

Gentran:Director[®]

for Windows[®]

Version 5.4

Forms Integration TRADACOMS Tutorial Guide

Sterling Commerce
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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 TRADACOMS 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 will 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 dialogue 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 organised into chapters. A brief description of the chapter contents follows.

- *Chapter 1, Getting Started* explains the content, organisation, and conventions in this guide, as well as the system requirements. This chapter also describes how to build forms using Gentran:Director and how to customise global EDI date formats, and gives you an introduction to form creation and the Forms Integration subsystem.
- *Chapter 2, Creating a Print Form* uses a step-by-step approach to explain the tasks and procedures necessary to create a print form for a TRADACOMS purchase order (ORDERS).
- *Chapter 3, Creating a Screen Entry Form* uses a step-by-step approach to explain the tasks and procedures necessary to create a screen entry form for a TRADACOMS 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:

- Creating a new form* 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**).
- Click this button* 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 messages. 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 (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 message using the Document Editor (screen entry translation object) or print messages (print translation object), so that your system can accurately process the data.

Gentran:Director will generate an EDI file for you, based on the standard (agency), version, transaction set, and release (for the TRADACOMS standard *only*) you selected. The system includes all the groups, segments, composites, and elements that are defined by the standards agency for the version of the message you selected. Please see *Creating the New Form* on page 27 (print forms) or *Creating the New Form* on page 138 (screen entry forms) for more information on generating an EDI file when you create a new form. You will typically need to customise the system-generated EDI file by modifying the properties of the form components, and using specialised Gentran:Director functions to manipulate the EDI file structure.

However, if you want to use a specialised 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.

Regardless of whether the system generates the EDI file or you define it, the specific EDI form components that you will use will depend on the type of form you are creating. This includes the standard, version, and transaction set (message) selected, and which groups, segments, composites, and elements your company requires. We recommend that you determine which form components you will be using 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 sub-group (this corresponds to a nested looping structure – a loop within a loop). The EDI file is a group and therefore, it is visually represented the same way as other groups and sub-groups 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 the EDI standards. A segment can occur once or can repeat multiple times. A segment is visually represented in Gentran:Director as the following: 
- A **composite** is a data element that contains two or more component data elements or sub-elements. 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 the following: 
- An **element** is the smallest piece of information defined by the EDI standards. An individual element can have different meanings depending on the context. Therefore, elements are normally not considered to have useful meaning until they are combined into segments. An element is visually represented in Gentran:Director as the following: 

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

Layout Window

The Layout Window (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 the 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 list boxes. Elements are formatted as edit boxes (fields) or drop-down list boxes on the frame.

Elements will typically be formatted as fields, but will be formatted as a drop-down list box 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 enables you to design forms to facilitate the keying (screen entry) and printing (print) of EDI messages that you receive inbound or send outbound.

Navigation

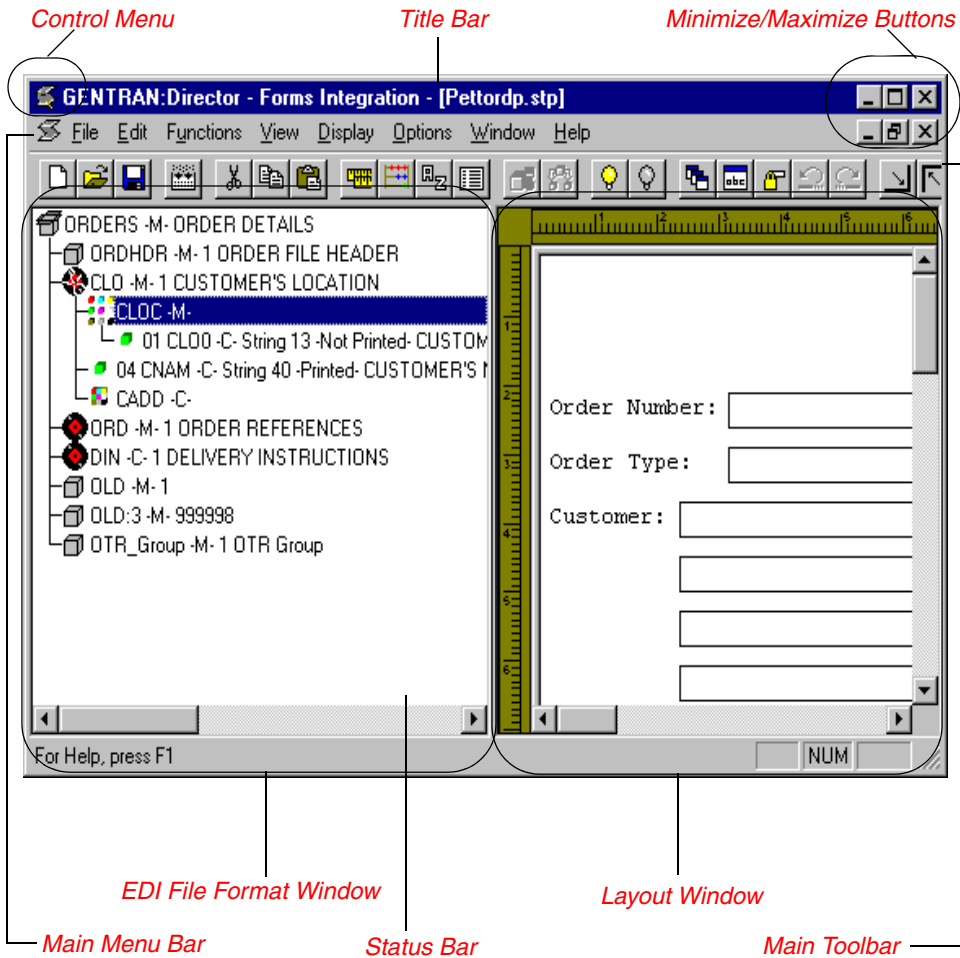
The Gentran:Director Forms Integration Window allows you to access its functionality in four different ways, as follows:

- 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 that contains all the functions that are currently available for that form component. The shortcut menus enable you to quickly and easily access available functionality. The content of the shortcut menus will vary, depending on the type and level of the selected form component.



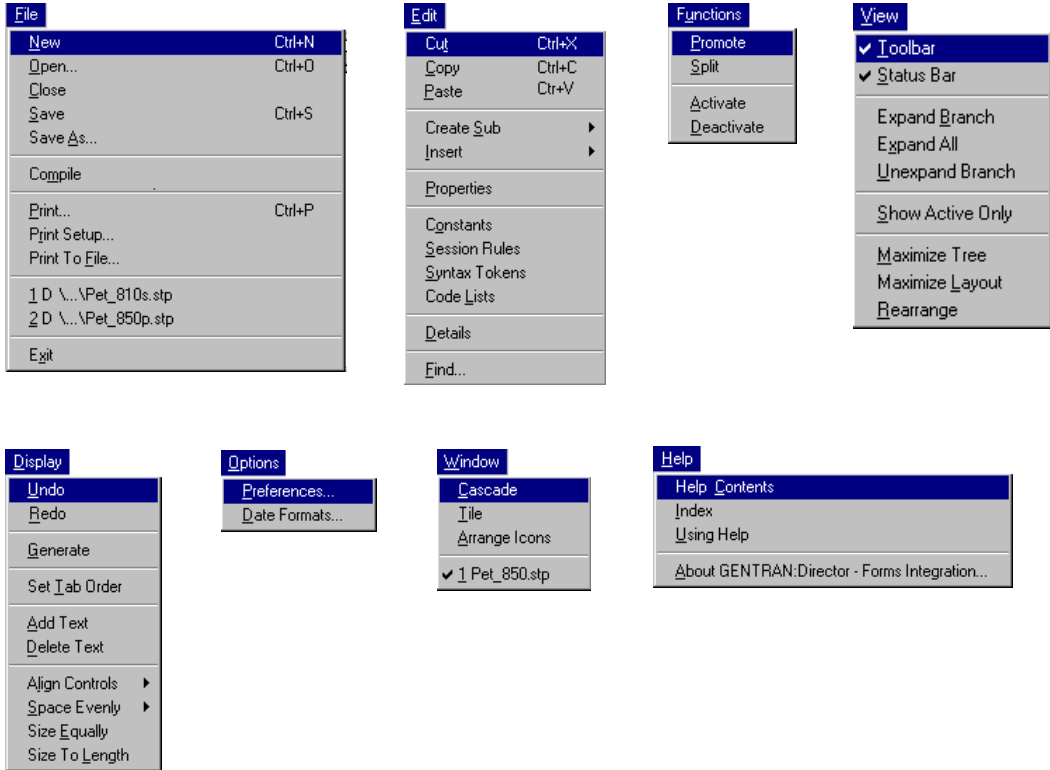
When you start Gentran:Director, the Main Menu Bar contains a subset of menu items. The full set of menu items is displayed after you create a new form or open (load) an existing form.

The Gentran:Director Forms Integration Window appears as follows:

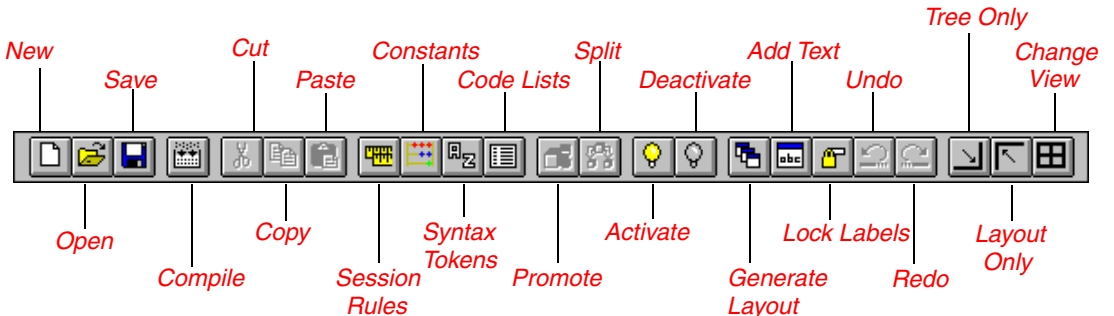


- The **Control Menu** contains the following commands: **Restore**, **Move**, **Size**, **Minimize**, **Maximize**, and **Close**.
- The **Title Bar** contains the name of the application. You can use this to move the position of the EDI Director window on your desktop.
- The **Minimize** icon reduces 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 operations in Gentran:Director. 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, NUM for the “Num Lock” key, etc.).

Keyboard Techniques



The procedures in this manual are designed to be executed with a mouse. If you prefer to use the keyboard instead of the mouse to click a desired menu option, you may also 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, you may press that key combination as well.

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

Building a Form with Forms Integration

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

- 1. Preparation and Analysis**

Obtain a layout of how you want the form to be displayed and determine how it corresponds to the EDI standard you will be using. Determine what operations need to be performed to generate the required layout.
- 2. Set Global Defaults (first time only)**

The first time you use Gentran:Director, you should establish the default date format that the system will use. Please see *Verifying the Global EDI Date Formats* on page 25 (print forms) or *Verifying the Global EDI Date Formats* on page 136 (screen entry forms) for more information on setting the global date default.
- 3. Create, Save, and Name a New Form**

Please see *Creating the New Form* on page 27 (print forms) or *Creating the New Form* on page 138 (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 142 (screen entry forms) for more information on activation.
- 5. Define the Layout of the Form**

Please see *Verifying EDI Delimiters* on page 36 (print forms) or *Verifying EDI Delimiters and Adding Frame Help Text* on page 145 (screen entry forms) for more information on customising your EDI file, including verifying the EDI delimiters.
- 6. Compile the Form**

Please see *Compiling the Form* on page 116 (print forms) or *Compiling the Form* on page 310 (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 118 (print forms) or *Printing the Report* on page 312 (screen entry forms) for more information on printing the report.

8. **Register the Translation Object with Gentrans:Director**

Please see the *Gentrans:Director User's Guide* for more information on registering translation objects.

9. **Create the Appropriate Trading Relationship**

Establish the appropriate trading relationship in Gentrans:Director for your trading partners. Please see the *Gentrans:Director User's Guide* for more information on creating trading relationships.

10. **Test the Translation Object**

For a screen entry translation object, create a new message in Document Editor, using the screen entry translation object. For a print translation object, print a message. Verify that the output is correct. Please *Testing the Translation Object* on page 119 (print translation objects) or *Testing the Translation Object* on page 313 (screen entry translation objects) for more information on testing the translation objects.

Creating a Print Form

A form is a set of instructions that you define in the Forms Integration subsystem to indicate how the system should format data. A form contains a set of fields arranged and formatted so that it can be reused to ensure consistency. You can create two types of forms in Gentran:Director. The *print form* enables you to print (on a printout) EDI data that has been processed through the translation object. The *screen entry form* ensures that users in your company enter into a predesigned data-entry translation object all the EDI data necessary to create a business message, which then will be transmitted to a trading partner.

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

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



Press F1 from any area of the system to access the online Help for that function. The online Help system contains field definitions and other detailed information.

Getting Started

A print form is a predesigned layout that, when compiled into a translation object, enables users to print out an EDI message in a customised, readable format. This tutorial explains how you customise and format a form before it is compiled into a translation object. The form that you create using Gentran:Director 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 print messages of that type).

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

- Type of form (e.g. print or screen entry)
- Standard agency (e.g. TRADACOMS, EDIFACT)
- Standard version (e.g. ANA001, 92.1)
- Message type (e.g. ORDERS, INVOIC)
- Release (message version) (e.g. 9)

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 customise and format the form so that it is appropriate and useful for your company's needs.

Before you begin to customise 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 will be using the print forms to create printouts of processed EDI data)
- Your trading partners (the organisations 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, standard version, and release. There is no limit to the number of print forms you can create, and the number of print forms you create is not affected by the number of screen entry forms you create.

We recommend that you mock up a layout of the print form the way you ultimately want it to look. As you are designing the layout, you should take into consideration the people who will be using the printouts. Make sure that the form makes sense to the people who will be using it. By analysing your company's needs before you actually create the print form, you will reduce the amount of time spent later on redesigning or reformatting the form. Specifically, 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 order in which they are listed below, although the form design process is an iterative one (that is, 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. However, when you create your own forms, the phases may overlap, and usually you will return to one or more of the phases several times before the form is completed.

1. Designing and creating the form
2. Customising the form components
3. Formatting the form
4. Finalising 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 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 analysing the purpose of the form, creating and saving the form, and setting up the form. You can find techniques for customising the segments, elements, and groups in the form, as well as for formatting the organisation 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 TRADACOMS ANA001 release 9 standard. The steps involved in creating this form are broken down into manageable pieces so that you can learn the tasks and procedures involved in creating a print form. Then, you can apply the knowledge gained from using this tutorial to create your print forms.

In this scenario, your company is MWT Manufacturing Co., which manufactures a wide variety of pet supplies for pet stores. You 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 printout of a purchase order. You do not want to alter the integrity of the EDI data. However, you will 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 the analysis of the 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 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 TRADACOMS 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 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.

Analysing the EDI File

To analyse the EDI file, first you must determine what data your trading partner will send you. You and your partner must agree on which standard, version, message, and release you will be using. In this tutorial, you are using a TRADACOMS ANA001 ORDERS release 9 purchase order. It is important to know the information that your partner will send you in the purchase order, and what data will be contained in each element used.

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

The TRADACOMS standard uses a header with each interchange (ORDHDR for the ORDERS message). The header message contains information that pertains to each message in the interchange. Gentran:Director copies the header segments to the beginning of each document, to ensure that all the relevant information is contained in the document. Therefore, you will need to load the header message (ORDHDR) into the ORDERS EDI file, so that all the segments and elements are available for use.

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. Then, you will make the form components you need available for use (activate). When Gentran:Director generates the EDI file format, the system includes all the groups, segments, composites, and elements that are defined by the standard agency for the version of the message 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 mandatory groups, segments, composites, and elements.

For a TRADACOMS ANA001 ORDERS release 9 purchase order, 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	
ORDHDR				Order File Header	
	TYP			Transaction Type Details	
			CD02	Transaction Code	
	SDT			Supplier Details	
		SIDN			
	CDT			Customer Details	
		CIDN			
	FIL				File Details
		FLGN			File Generation Number
		FLVN			File Version Number
FLDT				File Creation Date	

Group	Segment	Composite	Element	Description
	CLO			Customer's Location
		CLOC		
	ORD			Order References
		ORNO		
OLD				
	OTR			Order Trailer
			LORD	Lines Ordered

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

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
Order File Header (ORDHDR Group) (Already Activated)				
Supplier Details (SDT Segment) (Already Activated)				
SDT SIDN SID0	Supplier's ANA Location Code	String	13	
SDT SNAM	Supplier's Name	String	40	
Customer Details (CDT Segment) (Already Activated)				
CDT CIDN CID0	Customer's ANA Identity/Loc	String	13	
CDT CNAM	Customer's Name	String	40	
CDT CADD CAD0	Customer's Address Line 1	String	35	
CDT CADD CAD1	Customer's Address Line 2	String	35	
CDT CADD CAD2	Customer's Address Line 3	String	35	
CDT CADD CAD3	Customer's Address Line 4	String	35	
CDT CADD CAD4	Customer's Post Code	String	8	
Customer's Location (CLO Segment) (Already Activated)				
CLO CLOC CLO0	Customer's ANA Location Code	String	13	
CLO CNAM	Customer's Name	String	40	
CLO CADD CAD0	Customer's Address Line 1	String	35	
CLO CADD CAD1	Customer's Address Line 2	String	35	

Element	Description	Data Type	Length	Code Value/ Format to Be Assigned
CLO CADD CAD2	Customer's Address Line 3	String	35	
CLO CADD CAD3	Customer's Address Line 4	String	35	
CLO CADD CAD4	Customer's Post Code	String	8	
Order References (ORD Segment) (Already Activated)				
ORD ORNO ORN0	Customer's Order Number	String	17	
ORD ORNO ORN2	Date Order Placed by Customer	Dt/Tm	6	Screen Format = DD/MM/YY
ORD CD07	Order Code	String	1	Any valid code
Delivery Instructions (DIN Segment)				
DIN LDAT	Latest Delivery Date	Dt/Tm	6	Screen Format = DD/MM/YY
Order Line Details (OLD Group) (Already Activated)				
Order Line Details (OLD:2 Segment)				
OLD:2 SPRO SPR1	Supplier's Code for the Traded Unit	String	30	
OLD:2 CPRO CPR1	Customer's Item Code	String	30	
OLD:2 UNOR UNO0	Consumer Units in Traded Unit	String	15	Format = N0
OLD:2 UNOR CD04	Measure Indicator	String	6	
OLD:2 OQTY OQT0	Number of Traded Units Ordered	String	15	Format = N0
OLD:2 OUCT OUC0	Cost Price	Real	14	Screen Format = R4
OLD:2 TDES TDE0	Traded Unit Descr. Line 1	String	40	
OLD:2 TDES TDE1	Traded Unit Descr. Line 2	String	40	



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 segment activated (either mandatory or optional), 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 (TRADACOMS, EDIFACT, and certain ANSI X12 standards).

The *maximum use* of a segment refers to the number of times that a segment can be used within the structure in which the segment is defined. For example, if a segment can be used only once within a group, but the group can be used multiple times, the segment still has a maximum use of one within each occurrence of the group. The standard defines the maximum number of times a segment can be used, but you must determine which of these segments 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 be expecting 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 customise the form components to produce a printed report that looks the way your company expects it to look.

The following form customising tasks (by group, segment, and element) are required for this tutorial. The table below lists the significant customising tasks. In addition, you will change field and element lengths, prevent some fields and/or field labels from being displayed (hide them), or change the labels of some fields (as explained in the appropriate sections of this tutorial).

Form Component	Description	Customising Needed
ORDHDR group	Order File Header	You will promote this group so that the fields in this group are placed on the parent frame.
TYP CD02 element	Transaction Code	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.

Form Component	Description	Customising Needed
SDT SIDN SID0 element	Supplier's ANA Location Code	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
SDT SNAM element	Supplier's Name	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
CDT CIDN CID0 element	Customer's ANA Identity/Loc	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
CDT CNAM element	Customer's Name	You will change the field name to "Customer", which better describes the data in this field for your company.
CDT CADD CAD0 element	Customer's Address Line 1	The data in this element will be self-explanatory, so you will remove the label from this field.
CDT CADD CAD1 element	Customer's Address Line 2	The data in this element will be self-explanatory, so you will remove the label from this field.
CDT CADD CAD2 element	Customer's Address Line 3	The data in this element will be self-explanatory, so you will remove the label from this field.
CDT CADD CAD3 element	Customer's Address Line 4	The data in this element will be self-explanatory, so you will remove the label from this field.
CDT CADD CAD4 element	Customer's Post Code	The data in this element will be self-explanatory, so you will remove the label from this field.
FIL FILGN element	File Generation Number	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
FIL FILVN element	File Version Number	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
FIL FILD T element	File Creation Date	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
CLO CLOC CLO0 element	Customer's ANA Location Code	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
CLO CNAM element	Customer's Name	You will change the field name to "Location", which better describes the data in this field for your company.
CLO CADD CAD0 element	Customer's Address Line 1	The data in this element will be self-explanatory, so you will remove the label from this field.
CLO CADD CAD1 element	Customer's Address Line 2	The data in this element will be self-explanatory, so you will remove the label from this field.

Form Component	Description	Customising Needed
CLO CADD CAD2 element	Customer's Address Line 3	The data in this element will be self-explanatory, so you will remove the label from this field.
CLO CADD CAD3 element	Customer's Address Line 4	The data in this element will be self-explanatory, so you will remove the label from this field.
CLO CADD CAD4 element	Customer's Post Code	The data in this element will be self-explanatory, so you will remove the label from this field.
ORD ORNO ORN0 element	Customer's Order 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, you will change the field name to "Order Number", which better describes the data in this field for your company.
ORD ORNO ORN2 element	Date Order Placed by Customer	You will change the field name to "Order Date", which better describes the data in this field for your company. Also, the date in the EDI data will be in the format "YYMMDD", but you want the date to be printed in the format "DD/MM/YY", so you will set the screen format accordingly. In addition, you will change the field and element lengths to reflect the longer date format.
ORD CD07 element	Order Code	The code from this element will be used to look up the description in a code values list, and the description will be printed in another field that you create. You will prevent the Order Code field from being displayed on the printout, because the more meaningful description will be printed instead.
DIN LDAT element	Latest Delivery Date	The date in the EDI data will be in the format "YYMMDD", but you want the date to be printed in the format "DD/MM/YY", so you will set the screen format accordingly. Also, you will change the field and element lengths to reflect the longer date format.
OLD group	Order Line Details	After you customise and format the fields in the OLD group, you will copy and paste the OLD group at the same level in the EDI file. The original OLD 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 OLD 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 OLD group to 999,998. Up to 999,999 line items (one from the first OLD group and 999,998 from the second OLD group) can be printed on the printout (without printing the column headings for each line item).

Form Component	Description	Customising Needed
OLD:2 SEQA element	First Level Sequence Number	The standard allows a maximum length of ten digits, but you expect a number no longer than five digits from your partner. You will change the maximum length of the element and the display length of the field to five. You will change the field name to "Line", which better describes the data in this field for your company.
OLD:2 SPRO SPR1 element	Supplier's Code for the Traded Unit	The standard allows a maximum length of thirty characters, but you expect a string no longer than ten characters from your partner. You will change the maximum length of the element and the display length of the field to ten. You will change the field name to "Prod ID", which better describes the data in this field for your company.
OLD:2 CPRO CPR1 element	Customer's Item Code	This element is required in the purchase order, but is not meaningful for your purposes. Therefore, you will prevent this field from being printed on the printout.
OLD:2 UNOR UNO0 element	Consumer Units in Traded Unit	The standard allows a maximum length of fifteen characters, but you expect a number no longer than ten digits from your partner. You will change the maximum length of the element and the display length of the field to ten. Also, you will change the data type from string to number, and assign EDI and screen formats of N0 (indicating a number with an implicit decimal point and no decimal places). In addition, you will change the field name to "Cons. Units", which better describes the data in this field for your company.
OLD:2 UNOR CD04 element	Measure Indicator	You will change the field name to "Unit", which better describes the data in this field for your company.
OLD:2 OQTY OQT0 element	Number of Traded Units Ordered	The standard allows a maximum length of fifteen characters, 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. Also, you will change the data type from string to number, and assign EDI and screen formats of N0 (indicating a number with an implicit decimal point and no decimal places). In addition, you will change the field name to "Qty Ord", which better describes the data in this field for your company.

Form Component	Description	Customising Needed
OLD:2 OUCT OUC0 element	Cost Price	The standard allows a maximum length of fourteen digits, but you expect a number no longer than ten digits from your partner. You will change the maximum length of the element and the display length of the field to ten. Also, you will change the screen format of the data to R4 (indicating a number with an explicit decimal point and four decimal places). In addition, you will change the field name to "Price Each", which better describes the data in this field for your company.
OLD:2 TDES TDE0 element	Traded Unit Descr. Line 1	The data in this element will be self-explanatory, so you will remove the label from this field.
OLD:2 TDES TDE1 element	Traded Unit Descr. Line 2	The data in this element will be self-explanatory, so you will remove the label from this field.
OTR segment	Order Trailer	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 OTR segment would be displayed on the same frame as the fields in the ORDHDR group). 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.
OTR LORD element	Lines Ordered	You will change the field name to "Number of Line Items", which better describes the data in this field for your company.

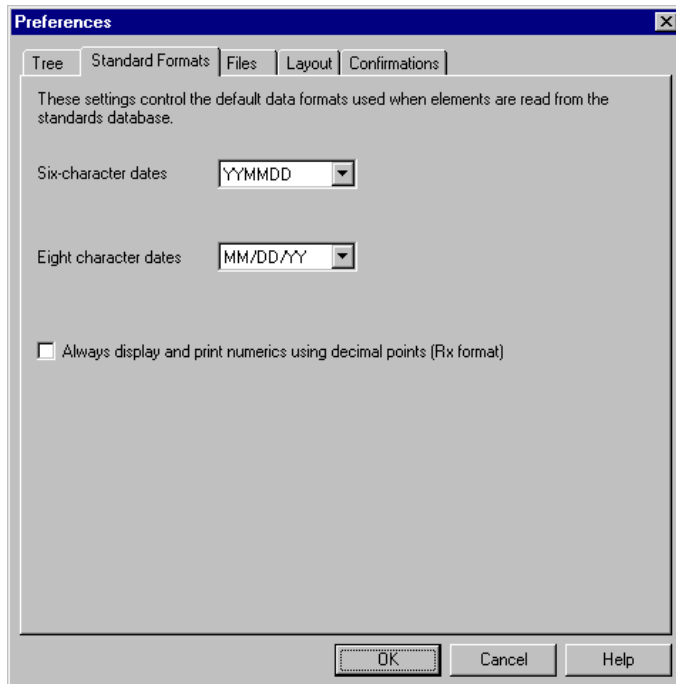
Verifying the Global EDI Date Formats

Gentran:Director enables you to customise 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 customise the global EDI date formats, the settings are valid for all forms created in the current session of Gentran:Director. However, you can override the default date formats for an individual element on the Field Properties dialogue for that element.

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

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” drop-down list box contains “YYMMDD” to define the format of the six-character EDI dates in your forms.
4. Verify that the “Eight character dates” drop-down list box 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.



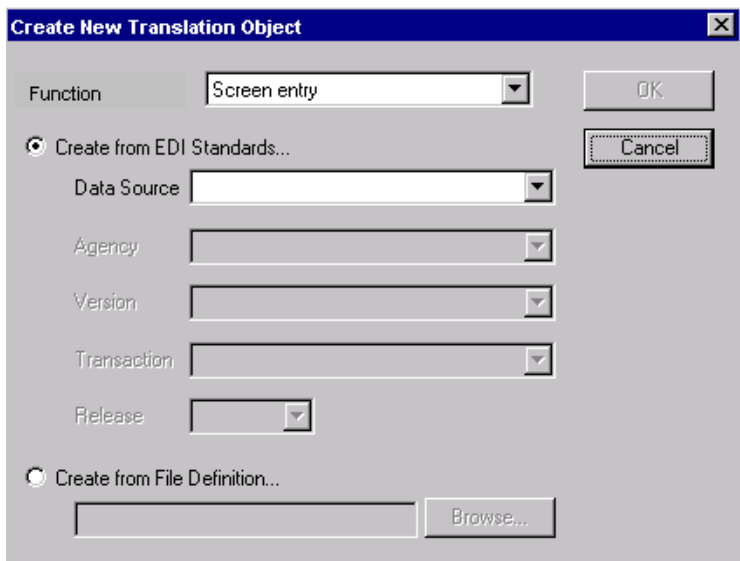
To change the order in which the date formats appear in the “Six-character dates” and “Eight character dates” drop-down list boxes or to add a new date format to the lists, select Date Formats... from the Options menu.

Creating the New Form

The first task in creating a new form is to define the type of form and EDI standard, version, transaction (message), and release. 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 TRADACOMS standard.

Complete the following steps to create the new print form:

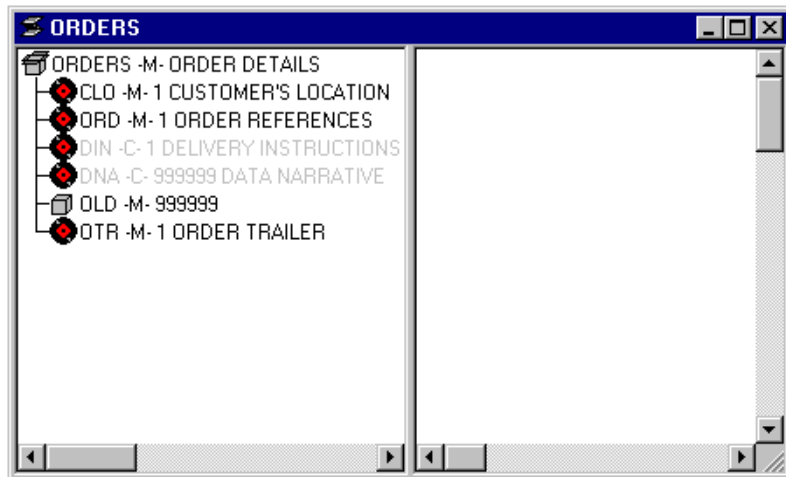
1. Select New from the File menu to display the Create New Translation Object dialogue.



The screenshot shows a dialog box titled "Create New Translation Object". It has a blue title bar with a close button (X). The dialog is divided into two main sections. The top section is for "Create from EDI Standards...". It features a "Function" dropdown menu currently set to "Screen entry". Below this are five more dropdown menus: "Data Source", "Agency", "Version", "Transaction", and "Release". The bottom section is for "Create from File Definition...". It has a radio button that is currently unselected, followed by a text input field and a "Browse..." button. On the right side of the dialog, there are "OK" and "Cancel" buttons. The "Cancel" button is highlighted with a dashed border.

2. From the Translation Object Function drop-down list box, 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..." radio button is selected.
4. From the Data Source drop-down list box, select the ODBC data source that you wish to use.
5. From the Agency drop-down list box in the Standards section, select "[A] Tradacoms", which is the EDI standard you will use for this translation object.

6. From the Version drop-down list box, select “[ANA001]”, 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.
7. From the Transaction drop-down list box, select “[ORDERS] ORDER DETAILS”, which is the transaction set (message) you will use for this translation object. The messages that are available depend on which standard and version you selected.
8. From the Release drop-down list box, select “9”, which is the message version you will use for this translation object. The message versions that are available depend on which message (transaction) you selected.
9. Click OK to create the EDI file (it may take a few seconds to create the file). The form is displayed as follows:



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.

10. Select Save from the File menu. The Translation Object Details dialogue is displayed.



If you have performed any function that invalidates the current format of the translation object, the Save function is not available (dimmed) until you regenerate the layout (click Generate Layout on the Main Toolbar).

11. In the Author field, type your name. This field usually contains the name of the person who created the form.
12. In the Description field, type “Print TRADACOMS ORDERS Pet Zone”. This field is used to provide a brief explanation of the compiled translation object that will enable you to differentiate it from similar translation objects in Gentran:Director. For example, “Print TRADACOMS ORDERS Pet Zone” is the description of a print translation object for a TRADACOMS ANA001 purchase order (ORDERS) for partner Pet Zone.
13. Verify that “Print” is selected from the Translation Object Function drop-down list box.
14. In the Major version field, type “1” to designate the version number for this translation object.
15. In the Minor version field, accept the default value “0” that designates the release number for this translation object.



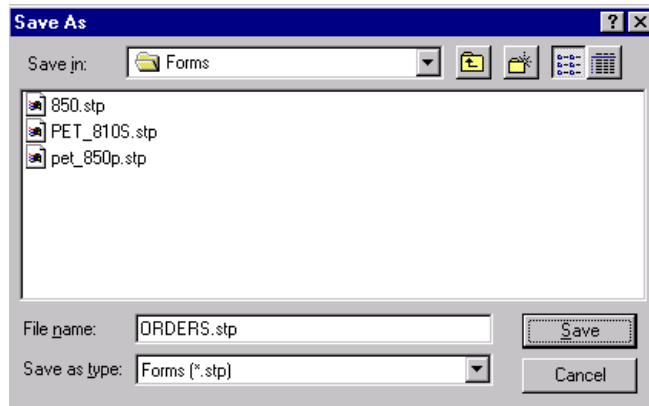
When you make a major change to this form, increase the version to the next higher sequential number (e.g. 2.0, 3.0). If you make a minor change to the form, increase the release to the next higher sequential number (e.g. 2.1, 2.2).

- 16. The Input and Output fields (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 fields.



The system allows you to change the information in the Input and Output fields, but modifying this information does not alter the content of the form. An example of when you might want to alter these fields 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 dialogue, and then physically alter the form to be compliant with that version.

- 17. Click OK to save the translation object details and access the Save As dialogue.



- 18. Verify that the “Save in” drop-down list box reflects the drive\folder where Gentran:Director is installed. The default is GENTRAN Director\Forms.

19. In the “File name” field, type “pettordp.stp” to replace the default filename. You allocate a filename to a form when you save the form for the first time or use the Save As function to save a copy of the form under a different name. The name of the form must be one to eight unique characters that define the form in a meaningful way. For example, “PETTORDP” is the name of a print form for a TRADACOMS purchase order message (ORDERS) for partner Pet Zone.

The default file extension for forms is .STP. Using this extension distinguishes source form files from other types of files, such as compiled translation objects. The naming conventions in 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. PETTORDP.STP).
- The compiled translation object (translation object that is the result of compiling the source form) should be named using the same filename that was allocated to the source form, but with the file extension **.TPL** (e.g. PETTORDP.TPL).

We recommend that you use these naming conventions to distinguish source forms and compiled translation objects from other types of files. We also recommend that you use the same filename (different file extension) for a source form and the translation object that was compiled from it.

20. Click **SAVE** to save the form.

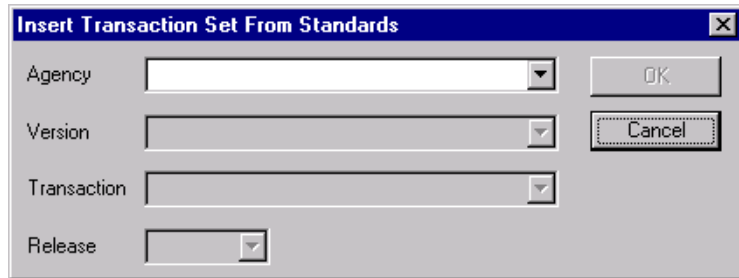
Loading the ORDHDR Message

The TRADACOMS standard uses a header with each interchange (ORDHDR for the ORDERS message). The header message contains information that pertains to each message in the interchange. Gentran:Director copies the header segments to the beginning of each document, to ensure that all the relevant information is contained in the document. Therefore, you need to load the header message (ORDHDR) into the ORDERS EDI file, so that all the segments and elements are available for use.

Complete the following steps to load the ORDHDR message into the ORDERS EDI file:

1. Click the ORDERS EDI file icon to select it.
2. Select Create Sub from the Edit menu.

3. Select Transaction Set from the Create Sub cascading menu. You will be prompted to select an ODBC datasource name. Select the appropriate DSN and click OK to display the Insert Transaction Set From Standards dialogue.



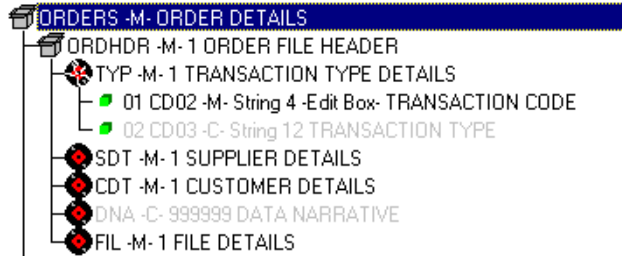
4. From the Agency drop-down list box, select “[A] Tradacoms”, which is the EDI standard you will use for the inserted message.
5. From the Version drop-down list box, select “[ANA001]”, which is the version of the standard you will use for the inserted message. The versions that are available depend on which standard you selected.
6. From the Transaction drop-down list box, select “[ORDHDR] ORDER FILE HEADER”, which is the transaction set (message) you will use for the inserted message. The transactions that are available depend on which standard and version you selected.
7. From the Release drop-down list box, select “9”, which is the message version you will use for the inserted message. The message versions that are available depend on which message (transaction) you selected.
8. Click OK to load the ORDHDR message into the ORDERS EDI file as a subordinate group.

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 (TRADACOMS) for the version (ANA001), message (ORDERS), and release (9) 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 CLO segment and CLO CLOC composite are mandatory for the purchase order. You do not need to activate these components. The CLO CLOC CLO0, CLO CLOC CLO1, CLO CLOC

CLO2, and CLO CNAM elements and the CLO CADD composite 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:

1. Double-click the groups, segments, and composites listed in the table that follows to open them. The 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	Segment	Composite	Element	
ORDHDR (already activated)	SDT (already activated)	SIDN (already activated)	SID0	
			SNAM	
	CDT (already activated)	CIDN (already activated)		CID0
				CNAM
		CADD		CAD0
				CAD1
				CAD2
				CAD3
		CAD4		
		CLO (already activated)	CLOC (already activated)	CLO0
				CNAM
CADD				CAD0
				CAD1
				CAD2
				CAD3
		CAD4		
ORD (already activated)		ORNO (already activated)		ORN0
				ORN2
				CD07
DIN			LDAT	

Group	Segment	Composite	Element
OLD (already activated)	OLD:2	SPRO (mandatory for OLD:2)	SPR1
		CPRO	CPR1
		UNOR (mandatory for OLD:2)	UNO0
			CD04
		OQTY (mandatory for OLD:2)	OQT0
		OUCT	OUC0
		TDES	TDE0
TDE1			



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 segment that you need to use. Clicking these segments will activate the segments.



If you accidentally click a segment that you did not mean to activate, click the segment with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.

4. Click each inactive composite that you need to use. Clicking these composites will activate the composites.



If you accidentally click a composite that you did not mean to activate, click the composite with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.

5. Click each inactive element that you need to use. Clicking these elements 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.



If you accidentally click an element that you did not mean to activate, click the element with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.



6. Click Activate on the Main Toolbar to turn activation mode off.

Verifying EDI Delimiters

You are using an EDI standard that contains composite elements, so you must verify that Gentrans: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.

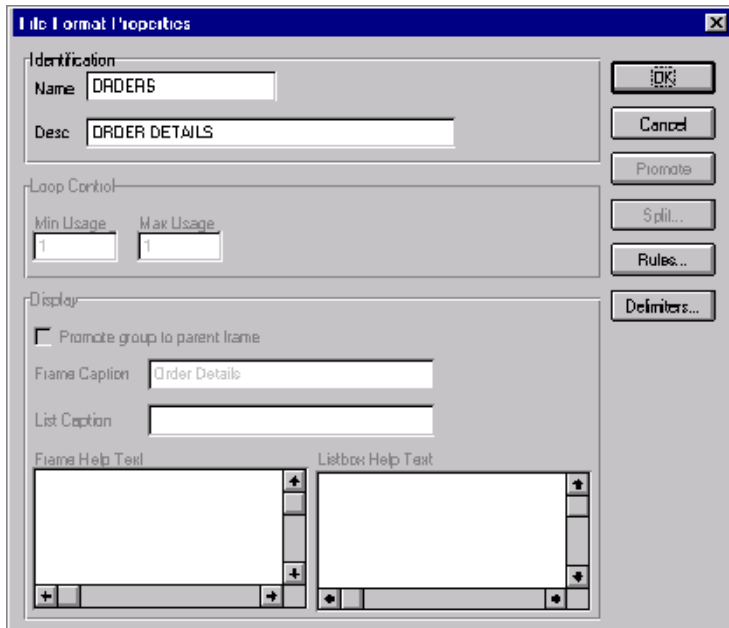


Although verifying EDI delimiters in Gentrans:Director is mandatory *only* if you are using a standard with composite elements or subelements, we recommend that you perform this task regardless of which standard you use.

