Gentran:Server® for Windows®

Forms Integration
ANSI Tutorial Guide

Version 5.2

Sterling Commerce
An IBM Company

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Glossary

About This Guide

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Introduction

Welcome	Welcome to Gentran:Server® Windows® Forms Integration subsystem, Sterling Commerce's Electronic Data Interchange (EDI) form-generation software for the Windows operating system. Gentran:Server provides you with the tools that you need to design forms to facilitate the keying and printing of EDI documents.

What's in this manual

Overview	This manual contains a tutorial for Gentran:Server Forms Integration, using the ANSI 92.1 standard. This tutorial includes a print form example (purchase order) and a screen entry form example (invoice). The purpose of this tutorial is to break the form creation process into concise and understandable steps, using examples that enable you to understand and master the tasks and processes required to create your own forms.

Complete the print form tutorial first. After you have mastered the steps involved in creating a print form, you can begin the tutorial for the screen entry form. |

Related manuals   To access reference information, refer to the Gentran:Server Forms Integration online Help or *Forms Integration User's Guide*. For additional information on the various tasks described in this manual, refer to the *Forms Integration User's Guide*.

Intended audience   This manual is intended for the following users:

◗   Technical users—users with a detailed knowledge of the Windows operating system, networking, databases, and communications.

◗   Novice-to-average experienced users—users who are new to Gentran:Server for Windows, EDI, or both.

◗   EDI Coordinators—users responsible for creating and maintaining the transfer of EDI data between Trading Partners.

Prerequisite knowledge   The audience using this software should be familiar with:

◗   PC and Microsoft$^{®}$ Windows functions

◗   EDI concepts

◗   EDI standard structure

◗   the internal application format

◗   data mapping concepts

◗   Gentran:Server® Windows® product

Description of Contents

Overview

The Forms Integration ANSI Tutorial contains the tasks associated with using the Forms Integration subsystem.

Organization of chapters

The tutorial guide is organized into the following chapters:

◗ Chapter 1, Getting Started, explains the content, organization, conventions, and system requirements. This chapter describes how to build forms and how to customize global EDI date formats.

◗ Chapter 2, Creating a Print Form, explains the tasks necessary to create a print form for an ANSI purchase order (ORDERS).

◗ Chapter 3, Creating a Screen Entry Form, explains the tasks necessary to create a screen entry form for an ANSI invoice (INVOIC).

◗ The Glossary contains definitions of Forms Integration and Gentran:Server terms and concepts.

Online Help

Overview   The majority of the Gentran:Server for Windows Forms Integration User's Guide
documentation is also contained in the online Help system.

Getting Support

Introduction

Sterling Commerce's Gentran:Server software is supported by trained product support personnel who are available to help you with product questions or concerns.

Note
Gentran:Server Customer Support does not support non-Sterling Commerce products (e.g., SQL Server, Oracle, etc.), but can assist you in configuring non-Sterling Commerce products to work with Gentran:Server.

Phone number

For assistance, please refer to your *Getting Started Guide* to determine which support phone number you should use.

Before calling support

To help us provide prompt service, we ask that you do the following:

◗   Attempt to recreate any problem that you encounter and record the exact sequence of events.

◗   When you call product support, you should be prepared to provide us with the information below.

Information	Description
Identification	Your company name, your name, telephone number and extension, and the case number (if the question refers to a previously reported issue).
System Configuration	The Gentran:Server version (and any service packs installed) and information about the primary Gentran system controller and all machines experiencing problems, including: the Windows operating system version, amount of memory, available disk space, database version, Microsoft Data Access (MDAC) version, and Internet Explorer version. Also, please describe any recent changes in your hardware, software, or the configuration of your system.
System Data Store	Which machines contain folders in the system data store?
Error Messages	Record the exact wording of any error messages you receive and the point in the software where the error occurred, as well as any log files.
Attempted Solutions	Record any steps that you took attempting to resolve the problem and note all the outcomes, and provide an estimate on how many times the problem occurred and whether it can be reproduced.

Accessing the Sterling Commerce Support Web Site

The Sterling Commerce Customer Support Web Site contains valuable information about getting support for Gentran:Server for Windows, including the:

- ◗ scope of support services
- ◗ customer support policies
- ◗ call prioritizing
- ◗ customer support phone directory
- ◗ how to create new Support on Demand cases
- ◗ how to check the status of Support on Demand cases
- ◗ how to add information to Support on Demand cases

The Customer Support Web Site is constantly updated and all Sterling Commerce customers have access to it. This web site also contains the most recent product updates and is a valuable source of product information.

Reference
Refer to the *Getting Started Guide* for information on how to access the Customer Support World Wide Web Site.

Documentation

The Customer Support Web Site contains a documentation library, which has the entire Gentran:Server for Windows documentation set. You can download the product manuals in PDF format from this library at any time.

CHAPTER

1

Getting Started

Contents

Introducing Forms Integration

Overview

The Gentran:Server® Windows® Forms Integration subsystem enables you to design forms to facilitate the keying (screen entry) and printing (print) of EDI documents that you receive inbound or send outbound.

What is a form?

A form is a set of instructions you define in the Forms Integration subsystem that indicates how the system should format data. When you compile the form, Gentran:Server generates a translation object. After you register the translation object with Gentran:Server and associate the translation object with a partner relationship, the system uses the translation object to format EDI documents. The Forms Integration subsystem enables you to create print and screen entry translation objects.

What is a print translation object?

A print translation object organizes and formats the printout of EDI documents that are received from or sent to the trading partners for which you have established an inbound or outbound trading relationship that utilizes that print translation object. The print translation object enables you to view the EDI document in an easy-to-read format.

What is a screen entry translation object?

A screen entry translation object provides a standardized format for keying an EDI document into the Document Editor for translation and transmission to your trading partners. The screen entry translation object ensures that your users key all the data necessary to create the required EDI document.

Gentran:Server generates the translation object format based on the EDI file format in the EDI File Format Pane and displays that format in the Layout Pane.

Navigation

Overview   You can access the Gentran:Server Forms Integration Window in one of four ways:

◗   Click the menu option from the Main Menu Bar.

◗   Click the appropriate button on the Main Toolbar.

◗   Click or double-click the appropriate part of the form.

◗   Click a form component (EDI File Format Pane or Layout Pane) with the right mouse
     button to access a shortcut menu that contains all the functions that are currently
     available for that form component. The shortcut menus enable you to quickly and
     easily access available functionality. The content of the shortcut menus varies,
     depending on the type and level of the selected form component.

Note
When you start Gentran:Server, the Main Menu Bar contains a subset of menu items. The
full set of menu items is displayed after you create a new form or open (load) an existing
form.

Forms Integration Window

This diagram illustrates the Forms Integration Window.

Control Menu
Title Bar
Minimize/Maximize Buttons
EDI File Format Pane
Status Bar
Layout Pane
Main Menu Bar
Main Toolbar
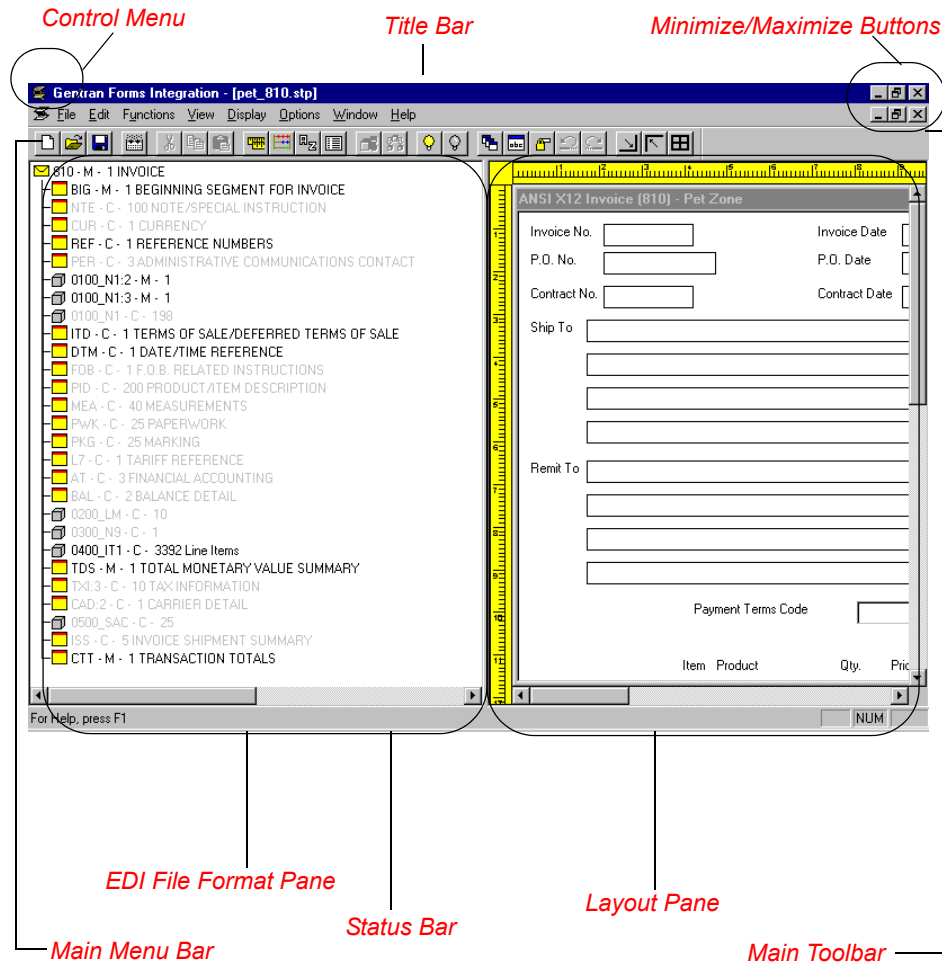
Forms Integration Window parts and functions

This table describes the parts of the Gentran:Server Forms Integration Window.

Part	Function
Main Menu Bar	The **Main Menu Bar** contains the menus **Note** Detailed descriptions of each of the commands on these menus are found in the online Help.
Main Toolbar	The **Main Toolbar** gives you access to some of the most common operations in Gentran:Server. (Continued on next page)

Part	Function
EDI File Format Pane	The **EDI File Format Pane** contains the EDI file format. When you click a segment or group in the EDI file format, the corresponding frame is displayed in the Layout Pane. When you click an element in the EDI file format, the corresponding layout component is highlighted in the Layout Pane.
Layout Pane	The **Layout Pane** contains the actual format of the translation object. Each group (with a maximum usage greater than one) and repeating segment has a corresponding frame in the Layout Pane. When you click a segment or group in the EDI file format, the corresponding frame is displayed in the Layout Pane. When you click an element in the EDI file format, the corresponding layout component is highlighted in the Layout Pane.
Status Bar	The **Status Bar** displays status information about a selection, command, or process, defines menu items as you highlight each item in the menu, and indicates any current keyboard-initiated modes for typing (e.g., CAP for the "Caps Lock" key, NUM for the "Num Lock" key, etc.).

Main Toolbar

The **Main Toolbar** gives you access to some of the most common operations in Gentran:Server. Unavailable items are dimmed. The Main Toolbar is a dockable toolbar, so you can affix it to any edge of the client window. This diagram illustrates the Main Toolbar.
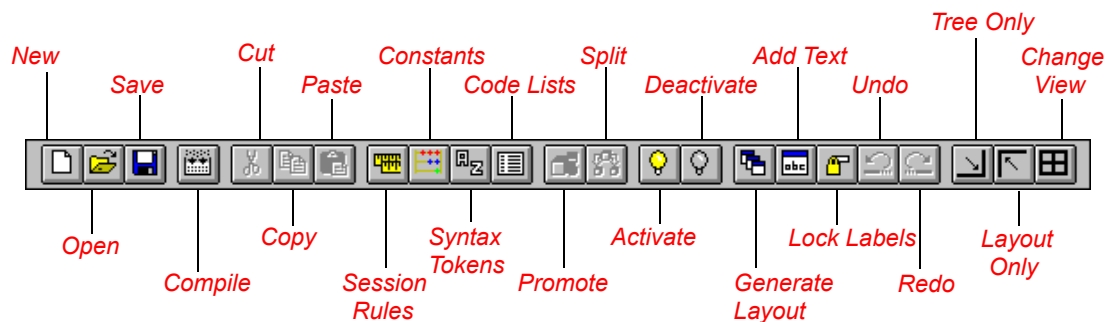
EDI File Format Pane

Overview	The EDI File Format Pane (left side of the Forms Integration subsystem main window) contains the EDI file format. The EDI file must contain all the information that you need to include to either create a document using the Document Editor (screen entry translation object) or print documents (print translation object), so that your system can accurately process the data.
Generating EDI files	Gentran:Server generates an EDI file for you, based on the standard (agency), version, transaction set, and release (for the TRADACOMS standard *only*) you selected. The system includes all the groups, segments, composites, and elements that are defined by the standards agency for the version of the document you selected.
	You typically need to customize the system-generated EDI file by modifying the properties of the form components, and using specialized Gentran:Server functions to manipulate the EDI file structure.
	Reference See *Design and Create the Form* on page 2 - 15 (print form) or *Design and Create the Form* on page 3 - 16 (screen entry form) for more information on generating an EDI file when you create a new form.
Generating specialized EDI standard versions	If you want to use a specialized version of an EDI standard that is not available in the Gentran:Server standards database, it may be appropriate for you to define the EDI file yourself.
	Regardless of whether the system generates the EDI file or you define it, the specific EDI form components that you use depend on the type of form you are creating. This includes the standard, version, and transaction set (document) selected, and which groups, segments, composites, and elements your company requires.
	Recommendation We recommend that you determine which form components you are using before generating or defining an EDI file.

Form components   This table describes form components that Gentran:Server uses to define the EDI file
format.

Icon	Description
	A group is a looping structure that contains related segments and/or groups that repeat in sequence until either the group data ends or the maximum number of times that the loop is allowed to repeat is exhausted. Groups are defined by the EDI standards. A group that is subordinate to another group is a subgroup (this corresponds to a nested looping structure – a loop within a loop). The EDI file is a group and therefore, it is visually represented the same way as other groups and subgroups in Gentran:Server.
	A segment contains a group of related elements or composite data elements that combine to communicate useful data. Segments are defined by the EDI standards. A segment can occur once or can repeat multiple times.
	A composite is a data element that contains two or more component data elements or subelements. Composites are defined by the EDI standards that use them (EDIFACT, TRADACOMS, and certain ANSI X12 standards).
	An element is the smallest piece of information defined by the EDI standards. An individual element can have different meanings depending on the context. Therefore, elements are normally not considered to have useful meaning until they are combined into segments. When an element has an operation performed against it, a red checkmark is displayed over the element icon. When an element contains a standard rule a black asterisk appears to the right of the element icon.

Layout Pane

Overview
The Layout Pane (right side of the Forms Integration subsystem main window) contains the actual format of the translation object. Gentran:Server uses *frames* to format the EDI file for the translation object. Each frame contains the groups, repeating segments, and elements at that level (single segments are not represented on the frame).

List formats
For screen entry translation objects, groups (with a maximum usage greater than one) and repeating segments are formatted as lists. Elements are formatted as edit boxes (boxes) or lists on the frame. Elements are typically formatted as fields, but are formatted as a list if you apply a standard rule that allows a selection of multiple items. Each group and repeating segment also has a corresponding frame that contains all the groups (with a maximum usage greater than one), repeating segments, and elements at that level.

Field formats
For print translation objects, groups, repeating segments, and elements are always formatted as fields.

Frames
Each group and repeating segment also has a corresponding frame that contains all the groups (with a maximum usage greater than one), repeating segments, and elements at that level.

Displaying information
When you click a segment or group in the EDI File Format Pane, the corresponding frame is displayed in the Layout Pane. When you click an element in the EDI File Format Pane, the corresponding layout component is highlighted in the Layout Pane.

Building a Form with Forms Integration

Overview

This section defines how to proceed with building a form using the Gentran:Server Forms Integration subsystem.

Stages of building a form

This table describes the steps required to build a form using Forms Integration.

Stage	Description
1	**Prepare and Analyze.** Obtain a layout of how you want the form to be displayed and determine how it corresponds to the EDI standard you are using. Determine what operations need to be performed to generate the required layout.
2	**Set Global Defaults (first time only).** The first time you use the Gentran:Server Forms Integration subsystem, you should verify the default date format that the system uses. **Reference** See *Verifying the Global EDI Date Formats* on page 2 - 15 (print form) or *Verifying the Global EDI Date Formats* on page 3 - 16 (screen entry form) for more information on verifying the global date default.
3	**Create, Save, and Name a New Form.** **Reference** See *Defining the Type of Form* on page 2 - 16 (print form) or *Defining the Type of Form* on page 3 - 18 (screen entry form) for more information on creating, saving, and naming a form.
4	**Activate the Appropriate EDI Groups, Segments, and Elements.** **Reference** See *Activating Groups, Segments, and Elements* on page 2 - 20 (print form) or *Activating Groups, Segments, and Elements* on page 3 - 23 (screen entry form) for more information on activation.
5	**Promote, Split, and Change Segments and Groups.** **Reference** See *Modify Form Components* on page 2 - 26 (print form) or *Modify Form Components* on page 3 - 29 (screen entry form) for more information on promoting, splitting, and changing segments and groups. *(Continued on next page)*

(Contd) Stage	Description
6	**Customize the EDI Data.** **Reference** See *Customize the EDI Data* on page 2 - 41 (print form) or *Customize the EDI Data* on page 3 - 41 (screen entry form) for more information on customizing the EDI data.
7	**Define the Layout of the Form.** **Reference** See *Verifying EDI Delimiters* on page 2 - 23 (print form) or *Verifying EDI Delimiters and Adding Frame Help Text* on page 3 - 26 (screen entry form) for more information on customizing your EDI file, including verifying the EDI delimiters.
8	**Compile the Form.** **Reference** See *Compiling the Form* on page 2 - 125 (print form) or *Compiling the Form* on page 3 - 133 (screen entry form) for more information on compiling the form and translation object naming conventions.
9	**Print the Report.** Validate and review the form, and make modifications as needed. **Reference** See *Printing the Report* on page 2 - 127 (print form) or *Printing the Report* on page 3 - 134 (screen entry form) for more information on printing the report.
10	**Test the Translation Object.** For a screen entry translation object, create a new document in Document Editor, using that translation object. For a print translation object, print a document. Verify that the output is correct. **Reference** See *Testing the Translation Object* on page 2 - 128 (print form) or *Testing the Translation Object* on page 3 - 135 (screen entry form) for more information on testing the translation objects.

How to Launch Forms Integration

Overview   This section describes how to launch the Forms Integration subsystem by means of
Gentran:Server.

Procedure   Use this procedure to launch the Forms Integration subsystem.

Step	Action
1	Select **Programs** from the Windows Start menu.
2	Select **Gentran Server Forms Integration** from the Gentran Server Programs group. **System Response** The system displays the Forms Integration subsystem.

How to Install Gentran Standards

Overview   **Note**
You need to install Gentran Standards only if you installed Integration Components during the Gentran:Server installation.

Reference
See the appropriate Gentran:Server Standards card for information about installing the Gentran Standards.

CHAPTER

2

Creating a Print Form

Overview

Introduction

In this chapter

This chapter includes the following topics associated with creating a print form:

- ◗ Form analysis
- ◗ Creating, saving, and setting up a new form
- ◗ Customizing the form, including the groups, segments, and elements
- ◗ Formatting the form, including fields and field labels
- ◗ Finalizing the form

Purpose of this tutorial

This tutorial defines the tasks necessary to create a print form. The print form enables you to print (on a printout) customized EDI data that has been processed through the translation object. This tutorial explains how to customize and format a form before it is compiled into a translation object. The form that you create using the Gentran:Server Forms Integration subsystem is a **source form**. When that source form is compiled, the result is a **compiled translation object**. You must register the translation object with Gentran:Server to be able to use the translation object (to print documents of that type).

Form criteria

Gentran:Server generates a basic form based on the following information:

- ◗ Type of form (e.g., print or screen entry)
- ◗ Standard agency (e.g., ANSI X12, EDIFACT)
- ◗ Standard version (e.g., 003040, 92.1)
- ◗ Document type (e.g., 850 Purchase Order, ORDERS)

Mandatory components

All mandatory groups, segments, and elements for the standard, version, and transaction set you specify are available for use (activated) when Gentran:Server creates a form. Only these mandatory form components (groups, segments, and elements) are activated automatically. You must activate additional form components to accommodate the data you expect to receive from your trading partner, and then customize and format the form so that it is appropriate and useful for your company's needs.

Before you begin   Before you begin to customize a print form, you should be familiar with the following elements of form design:

◗   EDI standards (how EDI standards work and how the information your users need is translated to and from the standards)

◗   Your users (the individuals who are using the print forms to create printouts of processed EDI data)

◗   Your trading partners (the organizations that send you or that you send the EDI data to be processed and printed)

You can create a different print form for each combination of transaction set, trading partner, and standard version. There is no limit to the number of print forms you can create, and the number of print forms you create is not affected by the number of screen entry forms you create.

Recommendation

We recommend that you mock up a layout of the print form the way you ultimately want it to look. As you are designing the layout, you should take into consideration the people who are using the printouts. Make sure that the form makes sense to the people who are using it. By analyzing your company's needs before you actually create the print form, you reduce the amount of time spent later on redesigning or reformatting the form. You should include the following design considerations in your form planning:

◗   Which fields should be printed, and which are necessary for the EDI data but do not need to be displayed on the printout

◗   Where fields should be located on the form

◗   What labels you are using to identify the fields on the form

Phases of Designing a Form

Design phases   This table lists the phases in designing a form.

Stage	Description
1	Analyze the EDI File.
2	Design and create the form.
3	Modify form components.
4	Customize the EDI data.
5	Format the form.
6	Finalize the form.

Getting Started

Overview   This tutorial is designed to guide you through each of these four phases in sequential order, completing one phase before proceeding to the next. When you create your own forms, the phases may overlap and you may have to return to one or more of the phases several times before the form is completed.The purpose of completing each task in this tutorial in sequential order, as if it were your own scenario, is not only to teach you how to perform the individual tasks, but also to teach you a logical approach and methods that should be used when you create your own form.

This section guides you in completing the steps in the first phase of form design. In this section, you create a new print form based on a scenario we have defined for you. This section includes the basics of creating the form, such as defining the scenario and analyzing the purpose of the form, creating and saving the form, and setting up the form. You can find techniques for customizing the segments, elements, and groups in the form, as well as for formatting the organization and appearance of the form, later in this chapter.

Print form scenario   For this tutorial, you create a print form for the 850 transaction set (purchase order), using the ANSI X12 003040 standard. The steps involved in creating this form are broken down into manageable pieces so that you can learn the tasks and procedures involved in creating a print form. Then, you can apply the knowledge gained from using this tutorial to create your print forms.

In this scenario, your company is MWT Manufacturing Co., which manufactures a wide variety of pet supplies for pet stores. You create a form that formats and arranges the EDI data you receive from one of your trading partners, Pet Zone (a large pet supply retailer), to produce a printout of a purchase order. You do not want to alter the integrity of the EDI data. However, you want to interpret some of the codes included in the EDI message into more meaningful text.

Analyze the EDI File

Basic Tasks

Introduction   To analyze the EDI file, you must first determine what data your trading partner is sending you. You and your partner must agree on which standard, version, and transaction set you are using. In this tutorial, you are using an ANSI X12 version 003040 850 purchase order. It is important to know the information that your partner sends you in the purchase order, and what data is contained in each element used.

It is very helpful to review the EDI standard that you are using before analyzing the EDI file. We recommend that you obtain an EDI standard manual for the standard and version that you are using. Standard manuals are available from EDI standard agencies.

After discussing with your partner what they will send, determining which segments and elements your company requires, and reviewing the EDI standard, you can list the items that you will need to use. You will then make the form components you need available for use.

Form analysis   The first step in creating a form is the analysis of the form requirements. If the analysis you perform is complete, you have all the information you need to create the form in an efficient and logical manner. If you omit this critical step and proceed directly to creating the form, it is likely that creating the form is a much longer and arduous task, and the form may not work the way you need it to due to oversights and omissions.

Creating a print form for the ANSI X12 850 purchase order requires several steps. Some steps are performed at the document level (such as activating form components), and others are iterative steps that are performed for each group, segment, or element in the form. In this analysis phase, you must determine what EDI data Pet Zone is sending you, as well as what information you want to print for the purchase order. The fields on the form must accommodate all information that you want to print from the purchase order your trading partner sends you.

Mandatory components

For an ANSI X12 purchase order (850), the following groups, segments, and elements have been defined as mandatory by the standards committee. These components are activated automatically when you create a new form:

Group	Segment	Element	Description	Data Type	Length
	BEG		Beginning Segment for Purchase Order		
		BEG01	Transaction Set Purpose Code	String	2
		BEG02	Purchase Order Type Code	String	2
		BEG03	Purchase Order Number	String	22
		BEG05	Purchase Order Date	Dt/Tm	6
PO1			Item Detail		
	CTT		Transaction Totals		
		CTT01	Number of Line Items	Integer	6

When translating data, the system does not process groups, segments, and elements that are not activated. Therefore, *you* must make available (activate) the groups, segments, and elements that are not defined as mandatory by the standard, but that you have determined you need to use in the form.

Required components

This table lists the form components that are required (need to be activated) and are not mandatory for the standard.

Note
When you activate a conditional group or segment, the mandatory subordinate segments and elements are activated automatically. A conditional group or segment is used only if there is EDI data available for that element.

Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Note/Special Instruction (NTE Segment)				
NTE02	Free Form Message	String	60	
Reference Numbers (REF Segment)				
REF01	Reference Number Qualifier	String	2	
REF02	Reference Number	String	30	
				(Continued on next page)

(Contd) Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Terms of Sale/Deferred Terms of Sale (ITD Segment)				
ITD01	Terms Type Code	String	2	
ITD12	Description	String	80	
Name and Address (N1 Group)				
Name (N1 Segment in N1 Group)				
N101	Entity Identifier Code	String	2	◗ BT (Bill to) ◗ ST (Ship to) ◗ BY (Buying party)
N102	Name	String	35	
Address Information (N3 Segment in N1 Group)				
N301	Address Information	String	35	
N302	Address Information	String	35	
Geographic Location (N4 Segment in N1 Group)				
N401	City Name	String	30	
N402	State or Province Code	String	2	
N403	Postal Code	String	9	
Item Detail (PO1 Group)				
Baseline Item Data (PO1 Segment in PO1 Group) (Already Activated)				
PO101	Assigned Identification	String	11	
PO102	Quantity Ordered	Real	9	Format = R6
PO103	Unit or Basis for Measurement Code	String	2	
PO104	Unit Price	Real	14	Format = R2
PO106	Product/Service ID Qualifier	String	2	VN (Vendor) UP (UPC Code)
PO107	Product/Service ID	String	30	

(Continued on next page)

(Contd) Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Product/Item Description (PID Group in PO1 Group)				
Product/Item Description (PID:2 Segment in PID Group)				
PID:201	Item Description Type	String	1	
PID:202	Description	String	80	
Date/Time Reference (DTM:2 Segment in PO1 Group)				
DTM:201	Date/Time Qualifier	String	3	◗ 010 (Requested Ship) ◗ 038 (Ship No Later)
DTM:202	Date	Dt/Tm	6	Screen Format = MM/DD/YY

Segment analysis   For each segment activated (either mandatory or optional), you must answer the following questions:

- ◗ Is the segment a group?
- ◗ Does the segment have a maximum use greater than one?
- ◗ What elements need to be activated for the segment?

This table describes the segment components used in this tutorial.

Component	Description
Group	Contains related segments and/or groups that repeat in sequence until either the group data ends or the maximum number of times that the loop is allowed to repeat is exhausted.
Repeating segment	Consists of elements that repeat (in sequence) until either the data ends or the maximum number of times the segment is allowed to repeat is exhausted.

Component	Description
Maximum use	Refers to the number of times that a segment can be used within the structure in which the segment is defined. For example, if a segment can be used only once within a group, but the group can be used multiple times, the segment still has a maximum use of one within each occurrence of the group. The standard defines the maximum number of times a segment can be used, but you must determine which of these segments are used, based on what your trading partner is sending you.
Elements	Each segment contains elements. Some elements are mandatory and others are optional to the standard but necessary for your needs. You must define all the elements that you are expecting from Pet Zone for each segment.

Customization tasks

Gentran:Server generates a form based on the groups, segments, and elements you activate. At this point, the form is compliant with the standard and it contains all the necessary components based on the data Pet Zone sends you. However, you need to customize the form components to produce a printed report that looks the way your company expects it to look.

This table lists the customizing tasks described in this tutorial.

Form Component	Description	Customizing Needed
BEG01 element	Transaction Set Purpose Code	This element is required in the purchase order, but is not meaningful for your purposes. You prevent this field from being displayed on the printout.
BEG02 element	Purchase Order Type Code	The code from this element is used to look up the description in a code list table, and the description is printed in another field that you create. You prevent the Purchase Order Type Code field from being displayed on the printout, because the more meaningful description is printed instead.
BEG05 element	Purchase Order Date	The date in the EDI data is in the format "YYMMDD," but you want the date to be printed in the format "MM/DD/YY," so you set the format accordingly.
		(Continued on next page)

(Contd) Form Component	Description	Customizing Needed
REF segment	Reference Numbers	The standard allows this segment to be used up to twelve times in one purchase order, but you and your trading partner have decided to use this segment only once. Therefore, you change the maximum use of this segment from twelve to one.
REF01 element	Reference Number Qualifier	The code from this element is used to look up its description in a code list table, and the description is printed in another field that you create. You prevent the Reference Number Qualifier field from being displayed on the printout, because the more meaningful description is printed instead.
ITD01 element	Terms Type Code	The code from this element is used to look up its description in a code list table, and the description is printed in another field that you create. You prevent the Terms Type Code field from being displayed on the printout, because the more meaningful description is printed instead.
N101 element	Entity Identifier Code	The code from this element is used to look up its description in a code list table, and the description is printed in another field that you create. You prevent the Entity Identifier Code field from being displayed on the printout, because the more meaningful description is printed instead.
N4 segment	Geographic Location	The fields (city, state, postal code) for the N4 segment currently are set up to be printed before the street address from the N3 segment. (The segments are set up this way to allow the N3 segment to repeat, causing the N3 fields to be displayed on a different frame than the one that contains the N1 and N4 fields.) However, this format is not the standard format for an address. You insert a new group and place the N4 segment under the new group so that the address is printed properly. (Continued on next page)

(Contd) Form Component	Description	Customizing Needed
PO1 group	Baseline Item Data	After you customize and format the fields in the PO1 group, you copy and paste the PO1 group at the same level in the EDI file. The original PO1 group contains column headings for the line item detail, but you prevent the column headings from being printed on the printout for all line items after the first. You change the maximum use of the first PO1 group to one so that the column headings are printed only once (for the first line item). The second PO1 group retains its maximum use of one hundred thousand, allowing up to one hundred thousand line items to be printed on the printout (without printing the column headings for each line item).
PO104 element	Unit Price	Both the EDI data and the printed price are formatted with two explicit decimal places.
PO106 element	Product/Service ID Qualifier	The code from this element is used to look up its description in a code list table, and the description is printed in another field that you create. You prevent the Product/Service ID Qualifier field from being displayed on the printout, because the more meaningful description is printed instead.
PID group	Product/Item Description	The standard allows this group to be used up to one thousand times for each line item. You need this group to be used only once for each line item, so you change the maximum use of this group to one.
DTM segment	Date/Time Reference	The standard allows the date to be used up to ten times for each line item. You need two separate DTM segments: one for the requested ship date, and one for the ship no later date (in that order). You promote this segment to cause another iteration of this segment to occur for each line item. Also, because you know what types of dates you receive (and in what order), you instruct the system to use the key fields function to print the requested ship date in one DTM segment and the ship no later date in the other DTM segment.
		(Continued on next page)

(Contd) Form Component	Description	Customizing Needed
DTM01 element	Date/Time Qualifier	You know that your partner sends you only two types of dates: requested ship and ship no later (in that order), so you use the key fields function in both DTM segments to place the appropriate date in the appropriate DTM02 element. You do not need to load the code list table for the DTM01 element, because you receive only one valid code for this field. You hide this qualifier field.
DTM02 element	Date	The date in the EDI data is in the format "YYMMDD," but you want the date to be printed in the format "MM/DD/YY," so you set the format accordingly.
CTT segment	Transaction Totals	You want this segment to print the total number of line items at the end of the printout. However, if the form were generated now, the total would be printed at the beginning of the printout (because the fields in the CTT segment are displayed on the same frame as the fields in the BEG segment). You change the arrangement of the form, while maintaining the integrity of the EDI data, so the total is printed at the end of the purchase order.

Design and Create the Form

Verifying the Global EDI Date Formats

Introduction The Forms Integration subsystem enables you to customize the global EDI date formats (for all forms). You can specify the default EDI format of dates for both six-character dates and eight-character dates. When you customize the global EDI date formats, the settings are valid for all forms created in the current session of Gentran:Server. However, you can override the default date formats for an individual element on the Element Properties dialogue for that element.

You must verify that you are using the correct global date formats the first time you use the Forms Integration subsystem. Typically, you verify the global EDI date formats one time only. You can change the default date formats if they do not match the formats you intend to use.

Procedure Use this procedure to verify the global EDI date formats.
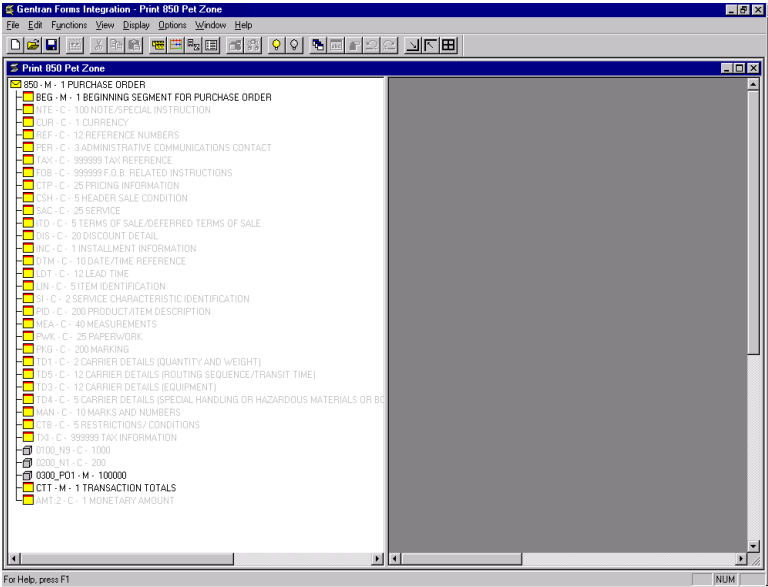
Step	Action
1	Select **Preferences** from the Options menu to display the Preferences dialog. The Preferences dialog is a property sheet that enables you to set global defaults for Gentran:Server.
2	Verify that the **Standard Formats** tab displays the default date formats that are used when elements are read from the standards database.
3	Verify that the Six-character dates list contains **YYMMDD** to define the format of the six-character EDI dates in your forms.
4	Verify that the Eight character dates list contains **YYYYMMDD** to define the format of the eight-character EDI dates in your forms.
5	Click **OK** to accept the default date formats for 6- and 8-character date fields and exit the Preferences dialog. **Note** To change the order in which the date formats appear in the "Six-character dates" and "Eight character dates" lists or to add a new date format to the lists, select Date Formats from the Options menu.

Defining the Type of Form

Overview   The first task in creating a new form is to define the type of form and EDI standard, version, and transaction set (document). In this tutorial, you are creating a print form so that you can print the purchase orders that your partner sends you. Instead of defining the 850 message to the system yourself, you want Gentran:Server to use the standards database on your system to build the purchase order according to the ANSI X12 standard.

Procedure   Use this procedure to create the new print form.

Step	Action
1	Select **New** from the File menu to display the New Form Wizard.
2	From the What kind of form list, select **Print** to indicate that the translation object you are creating is a print translation object.
3	In the What is the name of the form box, enter **Print 850 Pet Zone**. This description provides a brief explanation of the compiled translation object that enables you to differentiate it from similar translation objects in Gentran:Server. **Example** Print 850 Pet Zone is the description of a print translation object for an ANSI X12 purchase order (850) for partner Pet Zone.
4	Verify that the name that appears in the What is your name box is accurate.
5	Click **Next** to advance the wizard.
6	Select **Delimited EDI** as the data format syntax that you want to use.
7	Click **Customize**. **System Response** The system displays the New Delimited EDI Wizard.
8	Click **Next** to continue.
9	From the Data Source list, select **Gentran Standards** ODBC data source.
10	Click **Next** to continue.
11	From the Agency list in the Standards section, select **[X] X12**, which is the EDI standard you will use for this translation object. *(Continued on next page)*

(Contd) Step	Action
12	From the Version list, select **[003040] ANSI X 12 VERSION 3 RELEASE 4**, which is the version of the standard you use for this translation object. The versions that are available depend on which standard you selected.
13	From the Transaction list, select **[850] PURCHASE ORDER**, which is the transaction set (document) you use for this translation object. The documents that are available depend on which standard and version you selected.
14	Click **Next** to continue.
15	Click **Finish**. This may take a few seconds. **System Response** The system displays the New Form Wizard dialog box.
16	Click **Next** to continue.
17	Click **Finish** to create the EDI file (it may take a few seconds to create the file). **System Response** The form is displayed as follows:
18	From the Edit menu, select **Details**. **System Response** The Translation Object Details box is displayed. (Continued on next page)

(Contd) Step	Action
19	Verify that **Print** is selected from the Translation Object Function list.
20	In the Major version box, enter **1** to designate the version number for this translation object.
21	In the Minor version box, accept the default value **0** that designates the release number for this translation object. **Hint** When you make a major change to this form, increase the version to the next higher sequential number (e.g., 2.0, 3.0). If you make a minor change to the form, increase the release to the next higher sequential number (e.g., 2.1, 2.2).
22	The Input and Output boxes (Agency, Version, Transaction, Release, and F Group) contain information only if the Input and/or Output sides of the form are of EDI format. For this tutorial, do not change the information in these boxes. **Note** The system allows you to change the information in the Input and Output boxes, but modifying this information does not alter the content of the form. An example of when you might want to alter these boxes is when you want the form to reflect a standard version that is not loaded on your system. You can change the version on this dialog, and then physically alter the form to be compliant with that version.
23	Click **OK** to save the translation object details.
24	Select **Save** from the File menu. **Recommendation** We recommend that you save the form as often as possible, to mitigate the possible loss of additions or modifications in the event of a hardware or system error. **Note** If you have performed any function that invalidates the current format of the translation object, the Save function is unavailable until you regenerate the layout (Click Generate Layout on the Main Toolbar).
25	Verify that the **Save in** list reflects the drive\folder where Gentran:Server is installed. **Default** The default drive\folder is GENSRVNT\Forms.

