

Gentran:Director[®]

for Windows[®]

Version 5.4

*Forms Integration
EDIFACT Tutorial Guide*

Sterling Commerce
An IBM Company

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Getting Started

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

What's in this Manual

This manual contains a tutorial for Gentran:Director Forms Integration, using the EDIFACT 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.

To access reference information, refer to the Gentran:Director 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*.



This manual assumes that you are familiar with using a PC and with Microsoft® Windows functions, including:

- **The terminology used to describe mouse and cursor actions.**
- **The terminology used to describe Windows-specific attributes, including dialog boxes, icons, windows, and buttons.**

This manual also assumes that you are familiar with EDI concepts, EDI standard structure, your internal application format, data mapping concepts, and the Gentran:Director product.

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 EDIFACT purchase order (ORDERS).
- *Chapter 3, Creating a Screen Entry Form* explains the tasks necessary to create a screen entry form for an EDIFACT invoice (INVOIC).
- The *Glossary* contains definitions of Forms Integration and Gentran:Director terms and concepts.

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.

Conventions in this Manual

The typefaces used in this manual are as follows:

<i>Creating a new form</i>	This typeface is used for emphasis or to indicate a chapter or section in this manual or other Gentran:Director manuals.
NEW...	This typeface indicates a button in the program. Click the button with your mouse, or press TAB until the button is highlighted, then press ENTER to execute that command.
F1	This typeface indicates a key that you need to press on your keyboard. A plus sign (+) between key names indicates a combination of keys to be pressed together (e.g., ALT + TAB).
<i>Click this button</i>	This typeface highlights an action that you should take or indicates descriptive text. It is most often used for callouts (text that is “pulled out” to the side or bottom of an illustration) in this manual to highlight specific steps that you need to take to complete a task. In the callouts, any button that you need to click is described in this same typeface.

The icons used in this manual are as follows:



This icon indicates a note that gives you additional information on the current subject.



This icon indicates a caution that alerts you to the potential loss of information. Please read any text preceded by this icon carefully.



This icon indicates helpful tips, suggestions, shortcuts, and alternative actions.

Introducing Forms Integration

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:Director generates a translation object. After you register the translation object with Gentran:Director 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.

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.

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:Director generates the translation object format based on the EDI file format in the EDI File Format Window and displays that format in the Layout Window.

EDI File Format Window

The EDI File Format Window (the 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.





Gentran:Director 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 groups, segments, composites, and elements that are defined by the standards agency for the version of the document you selected. Please see *Creating the New Form* on page 29 (print forms) or *Creating the New Form* on page 166 (screen entry forms) in this tutorial for more information on generating an EDI file when

you create a new form. You need to customize the system-generated EDI file by modifying the properties of the form components and using specialized Gentran:Director functions to manipulate the EDI file structure.

If you want to use a specialized version of an EDI standard that is not available in the Gentran:Director standards database, it may be appropriate for you to define the EDI file yourself.

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. We recommend that you determine which form components you will use before generating or defining an EDI file.

The form components that Gentran:Director uses to define the EDI file format are as follows:

- 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 is visually represented the same way as other groups and subgroups in Gentran:Director: 
- A **segment** contains a group of related elements or composite data elements that combine to communicate useful data. Segments are defined by EDI standards. A segment can occur once or can repeat multiple times. A segment is visually represented in Gentran:Director as: 
- 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). A composite is visually represented in Gentran:Director as: 
- An **element** is the smallest piece of information defined by the EDI standards. An individual element can have different meanings depending on the context. Elements are normally not considered to have useful meaning until they are combined into segments. An element is visually represented in Gentran:Director as: 

After an element has an operation performed against it, a red checkmark is displayed over the element icon.

Layout Window

The Layout Window (the right side of the Forms Integration subsystem main window) contains the actual format of the translation object.

Gentran:Director uses *frames* to format the EDI file for the translation object. Each frame contains groups, repeating segments, and elements at that level. Single segments are not represented on the frame.

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 (fields) 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.

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

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

Introducing the Forms Integration Subsystem

The Gentran:Director Forms Integration subsystem lets you design forms to facilitate the keying (screen entry) and printing (print) of EDI documents that you receive or send.

Navigation

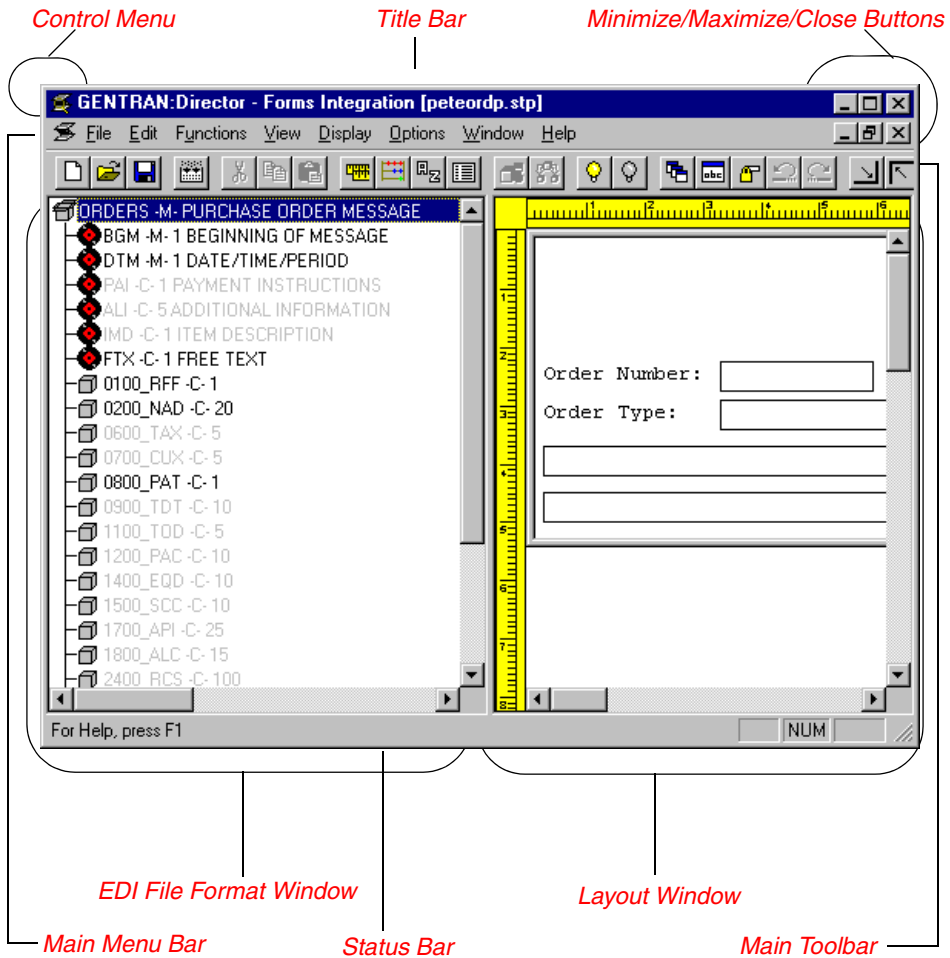
You can access the Gentran:Director Forms Integration Window in one of four ways:

- 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 Window or Layout Window) with the right mouse button to access a shortcut menu, which contains all the functions that are currently available for that form component. The content of the shortcut menus depends on the type and level of the selected form component.



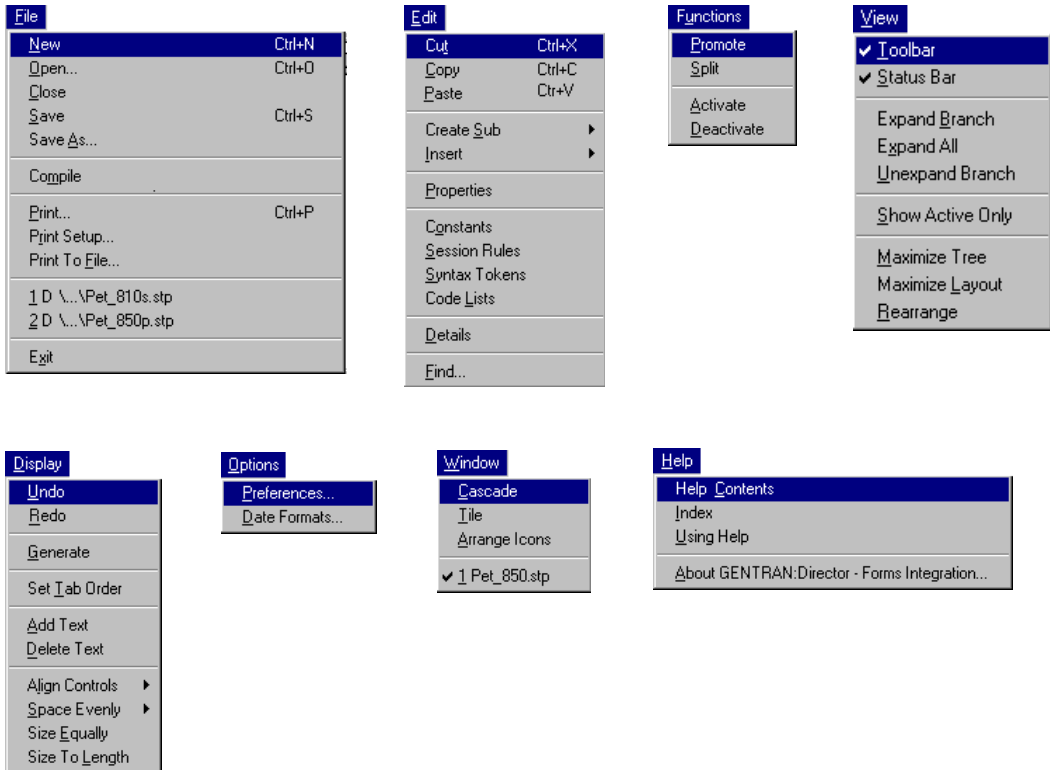
When you start Gentran:Director, the Main Menu Bar contains a subset of menu items. The full set of menu items is displayed after you create a new form or open (load) an existing form.

The Gentran:Director Forms Integration Window appears as follows:

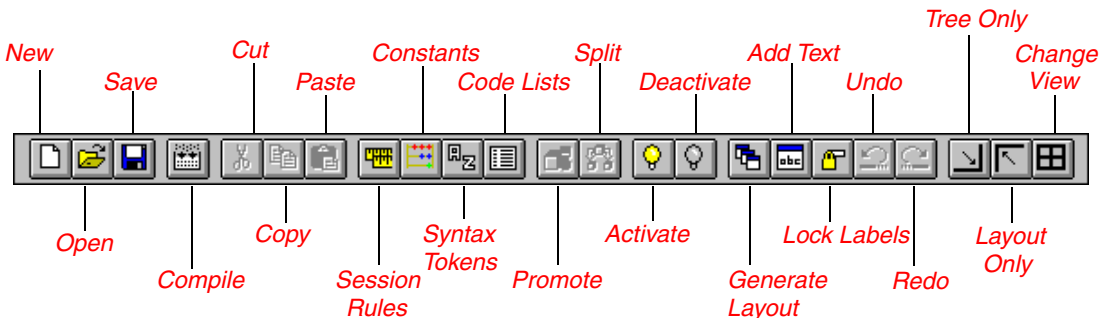


- The **Control Menu** contains the following commands: **Restore**, **Move**, **Size**, **Minimize**, **Maximize**, and **Close**.
- The **Title Bar** contains the name of the application. You can use this to move the position of the EDI Director window on your desktop.
- The **Minimize** icon reduces the window to an icon. The **Maximize** icon enlarges the window to its maximum size.

- The **Main Menu Bar** contains the following drop-down menus. Detailed descriptions of each of the commands on these menus are found in the online Help. Unavailable items are dimmed.



- The **Main Toolbar** gives you access to some of the most common Gentran:Director operations. Unavailable items are dimmed. The Main Toolbar is a dockable toolbar so you can affix it to any edge of the client window. The Main Toolbar is illustrated below:



- 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.
- 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.
- 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).

Keyboard Techniques



The procedures in this manual are designed to be executed with a mouse. If you prefer to use the keyboard, press the **ALT** key and the underlined letter of the desired menu option to open the menu. Once the menu is open, press the underlined letter of the desired menu option to access that option.



If a key combination (e.g., CTRL + N for the NEW command) is specified on the menu for that option, press that key combination.

Instead of clicking a button to execute a command on a dialog or browser, press TAB to highlight the desired button, and press ENTER to execute that command.

Building a Form with Forms Integration

This section is an overview of the process of building a form.

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 use. Determine what operations need to be performed to generate the required layout.

2. **Set Global Defaults (first time only)**

The first time you use Gentran:Director, you should verify the default date format that the system uses. Please see *Verifying the Global EDI Date Formats* on page 27 (print forms) or *Verifying the Global EDI Date Formats* on page 164 (screen entry forms) for more information on verifying the global date default.

3. **Create, Save, and Name a New Form**

Please see *Creating the New Form* on page 29 (print forms) or *Creating the New Form* on page 166 (screen entry forms) for more information on creating, saving, and naming a form.

4. **Activate the Appropriate EDI Groups, Segments, Composites, and Elements**

Please see *Activating Groups, Segments, Composites, and Elements* on page 32 (print forms) or *Activating Groups, Segments, Composites, and Elements* on page 169 (screen entry forms) for more information on activation.

5. **Define the Layout of the Form**

Please see *Verifying EDI Delimiters* on page 35 (print forms), *Adding Frame Help Text* on page 172, or *Setting EDI Delimiters* on page 174 (screen entry forms) for more information on customizing your EDI file, including verifying the EDI delimiters.

6. **Compile the Form**

Please see *Compiling the Form* on page 145 (print forms) or *Compiling the Form* on page 345 (screen entry forms) for more information on compiling the form and translation object naming conventions.

7. **Print the Report**

Validate and review the form, and make modifications as needed. Please see *Printing the Report* on page 147 (print forms) or *Printing the Report* on page 347 (screen entry forms) for more information on printing the report.

8. **Register the Translation Object with Gentran:Director**
Please see the Gentran:Director *User's Guide* for more information on registering translation objects.
9. **Create the Appropriate Trading Relationship**
Establish the appropriate trading relationship in Gentran:Director for your trading partners. Please see the Gentran:Director *User's Guide* for more information on creating trading relationships.
10. **Testing 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. Please *Testing the Translation Object* on page 148 (print translation objects) or *Testing the Translation Object* on page 347 (screen entry translation objects) for more information on testing the translation objects.

Creating a Print Form

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 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

Getting Started

This tutorial explains how to customize and format a form before it is compiled into a translation object. The form that you create is a *source form*. After that source form is compiled, the result is a *compiled translation object*. You must register the translation object with Gentran:Director before you can use the translation object to print messages of that type.

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

- Type of form (print or screen entry)
- Standard agency (e.g., EDIFACT)
- Standard version (e.g., 92.1)
- Message type (e.g., ORDERS)

All mandatory groups, segments, composites, and elements for the standard, version, and message you specify are available for use (activated) when Gentran:Director creates a form. Only these mandatory form components (groups, segments, composites, 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 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 use the print translation objects 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 message, trading partner, and standard version. You can create an unlimited number of print forms, and the number of print forms you create is not affected by the number of screen entry forms you create.

We recommend that you mock up a layout of the print form the way you ultimately want it to look. As you design the layout, make sure that the form will make sense to the people who will use 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 will use to identify the fields on the form

There are four phases in designing a form. These phases generally are completed in the following order:

1. Designing and creating the form
2. Customizing the form components
3. Formatting the form
4. Finalizing the translation object

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.

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 will 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 will create a print form for the ORDERS message (purchase order) using the EDIFACT 92.1 standard. The steps are broken down into manageable pieces so you can apply what you learn to your print forms.

In this scenario, your company is MWT Manufacturing Co., which manufactures a wide variety of pet supplies for pet stores. You will 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 purchase order printout. You do not want to alter the integrity of the EDI data. You do want to interpret some of the codes included in the EDI message into more meaningful text.

Form Analysis

The first step in creating a form is to analyze its requirements. If the analysis you perform is complete, you will 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 will be 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 EDIFACT ORDERS purchase order requires several steps. Some steps are performed at the message 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 type of EDI data Pet Zone will be 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.

Analyzing the EDI File

To analyze the EDI file, you must determine what data your trading partner will be sending you. You and your partner must agree on which standard, version, and message you will be using. In this tutorial, you are using an EDIFACT version 92.1 ORDERS purchase order. It is important to know what type of information that your partner will send you in the purchase order, and what type of data will be contained in each element used.

It is very helpful to review the EDI standard that you will use before analyzing the EDI file. We recommend that you obtain an EDI standards manual for the standard and version that you will use. Standards manuals are available from EDI standards 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.

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

Segment	Composite	Element	Description
BGM			Beginning of Message
DTM			Date/Time/Period
	C507	DTM01	Date/Time/Period Qualifier
UNS			Section Control
		UNS01	Section Identification

For this tutorial, the form components that are required (need to be activated) and are not mandatory for the standard are the following:

Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Beginning of Message (BGM Segment) (Already Activated)				
BGM05	Document/Message Number	String	35	
BGM06	Message Function, Coded	String	3	
Date/Time/Period (DTM Segment)				
DTM01	Date/Time/Period Qualifier	String	3	
DTM02	Date/Time/Period	String	35	4 (Change) 13 (Request)
Free Text (FTX Segment)				
FTX01	Text Subject Qualifier	String	3	
FTX06	Free Text	String	70	
Reference (RFF Group)				
Reference (RFF Segment)				
RFF01	Reference Qualifier	String	3	
RFF02	Reference Number	String	35	
Name and Address (NAD Group)				
Name and Address (NAD Segment)				
NAD01	Party Qualifier	String	3	AA (Party billed) BY (Buyer) ST (Ship to)

Element	Description	Data Type	Length	Code Value/Format to Be Assigned
NAD10	Party Name	String	35	
NAD16	Street and Number/P.O. Box	String	35	
NAD17	Street and Number/P.O. Box	String	35	
NAD19	City Name	String	35	
NAD20	Country Sub-Entity Identification	String	9	
NAD21	Postcode Identification	String	9	
Payment Terms Basis (PAT Group)				
Payment Terms Basis (PAT Segment)				
PAT01	Payment Terms Type Qualifier	String	3	10 (Instant) 18 (Previously Agreed Upon)
PAT02	Terms of Payment Identification	String	17	
PAT05	Terms of Payment	String	35	
Line Item (LIN Group)				
Line Item (LIN Segment)				
LIN01	Line Item Number	Number	6	
Additional Product ID (PIA Segment in LIN Group)				
PIA01	Product ID Function Qualifier	String	3	
PIA02	Item Number	String	35	
Item Description (IMD:2 Segment in LIN Group)				
IMD:206	Item Description	String	35	
Measurements (MEA:3 Segment in LIN Group)				
MEA:301	Measurement Application Qualifier	String	3	
MEA:305	Measure Unit Qualifier	String	3	
MEA:306	Measurement Value	String	18	Format = R0
Quantity (QTY:3 Segment in LIN Group)				
QTY:301	Quantity Qualifier	String	3	
QTY:302	Quantity	Number	15	Format = N0
Date/Time/Period (DTM:13 Segment in LIN Group)				
DTM:1301	Date/Time/Period Qualifier	String	3	
DTM:1302	Date/Time/Period	String	35	

Element	Description	Data Type	Length	Code Value/Format to Be Assigned
Monetary Amount (MOA:5 Segment in LIN Group)				
MOA:501	Monetary Amount Type Qualifier	String	3	
MOA:502	Monetary Amount	Number	18	Format = R2
Section Control (UNS Segment)				
UNS01	Section Identification	String	1	
Control Total (CNT Segment)				
CNT01	Control Qualifier	String	3	
CNT02	Control Value	Number	18	Format = N0



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

Segment Analysis

For each mandatory or optional segment activated you must answer the following questions:

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

A *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.

A *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.

A *composite* 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).

A segment's *maximum use* to the number of times it can be used within the structure in which it 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 will be used based on what your trading partner will be sending you.

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 will expect from Pet Zone for each segment.

Gentran:Director generates a form based on the groups, segments, composites, 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 will send you. However, you need to customize the form components to produce a printed report the way your company expects it to look.

The following table lists the customizing tasks described in this tutorial.

Form Component	Description	Customizing Needed
BGM05 element	Document/Message Number	You will set up the document name (which enables you to differentiate between messages in the document browsers in Gentran:Director) in this element. In addition, the standard allows this element to have a maximum length of thirty-five characters, but you expect a string no longer than ten characters from your trading partner. You will change both the maximum length of the element and the display length of the field to ten. Also, you will change the field name to "Order Number," which better describes the data in this field for your company.
BGM06 element	Message Function, Coded	The code from this element will be used to look up the description in a code list table, and the description will be printed in another field that you create. You will prevent the Message Function, Coded field from being displayed on the printout, because the more meaningful description will be printed instead.
DTM segment	Date/Time/Period	The standard allows this segment to be used up to thirty-five times in one purchase order, but you and your trading partner have decided to use this segment only once. Therefore, you will change the maximum use of this segment to one.
DTM01 element	Date/Time/Period Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
DTM02 element	Date/Time/Period	The standard allows a maximum length of thirty-five characters, but you expect a string no longer than eight characters from your partner. You will change the maximum length of the element and the display length of the field to eight. Also, you will change the field name to "Order Date," which better describes the data in this field for your company.

Form Component	Description	Customizing Needed
FTX segment	Free Text	The standard allows this segment to be used up to five times in one purchase order, but you and your trading partner have decided to use this segment only once. Therefore, you will change the maximum use of this segment to one.
FTX01 element	Text Subject Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being displayed on the printout.
FTX06 element	Free Text	The standard allows a maximum length of seventy characters, but you expect a string no longer than sixty characters from your partner. You will change the maximum length of the element and the display length of the field to sixty. Also, the data in this element will be self-explanatory, so you will remove the label from this field.
RFF group	Reference	The standard allows this group to be used up to ten times in one purchase order, but you and your trading partner have decided to use this group only once. Therefore, you will change the maximum use of this group. Also, you will promote this group so that the fields in this group are placed on the same frame as the related header fields.
RFF01 element	Reference Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
RFF02 element	Reference Number	The standard allows a maximum length of thirty-five characters, but you expect a string no longer than twelve characters from your partner. You will change the maximum length of the element and the display length of the field to twelve. Also, you will change the field name to "Contract No.," which better describes the data in this field for your company.
NAD01 element	Party Qualifier	The qualifier from this element will be used to look up the description in a code list table, and the description will be printed in another field that you create. You will prevent the Party Qualifier field from being displayed on the printout, because the more meaningful description will be printed instead.
NAD10 element	Party Name	The data in this element will be explained by the qualifier in the Party Qualifier element, so you will remove the label from this field.
NAD16 element	Street and Number/P.O. Box	The data in this element will be self-explanatory, so you will remove the label from this field.
NAD17 element	Street and Number/P.O. Box	The data in this element will be self-explanatory, so you will remove the label from this field.

Form Component	Description	Customizing Needed
NAD19 element	City Name	The standard allows a maximum length of thirty-five characters, but you expect a string no longer than thirty characters from your partner. You will change the maximum length of the element and the display length of the field to thirty. Also, the data in this element will be self-explanatory, so you will remove the field label.
NAD20 element	Country Sub-Entity Identification	The standard allows a maximum length of nine characters, but you expect a string no longer than two characters from your partner. You will change the maximum length of the element and the display length of the field to two. Also, the data in this element will be self-explanatory, so you will remove the field label.
NAD21 element	Postcode Identification	The data in this element will be self-explanatory, so you will remove the field label.
PAT group	Payment Terms Basis	The standard allows this group to be used up to ten times in one purchase order, but you and your trading partner have decided to use this group only once. Therefore, you will change the maximum use of this group. Also, you will promote this group so that the fields in this group are placed on the same frame as the related header fields.
PAT01 element	Payment Terms Type Qualifier	The qualifier from this element will be used to look up the description in a code list table, and the description will be printed in another field that you create. You will prevent the Payment Terms Type Qualifier field from being displayed on the printout, because the more meaningful description will be printed instead.
PAT02 element	Terms of Payment Identification	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
PAT05 element	Terms of Payment	The data in this element will be explained by the qualifier in the Terms of Payment Identification element, so you will remove the label from this field.

Form Component	Description	Customizing Needed
LIN group	Line Item	After you customize and format the fields in the LIN group, you will copy and paste the LIN group at the same level in the EDI file. The original LIN group will contain column headings for the line item detail, but you will prevent the column headings from being printed for all line items after the first. You will change the maximum use of the first LIN group to one so that the column headings are printed only once (for the first line item). You will change the maximum use of the second LIN group to 199,999. Up to two hundred thousand line items (one from the first LIN group and 199,999 from the second LIN group) can be printed on the printout (without printing the column headings for each line item).
LIN01 element	Line Item Number	The standard allows a maximum length of six characters, but you expect a string no longer than five characters from your partner. You will change the maximum length of the element and the display length of the field to five. Also, you will change the field name to "Line," which briefly describes the data in this field.
PIA segment (in LIN group)	Additional Product ID	The standard allows this segment to be used up to twenty-five times for each line item, but you and your trading partner have decided to use this segment only once. Therefore, you will change the maximum use of this segment to one.
PIA01 element	Product ID Function Qualifier	You will change the field name to "Code," which more briefly describes the data in this field for your company.
PIA02 element	Item Number	The standard allows a maximum length of thirty-five characters, but you expect a string no longer than six characters from your partner. You will change the maximum length of the element and the display length of the field to six. Also, you will change the field name to "Prod ID," which briefly describes the data in this field.
IMD segment (in LIN group)	Item Description	The standard allows this segment to be used up to ten times for each line item, but you and your trading partner have decided to use this segment only once. Therefore, you will change the maximum use of this segment to one.
IMD06 element	Item Description	The data in this element will be self-explanatory, so you will remove the label from this field.
MEA segment (in LIN group)	Measurements	The standard allows this conditional segment to be used up to five times for each line item, but you and your trading partner want to use this segment only once. You will change the maximum use of this segment to one. Also, to make this segment mandatory, you will change the minimum use of this segment to one.

Form Component	Description	Customizing Needed
MEA01 element	Measurement Application Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
MEA05 element	Measure Unit Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
MEA06 element	Measurement Value	The standard allows a maximum length of eighteen digits, but you expect a number no longer than two digits from your partner. You will change the maximum length of the element and the display length of the field to two. You will change the field name to "Unit," which better describes the data in this field for your company. Also, the standard defines the data in this element as being formatted with an explicit decimal point and up to nine decimal places. You will not use decimal places for the data in this field, so you will format both the EDI data and the printed data without decimal places.
QTY segment (in LIN group)	Quantity	The standard allows this segment to be used up to ten times for each line item, but you and your trading partner want to use this segment only once. You will change the maximum use of this segment to one. Also, to make this segment mandatory, you will change the minimum use of this segment to one.
QTY01 element	Quantity Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
QTY02 element	Quantity	The standard allows a maximum length of fifteen digits, but you expect a number no longer than six digits from your partner. You will change the maximum length of the element and the display length of the field to six. You will change the field name to "Qty," which briefly describes the data in this field. Also, the standard defines the data in this element as being formatted with an explicit decimal point and up to nine decimal places. You will not use decimal places for the data in this field, so you will format both the EDI data and the printed data with an implicit decimal point and no decimal places.

Form Component	Description	Customizing Needed
DTM segment (in LIN group)	Date/Time/Period	The standard allows the date/time/period to be used up to thirty-five times for each line item. You need two separate DTM segments: the required shipment date, and the last delivery date (in that order). You will promote this segment to cause another iteration of this segment to occur for each line item, and then change the maximum use to one because you need to use this segment only once per line item. Also, you know what types of dates you will receive (and in what order), so you will use the key field function to print the required shipment date in one DTM segment and the last delivery date in the other DTM segment.
DTM01 element	Date/Time/Period Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
DTM02 element	Date/Time/Period	The standard allows a maximum length of thirty-five characters, but you expect a string no longer than eight characters from your partner. You will change the maximum length of the element and the display length of the field to eight. Also, you will change the field name to "Requested" (or "Ship No" for the DTM02 element in the second iteration of the DTM segment), which briefly describes the data in this field.
MOA segment (in LIN group)	Monetary Amount	The standard allows this segment to be used up to five times for each line item, but you and your trading partner have decided to use this segment only once. You will change the maximum use of this segment to one.
MOA01 element	Monetary Amount Type Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
MOA02 element	Monetary Amount	The standard allows a maximum length of eighteen digits, but you expect a number no longer than eight digits from your partner. You will change the maximum length of the element and the display length of the field to eight. You will change the field name to "Price," which better describes the data in this field for your company. Also, the standard defines the data in this element as being formatted with an explicit decimal point and up to nine decimal places. You need only two decimal places for the data in this field, so you will format the EDI data and the printed data with two decimal places.
UNS01 element	Section Identification	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.

Form Component	Description	Customizing Needed
CNT segment	Control Total Segment	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 CNT segment would be displayed on the same frame as the fields in the BGM segment). You will 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.
CNT01 element	Control Qualifier	This element is required in the purchase order, but is not meaningful for your purposes. You will prevent this field from being displayed on the printout.
CNT02 element	Control Value	The standard allows a maximum length of eighteen digits, but you expect a number no longer than six digits from your partner. You will change the maximum length of the element and the display length of the field to six. You will change the field name to "Number of Line Items," which better describes the data in this field for your company. Also, the standard defines the data in this element as being formatted with an explicit decimal point and up to nine decimal places. You will not use decimal places for the data in this field, so you will format both the EDI data and the printed data with an implicit decimal point and no decimal places.

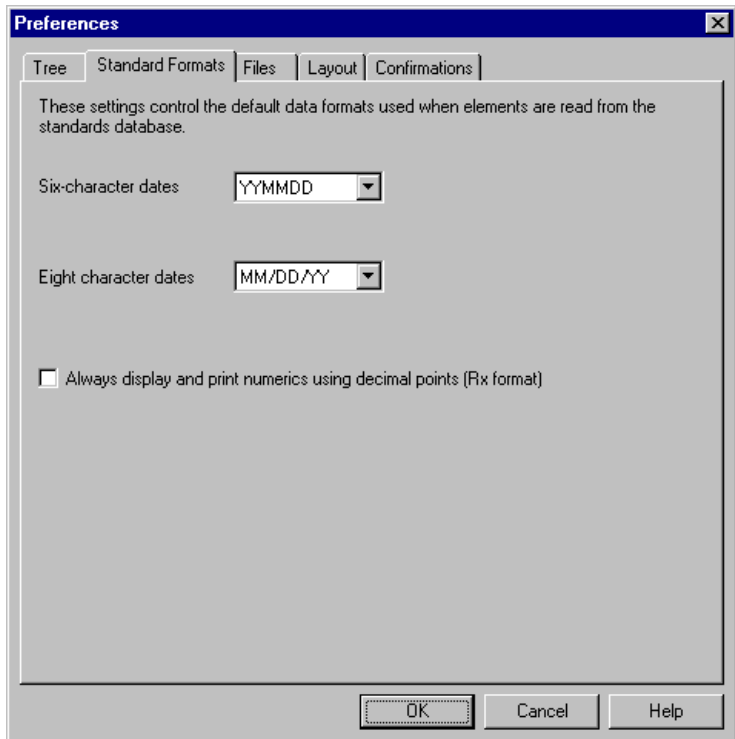
Verifying the Global EDI Date Formats

Gentran:Director enables you to customize the global EDI date formats. You can specify the default EDI format of dates for both six-character dates and eight-character dates. After you customize the global EDI date formats, the settings are valid for all forms created in the current session. You can override the default date formats for an individual element on the Field Properties dialog for that element.

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

Complete the following steps to verify the global EDI date formats:

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:Director.
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.



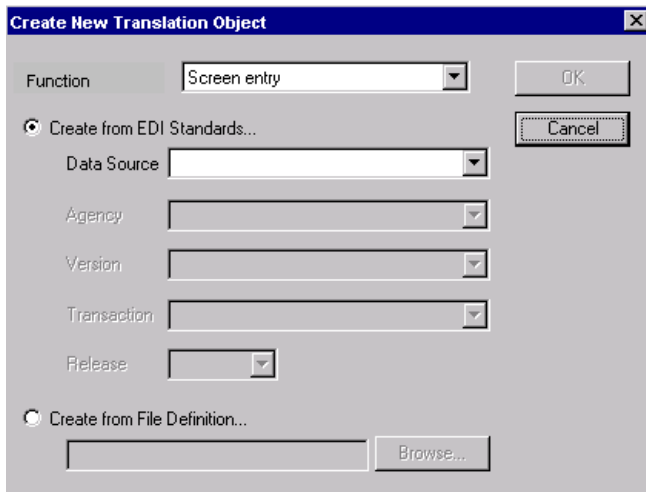
To change the order in which the date formats appear in the “Six-character dates” and “Eight character dates” lists or to add a new date format to the lists, select Date Formats... from the Options menu.

Creating the New Form

The first task in creating a new form is to define the type of form and EDI standard, version, and message. 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 ORDERS message to the system yourself, you want Gentran:Director to use the standards database on your system to build the purchase order according to the EDIFACT standard.

Complete the following steps to create the new print form:

1. Select New from the File menu to display the Create New Translation Object dialog.

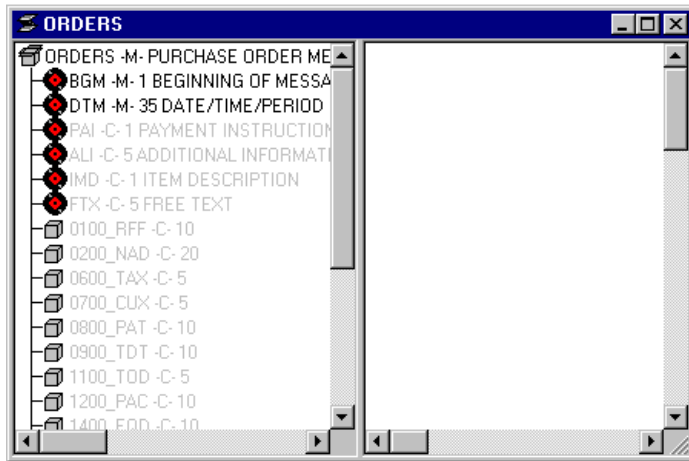


2. From the Function list, select “Print” to indicate that the translation object you are creating is a print translation object.
3. Since you want to use the EDI Standards database, verify that the “Create from EDI Standards...” option is selected.
4. From the Data Source list, select the ODBC data source that you wish to use.
5. From the Agency list in the Standards section, select “[E] Edifact,” which is the EDI standard you will use for this translation object.
6. From the Version list, select “[092001] EDIFACT 1992 RELEASE 1,” which is the version of the standard you will use for this translation object. The versions that are available depend on which standard you

selected. The EDIFACT standard version 92.1 is listed as version 092001 in the Gentran:Director standards files.

7. From the Transaction list, select “[ORDERS] PURCHASE ORDER MESSAGE,” which is the message you will use for this translation object. The messages that are available depend on which standard and version you selected.
8. Click OK to create the EDI file. This may take a few seconds.

The form is displayed.



After you create a new form, it is important to define the details of the form and save it. The Save function writes (saves) the currently selected form to disk.



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.

9. Select Save from the File menu.

The Translation Object Details dialog is displayed.

Translation Object Details

Summary

Author: [] Description: [] Translation Object Function: Print [v] System:

Version Control

Major version: 0 Minor version: 0 Compiled on: []

EDI Associations

	Input		Output	
Agency	E	Edifact	E	Edifact
Version	092001	EDIFACT 1992 REL	092001	EDIFACT 1992 REL
Transaction	ORDERS	PURCHASE ORDE	ORDERS	PURCHASE DRDE
Release	0		0	
F Group	[]	[]	[]	[]



If you have performed any function that invalidates the current format of the translation object, the Save function is unavailable (dimmed) until you regenerate the layout (click Generate Layout on the Main Toolbar).

10. In the Author box, type your name. This box usually contains the name of the person who created the form.
11. In the Description box, type “Print ORDERS Pet Zone”. This description provides a brief explanation of the compiled translation. For example, “Print ORDERS Pet Zone” is the description of a print translation object for an EDIFACT 92.1 purchase order (ORDERS) for partner Pet Zone.
12. Verify that “Print” is selected from the Translation Object Function list.
13. In the Major version box, type “1” to designate the version number for this translation object.
14. In the Minor version box, accept the default value “0” that designates the release number for this translation object.



After you make a major change to this form, increase the version to the next higher sequential number (for example, 2.0). If you make a minor change to the form,

increase the release to the next higher sequential number (for example, 2.1).

15. 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.



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.

16. Click OK to save the translation object details and access the Save As dialog.
17. Verify that the “Save in” list reflects the drive\folder where Gentran:Director is installed. The default is GENSRVNT\Forms.
18. In the “File name” box, type “peteordp.stp” to replace the default file name. The file name should be unique. In our example, the name indicates an EDIFACT purchase order message (ORDERS) for partner Pet Zone.

The default file extension for forms is .STP. The naming conventions in Gentran:Director – Forms Integration are as follows:

- The source form (form created in Gentran:Director) should be named using the file extension **.STP** (e.g., PETEORDP.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., PETEORDP.TPL).

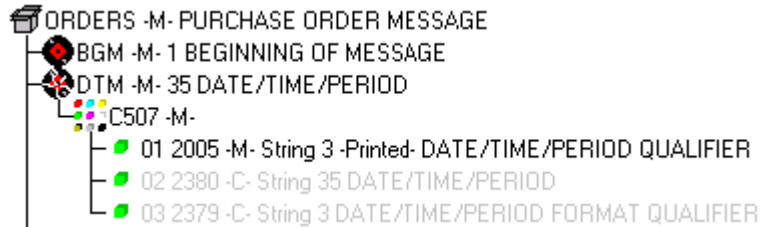
19. Click SAVE to save the form.

Activating Groups, Segments, Composites, and Elements

When Gentran:Director generates the form, the system includes all the groups, segments, composites, and elements that are defined by the standard agency (EDIFACT) for the version (92.1) of the message (ORDERS) you selected. 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.

In the example below, the BGM and DTM segments, C507 composite, and DTM01 element are mandatory for the purchase order. You do not need to activate these components. The DTM02 and DTM03 elements are not mandatory, so they are dimmed on the form.



To view the segments, composites, and elements in a group, segment, or composite 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.

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 the form.

Complete the following steps to activate the required groups, segments, composites, and elements:



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.

1. Double-click the groups, segments, and composites listed in the following table to open them. Opening all the necessary groups, segments, and composites before you start to activate enables you to scroll down the form and activate the segments, composites, and elements sequentially.

Group	Segment	Composite	Element
	BGM (already activated)		BGM05
			BGM06
	DTM (already activated)	C507 (already activated)	DTM02
	FTX	C108	
RFF	RFF	C506 (mandatory for RFF)	RFF02
NAD	NAD	C080	
		C059	NAD17
			NAD19
			NAD20
			NAD21
PAT	PAT	C110	PAT05
LIN	LIN		LIN01
	PIA	C212 (mandatory for PIA)	PIA02
	IMD:2	C273	IMD:206
	MEA:3	C174	MEA:306
	QTY:3		
	DTM:13	C507 (mandatory for DTM:13)	DTM:1302
	MOA:5	C516 (mandatory for MOA:5)	MOA:502
	CNT		



When you activate a conditional group, segment, or composite, the mandatory subordinate segments, composites, and elements are activated automatically.



2. Click Activate on the Main Toolbar.
3. Click each inactive **group** that you need to use. This will activate the groups.



If you click a group, segment, composite, 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. This will activate the segments.
5. Click each inactive **composite** that you need to use. This will activate the composites.
6. Click each inactive **element** that you need to use. This will activate 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 will be 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.



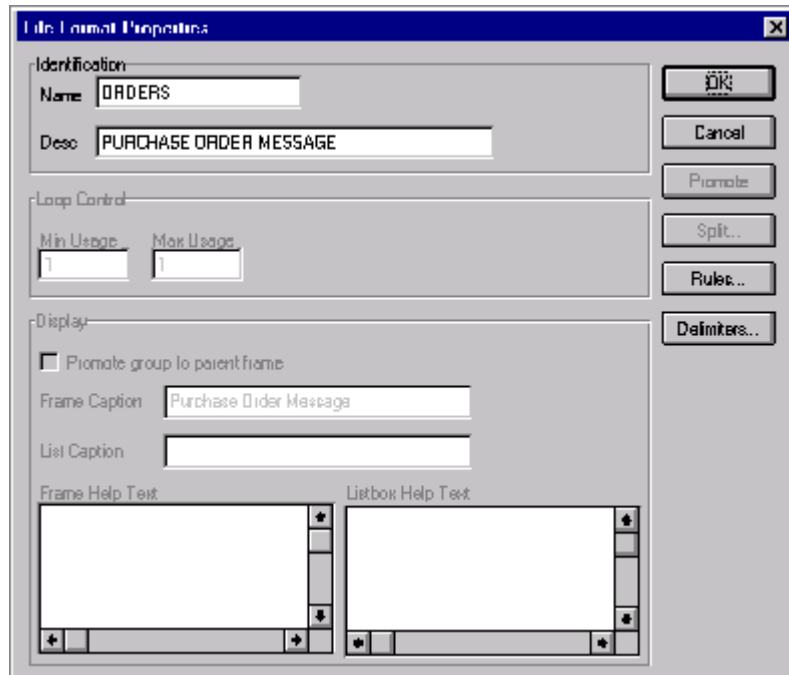
7. Click Activate on the Main Toolbar to turn activation mode off.
8. To hide the groups, segments, and elements that you are not using, select Show Active Only from the View menu.

Verifying EDI Delimiters

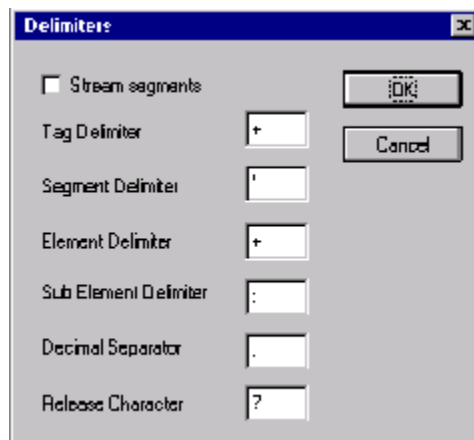
You are using an EDI standard that contains composite elements or subelements, so you must verify that Gentran:Director is specifying the correct delimiters. Delimiters are flags that you define to the system as separating specific EDI components. Delimiters are necessary for all variable field-length 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.

Complete the following steps to verify EDI delimiters:

1. Click the ORDERS file icon with the right mouse button and select Properties... from the shortcut menu to display the File Format Properties dialog.



2. Click DELIMITERS... to access the Delimiters dialog.



- Verify that the correct delimiters are being used for the EDIFACT standard. If the delimiters differ from the default values listed in the table below, you can enter either the character or the hexadecimal value in the correct box. The default delimiters for EDIFACT are the following (the tag delimiter is not used for EDIFACT):

Field	EDIFACT Default Character	EDIFACT Default Hex Value
Tag Delimiter		
Segment Delimiter	' (apostrophe)	0x27
Element Delimiter	+ (plus sign)	0x2B
Sub Element Delimiter	: (colon)	0x3A
Decimal Separator	. (period)	0x2E
Release Character	? (question mark)	0x3F



If you use the default hex value, the value *must* begin with “0x” (the number zero and the letter “x”).



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.

- Click OK to save the delimiters and exit the Delimiters dialog.
- Click CLOSE to exit the File Format Properties dialog.

Promoting and Changing the Minimum and Maximum Use of Segments and Groups

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 than 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 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.

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.

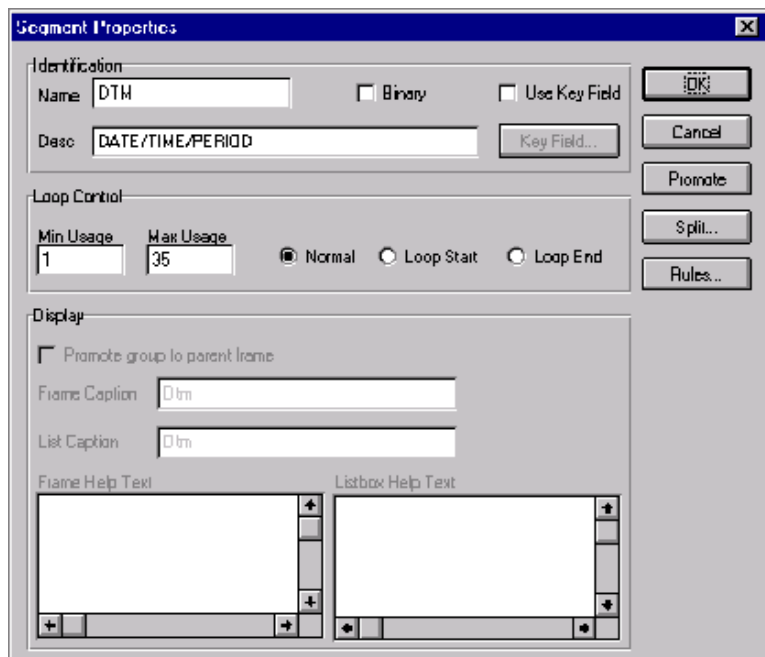
Changing the Maximum Use of the DTM Segment

The DTM segment contains Date/Time/Period header information (in this tutorial, the order date) used in the EDI data. The standard allows the DTM segment to be used up to 35 times in one purchase order. In this tutorial, you expect the DTM segment only once from your trading partner, so you will change the maximum number of times this segment can be used to one.

Complete the following steps to change the maximum use of the DTM segment:

1. Click the DTM segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1” to indicate that this segment can be used only once.
3. Click OK to exit the Segment Properties dialog.

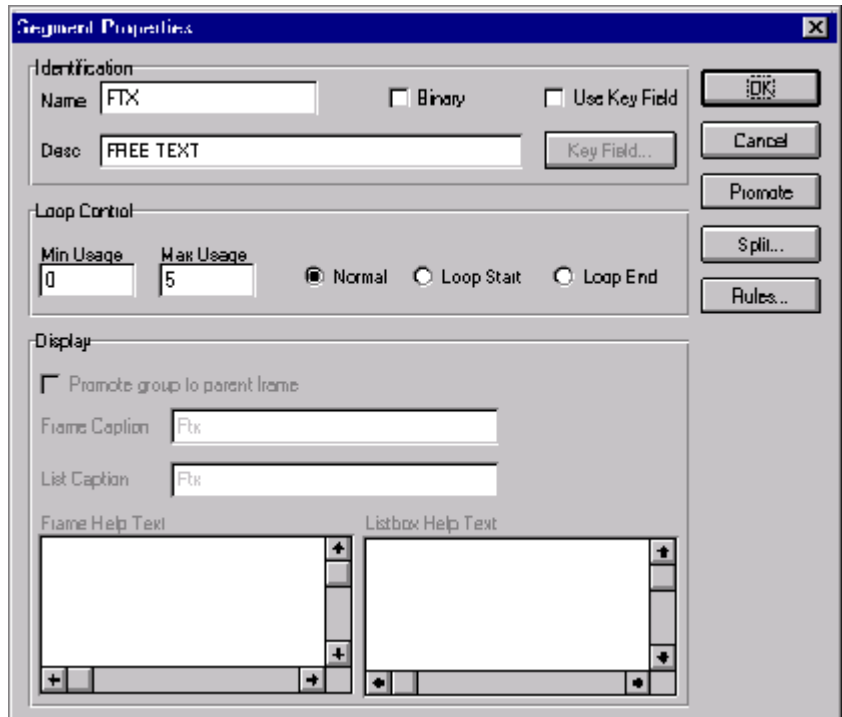
Changing the Maximum Use of the FTX Segment

The FTX segment contains Free Text header details in the EDI data. The standard allows the FTX segment to be used up to five times in one purchase order. In this tutorial, you expect the FTX segment only once from your trading partner so you will change the maximum number of times this segment can be used to one.

Complete the following steps to change the maximum use of the FTX segment:

1. Click the FTX segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

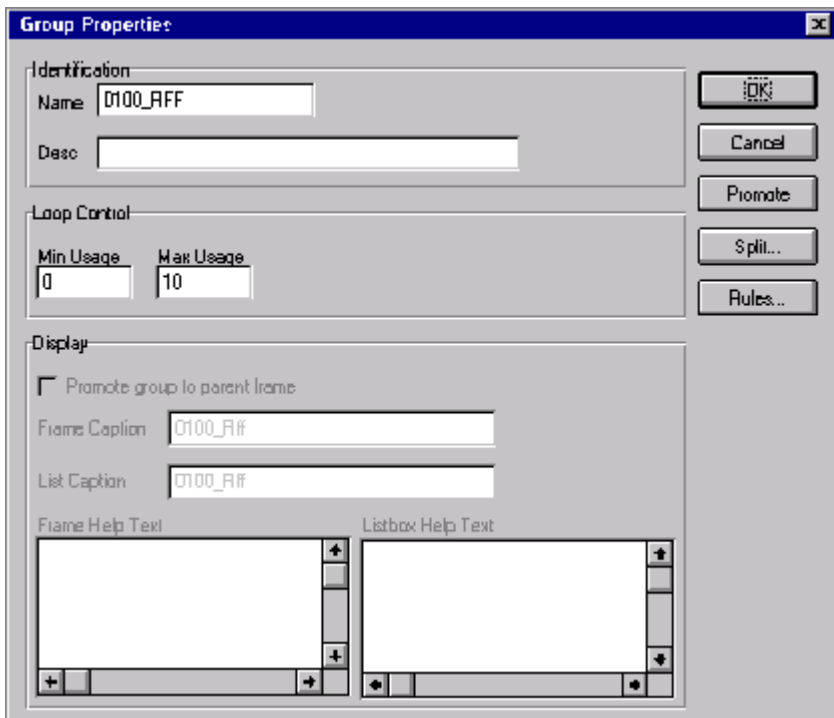
Changing the Maximum Use of the RFF Group

If the form were generated now, the fields associated with the RFF group would be displayed on a separate frame than the BGM header fields. The standard allows the RFF group to be used up to 10 times in one purchase order. In this tutorial, you expect the RFF group only once from your trading partner so you will change the maximum number of times the RFF group can be used to one. Also, you need to set the Promote flag on the group so that the RFF fields are placed on the same frame as the BGM fields. After you generate the form later in this tutorial, the RFF fields are displayed on the same frame as the BGM fields.

Complete the following steps to change the maximum use of the RFF group and promote the RFF group to the parent frame:

1. Click the RFF group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box to display the fields in the RFF group on the same frame as the fields in the parent group.



If you change the maximum use of this group, but do not select the Promote group to parent frame check box, the fields in this group will *not* be displayed on the same frame in the Layout Window as the fields in the parent group.

4. Click OK to promote the group and exit the Group Properties dialog.

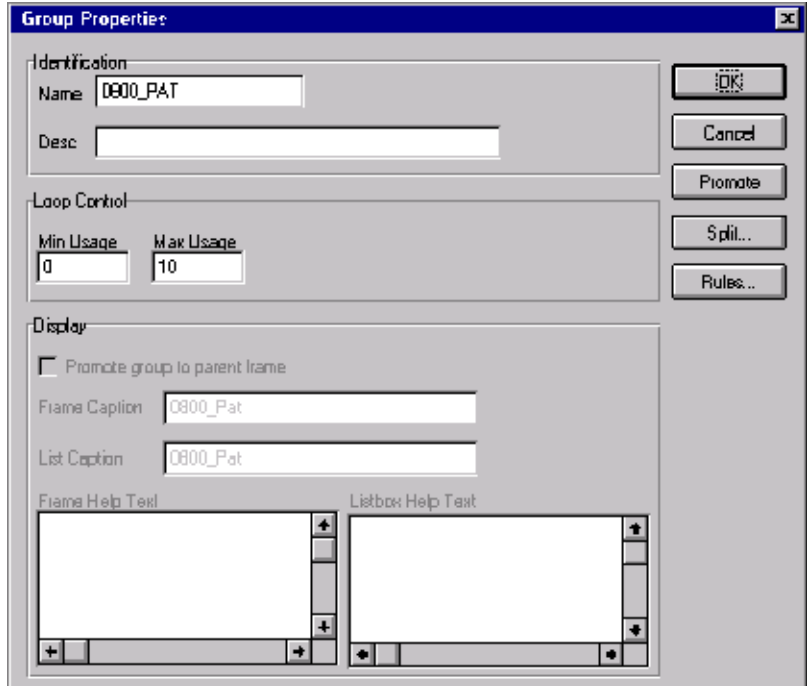
Changing the Maximum Use of the PAT Group

The standard allows the PAT group to be used up to 10 times in one purchase order. You expect the PAT group only once from your trading partner so you must change the maximum number of times the PAT group can be used to one. Also, you need to set the Promote flag on the group so that the PAT fields are placed on the same frame as the BGM fields. When you generate the form later in this tutorial, the PAT fields will be displayed on the same frame as the BGM fields.

Complete the following steps to change the maximum use of the PAT group and promote the PAT group to the parent frame:

1. Click the PAT group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box to display the fields in the PAT group on the same frame as the fields in the parent group.
4. Click OK to promote the group and exit the Group Properties dialog.

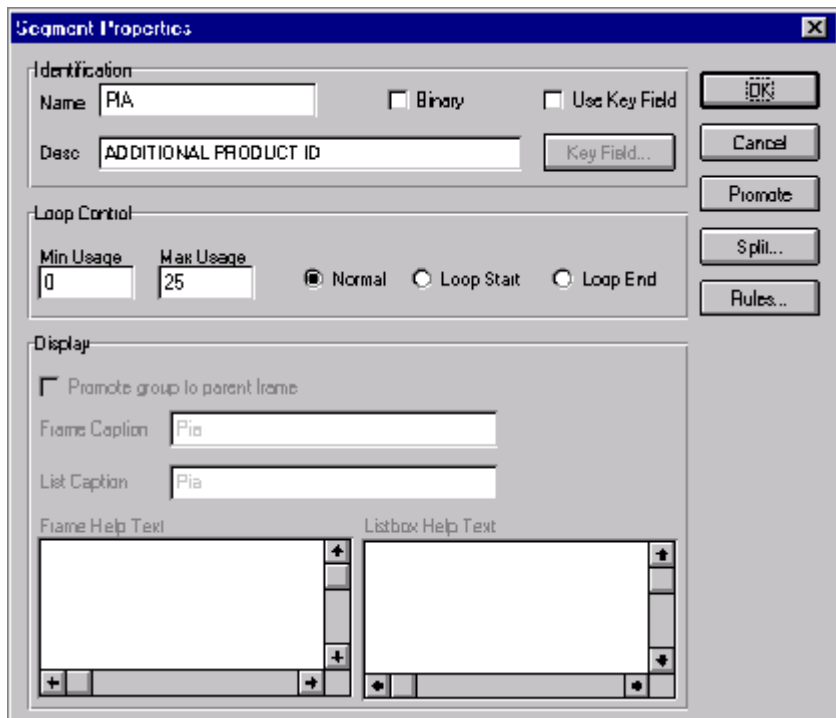
Changing the Maximum Use of the PIA Segment

The PIA segment in the LIN group contains Line Item details used in the EDI data. The standard allows the PIA segment to be used up to 25 times for each line item. In this tutorial, you expect the PIA segment only once per line item from your trading partner so you will change the maximum number of times this segment can be used for each line item to one.

Complete the following steps to change the PIA segment’s maximum use:

1. Click the PIA segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the IMD:2 Segment

The IMD:2 segment (in the LIN group) contains Item Description details used in the EDI data. The standard allows the IMD:2 segment to be used up to 10 times for each line item. You expect the IMD:2 segment only once per line item from your trading partner so you must change the maximum number of times this segment can be used for each line item to one.

Complete the following steps to change the maximum use of the IMD:2 segment:

1. Click the IMD:2 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

The screenshot shows the 'Segment Properties' dialog box for the 'IMD:2' segment. The 'Identification' section shows the Name as 'IMD:2' and Description as 'ITEM DESCRIPTION'. The 'Loop Control' section shows 'Min Usage' as 0 and 'Max Usage' as 10, with 'Normal' selected. The 'Display' section shows 'Promote group to parent frame' unchecked, 'Frame Caption' as 'Imd:2', and 'List Caption' as 'Imd:2'. There are two empty text boxes for 'Frame Help Text' and 'Listbox Help Text'. On the right side, there are buttons for 'OK', 'Cancel', 'Promote', 'Split...', and 'Rules...'.

2. In the Max Usage box, type "1".
3. Click OK to exit the Segment Properties dialog.

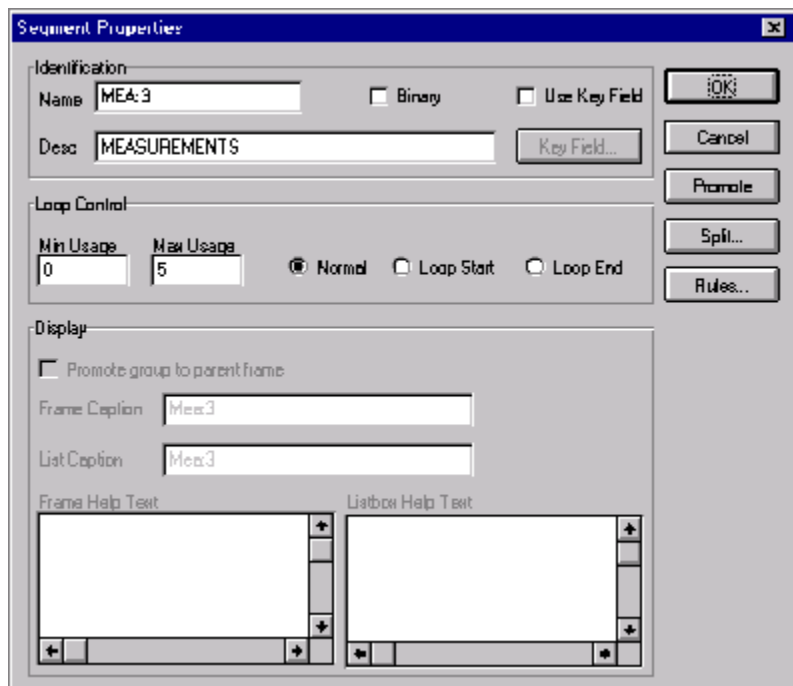
Changing the Minimum and Maximum Use of the MEA:3 Segment

The MEA:3 segment in the LIN group contains Measurements details used in the EDI data. The standard allows the MEA:3 segment to be used up to five times for each line item. In this tutorial, you expect the MEA:3 segment only once per line item from your trading partner so you will change the maximum number of times this segment can be used for each line item to one. The standard also allows this segment to be conditional. You and your trading partner agree that the measurements contained in the MEA:3 segment are important to the purchase order, so you will change the minimum use of this segment to one to make it mandatory.

Complete the following steps to change the minimum use and maximum use of the MEA:3 segment:

1. Click the MEA:3 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Min Usage box, type “1”.
3. In the Max Usage box, type “1”.
4. Click OK to exit the Segment Properties dialog.

Changing the Minimum and Maximum Use of the QTY:3 Segment

The QTY:3 segment (in the LIN group) contains Quantity details used in the EDI data. The standard allows the QTY:3 segment to be used up to 10 times for each line item. In this tutorial, you expect the QTY:3 segment only once per line item from your trading partner so you will change the maximum number of times this segment can be used for each line item to one. You and your trading partner agree that the quantities contained in the QTY:3 segment are important to the purchase order so you will change the minimum use of this segment to one.

Complete the following steps to change the minimum use and maximum use of the QTY:3 segment:

1. Click the QTY:3 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Min Usage box, type "1".
3. In the Max Usage box, type "1".
4. Click OK to exit the Segment Properties dialog.

Promoting the DTM:13 Segment

If the form were generated now, the date in the DTM:13 segment in the LIN 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 will promote the DTM:13 segment. Your trading partner sends you two sets of dates: the required shipment date and the last delivery date (in that order). The DTM:13 segment must occur twice in the form to accommodate both sets of dates from your trading partner in the particular order in which you expect them. To customize the DTM:13 segment while preserving the integrity of the EDI structure, you need to promote the DTM:13 segment, then change the maximum use of the original DTM:13 segment to one so that it is no longer a repeating segment.

Promoting the Segment To promote the DTM:13 segment, click the DTM:13 segment with the right mouse button and select Promote from the shortcut menu to extract one iteration of the DTM:13 segment and place it directly above the DTM:13 segment that you selected to promote. The new iteration of the DTM:13 segment is named DTM:27.

Making the DTM:27 Segment Conditional Complete the following steps to make the DTM:27 segment conditional:



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.

1. Click the DTM:27 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

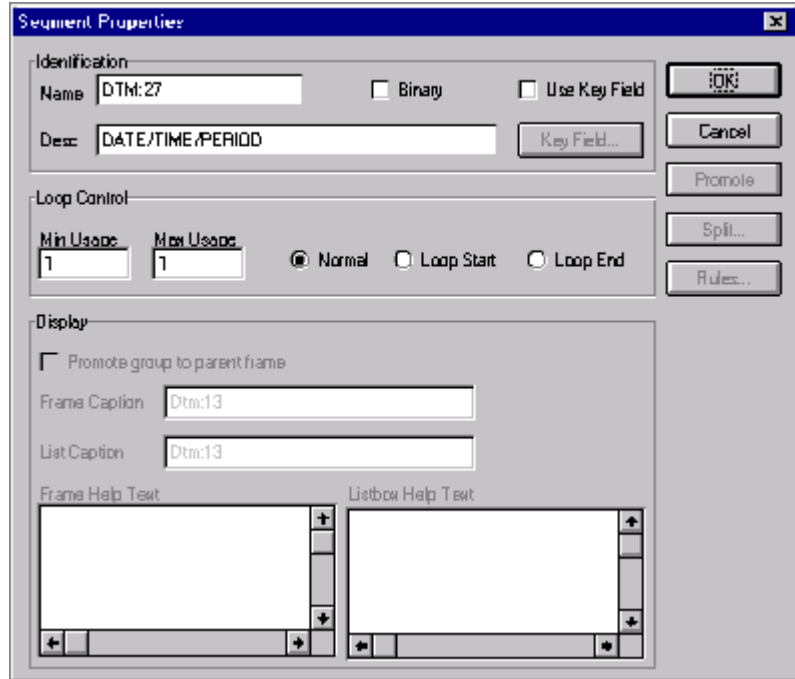
2. In the Min Usage box, type “0” to make this segment conditional.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the DTM:13 Segment

Complete the following steps to change the DTM:13 segment’s maximum use:

1. Click the DTM:13 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the MOA:5 Segment

The MOA:5 segment (in the LIN group) contains Monetary Amount details used in the EDI data. The standard allows the MOA:5 segment to be used up to five times for each line item. You expect the MOA:5 segment only once per line item from your trading partner so you need to change the maximum number of times this segment can be used for each line item to one.

Complete the following steps to change the maximum use of the MOA:5 segment:

1. Click the MOA:5 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Creating a CNT Group

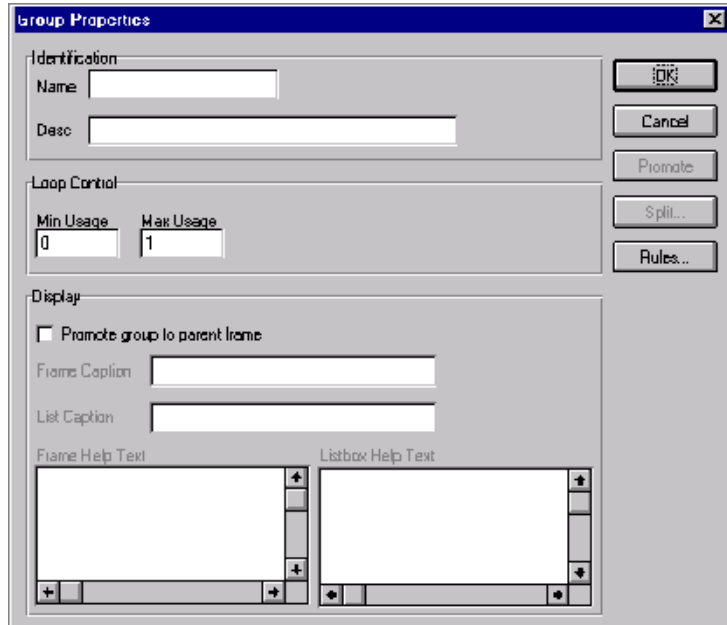
The CNT segment contains Control Total summary information for the purchase order. The standard allows the CNT segment to be used up to 10 times in a purchase order. You want to use CNT segment once per purchase order so you need to change the minimum and maximum use of the CNT segment to one. If the form were generated after changing the minimum and maximum use of the CNT segment, the total number of line items would be printed with the BGM fields at the beginning of the purchase order because the fields in the CNT segment would be displayed on the same frame as the fields in the BGM segment.

For the CNT segment to print the total number of line items at the end of the purchase order *and* maintain the integrity of the purchase order, you must create a CNT *group* with a minimum use and a maximum use of one, then cut the CNT segment and paste it as a subordinate to the group you just created. After you move the CNT segment to the new CNT group that you create, the total number of line items is displayed on its own frame.

