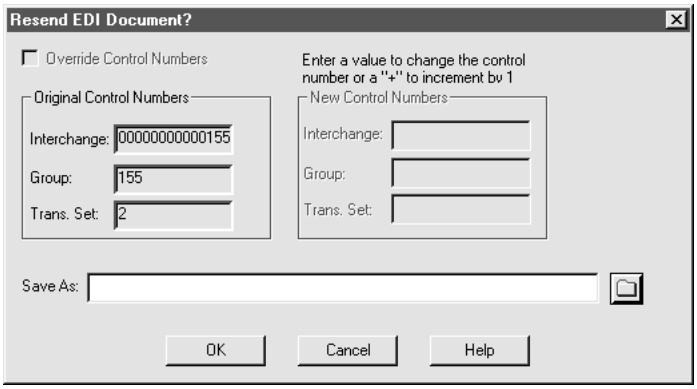
(Continued on next page)

Editing an archived EDI document

Use this procedure to correct EDI data that contains errors so that you can send the corrected version to your trading partner.

Step	Action	
1	Extract the document for editing. **Reference** See Extracting archived data in this chapter. **System Response** Gentran:Server displays the document in the File Browser.	
2	Use these instructions to edit the document.	
	IF you want to…	**THEN…**
	Insert characters	Click at the insertion point and type the characters.
	Copy selected text to the clipboard	Click **Copy** on the **Edit** menu.
	Paste text on the clipboard into the document	Click at the insertion point and then click **Paste** on the **Edit** menu.
	Select the entire document	Click **Select All** on the **Edit** menu.
	Search for characters, words, or phrases	Click **Find** on the **Edit** menu. Then, enter the search string.
	Search for the next occurrence of a search item	Click **Find Next** on the **Edit** menu.
	Replace selected text	Click **Replace** on the **Edit** menu. Then type the replacement text.
	Print the document	Click **Print** on the **File** Menu.
	Save the changes to the document	Click **Save** on the **File** menu.
	Save a copy of the document under a new path or name	Click **Save As** on the **File** menu. and enter the new path and file name.
3	Click **Save** on the **File** menu to save your changes.	

(Continued on next page)

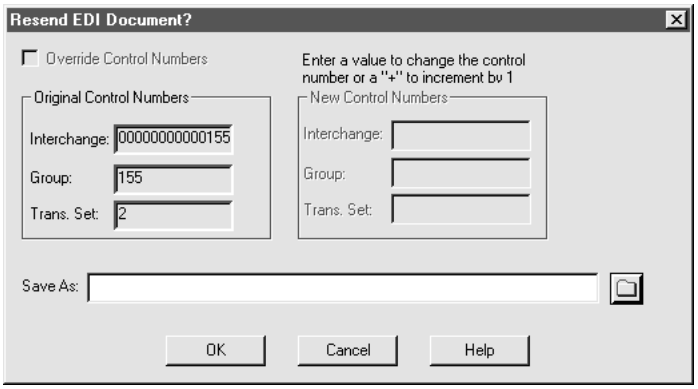
(Contd) Step	Action
4	Click **Close** on the **File** menu. **System Response** Gentran:Server displays the Resend EDI Document dialog box. 
5	Do you want to assign new control numbers to the extracted outbound data? ◗ If YES, click **Override Control Numbers**. Then, type the new control numbers in the **New Control Numbers** boxes. To reuse an original number, leave a box blank. ◗ If NO, continue with Step 6. **WARNING** **The Override Control Numbers option is unavailable for inbound data.** **Note** If you do not assign new control numbers to outbound data and it has already been sent, the recipient's archive program views the edited document as a duplicate and does not archive it.
6	Type a destination path and file name for the data. **Note** If you type only a filename, the program uses *$ENV_ROOT* as the default directory. (Continued on next page)

(Contd) Step	Action
7	Click **OK**. **System Response** If you resent outbound EDI data, the resend program modifies the archived outbound data, replacing new lines with character terminators and replacing the original control numbers with the new ones you specified. If you resent inbound data, the system creates a new file using the name typed in step 6.
8	If you want to archive this data, run **ediarc**. **Reference** For more information, see the topic How to Run the Archive Program earlier in this chapter.
9	Resend the document by following the procedures your company has established for sending EDI documents.

(Continued on next page)

Preparing an unedited archived EDI document for resending

Use this procedure to prepare to resend an archived document that your trading partner did not receive.

Step	Action
1	Extract the document for editing. **Reference** See Extracting archived data in this chapter. **System Response** Gentran:Server displays the document in the File Browser window.
2	Click **Close** on the **File** menu. **System Response** Gentran:Server displays the Resend EDI Document dialog box. 
3	Do you want to assign new control numbers to the extracted data? ◗ If YES, click **Override Control Numbers**. Then, type the new control numbers in the **New Control Numbers** boxes. To reuse an original number, leave a box blank. ◗ If NO, continue with Step 5. **Note** If you do not assign new control numbers, the archive program views the unedited document as a duplicate and does not archive it. This is fine if you have not made changes. (Continued on next page)

(Contd) Step	Action
4	Do you want to save the data to a different path or file name? ◗ If YES, type the new path and file name in the **Save As** box. ◗ If NO, continue with Step 6. **Note** If you do not type a new path and file name, the program uses *edixtrct.tmp* as the default file name.
5	Click **OK**. **System Response** The resend program modifies the archived data, replacing new lines with character terminators and replacing the original control numbers with the new ones you specified.
6	Resend the document by following the procedures your company has established for sending EDI documents.

How to Purge Data

Introduction

Leaving large amounts of data in the archive files slows down the retrieval process when you view or edit data. You should remove the stored data from the audit/archive directory regularly. Determine the interval based on management of your disk space and your company's policies.

Running the purge program

The purge program enables you to purge data based on criteria you select. You may start the purge program from:

- The archive menu
- The command line
- A batch file or script through the Task Scheduler.

In this section, you learn to run the purge program from the **Archive** menu.

Comment

The data purge process may require a long time to run. You may want to run it from a batch file or script during off hours through the Task Scheduler.

When you schedule **edipurge** to run during the off hours, you must verify that the system will not be running **ediarc** at the same time.

References

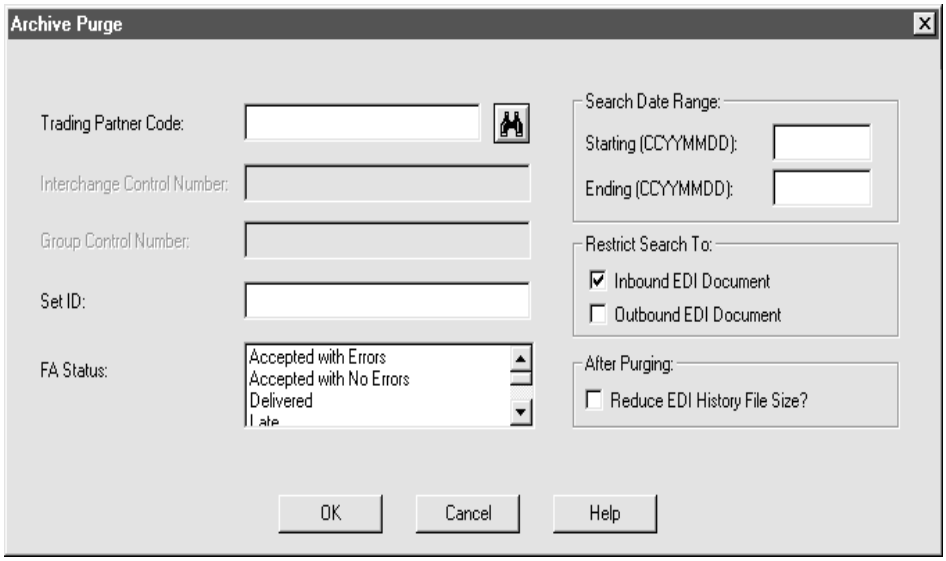
To select data for purging with a command line program, use the **edipurge** command. See the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for more information about **edipurge**.

To run the purge program from the Task Scheduler, see the chapter Using the Task Scheduler in this guide.

(Continued on next page)

The Archive Purge dialog box

This illustration shows the Archive Purge dialog box for archived translation data.



Archive Purge dialog box fields and functions

This table describes the fields of the Archive Purge dialog box and their functions.

Field	Function
Trading Partner Code	Determines the Trading Partner Code associated with the data you want to purge. Leave blank to purge data from all trading partners.
Interchange Control Number	Specifies the Interchange Control Number of the data you want to purge. Leave blank to select all interchanges.
Group Control Number	Specifies the Group Control Number of the data you want to purge. Leave blank to select all groups.
Set ID	Specifies the Set ID of the data you want to purge. Leave blank to select all transaction sets.
FA Status	Specifies the functional acknowledgment status of the data you want to purge. Leave blank to purge all sets.

(Continued on next page)

(Contd) Field	Function
Search Date Range	
Starting (CCYYMMDD)	Specifies the earliest translation date of the data to be purged. Leave blank to purge a range of data beginning with the earliest data available.
Ending (CCYYMMDD)	Specifies the latest translation date of the data you want to purge.
Restrict Search To	
Inbound EDI Document	Restricts purging to only inbound EDI documents.
Outbound EDI Document	Restricts purging to only outbound EDI documents.
After Purging	
Reduce EDI History File Size	Compresses the EDI History file after documents are purged. **Note** The EDI History file is not available to the **ediarc** program during the compression process.

Purging data

Use this procedure to purge archived data.

Step	Action
1	Verify that the **ediarc** program is not running.
2	Click **Purge Archive** on the **Archive** menu. **System Response** Gentran:Server displays the Archive Purge dialog box.
3	Type the criteria of the data you want to purge. Leave a field blank to select all the documents in that criteria category. **Example** Leave the Set ID text box blank to purge all sets. (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="2">Action</th></tr>
<tr><td>4</td><td colspan="2">Click OK.

System Response
Gentran:Server purges the records from the EDI History Audit file, and also purges the archived data files if no other records point to the data file.

When the process is complete, Gentran:Server displays a list of the records and data files that were purged.</td></tr>
<tr><td rowspan="3">5</td><td colspan="2">Use this table to determine your next step.</td></tr>
<tr><td>IF you want to…</td><td>THEN…</td></tr>
<tr><td>Print the list of purged records and data files</td><td>Click Print.</td></tr>
<tr><td>Exit the Purge Archive Files window</td><td>Click OK.</td></tr>
</table>

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Using the Task Scheduler

Contents

Overview

Task Scheduler Basics

Introduction

You can use Gentran:Server's Task Scheduler to run tasks (DOS batch files or UNIX scripts) automatically on a schedule you specify.

You may find it convenient to run translations and other Gentran:Server functions from a batch file or script. You can schedule batch files or scripts to perform functions unattended during off-hours.

The Task Scheduler is available in both the Gentran:Server for UNIX (client/server) version and the Workstation version. However, each version handles a scheduled file differently.

Task Scheduler example

You might create a batch file or script to run outbound translation, and then use the Task Scheduler to run it every night at 11:00 p.m.

Gentran:Server for UNIX version

If you are running Gentran:Server for UNIX, the Task Scheduler sends the scheduled files to the host and executes the UNIX **crontab** command. The UNIX **crontab** command adds the file to the **cron** spool area. The UNIX **cron** program activates the timer.

The location of crontab and the UNIX program **cron** varies among the types and version of the UNIX operating system.