(Contd) Step	Action
26	In the **File name** box, enter **pet_850p.stp** to replace the default file name. You allocate a file name to a form when you save the form for the first time or use the Save As function to save a copy of the form under a different name. The name of the form must be one to eight unique characters that define the form in a meaningful way. For example, "PET_850P" is the name of a print form for an ANSI X12 purchase order message (850) for partner Pet Zone.
	Note
	The default file extension for forms is .STP. Using this extension distinguishes source form files from other types of files, such as compiled translation objects. The naming conventions in Gentran:Server are as follows:
	◗ The source form (form created in Gentran:Server) should be named using the file extension **.STP** (e.g., PET_850P.STP).
	◗ The compiled translation object (translation object that is the result of compiling the source form) should be named using the same file name that was allocated to the source form, but with the file extension **.TPL** (e.g., PET_850P.TPL).
	Recommendation
	We recommend that you use these naming conventions to distinguish source forms and compiled translation objects from other types of files. We also recommend that you use the same file name (different file extension) for a source form and the translation object that was compiled from it.
27	Click **Save** to save the form.

Activating Groups, Segments, and Elements

Overview   When Gentran:Server generates the form, the system includes all the groups, segments, and elements that are defined by the standard agency (ANSI) for the version (003040) of the transaction set (850) you selected. The system activates all the groups, segments, and elements that are defined as mandatory (must be present) by the standard. The system does not enable you to deactivate the mandatory groups, segments, and elements.

Example   In the example below, the 850 PURCHASE ORDER file icon and BEG segment are mandatory for the purchase order. You do not need to activate these components. TheE, CUR, and REF segments are not mandatory, so they are dimmed on the form. To view the segments and elements in a group or segment on your form, double-click the form component in the EDI File Format Window (left side of the Forms main window). To activate an inactive form component, click **Activate** on the Main Toolbar, then click the form component. The component is no longer dimmed.

```
☑ 850 · M · 1 PURCHASE ORDER
 ├─☐ BEG · M · 1 BEGINNING SEGMENT FOR PURCHASE ORDER
 ├─☐ NTE · C · 100 NOTE/SPECIAL INSTRUCTION
 ├─☐ CUR · C · 1 CURRENCY
 └─☐ REF · C · 12 REFERENCE NUMBERS
```

Groups, segments, composites, and elements used in this tutorial   This table lists the groups, segments, composites, and elements to be used in this tutorial.

Group	Group	Segment	Element
		NTE	
		REF	REF02
		ITD	ITD01
			ITD12
	N1	N1	N102
		N3	N302
		N4	N401
			N402
			N403
			(Continued on next page)

Group	Group	Segment	Element
PO1 (already activated)		PO1	PO101 PO102 PO103 PO104 PO106 PO107
	PID	PID:2	PID:205
		DTM:2	DTM:202

Procedure   Use this procedure to activate the required groups, segments, and elements.

IMPORTANT

YOU MUST ACTIVATE ALL REQUIRED GROUPS, SEGMENTS, COMPOSITES, AND ELEMENTS LISTED ON THE FOLLOWING TABLE. FAILURE TO DO SO WILL HINDER YOUR ABILITY TO PERFORM STEPS LATER IN THIS TUTORIAL.

Step	Action
1	Double-click the segments and groups listed in the previous table to open them. The table lists all the groups, segments, and elements that you need to activate. Opening all the necessary groups and segments before you start to activate enables you to scroll down the form and activate the groups, segments, and elements sequentially. **Note** When you activate a conditional group or segment, the mandatory subordinate segments and elements are activated automatically.
2	Click **Activate** on the Main Toolbar.
3	Click each inactive group that you need to use. Clicking these groups activates the groups. **Note** If you accidentally click a group, segment, or element that you did not mean to activate, click the component with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu. (Continued on next page)
4	Click each inactive segment that you need to use. Clicking these segments activates the segments.

Step	Action
5	Click each inactive element that you need to use. Clicking these elements activates the elements. When you activate an element in a print form, the tag "Printed" is displayed before that element's description to indicate that this field is printed. If you later prevent a field from being displayed on the printout, then the tag "Not Printed" is displayed before that element's description.
6	Click **Activate** on the Main Toolbar to turn activation mode off.
7	To hide the groups, segments, and elements that you are not using, select **Show Active Only** from the View menu.

Verifying EDI Delimiters

Overview

If you are using an EDI standard that contains composite elements or subelements, you must verify that Gentran:Server is specifying the correct delimiters. Delimiters are flags that you define to the system as separating specific EDI components. Delimiters are necessary for all variable field-length standards, because the data is compressed (and the leading zeroes and trailing blanks are removed). The fields vary in length, so the system needs a flag to determine where one element ends and another begins. For example, an element delimiter marks the beginning of a new element.

Recommendation

Although setting EDI delimiters in Gentran:Server is mandatory *only* if you are using a standard with composite elements or subelements, we recommend that you perform this task regardless of which standard you use.

EDI delimiters table
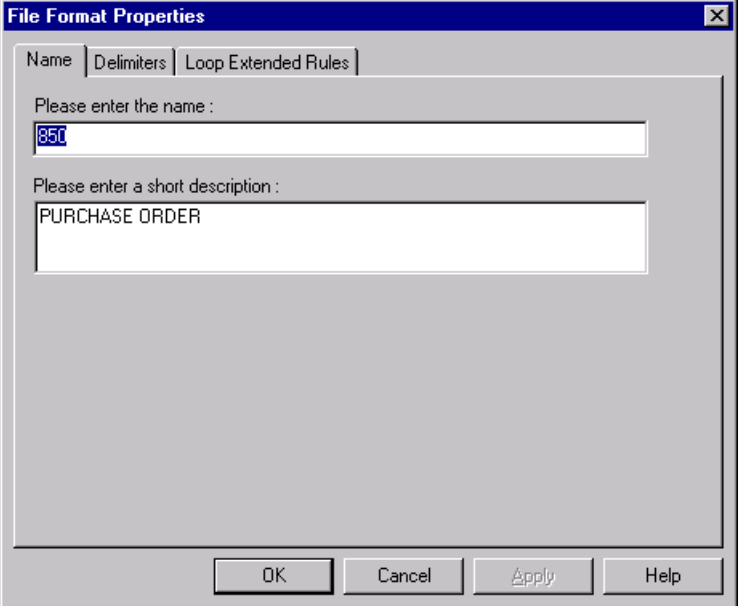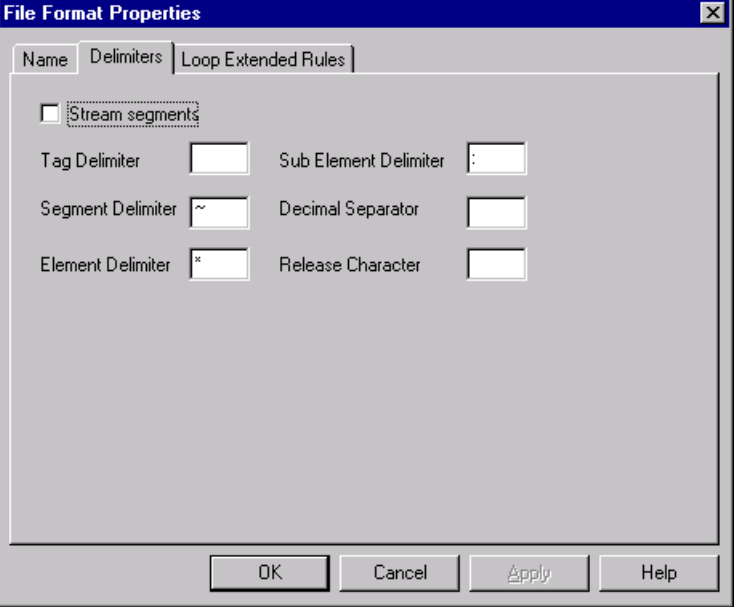
This table lists the valid EDI delimiters.

Field	ANSI X12 Default Character	ANSI X12 Default Hex Value
Tag Delimiter		
Segment Delimiter	~ (tilde)	0x7E
Element Delimiter	* (asterisk)	0x2A
Sub Element Delimiter	: (colon)	0x3A
Decimal Separator		
Release Character		

Procedure

Use this procedure to verify EDI delimiters.

Step	Action
1	Click the **850 PURCHASE ORDER** file icon with the right mouse button to access the shortcut menu. *(Continued on next page)*

(Contd) Step	Action
2	Select **Properties** from the shortcut menu to display the File Format Properties dialog.
3	Select the **Delimiters** tag to access the Delimiters dialog. (Continued on next page)

(Contd) Step	Action
4	Verify that the correct delimiters are being used for the ANSI X12 standard. If the delimiters differ from the default values listed in the previous table, you can enter either the character or the hexadecimal value in the correct box. The default delimiters for ANSI X12 are the following (the tag delimiter, release character, and decimal separator are not used for ANSI): **Note** If you use the default hex value, the value must begin with "0x" (the number zero and the letter "x"). **Reference** See the *EDI delimiters table* on page 2 - 23 for a list of valid EDI delimiters.
5	Click **OK** to save the delimiters and exit the dialog.

Note
The Stream segments check box on the Delimiters dialog currently is not selected. For this tutorial, leave it cleared so that the translator will continue to insert a carriage return after every segment.

Modify Form Components

Promoting and Changing Segments and Groups

Introduction　　The Promote function extracts one iteration (instance) of a group or repeating segment. Promote is a specialized function that preserves the integrity of the EDI structure.

By default, the fields corresponding to each group and repeating segment are displayed on a separate frame from the rest of the fields in the document. When you promote a group to the parent frame, the fields corresponding to the group are displayed on the frame to which the group is subordinate. If you do not promote a group to the parent frame, the fields corresponding to the group are displayed on their own frame.
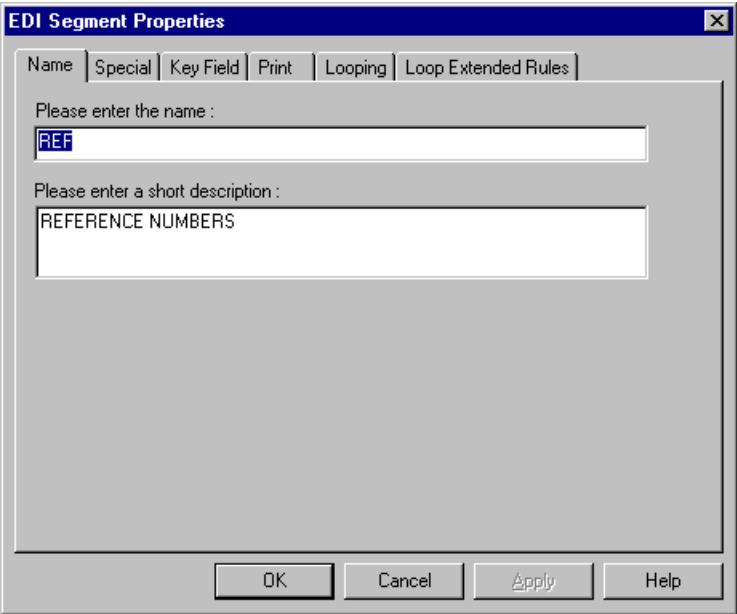
Changing the maximum use　　Changing the maximum use of a segment or group changes the maximum number of times the segment or group can be used. A segment or group with a maximum use greater than one repeats (loops), and is placed on a separate frame than the segment or group to which it is subordinate. A segment or group with a maximum use of one does not repeat, and its fields are displayed on the same frame as the group or segment to which they are subordinate.

Modifying the Maximum Use of the REF Segment

Overview   The REF segment contains Reference Numbers (for example, a contract number) used in the EDI data. The standard allows the REF segment to be used up to twelve times in one purchase order. In this tutorial, you expect the REF segment only once from your trading partner, so you change the maximum number of times this segment can be used to one.

Procedure   Use this procedure to change the maximum use of the REF segment.

Step	Action
1	Click the **REF** segment with the right mouse button and select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Looping** tab.
3	In the Max Usage box, enter **1** to indicate that this segment can be used only once.
4	Click **OK** to exit the EDI Segment Properties dialog.

Inserting a New N4 Group

Overview

The N4 segment (in the N1 group) contains the Geographic Location of the entity or individual named in the N1 segment. If the form were generated now (displaying the layout of the fields in the form on the right side of the Forms main window), the fields associated with the N4 segment would be located on the same frame as the fields associated with the N1 segment. (In a print form, each group and repeating segment has a corresponding frame that contains all the groups, segments, and elements at that level.) The name would be printed, then the city, state (or province), and postal code would be printed, and *then* the street address would be printed. This print sequence would not format the address in a standard address format.
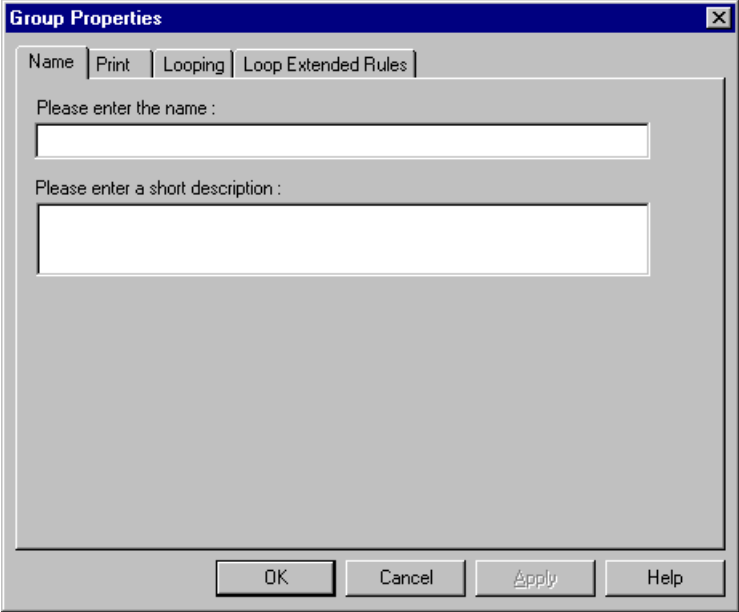
To ensure that the city, state (or province), and postal code are printed *after* the street address, and to maintain the integrity of the purchase order, you must create an N4 group with a minimum use of zero and a maximum use of one, then cut the N4 segment and paste it as a subordinate to the group you just created. Making the N4 segment subordinate to the N4 group enables you to retain the N3 segment's maximum use of two, and use the standard address format. The fields associated with the N4 segment (city, state, and postal code) are displayed on a separate frame, which is printed *after* the street address.

How to add a group

Use this procedure to add a new N4 group.

Step	Action
1	Select the **N3** segment, which is the segment after which you want to insert the group.
2	Select **Insert** from the Edit menu.
	(Continued on next page)

(Contd) Step	Action
3	Select **Group** from the submenu. **System Response** The Group Properties dialog is displayed. ![Group Properties dialog]
4	In the Name box, enter **NEW_N4** as the segment loop identification code. **Important** Do not use spaces or hyphens (-) in the Name box. You can use the underscore (_) to separate words.
5	In the Description box, enter **NEW N4** to provide a brief explanation of the loop.
6	Click **OK** to create the group.

How to cut and paste the N4 segment

Use this procedure to cut and paste the N4 segment.

Step	Action
1	Select the **N4** segment.
2	Click **Cut** on the Main Toolbar.
3	Click **Yes** at the prompt. *(Continued on next page)*
4	Select the **NEW_N4** group, which is the group for which you want to paste the N4 segment as a subordinate.

Step	Action
5	Click **Paste** on the Main Toolbar to paste the N4 segment.
6	At the prompt, accept the default to paste the Clipboard contents as a child (subordinate) of the group and click **OK** to exit the dialog.
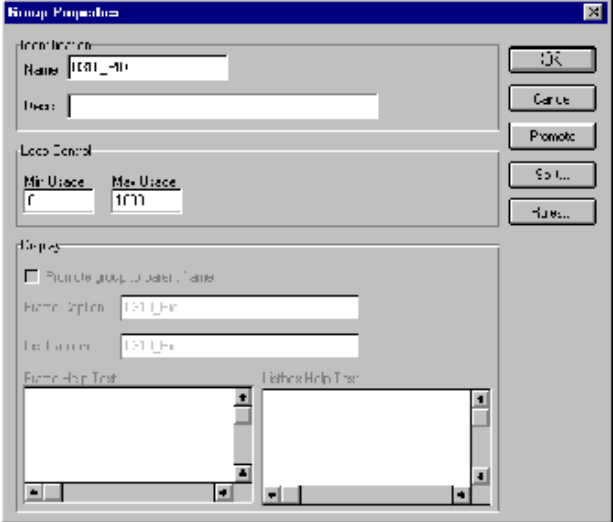
Modifying the Maximum Use of the PID Group

Overview   If the form were generated now, the fields associated with the PID group (in the PO1 group) would be displayed on a separate frame than the PO1 fields. The PID and PO1 fields all relate to the same set of purchase order items, so all those fields need to be displayed on the same frame. You change the maximum use of the PID group from one thousand to one and set the Promote flag on the group. When you generate the form later in this tutorial, the PID fields are displayed on the same frame as the PO1 fields.

Procedure   Use this procedure to change the maximum use of the PID group.

Step	Action
1	Click the **PID** group with the right mouse button and Select **Properties** from the shortcut menu. **System Response** The Group Properties dialog is displayed.
2	Select the **Looping** tab.
3	In the Max Usage box, enter **1** to indicate that this group can be used only once.
4	Select the **Print** tab. (Continued on next page)

(Contd) Step	Action
5	Click the **Promote group to parent frame** check box to display the fields in the PID group on the same frame as the fields in the parent group (PO1 group). **Note** If you change the maximum use of this group, but do not check the "Promote group to parent frame" check box, then the fields in this group are *not* displayed on the same frame in the Layout Window as the fields in the parent group.
6	Click **OK** to promote the group and exit the Group Properties dialog.

Promoting the DTM:2 Segment

Overview

If the form were generated now, the date in the DTM:2 segment (in the PO1 group) for the line item information would be printed on a separate frame than the rest of the line item fields. You want the date to be placed on the *same* frame as the rest of the line item information, so you promote the DTM:2 segment. Your trading partner sends you two sets of dates: the requested date and the ship date (in this order). The DTM:2 segment must occur twice in the form to accommodate both sets of dates from your trading partner. To customize the DTM:2 segment while preserving the integrity of the EDI structure, you promote the DTM:2 segment, then change the maximum use of the original DTM:2 segment to one so that it is no longer a repeating segment.

How to promote the segment

Use this procedure to promote the DTM:2 segment.
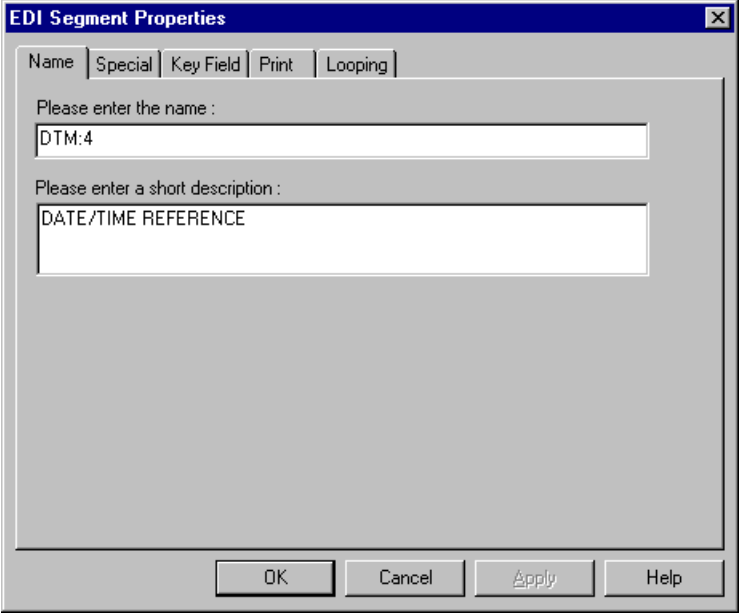
Step	Action
1	Click the **DTM:2** segment with the right mouse button to access the shortcut menu.
2	Select **Promote** from the shortcut menu to extract one iteration of the DTM:2 segment and place it directly above the DTM:2 segment that you selected to promote. **System Response** The new iteration of the DTM:2 segment is named DTM:4.

How to make the DTM:4 segment conditional

Use this procedure to make the DTM:4 segment conditional.
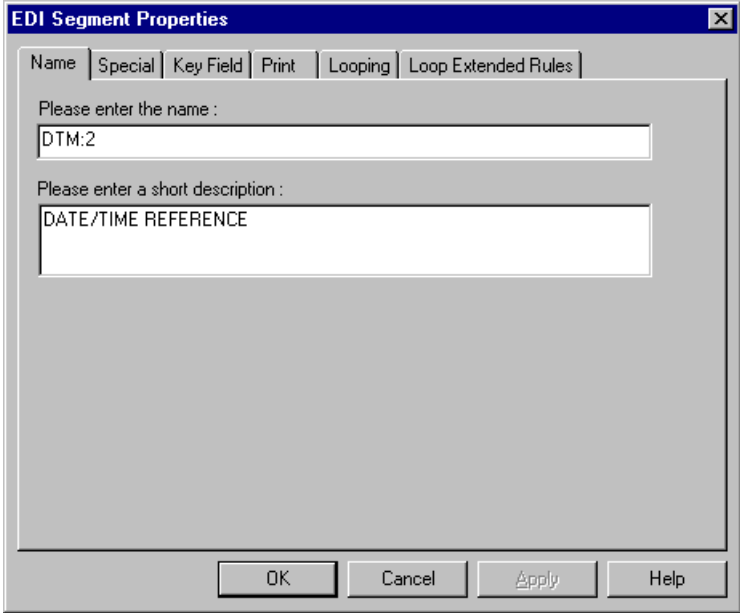
Note
When you promote a segment, the new segment is defined as mandatory (with a minimum use of one). If you want to make the segment conditional, you must change the minimum use to zero.

Step	Action
1	Click the **DTM:4** segment with the right mouse button and select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Looping** tab.
3	In the Min Usage box, enter **0** to make this segment conditional.
4	Click **OK** to exit the EDI Segment Properties dialog.

How to change the maximum use of the DTM:2 segment

Use this procedure to change the maximum use of the DTM:2 segment.

Step	Action
1	Click the **DTM:2** segment with the right mouse button and select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Looping** tab.
3	In the Max Usage box, enter **1** to allow this segment to be used only once.
4	Click **OK** to exit the EDI Segment Properties dialog.
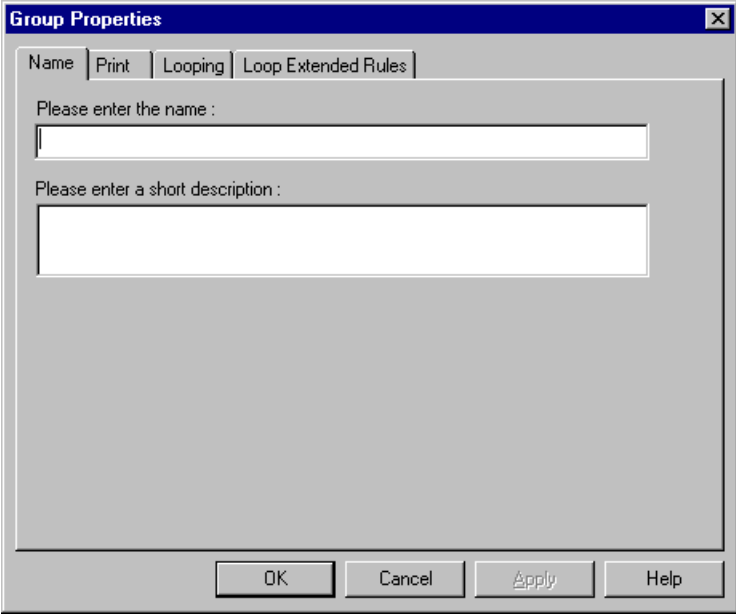
Creating a CTT Group

Overview   The CTT segment is a mandatory segment that can display Transaction Totals for the purchase order. If the form were generated now, the total number of line items would be printed with the BEG fields at the beginning of the printout (because the fields in the CTT segment are displayed on the same frame as the fields in the BEG segment). For the CTT segment to print the total number of line items at the end of the printout *and* maintain the integrity of the purchase order, you must create a CTT *group* with a minimum use and a maximum use of one, then cut the CTT segment and paste it as a subordinate to the group you just created. By moving the CTT segment to a new CTT group that you create, the total number of line items are displayed on a frame that is separate from the header (BEG) information.

How to create the CTT group   Use this procedure to create a CTT group.
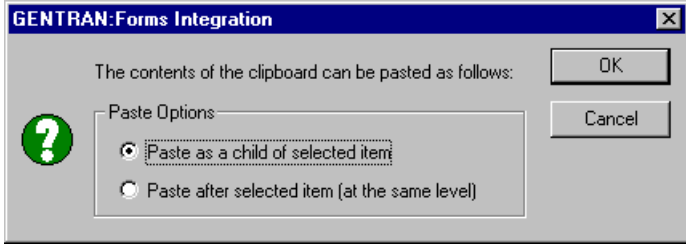
Step	Action
1	Select the **CTT** segment.
2	Select **Insert** from the Edit menu.
3	Select **Group** from the submenu. **System Response** The Group Properties dialog is displayed. *(Continued on next page)*

(Contd) Step	Action
4	In the Name box, enter **CTT_Group** as the segment loop identification code. **Important** Do not use spaces or hyphens (-) in the Name box. You can use the underscore (_) to separate words.
5	In the Description box, enter **CTT Group** as the segment loop identification code.
6	Select the **Looping** tab.
7	In the Min Usage box, enter **1** to make this group mandatory. **Note** Changing the minimum use of a segment or group from zero to one changes the status of the segment or group from conditional to mandatory. If EDI data is not present for a segment or group that has a minimum use of one or greater, a compliance error occurs during translation for that segment or group.
8	Click **OK** to create the group.

How to cut and paste the CTT segment

Use this procedure to cut and paste the CTT segment.
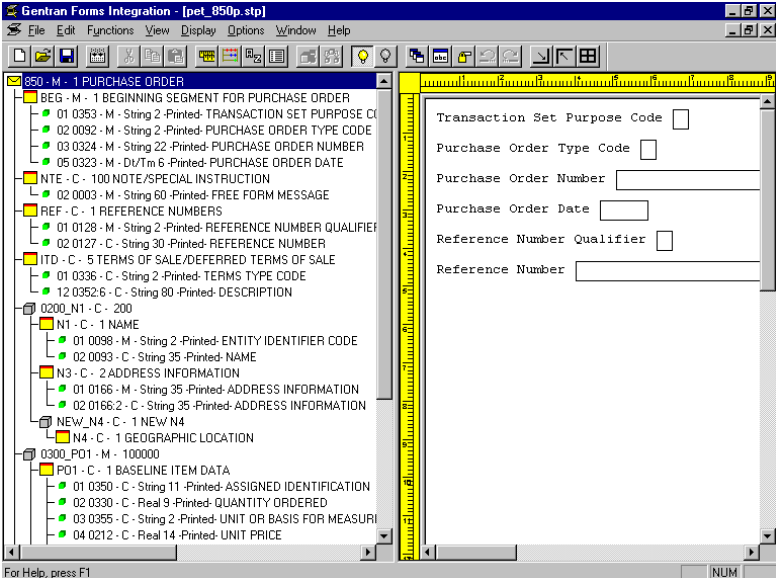
Step	Action
1	Select the **CTT** segment.
2	Click **Cut** on the Main Toolbar.
3	Select the **CTT** group, which is the group for which you want to paste the CTT segment as a subordinate.
4	Click **Paste** on the Main Toolbar to paste the CTT segment. **System Response** Gentran:Server prompts you to specify whether you want the contents of the Clipboard pasted as a child (subordinate) of the selected group, or at the same level as the group.
5	The **Paste as a child of selected item** option is selected as the default. Accept the default to paste the Clipboard contents as a child (subordinate) of the group. Click **OK** to exit the dialog.

Generating the Form

Overview   Generating a form is different from compiling a form. When you *compile* a form, the source form is translated into a compiled translation object. When you *generate* a form, the fields of the form are displayed on a frame in the Layout Window (right side of Forms main window), based on the groups, segments, and elements that are activated.

Procedure   Use this procedure to generate the print form based on the groups, segments, and elements you activated.

Note
You should regenerate the form periodically as you customize the print form to ensure that the most recent changes to the frame are reflected in the Layout Window.

Step	Action
1	Select the **850 PURCHASE ORDER** file icon. Selecting the 850 PURCHASE ORDER file icon before you generate the layout enables you to view the beginning of the purchase order layout in the Layout Window after the layout is generated. However, selecting the 850 PURCHASE ORDER file icon is not a required prerequisite to generating the layout. *(Continued on next page)*
2	Click **Generate Layout** on the Main Toolbar. **System Response** The layout of the print form is displayed in the Layout Window.

After generating the form

After you generate the form, there is one field on the right side of your screen (Layout Window) for every activated element on the left side of your screen (EDI File Format Window). You can click either the field or its corresponding element to select it. To access the Element Properties dialogue for a field/element, either double-click the element, or use the right mouse button to click the field or element, then select Properties from the shortcut menu.

Note
When you first generate the form, each field in the Layout Window is labeled with the same name as its corresponding element in the EDI File Format Window. As you customize the form, however, you change some of the labels and remove others, so all the fields are not labeled the same as their corresponding elements. Even though you change or remove some field labels, each field still corresponds to one element.

When the print form is generated, each group and repeating segment has a corresponding frame in the Layout Window that contains all the groups, segments, and elements at that level. Fields in groups or segments that have a maximum use of only one are displayed on the frame corresponding to the group to which the groups or segments are subordinate. For example, the Transaction Set Purpose Code (BEG01), Purchase Order Type Code (BEG02), Purchase Order Number (BEG03), Purchase Order Date (BEG05), Reference Number Qualifier (REF01), and Reference Number (REF02) are displayed on one frame (all the groups and segments in which these fields are contained are subordinate to the same group).

In print forms, the frames are not titled in the Layout Window (as they are in screen entry forms). To identify the frame that currently is displayed, click one of the fields on the frame, then check the EDI File Format Window to determine in which segment or group the field is contained.

Customize the EDI Data

Overview

Introduction   You can customize the form, including the properties of each type of form component (group, segment, and element).

Customizing the form is an iterative process. This tutorial guides you through all the steps involved in customizing the form, component by component. When you create print forms, you usually activate the form components you need to use, then compile the form, test it, and print the EDI data using the compiled translation object. As you substantially customize the form, you usually compile and print the form several times to view your changes before the form truly is finalized.

This section explains how to customize the form components for each sequential component.
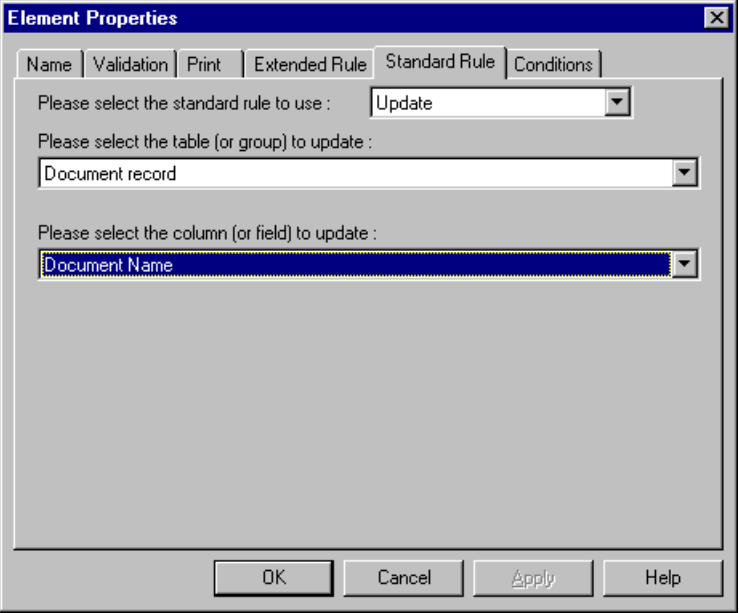
How to set up the document name   We recommend that you set up a Document Name for each form. The document name makes the identification of a document created by the form easier in Gentran:Server. Setting up the document name enables you to differentiate between documents in the document browsers in Gentran:Server. If you set up the document name in the Forms Integration subsystem, the Name field of the document browsers that contain this document in Gentran:Server contains the data from that element. You can choose any element as the document name, but we strongly recommend that you select an element that occurs only once in the document and has a data type of string. For an ANSI X12 850 purchase order, the document name usually is the Purchase Order Number.

Use this procedure to set up the document name.

Step	Action
1	Double-click the **BEG03** element. **Recommendation** We recommend that you select this element because it is a non-recurring, mandatory element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Select the **Update** from the Please select a standard rule to use list.
4	Click **Yes** at the prompt. *(Continued on next page)*

(Contd) Step	Action
5	From the Select the table (or group) to update list, select **Document record** to indicate that you are updating the document record.
6	From the Column (or field) to update list, select **Document Name** to indicate that you are updating the Name field in the document browsers with the contents of the BEG03 element. **System Response** The dialog now should look like this:
7	Click **OK** to set up the document name.

Customizing the BEG Segment

Overview   The BEG segment contains the Beginning Segment for the purchase order. This segment uses four mandatory elements: Transaction Set Purpose Code, Purchase Order Type Code, Purchase Order Number, and Purchase Order Date. Each of these elements contains information that is pertinent to the entire purchase order.

How to customize the BEG01 element   The BEG01 element (Transaction Set Purpose Code) is a mandatory element for the ANSI X12 850 purchase order. You do not need to print the code on the printout, so you prevent (hide) the Transaction Set Purpose Code field from being printed.

Use this procedure to prevent the Transaction Set Purpose Code field from being printed.

Step	Action
1	Double-click the **BEG01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include in print** check box to turn the option off.
4	Click **OK** to exit the dialog.

How to customize the BEG02 element   The BEG02 element (Purchase Order Type Code) also is a mandatory element for the ANSI X12 850 purchase order. This element contains the two-character code from your partner's EDI data representing the type of purchase order (e.g., new order, order change, etc.) for this document. You want the more meaningful description of the code to be printed on the printout, instead of the code itself. Therefore, you hide the Purchase Order Type Code field, but use the code from that element (BEG02) to look up the code description in the Purchase Order Type Code table and print that description in another field that you create. The description of the code is displayed in the new field on the printout. Also, you rename the new field.

For this tutorial, you and your trading partner have agreed that they send you these two types of purchase orders:

◗   New orders (Purchase Order Type Code "NE")

◗   Purchase order changes (Purchase Order Type Code "CP")

How to copy the BEG02 element

The description of the EDI code in the BEG02 element is important, even though you do not need to print the code itself. For example, the EDI code value "NE" is not descriptive enough for users reading a printout of the purchase order. The description of code "NE" ("New Order") is meaningful, however.

Before you can print the description of the EDI code value, you must create a new element in the BEG segment to store and print the description. The new BEG element is the element that displays the description of the Purchase Order Type Code. You use the Copy and Paste functions to move EDI information in the form. Copied form components retain all the information of the original form components.

Complete the following steps to copy and paste the BEG02 element.

Step	Action
1	Select the **BEG02** element.
2	Click **Copy** on the Main Toolbar.
3	Select the **BEG08** element, which is the last element in the BEG segment. The BEG08 element is the element after which you want the BEG02 element to be pasted.
4	Click **Paste** on the Main Toolbar to paste the BEG02 element. **System Response** A new element (BEG09) is created. The BEG09 element is an exact copy of the BEG02 element.

How to change the BEG09 element and field properties

The system names the new element created from copying the BEG02 element 0092:2. You rename the new element to identify its purpose, which is to print the description of the code from the BEG02 element.

You remove the Mandatory status from the BEG09 element to make it a conditional element (this element is used only if there is EDI data available for it), and increase its length to accommodate the longer description.

Also, you need to change the field label corresponding to the newly-created BEG09 element to reflect the contents of the field (the description of the Purchase Order Type Code). Also, you increase the display length of the field to accommodate the longer description.

How to change the BEG09 element and field properties (contd)

Use this procedure to change the element name and length, make the element conditional, and change the field label and field length for the BEG09 element.5.

Step	Action
1	Double-click the **BEG09** element. **System Response** The Element Properties dialog is displayed.
2	In the Name box, enter **0092_DESC** to give the name a more descriptive identifier than its current name.
3	Select the **Validation** tab.
4	Click the **Mandatory** check box to make the element conditional.
5	In the Min box, enter **0** for the minimum number of characters allowed for this element.
6	In the Max box, enter **30** for the maximum number of characters allowed for this element.
7	Click the **Print** tab.
8	In the Label box, enter **Order Type:** to replace the existing field label.
9	In the Maximum number of characters to print box, enter **30** to allow a thirty-character description to be displayed on the printout.
10	Click **OK** to save the new label and exit the dialog.