Creating the CNT Group Complete the following steps to create a CNT group:

1. Select the CNT segment.
2. Select Insert from the Edit menu.
3. Select Group from the submenu.

The Group Properties dialog is displayed.



4. In the Name box, type “CNT_Group” as the loop identification code.



Do not use spaces or hyphens (-) in the Name box. You can use the underscore (_) to separate words.

5. In the Desc box, type “CNT Group” to provide a brief explanation of the loop.
6. In the Min Usage box, type “1” to make this group mandatory. 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.

7. Click OK to create the group. Gentran:Director prompts you that the caption for the group will default to the name of the group. Click OK to accept the message. Click OK to accept the message.
8. Gentran:Director prompts you that the caption for the group will default to the name of the group. The list caption is the name of the list on the parent frame. When the list caption is not specified, Gentran:Director uses the value in the Name box as the list caption. Click OK to accept the message.

Cutting and Pasting the CNT Segment

Complete the following steps to cut and paste the CNT segment:



1. Select the CNT segment.
2. Click Cut on the Main Toolbar.
3. Select the CNT group, which is the group to which you want to paste the CNT segment as a subordinate.



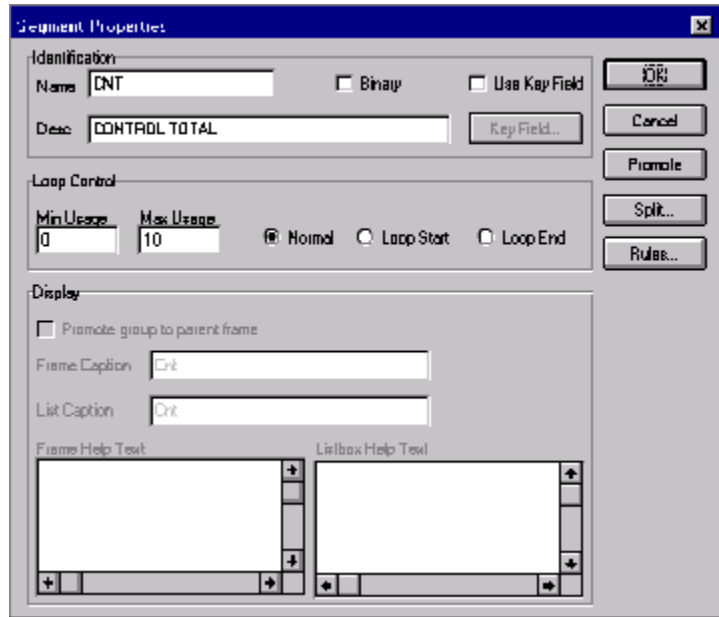
4. Click Paste on the Main Toolbar to paste the CNT segment.
5. At the prompt, accept the default to paste the Clipboard contents as a child (subordinate) of the group. Click OK to exit the dialog.

Changing the Maximum Use of the CNT Segment

Complete the following steps to change the maximum use of the CNT segment to one:

1. Click the CNT segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Generating the Form

Generating a form is different from compiling a form. 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. When you *compile* a form, the source form is translated into a compiled translation object.



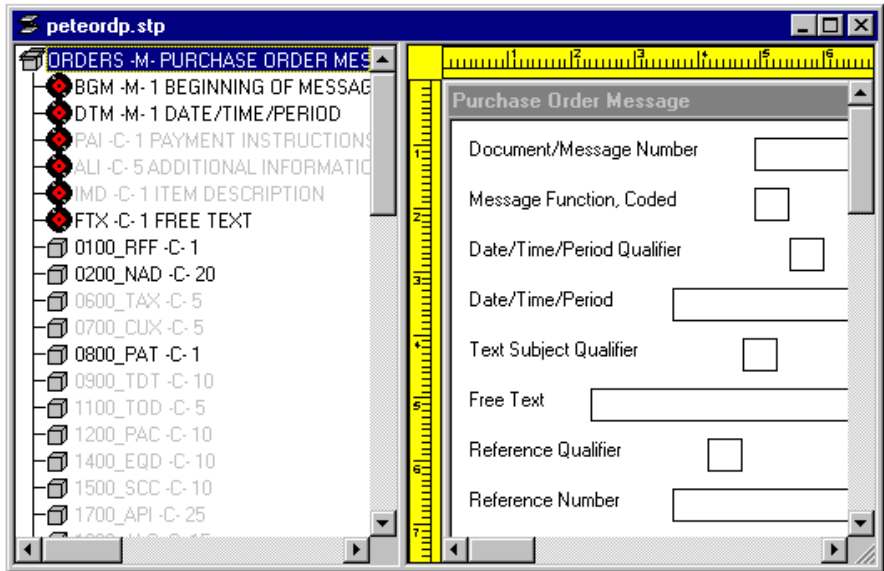
You should regenerate (or refresh) the form several times to ensure that you are viewing the most recent changes to the Layout Window.

Complete the following step to generate the print form based on the groups, segments, and elements you activated:

1. Select the ORDERS file icon. Selecting the ORDERS 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. This is not a required prerequisite to generating the layout.
2. Click Generate Layout on the Main Toolbar.



The layout of the print form is displayed in the Layout Window.



After you generate the form, the right side of your screen (Layout Window) will have one field 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 Field Properties dialog 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.



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, you change and remove some of the labels so not all of the fields are labeled the same as their corresponding elements. 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 segments that have a maximum use of only one are displayed on the frame corresponding to the group to which the segments are subordinate.

In print forms, the frames are not titled in the Layout Window. 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.

Customizing the EDI Data

You can customize the form, including the properties of each 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, 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.

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

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 message created by the form easier in Gentran:Director. Setting up the document name enables you to differentiate between messages in the document browsers. We strongly recommend that you select an element that occurs only once in the message and has a data type of string. For an EDIFACT 92.1 purchase order, the document name usually is the Document/Message Number.

Complete the following steps to set up the document name:

1. Double-click the BGM05 element.



We recommend that you select this element because it is a non-recurring, mandatory element.

The Field Properties dialog is displayed.

Data Validation						
	Min	Max	Type	Screen Format	EDI Format	
<input checked="" type="checkbox"/> Mandatory	1	35	String	X	X	

- If the Advanced section of the dialog currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.



The Advanced section is displayed only if you previously clicked **ADVANCED>> on a Field Properties dialog (during this session of **Gentran:Director**), and did not click **<<ADVANCED** to hide this section before exiting the Field Properties dialog.**

- Select the Use Standard Rule check box.
- Click the Update option.
- From the Table/Key list, select “Document record” to indicate that you are updating the document record.
- From the Field list, select “Document Name” to indicate that you are updating the Name field in the document browsers with the contents of the BGM05 element.

The Advanced section of the Field Properties dialog now should look like this:

The screenshot shows a dialog box titled "Advanced" with the following settings:

- Use Standard Rule
- Select Update Constant Use Accum Loop Count Use Code
- Table/Key: Document record
- Field: Document Name

- Click OK to set up the document name.

Customizing the BGM Segment

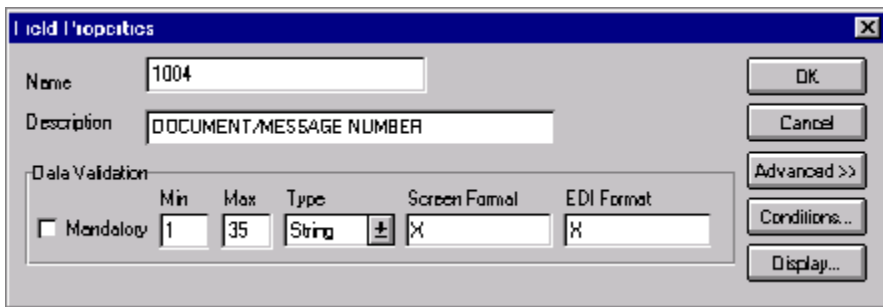
The BGM segment is the Beginning of Message segment for the purchase order. This segment contains information that is pertinent to the entire purchase order.

Customizing the BGM05 Element

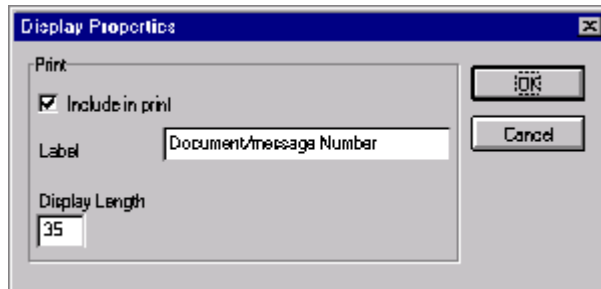
The BGM05 element (Document/Message Number) is defined by the standard to be a string of thirty-five alphanumeric characters. You know that your trading partner’s purchase order number will be a 10-character string, so you will change the element and field lengths to accommodate the shorter purchase order number. In addition, you will rename the field label.

Complete the following steps to change the field and element lengths and rename the field label for the Document/Message Number field:

1. Double-click the BGM05 element.
The Field Properties dialog is displayed.



2. In the Max box, type “10” for the maximum number of characters allowed for this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Order Number:” to replace the existing text.
5. In the Display Length box, type “10” to display a 10-character purchase order number on the printout.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Customizing the BGM06 Element

The BGM06 element (Message Function, Coded) contains the code from your partner's EDI data representing the type of purchase order (e.g., new order) for this message. You want the meaningful description of the code to be printed on the printout instead of the code itself. You need to prevent the Message Function, Coded field from being displayed (hide it), but use the code from that element (BGM06) to look up the code description in the Message Function, Coded code list table. You then need to print that description in another field that you create. The description of the code is displayed in the new field on the printout.

Your trading partner has agreed to only send you two types of purchase orders:



- Request (Message Function Code "13")
- Change (Message Function Code "4")

Copying the BGM06 Element

The description of the EDI code in the BGM06 element is important, though you do not need to print the code itself. For example, the EDI code value "13" is not descriptive enough for users reading a printout of the purchase order. The description of code "13" (Request) is meaningful.

Before you can print the description of the EDI code value, you must create a new element in the BGM segment to store and print the description. The new BGM element is the element that displays the description of the Message Function, Coded. 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 BGM06 element:

1. Select the BGM06 element.
-  2. Click Copy on the Main Toolbar.
3. Select the BGM07 element, which is the last element in the BGM segment. The BGM07 element is the element *after* which you want the BGM06 element to be pasted.
-  4. Click Paste on the Main Toolbar to paste the BGM06 element. A new element (BGM08) is created. The BGM08 element is an exact copy of the BGM06 element.

Changing the BGM08 Element and Field Properties

The system names the new element created from copying the BGM06 element 1225:2. You need to rename the new element to identify its purpose, which is to print the description of the code from the BGM06 element.



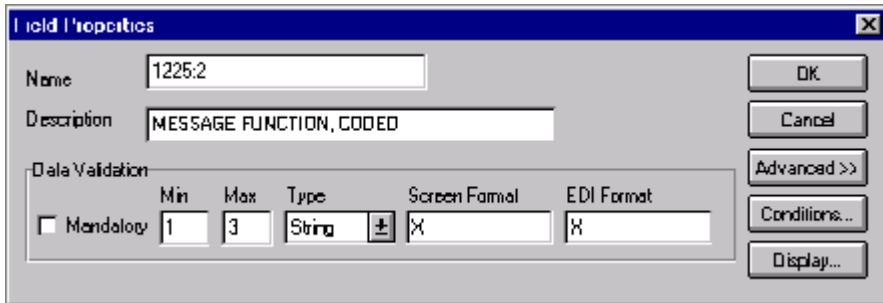
If a segment or element occurs more than once in a form, it is identified by its name <ID>. The second and subsequent occurrences are identified by <ID>:n, where “n” is the number of the occurrence in the form.

You will increase the element and field lengths of the BGM08 element to accommodate the longer description. Also, you will rename the field label for the newly created BGM08 element to reflect the contents of the field (the description of the Message Function, Coded).

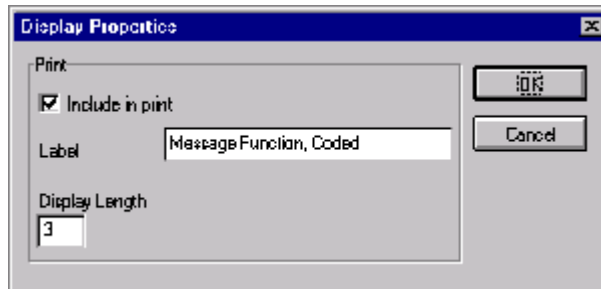
Complete the following steps to change the element name and length, and change the field label and field length for the Message Function, Coded field:

1. Double-click the BGM08 element.

The Field Properties dialog is displayed.



2. In the Name box, type “1225_DESC”.
3. In the Min box, type “0” for the minimum number of characters allowed for this element.
4. In the Max box, type “30” for the maximum number of characters allowed for this element.
5. Click DISPLAY... to access the Display Properties dialog.



6. In the Label box, type "Order Type:"
7. In the Display Length box, type "30".
8. Click OK to save the new label and exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

Hiding the BGM06 Field and Loading a Code List Table from the Standard

Now that you have created an exact copy of the BGM06 element, you can hide the first Message Function, Coded 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 will send you only these two types of purchase orders:

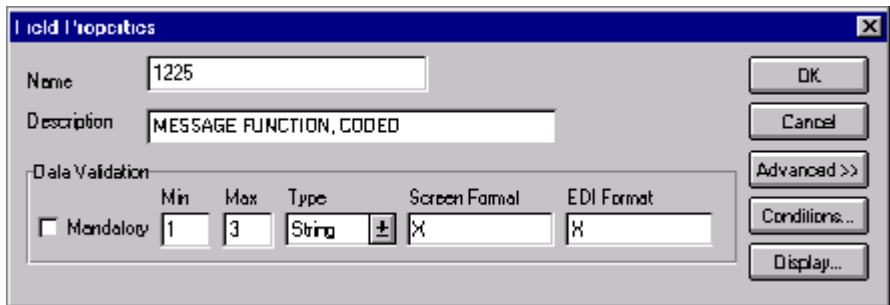
- n Request (Message Function Code "13")
- n Change (Message Function Code "4")

You do not need to load the entire code list table, so you will load only codes "13" and "4" from the code list table.

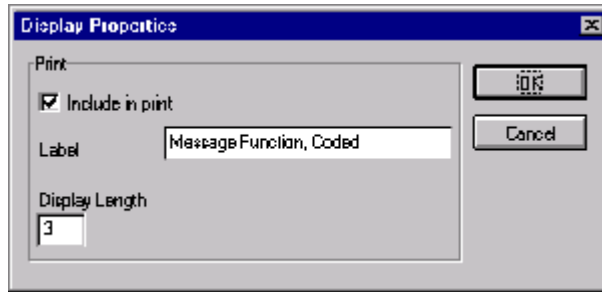
Complete the following steps to hide the Message Function, Coded field and load the code list table from the standard:

1. Double-click the BGM06 element, which is the element for which you need to use a code list table.

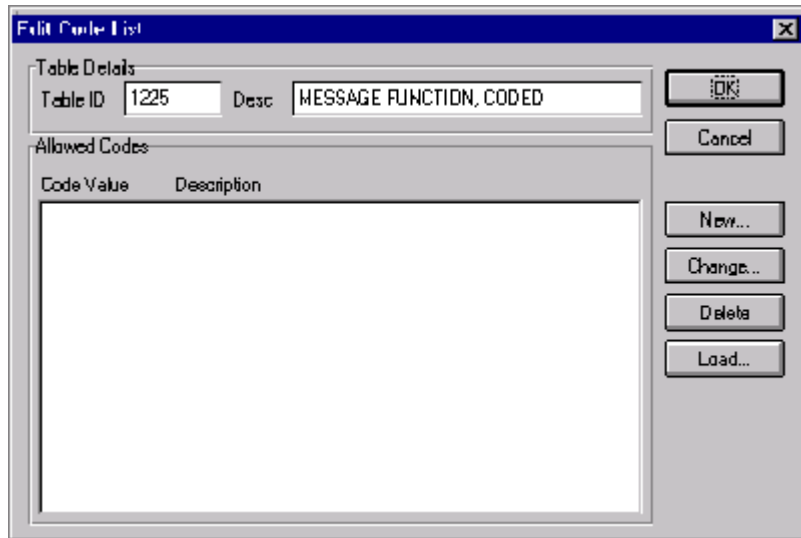
The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.

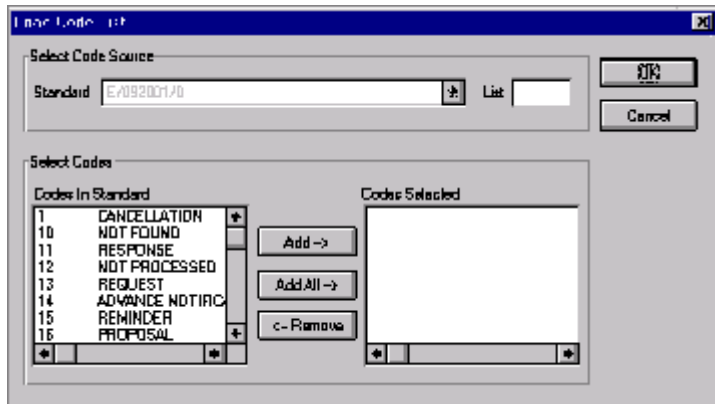


3. Clear the Include in print check box to turn the option off. The Message Function, Coded field will not be displayed on the printout.
4. Click OK to exit the Display Properties dialog.
5. In the Advanced section, select the Use Standard Rule check box.
6. Click the Use Code option.
7. Click EDIT TABLE... to access the Edit Code List dialog.



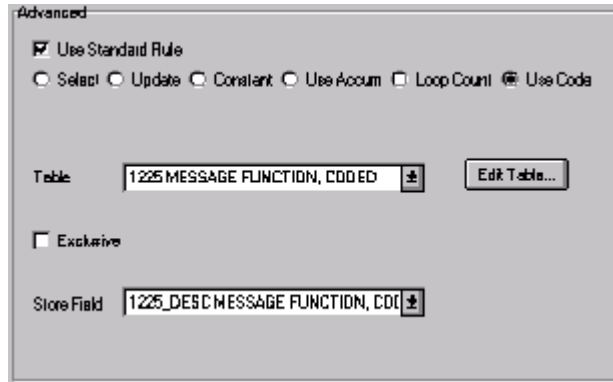
The Table ID box contains “1225,” the name of the element for which this code list table is used. The Desc box contains “MESSAGE FUNCTION, CODED,” the description of the element for which this code list table is used.

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.



9. From the Codes In Standard list, highlight code "13."
10. Click ADD--> to move it to the Codes Selected list.
11. From the Codes In Standard list, highlight code "4."
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 "1225_DESC MESSAGE FUNCTION, CODED" to store the description in the BGM08 element you created.

The Advanced section of the Field Properties dialog now should look like this:



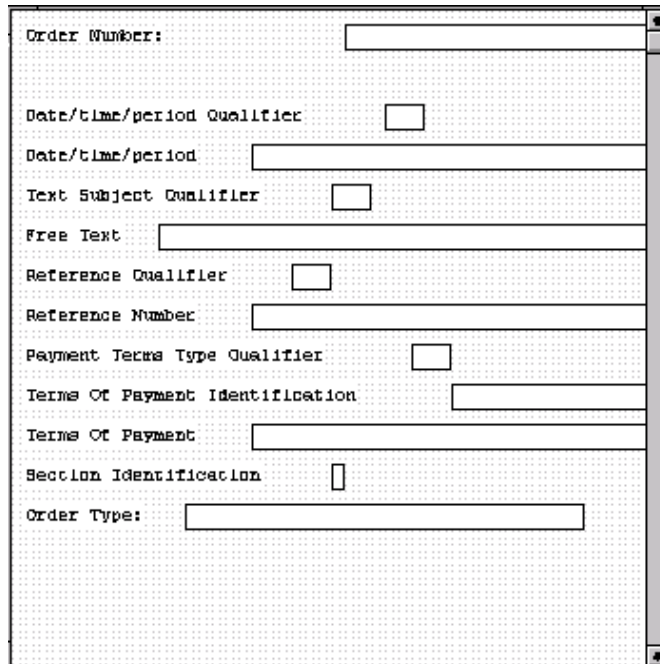
16. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the display of the print form.



The header frame now should look like this:



Customizing the DTM Segment

The DTM segment (Date/Time/Period) is used to print the order date for the purchase order. The standard allows the DTM segment to be used up to 35 times in one purchase order. In this tutorial, you will use the DTM segment only once. You have already changed the maximum use of the DTM segment to obtain just one instance of the DTM segment and to place the order date on the same frame as the order number.

Customizing the DTM01 Element

The DTM01 element (Date/Time/Period Qualifier) is a mandatory element for the EDIFACT 92.1 purchase order (ORDERS). You do not need to print the qualifier on the printout so you will hide the Date/Time/Period Qualifier field.

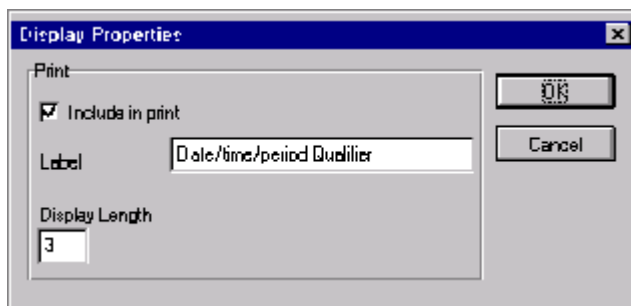
Complete the following steps to hide the Date/Time/Period Qualifier field:

1. Double-click the DTM01 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



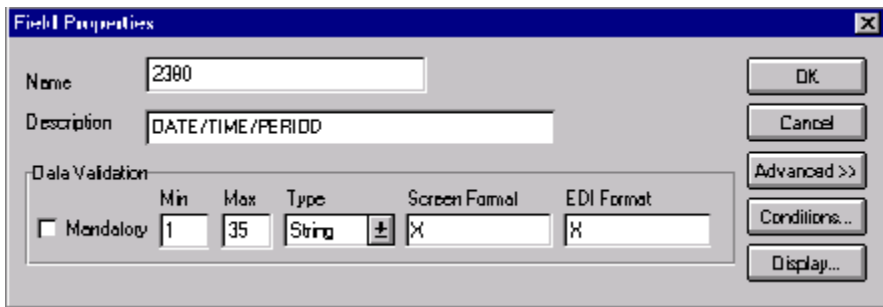
3. Clear the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM02 Element

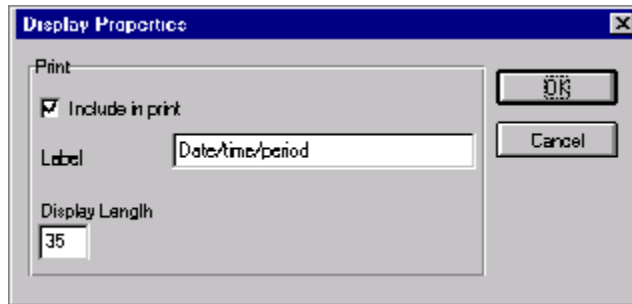
The DTM02 element (Date/Time/Period) contains the purchase order date. The standard allows this field to contain up to a 35-character string, but your trading partner sends you shorter dates. You need to change the element and field lengths to accommodate the shorter dates, and then rename the field label.

Complete the following steps to change the element and field lengths and rename the field label for the Date/Time/Period field:

1. Double-click the DTM02 element.
The Field Properties dialog is displayed.



2. In the Max box, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Order Date:” to replace the existing field label.
5. In the Display Length box, type “8”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the print form display.

The header frame now should look like this:



The screenshot shows a print form header frame with the following fields:

- Order Number: [Text Input]
- Order Date: [Text Input]
- Text Subject Qualifier: [Text Input]
- Free Text: [Text Input]
- Reference Qualifier: [Text Input]
- Reference Number: [Text Input]
- Payment Terms Type Qualifier: [Text Input]
- Terms Of Payment Identification: [Text Input]
- Terms Of Payment: [Text Input]
- Section Identification: [Text Input]
- Order Type: [Text Input]

Customizing the FTX Segment

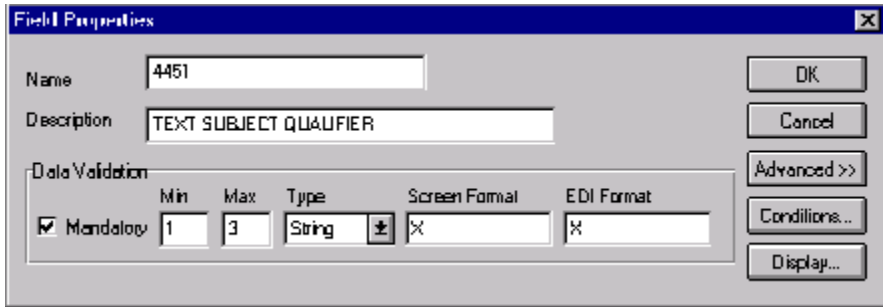
Your trading partner sends you messages or notes, so the FTX segment must be present to receive them. The standard allows the FTX segment to be used up to five times in one purchase order. In this tutorial, you will use the FTX segment only once. You have already changed the maximum use of the FTX segment to obtain just one instance of the FTX segment and to place the note or message on the same frame as the purchase order number and date.

Customizing the FTX01 Element

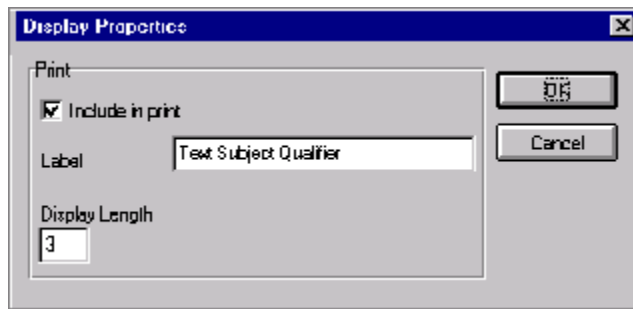
The FTX01 element (Text Subject Qualifier) is a mandatory element for the FTX segment. The FTX01 element contains the three-character qualifier from your partner's EDI data to indicate what type of free text follows (in this tutorial, "AAP" for General Information). The system does not enable you to deactivate this element, because it is a mandatory element. Because you expect only one qualifier (General Information) in this element, you do not need to print the qualifier on the report. You will hide the Text Subject Qualifier field.

Complete the following steps to hide the Text Subject Qualifier field:

1. Double-click the FTX01 element.
The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Fields Properties dialog.

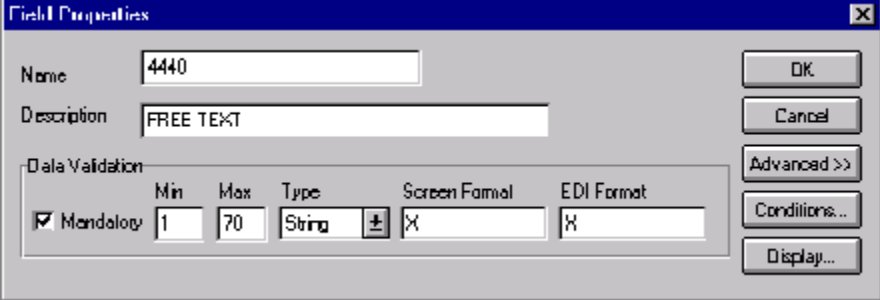
Customizing the FTX06 Element

The FTX06 element (Free Text) is mandatory when the FTX segment is used. The EDI data in the FTX06 element contains the exact message that should be printed. The message is self-explanatory so you do not need to print the label for this field. You need to remove the field label from the form. You also know that your partner sends free text in 60 characters or fewer (70 is the maximum length allowed by the standard for this field) so you need to change the element and field lengths for the Free Text field.

Complete the following steps to remove the field label and change the element and field lengths for the Free Text field:

1. Double-click the FTX06 element.


The Field Properties dialog is displayed.



The Field Properties dialog box is shown with the following fields and controls:

- Name: 4440
- Description: FREE TEXT
- Data Validation section:
 - Mandatory:
 - Min: 1
 - Max: 70
 - Type: String
 - Screen Format: X
 - EDI Format: X
- Buttons: OK, Cancel, Advanced >>, Conditions..., Display...

2. In the Max box, type “60” to allow a 60-character string in this element.
3. Click DISPLAY... to access the Display Properties dialog.



The Display Properties dialog box is shown with the following fields and controls:

- Print section:
 - Include in print:
 - Label: Free Text
 - Display Length: 70
- Buttons: OK, Cancel

4. In the Label box, delete the existing field label.
5. In the Display Length box, type “60”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the print form display.

The header frame now should look like this:



The screenshot shows a print form header frame with the following fields and controls:

- Order Number: [Text Input Field]
- Order Date: [Text Input Field]
- Reference Qualifier:
- Reference Number: [Text Input Field]
- Payment Terms Type Qualifier:
- Terms Of Payment Identification: [Text Input Field]
- Terms Of Payment: [Text Input Field]
- Section Identification:
- Order Type: [Text Input Field]

Customizing the RFF Group

The RFF segment is a conditional group that specifies the Reference information for the purchase order. The standard allows this group to be used up to 10 times in one purchase order. You need to use this group only once in the header of the purchase order (for the contract number) so you have already changed the maximum use of this group to one. At the same time, you promoted this group to the parent frame so that the contract number is displayed on the same frame as the purchase order number and date.

Customizing the RFF Segment

The RFF segment (Reference) contains reference information used in the EDI data. In this tutorial, you know that the only reference number your partner will send you in the RFF segment is a contract number that your trading partner uses for their records.

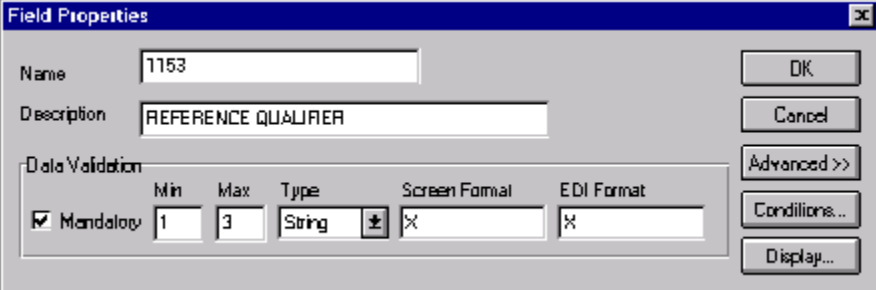
Customizing the RFF01 Element

The RFF01 element (Reference Qualifier) is a mandatory element for the RFF segment. The RFF01 element contains the three-character code from your partner's EDI data to indicate what type of reference follows. For this tutorial, you know that your trading partner sends you only one type of reference — the contract number. The system does not enable you to deactivate this element, because it is a mandatory element. Since you expect only one qualifier in this element, you do not need to print the qualifier on the report. You will hide the Reference Qualifier field.

Complete the following steps to hide the Reference Qualifier field:

1. Double-click the RFF01 element.

The Field Properties dialog is displayed.

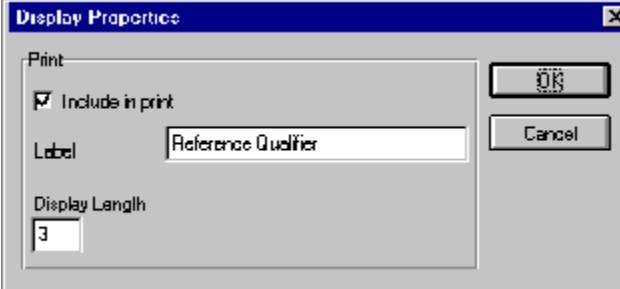


The Field Properties dialog box is shown with the following details:

- Name:** 1153
- Description:** REFERENCE QUALIFIER
- Data Validation:**
 - Mandatory
 - Min:** 1
 - Max:** 3
 - Type:** String
 - Screen Format:** X
 - EDI Format:** X

Buttons on the right side include: OK, Cancel, Advanced >>, Conditions..., and Display...

2. Click DISPLAY... to access the Display Properties dialog.



The Display Properties dialog box is shown with the following details:

- Print:**
 - Include in print
 - Label:** Reference Qualifier
 - Display Length:** 3

Buttons on the right side include: OK and Cancel.

3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Fields Properties dialog.

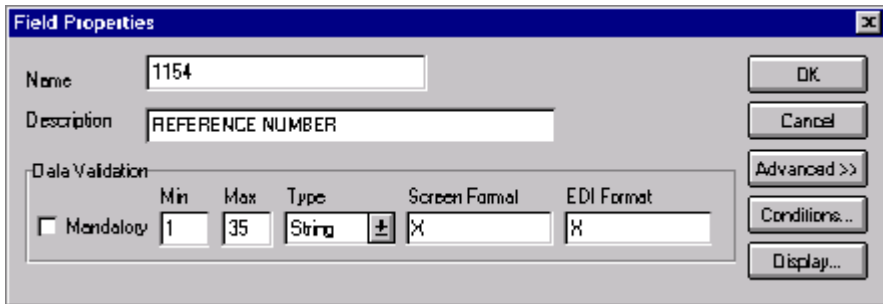
Customizing the RFF02 Element

The RFF02 element contains the Reference Number. This element is defined by the standard to be a string of 35 alphanumeric characters. In this tutorial, you know that your trading partner’s reference number (the contract number) is a 12-character string so you need to change the field and element lengths to accommodate the reference number that is shorter than the standard expects. In addition, you need to rename the field label.

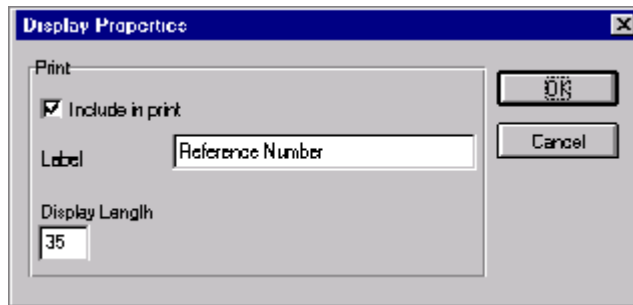
Complete the following steps to change the element and field lengths and to rename the field label for the Reference Number field:

1. Double-click the RFF02 element.

The Field Properties dialog is displayed.



2. In the Max box, type “12” to allow a 12-character string in this element.
3. Click DISPLAY... to access the Display Properties dialog.



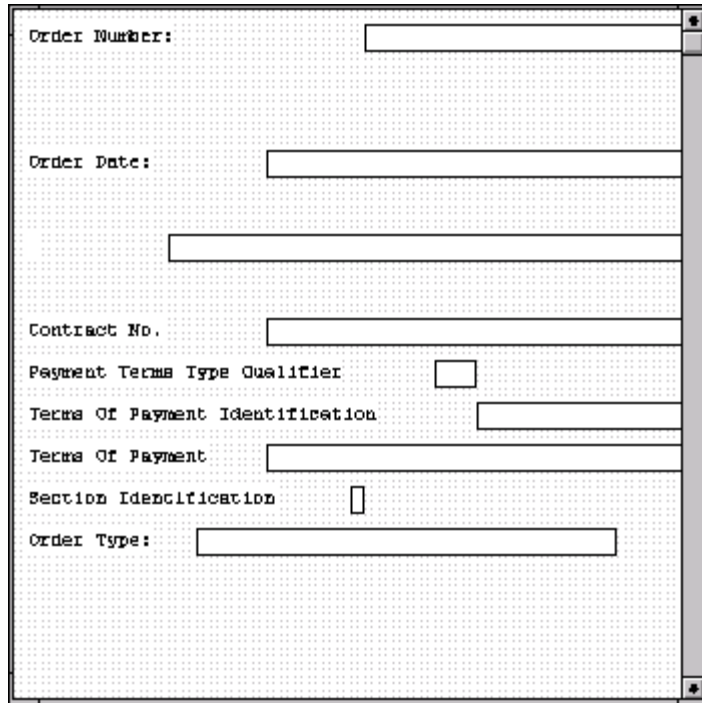
4. In the Label box, type “Contract No.” (note the period in the label) to replace the existing field label.
5. In the Display Length box, type “12”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar.



The header frame now should look like this:



The screenshot shows a header form with the following fields:

- Order Number: [input field]
- Order Date: [input field]
- Contract No.: [input field]
- Payment Terms Type Qualifier: [input field]
- Terms Of Payment Identification: [input field]
- Terms Of Payment: [input field]
- Section Identification: [input field]
- Order Type: [input field]

Customizing the NAD Group

The standard allows the NAD group (Name and Address) to be used up to 20 times. In the NAD group, you have already activated the NAD segment to contain the name and address of an entity or individual. Your trading partner uses the NAD group to send you these three types of addresses:

- Party to be billed (Party Qualifier “AA”)
- Buyer (Party Qualifier “BY”)
- Ship to (Party Qualifier “ST”)

Customizing the NAD Segment

The NAD segment identifies the Name and Address of an entity or individual. The NAD01 element is a mandatory element in the NAD segment and contains the three-character qualifier identifying the type of party in the NAD segment.

Customizing the NAD01 Element

The NAD01 element (Party Qualifier) identifies the type of party in the NAD segment. For this tutorial, you know that your trading partner sends only these three types of names/addresses: Party to be billed, Buyer, and Ship to. You want the meaningful description of the qualifier on the printout instead of the qualifier itself.

To print the description of the EDI code value, you must copy the NAD01 element to another element in the NAD segment, then use the new NAD element to print the description of the Party Qualifier code.

Copying the NAD01 Element

Complete the following steps to copy and paste the NAD01 element:



1. Select the NAD01 element.
2. Click Copy on the Main Toolbar.
3. Select the NAD22 element, which is the last element in the NAD segment.



4. Click Paste on the Main Toolbar to paste the new element.

Changing the NAD23 Element and Field Properties

The system names the new element created from copying the NAD01 element 3035:3. You need to rename the new element to identify its purpose, which is to print the description of the qualifier from the NAD01 element. You need to remove the Mandatory status from the NAD23 element to make it a conditional element (meaning that the element will be used only if there is EDI data available for it) and increase the element and field lengths to accommodate the qualifier's description.

Complete the following steps to change the element name and length, make the element conditional instead of mandatory, and change the field label and field length for the Party Qualifier field:

1. Double-click the NAD23 element.

The Field Properties dialog is displayed.

2. In the Name box, type “3035_DESC”.
3. Select the Mandatory check box to make the element conditional. You will not receive an NAD23 element from your trading partner so if you leave the mandatory status checked, you will receive a compliance error.
4. In the Min box, type “0” for the minimum number of characters allowed for this element.
5. In the Max box, type “18” for the maximum number of characters allowed for this element.
6. Click DISPLAY... to access the Display Properties dialog.

7. In the Label box, delete the existing field label.
8. In the Display Length box, type “18”.
9. Click OK to exit the Display Properties dialog.
10. Click CLOSE to exit the Field Properties dialog.

Hiding the NAD01 Field and Loading the Code List Table from the Standard

Now that you have created an exact copy of the NAD01 element, you can hide the first Party Qualifier field.

For this tutorial, you know that your trading partner will send you the following types of names and addresses:

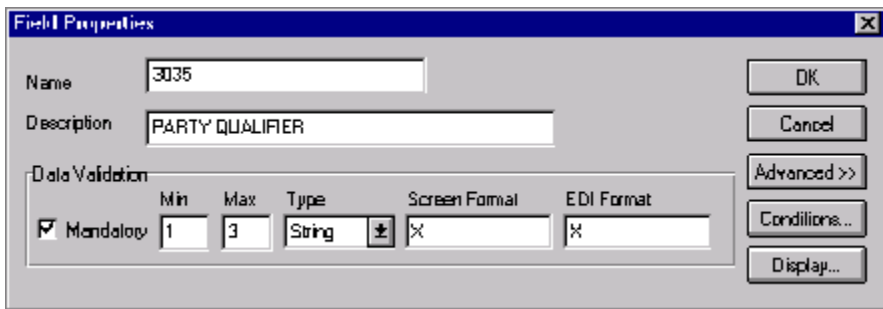
- Party to be billed (Party Qualifier “AA”)
- Buyer (Party Qualifier “BY”)
- Ship to (Party Qualifier “ST”)

You do not need to load the entire code list table; you will load only codes “AA,” “BY,” and “ST” from the code list table.

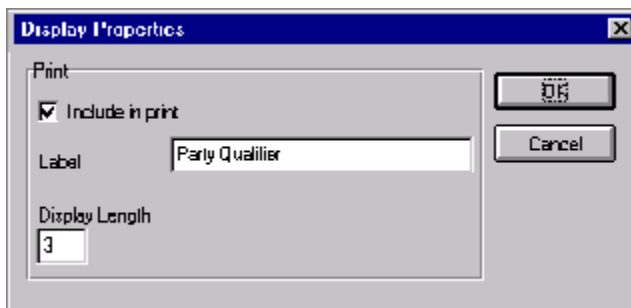
Complete the following steps to hide the first Party Qualifier field and load the codes from the standard:

1. Double-click the NAD01 element, which is the element for which you need to use a code list table.

The Field Properties dialog is displayed.

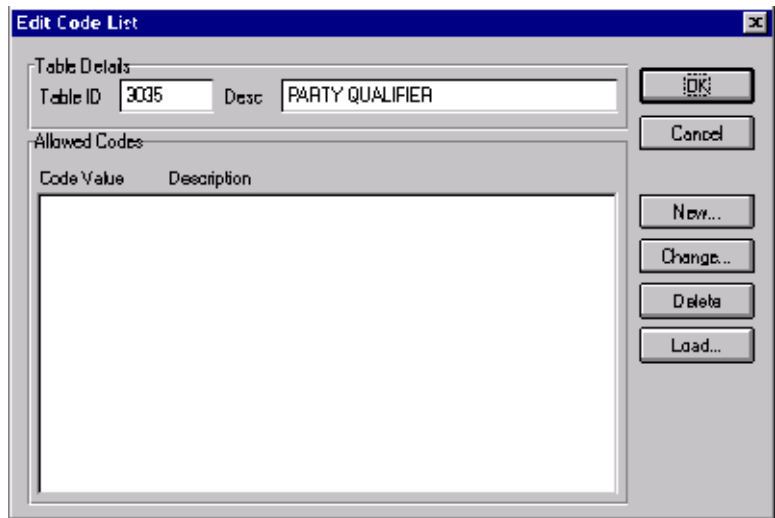


2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. In the Advanced section, select the Use Standard Rule check box.

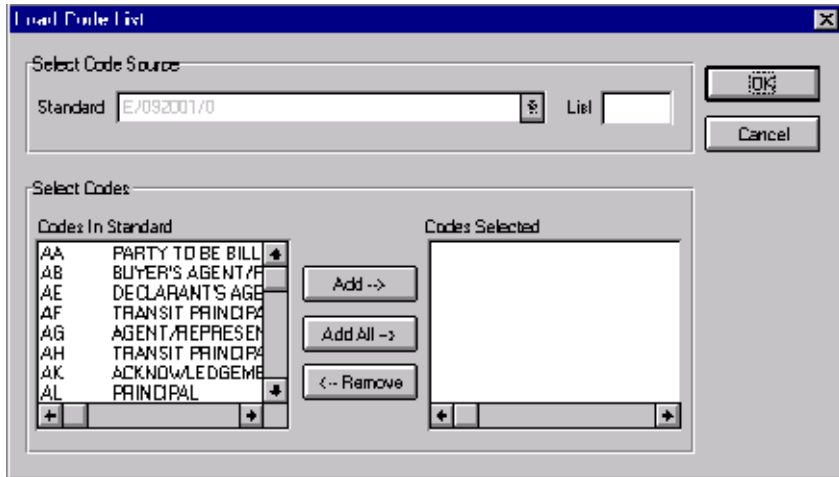
6. Click the Use Code option.
7. Click EDIT TABLE... to access the Edit Code List dialog.



The Table ID box contains “3035,” the name of the element for which this code list table will be used. The Desc box contains “PARTY QUALIFIER,” the description of the element for which this code list table will be used.

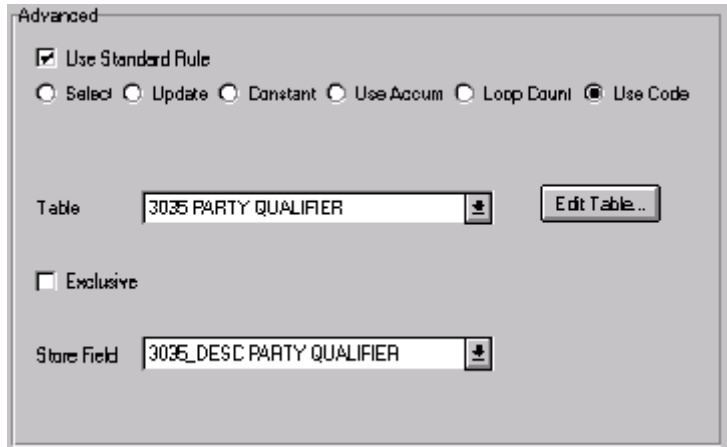
8. Click LOAD... to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click OK to access the Load Code List dialog.

The Codes In Standard list contains the entire code list.



9. From the Codes In Standard list, highlight code “AA.”
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. This code list table contains many codes. To access code “ST” quickly, press the letter “s”; the first code that begins with the letter “s” is highlighted. You need to scroll through only the list of codes beginning with “s,” instead of the entire code list, to access code “ST.”
15. Click ADD--> to move it to the Codes Selected list.
16. Click OK to load the code list table and exit the Load Code List dialog.
17. Click CLOSE to exit the Edit Code List dialog.
18. From the Store Field list, select “3035_DESC PARTY QUALIFIER” to store the description in the NAD23 element you created.

The Advanced section of the Field Properties dialog now should look like this:



19. Click CLOSE to exit the Field Properties dialog.

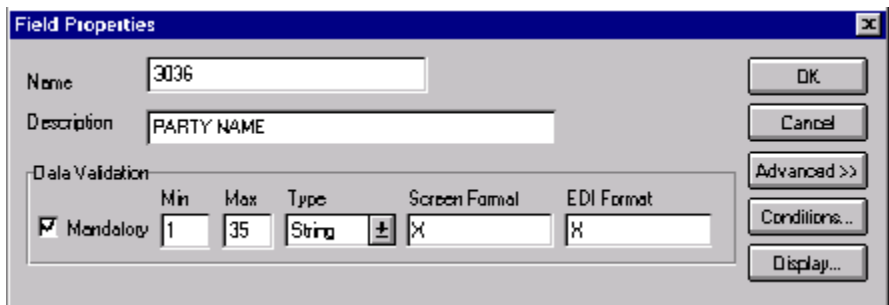
Customizing the NAD10 Element

The NAD10 element (Party Name) contains the exact name that should be printed in the purchase order. The name is explained by the description of the Party Qualifier so you do not need to print the label associated with the name. The only customizing that is necessary for the NAD10 element is to remove the field label on the printout.

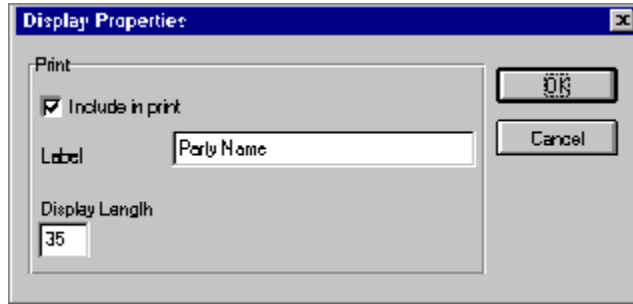
Complete the following steps to hide the Party Name field label:

1. Double-click the NAD10 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, delete the existing text. The party name is explained by the description in the Party Qualifier field (NAD23).
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

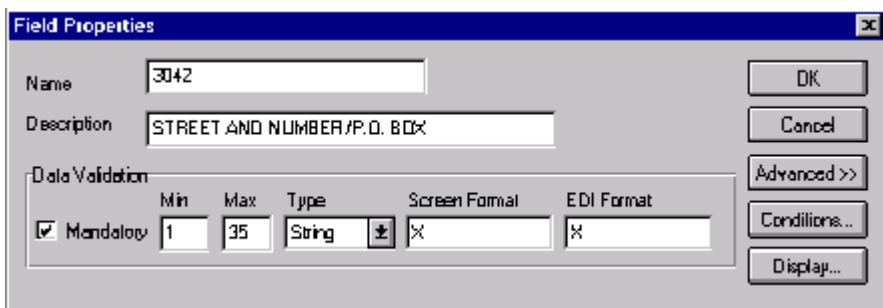
Customizing the NAD16 Element

The NAD16 element contains the Street and Number/P.O. Box, which identifies the street name and number, suite number, or any other address information that your trading partner sends you. The NAD16 element contains the exact address information that should be printed. The address information corresponds to the name that is printed from the NAD10 element. There is no need to print the label associated with the address so you need to remove the field label for the NAD16 element.

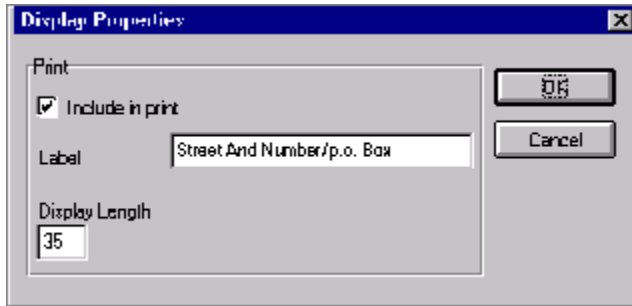
Complete the following steps to hide the field label for the first Street and Number/P.O. Box field:

1. Double-click the NAD16 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



2. In the Label box, delete the existing text.
3. Click OK to exit the Display Properties dialog.
4. Click CLOSE to exit the Field Properties dialog.

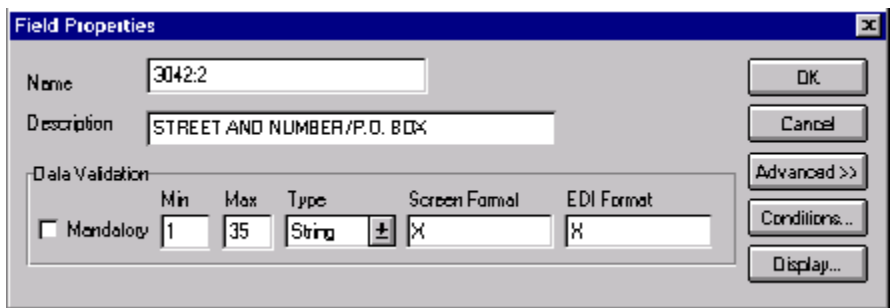
Customizing the NAD17 Element

The NAD17 element contains the second Street and Number/P.O. Box line, which (like the NAD16 element) identifies the street name and number, suite number, or any other address information that your trading partner sends you. The NAD17 element contains the exact address information that should be printed. The address information corresponds to the name that is printed from the NAD10 element. There is no need to print the label associated with the address, so you need to remove the field label for the NAD17 element.

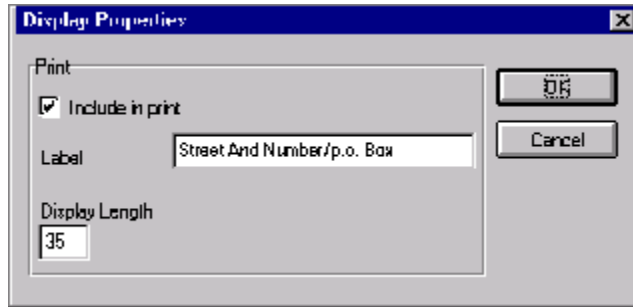
Complete the following steps to remove the field label for the second Street and Number/P.O. Box field:

1. Double-click the NAD17 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, delete the existing text.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

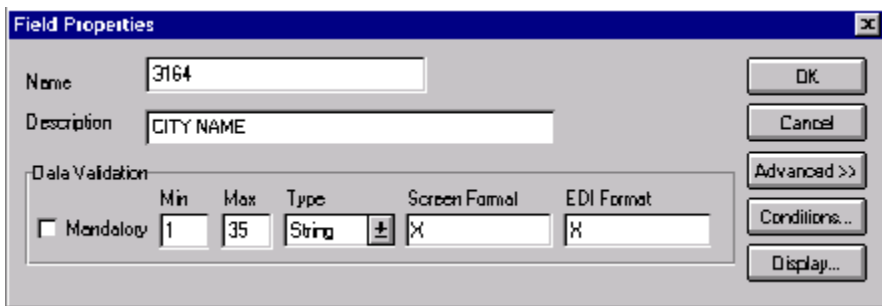
Customizing the NAD19 Element

The NAD19 element contains the City Name. There is no need to print the field label associated with this element, because it will be evident on the printout that all the name and address information are associated. Therefore, you will remove the field label for the NAD19 element. Also, you must change the element and field lengths because you do not need the City Name field to be longer than 30 characters.

Complete the following steps to change the element and field lengths and remove the City Name field label:

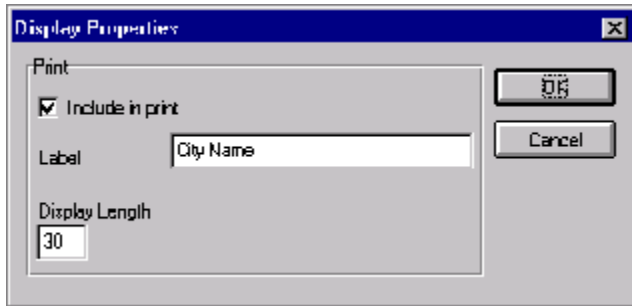
1. Double-click the NAD19 element.

The Field Properties dialog is displayed.



2. In the Max box, type “30” to allow a 30-character string in this element.

3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, delete the existing text.
5. In the Display Length box, type “30” to display a 30-character city name on the printout.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

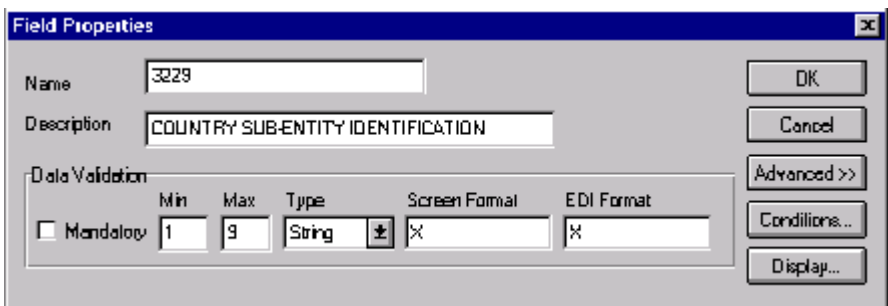
Customizing the NAD20 Element

The NAD20 element contains the Country Sub-Entity Identification. You do not need to print the field label associated with this element, because it is evident on the printout that all the name and address information are associated. You must remove the field label for the NAD20 element and change the element and field lengths because your partner sends a Country Sub-Entity Identification that is abbreviated to no more than two characters.

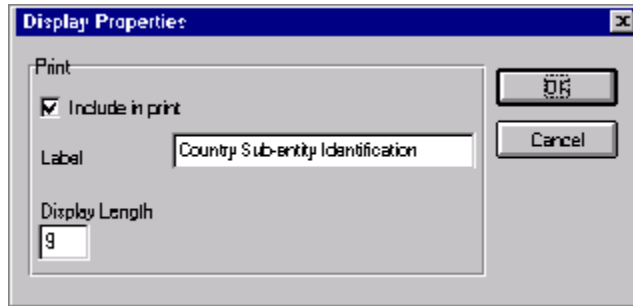
Complete the following steps to change the element and field lengths and remove the Country Sub-Entity Identification field label:

1. Double-click the NAD20 element.

The Field Properties dialog is displayed.



2. In the Max box, type “2” to allow a two-character string in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, delete the existing text.
5. In the Display Length box, type “2”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

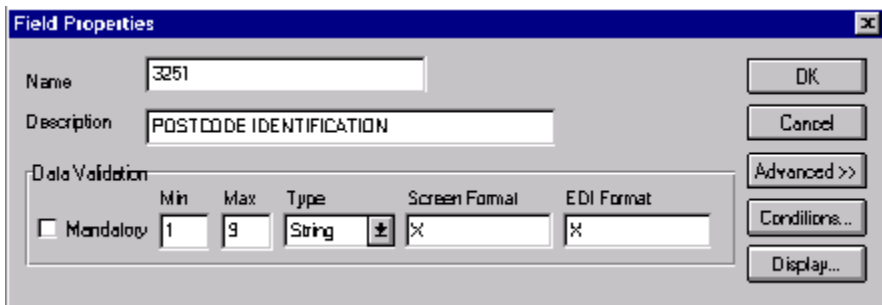
Customizing the NAD21 Element

The NAD21 element contains the Postcode Identification. You do not need to print the field label associated with this element, because it is evident on the printout that all the name and address information are associated. You need to remove the field label for the NAD21 element.

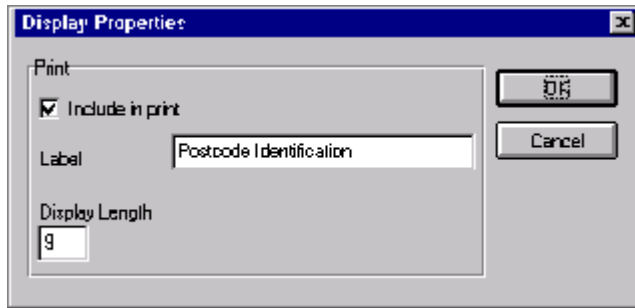
Complete the following steps to remove the Postcode Identification field label:

1. Double-click the NAD21 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.

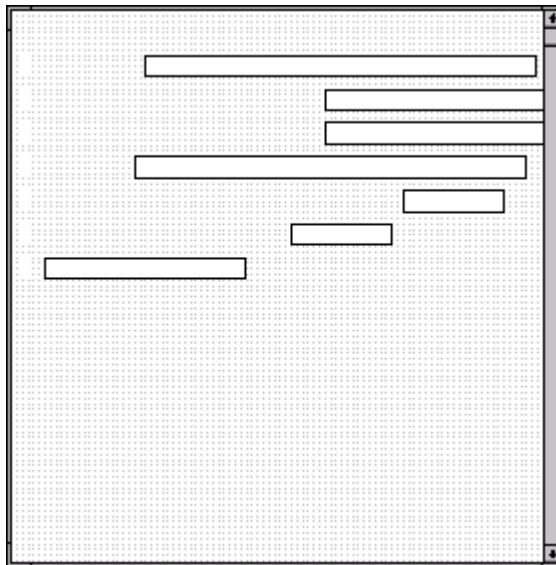


3. In the Label box, delete the existing text.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the print form display.

The Name and Address (NAD) frame now should look like this:



Customizing the PAT Group

The PAT group is a conditional group that specifies the Payment Terms for the purchase order. The standard allows this group to be used up to 10 times in one purchase order. You need to use this group only once in the header of the purchase order so you changed the maximum use of this group to one. At the same time, you promoted this group to the parent frame so that the payment terms are displayed on the same frame as the purchase order number and date (the header frame).

Customizing the PAT Segment

The PAT segment is a conditional segment in the PAT group that specifies the Payment Terms Basis for the purchase order. You have already activated the PAT05 element for the Terms of Payment. The mandatory elements PAT01 (Payment Terms Type Qualifier) and PAT02 (Terms of Payment Identification) also are activated.

Customizing the PAT01 Element

The PAT01 element is a mandatory element that contains the Payment Terms Type Qualifier, a three-character code that identifies the terms under which this purchase order is valid. You need to hide the PAT01 element and print the more meaningful description of the code in a new element that you create.



You know that your trading partner only sends you purchase orders with these terms:

- Previously Agreed Upon (Payment Terms Type Qualifier “18”)
- Instant (Payment Terms Type Qualifier “10”)

To print the description of an EDI code value, you must copy the PAT01 element to a new element in the PAT segment, then use the new PAT element to print the description of the Payment Terms Type Qualifier.

Copying the PAT01 Element

Complete the following steps to copy and paste the PAT01 element:

1. Select the PAT01 element.
-  2. Click Copy on the Main Toolbar.
3. Select the PAT06 element, which is the last element in the C110 composite (the composite that the PAT01 element is in) in the PAT segment.
-  4. Click Paste on the Main Toolbar to paste the new element. A new element (PAT07) is created, which is an exact copy of the PAT01 element.

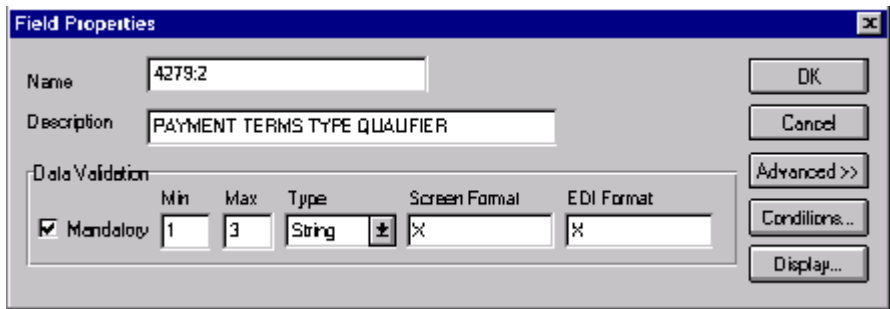
Changing the PAT07 Element and Field Properties

The system names the new element created from copying the PAT07 element 4279:2. You need to rename the new element to identify its purpose, which is to print the description of the code from the PAT01 element. Also, you need to increase the element and field lengths to accommodate the longer description.

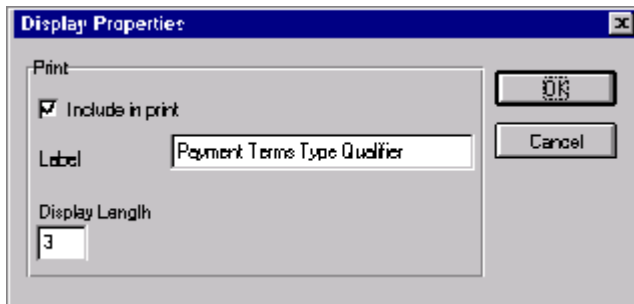
Complete the following steps to change the element name and length and to change the field label and length for the Payment Terms Type Qualifier field:

1. Double-click the PAT07 element.

The Field Properties dialog is displayed.



2. In the Name box, type “4279_DESC” to give the name a more descriptive identifier than its current name.
3. Select the Mandatory check box to make the element conditional
4. In the Min box, type “0”.
5. In the Max box, type “30”.
6. Click DISPLAY... to access the Display Properties dialog.



7. In the Label box, delete the existing text.
8. In the Display Length box, type “30”.

9. Click OK to exit the Display Properties dialog.
10. Click CLOSE to exit the Field Properties dialog.

Hiding the PAT01 Field and Loading the Code List Table from the Standard

Now that you have created an exact copy of the PAT01 element, you can hide the first Payment Terms Type Qualifier field.

You know that your trading partner only sends purchase orders with these two term types:

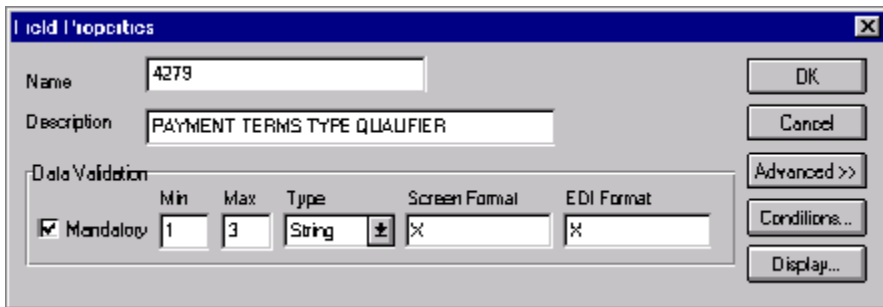
- Previously agreed upon (Payment Terms Type Qualifier “18”)
- Instant (Payment Terms Type Qualifier “10”)

You do not need to load the entire code list table so load only codes “18” and “10” from the code list table.