Complete the following steps to verify EDI delimiters:

1. Click the ORDERS file icon with the right mouse button to access the shortcut menu.

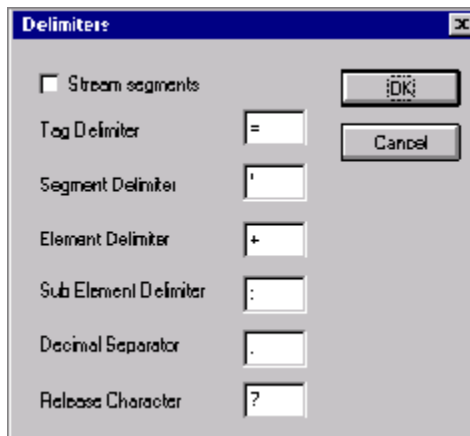
2. Select Properties... from the shortcut menu to display the File Format Properties dialogue.



The 'File Format Properties' dialog box is shown with the following fields and controls:

- Identification:**
 - Name: ORDERS
 - Desc: ORDER DETAILS
- Loop Control:**
 - Min Usage: 1
 - Max Usage: 1
- Display:**
 - Promote group to parent frame
 - Frame Caption: Order Details
 - List Caption: (empty)
 - Frame Help Text: (empty text area)
 - Listbox Help Text: (empty text area)
- Buttons:** OK, Cancel, Promote, Split..., Rules..., Delimiters...

3. Click DELIMITERS... to access the Delimiters dialogue.



The 'Delimiters' dialog box is shown with the following fields and controls:

- Stream segments
- Tag Delimiter: =
- Segment Delimiter: ' (single quote)
- Element Delimiter: +
- Sub Element Delimiter: :
- Decimal Separator: .
- Release Character: ?
- Buttons:** OK, Cancel

- Verify that the correct delimiters are being used for the TRADACOMS 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 field. The default delimiters for TRADACOMS are the following:



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

Field	EDIFACT Default Character	EDIFACT Default Hex Value
Tag Delimiter	= (equal sign)	0x3D
Segment Delimiter	' (apostrophe)	0x27
Element Delimiter	+ (plus sign)	0x2B
Sub Element Delimiter	: (colon)	0x3A
Decimal Separator	. (full stop)	0x2E
Release Character	? (question mark)	0x3F



The Stream segments check box on the Delimiters dialogue currently is not marked. For this tutorial, do not mark this check box, so the translator will continue to insert a carriage return after every segment. If the Stream segments check box is marked, then a carriage return is *not* used after every segment, and the segments are “streamed”.

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

Promoting the ORDHDR Group to the Parent Frame

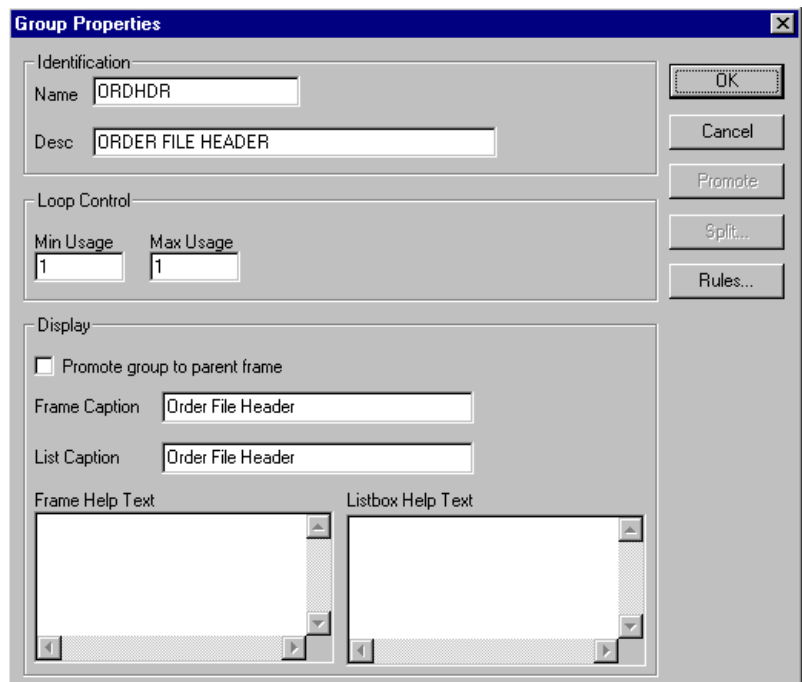
The Promote function extracts one iteration (instance) of a group or repeating segment. Promote is a specialised function that preserves the integrity of the EDI structure.

By default, the fields corresponding to each group and repeating segment are displayed on a separate frame from the rest of the fields in the message. 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.

Complete the following steps to promote the ORDHDR group to the parent frame:

1. Click the ORDHDR group with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu. The Group Properties dialogue is displayed.



3. Click 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 mark 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 dialogue.

Creating an OTR Group

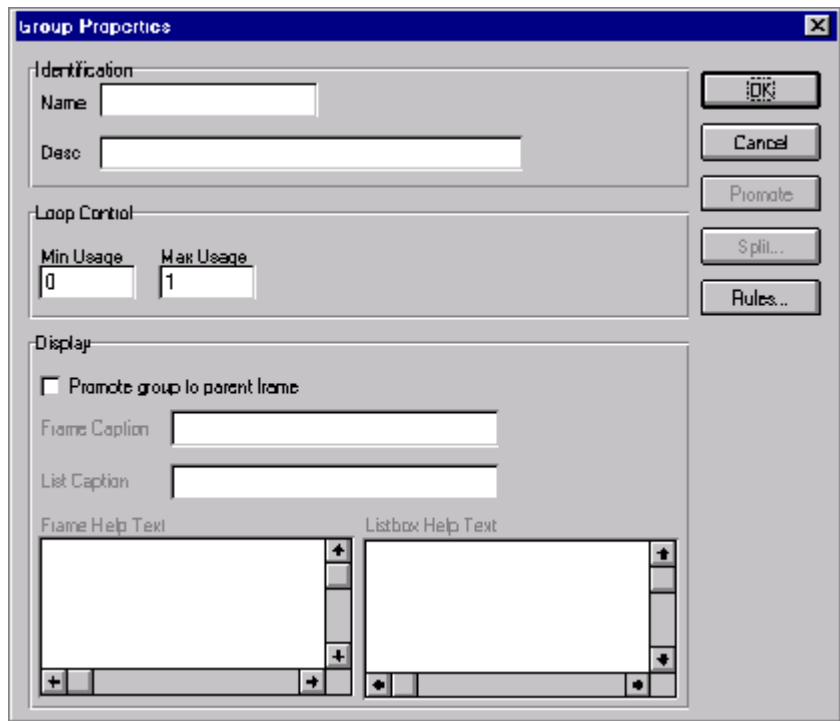
The OTR segment contains Order Trailer summary information for the purchase order. If the form were generated now (displaying the layout of the fields in the form on the right side of the Forms main window), the total number of line items would be printed along with the ORDHDR fields at the beginning of the purchase order (because the fields in the OTR segment would be displayed on the same frame as the fields in the ORDHDR group).

To print the total number of line items at the end of the printout *and* maintain the integrity of the purchase order, you must create an OTR *group* with a minimum use and a maximum use of one, then cut the OTR segment and paste it as a subordinate to the group you just created. By moving the OTR segment to the new OTR group that you create, the total number of line items will be displayed on its own frame, separate from the header (ORDHDR) information.

Creating the OTR Group Complete the following steps to create an OTR group:

1. Select the OTR segment.
2. Select Insert from the Edit menu.

3. Select Group from the cascading menu. The Group Properties dialogue is displayed.



4. In the Name field, type “OTR_Group” as the segment loop identification code.



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

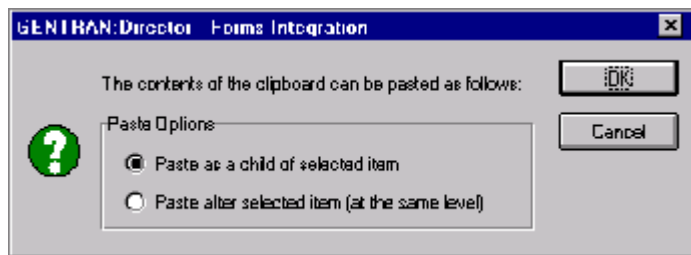
5. In the Desc field, type “OTR Group” to provide a brief explanation of the loop.
6. In the Min Usage field, type “1” to make this group mandatory. Changing the minimum use of a segment or group from zero to one changes the status of the segment or group from conditional to mandatory. If EDI data is not present for a segment or group that has a minimum use of one or greater, a compliance error will occur during translation for that segment or group.

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

Cutting and Pasting the OTR Segment

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

1. Verify that the OTR segment is selected.
2. Click Cut on the Main Toolbar.
3. Select the OTR group, which is the group for which you want to paste the OTR segment as a subordinate.
4. Click Paste on the Main Toolbar to paste the OTR segment. 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.



5. The Paste as a child of selected item radio button is selected as the default. Accept the default to paste the Clipboard contents as a child (subordinate) of the group. Click OK to exit the dialogue.

Generating the Form

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



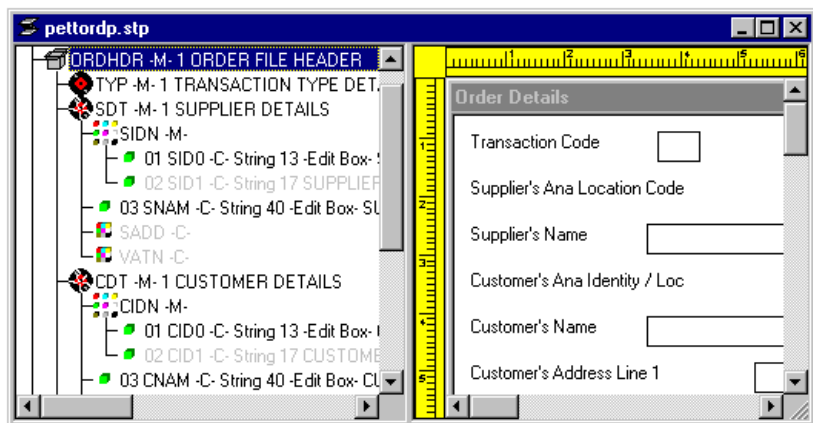
You can, and should, regenerate (or refresh) the form several times as you customise and format the form to ensure that you are viewing the most recent changes to the Layout Window.

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. However, selecting the ORDERS file icon is not a required prerequisite to generating the layout.



2. Click Generate Layout on the Main Toolbar. The layout of the print form will be displayed in the Layout Window.



You should regenerate the form periodically as you customise the print form to ensure that the most recent changes to the frame are reflected 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 dialogue for a field/element, either double-click the element, or use the right mouse button to click the field or element, then select Properties from the shortcut menu.



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

When the print form is generated, each group and repeating segment has a corresponding frame in the Layout Window that contains all the groups, segments, and elements at that level. Fields in groups or segments that have a maximum use of only one are displayed on the frame corresponding to the group to which the groups or segments are subordinate. For example, the following fields are displayed on one frame (all the groups and segments in which these fields are contained are subordinate to the same group):

- Transaction Code (TYP CD02)
- Supplier's ANA Location Code (SDT SIDN SID0)
- Supplier's Name (SIDN SNAM)
- Customer's ANA Identity/Loc (CDT CIDN CID0)



There are several other fields on this frame. All of the fields on this frame are subordinate to the same group.

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

Customising the EDI Data

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

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

This section explains how to customise 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 in Gentran:Director. If you set up the document name in the Forms Integration subsystem, the Name field of the document browsers that contain this message in Gentran:Director will contain the data from that element. You can choose any element as the document name, but we strongly recommend that you select an element that occurs only once in the message and has a data type of string. For a TRADACOMS ANA001 ORDERS release 9 purchase order, the document name usually is the Customer's Order Number.

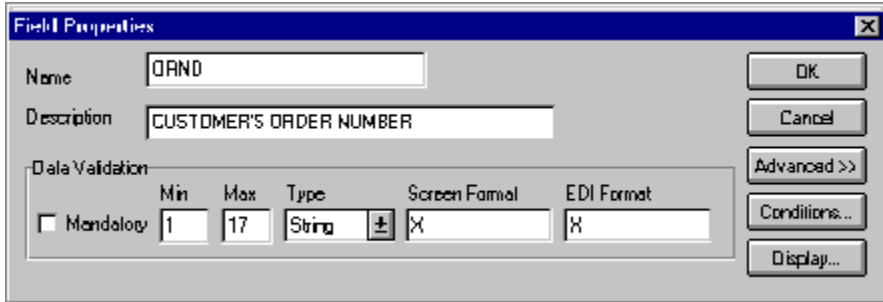
Complete the following steps to set up the document name:

1. Double-click the ORD ORNO ORN0 element.



In this tutorial, 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 dialogue is displayed.



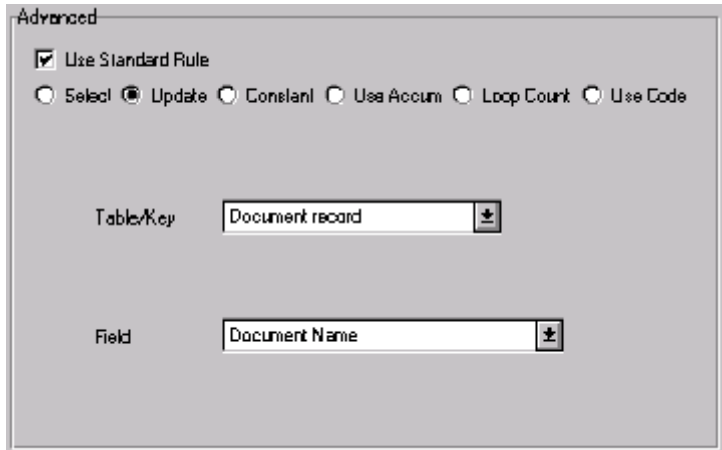
2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.



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

3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Update radio button.
5. From the Table/Key drop-down list box, select “Document record” to indicate that you are updating the document record in **Gentran:Director**.
6. From the Field drop-down list box, select “Document Name” to indicate that you are updating the Name field in the document browsers with the contents of the **ORD ORNO ORNO** element.

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



7. Click OK to set up the document name.

Customising the ORDHDR Group

The ORDHDR group (Order File Header) is used to print the header details pertaining to the ORDERS message. You already promoted this group to the parent frame (the ORDERS file).

Customising the TYP Segment

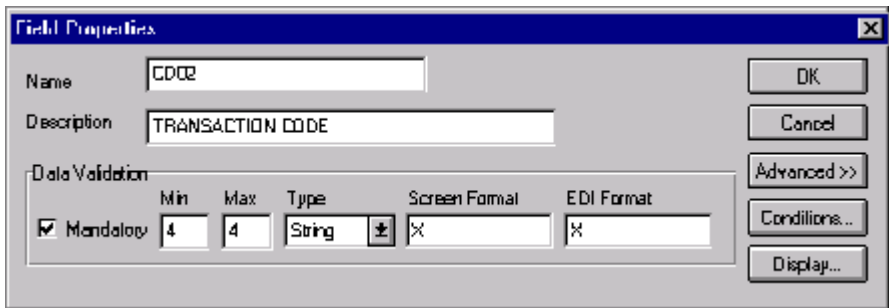
The TYP segment (Transaction Type Details) contains the transaction code for this message.

Customising the TYP CD02 Element

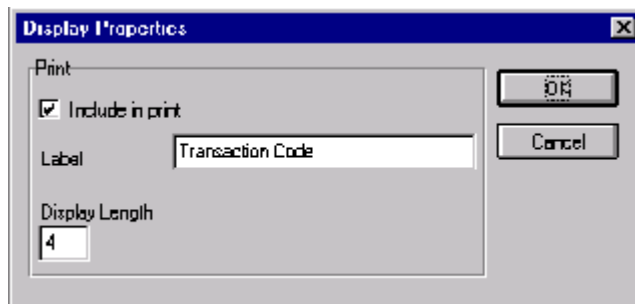
The TYP CD02 element (Transaction Code) is a mandatory element that contains the code for the type of orders that follow (e.g. new orders, cancelled orders, etc.). You do not need to print the code on the printout, so you will prevent (hide) the Transaction Code field from being printed.

Complete the following steps to prevent the Transaction Code field from being printed:

1. Double-click the TYP CD02 element. The Field Properties dialogue is displayed.



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



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

Customising the SDT Segment

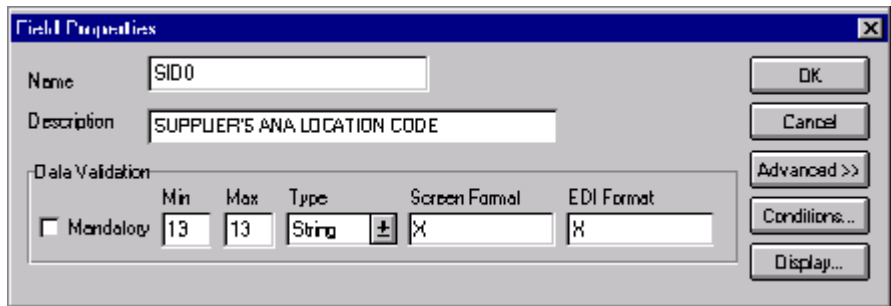
The SDT segment (Supplier Details) contains details about the supplier. In this tutorial, the supplier is your company, MWT Manufacturing Co.

Customising the SDT SIDN SID0 Element

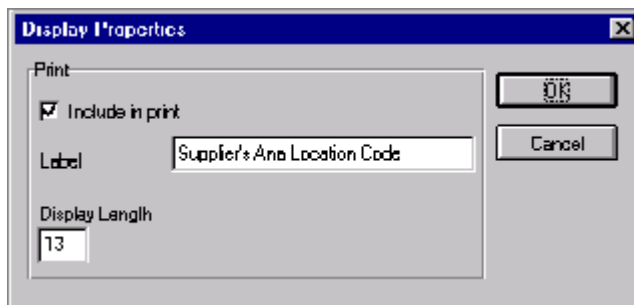
The SDT SIDN SID0 element (Supplier's ANA Location Code) contains the code assigned by the Article Numbering Association for the supplier's location. Your trading partner will send you this code, but you do not need the code to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the Supplier's ANA Location Code field:

1. Double-click the SDT SIDN SID0 element. The Field Properties dialogue is displayed.



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



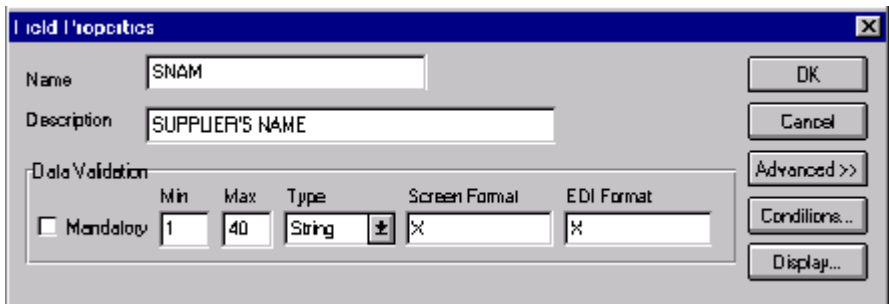
3. Click the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the SDT SNAM Element

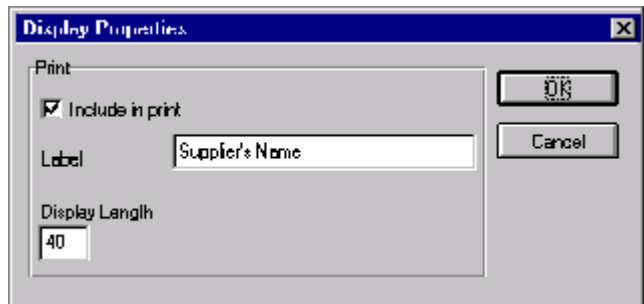
The SDT SNAM element (Supplier's Name) contains the name of the supplier (in this tutorial, you are the supplier). Your trading partner will send you this name, but you do not need the name to be printed on the printout. (All purchase orders you receive from customers should have your company designated as the supplier.) Therefore, you will hide this field.

Complete the following steps to hide the Supplier's Name field:

1. Double-click the SDT SNAM element. The Field Properties dialogue is displayed.



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



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

Customising the CDT Segment

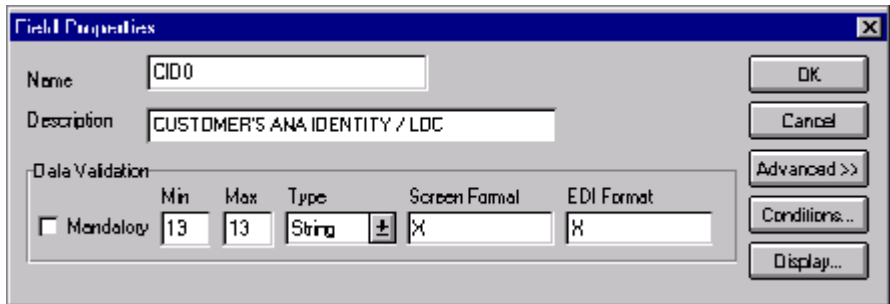
The CDT segment (Customer Details) contains details about the customer (your trading partner, Pet Zone). In this tutorial, the CDT segment contains details relating to the Pet Zone corporate office.

Customising the CDT CIDN CID0 Element

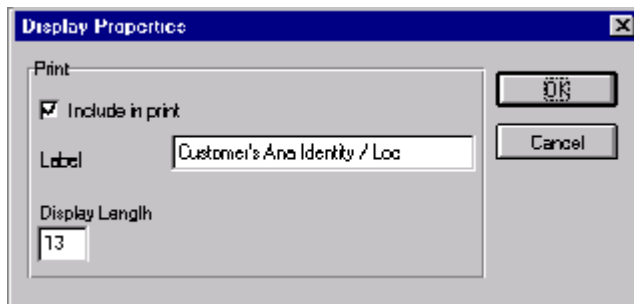
The CDT CIDN CID0 element (Customer's ANA Identity/Loc) contains the code assigned by the Article Numbering Association for the customer's location. Your trading partner will send you this code, but you do not need the code to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the Customer's ANA Identity/Loc field:

1. Double-click the CDT CIDN CID0 element. The Field Properties dialogue is displayed.



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



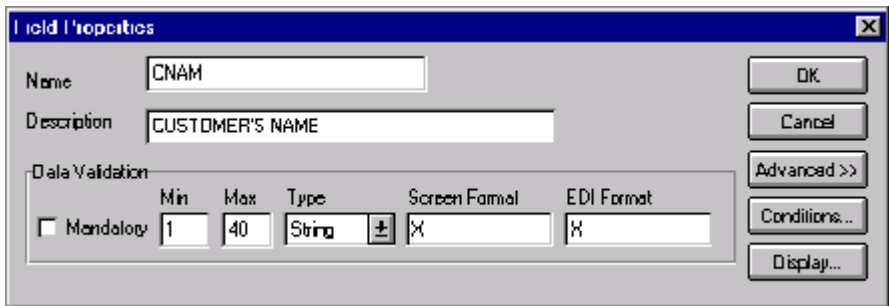
3. Click the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CNAM Element

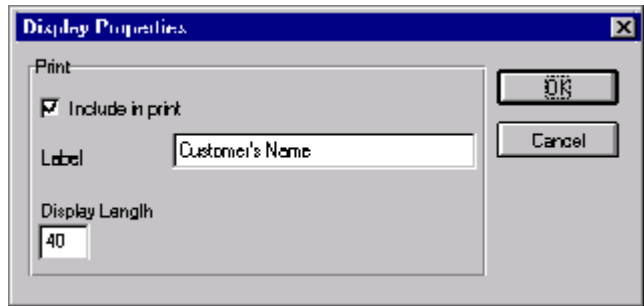
The CDT CNAM element contains the Customer’s Name. For brevity, you will change the field label to Customer.

Complete the following steps to change the field label for the Customer’s Name field:

1. Double-click the CDT CNAM element. The Field Properties dialogue is displayed.



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



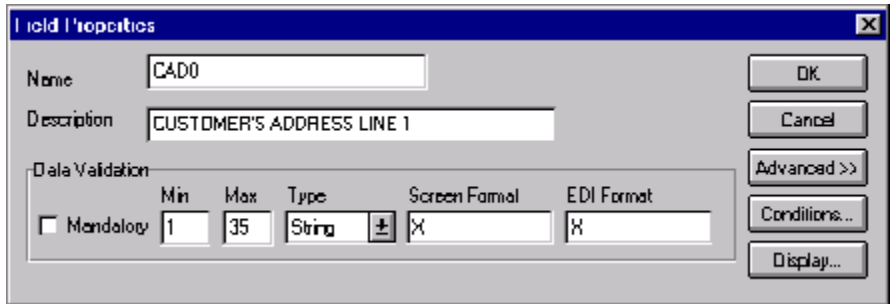
3. In the Label field, type ‘Customer:’ to replace the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CADD CAD0 Element

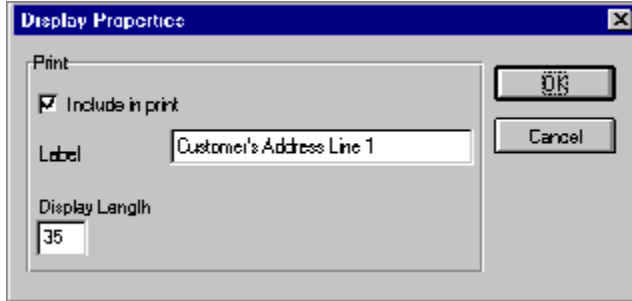
The CDT CADD CAD0 element (Customer’s Address Line 1) contains the first line of the customer’s address. The address will correspond to the name in the CDT CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 1 field:

1. Double-click the CDT CADD CAD0 element. The Field Properties dialogue is displayed.



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



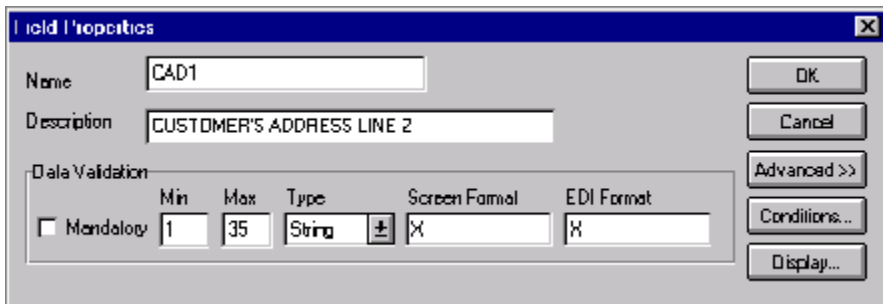
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CADD CAD1 Element

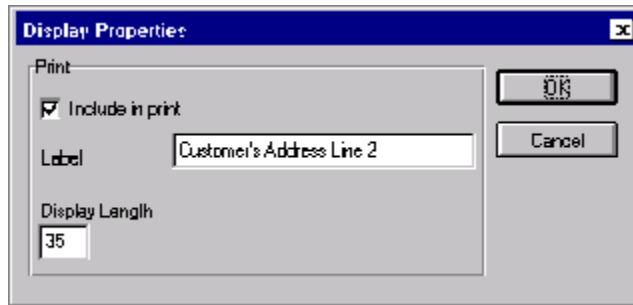
The CDT CADD CAD1 element (Customer’s Address Line 2) contains the second line of the customer’s address. The address will correspond to the name in the CDT CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 2 field:

1. Double-click the CDT CADD CAD1 element. The Field Properties dialogue is displayed.



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



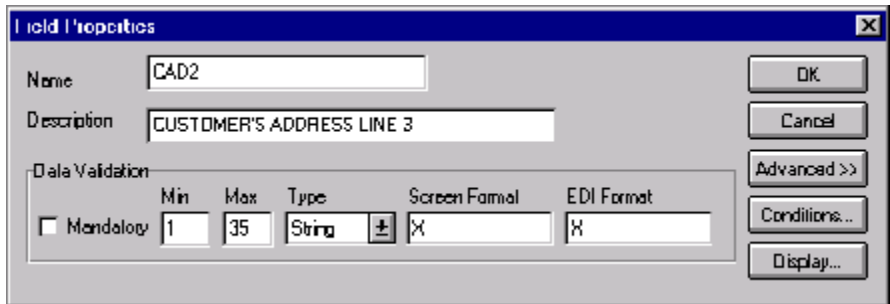
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CADD CAD2 Element

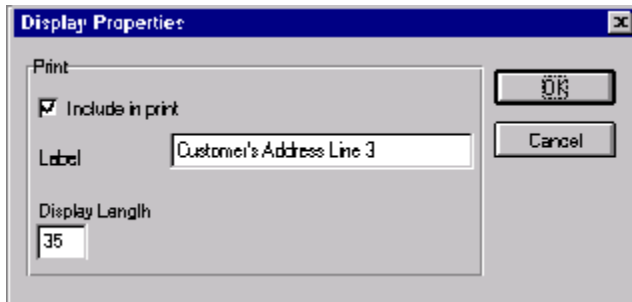
The CDT CADD CAD2 element (Customer’s Address Line 3) contains the third line of the customer’s address. The address will correspond to the name in the CDT CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 3 field:

1. Double-click the CDT CADD CAD2 element. The Field Properties dialogue is displayed.



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



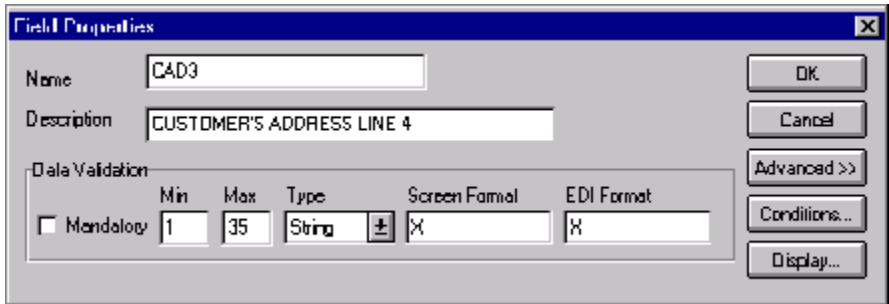
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CADD CAD3 Element

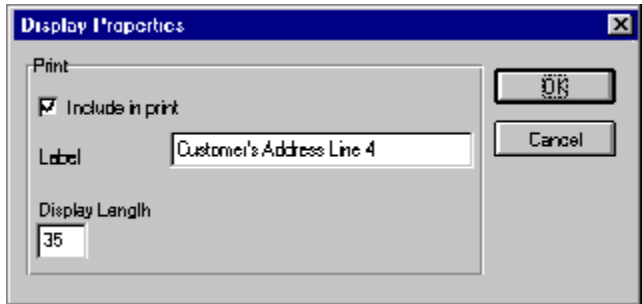
The CDT CADD CAD3 element (Customer’s Address Line 4) contains the fourth line of the customer’s address. The address will correspond to the name in the CDT CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 4 field:

1. Double-click the CDT CADD CAD3 element. The Field Properties dialogue is displayed.



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



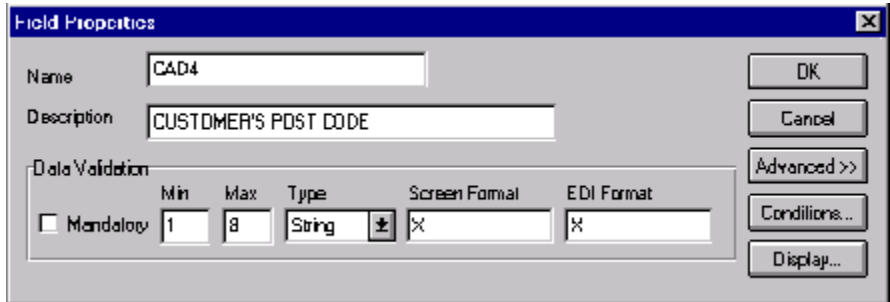
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CDT CADD CAD4 Element

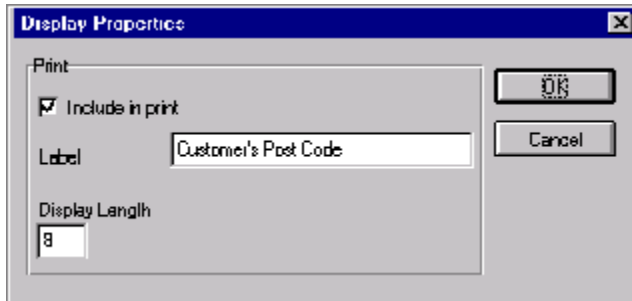
The CDT CADD CAD4 element (Customer’s Post Code) contains the post code of the customer’s address. The post code will correspond to the name in the CDT CNAM element, so you do not need to print a label for this field.

Complete the following steps to remove the field label for the Customer’s Post Code field:

1. Double-click the CDT CADD CAD4 element. The Field Properties dialogue is displayed.



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



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

Customising the FIL Segment

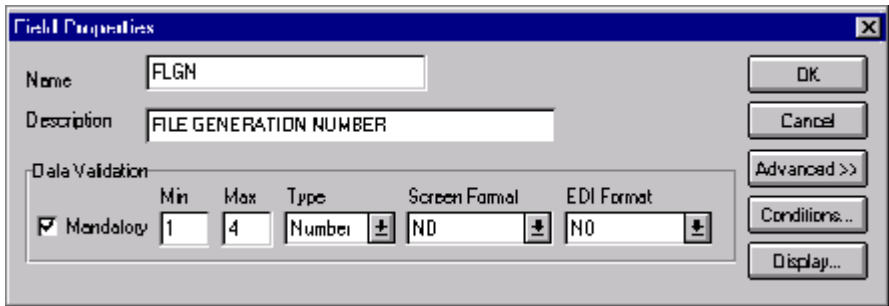
The FIL segment (File Details) contains details about the ORDHDR message. These elements must be present in the ORDHDR message, but you do not need to print them on a printout.

Customising the FIL FLGN Element

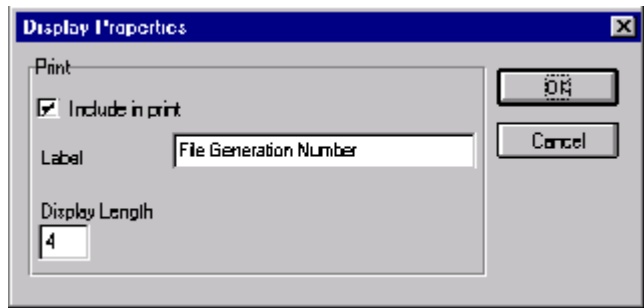
The FIL FLGN element (File Generation Number) contains the sequential number assigned to this message by your trading partner. Your trading partner will send you this number, but you do not need the number to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the File Generation Number field:

1. Double-click the FIL FLGN element. The Field Properties dialogue is displayed.



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



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

Customising the FIL FLVN Element

The FIL FLVN element (File Version Number) contains the number corresponding to this version of the message. The first version of the message is always version one, and subsequent copies of the message are incremented by one. Your trading partner will send you this number, but you do not need the number to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the File Version Number field:

1. Double-click the FIL FLVN element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box. The 'Name' field contains 'FLVN' and the 'Description' field contains 'FILE VERSION NUMBER'. Under the 'Data Validation' section, the 'Mandatory' checkbox is checked. The 'Min' value is 1, 'Max' is 4, 'Type' is 'Number', 'Screen Format' is 'N0', and 'EDI Format' is 'N0'. Buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...' are visible on the right side.

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

The screenshot shows the 'Display Properties' dialog box. Under the 'Print' section, the 'Include in print' checkbox is checked. The 'Label' field contains 'File Version Number' and the 'Display Length' field contains '4'. Buttons for 'OK' and 'Cancel' are visible on the right side.

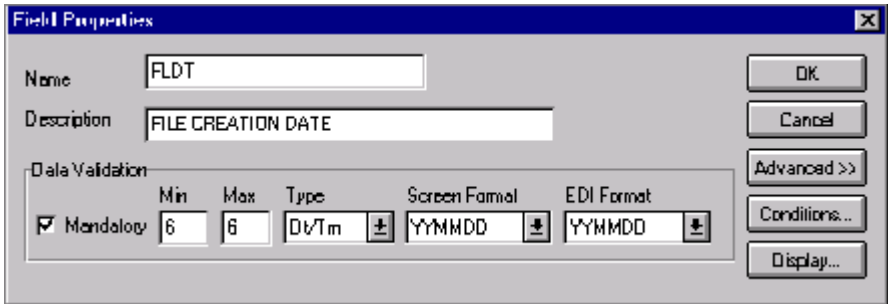
2. Click the Include in print check box to turn the option off.
3. Click OK to exit the Display Properties dialogue.
4. Click CLOSE to exit the Field Properties dialogue.

**Customising the
FIL FLDT Element**

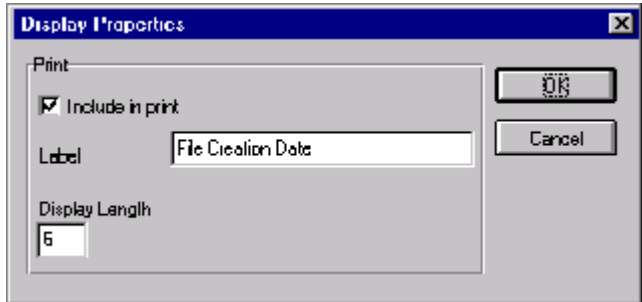
The FIL FLDT element (File Creation Date) contains the date on which the message was created. Your trading partner will send you this date, but you do not need the date to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the File Creation Date field:

1. Double-click the FIL FLDT element. The Field Properties dialogue is displayed.



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



3. Click the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.
6. Click Generate Layout on the Main Toolbar to refresh the display of the print form.



The print form now should look like this:

The image shows a print form with a dotted background. The form contains the following fields and labels:

- Supplier's Name: [input field]
- Customer: [input field]
- [input field]
- [input field]
- [input field]
- [input field]
- [input field]
- Customer's Ans Location Code: [input field]
- Customer's Name: [input field]
- Customer's Address Line 1: [input field]

Customising the CLO Segment

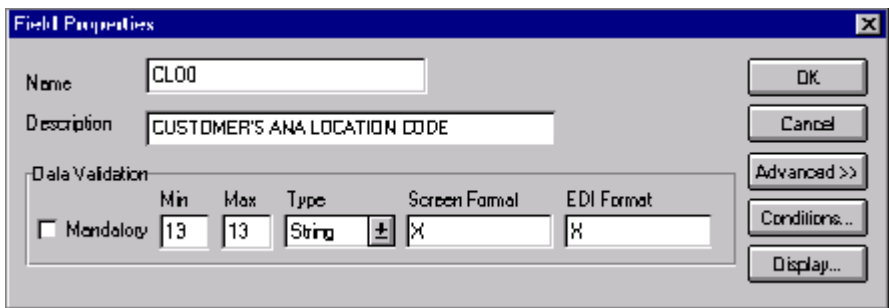
The CLO segment (Customer's Location) contains details about the specific customer location pertaining to this purchase order. In this tutorial, the CLO segment contains details relating to the specific Pet Zone store to which the order should be sent. Earlier in this tutorial, you customised the CDT segment, which contains details relating to the Pet Zone corporate office.

Customising the CLO CLOC CLO0 Element

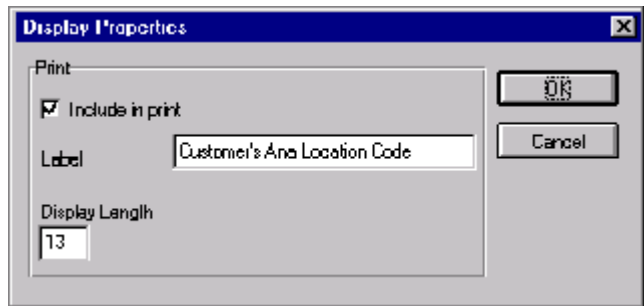
The CLO CLOC CLO0 element (Customer's ANA Location Code) contains the code assigned by the Article Numbering Association for the customer's location. Your trading partner will send you this code, but you do not need the code to be printed on the printout. Therefore, you will hide this field.

Complete the following steps to hide the Customer's ANA Location Code field:

1. Double-click the CLO CLOC CLO0 element. The Field Properties dialogue is displayed.



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



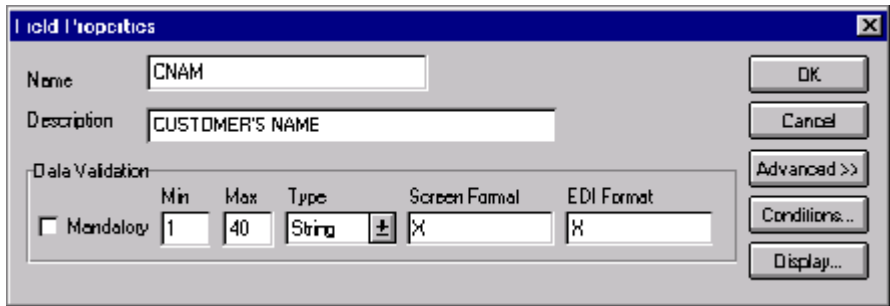
3. Click the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CNAM Element

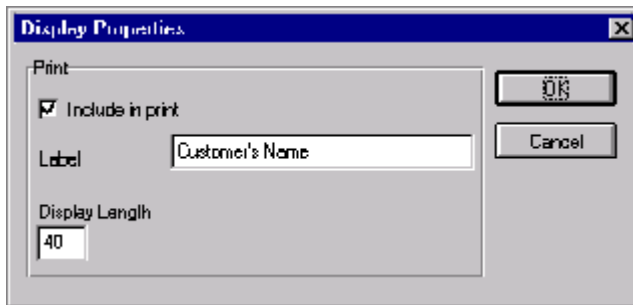
The CLO CNAM element contains the Customer’s Name (for the specific location to which the order should be sent). For brevity, you will change the field label to Location.