How to hide the BEG02 Field and load a code list table from the standard

Now that you have created an exact copy of the BEG02 element to retain all of the EDI data and formatting associated with that element, you can hide the first Purchase Order Type Code field.

When you use code list tables, you load a code list table from the standard to tell the system which code list table to use in looking up EDI code values. You can load the specific code values you expect to receive in the EDI data, or you can load the entire code list table. For this tutorial, you know that your trading partner sends you only two types of purchase orders:
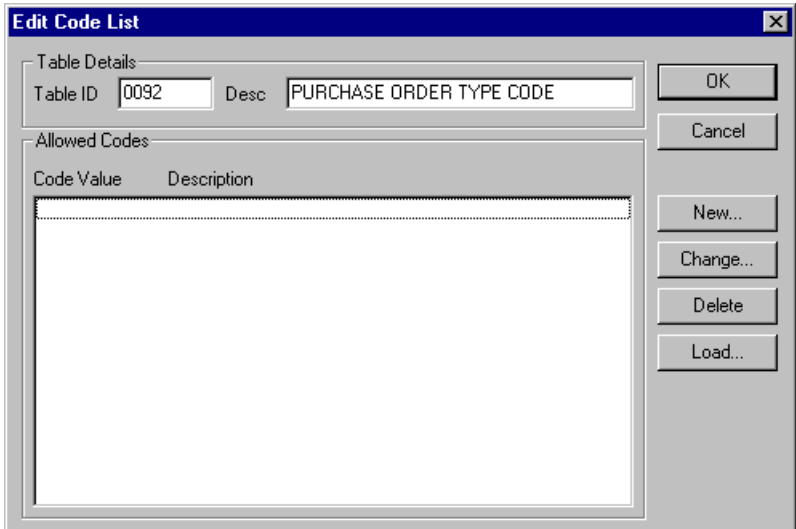
◗ New orders (Purchase Order Type Code "NE")

◗ Purchase order changes (Purchase Order Type Code "CP")
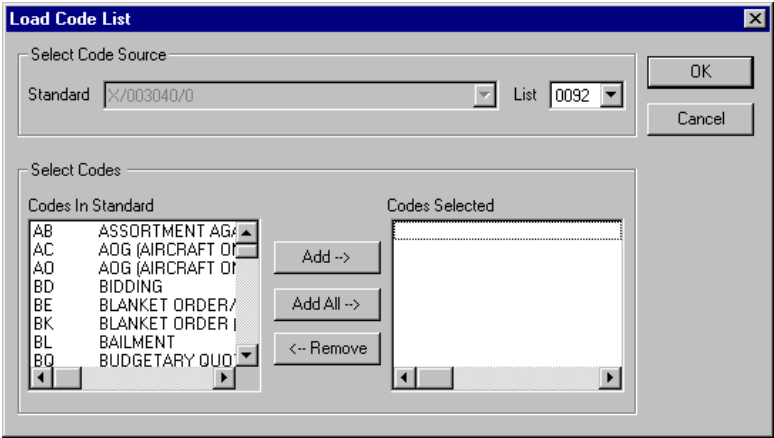
You do not need to load the entire code list table, so you load only codes "NE" and "CP" from the Purchase Order Code List table.

How to hide the BEG02 Field and load a code list table from the standard (contd)
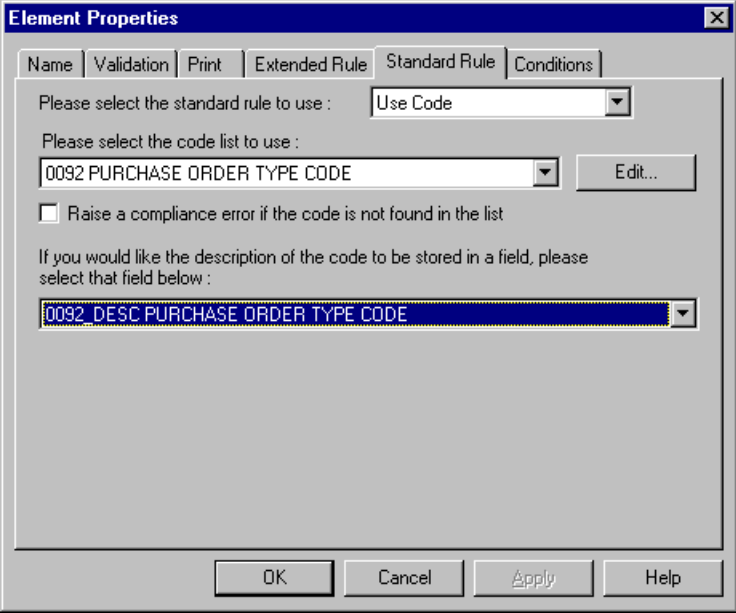
Use this procedure to hide the Purchase Order Type Code field and load the code list table from the standard.

Step	Action
1	Double-click the **BEG02** element. You need to use a code list table for this element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include in print** check box to turn the option off.
4	Select the **Standard Rule** tab.
5	Click the **Use Code** option from the Please select a standard rule to use list.
6	Click **Yes** at the prompt.
7	Click **Edit** to access the Edit Code List dialog. The Table ID box contains **0092**, the name of the element for which this code list table is used. The Desc box contains PURCHASE ORDER TYPE CODE, the description of the element for which this code list table is used. (Continued on next page)

(Contd) Step	Action
8	Click **Load** to access the Load Code List dialog. The Codes In Standard list contains the entire code list table. you are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog.
9	From the Codes In Standard list, highlight code **CP**.
10	Click **Add** to move it to the Codes Selected list.
11	From the Codes In Standard list, highlight code **NE**.
12	Click **Add** to move it to the Codes Selected list.
13	Click **OK** to load the code list table and exit the Load Code List dialog.
14	Click **Close** to exit the Edit Code List dialog. *(Continued on next page)*

(Contd) Step	Action
15	From the Store Field list, select **0092_DESC PURCHASE ORDER TYPE CODE** to store the description in the BEG09 element you created. The dialog now should look like this:
16	Click **OK** to exit the dialog.

How to customize the BEG03 element

The BEG03 element is a mandatory element that contains the Purchase Order Number. This element is defined by the standard to be a string of twenty-two alphanumeric characters. Your trading partner's purchase order number is always a ten-character alphanumeric string, so you change the element and field lengths to accommodate the shorter purchase order number. In addition, you rename the field label.

Use this procedure to change the field and element lengths, as well as the field label, for the Purchase Order Number field.

Step	Action
1	Double-click the **BEG03** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **10** to allow a ten-character string in this element. (Continued on next page)

Step	Action
4	Select the **Print** tab. .
5	In the Label box, enter **Order Number:** to replace the existing field label.
6	In the Maximum number of characters to be printed box, enter **10** to allow a ten-character purchase order number to be displayed on the printout.
7	Click **OK** to exit the dialog.

How to customize the BEG05 element
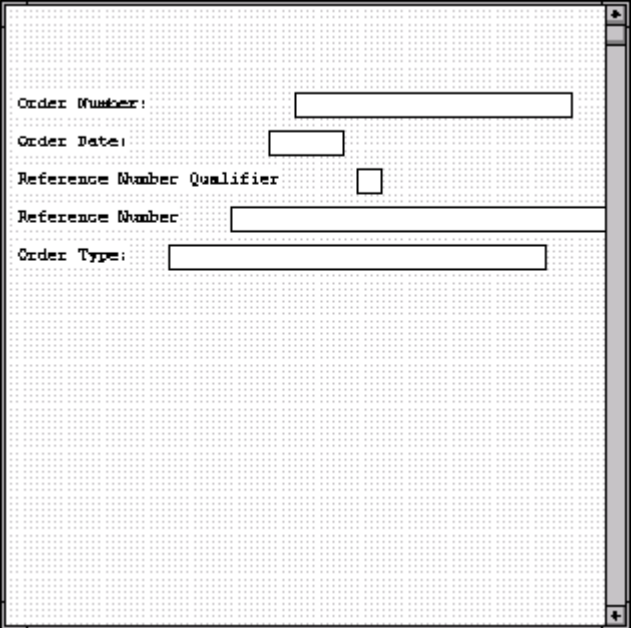
The BEG05 element is a mandatory element in the header (BEG) segment of the purchase order that contains the Purchase Order Date. The EDI data from your trading partner is formatted as **YYMMDD**, but you want to format the date as **MM/DD/YY** on the printout. In addition, you rename the field label.

Use this procedure to change the date format and the field label for the Purchase Order Date field.

Step	Action
1	Double-click the **BEG05** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), to be contained in this element.
4	From the Form Format list, select **MM/DD/YY** to designate the format for the date on the printout.
5	Verify that **YYMMDD** is selected in the File Format list to designate the format for the date in the EDI data.
6	Select the **Print** tab.
7	In the Label box, enter **Order Date:** to replace the existing field label.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed.
9	Click **OK** to exit the dialog. *(Continued on next page)*

(Contd) Step	Action
10	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The purchase order frame now should look like this

Customizing the NTE Segment

Overview
Your trading partner sends you messages or notes after the purchase order header information, so the NTE segment should be present to receive each message. The standard allows the NTE segment to be used up to one hundred times in one purchase order.

How to customize the NTE02 element
The NTE02 element is a mandatory element that contains the exact message that should be printed. Because the message is self-explanatory, you do not need to print the label for this field. The only customizing that is necessary for the NTE02 element is to remove the field label from the form.
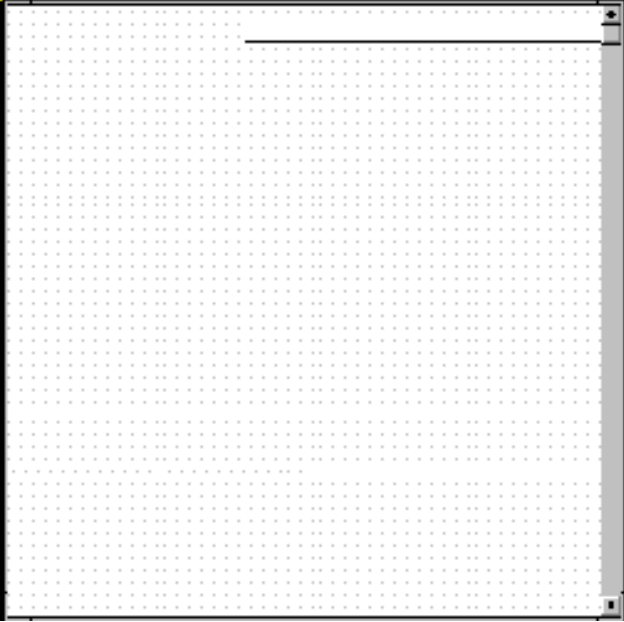
Use this procedure to hide the Free Form Message field label.

Step	Action
1	Double-click the **NTE02** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

(Contd) Step	Action
5	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The Note (NTE) frame now should like this:

Customizing the REF Segment

Overview

The REF segment contains Reference Numbers used in the EDI data. In this tutorial, you know that the only reference number your partner sends you in the REF segment is a contract number that your trading partner uses for their records. Although the standard allows the REF segment to be used up to twelve times in one purchase order, you expect the REF segment only once from your trading partner. You already changed the maximum use of this segment to one.

How to customize the REF01 element

The REF01 element (Reference Number Qualifier) is a mandatory element for the REF segment. The REF01 element contains the two-character code from your partner's EDI data to indicate what type of reference number follows. For this tutorial, you know that your trading partner sends you only one type of reference number—the contract number ("CN"). The system does not enable you to deactivate this element, because it is a mandatory element. However, since you expect only one code in this element, you do not need to print the code on the report. Therefore, you hide the Reference Number Qualifier field.

Use this procedure to hide the Reference Number Qualifier field.
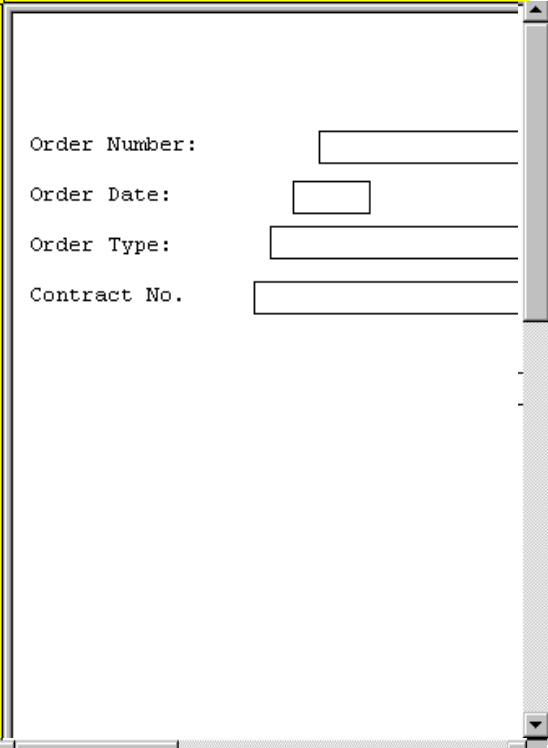
Step	Action
1	Double-click the **REF01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include in print** check box to turn the option off.
4	Click **OK** to exit the dialog.

How to customize the REF02 element

The REF02 element is a mandatory element that contains the Reference Number. This element is defined by the standard to be a string of thirty alphanumeric characters. In this tutorial, you know that your trading partner's reference number (the contract number) is always a twelve-character alphanumeric string, so you change the field and element lengths to accommodate the reference number that is shorter than the standard allows. In addition, you rename the field label.

Use this procedure to change the field and element lengths, and to change the field label, for the Reference Number field.

Step	Action
1	Double-click the **REF02** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **12** to allow a twelve-character string in this element.
4	Select the **Print** tab.
5	In the Label box, enter **Contract No.** (note the period in the label) to replace the existing field label.
6	In the Maximum number of characters box, enter **12** to allow twelve characters to be displayed on the printout.
7	Click **OK** to exit the dialog. *(Continued on next page)*

(Contd) Step	Action
8	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The purchase order frame now should look like this: Order Number: Order Date: Order Type: Contract No.

Customizing the ITD Segment

Overview

The ITD segment is a conditional segment that specifies the Terms of Sale/Deferred Terms of Sale for the purchase order. In this tutorial, you already activated the ITD01 and ITD12 elements for the Terms Type Code and Description, respectively. The standard specifies that the ITD segment can be used up to five times in one purchase order. Since this is a conditional segment, if the ITD segment is not used at all in a purchase order (data is not present), the fields are not printed.

The ITD12 element contains the terms of the purchase order. The description of the code in the ITD01 element explains the data in the ITD12 element, so you hide the field label for the ITD12 element.

Customizing the ITD01 element

The ITD01 element contains the Terms Type Code, a two-character code that identifies the terms under which this purchase order is valid. The code itself is not meaningful for a printout, so you hide the ITD01 element and print the description of the code in a new element that you create.

For this tutorial, you know that your trading partner sends you purchase orders with only these terms:

❶ Previously agreed upon (Terms Type Code "14")

❶ Payment due upon (Terms Type Code "23")

To print the description of an EDI code value, you must copy the ITD01 element to a new element in the ITD segment, then use the new ITD element to print the description of the Terms Type Code.

How to copy the ITD01 element

Use this procedure to copy and paste the ITD01 element.

Step	Action
1	Select the **ITD01** element.
2	Click **Copy** on the Main Toolbar.
3	Select the **ITD15** element, which is the last element in the ITD segment. The ITD15 element is the element after which you want the copied element to be pasted.
4	Click **Paste** on the Main Toolbar to paste the new element. A new element (ITD16) is created, which is an exact copy of the ITD01 element.

How to change the ITD16 element and field properties

The system names the new element created from copying the ITD01 element 0336:3. You rename the new element to identify its purpose, which is to print the description of the

code from the ITD01 element. Also, you increase the element and field lengths to accommodate the longer description.

Use this procedure to change the element name and length and change the field label and length for the ITD16 element.

Step	Action
1	Double-click the **ITD16** element. **System Response** The Element Properties dialog is displayed.
2	In the Name box, enter **0336_DESC** to give the name a more descriptive identifier than its current name.
3	Select the **Validation** tab.
4	In the Min box, enter **0** for the minimum number of characters allowed for this element.
5	In the Max box, enter **30** for the maximum number of characters allowed for this element.
6	Select the **Print** tab.
7	In the Label box, delete the existing field label. The description of the terms type code is self-explanatory and does not require a label.
8	In the Maximum number of characters box, enter **30** to allow thirty characters to be displayed on the printout.
9	Click **OK** to exit the dialog.

How to hide the ITD01 field and load the code list table from the standard

Now that you have created an exact copy of the ITD01 element to retain all of the EDI data and formatting associated with that element, you can hide the first Terms Type Code field.

For this tutorial, you know that your trading partner sends you purchase orders with these two term types:
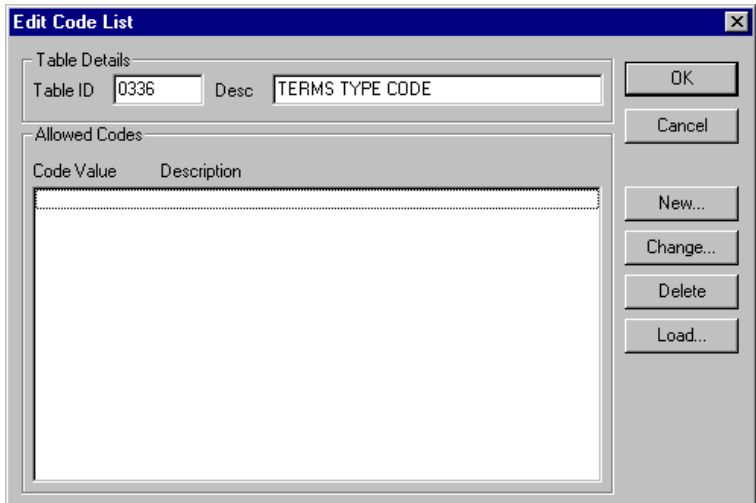
◗ Previously agreed upon (Terms Type Code "14")
◗ Payment due upon (Terms Type Code "23")

You do not need to load the entire code list table, so you load only codes "14" and "23" from the Terms Type Code list table.
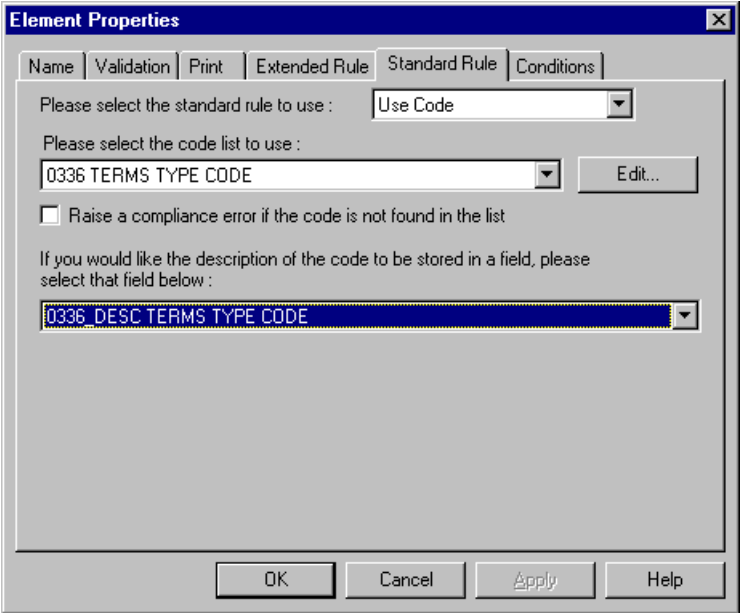
(Continued on next page)

How to hide the ITD01 field and load the code list table from the standard (contd)

Use this procedure to hide the first Terms Type Code field and load the code list table from the standard.

Step	Action
1	Double-click the **ITD01** element. You need to use a code list table for this element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include in print** check box to turn the option off.
4	Select the **Standard Rule** tab.
5	Click the **Use Code** option.
6	Click **Yes** at the prompt.
7	Click **Edit** to access the Edit Code List dialog. **Note** The Table ID box contains 0336, the name of the element for which this code list table is used. The Desc box contains TERMS TYPE CODE, the description of the element for which this code list table is used.
8	Click **Load** to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog. The Codes In Standard list contains the entire code list table.
9	From the Codes In Standard list, highlight code **14**.
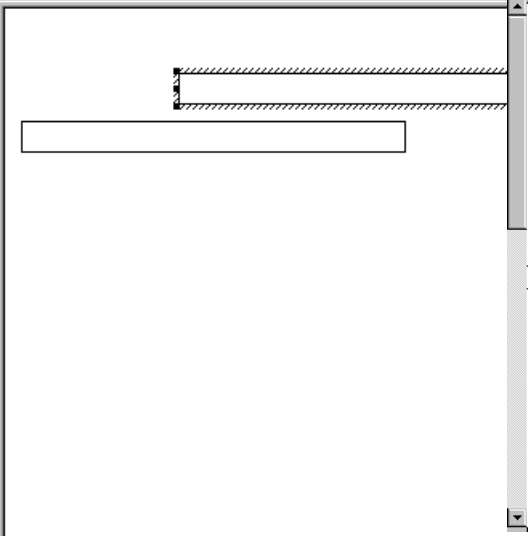
(Contd) Step	Action
10	Click **Add** to move it to the Codes Selected list.
11	From the Codes In Standard list, highlight code **23**.
12	Click **Add** to move it to the Codes Selected list.
13	Click **OK** to load the code list table and exit the Load Code List dialog.
14	Click **Close** to exit the Edit Code List dialog.
15	From the Store Field list, select **0336_DESC TERMS TYPE CODE** to store the code in the ITD16 element you created. The dialog now should look like this:
16	Click **OK** to exit the dialog.

How to customize the ITD12 element

The ITD12 element contains the exact terms of the purchase order. The terms are explained by the description of the Terms Type Code, so there is no need to print the label associated with the message. Therefore, you hide the field label for the ITD12 element on the printout.

Use this procedure to hide the Description field label.

Step	Action
1	Double-click the **ITD12** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.
5	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The ITD frame now should look like this:

Customizing the N1 Group

Overview

The standard allows the N1 group to be used up to two hundred times. In the N1 group, you already activated the N1, N3, and N4 segments to provide the name and address of an entity or individual. Your trading partner uses the N1 group to send you these three types of addresses:

◗ Bill to name and address (Entity Identifier Code "BT")

◗ Ship to name and address (Entity Identifier Code "ST")

◗ Buying party name and address (Entity Identifier Code "BY")

You already inserted an N4 group and moved the N4 segment to be subordinate to the N4 group (so that the city, state or province code, and postal code are printed after the address information), so the fields for the N1, N3, and N4 segments are displayed on three frames. Currently, the three frames look like these (your frames may be larger than the ones shown below):

After customization

After you customize the N1, N3, and N4 segments, the fields still are displayed on three frames. The frames are printed in order, so that the name is printed first; then the address (one to four lines of address information); then the city, state, and postal code. The address is formatted the way you expect an address to be formatted. After you customize and format the N1 group, the address fields (on three frames) should look like these:

Customizing the N1 Segment

Overview

The N1 segment identifies the Name of the entity or individual. When the N1 segment is used, the N101 element is mandatory. The N101 element contains the two-character Entity Identifier Code.

You want the more meaningful description of the code to be printed on the printout, instead of the code itself.

The N102 element is a conditional element that identifies the name of the entity or individual. You hide the field label for this field, since the the name is self-explanatory.

Customizing the N101 element

For this tutorial, you know that your trading partner sends you these three types of names and addresses:

◗   Bill to name and address (Entity Identifier Code "BT")

◗   Ship to name and address (Entity Identifier Code "ST")

◗   Buying party name and address (Entity Identifier Code "BY")

To print the description of the EDI code value, you must copy the N101 element to another element in the N1 segment, then use the new N1 element to print the description of the Entity Identifier Code.

How to copy the N101 element

Use this procedure to copy and paste the N101 element.

Step	Action
1	Select the **N101** element.
2	Click **Copy** on the Main Toolbar.
3	Select the **N106** element, which is the last element in the N1 segment. The N106 element is the element after which you want the N101 element to be pasted.
4	Click **Paste** on the Main Toolbar to paste the new element. **System Response** A new element (N107) is created, which is an exact copy of the N101 element.

How to change the N107 element and field properties

The system names the new element created from copying the N101 element 0098:3. You rename the new element to identify its purpose, which is to print the description of the code from the N101 element. You also remove the Mandatory status from the N107 element to make it a conditional element (the element is used only if there is EDI data available for it) and increase the element and field lengths to accommodate the code description.

Use this procedure to change the element name and length, make the element conditional instead of mandatory, and change the field label and field length for the N107 element.

Step	Action
1	Double-click the **N107** element. **System Response** The Element Properties dialog is displayed.
2	In the Name box, enter **0098_DESC** to give the name a more descriptive identifier than its current name.
3	Select the **Validation** tab.
4	Clear the **Mandatory** check box to make the element conditional.
5	In the Min box, enter **0**.
6	In the Max box, enter **30**.
7	Select the **Print** tab.
8	In the Label box, delete the existing field label.
9	In the Maximum number of characters box, enter **30**.
10	Click **OK** to exit the dialog.

How to hide the N101 Field and load the code list table from the standard

Now that you have created an exact copy of the N101 element in order to retain all of the EDI data and formatting associated with that element, you can hide the first Entity Identifier Code field.

For this tutorial, you know that your trading partner sends you the following types of names and addresses:
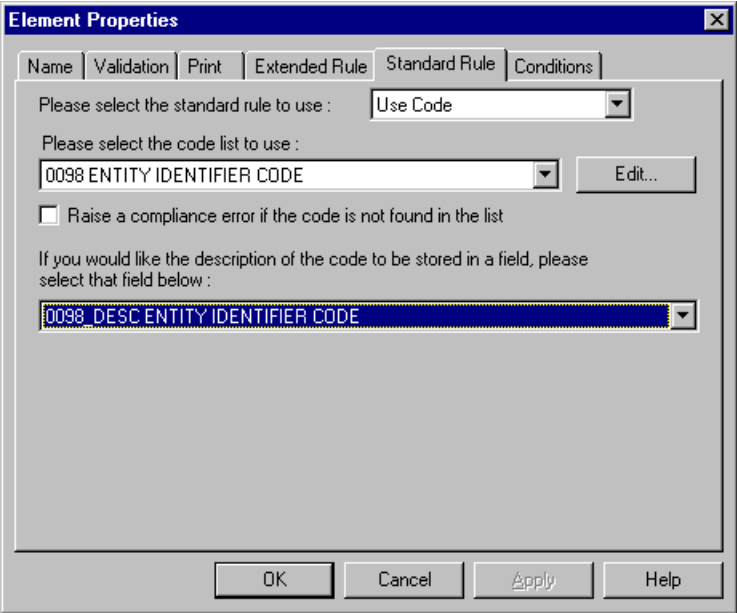
◗ Bill to name and address (Entity Identifier Code "BT")

◗ Ship to name and address (Entity Identifier Code "ST")

◗ Buying party name and address (Entity Identifier Code "BY"

You do not need to load the entire code list table, so you load only codes BT, ST, and BY from the Entity Identifier Code table.

Use this procedure to hide the first Entity Identifier Code field and load the code list table from the standard.

Step	Action
1	Double-click the **N101** element. You need to use a code list table for this element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include this field in the print** check box.
4	Select **Standard Rule** tab.
5	Click the **Use Code** option.
6	Click **Yes** at the prompt.
7	Click **Edit** to access the Edit Code List dialog. The Table ID box contains 0098, the name of the element for which this code list table is used. The Desc box contains ENTITY IDENTIFIER CODE, the description of the element for which this code list table is used.
8	Click **Load** to access the Load Code List dialog. **System Response** You are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog. The Codes In Standard list contains the entire code list table.
9	From the Codes In Standard list, highlight code **BT**. *(Continued on next page)*

(Contd) Step	Action
10	Click **Add** to move it to the Codes Selected list.
11	From the Codes In Standard list, highlight code **BY**.
12	Click **Add** to move it to the Codes Selected list.
13	From the Codes In Standard list, highlight code **ST**.
14	Click **Add** to move it to the Codes Selected list.
15	Click **OK** to load the code list table and exit the Load Code List dialog.
16	Click **Close** to exit the Edit Code List dialog.
17	From the Store Field list, select **0098_DESC ENTITY IDENTIFIER CODE** to store the code in the N107 element you created. **System Response** The dialog now should look like this:
18	Click **OK** to exit the Element Properties dialog.

**How to customize
the N102 element**

The N102 element contains the exact name that should be printed. The name is explained by the description of the Entity Identifier Code, so you do not need to print the label associated with the name. The only customizing that is necessary for the N102 element is to hide the field label on the printout.

Use this procedure to hide the Name field label.

Step	Action
1	Double-click the **N102** element. **System Response** The Element Properties dialog is displayed
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

Customizing the N3 Segment

Overview
The N3 segment contains the Address of the entity or individual named in the N1 segment. If the N3 segment is used, the N301 element is mandatory. The N301 element contains address information, which identifies the street name, suite number, or any other address information that your trading partner sends you. This element does *not* contain the city, state/province, or postal code; that data is contained in the N4 segment. You already activated the N302 element, which is a conditional element that contains an additional line of address information (if it is received).

The N301 and N302 elements contain the exact address information that should be printed. The address information corresponds to the name that is printed from the N101 element. Therefore, there is no need to print the labels associated with the address information, so you hide the field labels for the N301 and N302 elements.

How to customize the N301 element
Use this procedure to hide the Address Information field label.

Step	Action
1	Double-click the **N301** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

How to customize the N302 element
Use this procedure to hide the second Address Information field label.

Step	Action
1	Double-click the **N302** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

Customizing the N4 Segment

Overview

The N4 segment (in the NEW_N4 group in the N1 group) contains the Geographic Location of the entity or individual named in the N1 segment. The N4 segment is not a mandatory segment. The N401 element contains the name of the city, the N402 element contains the code for the state or province, and the N403 element contains the postal code.

There is no need to print the labels associated with the geographic location, because it is evident on the printout that the name, address, and geographic location are associated. Therefore, you hide the field labels for the N401, N402, and N403 elements.

How to customize the N401 element

Use this procedure to hide the City Name field label.

Step	Action
1	Double-click the **N401** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

How to customize the N402 element
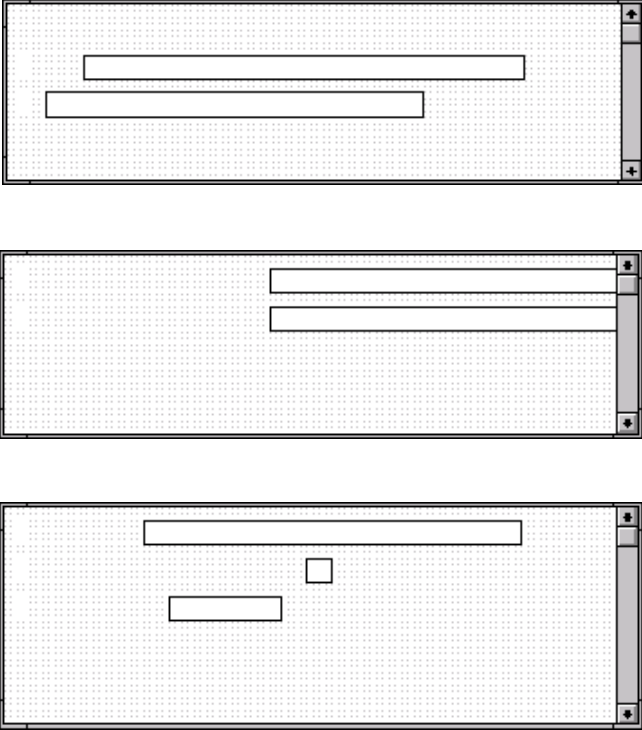
Use this procedure to hide the State or Province Code field label.

Step	Action
1	Double-click the **N402** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

How to customize the N403 element

Use this procedure to hide the Postal Code field label.

Step	Action
1	Double-click the **N403** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog. (Continued on next page)

(Contd) Step	Action
5	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The N1, N3, and N4 frames now should look like these (your frames may be larger than the ones shown below: Later in the tutorial, you format these fields so they are formatted in a standard address format, like the example below: M. Wolfgang Pet Zone 123 Corporate Blvd. Anytown, NY 12345-6789

Customizing the PO1 Group

Overview   The standard allows the PO1 group to be used up to one hundred thousand times, containing up to one hundred thousand line items in one purchase order. You already activated these segments and group in the PO1 group: PO1 segment, PID group, DTM:4 segment, and DTM:2 segment.

Before customizing   Before you customize the group, segments, and elements in the PO1 group, the fields in the form are arranged with one field on a line, like the following:

If the frames were not customized and formatted differently, then each set of fields would be repeated for each item ordered. A more efficient and traditional way of listing items on a purchase order is to arrange the related information in columns, so all the related information for one item is listed on one or two lines. The column headings are printed only once.

After customizing   The following figure shows how you ultimately want the fields in the PO1 group to be arranged (after customizing and then formatting the fields).

The following sections describe how to customize the PO1 segment, the PID group, and the DTM segment so that their associated fields are displayed on a single frame.

Customizing the PO1 Segment
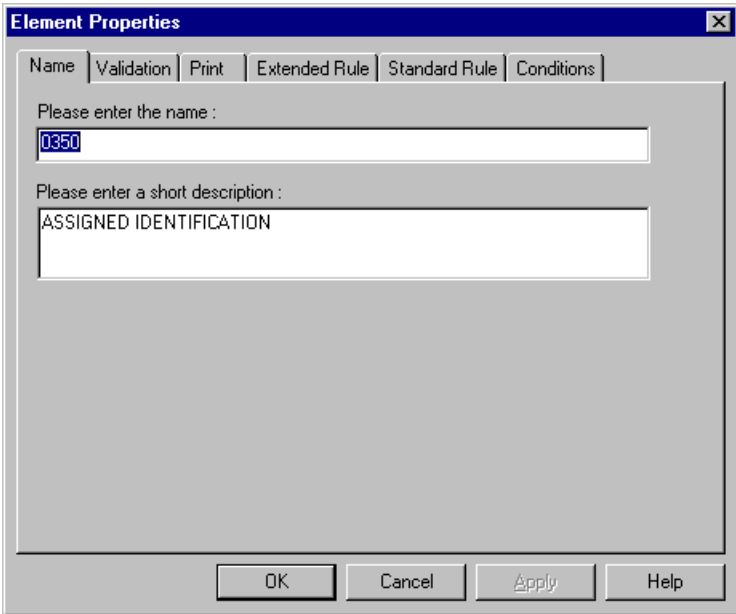
Overview   The PO1 segment (in the PO1 group) contains the Baseline Item Data that identifies the details of the items on the purchase order. You assign new labels for each of the fields in the PO1 segment to identify more specifically the information your partner sends you. You then change the maximum lengths for some of the fields, and print the description of the Product/Service ID Qualifier.

How to customize   The PO101 element contains the Assigned Identification for one item on the purchase
the PO101 element   order. Assigned Identification is a general term; you and your trading partner have agreed to call this identification a line number. You change the label for this field to reflect the new field name. You and your trading partner also have agreed that there are no more than 99,999 line items per purchase order. Since each line item is numbered sequentially, starting with one, you need a maximum length of only five digits for this field. You change the maximum length for this field to five.

Use this procedure to change the element and field lengths, field label, and field length for the Assigned Identification field.

Step	Action
1	Double-click the **PO101** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab. (Continued on next page)

(Contd) Step	Action
3	In the Max box, enter **5** to allow a five-character string in this element.
4	Select the **Print** tab.
5	In the Label box, enter **Line** to replace the existing field label. **Note** The label for the Assigned Identification field ultimately forms the column heading "Line No." To make the width of the column heading as narrow as possible, you place "Line" on one line and "No." below. The Label box does not enable you to enter a label on more than one line, so you enter "Line" in the Label box, then add "No." by adding static text later in this tutorial.
6	In the Maximum number of characters box, enter **5** to allow five numeric digits to be displayed on the printout.
7	Click **OK** to exit the dialog.

How to customize the PO102 element

The PO102 element contains the Quantity Ordered for one item on the purchase order. For brevity on the printout, you rename the field label. The standard allows up to a nine-digit number in this field. You know that your trading partner orders no more than 99,999 (a five-digit number) of any one item, so you change the maximum length to six for this field (for a five-digit number and a place separator) and change the value in the Screen Format and EDI Format lists to "N0" (for a number with an implied decimal point and no decimal places).

Use this procedure to change the element length, field label, and field length for the Quantity Ordered field.

Step	Action
1	Double-click the **PO102** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **6** to allow a five-digit number and a place separator in this element.
4	From the Form Format list, select **N0** to allow a number with an implicit decimal point and no decimal places to be displayed on the printout.
5	From the File Format list, select **N0** to indicate that you expect a number with an implied decimal point and no decimal places in the EDI data.
6	Select the **Print** tab.
7	In the Label box, enter **Qty** to replace the existing field label.
8	In the Maximum number of characters box, enter **6** to allow a five-digit number and a place separator to be displayed on the printout.
9	Click **OK** to exit the dialog.

How to customize the PO103 element

The PO103 element contains the Unit or Basis for Measurement Code for each item on the purchase order. For brevity on the printout, you rename the field label.

Use this procedure to change the field label of the Unit or Basis for Measurement Code field.

Step	Action
1	Double-click the **PO103** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, enter **Unit** to replace the existing field label.
4	Click **OK** to exit the dialog.

How to customize the PO104 element

The PO104 element contains the Unit Price for each item on the purchase order. For this tutorial, you rename the field label.

The standard designates an EDI format of "R9" for the Unit Price field, meaning that the price is formatted with an explicit decimal point and up to nine decimal places. Your trading partner sends you EDI data for the price in "R2" format, and this is also the format you want to use to display the price on the printout (e.g., "100.00" instead of "100.000000000"). You change the number formats in the Screen Format and EDI Format fields for this element to reflect the number formats you use.