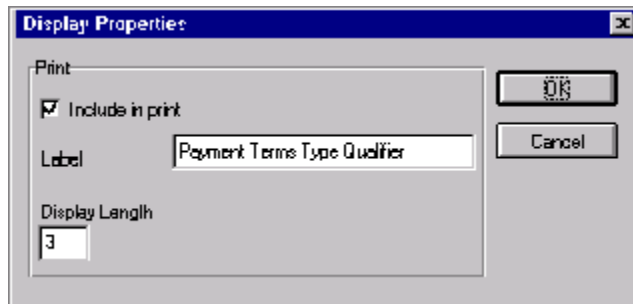
Complete the following steps to hide the first Terms Type Code field and load the codes from the standard:

1. Double-click the PAT01 element, which is the element for which you need to use a code list table.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



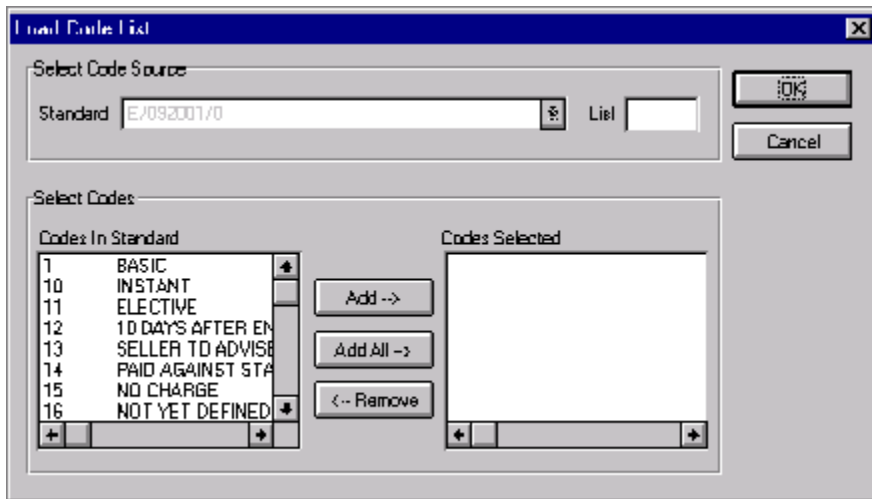
3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. In the Advanced section, select the Use Standard Rule check box.
6. Click the Use Code option.
7. Click EDIT TABLE... to access the Edit Code List dialog.

The screenshot shows the 'Edit Code List' dialog box. The 'Table Details' section has 'Table ID' set to '4279' and 'Desc' set to 'PAYMENT TERMS TYPE QUALIFIER'. The 'Allowed Codes' section is empty. The right side of the dialog has buttons for 'OK', 'Cancel', 'New...', 'Change...', 'Delete', and 'Load...'.

The Table ID box contains “4279,” the name of the element for which this code list table is used. The Desc box contains “PAYMENT TERMS TYPE QUALIFIER,” the description of the element for which this code list table is used.

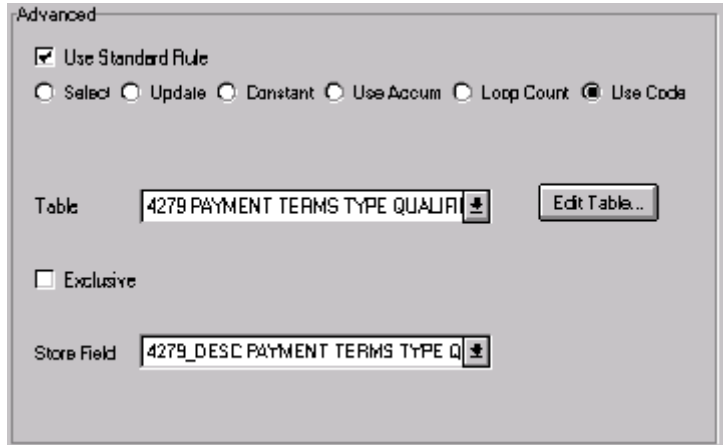
8. Click LOAD... to access the Load Code List dialog. You are prompted to select an ODBC data source name. Select the appropriate DSN and click

OK to access the Load Code List dialog. The Codes In Standard list contains the entire code list.



9. From the Codes In Standard list, highlight code “10.”
10. Click ADD--> to move it to the Codes Selected list.
11. From the Codes In Standard list, highlight code “18.”
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 drop-down list, select “4279_DESC PAYMENT TERMS TYPE QUALIFIER” to store the code in the PAT07 element you created.

The Advanced section of the Field Properties dialog now should look like this:



16. Click CLOSE to exit the Field Properties dialog.

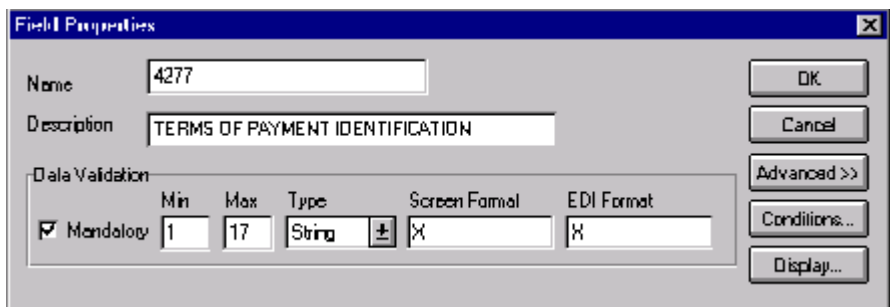
Customizing the PAT02 Element

The PAT02 element (Terms of Payment Identification) is a mandatory element for the PAT segment. You do not need to print the identification on the printout so you will hide the Terms of Payment Identification field.

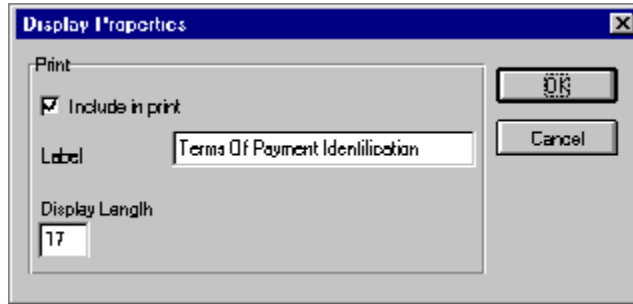
Complete the following steps to hide the Terms of Payment Identification field:

1. Double-click the PAT02 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

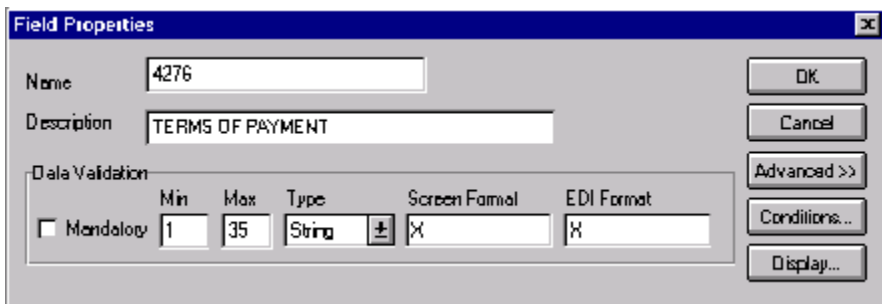
Customizing the PAT05 Element

The PAT05 element contains the exact terms of payment for the purchase order. The terms are explained by the description of the Payment Terms Type Qualifier so there is no need to print the label associated with the terms of payment. You need remove the field label for the PAT05 element on the printout.

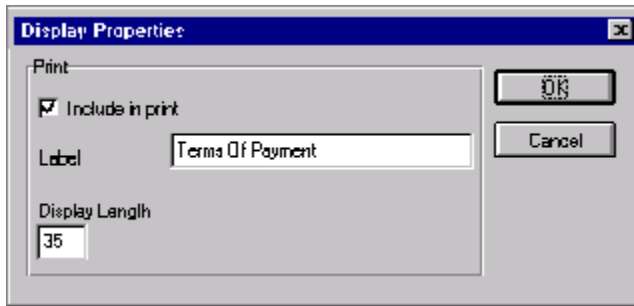
Complete the following steps to remove the Terms of Payment field label:

1. Double-click the PAT05 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, delete the existing field label.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the print form display.

The header frame now should look like this:



Customizing the LIN Group

The standard allows the LIN group to be used up to 200,000 times, containing up to 200,000 line items in one purchase order. You have already activated these segments in the LIN group: LIN, PIA, IMD:2, MEA:3, QTY:3, DTM:13, and MOA:5. Also, you have already promoted the DTM:13 segment in the LIN group to create the DTM:27 segment.

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

The screenshot shows a form with the following fields arranged vertically:

- Line Item Number
- Product Id Function Qualifier
- Item Number
- Item Description
- Measurement Application Qualifier
- Measure Unit Qualifier
- Measurement Value
- Quantity Qualifier
- Quantity
- Date/Time/Period Qualifier
- Date/Time/Period
- Date/Time/Period Qualifier
- Date/Time/Period
- Monetary Amount Type Qualifier
- Monetary Amount

If the frame were not customized and formatted differently, 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.

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

Line No.	Prod ID	Code Type	Qty Ord	Unit	Price Each	Requested Ship Date	Ship No Later
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>							

Customizing the LIN Segment

The LIN segment (in the LIN group) contains the Line Item details for the items on the purchase order. Information in the LIN segment pertains to each line item on the purchase order and not to the entire purchase order.

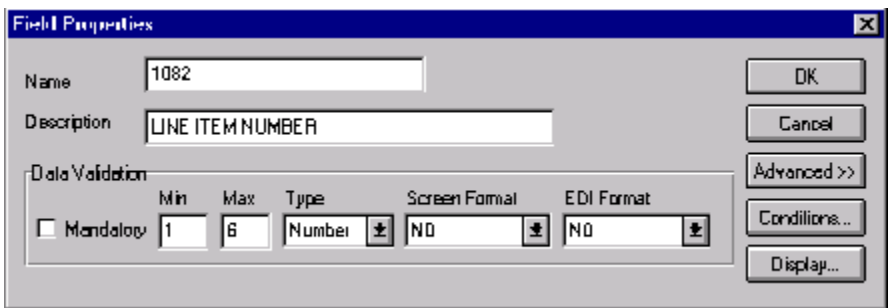
Customizing the LIN01 Element

The LIN01 element contains the Line Item Number for one item on the purchase order. You need to rename the field label to reflect the new label that you and your trading partner have agreed to use. You and your trading partner have agreed that the line items per purchase order will not exceed 99,999. Since each line item is numbered sequentially, starting with one, you need a maximum length of only five digits for this field. Therefore, you need to change the maximum length for this field.

Complete the following steps to change the element and field lengths and rename the field label for the Line Item Number field:

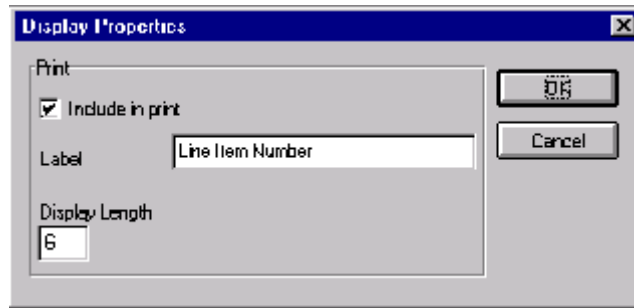
1. Double-click the LIN01 element.

The Field Properties dialog is displayed.



2. In the Max box, type "5".

3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Line” to replace the existing field label.



The label for the Line Item Number field ultimately will form the column heading “Line No.” To make the width of the column heading as narrow as possible, you will place “Line” on one line and “No.” below. The Label field does not enable you to type a label on more than one line, so you will type “Line” in the Label box, then add “No.” by adding static text later in this tutorial. (Static text is text that is always printed or displayed when the form is used, and that is not defined in the field properties of the element.)

5. In the Display Length box, type “5”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Customizing the PIA Segment

The PIA segment in the LIN group contains the Additional Product ID details for the items on the purchase order. Information in the PIA segment pertains to each line item on the purchase order and not to the entire purchase order. The standard allows the PIA segment to be used up to 25 times for each line item, but you need the PIA segment to be used only once for each line item. You have already changed the maximum use of the PIA segment to one.

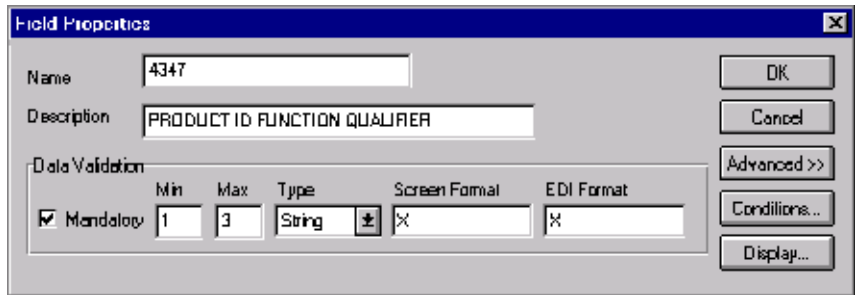
Customizing the PIA01 Element

The PIA01 element is a mandatory element that contains the Product ID Function Qualifier for each item on the purchase order. For brevity on the printout, you will rename the field label.

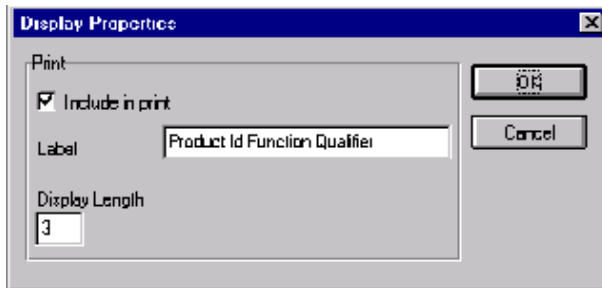
Complete the following steps to rename the field label for the Product ID Function Qualifier field:

1. Double-click the PIA01 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, type “Code” to replace the existing field label.



The label for the Product ID Function Qualifier field ultimately will form the column heading “Code Type.” To make the width of the column heading as narrow as possible, you will place “Code” on one line and “Type” below. The Label field does not enable you to type a label on more than one line, so you will type “Code” in the Label box, then add “Type” by adding static text later in this tutorial.

4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

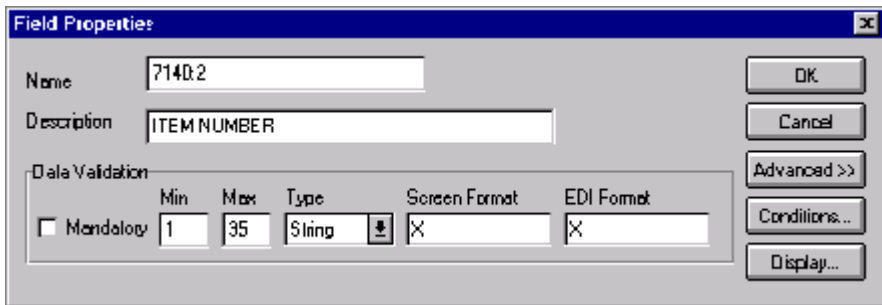
Customizing the PIA02 Element

The PIA02 element contains the Item Number for one item on the purchase order. You need to rename the field label to more accurately identify this field for you and your trading partner. The standard allows up to a 35-character string in this field. Your trading partner uses product identification numbers that are no longer than 10 characters so you need to change the maximum length for this field to ten.

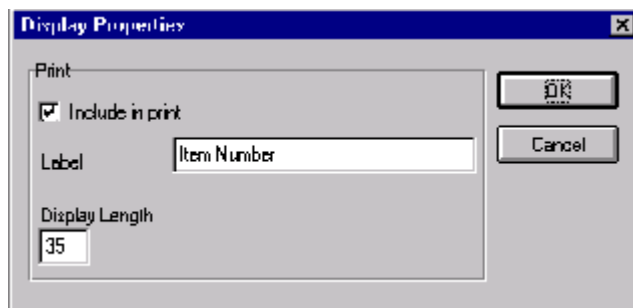
Complete the following steps to change the element and field lengths and rename the field label for the Item Number field:

1. Double-click the PIA02 element.

The Field Properties dialog is displayed.



2. In the Max box, type “10” to allow a 10-character string for the product identification number in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Prod ID” to replace the existing field label.
5. In the Display Length box, type “10”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Customizing the IMD:2 Segment

The IMD:2 segment (in the LIN group) contains the Item Description for the items on the purchase order. Information in the IMD:2 segment pertains to each line item on the purchase order and not to the entire purchase order. The standard allows the IMD:2 segment to be used up to 10 times for each line item, but you need the IMD:2 segment to be used only once for each line item. You have already changed the maximum use of the IMD:2 segment to one.

Customizing the IMD:206 Element

The IMD:206 element contains the Item Description for the purchase order item. The description is self-explanatory so there is no need to print the field label associated with the description.

Complete the following steps to remove the Item Description field label:

1. Double-click the IMD:206 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	35	String	X	X

2. Click DISPLAY... to access the Display Properties dialog.

3. In the Label box, delete the existing field label.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the MEA:3 Segment

The MEA:3 segment (in the LIN group) contains the Measurements for the items on the purchase order. Information in the MEA:3 segment pertains to each line item on the purchase order and not to the entire purchase order. The standard allows the MEA:3 segment to be used up to five times for each line item, but you need the MEA:3 segment to be used only once for each line item. You have already changed the maximum use of the MEA:3 segment to one.

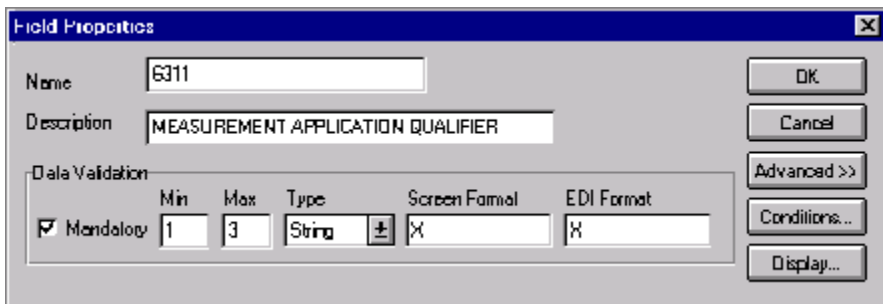
Customizing the MEA:301 Element

The MEA:301 element is a mandatory element that contains the Measurement Application Qualifier for each item on the purchase order. This element must be present in the purchase order, but you do not need this qualifier to be printed.

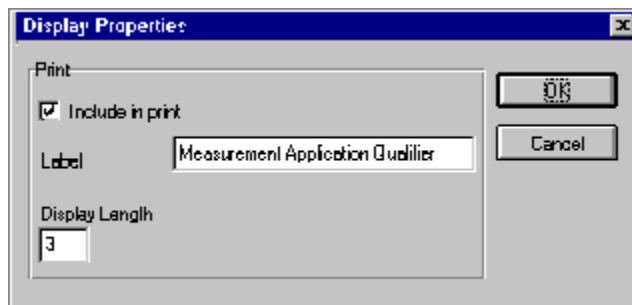
Complete the following steps to hide the Measurement Application Qualifier field:

1. Double-click the MEA:301 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the MEA:305 Element

The MEA:305 element is a mandatory element that contains the Measure Unit Qualifier for each item on the purchase order. This element must be present in the purchase order. You do not need this qualifier to be printed on the printout so you need to prevent this field from being displayed on the printout.

Complete the following steps to hide the Measure Unit Qualifier field:

1. Double-click the MEA:305 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

2. Click DISPLAY... to access the Display Properties dialog.

3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

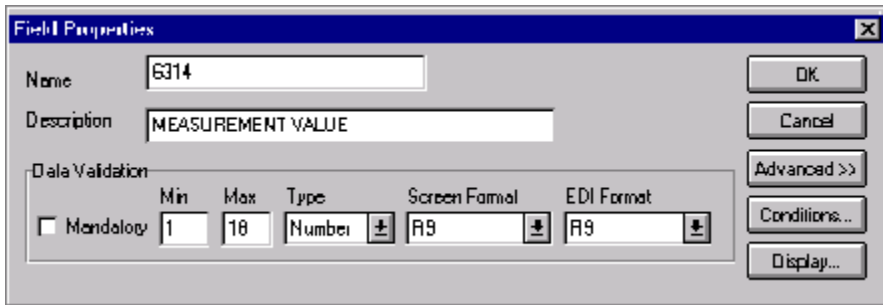
Customizing the MEA:306 Element

The MEA:306 element contains the Measurement Value for each item on the purchase order. For brevity, you will rename the field label. The standard allows up to an 18-digit number in this field. You expect a number no longer than two digits from your trading partner so you need to change the maximum length for this field accordingly. Also, the screen format and EDI format of the data currently use the number format “R9,” which indicates a number with an explicit decimal point and up to nine decimal places. You do not expect any decimal places from your partner’s data, so you need to change the screen format and EDI format to “R0,” which indicates a number with an explicit decimal point and no decimal places.

Complete the following steps to rename the field label, change the screen and EDI formats, and change the element and field lengths for the Measurement Value field:

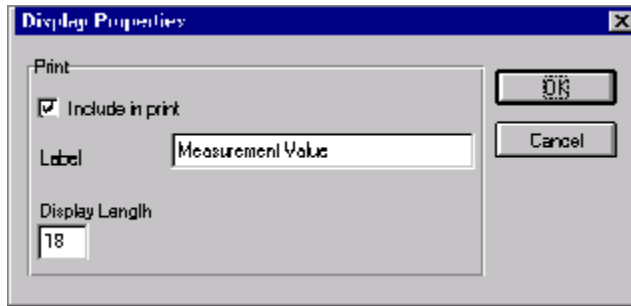
1. Double-click the MEA:306 element.

The Field Properties dialog is displayed.



2. In the Max box, type “2” to allow a two-digit number in this element.
3. From the Screen Format list, select “R0” to allow a number with an explicit decimal point and no decimal places to be displayed on the printout.
4. From the EDI Format list, select “R0” to indicate that you expect a number with an explicit decimal point and no decimal places.

- Click DISPLAY... to access the Display Properties dialog.



- In the Label box, type “Unit” to replace the existing field label.
- In the Display Length box, type “2”.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

Customizing the QTY:3 Segment

The QTY:3 segment in the LIN group contains the Quantity details for the items on the purchase order. Information in the QTY:3 segment pertains to each line item on the purchase order and not to the entire purchase order. The standard allows the QTY:3 segment to be used up to 10 times for each line item but you need the QTY:3 segment to be used only once for each line item. You have already changed the maximum use of the QTY:3 segment to one.

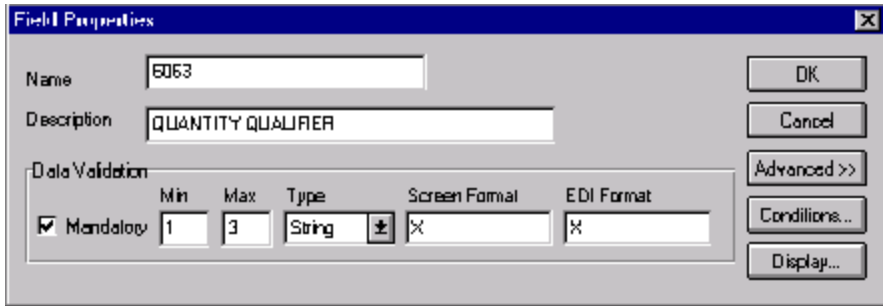
Customizing the QTY:301 Element

The QTY:301 element is a mandatory element that contains the Quantity Qualifier for each item on the purchase order. This element must be present in the purchase order, but you do not need this qualifier to be printed so you need to prevent this field from being displayed on the printout.

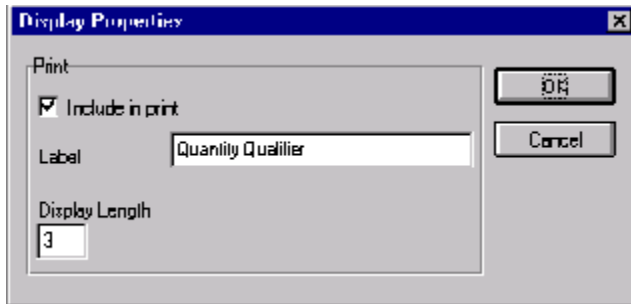
Complete the following steps to hide the Quantity Qualifier field:

- Double-click the QTY:301 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



2. Clear the Include in print check box.
3. Click OK to exit the Display Properties dialog.
4. Click CLOSE to exit the Field Properties dialog.

Customizing the QTY:302 Element

The QTY:302 element contains the Quantity for one item on the purchase order. You need to abbreviate the field label on the printout. The standard allows up to a 15-digit number in this field. You know that your trading partner will order no more than 99,999 (a five-digit number) of any one item so you need to change the maximum length to six for this field (to accommodate a five-digit number and a place separator) and change the value in the Screen Format and EDI Format lists to “N0,” which indicates a number with an implied decimal point and no decimal places.

Complete the following steps to change the element and field lengths, rename the field label, and change the screen and EDI formats for the Quantity field:

1. Double-click the QTY:302 element.

The Field Properties dialog is displayed.

2. In the Max box, type “6” to allow a five-digit number with a place separator in this element.
3. From the Screen Format list, select “N0” to allow a number with an implicit decimal point and no decimal places to be displayed on the printout.
4. From the EDI Format list, select “N0” to indicate that you expect a number with an implicit decimal point and no decimal places.
5. Click DISPLAY... to access the Display Properties dialog.

6. In the Label box, type “Qty”.
7. In the Display Length box, type “6”.
8. Click OK to exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:27 Segment

The DTM:27 segment (in the LIN group) is used to print the required shipment date. To ensure that Gentran:Director prints the correct date in the Date/Time/Period 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 required shipment date (DTM:27) first, and then the last delivery date (DTM:13).



The dates printed in the DTM:27 and DTM:13 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 will send 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.

When the Date/Time/Period Qualifier field contains the value “10” (required shipment date), the date is printed in the Date/Time/Period field of the DTM:27 segment. If the Date/Time/Period Qualifier field contains the value “128” (last delivery date), then the date is printed in the Date/Time/Period field of the DTM:13 segment.

Using a Key Field for the DTM:27 Segment

Complete the following steps to use a key field for the DTM:27 segment:

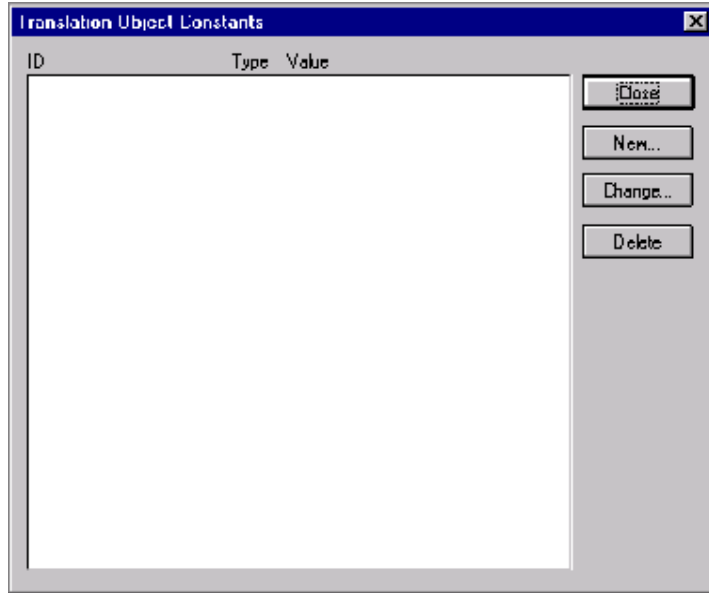
1. Click the DTM:27 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

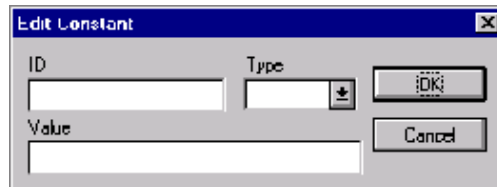
2. Select the Use Key Field check box.
3. Click KEY FIELD... to access the Key Field dialog.

4. From the Field list, select “2005:3 DATE/TIME/PERIOD QUALIFIER.”
5. Verify that the Use constant option is selected.

- Click **EDIT...** to access the Translation Object Constants dialog.



- Click **NEW...** to display the Edit Constant dialog.



- In the ID box, type “Shipment date/time, req” to identify the unique literal constant.
- From the Type list, select “String.”
- In the Value box, type “10” to identify the actual value of the constant.
- Click **OK** to exit the Edit Constant dialog.
- Click **CLOSE** to exit the Translation Object Constants dialog.
- From the Use constant list, select “10” to indicate to the system that this date is the required shipment date.
- Click **OK** to exit the Key Field dialog.
- Click **CLOSE** to exit the Segment Properties dialog.

Customizing the DTM:2701 Element

The DTM:2701 element (in the DTM:27 segment) contains the Date/Time/Period Qualifier for the date in the DTM:2702 element. Your trading partner sends two types of dates: the required shipment date and the last delivery date (in that order). You used the key field function for the DTM:27 segment to indicate to Gentran:Director that only the required shipment date are printed in the Date/Time/Period field (DTM:2702) so you can prevent the qualifier (DTM:2701) from being printed. The last delivery date is printed in the Date/Time/Period field for the DTM:13 segment.

Complete the following steps to hide the Date/Time/Period Qualifier field:

1. Double-click the DTM:2701 element.

The Field Properties dialog is displayed.

2. Click DISPLAY... to access the Display Properties dialog.

3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:2702 Element

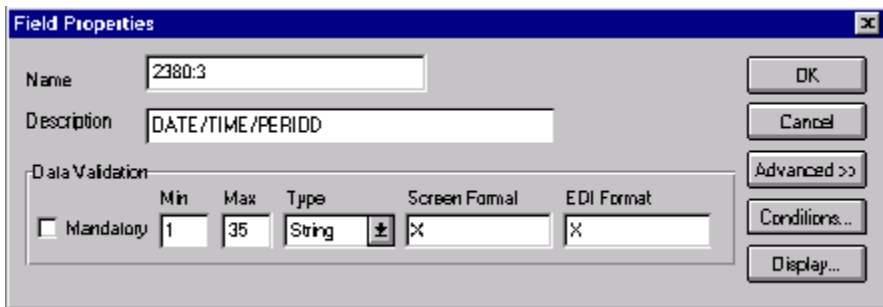
The DTM:2702 element contains the Date/Time/Period corresponding to the date qualifier in the DTM:2701 element. The DTM:2702 element is used to designate when the shipment is required.

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

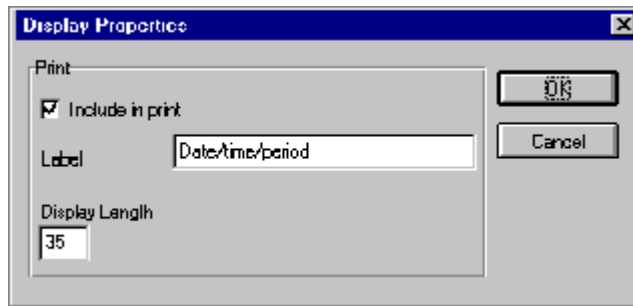
Complete the following steps to change the element and field lengths and rename the field label for the first Date/Time/Period field:

1. Double-click the DTM:2702 element.

The Field Properties dialog is displayed.



2. In the Max box, type “8” to allow the entire date, including separators (/), in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Requested” to replace the existing field label.



You will type “Ship Date” on a separate line later in this tutorial.

5. In the Display Length box, type “8”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:13 Segment

The DTM:13 segment (in the LIN group) is used to print the last delivery date (the latest date the order may be delivered). To ensure that Gentran:Director prints the correct date in the Date/Time/Period 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 required shipment date (DTM:27) first, and then the last delivery date (DTM:13).

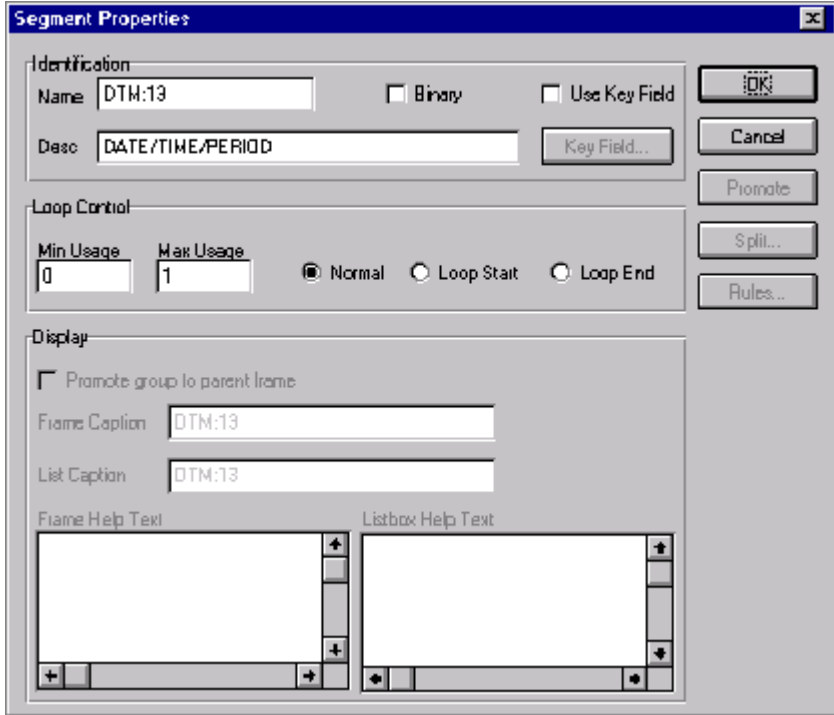
For this tutorial, if the Date/Time/Period Qualifier field contains the value “10” (required shipment date), then the date is printed in the Date/Time/Period field of the DTM:27 segment. If the Date/Time/Period Qualifier field contains the value “128” (last delivery date), then the date is printed in the Date/Time/Period field of the DTM:13 segment.

Using a Key Field for the DTM:13 Segment

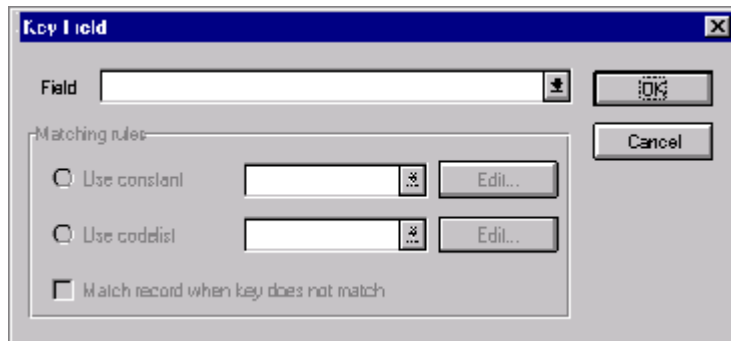
Complete the following steps to use a key field for the DTM:13 segment:

1. Click the DTM:13 segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

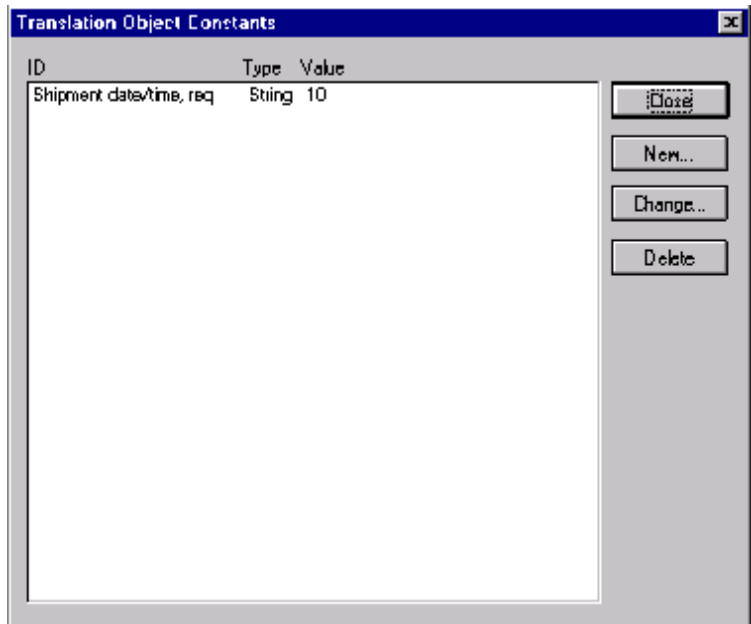


2. Select the Use Key Field check box to turn that option on.
3. Click KEY FIELD... to access the Key Field dialog.



4. From the Field list, select “2005 DATE/TIME/PERIOD QUALIFIER.”
5. Verify that the Use constant option is turned on.

6. Click **EDIT...** to display the Translation Object Constants dialog.



7. Click **NEW...** to display the Edit Constant dialog.
8. In the ID box, type “Delivery date/time, last”.
9. From the Type list, select “String.”
10. In the Value box, type “128” to identify the actual value of the constant.
11. Click **OK** to exit the Edit Constant dialog.
12. Click **CLOSE** to exit the Translation Object Constants dialog.
13. From the Use constant list, select “128” to indicate to the system that this date is the last delivery date.
14. Click **OK** to exit the Key Field dialog.
15. Click **CLOSE** to exit the Segment Properties dialog.

Customizing the DTM:1301 Element

The DTM:1301 element (in the DTM:13 segment) contains the Date/Time/Period Qualifier for the date in the DTM:1302 element. Your trading partner sends you two types of dates: the required shipment date and the last delivery date (in that order). You used the key field function for the DTM:13 segment to indicate to Gentran:Director that the last delivery date is printed

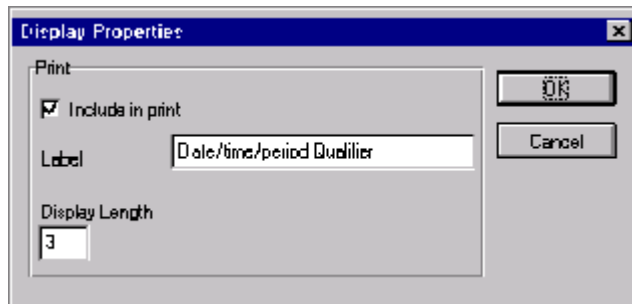
in the Date/Time/Period field (DTM:1302). The DTM:1301 element must be present, but you can prevent this field from being displayed, since the meaningful information for a printout is the date itself.

Complete the following steps to hide the second Date/Time/Period Qualifier field:

1. Double-click the DTM:1301 element.
The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:1302 Element

The DTM:1302 element contains the Date/Time/Period corresponding to the date qualifier in the DTM:1301 element. The DTM:1302 element is used to designate the last delivery date that shipments can be shipped.

You need to rename the label for this field (the new label will be named Ship No). You need to add Later further in this tutorial using static text so that

Later is displayed on the line below Ship No. The full field label will be Ship No Later.

Complete the following steps to change the field and element lengths and rename the field label for the second Date/Time/Period field:

1. Double-click the DTM:1302 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	35	String	X	X

2. In the Max box, type “8” to allow the entire date, including separators (/), in this element.
3. Click DISPLAY... to access the Display Properties dialog.

4. In the Label box, type “Ship No” to replace the existing field label.



You will type “Ship No” on a separate line later in this tutorial.

5. In the Display Length box, type “8”.
6. Click OK to exit the Display Properties dialog.
7. Click CLOSE to exit the Field Properties dialog.

Customizing the MOA:5 Segment

The MOA:5 segment contains the Monetary Amount for the items on the purchase order. Information in the MOA:5 segment pertains to each line item on the purchase order, and not to the entire purchase order. The standard allows the MOA:5 segment to be used up to five times for each line item but you need the MOA:5 segment to be used only once for each line item. You have already changed the maximum use of the MOA:5 segment to one.

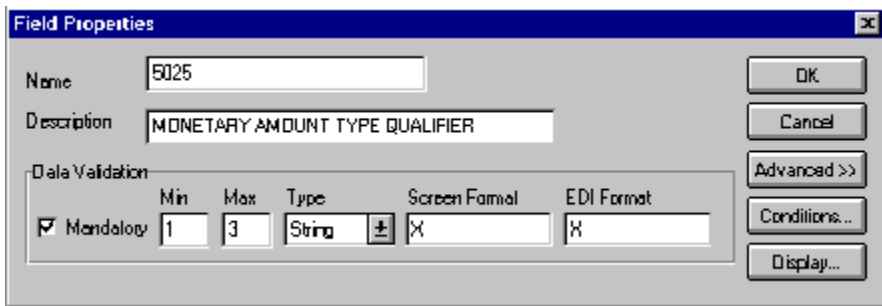
Customizing the MOA:501 Element

The MOA:501 element is a mandatory element that contains the Monetary Amount Type Qualifier for the purchase order. This element must be present in the purchase order when the MOA:5 segment is activated. You do not need this qualifier to be printed on the printout. You must prevent this field from being displayed on the printout.

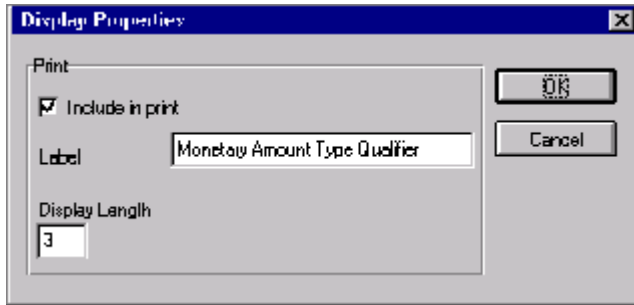
Complete the following steps to hide the Monetary Amount Type Qualifier field:

1. Double-click the MOA:501 element.

The Field Properties dialog is displayed.



- Click DISPLAY... to access the Display Properties dialog.



- Clear the Include in print check box.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

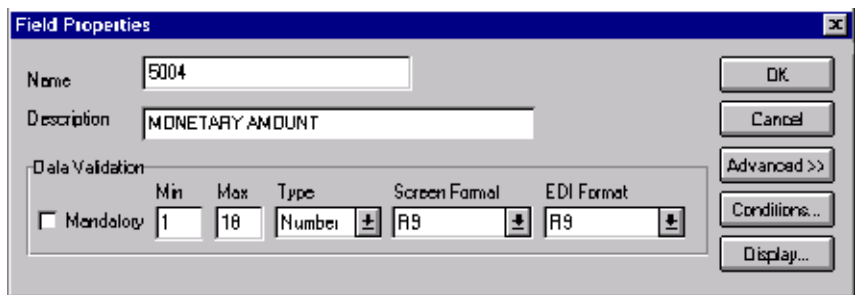
Customizing the MOA:502 Element

The MOA:502 element contains the Monetary Amount for the purchase order. You need to rename the field label on the printout. The standard allows up to 18 digits in this field. You know that your trading partner orders items totaling no more than \$999,999 (a six-digit number), so you need to change the maximum length to eight for this field (to accommodate a six-digit number, a place separator, and a plus or minus sign) and change the value in the Screen Format and EDI Format lists to “R2,” which indicates a number with an explicit decimal point and two decimal places.

Complete the following steps to change the element and field lengths, rename the field label, and change the screen and EDI formats for the Monetary Amount field:

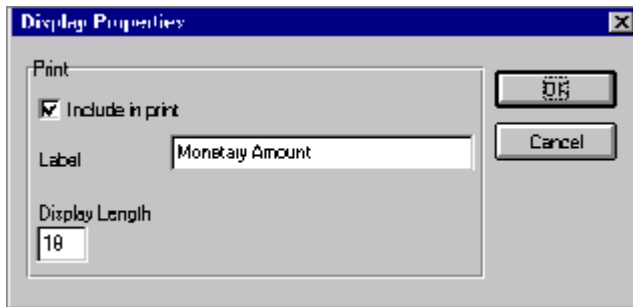
- Double-click the MOA:502 element.

The Field Properties dialog is displayed.



- In the Max box, type “8”.

3. From the Screen Format list, select “R2.”
4. From the EDI Format list, select “R2” to indicate that you expect a number with an explicit decimal point and up to two decimal places.
5. Click DISPLAY... to access the Display Properties dialog.



6. In the Label box, type “Price”.
7. In the Display Length box, type “8”.
8. Click OK to exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the print form display.

The Line Item (LIN) frame now should look like this:



Line	<input type="text"/>
Code	<input type="text"/>
Prod ID	<input type="text"/>
	<input type="text"/>
Date	<input type="text"/>
Qty	<input type="text"/>
Requested	<input type="text"/>
Ship No	<input type="text"/>
Price	<input type="text"/>

Customizing the UNS Segment

The UNS segment is a mandatory segment that contains the Section Control summary information for the purchase order. This segment identifies summary information that is pertinent to the entire purchase order.

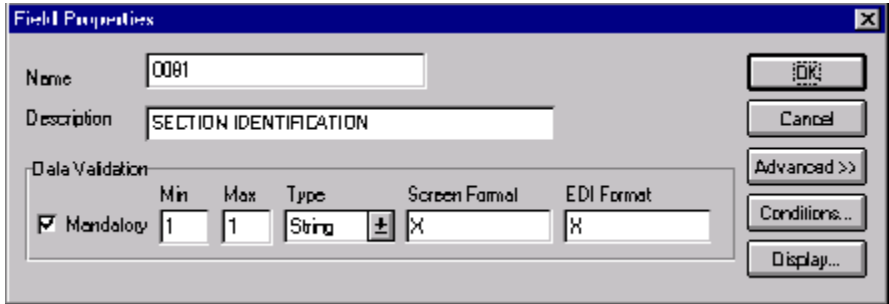
Customizing the UNS01 Element

The UNS01 element is a mandatory element that contains the Section Identification for the purchase order. This element must be present in the purchase order, but you do not need this field to be printed on the printout.

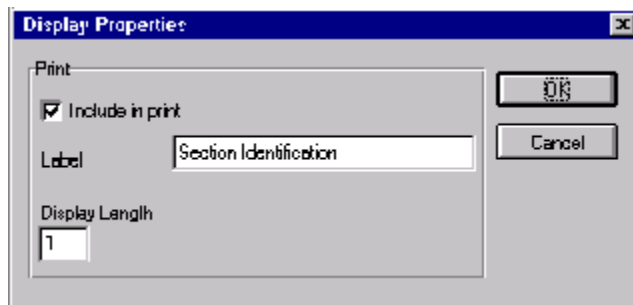
Complete the following steps to hide the Section Identification field:

1. Double-click the UNS01 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.

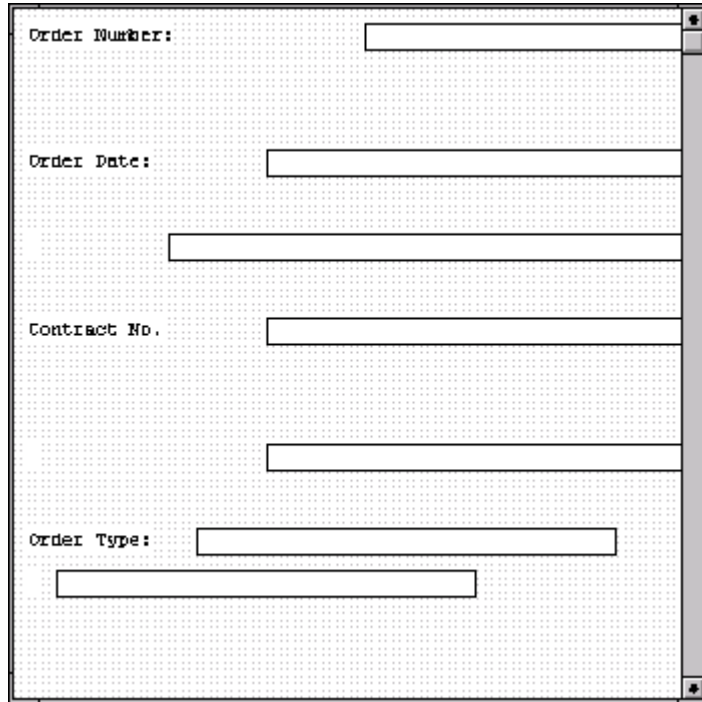


3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar.

The header frame now should look like this:



The screenshot shows a header form layout with the following fields:

- Order Number: [Text Input Field]
- Order Date: [Text Input Field]
- Contract No.: [Text Input Field]
- Order Type: [Text Input Field]

There are also several empty text input fields below the labeled ones, suggesting a multi-line or multi-field structure for some of the data.

Customizing the CNT Segment

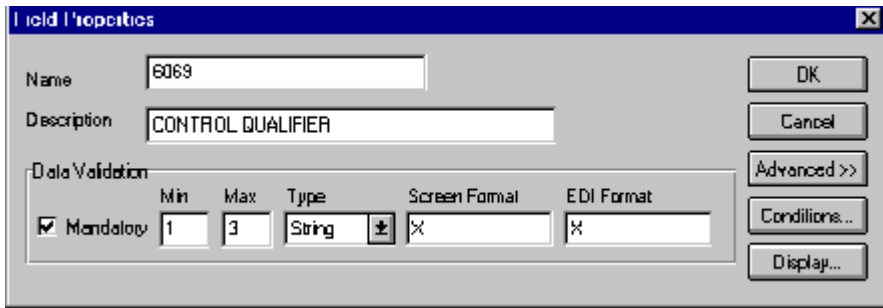
The CNT segment (in the CNT group) contains the Control Total summary information for the purchase order. This segment identifies summary information that is pertinent to the entire purchase order. You expect to use this segment only once, so you have already changed the maximum use of the CNT segment to one.

Customizing the CNT01 Element

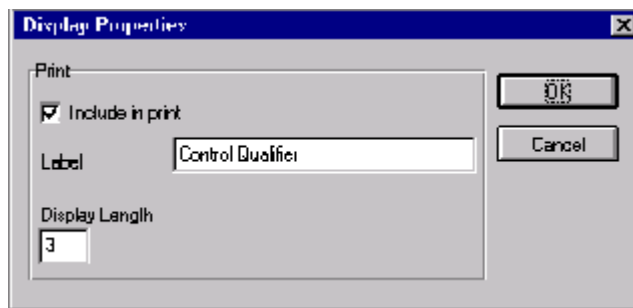
The CNT01 element is a mandatory element that contains the Control Qualifier for the purchase order. This element must be present in the purchase order when the CNT segment is used. You do not need this qualifier to be printed so you need to prevent this field from being displayed on the printout.

Complete the following steps to hide the Control Qualifier field:

1. Double-click the CNT01 element.
The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. Clear the Include in print check box.
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the CNT02 Element

The CNT02 element contains the Control Value (the total number of line items) for the purchase order. You need to rename the field label on the printout to more clearly identify the contents of the field. The standard allows up to an 18-digit number in this field. You know that your trading partner will order no more than 99,999 (a five-digit number) items so you will change the maximum length to six for this field. You also need to change the value in the Screen Format and EDI Format lists to “N0,” which indicates a number with an implicit decimal point and no decimal places.

Complete the following steps to change the element and field lengths, rename the field label, and change the screen and EDI formats for the Control Value field:

1. Double-click the CNT02 element.

The Field Properties dialog is displayed.

2. In the Max box, type “6” for the maximum number of digits allowed for this element.
3. From the Screen Format list, select “N0.”
4. From the EDI Format list, select “N0.”
5. Click DISPLAY... to access the Display Properties dialog.

6. In the Label box, type “Number of Line Items”.
7. In the Display Length box, type “6” to allow five digits and a place separator on the printout.
8. Click OK to exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

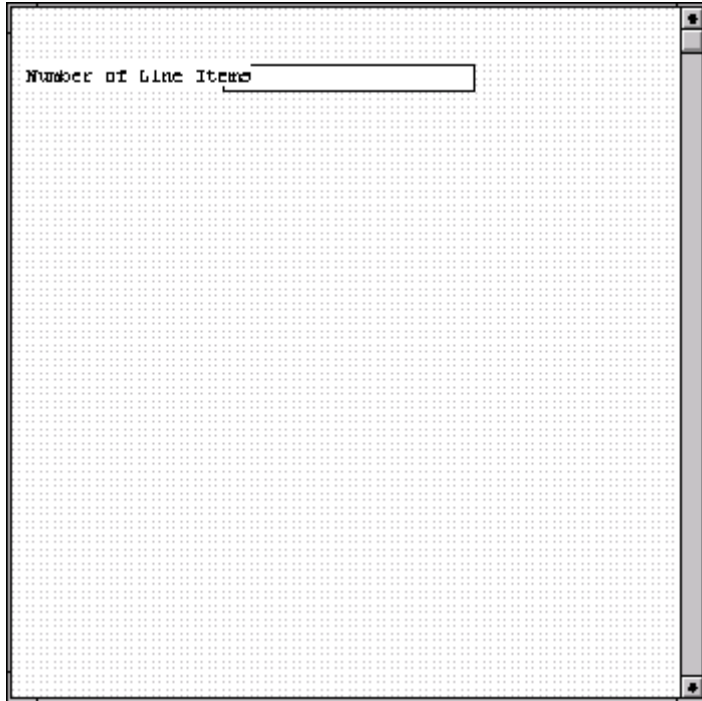
Generating the Layout

Complete the following steps to generate and save your layout.

1. Click Generate Layout on the Main Toolbar.



The Control Total (CNT) frame now should look like this:

A screenshot of a Control Total (CNT) frame. The frame is a large rectangle with a grid background. At the top left, the text "Number of Line Items" is displayed. To the right of this text is a rectangular input field. The frame has a vertical scrollbar on the right side and small arrows at the top and bottom right corners.

2. Click Save from the File menu to save the form.

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

Formatting the Print Form

In the previous section of this tutorial, you customized the print form for an EDIFACT 92.1 purchase order (ORDERS) that you will 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

When a printout is produced based on the customized print form, the information is 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.

Complete the following steps to resize the header frame (containing fields from the BGM, DTM, and FTX segments, and the RFF and PAT groups):

1. Click the BGM segment to display the Beginning of Message (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 to view.



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, 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).



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

You want the form to have a title designating the standard agency (EDIFACT), the version (92.1), the type of message (purchase order), and the trading partner (Pet Zone) for which this form is used. You need to add a title to the print form by adding static text.

Complete the following steps to add and position the title for the form:

1. Select all the fields and field labels on the frame.



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. When you release the mouse button, all the fields and field labels *completely* included within the dragged-across area have handles, indicating that they were selected.

2. Click and drag your selection approximately two or three centimeters lower on the frame to make room at the top of the frame for the title.



3. 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.
4. In the new text box, type “EDIFACT 92.1 Purchase Order”.
5. Click Add Text on the Main Toolbar. Again, text is added to the current frame in the upper left corner.
6. In the new text box, type “Pet Zone”.
The static text you added is displayed in the upper left corner of the frame.

Centering the Text

Complete the following steps to center the static text at the top of the purchase order form:

1. Click and drag the first line of static text (“EDIFACT 92.1 Purchase Order”) so that the text is centered on the first line of the frame.

- Click and drag the second line of static text (“Pet Zone”) so that the text is centered on the second line of the frame.

The header frame now should look like this:

The screenshot shows a form titled "EDIFACT 92.1 Purchase Order" with a sub-header "Pet Zone" centered on the second line. The form contains several input fields with labels to their left: "Order Number:" followed by a single-line text box; "Order Date:" followed by a single-line text box; "Contract No." followed by a single-line text box; and "Order Type:" followed by a single-line text box. There are also two additional empty single-line text boxes below the "Contract No." and "Order Type:" labels. The form has a dotted background and a vertical scrollbar on the right side.

Arranging the Header Fields

By default, each field and its associated label are printed on their own line. 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 BGM, DTM, and FTX segments, and the RFF and PAT groups.

By removing the field label in the Label field of the Display Properties dialog, you prevented some of the field labels from being printed. The fields are displayed on your print form but their associated labels are not printed.



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.

Resizing the Header Fields

When you customized the element properties in the previous section of this chapter, you changed the display lengths (on the Display 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.



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.

Complete the following steps to resize the fields on the header frame:

1. Select all the fields on the header frame (Order Number, Order Date, Free Text, Contract No., Terms of Payment, Order Type, and Payment Terms Type Qualifier).



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. All selected fields are resized to the lengths specified in the Display Length field of the Display Properties dialog for each field.



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.

Moving and Aligning the Header Fields and Field Labels

Complete the following steps to move and align the fields and field labels on the header frame:



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 field(s).

1. Select each field individually and drag it closer to its respective field label. 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. on the horizontal ruler).

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 Free Text field and drag it below the Order Type label and field.
6. Select the Payment Terms Type Qualifier field and drag it below the Free Text field.
7. Select the Terms of Payment field and drag it to the right of the Payment Terms Type Qualifier field.
8. Select the following items:
 - Order Number field label
 - Order Type field label
 - Free Text field
 - Payment Terms Type Qualifier field



To select more than one item on a frame, click the first item, then press CTRL and click the second item.

9. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected labels and fields are aligned.
10. Select the Order Type and Order Number fields (in that order).
11. 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.
12. Select the Order Date and Contract No. field labels.
13. 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.
14. Select the Order Date and Contract No. fields (in that order).
15. 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.
16. Select the Order Number and Order Date labels and fields.

17. 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.
18. Select the Order Type and Contract No. labels and fields.
19. 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.
20. Select the Payment Terms Type Qualifier and Terms of Payment fields.
21. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. The tops of the selected fields are aligned.
22. To resize the frame, click and drag the bottom of the frame to just below the Payment Terms Type Qualifier and Terms of Payment fields.

The header frame now should look like this:

EDIFACT 92.1 Purchase Order
Pet Zone

Order Number: Order Date:

Order Type: Contract No.

Arranging the Name and Address (NAD) Fields

The fields that contain information about the names and addresses (NAD group) for the purchase order are contained on a separate frame than the rest of the header information. When you print the purchase order form, the fields on the Name and Address frame will be printed after the fields on the header frame (the fields in the BGM, DTM, and FTX segments, and the RFF and PAT groups).

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

In arranging the Name and Address (NAD) frame, first you will resize the frame to give it the same width as the header frame, then you will move and resize the fields.

Resizing the Name and Address (NAD) Frame

Complete the following steps to resize the Name and Address (NAD) frame:

1. Click the NAD group to display the Name and Address 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).

Resizing the Name and Address Fields

Complete the following steps to resize the fields on the Name and Address (NAD) frame:

1. Select all the fields on the Name and Address frame (Party Qualifier field, Party Name field, both Street and Number/P.O. Box fields, City Name field, Country Sub-Entity Identification field, and Postcode Identification field).
2. Select Size to Length from the Display menu. All selected fields will be resized to the lengths specified in the Display Length box of the Display Properties dialog for each field.

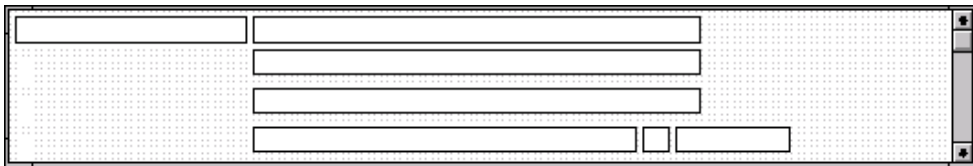
Arranging the Name and Address Fields

Complete the following steps to arrange the fields on the Name and Address frame:

1. Select the Party Qualifier field (3035_DESC) and drag it to the upper left corner on the frame.
2. Select the Party Name field and drag it to the right of the Party Qualifier field (on the same line).
3. Select both Street and Number/P.O. Box fields and drag them below the Party Name field.
4. Select the City Name field and drag it below the second Street and Number/P.O. Box field.
5. Select the Country Sub-Entity Identification field and drag it to the right of the City Name field (on the same line).
6. Select the Postcode Identification field and drag it to the right of the Country Sub-Entity Identification field (on the same line).
7. Select the Party Qualifier and Party Name fields.
8. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. The tops of the selected fields will be aligned.
9. Select the City Name, Country Sub-Entity Identification, and Postcode Identification fields.
10. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. The tops of the selected fields will be aligned.

11. Select the following fields:
 - Party Name
 - Street and Number/P.O. Box (both fields)
 - City Name
12. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected fields will be aligned.
13. To resize the frame, click and drag the bottom of the frame to just below the City Name, Country Sub-Entity Identification, and Postcode Identification fields.

The Name and Address (NAD) frame now should look like this:



Arranging the Line Item (LIN) Fields

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 LIN 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 their associated labels. In case you have forgotten which unlabeled field contains what data, you can click the field. The name of the element will be highlighted in the EDI File Format Window.

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

Resizing the Line Item (LIN) Frame

Complete the following steps to resize the Line Item (LIN) frame:

1. Click the LIN group to display the Line Item 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).

Resizing the Line Item Fields

Complete the following steps to resize the line item fields:

1. Select the following fields:
 - Line
 - Prod ID
 - Unit
 - Qty
 - Requested
 - Ship No
 - Price
2. Select Size to Length from the Display menu. All selected fields are resized to the lengths specified in the Display Length box of the Display Properties 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 consists of one line of text.

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

You will add 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

You need to 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 Line Item (LIN) frame should look like this:

Line No.	Prod ID	Code Type	Qty Ord	Unit	Price Each	Requested Ship Date	Ship No Later
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Complete the following steps to add and position static text:

1. Select all the fields and field labels on the frame. 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 at the top of the frame.



2. Click Add Text on the Main Toolbar.
3. Select the new text box and type “No.” (note the period included in the text). The Text Properties dialog is displayed as you are typing. Click OK to add the text.
4. Click Add Text on the Main Toolbar. Again, text is added to the current frame in the upper left corner.
5. Select the new text box and type “Type”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
6. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
7. Select the new text box and type “Ord”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
8. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
9. Select the new text box and type “Each”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
10. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
11. Select the new text box and type “Ship Date”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
12. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.

13. Select the new text box and type "Later". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
 The column headings (static text) you added are displayed in the upper left corner of the frame.
14. Select all the static text you added and drag it to the bottom of the frame.

**Adding 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 no 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 need to add static text to the form to add the separating lines.

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
-----	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 Line Item (LIN) frame should look like this:

Line No.	Prod ID	Code Type	Qty Ord	Unit	Price Each	Requested Ship Date	Ship No Later
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>							

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

Complete the following steps to add and position separating lines (-----) in the form:



1. Click Add Text on the Main Toolbar.
2. Select the new text box and type "-----" (six hyphens). This series of hyphens forms a separating line between the words Line No. and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
3. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
4. Select the new text box and type "-----" (12 hyphens). This series of hyphens forms a separating line between the words Prod ID and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
5. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
6. Select the new text box and type "----" (four hyphens). This series of hyphens forms a separating line between the words Code Type and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
7. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
8. Select the new text box and type "-----" (eight hyphens). This series of hyphens forms a separating line between the words Qty Ord and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
9. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
10. Select the new text box and type "----" (four hyphens). This series of hyphens forms a separating line between the word Unit and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
11. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
12. Select the new text box and type "-----" (11 hyphens). This series of hyphens forms a separating line between the words Price Each and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.

13. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
14. Select the new text box and type “-----” (10 hyphens). This series of hyphens forms a separating line between the words Requested Ship Date and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
15. Click Add Text on the Main Toolbar and text is added to the current frame in the upper left corner.
16. Select the new text box and type “-----” (ten hyphens). This series of hyphens forms a separating line between the words Ship No Later and the field below. The Text Properties dialog is displayed as you are typing. Click OK to add the text.

The separating lines 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 will give you more room at the top of the frame.

Moving the Line Item Fields, Column Headings, and Separating Lines

The Line Item (LIN) frame now contains all of the fields, column headings, and separating lines that will be arranged on the form to create columns of information. You are ready to move the fields, labels, and static text (column headings, and separating lines) to their proper locations on the frame.

Arranging the Line No. Column

Complete the following steps to arrange the Line No. column on the Line Item (LIN) frame:

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.

Arranging the Prod ID Column

Complete the following steps to arrange the Prod ID column on the Line Item (LIN) frame:

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 (12 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.

Arranging the Code Type Column Complete the following steps to arrange the Code Type column on the Line Item (LIN) frame:

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.

Arranging the Qty Ord Column Complete the following steps to arrange the Qty Ord column on the Line Item (LIN) frame:

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.

Arranging the Unit Column Complete the following steps to arrange the Unit column on the Line Item (LIN) frame:

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.

Arranging the Price Each Column Complete the following steps to arrange the Price Each column on the Line Item (LIN) frame:

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 (11 hyphens) and drag it below the Each static text.
4. Select the Price field and drag it below the separating line you just moved.

Arranging the Requested Ship Date Column

Complete the following steps to arrange the Requested Ship Date column on the Line Item (LIN) frame:

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.

Arranging the Ship No Later Column

Complete the following steps to arrange the Ship No Later column on the Line Item (LIN) frame:

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.

Moving the Item Description Field

The Item Description field will not be placed in a column. Rather, this field will be placed below the other fields on the Line Item (LIN) frame.

To move the Item Description field, click and drag it below the row of fields.

Resizing the Line Item (LIN) Frame

You should resize the Line Item (LIN) frame to eliminate unnecessary space resulting from arranging the fields on the frame.

To resize the frame, click and drag the bottom of the frame to just below the Item Description field.

The Line Item (LIN) frame now should look similar to this:

The screenshot shows a form titled 'Line Item (LIN)' with a dotted background. It contains several fields arranged in a grid-like structure. The fields are: 'Line No.', 'Prod ID', 'Code Type', 'Qty Ord', 'Unit', 'Price Each', 'Requested Ship Date', and 'Ship No later'. Each field is represented by a rectangular box. There are also some dashed lines and a vertical scrollbar on the right side of the form.

Aligning Rows

One of the remaining tasks in formatting the Line Item frame is to align the fields, field labels, and static text. You will first align the items in rows to give the form a consistent appearance. You will align the items in columns later in this tutorial.

Complete the following steps to align the fields, field labels, and static text by row (horizontally):

1. Select the following field labels and static text:
 - Line
 - Code
 - Qty
 - Price
 - Requested
 - Ship No
2. Select Align Controls from the Display menu. Select Top from the Align Controls submenu. The tops of all selected field labels and static text are aligned in a row.
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. Select Top from the Align Controls submenu.

5. Select all the separating lines between column headings and fields.
6. Select Align Controls from the Display menu. Select Top from the Align Controls submenu.
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. Select Top from the Align Controls submenu.