Complete the following steps to change the field label for the Customer’s Name field:

1. Double-click the CLO CNAM element. The Field Properties dialogue is displayed.



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



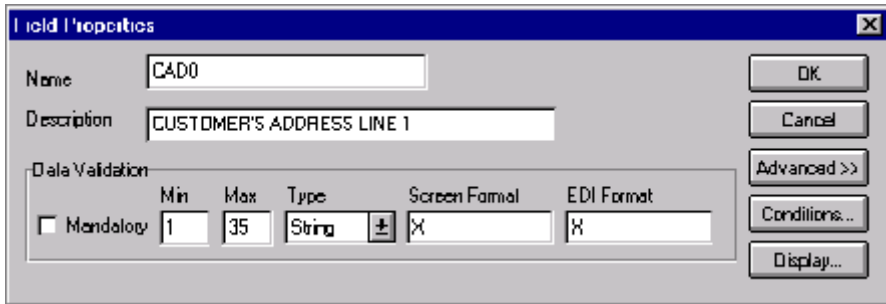
3. In the Label field, type “Location:” to replace the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD0 Element

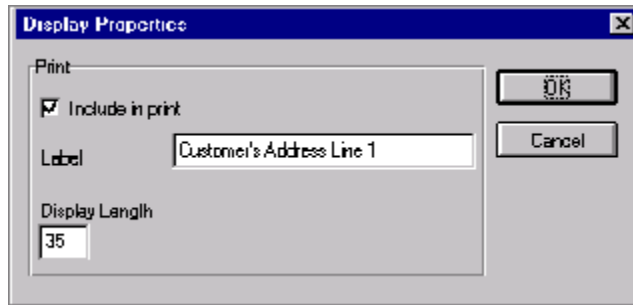
The CLO CADD CAD0 element (Customer’s Address Line 1) contains the first line of the customer’s address. The address will correspond to the name in the CLO CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 1 field:

1. Double-click the CLO CADD CAD0 element. The Field Properties dialogue is displayed.



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



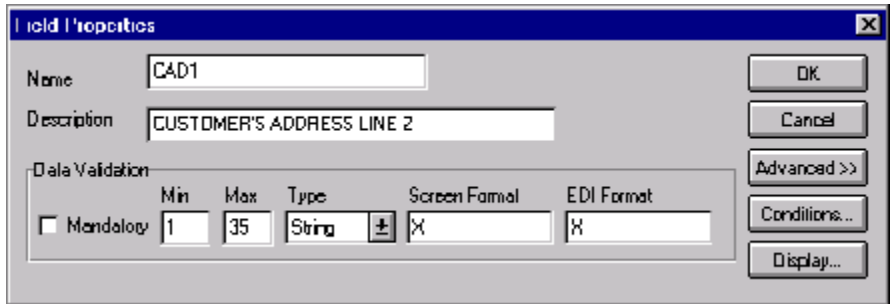
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD1 Element

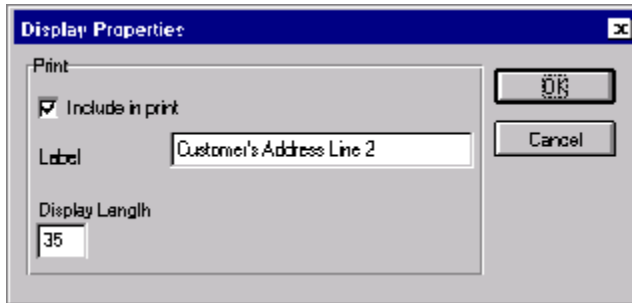
The CLO CADD CAD1 element (Customer’s Address Line 2) contains the second line of the customer’s address. The address will correspond to the name in the CLO CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 2 field:

1. Double-click the CLO CADD CAD1 element. The Field Properties dialogue is displayed.



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



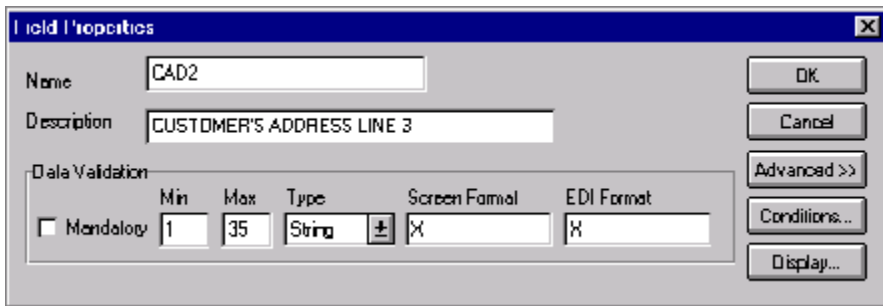
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD2 Element

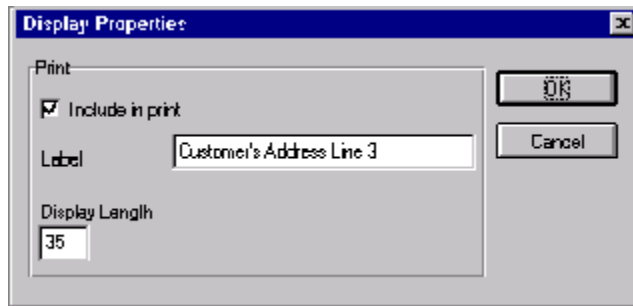
The CLO CADD CAD2 element (Customer’s Address Line 3) contains the third line of the customer’s address. The address will correspond to the name in the CLO CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 3 field:

1. Double-click the CLO CADD CAD2 element. The Field Properties dialogue is displayed.



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



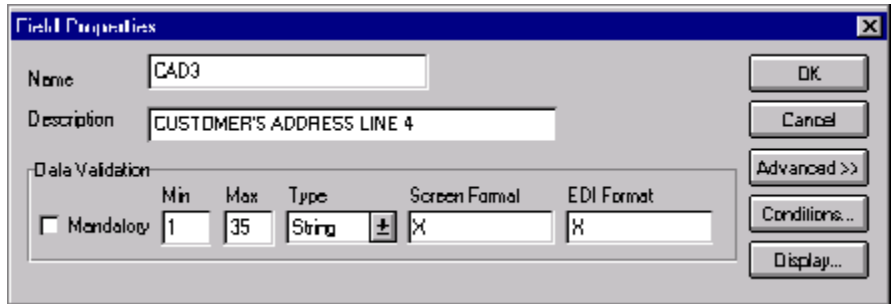
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD3 Element

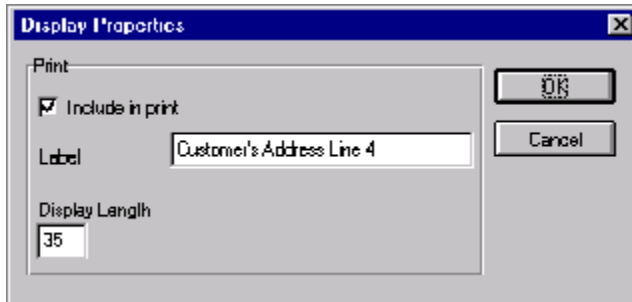
The CLO CADD CAD3 element (Customer’s Address Line 4) contains the fourth line of the customer’s address. The address will correspond to the name in the CLO CNAM element, so you do not need to print a label for the address fields.

Complete the following steps to remove the field label for the Customer’s Address Line 4 field:

1. Double-click the CLO CADD CAD3 element. The Field Properties dialogue is displayed.



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



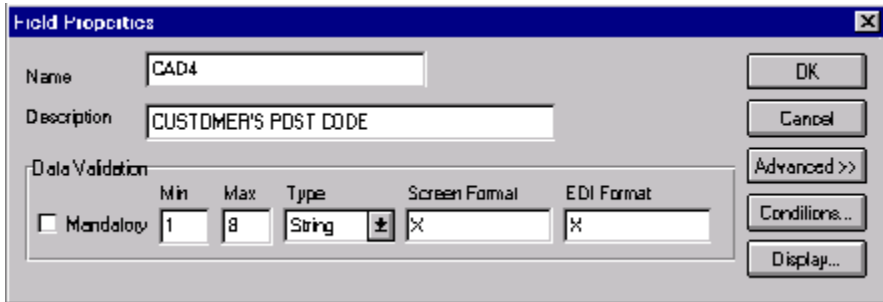
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD4 Element

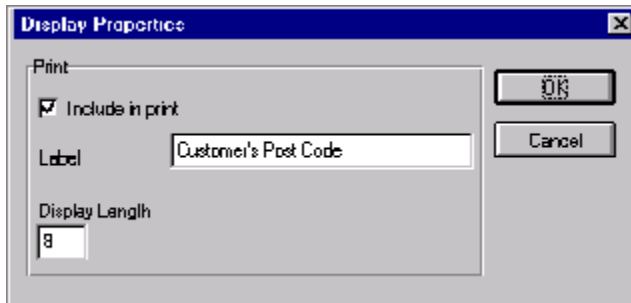
The CLO CADD CAD4 element (Customer’s Post Code) contains the post code of the customer’s address. The post code will correspond to the name in the CLO CNAM element, so you do not need to print a label for this field.

Complete the following steps to remove the field label for the Customer’s Post Code field:

1. Double-click the CLO CADD CAD4 element. The Field Properties dialogue is displayed.



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



2. In the Label field, delete the existing field label.
3. Click OK to exit the Display Properties dialogue.
4. Click CLOSE to exit the Field Properties dialogue.
5. Click Generate Layout on the Main Toolbar to refresh the display of the print form.



The section of the print form that contains the fields in the CLO segment now should look like this (you may need to scroll down the form to see these fields):

The image shows a screenshot of a print form with a dotted grid background. The form is divided into three main sections:

- CUSTOMER:** This section is at the top and contains five horizontal input fields. The first field is the longest, followed by four shorter fields stacked vertically. A small square icon is visible in the top right corner of this section.
- Location:** This section is in the middle and contains five horizontal input fields. The first field is the longest, followed by four shorter fields stacked vertically. A small square icon is visible in the bottom right corner of this section.
- Customer's Order Number:** This section is at the bottom and contains a single horizontal input field.

Customising the ORD Segment

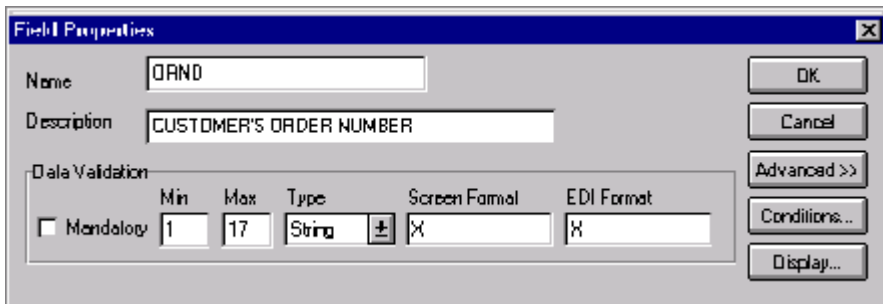
The ORD segment (Order References) contains reference information pertaining to this purchase order, such as the purchase order number, the date the order was placed, and the purchase order code.

Customising the ORD ORNO ORN0 Element

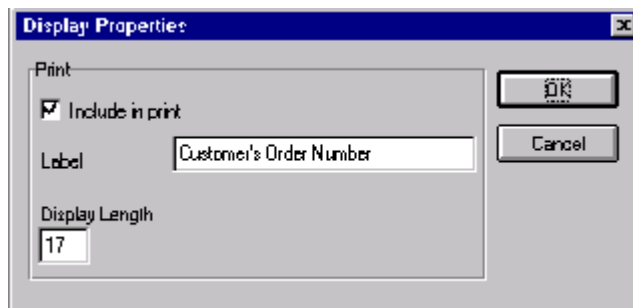
The ORD ORNO ORN0 element (Customer's Order Number) contains the purchase order number assigned by the customer. You already used a standard rule for this element to assign the document name. For brevity, you will change the field label to Order Number.

Complete the following steps to change the field label for the Customer's Order Number field:

1. Double-click the ORD ORNO ORN0 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type "Order Number:" to replace the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the ORD ORNO ORN2 Element

The ORD ORNO ORN2 element (Date Order Placed by Customer) contains the date on which the customer placed the purchase order. You will change the screen format for the purchase order date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, the purchase order date will be printed as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. For brevity, you will change the field label to Order Date.

Complete the following steps to change the screen format, change the element and field lengths, and rename the field label for the Date Order Placed by Customer field:

1. Double-click the ORD ORNO ORN2 element. The Field Properties dialogue is displayed.

Data Validation					
Mandatory	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/>	6	6	Dt/Tm	YYMMDD	YYMMDD

2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to designate the format for the date on the printout.
4. Click DISPLAY... to access the Display Properties dialogue.

5. In the Label field, type “Order Date:” to replace the existing field label.
6. In the Display Length field, type “8” to allow the entire date, including separators (/), to be displayed.
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

Customising the ORD ORNO CD07 Element

The ORD ORNO CD07 element (Order Code) contains the code representing the type of purchase order (e.g. new order, cancelled order) for this message. You want the more meaningful description of the code to be printed on the printout, instead of the code itself. Therefore, you will hide the Order Code field, but use the code from that element (ORD ORNO CD07) to look up the code description in Code Values List 7 and print that description in another field that you create. The description of the code will be displayed in the new field on the printout. You will rename the new field and change the element and field lengths to accommodate the text from the description of the code.

Copying the ORD ORNO CD07 Element

The description of the EDI code in the ORD ORNO CD07 element is important, even though you do not need to print the code itself. For example, the EDI code value “N” is not descriptive enough for users reading a printout of the purchase order. The description of code “N” (“New Order”) is meaningful, however.

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

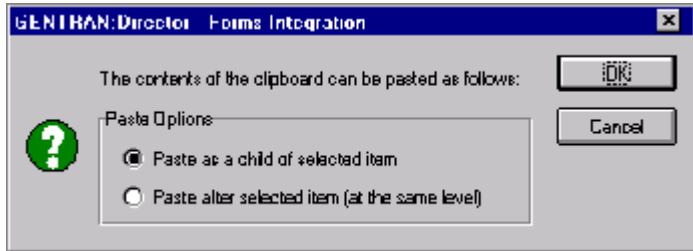
Complete the following steps to copy and paste the ORD ORNO CD07 element:

1. Select the ORD ORNO CD07 element.
2. Click Copy on the Main Toolbar.
3. Select the ORNO SCRF composite, which is the last form component in the ORNO segment. The ORNO SCRF composite is the form component *after* which you want the copy of the ORD ORNO CD07 element to be pasted.





- Click Paste on the Main Toolbar to paste the ORD ORNO CD07 element. Gentran:Director prompts you to specify whether you want the contents of the Clipboard pasted as a child (subordinate) of the selected composite, or at the same level as the composite.



- Click the Paste after selected item (at the same level) radio button to paste the Clipboard contents after the ORNO SCRF composite. A new element (ORD CD07:2) is created. The ORD CD07:2 element is an exact copy of the ORD ORNO CD07 element.
- Click OK to exit the dialogue.

Changing the ORD CD07:2 Element and Field Properties

The system names the new element created from copying the ORD ORNO CD07 element ORD CD07:2. You will rename the new element to identify its purpose, which is to print the description of the code from the ORD ORNO CD07 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 rename the element name and field label corresponding to the newly-created ORD CD07:2 element to reflect the contents of the field (the description of the Order Code). You will also increase the field and element lengths to accommodate the longer description.

Complete the following steps to change the rename the element name and field label, and change the field and element lengths, for the ORD CD07:2 element:

1. Double-click the ORD CD07:2 element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box. The 'Name' field is 'CD07:2' and the 'Description' field is 'ORDER CODE'. Under 'Data Validation', the 'Mandatory' checkbox is checked, 'Min' is 1, 'Max' is 1, 'Type' is 'String', 'Screen Format' is 'X', and 'EDI Format' is 'X'. Buttons on the right include 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

2. In the Name field, type “CD07_DESC” to give the name a more descriptive identifier than its current name.



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

3. In the Max field, type “35” for the maximum number of characters allowed for this element.
4. Click DISPLAY... to access the Display Properties dialogue.

The screenshot shows the 'Display Properties' dialog box. The 'Print' section has the 'Include in print' checkbox checked. The 'Label' field contains 'Order Code' and the 'Display Length' field contains '1'. Buttons on the right include 'OK' and 'Cancel'.

5. In the Label field, type “Order Type:” to replace the existing field label.
6. In the Display Length field, type “35” to allow a thirty-five-character description to be displayed on the printout.
7. Click OK to save the new label and exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

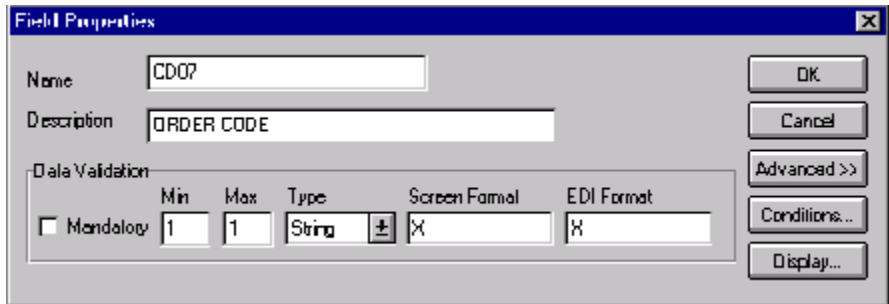
Hiding the ORD ORNO CD07 Field and Loading a Code List Table from the Standard

Now that you have created an exact copy of the ORD ORNO CD07 element in order to retain all of the EDI data and formatting associated with that element, you can hide the Order Code field.

When you use code list tables, you load a code list table from the standard to tell the system which code list table to use in looking up EDI code values. You can load the specific code values you expect to receive in the EDI data, or you can load the entire code list table. For this tutorial, you will load the entire code list table.

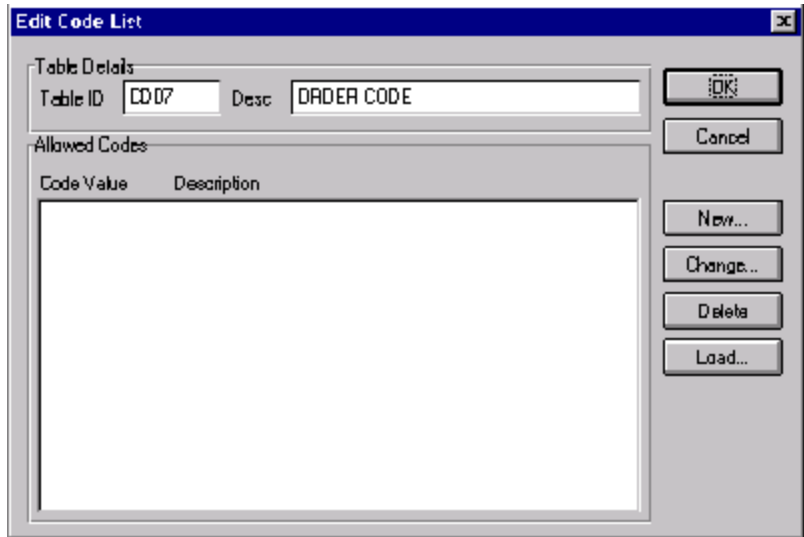
Complete the following steps to hide the Order Code field and load the code list table from the standard:

1. Double-click the ORD ORNO CD07 element. You need to use a code list table for this element. The Field Properties dialogue is displayed.



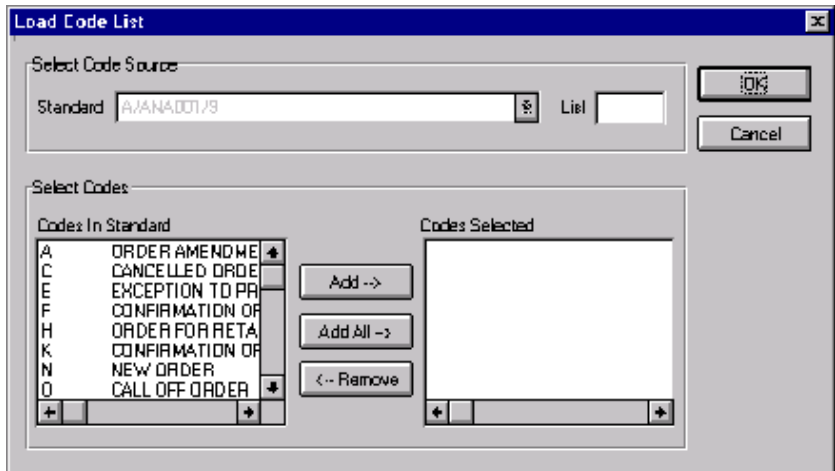
2. Click DISPLAY... to access the Display Properties dialogue.
3. Click the Include in print check box to turn the option off.
4. Click OK to exit the Display Properties dialogue.
5. If the Advanced section of the dialogue currently is not displayed, click ADVANCED>> to access this section, which enables you to define rules.
6. In the Advanced section, click the Use Standard Rule check box.
7. Click the Use Code radio button.

8. Click EDIT TABLE... to access the Edit Code List dialogue.



The Table ID field contains “CD07”, the name of the element for which this code list table will be used. The Desc field contains “ORDER CODE”, the description of the element for which this code list table will be used.

9. Click LOAD... to access the Load Code List dialogue. You will be prompted to select an ODBC data source name. Select the appropriate DSN and click OK to access the Load Code List dialogue. The Codes In Standard list box contains the entire code list table.



- Click **ADD ALL-->** to move all of the codes in the code list table to the Codes Selected list box.



Adding all the codes in the list (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 choose.**

- Click **OK** to load the code list table and exit the Load Code List dialogue.
- Click **CLOSE** to exit the Edit Code List dialogue.
- From the Store Field drop-down list box, select “**CD07_DESC ORDER CODE**” to store the description in the ORD CD07_DESC element you created.

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

The screenshot shows the 'Advanced' section of a dialog box with the following elements:

- Use Standard Rule
- Select Update Constant Use Accum Loop Count Use Code
- Table:
- Exclusive
- Store Field:

- Click **CLOSE** to exit the Field Properties dialogue.



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

The section of the print form that contains the fields in the ORD segment now should look like this (you may need to scroll down the form to see these fields):

The screenshot shows a print form with a dotted background. At the top, there is a small rectangular field. Below it, the label "Location:" is followed by a long horizontal field, and then four shorter horizontal fields stacked vertically. Further down, the label "Order Number:" is followed by a horizontal field. Below that, the label "Order Date:" is followed by a horizontal field. The label "Latest Delivery Date" is followed by a horizontal field. At the bottom, the label "Order Type:" is followed by a long horizontal field. The form has a vertical scrollbar on the right side.

Customising the DIN Segment

The DIN segment (Delivery Instructions) is a conditional segment that contains details about the delivery of the ordered items. For this tutorial, the only delivery instructions you and your trading partner require is the last date on which the items may be delivered.

Customising the DIN LDAT Element

The DIN LDAT element (Latest Delivery Date) contains the last date on which the ordered items may be delivered. You will change the screen format for the last delivery date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, the last delivery date will be printed as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. In addition, you will add a colon (:) to the field label to make the label consistent with the other field labels on the same frame.

Complete the following steps to change the screen format, change the field and element lengths, and add a colon (:) to the field label for the Latest Delivery Date field:

1. Double-click the DIN LDAT element. The Field Properties dialogue is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	6	6	Dt/Tm	YYMMDD	YYMMDD

2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to designate the format for the date on the printout.
4. Click DISPLAY... to access the Display Properties dialogue.

5. In the Label field, type “:” after the text in the field label (for consistency in labelling the fields).
6. In the Display Length field, type “8” to allow the entire date, including separators (/), to be displayed.
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.



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

The section of the print form that contains the field in the DIN segment now should look like this:

The screenshot shows a print form with a dotted background. At the top, there is a small rectangular field. Below it, the label "Location:" is followed by a long horizontal field. To the right of this field are four shorter horizontal fields stacked vertically. Below these, there is another small rectangular field. The label "Order Number:" is followed by a horizontal field. Below that, the label "Order Date:" is followed by a horizontal field. The label "Latest Delivery Date:" is followed by a horizontal field. At the bottom, the label "Order Type:" is followed by a long horizontal field. The form has a vertical scrollbar on the right side.

Customising the OLD Group

The OLD group contains details about each line item in the purchase order. The fields in the OLD group are displayed on a separate frame than the fields you have customised up to now, because the OLD group has a maximum use of 999,999. The fields on the OLD frame will be printed as many times as necessary (up to 999,999 occurrences) before the fields on the next frame (OTR group) are printed.

Customising the OLD:2 Segment

The OLD:2 segment (Order Line Details) contains line item details for the purchase order.

Customising the OLD:2 SEQA Element

The OLD:2 SEQA element (First Level Sequence Number) contains the line number for each item on the purchase order. Your trading partner will send you the value “1” for the first line item, and will increment each subsequent line item by one. You and your trading partner have agreed that they will order no more than 99999 line items per purchase order. Because each line item will be numbered sequentially, starting with one, you will need a maximum length of only five digits for this field. Therefore, you will change the element and field lengths to five. Also, for brevity, you will rename the field label.

Complete the following steps to change the field and element lengths and rename the field label for the First Level Sequence Number field:

1. Double-click the OLD:2 SEQA element. The Field Properties dialogue is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	10	Number	ND	NO

2. In the Max field, type “5” to allow a five-digit number in this element.
3. Click DISPLAY... to access the Display Properties dialogue.

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



The label for the First Level Sequence 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 field, then add “No.” by adding static text later in this tutorial.

5. In the Display Length field, type “5” to allow five numeric digits to be displayed on the printout.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.

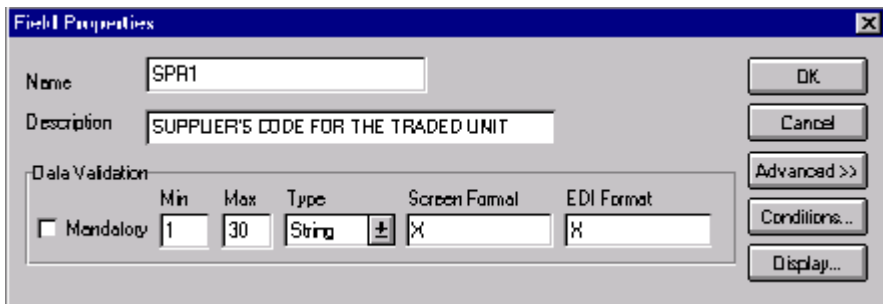
Customising the OLD:2 SPRO SPR1 Element

The OLD:2 SPRO SPR1 element (Supplier’s Code for the Traded Unit) contains the supplier’s internal reference identifying the ordered item. In this tutorial, MWT Manufacturing Co. (the supplier) provides a catalogue to its trading partners (customers). The catalogue lists all the items available for ordering, including the supplier’s code for each item. Your trading partner will send you the supplier’s number corresponding to each item ordered.

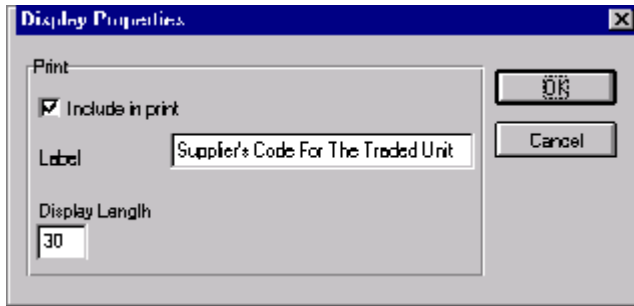
In this tutorial, the supplier’s codes do not exceed ten characters, so you will change the field and element lengths to ten. In addition, for brevity, you will rename the field label.

Complete the following steps to change the field and element lengths and rename the field label for the Supplier’s Code for the Traded Unit field:

1. Double-click the OLD:2 SPRO SPR1 element. The Field Properties dialogue is displayed.



- In the Max field, type “10” to allow a ten-character string in this element.
- Click DISPLAY... to access the Display Properties dialogue.



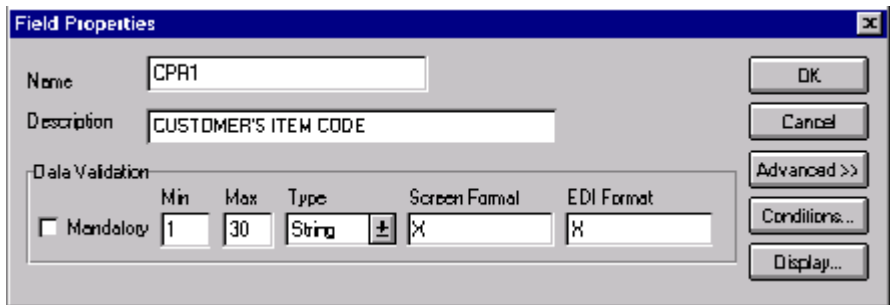
- In the Label field, type “Prod ID” to replace the existing field label.
- In the Display Length field, type “10” to allow ten characters to be displayed on the printout.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the OLD:2 CPRO CPR1 Element

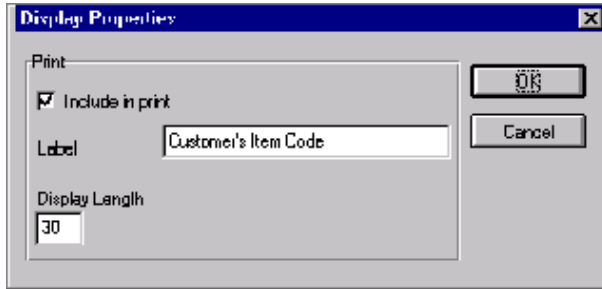
The OLD:2 CPRO CPR1 element (Customer’s Item Code) contains the customer’s internal reference identifying the ordered item. In this tutorial, your trading partner will send you the customer’s item code corresponding to each item ordered. However, you do not need this code to be printed on the printout, so you will hide this element.

Complete the following steps to hide the Customer’s Item Code field:

- Double-click the OLD:2 CPRO CPR1 element. The Field Properties dialogue is displayed.



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



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

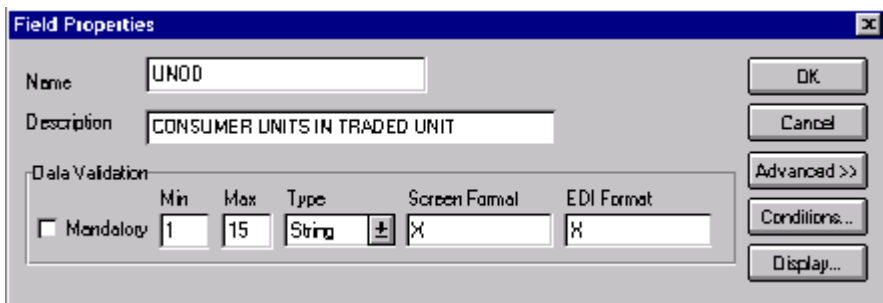
Customising the OLD:2 UNOR UNO0 Element

The OLD:2 UNOR UNO0 element (Consumer Units in Traded Unit) contains the consumer units information. The standard defines the OLD:2 UNOR UNO0 element as a string data type. However, your trading partner will send you a number-type element in N0 format (formatted with an implicit decimal point and no decimal places). Therefore, you will change the data type and the screen and EDI formats to reflect the data your partner will send you.

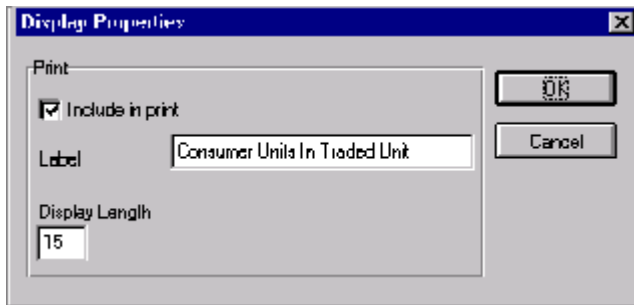
Also, you and your partner have decided that none of the items you will trade contain a number of units greater than ten digits. You will change the field and element lengths to reflect the smaller number of units. In addition, for brevity, you will rename the field label.

Complete the following steps to change the field and element lengths, the data type, and the screen and EDI formats, as well as to rename the field label, for the Consumer Units in Traded Unit field:

1. Double-click the OLD:2 UNOR UNO0 element. The Field Properties dialogue is displayed.



2. In the Max field, type “10” to allow a ten-digit number in this element.
3. From the Type drop-down list box, select “Number” to allow a number data type in this element. Gentran:Director prompts you that changing the field’s data type will invalidate its format.
4. Click YES to proceed with modifying the properties of this element.
5. From the Screen Format drop-down list box, select “N0” to allow a number with an implied decimal point and no decimal places to be displayed on the printout.
6. From the EDI Format drop-down list box, select “N0” to indicate that you expect a number with an implied decimal point and no decimal places.
7. Click DISPLAY... to access the Display Properties dialogue.



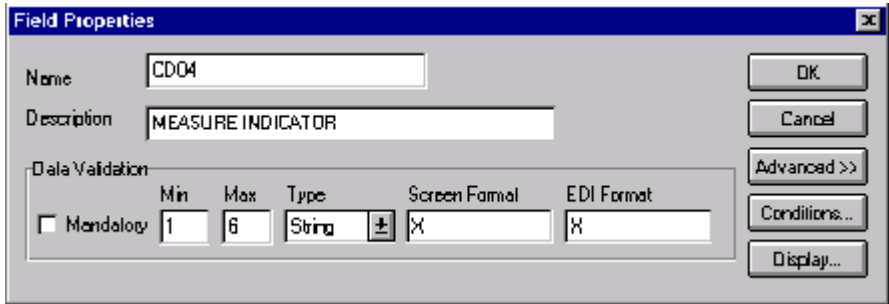
8. In the Label field, type “Cons. Units” to replace the existing field label.
9. In the Display Length field, type “10” to allow a ten-digit number to be displayed on the printout.
10. Click OK to exit the Display Properties dialogue.
11. Click CLOSE to exit the Field Properties dialogue.

Customising the OLD:2 UNOR CD04 Element

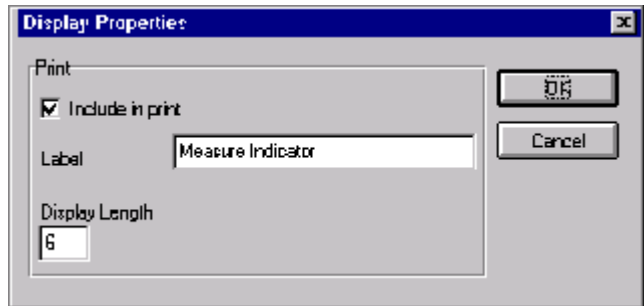
The OLD:2 UNOR CD04 element (Measure Indicator) contains the abbreviation for the ordering measure (e.g. kilograms, metres, litres) for the ordered item. For brevity, you will rename the field label.

Complete the following steps to rename the field label for the Measure Indicator field:

1. Double-click the OLD:2 UNOR CD04 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type “Unit” to replace the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the OLD:2 OQTY OQT0 Element

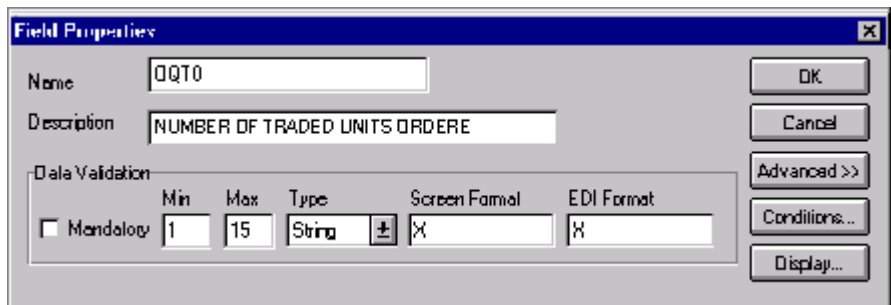
The OLD:2 OQTY OQT0 element (Number of Traded Units Ordered) contains the total number of units ordered (quantity) for each line item, in units defined in the OLD:2 UNOR CD04 element. The standard defines the OLD:2 OQTY OQT0 element as a string data type. However, your trading partner will send you a number-type element in N0 format (formatted with an implicit decimal point and no decimal places). Therefore, you will change

the data type and the screen and EDI formats to reflect the data your partner will send you.

Also, you know that your trading partner will order no more than 999999 (a six-digit number) of any one item, so you will change the maximum length to six for this field. You will change the field and element lengths to reflect the smaller quantities. In addition, for brevity, you will rename the field label.

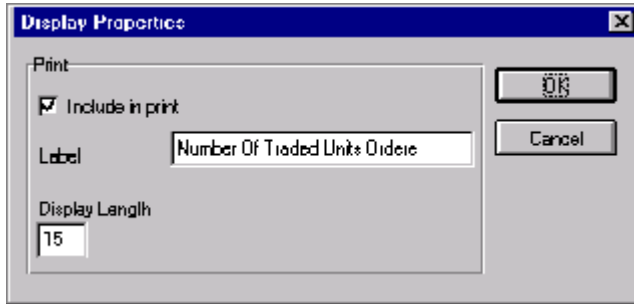
Complete the following steps to change the field and element lengths, the data type, and the screen and EDI formats, as well as to rename the field label, for the Number of Traded Units Ordered field:

1. Double-click the OLD:2 OQTY OQT0 element. The Field Properties dialogue is displayed.



2. In the Max field, type “6” to allow a six-digit number in this element.
3. From the Type drop-down list box, select “Number” to allow a number data type in this element. Gentran:Director prompts you that changing the field’s data type will invalidate its format.
4. Click YES to proceed with modifying the properties of this element.
5. From the Screen Format drop-down list box, select “N0” to allow a number with an implied decimal point and no decimal places to be displayed on the printout.
6. From the EDI Format drop-down list box, select “N0” to indicate that you expect a number with an implied decimal point and no decimal places.

7. Click DISPLAY... to access the Display Properties dialogue.



8. In the Label field, type “Qty Ord” to replace the existing field label.
9. In the Display Length field, type “6” to allow a six-digit number to be displayed on the printout.
10. Click OK to exit the Display Properties dialogue.
11. Click CLOSE to exit the Field Properties dialogue.

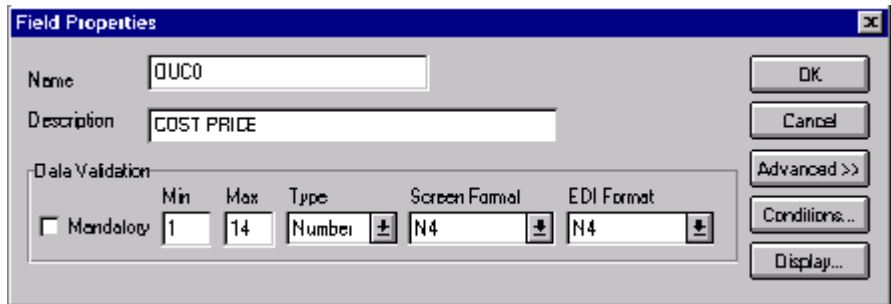
**Customising the
OLD:2 OUCT
OUC0 Element**

The OLD:2 OUCT OUC0 element (Cost Price) contains the price per unit ordered. This price is the net cost in pounds (e.g. after deducting line discounts, etc., but before the application of VAT) for an item. Your trading partner will send you prices in N4 format (formatted with an implicit decimal point and four decimal places), but you want the price to be displayed on the printout in R4 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the price to look on the printout.

Also, you know that the items you sell to Pet Zone are not priced at more than £9999.99 each, so this field needs a maximum length of only ten (four places for the pounds; four places for the pence, if present; one place for the decimal point; and one place for a plus or minus sign, if present). You will change the field and element lengths to reflect the prices you expect. In addition, you will rename the field label Price Each.

Complete the following steps to change the field and element lengths, change the screen format, and rename the field label for the Cost Price field:

1. Double-click the OLD:2 OUCT OUC0 element. The Field Properties dialogue is displayed.



2. In the Max field, type “10” to allow ten numeric digits in this field, including a plus or minus sign and a decimal point.
3. From the Screen Format drop-down list box, select “R4” to allow a number with an explicit decimal point and four decimal places to be displayed on the printout.
4. Click DISPLAY... to access the Display Properties dialogue.