The standard defines this element as having a maximum length of fourteen, but the items you sell to Pet Zone are not priced at more than $9,999.99 each, so this field needs a maximum length of only eight (four places for the dollars; two places for the cents; one place for the decimal point; and one place for a plus or minus sign, if present).

Use this procedure to change the element and field lengths, field label, and number formats for the Unit Price field.

Step	Action
1	Double-click the **PO104** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow eight numeric digits in this field, including a plus or minus sign and a decimal point. (Continued on next page)

(Contd) Step	Action
4	From the Form Format list, select **R2** to allow a number with an explicit decimal point and four decimal places to be displayed on the printout.
5	Click **Yes** at the prompt.
6	From the File Format list, select **R2** to indicate that you expect a number with an implicit decimal point and no decimal places.
7	Click **Yes** at the prompt.
8	Select the **Print** tab.
9	In the Label box, enter **Price** to replace the existing field label.
10	In the Maximum number of characters box, enter **8**.
11	Click **OK** to exit the dialog.

How to customize the PO106 element

The PO106 element contains the Product/Service ID Qualifier for each item on the purchase order. For this tutorial, Pet Zone sends you one of these two types of product codes: VN (Vendor) or UP (UPC Code). For brevity on the printout, you rename the field label.
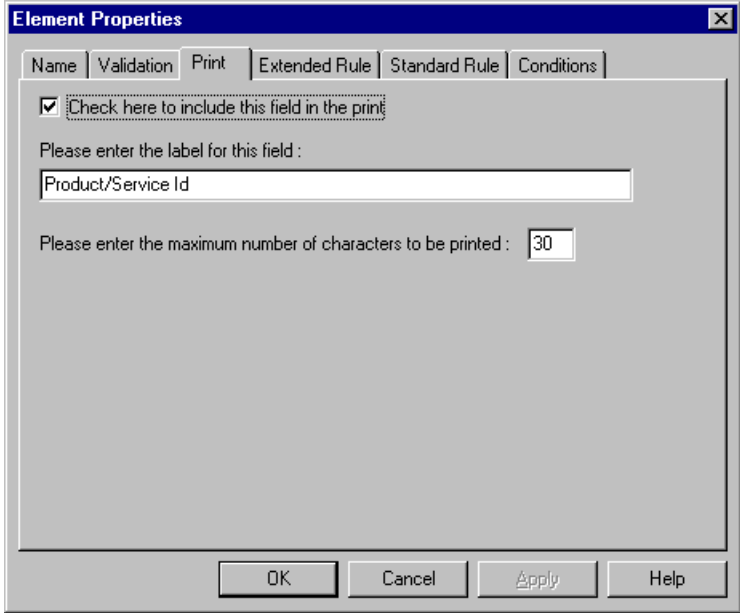
Use this procedure to change the field label for the Product/Service ID Qualifier field.
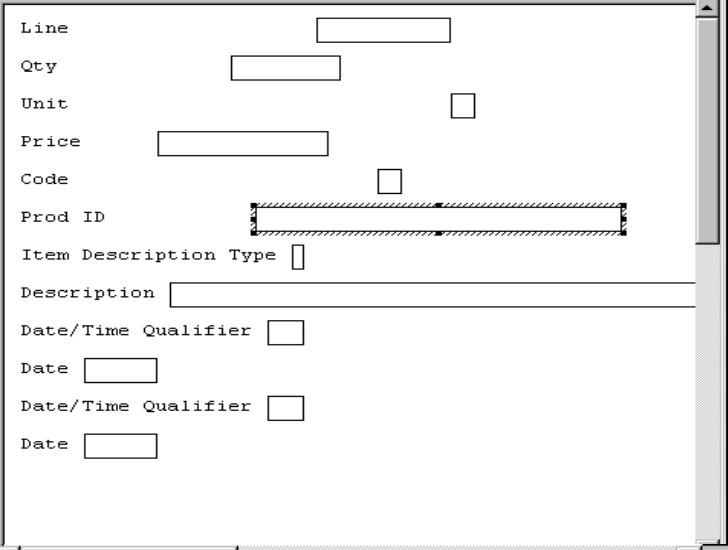
Step	Action
1	Double-click the **PO106** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, enter **Code** to replace the existing field label.
4	Click **OK** to exit the Element Properties dialog.

How to customize the PO107 element

The PO107 element contains the Product/Service ID for one item on the purchase order. For brevity on the printout, you change the field label to "Prod ID." The standard allows up to a thirty-character string in this field. Your trading partner uses product identification numbers that are no longer than ten characters, so you change the maximum length for this field to ten.

Use this procedure to change the field and element lengths and the field label for the Product/Service ID field.

Step	Action
1	Double-click the **PO107** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **10** for the maximum number of characters allowed for this element.
4	Select the **Print** tab. **System Response** The Print dialog is displayed. ![Element Properties dialog showing the Print tab with tabs Name, Validation, Print, Extended Rule, Standard Rule, Conditions. Checkbox "Check here to include this field in the print" is checked. Label field contains "Product/Service Id". Maximum number of characters to be printed is 30. Buttons: OK, Cancel, Apply, Help.]
5	In the Label box, enter **Prod ID** to replace the existing field label.
6	In the Maximum number of characters box, enter **10** to allow a ten-character string to be displayed on the printout. (Continued on next page)

(Contd) Step	Action
7	Click **OK** to exit the dialog.
8	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The PO1 frame now should look like this: Line Qty Unit Price Code Prod ID Item Description Type Description Date/Time Qualifier Date Date/Time Qualifier Date

Customizing the PID Group

Overview

The PID group contains the item description. The standard allows the PID group to be used up to one thousand times for each line item, but you need the PID group to be used only once for each line item. You already changed the maximum use of the PID group to one and promoted the group to the parent frame.

How to customize the PID:201 element

The PID:201 element (in the PID:2 segment in the PID group) contains the Item Description Type ("F" for free-form item description, "S" for structured description, or "X" for semi-structured). This element must be present, because you expect this data from your trading partner. However, you can hide this field, since the meaningful information for a print is the description itself, not the type of description.

Use this procedure to hide the Item Description Type field.

Step	Action
1	Double-click the **PID:201** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	Clear the **Include fields in the print** check box.
4	Click **OK** to exit the dialog.
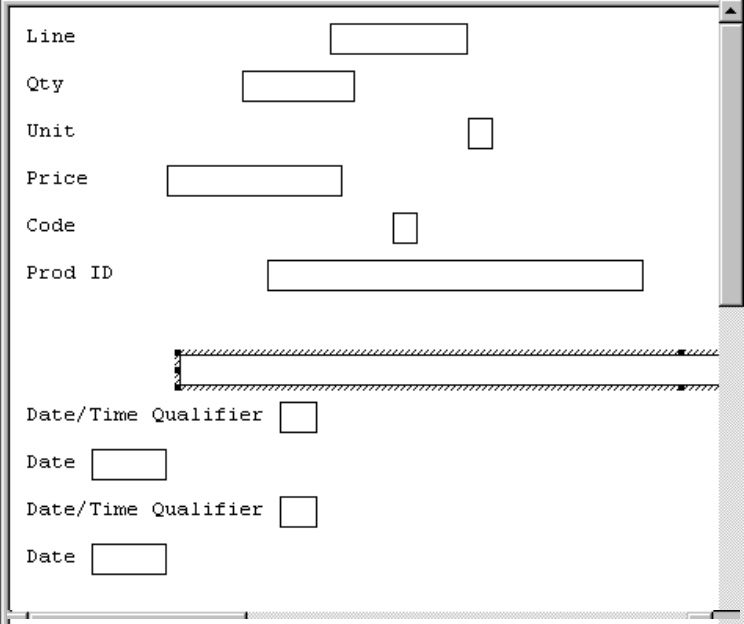
How to customize the PID:205 element

The PID:205 element (in the PID:2 segment in the PID group) contains the Description of the purchase order item. The description is self-explanatory, so there is no need to print the field label associated with the message.

Use this procedure to hide the Description field label.

Step	Action
1	Double-click the **PID:205** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Print** tab.
3	In the Label box, delete the existing field label.
4	Click **OK** to exit the dialog.

(Contd) Step	Action
5	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. **System Response** The PO1 frame now should look like this:

Customizing the DTM:4 Segment

Overview

The DTM:4 segment (in the PO1 group) is used to print the requested ship date. To ensure that Gentran:Server prints the correct date in the Date field, you must use the key field function. The key field function enables you to specify a second qualification in selecting a segment (the segment name is the first qualification). Data must be provided in the order designated through the use of key fields. For example, for this tutorial, you expect the requested ship date (DTM:4) first, and then the ship no later date (DTM:2).

Important

For this tutorial, the dates printed in the DTM:4 and DTM:2 segments can be set up using key fields because you expect the dates in a particular order. If the dates were sent in a different order, only one date would be printed. If you were not sure of the order in which your partner sends the dates, you could not use key fields. You would need to use three DTM segments (using the promote function), and two of those DTM segments would need to be identical.
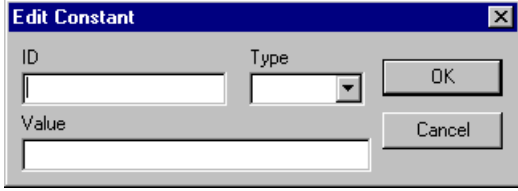
For this tutorial, when the Date/Time Qualifier field contains the value "010" (Requested Ship), then the date is printed in the Date field of the DTM:4 segment. If the Date/Time Qualifier field contains the value "038" (Ship No Later), then the date is printed in the Date field of the DTM:2 segment.

How to use a key field for the DTM:4 segment

Use this procedure to use a key field for the DTM:4 segment.

Step	Action
1	Click the **DTM:4** segment with the right mouse button to access the shortcut menu and select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Key Field** tab to access the Key Field dialog. (Continued on next page)

(Contd) Step	Action
3	From the Field list, select **0374:9 DATE/TIME QUALIFIER**.
4	Verify that the **Use constant** option is selected.
5	Click **Edit** to access the Map Constants dialog.
6	Click **New** to display the Edit Constant dialog.
7	In the ID box, enter **Requested Ship** to identify the unique literal constant.
8	From the Type list, select **String**.
9	In the Value box, enter **010** to identify the actual value of the constant.
10	Click **OK** to exit the Edit Constant dialog.
11	Click **Close** to exit the Map Constants dialog.
12	From the Use constant list, select **010** to indicate to the system that this date is the requested ship date.
13	Click **OK** to exit the dialog.

How to customize the DTM:401 element

The DTM:401 element (in the DTM:4 segment) contains the Date/Time Qualifier for the date in the DTM:402 element. For this tutorial, your trading partner sends you just two types of dates: the requested ship date and the ship no later date (in that order). You used the key field function for the DTM:4 segment to indicate to Gentran:Server that only the requested ship date is printed in the Date field (DTM:402), so you can prevent the qualifier (DTM:401) from being printed. The ship no later date is printed in the Date field for the DTM:2 segment.

Use this procedure to hide the Date/Time Qualifier field.

Step	Action
1	Double-click the **DTM:401** element. **System Response** The Element Properties dialog is displayed. (Continued on next page)

Step	Action
2	Select the **Print** tab.
3	Clear the **Include fields in the print** check box.
4	Click **OK** to exit the dialog.

How to customize the DTM:402 element

The DTM:402 element contains the Date corresponding to the date qualifier in the DTM:401 element. For this tutorial, the DTM:402 element is used to designate when the shipment is requested.

In this section of the tutorial, you rename the label for this field (the new label is named Requested). You add the words Ship Date later in this tutorial using static text (static text is text that is always printed when the form is used, and that is not defined in the field properties of the element) so that Ship Date is displayed on the line below Requested. Therefore, the full field label is Requested Ship Date.

The EDI data from your trading partner is formatted as "YYMMDD," but you format the date as "MM/DD/YY" on the printout.

Use this procedure to change the element and field lengths, hide the Date field label, and set the date format for the date on the printout.

Step	Action
1	Double-click the **DTM:402** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), in this element.
4	From the Format of the data in the form list, select **MM/DD/YY** to designate the format for the date on the printout.
5	Verify that **YYMMDD** is selected in the Format of the data in the file list to designate the format for the date in the EDI data.
6	Select the **Print** tab. (Continued on next page)

(Contd) Step	Action
7	In the Label box, enter **Requested** to replace the existing field label. **Note** The label for the Date field ultimately forms the column heading, Requested Ship Date. To make the width of the column heading as narrow as possible, you place "Requested" on one line and "Ship Date" below. The Label box does not enable you to enter a label on more than one line, so you enter "Requested" in the Label box, then add "Ship Date" by adding static text later in this tutorial.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed on the printout.
9	Click **OK** to exit the dialog.

Customizing the DTM:2 Segment

Overview

The DTM:2 segment (in the PO1 group) is used to print the latest date that the order can be shipped. To ensure that Gentran:Server prints the correct date in the Date field, you must use the key field function. The key field function enables you to specify a second qualification in selecting a segment (the segment name is the first qualification). Data must be provided in the order designated through the use of key fields. For example, for this tutorial, you expect the requested ship date (DTM:4) first, and then the ship no later date (DTM:2).

Important

For this tutorial, the dates printed in the DTM:4 and DTM:2 segments can be set up using key fields because you expect the dates in a particular order. If the dates were sent in a different order, then only one date would be printed. If you were not sure of the order in which your partner sends the dates, then you could not use key fields. You would need to use three DTM segments (using the promote function), and two of those DTM segments would need to be identical.

For this tutorial, if the Date/Time qualifier field contains the value "010" (Requested Ship), then the date is printed in the Date field of the DTM:4 segment. If the Date/Time Qualifier field contains the value "038," then the date is printed in the Date field of the DTM:2 segment.

How to use a key field for the DTM:2 segment

Use this procedure to use a key field for the DTM:2 segment.

Step	Action
1	Click the **DTM:2** segment with the right mouse button and select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Key Field** tab to access the Key Field dialog. *(Continued on next page)*

(Contd) Step	Action
3	From the Field list, select **0374:6 DATE/TIME QUALIFIER**.
4	Verify that the **Use constant** option is selected.
5	Click **Edit** to display the Map Constants dialog.
6	Click **New** to display the Edit Constant dialog.
7	In the ID box, enter **Ship No Later** to identify the literal constant.
8	From the Type list, select **String**.
9	In the Value box, enter **038** to identify the actual value of the constant.
10	Click **OK** to exit the Edit Constant dialog.
11	Click **Close** to exit the Map Constants dialog.
12	From the Use constant list, select **038** to indicate to the system that this date is the Ship No Later date.
13	Click **OK** to exit the dialog.

How to customize the DTM:201 element

The DTM:201 element (in the DTM:2 segment) contains the Date/Time Qualifier for the date in the DTM:202 element. For this tutorial, your trading partner sends you just two types of dates: the requested ship date and the ship no later date (in that order). You used the key field function for the DTM:2 segment to indicate to Gentran:Server that the ship no later date is printed in the DTM:202 field (Date). The DTM:201 element must be present, but you can prevent this field from being displayed, since the meaningful information for a printout is the date itself.

Use this procedure to hide the second Date/Time Qualifier field.

Step	Action
1	Double-click the **DTM:201** element.
	System Response
	The Element Properties dialog is displayed.
	(Continued on next page)

(Contd) Step	Action
2	Select the **Print** tab.
3	Clear the **Include fields in the print** check box.
4	Click **OK** to exit the dialog.

How to customize the DTM:202 element
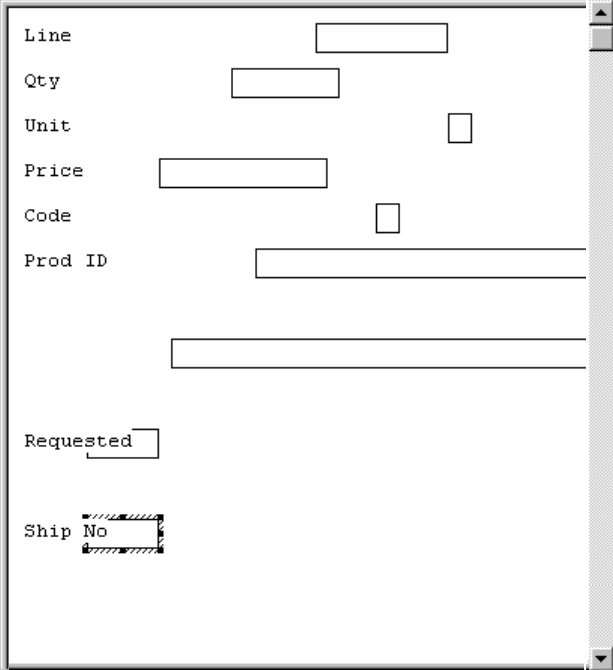
The DTM:202 element contains the Date corresponding to the date qualifier in the DTM:201 element. For this tutorial, the DTM:202 element is used to designate the latest date that shipments should be shipped.

In this section of the tutorial, you rename the label for this field (the new label is named Ship No). You add Later further in this tutorial using static text so that Later is displayed on the line below Ship No. The full field label is Ship No Later.

The EDI data from your trading partner is formatted as YYMMDD, but you format the date as MM/DD/YY on the printout.

Use this procedure to change the field and element lengths, hide the Date field label, and set the date format for the date on the printout.

Step	Action
1	Double-click the **DTM:202** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), in this element.
4	From the Format of the data in the form list, select **MM/DD/YY** to designate the format for the date on the printout.
5	Verify that **YYMMDD** is selected in the Format of the data of the file list to designate the format for the date in the EDI data.
6	Select the **Print** tab.
7	In the Label box, enter **Ship No** to replace the existing field label.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed on the printout.
9	Click **OK** to exit the dialog. (Continued on next page)

(Contd) Step	Action
10	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form. The PO1 frame now should look like this:

Now you are ready to format the fields and their labels to make the frame more consistent and visually attractive.

Format the Print Form

Overview

Introduction   In the previous section of this tutorial, you customized the print form for an ANSI X12 003040 purchase order (850) that you use to print the data you receive from Pet Zone. After successfully customizing the fields and elements of the print form, you are ready to format the layout of the form.

One form can consist of several frames. Each group and repeating segment has a corresponding frame that contains all the groups, segments, and elements at that level. When the form is printed, the frames are printed consecutively, in the order in which they occur in the form. Each frame is not printed on a separate page.

This section explains how to format the form, field by field.

Resizing the Header Frame

Overview

When a printout is produced based on the customized print form, the information is arranged according to how the frames and the fields contained in them were arranged when the form was compiled. You should eliminate unnecessary space as you arrange the fields on each frame.

Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Procedure

Use this procedure to resize the header frame.

Step	Action
1	Click the **BEG** segment to display the Beginning Segment for Purchase Order (header) frame in the Layout Window.
2	To display more of the form on your screen, click and drag the **center bar** between the EDI File Format Window and the Layout Window to the left until the Layout Window is wide enough to display as much of the form as you want. **Note** You should be able to view the entire width of the frame. If the right side of the header frame (and the vertical scroll bar for the frame) are not visible in the Layout Window, then move the center bar between the EDI File Format Window and the Layout Window farther to the left so the entire frame is displayed. Alternatively, you can use the horizontal scroll bar at the bottom of the Forms main window to bring the right side of the header frame into view.
3	To resize the header frame, click and drag the right side of the frame approximately to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" sheet of paper). **Note** Use the horizontal ruler at the top of the frame to help you resize the frame. The instructions in this tutorial are given in centimeters. You can toggle from inches to centimeters by double-clicking the yellow square where the vertical and horizontal rulers meet.

Adding a Title to the Form

Overview   You want the form to have a title designating the standard agency (ANSI X12), the version (3040), the type of document (purchase order), and the trading partner for which this form is used. You add a title to the print form by adding static text.
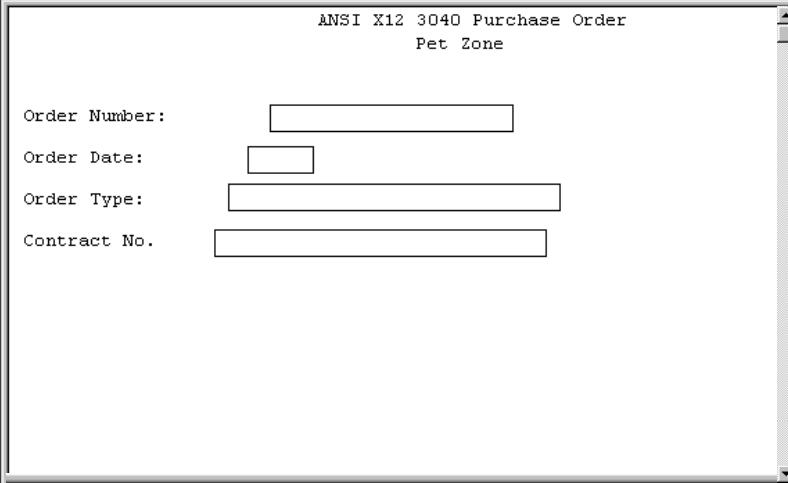
Procedure   Use this procedure to add and position the title for the form.

Step	Action
1	Click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame. **Note** If the template is larger than the frame (there is a scroll bar on the right side of the frame), the static text is displayed in the upper left corner of the part of the template that is displayed, not at the top of the template.
2	In the new selected text box, enter **ANSI X12 3040 Purchase Order** and click **OK**.
3	Click **Add Text** on the Main Toolbar **System Response.** A new text box is added to the current frame in the upper left corner.
4	In the new selected text box, enter **Pet Zone** and click **OK**. **System Response** The static text you added is displayed in the upper left corner of the frame.

How to center the text   Use this procedure to center the static text at the top of the purchase order form.

Step	Action
1	Click and drag the first line of static text (**ANSI X12 3040 Purchase Order**) so that the text is centered on the first line of the frame. *(Continued on next page)*

Step	Action
2	Click and drag the second line of static text (**Pet Zone**) so that the text is centered on the second line of the frame. **System Response** The header frame (BEG) now should look like this: ANSI X12 3040 Purchase Order Pet Zone Order Number: Order Date: Order Type: Contract No.

Arranging the Header Fields (BEG and REF Segments)

Overview   By default, each field and its associated label are printed on their own line. However, it is common for purchase orders and forms to arrange some fields in columns of information. The first fields you rearrange are the header fields, which are the fields associated with the BEG and REF segments.

You prevented some of the field labels from being printed (by removing the field label in the Label box of the Print dialog). For these fields, the fields are displayed on your print form, but their associated labels are not.

Note
If you forget which unlabeled field contains what data, you can click the field. Its associated element is highlighted in the EDI File Format Window, providing you with a description of the field.

How to resize the header fields   When you customized the element properties in the previous section of this chapter, you changed the display lengths (on the Element Properties dialog) for some of the fields on the header frame. The fields that are displayed in the Layout Window currently reflect the default display lengths for the fields. To reflect the new sizes of the fields in the Layout Window, you must select the fields for which you changed the display lengths, then resize the fields.

Note
If a field and its corresponding field label move together, the Lock Labels to Fields option is turned on. Click the Lock Labels button on the Main Toolbar to turn off the Lock Labels option.

Use this procedure to resize the fields on the header frame.

Step	Action
1	Select all the fields on the header frame (Order Number, Order Date, Contract No., and Order Type). **Note** To select a group of fields, click and drag the mouse diagonally across all the fields you want to select.
2	Select **Size to Length** from the Display menu. The selected fields are resized to the lengths specified in the Maximum number of characters box of the Print dialog for each field. **Note** If you format a form component in a way you did not intend, select Undo from the Display menu to undo your last formatting action.

How to move and align the header fields and field labels
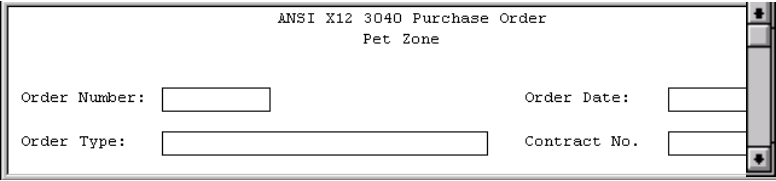
Use this procedure to move and align the fields and field labels on the header frame.

Note
If a field is not in the part of the frame that currently is displayed, use the scroll bar to scroll down the frame until you locate the hidden fields.

Step	Action
1	Select each field individually and drag it closer to its respective field label. **CAUTION** **DO NOT MOVE FIELDS THAT ARE NOT LABELED.**
2	Select the **Order Date** label and field and drag them to the right of the Order Number label and field (at approximately 11.5 cm.).
3	Select the **Order Type** label and field and drag them below the Order Number label and field.
4	Select the **Contract No**. label and field and drag them below the Order Date label and field.
5	Select the **Order Number** and **Order Type** field labels.
6	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the Order Type and Order Number field labels are aligned.
7	Select the **Order Type** and **Order Number** fields (in that order).
8	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the Order Type and Order Number fields are aligned.
9	Select the **Order Date** and **Contract No.** field labels (in that order).
10	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the Contract No. and Order Date field labels are aligned.
11	Select the **Order Date** and **Contract No.** fields (in that order).
12	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the Contract No. and Order Date fields are aligned.
13	Select the **Order Number** and **Order Date** labels and fields. **Note** To select a group of fields, click and drag the mouse diagonally across all the items you want to select. *(Continued on next page)*

(Contd) Step	Action
14	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields and field labels are aligned.
15	Select the **Order Type** and **Contract No.** labels and fields.
16	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields and field labels are aligned.
17	To resize the frame, click and drag the bottom of the frame to just below the Order Type and Contract No. labels and fields. **System Response** The header frame now should look like this:

Arranging the Note Field

Overview   The field that contains any notes or messages for the purchase order is contained on a separate frame than the header fields. To access this frame, select the NTE segment.

You prevented the label for the Free Form Message field from being displayed, so you see the field in the layout of your print form, but not its associated label.

In arranging the Free Form Message field and its frame, you first move the field, then you resize the frame to give it the same width as the header frame.

How to move the field   You should move the Free Form Message field so that its left side is aligned with the left sides of the field labels on the header frame.
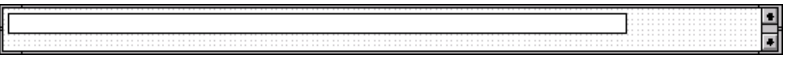
Step	Action
1	Click the **NTE** segment to display the Note frame in the Layout Window.
2	To move the Free Form Message field, click and drag it to the upper left corner of the Note frame.

How to resize the NTE frame   Use this procedure to resize the NTE (Note) frame.

Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Step	Action
1	Click and drag the bottom of the frame to just below the Free Form Message field.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper). **Note** Use the horizontal ruler at the top of the frame to help you resize the frame. **System Response** The NTE (Note) frame now should look like this:

Arranging the Terms of Sale Fields

Overview

The fields that contain information about the Terms of Sale for the purchase order are contained on another frame. To access this frame, select the ITD segment.

You prevented the labels for the Terms Type Code and Description fields from being displayed, so you see the fields in your print form, but not their associated labels.

In arranging the Terms of Sale fields and their frame, you first resize, move, and align the fields, then you resize the frame to give it the same width as the other frames.

How to resize the ITD fields

Use this procedure to resize the Terms of Sale fields.

Step	Action
1	Click the **ITD** segment to display the Terms of Sale frame in the Layout Window.
2	Select the **Terms Type Code** and **Description** fields. **Note** To select a group of fields, click and drag the mouse diagonally across all the fields you want to select.
3	Select **Size to Length** from the Display menu. The selected fields are resized to the lengths specified in the Maximum number of characters box of the Print dialog for each field.

How to move the fields

Use this procedure to move the Terms of Sale fields.

Step	Action
1	Select the **Terms Type Code** field and drag it to the upper left corner on the frame.
2	Select the **Description** field and drag it to the right of the Terms Type Code field (on the same line).

How to align the fields

Use this procedure to align the Terms of Sale fields.
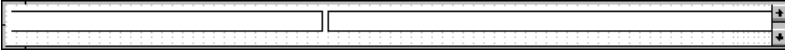
Step	Action
1	Select the **Terms Type Code** and **Description** fields.
2	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields are aligned.

How to resize the ITD frame

Use this procedure to resize the ITD (Terms of Sale) frame.

Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Step	Action
1	Click and drag the bottom of the frame to just below the Description and Terms Type Code fields.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper). **Note** Use the horizontal ruler at the top of the frame to help you resize the frame. The ITD (Terms of Sale) frame now should look like this:

Arranging the Name and Address Fields

Overview   The fields that contain information about the Names and Addresses for the purchase order are contained on three frames. When you finish formatting all the associated name and address fields, the information printed in these fields is arranged in a standard address format (the name on the first line; the street address on the next four lines; and the city, state, and zip code on the last line). To access the first frame, select the N1 segment.

After you format the fields in the N1 group, the address fields (on three frames corresponding to the N1, N3, and N4 segments) should look like these:

You prevented all the labels for the name and address fields from being displayed, so you see the fields in your print form, but not their associated labels.

In arranging the Name and Address fields and their frames, first you resize the frames to give them the same width as the header frame, then you move and resize the fields.

How to resize the   Use this procedure to resize the N1 (Name) frame.
N1 frame
Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Step	Action
1	Click the **N1** segment to display the Name frame in the Layout Window.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper). **Note** Use the horizontal ruler at the top of the frame to help you resize the frame.

How to resize the N3 frame

Use this procedure to resize the N3 (Address Information) frame.

Step	Action
1	Click the **N3** segment to display the Address Information frame in the Layout Window.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper).

How to resize the N4 frame

Use this procedure to resize the N4 (Geographic Location) frame.

Step	Action
1	Click the **NEW_N4** group to display the Geographic Location frame in the Layout Window.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper).

How to arrange the N1 fields

Use this procedure to arrange the Name fields on the N1 frame.

Step	Action
1	Click the **N1** segment to display the Name frame in the Layout Window.
2	Select the **Entity Identifier Code** field (0098_DESC) and drag it to the upper left corner on the frame.
3	Select the **Name** field and drag it to right of the Entity Identifier Code field (on the same line).
4	Select the **Entity Identifier Code** and **Name** fields. **Note** To select more than one field, click the first field, then press CTRL and click the second field.
5	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields are aligned.
6	To resize the frame, click and drag the bottom of the frame to just below the Entity Identifier Code and Name fields.

How to arrange the N3 fields
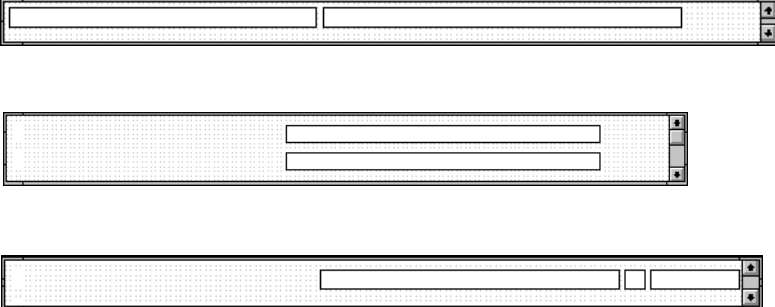
Use this procedure to move the Address Information fields on the N3 frame.

Step	Action
1	Click the **N3** segment to display the Address Information frame in the Layout Window.
2	Select both **Address Information** fields.
3	Click and drag them so that the left margins of the fields begin at approximately 8.3 cm. The Address Information fields are aligned with the Name field on the previous (Name) frame.
4	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the Address Information fields are aligned.
5	To resize the frame, click and drag the bottom of the frame to just below the second Address Information field.

How to arrange the N4 fields

Use this procedure to move the Geographic Location fields on the N4 frame.

Step	Action
1	Click the **NEW_N4** group to display the Geographic Location frame in the Layout Window.
2	Click and drag the **City Name** field so that the left margin of the field begins at approximately 8.3 cm. The City Name field is aligned with the Name field on the Name frame, and with the Address Information fields on the Address Information frame.
3	Click and drag the **State or Province Code** field to the right of the City Name field (on the same line).
4	Click and drag the **Postal Code** field to the right of the State or Province Code field (on the same line).
5	Select the **City Name**, **State** or **Province Code**, and **Postal Code** fields.
6	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected items are aligned. *(Continued on next page)*

Step	Action
7	To resize the frame, click and drag the bottom of the frame to just below the City Name, State or Province Code, and Postal Code fields. The N1, N3, and N4 frames now should look like these:

Arranging the Line Items Fields

Overview

The fields that contain information about each line item for the purchase order are contained on a separate frame. To access this frame, select the PO1 group.

You prevented some of the field labels from being displayed, so you see the fields in the layout of your print form, but not all of the associated labels. In case you have forgotten which unlabeled field contains what data, you can click the field. The name of the element is highlighted in the EDI File Format Window.

Before you arrange the line items fields and their frame, first you resize the frame to give it the same width as the other frames. Then, you move and resize the fields and field labels, as well as add static text to the form.

How to resize the PO1 frame

Use this procedure to resize the PO1 (Line Items) frame.

Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Step	Action
1	Click the **PO1** group to display the Line Items frame in the Layout Window.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" piece of paper). **Note** Use the horizontal ruler at the top of the frame to help you resize the frame.

How to resize the line items fields

Use this procedure to resize the line items fields.

Step	Action
1	Select the following fields: ◗ Line ◗ Qty ◗ Price ◗ Prod ID ◗ Requested ◗ Ship No ◗ Description **Note** To select more than one field, click the first field, then press CTRL and click the second field.
2	Select **Size to Length** from the Display menu. **System Response** The selected fields are resized to the lengths specified in the Maximum number of characters field of the Print dialog for each field.

Adding column headings

You can add column headings (using static text) to the frame to change the way the field labels are displayed in the form. Currently, each field label in this form takes up one line of text.

You need all the horizontal space that is available to arrange the line item fields horizontally. By adding a second line of text to some of the longer field labels (these field labels are identified in the steps that follow), more horizontal space is available on the frame.

You are adding the following lines of static text to the form:

Static Text	Placement on Form
No.	Below the Line field label
Type	Below the Code field label
Ord	Below the Qty field label
Each	Below the Price field label
Ship Date	Below the Requested field label
Later	Below the Ship No field label

Adding column headings (contd)

You add all of the static text (column headings and separating lines), then move each line of static text into its proper location, later in this section.

When you finish adding the static text and moving each line of static text to its proper location, the PO1 (Baseline Item Data) frame should look like this:

Procedure

Use this procedure to add and position static text.

Step	Action
1	Select all the fields and field labels on the frame. **Note** To select more than one field or field label, click and drag the mouse diagonally across all the fields and field labels you want to select.
2	Click and drag them to the bottom portion of the frame. You are arranging the fields at the top of the frame, so moving the fields and field labels out of the way initially gives you room to work with at the top of the frame.
3	Click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame. If the template is larger than the frame (there is a scroll bar on the right side of the frame), the static text is displayed in the upper left corner of the part of the template that is displayed, not at the top of the template.
4	In the selected text box, enter **No.** (note the period included in the text) and click **OK**. **Note** A field already has a label named Line. To complete the identification of this field, you add static text with the name "No." After you add the static text for this field, you move No. below "Line" to create a column heading for the fields containing the line item number.
5	Again click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame. *(Continued on next page)*

(Contd) Step	Action
6	In the new text box, enter **Type** and click **OK**. **Note** A field already has a label named Code. To complete the identification of this field, you add static text with the name, Type. After you add the static text for this field, you move "Type" below "Code" to create a column heading for the fields containing the product/service ID qualifier.
7	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
8	In the new text box, enter **Ord**. **Note** A field already has a label named Qty. To complete the identification of this field, you add static text with the name Ord. After you add the static text for this field, you move Ord below Qty to create a column heading for the fields containing the quantity ordered.
9	Click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame.
10	In the new text box, enter **Each**. **Note** A field already has a label named Price. To complete the identification of this field, you add static text with the name, Each. After you add the static text for this field, you move "Each" below "Price" to create a column heading for the fields containing the price of each line item.
11	Click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame.
12	In the new text box, enter **Ship Date**. **Note** A field already has a label named Requested. To complete the identification of this field, you need to add static text with the name Ship Date. After you add the static text for this field, you move Ship Date below Requested to create a column heading for the fields containing the requested ship date. (Continued on next page)

(Contd) Step	Action
13	Click **Add Text** on the Main Toolbar. **System Response** A text box is added to the current frame, displayed in the upper left corner of the frame.
14	In the new text box, enter **Later**. **Note** A field already has a label named "Ship No". To complete the identification of this field, you need to add static text with the name "Later". After you add the static text for this field, you move "Later" below "Ship No" to create a column heading for the fields containing the latest date items may be shipped. The column headings (static text) you added are displayed in the upper left corner of the frame.
15	Select all the static text you added and drag it to the bottom of the frame. Moving the static text out of the way gives you more room at the top of the frame.

How to add lines separating column headings and fields

In this print form, rectangular boxes are used to designate fields. The boxes make it easy to distinguish fields from field labels and static text. On the printout, there are not rectangular boxes surrounding the data in the fields. The printed field data and the field labels tend to look the same on the printout (same typeface, same size text, no boldface or italic type). You can make the field labels and static text stand out from the fields containing the actual data by adding lines separating the labels from the fields. You add static text to the form to add the separating lines.

You add the following lines of static text (hyphens) to the form:

Static Text	Number of Hyphens	Placement on Form
------	Six	Below the No. static text
------------	Twelve	Below the Prod ID field label
----	Four	Below the Type static text
--------	Eight	Below the Ord static text
----	Four	Below the Unit field label
-----------	Eleven	Below the Each static text (Continued on next page)

(Contd) Static Text	Number of Hyphens	Placement on Form
----------	Ten	Below the Ship Date static text
----------	Ten	Below the Later static text

When you finish adding the static text and moving each line of static text to its proper location, the PO1 (Baseline Item Data) should look like this:

You add all of the static text, then move each static text to its proper location.

Use this procedure to add and position separating lines (------) in the form.