Example
Here is a sample path:

/var/spool/cron/crontab/muser

Note
The *muser* file, which represents the server where **cron** runs, needs permission to run **cron**.

(Continued on next page)

Workstation version

The Workstation version of Gentran:Server has its own timer, **mtimer**. You may activate this executable file by:

- Clicking **Run Task Scheduler** on the **Tools** menu
- Configuring *mtimer.exe* to start when your computer starts.

When you use the Task Scheduler to schedule a file, the Task Scheduler saves the file to *crontab.dat*. Then, when you activate **mtimer**, **mtimer** reads the *crontab.dat* file and processes the files based on the schedule you established in the Task Scheduler.

In this chapter

This chapter contains relevant points about creating batch files or scripts containing the Gentran:Server command-line and operating-system commands you want to perform. You will also learn how to use the Task Scheduler to specify the date and time you want the batch file or script to run and important points about running the batch files and scripts.

Key terms

This table lists the key terms used in this chapter.

Term	Description
batch file	A file that contains command-line commands and DOS commands.
cron	A UNIX operating-system utility that runs commands and scripts according to a preset schedule. This is the executable file that activates the timer in Gentran:Server for UNIX.
ediarc	The Gentran:Server program that controls archiving.
edifrmat	The utility that removes segment terminator and replaces it with a new-line terminator.
envelope	The utility that combines like interchanges.
mtimer	A feature you can use to start, stop, or resume unattended processes in the Workstation version of Gentran:Server.
script file	A file that contains command-line commands and UNIX commands.

(Continued on next page)

The Flow of Work

This table describes the process of scheduling a batch file or script.

Stage	Description	
1	Create a batch file or script file that contains the Gentran:Server commands and operating-system commands that you want to run on a schedule.	
2	Use the Task Scheduler to schedule execution of the batch file or script by specifying the path and name of the batch file or script and the date and time you want it to run.	
3	Use this table to determine the next action.	
	IF operating environment is...	**THEN...**
	Gentran:Server for UNIX	Gentran:Server automatically uses **cron** to activate the process unless prohibited from doing so by your system administrator.
	Gentran:Server Workstation	You must use the **Run Task Scheduler** command to start the timer (**mtimer**).

DOS Batch Files and UNIX Script Files

Introduction

For use with Gentran:Server, DOS batch files or UNIX scripts generally contain a combination of operating-system commands and Gentran:Server command-line commands. When you create a batch file or script, you enter the commands in the order you want to execute them.

Reference
See the chapter Command Reference in the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for information on command syntax and options.

Used for unattended translation

Perhaps one of the most common uses for batch files or scripts within Gentran:Server is for unattended inbound and outbound translation.

About unattended inbound translations

To run inbound translations unattended, you create a batch file or script that includes commands to do some or all of the following:

- Delete files created in the previous translation (mandatory unless you want Gentran:Server to append these results to the results of the previous translation).
- Remove non-EDI data from the input file (mandatory; this is the **edifrmat** utility).
- Translate the EDI data (mandatory).
- Envelope the outbound functional acknowledgment or CONTRL (optional).
- Archive the EDI data exactly as it was received (optional).
- Archive the outbound functional acknowledgments (optional).
- Create and print a Translation Summary Report (optional).
- Delete or rename intermediate files created in this run (mandatory).

(Continued on next page)

About unattended outbound translations

To run outbound translations unattended, you create a batch file or script that includes commands to do some or all of the following:

- Delete files created in the previous translation (mandatory unless you want Gentran:Server to append these results to the results of the previous translation).
- Translate the data into EDI or XML data (mandatory).

  Note
  If you have the XML translation option, then the data can also be translated into XML.

- Combine like interchanges for EDI data (optional; this is the envelope utility).
- Archive the EDI data exactly as it was sent (optional).
- Create and print a Translation Summary Report (optional).
- Delete or rename intermediate files created in this run (mandatory).

Sample Gentran:Server Batch Files (Workstation Version)

Introduction

If you are running the Workstation version of Gentran:Server, Gentran:Server batch files run from the Task Scheduler and **mtimer**.

How Gentran:Server batch files differ from DOS files

Gentran:Server batch files differ from DOS files in the following ways:

- Gentran:Server batch files can execute only Gentran:Server and DOS command-line commands, working from the top of the file to the end.
- Gentran:Server batch files cannot contain conditions or pointers (for example, **GOTO**). However, you can nest DOS batch files in Gentran:Server batch files. Nested DOS batch files execute properly, including conditions and pointers. You cannot, however, include Windows Gentran:Server commands (**lftran** and **mtimer**) in DOS batch files that are nested in Gentran:Server batch files.
- To adhere to the syntax of the **mtimer** scripting language, for the Workstation version you must precede each DOS command in unnested or top-level batch files with 'DOS'.

About these samples

The following batch files are intended as examples only. File names used here suggest possible naming conventions. In your work, select one file naming convention and use it consistently.

Keep in mind that you can create one batch file to perform multiple tasks or handle multiple standard types.

Sample 1: Batch file for inbound purchase orders

The sample batch file below deletes files previously created, runs inbound translation on X12 purchase orders, archives the received EDI data and the functional acknowledgment sent, and then deletes the **edifrmat** input file.

Batch file line	Function
DOS del \server\temp\xlcntl.err	Deletes the translation log file *xlcntl.err*.
DOS del val4po.dat	Deletes previous **lftran** translation output.

(Continued on next page)

Batch file line	Function
edifrmat \server\data\val4.in boxin.edi -l	Runs the **edifrmat** program. This program prepares the data for translation.
lftran boxin.edi -if val4po.dat	Runs the **lftran** program. This program translates the data. **Comment** **lftran** uses the six key fields in the inbound document to locate the Trading Partnership record.
envelope	Runs the **envelope** program. This program combines like interchanges.
ediarc -I	Archives the inbound data using the **ediarc** program.
ediarc -O	Archives the outbound data using the **ediarc** program.
DOS del \server\data\val4.in	Deletes the temporary file(s) that the **edifrmat** program creates.

Sample 2: Batch file for inbound purchase orders

This sample deletes previously created files, runs inbound translations on EDIFACT purchase orders, archives the received EDI data and the CONTRL sent, and then deletes the **edifrmat** input file.

Batch file line	Function
DOS del \server\temp\xlcntl.err	Deletes the translation log file *xlcntl.err*.
DOS del boxin.po	Deletes previous **lftran** translation output.
edifrmat \server\data\val4.in boxin.edi -l	Runs the **edifrmat** program. This program prepares the data for translation. (Continued on next page)

(Contd) Batch file line	Function
lftran boxin.edi -i	Runs the **lftran** program. This program translates the data. **Comment** **lftran** uses the 6 key fields in the inbound document to locate the Trading Partnership record.
envelope	Runs the **envelope** program. This program combines like interchanges.
ediarc -I	Archives the inbound data using the **ediarc** program.
ediarc -O	Archives the outbound data using the **ediarc** program.
DOS del \server\data\val4.in	Deletes the temporary file that the **edifrmat** program creates.

Sample 3: Batch file for outbound invoices

The sample batch file below deletes files from previous executions, runs outbound translations on X12 invoices, and archives the EDI data sent.

Batch file line	Function
DOS del \server\temp\xlcntl.err	Deletes the translation log file *xlcntl.err*.
DOS del boxin.edi	Deletes previous **lftran** translation output.
lftran \server\data\boxin.udf -oT[TPCODE]	Runs the **lftran** program. This program translates data.
envelope	Runs the **envelope** program. This program combines like interchanges.
ediarc -O	Archives the outbound data using the **ediarc** program.

(Continued on next page)

Sample 4: Batch file for outbound invoices

This sample deletes files from previous executions, runs outbound translations on EDIFACT invoices, and archives the EDI data sent.

Batch file line	Function
DOS del \server\temp\xlcntl.err	Deletes the translation log file *xlcntl.err*.
lftran \server\data\boxin.udf -oT[TPCODE]f edat	Runs the **lftran** program. This program translates the data.
envelope	Runs the **envelope** program This program combines the interchanges.
ediarc -O	Archives the outbound data using the **ediarc** program.

Sample UNIX Scripts

Introduction

If you are running Gentran:Server for UNIX, you use UNIX scripts for inbound and outbound translation. This topic contains samples of UNIX scripts you can schedule using the Task Scheduler.

Note
As in UNIX, commands in scripts are case-sensitive.

About these samples

The following scripts are intended as examples only. File names used here suggest possible naming conventions. In your work, you should select one file naming convention and use it consistently.

Keep in mind that you can create one script to perform multiple tasks or handle multiple standard types.

Sample 1: UNIX script for inbound purchase orders

The sample UNIX script below deletes previously created files, runs inbound translation on X12 purchase orders, archives the received EDI data and the functional acknowledgment sent, and deletes the **edifrmat** input file.

Script line	Description
rm /usr/server/temp/xlcntl.err	Removes the translation log file *xlcntl.err*.
rm value4po.dat	Removes previous **lftran** translation output.
edifrmat /usr/server/data/ value_4.in boxin.edi -l	Runs the **edifrmat** program. This program prepares the data for translation.
lftran boxin.edi -if value4po.dat -cp	Runs the **lftran** program. This program translates the data. **Comment** **lftran** uses the 6 key fields in the inbound document to locate the Trading Partnership record.
envelope	Runs the **envelope** program. This program combines like interchanges.

(Continued on next page)

(Contd) Script line	Description
ediarc -I	Archives the inbound data using the **ediarc** program.
ediarc -cp /user/server/temp	Archives the outbound data using the **ediarc** program.
rm /usr/server/data/val4.in	Removes the temporary file that the **edifrmat** program creates.

Sample 2: UNIX script for inbound purchase orders

This sample deletes previously created files, runs inbound translations on EDIFACT purchase orders, archives the received EDI data and the CONTRL sent, and deletes the **edifrmat** input file.

Script line	Description
rm /usr/server/temp/xlcntl.err	Removes the translation log file *xlcntl.err*.
rm boxin.po	Removes previous **lftran** translation output.
edifrmat /usr/server/data/value_4.in boxin.edi -I	Runs the **edifrmat** program. this program prepares the data for translation.
lftran boxin.edi -i boxin.in -cp /user/server/temp	Runs the **lftran** program. This program translates the data. **Comment** **lftran** uses the 6 key fields in the inbound document to locate the Trading Partnership record.
envelope	Runs the **envelope** program This program combines like interchanges.
ediarc -I -cp /usr/server/temp	Archives the inbound data using the **ediarc** program.
ediarc -O -cp /usr/server/temp	Archives the outbound data using the **ediarc** program.
rm /usr/server/data/val4.in	Removes the temporary file that the **edifrmat** program creates.

(Continued on next page)

Sample 3: UNIX script for outbound invoices

The sample UNIX script below deletes files from previous executions, runs outbound translation on X12 invoices, and archives the EDI data sent.

Script line	Description
rm /usr/server/temp/xlcntl.err	Removes the translation log file *xlcntl.err*.
rm boxin.edi	Removes previous **lftran** translation output.
lftran /usr/server/data/boxin.udf -oT[TPCODE]f boxin.in -cp /user/server/temp	Runs the **lftran** program. This program translates the data.
envelope	Runs the **envelope** program. This program combines like interchanges.
ediarc -O -cp /usr/server/temp	Archives the outbound data using the **ediarc** program.