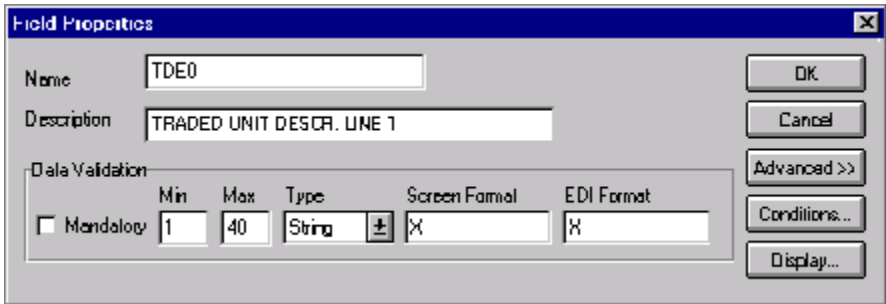
5. In the Label field, type “Price Each” to replace the existing field label.
6. In the Display Length field, type “10” to allow eight digits on the printout, including a plus or minus sign and a decimal point.
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

**Customising the
ORD:2 TDES TDE0
Element**

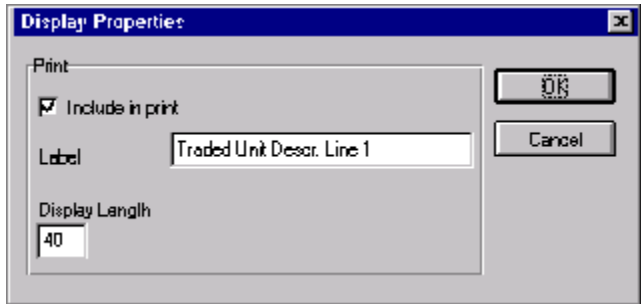
The ORD:2 TDES TDE0 element (Traded Unit Descr. Line 1) contains the first line of the description of the ordered item. The description will be self-explanatory in the context of the rest of the line item information, so you will remove the label from this field.

Complete the following steps to remove the field label for the Traded Unit Descr. Line 1 field:

1. Double-click the ORD:2 TDES TDE0 element. The Field Properties dialogue is displayed.



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



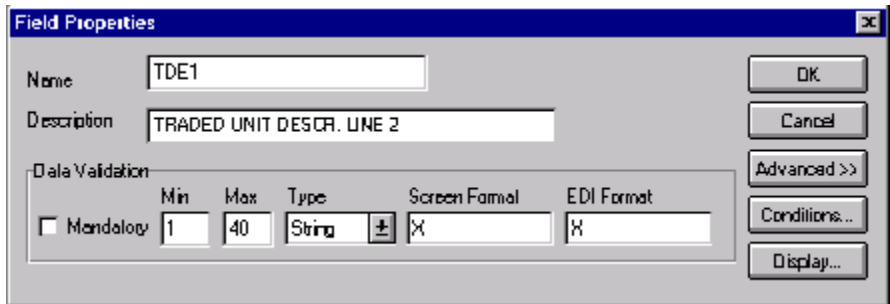
3. In the Label field, delete the existing field label.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

**Customising the
ORD:2 TDES TDE1
Element**

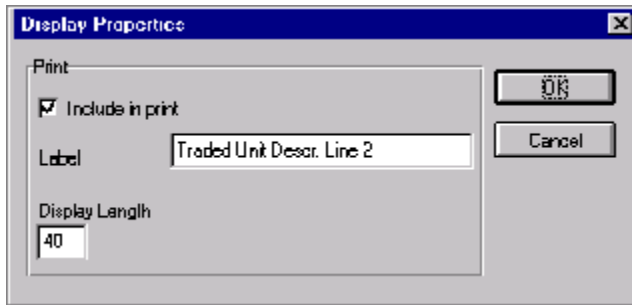
The ORD:2 TDES TDE1 element (Traded Unit Descr. Line 2) contains the second line of the description of the ordered item. The description will be self-explanatory in the context of the rest of the line item information, so you will remove the label from this field.

Complete the following steps to remove the field label for the Traded Unit Descr. Line 2 field:

1. Double-click the ORD:2 TDES TDE1 element. The Field Properties dialogue is displayed.



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



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



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

The OLD frame now should look like this:

A screenshot of a form window with a dotted background. The form contains several input fields: 'Line' (a small box), 'Prod ID' (a long box), 'Cons. Units' (a box), 'Unit' (a small box), 'Qty Ord' (a box), and 'Price Each' (a box). There are also two empty boxes at the bottom right of the form area.

Customising the OTR LORD Element

The OTR LORD element contains the Lines Ordered. You will rename the field label.

Complete the following steps to rename the field label for the Lines Ordered field:

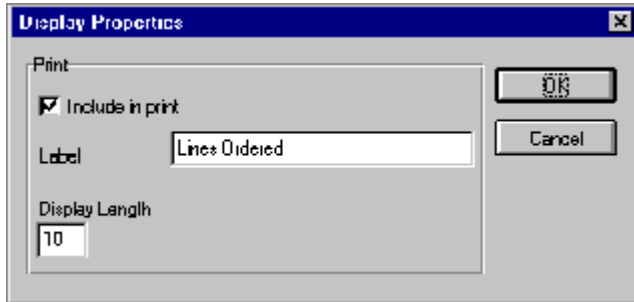
1. Double-click the OTR LORD element. The Field Properties dialogue is displayed.

A screenshot of the 'Field Properties' dialog box. The 'Name' field contains 'LORD' and the 'Description' field contains 'LINES ORDERED'. The 'Data Validation' section has a checked 'Mandatory' checkbox and a table with the following values:

	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	10	Number	ND	NO

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

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

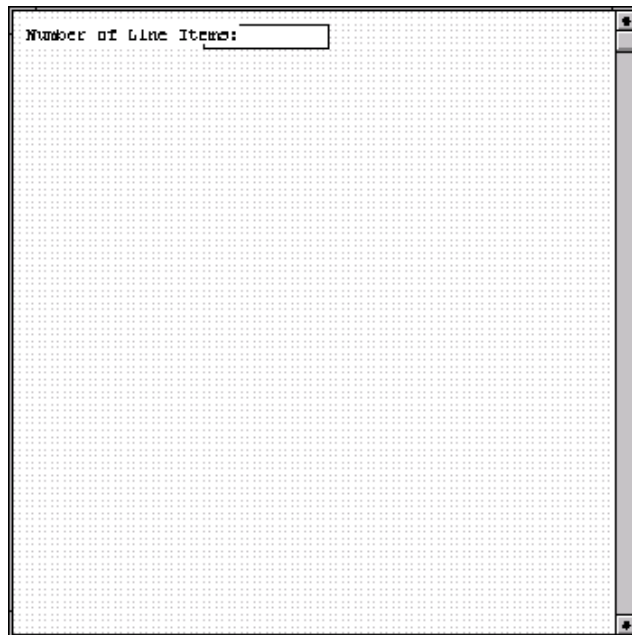


- In the Label field, type “Number of Line Items:” to replace the existing field label.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.



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

The OTR frame now should look like this:



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 customised the print form for a TRADACOMS ANA001 ORDERS release 9 purchase order that you will use to print the data you receive from Pet Zone. After successfully customising 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 (with a maximum use greater than one) and repeating segment has a corresponding frame that contains all the groups, segments, and elements at that level. 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 customised 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.



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

Complete the following steps to resize the header frame (containing fields from the ORDHDR group and the CLO, ORD, and DIN segments):

1. Click the ORDHDR group to display the Order File Header (header) frame in the Layout Window.
2. To display more of the form on your screen, click and drag the centre 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, then move the centre bar between the EDI File Format Window and the Layout Window farther to the left so the entire frame is displayed in the Layout Window. Another way to view more of the frame is to 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 A4 sheet of paper).



Use the horizontal ruler at the top of the frame to help you resize the frame.

Adding a Title to the Form

You want the form to have a title designating the standard agency (TRADACOMS), the version (ANA001), the type of message (purchase order), the release (9), and the trading partner (Pet Zone) for which this form is used. You will 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. 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 field and type “TRADACOMS ANA001 ORDERS Release 9”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
3. Click Add Text on the Main Toolbar to add text to the current frame in the upper left corner.
4. Select the new text field and type “Pet Zone”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.

The static text you added is displayed in the upper left corner of the frame.

Centring the Text

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

1. Click and drag the first line of static text (“TRADACOMS ANA001 ORDERS Release 9”) so that the text is centred on the first line of the frame.
2. Click and drag the second line of static text (“Pet Zone”) so that the text is centred on the second line of the frame.

The header frame now should look like this:

Arranging the Header Fields

By default, each field and its associated label are displayed on their own line. However, it is common for purchase orders and forms to arrange some fields in columns of information. The first fields you rearrange will be the header fields, which are the fields associated with the ORDHDR group and the CLO, ORD, and DIN segments.

You prevented some of the field labels from being printed (by removing the field label in the Label field of the Display Properties dialogue). For these fields, the fields will be displayed on your print form, but their associated labels will not.



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

Resizing the Header Fields

When you customised the element properties in the previous section of this chapter, you changed the display length (on the Display Properties dialogue) 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 on 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 the Latest Delivery Date and Order Date fields.
2. Select Size to Length from the Display menu. The selected fields will be resized to the lengths specified in the Display Length field of the Display Properties dialogue for each field.



If you accidentally 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 labelled.)
2. Select the Order Number label and field and drag them to the upper left corner on the frame (below the heading).




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 space formed by dragging the mouse will have handles, indicating that they were selected.

3. Select the Order Date label and field and drag them to the right of the Order Number label and field (at approximately 12.5 cm on the horizontal ruler).
4. Select the Order Type label and field and drag them below the Order Number label and field.
5. Select the Latest Delivery Date field and drag it below the Order Date label and field.
6. Select the Customer label and field and drag them below the Order Type label and field.
7. Select the following fields and drag them below the Customer field:
 - Customer's Address Line 1
 - Customer's Address Line 2
 - Customer's Address Line 3
 - Customer's Address Line 4
 - Customer's Post Code
8. Select the Location label and field and drag them below the Customer's Post Code field.
9. Select the following fields and drag them below the Location field:
 - Customer's Address Line 1
 - Customer's Address Line 2
 - Customer's Address Line 3
 - Customer's Address Line 4
 - Customer's Post Code
10. Select the following field labels:
 - Order Number
 - Order Type
 - Customer
 - Location
11. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
12. Select the Order Date and Latest Delivery Date field labels.



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

13. Select **Align Controls** from the **Display** menu, then select **Left** from the **Align Controls** cascading menu. The left margins of the selected field labels are aligned.
14. Select the **Order Type** and **Order Number** fields (in that order).
15. Select **Align Controls** from the **Display** menu, then select **Left** from the **Align Controls** cascading menu. The left margins of the **Order Type** and **Order Number** fields are aligned.
16. Select the **Order Date** and **Latest Delivery Date** fields (in that order).
17. Select **Align Controls** from the **Display** menu, then select **Left** from the **Align Controls** cascading menu. The left margins of the **Latest Delivery Date** and **Order Date** fields are aligned.
18. Select all the **Customer** and **Location** fields (**Customer's Address Line 1**, **Customer's Address Line 2**, **Customer's Address Line 3**, **Customer's Address Line 4**, and **Customer's Post Code**).
19. Select **Align Controls** from the **Display** menu, then select **Left** from the **Align Controls** cascading menu. The left margins of the selected fields are aligned.
-  20. Click the **Lock Labels** button on the **Main Toolbar** to turn on the **Lock Labels** function. When you select a field, its corresponding field label will be selected also.
21. Select the **Order Number** and **Order Date** fields. (Their field labels will be selected, too, because you have the **Lock Labels** function turned on.)
22. Select **Align Controls** from the **Display** menu, then select **Top** from the **Align Controls** cascading menu. The tops of the selected labels and fields are aligned.
23. Select the **Order Type** and **Latest Delivery Date** fields. (Their field labels will be selected, too.)
24. Select **Align Controls** from the **Display** menu, then select **Top** from the **Align Controls** cascading menu. The tops of the selected labels and fields are aligned.
25. Select the **Customer** field. (Its field label will be selected, too.)
26. Select **Align Controls** from the **Display** menu, then select **Top** from the **Align Controls** cascading menu. The tops of the **Customer** label and field are aligned.
27. Select the **Location** label and field. (Its field label will be selected, too.)
28. Select **Align Controls** from the **Display** menu, then select **Top** from the **Align Controls** cascading menu. The tops of the **Location** label and field are aligned.

29. To resize the frame, click and drag the bottom of the frame to just below the Customer's Post Code field for the Location address.
30. Click the Lock Labels button on the Main Toolbar to turn off the Lock Labels function.



The header frame now should look like this:

TRADACOMS ANA001 ORDERS Release 9
Pet Zone

Order Number: Order Date:

Order Type: Latest Delivery Date:

Customer:

Location:

Arranging the Line Item (OLD) 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 OLD group.

You prevented some of the field labels from being displayed, so you will see all of the fields in the layout of your print form, but not all of the associated labels. In case you have forgotten which unlabelled 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, first you will resize the frame to give it the same width as the other frames. You will then move and resize the fields and field labels, as well as add static text to the form.

Resizing the Line Item (OLD) Frame

Complete the following steps to resize the line item (OLD) frame:



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

1. Click the OLD group to display the line item (OLD) 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 A4 sheet of paper).



Use the ruler at the top of the frame to help you resize the frame.

Resizing the Line Item Fields

Complete the following steps to resize the line item fields:

1. Select the following fields:
 - Line
 - Prod ID
 - Cons. Units
 - Qty Ord
 - Price Each



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

2. Select Size to Length from the Display menu. All selected fields will be resized to the lengths specified in the Display Length field of the Display Properties dialogue for each field.

Completing the Line No. Column Heading

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 the form consists of one line of text.

In this tutorial, you want to label the Line field “Line No.” You do not want the label to extend beyond the margins of the field that it labels, so you will place “Line” on one line on the frame and “No.” on the line below.

Complete the following steps to add and position static text:

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.

2. Click and drag them to the bottom portion of the frame. You will be arranging the fields at the top of the frame, so moving the fields and field labels out of the way initially will give you room to work with at the top of the frame.



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 field, type “No.” (note the full stop included in the text).



This field already has a label named “Line”. To complete the identification of this field, you will add static text with the name “No.” After you add the static text for this field, you will move “No.” below “Line” to create a column heading for the fields containing the line item number.

The text you added is displayed in the upper left corner of the frame.

5. Select the static text you added (“No.”) 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.

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. In the printed report, there will not be 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 will add static text to the form to add the separating lines.

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

Static Text	Number of Hyphens	Placement on Form
-----	Seven	Below the No. static text
-----	Thirteen	Below the Prod ID field label
-----	Eight	Below the Qty Ord field label
-----	Eight	Below the Unit field label
-----	Thirteen	Below the Cons. Units field label
-----	Thirteen	Below the Price Each field label

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

You will 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. 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 field and type “-----” (seven hyphens). This series of hyphens will form 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 to add text to the current frame in the upper left corner.
4. Select the new text field and type “-----” (thirteen hyphens). This series of hyphens will form 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 to add text to the current frame in the upper left corner.
6. Select the new text field and type “-----” (eight hyphens). This series of hyphens will form 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.
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 field and type “-----” (eight hyphens). This series of hyphens will form 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.
9. Click Add Text on the Main Toolbar to add text to the current frame in the upper left corner.
10. Select the new text field and type “-----” (thirteen hyphens). This series of hyphens will form a separating line between the words Cons. Units 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 to add text to the current frame in the upper left corner.
12. Select the new text field and type “-----” (thirteen hyphens). This series of hyphens will form 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.

The separating lines (static text) you added are displayed in the upper left corner of the frame.

13. 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.



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.

Moving the Line Item Fields, Labels, and Separating Lines

The line item (OLD) frame now contains all of the fields, labels, and separating lines that will be arranged on the form to create columns of information. Now you are ready to move the fields, labels, 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 (OLD) 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 (seven 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 (OLD) 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 (thirteen 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 Qty Ord Column

Complete the following steps to arrange the Qty Ord column on the line item (OLD) frame:

1. Select the Qty Ord field label and drag it to the right of the Prod ID field label.
2. Select the third separating line you added (eight hyphens) and drag it below the Qty Ord field label.
3. Select the Qty Ord 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 (OLD) frame:

1. Select the Unit field label and drag it to the right of the Qty Ord field label.

2. Select the fourth separating line you added (eight 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 Cons. Units Column Complete the following steps to arrange the Cons. Units column on the line item (OLD) frame:

1. Select the Cons. Units field label and drag it to the right of the Unit field label.
2. Select the fifth separating line you added (thirteen hyphens) and drag it below the Cons. Units field label.
3. Select the Cons. Units 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 (OLD) frame:

1. Select the Price Each field label and drag it to the right of the Cons. Units field label.
2. Select the sixth separating line you added (thirteen hyphens) and drag it below the Price Each field label.
3. Select the Price Each field and drag it below the separating line you just moved.

Moving the Description Fields The description fields (Traded Unit Descr. Line 1 and Traded Unit Descr. Line 2) will not be placed in a column. Rather, these fields will be placed below the rest of the fields on the line item (OLD) frame.

Complete the following steps to move the description fields:

1. Select the Traded Unit Descr. Line 1 and Traded Unit Descr. Line 2 fields.



To select more than one field or field label, click and drag the mouse diagonally across all the fields and field labels you want to select.

2. Drag them below the row of fields near the top of the frame.

Resizing the Line Item (OLD) Frame You should resize the line item (OLD) 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 description fields.

The line item (OLD) frame now should look like this:

Line No.	Prod ID	Qty Ord	Unit	Cons. Units	Price Each
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>					
<input type="text"/>					

Aligning Rows One of the remaining tasks in formatting the line item frame is to align the fields, field labels, and static text. First, you will align the items in rows to give the form a consistent appearance. Then, 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:
 - No.
 - Prod ID
 - Qty Ord
 - Unit
 - Cons. Units
 - Price Each



To select a group of items, click and drag the mouse diagonally across all the items you want to select.

2. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of all selected field labels and static text are aligned in a row.
3. Select all the separating lines between column headings and fields.
4. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of all selected static text are aligned in a row.
5. Select the following fields:
 - Line No.
 - Prod ID
 - Qty Ord

- Unit
 - Cons. Units
 - Price Each
6. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of all selected fields are aligned in a row.
 7. Select all the separating lines between column headings and fields.
 8. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of all selected static text are aligned in a row.
 9. Select the following fields:
 - Line No.
 - Prod ID
 - Qty Ord
 - Unit
 - Cons. Units
 - Price Each
 10. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of all selected fields are aligned in a row.

Aligning Columns

Now, you will 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, and the Line No. field.



To select a group of items, click and drag the mouse diagonally across all the items you want to select.

2. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.
3. Select the Prod ID column heading, its separating line, the Prod ID field, and both description fields (Traded Unit Descr. Line 1 and Traded Unit Descr. Line 2).



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

4. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.
5. Select the Qty Ord column heading, its separating line, and the Qty Ord field.
6. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.
7. Select the Unit column heading, its separating line, and the Unit field.
8. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.
9. Select the Cons. Units column heading, its separating line, and the Cons. Units field.
10. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.
11. Select the Price Each column heading, its separating line, and the Price Each field.
12. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. All selected items are left-aligned in a column.

The line item (OLD) frame now should look like this:

LINE NO.	Prod ID	Qty Ord	Unit	Cons. Units	Price Each
<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 (OLD) frame so that the line item information will be displayed in columns and rows. If you were to register the translation object now with *Gentran:Director* and run EDI data through the translation object, then you would see that the column headings would be repeated for every line item.

The column headings need to be printed on the printout only once, so you will copy and paste the OLD group to create a second OLD group (named OLD:3). The formatting in the OLD group will be retained in the OLD:3 group. You will change the maximum use of the first OLD group to one (so that the column headings are printed only once). Then, you will remove the column headings in the OLD:3 group from the area that will be printed, leaving only the fields for printing the information on the printout.

In addition, you will change the maximum use of the OLD:3 group to 999,998. Your partner can send you up to 999,999 line items, so the total maximum use of both OLD groups does not need to exceed 999,999. The maximum use of the OLD group will be changed to one, and the maximum use of the OLD:3 group will be changed to 999,998.

Copying and Pasting the OLD Group

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

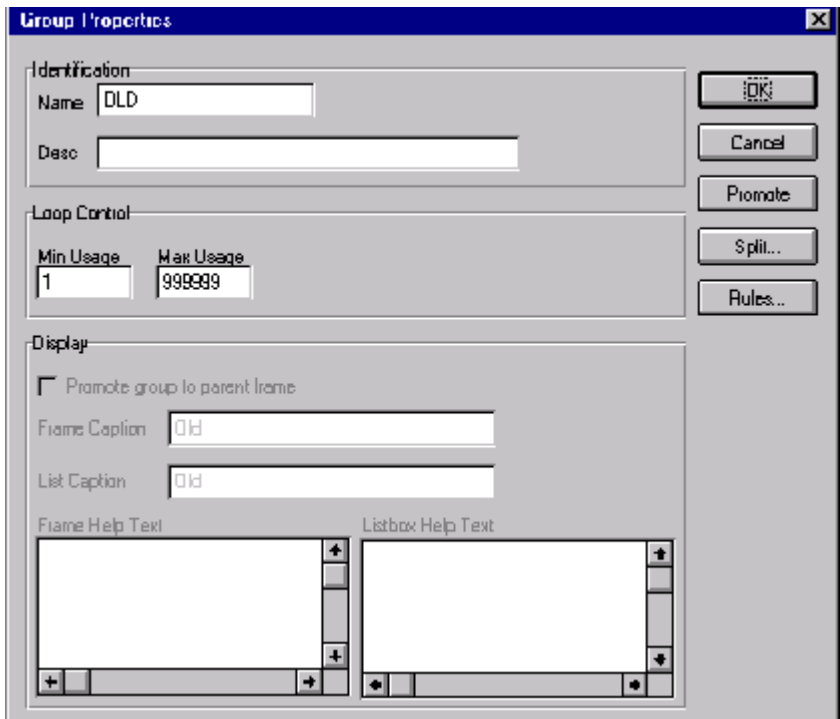


1. Select the OLD group.
2. Click Copy on the Main Toolbar.
3. Select Paste on the Main Toolbar to paste the OLD group after the existing OLD group. *Gentran:Director* prompts you to specify whether you want the contents of the clipboard pasted as a child (subordinate) of the selected group, or at the same level as the group.
4. Click the Paste after selected item (at the same level) radio button to paste the Clipboard contents after the original OLD group.
5. Click OK to exit the dialogue. The pasted group is named OLD:3.

Formatting the Print Form

Changing the Maximum Use of the OLD Group Complete the following steps to change the maximum use of the OLD group:

1. Click the OLD group with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu. The Group Properties dialogue is displayed.

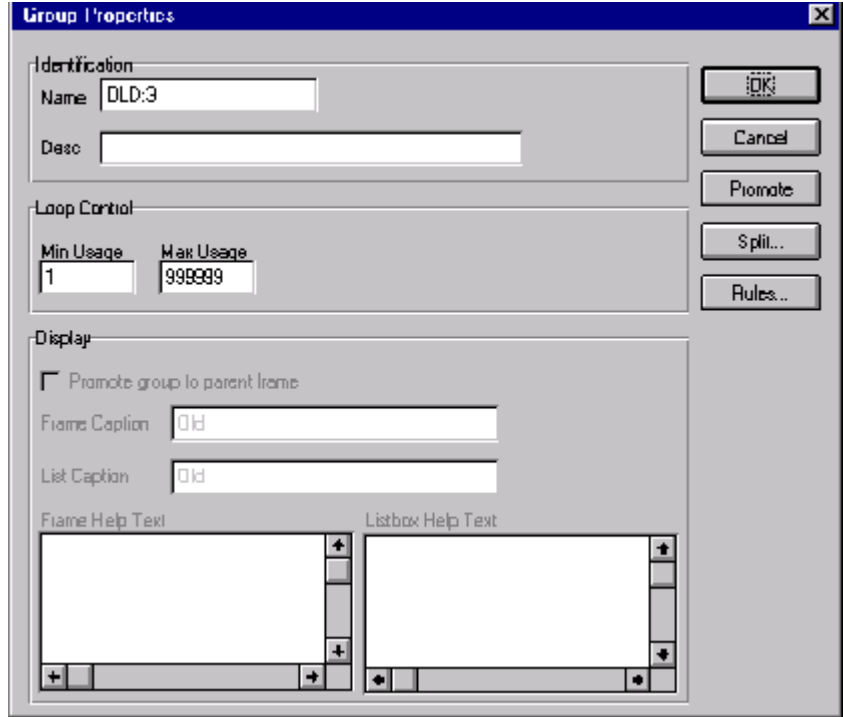


3. In the Max Usage field, type "1" to indicate that this group can be used only once in each purchase order.
4. Click OK to exit the Group Properties dialogue.

Changing the Maximum Use of the OLD:3 Group Complete the following steps to change the maximum use of the OLD:3 group:

1. Click the OLD:3 group with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu.

The Group Properties dialogue is displayed.



3. In the Max Usage field, type “999998” to indicate that this group can be used up to 999,998 times in each purchase order.
4. Click OK to exit the Group Properties dialogue.

Moving the OLD:3 Column Headings Below the Print Area

Complete the following steps to move the column headings on the second line item frame (OLD:3) below the print area, so the headings will not be printed.



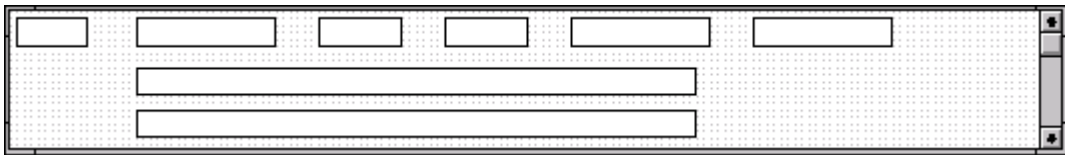
1. Click Generate Layout on the Main Toolbar to refresh the display of the print form.
2. Select the OLD:3 group. Its corresponding frame is displayed in the Layout Window.
3. Select all of the column headings and separating lines on the frame, and drag them below the bottom of the frame so they are not displayed. These items still will be included in the print form, but they will not be printed on the printout.



To select more than one field label or static text, click and drag the mouse diagonally across all the items you want to select.

4. Select all of the fields on the frame, and drag them to the top of the frame.
5. To resize the frame, click and drag the bottom of the frame to just below the description fields (Traded Unit Descr. Line 1 and Traded Unit Descr. Line 2).

The second line item (OLD:3) frame now should look like this:



Arranging the Order Trailer (OTR) Field

The Number of Line Items field (OTR 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 form.

You will resize the Order Trailer (OTR) frame to give it the same width as the header and line item frames.

Moving the Order Trailer (OTR) Field

Complete the following steps to move the Number of Line Items field on the Order Trailer (OTR) frame:

1. Select the Number of Line Items field and drag it to the right of its field label.
2. Select the Number of Line Items label and field.



To select more than one field label or static text, click and drag the mouse diagonally across all the items you want to select.

3. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The tops of the Number of Line Items label and field are aligned.
4. To resize the Order Trailer (OTR) frame, click and drag the bottom of the frame to just below the Number of Line Items label and field.

5. Select Save from the File menu to save the form. You have completed your Purchase Order form and you are ready to compile the form.

The Order Trailer (OTR) frame now should look like this:



The image shows a screenshot of a software window titled "Number of Line Items:". The window has a dotted background and a standard Windows-style title bar with a maximize button and a close button. Inside the window, the text "Number of Line Items:" is followed by a small, empty rectangular text input field.

Finalising the Form

Now that you have created and customised 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.

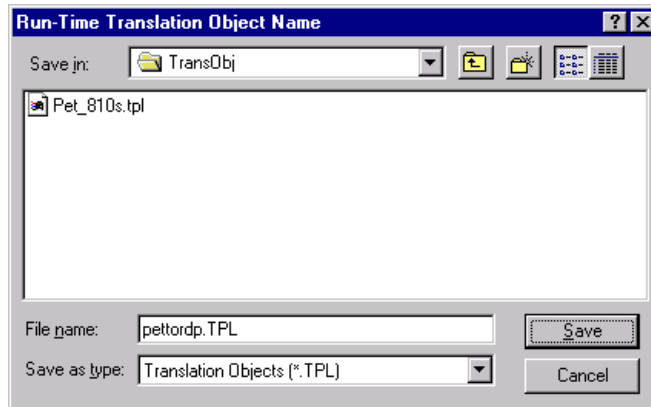
Compiling the Form

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

This translation object must be registered with the Gentran: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 dialogue.



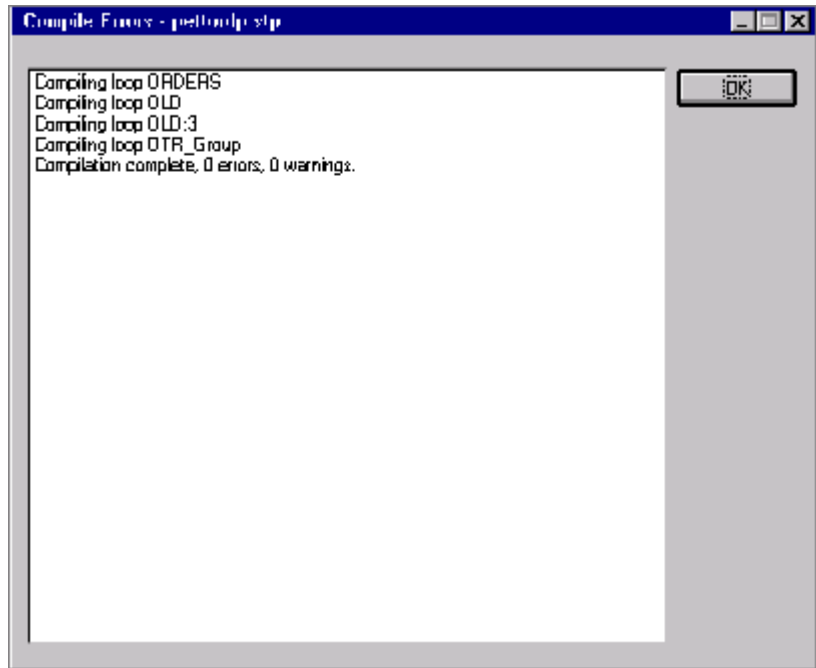
2. Click SAVE to accept the translation object name (pettordp.tpl) in the "File name" field.

This name for the compiled translation object (.TPL file) is the same filename as the source form (.STP file). Preserving the same filename (with different file extensions) ensures that the relationship between the source form and the compiled translation object remains evident.



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

The system will compile the form and generate an error report. The error report is displayed in the Compile Errors dialogue.



3. Click OK to exit the Compile Errors dialogue. The date on which you compiled the form is loaded automatically into the Compiled on field on the Translation Object Details dialogue.



If the Compile Errors dialogue 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.

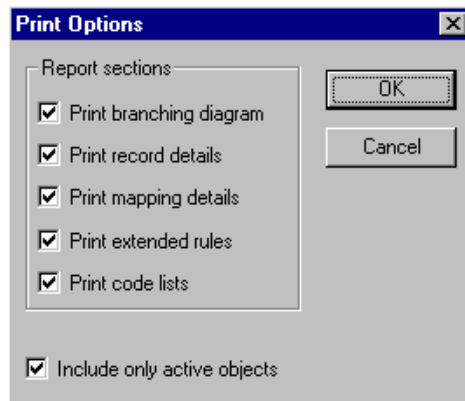
4. Select Save from the File menu to save the form.

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 dialogue.



2. Click OK to accept the defaults on this dialogue (all options marked), so the report includes all sections and only the activated form components. The Print dialogue is displayed.
3. Set the appropriate options. Click OK if you do *not* need to change Setup options, and the report will be printed.
Click SETUP... if you need to access printer setup information (to select a specific printer, paper orientation, or size and source of paper).
4. Set the appropriate options. Click OK if you do *not* need to change Print Options (dithering, intensity control, or print true type as graphics), and you will return to the Print dialogue. Click OK on the Print dialogue and the report will be printed.
Click OPTIONS... if you need to access printer setup options information. The Options dialogue is displayed.
5. Set the appropriate options. Click OK to return to the Print Setup dialogue, then click OK on the Print Setup dialogue to return to the Print dialogue. Click OK on the Print dialogue and the report will be printed.

Testing the Translation Object

Before you can use the TRADACOMS 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 PETTSTT2.INT test file.

Complete the following steps to test the print translation object you just created:

1. Register the PETTORDP.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 PETZONE4.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\PETZONE4.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 (PETTSTT2.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\PETTSTT2.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

A form is a set of instructions that you define in Gentran:Director to indicate how the system should format data. A form contains a set of fields arranged and formatted so that it can be reused to ensure consistency. You can create two types of forms in Gentran:Director. The *print form* enables you to print on a printout EDI data that has been processed through the translation object. The *screen entry form* ensures that users in your company enter into a predesigned data-entry translation object all the EDI data necessary to create a business message, which then will be transmitted to a trading partner.

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

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



Press F1 from any area of the system to access the online Help for that function. The online Help system contains field definitions and other detailed information.

Getting Started

A screen entry form is a predesigned layout that, when compiled into a translation object, enables users in your company to enter easily all the data necessary to create a business message. This tutorial explains how you customise and format a form before it is compiled into a translation object. The form that you create using Gentran:Director 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 you specify:

- Type of form (e.g. screen entry or print)
- Standard agency (e.g. TRADACOMS, EDIFACT)
- Standard version (e.g. ANA001, 92.1)
- Message type (e.g. ORDERS, INVOIC)
- Release (message version) (e.g. 9)

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 customise and format the form so that it is appropriate and useful for your company's needs.

Before you begin to customise 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 will be using the screen entry forms to enter EDI data)
- Your trading partners (the organisations receiving the EDI data that your users enter in the screen entry form)

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

We recommend that you mock up a layout of the screen entry form the way you ultimately want it to look. As you are designing the layout, you should

take into consideration the people who will be using the translation object. Make sure that the form makes sense to the people who will be using it. By analysing your company's needs before you actually create the screen entry form, you will 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 (that is, 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. However, when you create your own forms, the phases may overlap, and usually you will return to one or more of the phases several times before the form is completed.

1. Designing and creating the form
2. Customising the form components
3. Formatting the form
4. Finalising 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 analysing the purpose of the form, creating and saving the form, and setting up the form. Later in this chapter, you can find techniques for customising the segments, elements, and groups in the form, as well as for formatting the organisation and appearance of the form.

Screen Entry Form Scenario

For this tutorial, you will create a screen entry form for the INVOIC message (invoice), using the TRADACOMS ANA001 release 9 standard. The steps involved in creating this form are broken down into manageable pieces so that you can learn the tasks and procedures involved in creating a screen entry form. Then, you can apply the knowledge gained from using this tutorial to create your screen entry forms.

In this scenario, your company is MWT Manufacturing Co., which manufactures a wide variety of pet supplies for pet stores. One of your trading partners, Pet Zone (a large pet supply retailer), orders products from your company. Your company then invoices Pet Zone for those products. You 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. In this tutorial, you will invoice one order per message only. You will not use settlement discounts.

Form Analysis

The first step in creating a form is the analysis of the 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 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 TRADACOMS 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.

Analysing the EDI File

To analyse the EDI file, first you must determine what data you need to send your trading partner and what data your trading partner expects to receive. It is important to analyse the data in this way so that the invoice will contain all the necessary information, and so that your company can bill your partner correctly for the order you shipped to them. You and your partner must agree on which standard, version, message, and release you will be using. In this tutorial, you are using a TRADACOMS ANA001 INVOIC release 9 invoice. It is important to know the information your partner expects you to send in the invoice, and what data will be contained in each element used.

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

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 will need to use (activate). When Gentran:Director generates the EDI file format, the system includes all the

groups, segments, composites, and elements that are defined by the standard agency for the version of the message 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 mandatory groups, segments, composites, and elements.

For a TRADACOMS ANA001 INVOIC release 9 invoice, 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	Group	Segment	Composite	Element	Description
		CLO			Customer's Location
			CLOC		
		IRF			Invoice References
				INVN	Invoice Number
				IVDT	Date of Invoice
				TXDT	Tax-Point Date
ODD					
	ILD				
		STL			VAT Rate Invoice Sub Trailer
				SEQA:7	First Level Sequence Number
				CD12:2	VAT Rate Category Code
				VATP:2	VAT Rate Percentage
				NRIL	Number of Item Lines
				LVLA	Lines Sub-Total (Excluding VAT)
				EVLA	Extended Sub-Total Amount (Excluding VAT)
				ASDA	Extended Sub-Total Amount (After Settlement Discount Has Been Applied)
				VATA	VAT Amount Payable
				APSI	Payable Sub-Total Amount Including Settlement Discount

Group	Group	Segment	Composite	Element	Description
		TLR			Invoice Trailer
				NSTL	Number of Total Segments
				LVLT	Lines Total Amount (Excluding VAT)
				EVLТ	Total Extended Amount Ex Settlement Discount
				ASDT	Total Amount Exc VAT Inc Sett
				TVAT	Total VAT Amount Payable
				TPSI	Total Payable Inc Settlement

When translating data, the system does not process groups, segments, composites, and elements that are not activated. Therefore, *you* must make available (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.

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
Customer's Location (CLO Segment) (Already Activated)				
CLO CLOC CLO0	Customer's ANA Location Code	String	13	Format = 9
CLO CLOC CLO1	Customer's Own Location Code	String	17	
CLO CNAM	Customer's Name	String	40	
CLO CADD CAD0	Customer's Address Line 1	String	35	
CLO CADD CAD1	Customer's Address Line 2	String	35	
CLO CADD CAD2	Customer's Address Line 3	String	35	
CLO CADD CAD3	Customer's Address Line 4	String	35	
CLO CADD CAD4	Customer's Post Code	String	8	
Settlement Terms (PYT Segment)				
PYT PAYT	Terms of Payment	String	40	
Data Narrative (DNA Segment)				
DNA GNAR GNA0	General Narrative Line 1	String	40	
DNA GNAR GNA1	General Narrative Line 2	String	40	

Element	Description	Data Type	Length	Constant, Code Value, or Format to Be Assigned
DNA GNAR GNA2	General Narrative Line 3	String	40	
DNA GNAR GNA3	General Narrative Line 4	String	40	
Order and Delivery Terms (ODD Group) (Already Activated)				
Order and Delivery Terms (ODD:2 Segment)				
ODD:2 ORNO ORN0	Customer's Order Number	String	17	
ODD:2 ORNO ORN2	Date Order Placed by Customer	Dt/Tm	6	Screen Format = DD/MM/YY
ODD:2 DELN DEL0	Delivery Note Number	String	17	
ODD:2 DELN DEL1	Date of Despatch by Supplier	Dt/Tm	6	Screen Format = DD/MM/YY
Invoice Line Details (ILD Group in ODD Group) (Already Activated)				
Invoice Line Details (ILD:2 Segment)				
ILD:2 SPRO SPR0	EAN-13 Code for the Traded Unit	String	13	
ILD:2 SPRO SPR1	Supplier's Code for the Traded Unit	String	30	
ILD:2 CPRO CPR1	Customer's Item Code	String	30	
ILD:2 QTYI QTY0	Number of Order Units Invoice	String	15	Format = N0 (Number data type)
ILD:2 QTYI CD04:2	Measure Indicator	String	6	Any valid code
ILD:2 TDES TDE0	Traded Unit Descr. Line 1	String	40	



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 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).

The *maximum use* of a segment refers to the number of times that a segment can be used within the structure in which the segment is defined. For example, if a segment can be used only once within a group, but the group can be used multiple times, the segment still has a maximum use of one within each occurrence of the group. The standard defines the maximum number of times a segment can be used, but you must determine how many times a segment will be used, based on what you will be sending 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 will be sending 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 you will send Pet Zone. However, you need to customise the form components to produce a form that is easy to use to enter data in a logical manner.

The following form customising tasks (by group, segment, and element) are required for this tutorial. The table below lists the significant customising tasks. You also will add Help text to some of the fields (as explained in the appropriate sections of this tutorial).

Form Component	Description	Customising Needed
INVOIC file	Invoice Details	Use an extended rule to calculate the VAT summary for the fields in the STL and TLR segments.
CLO CLOC CLO0 element	Customer's ANA Location Code	Your users will enter the ANA code for the customer's location to which the invoiced items are to be shipped as a string data type accepting numeric characters only. Therefore, you will designate the appropriate string format for this element. Also, you will change the field label to "Location ANA Code".

Form Component	Description	Customising Needed
CLO CLOC CLO1 element	Customer's Own Location Code	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 "Location Own Code".
CLO CNAM element	Customer's Name	Your users will enter a string no longer than thirty-five characters in this element, so you will change the maximum length for this element to thirty-five. Also, you will shorten the field label to "Name".
CLO CADD CAD0 element	Customer's Address Line 1	You will shorten the field label for this element to "Address Line 1".
CLO CADD CAD1 element	Customer's Address Line 2	You will shorten the field label for this element to "Address Line 2".
CLO CADD CAD2 element	Customer's Address Line 3	You will shorten the field label for this element to "Address Line 3".
CLO CADD CAD3 element	Customer's Address Line 4	You will shorten the field label for this element to "Address Line 4".
CLO CADD CAD4 element	Customer's Post Code	You will shorten the field label for this element to "Post Code".
IRF segment	Invoice References	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one.
IRF INVN element	Invoice Number	You will shorten the field label for this element to "Invoice No." In addition, you will set up the document name (which enables you to differentiate between messages in the document browsers in Gentran:Director) for this element.
IRF IVDT element	Date of Invoice	Your users will enter the invoice date in DD/MM/YY format (not YYMMDD format, the default format defined by the standard). Therefore, you will change the screen format accordingly. You will change the maximum length for this field and element to eight (to accommodate the longer date format). In addition, you will change the field label to "Invoice Date".
IRF TXDT element	Tax-Point Date	Your users will enter the tax-point date in DD/MM/YY format (not YYMMDD format, the default format defined by the standard). Therefore, you will change the screen format accordingly. You will change the maximum length for this field and element to eight (to accommodate the longer date format).
PYT segment	Settlement Terms	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one.