Step	Action
1	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame. If the template is larger than the frame (there is a scroll bar on the right side of the frame), the static text is displayed in the upper left corner of the part of the template that is displayed, not at the top of the template.
2	In the new text box, enter **------** (six hyphens). This series of hyphens forms a separating line between the words Line No. and the field below.
3	Click Add Text on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
4	In the new text box, enter **-------------** (twelve hyphens). This series of hyphens forms a separating line between the words Prod ID and the field below.
5	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
6	In the new text box, enter **----** (four hyphens). This series of hyphens forms a separating line between the words Code Type and the field below.
7	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
8	In the new text box, enter **--------** (eight hyphens). This series of hyphens forms a separating line between the words Qty Ord and the field below.

(Contd) Step	Action
9	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
10	In the new text box, enter **----** (four hyphens). This series of hyphens forms a separating line between the word Unit and the field below.
11	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
12	In the new text box, enter **-----------** (eleven hyphens). This series of hyphens forms a separating line between the words Price Each and the field below.
13	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
14	In the new text box, enter **----------** (ten hyphens). This series of hyphens forms a separating line between the words Requested Ship Date and the field below.
15	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame.
16	In the newtext box, enter **----------** (ten hyphens). This series of hyphens forms a separating line between the words Ship No Later and the field below. The column headings you added are displayed in the upper left corner of the frame.
17	Select all the static text you added and drag it to the bottom of the frame. Moving the static text out of the way gives you more room at the top of the frame.

Moving the PO1 fields, column headings, and separating lines

The PO1 frame now contains all of the fields, column headings, and separating lines that are arranged on the form to create columns of information. Now you are ready to move the fields, labels, static text (column headings), and separating lines to their proper locations on the frame.

How to arrange the line no. column

Use this procedure to arrange the Line No. column on the PO1 frame.

Step	Action
1	Select the **Line** field label and drag it to the upper left corner on the frame.
2	Select the **No.** static text and drag it below the Line field label.
3	Select the first separating line you added (six hyphens) and drag it below the No. static text.
4	Select the **Line** field and drag it below the separating line you just moved.

How to arrange the prod ID column

Use this procedure to arrange the Prod ID column on the PO1 frame.

Step	Action
1	Select the **Prod ID** field label and drag it to the right of the No. static text.
2	Select the second separating line you added (twelve hyphens) and drag it below the Prod ID field label.
3	Select the **Prod ID** field and drag it below the separating line you just moved.

How to arrange the code type column

Use this procedure to arrange the Code Type column on the PO1 frame.

Step	Action
1	Select the **Code** field label and drag it to the right of the Prod ID field label (but in the same row as the Line field label).
2	Select the **Type** static text and drag it below the Code field label.
3	Select the third separating line you added (four hyphens) and drag it below the Code field label.
4	Select the **Code** field and drag it below the separating line you just moved.

How to arrange the Qty Ord column

Use this procedure to arrange the Qty Ord column on the PO1 frame.

Step	Action
1	Select the **Qty** field label and drag it to the right of the Code field label.
2	Select the **Ord** static text and drag it below the Qty field label.
3	Select the fourth separating line you added (eight hyphens) and drag it below the Ord static text.
4	Select the **Qty** field and drag it below the separating line you just moved.

How to arrange the Unit column

Use this procedure to arrange the Unit column on the PO1 frame.

Step	Action
1	Select the **Unit** field label and drag it to the right of the Ord static text.
2	Select the fifth separating line you added (four hyphens) and drag it below the Unit field label.
3	Select the **Unit** field and drag it below the separating line you just moved.

How to arrange the Price Each column

Use this procedure to arrange the Price Each column on the PO1 frame.

Step	Action
1	Select the **Price** field label and drag it to the right of the Unit field label (but in the same row as the Qty field label).
2	Select the **Each** static text and drag it below the Price field label.
3	Select the sixth separating line you added (eleven hyphens) and drag it below the Each static text.
4	Select the **Price** field and drag it below the separating line you just moved.

How to arrange the Requested Ship Date column

Use this procedure to arrange the Requested Ship Date column on the PO1 frame.

Step	Action
1	Select the **Requested** field label and drag it to the right of the Price field label.
2	Select the **Ship Date** static text and drag it below the Requested field label.
3	Select the seventh separating line you added (ten hyphens) and drag it below the Ship Date static text.
4	Select the **Requested** field and drag it below the separating line you just moved.

How to arrange the Ship No later column

Use this procedure to arrange the Ship No Later column on the PO1 frame.

Step	Action
1	Select the **Ship No** field label and drag it to the right of the Requested field label.
2	Select the **Later** static text and drag it below the Ship No field label.
3	Select the eighth separating line you added (ten hyphens) and drag it below the Later static text.
4	Select the **Ship No** field and drag it below the separating line you just moved.

How to move the Description field
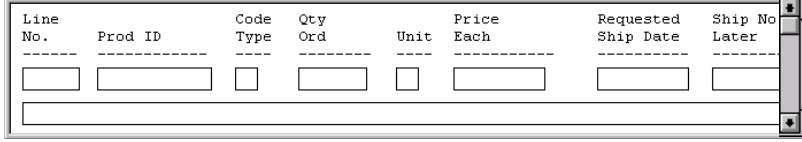
The Description field is not placed in a column. Rather, this field is placed below the other fields on the PO1 frame.

Step	Action
1	To move the Description field, click and drag it below the last row of fields.

**How to resize the
PO1 frame**

You should resize the PO1 frame to eliminate unnecessary space resulting from arranging the fields on the frame.

Step	Action

1	To resize the frame, click and drag the bottom of the frame to just below the Description field.
	
	The PO1 frame now should look like this:
	
	`Line` `Code` `Qty` `Price` `Requested` `Ship No`
	`No.` `Prod ID` `Type` `Ord` `Unit` `Each` `Ship Date` `Later`

How to align rows

One of the remaining tasks in formatting the print form is to align the fields, field labels, and static text. First, you align the items in rows to give the form a consistent appearance. You align the items in columns later in this tutorial.

Use this procedure to align the fields, field labels, and static text by row (horizontally).

Step	Action
1	Select the following field labels and static text: ◗ Line ◗ Code ◗ Qty ◗ Price ◗ Requested ◗ Ship No **Note** To select a group of items, click and drag the mouse diagonally across all the items you want to select.
2	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected field labels and static text are aligned in a row. *(Continued on next page)*
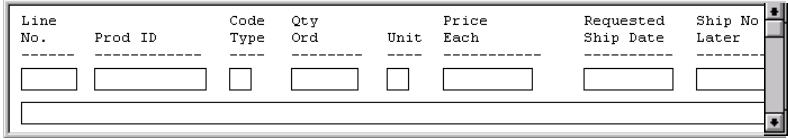
(Contd) Step	Action
3	Select the following field labels and static text: ◗ No. ◗ Prod ID ◗ Type ◗ Ord ◗ Unit ◗ Each ◗ Ship Date ◗ Later
4	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected field labels and static text are aligned in a row.
5	Select all the separating lines between column headings and fields.
6	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected static text are aligned in a row.
7	Select the following fields: ◗ Line No. ◗ Prod ID ◗ Code Type ◗ Qty Ord ◗ Unit ◗ Price Each ◗ Requested Ship Date ◗ Ship No Later
8	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields are aligned in a row.

How to align columns
Now, you align the fields, field labels, and static text in columns to help give the form a consistent appearance.

Use this procedure to align the fields, field labels, and static text in columns.

Step	Action
1	Select the **Line No.** column heading, its separating line, the **Line No.** field, and the **Description** field. **Note** To select a group of items, click and drag the mouse diagonally across all the items you want to select.
2	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
3	Select the **Prod ID** column heading, its separating line, and the **Prod ID** field.
4	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
5	Select the **Code Type** column heading, its separating line, and the **Code Type** field.
6	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
7	Select the **Qty Ord** column heading, its separating line, and the **Qty Ord** field.
8	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
9	Select the **Unit** column heading, its separating line, and the Unit field.
10	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
11	Select the **Price Each** column heading, its separating line, and the **Price Each** field.
12	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.
13	Select the **Requested Ship Date** column heading, its separating line, and the **Requested Ship Date** field.
14	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.

(Continued on next page)