Aligning Columns

You need to align the fields, field labels, and static text in columns to help give the form a consistent appearance.

Complete the following steps to align the fields, field labels, and static text in columns:

1. Select the Line No. column heading, its separating line, the Line No. field, and the Item Description field.
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.
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.
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.

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.
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.
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.
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 Line Item (LIN) frame now should look like this:

Line No.	Prod ID	Code Type	Qty Ord	Unit	Price Each	Requested Ship Date	Ship No Later
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Creating the Line Item Frame Without Column Headings

You have completed formatting the Line Item (LIN) frame so that the line item information is displayed in columns and rows. If you were to register the translation object now and run EDI data through the translation object, then you would see that the column headings are repeated for every line item.

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

You need change the maximum use of the LIN:2 group to 199999. Your partner can send you up to 200,000 line items, so the total maximum use of

both LIN groups does not need to exceed 200000. The LIN group retains its maximum use of one, and the maximum use of the LIN:2 group changes to 199999.

Copying and Pasting the LIN Group

Complete the following steps to copy and paste the LIN group:



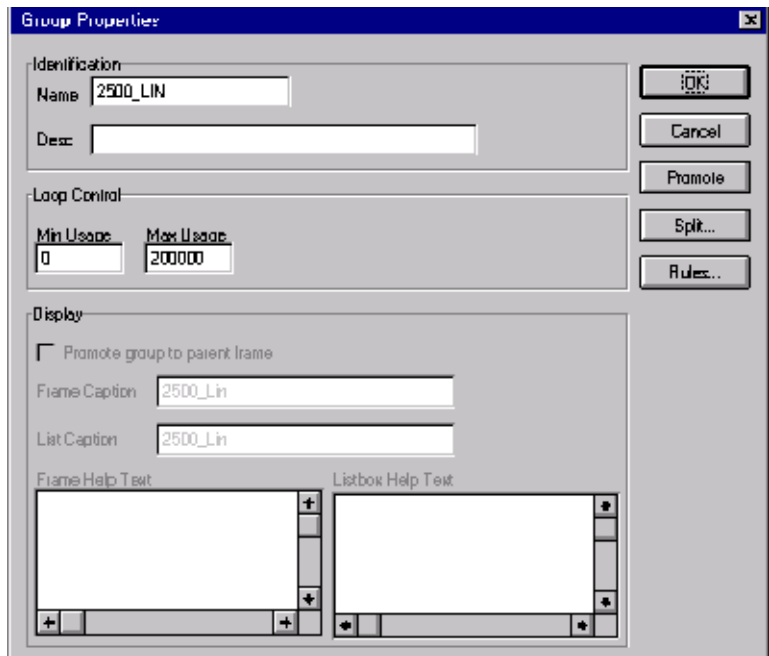
1. Select the LIN group.
2. Click Copy on the Main Toolbar.
3. Select Paste on the Main Toolbar to paste the LIN group after the existing LIN group. Gentran:Director prompts you to specify whether you want the contents of the clipboard pasted as a child (subordinate) of the selected group, or at the 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 LIN group.
5. Click OK to exit the dialog. The pasted group is named LIN:2.

Changing the Maximum Use of the LIN Group

Complete the following steps to change the maximum use of the LIN group:

1. Click the LIN group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



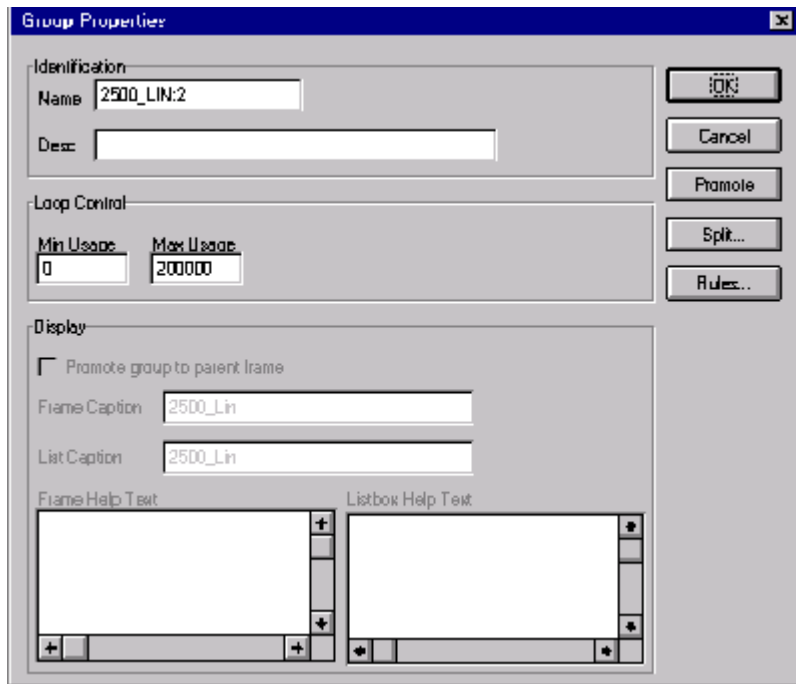
2. In the Max Usage box, type “1”.
3. Click OK to exit the Group Properties dialog.

Changing the Maximum Use of the LIN:2 Group

Complete the following steps to change the maximum use of the LIN:2 group:

1. Click the LIN:2 group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “199999” to indicate that this group can be used up to 199,999 times in each purchase order.
3. Click OK to exit the Group Properties dialog.

Moving the LIN:2 Column Headings Below the Print Area

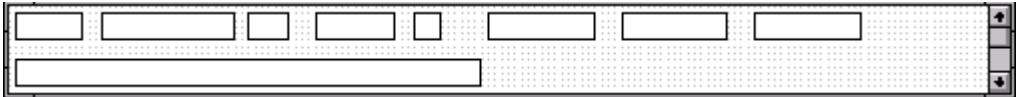
Complete the following steps to move the column headings on the second Line Item (LIN:2) frame below the print area so the headings do not print.

1. Click Generate Layout on the Main Toolbar to refresh the print form display.
2. Select the LIN: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.
4. Select all of the fields on the frame and drag them to the top of the frame.
5. To resize the frame, click and drag the bottom of the frame to just below the Item Description field.

The second Line Item (LIN:2) frame now should look like this:



Arranging the Control Total (CNT) Field

The Number of Line Items field (CNT 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 need to resize the Control Total (CNT) frame to give it the same width as the Header, Name and Address, and Line Item frames.

Resizing the Control Total (CNT) Frame

Complete the following steps to resize the Control Total (CNT) frame:

1. Click the CNT group to display the Control Total 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).

Resizing and Moving the Control Total (CNT) Field

Complete the following steps to resize and move the Number of Line Items field on the Control Total (CNT) frame:

1. Select the Number of Line Items field.
2. Select Size to Length from the Display menu. The Number of Line Items field is resized to the length specified in the Display Length box of the Display Properties dialog.
3. Select the Number of Line Items field label and drag it to the upper left corner on the frame.

4. Select the Number of Line Items field and drag it to the right of its field label.
5. To resize the Control Total (CNT) frame, click and drag the bottom of the frame to just below the Number of Line Items label and field.
6. Select Save from the File menu to save the form.

The Control Total (CNT) frame now should look like this:

The image shows a rectangular frame with a dotted background. On the left side, the text "Number of Line Items" is displayed. To the right of the text is a small, empty rectangular input field. On the far right side of the frame, there are two small, vertically stacked square buttons with arrows, indicating a scrollable area.

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

Finalizing the Form

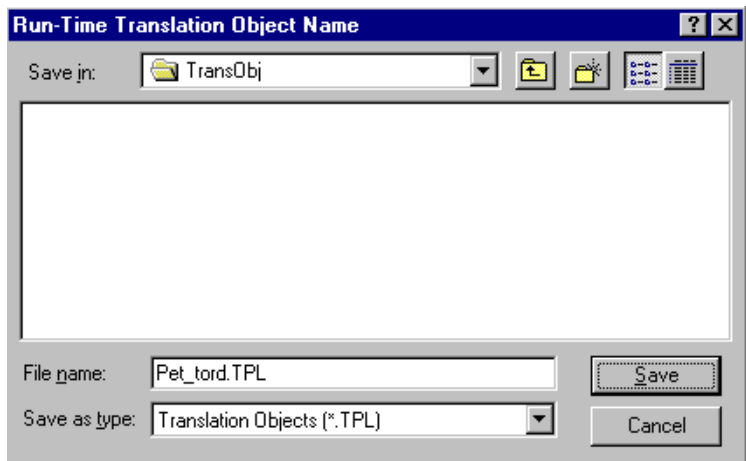
Now that you have created and customized the print form, you are ready to compile the form to generate the translation object (*.TPL) that Gentran:Director uses before you print the report and test the compiled translation object.

Compiling the Form

The Compile function generates a translation object. The form that you created is a *source map*. When that source form is compiled the result is a *compiled translation object*.

After you save the translation object, you must register it with Gentran:Director before you can use it. Complete the following steps to compile the form:

1. Select Compile from the File menu to display the Run-Time Translation Object Name dialog.



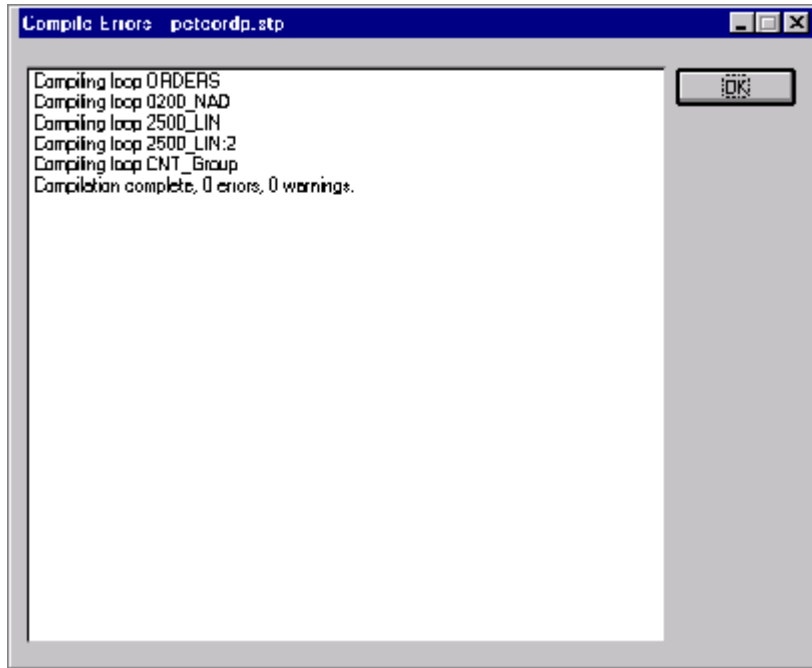
2. Click SAVE to accept the translation object name (peteordp.tpl) in the “File name” box.

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.



Do not to overlay the source form with the compiled translation object. Use the .TPL file extension to distinguish the compiled translation object.

The system compiles the form and generate an error report. The error report is displayed in the Compile Errors dialog.



3. Click OK to exit the Compile Errors dialog.



If the Compile Errors dialog contains errors, you must fix the problem(s) by redoing the appropriate section of the tutorial. Recompile the form after you correct the error(s) and save the form.

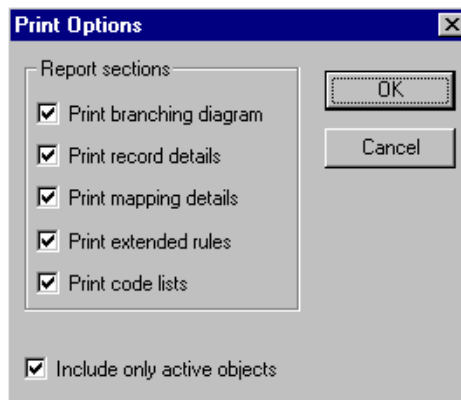
4. Select SAVE from the File menu to save the form.
5. Select Edit/Details to access the Translation Object Details dialog. The date on which you compiled the form is loaded automatically into the Compiled on box.
6. Click CANCEL to exit the dialog.

Printing the Report

The Gentran:Director 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).

Complete the following steps to print the Gentran:Director report:

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 selected), so the report includes all sections and only the activated form components. The Print dialog is displayed.
3. If you need to change the paper size or page layout, click PROPERTIES.
4. Click OK to Print.

Testing the Translation Object

Before you can use the EDIFACT ORDERS 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 will use the PETTSTE2.INT test file.

Following is an overview of the steps required for testing the print translation object you just created:

1. Register the PETEORDP.TPL translation object with Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on registering a translation object.
2. Import the PETZONE2.PAR partner relationship into Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on importing a partner.

The default path for the partner is:

```
C:\Program Files\Sterling Commerce\GENTRAN Director\
TUTORIAL\PETZONE2.PAR
```

3. Verify (in Partner Editor) that the ORDERS Pet Zone print translation object is selected for the Inbound Relationship. Please see the Gentran:Director *User's Guide* for more information on selecting inbound translation objects.
4. Use the Process File option in Gentran:Director to process the data file (PETTSTE2.INT) through the translation object. The data file is located in the TUTORIAL subfolder under the folder where Gentran:Director is installed.

The default path for the data file is:

```
C:\Program Files\Sterling Commerce\GENTRAN Director\
TUTORIAL\PETTSTE2.INT
```

5. After the message is translated, it is located in the In Documents in Gentran:Director. Print the message to ensure that the message was translated correctly and that the printout looks the way you want it to look. Please see the Gentran:Director *User's Guide* for more information on printing messages.

Creating a Screen Entry Form

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 message.

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

Getting Started

This tutorial explains how to customize and format a form before it is compiled into a translation object. The form that you create 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:Director to be able to use the translation object (to enter EDI data in messages of that type).

Gentran:Director generates a basic form based on the following criteria that you specify:

- Type of form (screen entry or print)
- Standard agency (e.g., EDIFACT, ANSI X12)
- Standard version (e.g., 92.1, 003040)
- Message type (e.g., INVOIC, 810 Invoice)

All mandatory groups, segments, composites, and elements for the standard, version, and message you specify are available for use (activated) when Gentran:Director creates a form. Only these mandatory form components (groups, segments, composites, 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 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 use the screen entry translation objects to enter EDI data)
- Your trading partners (the organizations receiving the EDI data that your users enter in the screen entry translation object)

You can create a different screen entry form for each combination of message, trading partner, and standard version. The number of screen entry forms that you create is not limited and does not affect the number of print forms you create.

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 consider the people who use the translation object. Make sure that the form makes sense to the people who use 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.

There are four phases in designing a form. These phases generally are completed in the order in which they are listed below, although the form design process is an iterative one (and the phases may overlap). 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 return to one or more of the phases several times before the form is completed.

1. Designing and creating the form
2. Customizing the form components
3. Formatting the form
4. Finalizing the translation object

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 will 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

You will create a screen entry form for the INVOIC message (invoice), using the EDIFACT 92.1 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. 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 will create a form that your data entry users will use to enter EDI data for the invoice that you will send to Pet Zone. From discussions with Pet Zone, you know the requirements for the invoices that they receive from you.

Form Analysis

The first step in creating a form is to analyze your form requirements. If the analysis you perform is complete, you will 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 will be a much longer and more 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 EDIFACT INVOIC message requires several steps. Some steps are performed at the message 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 will send 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.

Analyzing the EDI File

To analyze the EDI file, you must first 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 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 message you will use. In this tutorial, you are using an EDIFACT version 92.1 INVOIC invoice. It is important to know the format of the information your partner expects you to send in the invoice and what type of data will be contained in each element.

After discussing with your partner what you will send, determining which segments and elements your partner requires, and reviewing the EDI standard, you can list the items that you need to use.

For an EDIFACT invoice (INVOIC), the following groups, segments, composites, and elements have been defined as mandatory by the standards committee. These components are activated automatically when you create a new form.

Group	Segment	Composite	Element	Description
	BGM			Beginning of Message
	DTM			Date/Time/Period
		C507		
			DTM01	Date/Time/Period Qualifier
	UNS			Section Control
			UNS01	Section Identification
MOA				Monetary Amount

For this tutorial, the form components that are required (need to be activated) and are not mandatory for the standard are the following:

Element	Description	Data Type	Length	Constant, Code Value, or Format to Be Assigned
Beginning of Message (BGM Segment) (Already Activated)				
BGM05	Document/Message Number	String	35	
Date/Time/Period (DTM Segment) (Already Activated)				
DTM01	Date/Time/Period Qualifier	String	3	3 (Invoice Date/Time)
DTM02	Date/Time/Period	String	35	
Reference (RFF Group)				
Reference (RFF Segment in RFF Group)				
RFF01	Reference Qualifier	String	3	CT (Contract Number) ON (Order Number (Purchase))
RFF02	Reference Number	String	35	
Date/Time/Period (DTM:2 Segment in RFF Group)				
DTM:201	Date/Time/Period Qualifier	String	3	92 (Contract Effective Date) 4 (Order Date/Time)
DTM:202	Date/Time/Period	String	35	

Element	Description	Data Type	Length	Constant, Code Value, or Format to Be Assigned
Name and Address (NAD Group)				
Name and Address (NAD Segment in NAD Group)				
NAD01	Party Qualifier	String	3	ST (Ship To) RE (Party To Receive Commercial Invoice Remittance)
NAD10	Party Name	String	35	
NAD16	Street and Number/P.O. Box	String	35	
NAD17	Street and Number/P.O. Box	String	35	
NAD19	City Name	String	35	
NAD20	Country Sub-Entity Identification	String	9	
NAD21	Postcode Identification	String	9	
Payment Terms (PAT Group)				
Payment Terms Basis (PAT Segment in PAT Group)				
PAT01	Payment Terms Type Qualifier	String	3	Any valid code
Line Item (LIN Group)				
Line Item (LIN Segment in LIN Group)				
LIN01	Line Item Number	Number	6	
Additional Product ID (PIA Segment in LIN Group)				
PIA01	Product ID Function Qualifier	String	3	5 (Product Identification)
PIA02	Item Number	String	35	
PIA03	Item Number Type, Coded	String	3	UP (UPC (Universal Product Code))
Item Description (IMD:2 Segment in LIN Group)				
IMD:201	Item Description Type, Coded	String	3	F (Free Form)
IMD:206	Item Description	String	35	
Measurements (MEA:2 Segment in LIN Group)				
MEA:201	Measurement Application Qualifier	String	3	AAE (Measurement)
MEA:202	Measurement Dimension, Coded	String	3	

Element	Description	Data Type	Length	Constant, Code Value, or Format to Be Assigned
Quantity (QTY:2 Segment in LIN Group)				
QTY:201	Quantity Qualifier	String	3	47 (Invoiced Quantity)
QTY:202	Quantity	Number	15	Format = R0
Date/Time/Period (DTM:11 Segment in LIN Group)				
DTM:1101	Date/Time/Period Qualifier	String	3	186 (Departure Date/ Time, Actual)
DTM:1102	Date/Time/Period	String	35	
Monetary Amount (MOA Group in LIN Group)				
Monetary Amount (MOA:5 Segment in MOA Group in LIN Group)				
MOA:501	Monetary Amount Type Qualifier	String	3	146 (Unit Price)
MOA:502	Monetary Amount	Number	18	Format = R2
Details of Transport (TDT Group in LIN Group)				
Details of Transport (TDT:2 Segment in TDT Group in LIN Group)				
TDT:201	Transport Stage Qualifier	String	3	20 (Main-Carriage Transport)
TDT:205	Type of Means of Transport Identification	String	8	Any valid code
TDT:207	Carrier Identification	String	17	
Section Control (UNS Segment)				
UNS01	Section Identification	String	1	S (Summary)
Control Total (CNT Segment)				
CNT01	Control Qualifier	String	3	2 (Number of Line Items)
CNT02	Control Value	Number	8	Format = N0
Monetary Amount (MOA Group) (Already Activated)				
Monetary Amount (MOA:10 Segment in MOA Group)				
MOA:1001	Monetary Amount Type Qualifier	String	3	77 (Invoice Amount)
MOA:1002	Monetary Amount	Number	18	Format = R2



When you activate a conditional group, segment, or composite, the mandatory subordinate segments,

composites, and elements are activated automatically. A conditional group, segment, or composite is used only if there is EDI data available for an element contained in it.

Segment Analysis

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

- Will the segment have a maximum use greater than one?
- What composites and elements need to be activated for the segment?

A *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.

A *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.

A *composite* 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).

A segment's *maximum use* refers to the number of times it 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. You must determine how many times a segment is used based on what you send your trading partner.

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 send Pet Zone for each segment.

Genran:Director generates a form based on the groups, segments, composites, 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. You need to customize the form components to produce a form that is easy to use to enter data in a logical manner.

The following table lists the customizing tasks described in this tutorial.

Form Component	Description	Customizing Needed
BGM05 element	Document/Message Number	You will set up the document name (which enables you to differentiate between messages in the document browsers in Gentran:Director) in this element. Also, your users will enter no longer than an eight-character string in this element, so you will change the maximum length for this element to eight. In addition, you will change the field label to "Invoice No.," which better describes the data your users will enter.
DTM segment	Date/Time/Period	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one.
DTM01 element	Date/Time/Period Qualifier	Your users will enter only the invoice date in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the invoice date. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
DTM02 element	Date/Time/Period	Your users will enter a string no longer than eight characters in this element, so you will change the maximum length for this element to eight. Also, you will change the field label to "Invoice Date."
RFF group	Reference	You and your trading partner will use this group only once, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame. Also, you need two iterations of this group: one for the contract number, and one for the purchase order number. You will copy this segment so that you will have the two iterations of this group you need.
RFF01 element	Reference Qualifier	Your users will enter only the contract number in this segment, so you do not need to load the entire code list table. You will define a constant value in this field for the contract number. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically. You will perform the same task (with a different constant value) for the Reference Qualifier field in the new RFF group that you created by copying the original RFF group.

Form Component	Description	Customizing Needed
RFF02 element	Reference Number	Your users will enter a string no longer than ten characters in this element, so you will change the maximum length for this element to ten. Also, you will change the field label to "P.O. No." ("Contract No." for the Reference Number field in the second iteration of the RFF segment).
DTM:2 segment	Date/Time/Period	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one
DTM:201 element	Date/Time/Period Qualifier	Your users will enter only the contract date in this segment, so you do not need to load the entire code list table. You will define a constant value in this field for the contract date. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically. You will perform the same task (with a different constant value) for the Date/Time/Period Qualifier field in the new RFF group that you created by copying the original RFF group.
DTM:202 element	Date/Time/Period	Your users will enter a string no longer than eight characters in this element, so you will change the maximum length for this element to eight. Also, you will change the field label to "P.O. Date" ("Contract Date" for the Date/Time/Period field in the second iteration of the RFF segment).
NAD group	Name and Address	You and your trading partner have decided to use this group only once, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame. Also, you need two iterations of this group: one for the Ship To name and address, and one for the Remit To name and address. You will copy this segment so that you will have the two iterations of this group you need.
NAD01 element	Party Qualifier	Your users will enter only the Ship To name and address in this group, so you do not need to load the entire code list table. You will define a constant value in this element for the contract number. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically. You will perform the same task (with a different constant value) for the Party Qualifier field in the new NAD group that you created by copying the original NAD group.
NAD10 element	Party Name	You will change the field label for this element to "Ship To" ("Remit To" for the Party Name field in the new NAD group).
NAD16 element	Street and Number/ P.O. Box	The data in this element will be self-explanatory, so you will remove the label from this field.

Form Component	Description	Customizing Needed
NAD17 element	Street and Number/ P.O. Box	The data in this element will be self-explanatory, so you will remove the label from this field.
NAD19 element	City Name	The data in this element will be self-explanatory, so you will remove the label from this field. Also, your users will enter no longer than a thirty-character string in this element, so you will change the maximum length for this element to thirty.
NAD20 element	Country Sub-Entity Identification	The data in this element will be self-explanatory, so you will remove the label from this field. Also, your users will enter no longer than a two-character string in this element, so you will change the maximum length for this element to two.
NAD21 element	Postcode Identification	The data in this element will be self-explanatory, so you will remove the label from this field.
PAT group	Payment Terms	You and your trading partner will use this group only once, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame.
PAT01 element	Payment Terms Type Qualifier	Your users can enter any of the payment terms type codes that the standard designates as valid codes. You will load the entire code list for this element, which will create a list containing valid codes from which users can select. Also, you will change the field label to "Payment Terms Code."
LIN group	Line Item	You will add the more descriptive title "Line Items" to the group description to label the fields contained on the LIN frame.
LIN01 element	Line Item Number	You will use an accumulator for this element to count line items in the invoice. This accumulator will be used in the Control Value field (CNT02) to calculate the total number of line items in the invoice. You will instruct the system to display the value in this field in the first column in the Line Items list on the Invoice Message frame. Also, the line item number will be no longer than five digits, so you will change the maximum length for this element to five. In addition, you will change the field label to "Item No."
PIA segment in the LIN group	Additional Product ID	You and your trading partner will use this segment only once per line item, so you will change the maximum use of this segment to one.

Form Component	Description	Customizing Needed
PIA01 element	Product ID Function Qualifier	Your users will enter only the item number in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the item number. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
PIA02 element	Item Number	Your users will enter a string no longer than ten characters in this segment, so you will change the maximum length for this element to ten. Also, you will change the field name to "Product Code." In addition, you will instruct the system to display the value in this field in the second column in the Line Items list on the Invoice Message frame.
PIA03 element	Item Number Type, Coded	Your users will enter only the product identification in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the product identification. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically. Also, the constant you defined for this element is only two characters long, so you will change the maximum length of this element to two.
IMD:2 segment in the LIN group	Item Description	You and your trading partner have decided to use this segment only once per line item, so you will change the maximum use of this segment to one.
IMD:201 element	Item Description Type, Coded	Your users will enter only the free-form description in this segment, so you do not need to load the entire code list table. You will define a constant value in this field for the free-form description. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
MEA:2 segment in the LIN group	Measurements	You and your trading partner have decided to use this segment only once per line item, so you will change the maximum use of this segment to one.
MEA:201 element	Measurement Application Qualifier	Your users will enter only the measurement dimension in this element, so you do not need to load the entire code list table. You will define a constant value in this element for the measurement dimension. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.

Form Component	Description	Customizing Needed
MEA:202 element	Measurement Dimension, Coded	Your users can enter any of the measurement dimension codes that the standard designates as valid codes. You will load the entire code list for this element, which will create a list containing valid codes from which users can select. Also, you will change the field label to "UOM" (indicating "Unit of Measure").
QTY:2 segment in the LIN group	Quantity	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one.
QTY:201 element	Quantity Qualifier	Your users will enter only the invoiced quantity in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the invoiced quantity. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
QTY:202 element	Quantity	You will use an accumulator for this element to generate a running total of the invoice amount. This accumulator will be used in the Monetary Amount field (MOA:1002) to identify the total dollar amount invoiced. You will instruct the system to display the value in this field in the third column in the Line Items list on the Invoice Message frame. Also, your users will enter a number no longer than five digits in this element, so you will change the maximum length for this element to five. In addition, Your users will not use decimal places for the data in this field, so you will format the data with an explicit decimal point and no decimal places.
DTM:11 segment in the LIN group	Date/Time/Period	You and your trading partner will use this segment only once per line item, so you will change the maximum use of this segment to one.
DTM:1101 element	Date/Time/Period Qualifier	Your users will enter only the actual departure date in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the actual departure date. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
DTM:1102 element	Date/Time/Period	Your users will enter a string no longer than eight characters in this element, so you will change the maximum length for this element to eight. Also, you will change the field label to "Date Shipped."
MOA group in the LIN group	Monetary Amount	You and your trading partner will use this group only once per line item, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame.

Form Component	Description	Customizing Needed
MOA:501 element	Monetary Amount Type Qualifier	Your users will enter only the unit price in this segment, so you do not need to load the entire code list table. You will define a constant value in this element for the unit price. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
MOA:502 element	Monetary Amount	You will use an accumulator for this element to generate the total dollar amount of the invoice amount. This accumulator will be used in the Monetary Amount field (MOA:1002) to identify the total dollar amount invoiced. You will instruct the system to display the value in this field in the fourth column in the Line Items list on the Invoice Message frame. Also, your users will enter a number no longer than eight digits in this element, so you will change the maximum length for this element to eight. In addition, your users will enter prices with two decimal points in this field, so you will format the data with an explicit decimal point and two decimal places. Finally, you will change the field label to "Price."
TDT group in the LIN group	Details of Transport	You and your trading partner have decided to use this group only once per line item, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame.
TDT:201 element	Transport Stage Qualifier	Your users will enter only the main-carriage transport in this segment, so you do not need to load the entire code list table. You will define a constant value in this field for the transport stage. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
TDT:205 element	Type of Means of Transport Identification	Your users can enter any of the type of means of transport identification codes that the standard designates as valid codes. You will load the entire code list for this element, which will create a list containing valid codes from which users can select. Also, you will change the field label to "Transport Method." In addition, your users will enter a string no longer than two characters in this element, so you will change the maximum length for this element to two.
TDT:207 element	Carrier Identification	Your users will enter a string no longer than twelve characters in this element, so you will change the maximum length for this element to twelve. Also, you will change the field name to "Carrier Code."

Form Component	Description	Customizing Needed
UNS01 element	Section Identification	The only type of section identification used in this segment is summary, so you do not need to load the entire code list table. You will define a constant value in this element for the summary. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
CNT segment	Control Total	You and your trading partner have decided to use this segment only once, so you will change the maximum use of this segment to one.
CNT01 element	Control Qualifier	The only type of control used in this segment is the number of line items, so you do not need to load the entire code list table. You will define a constant value in this element for the number of line items. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
CNT02 element	Control Value	You will use an accumulator for this element to generate a total of the number of line items in the invoice. You will make this field display-only, so that users cannot change the value in this field. Also, the total in this field will be no longer than a six-character string, so you will change the maximum length for this element to six. You will change the field label to "Number of Line Items." In addition, the value in this field always will be a whole number, so you will format the data with an explicit decimal point and no decimal places.
MOA group	Monetary Amount	You and your partner will use this group only once, so you will change the maximum use of this group to one. You will promote this group so that the fields in this group are placed on the main Invoice Message frame.
MOA:1001 element	Monetary Amount Type Qualifier	The only type of monetary amount used in this segment is the invoice amount, so you do not need to load the entire code list table. You will define a constant value in this field for the invoice amount. Then, you will prevent this field from being displayed in the screen entry form, because the value for this field will be entered automatically.
MOA:1002 element	Monetary Amount	You will use an accumulator for this element to generate a running total of price (the quantity invoiced for each line item multiplied by the unit price). You will make this field display-only, so that users cannot change the value in this field. Also, the total in this field will be no longer than a ten-character string, so you will change the maximum length for this element to ten. You will change the field label to "Total Invoice Amount." Finally, the value in this field will be a price with two decimal places, so you will format the data with an explicit decimal point and two decimal places.

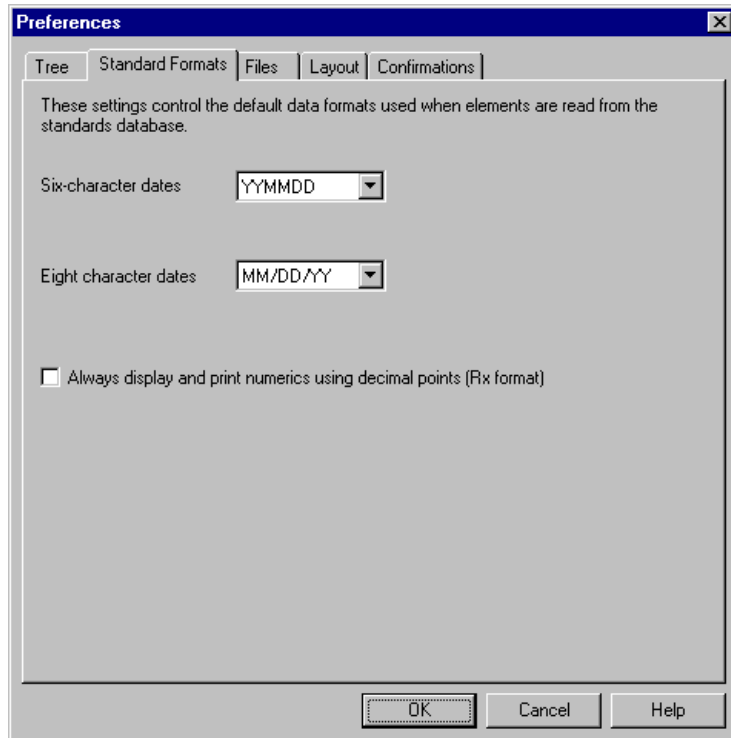
Verifying the Global EDI Date Formats

Gentran:Director 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:Director. You can override the default date formats for an individual element on the Field Properties dialog for that element.

You must verify the global date formats the first time you use Gentran:Director. You can change the default date formats if they do not match the formats you intend to use.

Complete the following steps to verify the global EDI date formats:

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:Director.
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.



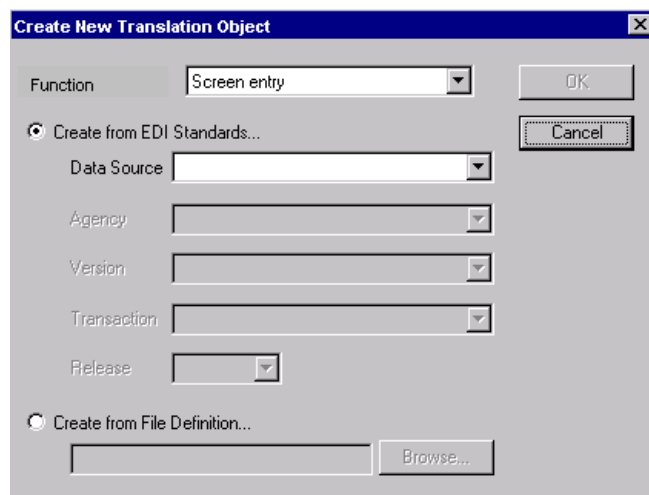
To change the order in which the date formats appear in the “Six-character dates” and “Eight character dates” lists or to add a new date format to the lists, select Date Formats... from the Options menu.

Creating the New Form

The first task in creating a new form is to define the type of form and EDI standard, version, and message. 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 Document Editor. Instead of defining the INVOIC (invoice) message to the system yourself, you want Gentran:Director to use the standards database on your system to build the invoice according to the EDIFACT 92.1 standard.

Complete the following steps to create the new screen entry form:

1. Select New from the File menu to display the Create New Translation Object dialog.

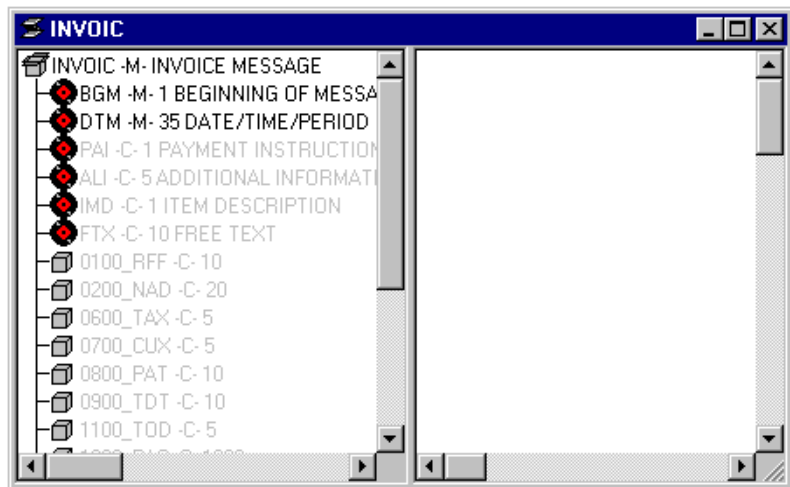


2. From the Translation Object Function list, accept the default value “Screen entry” to indicate that the translation object you are creating is a screen entry translation object.
3. Since you want to use the EDI Standards database, verify that the “Create from EDI Standards...” option is selected.
4. From the Data Source list, select the ODBC data source that you wish to use.
5. From the Agency list, select “[E] Edifact,” which is the EDI standard you will use for this translation object.
6. From the Version list, select “[092001] EDIFACT 1992 RELEASE 1,” which is the version of the standard you will use for this translation object. The versions that are available depend on which standard you

selected. The EDIFACT standard version 92.1 is listed as version 092001 in the Gentran:Director standards files.

- From the Transaction list, select “[INVOIC] INVOICE MESSAGE,” which is the transaction set (message) you will use for this translation object. The documents that are available depend on which standard and version you selected.
- Click OK to create the EDI file. This may take a few seconds.

The form is displayed.



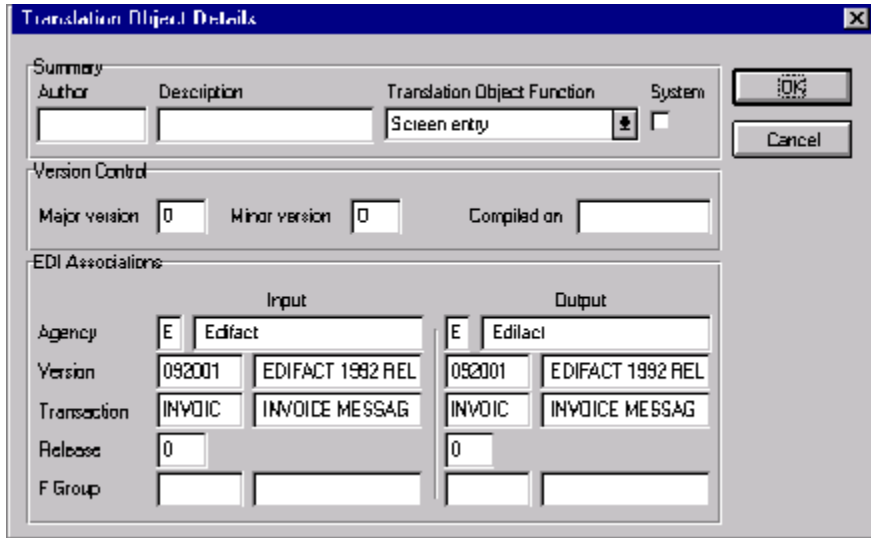
After you create a new form, it is important to define the details of the form and save it. The Save function writes (saves) the currently selected form to disk.



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.

- Select Save from the File menu.

The Translation Object Details dialog is displayed.



If you have performed any function that invalidates the current format of the translation object, the Save function is unavailable (dimmed) until you regenerate the layout (click Generate Layout on the Main Toolbar).

10. In the Author box, type your name. This box usually contains the name of the person who created the form.
11. In the Description box, type “Screen INVOIC 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:Director. In our example, the description indicates an EDIFACT 92.1 Invoice (INVOIC) for partner Pet Zone.
12. Verify that “Screen entry” is selected from the Translation Object Function list.
13. In the Major version box, type “1” to designate the version number for this translation object.
14. In the Minor version box, accept the default value “0” that designates the release number for this translation object.



When you make a major change to this form, increase the version to the next higher sequential number (for example, 2.0). If you make a minor change to the form,

increase the release to the next higher sequential number (for example, 2.1).

15. 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.



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.

16. Click OK to save the translation object details and access the Save As dialog.
17. Verify that the “Save in” list reflects the drive\folder where Gentran:Director is installed. The default is GENSRVNT\Forms.
18. In the “File name” field, type “peteinvs.stp” to replace the default file name. The file name must be unique. In our example, the name indicates an EDIFACT invoice message (INVOIC) for partner Pet Zone.

The default file extension for forms is .STP. The naming conventions in the Gentran:Director Forms Integration subsystem are as follows:

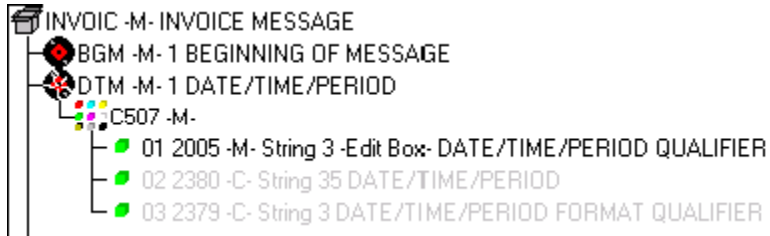
- The source form (form created in Gentran:Director) should be named using the file extension **.STP** (e.g., PETEINVS.STP).
- The compiled translation object (translation object that is the result of compiling the source form) should be named using the same file name that was allocated to the source form, but with the file extension **.TPL** (e.g., PETEINVS.TPL).

19. Click SAVE to save the form.

Activating Groups, Segments, Composites, and Elements

When Gentran:Director generates the form, it includes all groups, segments, composites, and elements that are defined by the standard agency (EDIFACT) for the version (92.1) of the message (INVOIC) you selected. 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, and elements.

In the example below, the INVOIC file icon, BGM and DTM segments, C507 composite, and DTM01 element are mandatory for the invoice. You do not need to activate these components. The DTM02 and DTM03 elements are not mandatory, so they are dimmed on the form.



To view the segments, composites, and elements in a group, segment, or composite 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, composites, and elements that are not activated. *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 the form.

Complete the following steps to activate the required groups, segments, composites, and elements:



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.

1. Double-click the groups, segments, and composites listed in the table below to open them. This table lists all the groups, segments, composites, and elements that you need to activate. Opening all the necessary groups, segments, and composites before you start to activate enables you to scroll down the form and activate the segments, composites, and elements sequentially.

Group	Group	Segment	Composite	Element
		BGM (already activated)		BGM05
		DTM (already activated)	C507 (already activated)	DTM02

Group	Group	Segment	Composite	Element	
RFF		RFF	C506 (mandatory for RFF)	RFF02	
		DTM:2	C507 (mandatory for DTM:2)	DTM:202	
NAD		NAD	C080		
			C059	NAD17	
				NAD19	
				NAD20	
				NAD21	
PAT		PAT			
LIN		LIN		LIN01	
		PIA	C212 (mandatory for PIA)	PIA02	
				PIA03	
		IMD:2		IMD:201	
				C273	IMD:206
		MEA:2	C502	MEA:202	
		QTY:2			
		DTM:11	C507 (mandatory for DTM:11)	DTM:1102	
		MOA	MOA:5	C516 (mandatory for MOA:5)	MOA:502
		TDT	TDT:2	C228	TDT:205
C040	TDT:207				
		CNT			
	MOA (already activated)	MOA:10	C516 (mandatory for MOA:10)	MOA:1002	



When you activate a conditional group, segment, or composite, the mandatory subordinate segments, composites, and elements are activated automatically.



2. Click Activate on the Main Toolbar.

3. Click each inactive **group** that you need to use. This activates the groups.



If you click a group, segment, element, or composite that you did not mean to activate, click the group 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. This activates the segments.
5. Click each inactive **composite** that you need to use. This activates the composites.
6. Click each inactive **element** that you need to use. This 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.



7. Click Activate on the Main Toolbar to turn activation mode off.
8. To hide the groups, segments, and elements that you are not using, select Show Active Only from the View menu.

Adding Frame Help Text

You need to add frame Help text so that your end users can access online Help for the Invoice Details frame.

Complete the following steps to add frame Help text:

1. Click the INVOIC file icon with the right mouse button and select Properties... from the shortcut menu.

The File Format Properties dialog is displayed.

2. In the Frame Help Text box, type the following text (press **ENTER** at the end of each line of text below):
 “This frame contains header information
 pertaining to the entire invoice message
 (INVOIC). For online Help on an individual
 field on this frame, select the field and press F1.”



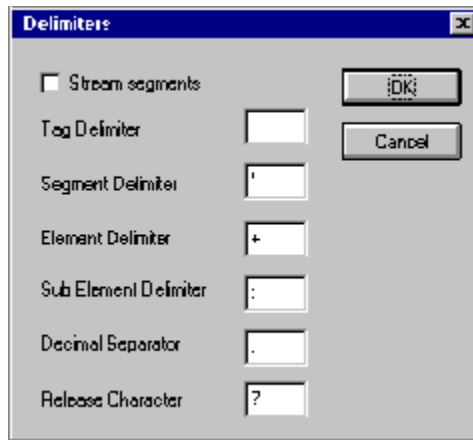
Pressing ENTER creates line breaks for the online Help that the screen entry translation object users in Gentran:Director view when they press F1. If you do not create line breaks, the online Help will be displayed on one line of text in the online Help pop-up window, and text that extends beyond the width of the user’s monitor will not be 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.

Setting EDI Delimiters

You are using an EDI standard that contains composite elements or subelements, so you must define the EDI delimiters. Delimiters are flags that separate 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.

1. Click DELIMITERS... to access the Delimiters dialog.



2. Verify that the correct delimiters are being used for the EDIFACT 92.1 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 EDIFACT are the following (the tag delimiter is not used for EDIFACT):

Field	EDIFACT Default Character	EDIFACT Default Hex Value
Tag Delimiter		
Segment Delimiter	' (apostrophe)	0x27
Element Delimiter	+ (plus sign)	0x2B
Sub Element Delimiter	: (colon)	0x3A
Decimal Separator	. (period)	0x2E
Release Character	? (question mark)	0x3F



If you use the default hex value, the value *must* begin with “0x” (the number zero and the letter “x”).



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.

3. Click OK to save the delimiters and exit the Delimiters dialog.
4. Click CLOSE to exit the File Format Properties dialog.

Promoting, Splitting, and Changing the Maximum Use of Segments and Groups

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.

The Split function enables you to split (break) a group or repeating segment into two loops. This function is useful when you need more than one instance of the same form component that occurs multiple times. When you split a group, the Promote flag is not set. If you want the split group to be displayed on the parent frame, you must set the Promote flag after you split the group.

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.

You must promote, split, and 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 promote, split, and change the maximum use of the groups and segments *after* you generate the form, the fields will be placed on several more frames than will be present ultimately in the form. Changing the group and segment properties before you first generate the form enables the fields to be placed on as few frames as necessary.

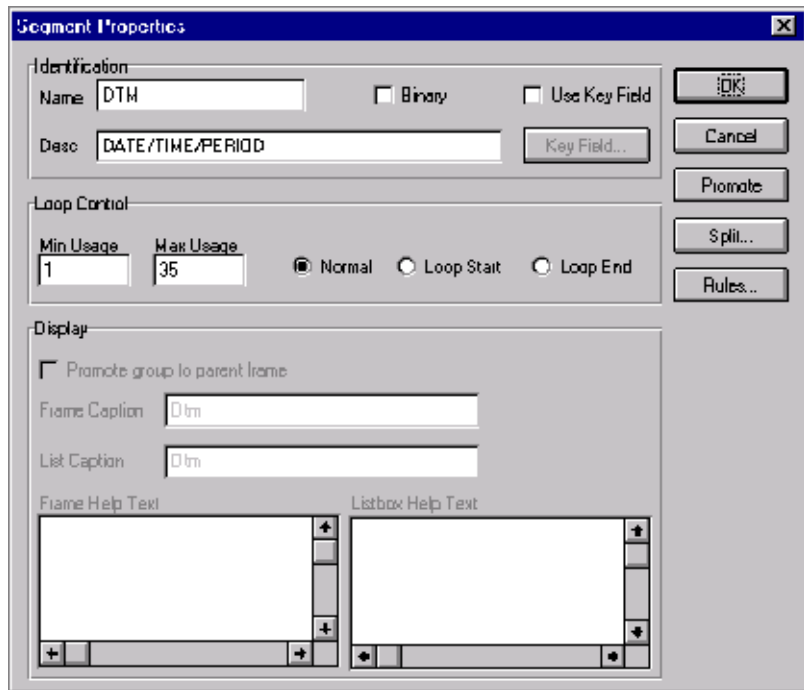
Changing the Maximum Use of the DTM Segment

The DTM segment contains the Date/Time Reference Numbers for the invoice. The DTM segment is used for the invoice date associated with the invoice number (in the BGM segment). The standard allows the DTM segment to be used up to 35 times in one invoice. You will use the DTM segment only once (for the invoice date). You will change the maximum use of the DTM segment to one, which will place the associated fields on the main Invoice Message frame with the majority of the invoice fields.

Complete the following steps to change the maximum use of the DTM segment:

1. Click the DTM segment with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



3. In the Max Usage box, type “1” to designate that this segment can be used only once per invoice.
4. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the DTM:2 Segment

The DTM:2 segment (in the RFF group) contains the Date/Time Reference information for the reference. In this tutorial, the DTM:2 segment is used for the purchase order date associated with the purchase order number (in the RFF segment). The standard allows the DTM:2 segment to be used up to five times each time the RFF group is used. You need use the DTM:2 segment once (for the purchase order date). You will change the maximum use of the DTM:2 segment to one, which will place the associated fields on the main Invoice Message frame with the majority of the invoice fields.

Complete the following steps to change the maximum use of the DTM:2 segment:

1. Click the DTM:2 segment (in the RFF group) with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Max Usage box, type "1".
3. Click OK to exit the Segment Properties dialog.

Splitting the RFF Group

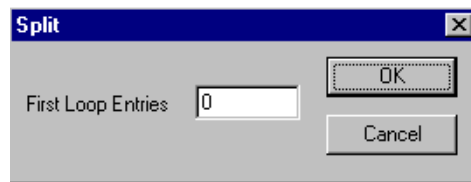
The standard allows the RFF group (Reference) to be used up to 10 times in one invoice. If the invoice were generated now, the fields associated with the RFF group would be displayed on a separate frame than the majority of the invoice fields. You need two iterations of the RFF group, each with a maximum use of one. You will enter the purchase order number and date in the first RFF group and the contract number and date in the second RFF group.

You need to split the RFF group to obtain a second iteration of the RFF group (the new RFF group will be named RFF:2), then you need to change the maximum use of the original group (RFF).

Splitting the RFF Group Complete the following steps to split the RFF group:

1. Click the RFF group with the right mouse button and select Split... from the shortcut menu.

The Split dialog is displayed.



2. In the First Loop Entries box, type “1” to indicate that you want the RFF group to be split after the first iteration. The resulting split will generate one RFF group (RFF:2) that has a maximum use of one, and will retain the original RFF group (with a maximum use of nine).
3. Click OK to exit the Split dialog.

Promoting the RFF:2 Group to the Parent Frame Complete the following steps to promote the RFF:2 group to the parent frame:

1. Click the RFF:2 group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.

2. Select the Promote group to parent frame check box to display the fields in this group on the same frame as the fields in the parent group.



Although this group has a maximum use of one, if you 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.

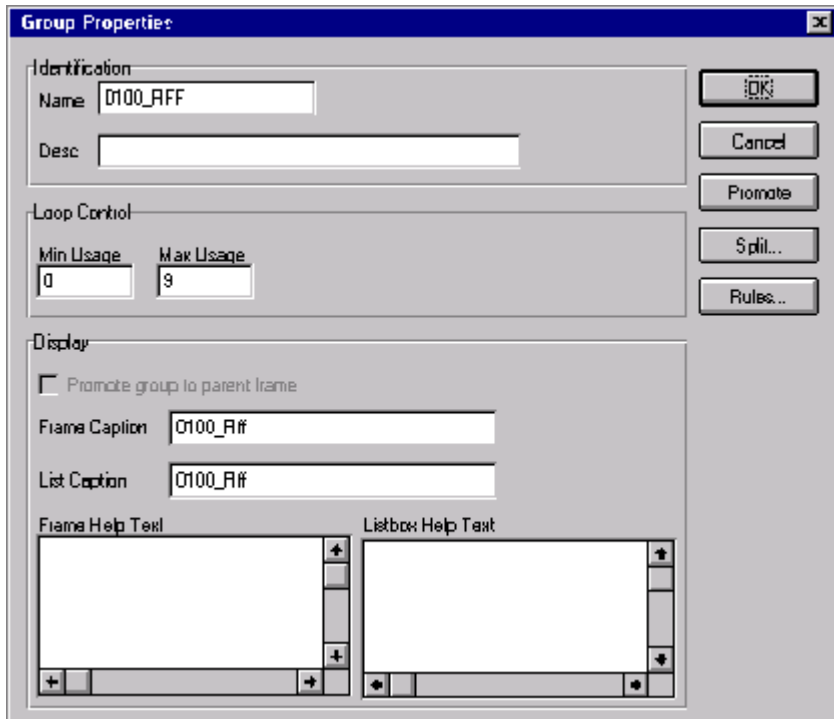
3. Click OK to exit the Group Properties dialog.

Changing the Maximum Use of the RFF Group

Complete the following steps to change the maximum use of the RFF group:

1. Click the RFF group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type "1" to designate that this group can be used only once per invoice.
3. Select the Promote group to parent frame check box to display the fields in this group on the same frame as the fields in the parent group.



If you change the maximum usage of this group, but do not select the Promote group to parent frame check box, then the fields in this group will *not* be displayed on the same frame in the Layout Window as the fields in the parent group.

4. Click OK to exit the Group Properties dialog.

Copying and Changing the Maximum Use of the NAD Group

The standard allows the NAD group (Name and Address) to be used up to 20 times in one invoice. If the invoice were generated now, the fields associated with the NAD group would be displayed on a separate frame than the majority of the invoice fields. You know that your users complete the fields in this iteration of the NAD group only once per invoice. You need to change the maximum use of the NAD group to one, which moves the Name and Address fields to the parent frame (the main Invoice Message frame).

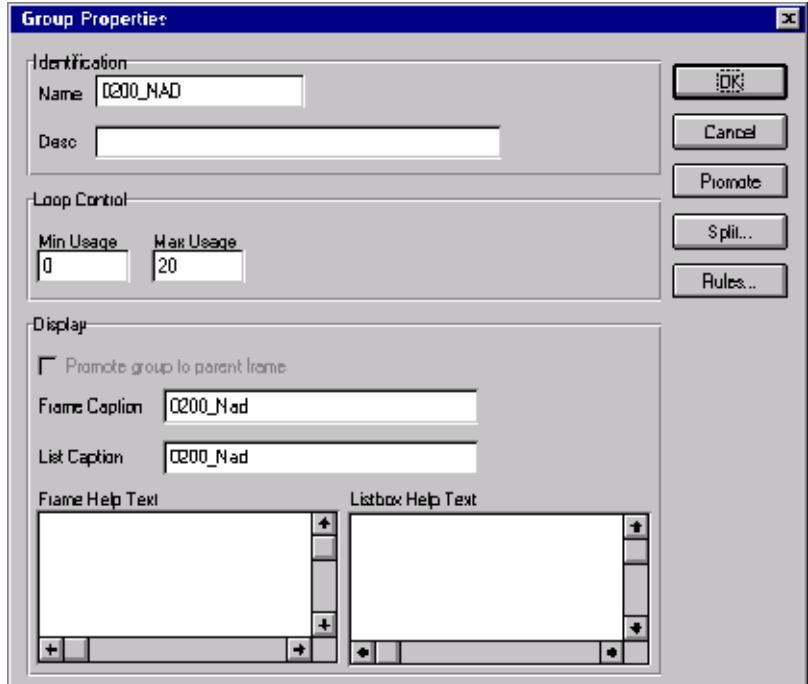
After you change the maximum use of the NAD group, you need to copy the NAD group and paste the copy at the same level as the original group to create a second iteration of the NAD group. Users will enter the Ship To name and address in the first iteration of the NAD group, and they will enter the Remit To name and address in the second iteration of the NAD group (NAD:2).

Changing the Maximum Use of the NAD Group

Complete the following steps to change the maximum use of the NAD group:

1. Click the NAD group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box to display the fields in this group on the same frame as the fields in the parent group.
4. Click OK to exit the Group Properties dialog.

Copying and Pasting the NAD Group

Complete the following steps to copy and paste the NAD group:



1. Verify that the NAD group is selected.
2. Click Copy on the Main Toolbar.
3. Click Paste on the Main Toolbar to paste the NAD group after the existing NAD group. Gentran:Director 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 NAD group. The pasted NAD group is named NAD:2.
5. Click OK to exit the dialog.

Changing the Maximum Use of the PAT Group

The standard allows the PAT group (Payment Terms) to be used up to 10 times in one invoice. If the invoice were generated now, the fields associated with the PAT 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 PAT group only once per invoice. You need to change the maximum use of the PAT group to one, which moves the Payment Terms fields to the main Invoice Message frame.

Complete the following steps to change the maximum use of the PAT group:

1. Click the PAT group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box.
4. Click OK to exit the Group Properties dialog.

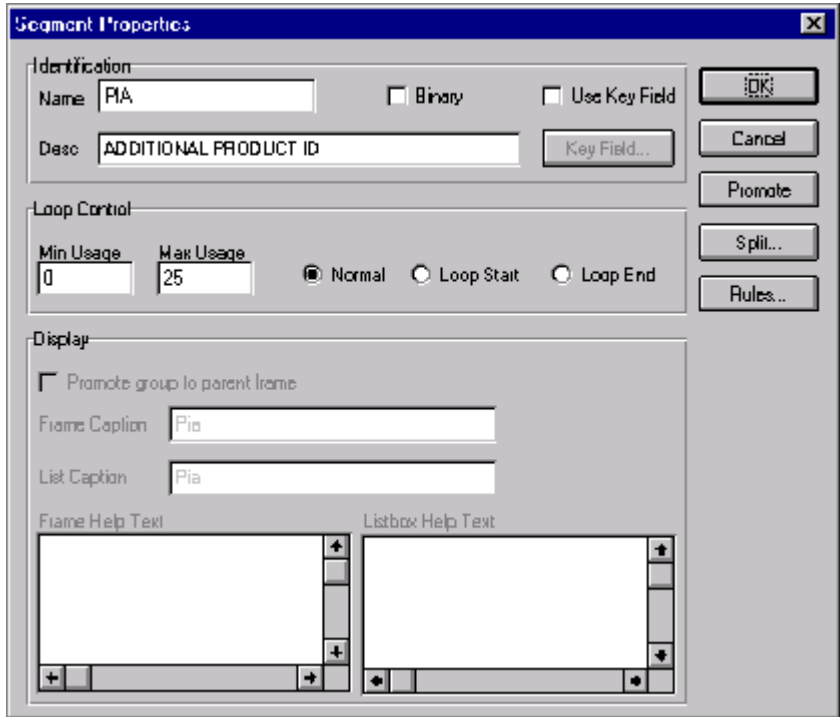
Changing the Maximum Use of the PIA Segment

The PIA segment (in the LIN group) contains the Additional Product ID for each line item. The standard allows the PIA segment to be used up to 25 times per line item. Your users use the PIA segment only once per line item (for the product code). You need to change the maximum use of the PIA segment to one, which places the associated fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the PIA segment:

1. Click the PIA segment (in the LIN group) with the right mouse and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the IMD:2 Segment

The IMD:2 segment (in the LIN group) contains the Item Description for each line item. The standard allows the IMD:2 segment to be used up to 10 times per line item. Your users use the IMD:2 segment only once per line item (for the free-form description). You need to change the maximum use of the IMD:2 segment to one, which places the associated fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the IMD:2 segment:

1. Click the IMD:2 segment (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

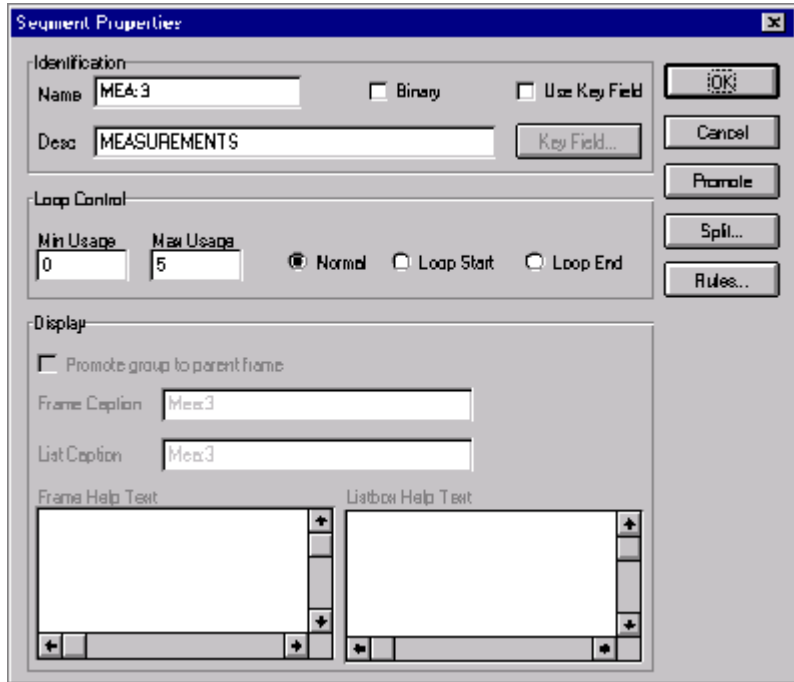
Changing the Maximum Use of the MEA:2 Segment

The MEA:2 segment (in the LIN group) contains the Measurements for each line item. The standard allows the MEA:2 segment to be used up to five times per line item. Your users use the MEA:2 segment only once per line item (for the unit of measure). You need to change the maximum use of the MEA:2 segment to one, which places the associated fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the MEA:2 segment:

1. Click the MEA:2 segment (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the QTY:2 Segment

The QTY:2 segment (in the LIN group) contains the Quantity for each line item. The standard allows the QTY:2 segment to be used up to five times per line item. Your users use the QTY:2 segment only once per line item (for the invoiced quantity). You need to change the maximum use of the QTY:2 segment to one, which places the associated fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the QTY:2 segment:

1. Click the QTY:2 segment (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

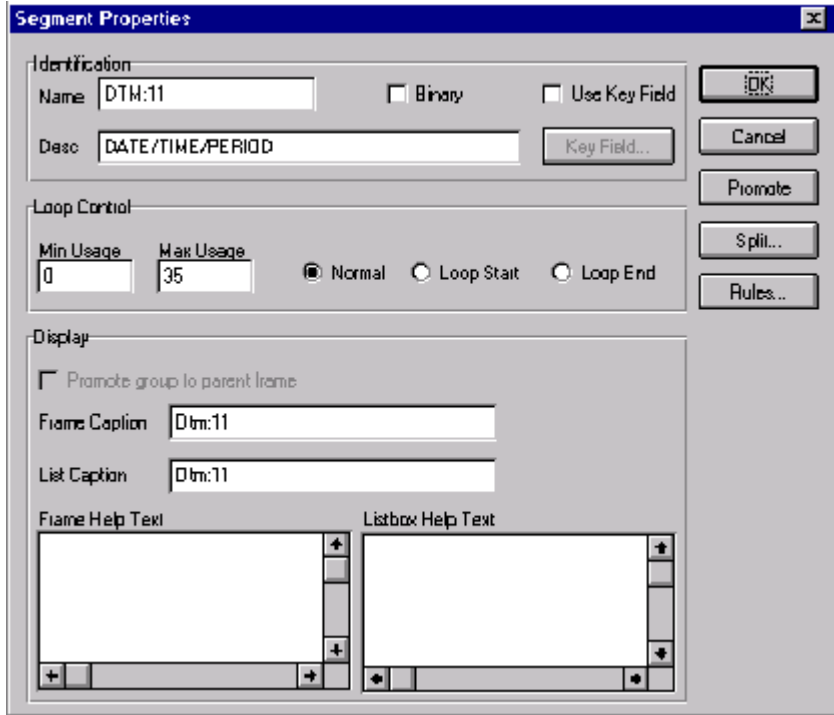
Changing the Maximum Use of the DTM:11 Segment

The DTM:11 segment (in the LIN group) contains the Date/Time/Period for each line item. The standard allows the DTM:11 segment to be used up to 35 times per line item. Your users use the DTM:11 segment only once per line item (for the date shipped). You need to change the maximum use of the DTM:11 segment to one, which places the associated fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the DTM:11 segment:

1. Click the DTM:11 segment (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

Changing the Maximum Use of the MOA Group in the LIN Group

The standard allows the MOA group (Monetary Amount) in the LIN group to be used up to five times per line item. If the invoice were generated now, the fields associated with the MOA group would be displayed on a separate frame than the majority of the line item fields. For this tutorial, you know that your users will complete the fields in the MOA group only once per line item. You will change the maximum use of the MOA group to one, which will place the Monetary Amount fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the MOA group:

1. Click the MOA group (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box.
4. Click OK to exit the Group Properties dialog.