Form Component	Description	Customising Needed
PYT SEQA element	First Level Sequence Number	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object. Also, you will define a constant value for this field, as this field will always have the same value (because each invoice corresponds to only one purchase order).
PYT PAYT element	Terms of Payment	You will shorten the field label for this element to "Payment Terms".
DNA segment	Data Narrative	You and your trading partner will use this segment only once, so you will change the maximum use of this segment to one.
DNA SEQA:2 element	First Level Sequence Number	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object. Also, you will define a constant value for this field, as this field will always have the same value (because each invoice corresponds to only one purchase order).
DNA GNAR GNA0 element	General Narrative Line 1	You will shorten the field label for this element to "Invoice Notes".
DNA GNAR GNA1 element	General Narrative Line 2	The data in this element will be self-explanatory, so you will remove the label from this field.
DNA GNAR GNA2 element	General Narrative Line 3	The data in this element will be self-explanatory, so you will remove the label from this field.
DNA GNAR GNA3 element	General Narrative Line 4	The data in this element will be self-explanatory, so you will remove the label from this field.
ODD group	Order and Delivery 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 Details frame.
ODD:2 SEQA element	First Level Sequence Number	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object. Also, you will define a constant value for this field, as this field will always have the same value (because each invoice corresponds to only one purchase order).
ODD:2 ORNO ORN0 element	Customer's Order Number	You will change the field label for this element to "Customer's P.O. No.".

Form Component	Description	Customising Needed
ODD:2 ORNO ORN2 element	Date Order Placed by Customer	Your users will enter the purchase order date in DD/MM/YY format (not YYMMDD format, the default format defined by the standard). Therefore, you will change the screen format accordingly. You will change the maximum length for this field and element to eight (to accommodate the longer date format). In addition, you will shorten the field label to "P.O. Date".
ODD:2 DELN DEL0 element	Delivery Note Number	You will add Help text to this field.
ODD:2 DELN DEL1 element	Date of Despatch by Supplier	Your users will enter the delivery date in DD/MM/YY format (not YYMMDD format, the default format defined by the standard). Therefore, you will change the screen format accordingly. You will change the maximum length for this field and element to eight (to accommodate the longer date format). In addition, you will shorten the field label to "Delivery Date".
ILD group in the ODD group	Invoice Line Details	You will add the more descriptive title "Line Items" to the group description to label the fields contained on the ILD:2 frame. In addition, you will use an extended rule to calculate the extended line cost for the line items, and to convert the VAT rate percentage from a string (its data type in the partner database) to a number (the data type required in the VAT Rate Percentage element).
ILD:2 SEQA element	First Level Sequence Number	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object. Also, you will define a constant value for this field, as this field will always have the same value (because each invoice corresponds to only one purchase order).
ILD:2 SEQB element	2nd Level Sequence No.	You will use the Loop Count standard rule to count the number of this iteration of the group in this field (to provide a count of the number of line items in the invoice). You will instruct the system to display the value from this field in the first column in the Line Items list box on the Invoice Details 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 shorten the field label to "Item No." and make the field display-only (as the users will not need to enter a value in this field).
ILD:2 SPRO SPR0 element	EAN-13 Code for the Traded Unit	You will shorten the field label for this element to "EAN Code".

Form Component	Description	Customising Needed
ILD:2 SPRO SPR1 element	Supplier's Code for the Traded Unit	You will instruct the system to display the value from this field in the second column in the Line Items list box on the Invoice Details frame. Also, you will change the field label to "Supplier's Product Code".
ILD:2 CPRO CPR1 element	Customer's Item Code	You will change the field label for this element to "Customer's Product Code".
ILD:2 QTYI QTY0 element	Number of Order Units Invoice	Your users will enter the quantity as a number with N0 format (formatted with an implicit decimal point and no decimal places). Therefore, you will change the data type from String to Number and the screen and EDI formats to N0 formats. You will instruct the system to display the value from this field in the third column in the Line Items list box on the Invoice Details frame. Also, the quantity will be no longer than five digits, so you will change the maximum length for this element to five. In addition, you will shorten the field label to "Quantity".
ILD:2 QTYI CD04:2 element	Measure Indicator	Your users can enter any of the measure indicator codes that the standard designates as valid codes. You will load the entire code list for this element, which will create a drop-down list box containing valid codes from which users can select. Also, you will change the field label to "Unit of Measure".
ILD:2 AUCT AUC0 element	Cost Price (Excluding VAT)	Your users will enter the unit price in R4 format (formatted with an explicit decimal point and up to four decimal places). Therefore, you will change the screen format to R4. You will instruct the system to display the value from this field in the fourth column in the Line Items list box on the Invoice Details frame. Also, you will change the field label to "Unit Price (Ex. VAT)".
ILD:2 LEXC element	Extended Line Cost (Excluding VAT)	The extended line cost will be formatted as an R4 number (formatted with an explicit decimal point and up to four decimal places). Therefore, you will change the screen format to R4. In addition, you will prevent this field from being displayed in the screen entry translation object, as users will not need to enter or view a value in this field.
ILD:2 CD12 element	VAT Rate Category Code	You will use a Select standard rule so that all of the available codes from the VAT rate category code table (VATCODES table) will be available in a drop-down list box for your screen entry translation object users. Also, you will shorten the field label to "VAT Code".

Form Component	Description	Customising Needed
ILD:2 VATP element	VAT Rate Percentage	You will create a temporary storage field for the VAT rate (with a string data type, to accommodate the VAT rate from the partner database). The extended rule you used on the ILD group will convert the string data in the temporary storage field to a number, then place the number in the ILD:2 VATP element (which has a number data type) and delete the value from the temporary field. You will prevent the ILD:2 VATP field from being displayed on the screen entry translation object.
ILD:2 TDES TDE0 element	Traded Unit Descr. Line 1	You will shorten the field label for this element to "Description".
STL segment	VAT Rate Invoice Sub Trailer	You will add the more descriptive title "VAT Summary" to the group description to label the fields contained on the STL frame.
STL SEQA:7 element	First Level Sequence Number	This element is required in the invoice, but screen entry translation object users will not need to enter a value in this field (this field will be assigned a value in an extended rule used on the INVOIC file). You will prevent this field from being displayed in the screen entry translation object.
STL CD12:2 element	VAT Rate Category Code	You will instruct the system to display the value from this field in the first column in the VAT Summary list box on the Invoice Details frame. Also, you will shorten the field label to "VAT Code" and make the field display-only (as users will not need to enter a value in this field).
STL VATP:2 element	VAT Rate Percentage	The VAT rate will be displayed in the screen entry translation object in R3 format (formatted with an explicit decimal point and up to three decimal places). Therefore, you will change the screen format to R3. You will instruct the system to display the value from this field in the second column in the VAT Summary list box on the Invoice Details frame. Also, you will shorten the field label to "VAT rate" and make the field display-only (as users will not need to enter a value in this field).
STL NRIL element	Number of Item Lines	This field will be assigned a value in an extended rule (used on the INVOIC file). You will change the field label to "Number of Line Items" and make the field display-only (as users will not need to enter a value in this field).

Form Component	Description	Customising Needed
STL LVLA element	Lines Sub-Total (Excluding VAT)	The lines subtotal will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. You will instruct the system to display the value from this field in the third column in the VAT Summary list box on the Invoice Details frame. Also, you will make this field display-only (as users will not need to enter a value in this field) and make minor changes to the field label.
STL EVLA element	Extended Sub-Total Amount (Excluding VAT)	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object (this field will be assigned a value in the extended rule used on the INVOIC file).
STL ASDA element	Extended Sub-Total Amount (After Settlement Discount Has Been Applied)	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object (this field will be assigned a value in the extended rule used on the INVOIC file).
STL VATA element	VAT Amount Payable	The VAT amount payable will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).
STL APSI element	Payable Sub-Total Amount Including Settlement Discount	The payable subtotal will be displayed in the screen entry translation object in R3 format (formatted with an explicit decimal point and up to three decimal places). Therefore, you will change the screen format to R3. Also, you will make this field display-only (as users will not need to enter a value in this field) and shorten the field label to "Payable Subtotal (Inc. Sett. Disc.)".
TLR NSTL element	Number of Total Segments	This element is required in the invoice, but is not meaningful for your purposes. You will prevent this field from being displayed in the screen entry translation object (this field will be assigned a value in the extended rule used on the INVOIC file).
TLR LVLT element	Lines Total Amount (Excluding VAT)	The invoice amount (excluding VAT) will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).

Form Component	Description	Customising Needed
TLR EVLT element	Total Extended Amount Ex Settlement Discount	The invoice amount (excluding settlement discount) will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).
TLR ASDT element	Total Amount Exc VAT Inc Sett	The invoice amount (excluding VAT, including settlement discount) will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).
TLR TVAT element	Total VAT Amount Payable	The VAT total will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).
TLR TPSI element	Total Payable Inc Settlement	The total invoice amount will be displayed in the screen entry translation object in R2 format (formatted with an explicit decimal point and up to two decimal places). Therefore, you will change the screen format to R2. Also, you will make this field display-only (as users will not need to enter a value in this field).

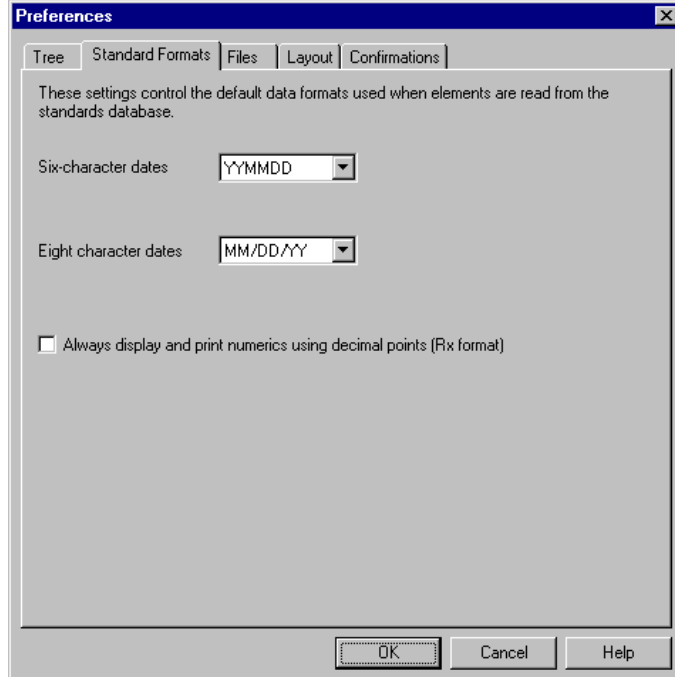
Verifying the Global EDI Date Formats

Gentran:Director enables you to customise 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 customise the global EDI date formats, the settings are valid for all forms created in the current session of Gentran:Director. However, you can override the default date formats for an individual element on the Field Properties dialogue for that element.

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

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” drop-down list box contains “YYMMDD” to define the format of the six-character EDI dates in your forms.
4. Verify that the “Eight character dates” drop-down list box 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.



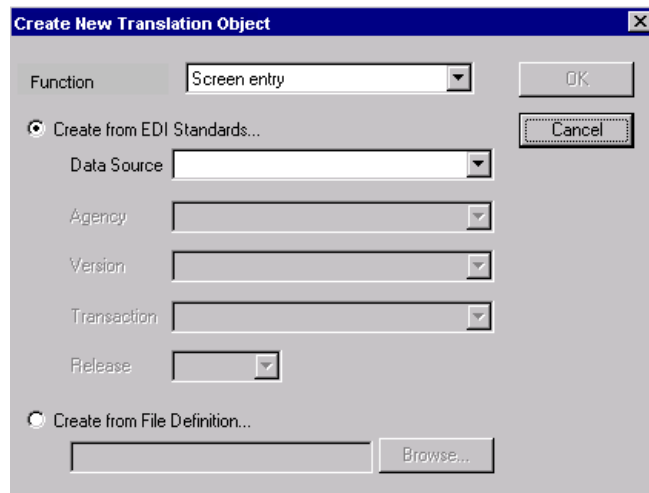
To change the order in which the date formats appear in the “Six-character dates” and “Eight character dates” drop-down list boxes or to add a new date format to the lists, select Date Formats... from the Options menu.

Creating the New Form

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

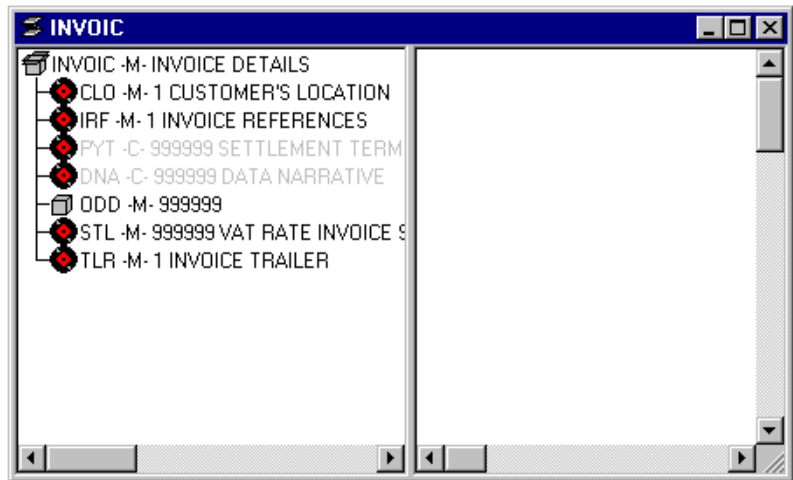
Complete the following steps to create the new screen entry form:

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



2. From the Translation Object Function drop-down list box, 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...” radio button is selected.
4. From the Data Source drop-down list box, select the ODBC data source that you wish to use.
5. From the Agency drop-down list box, select “[A] Tradacoms”, which is the EDI standard you will use for this translation object.
6. From the Version drop-down list box, select “[ANA001]”, 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.

7. From the Transaction drop-down list box, select “[INVOIC] INVOICE DETAILS”, which is the transaction set (message) you will use for this translation object. The messages that are available depend on which standard and version you selected.
8. From the Release drop-down list box, select “9”, which is the message version you will use for this translation object. The message versions that are available depend on which message (transaction) you selected.
9. Click OK to create the EDI file (it may take a few seconds to create the file). The form is displayed as follows:



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.

10. Select Save from the File menu. The Translation Object Details dialogue is displayed.

Summary	
Author	Description
Translation Object Function	System
Screen entry	<input checked="" type="checkbox"/>

Version Control		
Major version	Minor version	Compiled on
0	0	

EDI Associations					
	Input		Output		
Agency	A	Tradacomz	A	Tradacomz	
Version	ANA001	TRADACOMS UNI	ANA001	TRADACOMS UNI	
Transaction	INVOIC	INVOICE DETAILS	INVOIC	INVOICE DETAILS	
Release	9		9		
F Group					



If you have performed any function that invalidates the current format of the translation object, the Save function is not available (dimmed) until you regenerate the layout (click Generate Layout on the Main Toolbar).

11. In the Author field, type your name. This field usually contains the name of the person who created the form.
12. In the Description field, type “Screen TRADACOMS INVOIC Pet Zone”. This field is used to provide a brief explanation of the compiled translation object that will enable you to differentiate it from similar translation objects in Gentran:Director. For example, “Screen TRADACOMS INVOIC Pet Zone” is the description of a screen entry translation object for a TRADACOMS ANA001 invoice (INVOIC) for partner Pet Zone.
13. Verify that “Screen entry” is selected from the Translation Object Function drop-down list box.
14. In the Major version field, type “1” to designate the version number for this translation object.
15. In the Minor version field, accept the default value “0” that designates the release number for this translation object.



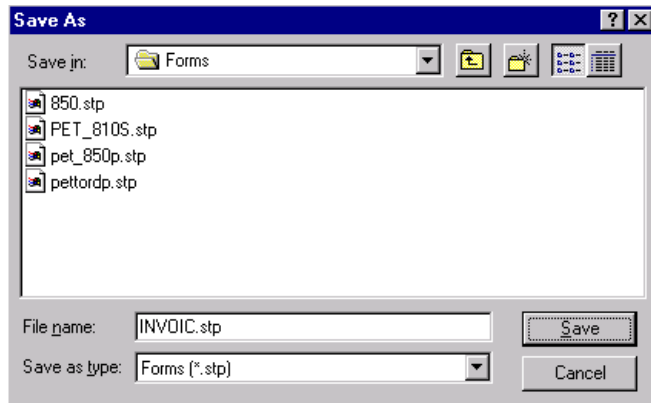
When you make a major change to this form, increase the version to the next higher sequential number (e.g. 2.0, 3.0). If you make a minor change to the form, increase the release to the next higher sequential number (e.g. 2.1, 2.2).

- The Input and Output fields (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 fields.



The system allows you to change the information in the Input and Output fields, but modifying this information does not alter the content of the form. An example of when you might want to alter these fields 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 dialogue, and then physically alter the form to be compliant with that version.

- Click OK to save the translation object details and access the Save As dialogue.



- Verify that the “Save in” drop-down list box reflects the drive/folder where Gentran:Director is installed. The default is c:\Program Files\Sterling Commerce\GENTRAN Director\Forms. If the selected drive is not the correct one, select the appropriate drive
- In the “File name” field, type “pettinvs.stp” to replace the default file name. You allocate a filename to a form when you save the form for the first time or use the Save As function to save a copy of the form under a different name. The name of the form must be one to eight unique

characters that define the form in a meaningful way. For example, “PETTINVS” is the name of a screen entry form for a TRADACOMS invoice message (INVOIC) for partner Pet Zone.

The default file extension for forms is .STP. Using this extension distinguishes source form files from other types of files, such as compiled translation objects. The naming conventions in 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. PETTINVS.STP).
- The compiled translation object (translation object that is the result of compiling the source form) should be named using the same filename that was allocated to the source form, but with the file extension **.TPL** (e.g. PETTINVS.TPL).

We recommend that you use these naming conventions to distinguish source forms and compiled translation objects from other types of files. We also recommend that you use the same filename (different file extension) for a source form and the translation object that was compiled from it.

20. 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 (TRADACOMS) for the version (ANA001), message (INVOIC), and release (9) 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 group, CLO segment, and CLO CLOC composite are mandatory for the invoice. You do not need to activate these components. The CLO CLOC CLO0, CLO CLOC CLO1, and CLO CLOC CLO2 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. 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 the form.

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

1. Double-click the groups, segments, and composites listed in the table below to open them. This table lists all the 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
		CLO (already activated)	CLOC (already activated)	CLO0
				CLO1
				CNAM
			CADD	CAD0
				CAD1
				CAD2
				CAD3
				CAD4
		PYT		PAYT
		DNA	GNAR	GNA0
				GNA1
				GNA2
				GNA3

Group	Group	Segment	Composite	Element
ODD (already activated)		ODD:2	ORNO (mandatory for ODD:2)	ORNO
				ORN2
			DELN (mandatory for ODD:2)	DEL0
				DEL1
	ILD (already activated)	ILD:2	SPRO (mandatory for ILD:2)	SPR0
				SPR1
			CPRO	CPR1
			QTYI (mandatory for ILD:2)	QTY0
		TDES	TDE0	



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 segment that you need to use. Clicking these segments will activate the segments.



If you accidentally click a segment that you did not mean to activate, click the segment with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.

4. Click each inactive composite that you need to use. Clicking these composites will activate the composites.



If you accidentally click a composite that you did not mean to activate, click the composite with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.

5. Click each inactive element that you need to use. Clicking these elements will activate 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 drop-down list box because you applied a standard rule that allows a selection of multiple items.



If you accidentally click an element that you did not mean to activate, click the element with the right mouse button to access the shortcut menu. Select Deactivate from the shortcut menu.



6. Click Activate on the Main Toolbar to turn activation mode off.

Verifying EDI Delimiters and Adding Frame Help Text

You are using an EDI standard that contains composite elements, 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.



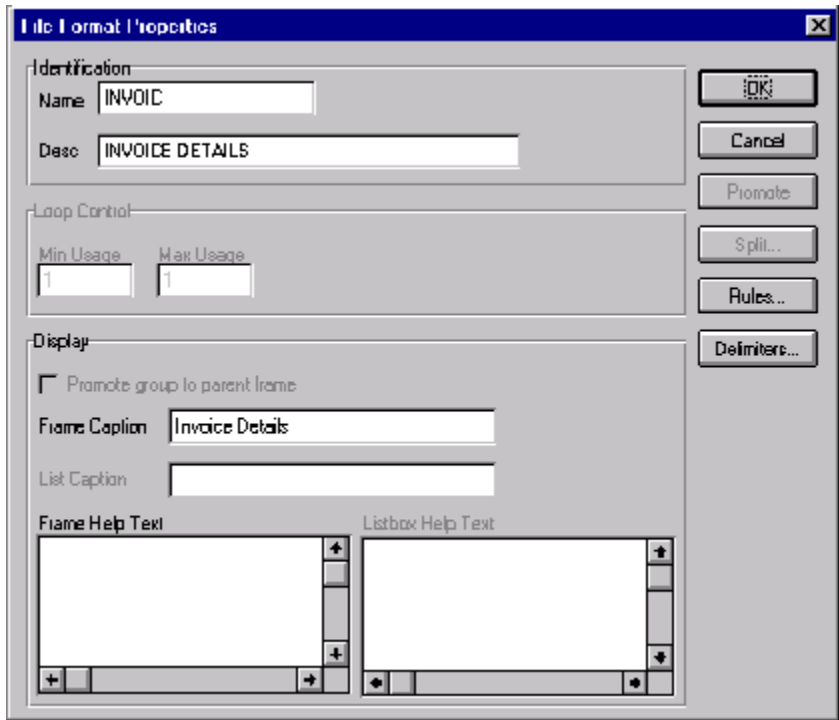
Although verifying EDI delimiters in Gentran:Director is mandatory *only* if you are using a standard with composite elements or subelements, we recommend that you perform this task regardless of which standard you use.

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

Complete the following steps to verify EDI delimiters and add frame Help text:

1. Click the INVOIC file icon with the right mouse button to access the shortcut menu.

2. Select Properties... from the shortcut menu to display the File Format Properties dialogue.



3. In the Frame Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

“This frame contains information pertaining to the entire invoice message (INVOIC). For online Help on an individual field on this frame, select the field and press F1.”

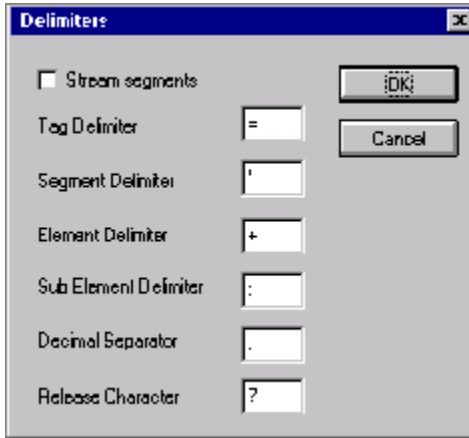


Pressing ENTER creates line breaks for the online Help that the screen entry translation object users in Gentran:Director view when they press F1. If you do not create line breaks, the online Help will be displayed on one line of text in the online Help pop-up window (the text will not wrap to the next line), 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.

4. Click DELIMITERS... to access the Delimiters dialogue.



5. Verify that the correct delimiters are being used for the TRADACOMS 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 field. The default delimiters for TRADACOMS are the following:



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

Field	TRADACOMS Default Character	TRADACOMS Default Hex Value
Tag Delimiter	= (equal sign)	0x3D
Segment Delimiter	' (apostrophe)	0x27
Element Delimiter	+ (plus sign)	0x2B
Sub Element Delimiter	: (colon)	0x3A
Decimal Separator	. (full stop)	0x2E
Release Character	? (question mark)	0x3F



The Stream segments check box on the Delimiters dialogue currently is not marked. For this tutorial, do not mark this check box, so the translator will continue to insert a carriage return after every segment. If the Stream segments check box is marked, then a carriage return is *not* used after every segment, and the segments are “streamed”.

6. Click OK to save the delimiters and exit the Delimiters dialogue.
7. Click CLOSE to exit the File Format Properties dialogue.

Changing the Maximum Use of Segments and Groups

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

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

Changing the Maximum Use of the IRF Segment

The IRF segment contains the Invoice References for the invoice. In this tutorial, the IRF segment will be used for the invoice number, invoice date, and tax-point date. The standard allows the IRF segment to be used up to 999,999 times in one invoice. In this tutorial, you will use the IRF segment only once per invoice. You will change the maximum use of the IRF segment to one, which will place the associated fields on the main Invoice Details frame with the majority of the invoice fields.

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

1. Click the IRF segment with the right mouse button to access the shortcut menu.

2. Select Properties... from the shortcut menu. The Segment Properties dialogue is displayed.

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

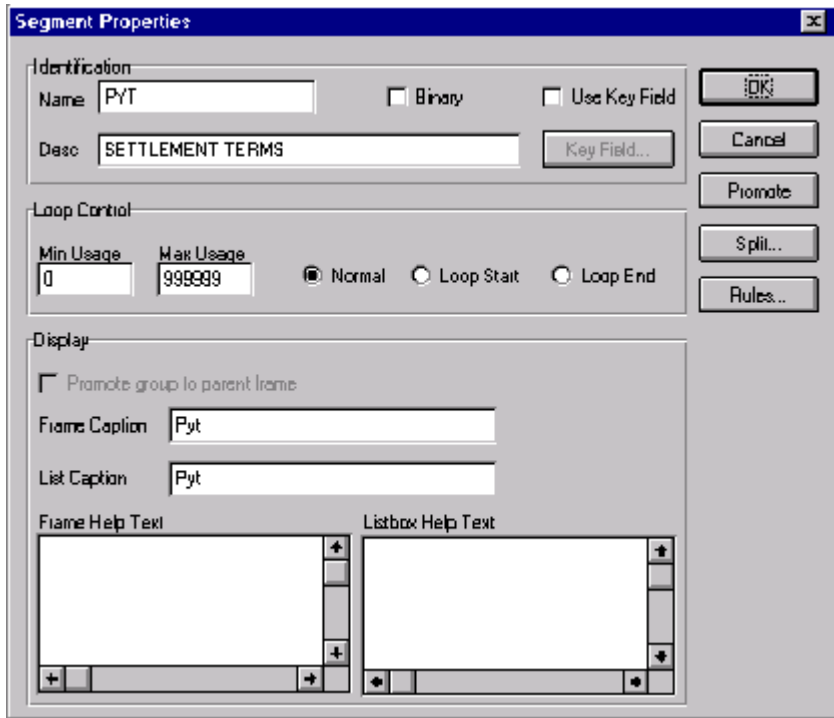
Changing the Maximum Use of the PYT Segment

The PYT segment contains the Settlement Terms for the invoice. In this tutorial, the PYT segment will be used for the describing the terms of payment. The standard allows the PYT segment to be used up to 999,999 times in one invoice. In this tutorial, you will use the PYT segment only once per invoice. You will change the maximum use of the PYT segment to one, which will place the associated fields on the main Invoice Details frame with the majority of the invoice fields.

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

1. Click the PYT segment with the right mouse button to access the shortcut menu.

2. Select Properties... from the shortcut menu. The Segment Properties dialogue is displayed.



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

Changing the Maximum Use of the DNA Segment

The DNA segment contains the Data Narrative for the invoice. In this tutorial, the DNA segment will be used for narrative (descriptive text) describing information that cannot be sent in a coded form. The standard allows the DNA segment to be used up to 999,999 times in one invoice. In this tutorial, you will use the DNA segment only once per invoice. You will change the maximum use of the DNA segment to one, which will place the associated fields on the main Invoice Details frame with the majority of the invoice fields.

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

1. Click the DNA segment with the right mouse button to access the shortcut menu.

2. Select Properties... from the shortcut menu. The Segment Properties dialogue is displayed.

The screenshot shows the 'Segment Properties' dialog box with the following details:

- Identification:** Name: DNA, Desc: DATA NARRATIVE, Binary: , Use Key Field:
- Loop Control:** Min Usage: 0, Max Usage: 999999, Normal: , Loop Start: , Loop End:
- Display:** Promote group to parent frame: , Frame Caption: Dna, List Caption: Dna
- Help Text:** Frame Help Text and Listbox Help Text (empty text areas)

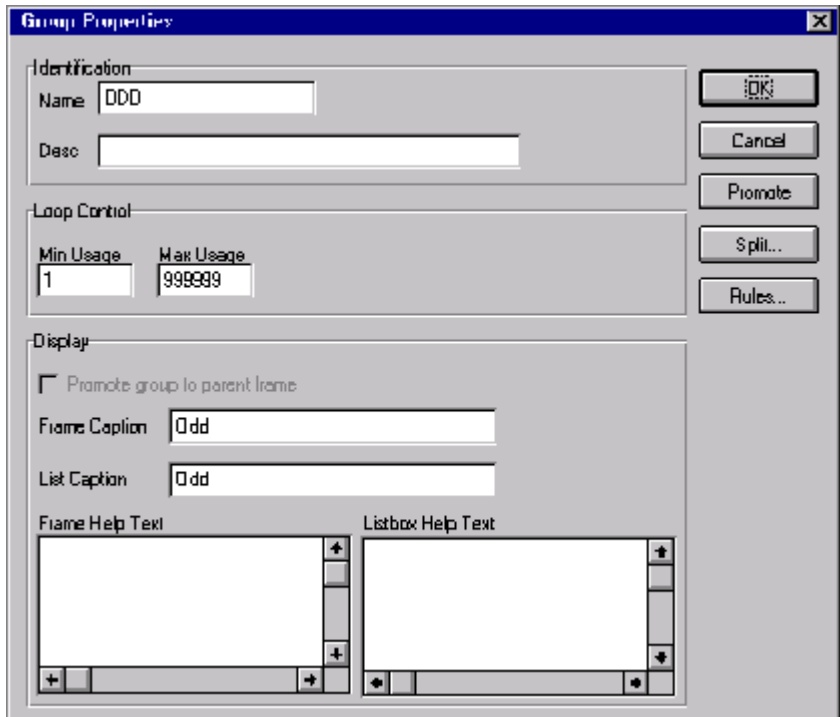
3. In the Max Usage field, type "1" to designate that this segment can be used only once per invoice.
4. Click OK to exit the Segment Properties dialogue.

Changing the Maximum Use of the ODD Group

The ODD group contains the Order and Delivery Terms information for the invoice. In this tutorial, the ODD group will be used for information about the customer's order number, the date the order was placed, and the delivery number and date. The standard allows the ODD group to be used up to 999,999 times per invoice (because you are addressing only one order with this invoice). In this tutorial, you will use the ODD group only once per invoice. You will change the maximum use of the ODD group to one, which will place the associated fields on the main Invoice Details frame with the majority of the invoice fields.

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

1. Click the ODD group with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu. The Group Properties dialogue is displayed.



3. In the Max Usage field, type “1” to designate that this group can be used only once per invoice.
4. Click the Promote group to parent frame check box to promote this group. The fields in this group will be displayed on the same frame as the fields in the parent group (INVOIC).



Although this group has a maximum use of one, if you do not mark 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.

5. Click OK to exit the Group Properties dialogue.

Generating the Form

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



You can, and should, regenerate (or refresh) the form several times as you customise and format the form 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. However, selecting the INVOIC file icon is not a required prerequisite to generating the layout.



2. Click Generate Layout on the Main Toolbar. The layout of the screen entry form will be displayed in the Layout Window.

The screenshot shows the 'pettinvs.stp' application window. On the left, a tree view under 'INVOIC -M- INVOICE DETAILS' lists several segments: CLO -M- 1 CUSTOMER'S LOCATION, IRF -M- 1 INVOICE REFERENCES, PYT -C- 1 SETTLEMENT TERMS, DNA -C- 1 DATA NARRATIVE, ODD -M- 1, STL -M- 999999 VAT RATE INVOICE SUB, and TLR -M- 1 INVOICE TRAILER. On the right, the 'Invoice Details' form is displayed, featuring a yellow ruler at the top and a vertical ruler on the left. The form contains the following fields: Customer's Ana Location Code, Customer's Own Location Code, Customer's Name, Customer's Address Line 1, Customer's Address Line 2, Customer's Address Line 3, Customer's Address Line 4, Customer's Post Code, and Invoice Number. Each field has a corresponding input box or dropdown menu.



You should regenerate the form periodically as you customise the screen entry form to ensure that the most recent changes to the frame are reflected 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 dialogue for a field or element, either double-click the element, or use the right mouse button to click the field or element, and then select Properties from the shortcut menu.



When you first generate the form, each field in the Layout Window is labelled with the same name as its corresponding element in the EDI File Format Window. As you customise the form, however, you will change some of the labels and remove others, so all the fields will not be labelled 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, then a list box 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.

Customising the EDI Data

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

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

This section explains how to customise 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. If you set up the document name in the Forms Integration subsystem, the Name field of the document browsers that contain this message in Gentran:Director will contain the data from that element. You can choose any element as the document name, but we strongly recommend that you select an element that occurs only once in the message and has a data type of string. For a TRADACOMS ANA001 INVOIC release 9 invoice, the document name usually is the Invoice Number.

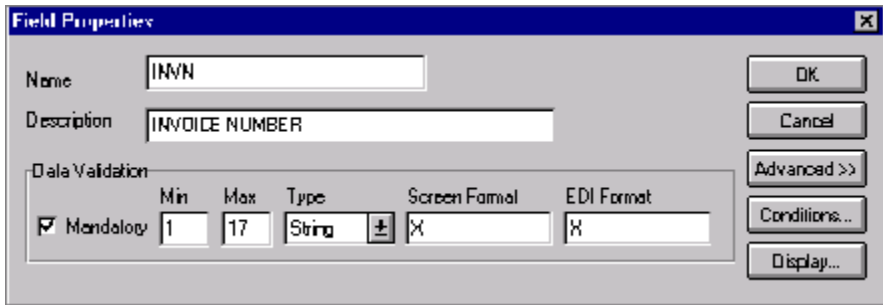
Complete the following steps to set up the document name:

1. Double-click the IRF INVN element.



In this tutorial, 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 dialogue is displayed.



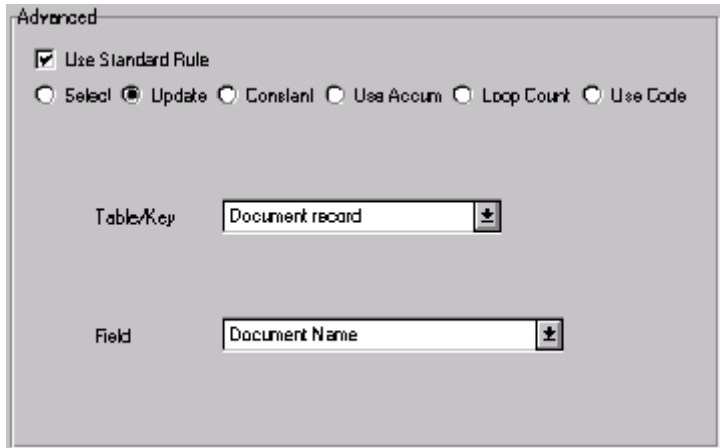
2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.



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

3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Update radio button.
5. From the Table/Key drop-down list box, select “Document record” to indicate that you are updating the document record in **Gentran:Director**.
6. From the Field drop-down list box, 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 IRF INVN element.

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



7. Click OK to set up the document name.

Customising the CLO Segment

The CLO segment (Customer's Location) contains details about the specific customer location pertaining to this invoice. In this tutorial, the CLO segment contains details relating to the specific Pet Zone store you are invoicing.

Customising the CLO CLOC CLO0 Element

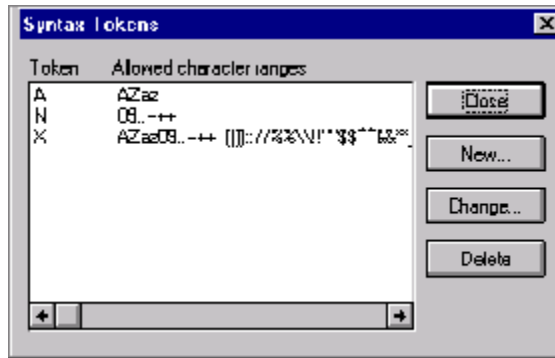
The CLO CLOC CLO0 element (Customer's ANA Location Code) contains the code assigned by the Article Numbering Association for the customer's location. In this tutorial, your users will enter the customer's ANA location code (which they will obtain from the purchase order for the invoiced items).

Your trading partner, Pet Zone, uses a string of numbers for the ANA location code, so you will create a syntax token that allows only numbers in the screen and EDI formats of the data. Syntax tokens enable you to designate a "token" that defines ranges of characters and/or numbers that are allowed to be used for a string-type element. The characters defined in the syntax token are used while compliance checking each element to ensure that the data in the element falls within the range of allowed characters.

In addition to creating a syntax token to be used for the screen and EDI formats of the data, you will rename the field label to make it shorter and add Help text to the field.

Creating a Syntax Token Complete the following steps to create a syntax token:

1. Select Syntax Tokens from the Edit menu to display the Syntax Tokens dialogue.



The Token column contains the value designated as the syntax token for each existing syntax token. The Token contains a range of characters that, when applied to an element, dictate the way that element must be formatted. If the element is not formatted as specified, the system will generate a compliance error.

The Allowed character ranges column contains the range(s) of characters that are permitted for each existing syntax token. Each range consists of a pair of characters that define the start and end characters.

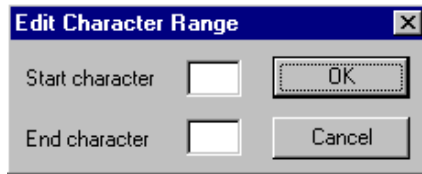
2. Click NEW... to access the Edit Syntax Token dialogue.



3. In the Token field, type "9" to designate the unique one-character alphanumeric value that the system will recognise as containing the allowed range of characters you designate.

The Character Ranges list box contains the character range or ranges that you defined for this token. You can define more than one character range for each token.

4. Click NEW... to access the Edit Character Range dialogue, which enables you to create a character range.



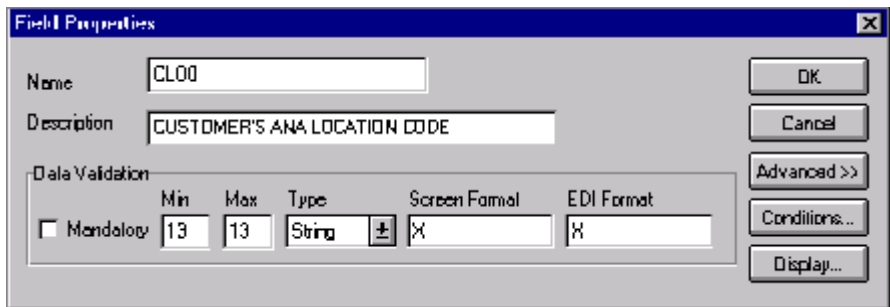
Gentran:Director uses the ANSI character set when determining the start-end range.

5. In the Start character field, type “0”, which is the character that begins the allowed token range.
6. In the End character field, type “9”, which is the character that terminates the allowed token range.
7. Click OK to exit the Edit Character Range dialogue.
8. Click OK to save the syntax token and exit the Edit Syntax Token dialogue.
9. Click CLOSE to exit the Syntax Tokens dialogue.

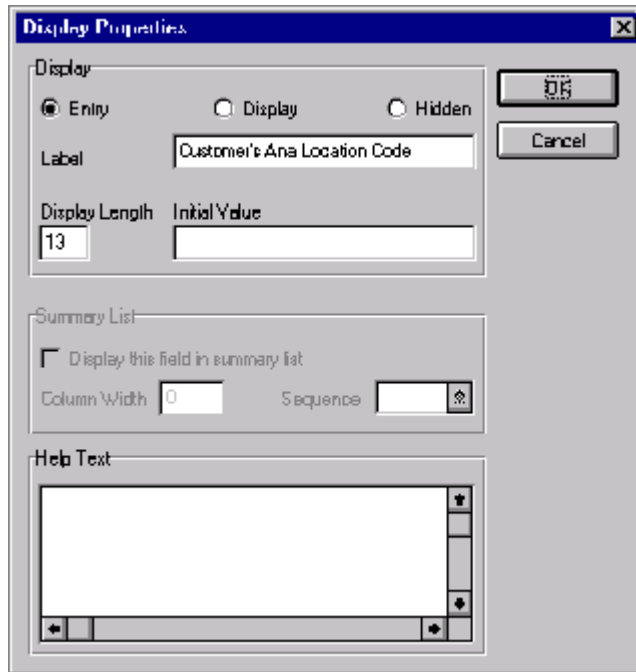
Changing the CLO CLOC CLO0 Element and Field Properties

Complete the following steps to change the screen and EDI formats for the data, rename the field label, and add Help text to the Customer’s ANA Location Code field:

1. Double-click the CLO CLOC CLO0 element. The Field Properties dialogue is displayed.



2. In the Screen Format field, type “9”, which is the name of the syntax token you just created for allowing users to enter data with only the characters 0–9 in this element.
3. In the EDI Format field, type “9”, which is the name of the syntax token you just created for allowing the EDI data to consist of only the characters 0–9 in this element.
4. Click DISPLAY... to access the Display Properties dialogue.