(Contd) Step	Action
15	Select the **Ship No Later** column heading, its separating line, and the **Ship No Later** field.
| 16 | Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The selected items are left-aligned in a column.<br><br>The PO1 (Baseline Item Data) frame now should look like this:<br><br>```
Line                  Code  Qty              Price       Requested   Ship No
No.     Prod ID       Type  Ord      Unit    Each        Ship Date   Later
------  ------------  ----  --------  ----    ----------- ---------   --------
[    ] [          ]   [ ]  [       ] [ ]    [         ]  [        ]   [     ]
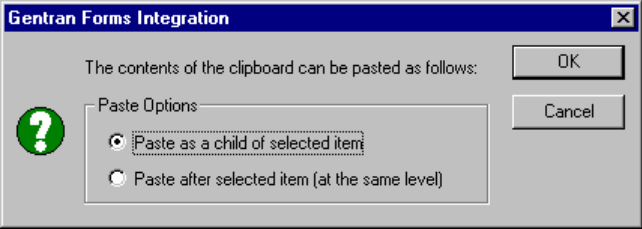
[                                                                         ]
``` |

Creating the Line Items frame without column headings

You have completed formatting the Line Items frame so that the line item information is displayed in columns and rows. If you were to register the translation object now with Gentran:Server and run EDI data through the translation object, then you would see that the column headings would be repeated for every line item.

The column headings need to be printed on the printout only once, so you copy and paste the PO1 group to create a second PO1 group (named PO1:2). The formatting in the PO1 group is retained in the PO1:2 group. You change the maximum use of the first PO1 group to one (so that the column headings are printed only once). Then, you remove the column headings in the PO1:2 group from the area that is printed, leaving only the fields for printing the information on the printout.

In addition, you change the maximum use of the PO1:2 group to 99,999. Your partner can send you to 100,000 line items, so the total maximum use of both PO1 groups does not need to exceed 100,000. The maximum use of the PO1:2 group is changed to 99,999.

How to copy and paste the PO1 group

Use this procedure to copy and paste the PO1 group.

Step	Action
1	Select the **PO1** group.
2	Click **Copy** on the Main Toolbar. *(Continued on next page)*

(Contd) Step	Action
3	Select **Paste** on the Main Toolbar to paste the PO1 group after the existing PO1 group. Gentran:Server prompts you to specify whether you want the contents of the clipboard pasted as a child (subordinate) of the selected group, or at the same level as the group.
4	Click the **Paste** after selected item (at the same level) option to paste the Clipboard contents after the original PO1 group.
5	Click **OK** to exit the dialog. The pasted PO1 group is renamed PO1:2.

How to change the maximum use of the PO1 group

Use this procedure to change the maximum use of the PO1 group.

Step	Action
1	Click the **PO1** group with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The Group Properties dialog is displayed.
3	In the Max Usage box, enter **1** to indicate that this group can be used only once in each purchase order.
4	Click **OK** to exit the Group Properties dialog.

How to change the maximum use of the PO1:2 group

Use this procedure to change the maximum use of the PO1:2 group.

Step	Action
1	Click the **PO1:2** group with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The Group Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **99999** to indicate that this group can be used up to 99,999 times in each purchase order.
5	Click **OK** to exit the Group Properties dialog.

How to move the PO1:2 column headings below the print area

Use this procedure to move the column headings on the second Line Items frame (PO1:2) below the print area, so the headings are not printed.

Step	Action
1	Click **Generate Layout** on the Main Toolbar to refresh the display of the print form.
2	Select the **PO1:2** group. Its corresponding frame is displayed in the Layout Window.
3	Select all of the column headings and separating lines on the frame, and drag them below the bottom of the frame so they are not displayed. These items are still included in the print form, but they are not printed on the printout. **Note** To select more than one field label or static text, click and drag the mouse diagonally across all the items you want to select.
4	Select all of the fields on the frame, and drag them to the top of the frame. *(Continued on next page)*

(Contd) Step	Action
5	To resize the frame, click and drag the bottom of the frame to just below the Description field. **CAUTION** **SELECT SAVE FROM THE FILE MENU TO SAVE THE FORM, BECAUSE YOU HAVE COMPLETED THE FORM AND YOU ARE READY TO COMPILE THE FORM.** The PO1:2 frame now should look like this:

Resizing the Transaction Total Frame

Overview   The Number of Line Items field (CTT_Group group) for the purchase order is contained on a separate frame than the rest of the purchase order information because this field contains summary information that you want to be printed at the bottom of the translation object.

You resize the Transaction Total (CTT_Group) frame to give it the same width as the other frames in the purchase order.

Procedure   Use this procedure to resize the following steps to resize the Transaction Total frame.

Step	Action
1	Click the **CTT_Group** group to display the Transaction Total (CTT_Group) frame in the Layout Window.
2	Click and drag the right side of the frame to the 20 cm. mark on the horizontal ruler (a form with a width of 20 cm. can be printed on an 8 1/2" x 11" sheet of paper).
3	Click and drag the bottom of the frame to just below the Number of Line Items field.
4	Select **Save** from the File menu. The CTT_Group frame now should look like this: Number Of Line Items

You have completed your Purchase Order form and you are ready to compile the form.

Finalize the Form

Overview

Introduction   Now that you have created and customized the print form, you are ready to compile the form to generate the translation object (*.TPL) that Gentran:Server uses before you print the report and test the compiled translation object.

Compiling the Form

Overview   The Compile function compiles the form. The form that you create using Gentran:Server is a source form. When that source form is compiled, the result is a compiled translation object.

This translation object must be registered with the Gentran:Server system before you can use it. Use the Compile function after the form is completed and saved.

Procedure   Use this procedure to compile the form.

Step	Action
1	Select **Compile** from the File menu to display the Run-Time Translation Object Name dialog. **CAUTION** **DO NOT TO OVERLAY THE SOURCE FORM WITH THE COMPILED TRANSLATION OBJECT. USE THE .TPL FILE EXTENSION TO DISTINGUISH THE COMPILED TRANSLATION OBJECT.** (Continued on next page)

(Contd) Step	Action
2	Click **Save** to accept the translation object name (pet_850p.tpl) in the File name box. This name for the compiled translation object (.TPL file) is the same file name as the source form (.STP file). Preserving the same file name (with different file extensions) ensures that the relationship between the source form and the compiled translation object remains evident. **System Response** The system compiles the form and generates an error report. The error report is displayed in the Compile Errors dialog.
3	Click **OK** to exit the Compile Errors dialog. **Note** If the Compile Errors dialog contains errors, you must fix the problems by redoing the appropriate section of the tutorial. Recompile the form after you correct the errors and save the form.
4	Select **Save** from the File menu to save the form.

Printing the Report

Overview   The Gentran:Server report enables you to validate and review the translation object, and make modifications as needed. If you review the report and determine that the translation object is incorrect, you should reiterate the form creation process as many times as necessary (make the modifications, save the form, recompile the form, and print the report again).

Procedure   Use this procedure to print the Gentran:Server report.

Step	Action
1	Select **Print** from the File menu to access the Print Options dialog. **System Response** The Print Options dialog is displayed
2	Click **OK** to accept the defaults on this dialog (all options checked), so the report includes all sections and only the activated form components. **System Response** The Print dialog is displayed.
3	Do you need to change setup options (to select a specific printer, paper orientation, or size and source of paper) ? ◗ If yes, click **Properties**. Set the appropriate options. Click **OK** to begin the print process. ◗ If no, click **OK** to begin the print process.

Testing the Translation Object

Overview   Before you can use the ANSI 850 Pet Zone print translation object, you must test the translation object to verify that there are no errors in it. To test the translation object, you must have a file containing test data. For this tutorial, you use the PETTEST2.INT test file.

Procedure   Use this procedure to test the print translation object you just created.

Step	Action
1	Register the **PET_850P.TPL** translation object with Gentran:Server. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on registering a translation object.
2	Import the **PETZONE.PAR** partner relationship into Gentran:Server. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on importing a partner. The default path for the partner is: C:\GENSRVNT\TUTORIAL\PETZONE4.PAR
3	Verify (in Partner Editor) that the **Print 850 Pet Zone** print translation object is selected for the Inbound Relationship. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on selecting inbound translation objects.
4	Use the **Process File** option in Gentran:Server to process the data file (PETTEST2.INT) through the translation object. The data file is located in the TUTORIAL subfolder under the folder where Gentran:Server is installed. The default path for the data file is: C:\GENSRVNT\TUTORIAL\PETTEST2.INT
5	After the document is translated, it is located in the In Documents in Gentran:Server. Print the document to ensure that the document was translated correctly and that the printout looks the way you want it to look. **Reference** See the *User's Guide* for more information on printing documents.

CHAPTER

3

Creating a Screen Entry Form

Overview

Introduction

In this chapter
This tutorial defines the tasks necessary to create a screen entry form. A screen entry form is a predesigned layout that, when compiled into a translation object, enables users in your company to easily enter the data necessary to create a business document.

This chapter includes the following topics associated with creating a screen entry form:

◗ Form analysis

◗ Creating, saving, and setting up a new form

◗ Customizing the form, including the groups, segments, and elements

◗ Formatting the form, including fields and field labels

◗ Finalizing the form

Form criteria
Gentran:Server generates a basic form based on the following criteria you specify:

◗ Type of form (e.g., print or screen entry)

◗ Standard agency (e.g., ANSI X12, EDIFACT)

◗ Standard version (e.g., 003040, 90.1)

◗ Document type (e.g., 810 INVOICE, INVOIC)

Mandatory components
All mandatory groups, segments, and elements for the standard, version, and transaction set you specify are available for use (activated) when Gentran:Server creates a form. Only these mandatory form components (groups, segments, and elements) are activated automatically. You must activate additional form components that you want to be displayed in the screen entry form, and then customize and format the form so that it is appropriate and useful for your company's needs.

Before you begin
Before you begin to customize a screen entry form, you should be familiar with the following elements of form design:

◗ EDI standards (how EDI standards work and how the information your users need is translated to and from the standards)

◗ Your users (the individuals who are using the screen entry forms to enter EDI data)

◗ Your trading partners (the organizations receiving the EDI data that your users enter in the screen entry form)

Before you begin (contd)

You can create a different screen entry form for each combination of transaction set, trading partner, and standard version. There is no limit to the number of screen entry forms you can create, and the number of screen entry forms you create is not affected by the number of print forms you create.

Recommendation

We recommend that you mock up a layout of the screen entry form the way you ultimately want it to look. As you are designing the layout, you should take into consideration the people who are using the translation object. Make sure that the form makes sense to the people who are using it. By analyzing your company's needs before you actually create the screen entry form, you reduce the amount of time spent later on redesigning or reformatting the form.

Phases of Designing a Form

Design phases   This table lists the phases of form design.

Phase	Description
1	Analyze the EDI file.
1	Design and creating the form.
2	Modify the form components.
3	Customize the EDI data.
4	Format the form.
5	Finalize the form.

Getting Started

Overview

This tutorial is meant to be completed in its entirety. We strongly recommend that you complete each task sequentially. The purpose of completing each task in this tutorial in sequential order, as if it were your own scenario, is not only to teach you how to perform the individual tasks, but also to teach you a logical approach and methods that should be used when you create your own form.

This section guides you in completing the steps in the first phase of form design. In this section, you create a new screen entry form based on a scenario we have defined for you. This section includes the basics of creating the form, such as defining the scenario and analyzing the purpose of the form, creating and saving the form, and setting up the form. You can find techniques for customizing the segments, elements, and groups in the form, as well as for formatting the organization and appearance of the form, later in this chapter.

Screen entry form scenario

For this tutorial, you create a screen entry form for the 810 transaction set (invoice), using the ANSI X12 003040 standard. The steps involved in creating this form are broken down into manageable pieces so that you can learn the tasks and procedures involved in creating a screen entry form. Then, you can apply the knowledge gained from using this tutorial to create your screen entry forms.

In this scenario, your company is MWT Manufacturing Co., which manufactures a wide variety of pet supplies for pet stores. One of your trading partners, Pet Zone (a large pet supply retailer), orders products from your company. Your company then invoices Pet Zone for those products. You create a form that your data entry users will use to enter EDI data for the invoice that you send to Pet Zone. From discussions with Pet Zone, you know the requirements for the invoices that they receive from you.

Analyze the EDI File

Basic Tasks

Introduction To analyze the EDI file, first you must determine what data you need to send your trading partner and what data your trading partner expects to receive. It is important to analyze the data in this way so that the invoice contains all the necessary information, and so that your company can bill your partner correctly for the order you shipped to them. You and your partner must agree on which standard, version, and transaction set you are using. In this tutorial, you are using an ANSI X12 version 003040 810 invoice. It is important to know the information your partner expects you to send in the invoice, and what data is contained in each element used.

It is very helpful to review the EDI standard that you are using before analyzing the EDI file. We recommend that you obtain an EDI standard manual for the standard and version that you are using. Standard manuals are available from EDI standard agencies.

After discussing with your partner what you are sending, determining which segments and elements your partner requires, and reviewing the EDI standard, you can list the items that you must use (activate). When Gentran:Server generates the EDI file format, the system includes all the groups, segments, and elements that are defined by the standard agency for the version of the document you selected. The system activates all the groups, segments, and elements that are defined as mandatory (must be present) by the standard. The system does not enable you to deactivate mandatory groups, segments, and elements.

Form analysis The first step in creating a form is the analysis of the form requirements. If the analysis you perform is complete, you have all the information you need to create the form in an efficient and logical manner. If you omit this critical step and proceed directly to creating the form, it is likely that creating the form is a much longer and arduous task, and the form may not work the way you need it to, due to oversights and omissions.

Creating a screen entry form for the ANSI X12 810 invoice requires several steps. Some steps are performed at the document level (such as activating form components), and others are iterative steps that are performed for each group, segment, or element in the form. In this analysis phase, you must determine what EDI data you are sending Pet Zone, as well as what information Pet Zone requires to process the invoice. The fields on the form must account for all information that you expect to send to Pet Zone.

Mandatory components

This table lists the following groups, segments, and elements have been defined as mandatory by the standard committee for an ANSI X12 invoice (810). These components are activated automatically when you create a new form.

Segment	Element	Description	Data Type	Length
BIG		Beginning Segment for Invoice		
	BIG01	Invoice Date	Dt/Tm	6
	BIG02	Invoice Number	String	22
TDS		Total Monetary Summary		
	TDS01	Total Invoice Amount	Real	10
CTT		Transaction Totals		
	CTT01	Number of Line Items	Integer	6

When translating data, the system does not process groups, segments, and elements that are not activated. Therefore, *you* must make available (activate) the groups, segments, and elements that are not defined as mandatory by the standard, but that you have determined that you need to use in the form.

Required components

This table lists the form components that are required (need to be activated) and are not mandatory for the standard for this tutorial.

Note
When you activate a conditional group or segment, the mandatory subordinate segments and elements are activated automatically. A conditional group or segment is used only if there is EDI data available for an element contained in it.

Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Beginning Segment for Invoice (BIG Segment) (Already Activated)				
BIG03	Purchase Order Date	Dt/Tm	6	
BIG04	Purchase Order Number	String	22	
Reference Numbers (REF Segment)				
REF01	Reference Number Qualifier	String	2	CT (Contract Number)
REF02	Reference Number	String	30	
				(Continued on next page)

(Contd) Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Name and Address (N1 Group)				
Name (N1 Segment)				
N101	Entity Identifier Code	String	2	◗ ST (Ship To) ◗ RT (Remit To)
N102	Name	String	35	
Address Information (N3 Segment)				
N301	Address Information	String	35	
N302	Address Information	String	35	
Geographic Information (N4 Segment)				
N401	City	String	30	
N402	State or Province Code	String	2	
N403	Postal Code	String	9	
Terms of Sale/Deferred Terms of Sale (ITD Segment)				
ITD01	Terms Type Code	String	2	Any valid code
Date/Time Reference (DTM Segment)				
DTM01	Date/Time Qualifier	String	3	090 (Contract Effective)
DTM02	Date	Dt/Tm	6	
Baseline Item Data (IT1 Group)				
Baseline Item Data (Invoice) (IT1 Segment in the IT1 Group)				
IT101	Assigned Identification	String	11	
IT102	Quantity Invoiced	Real	10	
IT103	Unit or Basis for Measurement Code	String	2	Any valid code
IT104	Unit Price	Real	14	Format = R2
IT106	Product/Service ID	String	30	
IT107	Product/Service ID Qualifier	String	2	UP (UPC Consumer Package Code)
				(Continued on next page)

(Contd) Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Product/Item Description (PID Group in the IT1 Group)				
Product/Item Description (PID:2 Segment in the PID Group)				
PID:201	Item Description Type	String	1	F (Free-Form Description)
PID:205	Description	String	80	
Date/Time Reference (DTM:2 Segment in the IT1 Group)				
DTM:201	Date/Time Qualifier	String	3	011 (Date Shipped)
DTM:202	Date	Dt/Tm	6	
Carrier Detail (CAD Segment in the IT1 Group)				
CAD01	Transportation Method/ Type Code	String	2	Any valid code
CAD08	Reference Number	String	30	

Segment analysis   For each segment activated (either mandatory or optional), you must ask the following questions:

◗   Does the segment have a maximum use greater than one?

◗   What elements need to be activated for the segment?

◗   This table describes the segment components used in this tutorial.

Component	Description
Group	Contains related segments and/or groups that repeat in sequence until either the group data ends or the maximum number of times that the loop is allowed to repeat is exhausted.
Repeating segment	Consists of elements that repeat (in sequence) until either the segment data ends or the maximum number of times the segment is allowed to repeat is exhausted. *(Continued on next page)*

Component	Description
Maximum use	Refers to the number of times that a segment can be used within the structure in which the segment is defined. For example, if a segment can be used only once within a group, but the group can be used multiple times, the segment still has a maximum use of one within each occurrence of the group. The standard defines the maximum number of times a segment can be used, but you must determine how many times a segment is used, based on what you are sending your trading partner.
Elements	Some elements are mandatory and others are optional to the standard but necessary for your needs. You must define all the elements that you are sending Pet Zone for each segment.

Customization tasks

Gentran:Server generates a form based on the groups, segments, and elements you activate. At this point, the form is compliant with the standard and it contains all the necessary components based on the data you send Pet Zone. However, you need to customize the form components to produce a form that is easy to use to enter data in a logical manner.

This table lists the customization tasks described in this tutorial.

Form Component	Description	Customization Task
BIG01 element	Invoice Date	Your users enter the date in the format "MM/DD/YY," but the date in the EDI data should be in the format of "YYMMDD," so you set the format accordingly.
BIG03 element	Purchase Order Date	Your users enter the date in the format "MM/DD/YY," but the date in the EDI data should be in the format of "YYMMDD," so you set the format accordingly.
REF segment	Reference Numbers	The standard allows this segment to be used up to twelve times, but you and your trading partner have decided to use this segment only once. Therefore, you change the maximum use of this segment to one. *(Continued on next page)*

(Contd) Form Component	Description	Customization Task
REF01 element	Reference Number Qualifier	The only type of reference number that you use is the contract number, so you do not need to load the entire code list table. You define a constant value in this field designating the type of number (contract number) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("CT" for contract number) is entered automatically.
N1 group	Name and Address	The standard allows this group to be used up to two hundred times, but you and your trading partner have decided to use two iterations of this segment and use each iteration once: one iteration is for the Ship To name and address, and one iteration is for the Remit To name and address. You promote this group twice so that one iteration of the N1 group is used for the Ship To name and address and another N1 group is used for the Remit To name and address. Then, you use the key field function to ensure that only the Ship To name and address are displayed in the first N1 group, and only the Remit To name and address are displayed in the second N1 group.
N3 segment in the N1 group	Address Information	The standard allows this segment to be used up to two times for each occurrence of the N1 group. You need this segment to be used only once for each name and address, so you change the maximum use of this segment to one.
N101 element in the Ship To address	Entity Identifier Code	The only type of entity identifier code that you use in this element is the Ship To name, so you do not need to load the entire code list table. You define a constant value in this field designating the type of name (Ship To name) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("ST" for Ship To name) is entered automatically.
N101 element in the Remit To address	Entity Identifier Code	The only type of entity identifier code that you use in this element is the Remit To name, so you do not need to load the entire code list table. You define a constant value in this field designating the type of name (Remit To name) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("RI" for Remit To name) is entered automatically. *(Continued on next page)*

(Contd) Form Component	Description	Customization Task
ITD segment	Terms of Sale/ Deferred Terms of Sale	The standard allows this segment to be used up to five times in one invoice to specify the terms under which this invoice is valid. You need this segment to be used only once for each invoice, so you change the maximum use of this segment to one.
ITD01 element	Terms Type Code	Your users can enter any of the terms type codes that the standard designates as valid codes. You load the entire code list for this element, which creates a list containing valid codes from which users can select.
DTM segment	Date/Time Reference	The standard allows the date to be used up to ten times. You use the DTM segment only once (for the contract date), so you change the maximum usage of the DTM segment.
DTM01 element	Date/Time Qualifier	The only type of date that you use in the DTM segment is the contract date, so you do not need to load the entire code list table. You define a constant value in this field designating the type of date (contract date) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("090" for contract date) is entered automatically.
DTM02 element	Date	Your users enter the date in the format "MM/DD/YY," but the date in the EDI data should be in the format "YYMMDD," so you set the format accordingly.
IT101 element	Assigned Identification	You use an accumulator for this element to count line items in the invoice. This accumulator is used in the Number of Line Items element (CTT01) to calculate the total number of line items in the invoice.
IT102 element	Quantity Invoiced	You use an accumulator for this element to calculate a running total of the invoice amount, which is used to calculate the total invoice amount. This accumulator is used in the Total Invoice Amount element (TDS01) to identify the total dollar amount invoiced.
IT103 element	Unit or Basis for Measurement Code	Your users can enter any of the unit codes that the standard designates as valid codes. You load the entire code list for this element, which creates a list containing valid codes from which users can select. *(Continued on next page)*

(Contd) Form Component	Description	Customization Task
IT104 element	Unit Price	Both the EDI data and the data that your users enter in the screen entry form should be formatted with an explicit decimal point and two decimal places. Also, you use an accumulator for this element to calculate the total dollar amount of the invoice. This accumulator is used in the Total Invoice Amount element (TDS01) to identify the total dollar amount invoiced.
IT106 element	Product/Service ID Qualifier	The only type of qualifier that you use in this element is the UPC code for the item, so you do not need to load the entire code list table. You define a constant value in this field designating the type of qualifier (UPC code) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("UP" for UPC code) is entered automatically.
PID group in the IT1 group	Product/Item Description	The standard allows this group containing line item information to be used up to two thousand times in one invoice. Your users complete the fields in this group only once per invoiced item, so you change the maximum use of this segment to one.
PID:201 element in the IT1 group	Item Description Type	The only type of item description that you use in this element is a free-form description for the item, so you do not need to load the entire code list table. You define a constant value in this field designating the type of description (free-form) you expect your users to enter. Then, you prevent this field from being displayed in the screen entry form, because the value for this field ("F" for free-form description) is entered automatically.
DTM:2 segment in the IT1 group	Date/Time Reference	The standard allows the date segment to be used up to ten times for each invoiced item. Your users complete the fields in this segment only once per invoiced item. You change the maximum use of this segment to one, which places the Date/Time Reference fields on the same frame as the rest of the line item fields.
DTM:201 element in the IT1 group	Date/Time Qualifier	The only type of date that you use in the DTM:2 segment is the date shipped, so you do not need to load the entire code list table. You define a constant value in this field designating the type of date (date shipped) you expect your users to enter. You then prevent this field from being displayed in the screen entry form, because the value for this field ("011" for date shipped) is entered automatically. (Continued on next page)

(Contd) Form Component	Description	Customization Task
DTM:202 element in the IT1 group	Date	Your users enter the date in the format "MM/DD/YY," but the date in the EDI data should be in the format "YYMMDD," so you set the format accordingly.
CAD segment	Carrier Detail	The standard allows this segment to be used up to 999,999 times for each line item. Your users use the fields in this segment only once per invoiced item. You change the maximum use of this segment to one (which places the Carrier Detail fields on the same frame as the rest of the line item fields).
CAD01 element	Transportation Method/Type Code	Your users can enter any of the transportation type codes that the standard designates as valid codes. You load the entire code list for this element, which creates a list containing valid codes from which users can select when completing a screen entry form.
TDS01 element	Total Invoice Amount	You use an accumulator to generate a running total of price (obtained by multiplying the quantity invoiced for each line item by the unit price) for this element.
CTT01 element	Number of Line Items	You use an accumulator to generate a total of the number of line items in the invoice for this element.

Design and Create the Form

Verifying the Global EDI Date Formats

Introduction   The Forms Integration subsystem enables you to customize the global EDI date formats (for all forms). You can specify the default EDI format of dates for both six-character dates and eight-character dates. When you customize the global EDI date formats, the settings are valid for all forms created in the current session of Gentran:Server. However, you can override the default date formats for an individual element on the Element Properties dialog for that element.

You must verify that you are using the correct global date formats the first time you use Gentran:Server. Typically, you verify the global EDI date formats one time only. You can change the default date formats if they do not match the formats you intend to use.

Procedure   Use this procedure to verify the global EDI date formats.

Step	Action
1	Launch the **Forms Integration** subsystem. **Reference** See *How to Launch Forms Integration* on page 1 - 11 for step-by-step instructions.
2	Select **Preferences** from the Options menu to display the Preferences dialog. The Preferences dialog is a property sheet that enables you to set global defaults for Gentran:Server.
3	Select the **Standard Formats** tab.
4	Verify that the Standard Formats tab displays the default date formats that are used when elements are read from the standards database.
5	Verify that the **Six-character dates** drop-down list box contains YYMMDD to define the format of the six-character EDI dates in your forms.
6	Verify that the **Eight character dates** list contains YYYYMMDD to define the format of the eight-character EDI dates in your forms. *(Continued on next page)*

(Contd) Step	Action
7	Click **OK** to accept the default date formats for 6- and 8-character date fields and exit the Preferences dialog. **Note** To change the order in which the date formats appear in the Six-character dates and Eight character dates lists or to add a new date format to the lists, select **Date Formats** from the Options menu.

Defining the Type of Form

Overview   The first task in creating a new form is to define the type of form and EDI standard, version, and transaction set (document). In this tutorial, you are creating a screen entry form so that your data entry users can enter EDI data in an invoice translation object in Gentran:Server. Instead of defining the 850 (Invoice) transaction set to the system yourself, you want Gentran:Server to use the standards database on your system to build the invoice according to the ANSI X12 standard.

Before you begin   Before you begin this procedure, verify that you have installed the Gentran standards.

Reference
See *How to Install Gentran Standards* on page 1 - 12 for instructions.

Procedure   Use this procedure to create the new screen entry form.

Step	Action
1	Select **New** from the File menu to display the New Form Wizard.
2	From the What kind of form are you creating list, select **Screen Entry** to indicate that the translation object that your are creating is a Screen Entry translation object.
3	In the What is the name of the form box, enter **Screen 810 Pet Zone**. This description provides a brief explanation of the compiled translation object that enables you to differentiate it from similar translation objects in Gentran:Server. **Example** Screen 810 Pet Zone is the description of a screen entry translation object for an ANSI X12 Invoice (810) for partner Pet Zone.
4	Verify that the name that is displayed in the What is your name box is accurate.
5	Click **Next** to advance the wizard.
6	Select **Delimited EDI** as the data format syntax that you want to use.
7	Click **Customize**. **System Response** The New Delimited EDI Wizard is displayed.
8	Click **Next** to continue. (Continued on next page)

(Contd) Step	Action
9	From the Data Source list, select the **ODBC** data source that you wish to use.
10	Click **Next** to continue.
11	From the Agency list, select **[X] X12**, which is the EDI standard you are using for this translation object.
12	From the Version list, select **[003040] ANSI X 12 VERSION 3 RELEASE 4**, which is the version of the standard you are using for this translation object. The versions that are available depend on which standard you selected.
13	From the Transaction list, select **[810] INVOICE**, which is the transaction set (document) you are using for this translation object. The documents that are available depend on which standard and version you selected.
14	Click **Next** to continue.
15	Click **Finish**.
16	Click **Next** to continue. (Continued on next page)

(Contd) Step	Action
17	Click **Finish** to create the EDI file This may take a few seconds. **System Response** The form is displayed. After you create a new form, it is important to define the details of the form and save it. **Recommendation** We recommend that you save the form as often as possible, to mitigate the possible loss of additions or modifications in the event of a hardware or system error.
18	From the Edit menu, select **Details**. **System Response** The Translation Object Details box is displayed.
19	Verify that **Screen Entry** is selected in the Translation Object Function list.
20	In the Major version box, enter **1** to designate the version number for this translation object. (Continued on next page)

(Contd) Step	Action
21	In the Minor version box, accept the default value **0** that designates the release number for this translation object. **Recommendation** When you make a major change to this form, increase the version to the next higher sequential number (e.g., 2.0, 3.0). If you make a minor change to the form, increase the release to the next higher sequential number (e.g., 2.1, 2.2).
22	The Input and Output boxes (Agency, Version, Transaction, Release, and F Group) contain information only if the Input and/or Output sides of the form are of EDI format. For this tutorial, do not change the information in these boxes. **Note** The system allows you to change the information in the Input and Output boxes, but modifying this information does not alter the content of the form. An example of when you might want to alter these boxes is when you want the form to reflect a standard version that is not loaded on your system. You can change the version on this dialog, and then physically alter the form to be compliant with that version.
23	Click **OK** to save the translation object details.
24	Select **Save** from the File menu. **System Response** The Translation Object Details dialog is displayed. **Note** If you have performed any function that invalidates the current format of the translation object, the Save function is not available (dimmed) until you regenerate the layout (click Generate Layout on the Main Toolbar).
25	Verify that the **Save in** list reflects the drive\folder where Gentran:Server is installed. The default is GENSRVNT\Forms.

(Contd) Step	Action
26	In the File name field, enter **pet_810s.stp** to replace the default file name. You allocate a file name to a form when you save the form for the first time or use the Save As function to save a copy of the form under a different name. The name of the form must be one to eight unique characters that define the form in a meaningful way. For example, PET_810S is the name of a screen entry form for an ANSI X12 3040 invoice (810) for partner Pet Zone. **Note** The default file extension for forms is .STP. Using this extension distinguishes source form files from other types of files, such as compiled translation objects. The naming conventions in Gentran:Server are as follows: ◗ The source form (form created in Gentran:Server) should be named using the file extension **.STP** (e.g., PET_810S.STP). ◗ The compiled translation object (translation object that is the result of compiling the source form) should be named using the same file name that was allocated to the source form, but with the file extension **.TPL** (e.g., PET_810S.TPL). **Recommendation** We recommend that you use these naming conventions to distinguish source forms and compiled translation objects from other types of files. We also recommend that you use the same file name (different file extension) for a source form and the translation object that was compiled from it.
27	Click **Save** to save the form.

Activating Groups, Segments, and Elements

Overview   When Gentran:Server generates the form, the system includes all the groups, segments, and elements that are defined by the standard agency (ANSI) for the version (003040) of the transaction set (810) you selected. The system activates all the groups, segments, and elements that are defined as mandatory (must be present) by the standard. The system does not enable you to deactivate the mandatory groups, segments, and elements.

Example   In the example below, the 810 INVOICE file icon and BIG segment are mandatory for the invoice. You do not need to activate these components. The NTE, CUR, and REF segments are not mandatory, so they are dimmed on the form. To view the segments and elements in a group or segment on your form, double-click the form component in the EDI File Format Window (left side of the Forms main window). To activate an inactive form component, click Activate on the Main Toolbar, then click the form component. The component is no longer dimmed.

When translating data, the system does not process groups, segments, and elements that are not activated. Therefore, *you* must activate the groups, segments, and elements that are not defined as mandatory by the standard, but that you have determined that you need to use in the form.

Groups, segments, composites, elements used in this tutorial   This table lists the Groups, segments, composites, elements to be used in this tutorial.

Group		Segment	Element
		BIG (already activated)	BIG03
			BIG04
		REF	REF02
	N1	N1	N102
		N3	N302
		N4	N401
			N402
			N403
		ITD	ITD01
		DTM	DTM02

Group		Segment	Element
IT1		IT1	IT101
			IT106
			IT107
	PID	PID:2	PID:205
		DTM:2	DTM:202
		CAD	CAD01
			CAD08

Procedure   Use this procedure to activate the required groups, segments, and elements.

CAUTION

YOU MUST ACTIVATE ALL REQUIRED GROUPS, SEGMENTS, COMPOSITES, AND ELEMENTS LISTED ON THE FOLLOWING TABLE. FAILURE TO DO SO WILL HINDER YOUR ABILITY TO PERFORM STEPS LATER IN THIS TUTORIAL..

Step	Action
1	Double-click the groups and segments listed in the previous table to open them. This table lists all the groups, segments, and elements that you need to activate. Opening all the necessary groups and segments before you start to activate enables you to scroll down the form and activate the segments and elements sequentially. **Note** When you activate a conditional group or segment, the mandatory subordinate segments and elements are activated automatically.
2	Click **Activate** on the Main Toolbar.
3	Click each inactive **group** that you need to use. Clicking these groups activates the groups. **Note** If you click a group, segment, or element that you did not mean to activate, click the component with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.
4	Click each inactive **segment** that you need to use. Clicking these segments activates the segments. *(Continued on next page)*

(Contd) Step	Action
5	Click each inactive **element** that you need to use. Clicking these elements activates the elements. When you activate an element in a screen entry form, either the tag "Edit Box" or the tag "Drop Down" is displayed before that element's description. "Edit Box" indicates that the element is formatted as a field. "Drop Down" indicates that the element is formatted as a list because you applied a standard rule that allows a selection of multiple items.
6	Click **Activate** on the Main Toolbar to turn activation mode off. **Note** To hide the groups, segments, and elements that you are not using, select **Show Active Only** from the View menu.
7	From the File menu, select **Save** to save your form.

Verifying EDI Delimiters and Adding Frame Help Text

Overview   If you are using an EDI standard that contains composite elements or subelements, you must define the EDI delimiters to Gentran:Server. Delimiters are flags that you define to the system as sepa.rating specific EDI components. Delimiters are necessary for all variable field-length standards, because the data is compressed (and the leading zeroes and trailing blanks are removed). The fields vary in length, so the system needs a flag to determine where one element ends and another begins. For example, an element delimiter marks the beginning of a new element.

CAUTION

ALTHOUGH SETTING EDI DELIMITERS IN GENTRAN:SERVER IS MANDATORY *ONLY* **IF YOU ARE USING A STANDARD WITH COMPOSITE ELEMENTS OR SUBELEMENTS, WE RECOMMEND THAT YOU PERFORM THIS TASK REGARDLESS OF WHICH STANDARD YOU USE.**

In addition, you add frame Help text so screen entry translation object users can access online Help for the Invoice Details frame

EDI delimiters   This table lists the default delimiters for ANSI X12.

Field	ANSI X12 Default Character	ANSI X12 Default Hex Value
Tag Delimiter		
Segment Delimiter	~ (tilde)	0X2A
Element Delimiter	* (asterisk)	0X7E
Sub Element Delimiter	: (colon)	0X3A
Decimal Separator		
Release Character		

Procedure   Use this procedure to add frame Help text and set EDI delimiters.

Step	Action
1	Click the **810 INVOICE** file icon with the right mouse button to access the shortcut menu and select **Properties** from the shortcut menu **System Response** The File Format Properties dialog is displayed.
2	Select the **Display** tab. (Continued on next page)

(Contd) Step	Action
3	In the Frame Help Text list, enter the following text (press **Enter** at the end of each line of text below): **This frame contains information pertaining** **to the entire invoice document (810). For** **online Help on an individual field on this** **frame, select the field and press F1.** **Note** Pressing Enter creates line breaks for the online Help that the screen entry translation object users in Document Editor view when they press F1. If you do not create line breaks, the online Help is displayed on one line of text in the online Help pop-up window (the text does not wrap to the next line), and text that extends beyond the width of the user's monitor is not displayed. When you generate the form (display the fields in the Layout Window), there is one frame in the Layout Window (right side of Forms main window) for every group and repeating segment in the EDI File Format Window (left side of Forms main window). Entering frame Help text for the group or segment corresponding to each frame enables screen entry translation object users to access context-sensitive Help text for the frame.
4	Select the **Delimiters** tab to access the Delimiters dialog.
5	Verify that the correct delimiters are being used for the ANSI X12 3040 standard. If the delimiters differ from the default values listed in the table below, you can enter either the character or the hexadecimal value. The default delimiters for ANSI X12 are listed in the previous table (the tag delimiter, release character, and decimal separator are not used for ANSI). **Note** The hexadecimal value *must* begin with "0x" (that is, the number zero and the letter "x"). **Note** The Stream segments check box on the Delimiters dialog currently is not checked. For this tutorial, do not check this check box, so the translator continues to insert a carriage return after every segment. If the Stream segments check box is checked, then a carriage return is *not* used after every segment, and the segments are "streamed."
6	Click **OK** to save the delimiters and exit the Delimiters dialog.

Modify Form Components

Promoting and Changing the Maximum Use of Segments and Groups

Introduction

The Promote function extracts one iteration (instance) of a group or repeating segment. Promote is a specialized function that preserves the integrity of the EDI structure.

Changing the maximum use of a segment or group changes the maximum number of times the segment or group can be used. A segment or group with a maximum use greater than one repeats (loops), and is placed on a separate frame than the segment or group to which it is subordinate. A segment or group with a maximum use of one does not repeat, and its fields are displayed on the same frame as the segment or group or segment to which it is subordinate.

In this tutorial, you change the maximum use of the groups and segments before you generate the form (display the fields in the Layout Window). By customizing the group and segment properties first, all fields are placed on their appropriate frames the first time you generate the form. If you change the maximum use of the groups and segments *after* you generate the form, the fields are placed on several more frames than are present ultimately in the form. Therefore, changing the group and segment properties before you first generate the form enables the fields to be placed on as few frames as necessary.

Modifying the Maximum Use of the REF Segment

Overview   The REF segment contains Reference Numbers used in the EDI data, such as a contract number used to identify when a relationship began between your company and your trading partner. The standard allows the REF segment to be used up to twelve times in one invoice. In this tutorial, you use the REF segment only once (for the contract number). You change the maximum use of the REF segment to one, which places the associated fields on the same frame as the header segment.

Procedure   Use this procedure to change the maximum use of the REF segment.

Step	Action
1	Click the **REF** segment with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1** to designate that this segment can be used only once per invoice.
5	Click **OK** to exit the EDI Segment Properties dialog.

Modifying the Maximum Use of the N3 Segment

Overview   The N3 segment in the N1 group contains the Address of the entity or individual named in the N1 segment. If the form were generated now (displaying the layout of the fields in the form on the right side of your screen), the fields associated with the N1 and N4 segments would be located on the main invoice frame, but the fields associated with the N3 segment would be located on a separate frame. The separate frame is necessary because the N3 segment has a maximum use of two, so it requires another frame for users to enter two sets of address information. (In screen entry forms, each group with a maximum use greater than one and repeating segment has a corresponding frame that contains all the groups, segments, and elements at that level.)

Your users need the N3 segment to be used only once in one invoice, so you change the maximum use from two, as the standard allows, to one. When you generate the form, the fields associated with the N3 segment are displayed on the same frame as the fields for the N1 and N4 segments.

Procedure   Use this procedure to change the maximum use of the N3 segment.

Step	Action
1	Click the **N3** segment with the right mouse button and select Properties from the shortcut menu. **System Response** The system displays the EDI Segment Properties dialog.
2	Select the **Looping** tab.
3	In the Max Usage box, enter **1** to designate that this segment can be used only once per invoice.
4	Click **Yes** at the prompt.
5	Click **OK** to exit the EDI Segment Properties dialog.

Promoting the N1 Group

Overview   The standard allows the N1 group to be used up to two hundred times in one invoice. The N1 group contains the N1, N3, and N4 segments to provide the name and address of an entity or individual.

You promote the N1 group twice to accommodate the information for both the Ship To and Remit To names and addresses. Promoting the N1 group causes two singly-occurring N1 groups to exist in the form.

Procedure   Use this procedure to promote the N1 group.

Step	Action
1	Click the **N1** group with the right mouse button and select Properties from the shortcut menu.
2	Select **Promote** from the shortcut menu. Promoting the N1 group extracts one iteration of the N1 group and places it directly above the N1 group that you selected to promote. The new iteration of the N1 group is named N1:2.
3	Click the original **N1** group with the right mouse button to access the shortcut menu.
4	Select **Promote** from the shortcut menu. Another iteration of the N1 group is extracted and placed above the N1 group. The new iteration of the N1 group is named N1:3.
5	Click the original **N1** group with the right mouse button to access the shortcut menu.
6	Select **Deactivate** from the shortcut menu to deactivate this group.

Changing the Maximum Use of the ITD Segment

Overview

The ITD segment is a conditional segment that specifies the Terms of Sale/Deferred Terms of Sale for the invoice. The standard specifies that the ITD segment can be used up to five times in one invoice. For this tutorial, you know that your users must use the ITD segment only once, so you change the maximum use of this field from five to one.

If the form were generated now, the Terms Type Code would be displayed on a separate frame than the majority of the invoice fields because the ITD segment has a maximum use of five. After you change the maximum use to one and generate the form, the Terms Type Code field is displayed on the parent frame.

Procedure

Use this procedure to change the maximum use of the ITD segment.

Step	Action
1	Click the **ITD** segment with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed. ![EDI Segment Properties dialog with tabs: Name, Special, Key Field, Display, Looping, Loop Extended Rules. Please enter the name: ITD. Please enter a short description: TERMS OF SALE/DEFERRED TERMS OF SALE. Buttons: OK, Cancel, Apply, Help.]
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1** to designate that this segment can be used only once per invoice.
5	Click **OK** to exit the EDI Segment Properties dialog.

Changing the Maximum Use of the DTM Segment

Overview   The DTM segment contains the Date/Time Reference Numbers for the invoice. In this tutorial, the DTM segment is used for the contract date associated with the contract number (in the REF segment). The standard allows the DTM segment to be used up to ten times in one invoice. In this tutorial, you use the DTM segment only once (for the contract date). You change the maximum use of the DTM segment to one, which places the associated fields on the main Invoice frame with the majority of the invoice fields.

Procedure   Use this procedure to change the maximum use of the DTM segment.

Step	Action
1	Click the **DTM** segment with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1** to designate that this segment can be used only once per invoice.
5	Click **OK** to exit the EDI Segment Properties dialog.

Changing the Maximum Use of the PID Group

Overview   The standard allows the PID group (Product Item/Description) in the IT1 group to be used up to one thousand times in one invoice. If the invoice were generated now, the fields associated with the PID group would be displayed on a separate frame than the majority of the invoice fields. For this tutorial, you know that your users complete the fields in the PID group only once per invoiced item. You change the maximum use of the PID group to one, which moves the Product Item/Description fields to the frame containing line item information.

Procedure   Use this procedure to change the maximum use of the PID group.

Step	Action
1	Click the **PID** group with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The Group Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1**.
5	Select the **Display** tab. (Continued on next page)

(Contd) Step	Action
6	Click the **Promote group to parent frame** check box to promote this group. **Note** If you change the maximum usage of this group, but do not check the "Promote group to parent frame" check box, the fields in this group are not displayed on the same frame in the Layout Window as the fields in the parent group.
7	Click **OK** to exit the Group Properties dialog.

Changing the Maximum Use of the DTM:2 Segment

Overview   The standard allows the DTM:2 segment (Date/Time Reference) in the IT1 group to be used up to ten times in one invoice. If the invoice were generated now, the fields associated with the DTM:2 segment would be displayed on a separate frame than the majority of the invoice fields. For this tutorial, you know that your users complete the fields in the DTM:2 segment only once per invoiced item. You change the maximum use of the segment from ten to one, which enables the Date/Time Reference fields to be displayed on the frame containing other line item information.

Procedure   Use this procedure to change the maximum use of the DTM:2 segment.

Step	Action
1	Click the **DTM:2** segment with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1** to indicate that this segment can be used only once per invoice.
5	Click **OK** to exit the EDI Segment Properties dialog.

Changing the Maximum Use of the CAD Segment

Overview   The standard allows the CAD segment (Carrier Detail) to be used up to 999,999 times in one invoice. If the form were generated now, the fields associated with the CAD segment would be displayed on a separate frame than the majority of the invoice fields. For this tutorial, you know that your users complete the fields in the CAD segment only once per invoiced item. You change the maximum use of the CAD segment, which moves the Carrier Detail fields to the frame containing other line item information.

Procedure   Use this procedure to change the maximum use of the CAD segment.

Step	Action
1	Click the **CAD** segment with the right mouse button to access the shortcut menu.
2	Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
3	Select the **Looping** tab.
4	In the Max Usage box, enter **1** to indicate that this segment can be used only once per invoice.
5	Click **OK** to exit the EDI Segment Properties dialog.

Generating the Form

Overview

Generating a form is different from compiling a form. When you *compile* a form, the source form is translated into a compiled translation object. When you *generate* a form, the fields of the form are displayed on a frame in the Layout Window (right side of the Forms main window), based on the groups, segments, and elements that are activated.

Procedure

Use this procedure to generate the screen entry form based on the groups, segments, and elements you activated.

Step	Action
1	Select the **810 INVOICE** file icon. Selecting the 810 INVOICE file icon before you generate the layout enables you to view the beginning of the invoice layout in the Layout Window after the layout is generated. However, selecting the 810 INVOICE file icon is not a required prerequisite to generating the layout.
2	Click **Generate Layout** on the Main Toolbar. **Note** You should regenerate the form periodically as you customize the screen entry form to ensure that the most recent changes to the frame are reflected in the Layout Window. **System Response** The layout of the screen entry form is displayed in the Layout Window.

After generating the form

When you generate the form, there is one field on the right side of your screen (Layout Window) for every activated element on the left side of your screen (EDI File Format Window). You can click either the field or its corresponding element to select it. To access the Element Properties dialog for a field or element, either double-click the element, or use the right mouse button to click the field or element, and then select Properties from the shortcut menu.

Note
When you first generate the form, each field in the Layout Window is labeled with the same name as its corresponding element in the EDI File Format Window. As you customize the form, however, you change some of the labels and remove others, so all the fields are not labeled the same as their corresponding elements. Even though you change or remove some field labels, each field still corresponds to one element.

When the screen entry form is generated, the fields associated with each non-repeating segment or group are displayed on a frame in the Layout Window. If a segment or group is defined as repeating, then a list is displayed on the parent frame, and the fields for that repeating segment or group are displayed on the parent frame, and the fields for that repeating segment or group are displayed on a separate frame.

All frames in a screen entry form are titled. The default title for each frame is its transaction set, group, or segment name, but you can change the default titles to better identify the information that is entered.

Customize the EDI Data

Overview

Introduction

You can customize the form, including the properties of each type of form component (group, segment, and element).

Customizing the form is an iterative process. This tutorial guides you through all the steps involved in customizing the form, component by component. When you create forms, you usually activate the form components you need to use, customize and format the form components, then compile the form and test the translation object (and print a report, if necessary). As you substantially customize the form, you usually compile and print the form several times to view your changes before the form truly is finalized.

This section explains how to customize the form components for each sequential component in this tutorial.

Setting up the document name

We recommend that you set up a Document Name for each form. The document name makes the identification of a document created by the form easier in Gentran:Server. Setting up the document name enables you to differentiate between documents in the document browsers in Gentran:Server. If you set up the document name in the Forms Integration subsystem, the Name field of the document browsers that contain this document in Gentran:Server contains the data from that element. You can choose any element as the document name, but we strongly recommend that you select an element that occurs only once in the document and has a data type of string. For an ANSI X12 810 invoice, the document name usually is the Invoice Number.

Procedure

Use this procedure to set up the document name.

Step	Action
1	Double-click the **BIG02** element. **System Response** The Element Properties dialog is displayed. **Recommendation** In this tutorial, we recommend that you select this element because it is a non-recurring and mandatory element, and it helps to identify this document meaningfully in Gentran:Server.
2	Select **Standard Rule** tab.
3	Select **Update** from the list. *(Continued on next page)*

(Contd) Step	Action
4	From the Table/Group list, select **Document record** to indicate that you are updating the document record in Gentran:Server.
5	From the Column/Field list, select **Document Name** to indicate that you are updating the Name field (in the Gentran:Server document browsers that contain this message) with the contents of the B1G02 element. The dialog now should look like this:
6	Click **OK** to set up the document name.

Customizing the BIG Segment

Overview   The BIG segment contains the Beginning Segment for the invoice. This segment uses two mandatory elements: Invoice Date and Invoice Number. You also have activated the Purchase Order Date and Purchase Order Number elements for this segment. Each of these elements contains information that pertains to the entire invoice.

How to customize the BIG01 element   The BIG01 element is a mandatory element that contains the Invoice Date. Your users format the date as "MM/DD/YY" when they enter the date in the screen entry translation object, but the EDI data is sent to your trading partner as "YYMMDD." You must change the maximum length of this field from six to eight, to accommodate the entire date, including separators (/). Also, you add Help text to this field.