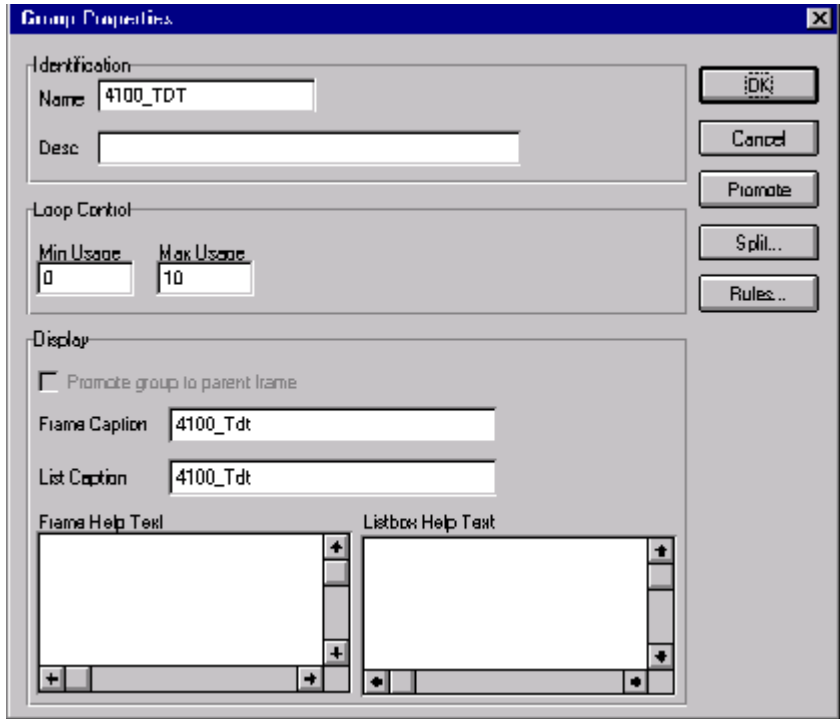
Changing the Maximum Use of the TDT Group

The standard allows the TDT group (Details of Transport) in the LIN group to be used up to five times per line item. If the invoice were generated now, the fields associated with the TDT group would be displayed on a separate frame than the majority of the line item fields. For this tutorial, you know that your users will complete the fields in the TDT group only once per line item. You will change the maximum use of the TDT group to one, which will place the Details of Transport fields on the frame containing other line item fields.

Complete the following steps to change the maximum use of the TDT group:

1. Click the TDT group (in the LIN group) with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box.
4. Click OK to exit the Group Properties dialog.

Changing the Maximum Use of the CNT Segment

The CNT segment contains the Control Totals for each line item. The standard allows the CNT segment to be used up to 10 times per line item. Your users use the CNT segment only once per line item (for the total number of line items). You need to change the maximum use of the CNT segment to one, which moves the Control Total fields to the main Invoice Message frame.

Complete the following steps to change the maximum use of the CNT segment:

1. Click the CNT segment with the right mouse button and select Properties... from the shortcut menu.

The Segment Properties dialog is displayed.

2. In the Max Usage box, type “1”.
3. Click OK to exit the Segment Properties dialog.

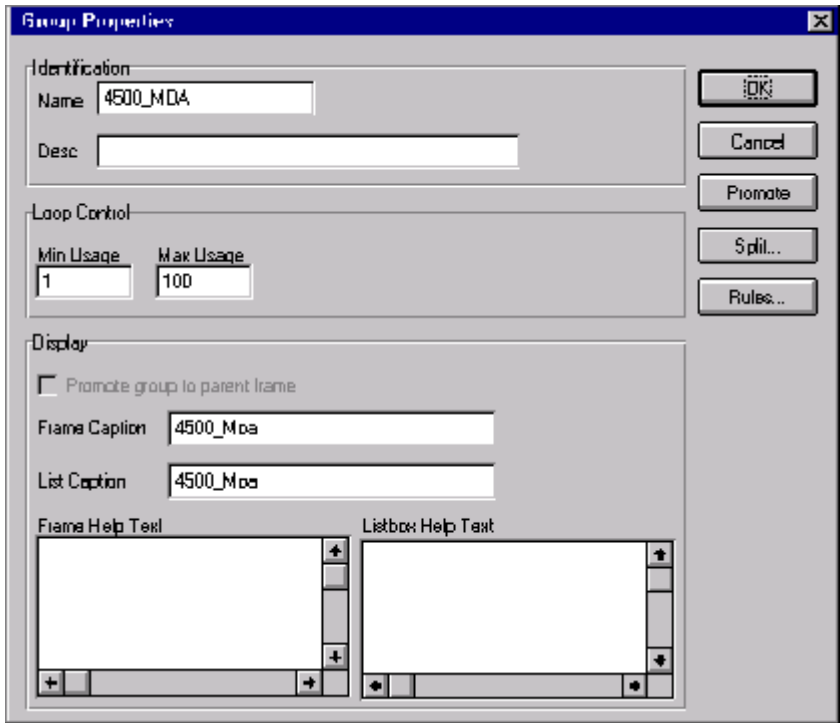
Changing the Maximum Use of the MOA Group

The standard allows the MOA group (Monetary Amount), in the summary section, to be used up to one hundred times per invoice. If the invoice were generated now, the fields associated with the MOA group would be displayed on a separate frame than many of the invoice fields. You know that your users complete the fields in the MOA group only once per invoice. You need to change the maximum use of the MOA group to one, which places the Monetary Amount fields on the main Invoice Message frame.

Complete the following steps to change the maximum use of the MOA group:

1. Click the MOA group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.



2. In the Max Usage box, type “1”.
3. Select the Promote group to parent frame check box.
4. Click OK to exit the Group Properties dialog.

Generating the Form

Generating a form is different from compiling a form. 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. When you *compile* a form, the source form is translated into a compiled translation object.



You should regenerate your form several times to ensure that you are viewing the most recent changes to the Layout Window.

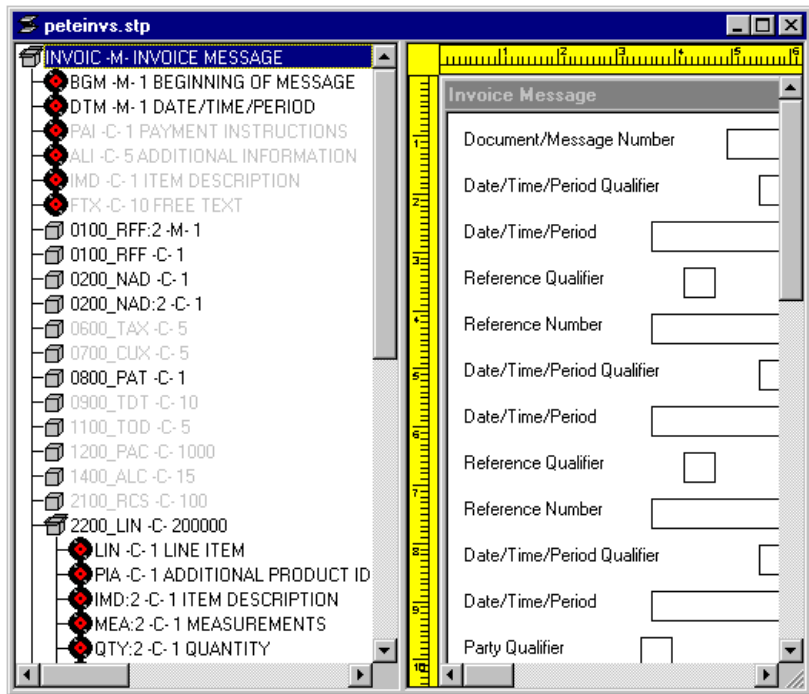
Complete the following step to generate the print form based on the groups, segments, and elements you activated:

1. Select the INVOIC file icon. Selecting the INVOIC 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. This is not a required prerequisite to generating the layout.



2. Click Generate Layout on the Main Toolbar.

The screen entry form layout is displayed in the Layout Window.



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 Field 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 select Properties from the shortcut menu.



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, you will change

some of the labels and remove others so all the fields will not be labeled the same as their corresponding elements. Even though you will 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, a list is 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 message, group, or segment name, but you can change the default titles to better identify the information that will be entered.

Customizing the EDI Data

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 the form and test the translation object 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:Director. Setting up the document name enables you to differentiate between documents in the document browsers in Gentran:Director. We strongly recommend that you select an element that occurs only once in the message and has a data type of string. For an EDIFACT 92.1 invoice, the document name is usually the Document/Message Number.

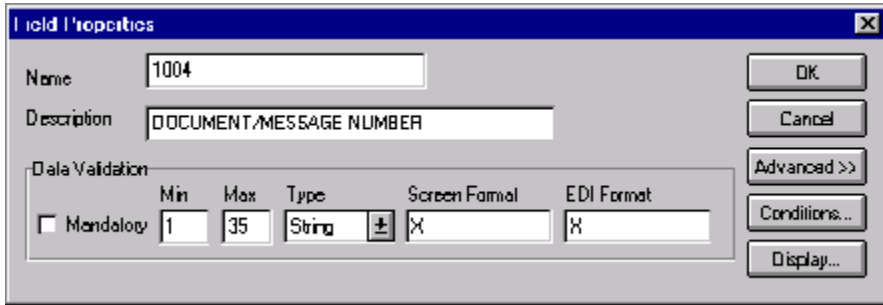
Complete the following steps to set up the document name:

1. Double-click the BGM05 element.



We recommend that you select this element because it is a non-recurring and mandatory element, and it will help identify this message meaningfully in Gentran:Director.

The Field Properties dialog is displayed.



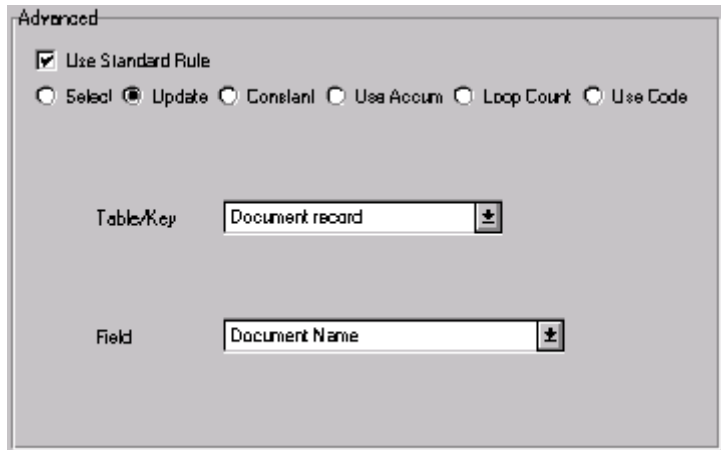
2. If the Advanced section of the dialog currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.



The Advanced section is displayed only if you previously clicked **ADVANCED>> on a Field Properties dialog (during this session of **Gentran:Director**), and did not click **<<ADVANCED** to hide this section before exiting the Field Properties dialog.**

3. Select the Use Standard Rule check box.
4. Click the Update option.
5. From the Table/Key list, select “Document record” to indicate that you are updating the document record in **Gentran:Director**.
6. From the Field list, select “Document Name” to indicate that you are updating the Name field (in the **Gentran:Director** document browsers that contain this message) with the contents of the BGM05 element.

The Advanced section of the Field Properties dialog now should look like this:



7. Click OK to set up the document name.

Customizing the BGM Segment

The BGM segment contains the Beginning of Message for the invoice. This mandatory segment contains information that is pertinent to the entire invoice.

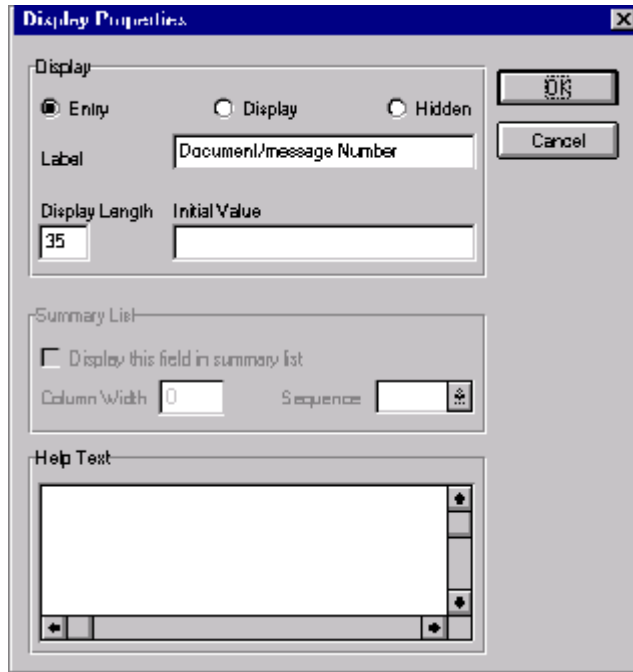
Customizing the BGM05 Element

The BGM05 element contains the Document/Message Number. This element is defined by the standard to be a string of 35 alphanumeric characters. You know that the invoice number your users enter is always an eight-character alphanumeric string so you need to change the element and field lengths to accommodate the shorter invoice number. You also need to rename the field label and add Help text to the field.

Complete the following steps to change the field and element lengths, rename the field label, and add Help text to the Document/Message Number field:

1. Double-click the BGM05 element.
The Field Properties dialog is displayed.
2. In the Max box, type “8” for the maximum number of characters allowed for this element.

3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Invoice No.” to replace the existing text.
5. In the Display Length box, type “8” to allow eight characters to be entered in this field.
6. In the Help Text box, type the following text:
“Type the invoice number. The invoice number cannot exceed 8 alphanumeric characters.”
7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the DTM Segment

The DTM segment (Date/Time/Period) is used to enter the invoice date. The standard allows the DTM segment to be used up to 35 times per invoice. You will use the DTM segment only once per invoice. You have already changed the maximum use of the DTM segment to obtain just one instance of the DTM segment and to place the invoice date on the same frame as the invoice number.

Customizing the DTM01 Element

The DTM01 element contains the Date/Time/Period Qualifier, a mandatory three-character code that qualifies the date that follows (in the DTM02 element). You know that the only type of date your users enter in the Date/Time/Period element (DTM02) is an invoice number so you need to define a constant value for the Date/Time/Period Qualifier field, designating that the constant “3” (Invoice Date/Time) always qualifies the date in the Date/Time/Period field. You need to hide the qualifier field because it does not need to be displayed in the translation object.

When a user enters the invoice date in the Date/Time/Period field, the system automatically assigns the code “3” to the Date/Time/Period Qualifier field.

Complete the following steps to define a constant value in the Date/Time/Period Qualifier field and hide the field:

1. Double-click the DTM01 element.

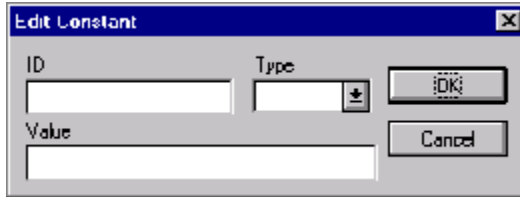
The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.

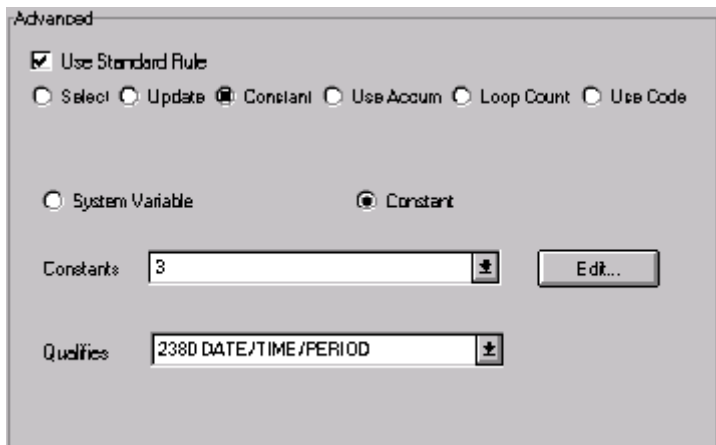
ID	Type	Value

6. Click NEW... to access the Edit Constant dialog.

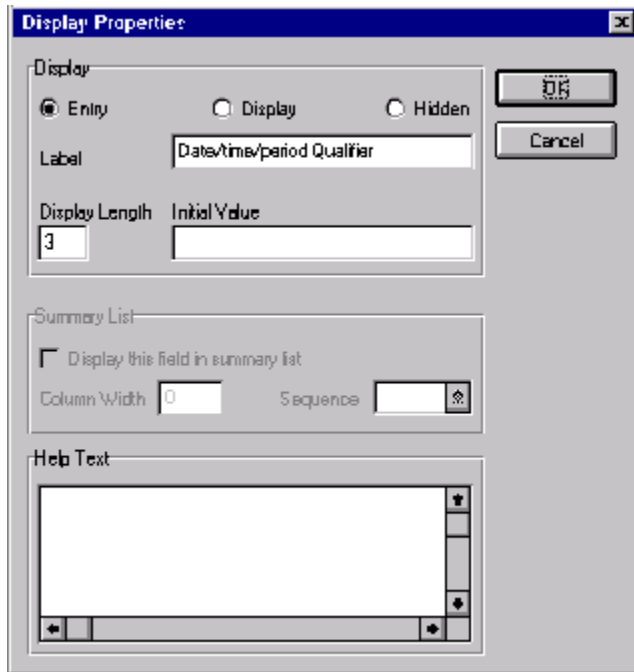


7. In the ID box, type "Invoice Date/Time" to identify the constant.
8. From the Type list, select "String" to indicate that the literal constant will be formatted as a string data type.
9. In the Value box, type "3" to indicate that the Date/Time/Period Qualifier field must contain the invoice date. This value is the actual value of the literal constant.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select "3" to identify the constant that will be used for this element.
13. From the Qualifies list, select "2380 DATE/TIME/PERIOD," which is the element that the Date/Time/Period Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.



- Click the Hidden option to prevent the field from being displayed in the translation object.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

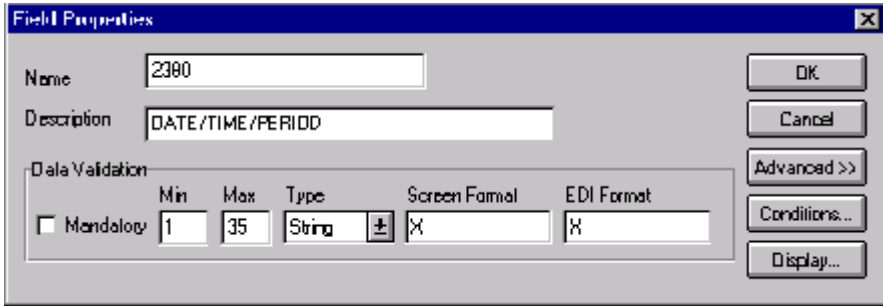
Customizing the DTM02 Element

The DTM02 element (Date/Time/Period) contains the invoice date. The standard allows this field to contain up to a 35 character string but your users enter shorter dates. You need to change the element and field lengths to accommodate the shorter dates and then rename the field label.

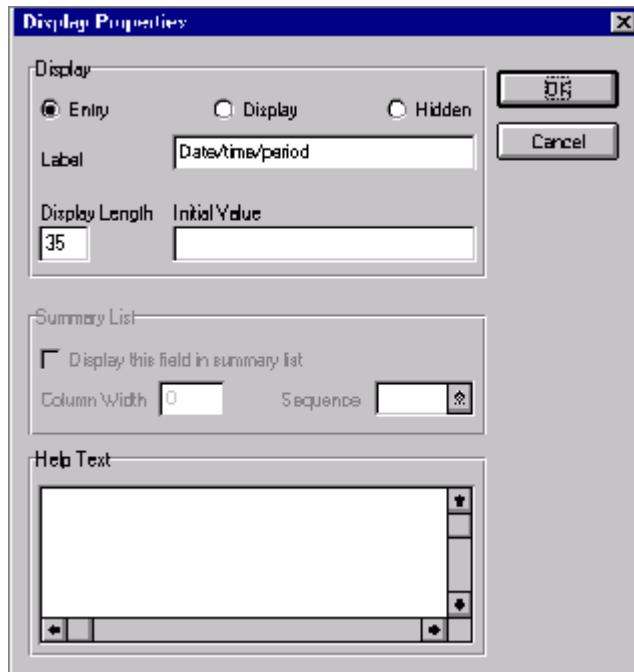
Complete the following steps to change the element and field lengths, rename the field label, and add Help text to the Date/Time/Period field:

- Double-click the DTM02 element.

The Field Properties dialog is displayed.



2. In the Max box, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Invoice Date”.
5. In the Display Length box, type “8”.
6. In the Help Text box, type the following text:
“Type the invoice date. Use the format MM/DD/YY.”

7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the RFF:2 Group

The RFF:2 group (Reference) is used to enter the purchase order number (RFF:11 segment) and date (DTM:22 segment). You have already promoted the RFF:2 group to place the purchase order number and date on the main Invoice Message frame.

Customizing the RFF:11 Segment

The RFF:11 segment (Reference) is used to enter the purchase order number. Your users enter the purchase order number in the Reference Number element (RFF:1102). You need to set a constant in the Reference Qualifier element so that the constant value is entered automatically when a user enters the purchase order number.

Customizing the RFF:1101 Element

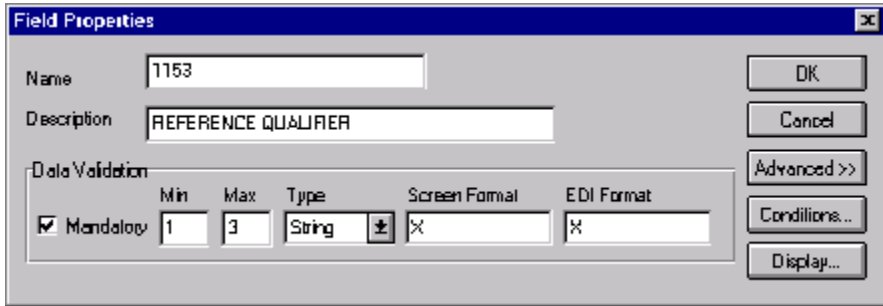
The RFF:1101 element contains the Reference Qualifier, a mandatory three-character code that identifies the type of reference that follows (in the RFF:1102 element). You know that the only type of reference your users enter in the Reference Number element is the purchase order number so you need to define a constant value for the Reference Qualifier field, designating that the constant “ON” (Order Number (Purchase)) always qualifies the reference in the Reference Number field. You must also hide the qualifier field because it does not need to be displayed in the translation object.

When a user enters the purchase order number in the Reference Number field, the system automatically assigns the code “ON” to the Reference Qualifier field.

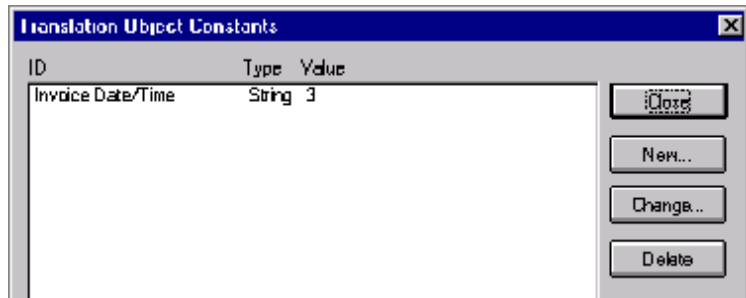
Complete the following steps to define a constant value in the first Reference Qualifier field and hide the field:

1. Double-click the RFF:1101 element.

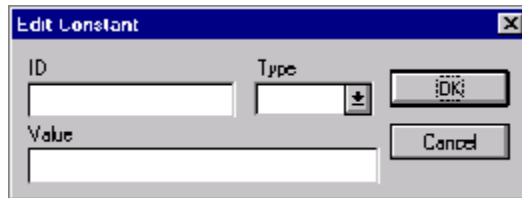
The Field Properties dialog is displayed.



2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



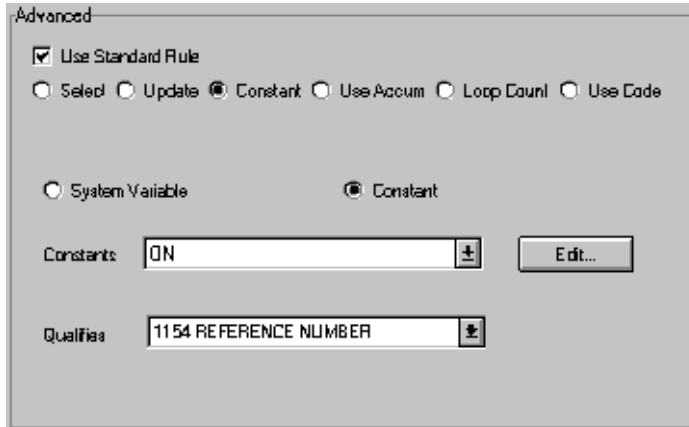
6. Click NEW... to access the Edit Constant dialog.



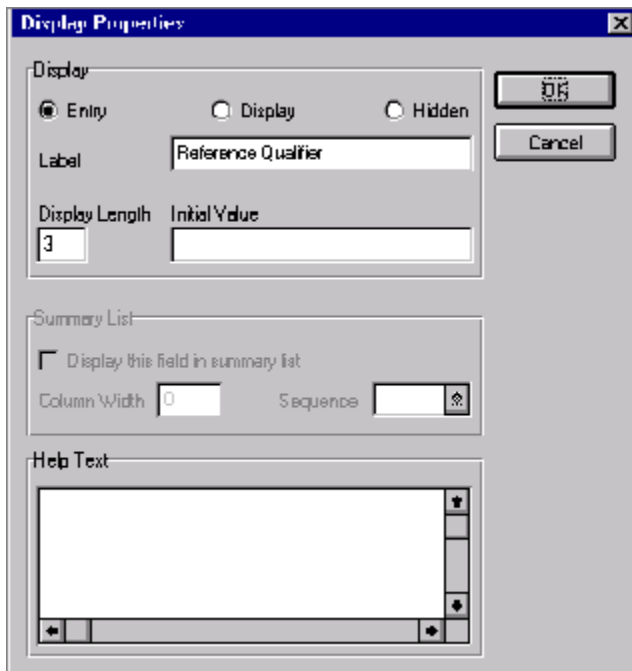
7. In the ID box, type “Order Number” to identify the constant.
8. From the Type list, select “String.”
9. In the Value box, type “ON”.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.

12. From the Constants list, select “ON”.
13. From the Qualifies list, select “1154 REFERENCE NUMBER,” which is the element that the Reference Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option to prevent the field from being displayed in the translation object.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

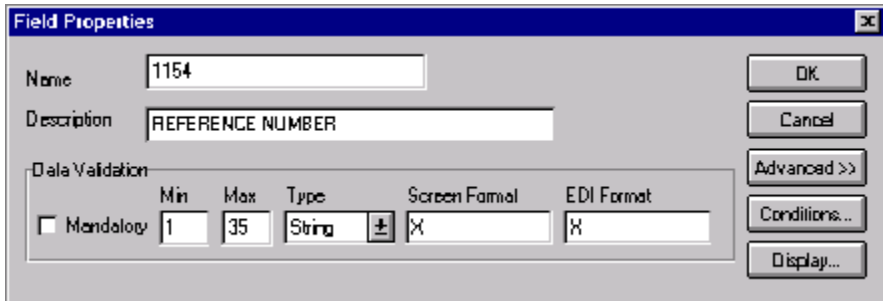
Customizing the RFF:1102 Element

The RFF:1102 element contains the Reference Number. This element is defined by the standard to be a string of 35 alphanumeric characters. You know that the reference number (the purchase order number) is a 10-character alphanumeric string, so you need to change the element and field lengths to accommodate the shorter reference number. In addition, you must rename the field label and add Help text to the field.

Complete the following steps to change the field and element lengths, rename the field label, and add Help text to the first Reference Number field:

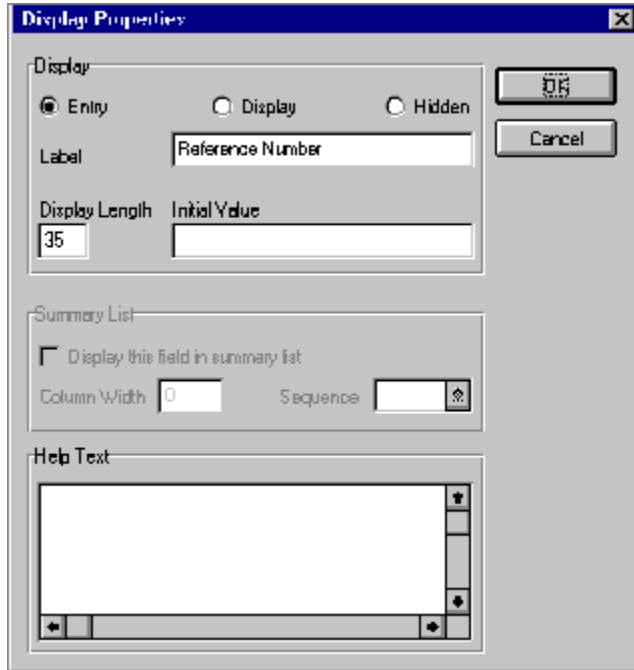
1. Double-click the RFF:1102 element.

The Field Properties dialog is displayed.



2. In the Max box, type "10".

- Click DISPLAY... to access the Display Properties dialog.



- In the Label box, type “P.O. No.” (note the period included in the label) to replace the existing field label.
- In the Display Length box, type “10”.
- In the Help Text box, type the following text:
 “Type the purchase order number. The purchase order number cannot exceed 10 alphanumeric characters.”
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:22 Segment

The DTM:22 segment (Date/Time/Period) is used to enter the purchase order date. The standard allows the DTM:22 segment to be used up to five times per invoice. You use the DTM:22 segment only once per invoice. You have already changed the maximum use of the DTM:22 segment to obtain just one instance of the segment and to place the purchase order date on the same frame as the invoice date and number.

Customizing the DTM:2201 Element

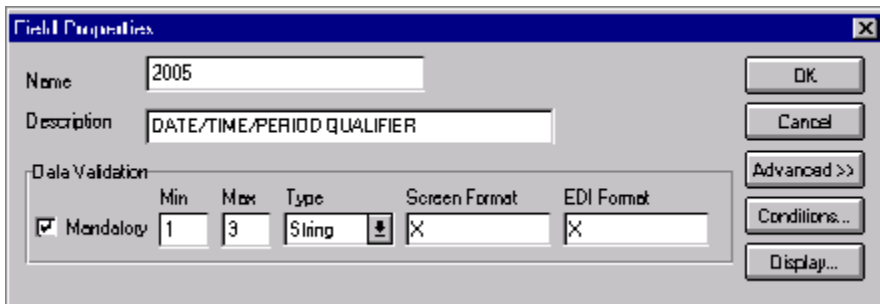
The DTM:2201 element contains the Date/Time/Period Qualifier, a mandatory three-character code that identifies the type of date that follows. The only type of date your users enter in the Date/Time/Period element (DTM:2202) that follows is the purchase order date so you need to define a constant value for the Date/Time/Period Qualifier field, designating that the constant “4” (Order Date/Time) always qualifies the date in the Date/Time/Period field. Then you need to hide the qualifier field because it does not need to be displayed in the translation object.

When a user enters the purchase order date in the Date/Time/Period field, the system automatically assigns the code “4” to the Date/Time/Period Qualifier field.

Complete the following steps to define a constant value in the first Date/Time/Period Qualifier field and hide the field:

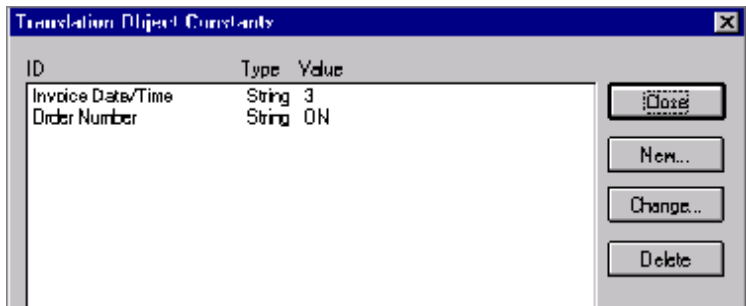
1. Double-click the DTM:2201 element.

The Field Properties dialog is displayed.

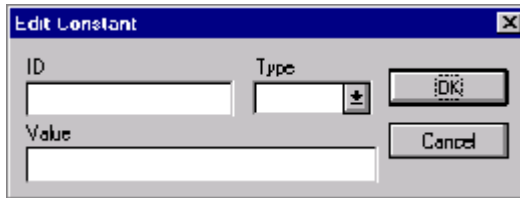


2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

- Click **EDIT...** to access the Translation Object Constants dialog.

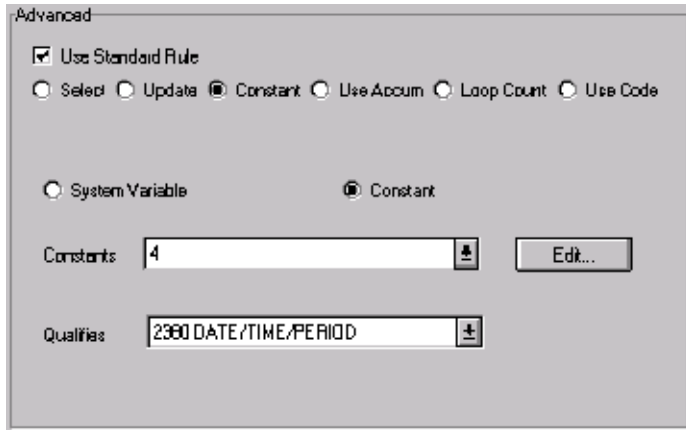


- Click **NEW...** to access the Edit Constant dialog.



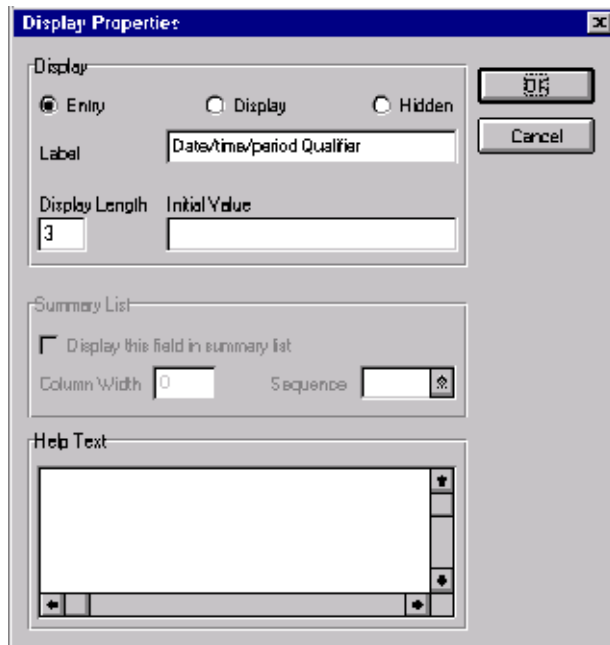
- In the ID box, type "Order Date/Time" to identify the constant.
- From the Type list, select "String."
- In the Value box, type "4" to indicate that the Date/Time/Period Qualifier field must contain the purchase order date.
- Click **OK** to add the constant.
- Click **CLOSE** to exit the Translation Object Constants dialog.
- From the Constants list, select "4" to identify the constant that will be used for this element.
- From the Qualifies list, select "2380 DATE/TIME/PERIOD," which is the element that the Date/Time/Period Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



The screenshot shows the 'Advanced' section of a dialog box. It contains several radio button options: 'Use Standard Rule' (checked), 'Selected', 'Update', 'Constant' (checked), 'Use Accum', 'Loop Count', and 'Use Code'. Below these are two more radio button options: 'System Variable' and 'Constant' (checked). There are two input fields: 'Constants' with the value '4' and a 'Edk...' button, and 'Qualifies' with the value '2980 DATE/TIME/PERIOD'.

13. Click DISPLAY... to access the Display Properties dialog.



The screenshot shows the 'Display Properties' dialog box. It has three main sections: 'Display', 'Summary List', and 'Help Text'. In the 'Display' section, the 'Hidden' radio button is selected, and the 'Label' is 'Date/time/period Qualifier'. The 'Display Length' is '3' and the 'Initial Value' is empty. In the 'Summary List' section, the checkbox 'Display this field in summary list' is unchecked, and the 'Column Width' is '0' and 'Sequence' is empty. The 'Help Text' section is empty.

14. Click the Hidden option.
15. Click OK to exit the Display Properties dialog.
16. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the DTM:2202 Element

The DTM:2202 element (Date/Time/Period) contains the purchase order date. The standard allows this field to contain up to a 35 character string but your users enter shorter dates. You need to change the element and field lengths to accommodate the shorter dates, rename the field label and add Help text.

Complete the following steps to change the element and field lengths, rename the field label, and add Help text to the first Date/Time/Period field:

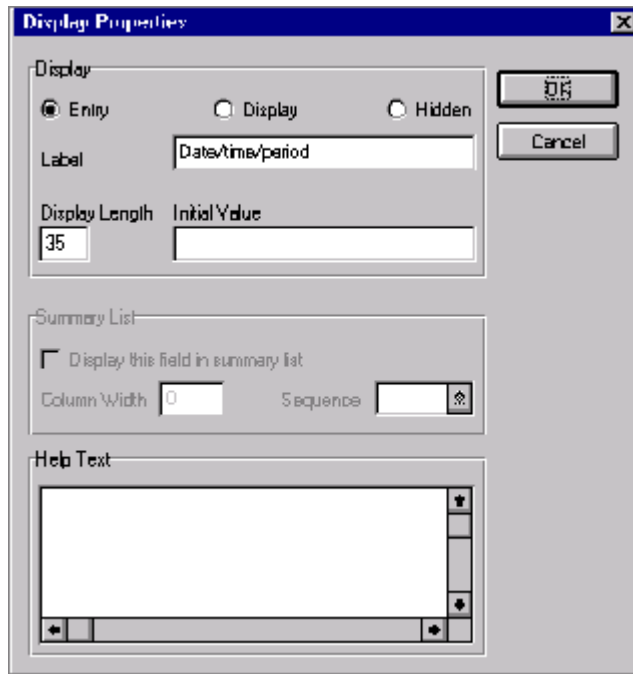
1. Double-click the DTM:2202 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	35	String	X	X

2. In the Max box, type "8".

3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “P.O. Date”.
5. In the Display Length box, type “8”.
6. In the Help Text box, type the following text:
“Type the purchase order date. Use the format MM/DD/YY.”
7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the RFF Group

The RFF group (Reference) is used to enter the contract number (RFF segment) and date (DTM:2 segment).

Customizing the RFF Segment

The RFF segment (Reference) is used to enter the contract number. Your users enter the contract number in the Reference Number element, and you will set a constant in the Reference Qualifier element so that the constant value is entered automatically when the users enter the contract number.

Customizing the RFF01 Element

The RFF01 element contains the Reference Qualifier, a mandatory three-character code that identifies the type of reference that follows. You know that the only type of reference your users enter in the Reference Number element (RFF02) is the contract number, so you need to define a constant value for the Reference Qualifier field, designating that the constant “CT” (Contract Number) always qualifies the reference in the Reference Number field. You need to hide the qualifier field because it does not need to be displayed in the translation object.

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

Complete the following steps to define a constant value in the second Reference Qualifier field and hide the field:

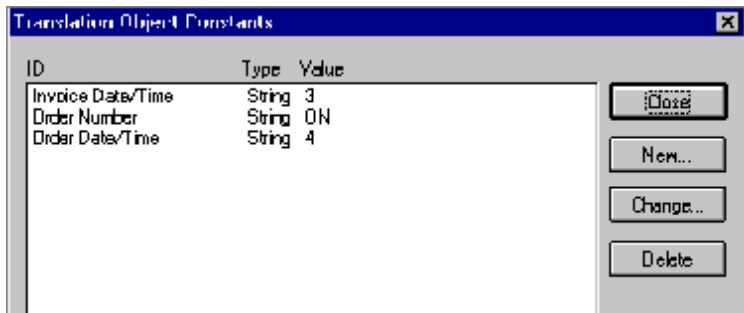
1. Double-click the RFF01 element.

The Field Properties dialog is displayed.

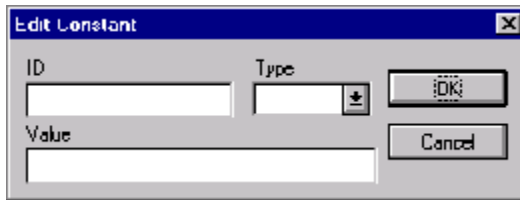
Field Properties						
Name	1153					OK
Description	REFERENCE QUALIFIER					Cancel
Data Validation						
<input checked="" type="checkbox"/> Mandatory	Min	Max	Type	Screen Format	EDI Format	Advanced >>
	1	3	String	X		Conditions...
						Display...

2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

5. Click **EDIT...** to access the Translation Object Constants dialog.

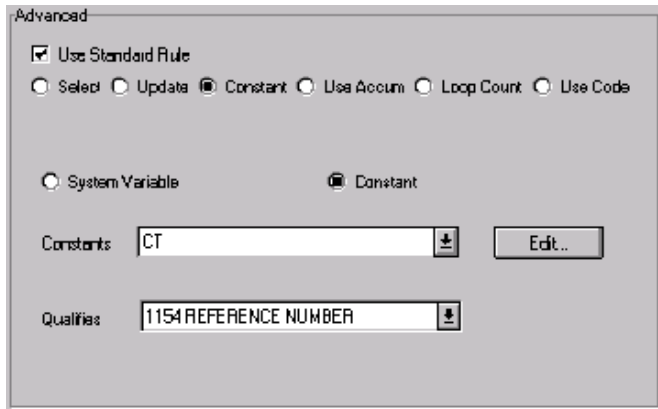


6. Click **NEW...** to access the Edit Constant dialog.

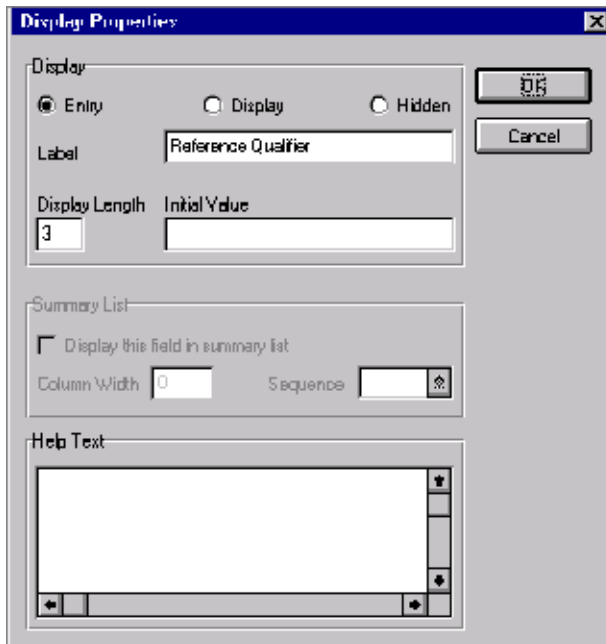


7. In the ID box, type “Contract Number” to identify the constant.
8. From the Type list, select “String.”
9. In the Value box, type “CT” to indicate that the Reference Qualifier field must contain the contract number.
10. Click **OK** to add the constant.
11. Click **CLOSE** to exit the Translation Object Constants dialog.
12. From the Constants list, select “CT” to identify the constant that will be used for this element.
13. From the Qualifies list, select “1154 REFERENCE NUMBER,” which is the element that the Reference Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

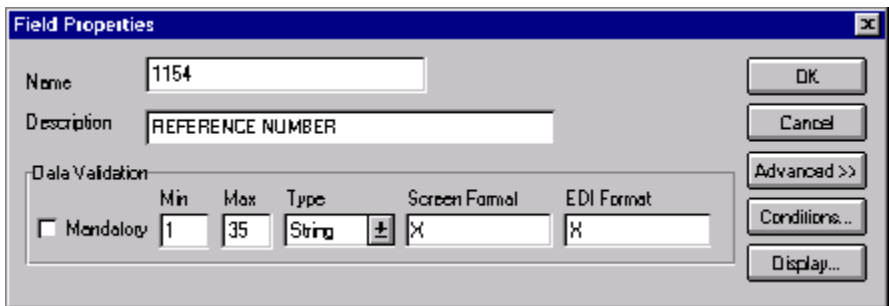
Customizing the RFF02 Element

The RFF02 element contains the Reference Number. This element is defined by the standard to be a string of 35 alphanumeric characters. You know that the reference number (the contract number) is always an eight-character alphanumeric string, so you need to change the element and field lengths to accommodate the shorter reference number. You need to rename the field label and add Help text to the field.

Complete the following steps to change the field and element lengths, rename the field label, and add Help text to the second Reference Number field:

1. Double-click the RFF02 element.

The Field Properties dialog is displayed.

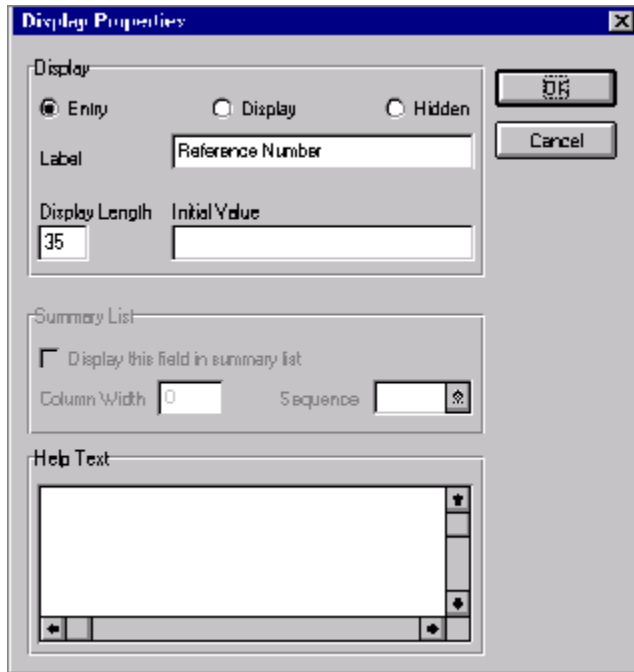


The image shows a 'Field Properties' dialog box with the following fields and controls:

- Name:** 1154
- Description:** REFERENCE NUMBER
- Data Validation:**
 - Mandatory
 - Min:** 1
 - Max:** 35
 - Type:** String
 - Screen Format:** X
 - EDI Format:** X
- Buttons:** OK, Cancel, Advanced >>, Conditions..., Display...

2. In the Max box, type "8".

- Click DISPLAY... to access the Display Properties dialog.



- In the Label box, type “Contract No.” (note the period included in the label) to replace the existing field label.
- In the Display Length box, type “8”.
- In the Help Text box, type the following text:
“Type the contract number. The contract number cannot exceed 8 alphanumeric characters.”
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

Customizing the DTM:2 Segment

The DTM:2 segment (Date/Time/Period) is used to enter the contract date. The standard allows the DTM:2 segment to be used up to five times per invoice. You use this segment only once per invoice. You have already changed the maximum use of the DTM:2 segment to obtain just one instance of this segment, and to place the contract date on the same frame as the invoice date and number.

Customizing the DTM:201 Element

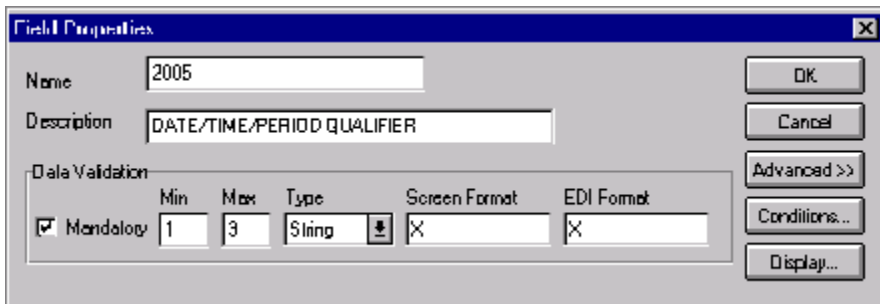
The DTM:201 element contains the Date/Time/Period Qualifier, a mandatory three-character code that identifies the type of date that follows. You know that the only type of date your users enter in the Date/Time/Period element (DTM:202) is the contract date so you need to define a constant value for the Date/Time/Period Qualifier field, designating that the constant “92” (Contract Effective Date) always qualifies the date in the Date/Time/Period field. Then, you need to hide the qualifier field because it does not need to be displayed in the translation object.

When a user enters the contract date in the Date/Time/Period field, the system automatically assigns the code “92” to the Date/Time/Period Qualifier field.

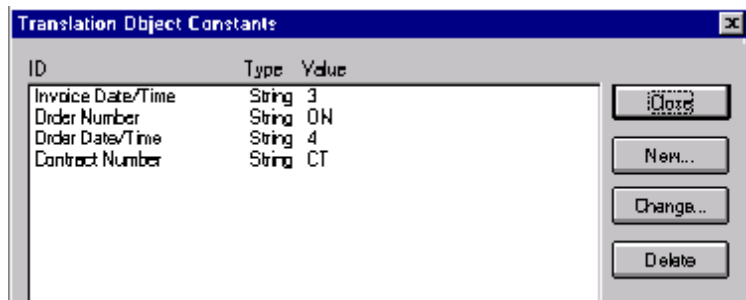
Complete the following steps to define a constant value in the second Date/Time/Period Qualifier field and hide the field:

1. Double-click the DTM:201 element.

The Field Properties dialog is displayed.



2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.

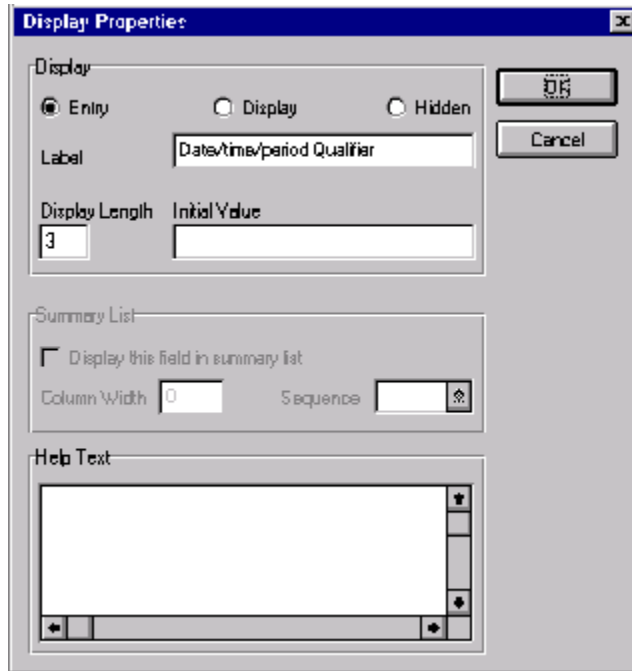


6. Click **NEW...** to access the Edit Constant dialog.
7. In the **ID** box, type “Contract Effective Date”.
8. From the **Type** option, select “String.”
9. In the **Value** box, type “92” to indicate that the Date/Time/Period Qualifier field must contain the contract date.
10. Click **OK** to add the constant.
11. Click **CLOSE** to exit the Translation Object Constants dialog.
12. From the **Constants** option, select “92” to identify the constant that is used for this element.
13. From the **Qualifies** option, select “2380 DATE/TIME/PERIOD”, which is the element that the Date/Time/Period Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:

The screenshot shows the 'Advanced' section of a dialog box. At the top, there is a checked checkbox labeled 'Use Standard Rule'. Below it are several radio buttons: 'Select', 'Update', 'Constant' (which is selected), 'Use Accum', 'Loop Count', and 'Use Code'. Further down, there are two more radio buttons: 'System Variable' and 'Constant' (which is selected). Below these are two text input fields. The first is labeled 'Constants' and contains the value '92'. To its right is a small button labeled 'Edit...'. The second text input field is labeled 'Qualifies' and contains the value '2380 DATE/TIME/PERIOD'. Both input fields have a small downward arrow icon on their right side.

14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

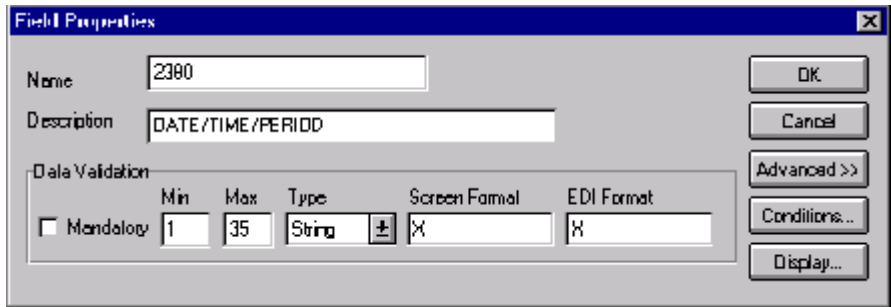
Customizing the DTM:202 Element

The DTM:202 element (Date/Time/Period) contains the contract date. The standard allows this field to contain up to a 35 character string but your users enter shorter dates. You need to change the element and field lengths to accommodate the shorter dates. In addition, you need to rename the field label and add Help text.

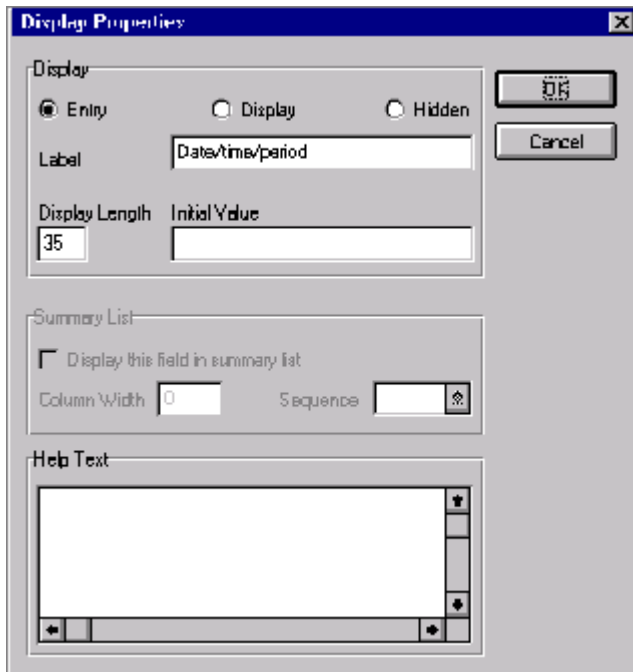
Complete the following steps to change the element and field lengths, rename the field label, and add Help text to the second Date/Time/Period field:

1. Double-click the DTM:202 element.

The Field Properties dialog is displayed.



2. In the Max box, type “8”.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Contract Date”.
5. In the Display Length box, type “8”.
6. In the Help Text box, type the following text:
 “Type the contract date. Use the format MM/DD/YY.”

7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD Group

You have already changed the maximum use and promoted the NAD group, then copied the NAD group to create a second iteration of this group (NAD:2). Your users enter the ship to name and address in the first iteration of the NAD group, and the remit to name and address in the second iteration of the group (NAD:2). By promoting the NAD group to the parent frame before copying the group, you cause all the Ship To and Remit To fields to be placed on the main Invoice Message frame.

Customizing the NAD Segment

The NAD segment (in the NAD group) identifies the Name and Address of an entity or individual. In this iteration of the NAD segment, users enter the Ship To name and address for the invoice.

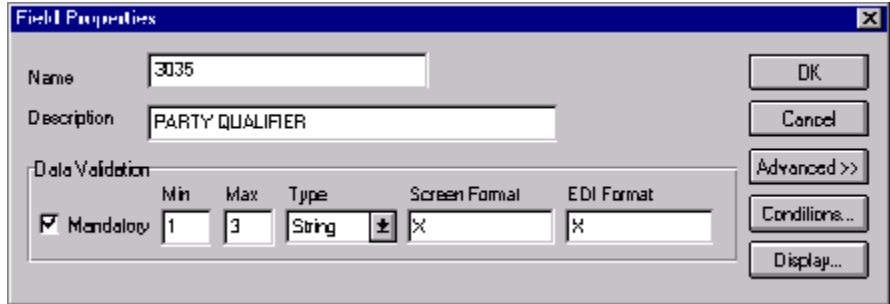
Customizing the NAD01 Element

The NAD01 element (in the NAD segment) contains the Party Qualifier, which is used to identify whether the name and address information that follows pertains to the Ship To or Remit To name. Your users enter only the Ship To name and address in the s associated with the first NAD group. You need to define the constant value “ST” in the Party Qualifier element, indicating that this group (NAD) contains only Ship To information. You need to hide the Party Qualifier field because it does not need to be displayed on the translation object.

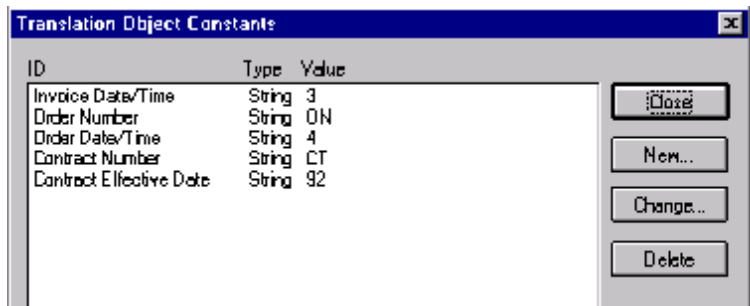
Complete the following steps to define a constant value for the Party Qualifier field and hide the field:

1. Double-click the NAD01 element (in the NAD group).

The Field Properties dialog is displayed.

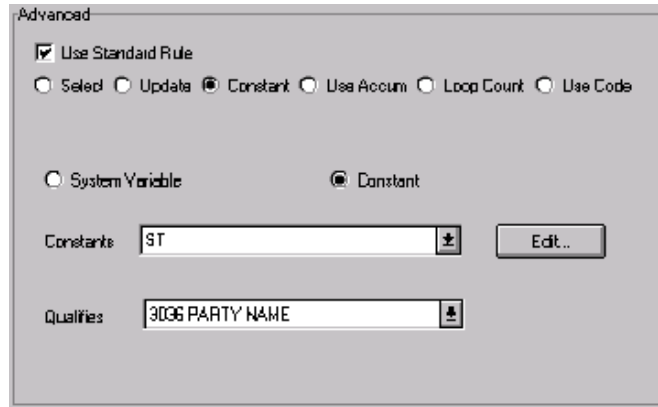


2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



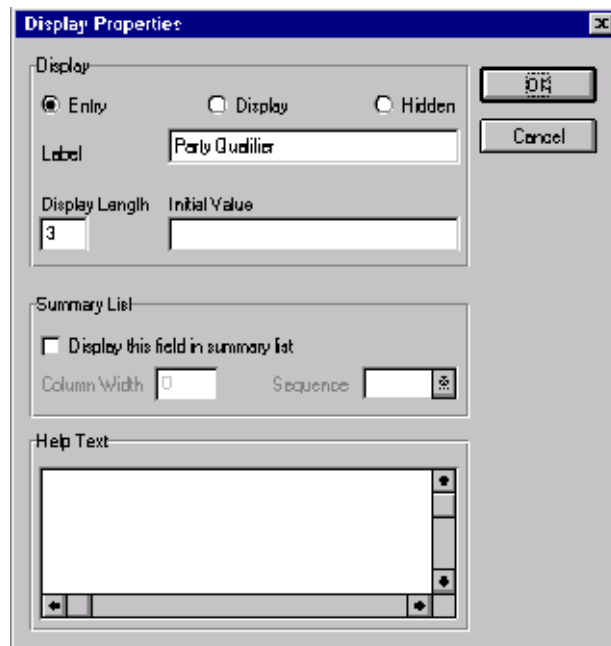
6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Ship To” to identify the constant.
8. From the Type option, select “String.”
9. In the Value box, type “ST” to indicate that the Entity Identifier Code field must contain the Ship To name and address.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants option, select “ST.”
13. From the Qualifies option, select “3036 PARTY NAME,” which is the element that the Entity Identifier Code field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



The screenshot shows the 'Advanced' section of a dialog box. It features several radio button options: 'Use Standard Rule' (checked), 'Selected', 'Update', 'Constant' (selected), 'Use Accum', 'Loop Count', and 'Use Code'. Below these are two more radio button options: 'System Variable' and 'Constant' (selected). There are two text input fields: 'Constants' containing 'ST' and 'Qualifies' containing '3036 PARTY NAME'. An 'Edit...' button is located to the right of the 'Constants' field.

14. Click DISPLAY... to access the Display Properties dialog.



The screenshot shows the 'Display Properties' dialog box. It has three main sections: 'Display', 'Summary List', and 'Help Text'. In the 'Display' section, there are radio buttons for 'Entry' (selected), 'Display', and 'Hidden'. There is a 'Label' field containing 'Party Qualifier', a 'Display Length' field with '3', and an empty 'Initial Value' field. In the 'Summary List' section, there is a checkbox 'Display this field in summary list' which is unchecked, and fields for 'Column Width' (0) and 'Sequence' (8). The 'Help Text' section contains an empty text area with scroll bars. On the right side, there are 'OK' and 'Cancel' buttons.

15. Click the Hidden option.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the NAD10 Element

The NAD10 element (Party Name) contains the name of the entity or individual to whom the order will be shipped. Your users are familiar with the standard address format (the name on the first line; the address on the next line(s); the city, state (or province or country), 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 need to rename the field label (so that your users know that the fields that follow contain the Ship To information) and add Help text to the field.

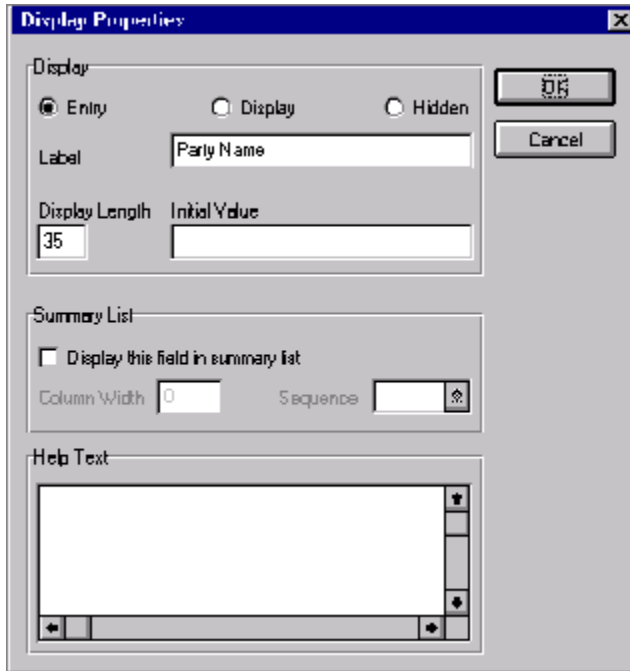
Complete the following steps to rename the field label and add Help text to the first Party Name field:

1. Double-click the NAD10 element.

The Field Properties dialog is displayed.

Data Validation		Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/>	Mandatory	1	35	String	±	X

2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, type “Ship To” to replace the existing field label. This label is the heading for the Ship To name and address information.
4. In the Help text box, type the following text:
“Type the name of the person or organization to whom the order will be shipped. The name cannot exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

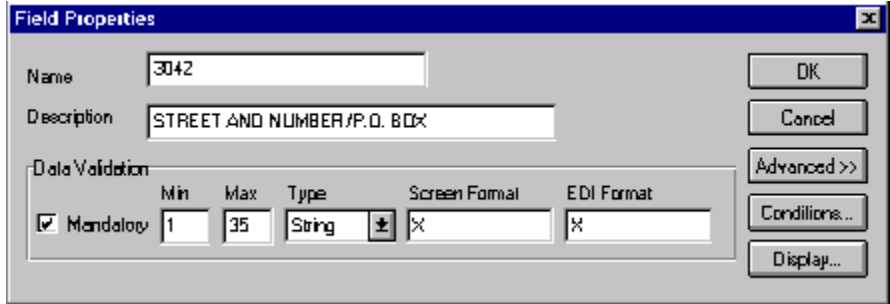
Customizing the NAD16 Element

The address information in the NAD16 element (in the NAD segment) corresponds to the name in the NAD10 element so there is no need to display the label associated with the address. For the NAD16 element, you need to remove the field label and add Help text.