Sample 4: UNIX script for outbound invoices

This sample UNIX script deletes files from previous executions, runs outbound translations on EDIFACT invoices, and archives the EDI data sent.

Script line	Description
rm /usr/server/temp/xlcntl.err	Removes the translation log file *xlcntl.err*.
rm dat.edi	Removes previous **lftran** translation output.
lftran /usr/server/data/boxin.udf -oT[TPCODE]f dat.edi -cp /user/server/temp	Runs the **lftran** program. This program translates the data.
envelope	Runs the **envelope** program. This program combines like interchanges.
ediarc -O -cp /usr/server/temp	Archives the outbound data using the **ediarc** program.

Task Scheduler Dialog Box

Introduction

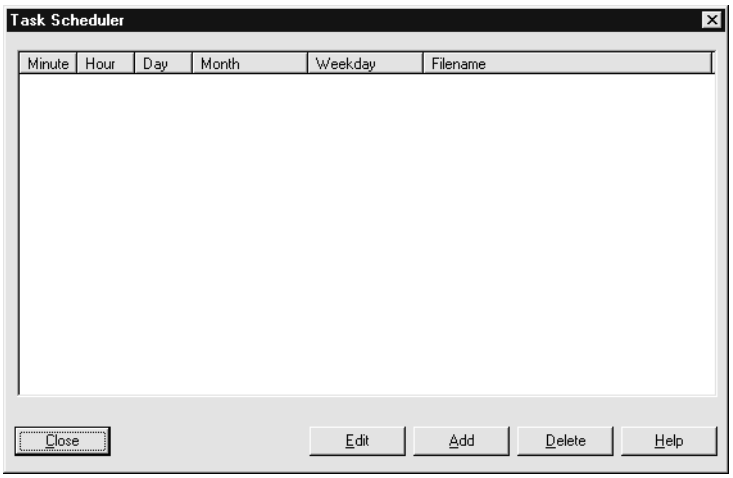
You use the Task Scheduler to specify the batch file or script you want to run and the date and time at which you want it to execute.

Opening the Task Scheduler

To open the Task Scheduler, click **Schedule Tasks** on the **Tools** menu.

The Task Scheduler dialog box

This illustration shows the Task Scheduler dialog box.



Task Scheduler dialog box fields, functions, and values

This table describes the Task Scheduler dialog box text fields that you use to enter information about the batch file or script and the execution date and time.

Field	Function	Values
Minute	Specifies the minute	0 through 59
Hour	Specifies the hour (24-hour clock)	0 through 23
Day	Specifies the day of the month	1 through 31
Month	Specifies the month (Continued on next page)	JAN through DEC

(Contd) Field	Function	Values
Weekday	Specifies the day of the week	SUN through SAT
Filename	Specifies the path and batch file or script name	
Edit	Opens the Edit Task Scheduler Entry dialog box so that you can change the date or time value or the filename.	
Add	Opens the Add Task Scheduler Entry dialog box so that you can add a task to the scheduler	
Delete	Removes a selected entry from the Task Scheduler	

Note
Use the asterisk (*) to include all values in a field. For example, if you want to run a batch file every day of the week, enter an asterisk into the Weekday box. To run the task every month of the year, enter an asterisk into the Month box.

Examples of scheduling a task

This table shows schedules for example batch files A, B, and C.

Batch File	Minute	Hour	Day	Month	Weekday
A	15	*	*	*	*
B	0	20	*	*	MON
C	30	8	30	*	*

- A runs everyday, at 15 minutes past every hour.
- B runs every Monday at 8 p.m.
- C runs on the thirtieth (30th) of each month at 8:30 a.m.

(Continued on next page)

About scheduling tasks in the Gentran:Server for UNIX version

When you close the Task Scheduler after scheduling tasks, Gentran:Server sends the file to the host and executes the UNIX crontab command. This adds the file to the cron spool area. This UNIX operating system **cron** program activates the timer.

CAUTION

Closing the Task Scheduler overwrites any existing *crontab* file and deletes tasks previously scheduled outside of Gentran:Server. You should check for previously scheduled tasks and, if necessary, schedule Gentran:Server tasks outside of Gentran:Server.

Reference

See the topic How to Run Scripts (UNIX Version) in this chapter for instructions on how to use **crontab** to check scheduled tasks and how to schedule Gentran:Server tasks outside of Gentran:Server.

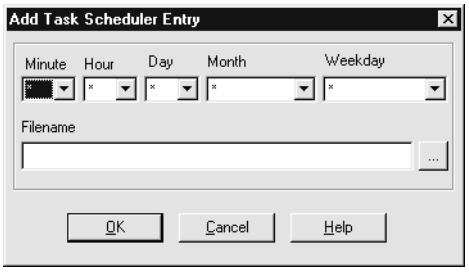
Add Task Scheduler Entry Dialog Box

Introduction

The Add Task Scheduler dialog box is used to add a batch file or script to the scheduler.

Illustration

This illustration shows the Add Task Scheduler dialog box.



Fields and functions

This table lists the fields of the Add Task Scheduler dialog box dialog box and their functions.

Field	Function	Values
Minute	Specifies the minute	0 through 59
Hour	Specifies the hour (24-hour clock)	0 through 23
Day	Specifies the day of the month	1 through 31
Month	Specifies the month	JAN through DEC
Weekday	Specifies the day of the week	SUN through SAT
Filename	Specifies the path and batch file or script name	alphanumeric characters

Procedures

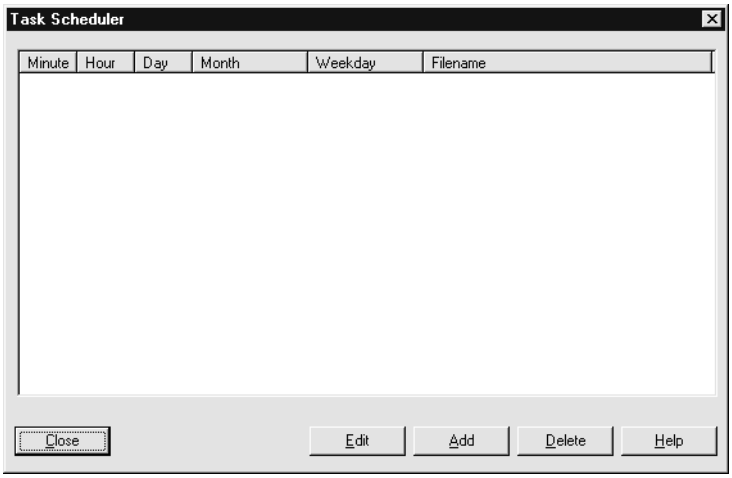
How to Add a Batch File or Script to the Scheduler

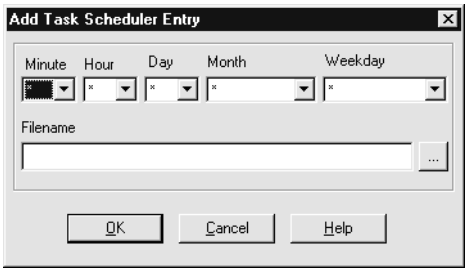
Introduction

This topic describes how to use the Task Scheduler to indicate the day and time you want to execute a batch file or script.

Scheduling a batch file or script

Use this procedure to schedule a batch file or script.

Step	Action
1	Click **Schedule Tasks** on the **Tools** menu. **System Response** The system displays the Task Scheduler dialog box.  **Reference** See the topic Task Scheduler Dialog Box in this chapter for instructions and a description of features. (Continued on next page)

(Contd) Step	Action
2	Click the **Add** button. **System Response** The system displays the Add Task Scheduler Entry dialog box. 
3	From the drop down list, select the appropriate time and date value.
4	Click the **Filename** text box and enter the full path and file name of the batch file or script. **Note** Alternatively, you can click **Browse** to display the Select File dialog box that enables you to search for the file.
5	Click **OK** to save your changes.

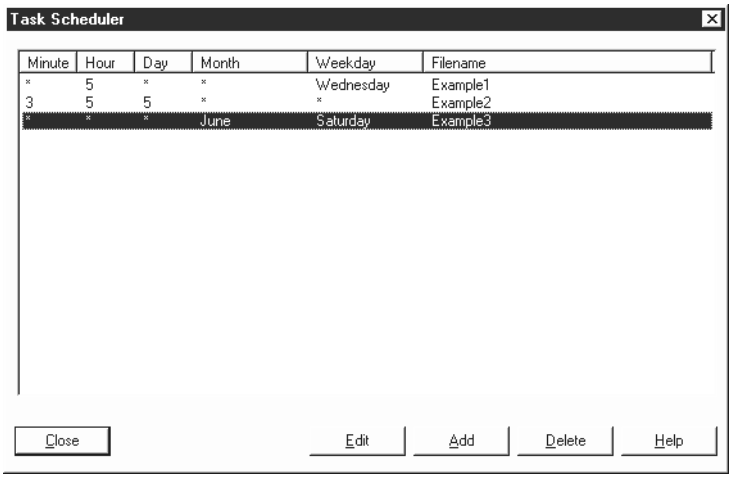
How to Edit a Scheduled Entry

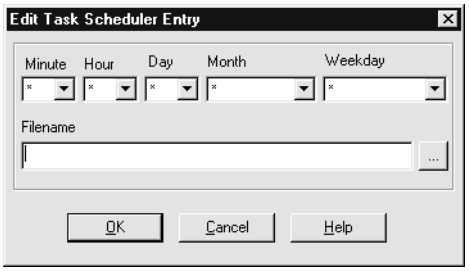
Introduction

You can use the Task Scheduler to change the date or time values or the file name entered.

Changing an entry

Use this procedure to change a schedule entry.

Step	Action
1	Open the Task Scheduler. **System Response** The system displays the Task Scheduler dialog box.  **Reference** See the topic Task Scheduler Dialog Box in this chapter for instructions and a description of features.
2	Select the entry you want to edit. (Continued on next page)

(Contd) Step	Action
3	Click the **Edit** button. **System Response** The system displays the Edit Task Scheduler Entry dialog box.  **Note** See the topic Add Task Scheduler Entry Dialog Box for a description of the fields for the Edit Task Scheduler Entry dialog box.
4	Select a value from the drop down menu in the field you want to edit.
5	Type the full path and filename of the batch file or script. **Note** You can also click the **Browse** button to display the Select File dialog box that enables you to search for the file.
6	Click **OK** to save your changes.

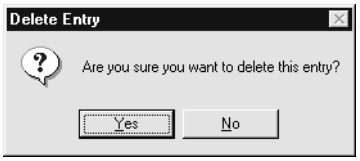
How to Delete an Entry from the Scheduler

Introduction

This topic explains how to delete a scheduled task from the Task Scheduler.

Deleting a task

Use this procedure to delete a scheduled task.

Step	Action
1	Open the Task Scheduler. **Reference** See the topic Task Scheduler Dialog Box in this chapter for instructions and a description of features.
2	Click anywhere on the row that contains the task you want to delete.
3	Click **Delete**. **System Response** The system displays the Delete Entry dialog box. 
4	Do you want to delete the entry? ◗ If YES, click Yes. **System Response** The system removes the task from the Task Scheduler. ◗ If NO, click No. **System Response** The systems returns to the Task Scheduler dialog box.

How to Run Scripts (UNIX Version)

Introduction

Gentran:Server for UNIX automatically uses **cron** to run a scheduled script at the specified time.