5. In the Label field, type “Location ANA Code” to replace the existing field label.
6. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the EAN location number identifying this customer’s location. You must enter a numeric value in this field.”
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

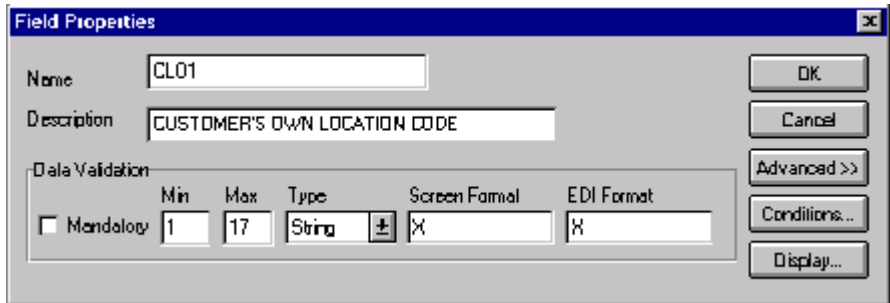
**Customising the
CLO CLOC CLO1
Element**

The CLO CLOC CLO1 element (Customer’s Own Location Code) contains the code assigned by the customer for the location to which the invoiced items are to be delivered. In this tutorial, your users will enter the customer’s own location code (which you have obtained from Pet Zone).

In this tutorial, you know that Pet Zone’s own location code will not exceed ten characters, so you will change the field and element lengths to ten. In addition, you will rename the field label and add Help text to the field.

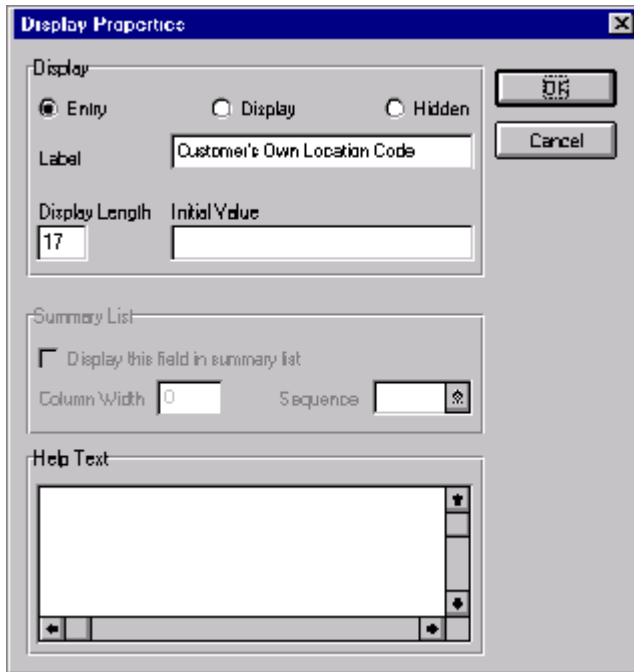
Complete the following steps to change the field and element lengths, rename the field label, and add Help text to the Customer’s Own Location Code field:

1. Double-click the CLO CLOC CLO1 element. The Field Properties dialogue is displayed.



2. In the Max field, type “10” to allow a ten-character string in this element.

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



4. In the Label field, type "Location Own Code" to replace the existing field label.
5. In the Display Length field, type "10" to allow ten characters to be entered in this field.
6. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
"Type the customer's own location number identifying the location to which the invoiced items are to be delivered. The customer's location number may not exceed 10 alphanumeric characters."
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CNAM Element

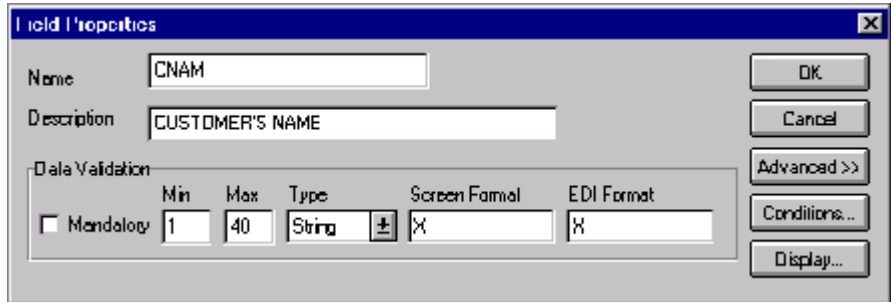
The CLO CNAM element (Customer's Name) contains the customer's registered legal name.

In this tutorial, you want the Customer's Name field to be the same length as the address fields that follow (in the CLO CADD composite), so you will

change the field and element lengths for the Customer's Name field to thirty-five. In addition, you will 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 Customer's Name field:

1. Double-click the CLO CNAM element. The Field Properties dialogue is displayed.



2. In the Max field, type "35" to allow a thirty-five-character string in this element.

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

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 containing 'Customer's Name'. The 'Display Length' section has a text box containing '40' 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 containing '0', and a 'Sequence' text box containing '1' with a list box icon. The 'Help Text' section has a large text area with scrollbars.

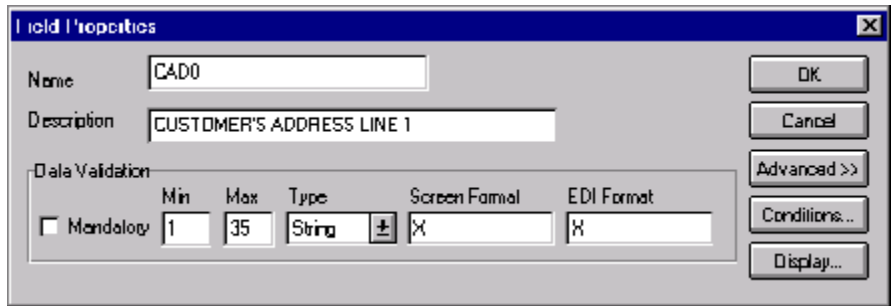
4. In the Label field, type "Name" to replace the existing field label.
5. In the Display Length field, type "35" to allow thirty-five characters to be entered in this field.
6. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
"Type the customer's name. The name may not exceed 35 alphanumeric characters."
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD0 Element

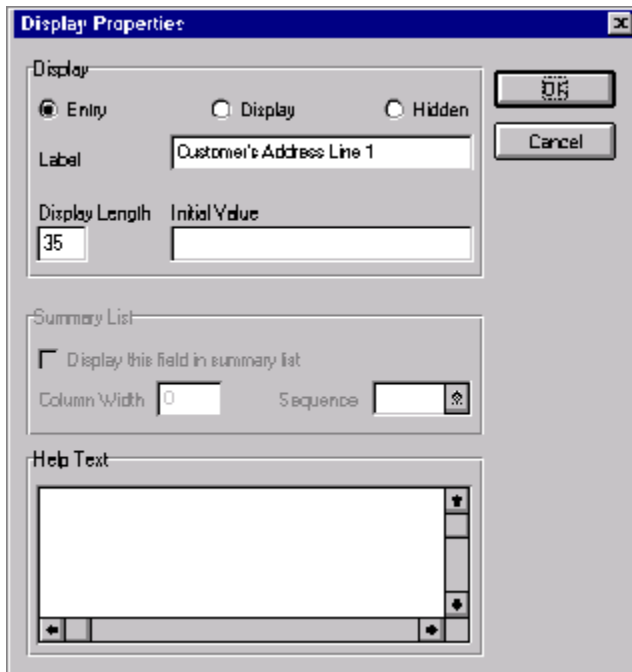
The CLO CADD CAD0 element (Customer’s Address Line 1) contains the first line of the customer’s address. You will rename the field label to shorten it and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the Customer’s Address Line 1 field:

1. Double-click the CLO CADD CAD0 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type “Address Line 1” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the first line of the customer’s address. This address line may not exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD1 Element

The CLO CADD CAD1 element (Customer’s Address Line 2) contains the second line of the customer’s address. You will rename the field label to shorten it and add Help text to this field.

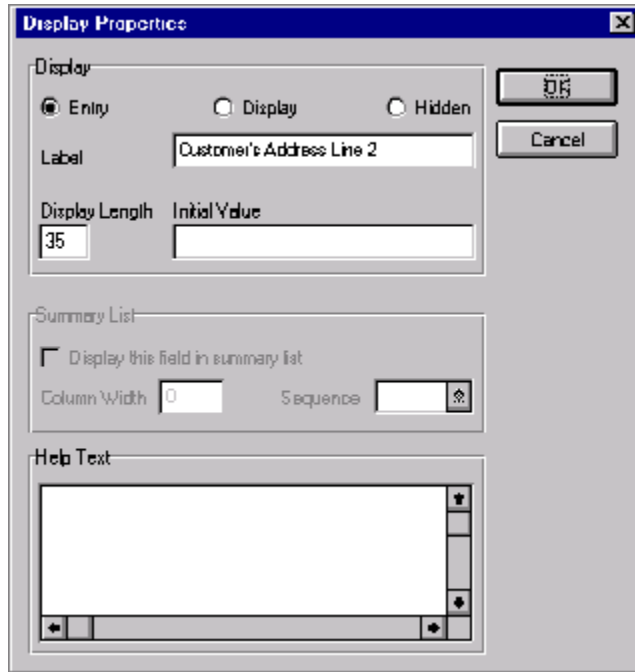
Complete the following steps to rename the field label and add Help text to the Customer’s Address Line 2 field:

1. Double-click the CLO CADD CAD1 element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box for the 'CAD1' field. The 'Name' field contains 'CAD1' and the 'Description' field contains 'CUSTOMER'S ADDRESS LINE 2'. The 'Data Validation' section is expanded, showing a table with columns for 'Mandatory', 'Min', 'Max', 'Type', 'Screen Format', and 'EDI Format'. The 'Mandatory' checkbox is checked. The 'Min' value is 1, 'Max' is 35, 'Type' is String, 'Screen Format' is X, and 'EDI Format' is X. On the right side of the dialog, there are buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

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

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



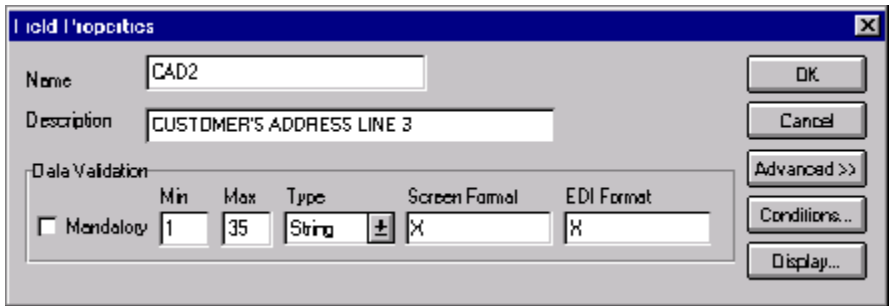
- In the Label field, type “Address Line 2” to replace the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
 “Type the second line of the customer’s address. This address line may not exceed 35 alphanumeric characters.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD2 Element

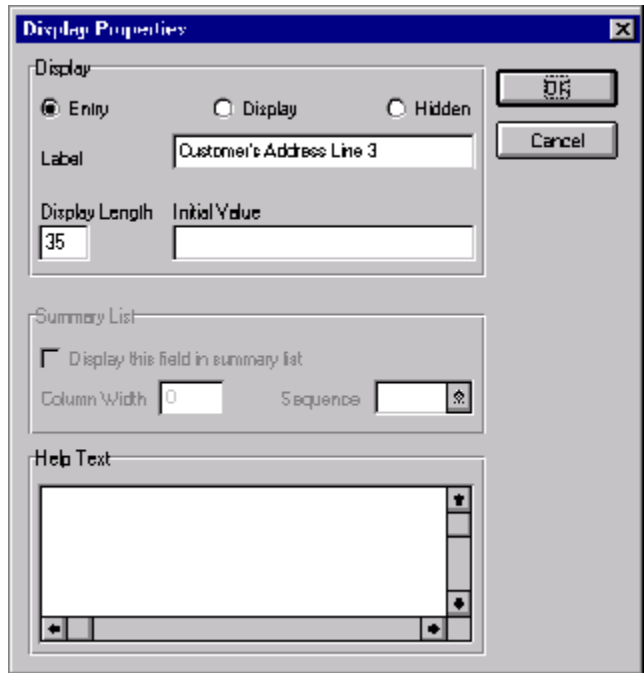
The CLO CADD CAD2 element (Customer’s Address Line 3) contains the third line of the customer’s address. You will rename the field label to shorten it and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the Customer’s Address Line 3 field:

1. Double-click the CLO CADD CAD2 element. The Field Properties dialogue is displayed.



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



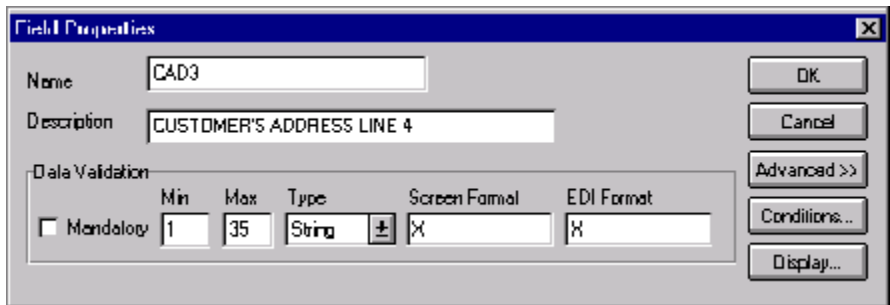
3. In the Label field, type “Address Line 3” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
 “Type the third line of the customer’s address. This address line may not exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD3 Element

The CLO CADD CAD3 element (Customer’s Address Line 4) contains the fourth line of the customer’s address. You will rename the field label to shorten it and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the Customer’s Address Line 4 field:

1. Double-click the CLO CADD CAD3 element. The Field Properties dialogue is displayed.



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

The screenshot shows the 'Display Properties' dialog box. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' field contains 'Customer's Address Line 4'. The 'Display Length' field contains '35'. The 'Summary List' section has a checkbox 'Display this field in summary list' which is unchecked. The 'Help Text' section has a large empty text area with scrollbars. On the right side of the dialog, there are 'OK' and 'Cancel' buttons.

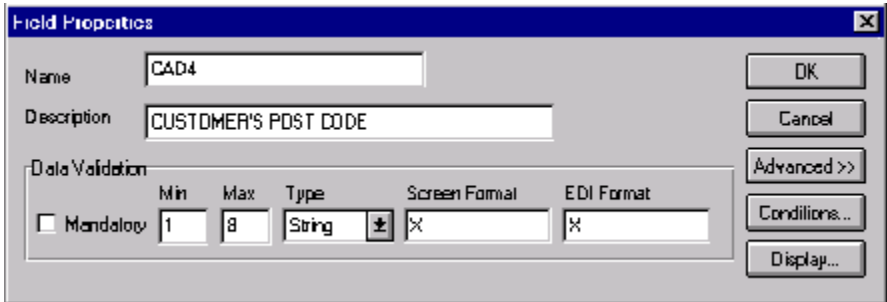
3. In the Label field, type “Address Line 4” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the fourth line of the customer’s address. This address line may not exceed 35 alphanumeric characters.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

Customising the CLO CADD CAD4 Element

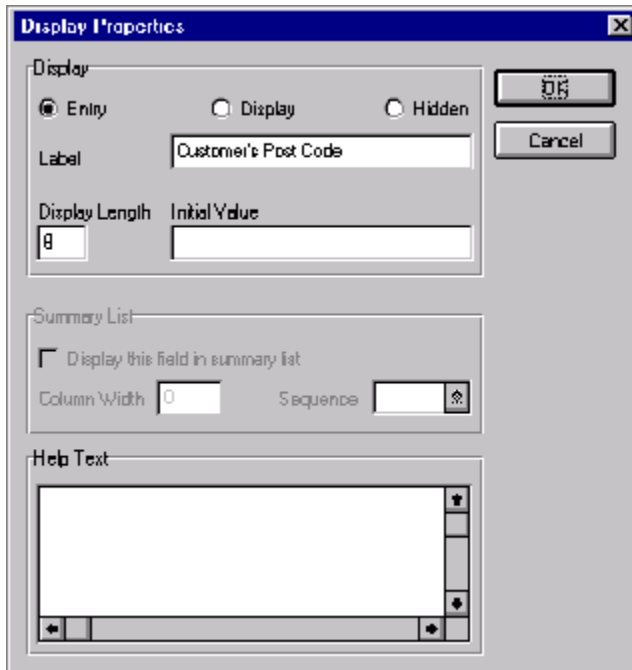
The CLO CADD CAD4 element (Customer’s Post Code) contains the post code of the customer’s address. You will rename the field label to shorten it and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the Customer’s Post Code field:

1. Double-click the CLO CADD CAD4 element. The Field Properties dialogue is displayed.



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



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

4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

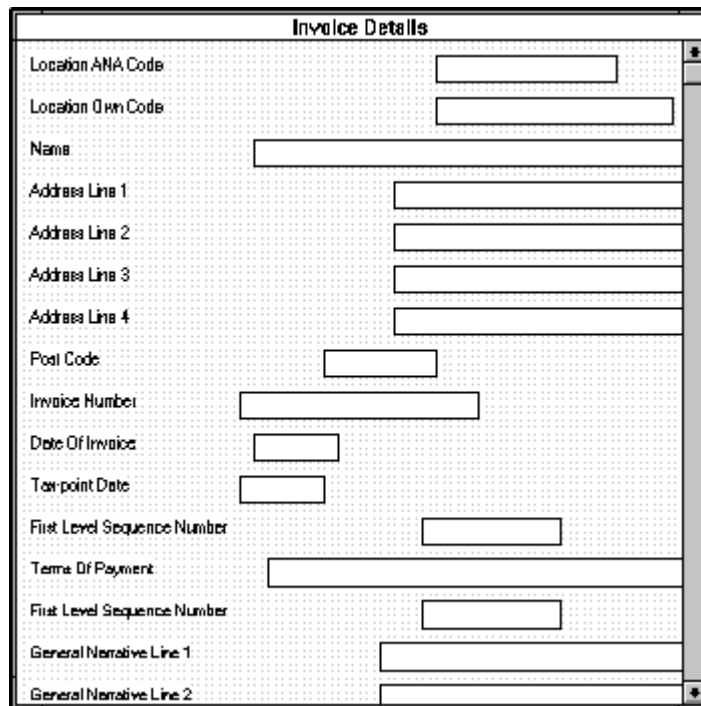
“Type the post code of the customer’s address. The post code may not exceed 8 alphanumeric characters.”

5. Click **OK** to exit the Display Properties dialogue.
6. Click **CLOSE** to exit the Field Properties dialogue.



7. Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form.

The Invoice Details frame now should look like this:



The screenshot shows a window titled "Invoice Details" with a dotted background. It contains the following fields:

Location ANA Code	<input type="text"/>
Location Own Code	<input type="text"/>
Name	<input type="text"/>
Address Line 1	<input type="text"/>
Address Line 2	<input type="text"/>
Address Line 3	<input type="text"/>
Address Line 4	<input type="text"/>
Post Code	<input type="text"/>
Invoice Number	<input type="text"/>
Date Of Invoice	<input type="text"/>
Terpoint Date	<input type="text"/>
First Level Sequence Number	<input type="text"/>
Terms Of Payment	<input type="text"/>
First Level Sequence Number	<input type="text"/>
General Narrative Line 1	<input type="text"/>
General Narrative Line 2	<input type="text"/>

Customising the IRF Segment

The IRF segment (Invoice References) contains details about the invoice, such as the invoice number, invoice date, and tax-point date. This segment, and all the elements contained in it, must be present in the invoice. You already changed the maximum use for this segment, so that this segment will be used only once in an invoice.

Customising the IRF INVN Element

The IRF INVN element (Invoice Number) contains the number assigned by the supplier for this invoice (in this tutorial, you are the supplier). You will rename the field label to shorten it and add Help text to this field. (You already set up this element as the document name.)

Complete the following steps to rename the field label and add Help text to the Invoice Number field:

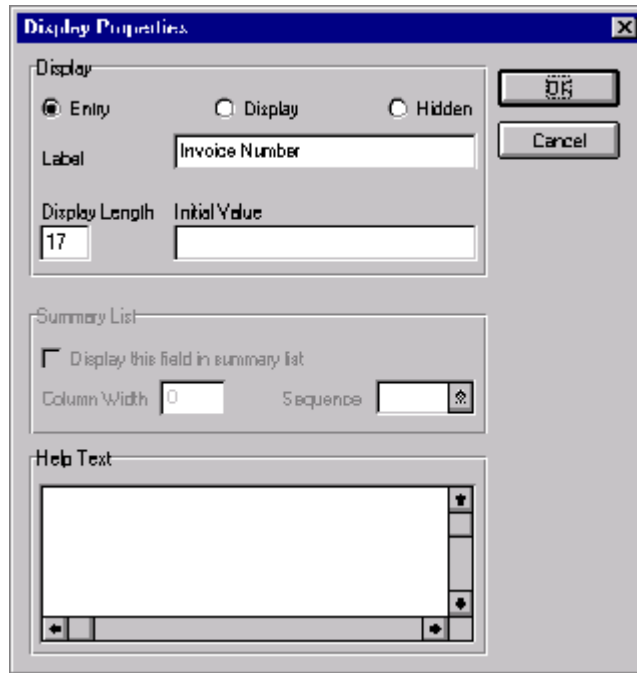
1. Double-click the IRF INVN element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box. The 'Name' field contains 'INVN' and the 'Description' field contains 'INVOICE NUMBER'. The 'Data Validation' section includes a table with the following data:

	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	17	String	X	X

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

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



The screenshot shows the 'Display Properties' dialog box. It has a title bar with the text 'Display Properties' and a close button. The dialog is divided into three main sections. The top section, 'Display', contains three radio buttons: 'Entry' (which is selected), 'Display', and 'Hidden'. Below these are two text boxes: 'Label' containing 'Invoice Number' and 'Display Length' containing '17'. The 'Initial Value' text box is empty. The middle section, 'Summary List', contains a checkbox labeled 'Display this field in summary list' which is unchecked. Below the checkbox are two text boxes: 'Column Width' containing '0' and 'Sequence' which is empty. The bottom section, 'Help Text', contains a large text area with scrollbars, currently empty.

3. In the Label field, type "Invoice No." to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
"Type the invoice number. The invoice number may not exceed 17 alphanumeric characters."
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

Customising the IRF IVDT Element

The IRF IVDT element (Date of Invoice) contains the invoice date. You will change the screen format for the invoice date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, your users will enter the invoice date as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. In addition, you will rename the field label and add Help text to this field.

Complete the following steps to change the screen format, change the field and element lengths, rename the field label, and add Help text to the Date of Invoice field:

1. Double-click the IRF IVDT element. The Field Properties dialogue is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	6	6	Dt/Tm	YYMMDD	YYMMDD

2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to indicate that this field on the translation object will accept a date entered in the format DD/MM/YY.

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

The screenshot shows the 'Display Properties' dialog box. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' field contains 'Date Of Invoice'. The 'Display Length' field contains '6'. The 'Summary List' section has an unchecked checkbox 'Display this field in summary list'. The 'Help Text' section is empty. The 'OK' and 'Cancel' buttons are on the right.

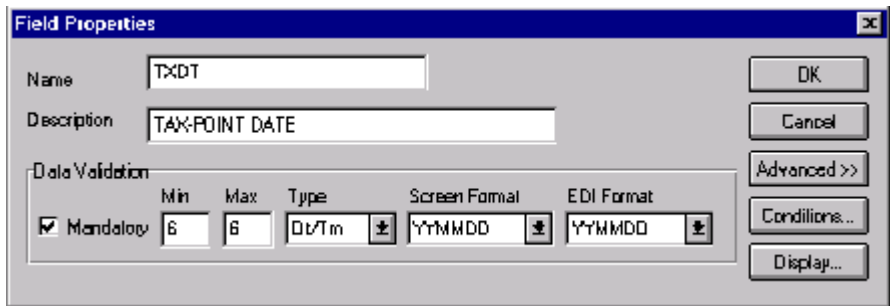
- In the Label field, type “Invoice Date” to replace the existing field label.
- In the Display Length field, type “8” to allow the entire date to be displayed, including separators (/).
- In the Help Text list box, type the following text:
“Type the invoice date. Use the format DD/MM/YY.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the IRF TXDT Element

The IRF TXDT element (Tax-Point Date) contains the date on which the VAT is applied. The tax-point date often is the same as the invoice date. You will change the screen format for the tax-point date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, your users will enter the invoice date as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. In addition, you will add Help text to this field.

Complete the following steps to change the screen format, change the field and element lengths, and add Help text to the Date of Invoice field:

1. Double-click the IRF TXDT element. The Field Properties dialogue is displayed.



2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to indicate that this field on the translation object will accept a date entered in the format DD/MM/YY.

4. Click DISPLAY... to access the Display Properties dialogue.

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 containing 'Tax-point Date'. The 'Display Length' section has a text box containing '6' and an 'Initial Value' text box. The 'Summary List' section has a checkbox 'Display this field in summary list' which is unchecked, a 'Column Width' text box, and a 'Sequence' text box with a dropdown arrow. The 'Help Text' section has a large text area with scrollbars.

5. In the Display Length field, type “8” to allow the entire date to be displayed, including separators (/).
6. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the tax-point date. The tax-point date is the date the VAT was applied. Use the format DD/MM/YY.”
7. Click OK to exit the Display Properties dialogue.
8. Click CLOSE to exit the Field Properties dialogue.
9. Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.



The Invoice Details frame now should look like this:

The screenshot shows a window titled "Invoice Details" with a dotted background. It contains the following fields:

- Location ANA Code:
- Location Own Code:
- Name:
- Address Line 1:
- Address Line 2:
- Address Line 3:
- Address Line 4:
- Post Code:
- Invoice No.:
- Invoice Date:
- Tax-point Date:
- First Level Sequence Number:
- Terms Of Payment:
- First Level Sequence Number:
- General Narrative Line 1:
- General Narrative Line 2:

Customising the PYT Segment

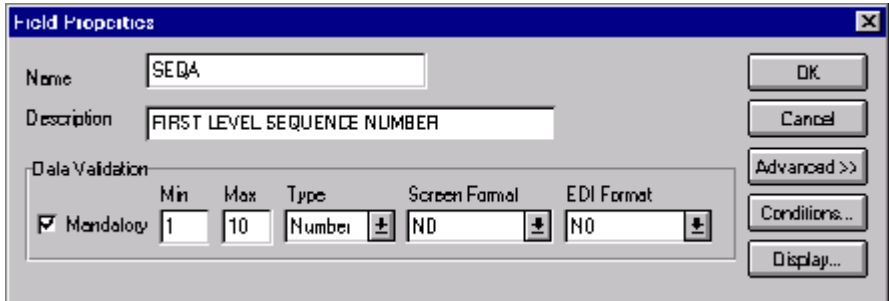
The PYT segment (Settlement Terms) specifies the settlement terms that apply to the invoice. You already changed the maximum use of the PYT segment to one.

Customising the PYT SEQA Element

The PYT SEQA element (First Level Sequence Number) contains the sequence number for the PYT segment. According to the standard, this number starts at one and increases for each occurrence of the PYT segment. You already changed the maximum use of the PYT segment to one (indicating that you will use the PYT segment only once per invoice). You will define a constant value for this field, designating that the constant "ONE" (which has a value of "1") is always the value in the PYT SEQA element. Then, you will prevent this field from being displayed in the screen entry form, since users will not need to enter a value in this field.

Complete the following steps to define a constant and hide the First Level Sequence Number field:

1. Double-click the PYT SEQA element. The Field Properties dialogue is displayed.

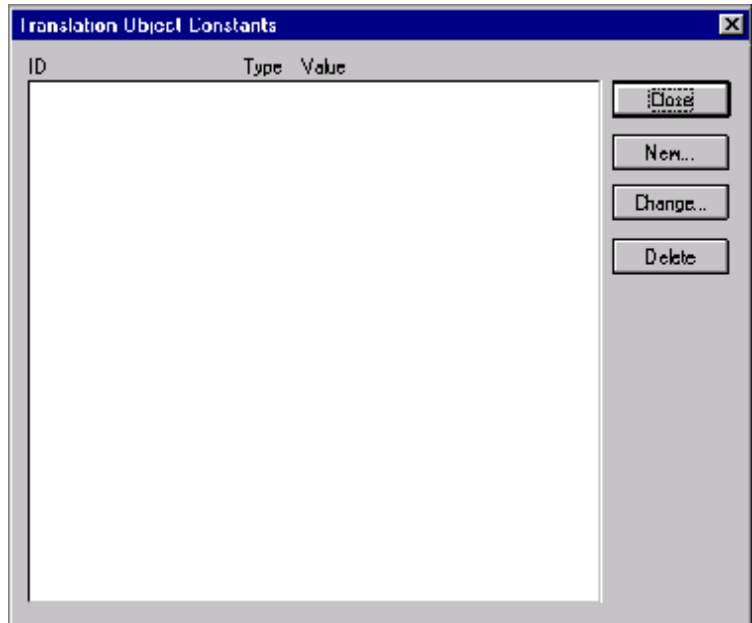


The Field Properties dialog box is shown with the following fields and options:

- Name: SEQA
- Description: FIRST LEVEL SEQUENCE NUMBER
- Data Validation section:
 - Mandatory
 - Min: 1
 - Max: 10
 - Type: Number
 - Screen Format: NO
 - EDI Format: NO

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

2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Constant radio button.
5. Click the second Constant radio button.
6. Click **EDIT...** to access the Translation Object Constants dialogue.

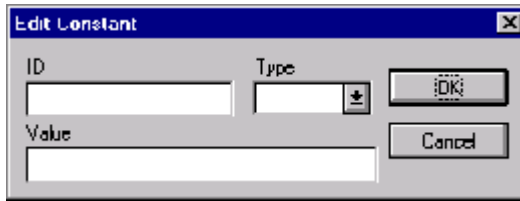


The Translation Object Constants dialog box is shown with the following structure:

ID	Type	Value
----	------	-------

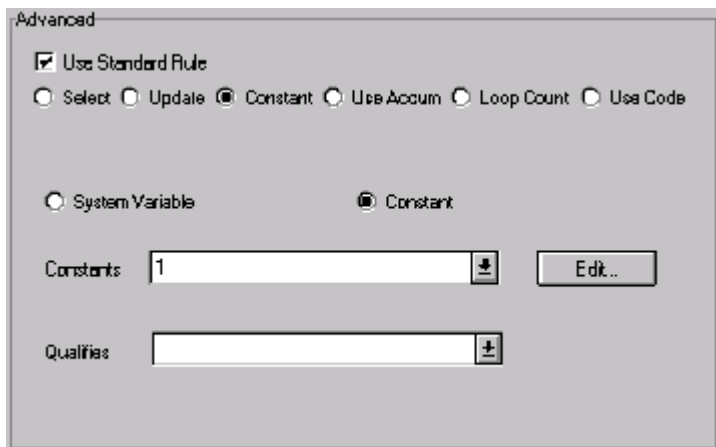
Buttons on the right side: Close, New..., Change..., Delete

- Click NEW... to access the Edit Constant dialogue.



- In the ID field, type "ONE" to identify the constant.
- From the Type drop-down list box, select "Integer" to indicate that the literal constant will be formatted as an integer (number) data type (not containing decimal places).
- In the Value field, type "1" to indicate that the First Level Sequence Number field must contain the value "1". This value is the actual value of the literal constant.
- Click OK to add the constant.
- Click CLOSE to exit the Translation Object Constants dialogue.
- In the Constants drop-down list box, select "1" to identify the constant that will be used for this element.

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



14. Click DISPLAY... to access the Display Properties dialogue.

The screenshot shows the 'Display Properties' dialog box. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' text box contains 'First Level Sequence Number'. The 'Display Length' text box contains '10' and the 'Initial Value' text box is empty. The 'Summary List' section has a checkbox 'Display this field in summary list' which is unchecked. The 'Column Width' text box is empty and the 'Sequence' text box is empty. The 'Help Text' section has a large empty text area with scrollbars. On the right side, there are 'OK' and 'Cancel' buttons.

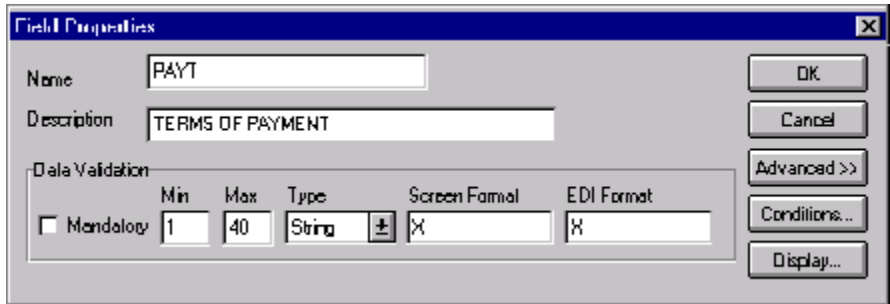
15. Click the Hidden radio button to prevent the field from being displayed in the translation object.
16. Click OK to exit the Display Properties dialogue.
17. Click CLOSE to exit the Field Properties dialogue.

**Customising the
PYT PAYT Element**

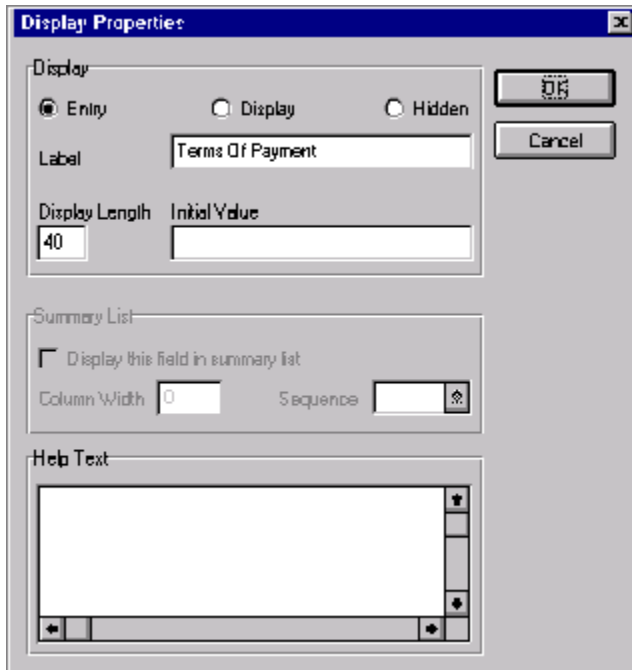
The PYT PAYT element (Terms of Payment) contains the description of the settlement terms. You will rename the field label and add Help text to this field.


Complete the following steps to rename the field label and add Help text to the Terms of Payment field:

1. Double-click the PYT PAYT element. The Field Properties dialogue is displayed.

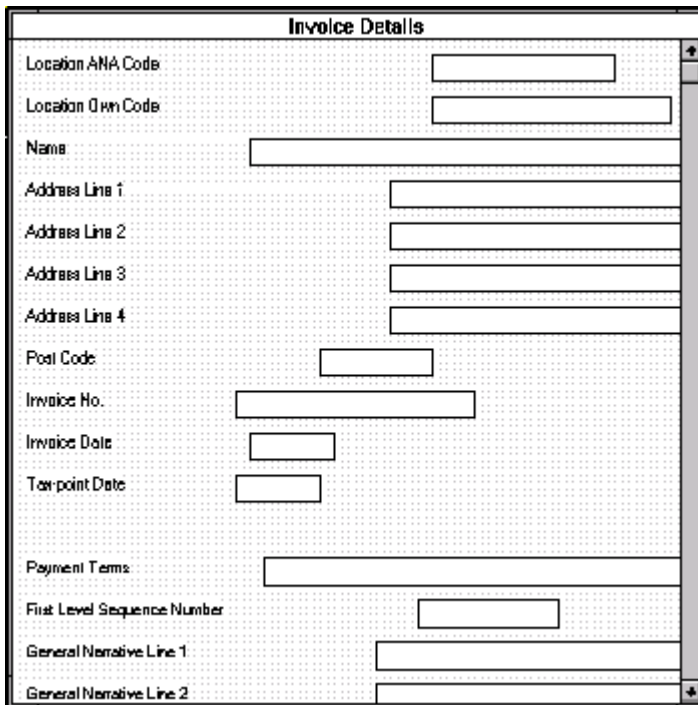


2. Click DISPLAY... to access the Display Properties dialogue.



3. In the Label field, type “Payment Terms” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the payment terms. The payment terms may not exceed 40 alphanumeric characters.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.
-  7. Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.

The Invoice Details frame now should look like this:



The screenshot shows a window titled "Invoice Details" with a dotted background. It contains the following fields:

- Location ANA Code:
- Location Own Code:
- Name:
- Address Line 1:
- Address Line 2:
- Address Line 3:
- Address Line 4:
- Post Code:
- Invoice No.:
- Invoice Date:
- Taxpoint Date:
- Payment Terms:
- First Level Sequence Number:
- General Narrative Line 1:
- General Narrative Line 2:

Customising the DNA Segment

The DNA segment (Data Narrative) contains narrative (descriptive text) pertaining to the invoice. The standard allows this segment to be used up to 999,999 times in an invoice. Your users will use this segment only once per segment, so you already changed the maximum use to one.

Customising the DNA SEQA:2 Element

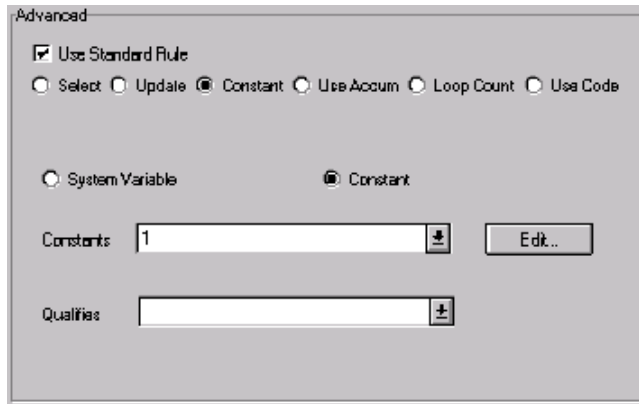
The DNA SEQA:2 element (First Level Sequence Number) contains the sequence number for the DNA segment. According to the standard, this number starts at one and increases for each occurrence of the DNA segment. You already changed the maximum use of the DNA segment to one (indicating that you will use the DNA segment only once per invoice). You will use the constant "ONE" (which has a value of "1"), so that "1" is always the value in the DNA SEQA:2 element. Then, you will prevent this field from being displayed in the screen entry form, since users will not need to enter a value in this field.

1. Double-click the DNA SEQA:2 element. The Field Properties dialogue is displayed.

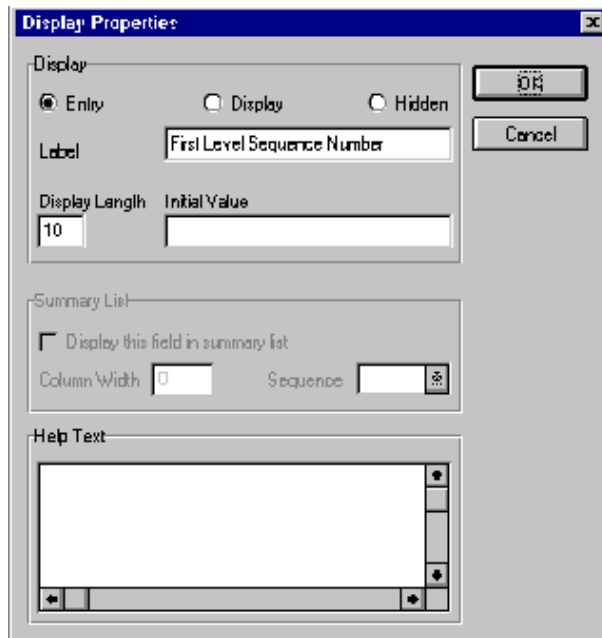
Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	10	Number	NO	NO

2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Constant radio button.
5. Click the second Constant radio button.
6. In the Constants drop-down list box, select "1" to identify the constant that will be used for this element.

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



7. Click DISPLAY... to access the Display Properties dialogue.



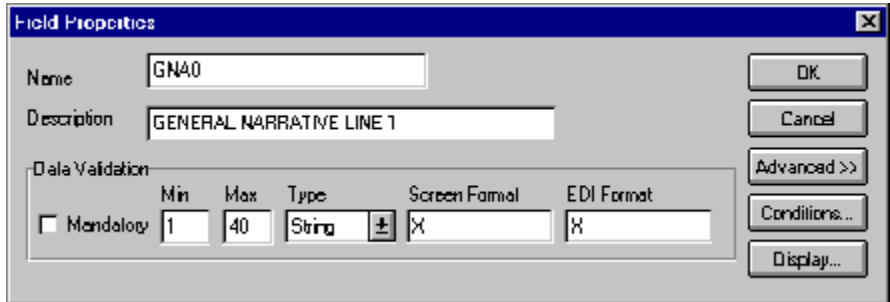
8. Click the Hidden radio button to prevent the field from being displayed in the translation object.
9. Click OK to exit the Display Properties dialogue.
10. Click CLOSE to exit the Field Properties dialogue.