Use this procedure to set the date format, change the element and field lengths, and add Help text to the Invoice Date field.

Step	Action
1	Double-click the **BIG01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), to be contained in this element.
4	From the Data Format list, select **MM/DD/YY** to indicate that this field on the translation object accepts a date entered in the format MM/DD/YY.
5	Verify that **YYMMDD** is selected in the File Format list to indicate that the EDI data is sent in the format YYMMDD.
6	Select the **Display** tab.
7	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed.
8	Select the **Help** tab.
9	In the Help Text list, enter the following text: **Enter the invoice date. Use the format MM/DD/YY.**
10	Click **OK** to exit the dialog.

How to customize the BIG02 element

The BIG02 element is a mandatory element containing the Invoice Number. This element is defined by the standard to be a string of twenty-two alphanumeric characters. You know that your invoice number is an eight-character alphanumeric string, so you change the element and field lengths to accommodate the shorter invoice number. In addition, you rename the field label and add Help text to the field.

Use this procedure to change the field and element lengths and the field label, and add Help text to the Invoice Number field.

Step	Action
1	Double-click the **BIG02** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow an eight-character string in this element.
4	Select the **Display** tab.
5	In the Label box, enter **Invoice No.** to replace the existing field label.
6	In the Maximum number of characters box, enter **8** to allow eight characters to be entered in this field.
7	Select the **Help** tab.
8	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the invoice number. The invoice number cannot exceed 8 alphanumeric characters.**
9	Click **OK** to exit the dialog.

How to customize the BIG03 element

The BIG03 element contains the Purchase Order Date, which is the date when your trading partner sent the purchase order. Your users format the date as "MM/DD/YY" when they enter the date into the screen entry translation object, but the EDI data is sent to your trading partner as "YYMMDD." You change the maximum length of this field to eight to accommodate the entire date, including separators (/). To save space in the screen entry form, you rename this field. Also, you add Help text to the field.

Use this procedure to set the date format, change the element and field lengths, change the field name, and add Help text to the Purchase Order Date field.

Step	Action
1	Double-click the **BIG03** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), to be contained in this element.
4	From the Form Format list, select **MM/DD/YY** to indicate that this field on the translation object accepts a date entered in the format MM/DD/YY.
5	Verify that **YYMMDD** is selected in the File Format list to indicate that the EDI data is sent in the format YYMMDD.
6	Select the **Display** tab.
7	In the Label box, enter **P.O. Date** to replace the existing field label.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed.
9	In the Help Text list, enter the following text: **Enter the purchase order date. Use the format MM/DD/YY**.
10	Click **OK** to exit the dialog.

How to customize the BIG04 element

The BIG04 element contains the Purchase Order Number. This element is defined by the standard to be a string of twenty-two alphanumeric characters. You know that your trading partner's purchase order number is always a ten-character alphanumeric string, so you change the element and field lengths to accommodate the shorter purchase order number. In addition, you rename the field label and add Help text to the field.

Use this procedure to change the field and element lengths, change the field label, and add Help text to the Purchase Order Number field.

Step	Action
1	Double-click the **BIG04** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **10** to allow a ten-character string in this element.
4	Select the **Display** tab.
5	In the Label box, enter **P.O. No.** to replace the existing field label.
6	In the Maximum number of characters box, enter **10** to allow ten characters to be entered in this field.
7	Select the **Help** tab.
8	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the purchase order number. The purchase order** **number cannot exceed 10 alphanumeric characters.**
9	Click **OK** to exit the dialog. (Continued on next page)

(Contd) Step	Action
10	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the fields in the BIG segment now should look like this:

Customizing the REF Segment

Overview

The REF segment contains Reference Numbers used in the EDI data, such as a contract number. The standard allows the REF segment to be used up to twelve times in one invoice. In this tutorial, you use the REF segment only once (for the contract number). You already have promoted the REF segment to obtain just one instance of the reference number, and to place the associated fields on the same frame as the BIG segment.

How to customize the REF01 element

The REF01 element (Reference Number Qualifier) is a mandatory element for the REF segment. The REF01 element contains the two-character code to indicate what type of reference number follows (e.g., contract number). Because you know that the only type of reference number your users enter for this invoice is a contract number, you define a constant value for the Reference Number Qualifier field, designating that the constant "CT" always qualifies the number in the Reference Number field. Then, you hide the Reference Number Qualifier field, because it does not need to be displayed in the translation object.

When a user enters a contract number in the Reference Number field, the system assigns the code "CT" to the Reference Number Qualifier field.

Use this procedure to define a constant value in the Reference Qualifier field and hide the field.

Step	Action
1	Double-click the **REF01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Select the **Use Constant** option.
4	Click **Edit** to access the Map Constants dialog.
5	Click **New** to access the Edit Constant dialog.
6	In the ID box, enter **Contract Number** to identify the constant. *(Continued on next page)*

(Contd) Step	Action
7	From the Type list, select **String** to indicate that the literal constant is formatted as a string data type.
8	In the Value box, enter **CT** to indicate that the Reference Number Qualifier field must contain the contract number. This value is the actual value of the literal constant.
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	From the Constants list, select **CT** to identify the constant that is used for this element.
12	From the Qualifies list, select **0127 REFERENCE NUMBER**, which is the element that the Reference Number Qualifier field qualifies.
13	Select the **Display** tab.
14	Click the **This field should not be displayed** option to prevent the field from being displayed in the translation object.
15	Click **OK** to exit the dialog.

How to customize the REF02 element

The REF02 element contains the Reference Number. This element is defined by the standard to be a string of thirty alphanumeric characters. In this tutorial, you know that the reference number (the contract number) is an eight-character alphanumeric string, so you change the element and field lengths to accommodate the shorter reference number. In addition, you rename the field label and add Help text to the field.

Use this procedure to change the field and element lengths, change the field label, and add Help text to the Reference Number field.

Step	Action
1	Double-click the **REF02** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8**.
4	Select the **Display** tab. *(Continued on next page)*

(Contd) Step	Action
5	In the Label box, enter **Contract No.** (note the period included in the label) to replace the existing field label.
6	In the Maximum number of characters box, enter **8** to allow an eight-character string to be entered.
7	Select the **Help** tab.
8	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the contract number. The contract number cannot** **exceed 8 alphanumeric characters**.
9	Click **OK** to exit the dialog.
10	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the fields in the REF segment now should look like this:

Customizing the N1 Groups

Overview   You already promoted the N1 group twice to accommodate the information for both the Ship To and Remit To names and addresses. There are now two N1 groups activated in the form: N1:2 (for the Ship To name and address) and N1:3 (for the Remit To name and address).

You activated the N1, N3, and N4 segments in each N1 group to provide the name and address of an entity or individual. For this tutorial, you use the N1 groups to identify these two types of addresses:

◗   Ship to name and address (Entity Identifier Code "ST")

◗   Remit to name and address (Entity Identifier Code "RI")

To make the screen entry translation object more convenient for your users, you changed the maximum use of the N3 segment (for both N1 groups) from two to one. Changing the maximum use of the N3 segment enabled the Address Information fields of the N3 segment to be displayed on the Invoice frame with the N1 and N4 fields.

Customizing the N1:3 Segment

Overview

The N1:3 segment in the N1:2 group identifies the Name of the entity or individual. If the N1:3 segment is used, then the N1:301 element is mandatory. The N1:301 element contains the Entity Identifier Code, which identifies the type of name and address in that iteration of the group.

To ensure that Gentran:Server displays the correct name and address in the Ship To and Remit To fields, you should use the key field function. The key field function enables you to specify a second qualification in selecting a segment (the segment name is the first qualification). Data must be provided in the order designated through the use of key fields. For example, for this tutorial, your screen entry translation object users enter the ship to name and address (N1:2 group) first, and then the remit to name and address (N1:3 group).

By using the key field function, if a screen entry translation object user enters only a Remit To name and address (N1:3 group) in a document using this invoice translation object, then saves the document and opens it later, the Remit To name and address are displayed in the correct fields. If you do not use the key field function, then in the same scenario described above, the Remit To name and address are displayed in the Ship To fields (since they are the first N1 fields in which data can be displayed).

How to use a key field for the N1:3 segment

Use this procedure to use a key field for the N1:3 segment (in the N1:2 group).

Step	Action
1	Click the **N1:3** segment with the right mouse button Select **Properties** from the shortcut menu. **System Response** The EDI Segment Properties dialog is displayed.
2	Select the **Key Field** tab.
3	From the Field list, select **0098 ENTITY IDENTIFIER CODE**.
4	Verify that the **Use constant** option is selected.
5	Click **Edit** to access the Map Constants dialog.
6	Click **New** to display the Edit Constant dialog. **Edit Constant** ID Type OK Value Cancel *(Continued on next page)*

(Contd) Step	Action
7	In the ID box, enter **Ship To** to identify the unique literal constant.
8	From the Type list, select **String**.
9	In the Value box, enter **ST** to identify the actual value of the constant.
10	Click **OK** to exit the Edit Constant dialog.
11	Click **Close** to exit the Map Constants dialog.
12	From the Use Constant list, select **ST** to indicate to the system that this name is the Ship To name.
13	Click **OK** to exit the dialog.

How to customize the N1:301 element

The N1:301 element (in the N1:3 segment) contains the Entity Identifier Code, which is used to identify whether the name and address that follows is the Ship To or Remit To name and address. For this tutorial, you know that your users enter only the Ship To name and address information in the fields associated with the N1:2 group. Therefore, you use the constant value "ST" (which you defined in the previous section) in the Entity Identifier Code field, indicating that this group (N1:2) contains only shipping information. Then, you hide the Entity Identifier Code field, because it does not need to be displayed on the translation object.

Use this procedure to use a constant value for the Entity Identifier Code field and hide the field.

Step	Action
1	Double-click the **N1:301** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Select the **Use Constant** option.
4	Click the second **Constant** option.
5	From the Constants list, select **ST** to identify the constant that is used for this element.
6	From the Qualifies list, select **0093 NAME**, which is the element that the Entity Identifier Code field qualifies.
7	Select the **Display** tab. (Continued on next page)

(Contd) Step	Action
8	Click the **This field should not be displayed** option to prevent the field from being displayed in the translation object.
9	Click **OK** to exit the dialog.

How to customize the N1:302 element

The N1:302 element (in the N1:3 segment) contains the name of the person or company that received the order for which you are sending an invoice. Your users are familiar with the standard address format (the name on the first line; the address on the next lines; the city, state, and postal code on the last line). For this reason, you do not need to label the fields containing the address, city, state, and postal code. You rename the field label and add Help text to the field.

Use this procedure to rename the field label and add Help text to the Name field.

Step	Action
1	Double-click the **N1:302** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, enter **Ship To** to replace the existing field label. This label is the heading for the Ship To name and address information.
4	Select the **Help** tab.
5	In the Help text list, enter the following text (press Enter at the end of each line of text below): **Enter the name of the person or organization to whom the** **order was shipped. The name cannot exceed 35** **alphanumeric characters.**
6	Click **OK** to exit the dialog.

Customizing the N3:3 Segment

Overview

The N3:3 segment (in the N1:2 group) contains the Address of the entity or individual named in the N1:3 segment. If the N3:3 segment is used, then the N3:301 element is mandatory. The N3:301 element contains Address Information, which can identify the street name, suite number, or any other address information. This element does *not* contain the city, state/province, or postal code; that data is contained in the N4:3 segment. You already activated the N3:302 element, which is a conditional element that contains an additional line of address information, if it is necessary.

Your users need the N3:3 segment to be used only once, so you changed the maximum use from two, as the standard allows, to one. Because you have changed the maximum use, the fields associated with the N3:3 segment are displayed on the Invoice frame with the fields for the N1:3 and N4:3 segments.

How to customize the N3:301 element

The address information in the N3:301 element (in the N3:3 segment) corresponds to the name in the N1:301 element, so there is no need to display the labels associated with the address information. For the N3:301 and N3:302 elements, you hide the field labels and add Help text to the fields.

Use this procedure to hide the Address Information field label and add Help text.

Step	Action
1	Double-click the **N3:301** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the first line of the address. This address line cannot exceed 35 alphanumeric characters.**
6	Click **OK** to exit the dialog.

**How to customize
the N3:302 element**

Use this procedure to hide the second Address Information field label of the Remit To address and add Help text.

Step	Action
1	Double-click the **N3:302** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text list, enter the following text (press Enter at the end of each line of text below): **Enter the second line of the address. This address line cannot exceed 35 alphanumeric characters.**
6	Click **OK** to exit the dialog.

Customizing the N4:3 Segment

Overview   The N4:3 segment in the N1:2 group contains the Geographic Location of the entity or individual named in the N1:3 segment. The N4:301 element contains the name of the city, the N4:302 element contains the code for the state or province, and the N4:303 element contains the postal code.

The geographic information in the N4:3 segment corresponds to the name in the N1:301 element, so there is no need to display the labels associated with the geographic information. You hide the field labels for the N4:31, N4:302, and N4:303 elements and add Help text to those fields.

How to customize the N4:301 element   Use this procedure to hide the field label and add Help text to the City Name field.

Step	Action
1	Double-click the **N4:301** element in the N1:2 group. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text box, enter the following text (press Enter at the end of each line of text below): **Enter the city name. The city cannot exceed 30 alphanumeric characters.**
6	Click **OK** to exit the dialog.

How to customize the N4:302 element   Use this procedure to hide the field label and add Help text to the State or Province Code field.

Step	Action
1	Double-click the **N4:302** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.

(Contd) Step	Action
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text list, enter the following text (press Enter at the end of each line of text below): **Enter the state or province code. The code cannot exceed 2 alphanumeric characters.**
6	Click **OK** to exit the dialog.

How to customize the N4:303 element

Use this procedure to hide the field label and add Help text to the Postal Code field.

Step	Action
1	Double-click the **N4:303** element (in the N1:2 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	In the Help Text box, enter the following text (press **Enter** at the end of each line of text below): **Enter the postal code. The postal code cannot exceed 9 alphanumeric characters. Do not enter a hyphen (-) before the 4-digit postal code extension (if used).**
5	Click **OK** to exit the dialog. (Continued on next page)

(Contd) Step	Action
6	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the fields in the N1:2 group now should look like this:

Customizing the N1:4 Segment

Overview   The N1:4 segment in the N1:3 group identifies the Name of the entity or individual. If the N1:4 segment is used, then the N1:401 element is mandatory. The N1:401 element contains the Entity Identifier Code, which identifies the type of name and address in that iteration of the group.

How to customize the N1:401 element   The N1:401 element (in the N1:4 segment) contains the Entity Identifier Code, which is used to identify whether the name and address that follows is the Ship To or Remit To name and address. For this tutorial, you know that your users enter only the Remit To name and address information in the fields associated with the N1:3 group. Therefore, you define the constant value "RI" in the Entity Identifier Code field, indicating that this group (N1:3) contains only Remit To information. Then, you hide the Entity Identifier Code field, because it does not need to be displayed on the translation object.

Use this procedure to define a constant value for the Entity Identifier Code field and hide the field.

Step	Action
1	Double-click the **N1:401** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Constant** option.
4	Click **Edit** to access the Map Constants dialog.
5	Click **New** to access the Edit Constant dialog. **Edit Constant** ID Type OK Value Cancel
6	In the ID box, enter **Remit To** to identify the constant.
7	From the Type list, select **String** to indicate that the literal constant is formatted as a string data type.
8	In the Value box, enter **RI** to indicate that the Entity Identifier Code field must contain the Remit To name and address. This value is the actual value of the literal constant. (Continued on next page)

(Contd) Step	Action
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	From the Constants list, select **RI** to identify the constant that is used for this element.
12	From the Qualifies list, select **0093 NAME**, which is the element that the Entity Identifier Code field qualifies.
13	Select the **Display** tab.
14	Click the **This field should not appear on the form** option.
15	Click **OK** to exit the dialog.

How to customize the N1:402 element

The N1:402 element (in the N1:4 segment) contains the name of the person or company to whom the invoice should be remitted. Your users are familiar with the standard address format (the name on the first line; the address on the next lines; the city, state, and postal code on the last line). For this reason, you do not need to label the fields containing the address, city, state, and postal code. You rename the field label and add Help text to the field.

Use this procedure to rename the field label and add Help text to the Name field.

Step	Action
1	Double-click the **N1:402** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, enter **Remit To** to replace the existing field label. This label is the heading for the Remit To name and address information.
4	Select the **Help** tab.
5	In the Help text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the name of the person or organization to whom the invoice should be remitted. The name cannot exceed 35 alphanumeric characters.**
6	Click **OK** to exit the dialog.

Customizing the N3:4 Segment

Overview   The N3:4 segment (in the N1:3 group) contains the Address of the entity or individual named in the N1:4 segment. If the N3:4 segment is used, then the N3:401 element is mandatory. The N3:401 element contains Address Information, which can identify the street name, suite number, or any other address information. This element does *not* contain the city, state/province, or postal code; that data is contained in the N4:4 segment. You already activated the N3:402 element, which is a conditional element that contains an additional line of address information, if it is necessary.

Your users need the N3:4 segment to be used only once in one invoice, so you changed the maximum use from two, as the standard allows, to one. Changing the maximum use of this segment enables the fields associated with the N3:4 segment to be displayed on the Invoice frame with the fields for the N1:4 and N4:4 segments.

How to customize the N3:401 element   The address information in the N3:401 element (in the N3:4 segment) corresponds to the name in the N1:401 element, so there is no need to display the labels associated with the address information. For the N3:401 and N3:402 elements, you hide the field labels and add Help text to the fields.

Use this procedure to hide the first Address Information field label of the Remit To address and add Help text.

Step	Action
1	Double-click the **N3:401** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the first line of the address. This address line cannot exceed 35 alphanumeric characters.**
5	Click **OK** to exit the dialog.

How to customize the N3:402 element

Use this procedure to hide the second Address Information field label and add Help text.

Step	Action
1	Double-click the **N3:402** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the second line of the address. This address line cannot exceed 35 alphanumeric characters.**
6	Click **OK** to exit the dialog.

Customizing the N4:4 Segment

Overview

The N4:4 segment in the N1:3 group contains the Geographic Location of the entity or individual named in the N1:4 segment in the N1:3 group. The N4:401 element contains the name of the city, the N4:402 element contains the code for the state or province, and the N4:403 element contains the postal code.

The geographic location in the N4:4 segment corresponds to the name in the N1:401 element, so there is no need to display the labels associated with the geographic location. You hide the field labels for the N4:401, N4:402, and N4:403 elements and add Help text to those fields.

How to customize the N4:401 element

Use this procedure to hide the field label and add Help text to the City Name field.

Step	Action
1	Double-click the **N4:401** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text box, enter the following text (press **Enter** at the end of each line of text below): **Enter the city name. The city cannot exceed 30 alphanumeric characters.**
6	Click **OK** to exit the dialog.

How to customize the N4:402 element

Use this procedure to hide the field label and add Help text to the State or Province Code field.

Step	Action
1	Double-click the **N4:402** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.

(Continued on next page)

Step	Action
4	Select the **Help** tab.
5	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the state or province code. The code cannot exceed 2 alphanumeric characters.**
6	Click **OK** to exit the dialog.

How to customize the N4:403 element

Use this procedure to hide the field label and add Help text to the Postal Code field.

Step	Action
1	Double-click the **N4:403** element (in the N1:3 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, delete the existing field label.
4	Select the **Help** tab.
5	In the Help Text box, enter the following text (press **Enter** at the end of each line of text below): **Enter the postal code. The postal code cannot exceed 9 alphanumeric characters. Do not enter a hyphen (-) before the 4-digit postal code extension (if used).**
6	Click **OK** to exit the dialog.

(Contd) Step	Action
7	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the fields in the N1:3 group) now should look like this (you may need to scroll down the frame to see all of these fields):

Customizing the ITD Segment

Overview

The ITD segment is a conditional segment that specifies the Terms of Sale/Deferred Terms of Sale for the invoice. The standard specifies that the ITD segment can be used up to five times in one invoice. For this tutorial, you know that your users must use the ITD segment only once, so you changed the maximum use of this segment from five to one.

How to customize the ITD01 element

The ITD01 element contains the Terms Type Code, a two-character code that identifies the terms under which this invoice is valid. Gentran:Server uses a list (instead of an edit box, or field) when you apply a standard rule that allows a selection of multiple items. When users use a translation object that contains a list, they select an item from the list, instead of typing a value in a field. You customize the ITD01 element so that a list containing all valid codes in the Terms Type Code code list is available to your users when they use the screen entry translation object. The Terms Type Code list enables them to select the appropriate EDI code from the code list.

After you specify the code list table to use for the list for the Terms Type Code field, you rename the field label. Also, you add Help text to the field.

Use this procedure to load the Terms Type Code code list from the standard, rename the field label, and add Help text to the Terms Type Code field.

Step	Action
1	Double-click the **ITD01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Code** option.
4	Click **Edit** to access the Edit Code List dialog.
5	The Table ID box contains **0336**, the name of the element for which this code list table is used. The Desc box contains TERMS TYPE CODE, the description of the element for which this code list table is used.
6	Click **Load** to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog.
7	Click **Add All** to select all the codes and move them to the Codes Selected list.
8	Click **OK** to load the code list and exit the Load Code List dialog. *(Continued on next page)*

(Contd) Step	Action
9	Click **Close** to exit the Edit Code List dialog.
10	Select the **Display** tab.
11	In the Label box, enter **Payment Terms Code** to replace the existing field label.
12	Select the **Help** tab.
13	In the Help Text list, enter the following text: **Select the payment terms code from the list.**
14	Click **OK** to exit the dialog.
15	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the field in the ITD segment now should look like this (you may need to scroll down the frame to see the field):

Customizing the DTM Segment

Overview   The DTM segment contains the Date/Time Reference Numbers for the invoice. In this tutorial, the DTM segment is used for the contract date associated with the contract number (in the REF segment). The standard allows the DTM segment to be used up to ten times in one invoice. In this tutorial, you use the DTM segment only once (for the contract effective date). You already changed the maximum use of the DTM segment to obtain just one instance of the DTM segment, and to place the associated fields on the same frame as the majority of the invoice fields.

How to customize the DTM01 element   The DTM01 element (Date/Time Qualifier) is a mandatory element for the DTM segment. The DTM01 element contains the two-character code from your EDI data to indicate what type of date follows (e.g., contract effective date). You define a constant value for the Date/Time Qualifier field, designating that the constant "090" qualifies the date in the Date field. Defining the constant indicates that the Date field contains the contract effective date.

When a user enters a contract effective date in the Date field, the system automatically assigns the code "090" to the Date/Time Qualifier field.

Use this procedure to define a constant value and hide the Date/Time Qualifier field.

Step	Action
1	Double-click the **DTM01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Constant** option.
4	Click **Edit** to access the Map Constants dialog.
5	Click **New** to access the Edit Constant dialog.
6	In the ID box, enter **Contract Effective** to identify the constant.
7	From the Type list, select **String** to indicate that the literal constant is formatted as a string data type. *(Continued on next page)*

(Contd) Step	Action
8	In the Value box, enter **090** to indicate that the Date/Time Qualifier field must contain the contract date. This value is the actual value of the literal constant.
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	Select the **Standard Rule** tab.
12	From the Constants list, select **090** to identify the constant that is used for this element.
13	From the Qualifies list, select **0373:6 DATE**, which is the element that the Date/Time Qualifier field qualifies. The dialog now should look like this:
14	Select the **Display** tab.
15	Select the **This field should not appear on the form** option.
16	Click **OK** to exit the dialog.

How to customize the DTM02 element

The DTM02 element in the DTM segment contains the contract effective date. This element is defined by the standard to be a date/time data type, consisting of six alphanumeric characters. In this tutorial, you know that the contract date is always an eight-character alphanumeric string, so you change the element and field lengths to accommodate the longer date. In addition, you rename the field label to more accurately reflect the field contents, and add Help text to the field.

Use this procedure to change the field and element lengths, change the field label, and add Help text to the Date field.

Step	Action
1	Double-click the **DTM02** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), to be contained in this element.
4	From the Form Format list, select **MM/DD/YY** to indicate that this field on the translation object accepts a date entered in the format MM/DD/YY.
5	Verify that **YYMMDD** is selected in the File Format list to indicate that the EDI data is sent in the format YYMMDD.
6	Select the **Display** tab.
7	In the Label box, enter **Contract Date** to replace the existing field label.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed.
9	Select the **Help** tab.
10	In the Help Text list, enter the following text: **Enter the contract date. Use the format MM/DD/YY.**
11	Click **OK** to exit the dialog. (Continued on next page)

(Contd) Step	Action
12	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. The section of the Invoice frame that contains the fields in the DTM segment now should look like this (you may need to scroll down the frame to see the fields):

Customizing the IT1 Group

Overview   The standard allows the IT1 group to be used up to one hundred thousand times in one invoice. The IT1 group contains the following segments and group that you already activated: IT1 segment, PID group, DTM:2 segment, and CAD segment.

The fields associated with the IT1 group are arranged on the 0400_It1 frame, which is separate from the Invoice frame that you have been working with thus far in this tutorial. Your users complete the fields on the 0400_It1 frame for each item in the invoice. The list of all line items in the invoice is displayed in a list on the Invoice frame. In that list, the invoiced items are displayed line by line, forming columns of information.

You already promoted or changed the maximum use of the following form components: PID group, DTM:2 segment, and CAD segment. Now, you are ready to customize these components and rename the IT1 group.

Procedure   Use this procedure to rename the IT1 group and its frame and add Help text to the list that is displayed on the Invoice frame.

Step	Action
1	Click the **IT1** group with the right mouse button and select **Properties** from the shortcut menu. **System Response** The Group Properties dialog is displayed.
2	In the Desc box, enter **Line Items** to describe the group.
3	Select the **Display** tab.
4	In the Frame Caption box, enter **Line Items** to rename the frame.
5	In the List Caption box, enter **Line Items** to rename the list that is displayed on the Invoice frame (listing the line items entered on the Line Items frame).
6	Select the **Help** tab.
7	In the Frame Help Text list, enter the following text (press **Enter** at the end of each line of text below): **This frame contains the line item detail** **information. For online Help on an** **individual field on this frame, select the** **field and press F1.** *(Continued on next page)*

(Contd) Step	Action
8	In the Listbox Help Text list, enter the following text (press **Enter** at the end of each line of text below): **This list contains the line item detail for** **the invoice. The data in this list is** **entered or changed on the Line Items** **frame. To enter a new line item, click the** **list and click New. To modify an** **existing line item, click that item and click** **Open.**
9	Click **OK** to exit the Group Properties dialog.

Customizing the IT1 Segment

Overview   The IT1 segment contains the Baseline Item Data that identifies the line item detail for each item invoiced. For some of the elements in the IT1 segment, you only need to add Help text and rename the field labels so they more accurately reflect your company's needs. With other elements, you change the maximum lengths for some of the fields, use accumulators to calculate the number of line items, or define a constant value.

The IT1 group is subordinate to the Invoice frame, so Gentran:Server creates a separate frame (the Line Items frame) to contain the group data (the line item details). The system also creates a list (the Line Items list) on the Invoice frame to allow the user to access the items in the list. Each set of data is displayed as a row in the list. After you customize the line item fields, the Line Items list contains these four columns of data: Item No., Product Code, Quantity, and Price.

How to customize   The IT101 element (in the IT1 segment in the IT1 group) contains the Assigned
the IT101 element   Identification for one item in the invoice. In this tutorial, you use the Assigned Identification field to identify sequentially each line item in the invoice. You use the Use Accum function to obtain an incremental count of the number of line items. This number is used in the Number of Line Items field (CTT01 element). The data type currently selected for this element is "String," so you must change the type to "Number" for the accumulators to work properly. You change the screen and EDI formats from "X" (a format appropriate for a string data type) to "N0" (a format appropriate for a number data type) to indicate that you expect numbers with implied decimal points and no decimal places in both the screen entry translation object and the EDI data.

You create a list definition for the IT101 element to include the line number in the list, and rename the field label to more accurately reflect the purpose of this field in this invoice. You change the minimum use of this element to zero to make this element conditional. Also, you know that your users enter no more than 99,999 line items per invoice. Each line item is numbered sequentially, starting with one, so you need a maximum length of only five digits for this field. You change the maximum length for this field from the default setting of eleven to five.

Procedure   Use this procedure to count line items in the IT1 segment and generate a control total in the CTT01 element of the number of line items, rename the IT101 field label, change the field length and data type, change the screen and EDI formats, add Help text, and create the list definition for the Assigned Identification field.

Step	Action
1	Double-click the **IT101** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab. *(Continued on next page)*

(Contd) Step	Action
3	In the Min box, enter **0** to make this element conditional.
4	In the Max box, enter **5** to allow a five-digit number in this element.
5	From the Type list, select **Number** to allow a number data type in this element.
6	From the Form Format list, select **N0** to indicate that this field on the translation object accepts a number with an implied decimal point and no decimal places.
7	From the File Format list, select **N0** to indicate that the EDI data contains a number with an implied decimal point and no decimal places.
8	Select the **Standard Rule** tab.
9	Click the **Use Accum** option.
10	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation using this element.
11	From the Primary Accumulator list, select **0**. Before any calculations are performed on an accumulator, its content is 0. When you use this accumulator, the system adds a new accumulator to the bottom of this list.
12	In the Name box, enter **Item Number** to give the accumulator a descriptive alias that enables you to differentiate the purposes of the accumulators you create.
13	From the First list, select **Increment primary** to specify that the system increments the value in this accumulator by one for each iteration of the IT1 group. This operation is the first operation that the system performs. (Continued on next page)

(Contd) Step	Action
14	From the Second list, select **Use primary** to specify that the system loads the current value of the accumulator into the IT101 (Assigned Identification) element. This operation is the second operation that the system performs, after the First operation is completed. The Edit Accumulator Entry dialog now should look like this: ![Edit Accumulator Entry dialog]
15	Click **OK** to add the accumulator and exit the Edit Accumulator Entry dialog. The dialog now should look like this: ![Element Properties dialog]
16	Select the **Display** tab.
17	Click the **Displayed but not editable** option to make this field display-only.
18	In the Label box, enter **Item No.** to replace the existing field label.

(Contd) Step	Action
19	In the Maximum number of characters box, enter **5**.
20	Select the **Summary List** tab.
21	In the Summary List section, click the **Display this field in summary** list check box to turn this option on. The value in the Item No. field is displayed in a column in the Line Items list.
22	In the Column Width box, enter **8** to set the width of this column in the Line Items list. **Note** The column width should be wider than the actual content of the column. The extra space that is not used for the content of the column provides white space separating the columns. If the column width is the exact width of the data, then there is no space separating the columns of data.
23	From the Sequence list, select **1** to indicate that this field is the first column in the list.
24	Click **OK** to exit the dialog.
25	Double-click the **CTT01** element (in the CTT segment). **System Response** The Element Properties dialog is displayed.
26	Select the **Standard Rule** tab.
27	Click the **Use Accum** option.
28	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation for this element.
29	From the Primary Accumulator list, select **0**.
30	From the First list, select **Use primary** to specify that the system loads the current value of the accumulator into the CTT01 (Number of Line Items) element.
31	Click **OK** to add the accumulator.
32	Select the **Display** tab.
33	Click the **Displayed but not editable** option. Users are able to read the data in the Number of Line Items field, but are not able to enter a value in this field.
34	Click **OK** to exit dialog.

How to customize the IT102 element

The IT102 element contains the Quantity Invoiced for each item in the invoice. The quantity for each line item is used to calculate the total dollar amount of the invoice. From this calculation, you generate a running total of extended price and load the final total into the TDS01 (Total Invoice Amount) element.

You create a list definition for the IT102 element to include the quantity invoiced in the list. For brevity on the translation object, you rename the field label. The standard allows up to a ten-digit number in this field. You know that your users do not enter a quantity of more than 99,999 (a five-digit number) for any one item, so you change the maximum length for this field and element to five.

Use this procedure to use an accumulator in the IT102 element to generate a running total of extended price that is used in the TDS01 element, rename the field label, change the field and element lengths, add Help text, and create the list definition for this field.

Step	Action
1	Double-click the **IT102** element (in the IT1 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Accum** option.
4	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation using this element.
5	From the Primary Accumulator list, select **1**.
6	In the Name box, enter **Extended Price** to give the accumulator a descriptive alias that enables you to differentiate the purposes of the accumulators you create. *(Continued on next page)*

(Contd) Step	Action
7	From the First list, select **Load primary** to specify that the system loads the content of the IT102 element into the Primary Accumulator for each iteration of the IT1 group. This operation is the first operation that the system performs.
	The Edit Accumulator Entry dialog now should look like this:
8	Click **OK** to add the accumulator.
9	Select the **Validation** tab.
10	In the Max box on the Element Properties dialog, enter **5** to allow a five-digit number in this element.
11	From the Form Format list, select **R0** to indicate that this field accepts a number with an explicit decimal point and no decimal places.
12	Select the **Display** tab.
13	In the Label box, enter **Quantity** to replace the existing field label.
14	In the Maximum number of characters box, enter **5** to allow five numeric digits to be displayed in this field.
15	Select the Summary List tab.
16	Click the **Display this field in summary list** check box to turn the option on. The value in the Quantity field is displayed in a column in the Line Items list.
17	In the Column Width box, enter **8** to set the width of this column in the Line Items list.
18	From the Sequence list, select **3** to indicate that this field is the third column in the list.
19	Select the **Help** tab.

(Contd) Step	Action
20	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the quantity of this invoiced item. The quantity cannot exceed 5 digits.**
21	Click **OK** to exit the dialog.

22	Double-click the **IT104** element.
	
	System Response
	The Element Properties dialog is displayed.
	
	![Element Properties dialog]
	
	Extended Rule · Standard Rule · Conditions
	Name · Validation · Display · Summary List · Help
	
	Please enter the name :
	`0212`
	
	Please enter a short description :
	`UNIT PRICE`
	
	OK · Cancel · Apply · Help

23	Select the **Standard Rule** tab.
24	Click the **Use Accum** option.
25	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation using this element.
26	From the Primary Accumulator list, select **1**. *(Continued on next page)*

(Contd) Step	Action
27	From the First list, select **Multiply with primary** to specify that the system multiplies the value of the IT104 (Unit Price) element by the content of the primary accumulator, and stores the result in the primary accumulator for each iteration of the IT1 group. This operation is the first operation that the system performs. The Edit Accumulator Entry dialog now should look like this:
28	Click **OK** to add the accumulator. The dialog now should look like this:
29	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation for this element.
30	From the Primary Accumulator list, select **2**. (Continued on next page)

(Contd) Step	Action
31	In the Name box, enter **Running Price** to give the accumulator a descriptive alias that enables you to differentiate the purposes of the accumulators you create.
32	From the First list, select **Add primary to alternate** to specify that the system adds the content of the primary accumulator to the content of the alternate accumulator, and stores the result in the primary accumulator for each iteration of the IT1 group.
33	From the Alternate Accum list, select **1**. This operation specifies that the system adds the value of accumulator 1 (which contains the extended price for a line item) to the value of accumulator 2. The system stores the sum in accumulator 2, which contains a running total of the extended price with each iteration of the IT1 group.
34	Click **OK** to add the accumulator. **System Response** The dialog now should look like this:
35	Click **OK** to exit the Element Properties dialog.
36	Double-click the **TDS01** element (in the TDS segment). **System Response** The Element Properties dialog is displayed.
37	Select the **Standard Rule** tab.
38	Click the **Use Accum** option. *(Continued on next page)*

(Contd) Step	Action
39	Click **New** to access the Edit Accumulator Entry dialog to create a new calculation for this element.
40	From the Primary Accumulator list, select **2**.
41	From the First list, select **Use primary** to specify that the system loads the content of the primary accumulator into the TDS01 (Total Invoice Amount) element. **System Response** The Edit Accumulator Entry dialog now should look like this:
42	Click **OK** to add the accumulator.
43	Select the **Validation** tab.
44	From the Form Format list, select **R2** to indicate that this field accepts a number with an explicit decimal point and two decimal places.
45	Select the **Display** tab.
46	Click the **Displayed but not editable** option. Users are able to read the data in the Total Invoice Amount field, but are not able to enter a value in this field.
47	Click **OK** to exit the dialog.

How to customize the IT103 element

The IT103 element contains the Unit or Basis for Measurement Code for each item in the invoice. For brevity on the translation object, you rename the field label. Also, you customize the IT103 element so that a list containing all valid codes in the Unit or Basis for Measurement Code code list is available to your users when they use the screen entry translation object. The list enables them to select the appropriate EDI code from the ones available.

Use this procedure to rename the field label, add Help text, and load the code list table from the standard for the Unit or Basis for Measurement Code field.

Step	Action
1	Double-click the **IT103** element (in the IT1 group). **System Response** The Element Properties dialog is displayed.
2	Select the **Display** tab.
3	In the Label box, enter **UOM** to replace the existing field label.
4	Select the **Help** tab.
5	In the Help Text list, enter the following text: **Select the unit of measurement for the invoiced item.**
6	Select the **Standard Rule** tab.
7	Select the **Use Code** option. *(Continued on next page)*

(Contd) Step	Action
8	Click **Edit** to access the Edit Code List dialog. The Table ID box contains 0355, which is the name of the element for which this code list table is used. The Desc box contains UNIT OR BASIS FOR MEASUREMENT CODE, which is the description of the element for which this code list table is used.
9	Click **Load** to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog.
10	Click **Add All** to select all the codes and move them to the Codes Selected list.
11	Click **OK** to load the code list and exit the Load Code List dialog. *(Continued on next page)*

(Contd) Step	Action
12	Click **Close** to exit the Edit Code List dialog. The dialog now should look like this:
13	Click **OK** to exit the dialog.

How to customize the IT104 element

The IT104 element contains the Unit Price for each item in the invoice. You already used an accumulator for this field so that the price for each line item is used to calculate the total dollar amount of the invoice. From this calculation, a running total of extended price is generated and the final total is loaded into the TDS01 (Total Invoice Amount) element. You create a list definition for the IT104 element to include the unit price in the list.

For this tutorial, you rename the field label. Also, the standard designates an "R9" screen format for this field, meaning that the price is formatted with an explicit decimal point and up to nine decimal places. Your users enter a price in an "R2" format (a number with up to two decimal places), so you change the screen format from "R9" to "R2."

The standard defines this element as having a maximum length of fourteen. For this tutorial, the items you sell Pet Zone are not priced at more than $9,999.99 each, so this field needs a maximum length of only eight (four places for the dollars; two places for the cents; one place for the decimal point; and one place for a plus or minus sign, if present).

(Continued on next page)

How to customize the IT104 element (contd)

Use this procedure to rename the field label, change the field length and number format, add Help text, and create the list definition for the Unit Price field.

Step	Action
1	Double-click the **IT104** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow eight numeric digits in this field, including a plus or minus sign and a decimal point.
4	From the Form Format list, select **R2** to indicate that this field on the translation object accepts a number with an explicit decimal point and up to two decimal places.
5	Select the **Display** tab.
6	In the Label box, enter **Price** to replace the existing field label.
7	In the Maximum number of characters box, enter **8** to allow eight numeric digits in this field, including a plus or minus sign and a decimal point.
8	Select the **Summary List** tab.
9	Select the **Display this field in summary list** check box. **System Response** The value in the Price field is displayed in a column in the Line Items list box.
10	In the Column Width box, enter **8** to set the width of this column in the Line Items list.
11	From the Sequence list, select **4** to indicate that this field is the fourth column in the list.
12	Select the **Help** tab.
13	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the unit price for this item. The price cannot exceed 8 digits, including a plus or minus sign and a decimal point.**
14	Click **OK** to exit the dialog.

How to customize the IT106 element

The IT106 element contains the Product/Service ID Qualifier for each item in the invoice. The IT101 element contains the two-character code to indicate what type of product/ service ID is in the Product Code field (IT107 element). You know that the only type of product/service ID that your users enter for this invoice is the UPC code, so you define a constant value for the Product/Service ID Qualifier field, designating that the constant "UP" qualifies the number in the Product Code field. When a user enters a UPC code in the Product Code field, the system automatically assigns the code "UP" to the Product/ Service ID Qualifier field.

Use this procedure to define a constant value and hide the Product/Service ID field.

Step	Action
1	Double-click the **IT106** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Constant** option.
4	Click **Edit** to access the Map Constants dialog.
5	Click **New** to access the Edit Constant dialog.
6	In the ID box, enter **UPC Package Code** to identify the constant.
7	From the Type list, select **String**.
8	In the Value box, enter **UP**.
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	From the Constants list, select **UP**. (Continued on next page)

(Contd) Step	Action
12	From the Qualifies list, select **0234 PRODUCT/SERVICE ID**, which is the element that the Product/service ID Qualifier field qualifies. The dialog now should look like this:
13	Select the **Display** tab.
14	Select the **This field should not appear on the form** option.
15	Click **OK** to exit the dialog.

How to customize the IT107 element

The IT107 element contains the Product/Service ID for each item in the invoice. For this tutorial, you rename the field label to Product Code. The standard allows up to a thirty-character string in this field. You know that your users enter product identification numbers (UPC codes) that are no longer than ten characters, so you change the maximum length for this field. Also, you create a list definition for the IT107 element to include the product code in the Line Items list on the Invoice frame.

Use this procedure to rename the field label, change the field length, add Help text, and create the list definition for the Product/Service ID field.

Step	Action
1	Double-click the **IT107** element. **System Response** The Element Properties dialog is displayed. *(Continued on next page)*

(Contd) Step	Action
2	Select the **Validation** tab.
3	In the Max box, enter **10**.
4	Select the **Display** tab.
5	In the Label box, enter **Product Code**.
6	In the Maximum number of characters box, enter **10**.
7	Select the **Summary List** tab.
8	Select the **Display this field in summary list** check box. The value in the Price field is displayed in a column in the Line Items list box.
9	In the Column Width box, enter **13** to set the width of this column in the Line Items list.
10	From the Sequence list, select **2** to indicate that this field is the second column in the list.
11	Select the **Help** tab.
12	In the Help Text box, enter the following text (press **Enter** at the end of each line of text below): **Enter your company's product code for this item in the invoice.** **The product code cannot exceed 10 alphanumeric** **characters.**
13	Click **OK** to exit the dialog.

Customizing the PID Group

Overview   The PID group contains the Product/Item Description for each item in the invoice. You already activated the PID:2 segment in the PID group.

Customizing the PID:2 Segment

Overview   The PID:2 segment (in the PID group) contains the Product/Item Description for each item in the invoice. When the PID:2 segment is activated, the PID:201 element is mandatory. Earlier in this tutorial, you activated the PID:205 element also. The PID:205 element provides a description of each item in the invoice, and the PID:201 element qualifies that description.

How to customize the PID:201 element   By standard definition, the PID:201 element contains the Item Description Type ("F" for free-form item description, "S" for structured description, or "X" for semi-structured description) for the invoiced item. For this tutorial, you know that the only type of description your users enter for this invoice is a free-form description. You define a constant value for the Item Description Type field to indicate that the constant "F" qualifies the text in the Description field. When a user enters a free-form description in the Description field, the system automatically assigns the code "F" to the Item Description Type field.

Use this procedure to define a constant value and hide the Item Description Type field.

Step	Action
1	Double-click the **PID:201** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Constant** option.
4	Click **Edit** to access the Map Constants dialog.
5	Click **New** to access the Edit Constant dialog.
6	In the ID box, enter **Free-Form Description** to identify the constant.
7	From the Type list, select **String** to indicate that the literal constant is formatted as a string data type.
8	In the Value box, enter **F** to indicate that the Product/Service ID Qualifier field is a free-form description. This value is the actual value of the literal constant. *(Continued on next page)*

(Contd) Step	Action
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	From the Constants list, select **F** to identify the constant that is used for this element.
12	From the Qualifies list, select **0352 DESCRIPTION**, which is the element that the Item Description Type field qualifies. The dialog now should look like this:
13	Select the **Display** tab.
14	Select the **This field should not appear on the form** option.
15	Click **OK** to exit the dialog.

How to customize the PID:205 element

The PID:205 element contains the Description of each invoiced item, and is defined by the standard to be a string of up to eighty alphanumeric characters. You add Help text to this field.

Use this procedure to add Help text to the Description field.

Step	Action
1	Double-click the **PID:205** element. **System Response** The Element Properties dialog is displayed.
2	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the description of the invoiced item. The description cannot exceed 80 alphanumeric characters.**
3	Click **OK** to exit the dialog.

Customizing the DTM:2 Segment

Overview In this tutorial, you use two iterations of the DTM segment (Date/Time Reference). The first active DTM segment in the invoice (the DTM:2 segment) is used to enter the contract date of the invoice. The DTM:2 segment you customize first is in the IT1 group (on the Line Items frame) and specifies the date on which each item in the invoice was shipped. You already changed the maximum use of the DTM:2 segment so that its associated fields are displayed on the same frame as the PID:2 and IT1 fields.

How to customize the DTM:201 element The DTM:201 element (Date/Time Qualifier) is a mandatory element for the DTM:2 segment. The DTM:201 element contains the three-character code from your EDI data to indicate what type of date follows (e.g., date shipped). You define a constant value for the Date/Time Qualifier field, designating that the constant "011" qualifies the date in the Date field.

When a user enters the date on which the item was shipped in the Date field, the system automatically assigns the code 011 to the Date/Time Qualifier field. The user does not need to enter the code in the qualifier field, so the qualifier field does not need to be displayed.

Use this procedure to define a constant and hide the Date/Time Qualifier field.

Step	Action
1	Double-click the **DTM:201** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab.
3	Click the **Use Constant** option.
4	Click **Edit** to display the Map Constants dialog.
5	Click **New** to display the Edit Constant dialog.
6	In the ID box, enter **Date Shipped** to identify the constant.
7	From the Type list, select **String** to indicate that the literal constant is formatted as a string data type. (Continued on next page)

(Contd) Step	Action
8	In the Value box, enter **011** to indicate that the Date/Time Qualifier field contains the Date Shipped. This value is the actual value of the literal constant.
9	Click **OK** to add the constant.
10	Click **Close** to exit the Map Constants dialog.
11	From the Constants list, select **011**.
12	From the Qualifies list, select **0373:6 DATE**, which is the element that the Date/Time Qualifier field qualifies. The dialog now should look like this:
13	Select the **Display** tab.
14	Select the **This field should not appear on the form** option.
15	Click **OK** to exit the dialog.

How to customize the DTM:202 element

The DTM:202 element in the DTM:2 segment contains the Date qualified by the Date/Time Qualifier field. This element is defined by the standard to be a Date/Time data type of six characters. In this tutorial, you know that the shipped date is always an eight-character date, so you change the element and field lengths to accommodate the new length. Also, you rename the field label and add Help text to the field.

Your users format the date as "MM/DD/YY" when they enter the date in the screen entry translation object, but the EDI data is sent to your trading partner as "YYMMDD." You set the screen format and EDI format for this element accordingly.

Use this procedure to set the date format, change the element and field lengths, rename the field label, and add Help text to the Date field.

Step	Action
1	Double-click the **DTM:202** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **8** to allow the entire date, including separators (/), in this element.
4	From the Form Format list, select **MM/DD/YY** to indicate that this field on the translation object accepts a date entered in the format MM/DD/YY.
5	Verify that **YYMMDD** is selected in the File Format list to indicate that the EDI data is sent in the format YYMMDD.
6	Select the **Display** tab.
7	In the Label box, enter **Date Shipped**.
8	In the Maximum number of characters box, enter **8** to allow the entire date, including separators (/), to be displayed.
9	Select the **Help** tab.
10	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter the date on which this invoiced item was shipped. Use the format MM/DD/YY.**
11	Click **OK** to exit the Display dialog.

Customizing the CAD Segment

Overview

The CAD segment contains Carrier Detail, such as the transportation method. For this tutorial, you provide a list for users from which users select the transportation method for the invoiced item, and provide a field so they can enter a reference number to identify the carrier.

How to customize the CAD01 element

The CAD01 element, the Transportation Method/Type Code, contains the two-character code that identifies the transportation method (e.g., parcel post, air express, etc.) for each invoiced item. You customize the CAD01 element so that a list containing all valid codes in the Transportation Method/Type Code list is available to your users when they use the screen entry translation object.