Note
Your system administrator can prohibit a scheduled script from running.

Using crontab to check scheduled tasks

To check the tasks you currently have scheduled outside of Gentran:Server, enter the following command at a UNIX prompt from any directory:

crontab -l

Scheduling Gentran:Server tasks outside of Gentran:Server

Use this procedure to schedule Gentran:Server tasks outside of Gentran:Server.

Step	Action
1	Copy the current list of your tasks by entering the following UNIX command from any directory: **crontab -l> jobs.txt** Where *jobs.txt* is a temporary file for storing tasks.
2	Use any text editor to edit the file, adding your Gentran:Server tasks to the current task list.
3	Save the file.
4	To overwrite the current task list, enter the following command: **crontab jobs.txt**

MTimer and Workstation Batch Files

Introduction

This topic discusses the use of **mtimer** in processing Gentran:Server Workstation batch files with the Run Task Scheduler tool.

Reference

After you read this topic, see the topic How to Run Scheduled Tasks (Workstation Version) in this chapter for step-by-step instructions.

About mtimer

For Windows platforms, you must have **mtimer** running at the time you want to run the unattended processes specified in the Task Scheduler.

Example

To run batch files daily, you must either activate **mtimer** daily or leave it on. You can leave **mtimer** on only if you leave your computer on with Windows running. You can close Gentran:Server without affecting **mtimer.**

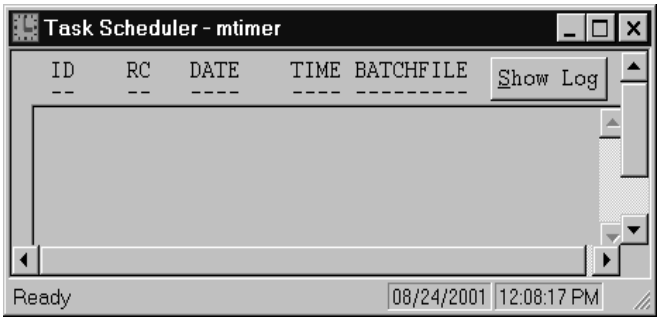
The system displays the **mtimer** window whenever **mtimer** is on. This window displays currently scheduled jobs. The system displays only the title bar if no jobs are scheduled.

The Task Scheduler mtimer dialog box

This illustration shows an example of the Task Scheduler mtimer window.

Click here to display menu

Double-click to stop **mtimer**



The **mtimer** window displays each scheduled task on a separate line. Each line contains the date and time as well as the batch file or script scheduled to run.

(Continued on next page)

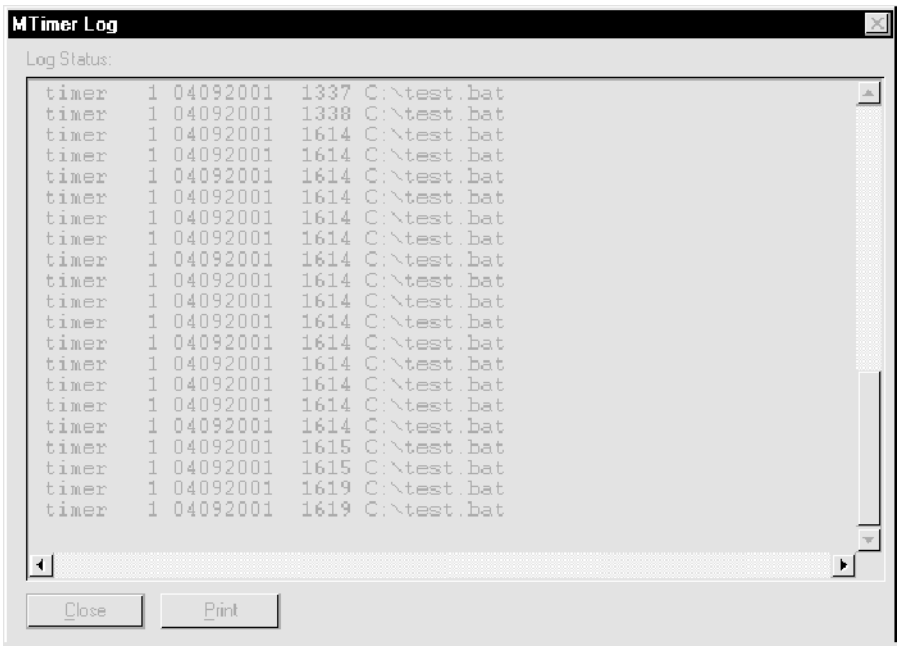
About mtimer files

When you activate **mtimer**, Gentran:Server creates three files. This table describes the files.

File	Description
unop.ran	Contains a list of tasks completed during this active session. Unless you elect to suspend processing, Gentran:Server deletes this file when you stop **mtimer**.
unop.log	Contains the list of completed tasks. Gentran:Server appends to this file with each new **mtimer** session, instead of deleting or overwriting it. This means it can grow very large. You should watch its size and periodically delete this log file manually. You can view this log on the MTimer Log dialog box while mtimer is running.
unop.err	Contains operating-system error messages in response to errors in the DOS commands included in your batch file.

MTimer Log dialog box

This illustration shows the MTimer Log dialog box.



How to Run Scheduled Tasks (Workstation Version)

Introduction

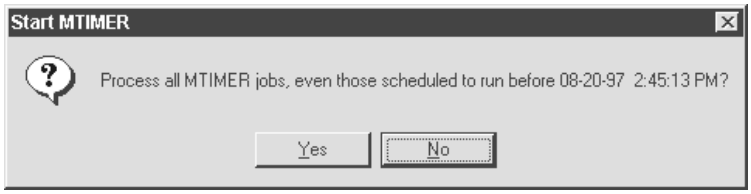
This topic contains step-by-step instructions for running scheduled tasks from the Gentran:Server Tools menu in the Workstation version of Gentran:Server.

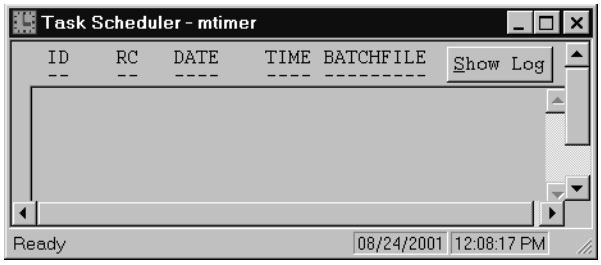
CAUTION

When you close Windows, mtimer automatically suspends job processing.

Procedure

Use this procedure to run scheduled tasks and activate **mtimer**.

Step	Action
1	Click **Run Task Scheduler** on the **Tools** menu. **System Response** Gentran:Server displays a message box that asks whether you want to run the tasks scheduled to run on the current date, but prior to the current time.  (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>2</td><td>Use this table to determine your action.
<table>
<tr><th>IF you want to...</th><th>THEN select...</th></tr>
<tr><td>Run all jobs, including those scheduled to run prior to the current time</td><td>Yes</td></tr>
<tr><td>Run only those jobs scheduled to run from the current time forward</td><td>No</td></tr>
</table>
System Response
The system displays the Tasks Scheduler - mtimer window.
 
</td></tr>
<tr><td>3</td><td>Do you want to display the unop.log file in the MTimer Log dialog box?
◗ If YES, click the Show Log button.
◗ If NO, continue with the next step.</td></tr>
<tr><td>4</td><td>Do you want to stop mtimer?
◗ If YES, GO TO How to Stop and Resume mtimer.
◗ If NO, you are finished.</td></tr>
</table>

How to Stop and Resume mtimer

Introduction

This topic contains instructions for stopping (or suspending), and resuming **mtimer** in the Workstation version of Gentran:Server.

About stopping or suspending mtimer

At any time during processing, you can either stop **mtimer** or suspend job processing.

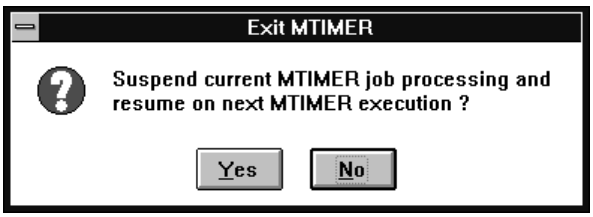
If you suspend job processing, Gentran:Server retains a list of the completed tasks. You have the option of resuming **mtimer** at any time in the future. When you resume **mtimer**, processing begins where it left off.

Stopping or suspending mtimer

Use this procedure to stop or suspend **mtimer**.

CAUTION

When you close Windows, mtimer automatically suspends job processing.

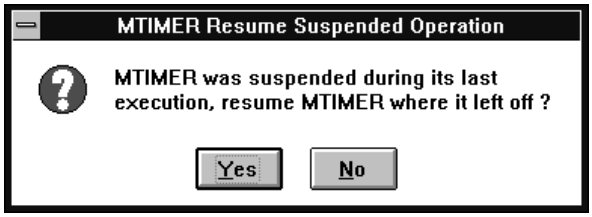
Step	Action
1	Double-click the control box bar in the **mtimer** window. **System Response** If there are jobs to be processed, Gentran:Server displays the following message.  **Note** The system does not display this message if there are no jobs to be processed. (Continued on next page)

(Contd) Step	Action	
2	Use this decision table to determine your action.	
	IF you want to…	**THEN click…**
	Suspend job processing. Suspending job processing retains the list of completed tasks. When you activate **mtimer** again, the system only runs tasks not completed previously.	Yes
	Stop **mtimer** and delete the list of completed tasks. The next time you activate **mtimer**, the system runs all tasks. This includes tasks run previously.	No

Note
When you suspend **mtimer**, the system retains the *unop.log* and *unop.err* files. However, if you stop **mtimer** and delete the list of completed tasks, Gentran:Server deletes the *unop.ran* file. This means that, the next time you activate **mtimer**, the system runs jobs that were already run.

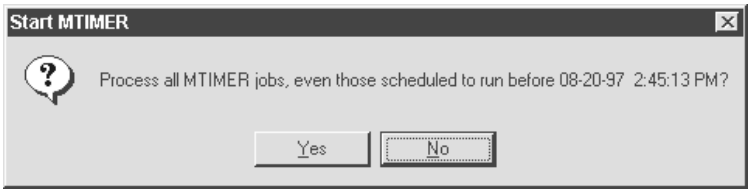
Resuming mtimer

Use this procedure to resume **mtimer** after you have suspended processing.

Step	Action
1	Click **Run Task Scheduler** on the **Tools** menu. **Note** You can also type **mtimer** at the command line. **System Response** Gentran:Server displays a message box asking whether you want it to resume the schedule at the point at which it stopped.  (Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="3">Action</th></tr>
<tr><td rowspan="4">2</td><td colspan="3">Use this decision table to determine your action.</td></tr>
<tr><td>IF you want to…</td><td>THEN select…</td><td>AND Gentran:Server…</td></tr>
<tr><td>Have Gentran:Server read the unop.ran file and resume job processing where it last stopped</td><td>Yes</td><td>resumes processing, omitting the files listed in the unop.ran file.

You are finished.</td></tr>
<tr><td>Run the job processing from the beginning, even if it means running completed jobs again</td><td>No</td><td>displays a message box that asks whether you want to run the tasks scheduled to run prior to the current time.

Continue with the next step.</td></tr>
<tr><td rowspan="4">3</td><td colspan="3">When this dialog box is displayed, use the decision table below to determine your action.
 