Customising the DNA GNAR GNA0 Element

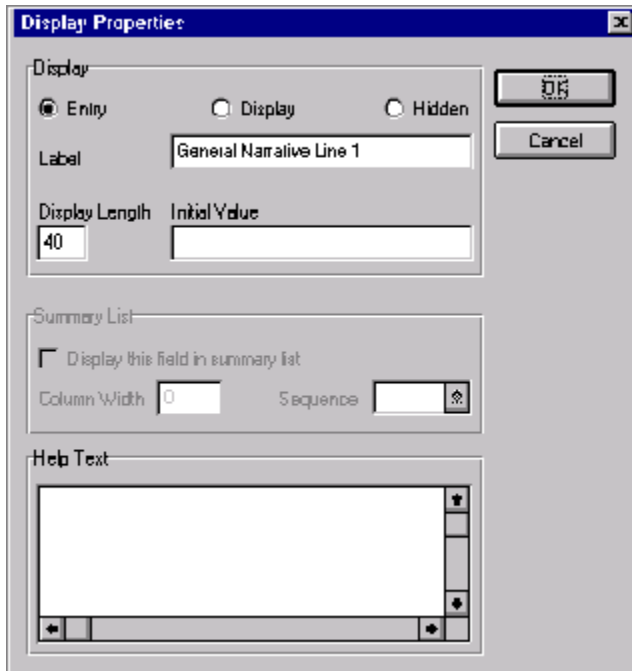
The DNA GNAR GNA0 element (General Narrative Line 1) contains descriptive text pertaining to the invoice. Users can enter up to four lines (each with up to forty characters) of descriptive text. For this tutorial, you will rename the field label Invoice Notes and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the General Narrative Line 1 field:

1. Double-click the DNA GNAR GNA0 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type “Invoice Notes” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the first line of the invoice notes. The invoice notes consist of descriptive text that pertains to the entire invoice. This line of invoice notes may not exceed 40 alphanumeric characters.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

Customising the DNA GNAR GNA1 Element

The DNA GNAR GNA1 element (General Narrative Line 2) contains the second line of descriptive text pertaining to the invoice. Users can enter up to four lines (each with up to forty characters) of descriptive text. For this tutorial, only the first line of descriptive text (General Narrative Line 1) will be labelled. Therefore, you will remove the field label for the General Narrative Line 2 field and add Help text to this field.

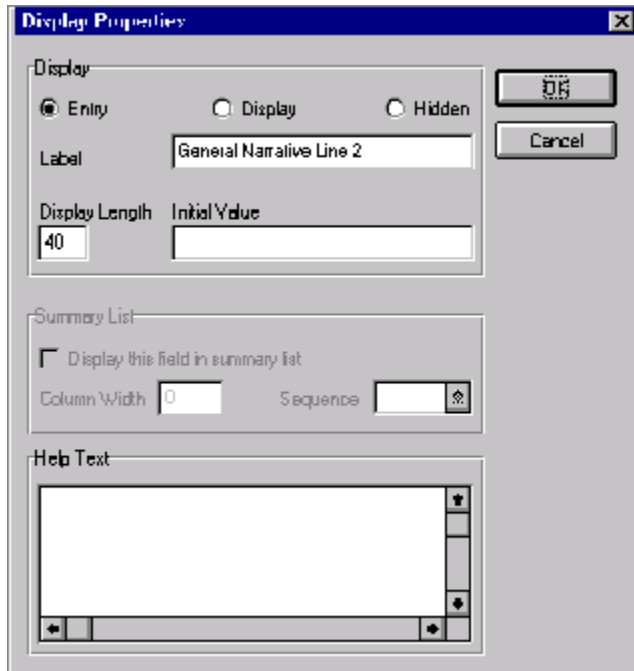
Complete the following steps to remove the field label and add Help text to the General Narrative Line 2 field:

1. Double-click the DNA GNAR GNA1 element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box for the 'GNA1' field. The 'Name' field contains 'GNA1' and the 'Description' field contains 'GENERAL NARRATIVE LINE 2'. The 'Data Validation' section is expanded, showing a table with columns for 'Mandatory', 'Min', 'Max', 'Type', 'Screen Format', and 'EDI Format'. The 'Mandatory' checkbox is unchecked, 'Min' is 1, 'Max' is 40, 'Type' is String, and both 'Screen Format' and 'EDI Format' contain the character 'X'. On the right side of the dialog, there are buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	40	String	X	X

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



- In the Label field, delete the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

“Type the second line of the invoice notes. The invoice notes consist of descriptive text that pertains to the entire invoice. This line of invoice notes may not exceed 40 alphanumeric characters.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the DNA GNAR GNA2 Element

The DNA GNAR GNA2 element (General Narrative Line 3) contains the third line of descriptive text pertaining to the invoice. Users can enter up to four lines (each with up to forty characters) of descriptive text. For this tutorial, only the first line of descriptive text (General Narrative Line 1) will be labelled. Therefore, you will remove the field label for the General Narrative Line 3 field and add Help text to this field.

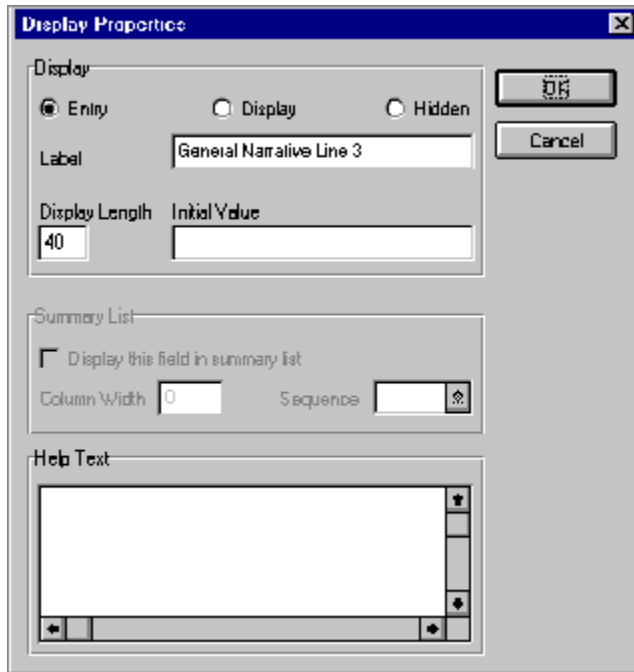
Complete the following steps to remove the field label and add Help text to the General Narrative Line 3 field:

1. Double-click the DNA GNAR GNA2 element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box for the 'GNA2' field. The 'Name' field contains 'GNA2' and the 'Description' field contains 'GENERAL NARRATIVE LINE 3'. The 'Data Validation' section is expanded, showing a table with columns for 'Mandatory', 'Min', 'Max', 'Type', 'Screen Format', and 'EDI Format'. The 'Mandatory' checkbox is unchecked, 'Min' is 1, 'Max' is 40, 'Type' is 'String', and both 'Screen Format' and 'EDI Format' contain the character 'X'. On the right side of the dialog, there are buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	40	String	X	X

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



- In the Label field, delete the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

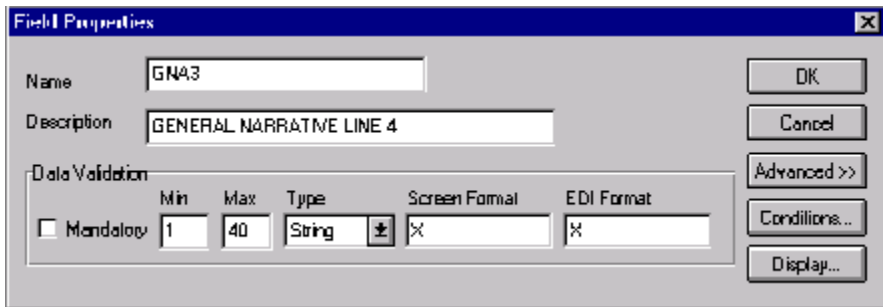
“Type the third line of the invoice notes. The invoice notes consist of descriptive text that pertains to the entire invoice. This line of invoice notes may not exceed 40 alphanumeric characters.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

**Customising the
DNA GNAR GNA3
Element**

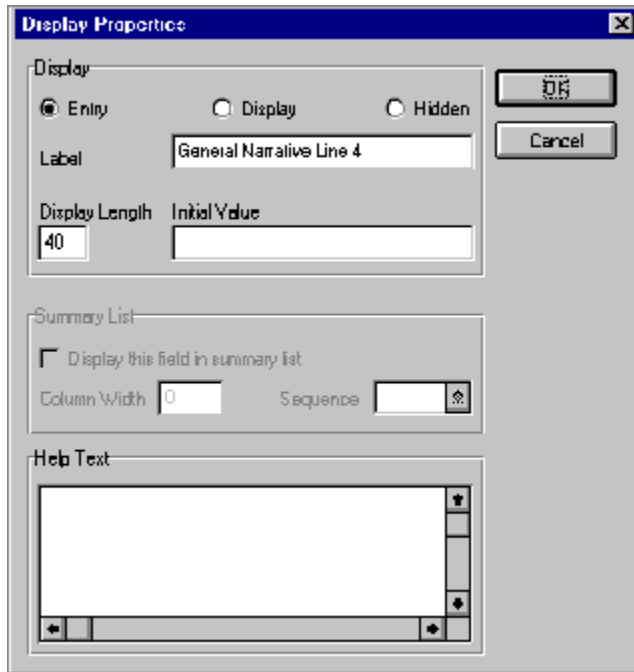
The DNA GNAR GNA3 element (General Narrative Line 4) contains the fourth line of descriptive text pertaining to the invoice. Users can enter up to four lines (each with up to forty characters) of descriptive text. For this tutorial, only the first line of descriptive text (General Narrative Line 1) will be labelled. Therefore, you will remove the field label for the General Narrative Line 4 field and add Help text to this field.

Complete the following steps to remove the field label and add Help text to the General Narrative Line 4 field:


1. Double-click the DNA GNAR GNA3 element. The Field Properties dialogue is displayed.



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



- In the Label field, delete the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

“Type the fourth line of the invoice notes. The invoice notes consist of descriptive text that pertains to the entire invoice. This line of invoice notes may not exceed 40 alphanumeric characters.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.
-  Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.

The section of the Invoice Details frame that contains the fields in the DNA segment now should look like this:

The screenshot shows a window titled "Invoice Details" with a dotted background. It contains the following fields:

- Address Line 1
- Address Line 2
- Address Line 3
- Address Line 4
- Post Code
- Invoice No.
- Invoice Date
- Taxpoint Date
- Payment Terms
- Invoice Notes (with four stacked text boxes)
- First Level Sequence Number

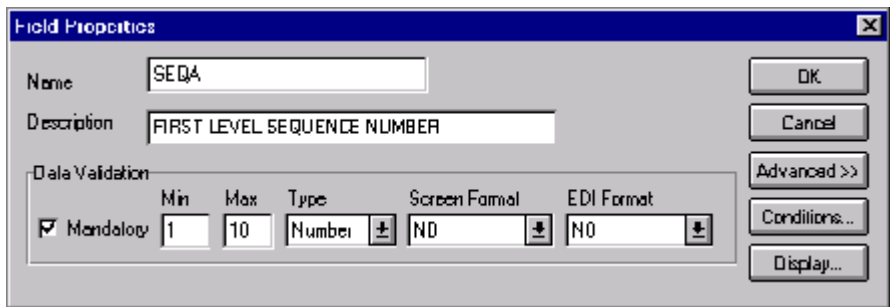
Customising the ODD Group

The ODD group contains the Order and Delivery Terms information for the invoice. In this tutorial, the ODD group will be used for information about the customer's order number, the date the order was placed, and the delivery number and date. The standard allows the ODD group to be used up to 999,999 times per invoice. In this tutorial, you will use the ODD group only once per invoice. You already changed the maximum use of the ODD group to one, which placed the associated fields on the main Invoice Details frame with the majority of the invoice fields.

**Customising the
ODD:2 SEQA
Element**

The ODD:2 SEQA element (First Level Sequence Number) contains the sequence number for the ODD:2 segment. According to the standard, this number starts at one and increases for each occurrence of the ODD:2 segment. The ODD:2 segment has a maximum use of only one, so the value in the ODD:2 SEQA element will always be “1”. You will use the constant “ONE” (which has a value of “1”), so that “1” is always the value in the ODD:2 SEQA:2 element. Then, you will prevent this field from being displayed in the screen entry form, since users will not need to enter a value in this field.

1. Double-click the ODD:2 SEQA element. The Field Properties dialogue is displayed.



2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Constant radio button.
5. Click the second Constant radio button.
6. From the Constants drop-down list box, select “1” to identify the constant that will be used for this element.

The Advanced section of the Field Properties dialogue 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), 'Select', '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 text input fields: 'Constants' with the value '1' and 'Qualifies' which is empty. An 'Edit...' button is next to the 'Constants' field.

7. Click DISPLAY... to access the Display Properties dialogue.

The screenshot shows the 'Display Properties' dialog box. It has three radio button options: 'Entry' (checked), 'Display', and 'Hidden'. The 'Label' field contains 'First Level Sequence Number'. There are two text input fields: 'Display Length' with the value '10' and 'Initial Value' which is empty. Below these are two more text input fields: 'Column Width' with the value '0' and 'Sequence' which is empty. There is a checkbox labeled 'Display this field in summary list' which is unchecked. At the bottom is a large text area for 'Help Text'.

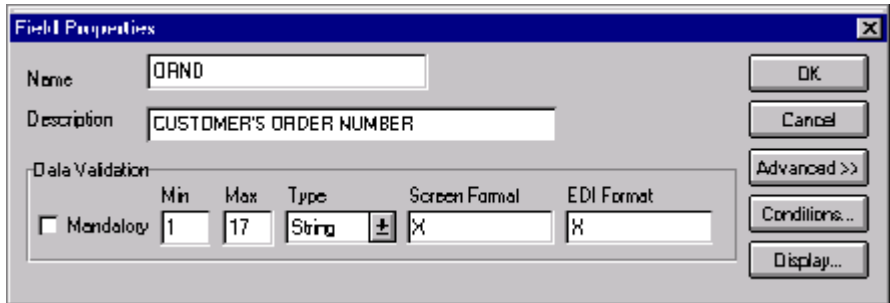
8. Click the Hidden radio button to prevent the field from being displayed in the translation object.
9. Click OK to exit the Display Properties dialogue.
10. Click CLOSE to exit the Field Properties dialogue.

Customising the ODD:2 ORNO ORNO Element

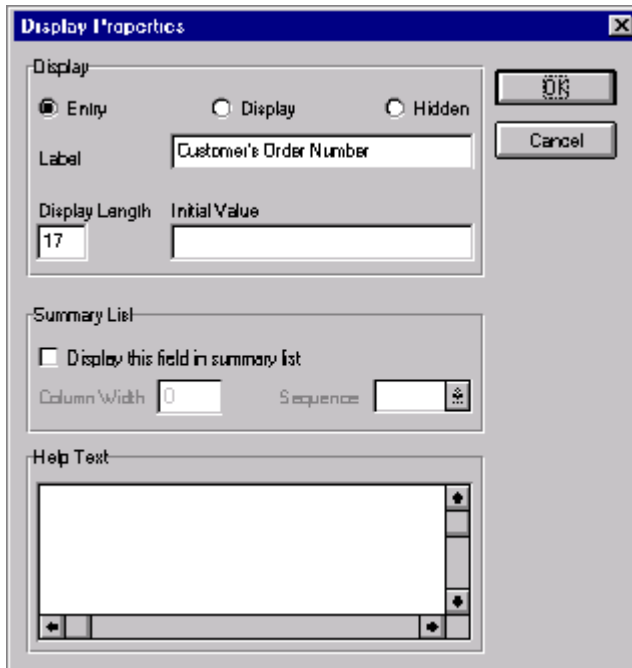
The ODD:2 ORNO ORNO element (Customer's Order Number) contains the number assigned by the customer to identify the order. You will rename the field label and add Help text to this field.

Complete the following steps to change the field label for the Customer's Order Number field:

1. Double-click the ODD:2 ORNO ORNO element. The Field Properties dialogue is displayed.



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



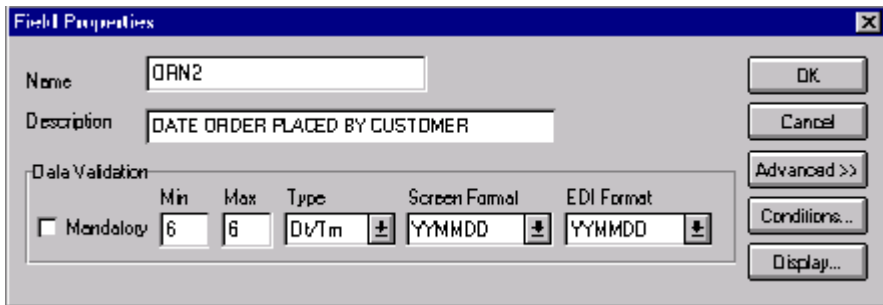
3. In the Label field, type “Customer’s P.O. No.” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the customer’s purchase order number. The purchase order number may not exceed 17 alphanumeric characters.”
5. Click **OK** to exit the Display Properties dialogue.
6. Click **CLOSE** to exit the Field Properties dialogue.

**Customising the
ODD:2 ORNO
ORN2 Element**

The ODD:2 ORNO ORN2 element (Date Order Placed by Customer) contains the date on which the customer placed the purchase order. You will change the screen format for the purchase order date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, the purchase order date will be printed as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. For brevity, you will change the field label to P.O. Date.

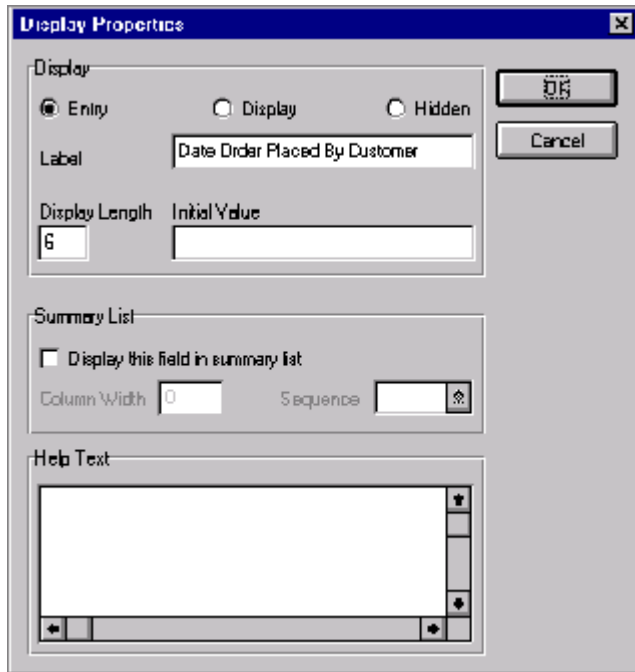
Complete the following steps to change the screen format, change the element and field lengths, and rename the field label for the Date Order Placed by Customer field:

1. Double-click the ODD:2 ORNO ORN2 element. The Field Properties dialogue is displayed.



2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to indicate that this field on the translation object will accept a date entered in the format DD/MM/YY.

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



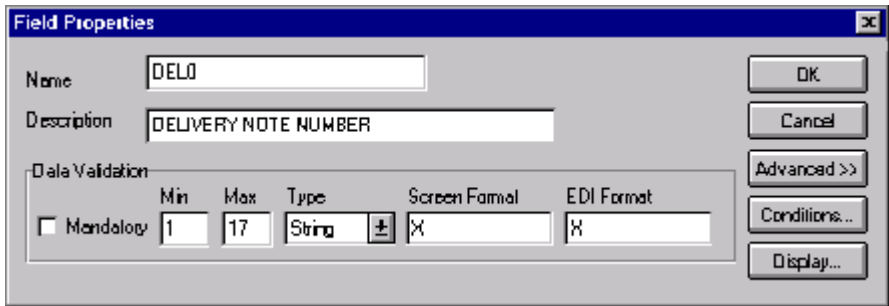
- In the Label field, type "P.O. Date" to replace the existing field label.
- In the Display Length field, type "8" to allow the entire date, including separators (/), to be displayed.
- In the Help Text list box, type the following text:
"Type the purchase order date. Use the format DD/MM/YY."
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the ODD:2 DELN DEL0 Element

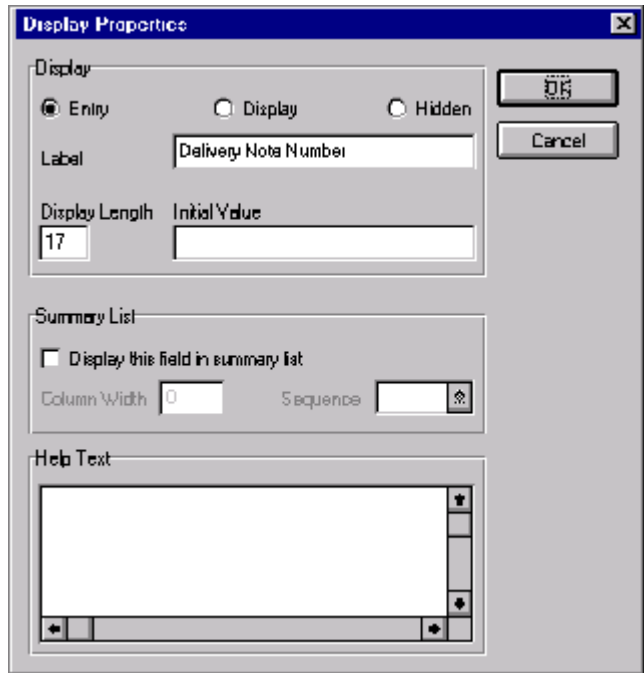
The ODD:2 DELN DEL0 element (Delivery Note Number) contains the number corresponding to the delivery note. The only customising you will perform for this field is adding Help text.

Complete the following steps to add Help text to the Delivery Note Number field:

1. Double-click the ODD:2 DELN DEL0 element. The Field Properties dialogue is displayed.



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



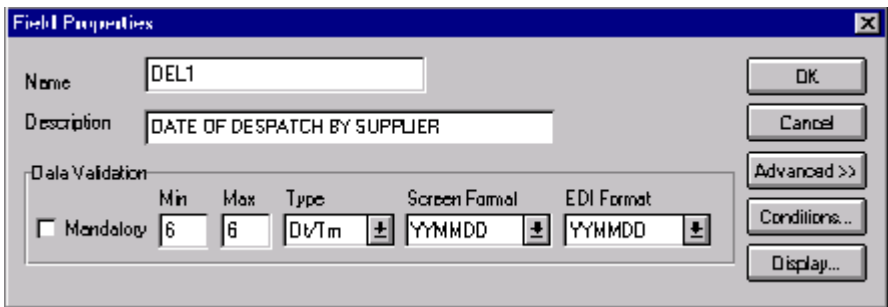
3. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
 “Type the number corresponding to the delivery note. The delivery note number may not exceed 17 alphanumeric characters.”
4. Click **OK** to exit the Display Properties dialogue.
5. Click **CLOSE** to exit the Field Properties dialogue.

Customising the ODD:2 DELN DEL1 Element

The ODD:2 DELN DEL1 element (Date of Despatch by Supplier) contains the date on which the order was delivered. You will change the screen format for the delivery date to DD/MM/YY. Also, this element is defined by the standard to be a six-digit date. In this tutorial, the delivery date will be printed as an eight-digit date, so you will change the element and field lengths to accommodate the longer date. For brevity, you will change the field label to P.O. Date.

Complete the following steps to change the screen format, change the element and field lengths, and rename the field label for the Date of Despatch by Supplier field:

1. Double-click the ODD:2 DELN DEL1 element. The Field Properties dialogue is displayed.



2. In the Max field, type “8” to allow the entire date, including separators (/), to be contained in this element.
3. From the Screen Format drop-down list box, select “DD/MM/YY” to indicate that this field on the translation object will accept a date entered in the format DD/MM/YY.

4. Click DISPLAY... to access the Display Properties dialogue.

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 'Date Of Despatch By Supplier'. The 'Display Length' section has a text box with '6' 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 '∞'. The 'Help Text' section has a large empty text area with scrollbars.

5. In the Label field, type “Delivery Date” to replace the existing field label.
6. In the Display Length field, type “8” to allow the entire date, including separators (/), to be displayed.
7. In the Help Text list box, type the following text:
“Type the delivery date. Use the format DD/MM/YY.”
8. Click OK to exit the Display Properties dialogue.
9. Click CLOSE to exit the Field Properties dialogue.

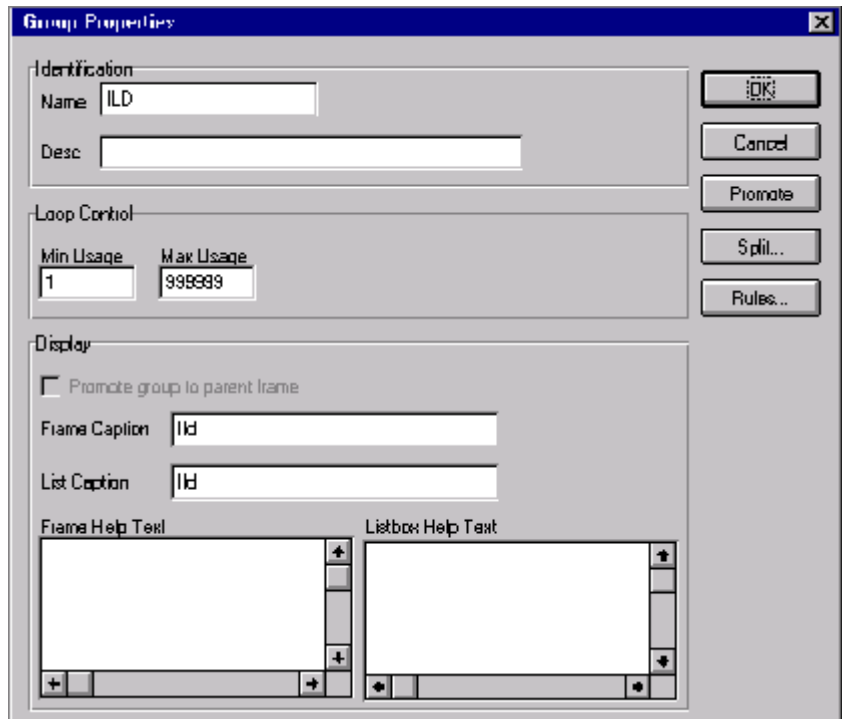
Customising the ILD Group

The ILD group (Invoice Line Details) contains the line item detail for each item invoiced. The standard allows the ILD group to be used up to 999,999 times per invoice.

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

Complete the following steps to rename the ILD frame and list box, provide a description for the ILD group, and add Help text to the line items list box:

1. Click the ILD group with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu. The Group Properties dialogue is displayed.



3. In the Desc field, type “Line Items” to describe the group.
4. In the Frame Caption field, type “Line Items” to rename the frame.
5. In the List Caption field, type “Line Items” to rename the list box that is displayed on the Invoice Details frame (listing the line items entered on the Line Items frame).
6. In the Frame Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“This frame contains line item detail information. For online Help on an individual field on this frame, select the field and press F1.”
7. In the Listbox Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“This list 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.”
8. Click OK to exit the Group Properties dialogue.

Customising the ILD:2 Segment

The ILD:2 segment (Invoice Line Details) contains the line item detail for each item invoiced. For some of the elements in the ILD:2 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 will change the maximum lengths for some of the fields, use accumulators to calculate the number of line items, or define a constant value.

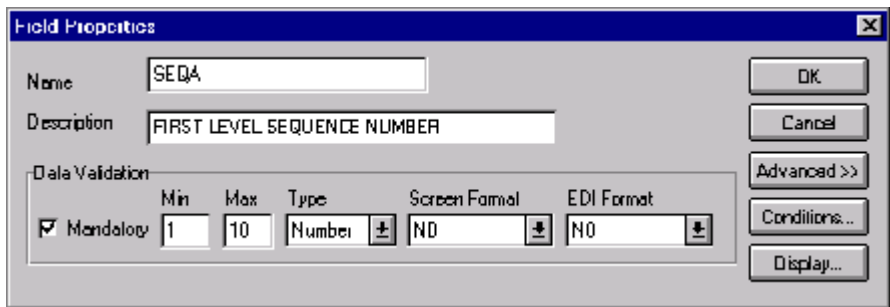
The ILD:2 group is subordinate to the Invoice Details frame, so Gentran:Director creates a separate frame (the Line Items frame) to contain the group data (the line item details). The system also creates a list box (the Line Items list box) on the Invoice Details frame to allow the user to access the items in the list box. Each set of data is displayed as a row in the list box. After you customise the line item fields, the Line Items list box will contain these four columns of data: Item, Product, Qty, and Price.

**Customising the
ILD:2 SEQA
Element**

The ILD:2 SEQA element (First Level Sequence Number) contains the sequence number for the ODD group (the parent group in which the ILD:2 SEQA element resides). According to the standard, this number starts at one and increases for each occurrence of the ODD group. The ODD group has a maximum use of only one, so the value in the ILD:2 SEQA element will always be “1”. You will use the constant “ONE” (which has a value of “1”), so that “1” is always the value in the ILD:2 SEQA:2 element. Then, you will prevent this field from being displayed in the screen entry form, since users will not need to enter a value in this field.

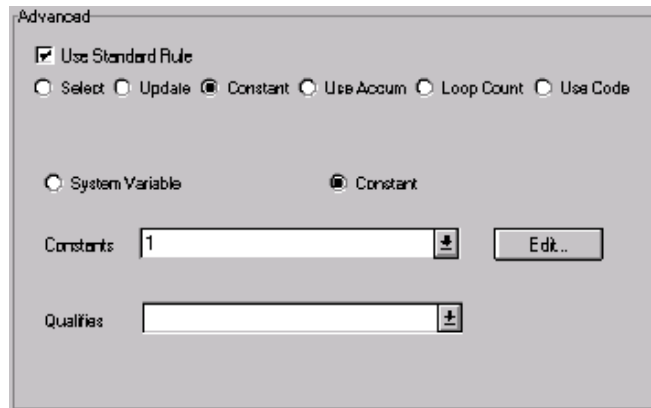
Complete the following steps to use a constant and hide the First Level Sequence Number field:

1. Double-click the ILD:2 SEQA element. The Field Properties dialogue is displayed.



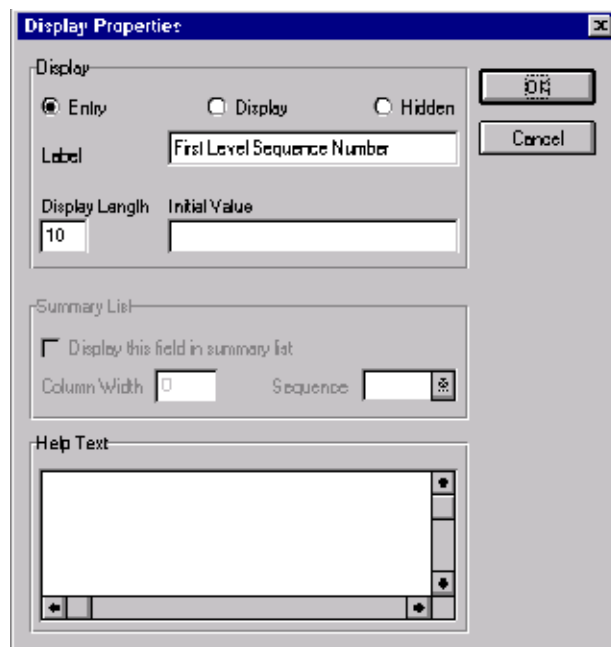
2. If the Advanced section of the dialogue currently is not displayed, click ADVANCED>> to access this section, which enables you to define rules.
3. In the Advanced section, click the Use Standard Rule check box.
4. Click the Constant radio button.
5. Click the second Constant radio button.
6. From the Constants drop-down list box, select “1” to identify the constant that will be used for this element.

The Advanced section of the Field Properties dialogue 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), 'Select', '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' with the value '1' and a dropdown arrow, and 'Qualifies' with a dropdown arrow. An 'Edit...' button is located to the right of the 'Constants' field.

7. Click DISPLAY... to access the Display Properties dialogue.



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 three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' field contains 'First Level Sequence Number'. The 'Display Length' field has the value '10', and the 'Initial Value' field is empty. In the 'Summary List' section, there is a checkbox 'Display this field in summary list' which is unchecked. The 'Column Width' field has the value '0', and the 'Sequence' field has a dropdown arrow. The 'Help Text' section contains a large empty text area with scrollbars.

8. Click the Hidden radio button to prevent the field from being displayed in the translation object.
9. Click OK to exit the Display Properties dialogue.
10. Click CLOSE to exit the Field Properties dialogue.

Customising the ILD:2 SEQB Element

The ILD:2 SEQB element (Second Level Sequence No.) contains the second-level sequence number for the ILD:2 segment in the ILD group (the subordinate group in which the ILD:2 SEQB element resides). According to the standard, this number starts at one and increases for each occurrence of the ILD group. You will use the Loop Count function to obtain the value of the current loop count, and then you will make this field display-only (since the users will not need to enter a value in this field). Also, since the value in this field reflects the sequential number for each line item, you will rename the field label Item No.

You will create a list box definition for this element to include the item number in the list box. Also, you know that your users will enter no more than 99,999 line items per invoice. Each line item will be numbered sequentially, starting with one, so you need a maximum length of only five digits for this field. You will change the field and element lengths for this field to five.

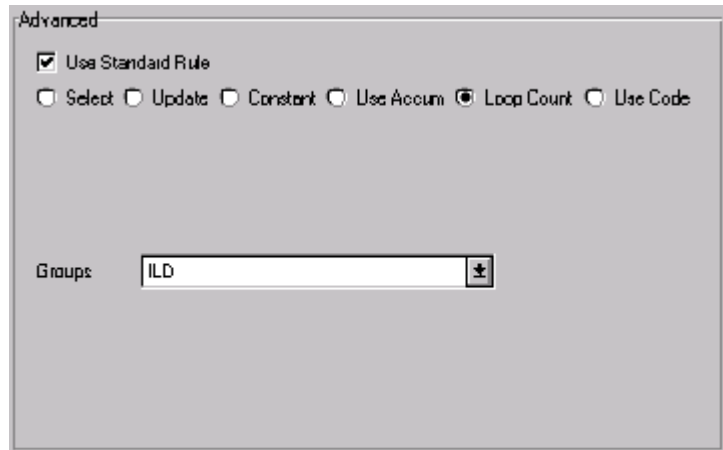
Complete the following steps to rename the field label, change the field and element lengths, add Help text, and create the list box definition for the Second Level Sequence No. field:

1. Double-click the ILD:2 SEQB element. The Field Properties dialogue is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandator	1	10	Number	NO	NO

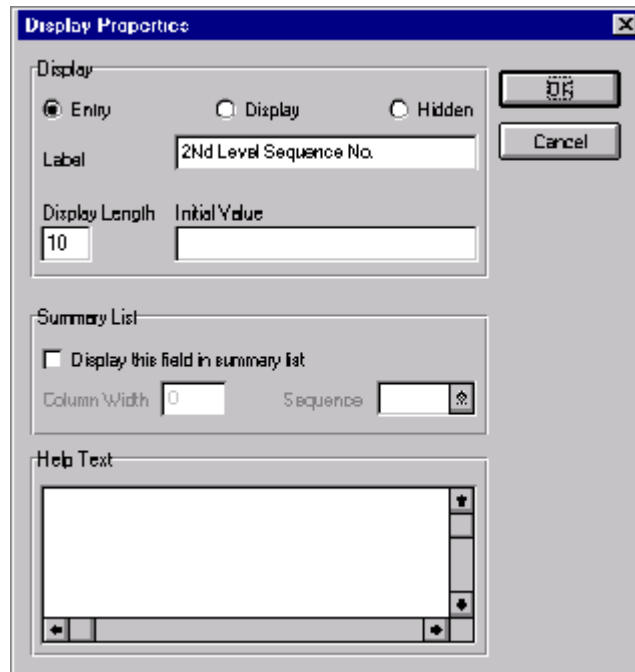
2. In the Max field, type “5” to allow a five-digit number in this element.
3. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
4. In the Advanced section, click the Use Standard Rule check box.
5. Click the Loop Count radio button.
6. In the Groups drop-down list box, select “ILD” to identify the loop for which you want to obtain the current value of the loop count. The ILD group is a nested group (the ODD group is the parent group of the ILD group).

The Advanced section of the Field Properties dialogue 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), 'Select', 'Update', 'Constant', 'Use Accum', 'Loop Count' (selected), and 'Use Code'. Below these options is a 'Groups' label followed by a text box containing 'ILD' and a small square icon with a downward arrow.

7. Click DISPLAY... to access the Display Properties dialogue.



The screenshot shows the 'Display Properties' dialog box. It has a title bar with 'Display Properties' and a close button. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. There is a 'Label' text box with '2Nd Level Sequence No.', a 'Display Length' text box with '10', and an 'Initial Value' text box. The 'Summary List' section has a checkbox 'Display this field in summary list' which is unchecked, and 'Column Width' and 'Sequence' text boxes. The 'Help Text' section has a large empty text area with scroll bars. On the right side, there are two buttons: 'OK' and 'Cancel'.

8. In the Display section, click the Display radio button to make this field display-only.

9. In the Label field, type “Item No.” to replace the existing field label.
10. In the Display Length field, type “5” to allow five numeric digits to be displayed in the field.
11. In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the Item No. field will be displayed in a column in the Line Items list box.
12. In the Column Width field, type “8” to set the width of this column in the Line Items list box.



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 width for each column is the exact width of the data, then there will not be space separating the columns of data.

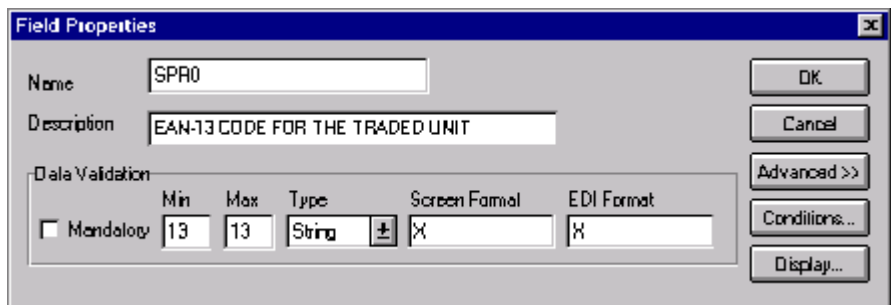
13. From the Sequence drop-down list box, select “1” to indicate that this field will be the first column in the list box.
14. Click OK to exit the Display Properties dialogue.
15. Click CLOSE to exit the Field Properties dialogue.

Customising the ILD:2 SPRO SPR0 Element

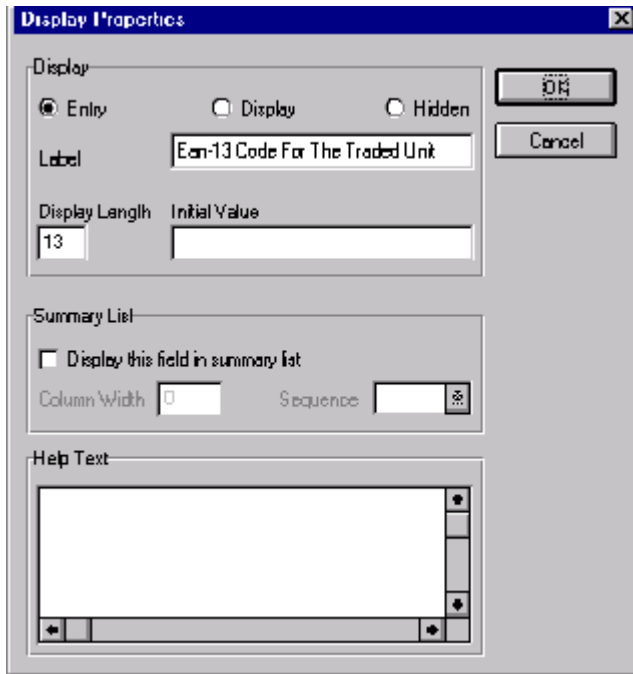
The ILD:2 SPRO SPR0 element (EAN-13 Code for the Traded Unit) contains the number of the thirteen-digit European Article Number allocated to the unit of trade (the invoiced item). In this tutorial, you will rename the field label to shorten it and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the EAN-13 Code for the Traded Unit field:

1. Double-click the ILD:2 SPRO SPR0 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type “EAN Code” to replace the existing field label.
4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the EAN code for the invoiced item. The EAN code must be exactly 13 alphanumeric characters long.”
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

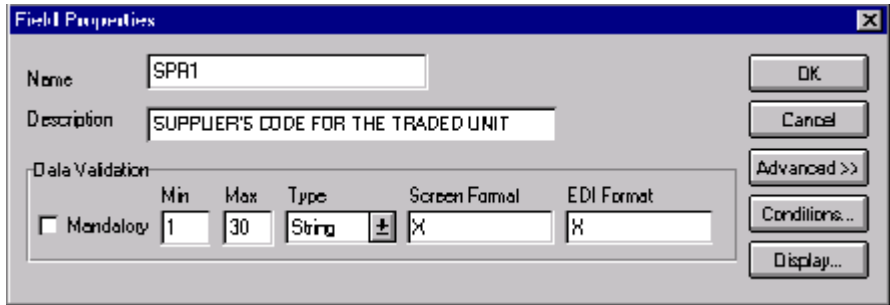
**Customising the
ILD:2 SPRO SPR1
Element**

The ILD:2 SPRO SPR1 element (Supplier’s Code for the Traded Unit) contains the supplier’s internal reference identifying the invoiced item (in this tutorial, your company is the supplier). You will rename the field label and add Help text to this field.