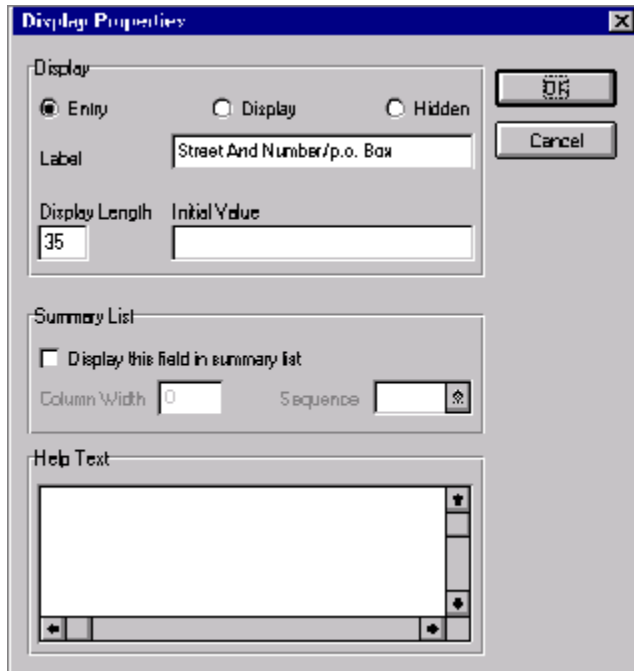
Complete the following steps to remove the field label and add Help text to the first Street and Number/P.O. Box field of the Ship To address:

1. Double-click the NAD16 element (in the NAD group).

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



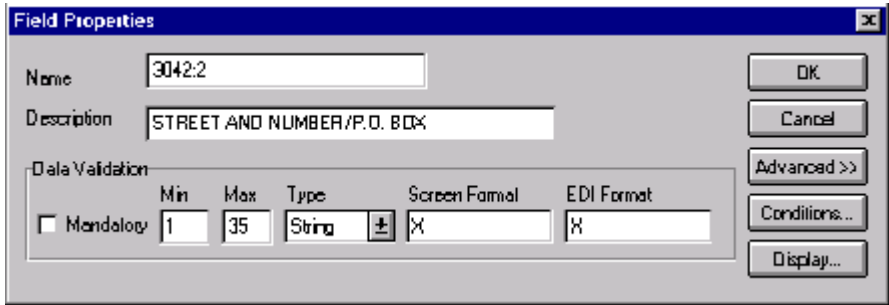
2. In the Label box, delete the existing text.
3. In the Help Text box, type the following text:
 “Type the first line of the address. This address line cannot exceed 35 alphanumeric characters.”
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD17 Element

Complete the following steps to remove the field label and add Help text to the second Street and Number/P.O. Box field of the Ship To address:

1. Double-click the NAD17 element (in the NAD group).

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.
3. In the Label box, delete the existing text.
4. In the Help Text box, type the following text:
“Type the second line of the address. This address line cannot exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

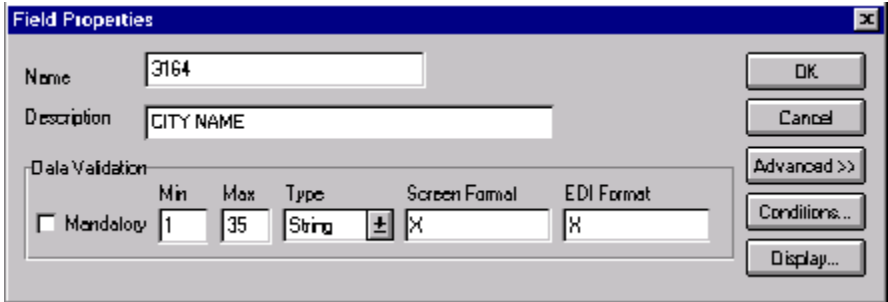
Customizing the NAD19 Element

The NAD19 element contains the City Name of the Ship To address. You will remove the field label for this element, because it will be evident to your users that they should enter the city name associated with the name and street address they have entered already. Also, you will change the element and field lengths, because the City Name field does not need to be longer than thirty characters.

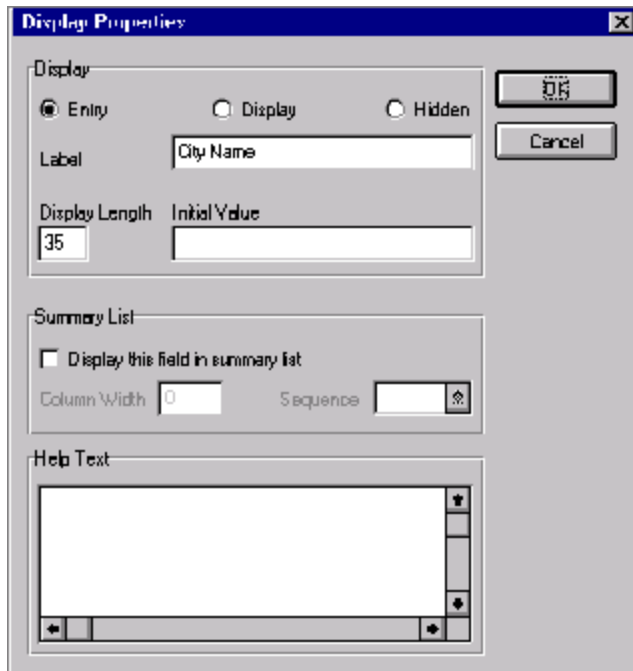
Complete the following steps to remove the field label, change the element and field lengths, and add Help text to the City Name field of the Ship To address:

1. Double-click the NAD19 element (in the NAD group).

The Field Properties dialog is displayed.



2. In the Max box, type “30” for the maximum number of characters allowed for this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, delete the existing text.
5. In the Display Length box, type “30”.

6. In the Help Text box, type the following text:
“Type the city name. The city cannot exceed 30 alphanumeric characters.”
7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD20 Element

The NAD20 element contains the Country Sub-Entity Identification. You need to remove the field label for this element, because it is evident to your users that they should enter the country sub-entity identification (e.g., state) associated with the name and street address they have entered already. Also, you need to change the field and element lengths because this field does not need to be longer than two characters.

Complete the following steps to remove the field label, change the element and field lengths, and add Help text to the Country Sub-Entity Identification field of the Ship To address:

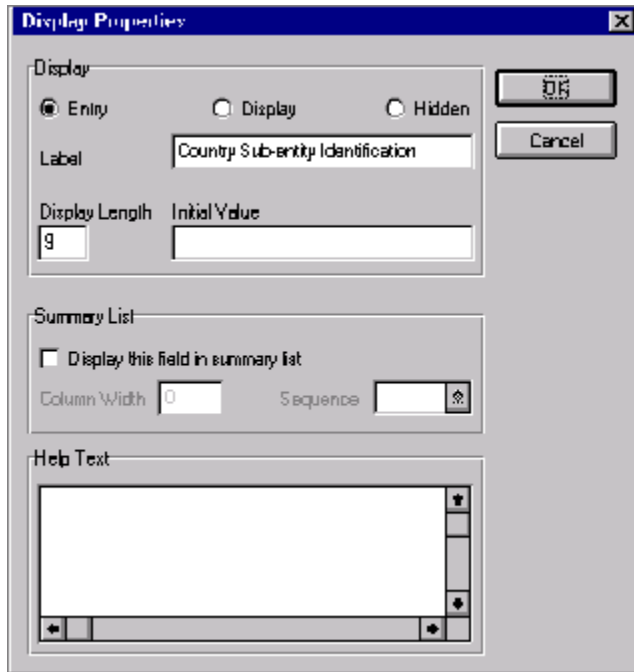
1. Double-click the NAD20 element (in the NAD group).

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	9	String	X	X

2. In the Max box, type “2”.

- Click DISPLAY... to access the Display Properties dialog.



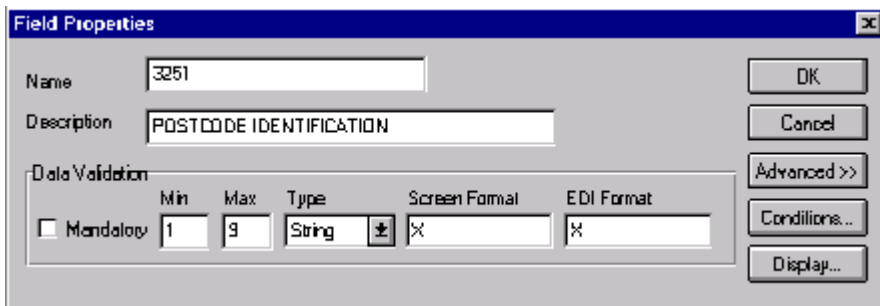
- In the Label box, delete the existing text.
- In the Display Length box, type "2".
- In the Help Text box, type the following text:
 "Type the country sub-entity identification. The code cannot exceed 2 alphanumeric characters."
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

Customizing the NAD21 Element

Complete the following steps to remove the field label and add Help text to the Postcode Identification field:

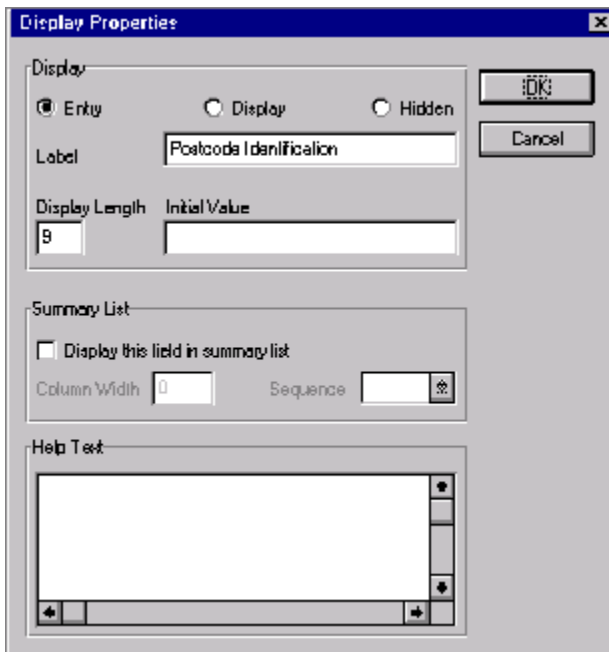
- Double-click the NAD21 element (in the NAD group).

The Field Properties dialog is displayed.



The Field Properties dialog box is shown. It has a title bar with 'Field Properties' and a close button. The 'Name' field contains '3251'. The 'Description' field contains 'POSTCODE IDENTIFICATION'. Below these is a 'Data Validation' section with a 'Mandatory' checkbox (unchecked), 'Min' value '1', 'Max' value '9', 'Type' set to 'String', and 'Screen Format' and 'EDI Format' both set to 'X'. On the right side, there are buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

2. Click DISPLAY... to access the Display Properties dialog.



The Display Properties dialog box is shown. It has a title bar with 'Display Properties' and a close button. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' field contains 'Postcode Identification'. Below that are 'Display Length' (set to '9') and 'Initial Value' (empty). The 'Summary List' section has a 'Display this field in summary list' checkbox (unchecked), 'Column Width' (set to '0'), and 'Sequence' (empty). The 'Help Text' section has a large text area with scroll bars.

2. In the Label box, delete the existing text.
3. In the Help Text box, type the following text:
“Type the postal code. The postal code cannot exceed 9 alphanumeric characters. Do not type a hyphen (-) before the 4-character postal code extension (if used).”
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD:2 Group

The NAD:2 group was created when you copied the NAD group to create a second iteration of that group. Your users enter the Remit To name and address in the NAD:2 group.

Customizing the NAD:3 Segment

The NAD:3 segment (in the NAD:2 group) identifies the Name and Address of an entity or individual. In the NAD:3 segment, your users enter the Remit To name and address for the invoice.

Customizing the NAD:301 Element

The NAD:301 element (in the NAD:2) group contains the Party Qualifier, which is used to identify whether the name and address information that follows pertains to the Ship To or Remit To name. Your users enter only the Remit To name and address in the fields associated with the NAD:2 group. You need to define the constant value “RE” in the Party Qualifier element, indicating that this group (NAD:2) contains only Remit To information. You need to hide the Party Qualifier field, because it does not need to be displayed on the translation object.

Complete the following steps to define a constant value for the second Party Qualifier field and hide the field:

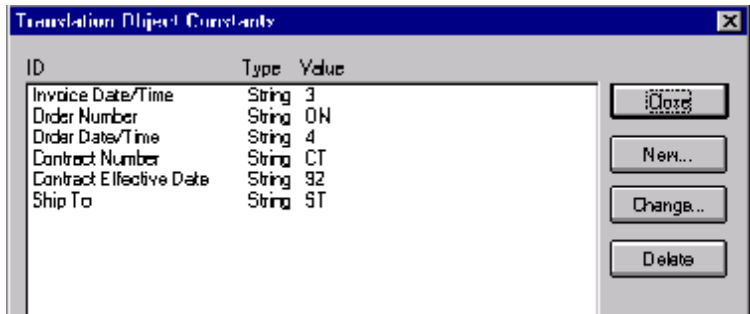
1. Double-click the NAD:301 element (in the NAD:2 group).

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

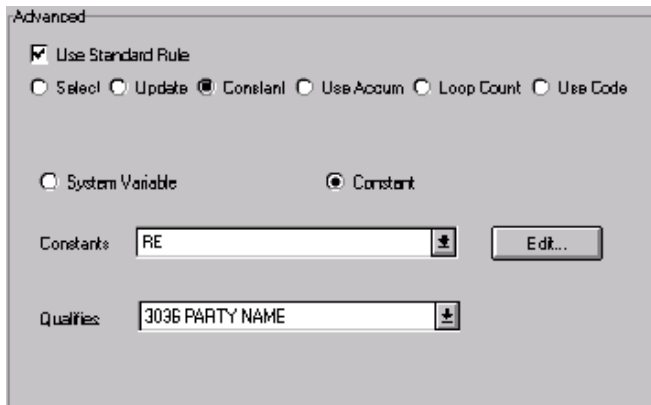
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

5. Click EDIT... to access the Translation Object Constants dialog.

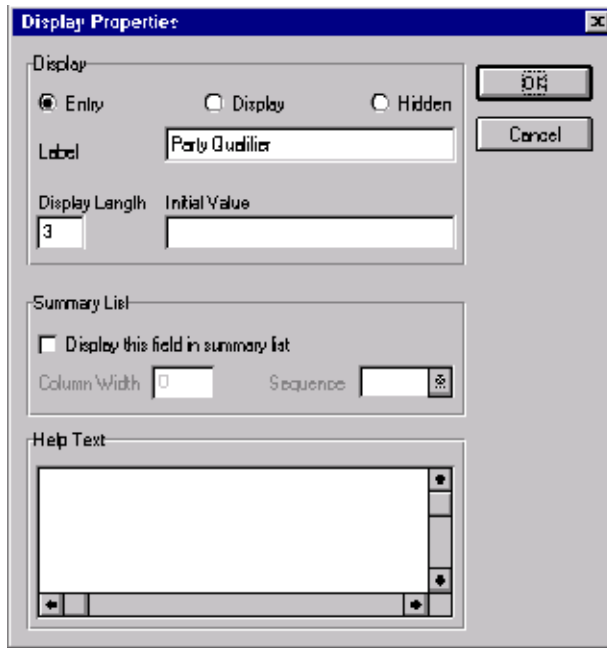


6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Remit To Party”.
8. From the Type list, select “String.”
9. In the Value box, type “RE” to indicate that the Entity Identifier Code field must contain the Remit To name and address.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select “RE.”
13. From the Qualifies list, select “3036 PARTY NAME,” which is the element that the Entity Identifier Code field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.



- Click the Hidden option.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

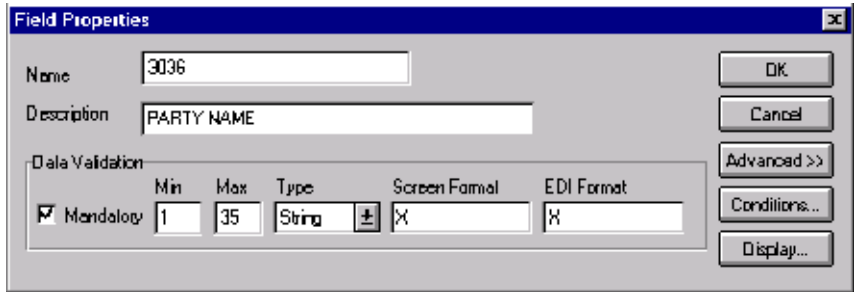
Customizing the NAD:310 Element

The NAD:310 element (Party Name) contains the name of the entity or individual to whom the invoice will be remitted. Your users are familiar with the standard address format (the name on the first line; the address on the next line(s); the city, state (or province or country), 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 need to rename the field label (so that your users know that the fields that follow contain the remit to information) and add Help text to the field.

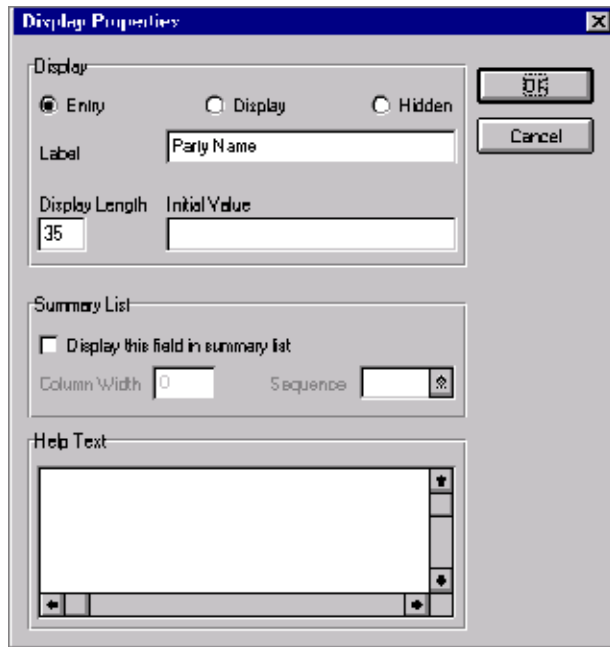
Complete the following steps to rename the field and add Help text to the second Party Name field:

- Double-click the NAD:310 element (in the NAD:2 group).

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, type “Remit To” to replace the existing text. This label is the heading for the Remit To name and address information.
4. In the Help text box, type the following text:
“Type the name of the person or organization to whom the invoice will be remitted. The name cannot exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD:316 Element

The address information in the NAD:316 element (in the NAD:2 group) corresponds to the name in the NAD:310 element so there is no need to display the label associated with the address. For the NAD:316 element, you will remove the field label and add Help text.

Complete the following steps to remove the field label and add Help text to the first Street and Number/P.O. Box field of the Remit To address:

1. Double-click the NAD:316 element (in the NAD:2 group).

The Field Properties dialog is displayed.

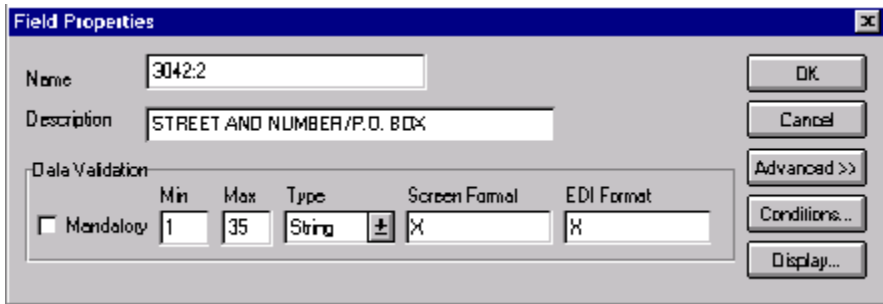
2. Click DISPLAY... to access the Display Properties dialog.

3. In the Label box, delete the existing text.
4. In the Help Text box, type the following text:
“Type the first line of the address. This address line cannot exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD:317 Element

Complete the following steps to remove the field label and add Help text to the second Street and Number/P.O. Box field of the Remit To address:

1. Double-click the NAD:317 element (in the NAD:2 group).
The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.
3. In the Label box, delete the existing text.
4. In the Help Text box, type the following text:
“Type the second line of the address. This address line cannot exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

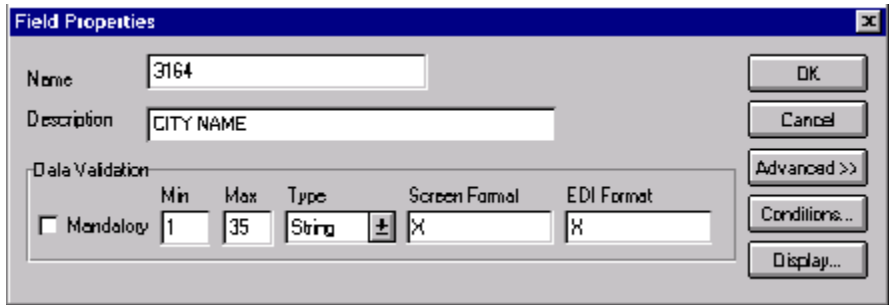
Customizing the NAD:319 Element

The NAD:319 element contains the City Name of the Remit To address. You need to remove the field label for this element, because it is evident to your users that they should enter the city name associated with the name and street address they have entered already. Also, you need to change the element and field lengths, because the City Name field does not need to be longer than 30 characters.

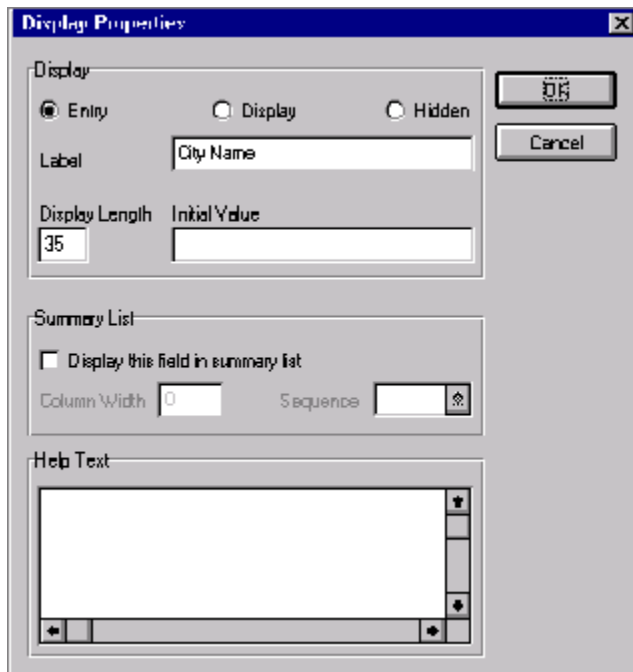
Complete the following steps to remove the field label, change the element and field lengths, and add Help text to the City Name field of the Remit To address:

1. Double-click the NAD:319 element (in the NAD:2 group).

The Field Properties dialog is displayed.



2. In the Max box, type “30”.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, delete the existing text.

5. In the Display Length box, type “30”.
6. In the Help Text box, type the following text:
“Type the city name. The city cannot exceed 30 alphanumeric characters.”
7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the NAD:320 Element

The NAD:320 element contains the Country Sub-Entity Identification. You will remove the field label for this element, because it will be evident to your users that they should enter the country sub-entity identification (e.g., state, province, or country) associated with the name and street address they have entered already. Also, you will change the element and field lengths, because you do not need this field to be longer than two characters.

Complete the following steps to remove the field label, change the element and field lengths, and add Help text to the Country Sub-Entity Identification field of the Remit To address:

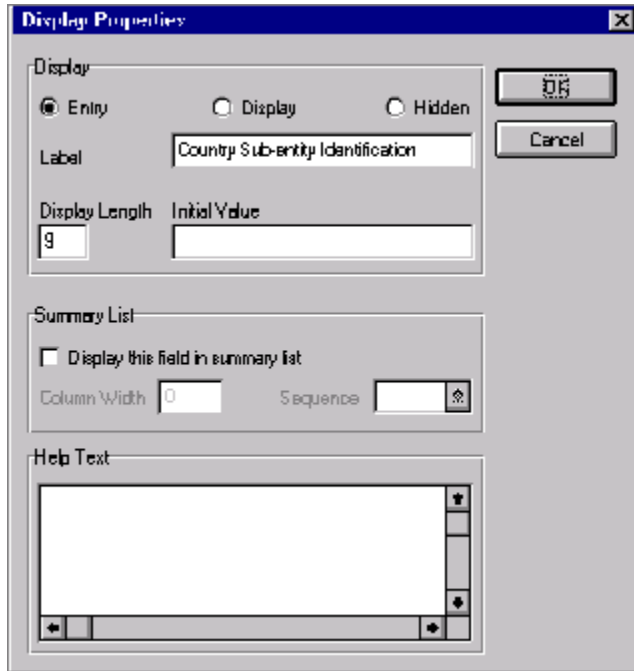
1. Double-click the NAD:320 element (in the NAD:2 group).

The Field Properties dialog is displayed.

Data Validation						
	Min	Max	Type	Screen Format	EDI Format	
<input type="checkbox"/> Mandatory	1	9	String	X	X	

2. In the Max box, type “2”.

- Click DISPLAY... to access the Display Properties dialog.



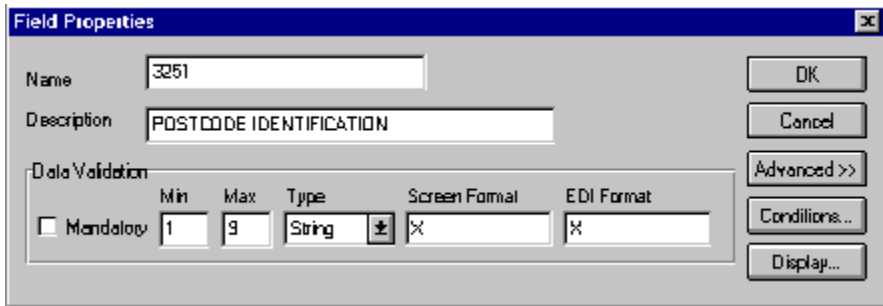
- In the Label box, delete the existing text.
- In the Display Length box, type “2”.
- In the Help Text box, type the following text:
 “Type the country sub-entity identification. The code cannot exceed 2 alphanumeric characters.”
- Click OK to exit the Display Properties dialog.
- Click CLOSE to exit the Field Properties dialog.

Customizing the NAD:321 Element

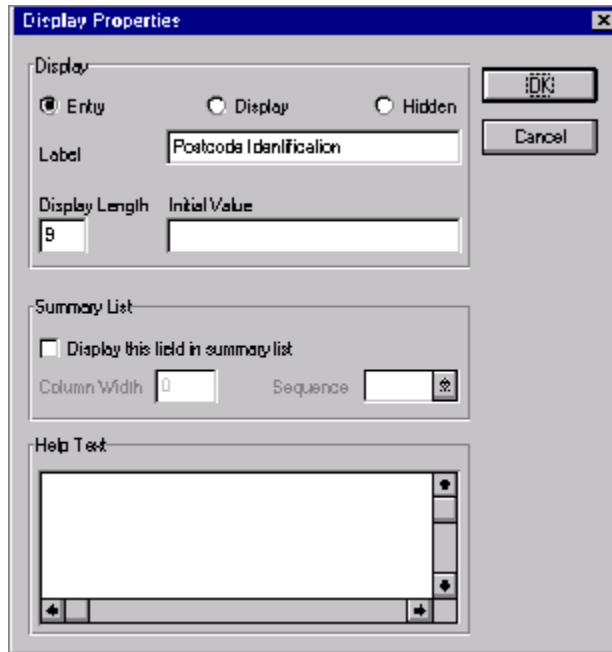
Complete the following steps to remove the field label and add Help text to the Postcode Identification field:

- Double-click the NAD:321 element (in the NAD:2 group).

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Label box, delete the existing text.
4. In the Help Text box, type the following text:
“Type the postal code. The postal code cannot exceed 9 alphanumeric characters. Do not type a hyphen (-) before the 4-character postal code extension (if used).”
5. Click OK to exit the Display Properties dialog.
6. Click CLOSE to exit the Field Properties dialog.

Customizing the PAT Group

The PAT group (Payment Terms) is used to enter the payment terms code for the invoice. The standard allows the PAT group to be used up to 10 times in an invoice. You know that your users need to use the PAT segment only once per invoice so you have already changed the maximum use of this segment from five to one.

Customizing the PAT Segment

The PAT segment is a conditional segment that specifies the Payment Terms Basis for the invoice.

Customizing the PAT01 Element

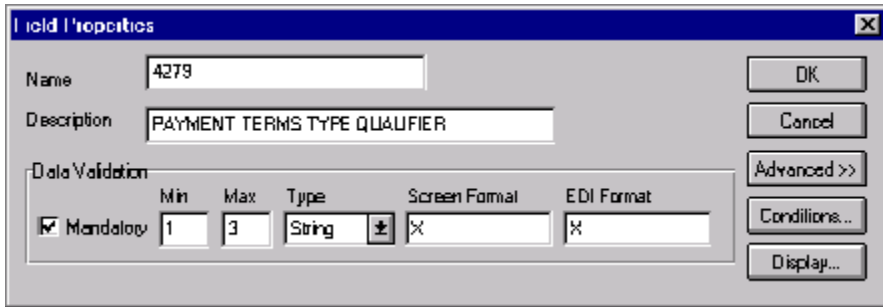
The PAT01 element contains the Payment Terms Type Qualifier, a three-character code that identifies the payment terms under which this invoice is valid. *Gentran:Director* uses a list (instead of an edit box or field) when you apply a standard rule that allows a selection of multiple items. When users use a translation object that contains a list, they select an item from the list instead of typing a value in the field. You will customize the PAT01 element so that a list containing all valid codes in the Payment Terms Type Qualifier code list is available to your users when they use the screen entry translation object. The Payment Terms Type Qualifier 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 Payment Terms Type Qualifier field, you need to rename the field label. You also need add Help text to the field.

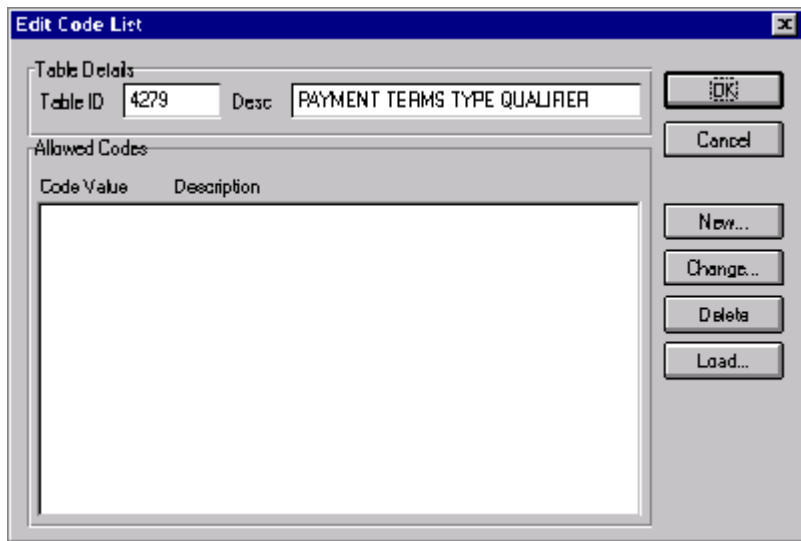
Complete the following steps to load the entire code list from the standard, rename the field label, and add Help text to the Payment Terms Type Qualifier field:

1. Double-click the PAT01 element.

The Field Properties dialog is displayed.

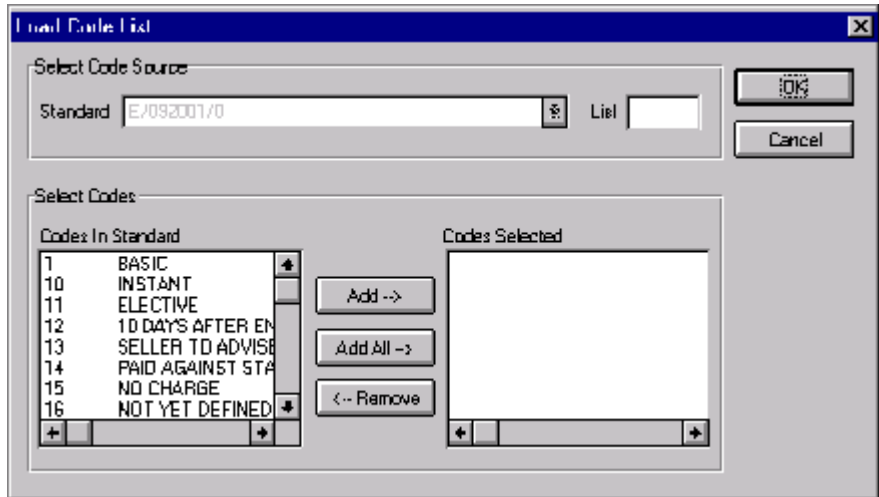


2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Use Code option.
4. Click EDIT TABLE... to access the Edit Code List dialog.



The Table ID box contains “4279,” the name of the element for which this code list table will be used. The Desc box contains “PAYMENT TERMS TYPE QUALIFIER,” the description of the element for which this code list table will be used.

- 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.



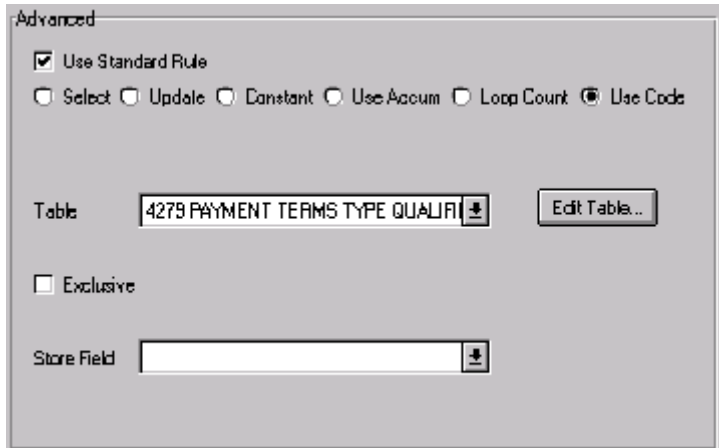
- Click ADD ALL--> to select all the codes and move them to the Codes Selected list.



Adding all the codes in the table (by using ADD ALL-->) creates a much larger form than if you use only selected codes. However, it is necessary for your users to have all the codes available from which to select.

- Click OK to load the code list and exit the Load Code List dialog.
- Click CLOSE to exit the Edit Code List dialog.

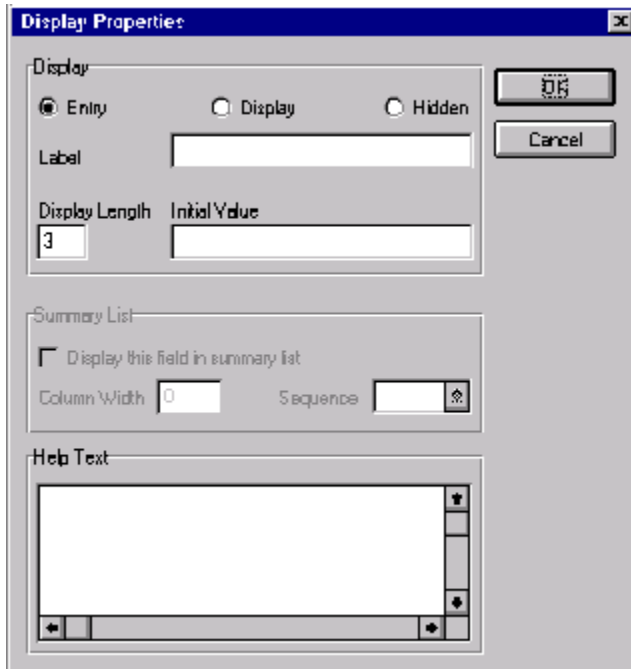
The Advanced section of the Field Properties dialog now should look like this:



The screenshot shows the 'Advanced' section of a dialog box. It contains the following elements:

- A checked radio button for 'Use Standard Rule'.
- Unselected radio buttons for 'Select', 'Update', 'Constant', 'Use Accum', 'Loop Count', and 'Use Code'.
- A 'Table' dropdown menu with the text '4279 PAYMENT TERMS TYPE QUALIF' and a downward arrow.
- An 'Edit Table...' button to the right of the table dropdown.
- An unselected checkbox for 'Exclusive'.
- A 'Store Field' dropdown menu with a downward arrow.

9. Click DISPLAY... to access the Display Properties dialog.



The screenshot shows the 'Display Properties' dialog box with the following sections and controls:

- Display:** Radio buttons for 'Entry' (selected), 'Display', and 'Hidden'. An 'OK' button is to the right.
- Label:** A text input field.
- Display Length:** A text input field containing the number '3'.
- Initial Value:** A text input field.
- Summary List:** An unselected checkbox for 'Display this field in summary list'. Below it are 'Column Width' and 'Sequence' input fields.
- Help Text:** A large text area with scrollbars.
- Buttons:** 'OK' and 'Cancel' buttons are located on the right side of the dialog.

10. In the Label box, type "Payment Terms Code".

11. In the Help Text box, type the following text:
 “Select the payment terms code from the drop-down box.”
12. Click OK to exit the Display Properties dialog.
13. Click CLOSE to exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the screen entry form display.



The Invoice Message frame now should look like this:

Customizing the LIN Group

The standard allows the LIN group to be used up to 200000 times in one invoice. The LIN group contains the following form components that you have already activated: LIN, PIA, IMD:2, MEA:2, QTY:2, and DTM:11 segments; MOA and TDT groups.

The fields associated with the LIN group are arranged on the 2200_Lin frame, which is separate from the Invoice Message frame that you have been

working with thus far. Your users need to complete the fields on the 2200_Lin frame for each item in the invoice. The list of all line items in the invoice are displayed in a list box on the Invoice Message frame. In that list box, the invoiced items are displayed line by line, forming columns of information.

Complete the following steps to rename the LIN frame and list box, provide a description for the LIN group, and add Help text to the line items list box:

1. Click the LIN group with the right mouse button and select Properties... from the shortcut menu.

The Group Properties dialog is displayed.

The screenshot shows the 'Group Properties' dialog box. The 'Identification' section has 'Name' set to '2200_LIN' and 'Desc' set to 'Line Items'. The 'Loop Control' section has 'Min Usage' set to '0' and 'Max Usage' set to '200000'. The 'Display' section has 'Promote group to parent frame' unchecked, 'Frame Caption' set to '2200_Lin', and 'List Caption' set to '2200_Lin'. There are two empty text areas for 'Frame Help Text' and 'Listbox Help Text'. On the right side, there are buttons for 'OK', 'Cancel', 'Promote', 'Split...', and 'Rules...'.

2. In the Desc box, type “Line Items”.
3. In the Frame Caption box, type “Line Items”.
4. In the List Caption box, type “Line Items” to rename the list box that is displayed on the Invoice Message frame (listing the line items entered on the Line Items frame).

5. In the Frame Help Text list box, type the following text:
 “This frame contains line item detail information. For online Help on an individual field on this frame, select the field and press F1.”
6. In the Listbox Help Text list box, type the following text:
 “This box contains the line item detail for the invoice. The data in this list box is entered or changed on the Line Items frame. To enter a new line item, click the list box and click New. To modify an existing line item, click that item and click Open.”
7. Click OK to exit the Group Properties dialog.

Customizing the LIN Segment

The LIN segment contains the details of the items on the invoice. For some of the elements in the LIN 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 need to change the maximum lengths for some of the fields, use accumulators to calculate the number of line items, or define a constant value.

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

Customizing the LIN01 and CNT02 Elements

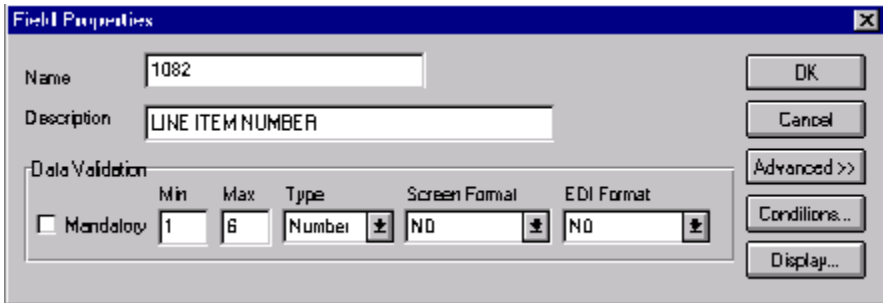
The LIN01 element (in the LIN group) contains the Line Item Number for each item in the invoice. You use the Line Item Number field to identify sequentially each line item in the invoice. You use the Use Accum function to obtain an incremental count of the number of line items. This number is used in the Control Value field (CNT02 element).

You create a list box definition for the LIN01 element to include the line number in the list box, and rename the field label to more briefly label this field. Also, you know that your users will 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 need to change the maximum length for this field to five.

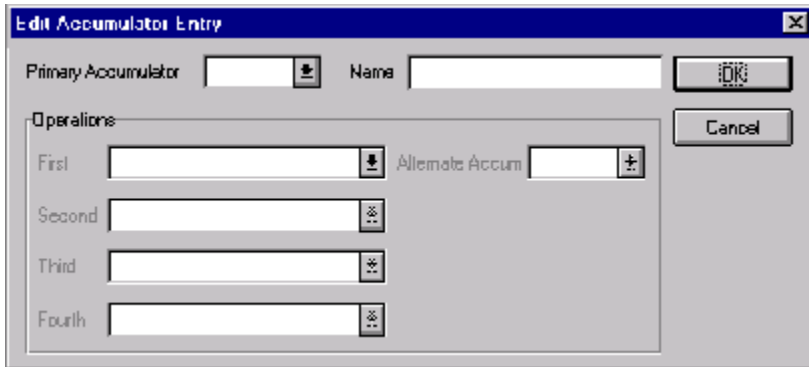
Complete the following steps to count line items in the LIN segment and generate a control total in the CNT02 element of the number of line items, rename the LIN01 field label, change the field and element lengths and create the list box definition for the Line Item Number field:

1. Double-click the LIN01 element.

The Field Properties dialog is displayed.



2. In the Max box, type “5” to allow a five-digit number in this element.
3. In the Advanced section, select the Use Standard Rule check box.
4. Click the Use Accum option.
5. Click NEW... to access the Edit Accumulator Entry dialog to create a new calculation using this element.



6. 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.



There is only one set of accumulators for each form. This means that accumulator “0,” whether it is used in

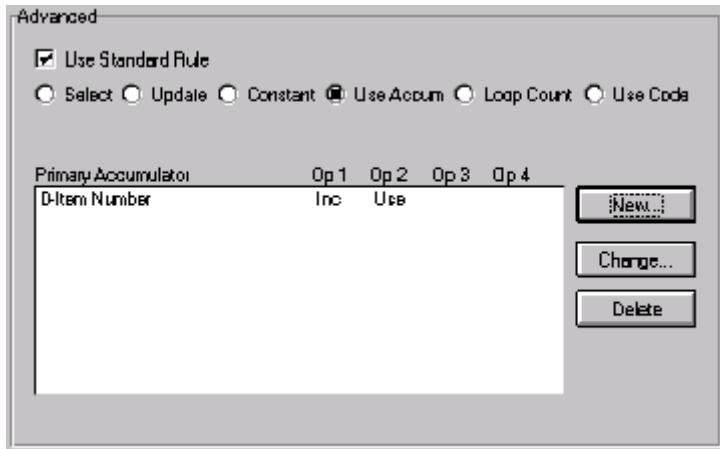
the Primary Accumulator or Alternate Accum box, is the same accumulator with the same content. If you assign calculations to accumulator “0” at the beginning of the form and then use accumulator “0” again later in the form, the content of that accumulator will be the result of the earlier calculation. Any additional calculations you assign to that accumulator will be performed on the content resulting from an earlier calculation.

7. In the Name box, type “Item Number” to give the accumulator a descriptive alias that enables you to distinguish it from other accumulators you create.
8. 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 LIN group. This operation is the first operation that the system performs.
9. From the Second list, select “Use primary” to specify that the system loads the current value of the accumulator into the LIN01 (Line Item Number) element. This operation is the second operation that the system performs, after the first operation is completed.

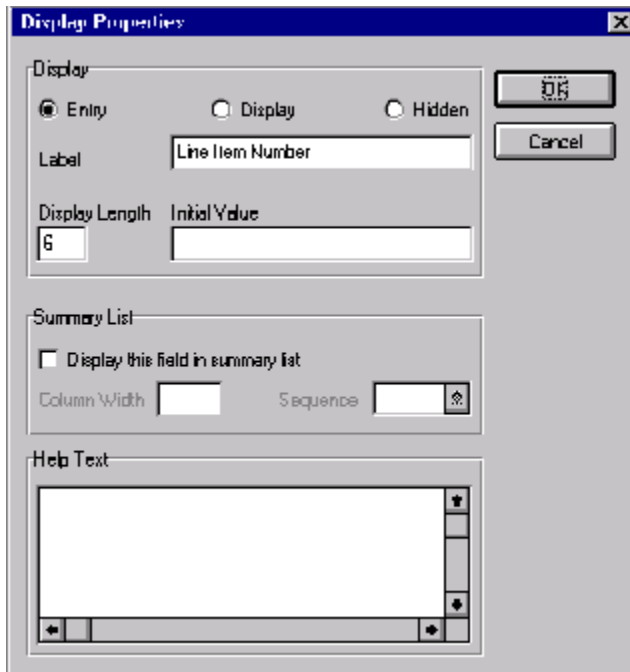
The Edit Accumulator Entry dialog now should look like this:

10. Click OK to add the accumulator and exit the Edit Accumulator Entry dialog.

The Advanced section of the Field Properties dialog now should look like this:



11. Click DISPLAY... to access the Display Properties dialog.



12. In the Display section, click the Display option to make this field display-only.

13. In the Label box, type “Item No.” to replace the existing field label.
14. In the Display length box, type “5” to allow five digits to be displayed in this field.
15. In the Summary List section, select the Display this field in summary list check box. The value in the Item No. field is displayed in a column in the Line Items list box.
16. In the Column Width box, type “8” to set the width of this column in the Line Items list.



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 will provide white space separating the columns. If the column width is the exact width of the data, then there will not be space separating the columns of data.

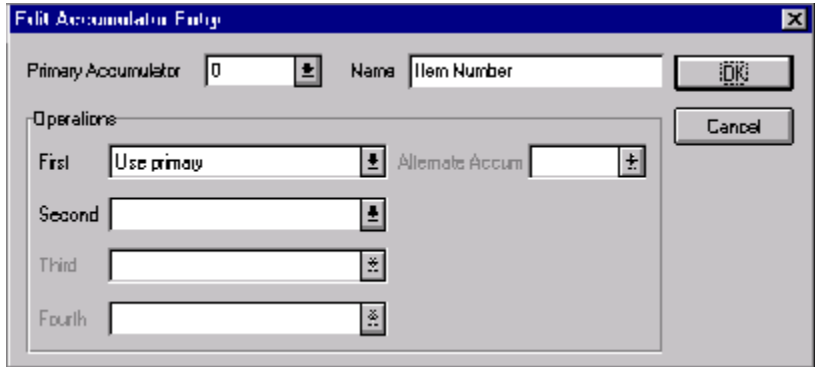
17. From the Sequence list, select “1” to indicate that this field is the first column in the list box.
18. Click OK to exit the Display Properties dialog.
19. Click CLOSE to add the standard rule to the LIN01 element and exit the Field Properties dialog.
20. Double-click the CNT02 element (in the CNT segment). The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	6	Number	NO	NO

21. In the Advanced section, select the Use Standard Rule check box.
22. Click the Use Accum option.
23. Click NEW... to access the Edit Accumulator Entry dialog to create a new calculation for this element.
24. From the Primary Accumulator list, select “0.”

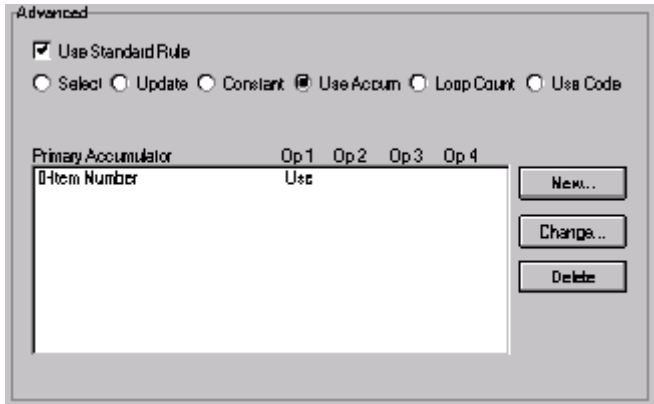
- 25. From the First list, select “Use primary” to specify that the system loads the current value of the accumulator into the CNT02 (Control Value) element.

The Edit Accumulator Entry dialog now should look like this:

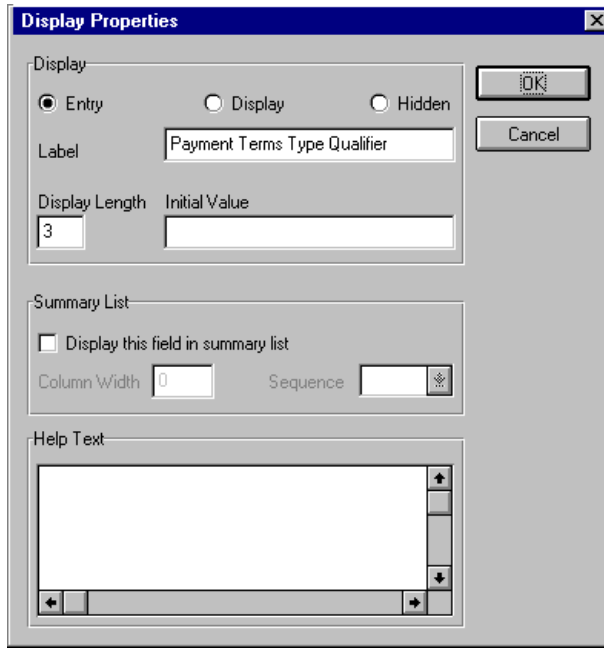


- 26. Click OK to add the accumulator.

The Advanced section of the Field Properties dialog now should look like this:



27. Click DISPLAY... to access the Display Properties dialog.



28. In the Display section, click the Display option.

29. Click OK to exit the Display Properties dialog.

30. Click CLOSE to add the standard rule to the element and exit the Field Properties dialog.

Customizing the PIA Segment

The PIA segment (in the LIN group) contains the Additional Product ID for each item in the invoice. The standard allows the PIA segment to be used up to 25 times per line item. Your users enter information in the PIA segment only once per line item so you have already changed the maximum use of this segment to one.

Customizing the PIA01 Element

The PIA01 element contains the Product ID Function Qualifier, a mandatory three-character code that identifies the type of product identification that follows. You know that the only type of product identification your users enter in the Item Number field (PIA02) is the product code, so you need to define a constant value for the Product ID Function Qualifier field,

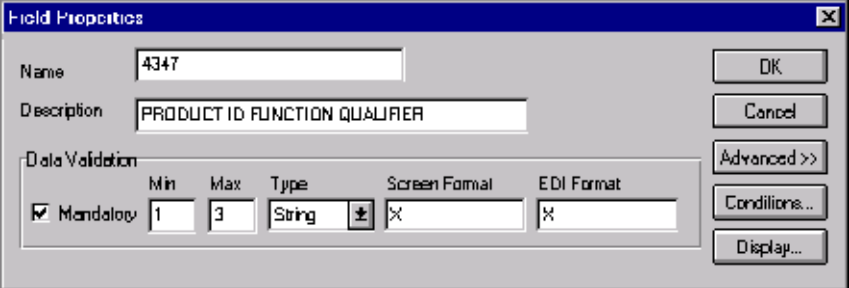
designating that the constant “5” (Product Identification) always qualifies the value in the Item Number field. You need to hide the qualifier field, because it does not need to be displayed in the translation object.

When you enter the product code in the Item Number field, the system assigns the code “5” to the Product ID Function Qualifier field.

Complete the following steps to define a constant value in the Product ID Function Qualifier field and hide the field:

1. Double-click the PIA01 element.

The Field Properties dialog is displayed.

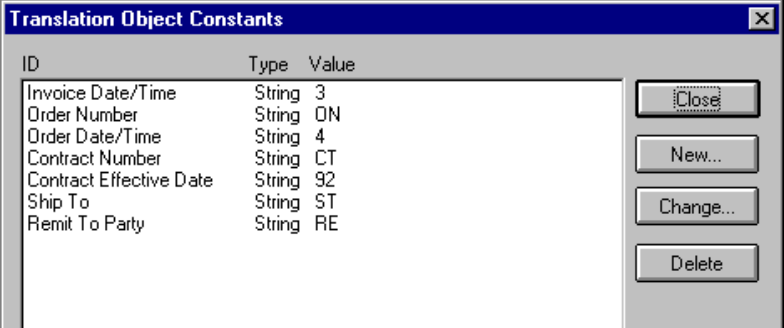


The Field Properties dialog box is shown with the following details:

- Name: 4347
- Description: PRODUCT ID FUNCTION QUALIFIER
- Data Validation section:
 - Mandatory:
 - Min: 1
 - Max: 3
 - Type: String
 - Screen Format: X
 - EDI Format: X

Buttons on the right: OK, Cancel, Advanced >>, Conditions..., Display...

2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



The Translation Object Constants dialog box is shown with the following table:

ID	Type	Value
Invoice Date/Time	String	3
Order Number	String	ON
Order Date/Time	String	4
Contract Number	String	CT
Contract Effective Date	String	92
Ship To	String	ST
Remit To Party	String	RE

Buttons on the right: Close, New..., Change..., Delete

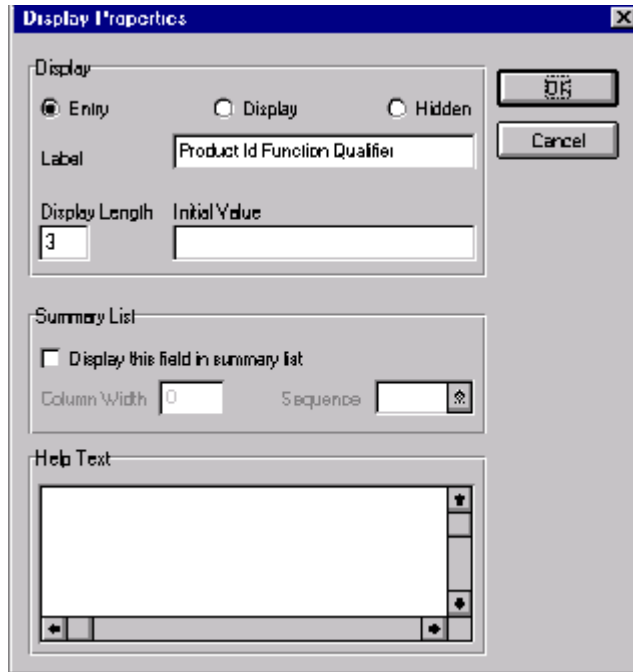
6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Product Identification” to identify the constant.
8. From the Type list, select “String” to indicate that the literal constant will be formatted as a string data type.

9. In the Value box, type “5” to indicate that the Reference Qualifier field must contain the product identification. This value is the actual value of the literal constant.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select “5” to identify the constant that will be used for this element.
13. From the Qualifies list, select “7140:2 ITEM NUMBER,” which is the element that the Reference Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:

The screenshot shows the 'Advanced' section of a dialog box. At the top, there is a checked radio button for 'Use Standard Rule'. Below it are several other radio buttons: 'Select', 'Update', 'Constant' (which is checked), 'Use Accum', 'Loop Count', and 'Use Code'. Further down, there are two more radio buttons: 'System Variable' and 'Constant' (which is checked). Below these are two text boxes. The first is labeled 'Constants' and contains the value '5'. To its right is a small 'Edit...' button. The second text box is labeled 'Qualifies' and contains the value '7140:2 ITEM NUMBER'. Both text boxes have a small downward arrow icon on their right side.

14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

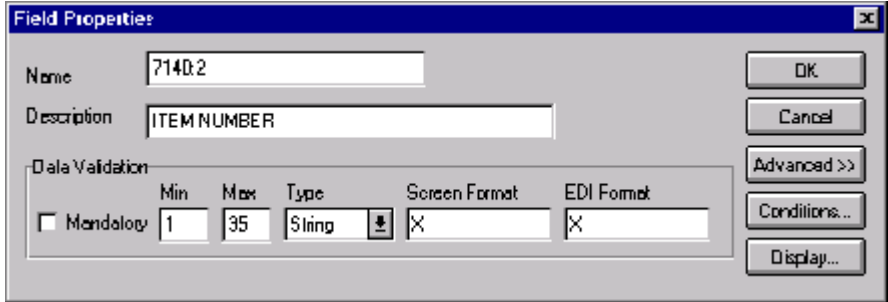
Customizing the PIA02 Element

The PIA02 element contains the Item Number for each item in the invoice. For this tutorial, you need to rename the field label. Also, the standard allows up to 35 characters in this field. You know that your users will enter product identification numbers that are no longer than 10 characters, so you need to change the element and field lengths. In addition, you need to create a list box definition for the PIA02 element to include the product code in the Line Items list box on the Invoice Message frame.

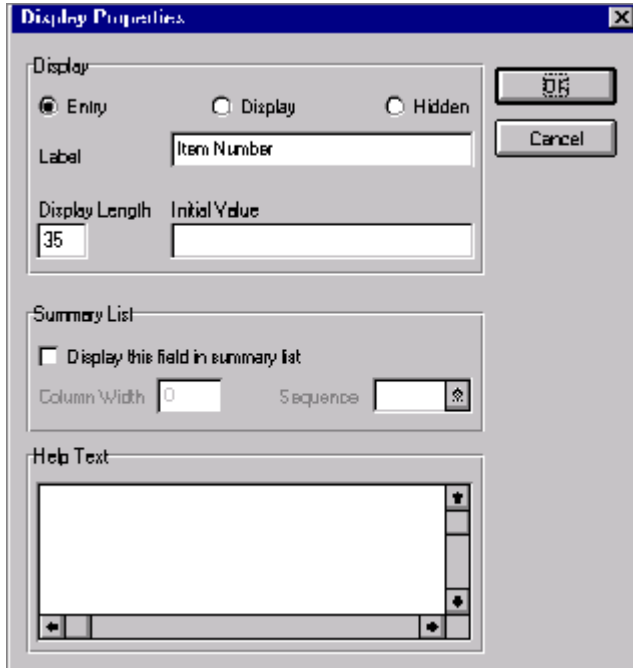
Complete the following steps to rename the field label, change the field and element lengths, add Help text, and create the list box definition for the Item Number field:

1. Double-click the PIA02 element.

The Field Properties dialog is displayed.



2. In the Max box, type “10”.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Product Code”.
5. In the Display Length box, type “10”.
6. In the Summary List section, select the Display this field in summary list check box. The value in the Product Code field will be displayed in a column in the Line Items list box.

7. In the Column Width box, type “13” to set the width of this column in the Line Items list box.
8. From the Sequence list, select “2” to indicate that this field will be the second column in the list box.
9. In the Help Text box, type the following text:
“Type your company's product code for this item in the invoice. The product code cannot exceed 10 alphanumeric characters.”
10. Click OK to exit the Display Properties dialog.
11. Click CLOSE to exit the Field Properties dialog.

Customizing the PIA03 Element

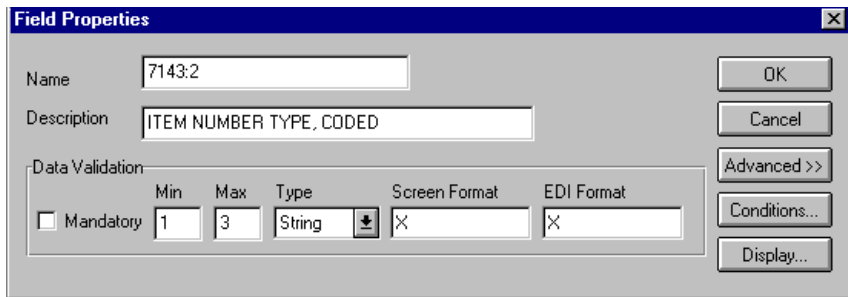
The PIA03 element contains the Item Number Type, Coded, a three-character code that identifies the type of item number in the PIA02 element. You know that the only type of product code your users enter in the Item Number field (PIA02) is the UPC code, so you need to define a constant value for the Item Number Type, Coded field, designating that the constant “UP” (UPC (Universal Product Code)) always qualifies the value in the Item Number field. Then, you will hide the qualifier field, because it does not need to be displayed in the translation object.

When a user enters the product code in the Item Number field, the system automatically assigns the code “UP” to the Item Number Type, Coded field.

Complete the following steps to define a constant value in the Item Number Type, Coded field and hide the field:

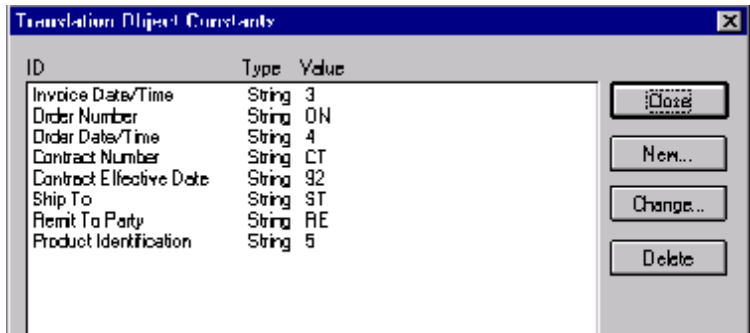
1. Double-click the PIA03 element.

The Field Properties dialog is displayed.



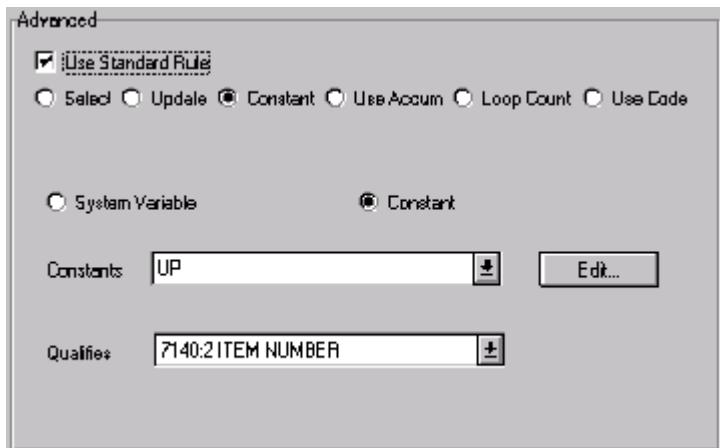
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.

4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.

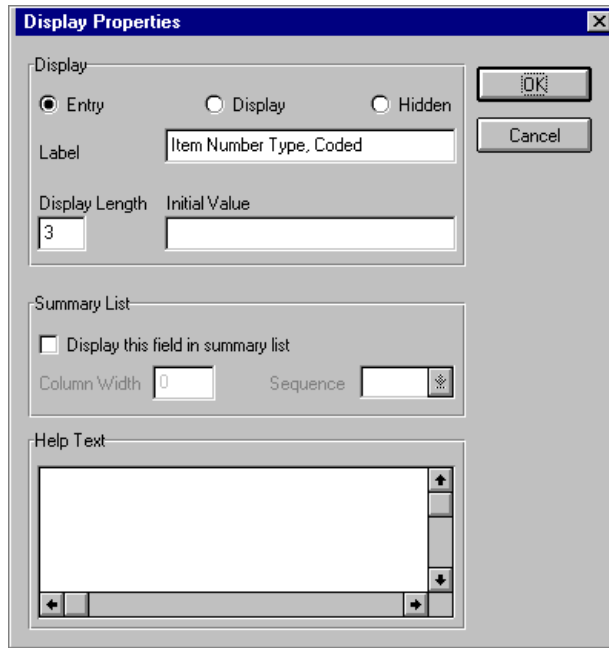


6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type "UPC Code".
8. From the Type list, select "String."
9. In the Value box, type "UP".
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select "UP."
13. From the Qualifies list, select "7140:2 ITEM NUMBER," which is the element that the Reference Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- 14. Click DISPLAY... to access the Display Properties dialog.



- 15. Click the Hidden option.
- 16. Click OK to exit the Display Properties dialog.
- 17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the IMD:2 Segment

The IMD:2 segment (in the LIN group) contains the Item Description for each item in the invoice. The standard allows the IMD:2 segment to be used up to ten times per line item. Your users enter information in the IMD:2 segment only once per line item, so you have already changed the maximum use of this segment to one.

Customizing the IMD:201 Element

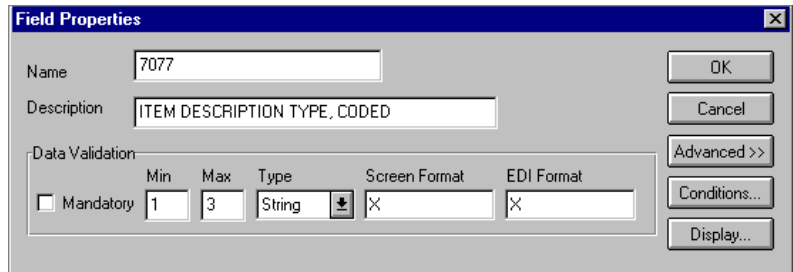
The IMD:201 element contains the Item Description Type, Coded for the invoiced item. You know that the only type of item description your users enter for this invoice is a free-form description. You need to define a constant value for the Item Description Type field, to indicate that the constant “F” (Free Form) qualifies the text in the Item Description field.

When a user enters a free-form description in the Description field, the system automatically will assign the code “F” to the Item Description Type, Coded field.

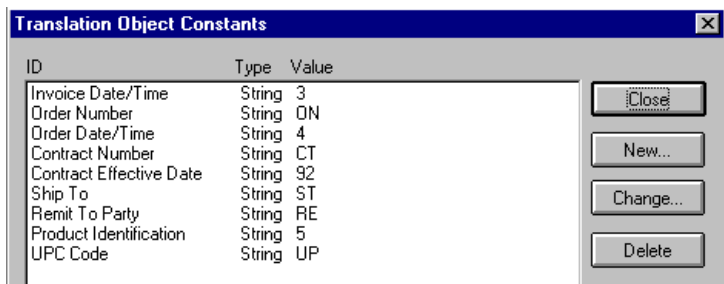
Complete the following steps to define a constant value and hide the Item Description Type, Coded field:

1. Double-click the IMD:201 element.

The Field Properties dialog is displayed.