</td></tr>
<tr><td colspan="2">IF you want to…</td><td>THEN select…</td></tr>
<tr><td colspan="2">Run the jobs scheduled to run today prior to the current time.</td><td>Yes</td></tr>
<tr><td colspan="2">Run only those jobs scheduled to run from the current time forward.</td><td>No</td></tr>
<tr><td colspan="3">System Response
The system opens the Task Scheduler mtimer window.</td></tr>
</table>

Glossary

active window

The window that the next action will affect by the next action or that will receive the next data.

While you can have two or more windows open at a time in the Windows operating system, only one window can be the active window at any given time. The title bar of the active window is highlighted.

alphanumeric data

Data of data type alphanumeric (AN) or identifier (ID); i.e., text strings with characters A-Z, a-z, and 0-9.

alphanumeric expression

An expression that results in alphanumeric data. Also called a string expression.

application

The business software generating the business information that you are sending or receiving via EDI.

application data file

The electronically stored data that Gentran:Server loads into or extracts from your application software.

application description

Your company's description of the records and fields in an ASCII file used for your data.

Application Editor

The Gentran:Server tool that enables you to describe your application data.

ASCII

American Standard Code for Information Interchange.

ASCII is a standard character set that enables the communication of data between disparate computer devices. The standard ASCII character set consists of 96 displayed upper- and lowercase characters and 32 non-displayed control characters. EDI uses the ASCII extended character set, which includes foreign language, technical, and block graphics characters in addition to the 128 characters in the standard ASCII character set.

archive

The process of copying and saving processed EDI data.

archive data

Interchange data that was saved for the purpose of enabling you to recreate conditions at a specific point in time.

You can use archive data to trace the introduction of an error in the data and/or to retrieve an original version to effectively undo all changes made since that version was saved.

arithmetic expression

An expression that results in numeric data.

attributes

The values you assign to describe a record or field.

audit data

Data about interchanges that enables you to track, check, and reconcile interchanges and the functional acknowledgments you receive.

To ensure the accuracy of archiving and reconciliation, you must have unique control numbers across all documents for a single trading partner. The best way to do this is to use Organization records and maintain control numbers globally.

AutoCreate Application Description

A Gentran:Server tool that automatically creates an application description from a specified implementation guide.

The resulting application description always has variable length fields.

If you are planning to use both the AutoTrim tool and the AutoCreate Application Description tool, use AutoTrim first.

AutoMap The Gentran:Server feature that compares specified source and destination files and creates a map between them based on criteria such as field or element name, record or segment tame, and loop structure.

AutoTrim A Gentran:Server tool that automatically creates an implementation guide by customizing a standard document according to sample application data you supply.

If you plan to use both AutoTrim and AutoCreate, use AutoTrim first.

batch file A file command-line commands and DOS commands.

binary A representation of numbers to the base 2.

categories A user-definable record that enables you to group Trading Partnerships.

central audit directory The EDI History Audit directory Gentran:Server uses to store permanent history files.

check box A square to the left of an option in a dialog box. When you select the option, the square contains an X. You click the check box to select the option or to cancel the selection.

click To quickly press and release a mouse button. Unless otherwise specified, clicking refers to pressing and releasing the left mouse button.

client The computer in a client/server network that acts as the interface between the user and the server.

client/server

A computer network architecture in which data is stored and processing is performed on the server, which users access through the interface provided on the client.

clipboard

A temporary storage buffer in Windows for use when cutting or copying information from a Windows application and pasting it in the same or a different Windows application.

collapsed view

Within the Visual Mapper, displays all the segments, but hides all the elements, composite elements, and sub-elements.

column

For databases, a unit of information contained in a database table.

A column is a field in a database record.

command

A text string that initiates a specific action.

compliance checking

The automatic checking of an interchange for completeness.

If you request that the translator do compliance checking, it looks at the control numbers in the headers and trailers that bracket the set, group, and interchange. If the control number in the header matches that in the trailer, the translator assumes that the set, group, or interchange is complete.

In addition, compliance checking does the following:

- Checks that data fields do not fall short of minimum field lengths or exceed maximum field lengths
- Checks that loops are not used more often than the maximum use value allows
- Checks that dates use valid formats
- Checks that all data uses valid formats for the data type

composite element

An element composed of two or more sub-elements.

conditional expression

A complete 'When' expression that may be part of a longer mapping condition.

CONTRL message

A functional acknowledgment in the EDIFACT and ODETTE standards.

Contact Code

A user-defined code that identifies a contact individual within the trading partner organization.

While a Contact Code does not have to be unique in your system, it must be unique among Contact Codes within in a specific set of Interchange and Group IDs.

Types of identifiers sometimes chosen for Contact Codes are as follows:

- Document type
- Title
- Telephone number

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	Up to 15 characters
Example:	Purchase_order

contact name

The name of the contact individual within a trading partner organization.

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	Up to 35 characters
Example:	Sam_Huston

Contact File

A file consisting of records containing identifying information about the individuals you telephone, fax, write, or e-mail in the organizations with which you do business.

The Contact File, consisting of *contact.dat* and *contact.idx*, contains Contact records.

contact record

A record containing the name, address, and telephone numbers of an individual in your trading partner's organization.

You can have Contact records for some, all, or none of your trading partners. In addition, you can have multiple Contact records for a single Trading Partnership. Contact records reside in the Contact File.

control box

The box or icon that enables you to close the window; to control such window attributes as the size and location; to minimize or maximize the window, or to switch to other open applications through the task list.

The control box is in the top left corner of the window.

control envelope

The standard header and trailer segments Gentran:Server uses to identify transaction sets, functional groups, and interchanges.

Control envelopes ensure complete and accurate translation of data.

control number

The number that identifies part or all of a document.

Control numbers enable the translator to determine whether or not the document/message Gentran:Server is translating is complete. There are three types of control numbers

- Set control numbers
- Group control numbers
- Interchange control numbers

You and your partner pass the appropriate control numbers in the headers and trailers that bracket the set, group, and interchange. If the control number in the header matches that in the trailer, the translator assumes that the set, group, or interchange is complete.

You can maintain Interchange and group control numbers either globally or locally.

Control numbers are sometimes called envelope control numbers.

Allowable Characters:	Letters (A-Z, a-z) and numbers (0-9)
Allowable Length:	Up to 14 characters
Example:	199400001

cron

A UNIX operating system utility that runs commands and scripts according to a preset schedule. This is the executable file that activates the timer in the client/server version of Gentran:Server.

CTT segment

A special segment containing the transaction set totals for an X12 document.

There are two commonly used types of CTT elements in the CTT segment. The translator can generate both automatically. Depending upon the type of document, you may want to use only the first element or both elements 01 and 02. They are

- CTT01
- CTT02

CTT totals

Hash totals of items in the detail section of certain X12 transaction sets. CTT totals can include the following:

- Count of occurrences of a specific segment

  This is a count of the lines in the detail section, called CTT01.

- Hash total of the contents of a specific element

  This is a hash total of the values in the lines in the detail section, called CTT02. A hash total ignores signs and decimal points.

cursor

An icon that indicates the currently active location in a window.

The insertion point and the mouse pointer are both cursors.

data

Business information that is suitable for computer processing.

database driver

Special software to format data for a specific database application.

In Gentran:Server, the database driver determines the directory path of data sources as well as the database type.

data element dictionary

The section of the EDI standards documentation that explains the purpose and syntax of each data element that the standard uses.

data element dictionary number

The number identifying a data element in the data element dictionary.

data file

The file that contains the inbound or outbound data.

data format

Qualifiers that describe the arrangement or placement of data.

Data formats enable users to further define their input and/or output data, for example specifying:

- Whether to right justify or to left justify the data
- Whether or not to pad empty places
- Whether or not to remove null characters

data type

The type of data in a field (for example, alphanumeric, binary, numeric, date, time).

date-time data

Data of data type date (DT) or time (TM); i.e., data expressing a date and/or time.

date-time expression

An expression that results in date-time data.

default

A value that Gentran:Server automatically assigns.

default synonym

A value that Gentran:Server uses when none of the other substitution conditions are satisfied.

To indicate a default synonym, enter an asterisk (*) in the Original Value column.

As long as none of the other substitution conditions are satisfied, Gentran:Server uses the default synonym in the destination document even if the item that was to determine the substitution is not present.

delimiter

A symbol Gentran:Server uses to separate data items in an application file.

dialog box

An application window through which you enter information into the application.

directory path

The name of the directory and any directories above it, including the drive.

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	Up to 59 characters
Example:	.\maps

display box

A box that displays information.

You cannot edit information in a display box, but you can edit information in a text entry/display box.

document standards

The data dictionary and syntax describing agreed-upon standard formats for commonly-used business documents (for example, invoices and purchase orders).

Sometimes, document standards are simply called standards.

document translator

The EDI software that translates electronic document files from one format to another, typically from an application format to a standard-data format and vice versa.

Sometimes, document translators are simply called translators.

double-click

To quickly press and release a mouse button twice in quick succession.

Unless otherwise specified, double-clicking refers to pressing and releasing the left mouse button twice.

drop-down list box

A list box containing all available choices and with a down arrow on the side.

To use a mouse to make a selection from a drop-down list box, click on the down arrow to open the list box and then click on the desired value.

To use the keyboard to make a selection from a drop-down list box, press the down arrow key to move the focus (highlighting) to the selection and then press TAB.

Alternatively, select the current information and type the desired value over it.

Windows drop-down list boxes are similar to DOS choice lists.

EDI Electronic Data Interchange.

Application-to-application transfer of key business transaction information in a standard format via a computer-to-computer communication link.

ediarc The Gentran:Server program that controls archiving.

EDIFACT Electronic Data Interchange For Administration, Commerce, and Transport.

EDIFACT has been developed by the United Nations as a standard for international EDI.

edifrmat The Gentran:Server feature that formats the data you receive from your trading partner. It removes non-EDI characters and changes segment terminators to new line characters.

EDI standard A format to regulate syntax, structure, and content of transaction data.

element A piece of data in a segment. Elements are analogous to fields in an application description. Elements are variable-length fields.

element minimum and maximum length The minimum and maximum number of characters allowable for a data element.

In the standard, the minimum and the maximum are separated with a slash, with the minimum always appearing first.

element reference designator

An alphanumeric code that identifies the segment and the position of this element within the segment.

For example, N101 is an element reference designator, where N1identifies this as the N1 segment within the document and 01 identifies this element as the first element in the N1 segment.

element separator

A special indicator that marks the beginning of a new data element.

A character used to signal the end of each element in a segment.

Because EDI standards use variable-length elements, element separators are necessary to determine where one element ends and the next begins. The character used as an element separator should not be used for any other purpose in the file unless it is preceded by a release character.

The X12, TDCC, AND UCS standards often use asterisks (*) element separators.

The EDIFACT, ODETTE, and TRADACOMS standards often use plus signs (+) as element separators.

element type

The type of data an element passes.

Possible element type codes vary with the standard, but they may include some or all of the following:

- AN (or A) alphanumeric
- B binary
- DT date
- ID identifier
- N*n* numeric with implicit decimal point
- R*n* numeric with explicit decimal point
- TM time

envelope

a)The process of combining like interchanges.

b) Data segments that separate different types of data and carry address information.

c) A Gentran:Server tool that compresses multiple like interchanges into one.

error message

An indication that Gentran:Server is unable perform this process or has stopped performing the current process.