After you specify the code list table to use for the list for the Transportation Method/Type Code field, you rename the field label to identify this field better.

Use this procedure to load the code list table from the standard, rename the field label, and add Help text to the Transportation Method/Type Code field.

Step	Action
1	Double-click the **CAD01** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Standard Rule** tab..
3	Select the **Use Code** option. (Continued on next page)

(Contd) Step	Action
4	Click **Edit** to access the Edit Code List dialog. The Table ID box contains **0091**, the name of the element for which this code list table is used. The Desc box contains TRANSPORTATION METHOD/TYPE CODE, the description of the element for which this code list table is used.
5	Click **Load** to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click **OK** to access the Load Code List dialog.
6	Click **Add All** to select all the codes and move them to the Codes Selected list.
7	Click **OK** to load the code list and exit the Load Code List dialog. *(Continued on next page)*

(Contd) Step	Action
8	Click **Close** to exit the Edit Code List dialog. The dialog now should look like this:
9	Select the **Display** tab.
10	In the Label box, enter **Transport Method**.
11	Select the **Help** tab.
12	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Select the transportation method code for this invoiced item from the list.**
13	Click **OK** to exit the dialog.

How to customize the CAD08 element

The CAD08 element contains a Reference Number, which is used in this tutorial to identify the carrier for an invoiced item. This element is defined by the standard to be a string of thirty alphanumeric characters. Your company has assigned reference numbers to the carriers with whom they have contracted. In this tutorial, you know that the carrier reference number cannot exceed twelve alphanumeric characters. You change the element and field lengths to accommodate the shorter reference number. In addition, you rename the field label and add Help text to the field.

Use this procedure to change the field and element lengths, rename the field label, and add Help text for the Reference Number field.

Step	Action
1	Double-click the **CAD08** element. **System Response** The Element Properties dialog is displayed.
2	Select the **Validation** tab.
3	In the Max box, enter **12**.
4	Select the **Display** tab.
5	In the Label box, enter **Carrier Code**.
6	In the Maximum number of characters box, enter **12**.
7	Select the **Help** tab.
8	In the Help Text list, enter the following text (press **Enter** at the end of each line of text below): **Enter your company's reference number for this carrier. The reference number cannot exceed twelve alphanumeric characters.**
9	Click **OK** to exit the Display dialog.
10	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form. *(Continued on next page)*

(Contd) Step	Action
11	Click **Save** from the File menu to save the form.

The Line Items list now should look like this:

 |

Customizing the TDS Segment

Overview   The TDS segment contains the Total Monetary Value Summary for the invoice. You already used an accumulator in the TDS01 element to calculate the total dollar amount invoiced, and made this field display-only so that users cannot change the value in this field.

Customizing the CTT Segment

Overview

The CTT segment is a mandatory segment that displays Transaction Totals for the invoice. For this tutorial, you use the CTT01 element to display the total number of line items invoiced. You already used an accumulator in the CTT01 element to generate a total of the number of line items, and made this field display-only so that users cannot change the value in this field.

Now that you have customized all of the elements used in this invoice, you are ready to format the fields and labels to make the frames more consistent and visually attractive.

Format the Screen Entry Form

Overview

Introduction   In the previous section of this tutorial, you customized the screen entry form for an ANSI X12 003040 invoice (810) that your users will use to enter data to invoice Pet Zone for items that were shipped to them. After successfully customizing the fields and elements of the screen entry form, you are ready to format the layout of the form.

This section explains how to format the form, field by field.

Resizing the Invoice Frame

Overview   When a form is compiled into a translation object, the fields are arranged according to how the frames and the fields contained on them were arranged when the form was compiled. You should eliminate unnecessary space as you arrange the fields on each frame.

CAUTION

WHEN YOU RESIZE THE FRAMES OF A SCREEN ENTRY FORM, YOU MUST RESIZE BASED ON THE RESOLUTION OF THE TARGET MONITOR (E.G., THE MONITOR ON WHICH THE END USER VIEWS THE TRANSLATION OBJECT). FOR EXAMPLE, IF YOU SIZE THE FRAMES OF A SCREEN ENTRY FORM ON A SUPER VGA MONITOR, THE COMPILED TRANSLATION OBJECT MAY NOT FIT IN THE DISPLAY AREA OF A VGA MONITOR.

Procedure   Use this procedure to resize the Invoice frame.

Step	Action
1	Click the **810 INVOICE** file icon to display the Invoice frame in the Layout Window. **Note** When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.
2	To display more of the form on your screen, click and drag the center bar between the EDI File Format Window and the Layout Window to the left until the Layout Window is wide enough to display as much of the form as you want to view. *(Continued on next page)*

(Contd) Step	Action
3	To resize the Invoice frame, click and drag the right side of the frame approximately to the 14 cm. mark on the horizontal ruler so that the form is wide enough to format the fields according to the instructions in this tutorial. **Note** Use the horizontal ruler at the top of the frame to help you resize the frame. The instructions in this tutorial are given in centimeters. If your rulers display inches (the default) as the measurement system, you can toggle the measurement system from inches to centimeters by double-clicking the yellow square where the vertical and horizontal rulers meet. The Invoice frame now should look like this:

Arranging the Fields on the Invoice Frame

Overview   You begin formatting the screen entry form by arranging the fields on the Invoice frame. You place the fields in the translation object in a logical order, then align the fields to give the frame a consistent and orderly appearance.

Invoice frame   When you have finished arranging the fields, your Invoice Frame should look like the one in the example below.

By default, each field and its associated label are displayed on their own line. However, it is common for invoices to place two or more fields on a line.

You prevented some of the field labels from being displayed (by removing the field label in the Label field of the Display dialog). For these fields, the fields are displayed on your screen entry form, but their associated labels are not displayed.

Note
If you forget which unlabeled field contains what data, you can click the field. Its associated element is highlighted in the EDI File Format Window, providing you with a description of the field.

**How to resize,
move, and align
the fields**

Use this procedure to resize, move, and align the fields on the Invoice frame of the screen entry form:

Note
If a field and its corresponding field label move together, the Lock Labels to Fields option is selected. Click the Lock Labels button on the Main Toolbar to turn off the Lock Labels option.

Step	Action
1	Select the following fields: ◗ Invoice Date ◗ Invoice No. ◗ P.O. Date ◗ P.O. No. ◗ Contract No. ◗ Contract Date **Note** To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select. **Note** If any of these fields is not in the part of the Invoice frame that currently is displayed, then use the scroll bar to scroll down the frame until you locate the hidden fields.
2	Select **Size to Length** from the Display menu. The selected fields are resized to the lengths specified in the Maximum number of characters box of the Display dialog for each field.
3	Select the **Invoice Date** label and field and drag them to the upper right corner of the Invoice frame.
4	Select the **Invoice Date** field and drag it closer to its label.
5	Select the **Invoice No.** label and field and drag them to the upper left corner of the frame.
6	Select the **Invoice No.** field and drag it closer to its label.
7	Select the **P.O. Date** label and field and drag them to the right side of the frame, below the Invoice Date label and field.
8	Select the **P.O. Date** field and drag it closer to its label.
9	Select the **P.O. No.** label and field and drag them to the left side of the frame, below the Invoice No. label and field. *(Continued on next page)*

(Contd) Step	Action
10	Select the **P.O. No.** field and drag it closer to its label.
11	Select the **Contract No.** label and field and drag them to the left side of the frame, below the P.O. No. label and field.
12	Select the **Contract No.** field and drag it closer to its label.
13	Select the **Contract Date** label and field and drag them to the right side of the frame, below the P.O. Date label and field. **Note** If the Contract Date field is not in the part of the Invoice frame that currently is displayed, then use the scroll bar to scroll down the frame until you locate the Contract Date field.
14	Select the **Contract Date** field and drag it farther away from the label so that they do not overlap.
15	Select the **Ship To** field (not the field label) and the two Address Information fields and the City Name field of the Ship To address. (The two Address Information fields and the City Name field are located below the Ship To field.)
16	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned in a row.
17	Select the **State** or **Province Code** field of the **Ship To** address and drag it to the immediate right of the City Name field of the Ship To address.
18	Select the **Postal Code** field of the Ship To address and drag it to the immediate right of the State or Province Code field of the Ship To address.
19	Click and drag all of the **Ship To** fields (including the Ship To field label) to the left side of the frame, below the Contract No. label and field. **Note** To select a group of items, click and drag the mouse diagonally across all the fields/labels you want to select. When you release the mouse button, all the fields and field labels completely included within the space formed by dragging the mouse has handles, indicating they were selected.
20	Select all of the **Ship To** fields (not including the Ship To field label) and drag them closer to the Ship To field label.
21	Select the **Remit To** field (not the field label) and the two Address Information fields and the City Name field of the Remit To address. (The two Address Information fields and the City Name field are located below the Remit To field.) *(Continued on next page)*

(Contd) Step	Action
22	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned in a row.
23	Select the **State or Province Code** field of the Remit To address and drag it to the immediate right of the City Name field of the Remit To address.
24	Select the **Postal Code** field of the Remit To address and drag it to the immediate right of the State or Province Code field of the Remit To address.
25	Select all of the **Remit To** fields (not including the Remit To field label) and drag them closer to the Remit To field label.
26	Click and drag all of the **Remit To** fields (including the Remit To field label) below the Ship To address.
27	Select the **Payment Terms Code** list.
28	Click and drag its right handle so that the list is approximately 1.5 cm. wide (including the Down Arrow). **Note** Use the horizontal ruler to help you find specific locations on the ruler, or to help you measure width.
29	Click and drag its bottom handle to make the drop-down part of the list long enough to list approximately four codes.
30	Select the **Payment Terms Code** list and label and drag them to the center of the frame, below the Remit To address.
31	Select the **Line Items** list and drag it closer to its label.
32	Select the **Line Items** list and label and drag them to the center of the frame, below the Payment Terms Code list and label. **Note** Leave extra space between the Payment Terms Code list and label, and the Line Items list and label, to add column headings (using static text) to label the data in the list.
33	Select the **Number of Line** Items field and drag it closer to its label.
34	Select the **Number of Line Items** label and field and drag them to the center of the frame, below the Line Items list and label.
35	Select the **Total Invoice Amount** field and drag it closer to its label.
36	Select the **Total Invoice Amount** label and field and drag them to the center of the frame, below the Number of Line Items label and field.

How to resize the invoice frame

You should resize the Invoice frame to make the most efficient use of space. You already resized the frame horizontally before you began arranging the fields. Then, you arranged the fields on the frame, so the fields do not use the same amount of vertical space as before you arranged the fields. To make better use of the frame space, you resize the frame vertically now.

Step	Action
1	To resize the Invoice frame, click and drag the bottom of the frame to just below the Total Invoice Amount label and field The Invoice frame now should look like this:
2	Select **Save** from the File menu.

How to align the fields and field labels

Now that the fields in the Invoice frame are resized and moved to their proper locations, you can align the fields and labels.

Use this procedure to align the fields and field labels on the Invoice frame.

Step	Action
1	Select the following field labels: ◗ Invoice No. ◗ P.O. No. ◗ Contract No. ◗ Ship To ◗ Remit To **Note** To select more than one item, click the first item, then press CTRL and click the second item. Repeat the process of pressing CTRL and clicking the item for each subsequent item you want to select.
2	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected field labels are aligned.
3	Select the following fields: ◗ Invoice No. ◗ P.O. No. ◗ Contract No.
4	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned.
5	Select the following field labels: ◗ Invoice Date ◗ P.O. Date ◗ Contract Date
6	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected field labels are aligned.
7	Select the following fields: ◗ Invoice Date ◗ P.O. Date ◗ Contract Date *(Continued on next page)*

(Contd) Step	Action
8	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned.
9	Select the following field labels: ◗ Number of Line Items ◗ Total Invoice Amount
10	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected field labels are aligned.
11	Select the following fields: ◗ Number of Line Items ◗ Total Invoice Amount
12	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned. *(Continued on next page)*

(Contd) Step	Action
13	To align the tops of all of the field labels and fields, select each row of items (one row at a time), select Align Controls from the Display menu, then select Top from the Align Controls submenu. The items for each row are listed below:

▶ Invoice No. label and field, Invoice Date label and field

▶ P.O. No. label and field, P.O. Date label and field

▶ Contract No. label and field, Contract Date label and field

▶ Ship To label and field

▶ City Name, State or Province Code, and Postal Code fields of the Ship To address

▶ Remit To label and field

▶ City Name, State or Province Code, and Postal Code fields of the Remit To address

▶ Payment Terms Code label and list

▶ Line Items label and list

▶ Number of Line Items label and field

▶ Total Invoice Amount label and field

The Invoice frame now should look like this:

How to add column headings to the line items list

Gentran:Server labels the fields on the Line Items frame, but does not label the column headings for the Line Items list on the Invoice frame. The Line Items list displays the information entered into the fields on the Line Items frame. To label the columns in the Line Items list, you must add the column headings with static text (text that is always included in the screen entry translation object).

You add the following column headings to the Line Items list on the Invoice frame:

Column Heading (Static Text)	Placement Above Line Items List
Item	First column
Product	Second column
Qty.	Third column
Price	Fourth column

After you add the column headings and move each column heading to its proper location, the Line Items list and the column headings should look like this:

Use this procedure to add and position the column headings.

Step	Action
1	Click **Add Text** on the Main Toolbar. Text is added to the current frame, displayed in the upper left corner of the frame. If the template is larger than the frame (there is a scroll bar on the right side of the frame), the static text is displayed in the upper left corner of the part of the template that is displayed, not at the top of the template.
2	In the new text box, enter **Item**.
3	Click **Add Text** on the Main Toolbar. Again, text is added to the current frame in the upper left corner.
4	In the new text box, enter **Product**.
5	Click **Add Text** on the Main Toolbar. Again, text is added to the current frame in the upper left corner.
	(Continued on next page)

(Contd) Step	Action
6	In the new text box, enter **Qty.** (note the period in the text).
7	Click **Add Text** on the Main Toolbar. Again, text is added to the current frame in the upper left corner.
8	In the new text box, enter **Price.** The column headings you added are displayed in the upper left corner of the frame.
9	Select the **Item** static text.
10	Click and drag it to above the Line Items list, immediately to the right of the left margin of the Line Items list (so it looks like the example on 3 - 119).
11	Select the **Product** static text.
12	Click and drag it to above the Line Items list, to the right of the Item column heading (so it looks like the example on 3 - 119).
13	Select the **Qty.** static text.
14	Click and drag it to above the Line Items list, to the right of the Product column heading (so it looks like the example on 3 - 119).
15	Select the **Price** static text.
16	Click and drag it to above the Line Items list, to the right of the Qty. column heading (so it looks like the example on 3 - 119). (Continued on next page)

(Contd) Step	Action
17	To ensure that the column headings (static text) you just added are aligned properly, select all the static text you just added (Item, Qty., Product, Price). Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. **Note** To select more than one item, click the first item, then press CTRL and click the second item. Repeat the process of pressing CTRL and clicking the item for each subsequent item you want to select. The Invoice frame now should look like this:

How to set the tab sequence on the invoice frame

The tab sequence is the order in which the cursor moves from field to field in the screen entry translation object when a user presses **TAB**. When you create a screen entry form, the system automatically positions the fields and sets the tab sequence for those fields. However, usually you want to modify the tab sequence of the fields to meet your screen entry requirements and the new positions of the fields on the frame.

Use this procedure to set the tab sequence for the fields on the Invoice frame.

Step	Action
1	Select **Set Tab Order** from the Display menu. **System Response** Numbers are displayed in the fields on the frame to indicate the current tab sequence. *(Continued on next page)*

(Contd) Step	Action
2	Click the fields and list box listed below in the order in which they are listed. As you click each field, the tab sequence number for that field will change to the next sequential number in the tab sequence.
	Note
	If you click a field out of sequence, you must begin setting the tab sequence again. To start over, select Set Tab Order from the Display menu so that the tab sequence numbers are no longer displayed in the fields on the frame, and then begin these steps again.
	a. Invoice No.
	b. Invoice Date
	c. P.O. No.
	d. P.O. Date
	e. Contract No.
	f. Contract Date
	g. Ship To name
	h. Ship To address (first line of address)
	i. Ship To address (second line of address)
	j. Ship To city
	k. Ship To state or province code
	l. Ship To postal code
	m. Remit To name
	n. Remit To address (first line of address)
	o. Remit To address (second line of address)
	p. Remit To city
	q. Remit To state or province code
	r. Remit To postal code
	s. Payment Terms Code
	t. Line Items
	u. Number of Line Items
	v. Total Invoice Amount
	When you click the last field in the sequence (Total Invoice Amount), the tab sequence is set, and the tab sequence numbers no longer are displayed in the fields.

(Contd) Step	Action
23	The new tab sequence should look like this:

Arranging the Fields on the Line Items Frame

Overview

Now that the fields, labels, and static text are arranged on the Invoice frame, you are ready to arrange the fields on the Line Items frame. You will place the fields in a logical order, then align the fields (as you did with the fields on the Invoice frame) to give the frame a consistent and orderly appearance. When you finish arranging the fields, the Line Items frame in your form should look like the one in the example below.

How to resize the line items frame

Before you begin arranging the fields on the Line Items frame, you should resize the frame so that it is the same width as the Invoice frame. When this form is compiled into a translation object, the fields will be arranged according to how the frames and the fields contained on them were arranged when the form was compiled. You should eliminate unnecessary space as you arrange the fields on each frame.

Note
When the form is generated, the upper left corner of each frame in the form is placed in the upper left corner of the Layout Window.

Step	Action
1	Click the **IT1** group to display the Line Items frame in the Layout Window.
2	To resize the Line Items frame, click and drag the right side of the frame to the 14 cm. mark on the horizontal ruler so that the form is wide enough to format the fields according to the instructions in this tutorial. **Note** Use the horizontal ruler at the top of the frame to help you resize the frame. *(Continued on next page)*

(Contd) Step	Action
3	To display more of the form on your screen, click and drag the center bar between the EDI File Format Window and the Layout Window to the left until the Layout Window is wide enough to display as much of the form as you want. The Line Items frame now should look like this:

How to resize the fields

Use this procedure to resize the fields on the Line Items frame of the screen entry form.

Step	Action
1	Select the following fields: ◗ Item No. ◗ Quantity ◗ Price ◗ Product Code ◗ Date Shipped ◗ Carrier Code **Note** To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select. *(Continued on next page)*

(Contd) Step	Action
2	Select **Size to Length** from the Display menu. **System Response** The selected fields are resized to the lengths specified in the Maximum number of characters box of the Display dialog for each field.

How to move and align the fields

Use this procedure to move and align the fields on the Line Items frame of the screen entry form.

Step	Action
1	Select the **UOM** list and drag its right handle so that it is approximately 2 cm. wide (including the Down Arrow). **Note** Use the horizontal ruler at the top of the frame to help you measure width.
2	Drag its bottom handle so that the list is long enough for four codes to be displayed in it when the drop-down section is open.
3	Select the **Transport Method** and **UOM** lists (in that order).
4	Select **Size Equally** from the Display menu. The Transport Method list is the same size as the UOM list (the reference).
5	Select each field on the frame individually and move it closer to its respective field label. If the field overlaps its label (e.g., Date Shipped), move the field slightly to the right of the label.
6	Select the **Product Code** label and field and drag them to the right of the Item No. label and field (use the example on 3 - 126 for reference). **Note** The Item No. label and field already are positioned where you want them to be (in the upper left corner of the frame). You do not need to move them.
7	Select the **Quantity** label and field and drag them to the right of the Product Code label and field (use the example on 3 - 126 for reference).
8	Select the **UOM** label and list and drag them below the Item No. label and field. The left side of the UOM field label should be aligned with the left side of the Item No. field label. (Use the example on 3 - 126 for reference.)

(Contd) Step	Action
9	Select the **Price** label and field and drag them below the Product Code label and field. The left side of the Price field label should be aligned with the left side of the Product Code field label. (Use the example on 3 - 126 for reference.)
10	Select the **Description** label and field and drag them below the UOM and Price labels and fields. The left side of the Description field label should be aligned with the left side of the Item No. and UOM field labels. (Use the example on 3 - 126 for reference.)
11	Select the **Date Shipped** label and field and drag them to the left side of the frame, below the Description label and field. The left side of the Date Shipped field label should be aligned with the left side of the Item No., UOM, and Description field labels. (Use the example on 3 - 126 for reference.)
12	Select the **Transport Method** label and list and drag them to the right of the Date Shipped label and field (use the example on 3 - 126 for reference).
13	Select the **Carrier Code** label and field and drag them to the right of the Transport Method label and field (use the example on 3 - 126 for reference).

How to resize the line items frame

Use this procedure to resize the Line Items frame.

Step	Action
1	To resize the Line Items frame, click and drag the bottom of the frame to below the last row of fields and labels (Date Shipped, Transport Method, and Carrier Code). **Note** Allow enough space between the last row of fields/labels and the bottom of the frame for the Transport Method list to be opened. The Line Items frame now should look like this:

How to align the fields and field labels

Use this procedure to align the fields and field labels on the Line Items frame.

Step	Action
1	Select the following labels and fields: ◗ Item No. ◗ Product Code ◗ Quantity **Note** To select more than one item, click the first item, then press CTRL and click the second item. Repeat the process of pressing CTRL and clicking the item for each subsequent item you want to select.
2	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields and labels are aligned in a row.
3	Select the following labels and fields: ◗ UOM ◗ Price
4	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields and labels are aligned in a row.
5	Select the **Description** label and field.
6	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the field and label are aligned in a row.
7	Select the following labels and fields: ◗ Date Shipped ◗ Transport Method ◗ Carrier Code
8	Select **Align Controls** from the Display menu, then select **Top** from the Align Controls submenu. The tops of the selected fields and labels are aligned in a row.
9	Select the following field labels: ◗ Item No. ◗ UOM ◗ Description ◗ Date Shipped *(Continued on next page)*

(Contd) Step	Action
10	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected field labels are aligned in a row.
11	Select the following fields: ◗ Item No. ◗ UOM ◗ Description
12	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned in a row.
13	Select the following field labels: ◗ Product Code ◗ Price
14	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected field labels are aligned in a row.
15	Select the following fields (in this order): ◗ Price ◗ Product Code
16	Select **Align Controls** from the Display menu, then select **Left** from the Align Controls submenu. The left margins of the selected fields are aligned in a row. The Line Items frame now should look like this:

How to set the tab sequence on the line items frame

Use this procedure to set the tab sequence of the fields on the Line Items frame.

Step	Action
1	Select **Set Tab Order** from the Display menu. **System Response** Numbers are displayed in the fields on the frame to indicate the current tab sequence. *(Continued on next page)*

(Contd) Step	Action
2	Click the fields listed below in the order in which they are listed. As you click each field, the tab sequence number for that field change to the next sequential number in the tab sequence you are now setting. **Note** If you click a field out of sequence, you must begin setting the tab sequence again. To start over, select Set Tab Order from the Display menu so that the tab sequence numbers are no longer displayed in the fields on the frame, and then begin these steps again. a. Product Code b. Quantity c. UOM d. Price e. Description f. Date Shipped g. Transport Method h. Carrier Code i. Item No. **Note** The Item No. field is the last field in the tab sequence, although it is the first field in the layout of the Line Items frame. This field is display-only, displaying the next consecutive line item number (the line item number is generated by an extended rule in the IT1 segment). By placing the Item No. field last in the tab sequence, this field can be skipped easily by users entering data. The first field in the sequence is the Product Code field, which is the first field into which users can enter a value.
10	The new tab sequence should look like this: **Note** When you click the last field in the sequence (Item No.), the tab sequence is set, and the tab sequence numbers no longer are displayed in the fields.

Changing the Invoice Frame Title

Overview   The system automatically titles the frames in a screen entry form when the form is created, based on the name of the file, segments, or groups. You can modify the frame titles (for example, at the file or document level) to distinguish one form from the others. The parent frame of the invoice currently is titled Invoice. You give this frame a more descriptive title to distinguish it from other invoices that your company uses.

Procedure   Use this procedure to change the frame title.

Step	Action
11	Click the **810 INVOICE** file icon with the right mouse button and select **Properties** from the shortcut menu. **System Response** The File Format Properties dialog is displayed. *(File Format Properties dialog image)*
12	Click the **Display** tab.
13	In the Frame Caption box, enter **ANSI X12 Invoice (810) - Pet Zone**.
14	Click **OK**. **System Response** The new frame title is displayed in the frame title in the Layout Window.
15	Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form.
16	Select **Save** from the File menu to save the form.

You have completed your Invoice form. Now, you are ready to finalize the form.

Finalize the Form

Overview

Introduction   Now that you have created and customized a screen entry form, you are ready to compile the form to generate the translation object (*.TPL) that Gentran:Server uses before you print the report and test the compiled translation object.

Compiling the Form

Overview   The Compile function compiles the form. The form that you create using Gentran:Server is a *source form*. When that source form is compiled, the result is a compiled translation object.

This translation object must be registered with the Gentran:Server system before you can use it. Use the Compile function after the form is completed and saved.

Procedure   Use this procedure to compile the form.

Step	Action
1	Select **Compile** from the File menu to display the Run-Time Translation Object Name dialog.
2	Click **Save** to accept the translation object name (pet_810s.tpl) in the "File name" box.
3	This name for the compiled translation object (.TPL file) is the same file name as the source form (.STP file). Preserving the same file name (with different file extensions) ensures that the relationship between the source form and the compiled translation object remains evident. The system compiles the form and generates an error report. The error report is displayed in the Compile Errors dialog.
4	Click **OK** to exit the Compile Errors dialog. **Note** If the Compile Errors dialog contains errors, you must fix the problems by redoing the appropriate section of the tutorial. Recompile the form after you correct the errors and save the form.
5	Select **Save** from the File menu to save the form. The date on which you compiled the form is automatically loaded into the Compiled on box on the Translation Object Details dialog.

Printing the Report

Overview   The Gentran:Server report enables you to validate and review the translation object, and make modifications as needed. If you review the report and determine that the translation object is incorrect, you should reiterate the form creation process as many times as necessary (make the modifications, save the form, recompile the form, and print the report again).

Procedure   Use this procedure to print the Gentran:Server report.

Step	Action
1	Select **Print** from the File menu to access the Print Options dialog.
2	Click **OK** to accept the defaults on this dialog (all options checked), so the report includes all sections and only the activated form components. **System Response** The Print dialog is displayed.
3	Do you need to change setup options (to select a specific printer, paper orientation, or size and source of paper) ? ◗ If yes, click **Properties**. Set the appropriate options. Click **OK** to begin the print process. ◗ If no, click **OK** to begin the print process.

Testing the Translation Object

Overview   After you compile the form, print and verify the report, and register the translation object with Gentran:Server, you should test the translation object to verify that the data is translated correctly. To test the compiled translation object, you should use the translation object to create a new document. You also should verify acknowledgement processing (if applicable) and verify communications with your network.

Important
The translation object must be registered with the Gentran:Server system before you can use it. See the "Gentran:Server® Windows® User's Guide" for information on registering the translation object.

Procedure   Use this procedure to test the screen entry translation object you just created.

Step	Action
1	Register the **PET_810S.TPL** translation object with Gentran:Server. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on registering a translation object.
2	If you have not done so already, import the **PETZONE.PAR** partner relationship into Gentran:Server. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on importing a partner.
3	Verify (in Partner Editor) that the SCREEN 810 Pet Zone screen entry translation object is selected for the Outbound Relationship. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on selecting outbound translation objects.
4	Create a new document to enter the data in the screen entry translation object you created. **Reference** See the "Gentran:Server® Windows® User's Guide" for more information on creating a document.

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GLOSSARY

Glossary

?In Documents This Gentran:Server browser contains a list of documents that were received by the system but failed compliance checking or that do not have an identifiable partner or transaction set.

?Out Documents This Gentran:Server browser contains a list of documents that were imported into the system via unattended processing but are invalid.

acknowledgement This term is used to indicate the ANSI 997 functional acknowledgement, the EDIA 999 acceptance/rejection advice, and the EDIFACT CNTRL document.

activation This function enables you to make map components available for use. The system activates all the groups, segments, composites, and elements that are defined as "mandatory" (must be present) by the standard. The system does not enable you to deactivate the mandatory groups, segments, composites, and elements. When translating data, the system does not process groups, segments, composites, and elements (or records and fields) that are not activated. Therefore, *you* must activate the groups, segments, composites, and elements that are not defined as mandatory by the standard, but that you have determined that you need to use in mapping.

AIAG The Automotive Industry Action Group (AIAG) is the standards-setting group for the automotive industry. The standards form a subset of the ANSI X12 standard.

ANA Article Numbering Association.

ANSI American National Standards Institute. ANSI sets standards for many products and services, such as safety glasses and battery capacities. The ANSI X12 committee is the chief EDI standards-setting organization for the United States.

application file If you are creating an import or export map, you must define your application to the Application Integration subsystem. In Gentran:Server terminology, your application file is also referred to as a fixed-format file or a positional file. Your application file must contain all the information that you either need to extract from your partner's document (if the map is inbound) or need to send to your partner (if the map is outbound), so that your system can accurately process the data.

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application system	Computer systems, outside of EDI, designed to fulfill specific business functions. These include accounting, purchasing, materials control, human resources, shipping, and other systems.
browser	A browser is a window that displays a list of items, such as documents (transaction sets), interchanges, translation objects, etc. A document browser displays only documents.
check box	A check box enables you to select or clear options from a list. You can select as many options from the list as you need. A selected check box contains a checkmark. The labels of unavailable options are dimmed.
code list tables	These are used by EDI standards as repositories for lists of codes. Each EDI standard provides a code list for each element that can be further defined with a code.
colours	This feature enables you to select foreground and background colours to visually define the various map components. The use of colour is optional.
communications session	Everything sent and received to/from one telephone number in one continuous period of connection. This could include sending two or three interchange envelopes to a network, each for a different trading partner.
compile	This function compiles the form and creates a translation object. The form that you create using Gentran:Server is a source form. When that source form is compiled, the result is a compiled translation object. This translation object must be registered with the Gentran:Server system before you can use it.
compliant	This means that the document conforms to the EDI standards as defined by the translation object.
component data element	A simple data element that belongs to a composite data element. Component data elements are also called subelements.
composite data element	A contains two or more component data elements or subelements. Composites are defined by the EDI standards that use them (EDIFACT, TRADACOMS, and certain ANSI X12 standards).
conditions	See relational conditions.

constant   This standard rule enables you to move a literal constant value to the specified element or field, indicate a qualifying relationship with another element or field, and map the current date or time to the specified element or field.

cross-reference table   This table is created in Partner Editor and is used to convert your values to your trading partner's values during outbound processing, or your partner's values to your values during inbound processing.

date/time   This type of field or element contains a date or time. If you specify that a field or element is a date/time type, you must specify exactly how the date or time must be formatted.

deactivation   This function enables you to make map components unavailable for use by the system. The system does not enable you to deactivate the mandatory groups, segments, composites, and elements.

default   A predefined value – programs use these built-in values *unless* you specifically override them.

document   One transaction set containing actual data and treated as a single entity. The amount of data does not affect whether something is a document or not, only the fact that it is treated as a single entity. For example, regardless of whether a purchase order contains one item or ten thousand, if it is one purchase order, it is one document.

If a trading partner sends you a communication containing 10 purchase orders, you have received 10 documents. If the communication contained 15 invoices, you have received 15 documents.

EANA   International Article Numbering Association, Brussels, Belgium.

EDI   Electronic Data Interchange (EDI) is the process by which companies can exchange business documents directly from application to application by computer without paper documents being produced.

EDI File Format Window   The EDI File Format Window contains the EDI file format. When you click a segment or group in the EDI file format, the corresponding frame is displayed in the Layout Window. When you click an element in the EDI file format, the corresponding layout component is highlighted in the Layout Window.

EDI standard   This is the rules for turning a business document into an EDI document.

EDIA   The Electronic Data Interchange Association, formerly known as the Transportation Data Coordinating Committee (TDCC).

EDIFACT   This is the standards organization of the United Nations Economic and Social Council. The acronym is short for the Electronic Data Interchange for Administration, Commerce, and Transport.

element   The smallest piece of usable information defined by the standards. Examples might include a quantity, unit price, or description. An individual element can have somewhat different meanings depending on context. Therefore, elements are normally not considered to have useful meaning until they are combined into segments. An element is the EDI map component that is mapped (linked) to a corresponding application field to move data to and from the EDI file.

There are three types of data elements, as illustrated in the table below:

Data Element	Definition
Simple data element	A single piece of information defined by the standards.
Composite data element	A data element that is made up of multiple component elements.
Component data element	A simple data element that belongs to a composite data element. Component data elements are also called subelements.

envelope   A way of separating information in transmissions for ease of processing. Each envelope contains a header segment and a trailer segment, which separate the envelope from other envelopes and provide information about the contents of the envelope.

There are three levels of envelopes, as follows:

◗   Transaction Set
    Each transaction set (business document) is contained within a transaction set envelope.

◗   Functional Group
    An envelope containing related business documents. The standards define which transaction sets should be placed together into a functional group envelope.

◗   Interchange Envelope
    All material being sent to one trading partner in one communication. The term Interchange Envelope is the term used by ANSI. EDIA uses the term Transmission Envelope to refer to this level of envelope. Since we use the term transmission for other uses, we refer to Interchange Envelope only.

Note
A communications session could easily include a number of interchange envelopes. For this reason, the standards-setting bodies are considering a fourth level of envelope to cover an entire communications session.

equalize This function enables you to reinstate the two sides of the map with focus in equal dimensions. The use of the Equalize function is optional.

export map This map defines how to move data from the EDI standard-formatted documents that your partners send you to your application file (flat file definition). An export map is necessary for inbound processing.

export translation object See export map.

extended rules These rules enable you to use a Gentran:Server proprietary programming language to perform virtually any mapping operation you require.

field The smallest piece of information defined in the application file. A field is the application map component that is mapped (linked) to a corresponding EDI element to move data to and from your application file.

fixed-format file See application file.

form A form is a set of instructions you define in the Forms Integration subsystem that indicates how the system should format data

frame A frame contains the groups, repeating segments, and elements at that level (single segments are not represented on the frame). Gentran:Server uses frames to format the EDI file for the translation object.

functional group A group of transaction sets that the standards-setting body (such as ANSI) has defined as fitting together with other related transaction sets. An example might be a Functional Group defined as containing all purchasing transaction sets.

group   A looping structure that contains related records/segments and/or groups that repeat in sequence until either the group data ends or the maximum number of times that the loop is allowed to repeat is exhausted. If you create a group that is subordinate to another group (a subgroup), this corresponds to a nested looping structure (a loop within a loop). The application (positional) file and the EDI file are both groups and therefore, they is visually represented the same way as other groups and subgroups in Gentran:Server.

import   This command enables you to import data from an external application file. Depending on the content of the file, the system may prompt you for partner, transaction, or translation object information.

import map   This map defines how to move data from your application file (flat file definition), which may contain multiple documents, to the EDI standard-formatted documents that your partners expect to receive from you. An import map is necessary for outbound processing.

import translation object   See import map.

inbound mapping   The system translates your trading partner's EDI standard formatted business document to your application file format, so you can receive documents from you partners. To translate inbound data, you need to create an export map.

In Documents   This Gentran:Server browser contains a list of documents that the system received but that have not yet been processed by the user. Once the documents are processed (printed or exported) the documents are transferred to the In Drawer.

In Drawer   This Gentran:Server browser contains a list of documents that were received and processed.

integer   An integer is a number that has an implied decimal point (e.g., "2.01" is formatted as "201").

interchange   The interchange contains all the functional groups of documents (transaction sets) sent from one sender to one receiver in the same transmission.

Layout Window   The Layout Window contains the actual format of the translation object. Each group (with a maximum usage greater than one) and repeating segment has a corresponding frame in the Layout Window. When you click a segment or group in the EDI file format, the corresponding frame is displayed in the Layout Window. When you click an element in the EDI file format, the corresponding layout component is highlighted in the Layout Window.

literal constant   These are used by the system as a repository to store information that is used at a later point in the map. Typically, constants are used in an outbound map to generate a qualifier.

location table   This is a table created in Partner Editor that is used to contain address-related information about the partner.

lookup table   This is a table created in Partner Editor that is used to select information related to a value in inbound or outbound data.

loop count   This standard rule enables you to count the number of times a loop is repeated, if the element or field is part of a loop. If the loop is a nested loop, you can track the current loop *or* the outer loop. For example, if the Y loop is nested within the X loop, and the Y loop has cycled through 15 iterations and the X loop has cycled through 3 iterations, you can choose to count either the "15" (Y loop) or the "3" (X loop).

loop start/loop end   Certain EDI standards use Loop Start (LS) and Loop End (LE) segments. LS and LE segments differentiate between two or more loops of the same type. If the transaction contains LS and LE segments and depending on whether your map is inbound or outbound, you must define the LS and LE segments for the loops you are using in the map in one of two different ways.

map   A set of instructions you define in the Application Integration subsystem that indicates the corresponding relationship between your application file and the EDI standards, and defines how the system should translate data.

network   Also known as a Third Party Network or Value-Added Network (VAN) that accepts and holds transmissions from companies until it is convenient for a trading partner to accept them.

number   This type of field or element contains either an integer or real number. If you specify that a field or element is a number type, you must designate the format by specifying a format of either "N" (integer) or "R" (real) and the number of decimal places.

ODETTE   The Organization for Data Exchange by Tele-Transmission in Europe.

outbound mapping The system translates your application file format to EDI standard formats, so you can send documents to your partners. To translate outbound data, you need to create an import map and a system import map in the Application Integration subsystem.

Out Documents   This Gentran:Server browser contains a list of documents that are ready to be sent. After the documents are successfully sent, they are automatically transferred to the Out Drawer.

Out Drawer   This Gentran:Server browser contains a list of documents that were successfully sent out by the system.

partner   Another firm with which your company trades documents. Also referred to as a trading partner.

Partner Editor   This Gentran:Server function enables you to define, edit, and delete all partner information for your company and all of your trading partners.

positional file See application file.

post   This Gentran:Server function enables you to move compliant documents from the Workspace to the Out Documents.

predefined   On a data entry translation object, a default value for a particular element. You can change the value as necessary.

printout   This is produced when data received from a trading partner passes through a print translation object. You do not have to actually print the data. The printout could be to a file on your hard disk.

print translation object   A print translation object organizes and formats the printout of EDI documents that are received from or sent to the trading partners for which you have established a trading relationship (inbound or outbound) that utilizes that print translation object. The print translation object enables you to view the EDI document in an easily readable format.

promote   This function extracts one iteration (instance) of a group or repeating segment. This enables you to map unique data from your application file, and/or enter a specialized definition. Gentran:Server specifies that only one-to-one (no loops) or many-to-many (loop) mapping relationships are valid.

qualifier   This is an element that has a value expressed as a code that gives a specific meaning to the function of another element. A qualifying relationship is the interaction between an element and its qualifier. The function of the element changes depending on which code the qualifier contains.

real number   A real number has an explicit decimal point (e.g., "2.01" is formatted as "2.01"), and truncates trailing zeroes.

receive   This Gentran:Server function enables you to manually initiate a communications session to receive data from a network through an invocation of the Connection Manager.

record   Contains a group of related fields. A record can occur once or can repeat multiple times.

relational condition   This function enables to connect fields together for syntax or compliance reasons. For example, Field A is invalid unless Field B is present. Therefore, if you set up a condition that pairs Fields A and B, the system generates a compliance error if one of those fields is not present.

respond   This Gentran:Server function enables you to create a turnaround document (using the Turn Around translation object in the partner relationship) in response to one or more selected documents in the In Drawer.

responsible agency   An organization that develops and updates standards for EDI communications. These organizations include ANSI, EDIA, AIAG, UCS, EDIFACT, ODETTE, and VICS.

screen entry translation object   A screen entry translation object provides a standardized format for keying an EDI document into the Document Editor, for translation and transmission to your trading partners, for which you have established an outbound trading relationship that utilizes that screen entry translation object. The screen entry translation object ensures that your users key all the data necessary to create the required EDI document.

segment	A group of related elements or composite data elements that combine to communicate useful data. Segments are defined by the EDI standards. A segment can occur once or can repeat multiple times. For example, a catalog price segment might consist of elements for item description, volume, price, lead time, etc. By themselves, none of these elements would communicate useful information. Together, they provide the information necessary for someone to tell if the item is what is desired, whether the price is reasonable, etc. A number of segments together form a transaction set.
select	This standard rule enables you to select entries from a location table, cross-reference table, partner table, or lookup table (all tables created in the Gentran:Server Partner Editor). You can then map the fields in those tables to one or more fields in the data. The Select function uses the value of the current field to perform the selection.
send	This Gentran:Server function enables you to manually start a communications session to send data to a network through an invocation of Connection Manager. Only selected documents are enveloped and sent. If no documents are selected, ALL documents are sent. Successfully sent documents are moved to the Out Drawer.
set	See Transaction Set.
simple mapping	See link.
split	This function enables you to split (break) a group or repeating segment into two loops. You typically use this function when you need more than one instance of the same map component that still occurs multiple times.
standard rules	These rules give you access to functions that are necessary for mapping operations that are more complex than simple linking, but less involved than extended rules. Each of the standard rules are mutually exclusive (you can use only one on a particular field).
static text	Static text is text that is always included in the screen entry or print translation object. Examples of static text include legends and column headings. Field labels, which usually accompany fields to identify the contents of the fields, are not considered static text.
status bar	The status bar of an application window defines information about a selection, command, or process, defines Menu Bar items as the user highlights each item, and indicates any current keyboard-initiated modes for typing (e.g., CAP for the "Caps Lock" key or NUM for the "Num Lock" key, etc.).

string This type of field or element contains one or more printable characters. If you specify that a field or element is a string type, you must designate the format by specifying a syntax token.

syntax token This function enables you to designate a "token" that defines ranges of characters and/or numbers that are allowed to be used for a string-type element or field. You can then use the syntax tokens in the Format field of the Field Properties dialog. This enables you to define what type of characters should be used while compliance checking each element/ field (i.e., alphanumeric within a certain range, numeric within a certain range, etc.).

system import map The translator uses this map to determine which trading relationship (established in Partner Editor) corresponds to each document in the application file, so the system knows which import map to use to process the document. You need a system import map that is defined in EDIMGR.INI to translate outbound data.

system import translation object See system import map.

system translation object These translation objects control the creation and separation of interchanges, functional groups, and transaction sets. They also used to generate and reconcile functional acknowledgements. All the required system translation objects are automatically installed with the Gentran:Server system.

TDCC See EDIA.

TDF TDF is the Transaction Data File. This file serves as a filter between your document files and the Gentran:Server translator. For outbound processing, data is imported from a TDF file and translated to EDI format using a TDF Import translation object. The data is then ready to be posted and sent to your trading partner. For inbound processing, EDI documents that are received by Gentran:Server can be exported to a TDF-formatted file using a TDF Export translation object. This data file is then ready to be processed or converted to your internal application files.

third-party network See Network.

title bar The title bar of an application window contains the name of the application and enables you to move the window to another position on your desktop.

toolbar This contains buttons that graphically represent commands available in the Menu Bar.

TRADACOMS	The U.K. standards for EDI that are published by the Article Numbering Association (UK) LTD.
trading partner	Another firm with which you company trades documents. Also referred to as a partner.
transaction set (document)	A business form as defined by the standards. Examples include an ANSI 850 purchase order or an UCS 880 invoice. The standards define each transaction set in terms of the segments and elements that make up the form, the order in which they appear, and the relationships among them. This is also known as "message" in Europe.

translation object A predesigned layout set up to ensure that input or output for a particular transaction set exists and is presented in a usable fashion. You must specify which translation objects are used by each partner relationship.

Inbound Translation Objects:

◗ **Turn Around:** This translation object is used when a document is received, to create the natural response document that contains as many elements from the received document as possible.

◗ **Export File:** This translation object indicates that when a document is received, it is exported to a specified file format.

◗ **Print:** This translation object is used to print documents.

Outbound Translation Objects:

◗ **Import:** This translation object is used to import data from an application file.

◗ **Print:** This translation object is used to print documents.

◗ **Data Entry:** This translation object is used to enter data into the Document Editor facility.

translator	This is the engine that processes data for the Gentran:Server, Application Integration subsystem and Forms Integration subsystem.
transmission	See Communications Session.
transmission chain	A path an EDI communication could follow, including one company, one trading partner, and one or more network services.
turnaround document	A document into which data elements from the source document have been automatically transferred using a turnaround map.

turnaround map	A series of instructions that the system uses to create a turnaround document (a logical response document to the source) from an inbound (source) document, by transferring data from the source document to elements in the target document (translation object).
UCS	The Uniform Communications Standard is the standard used by the grocery industry.
update	This standard rule enables you to update a specific field in a document record, envelope segment, interchange, group, current partner, or document (if the map side format type is EDI), with the contents of the element or field.
use accum	This standard rule gives you access to a set of numeric variables that you can manipulate via numeric operations, and then transfer to and from fields. This function enables you to add, change, or delete calculations for the element/field, including hash totals (used to accumulate numeric field values, i.e., quantity, price, etc.). This function also enables you to map the accumulated total into a control total field, and use accumulators. Accumulators are used generally for counting the occurrences of a specific element or generating increasing or sequential record or line item numbers.
use code	This standard rule enables you to match an element or field against a predefined code table, specify whether or not a compliance error is generated if the element or field does not contain one of the values in the code table, and store a code's description in another element or field.
user translation object	These translation objects control data entry, importing, exporting, document turnaround, and creating printed reports. These translation objects are created using the Application Integration or Forms Integration subsystems. The Application Integration subsystem enables you to generate import, export, and document turnaround translation objects. The Forms Integration subsystem enables you to generate data entry and print translation objects.
version	Each standards-setting body updates its standards on a regular basis. Each formal update is referred to as a version.
VICS	The Voluntary Inter-industry Communication Standards is the standards-setting body for the retail industry, a subset of ANSI X12.
Workspace	This Gentran:Server browser contains a list of outbound "Work in Progress" documents. It also contains recently imported or data entry documents.
X12	The ANSI committee that sets and publishes standards for EDI. |