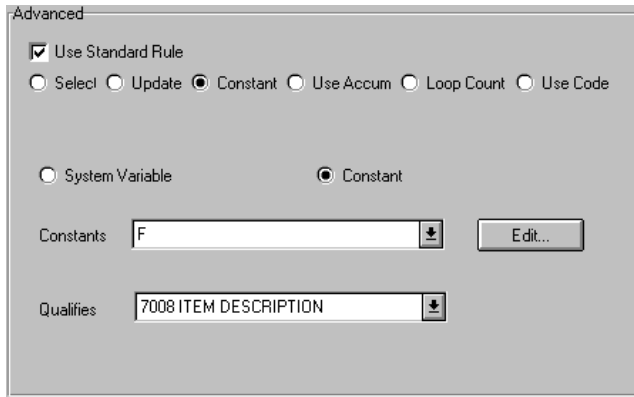
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



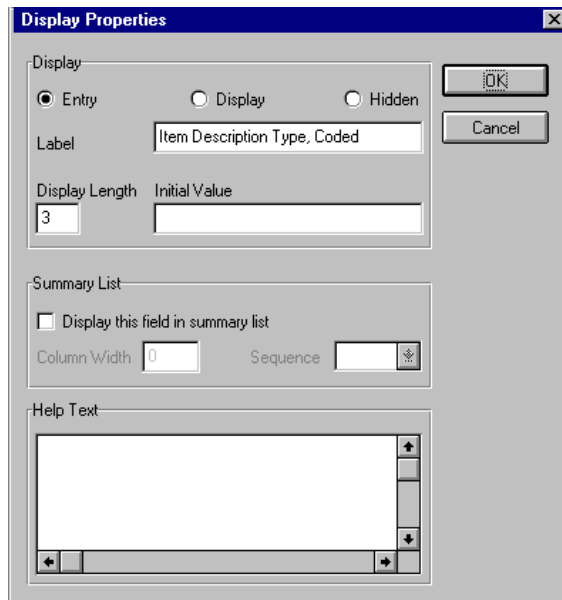
6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Free Form”.
8. From the Type list, select “String.”
9. In the Value box, type “F” to indicate that the Item Description Type, Coded field will be a free-form description. This value is the actual value of the literal constant.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.

- 12. From the Constants list, select “F.”
- 13. From the Qualifies list, select “7008 ITEM DESCRIPTION,” which is the element that the Item Description Type, Coded field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- 14. Click DISPLAY... to access the Display Properties dialog.



- 15. Click the Hidden option.

16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

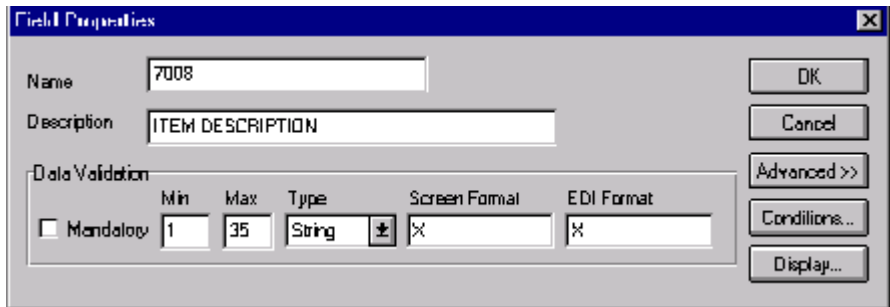
**Customizing the
IMD:206 Element**

The IMD:206 element contains the Item Description for each invoiced item, and is defined by the standard to be a string of up to 35 alphanumeric characters. You need to add Help text to this field.

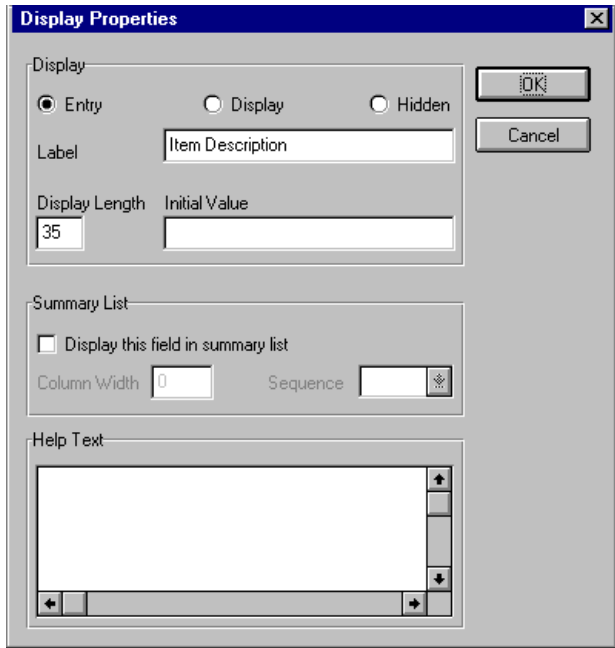
Complete the following steps to add Help text to the Item Description field:

1. Double-click the IMD:206 element.

The Field Properties dialog is displayed.



2. Click DISPLAY... to access the Display Properties dialog.



3. In the Help Text box, type the following text:
“Type the description of the invoiced item. The item description cannot exceed 35 alphanumeric characters.”
4. Click OK to exit the Display Properties dialog.
5. Click CLOSE to exit the Field Properties dialog.

Customizing the MEA:2 Segment

The MEA:2 segment (in the LIN group) contains the Measurements for each item in the invoice. The standard allows the MEA:2 segment to be used up to five times per line item. Your users enter information in the MEA:2 segment only once per line item, so you have already changed the maximum use of this segment to one.

Customizing the MEA:201 Element

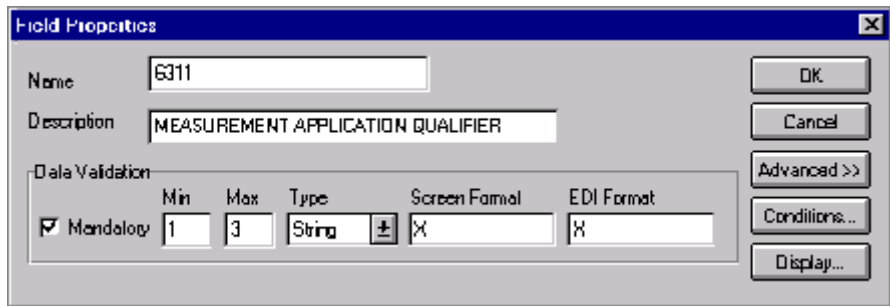
The MEA:201 element contains the Measurement Application Qualifier for each invoiced item. You know that the only type of measurement application your users enter for this invoice is a measurement. You need to define a constant value for the Measurement Application Qualifier field to indicate

that the constant “AAE” (Measurement) qualifies the text in the Measurement Dimension, Coded field. When a user enters a measurement in the Measurement Dimension, Coded field, the system automatically assigns the code “AAE” to the Measurement Application Qualifier field.

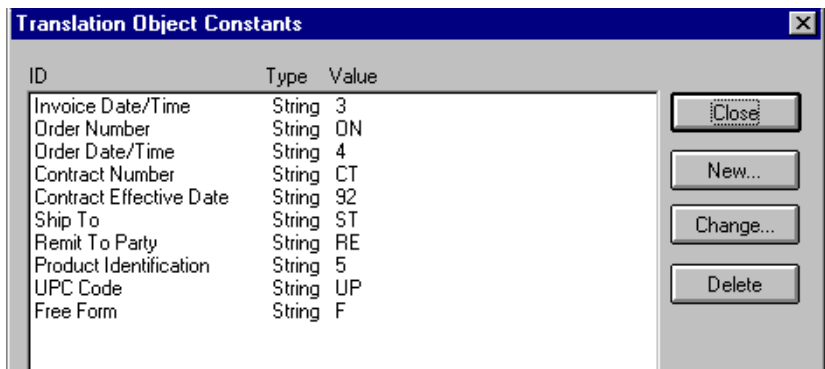
Complete the following steps to define a constant value and hide the Measurement Application Qualifier field:

1. Double-click the MEA:201 element.

The Field Properties dialog is displayed.



2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



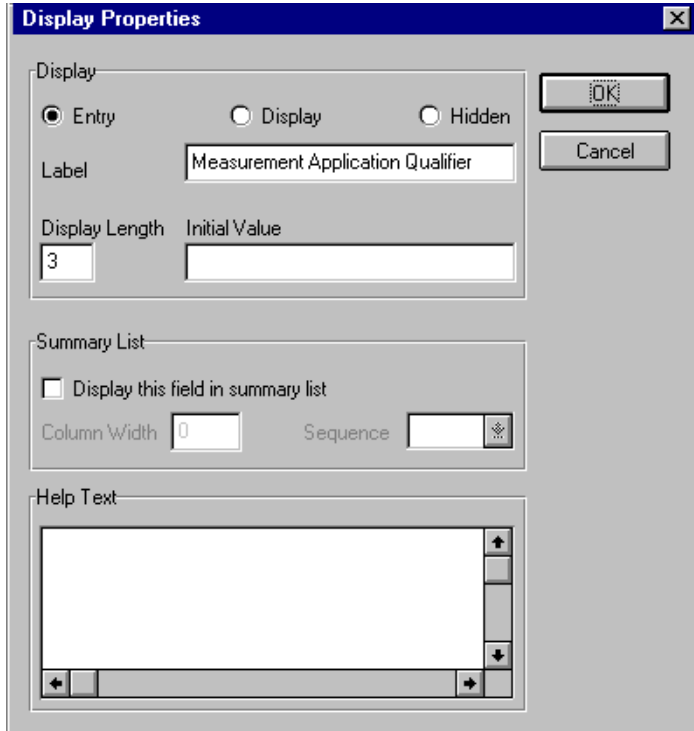
6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Measurement” to identify the constant.
8. From the Type list, select “String.”

9. In the Value box, type “AAE” to indicate that the Product/Service ID Qualifier field will be a measurement.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select “AAE.”
13. From the Qualifies list, select “6313 MEASUREMENT DIMENSION, CODED,” which is the element that the Item Description Type, Coded field qualifies.

The Advanced section of the Field Properties dialog now should look like this:

The screenshot shows the 'Advanced' section of a dialog box. It contains several radio button options for rule types: 'Use Standard Rule' (checked), 'Select', 'Update', 'Constant', 'Use Accum', 'Loop Count', and 'Use Code'. Below these are two more radio button options: 'System Variable' and 'Constant' (checked). There are two text input fields: 'Constants' containing 'AAE' and 'Qualifies' containing '6313 MEASUREMENT DIMENSION, CO'. Each input field has a dropdown arrow on its right side. An 'Edit...' button is located to the right of the 'Constants' field.

- Click DISPLAY... to access the Display Properties dialog.



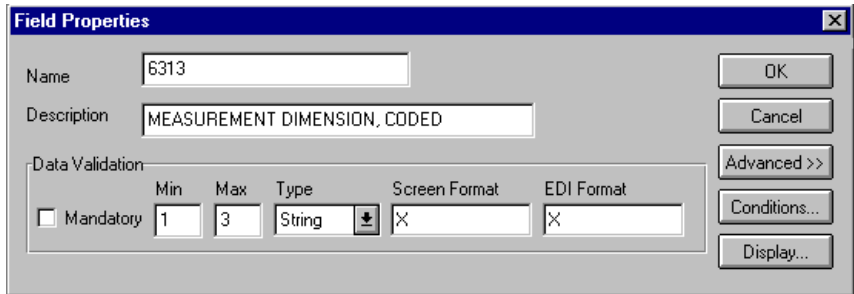
- Click the Hidden option.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the MEA:202 Element

The MEA:202 element contains the Measurement Dimension, Coded for each item in the invoice. For brevity on the translation object, you need to rename the field label. Also, you need to customize the MEA:202 element so that a drop-down list box containing all valid codes in the code list is available to your users when they use the screen entry translation object. The drop-down list box will enable them to select the appropriate EDI code from the ones available.

Complete the following steps to rename the field label, add Help text, and load the code list table from the standard for the Measurement Dimension, Coded field:

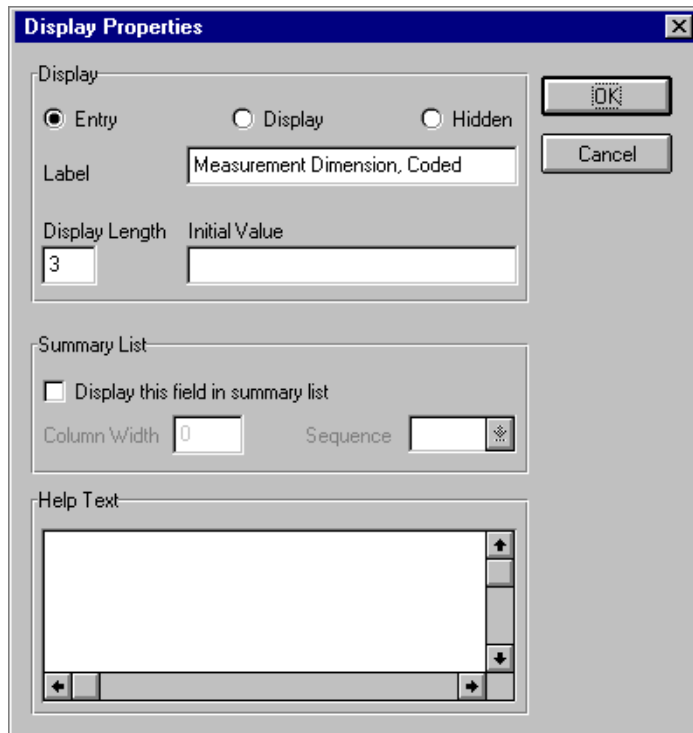
1. Double-click the MEA:202 element (in the LIN group). The Field Properties dialog is displayed.



The Field Properties dialog box is shown with the following fields and controls:

- Name: 6313
- Description: MEASUREMENT DIMENSION, CODED
- Data Validation section:
 - Mandatory:
 - Min: 1
 - Max: 3
 - Type: String
 - Screen Format: X
 - EDI Format: X
- Buttons: OK, Cancel, Advanced >>, Conditions..., Display...

2. Click DISPLAY... to access the Display Properties dialog.

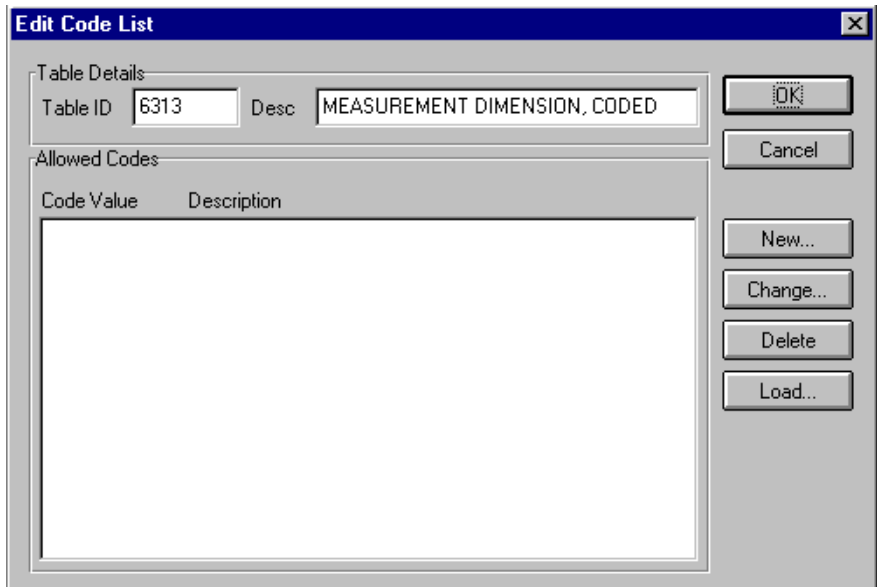


The Display Properties dialog box is shown with the following fields and controls:

- Display section:
 - Radio buttons: Entry (selected), Display, Hidden
 - Label: Measurement Dimension, Coded
 - Display Length: 3
 - Initial Value: (empty)
- Summary List section:
 - Display this field in summary list:
 - Column Width: 0
 - Sequence: (empty)
- Help Text section:
 - Empty text area with scrollbars
- Buttons: OK, Cancel

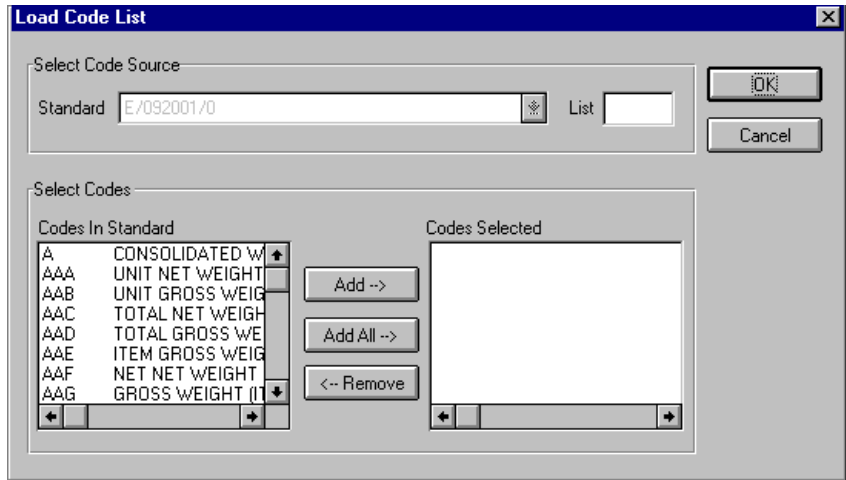
3. In the Label box, type “UOM”.
4. In the Help Text box, type the following text:
“Select the unit of measurement for the invoiced item.”
5. Click OK to exit the Display Properties dialog.

6. In the Advanced section, select the Use Standard Rule check box.
7. Click the Use Code option.
8. Click EDIT TABLE... to access the Edit Code List dialog.



The Table ID box contains “6313,” which is the name of the element for which this code list table will be used. The Desc box contains “MEASUREMENT DIMENSION, CODED,” 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.



Adding all the codes in the table (by using ADD ALL-->) creates a much larger form than if you only use selected codes.

11. Click OK to load the code list and exit the Load Code List dialog.
12. Click CLOSE to exit the Edit Code List dialog.

The Advanced section of the Field Properties dialog now should look like this:

13. Click CLOSE to exit the Field Properties dialog.

Customizing the QTY:2 Segment

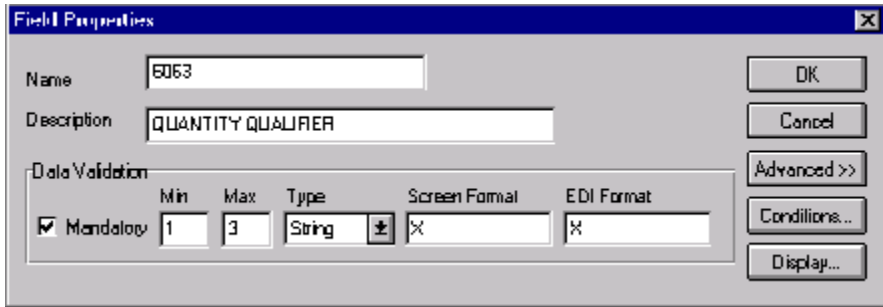
The QTY:2 segment (in the LIN group) contains the Quantity for each item in the invoice. The standard allows the QTY:2 segment to be used up to five times per line item. Your users enter information in the QTY:2 segment only once per line item so you have already changed the maximum use of this segment to one.

Customizing the QTY:201 Element

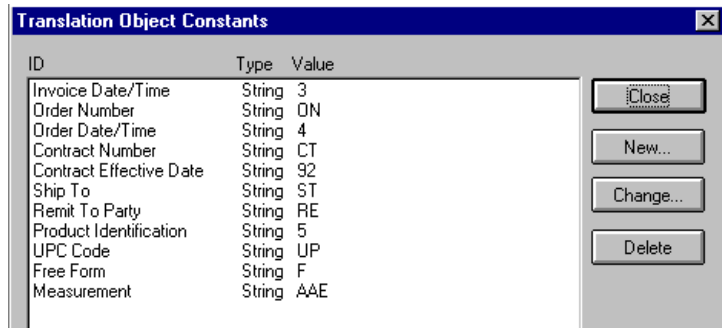
The QTY:201 element contains the Quantity Qualifier for each invoiced item. For this tutorial, you know that the only type of quantity your users enter for this invoice is the invoiced quantity. You need to define a constant value for the Quantity Qualifier field, to indicate that the constant “47” (Invoiced Quantity) qualifies the text in the Quantity field. When a user enters a measurement in the Quantity field, the system automatically assigns the code “47” to the Quantity Qualifier field.

Complete the following steps to define a constant value and hide the Quantity Qualifier field:

1. Double-click the QTY:201 element.
The Field Properties dialog is displayed.



2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to access the Translation Object Constants dialog.



6. Click NEW... to access the Edit Constant dialog.
7. In the ID box, type “Invoiced Quantity” to identify the constant.
8. From the Type list, select “String.”
9. In the Value box, type “47” to indicate that the Quantity Qualifier field will be the invoiced quantity.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.

12. From the Constants list, select “47” to identify the constant that is used for this element.
13. From the Qualifies list, select “6060 QUANTITY,” which is the element that the Quantity Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:

Advanced

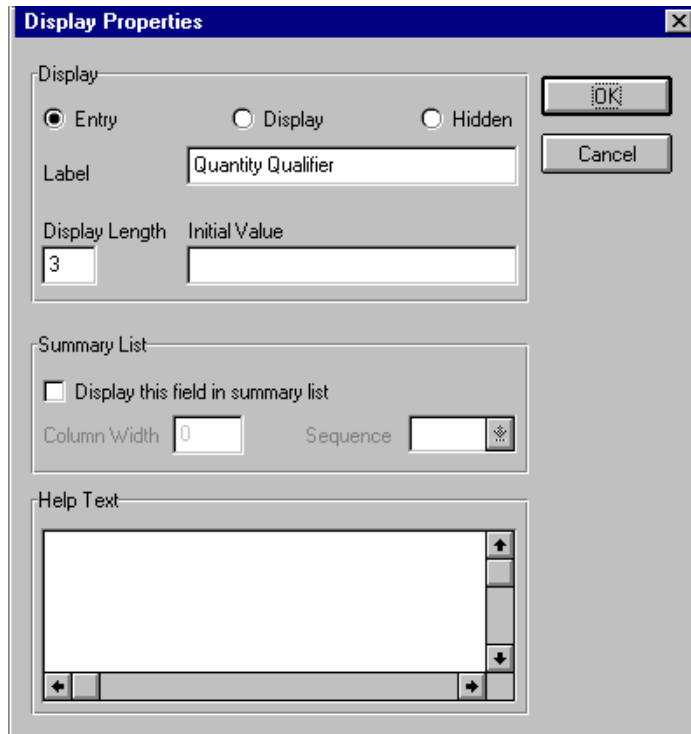
Use Standard Rule
 Select Update Constant Use Accum Loop Count Use Code

System Variable Constant

Constants: 47 [v] [Edit...]

Qualifies: 6060 QUANTITY [v]

- 14. Click DISPLAY... to access the Display Properties dialog.



- 15. Click the Hidden option.
- 16. Click OK to exit the Display Properties dialog.
- 17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

**Customizing the
QTY:202,
MOA:502, and
MOA:1002
Elements**

The QTY:202 element contains the Quantity for each item on the invoice. The quantity for each line item is used to calculate the total dollar amount of the invoice. From this calculation, you need to generate a running total of extended price and load the final total into the MOA:1002 (Monetary Amount) element.

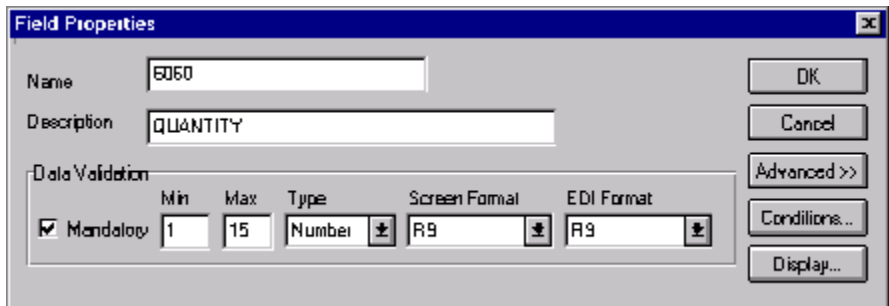
You need to create a list box definition for the QTY:202 element to include the quantity invoiced in the list box. The standard allows up to 15 digits in this field. You know that your users do not enter a quantity of more than 99,999 (a five-digit number) for any one item, so you need to change the maximum lengths for this field and element to five.

Also, the screen format and EDI format of the data currently use the number format “R9,” indicating a number with an explicit decimal point and up to nine decimal places. Your users do not enter any quantities with a decimal point so you need to change the screen and EDI formats to “R0,” indicating a number with an explicit decimal point and no decimal places.

Complete the following steps to use an accumulator in the QTY:202 element to generate a running total of extended price that is used in the MOA:1002 element, change the screen and EDI formats, change the field and element lengths, add Help text, and create the list box definition for the Quantity field:

1. Double-click the QTY:202 element (in the LIN group).

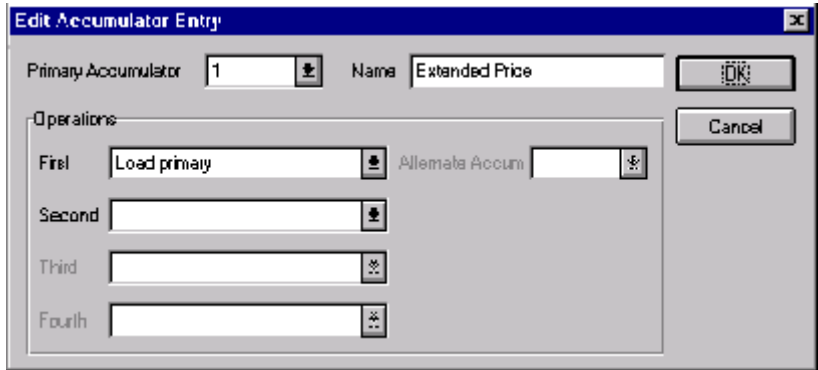
The Field Properties dialog is displayed.



2. In the Max box, type “5” for the maximum number of digits allowed in this element.
3. From the Screen Format list, select “R0” to allow a number with an explicit decimal point and no decimal places to be entered in this field.
4. From the EDI Format list, select “R0” to format the EDI data with an explicit decimal point and no decimal places.
5. In the Advanced section, select the Use Standard Rule check box.
6. Click the Use Accum option.
7. Click NEW... to access the Edit Accumulator Entry dialog to create a new calculation using this element.
8. From the Primary Accumulator list, select “1.”
9. In the Name box, type “Extended Price” to give the accumulator a descriptive alias that enables you to differentiate the purposes of the accumulators you create.
10. From the First list, select “Load primary” to specify that the system will load the content of the QTY:202 element into the Primary Accumulator

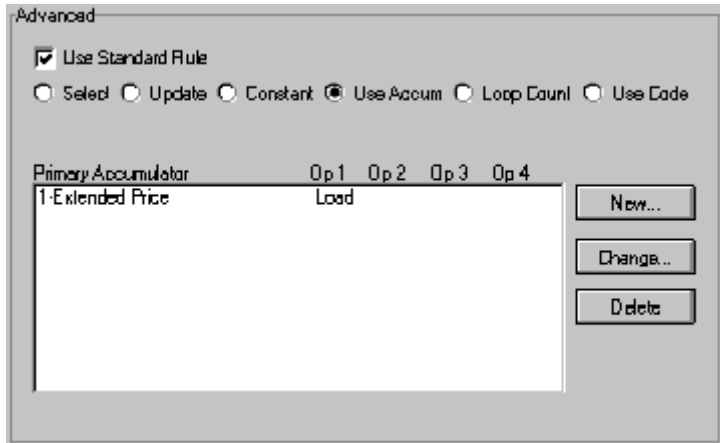
for each iteration of the LIN group. This operation is the first operation that the system performs.

The Edit Accumulator Entry dialog now should look like this:

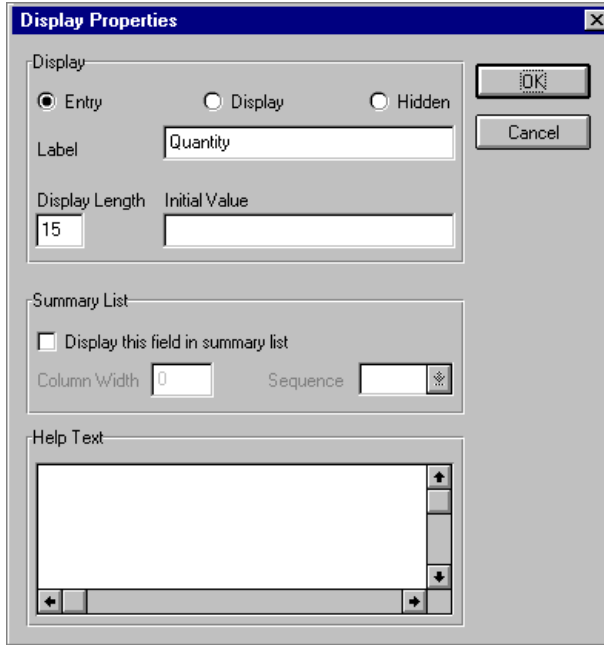


11. Click OK to add the accumulator.

The Advanced section of the Field Properties dialog now should look like this:

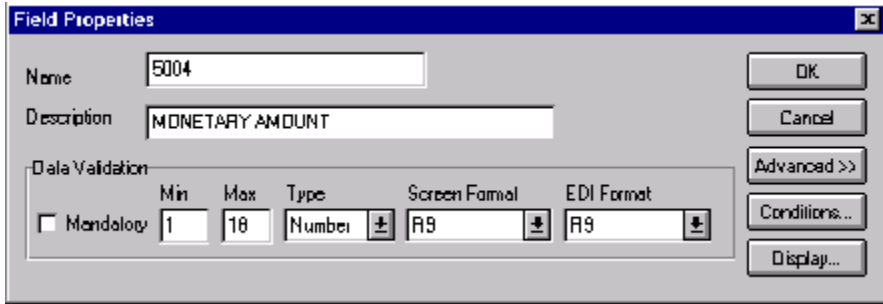


- Click DISPLAY... to access the Display Properties dialog.



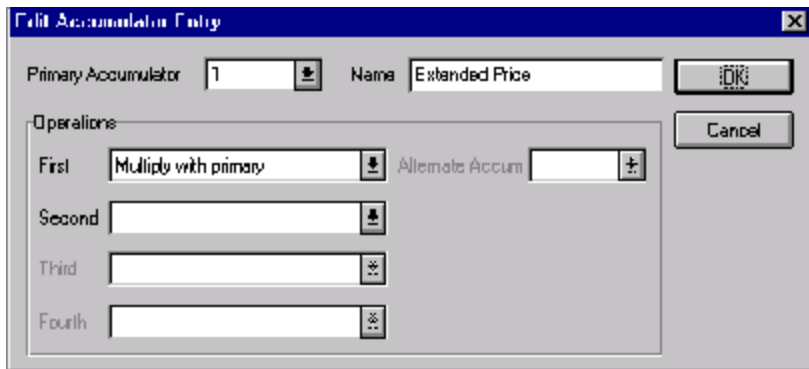
- In the Display Length box, type “5” to allow five digits to be displayed in this field.
- In the Summary List section, select the Display this field in summary list check box. The value in the Quantity field is displayed in a column in the Line Items list box.
- In the Column Width box, type “8” to set the width of this column in the Line Items list box.
- From the Sequence list, select “3” to indicate that this field is the third column in the list box.
- In the Help Text box, type the following text:
 “Type the quantity of this invoiced item. The quantity cannot exceed 5 digits.”
- Click OK to exit the Display Properties dialog.
- Click CLOSE to add the standard rule to the element and exit the Field Properties dialog.
- Double-click the MOA:502 element (in the LIN group).

The Field Properties dialog is displayed.



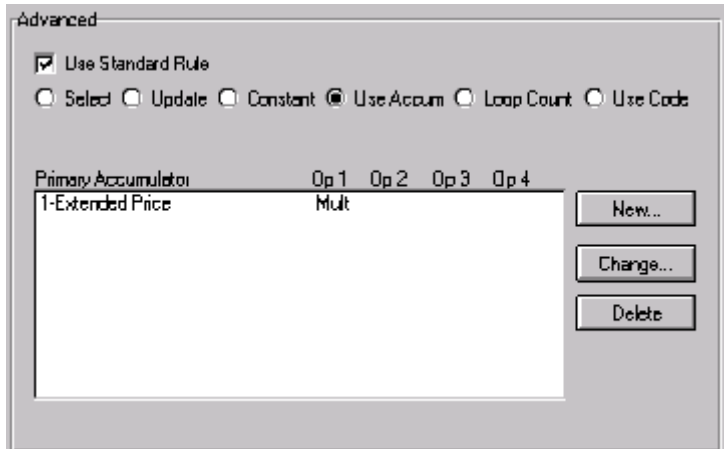
- 20. In the Advanced section, select the Use Standard Rule check box.
- 21. Click the Use Accum option.
- 22. Click NEW... to access the Edit Accumulator Entry dialog to create a new calculation using this element.
- 23. From the Primary Accumulator list, select "1".
- 24. From the First list, select "Multiply with primary" to specify that the system multiply the value of the MOA:502 (Monetary Amount) element (in the LIN group) by the content of the primary accumulator, and store the result in the primary accumulator for each iteration of the LIN group. This operation is the first operation that the system performs.

The Edit Accumulator Entry dialog now should look like this:



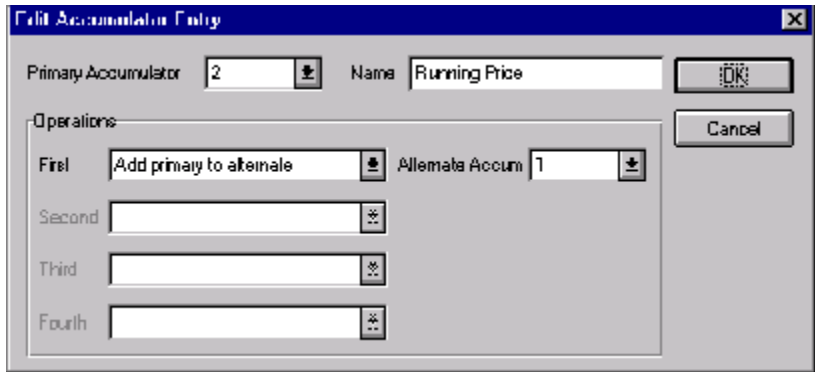
- 25. Click OK to add the accumulator.

The Advanced section of the Field Properties dialog now should look like this:



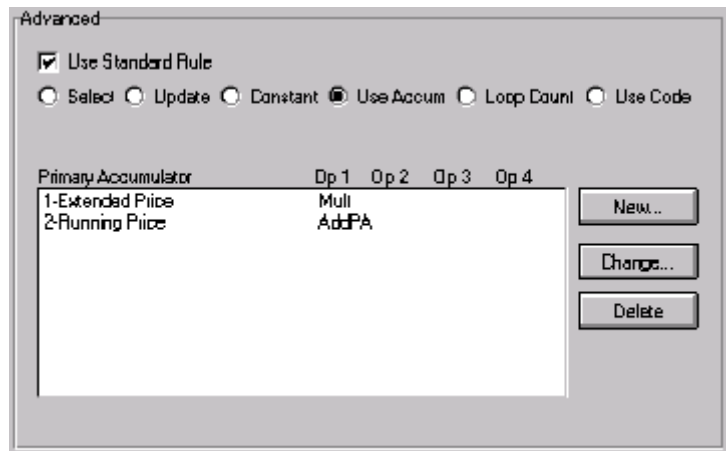
26. Click **NEW...** to access the Edit Accumulator Entry dialog to create a new calculation for this element.
27. From the Primary Accumulator list, select “2.”
28. In the Name box, type “Running Price” to give the accumulator a descriptive alias that enables you to differentiate the purposes of the accumulators you create.
29. From the First list, select “Add primary to alternate” to specify that the system add the content of the primary accumulator to the content of the alternate accumulator, and store the result in the primary accumulator for each iteration of the LIN group.
30. From the Alternate Accum list, select “1.” This operation specifies that the system add 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 LIN group.

The Edit Accumulator Entry dialog now should look like this:



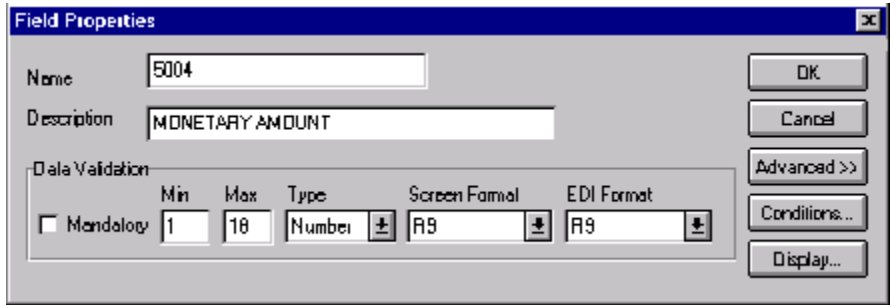
- 31. Click OK to add the accumulator.

The Advanced section of the Field Properties dialog now should look like this:



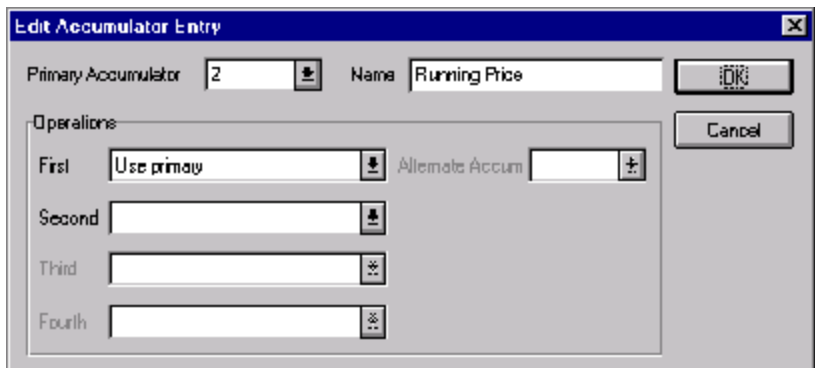
- 32. Click OK to exit the Field Properties dialog.
- 33. Double-click the MOA:1002 element (in the MOA group), in the summary section of the form.

The Field Properties dialog is displayed.



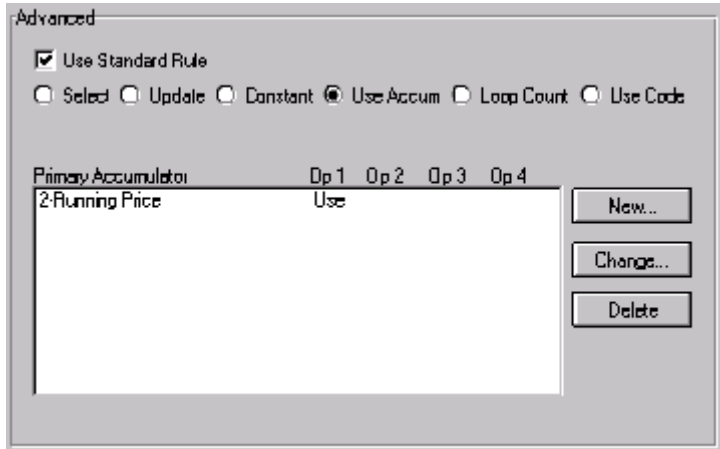
34. In the Advanced section, select the Use Standard Rule check box.
35. Click the Use Accum option.
36. Click NEW... to access the Edit Accumulator Entry dialog to create a new calculation for this element.
37. From the Primary Accumulator list, select “2.”
38. From the First list, select “Use primary” to specify that the system load the content of the primary accumulator into the MOA:1002 (Monetary Amount) element.

The Edit Accumulator Entry dialog now should look like this:

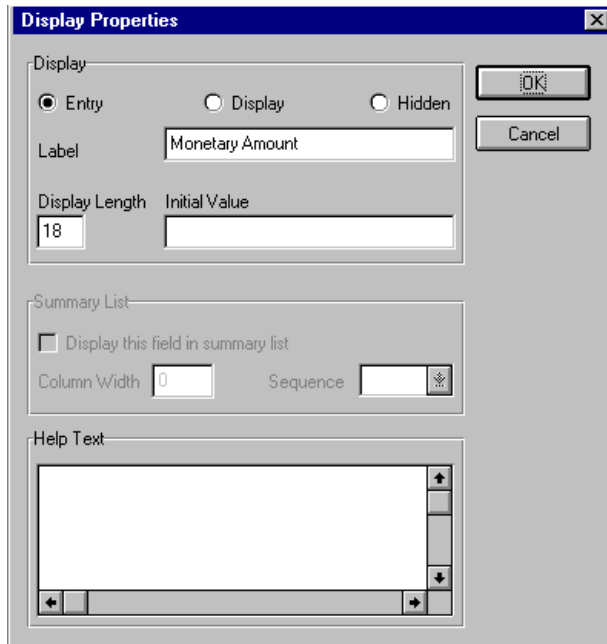


39. Click OK to add the accumulator.

The Advanced section of the Field Properties dialog now should look like this:



40. Click DISPLAY... to access the Display Properties dialog.



41. In the Display section, click the Display option. Users can read the data in the Monetary Amount field, but cannot enter a value in this field.

42. Click OK to exit the Display Properties dialog.
43. Click CLOSE to add the standard rule to the element and exit the Field Properties dialog.

Customizing the DTM:11 Segment

The DTM:11 segment (in the LIN group) contains the Date/Time/Period for each item in the invoice. The standard allows the DTM:11 segment to be used up to 35 times per line item. Your users enter information in the DTM:11 segment only once per line item so you have already changed the maximum use of this segment to one.

Customizing the DTM:1101 Element

The DTM:1101 element (Date/Time Qualifier) is a mandatory element for the DTM:11 segment. The DTM:1101 element contains the two-character code from your EDI data to indicate what type of date follows (e.g., date shipped). You need to define a constant value for the Date/Time/Period Qualifier field, designating that the constant “186” (Departure Date/Time, Actual) qualifies the date in the Date/Time/Period field.

When a user enters the date on which the item is shipped in the Date/Time/Period field, the system assigns the code “186” to the Date/Time/Period Qualifier field. The qualifier field does not need to be displayed.

Complete the following steps to define a constant and hide the Date/Time/Period Qualifier field:

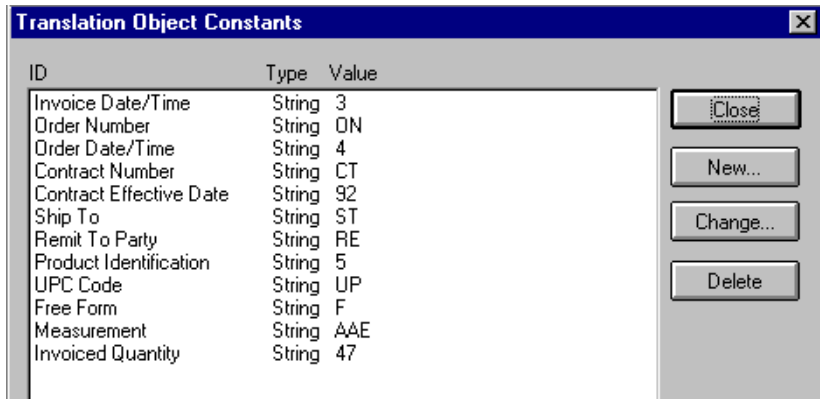
1. Double-click the DTM:1101 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

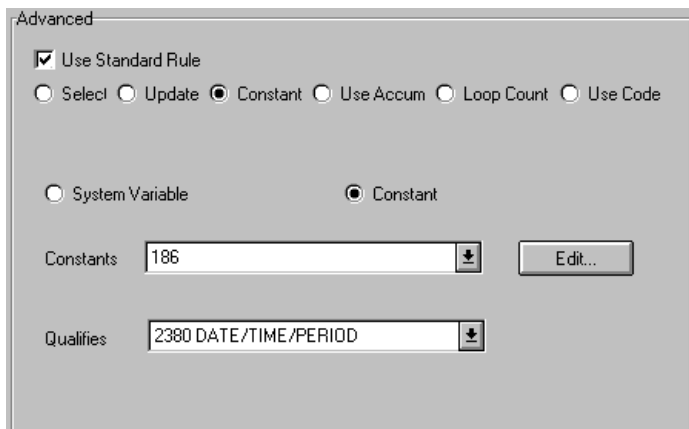
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

5. Click **EDIT...** to display the Translation Object Constants dialog.

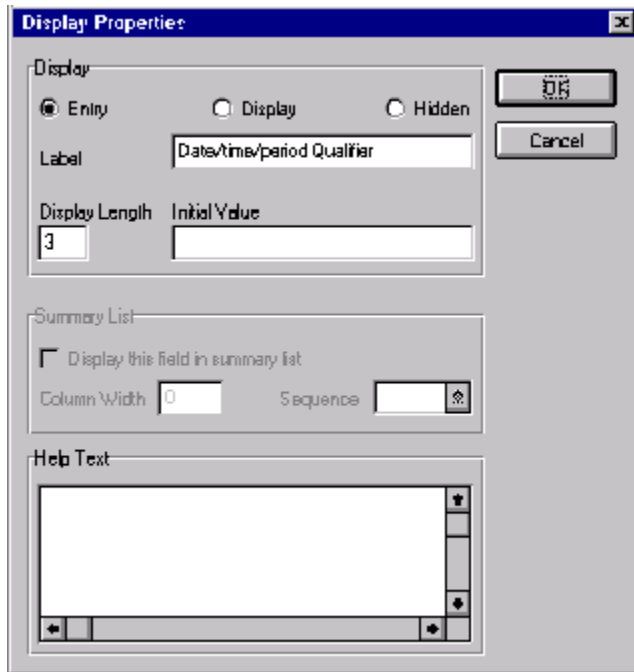


6. Click **NEW...** to display the Edit Constant dialog.
7. In the ID box, type “Date Shipped”.
8. From the Type list, select “String”.
9. In the Value box, type “186”.
10. Click **OK** to add the constant.
11. Click **CLOSE** to exit the Translation Object Constants dialog.
12. From the Constants list, select “186”.
13. From the Qualifies list, select “2380 DATE/TIME/PERIOD.”

The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.



- Click the Hidden option.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

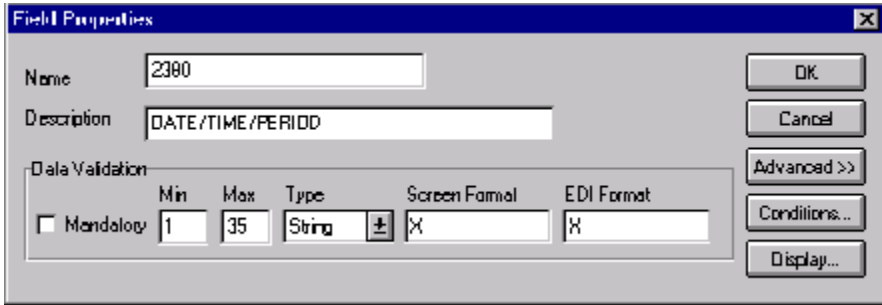
Customizing the DTM:1102 Element

The DTM:1102 element in the DTM:11 segment contains the Date/Time/Period qualified by the Date/Time/Period Qualifier field. This element is defined by the standard to be a string of 35 characters. In this tutorial, you know that the ship date always is an eight-character string, so you need to change the element and field lengths to accommodate the new length. Also, you need to rename the field label and add Help text to the field.

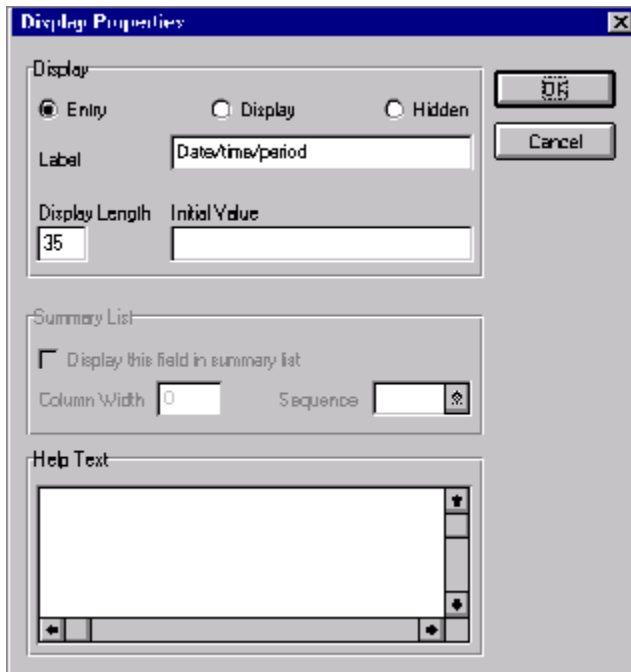
Complete the following steps to change the element and field lengths, rename the field label, and add Help text to the Date field:

- Double-click the DTM:1102 element.

The Field Properties dialog is displayed.



2. In the Max box, type “8” to allow the entire date, including separators (/), in this element.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Date Shipped”.
5. In the Display Length box, type “8”.

6. In the Help Text box, type the following text:
“Type the date on which this invoiced item was shipped. Use the format MM/DD/YY.”
7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to exit the Field Properties dialog.

Customizing the MOA Group

The MOA group (in the LIN group) contains the Monetary Amount for each line item. The standard allows the MOA group to be used up to five times per line item. You have already changed the maximum use of the MOA group and promoted the group to obtain just one instance of the MOA group, and to place the price on the Line Items frame.

Customizing the MOA:5 Segment

The MOA:5 segment (in MOA group which is in the LIN group) contains the Monetary Amount for each item in the invoice.

Customizing the MOA:501 Element

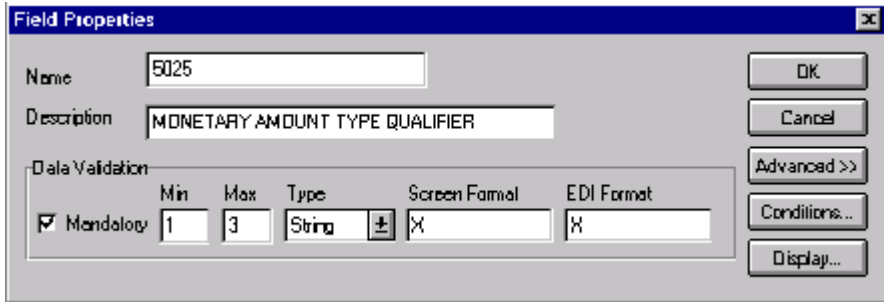
The MOA:501 element (Monetary Amount Type Qualifier) is a mandatory element for the MOA:5 segment. The MOA:501 element contains the three-character code from your EDI data to indicate what type of monetary amount follows (e.g., price). You need to define a constant value for the Monetary Amount Type Qualifier field, designating that the constant “146” (Unit Price) qualifies the monetary amount in the Monetary Amount field.

When a user enters the price for an item in the Monetary Amount field, the system assigns the code “146” to the Monetary Amount Type Qualifier field. The qualifier field does not need to be displayed.

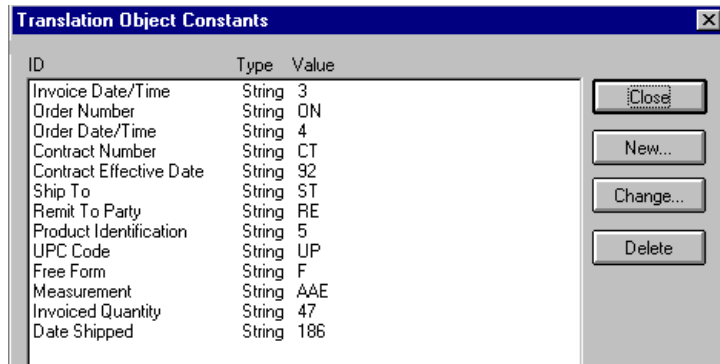
Complete the following steps to define a constant and hide the Monetary Amount Type Qualifier field:

1. Double-click the MOA:501 element.

The Field Properties dialog is displayed.

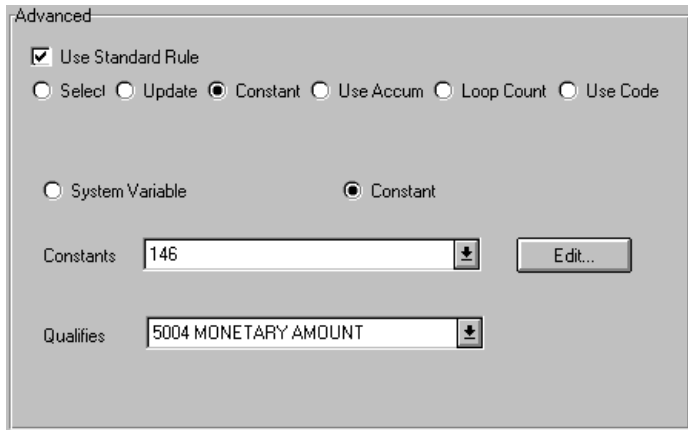


2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to display the Translation Object Constants dialog.

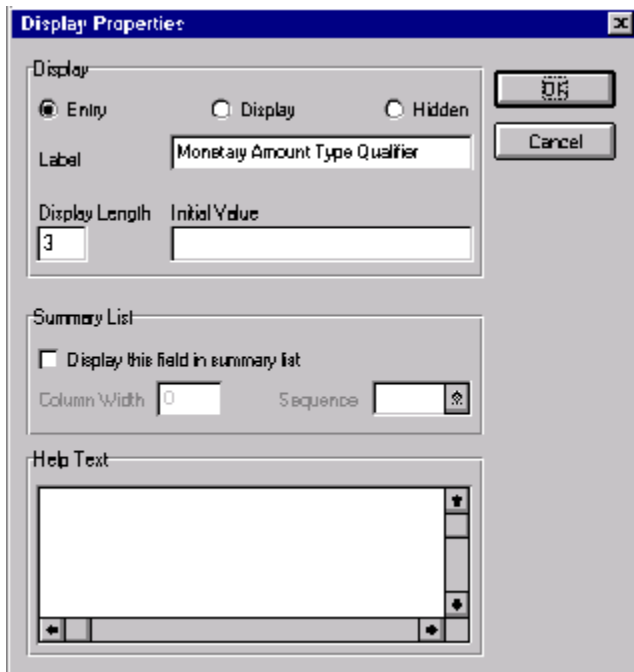


6. Click NEW... to display the Edit Constant dialog.
7. In the ID box, type “Unit Price”
8. From the Type list, select “String.”
9. In the Value box, type “146”.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select “146.”
13. From the Qualifies list, select “5004 MONETARY AMOUNT”, which is the element that the Monetary Amount Type Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option

16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the MOA:502 Element

The MOA:502 element contains the Monetary Amount for each item in the invoice. You have 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 will be loaded into the MOA:1002 (Monetary Amount) element. You need to create a list box definition for the MOA:502 element to include the unit price in the Line Items list box.

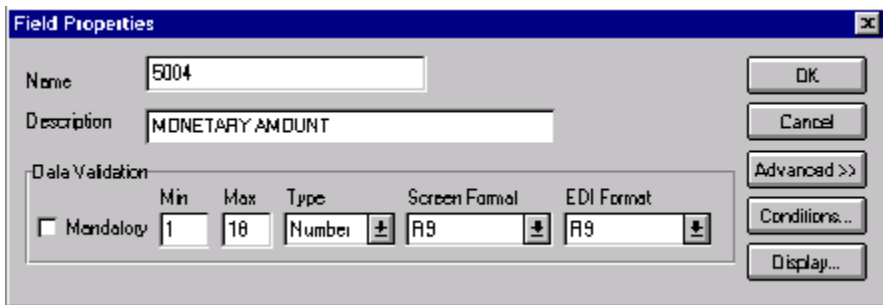
You need to rename the field label. The standard designates an “R9” screen format and EDI format for this field, meaning that the price is formatted with an explicit decimal point and up to nine decimal places. Your users enter a price in an “R2” format (a number with up to two decimal places) so you need to change the screen and EDI formats from “R9” to “R2.”

The standard defines this element as having a maximum length of 18. 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).

Complete the following steps to rename the field label, change the field and element lengths, change the number formats, add Help text, and create the list box definition for the Monetary Amount field:

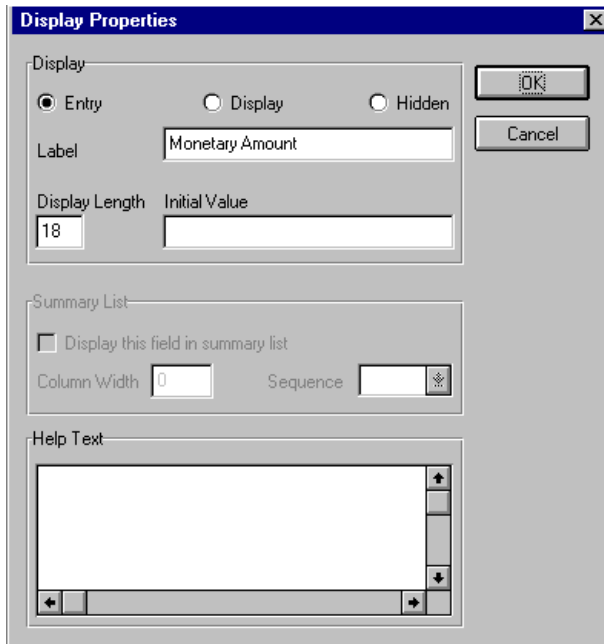
1. Double-click the MOA:502 element.

The Field Properties dialog is displayed.



2. In the Max box, type “8”.

3. From the Screen Format list, select “R2” to indicate that this field on the translation object accept a number with an explicit decimal point and up to two decimal places.
4. From the EDI Format list, select “R2” to format the EDI data with an explicit decimal point and two decimal places.
5. Click DISPLAY... to access the Display Properties dialog.



6. In the Label box, type “Price” to replace the existing text.
7. In the Display Length box, type “8” to allow eight numeric digits in this field, including a plus or minus sign and a decimal point.
8. In the Summary List section, 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, type “8” to set the width of this column in the Line Items list box.
10. From the Sequence list, select “4” to indicate that this field is the fourth column in the list box.
11. In the Help Text box, type the following text:
 “Type the unit price for this item. The price cannot exceed 8 digits, including a plus or minus sign and a decimal point.”

12. Click OK to exit the Display Properties dialog.
13. Click CLOSE to exit the Field Properties dialog.

Customizing the TDT Group

The TDT group (in the LIN group) contains the Details of Transport for each line item. The standard allows the TDT group to be used up to 10 times per line item. You use the TDT group only once per line item. You have already changed the maximum use of the TDT group and promoted the group to obtain just one instance of the TDT group and to place the transport method on the Line Items frame.

Customizing the TDT:2 Segment

The TDT:2 segment (in the LIN group) contains the Details of Transport for each item in the invoice.

Customizing the TDT:201 Element

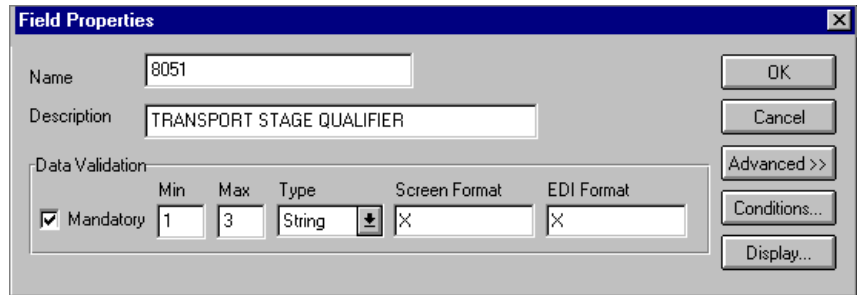
The TDT:201 element (Transport Stage Qualifier) is a mandatory element for the TDT:2 segment. The TDT:201 element contains the three-character code from your EDI data to indicate the type of transport (e.g., main-carriage transport). You need to define a constant value for the Transport Stage Qualifier field, designating that the constant “20” (Main-Carriage Transport) qualifies the transport type in the Type of Means of Transport Identification field.

When a user selects a transport method from the Type of Means of Transport Identification list box, the system assigns the code “20” to the Transport Stage Qualifier field. The qualifier field does not need to be displayed.

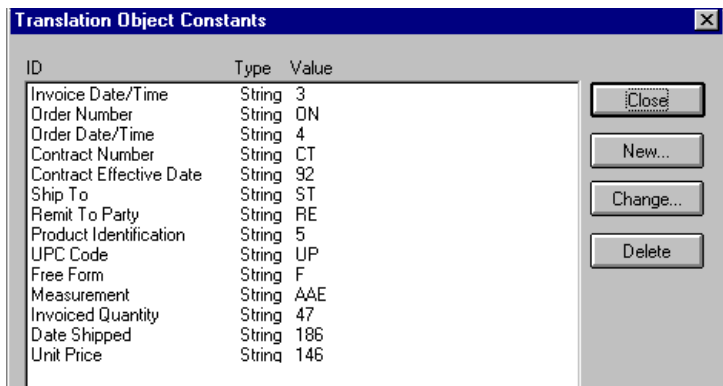
Complete the following steps to define a constant and hide the Transport Stage Qualifier field:

1. Double-click the TDT:201 element.

The Field Properties dialog is displayed.

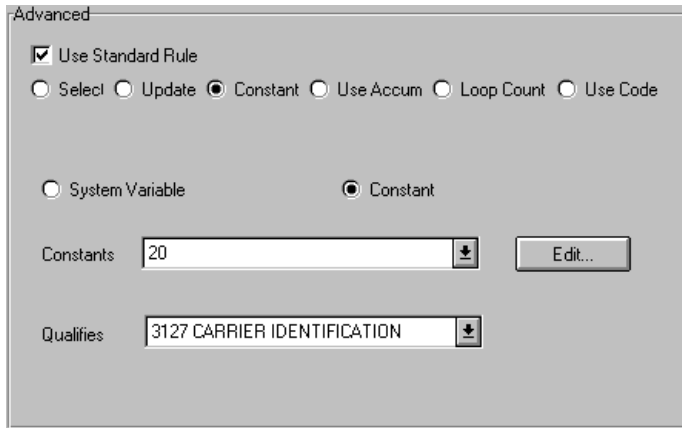


2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to display the Translation Object Constants dialog.

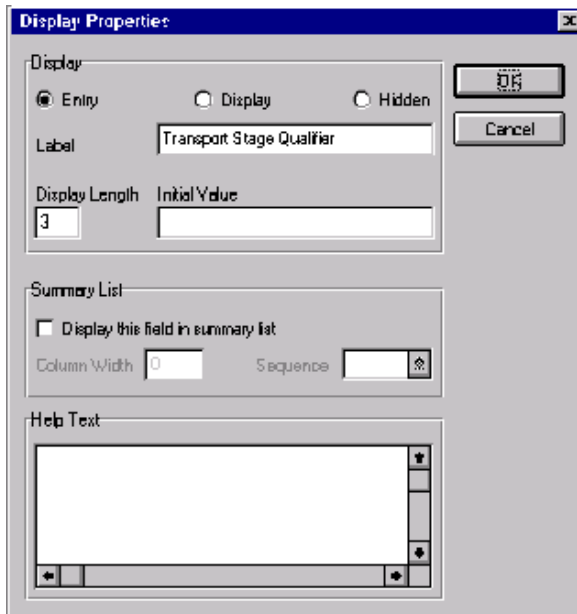


6. Click NEW... to display the Edit Constant dialog.
7. In the ID box, type "Main-Carriage Transport".
8. From the Type list, select "String."
9. In the Value box, type "20".
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select "20."
13. From the Qualifies list, select "3127 CARRIER IDENTIFICATION," which is the element that the Transport Stage Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- 14. Click DISPLAY... to access the Display Properties dialog.



- 15. Click the Hidden option.
- 16. Click OK to exit the Display Properties dialog.
- 17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the TDT:205 Element

The TDT:205 element, the Type of Means of Transport Identification, contains the eight-character string that identifies the means of transportation (e.g., ship) for each invoiced item. You need to customize the TDT:205 element so that a drop-down list box 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 drop-down list box for the Type of Means of Transport Identification field, you need to rename the field label to identify this field better.

Also, the standard allows this field to contain an eight-character string. You know that the codes from which your users will select are no longer than two characters, so you need to change the element and field lengths to two.