Do not confuse this message with an informational message, prompt, or warning message.

expanded view

Within the Visual Mapper, expanded view displays all elements, composite elements, and sub-elements, as well as all segments.

expert mode

A special mode for running Gentran:Server for use by EDI users who want more control when creating or editing mapping instructions.

The standard mode is the default mode in Gentran:Server. You must select expert mode on the User Setup dialog box or you remain in standard mode. However, once you select the expert mode, you remain in that mode until you clear the selection even if you close Gentran:Server and open it again. To open the User Setup dialog box, Click **User Setup** on the **Preferences** menu on either the Main or the Visual Mapper Toolbar.

FA Reconciliation Report

A report that enables you to check the reconciliation of functional acknowledgments that were sent and received.

An FA Reconciliation Report shows the following information for the selected interchanges, one functional group to a line:

- Translation date (for outbound interchanges) or received date (for inbound interchanges)
- Trading Partnership Code
- Trading partner's Interchange ID for this interchange
- Set ID
- Group control number
- Date functional acknowledgment was received (for outbound interchanges) or generated (for inbound interchanges)
- Status

To generate an FA Reconciliation Report, select the FA Reconciliation command from the Deploy menu and then select either the Inbound command (if you want to view inbound interchanges) or Outbound command (if you want to view outbound interchanges). To select the interchanges you want to include in the report, enter the desired criteria in the FA Reconciliation Ranges dialog box that appears. The report appears in a report window. To print the report, press F6.

To use a batch file or script to generate and print an FA Reconciliation Report, include the **fareport** command. Command line processing displays totals for each status type.

fast entry mode

A quick, but not graphical, mode for mapping items.

The fast entry mode enables you to type in the source field/element, the destination field/element, and then press RETURN to create the mapping association. This can be very fast if you are familiar with your data and if you are making only a few mapping associations in the map.

The tree mode is graphical and intuitive, but slower.

field

A discrete piece of data in a record, such as a quantity or a unit price.

field minimum and maximum length

The minimum and maximum number of characters allowable for a field.

file extension

A suffix that appears to the right of the period (.) in a complete file name.

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	From 1 to 3 characters
Example:	dat

While file extensions are not required, they are particularly useful in identifying the type of file (that is, out for output, txt for text, dat for data, etc.).

The complete file name is

(File name).(File extension)

A complete file name must be unique in its directory.

file generation number

A number Gentran:Server uses to identify files in EDIFACT; similar to an interchange control number in X12.

The file generation number resides in the actual document rather than in the envelope segments. The interchange control number resides in the envelope segments.

file name

A name that identifies a file. The file name appears to the left of the period (.) in a complete file name.

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	From 1 to 8 characters
Example:	2002X850

File names are required.

The complete file name is

(File name).(File extension)

While file extensions are not required, either the file name or the complete file name must be unique in the directory. If you have two files with the same name and in the same directory, you must use different file extensions for the files.

flat file

A non-database user-defined file.

focus

An indication that a certain window or screen element is active. The next action will affect the active item.

Screen elements include text and buttons. The title bar on the window with the focus is different from the title bar on other windows. The system highlights the text you select with the focus. Highlighted text has a different color background or appears in reverse video (that is, light text on a dark background). A button you select with the focus usually has a darker outline around it.

In Gentran:Server, you select the record/segment or field/element you want to edit by moving over it. When you make a selection, the system displays a thick box around the record/segment or field/element and the related attributes. This indicates the location of the focus.

functional acknowledgment (FA)

The standard transaction set Gentran:Server uses to acknowledge receipt of a transmission. The functional acknowledgment tells you if your trading partner received and processed a document you sent. It also can tell you whether your document contained EDI standards and compliance errors.

functional group

One or more transaction sets of the same type, from the same sender, to the same receiver, that Gentran:Server groups for transmission.

The functional group is referred to the group level envelope or the group envelope. This is distinct from the functional group that is part of a trading partner organization.

Generic Synonym Editor

The Gentran:Server tool that enables you to create and/or edit lists of terms and the terms you want to substitute for them when translating with various maps.

Do not confuse with Specific Synonym Editor.

generic synonym list

A synonym list that any map can use.

globally maintained control numbers

Control numbers that Gentran:Server uses when there are two or more Trading Partnership records for the same trading partner.

Globally maintained control numbers are unique for a single trading partner. Gentran:Server assigns the control numbers sequentially, regardless of the document you send to the trading partner. Gentran:Server stores globally maintained control numbers in the Organization records. The Interchange Organization record stores the last interchange control number sent and received, while the Group Organization records store the last group control numbers sent and received.

Group/ Application ID

A user-defined identifier for the sending or receiving organization at the functional group level.

The Trading Partner Agreement should specify the Group/Application IDs that Gentran:Server should use to identify the functional group level organizations of both parties to the agreement.

Types of identifiers sometimes chosen for Group/Application IDs are as follows:

- Telephone number
- Department number
- Department name
- Duns number

Allowable Characters: Letters (A-Z, a-z), numbers (0-9), and underscores (_)

Allowable Length: From 1 to 35 characters

Example: 313_555_1212

Do not confuse with the Group/Application ID with the Group Organization Code.

Group control header

Segment identifier for the header for the envelope containing the group control number.

Allowable Characters: Letters (A-Z, a-z) and numbers (0-9)

Allowable Length: From 1 to 3 characters

Example: GHR

Group envelope

One or more transaction sets of the same type, from the same sender, and to the same receiver, that Gentran:Server groups for transmission.

Sometimes, the group envelope is called the group level envelope or the functional group envelope.

Group organization

A division or functional group within a trading partner organization.

The group organization record includes the Group/Application IDs for you and your trading partner. This is where Gentran:Server stores the globally maintained group control numbers.

Group Organization Code

A code identifying a division or functional group within a trading partner organization.

The Group Organization Code is sometimes called the Group/Application Organization Code.

Types of codes sometimes chosen for Group Organization Codes are as follows:

- Regions
- Functions

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	From 1 to 15 characters
Example:	East_Division

Do not confuse the Group Organization Code with the Group/Application ID.

Group Organization record

A record containing identifying information about a group organization, as well as the group control number most recently received from or sent to that group organization.

There must be one Interchange Organization record for every Group Organization record. There must be one or more Group Organization records for every Interchange Organization record. Along with Interchange Organization records, Group Organization records reside in the Organization File.

The group organization record includes the Group/Application IDs for you and your trading partner. This is where Gentran:Server stores the globally maintained group control numbers.

header

The first segment of a transaction set, functional group, or interchange. A header segment begins and a trailer segment ends each transaction set, functional group, and interchange envelope.

historical record

The index files named *edihist.dat* and *edihist.idx* that store the location of the archived data. The files are built from the status records that translation produces. Together, they are the permanent audit file.

implementation guide

A specially-edited form of a standard that meets the requirements of a particular Trading Partnership.

inbound translation

Translation in which the source document is either a standard or an implementation guide.

informational message

Text containing feedback about, or the status of, the process just completed.

Do not confuse with an error message, prompt, or warning message.

insertion point

A bar or other icon indicating where the next text will appear or the next action will take effect.

interchange

A collection of transaction sets or messages.

An interchange is the exchange of a specified document with a specified trading partner and using a specified standard version. An interchange consists of an interchange header, any number of transaction sets, any number of functional groups, and an interchange trailer.

The use of functional groups is optional in the EDIFACT and TDCC standards.

interchange acknowledgment

An optional segment in an X12 interchange to acknowledge receipt of an unrelated interchange. An interchange acknowledgment does not take the place of a functional acknowledgment.

interchange control header

Segment identifier for the header for the envelope containing the interchange control number.

Allowable Characters:	Letters (A-Z, a-z) and numbers (0-9)
Allowable Length:	From 1 to 3 characters
Example:	HDR

Interchange ID

A user-defined identifier for the sending or receiving organization at the interchange level.

The Trading Partner Agreement should specify the Interchange IDs Gentran:Server uses to identify the interchange level organizations of both parties to the agreement.

Types of identifiers sometimes chosen for Interchange IDs are as follows:

- Telephone number
- Duns number

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	From 1 to 35 characters
Example:	General_Radio

Do not confuse with Interchange Organization Code.

Interchange organization

A trading partner at the organization level. An interchange organization must contain groups.

An Interchange Organization record contains Interchange IDs for both you and your partner. This is where Gentran:Server stores the globally maintained interchange control numbers.

Interchange Organization Code

A code identifying the interchange level of a trading partner organization.

Types of codes sometimes chosen for Interchange Organization Codes are as follows:

- Abbreviations
- Acronyms

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and underscores (_)
Allowable Length:	From 1 to 15 characters
Example:	GZ

Do not confuse with Interchange ID.

Interchange Organization record

A record containing all information specific to a single company.

join

The link that joins or connects one database table to another.

Joins form the relationships for a relational database. A join goes out of a field (that is, database column) in a record (that is, database table) and into a field in a higher-level (preceding) record.

While a record can have any number of joins coming into it from lower-level records, a record can have only one join going out of it to a higher-level record. Joins coming into a record can attach to the same or to a different field. In the Application Editor, the icon for a field from which a join goes out of a record appears yellow.

In Gentran:Server, joins are required only for databases used with outbound translation.

label

A unique identifier that Gentran:Server generates for every source and destination field/element in a map.

The label consists of a letter indicating whether this is a source (S) or a destination (D) item and a sequential number indicating the location of this item in the source or destination. Examples of labels are:

- S1
- S54
- D30
- D12

list box

In a dialog box, a list from which you can make one or more selections.

When using a mouse to make a selection from a list box, click on the desired item. If you want to select an item and immediately close the dialog box, double-click on the desired value.

When using the keyboard to make a selection from a list box, you usually press the arrows keys to move the focus (highlight) to the desired item and press TAB.

You can also select the current information and type the desired item name or value over it.

Windows list boxes are similar to DOS choice lists.

local audit directory

The EDI Status Audit directory in which Gentran:Server stores temporary audit files (*edistat.i* and *edistat.o*) and EDI data.

locally maintained control numbers

Control numbers that Gentran:Server uses when there is only one Trading Partnership record for a partner.

Locally maintained control numbers are unique for a single Trading Partnership record. Gentran:Server assigns the control numbers sequentially for each document type sent to each trading partner. Gentran:Server stores locally maintained control numbers in the Trading Partnership record.

logical expression

An expression that results in a logical value; either false (= 0) or true (not =0).

loop A sequence of related items that repeat within a transaction set.

macro A collection of commands that you use within Gentran:Server to simplify and organize mapping instructions.

many-to-many mapping A method of mapping two or more source fields/elements to two or more destination fields/elements.

The mapping GROUP for a many-to-many mapping contains two or more source items and two or more destination items. Some examples of many-to-many mappings include the following:

- Using the contents of one source item as the condition that determines whether or not the value(s) in the other source item(s) maps into the destination items.
- Using the contents of one source item as the condition that determines which of the other source items map into which of the destination items.

many-to-one mapping A method of mapping two or more source fields/elements to one destination field/element.

The mapping GROUP for a many-to-1 mapping contains two or more source items and only one destination item. Some examples of many-to-one mappings include the following:

- Using the value in one source item as the condition that determines whether or not the value in a second source item maps into the destination item.