Complete the following steps to load the code list table from the standard, change the element and field lengths, rename the field label, and add Help text to the Transportation Method/Type Code field:

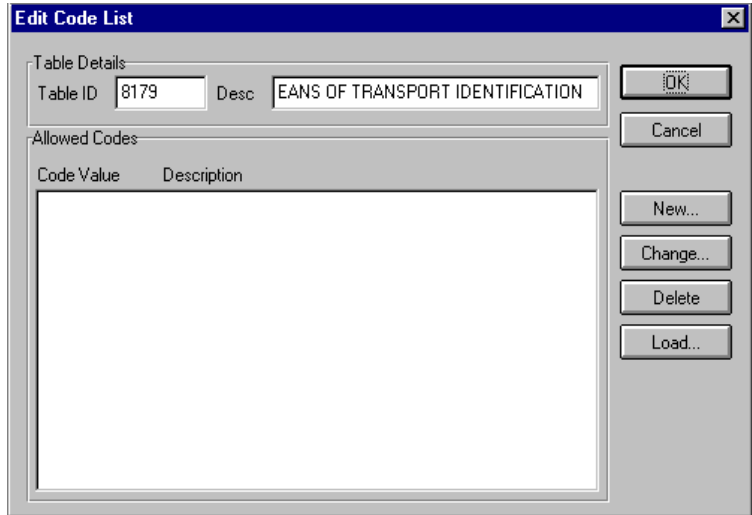
1. Double-click the TDT:205 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	8	String	X	X

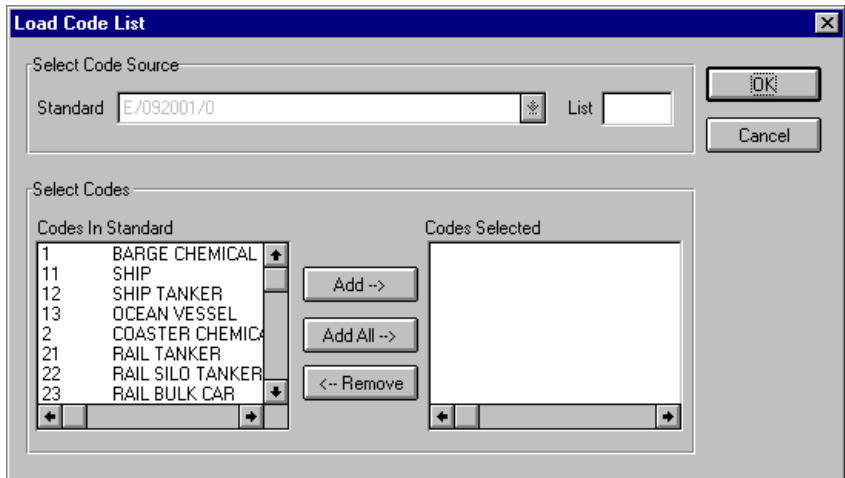
2. In the Max box, type "2" for the maximum number of characters allowed in this element.
3. In the Advanced section, select the Use Standard Rule check box.
4. Click the Use Code option.

5. Click **EDIT TABLE...** to access the Edit Code List dialog.



The Table ID box contains “8179,” the name of the element for which this code list table is used. The Desc box contains “TYPE OF MEANS OF TRANSPORT IDENTIFICATION,” 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.



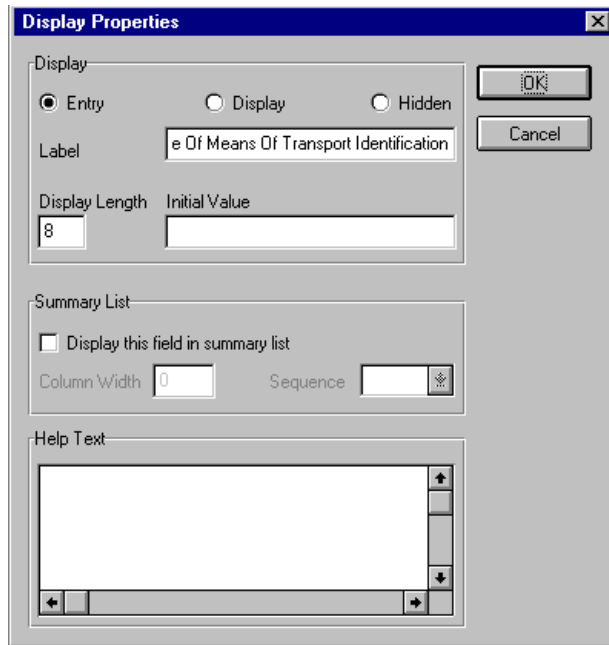
7. Click **ADD ALL-->** to select all the codes and move them to the Codes Selected list box.
8. Click **OK** to load the code list and exit the Load Code List dialog.
9. Click **CLOSE** to exit the Edit Code List dialog.

The Advanced section of the Field Properties dialog now should look like this:

The screenshot shows a dialog box titled "Advanced" with the following elements:

- Use Standard Rule
- Select Update Constant Use Accum Loop Count Use Code
- Table:
- Exclusive
- Store Field:

10. Click DISPLAY... to access the Display Properties dialog.



11. In the Label box, type “Transport Method”.
12. In the Display Length box, type “2”.
13. In the Help Text box, type the following text:
“Select the transportation method code for this invoiced item from the drop-down list box.”
14. Click OK to exit the Display Properties dialog.
15. Click CLOSE to exit the Field Properties dialog.

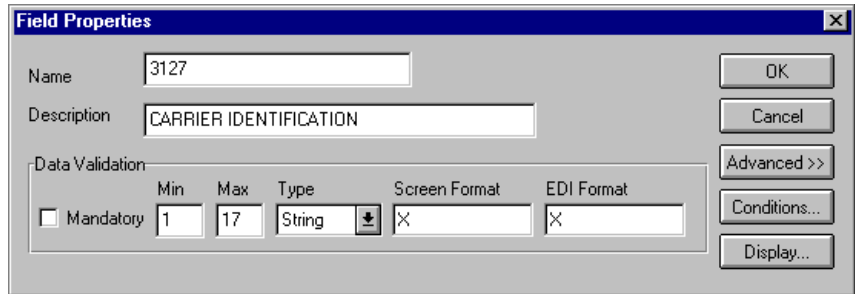
Customizing the TDT:207 Element

The TDT:207 element contains the Carrier Identification, a 17-character string that identifies the carrier for each line item. Your users enter a carrier code no longer than 12 characters, so you need to change the element and field lengths. You also need to rename the field label to more accurately describe the contents of this field for your users and add Help text to this field.

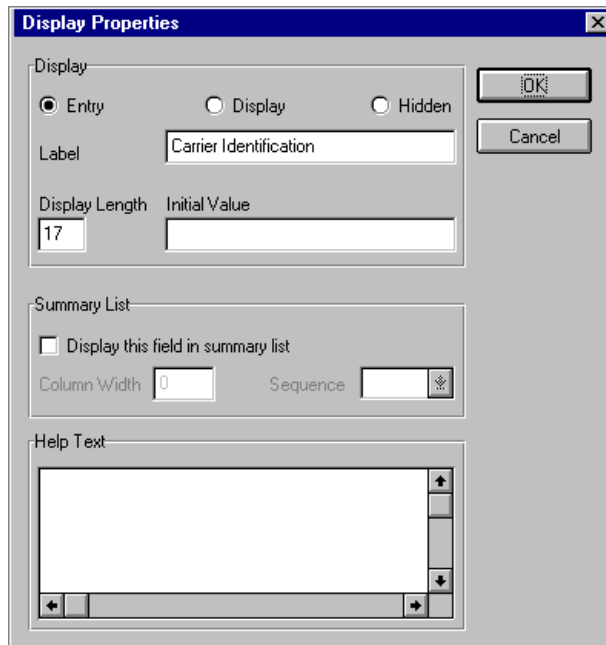
Complete the following steps to change the element and field lengths, rename the field, and add Help text to the Carrier Identification field:

1. Double-click the TDT:207 element.

The Field Properties dialog is displayed.



2. In the Max box, type “12”.
3. Click DISPLAY... to access the Display Properties dialog.



4. In the Label box, type “Carrier Code”.
5. In the Display Length box, type “12”.
6. In the Help Text box, type the following text:
 “Type your company’s reference number for this carrier. The reference number cannot exceed 12 alphanumeric characters.”

7. Click OK to exit the Display Properties dialog.
8. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the UNS Segment

The UNS segment contains the Section Control for the invoice. The Section Control contains EDI data to instruct the system that the data that follows pertains to the summary section of the invoice, not the header or detail sections.

Customizing the UNS01 Element

The UNS01 element (Section Identification) is a mandatory element for the invoice. The UNS01 element contains the one-character code to indicate that the data that follows pertains to the summary section of the invoice. You need to define a constant value for the Section Identification field, designating that the constant “S” (Summary) indicates that the summary section follows. The system assigns the code “S” to the Section Identification field, which does not need to be displayed.

Complete the following steps to define a constant and hide the Section Identification field:

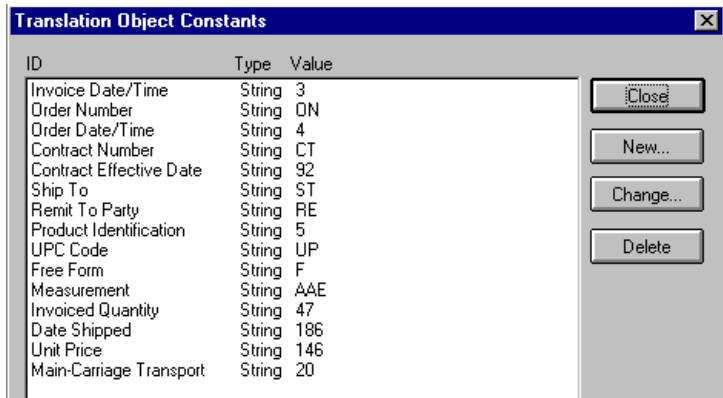
1. Double-click the UNS01 element.

The Field Properties dialog is displayed.

Data Validation						
	Min	Max	Type	Screen Format	EDI Format	
<input checked="" type="checkbox"/> Mandatory	1	1	String	X	X	

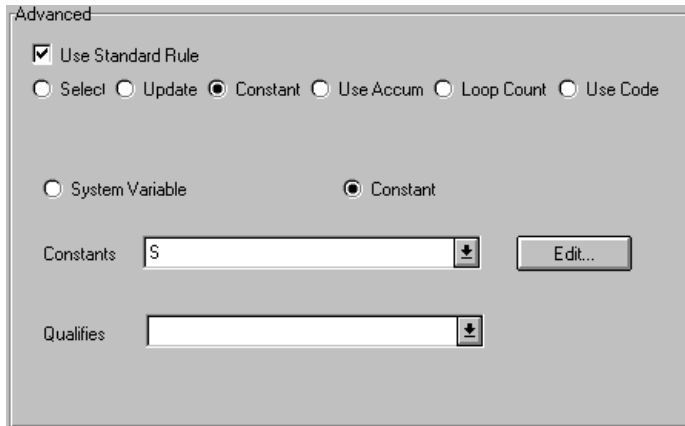
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

- Click **EDIT...** to display the Translation Object Constants dialog.



- Click **NEW...** to display the Edit Constant dialog.
- In the ID box, type “Summary”.
- From the Type list, select “String.”
- In the Value box, type “S” to indicate the Summary section of the invoice.
- Click **OK** to add the constant.
- Click **CLOSE** to exit the Translation Object Constants dialog.
- From the Constants list, select “S.”

The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.

The screenshot shows the 'Display Properties' dialog box. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. To the right are 'OK' and 'Cancel' buttons. The 'Label' section has a text box with 'Section Identification'. The 'Display Length' section has a text box with '1' and an 'Initial Value' text box. The 'Summary List' section has a checkbox 'Display this field in summary list' (unchecked), a 'Column Width' text box with '0', and a 'Sequence' text box with a small icon. The 'Help Text' section has a large empty text area with scrollbars.

- Click the Hidden option.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Generating the Layout

Click Generate Layout on the Main Toolbar to refresh the screen entry form display.



The Line Items frame now should look like this:

The screenshot shows a window titled "Line Items" with a dotted background. It contains several input fields: "Item No." (a small box), "Product Code" (a long box), "Item Description" (a long box), "UDM" (a small box with a dropdown arrow), "Quantity" (a box), "Date Shipped" (a long box), "Price" (a box), and "Transport Method" (a small box with a dropdown arrow). A vertical scrollbar is on the right side.

Complete the following steps to define a constant and hide the Transport Stage Qualifier field:

1. Double-click the TDT:201 element.

The Field Properties dialog is displayed.

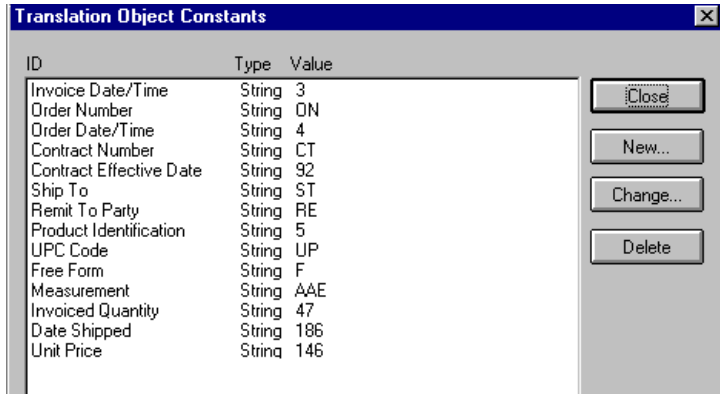
The screenshot shows a "Field Properties" dialog box. The "Name" field contains "8051" and the "Description" field contains "TRANSPORT STAGE QUALIFIER". Below these is a "Data Validation" section with a table:

	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

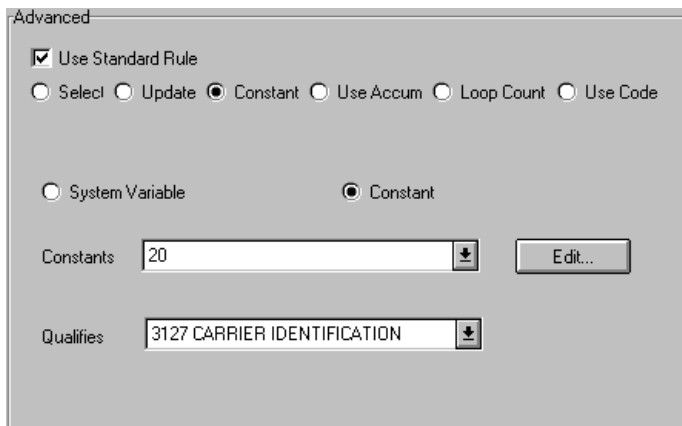
On the right side of the dialog are buttons for "OK", "Cancel", "Advanced >>", "Conditions...", and "Display...".

2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

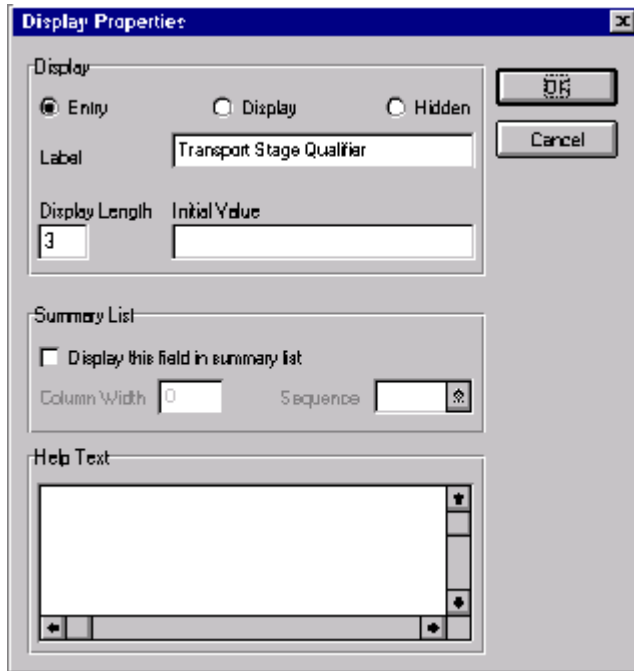
- Click **EDIT...** to display the Translation Object Constants dialog.



- Click **NEW...** to display the Edit Constant dialog.
- In the ID box, type “Main-Carriage Transport”.
- From the Type list, select “String.”
- In the Value box, type “20”.
- Click **OK** to add the constant.
- Click **CLOSE** to exit the Translation Object Constants dialog.
- From the Constants list, select “20.”
- From the Qualifies list, select “3127 CARRIER IDENTIFICATION,” which is the element that the Transport Stage Qualifier field qualifies. The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.



- Click the Hidden option.
- Click OK to exit the Display Properties dialog.
- Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the CNT Segment

The CNT segment contains the Control Total for the invoice. You have already used an accumulator to generate the total number of line items in the invoice. The standard allows the CNT segment to be used up to 10 times per invoice. You need to use the CNT segment only once per invoice so you have already changed the maximum use of this segment to one. Changing the maximum use of this segment placed the total number of line items on the main Invoice Message frame.

Customizing the CNT01 Element

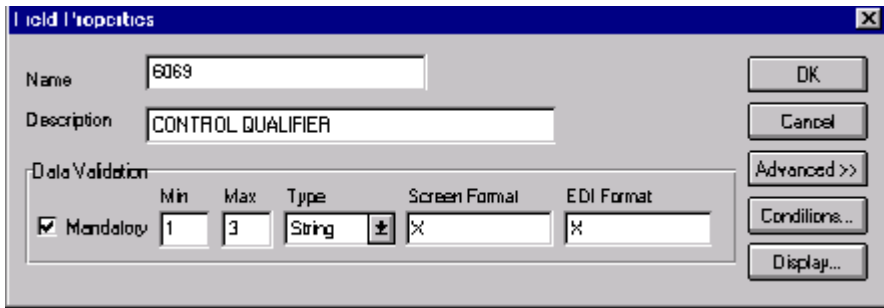
The CNT01 element (Control Qualifier) is a mandatory element for the CNT segment. The CNT01 element contains the three-character code from your

EDI data to indicate what type of control follows (e.g., total number of line items). You need to define a constant value for the Control Qualifier field, designating that the constant “2” (Number of Line Items in Message) qualifies the value in the Control Value field. The system assigns the code “2” to the Control Qualifier field so this field does not need to be displayed.

Complete the following steps to define a constant and hide the Control Qualifier field:

1. Double-click the CNT01 element.

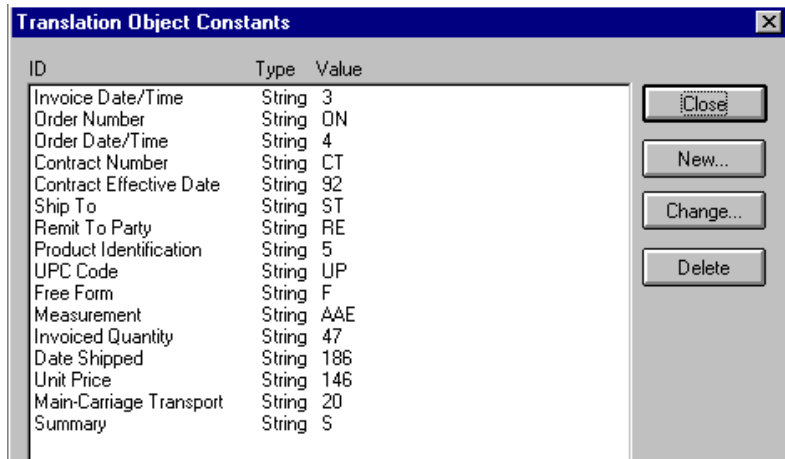
The Field Properties dialog is displayed.



The Field Properties dialog box is shown with the following details:

- Name: 6069
- Description: CONTROL QUALIFIER
- Data Validation: Mandatory, Min: 1, Max: 3, Type: String, Screen Format: %, EDI Format: %
- Buttons: OK, Cancel, Advanced >>, Conditions..., Display...

2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.
5. Click EDIT... to display the Translation Object Constants dialog.



The Translation Object Constants dialog box is shown with the following table:

ID	Type	Value
Invoice Date/Time	String	3
Order Number	String	0N
Order Date/Time	String	4
Contract Number	String	CT
Contract Effective Date	String	92
Ship To	String	ST
Remit To Party	String	RE
Product Identification	String	5
UPC Code	String	UP
Free Form	String	F
Measurement	String	AAE
Invoiced Quantity	String	47
Date Shipped	String	186
Unit Price	String	146
Main-Carriage Transport	String	20
Summary	String	S

Buttons: Close, New..., Change..., Delete

6. Click NEW... to display the Edit Constant dialog.

7. In the ID box, type “Number of Line Items”.
8. From the Type list, select “String.”
9. In the Value box, type “2” to indicate that the Control Qualifier field will contain the total number of line items in the invoice.
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select “2.”
13. From the Qualifies list, select “6066 CONTROL VALUE,” which is the element that the Monetary Amount Type Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:

Advanced

Use Standard Rule

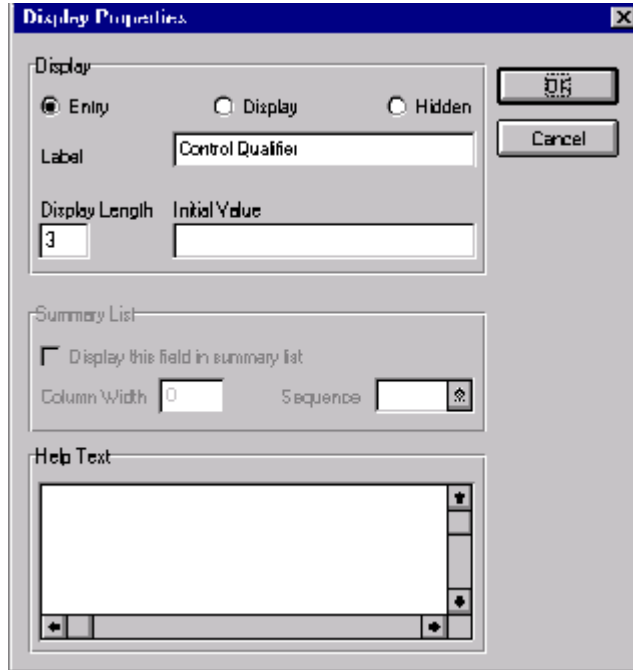
Select Update Constant Use Accum Loop Count Use Code

System Variable Constant

Constants:

Qualifies:

14. Click DISPLAY... to access the Display Properties dialog.



15. Click the Hidden option.
16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the CNT02 Element

The CNT02 element contains the Control Value for the invoice. You have already used an accumulator for this field 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.

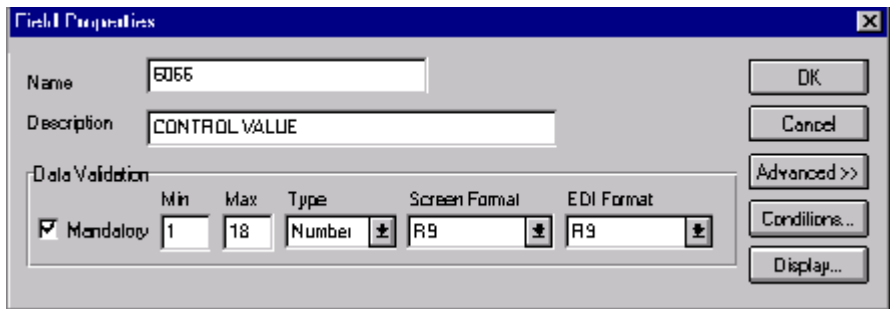
You must rename the field label to more clearly identify its contents. The standard designates an “R9” screen format and EDI format for this field, meaning that the number is formatted with an explicit decimal point and up to nine decimal places. The data is formatted in the “N0” format (a number with an implicit decimal point and no decimal places) so you need to change the screen format and EDI format from “R9” to “N0.”

The standard defines this element as having a maximum length of eight. Your users enter no more than 99,999 line items so this field needs a maximum length of only six.

Complete the following steps to rename the field label, change the field and element lengths, and change the screen and EDI formats for the Control Value field:

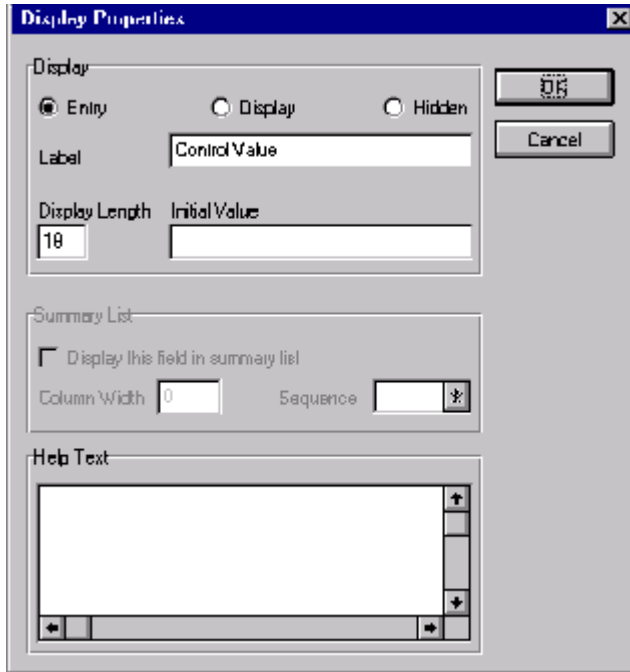
1. Double-click the CNT02 element.

The Field Properties dialog is displayed.



2. In the Max box, type “6”.
3. From the Screen Format list, select “N0” to indicate that this field on the translation object will accept a number with an implicit decimal point and no decimal places.
4. From the EDI Format list, select “N0” to format the EDI data with an implicit decimal point and no decimal places.

5. Click DISPLAY... to access the Display Properties dialog.



6. In the Label box, type “Number of Line Items”.
7. In the Display Length box, type “6”
8. Click OK to exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

Customizing the MOA Group

The MOA group contains the Monetary Amount for the invoice. The standard allows this MOA group to be used up to 100 times per invoice. You need to use this MOA group only once per invoice. You have already changed the maximum use of the MOA group to one and promoted the group to obtain just one instance of the MOA group and to place the total invoice amount on the main Invoice Message frame.



The MOA group that you want to customize is at the bottom of the map NOT in the LIN group.

Customizing the MOA:10 Segment

The MOA:10 segment contains the invoice's Monetary Amount. You have already used an accumulator to calculate the total dollar amount invoiced.

Customizing the MOA:1001 Element

The MOA:1001 element (Monetary Amount Type Qualifier) is a mandatory element for the MOA:10 segment. The MOA:1001 element contains the three-character code from your EDI data to indicate what type of monetary amount follows (e.g., total invoice amount). You need to define a constant value for the Monetary Amount Type Qualifier field, designating that the constant "77" (Invoice Amount) qualifies the value in the Monetary Amount field. The system automatically will assign the code "77" to the Monetary Amount Type Qualifier field, so this field does not need to be displayed on the translation object.

Complete the following steps to define a constant and hide the Monetary Amount Type Qualifier field:

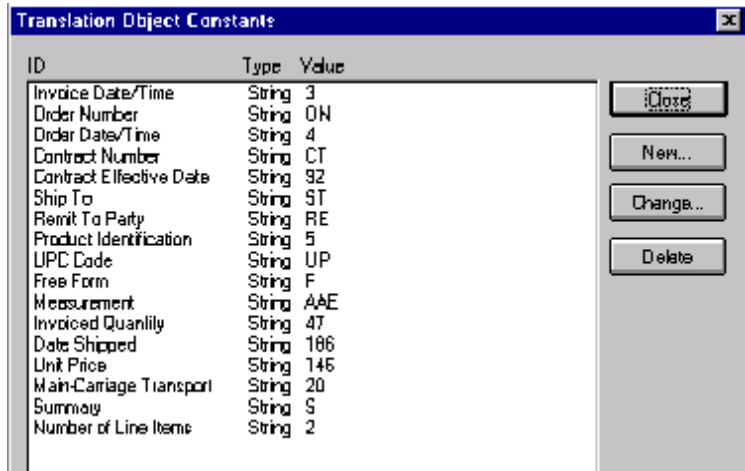
1. Double-click the MOA:1001 element.

The Field Properties dialog is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	3	String	X	X

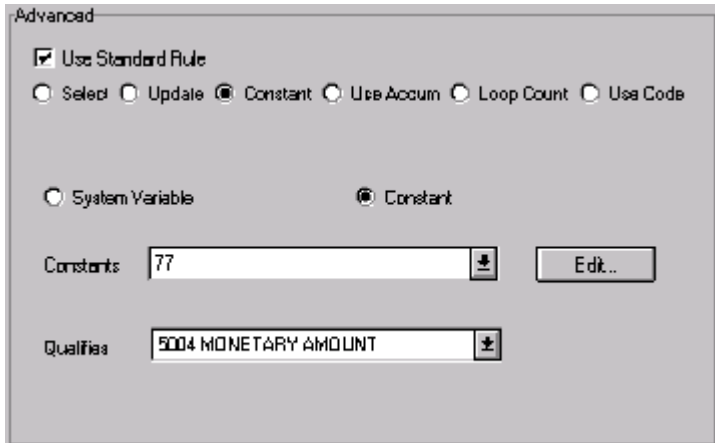
2. In the Advanced section, select the Use Standard Rule check box.
3. Click the Constant option.
4. Click the second Constant option.

5. Click EDIT... to display the Translation Object Constants dialog.

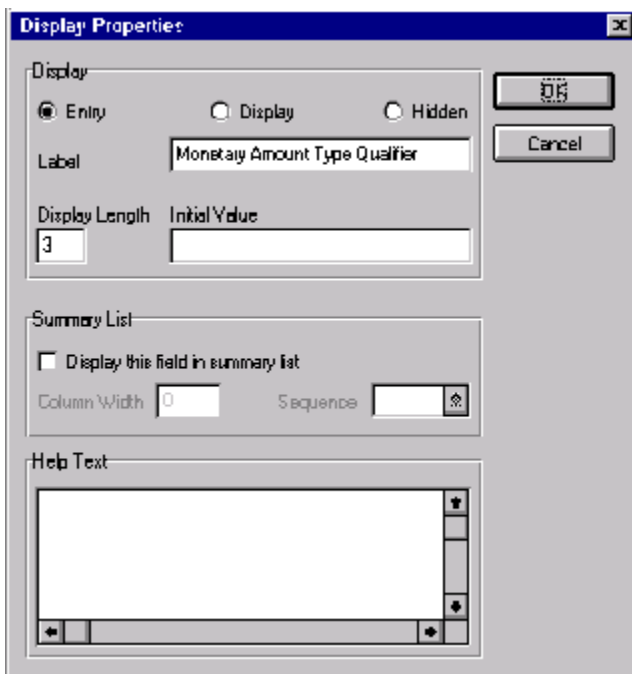


6. Click NEW... to display the Edit Constant dialog.
7. In the ID box, type "Invoice Amount".
8. From the Type list, select "String."
9. In the Value box, type "77".
10. Click OK to add the constant.
11. Click CLOSE to exit the Translation Object Constants dialog.
12. From the Constants list, select "77."
13. From the Qualifies list, select "5004 MONETARY AMOUNT," which is the element that the Monetary Amount Type Qualifier field qualifies.

The Advanced section of the Field Properties dialog now should look like this:



- Click DISPLAY... to access the Display Properties dialog.



- Click the Hidden option.

16. Click OK to exit the Display Properties dialog.
17. Click CLOSE to establish the qualifying relationship between the two elements and exit the Field Properties dialog.

Customizing the MOA:1002 Element

The MOA:1002 element contains the Monetary Amount for the invoice. You have already used an accumulator for this field to calculate the total dollar amount invoiced and made this field display-only so that users cannot change the value in this field.

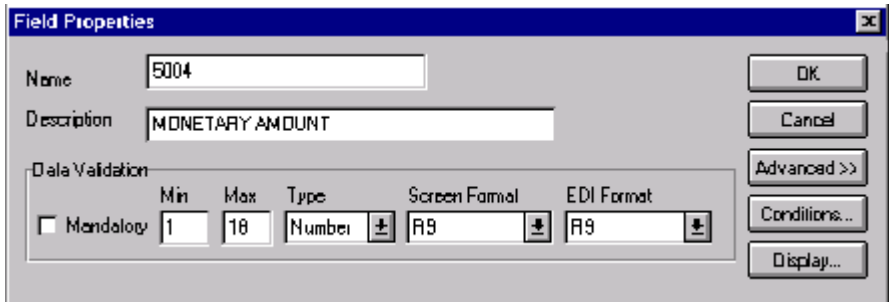
You need to rename the field label to more clearly identify its contents. Also, the standard designates an “R9” screen format and EDI format for this field, meaning that the number is formatted with an explicit decimal point and up to nine decimal places. The data is formatted in the “R2” format (a number with an explicit decimal point and up to two decimal places) so you need to change the screen format and EDI format from “R9” to “R2.”

The standard defines this element as having a maximum length of 18. The total invoice amount will total no more than \$999,999.99 so this field needs a maximum length of only 10 (six 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).

Complete the following steps to rename the field label, change the field and element lengths and to change the screen and EDI formats for the Monetary Amount field:

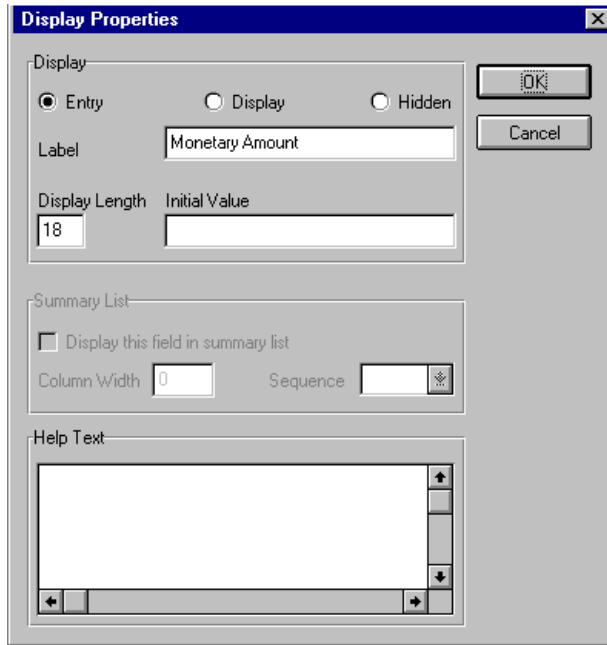
1. Double-click the MOA:1002 element.

The Field Properties dialog is displayed.



2. In the Max box, type “10” to allow a10-digit number in this element, including a plus or minus sign and a decimal point.
3. From the Screen Format list, select “R2.”
4. From the EDI Format list, select “R2.”

5. Click DISPLAY... to access the Display Properties dialog.



6. In the Label box, type “Total Invoice Amount”.
7. In the Display Length box, type “10”.
8. Click OK to exit the Display Properties dialog.
9. Click CLOSE to exit the Field Properties dialog.

Generating the Layout



Complete the following steps to generate your layout and to save your form.

1. Click Generate Layout on the Main Toolbar to refresh the print form display.
2. Click Save from the File menu to save the form.

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.

Formatting the Screen Entry Form

In the previous section of this tutorial, you customized the screen entry form for an EDIFACT 92.1 invoice (INVOIC) that your users 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 Message Frame

When a form is compiled into a translation object, the fields are 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.



Your screen resolution must be the same as that of the end user of the completed form.

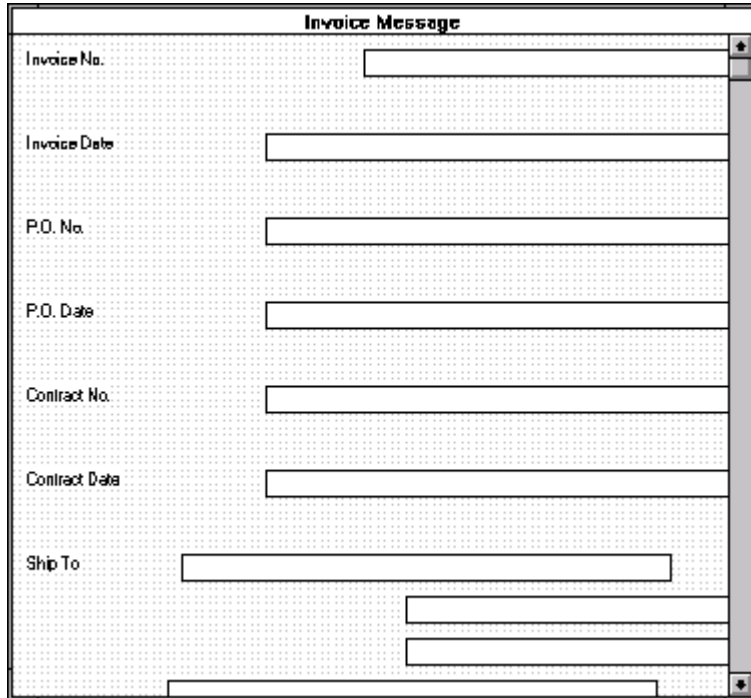
Complete the following steps to resize the Invoice Message frame:

1. Click the INVOIC file icon to display the Invoice Message 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 to view.
3. To resize the Invoice Message 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.



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.

The Invoice Message frame now should look like this:



The screenshot shows a window titled "Invoice Message" with a dotted background. It contains several input fields arranged vertically:

- Invoice No. (single line)
- Invoice Date (single line)
- P.O. No. (single line)
- P.O. Date (single line)
- Contract No. (single line)
- Contract Date (single line)
- Ship To (three stacked lines)

There are scroll bars on the right side of the form.

Arranging the Fields on the Invoice Message Frame

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

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

The screenshot shows a window titled "Invoice Message" with a dotted background. It contains the following fields and sections:

- Invoice Data:** Invoice No. [text box], Invoice Date [text box]
- P.O. Data:** P.O. No. [text box], P.O. Date [text box]
- Contract Data:** Contract No. [text box], Contract Date [text box]
- Ship To:** Four stacked text input fields.
- Remit To:** Four stacked text input fields.
- Payment Terms Code:** A text box followed by a dropdown arrow.
- Line Items Table:** A table with columns "Item", "Product", "Qty.", and "Price". The first row is highlighted.
- Summary:** Number of Line Items [text box], Total Invoice Amount [text box]

By default, each field and its associated label are displayed on its own line. 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 Display Properties dialog. These fields are displayed on your screen entry form, but their associated labels are not displayed.



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.

Resizing, Moving, and Aligning the Fields

Complete the following steps to resize, move, and align the fields on the Invoice Message frame of the screen entry form:



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

1. Click and drag the bottom of the frame to the bottom of the Forms window, so that as many of the fields on the frame are displayed as possible.
2. Select the following fields:
 - Invoice No.
 - Invoice Date
 - P.O. No.
 - P.O. Date
 - Contract No.
 - Contract Date
 - City Name (both Ship To and Remit To)
 - Country Sub-Entity Identification (both Ship To and Remit To)
 - Number of Line Items
 - Total Invoice Amount



To select more than one field, select the first field, press CTRL and click the second field. Repeat this process for each subsequent field you want to select.



If any of these fields is not in the part of the Invoice Message frame that currently is displayed, then use the scroll bar to scroll down the frame until you locate the hidden field(s).

3. Select Size to Length from the Display menu. The selected fields will be resized to the lengths specified in the Display Length box of the Display Properties dialog for each field.



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.

4. Select the following fields and drag them closer to their respective field labels:
 - Invoice No.
 - Invoice Date
 - P.O. No.
 - P.O. Date
 - Contract No.
 - Contract Date
5. Select the Invoice Date label and field and drag them to the upper right corner of the Invoice Message frame.
6. 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.
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 Contract No. label and field and drag them to the left side of the frame, below the P.O. No. label and field.
9. 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.
10. Select the Ship To field (not the field label), the two Street and Number/P.O. Box fields, and the City Name field of the Ship To address. (The two Street and Number/P.O. Box fields and the City Name field are located below the Ship To field.)
11. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected fields are aligned.
12. Select the Country Sub-Entity Identification field of the Ship To address and drag it to the immediate right of the City Name field of the Ship To address.
13. Select the Postcode Identification field of the Ship To address and drag it to the immediate right of the Country Sub-Entity Identification field of the Ship To address.
14. Click and drag all of the Ship To fields (not including the Ship To field label) closer to the Ship To label, so that none of the fields extend beyond the right side of the frame.
15. 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.



To select a group of items, click and drag the mouse diagonally across all the fields and field labels you want to select. When you release the mouse button, all the fields and field labels completely included within the dragged-across area will have handles, indicating they were selected.

16. Select the Remit To field (not the field label), the two Street and Number/P.O. Box fields, and the City Name field of the Remit To address. (The two Street and Number/P.O. Box fields and the City Name field are located below the Remit To field.)
17. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected fields are aligned.
18. Select the Country Sub-Entity Identification field of the Remit To address and drag it to the immediate right of the City Name field of the Remit To address.
19. Select the Postcode Identification field of the Remit To address and drag it to the immediate right of the Country Sub-Entity Identification Code field of the Remit To address.
20. Click and drag all of the Remit To fields (not including the Remit To field label) closer to the Remit To label, so that none of the fields extend beyond the right side of the frame.
21. Click and drag all of the Remit To fields (including the Remit To field label) below the Ship To address.
22. Select the Payment Terms Code list.
23. Click and drag its right handle so that the list box is approximately 1.5 cm. wide (including the Down Arrow).
24. Click and drag its bottom handle to make the drop-down part of the list box long enough to list approximately four codes (approximately 2 cm. long on the vertical ruler).
25. Click and drag the Payment Terms Code drop-down list box closer to its label.
26. Select the Payment Terms Code drop-down list box and label and drag them to the center of the frame, below the Remit To address.
27. Select the Line Items list box and drag it closer to its label.
28. Select the Line Items list box and label and drag them to the center of the frame, below the Payment Terms Code list box and label.



Leave extra space between the Payment Terms Code list box and label, and the Line Items list box and label, to add column headings (using static text) to label the data in the list box.

29. Select the Number of Line Items field and drag it closer to its label.
30. Select the Number of Line Items label and field and drag them to the center of the frame, below the Line Items list box.
31. Select the Total Invoice Amount field and drag it closer to its label.
32. 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.

Resizing the Invoice Message Frame

You should resize the Invoice Message frame to make the most efficient use of space. You have 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 need to resize the frame vertically.

To resize the Invoice Message frame, scroll to the top of the Invoice Message frame, then click and drag the bottom of the frame to just below the Total Invoice Amount label and field.

The Invoice Message frame now should look like this:

The screenshot shows a window titled "Invoice Message" with a dotted background. It contains several input fields and labels:

- Invoice No. [text box]
- Invoice Date [text box]
- P.O. No. [text box]
- P.O. Date [text box]
- Contract No. [text box]
- Contract Date [text box]
- Ship To [text box]
- Remit To [text box]
- Payment Terms Code [text box] with a dropdown arrow
- Line Items [table area with scroll bars]
- Number of Line Items [text box]
- Total Invoice Amount [text box]

Aligning the Fields and Field Labels

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

Complete the following steps to align the fields and field labels on the Invoice Message frame:

1. Select the following field labels:

- Invoice No.
- P.O. No.
- Contract No.
- Ship To
- Remit To

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
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.

13. To align the tops of all of the field labels and fields, select each row of fields and labels (one row at a time), select **Align Controls** from the **Display** menu, then select **Top** from the **Align Controls** submenu. The fields and labels 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, Country Sub-Entity Identification, and Postcode Identification fields of the Ship To address
 - Remit To label and field
 - City Name, Country Sub-Entity Identification, and Postcode Identification fields of the Remit To address
 - Payment Terms Code label and drop-down list box
 - Line Items label and list box
 - Number of Line Items label and field
 - Total Invoice Amount label and field

The Invoice Message frame now should look like this:

The screenshot shows a window titled "Invoice Message" with a dotted background. It contains several input fields and a list box. At the top, there are three rows of fields: "Invoice No." and "Invoice Date", "P.O. No." and "P.O. Date", and "Contract No." and "Contract Date". Below these are two sections for "Ship To" and "Remit To", each with three horizontal text boxes. A "Payment Terms Code" field with a dropdown arrow is positioned below the "Remit To" section. The "Line Items" section features a large list box with a scroll bar on the right and a small icon in the bottom-left corner. At the bottom of the form, there are two more fields: "Number of Line Items" and "Total Invoice Amount".

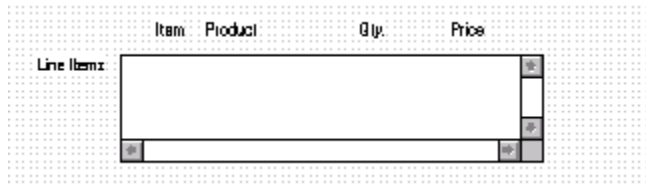
Adding Column Headings to the Line Items List Box

Gentran:Director labels the fields on the Line Items frame, but does not label the column headings for the Line Items list box on the Invoice Message frame. The Line Items list box displays the information entered into the fields on the Line Items frame. To label the columns in the Line Items list box, you must add the column headings with static text (text that is always included in the screen entry translation object).

You will add the following column headings to the Line Items list box on the Invoice Message frame:

Column Heading (Static Text)	Placement Above Line Items List Box
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 box and the column headings should look like this:



Complete the following steps to add and position the column headings:



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. Select the new text box and type "Item". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
3. Click and drag it to above the Line Items list box, immediately to the right of the left margin of the Line Items list box (so it looks like the example on page 332).
4. Click Add Text on the Main Toolbar to add text to the current frame in the upper left corner.
5. Select the new text box and type "Product". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
6. Click and drag it to above the Line Items list box, to the right of the Item column heading (so it looks like the example on page 332).
7. Click Add Text on the Main Toolbar to add text to the current frame in the upper left corner.

8. Select the new text box and type “Qty.” (note the period in the text). The Text Properties dialog is displayed as you are typing. Click OK to add the text.
9. Click and drag it to above the Line Items list box, to the right of the Product column heading (so it looks like the example on page 332).
10. Click Add Text on the Main Toolbar to add text to the current frame in the upper left corner.
11. Select the new text box and type “Price”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
12. Click and drag it to above the Line Items list box, to the right of the Qty. column heading (so it looks like the example on page 332).
13. 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.

The Invoice Message frame now should look like this:

The screenshot shows a window titled "Invoice Message" with a dotted background. It contains several input fields and a table. The fields are arranged as follows:

- Invoice No. Invoice Date
- P.O. No. P.O. Date
- Contract No. Contract Date
- Ship To:
- Remit To:
- Payment Terms Code
- Line Items table:

Item	Product	Qty.	Price
- Number of Line Items
- Total Invoice Amount

Setting the Tab Sequence on the Invoice Message 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, you usually will 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.

Complete the following steps to set the tab sequence for the fields on the Invoice Message frame:

1. Select Set Tab Order from the Display menu.

Numbers are displayed in the fields on the frame to indicate the current tab sequence.

The screenshot shows a window titled "Invoice Message" with a dotted background. It contains several input fields with small numbers indicating the current tab sequence:

- Invoice No. (1)
- Invoice Date (2)
- P.O. No. (3)
- P.O. Date (4)
- Contract No. (5)
- Contract Date (11)
- Ship To (13, 14, 15, 16, 17, 18)
- Remit To (20, 21, 22, 23, 24, 25)
- Payment Terms Code (30)
- Line Items table (27)
- Number of Line Items (10)
- Total Invoice Amount (12)

- 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 will change to the next sequential number in the tab sequence.



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.

- Invoice No.
- Invoice Date
- P.O. No.

4. P.O. Date
5. Contract No.
6. Contract Date
7. Ship To Party Name
8. Ship To Street and Number/P.O. Box (first line of address)
9. Ship To Street and Number/P.O. Box (second line of address)
10. Ship To City Name
11. Ship To Country Sub-Entity Identification
12. Ship To Postcode Identification
13. Remit To Party Name
14. Remit To Street and Number/P.O. Box (first line of address)
15. Remit To Street and Number/P.O. Box (second line of address)
16. Remit To City Name
17. Remit To Country Sub-Entity Identification
18. Remit To Postcode Identification
19. Payment Terms Code
20. Line Items
21. Number of Line Items
22. Total Invoice Amount

The new tab sequence should look like this:

The screenshot shows a form titled "Invoice Message" with a dotted background. The form contains several input fields, each with a small tab sequence number in its top-left corner. The fields and their tab numbers are:

- Invoice No. (1)
- Invoice Date (2)
- P.O. No. (3)
- P.O. Date (4)
- Contract No. (5)
- Contract Date (6)
- Ship To (7)
- Remit To (12)
- Payment Terms Code (14)
- Line Items table (20)
- Number of Line Items (21)
- Total Invoice Amount (22)

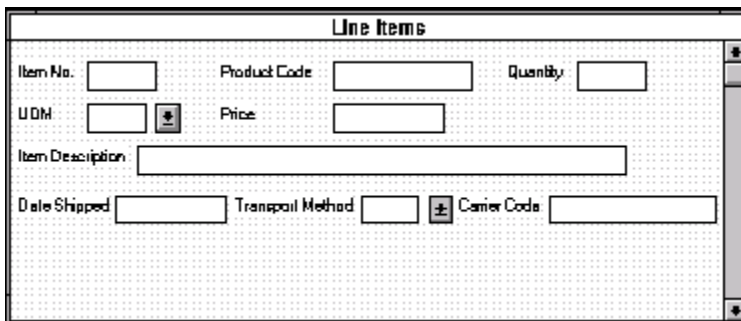
The "Line Items" section is a table with columns for "Item", "Product", "Qty.", and "Price". It contains two rows of data, each with a tab sequence number in the first column (20 and 21).



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.

Arranging the Fields on the Line Items Frame

Now that the fields, labels, and static text are arranged on the Invoice Message 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 Message 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.



The screenshot shows a window titled "Line Items" with a dotted background. It contains several input fields and labels arranged in a grid-like fashion. The fields are: "Item No." (text box), "Product Code" (text box), "Quantity" (text box), "UOM" (text box with a dropdown arrow), "Price" (text box), "Item Description" (wide text box), "Date Shipped" (text box), "Transport Method" (text box with a dropdown arrow), and "Carrier Code" (text box). The window has a standard Mac OS-style title bar and scroll bars on the right and bottom.

Resizing 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 Message 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.

1. Click the LIN 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.
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:

The screenshot shows a window titled "Line Items" with a dotted background. It contains several input fields: "Item No." (a small rectangular box), "Product Code" (a long horizontal box), "Item Description" (a long horizontal box), "UDM" (a small box with a plus sign icon), "Quantity" (a rectangular box), "Date Shipped" (a long horizontal box), "Price" (a rectangular box), and "Transport Method" (a small box at the bottom right). A vertical scroll bar is visible on the right side of the frame.

Resizing the Fields Complete the following steps to resize the fields on the Line Items frame of the screen entry form:



If any of the fields are not in the part of the Invoice Message frame that currently is displayed, then use the scroll bar to scroll down the frame until you locate the hidden field(s).

1. Select the following fields:
 - Item No.
 - Product Code
 - Quantity
 - Date Shipped
 - Price
 - Transport Method
 - Carrier Code



To select more than one field, select the first field, press CTRL and select the second field. Repeat this process for each subsequent field you want to select.

2. Select Size to Length from the Display menu. The selected fields are resized to the lengths specified in the Display Length box of the Display Properties dialog for each field.

Moving and Aligning the Fields

Complete the following steps to move and align the fields on the Line Items frame of the screen entry form:

1. Select the UOM field and drag its right handle so that the field is approximately 2 cm. wide (including the Down Arrow).
2. Drag its bottom handle so that the field is long enough for four codes to be displayed in it when the drop-down part of the drop-down list is open (approximately 2 cm. on the vertical ruler).
3. Select the Transport Method and UOM fields (in that order).
4. Select Size Equally from the Display menu. The Transport Method field is the same size as the UOM field. The UOM field is the *reference*, meaning that it is the field relative to which all other selected items in the form are formatted. The reference is indicated by an outline of diagonal lines, whereas all other selected items are outlined by a solid line. The last item (field, field label, or static text) selected in a group of selected items is the reference.
5. Select each field on the frame individually and move it closer to its respective field 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 page 339 for reference).



The Item No. label and field have already been 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 page 339 for reference).
8. Select the UOM label and field 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 page 339 for reference.)

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 page 339 for reference.)
10. Select the Item 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 page 339 for reference.)
11. Select the Date Shipped label and field and drag them to the left side of the frame, below the Item 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 Item Description field labels. (Use the example on page 339 for reference.)
12. Select the Transport Method label and field and drag them to the right of the Date Shipped label and field (use the example on page 339 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 page 339 for reference).

Resizing the Line Items Frame

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).



Allow enough space between the last row of fields/ labels and the bottom of the frame for the Transport Method drop-down list box to be opened.

The Line Items frame now should look like this:

The screenshot shows a window titled "Line Items" with a dotted background. The fields are arranged as follows:

- Item No. [text box]
- Product Code [text box]
- Quantity [text box]
- UOM [text box with dropdown arrow]
- Price [text box]
- Item Description [wide text box]
- Date Shipped [text box]
- Transport Method [text box with dropdown arrow]
- Carrier Code [text box]

Aligning the Fields and Field Labels

Complete the following steps to align the fields and field labels on the Line Items frame:

1. Select the following labels and fields:
 - Item No.
 - Product Code
 - Quantity
2. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. The tops of the selected items are aligned.
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 items are aligned.
5. Select the Item Description label and field.
6. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. Select the following labels and fields:
 - Date Shipped
 - Transport Method
 - Carrier Code
7. Select Align Controls from the Display menu, then select Top from the Align Controls submenu. The tops of the selected items are aligned.
8. Select the following field labels:
 - Item No.
 - UOM
 - Item Description
 - Date Shipped
9. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The tops of the selected field labels are aligned.
10. Select the following fields (in this order):
 - UOM
 - Item No.
11. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected fields are aligned.

12. Select the following field labels:
 - Product Code
 - Price
13. Select Align Controls from the Display menu, and select Left from the Align Controls submenu. The left margins of the selected field labels are aligned.
14. Select the following fields (in this order):
 - Price
 - Product Code
15. Select Align Controls from the Display menu, then select Left from the Align Controls submenu. The left margins of the selected fields are aligned.

The Line Items frame now should look like this:

The screenshot shows a window titled "Line Items" with a dotted background. The fields are arranged as follows:

- Item No. [] Product Code [] Quantity []
- UOM [] [v] Price []
- Item Description []
- Date Shipped [] Transport Method [] [v] Carrier Code []

 The labels "Product Code" and "Price" are aligned to the left. The fields "Price" and "Product Code" are also aligned to the left.

Setting the Tab Sequence on the Line Items Frame

Complete the following steps to set the tab sequence of the fields on the Line Items frame:

1. Select Set Tab Order from the Display menu. Numbers are displayed in the fields on the frame to indicate the current tab sequence.

The screenshot shows the same "Line Items" window, but now with small numbers in the top-left corner of each field to indicate the tab sequence:

- Item No. 1 [] Product Code 3 [] Quantity 10 []
- UOM 2 [] [v] Price 12 []
- Item Description 6 []
- Date Shipped 11 [] Transport Method 13 [] [v] Carrier Code 14 []

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 changes to the next sequential number in the tab sequence you are now setting.
 1. Product Code
 2. Quantity
 3. UOM
 4. Price
 5. Item Description
 6. Date Shipped
 7. Transport Method
 8. Carrier Code
 9. Item No.



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 item number for the invoice (the item number is generated by an accumulator in the Item No. field). 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.

The new tab sequence should look like this:

The screenshot shows a window titled "Line Items" with a dotted background. The fields and their tab sequence numbers are as follows:

- Item No. (tab 9) - located at the top left.
- Product Code (tab 1) - located to the right of Item No.
- Quantity (tab 2) - located to the right of Product Code.
- UDM (tab 3) - located below Item No.
- Price (tab 4) - located to the right of UDM.
- Item Description (tab 5) - a wide text area below UDM and Price.
- Date Shipped (tab 6) - located below Item Description.
- Transport Method (tab 7) - located to the right of Date Shipped.
- Carrier Code (tab 8) - located to the right of Transport Method.

Each field has a small box with its tab number next to it. There are also small square icons with a downward arrow next to the UDM and Transport Method fields. The window has a vertical scrollbar on the right side.

Changing the Invoice Message Frame Title

The system titles the frames in a screen entry form when the form is created, based on the name of the file, segment(s), or group(s). You can modify the frame titles (for example, at the file or message level) to distinguish one form from the others. The parent frame of the invoice currently is titled Invoice Message. You need to give this frame a more descriptive title to distinguish it from other invoices that your company uses.

Complete the following steps to change the frame title:

1. Click the INVOIC file icon with the right mouse button and select Properties... from the shortcut menu. The File Format Properties dialog is displayed.

2. In the Frame Caption box, type “EDIFACT Invoice (INVOIC) - Pet Zone”.
3. Click the OK button. The new frame title is displayed in the frame title in the Layout Window.

Generating the Layout

Complete the following steps to generate your layout and to save your form.



1. Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.
2. Select Save from the File menu to save the form. You have completed your Invoice form. Now, you are ready to finalize the form.

Finalizing the Form

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:Director uses before you print the report and test the compiled translation object.

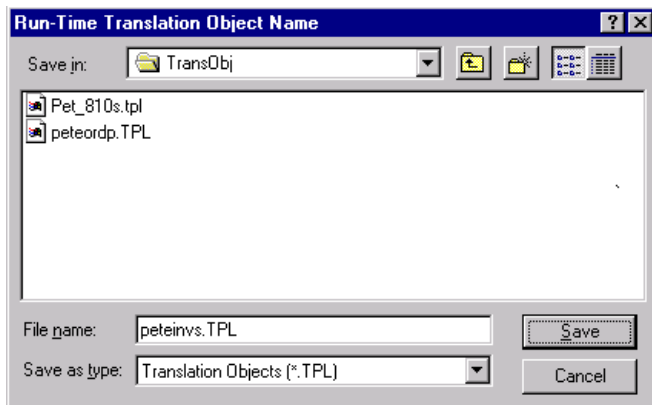
Compiling the Form

The Compile function generates the form. The form that you create is a *source form*. When that source form is compiled, the result is a *compiled translation object*.

After you save the translation object, you must register it with Gentran:Director system before you can use it. You will use the Compile function after the form is completed and saved.

Complete the following steps to compile the form:

1. Select Compile from the File menu to display the Run-Time Translation Object Name dialog.



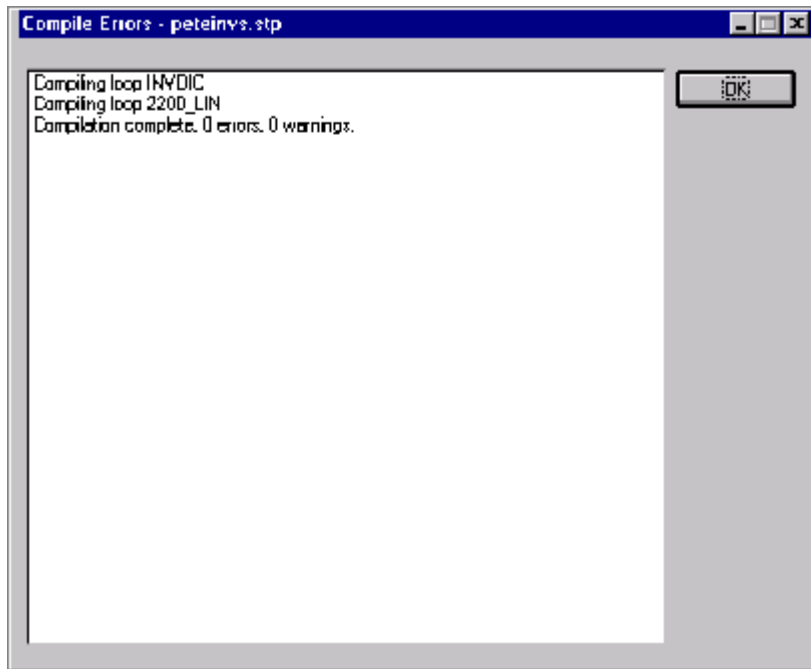
2. Click SAVE to accept the translation object name (peteinvS.tpl) in the “File name” box.

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.



Do not to overlay the source form with the compiled translation object. Use the .TPL file extension to distinguish the compiled translation object.

The system compiles the form and generate an error report. The error report is displayed in the Compile Errors dialog.



3. Click OK to exit the Compile Errors dialog.



If the Compile Errors dialog contains errors, you must fix the problem(s) by redoing the appropriate section of the tutorial. Recompile the form after you correct the error(s) and save the form.

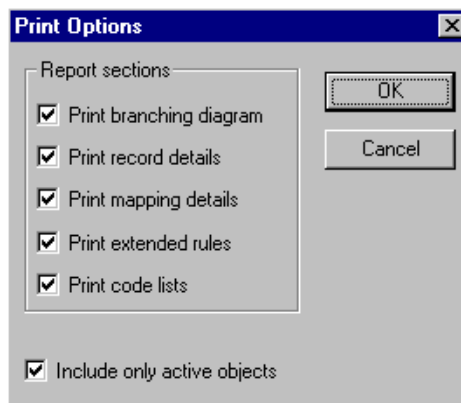
4. Select Save from the File menu to save the form. The date on which you compiled the form is automatically loaded into the Compiled on box on the Translation Object Details dialog.
5. Select Edit/Details to access the Translation Object Details dialog. The date on which you compiled the form is loaded automatically into the Compiled on box.
6. Click CANCEL to exit the dialog.

Printing the Report

The Gentran:Director 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 need to make modifications, save the form, recompile the form, and print the report again.

Complete the following steps to print the Gentran:Director report:

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 selected), so the report includes all sections and only the activated form components. The Print dialog is displayed.
3. If you need to change the paper size or page layout, click PROPERTIES.
4. Click OK to print.

Testing the Translation Object

After you compile the form, print and verify the report, and register the translation object with Gentran:Director, 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.

Following is an overview of the steps required for testing the screen entry translation object you just created:

1. Register the PETEINVS.TPL translation object with Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on registering a translation object.
2. If you have not done so already, import the PETZONE2.PAR partner relationship into Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on importing a partner.
3. Verify (in Partner Editor) that the Screen INVOIC Pet Zone screen entry translation object is selected for the Outbound Relationship. Please see the Gentran:Director *User's Guide* for more information on selecting outbound translation objects.
4. Create a new document (partner PETZONE2 and relationship PETZONE2_EDIFACT_INVOIC) to enter the data in the screen entry translation object you created. See the Gentran:Director *User's Guide* for more information on creating a document.

Glossary

- ?In Documents** This Gentran:Director 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:Director 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 file to the Application Integration subsystem. In Gentran:Director 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.

- 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.
- button** A button enables you to execute a command. You select a button either by clicking it or by pressing **TAB** until the button you want is selected and then pressing **ENTER**. Unavailable buttons are dimmed, and the currently selected button has a darker border than the other buttons.
- 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.
- click** Click indicates that you should position your cursor on top of the designated item and press and release your primary mouse button. The primary mouse button is the button you access with your index finger, regardless of whether you are utilizing right-handed or left-handed mouse operation.
- 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 colors to visually define the various map components. The use of color 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 creates a translation object. The form that you create is a *source form*. When that source form is compiled, the result is a *compiled translation object*. This translation object will need to be registered with the Gentran:Director 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 composite data element 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 will be 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.
- dialog box** A dialog box (or dialog) contains additional information or options that you need to act on. If you specify any options, you can select a button to execute the command. Some dialog boxes display warnings or messages indicating why a requested task cannot be accomplished. If the dialog box has a title bar, you can move it to another location on your desktop.
- 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.
- double-click** This indicates that you should position your cursor on top of the designated item and quickly press and release your primary mouse button twice. The primary mouse button is the button you access with your index finger, regardless of whether you are utilizing right-handed or left-handed mouse operation.

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 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 will refer to Interchange Envelope only.



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 extended rules** See export map. These rules enable you to use a Gentran:Director 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.
- font** This feature enables you to globally change the font that is used in the display of all maps. The default font that Gentran:Director uses is a Sans Serif 9 point. The Font feature enables you to change the font type, style, and point size. This gives you the flexibility to shrink the font if you need to view more of the map on your monitor, enlarge the font, or change the type and style to be more easily readable by you.

- 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:Director 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 are visually represented the same way as other groups and subgroups in Gentran:Director.
- 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:Director 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 will be transferred to the In Drawer.
- In Drawer** This Gentran:Director browser contains a list of documents that were received and processed.

- 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 will be 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 will need to define the LS and LE segments for the loops you will be 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.
- menu** A list of items from which you can choose. Each item represents a command. Unavailable items on a menu are dimmed to inform you they are disabled.
- menu bar** This contains the list of menus for the application.
- network** Also known as a third party network or value-added network (VAN). A service, such as Commerce:Network, 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 will be 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:Director 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:Director 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:Director 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:Director 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 partner(s) 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:Director 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.

radio buttons Radio buttons indicate a group of mutually exclusive options. You can only select one option at a time. Select an option by clicking the radio button or pressing the SPACE BAR until the option you want is selected. The selected option contains a black dot. The labels of unavailable choices are dimmed.

receive This Gentran:Director function enables you to manually initiate a communications session to receive data from Commerce: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 will generate a compliance error if one of those fields is not present.

respond This Gentran:Director 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 document(s) 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 partner(s), 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:Director 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:Director function enables you to manually start a communications session to send data to Commerce:Network through an invocation of Connection Manager. Only selected documents are enveloped and sent. If no documents are selected, ALL documents will be 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 will 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).
- string** This type of field or element contains one or more printable characters. If you specify that a field or element will be 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 (e.g., alphanumeric within a certain range).
- 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 will know 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:Director system.
- TDCC** See EDIA.
- TDF** TDF is the Transaction Data File. This file serves as a filter between your document files and the Gentran:Director 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:Director 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 object(s) will be 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 will be 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:Director, 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 will be 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:Director 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.