  This is the most common type of many-to-1 mapping.
- Concatenating part or all of the value in one source item with part or all of the value in another source item and mapping the result into the destination item.

map A file that contains the relationships between:

- The segments and elements of a standard EDI document and the data fields on your application,
- The segments and elements of two different standards, or
- The records and files of two different applications.

Map File The *<mapname>.vmp* file that contains a defined map.

mapping

The process of associating data fields or elements in your source document to corresponding data fields or elements in your destination document.

mapping association

The process of associating data fields or elements in your source document to corresponding data fields or elements in your destination document.

mapping compiler

A compiler that converts a Map File into a Mapping Table.

mapping condition

Qualifying term used in some mapping instructions to indicate when Gentran:Server should perform the mapping part of the instruction and when the instructions should be ignored. Mapping conditions begin with “When”.

mapping expression

A complete 'Map to' expression that may be part of a longer mapping.

For example, the following are mapping expressions:

- Map S3 to D4
- Map S7 to D12
- Map S11 to D3

mapping GROUP

A specific association between source and destination data.

mapping instruction

A set of information that controls special operations on mapped data during translation.

mapping mini-report

A list of the mapping GROUPs to which the selected item belongs and lists of all items in each GROUP.

To see a mapping mini-report, you select a mapped item.

mapping operation

Action you can currently perform to create mapping instructions.

When you first open the Mapping Instructions window, your available mapping operations are as follows:

- Add a mapping
- Add a condition

To see the list of currently available operations, click the Operations list box.

mapping table file

The file that contains the result of compiling a Map File. The file extension is *.TBL* for a map file. See TBL File.

marking

The process of flagging a line that you want to work with.

mass change

The process of changing multiple Trading Partnership records at one time by using a model TP record.

master file

The original, source version of a file.

maximize button

A button that enables you to enlarge the window to fill the entire screen.

The maximize button is in the top, extreme right side of the window. The minimize button is to the left of the maximize button.

menu

A list of related commands.

Menu bar

The row of menu names that runs across the top of a window immediately under the title bar.

message

An EDIFACT term referring to a collection of segments that together represent a standard business document.

X12 terminology refers to a message as a transaction set.

minimize button

A button that enables you to shrink the window to an icon.

The minimize button is in the top, right side of the window with the title bar to the left and either the maximize or the restore button to the right.

Model TP record

A template for Trading Partnership records. The Model Trading Partnership record should contain default values for as many fields as possible.

While Base Trading Partnership records are used with maps, Model TP records are not. Use either Model TP records or Base Trading Partnership records, when performing mass adds or mass changes.

mouse

A device that enables you to point to or select one or more items on a computer screen.

mouse button

A button that is under one of your fingers when you put your hand on a mouse.

A mouse can have two or three buttons, but Gentran:Server uses only the left and right mouse buttons.

mouse pointer

The icon that specifies where the action of the mouse will take effect.

The mouse pointer is sometimes called the mouse cursor.

mtimer

The Gentran:Server feature you use to start, stop, and resume unattended processes in the Workstation version of Gentran:Server.

Navigator

A Gentran:Server tool that uses interviews or dialogs to lead you through the process of Visual Mapping.

The Navigator is a quick and easy way to perform the tasks involved in EDI. While it is beneficial for all users, those users new to EDI will find the Navigator especially helpful.

numeric data

Data of data type numeric (N or N*n*) or real (R or R*n*); i.e., real or integer numbers with characters 0-9, perhaps including plus signs (+), minus signs (-), and/or decimal points (.).

ODBC

Open Database Connectivity.

Developed by Microsoft Corporation, ODBC provides standardized database access methods and tools.

ODETTE

Organization for Data Exchange by TeleTransmission in Europe.

ODETTE is a standard developed in the United Kingdom for use in the automobile industry.

one-to-many mapping

A method of mapping the contents of a simple source field/element into two or more destination fields/elements.

The mapping GROUP for a 1-to-many mapping contains only one source item and two or more destination items. Some examples of 1-to-many mappings include the following:

- Mapping the contents of the source item to two or more destination items without alteration.
- Mapping the contents of the source item to two or more destination items with alterations in some cases.
- Mapping part of the contents of the source item to two or more destination items with or without alteration.
- Mapping part of the contents of the source item to one destination item and part to another destination item with or without alteration.
- Mapping the source item to one destination item when the source value satisfies one condition and to another destination item when the source value satisfies another condition.

one-to-one mapping

A method of mapping the contents of a source field/element into a destination field/element.

The mapping GROUP for a 1-to-1 mapping contains only one source item and one destination item. To create a 1-to-1 mapping, map the contents of the source item to the destination item with or without alteration.

When you map the entire contents of a source item unchanged into a destination item, this is the simplest possible type of mapping.

option button

A round button used to select one option from a mutually exclusive set of options.

Organization File

A file consisting of records containing identifying information about the interchange and group organizations with which you do business.

The Organization File, consisting of *org.dat* and *org.idx*, contains the following types of records:

- Interchange Organization records
- Group Organization records

You cannot have more than one active Organization File in your Gentran:Server installation. To maintain one or more inactive Organization Files, store them each in a separate directory (with or without an inactive Trading Partnership File and Contact File). To make the inactive Organization File active, use the File Locations command on the Preferences menu to make its directory the default directory for trading partner files. Any other trading partner files in the new default directory become active at the same time.

Organization maintenance

The process of creating and maintaining the Organization File, which contains identifying information about each of the organizations with which you do business.

outbound translation

Translation in which your source document is application data.

production data

Data exchanged for the purpose of conducting business as opposed to data exchanged to test maps and other files.

Do not confuse with test data.

prompt

A request for additional information that Gentran:Server needs in order to continue the process.

Do not confuse with an error message, informational message, or warning message.

push button A symbol or icon that initiates some action when you click it.

reconciliation The process of viewing functional acknowledgments, viewing data with the status of Errors, and correcting the EDI data.

Reconciliation ID record A record containing a set of interchange and group IDs used with functional acknowledgments.

record A defined sequence of related fields.

record ID The field that identifies the record to Gentran:Server.

release character A character that indicates that the following character is to be treated as text, rather than as a control character.

For example, if you are using a dollar sign ($) as the release character and a plus sign (+) as an element separator, text reading as follows:

total of 9 + 3

should read as follows:

total of 9 $+ 3

Release characters are used only with EDIFACT, TRADACOMS, and ODETTE standards.

requirement designator The single-character code used in the data element dictionary and segment directory to indicate whether the use of an element or segment is floating (F), conditional (C), mandatory (M), optional (O), or relational (X).

Requirement designators also appear in application descriptions to indicate whether the use of a record or a field is conditional (C), mandatory (M), optional (O), or relational (X).

The meanings of these designators are as follows:

Floating	This data type is only for an element on the NOTE (NTE) segment, indicating that it may appear anywhere in the transaction set between the transaction set header and the transaction set trailer.
Conditional	The presence of the item depends on the presence of specific other items or values.
Mandatory	The item must be present.
Optional	The presence of the item is at the option of the sending party.
Relational	This is a complex conditional relationship requiring the presence of an item based on the presence of others in its pair or group, the exclusion of an item based on the presence of another item, the presence of an item based on the absence of other items in its group, or the presence of at least one other item in a group based on the presence of the first item in the group.

Not all standards use all requirement designators.

restore button A button that enables you to restore the window to its original size, which is neither an icon nor full-screen size.

{bmc RESTRBUT.BMP}Restore button

The restore button is in the top, right side of the window with the minimize button to the left.

row For databases, a single database record in a collection of database records.

script file A file that contains command-line commands and UNIX commands.

scroll bar Horizontal and vertical bars that enable you to move the image around in the window.

The vertical scroll bar is on the right side of the window, and the horizontal scroll bar is at the bottom of the window. The scroll bars appear only if there is additional information that cannot be seen. To use the vertical scroll bar to move the image down with respect to the window, click on the up arrow. To use the vertical scroll bar to move the image up with respect to the window, click on the down arrow. To use the horizontal scroll bar to move the image left with respect to the window, click on the right arrow. To use the horizontal scroll bar to move the image right with respect to the window, click on the left arrow.

Each scroll bar contains an elevator button that indicates where the currently displayed image is with relation to the entire image. To use the elevator button to move the image around in the window, move the mouse pointer to the elevator button and press the left mouse button. Moving the mouse then moves the elevator button in the same vertical or horizontal direction as long as you hold down the left mouse button.

segment

A defined sequence of related elements. Segments are analogous to records, which are used in application descriptions. A segment begins with a segment ID and ends with a segment terminator.

segment directory

The section of a standards book that lists, describes, and specifies the use of the segments in building sets used by that standard.

segment ID

In a segment, the first two or three characters that uniquely identify the segment.

For example, ST is the segment ID for the segment used as a transaction set header. DTM is the segment ID for the segment used to give the date or time.

segment terminator

A special indicator that marks the end of a variable-length record or segment.

The character used to designate the end of a segment.

Because EDI standards use variable-length segments, segment terminators are necessary to determine where one segment ends and the next begins. The character used as a segment terminator should not be used for any other purpose in the file.

The new line character (Hex 0A) is sometimes used as a segment terminator.

server

The computer in a client/server network that performs the system security, data storage, and major computing tasks.

Set/Message ID

A code, found in the standards, that uniquely identifies the type of document for which data is being translated.

For X12, TDCC, UCS, and VICS Standards,

Allowable Characters:	Numbers (0-9)
Allowable Length:	3 characters
Example:	810

For EDIFACT, ODETTE, and TRADACOMS Standards,

Allowable Characters:	Letters (A-Z)
Allowable Length:	6 characters
Example:	INVOIC

shaded item

An unavailable item (for example, a command or a Toolbar button) in a window or dialog box.

shortcut key

A key combination that enables you to use the keyboard to select a command, menu, push-button, radio button, or check box quickly.

The shortcut key combination includes the Alt key plus the key for the underscored letter or letters. You must keep the Alt key pressed while typing the other keys.

simple element

An element that cannot be divided into sub-elements.

specific synonym list

A synonym list used in a specific map.

speed key

A key or key combination that enables you to use the keyboard to select a command quickly.

Function keys can be speed keys, as can key combinations using the Ctrl key plus letter keys.

SQL

Standard Query Language.

Standard Query Language consists of standardized database commands to generically connect, select, query, and/or process the data in databases.

SQL Command File

A file containing the database driver that the translator is to use (if it is not overridden at runtime).

The SQL Command File also contains the SQL commands to select or extract the data to be translated from the proper database tables. Using the join information, Gentran:Server extracts the data from the database and puts it into a hierarchical order (in a temporary answer set) that the translator can easily process.

standard

A major data format model used for EDI (for example, X12, EDIFACT). Includes the rules and guidelines for formatting or structuring electronically transmitted documents.

standard data file

The electronically stored data conforming to the syntax rules of the EDI document standards.

Standard data files always have the *.std* extension.

standard description

The standard version files available in Gentran:Server.

standard format

A format intelligible to computerized data management systems.

Standard/IG Editor

The Gentran:Server feature that enables you to edit standards and create implementation guides.

Whether you edit a standard or an implementation guide, the edited result is an implementation guide.

standard mode

The default mode for running Gentran:Server for use by EDI users who want to quickly and easily create or edit mapping instructions.

The standard mode is the default mode in Gentran:Server. You remain in standard mode until you select the expert mode on the **User Setup** dialog box. Once you select expert mode, you must clear the selection before Gentran:Server will return to standard mode. To open the **User Setup** dialog box, click User Setup on the **Preferences** menu located on the **Main** or the **Visual Mapper** Toolbar.

Standard Version

The version and release number of the EDI standard you agree to use for a Trading Partnership.

StatusBar

A band that contains informational messages and data about the current status of the application in the window.

The StatusBar is along the bottom of a window.

status record

A temporary audit file name *edistat.i* or *edistat.o*, that Gentran:Server creates during the translation process. This file contains the directory path and file name for the EDI data you receive or generate. The record does not contain the actual EDI data.

sub-element

An element that is a component of another element.

sub-element separator

A character used to signal the end of each sub-element in an element.

EDI standards use variable-length sub-elements and must sub-element separators to identify where one sub-element ends and the next begins. If the character you use as a sub-element separator is used for any other purpose in the file, you must precede it with a release character.

Sub-elements are used only in X12, TDCC, and UCS standards. While EDIFACT, ODETTE, and TRADACOMS standards have the same concept, they call them simply components of a composite element.

synonym

A character string Gentran:Server will substitute for a given application field or data element value.

Synonym Editor

The Gentran:Server feature that enables you to create or edit change synonym lists.

synonym list

A list of terms and their equivalent substitutes for a given application field or data element value that Gentran:Server uses for mapping an applicable value.

There are two types of synonym lists -- generic and specific. You can set up a generic synonym list once and then use it to substitute values in many maps. You can use a specific synonym list to substitute values in only one specific map.

A synonym list contains pairs of values: Original value and substitute value. The original value, substitute value, or both can contain spaces.

Each synonym list can have a up to 10,000 rows.

The Synonym Editor is case-sensitive.

system variable

A type of buffer to and from which you can map values.

A system variable has a value of zero (0) until you map a value to it.

In the Mapping Instructions window, you automatically create a system variable by naming it. The name must start with a dollar sign ($). Gentran:Server automatically adds the dollar sign for you when in standard mode.

You must remember to include the dollar sign when in expert mode, with no spaces between that and the rest of the name.

Allowable Characters:	Letters (A-Z, a-z), numbers (0-9), and dollar sign
Allowable Length:	From 2 to 20 characters (including the dollar sign)
Example:	$specialvalue

table

For databases, the description or layout of a database record.

Task Scheduler

A tool in Gentran:Server that you use to specify a batch file and the date and time for execution of that batch file.

In Windows, use **mtimer** to start a search for the specified batch file. **Mtimer** also searches for the wait, or the specific date and time of the scheduled file execution.

To use **mtimer,** click **Activate Mtimer** on the **Deploy** menu. The Deploy menu is found on the Main Menu.

In UNIX, **mtimer** is not used. Instead, Gentran:Server writes the schedule to the file *crontab.dat* in your current working directory. Gentran:Server automatically uses **cron** to activate the process unless your system administrator prohibits it from doing.

Using Task Scheduler in UNIX deletes any tasks currently scheduled from outside of Gentran:Server.

To retain jobs currently scheduled from outside of Gentran:Server, you must first copy the *crontab* file. (It is in the */usr/spool/cron/crontabs* directory and has your user name as the file name.) You then add your Gentran:Server tasks and save the file. Finally, use the UNIX **crontab** command to overwrite the earlier file.

TBL File

The Mapping Table File that contains the result of compiling a Map File. Gentran:Server creates this file in the map directory.

TDCC

Transportation Data Coordinating Committee.

The TDCC was an early (1960s) standards-setting committee established to assist American transportation organizations in coordinating EDI standards for air, motor, rail, and ocean transportation.

temporary file

A file on the client that Gentran:Server uses during editing and compiling.

test data

This is data you exchange solely to test the maps and files created for a new Trading Partnership.

Do not confuse with production data.

text box

A box into which you enter alphanumeric text to provide data that the application requires.

Thesaurus Editor

The Gentran:Server feature you use to create or change Thesaurus lists.

thesaurus list

A list of element names that you want Gentran:Server to consider a match for the original element name when using AutoMap.

Title bar

The bar containing the name of the window.

The title bar is at the very top of the window between the control box and the minimize and maximize buttons. When the window is the active window, the title bar is displayed in a color different from other windows (the color depends upon the color scheme selected in the Windows Control Panel).

To move the window around on the screen, move the mouse cursor to the title bar, hold down the left mouse button, and then move the mouse. You will see the movements of the window matching those of your hand.

Toggle

To reverse the state of a command.

If it is Off, it turns On. If it is On, it turns Off.

Toolbar

A bar containing buttons that enable you to initiate common actions quickly.

You must use the mouse to select a button on the toolbar. To initiate an action with a toolbar button, simply move the mouse pointer onto the button and click the left mouse button.

TRADACOMS

The acronym for TRAding DAta COMmunicationS. TRADACOMS was developed by the Article Number Association in the United Kingdom as a standard for EDI.

TRADACOMS record

A record containing all the supplementary Trading Partnership information for use with TRADACOMS standards.

trading partner

The company, division, or group with whom you are exchanging business data via EDI.

Trading partner administration

The process of creating and updating as necessary the files that contain information related to your trading partners.

The TP admin (trading partner administration) files include

- Trading Partnership File
- Organization File
- Contact File

Trading Partner Agreement

An agreement between trading partners outlining the terms of EDI.

A typical Trading Partner Agreement states the following:

- The EDI standards that each trading partner will use
- The documents that the trading partners will exchange
- The method of communication
- Any security procedures
- How each trading partner receives, accepts, or rejects transmissions

Trading partner files

Those files holding information about trading partners, specifically

- Trading Partnership File
- Organization File
- Contact File

Gentran:Server always stores these three files in the same directory -- the default directory for trading partner files.

Trading Partner record

One of the five records maintained in Trading Partner files:

- Trading Partnership record
- Interchange Organization record
- Group Organization record
- Contact record
- TRADACOMS record

Trading Partnership

An arrangement with a specific organization to exchange information in a specific document type and using a particular standard version.

Trading Partnership Code

A user-defined code that uniquely identifies a Trading Partnership record. Normally, the Trading Partnership record describes a unique trading partner and document combination. The Trading Partnership Code must contain from 1-15 alphanumeric characters. Spaces and special characters are NOT allowed.

Trading Partnership File

A file consisting of records containing information about the Trading Partnerships you establish.

The Trading Partnership File, consisting of *tp.dat* and *tp.idx*, contains Trading Partnership records.

You can have only one active Trading Partnership File in your Gentran:Server installation. To maintain more than one Trading Partnership files, store each inactive file in a separate directory (with or without an inactive Organization file and Contact file). To make an inactive Trading Partnership File active, you make its directory the default directory for trading partner files. Use the File Locations command on the Preferences menu to change the default directory.

Trading Partnership record

A record containing information about one of your established Trading Partnerships.

Trading Partnership search

When searching for one or more Trading Partnership records, a string you enter to match a string in one of the fields in Trading Partnership records.

Enter an asterisk (*) to indicate that Gentran:Server should consider all remaining characters in a string to be a match.

Enter a question mark (?) to indicate that Gentran:Server should consider any character in this position in the string a match.

trailer

The segment you use to identify the end of a transaction set, functional group, or interchange.

The trailer contains identifying information such as the control number that matches the header control number, segment count for transactions sets, transaction set count for functional groups, or functional group count for an interchange.

transaction set

A set of segments which convey information equivalent to one document, such as a purchase order.

X12 term referring to a collection of segments that together represent a standard business document.

EDIFACT terminology refers to a transaction set as a message.

transaction set ID

The string that uniquely identifies a transaction set or business document in a specific standard.

X12 uses three-character IDs (for example, 850 identifies a purchase order). EDIFACT uses six-character IDs (for example, INVOIC identifies an invoice).

transaction set tables

The section of a standards book that describes how you can use segments within a transaction set.

Typically a transaction set listing groups the segments into three tables: the header table, the detail table, and the summary table.

translation

The conversion of data from one format to another.

Translation Summary Report

A report that shows the following information for the selected interchanges, one functional group to a line:

- Trading Partnership Code
- Trading partner's Interchange ID for this interchange
- Interchange control number
- Group control number
- Set ID
- Translation date
- Number of sets translated
- Number of characters

In addition, this report shows a grand total for the number of sets and the number of characters in all interchanges included in the report.

To generate a Translation Summary report, select **Translation Summary** on the **Deploy** menu. Gentran:Server then displays the Translation Summary Ranges

dialog box. Select the interchanges you want to include in the report and click OK. Gentran:Server then generates the report and displays it in a report window. To print the report, click **Print** on the report window.

To use a batch file or script to generate a Translation Summary Report, include the **transrpt** command.

tree mode

A graphical and intuitive mode for mapping items.

The tree mode displays items in a vertical list, with their IDs, names, and attributes. If the list displays only records/segments, you can select the Expand All command on the View menu to display the fields/elements as well. If the list displays both records/segments and fields/elements, you can select the Collapse All command on the View menu to see fields/segments only. (This is useful for understanding the loop structures in your data.)

If you display both sides of a map in tree mode and expanded, you can create mapping GROUPs by simply clicking the left mouse button on the item(s) on the source side, clicking the left mouse button on the item(s) on the destination side, and clicking the right mouse button. Gentran:Server puts an M in the icon of every item (that is, **{bmc MAP1ICON.BMP})** in the GROUP to indicate it is part of a mapping.

The fast entry mode can be quicker, but it is not graphical or intuitive.

trigram

Three-letter combination used for searches.

The AutoMapper searches for field/element matches by using various strings of three contiguous letters in the field/element names. For this reason, the AutoMapper will not find matches for two-letter field/element names. You should avoid two-letter field/element names whenever possible.

UCS

Uniform Communications Standard.

The UCS is an X12 subcommittee on document standards for the grocery industry in the US.

user-defined file

A file containing the application data that is input to the translator for outbound translation.

VAN

Value Added Network. A communications service that acts as a clearing house for EDI trading partners.

VAT Report

Value Added Tax report.

A VAT report is required by Great Britain.

VICS

Voluntary Interindustry Communications Standards.

VICS has been developed as a standard for EDI in the retail industry.

Visual Mapper

The Gentran:Server feature you use to create a map visually. The mapper displays the source document on the left side of the window and the destination document on the right.

warning message

An indication of a possible problem that does not stop processing.

Do not confuse with an error message, informational message, or prompt.

wildcard

A universal match for Trading Partnership record searches.

To indicate a wildcard for one of the following fields in a Trading Partnership record, enter a dollar sign ($):

- Your Interchange ID
- Your Partner's Interchange ID
- Your Group/Application ID
- Your Partner's Group/Application ID
- Set ID
- Standard Version

WINS

Warehouse Information Network Standards.

WINS is an X12 subset that applies to grocery warehouses and refrigeration warehouse document standards.

working file A file that Gentran:Server stores in the user's working directory on the server while the user has it checked out for editing.

working file directory The directory Gentran:Server creates on the server to hold the files that a user is editing.

X12 The ANSII subcommittee devoted to developing document standards for EDI in the US.

X12 also refers to the standards developed by the committee.

zero-to-one mapping A method of entering a constant into a destination field/element.

The mapping GROUP for a 0-to-1 mapping contains no source items and only one destination item. To create a 0-to-1 mapping, map text or a number to the destination item.

Sometimes, a 0-to-1 mapping is called a literal.

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