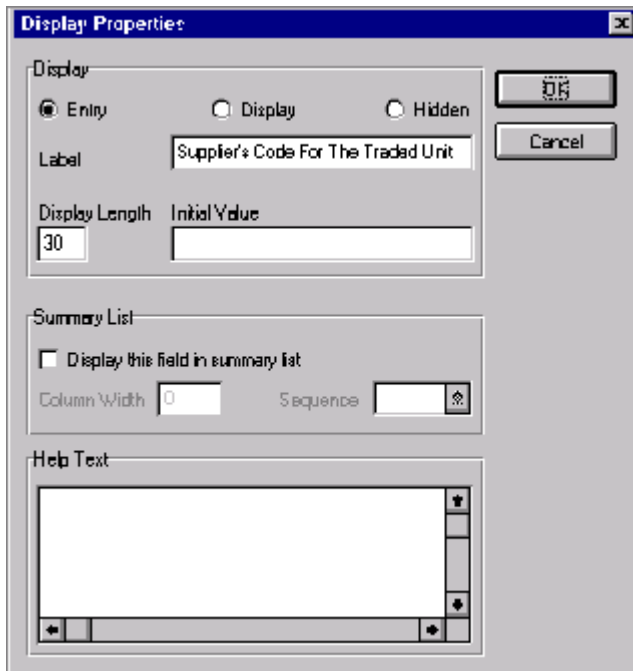
Also, you will create a list box definition for this element to include the supplier’s product code in the Line Items list box on the Invoice Details frame.

Complete the following steps to rename the field label, add Help text, and create the list box definition for the Supplier's Code for the Traded Unit field:

1. Double-click the ILD:2 SPRO SPR1 element. The Field Properties dialogue is displayed.



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



3. In the Label field, type "Supplier's Product Code" to replace the existing field label.

4. In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the Supplier’s Product Code field will be displayed in a column in the Line Items list box.
5. In the Column Width field, type “33” to set the width of this column in the Line Items list box.



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 width for each column is the exact width of the data, then there will not be space separating the columns of data.

6. From the Sequence drop-down list box, select “2” to indicate that this field will be the second column in the list box.
7. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

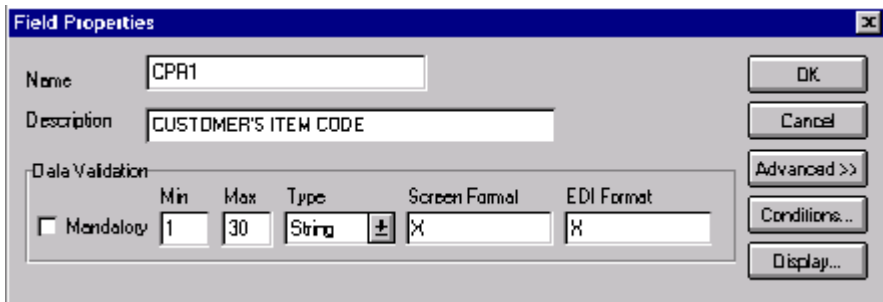
“Type the supplier’s product code for the invoiced item. The product code may not exceed 30 alphanumeric characters.”
8. Click **OK** to exit the Display Properties dialogue.
9. Click **CLOSE** to exit the Field Properties dialogue.

Customising the ILD:2 CPRO CPR1 Element

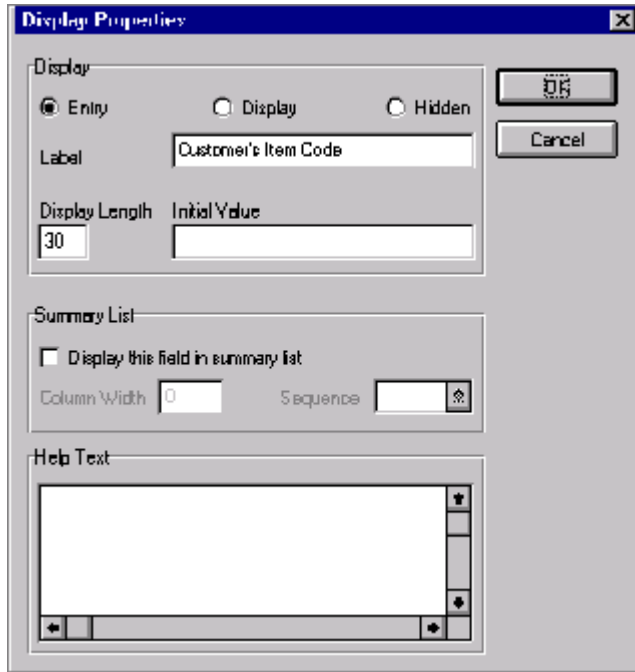
The ILD:2 CPRO CPR1 element (Customer’s Item Code) contains the customer’s internal reference identifying the invoiced item. Your users can obtain this information from the customer’s purchase order. In this tutorial, you will rename the field label and add Help text to this field.

Complete the following steps to rename the field label and add Help text to the Customer’s Item Code field:

1. Double-click the ILD:2 CPRO CPR1 element. The Field Properties dialogue is displayed.



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



- In the Label field, type “Customer’s Product Code” to replace the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
 “Type the customer’s product code for the invoiced item. The code may not exceed 30 alphanumeric characters.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

**Customising the
ILD:2 QTYI QTY0
Element**

The ILD:2 QTYI QTY0 element (Number of Order Units Invoiced) contains the quantity of invoiced items for this line item. You will create a list box definition for this element to include the quantity invoiced in the list box on the Invoice Details frame. For brevity, you will rename the field label. Also, the standard defines this field as a string data type, and allows up to fifteen alphanumeric characters in this element. However, your users will enter number-type data in N0 format (formatted with an implicit decimal point

and no decimal places). Therefore, you will change the data type and the screen and EDI formats to reflect the data your users will enter.

In addition, your users will enter quantities no greater than five digits (e.g. 99,999). You will change the field and element lengths to reflect the smaller data length. Then, you will add Help text to this field.

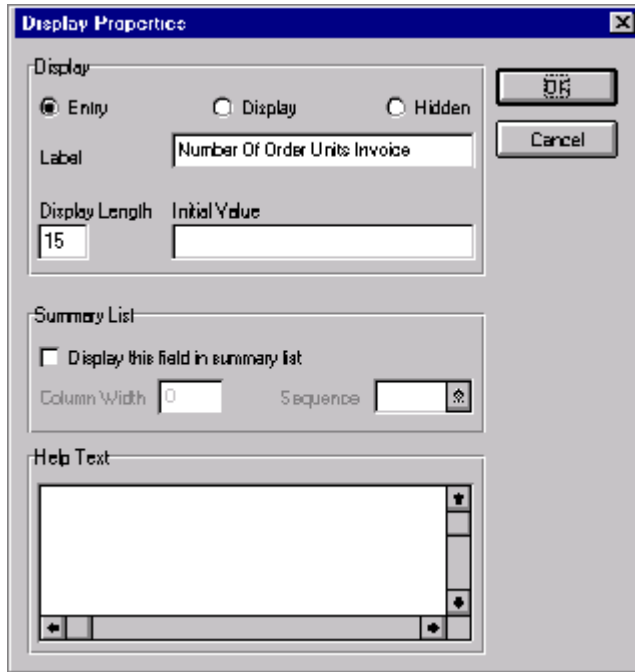
Complete the following steps to change the data type and screen and EDI formats, rename the field label, change the field and element lengths, add Help text, and create the list box definition for the Number of Order Units Invoiced field:

1. Double-click the ILD:2 QTYI QTY0 element. The Field Properties dialogue is displayed.

Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input type="checkbox"/> Mandatory	1	15	String	%	%

2. In the Max field, type “5” to allow a five-digit number in this element.
3. From the Type drop-down list box, select “Number” to allow a number data type in this element. Gentran:Director prompts you that changing the field’s data type will invalidate its format.
4. Click YES to proceed with modifying the properties of this element.
5. From the Screen Format drop-down list box, select “N0” to indicate that this field will accept a number with an implied decimal point and no decimal places.
6. From the EDI Format drop-down list box, select “N0” to format the EDI data with an implied decimal point and no decimal places.

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



- In the Label field, type “Quantity” to replace the existing field label.
- In the Display Length field, type “5” to allow five numeric digits to be displayed in the field.
- In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the Quantity field will be displayed in a column in the Line Items list box on the Invoice Details frame.
- In the Column Width field, type “8” to set the width of this column in the Line Items list box.



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 width for each column is the exact width of the data, then there will not be space separating the columns of data.

- From the Sequence drop-down list box, select “3” to indicate that this field will be the third column in the list box.

13. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Type the quantity of this invoiced item. The quantity may not exceed 5 digits.”
14. Click **OK** to exit the Display Properties dialogue.
15. Click **CLOSE** to exit the Field Properties dialogue.

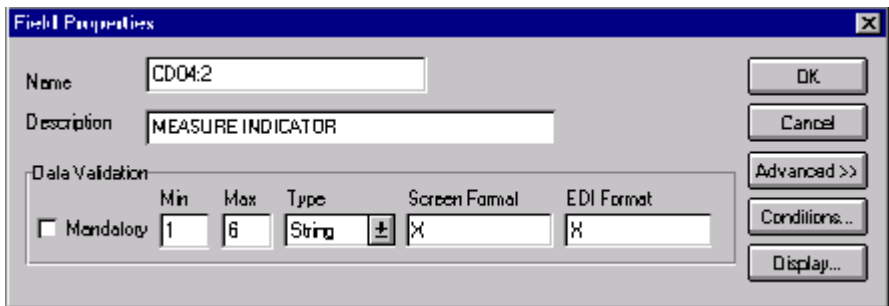
**Customising the
ILD:2 QTYI CD04:2
Element**

The ILD:2 QTYI CD04:2 element (Measure Indicator) contains the abbreviation for the measure of the invoiced item (e.g. kilometres, metres, litres). You want all the available codes from Code Values List 4 to be available to your screen entry users, so you will load the entire code list. Loading the code list in this element causes a drop-down list box to be displayed on the Invoice Details frame (instead of a field). Users will select an appropriate code from the list box, instead of typing a value in the field.

After you specify the code list table to use for the drop-down list box for the Measure Indicator field, you will rename the field label and add Help text to the field.

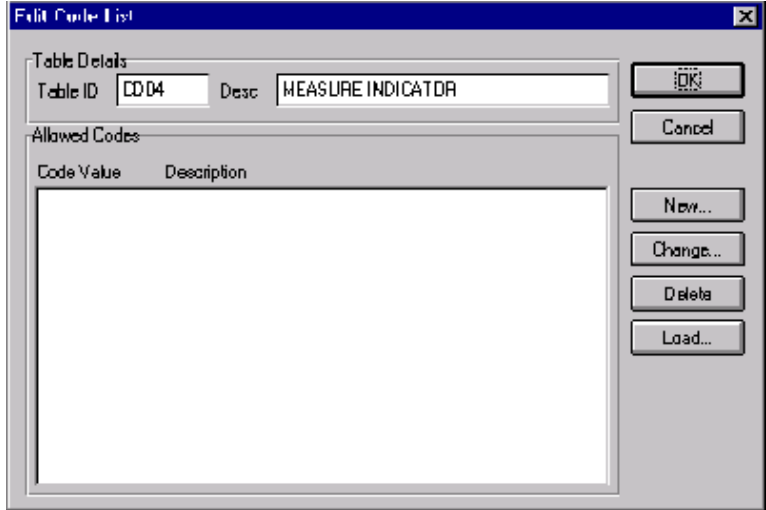
Complete the following steps to load Code Values List 4 from the standard, rename the field label, and add Help text to the Measure Indicator field:

1. Double-click the ILD:2 QTYI CD04:2 element. The Field Properties dialogue is displayed.



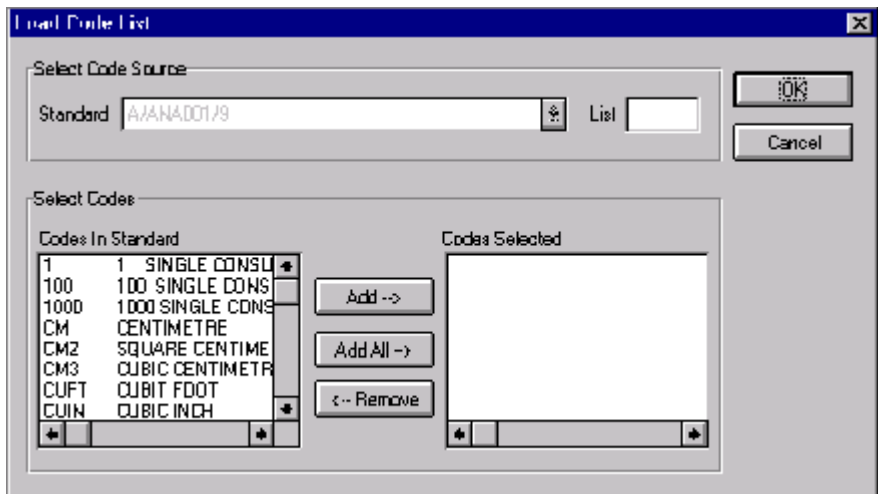
2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
3. In the Advanced section, click the **Use Standard Rule** check box.
4. Click the **Use Code** radio button.

- Click EDIT TABLE... to access the Edit Code List dialogue.



The Table ID field contains “CD04”, the name of the element for which this code list table will be used. The Desc field contains “Measure Indicator”, the description of the element for which this code list table will be used.

- Click LOAD... to access the Load Code List dialogue. You will be prompted to select an ODBC data source name. Select the appropriate DSN and click OK to access the Load Code List dialogue. The Codes In Standard list box contains the entire code list.



- Click **ADD ALL-->** to move all of the codes in the code list table to the Codes Selected list box.



Adding all the codes in the list (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 choose.**

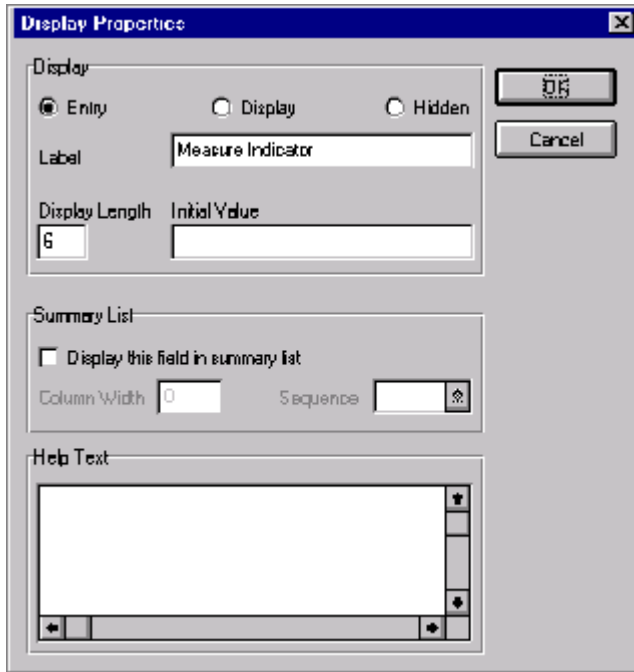
- Click **OK** to load the code list table and exit the Load Code List dialogue.
- Click **CLOSE** to exit the Edit Code List dialogue.
- Click the **Exclusive** check box to specify that, for compliance reasons, the element *must* contain one of the codes from Code Values List 4 (nothing else is valid for that element).

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

The screenshot shows the 'Advanced' section of a dialog box with the following elements:

- Use Standard Rule
- Select Update Constant Use Accum Loop Count Use Code
- Table:
- Exclusive
- Store Field:

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



- In the Label field, type “Unit of Measure” to replace the existing field label.
- In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

“Select the unit of measure for this invoiced item from the drop-down list box.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

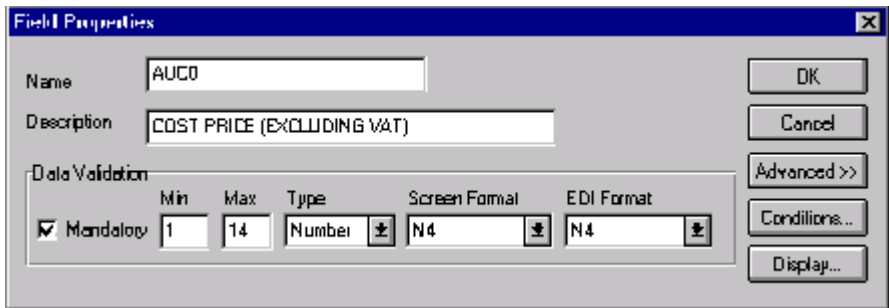
**Customising the
ILD:2 AUCT AUC0
Element**

The ILD:2 AUCT AUC0 element (Cost Price (Excluding VAT)) contains the price per unit invoiced. This price is the cost in pounds before line discounts and VAT have been applied. The EDI data will be formatted in N4 format (formatted with an implicit decimal point and four decimal places), but your users will enter the price in the translation object in R4 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the price to be entered in the translation object.

You will create a list box definition for this element to include the unit price in the list box on the Invoice Details frame. Also, you will rename the field label and add Help text to this field.

Complete the following steps to change the screen format, rename the field label, add Help text, and create the list box definition for the Cost Price (Excluding VAT) field:

1. Double-click the ILD:2 AUCT AUC0 element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R4” to indicate that this field will accept a number with an explicit decimal point and up to four decimal places.

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

- In the Label field, type “Unit Price (Ex. VAT)” to replace the existing field label.
- In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the Unit Price (Ex. VAT) field will be displayed in a column in the Line Items list box on the Invoice Details frame.
- In the Column Width field, type “14” to set the width of this column in the Line Items list box.



You do not need to make the column width for this field wider than the actual content of the column. The data from this field will form the last column in the list box, and you do not need to leave white space between the last column and the side of the list box.

- From the Sequence drop-down list box, select “4” to indicate that this field will be the third column in the list box.
- In the Help Text list box, type the following text:
“Type the unit price for this invoiced item.”
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

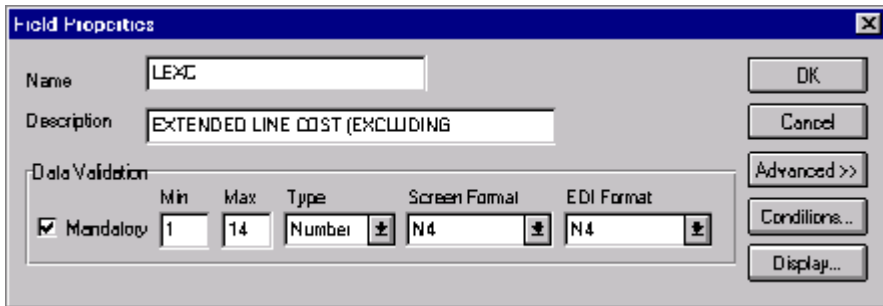
**Customising the
ILD:2 LEXC
Element**

The ILD:2 LEXC element (Extended Line Cost (Excluding VAT)) contains the price per unit invoiced, after any line discounts have been applied. This price is the net cost in pounds (e.g. after deducting line discounts, etc., but before the application of VAT). The EDI data will be formatted in N4 format (formatted with an implicit decimal point and four decimal places), but your users will enter the price in the translation object in R4 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the price to be formatted in the translation object.

Also, you will prevent this field from being displayed in the translation object. The extended line cost will be calculated automatically when users click STORE on the Line Items frame when they use this translation object in Gentran:Director. You can hide this field because users will not need to enter the value in the field.

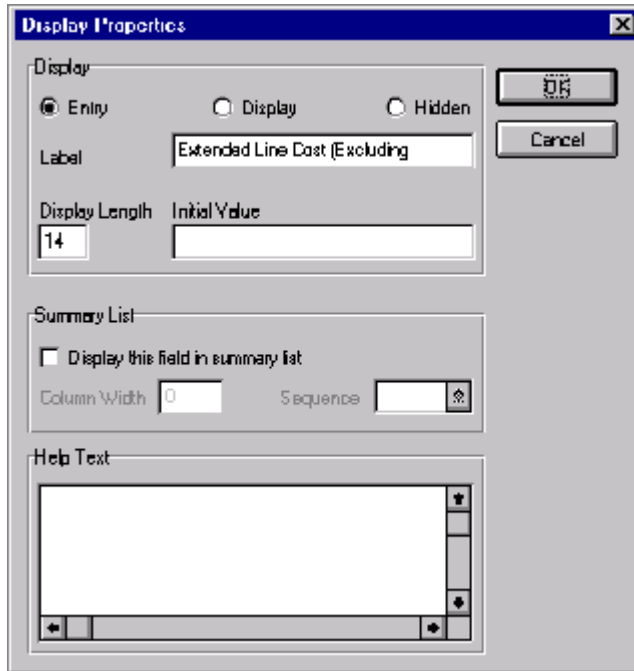
Complete the following steps to change the screen format for the Extended Line Cost (Excluding VAT) field, and prevent this field from being displayed:

1. Double-click the ILD:2 LEXC element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R4” to indicate that this field will accept a number with an explicit decimal point and up to four decimal places.

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



- Click the Hidden radio button to prevent this field from being displayed in the translation object.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

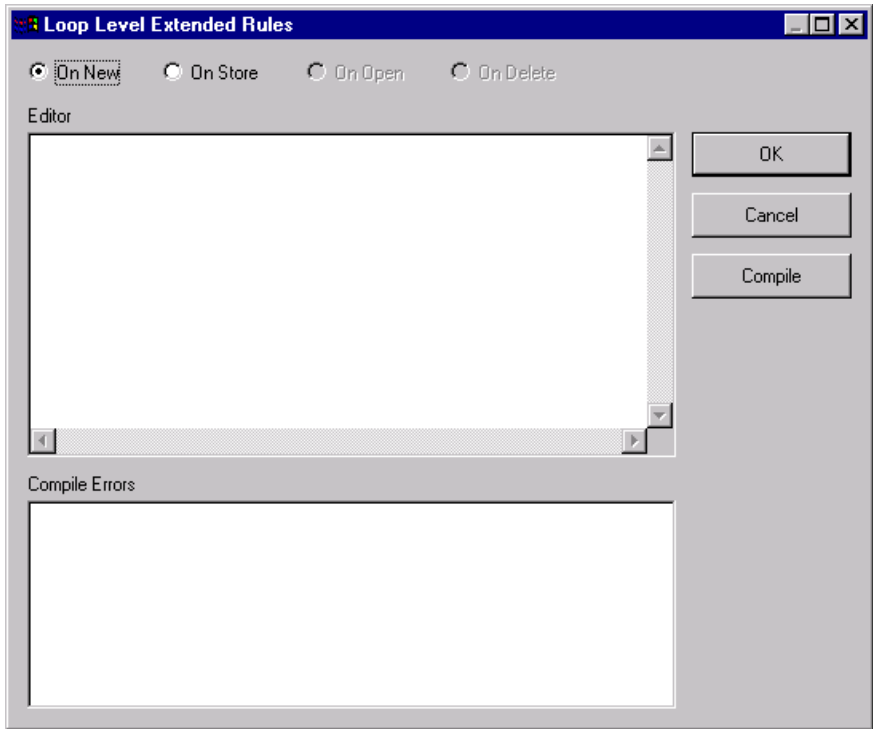
Calculating the Extended Price

You want to automate the calculation that results in the extended price for each line item, so that the screen entry users who use your invoice translation object do not have to perform this calculation manually. A simple way to perform this calculation is to use an extended rule to define the operation in the ILD group. You define extended rule with the Gentran:Director proprietary programming language, which gives you access to the entire Gentran:Director internal storage area.

Complete the following steps to define an extended rule to calculate the extended price:

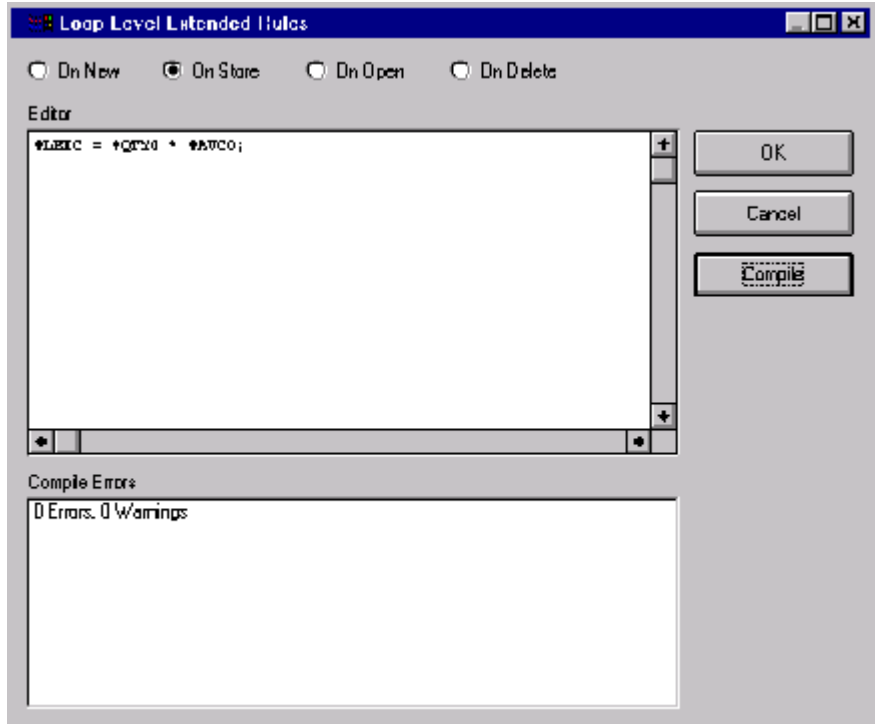
- Click the ILD group (in the ODD group) with the right mouse button to access the shortcut menu.

2. Select Extended Rules... from the shortcut menu. The Loop Level Extended Rules dialogue is displayed.



3. Click the On Store radio button to indicate that you want the rule to be executed when you store a group. When the screen entry users click STORE on the Line Items frame in Gentran:Director, the extended rule will be executed.
4. In the Editor list box, type the following extended rule:
#LEXC = #QTY0 * #AUC0;
This extended rule means that the value of the ILD:2 LEXC field is equal to the product of the values in the ILD:2 QTYI QTY0 and ILD:2 AUCT AUC0 fields. In other words, the quantity invoiced for one line item, multiplied by the price (excluding VAT) for each unit invoiced, equals the extended price (excluding VAT).
5. Click COMPILER to compile the extended rule and verify that this rule does not cause errors or warnings.

The Loop Level Extended Rules dialogue now should look like this:



If you receive any errors or warnings when you compile the rule, verify that you typed the rule exactly as it is written in step 4 above. After you make any change to the extended rule to correct it, click **COMPILE** again. Repeat this process until there are no errors generated.

6. Click **OK** to add the extended rule to the form and exit the Loop Level Extended Rules dialogue.

Customising the ILD:2 CD12 Element

The ILD:2 CD12 element (VAT Rate Category Code) contains the code from Codes Values List 12 to designate the VAT rate category for this invoiced item (e.g. standard rate, exemption from VAT, higher rate, etc.). You will use a Select standard rule on the VAT Rate Category Code field, but first you need to create a temporary VATP element.

Gentran:Director enables you to use selected information from the Gentran:Director partner database in your forms via a Select standard rule. You can map information from your trading partner's profile in the Partner Editor to a selected element in the form. The information that you can use in

the form includes any fields in a table (location, lookup, or cross-reference) or data from the partner record.

For this form, you need to map the appropriate VAT rate based on the code in the ILD:2 CD12 element from a lookup table, to look up data that you will map (via a standard rule) to the temporary VATP_TEMP field that you create. When you use tables, you must decide whether to create a code table in Gentran:Director that can be used only with this form, or to add the table to either the partner relationship or the internal system partner in Partner Editor. In this tutorial, you will set up the table you use under the internal system partner (<Internal System User>) so the table can be used globally.

In this tutorial, you need to extract information from a lookup table and insert it into the form. A lookup table is used when you want to supplement data before it is sent to your partner. Please see the Gentran:Director *User's Guide* for more information on lookup tables.



You do not need to create this lookup table (INVATCO.LKP). It is included with the tutorial data that is provided when you install Gentran:Director.

After you use the Select function, all the available codes from the selected table will be available in a drop-down list box (instead of a field) on the Invoice Details frame. Users will select an appropriate code from the drop-down list box, instead of typing a value in the field.


In addition to using the Select function, you will rename the field label and add Help text to the field.

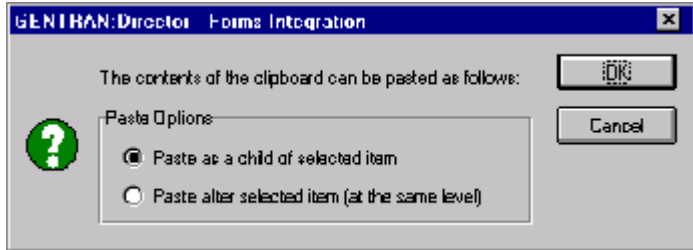
Creating a Temporary VATP Element

Complete the following steps to create a temporary VATP element:

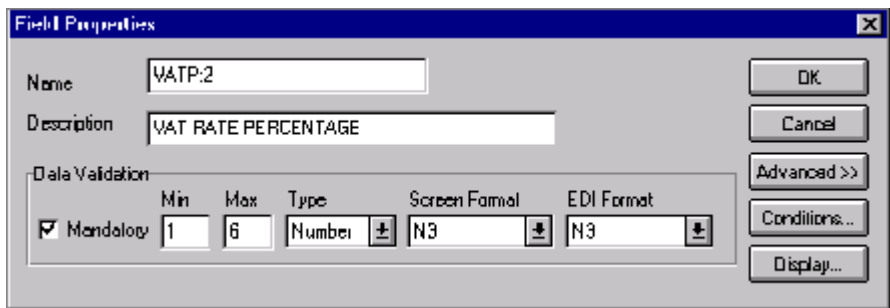


1. Select the ILD:2 VATP element.
2. Click Copy on the Main Toolbar.
3. Select the ILD:2 SCRF composite, which is the last form component in the ILD:2 segment. The ILD:2 SCRF composite is the composite *after* which you want the ILD:2 VATP element to be pasted.

- 
 4. Click Paste on the Main Toolbar to paste the ILD:2 VATP element. Gentran:Director prompts you to specify whether you want the contents of the Clipboard pasted as a child (subordinate) of the selected composite, or at the same level as the composite.



5. Click the Paste after selected item (at the same level) radio button to paste the Clipboard contents after the ILD:2 SCRF composite. A new element (ILD:2 VATP:2) is created. The ILD:2 VATP:2 element is an exact copy of the ILD:2 VATP element.
6. Click OK to exit the dialogue.
You should rename the ILD:2 VATP:2 element to give it a more descriptive name.
7. Double-click the ILD:2 VATP:2 element. The Field Properties dialogue is displayed.



8. In the Name field, type “VATP_TEMP” to replace the existing field label.
9. Click OK to exit the Field Properties dialogue. The ILD:2 VATP:2 element is renamed ILD:2 VATP_TEMP.

Changing the ILD:2 CD12 Element and Field Properties

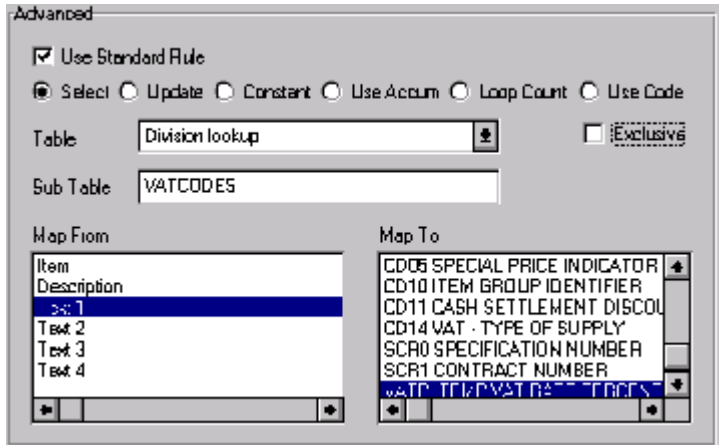
Complete the following steps to use the Select function, rename the field label, and add Help text to the VAT Rate Category Code field:

1. Double-click the ILD:2 CD12 element. The Field Properties dialogue is displayed.

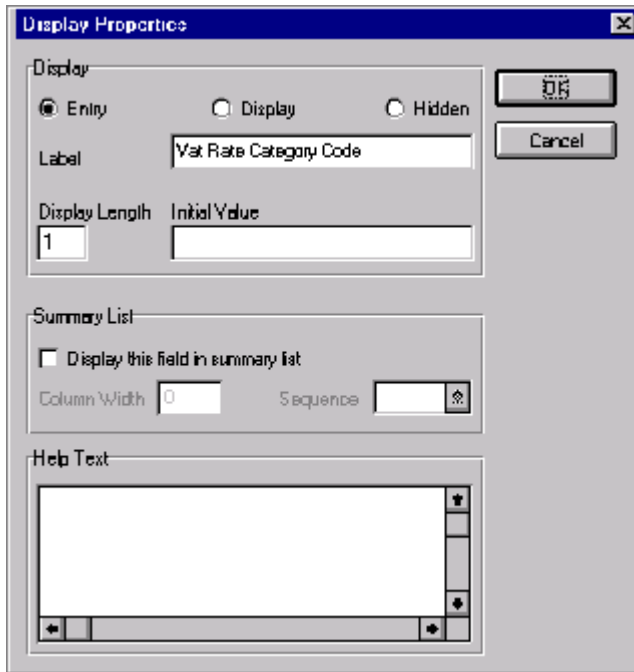
Data Validation					
	Min	Max	Type	Screen Format	EDI Format
<input checked="" type="checkbox"/> Mandatory	1	1	String	X	X

2. If the Advanced section of the dialogue currently is not displayed, click **ADVANCED>>** to access this section, which enables you to define rules.
3. In the Advanced section, click the Use Standard Rule check box.
4. Verify that the Select radio button is selected.
5. In the Table drop-down list box, select “Division lookup”. You are using the Division lookup because the VAT codes do not vary on a partner-by-partner basis, so you can use the <Internal System User> partner and map from any field on the Lookup Entry dialogue (in Partner Editor in Gentran:Director). You will be able to set up the lookup only once, regardless of the number of partners with which you will use this translation object.
6. In the Sub Table field, type “VATCODES”, which is the name of the table name for the <Internal System User> partner that you will import.
7. In the Map From list box, select “Text 1”, which is the field on the Lookup Entry dialogue in Partner Editor from which the contents will be mapped.
8. In the Map To list box, select “VATP_TEMP”, which is the temporary VATP element you just created. The system will map the value from Partner Editor to the VATP_TEMP element.

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



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



- In the Label field, type "VAT Code" to replace the existing field label.

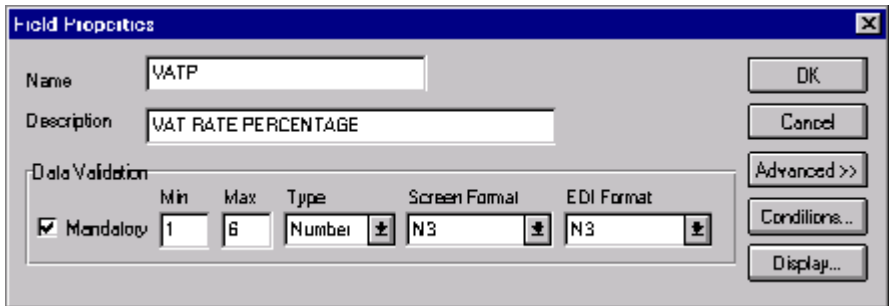
11. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
“Select the VAT code for this invoiced item from the drop-down list box.”
12. Click **OK** to exit the Display Properties dialogue.
13. Click **CLOSE** to exit the Field Properties dialogue.

Customising the ILD:2 VATP Element

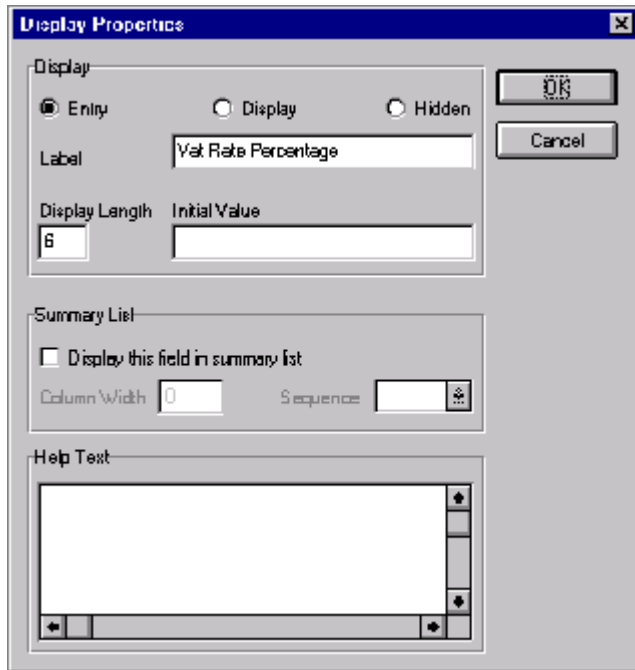
The ILD:2 VATP element (VAT Rate Percentage) contains the percentage rate for the VAT category code. Screen entry translation object users will not need to enter a value in this field because Gentran:Director will look up the percentage in the VATCODES table in Partner Editor and place the result in the ILD:2 VATP element automatically. You will prevent the ILD:2 VATP element from being displayed on the translation object.

Complete the following steps to hide the VAT Rate Percentage field:

1. Double-click the ILD:2 VATP element. The Field Properties dialogue is displayed.



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



- Click the Hidden radio button to prevent the field from being displayed in the translation object.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the ILD:2 VATP_TEMP Element

The ILD:2 VATP_TEMP element (VAT Rate Percentage) is the temporary element you created to map the VAT rate percentage in the VATCODES division lookup table. To map from the partner database to the VATP_TEMP field, the target field (VATP_TEMP) needs to be a string-type element. You will use the ILD:2 VATP_TEMP element to convert the VAT rate percentage (a string) into a real number (the data type required in the ILD:2 VATP field). For compliance reasons, you cannot change the data type in the ILD:2 VATP element; therefore, you created the ILD:2 VATP_TEMP element, whose data type you may change.

The system will be able to look up the VAT rate percentage (a string data type) in the VATCODES table, and map the string to the ILD:2 VATP_TEMP element. Later, you will add an extended rule to the ILD group to convert the string in the ILD:2 VATP_TEMP element to a number

in the ILD:2 VATP element, then remove all data from the ILD:2 VATP_TEMP element (so that element is empty). After having executed these functions, the system will have converted a string data type to a real number, maintaining the integrity of the data and the compliance of the invoice.

Complete the following steps to hide the VAT Rate Percentage field and change the data type for this field to string:

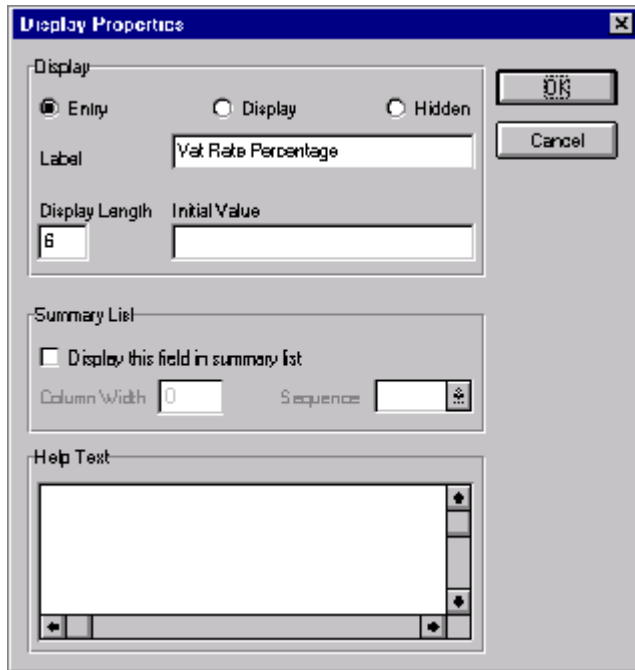
1. Double-click the ILD:2 VATP_TEMP element. The Field Properties dialogue is displayed.

The screenshot shows the 'Field Properties' dialog box for the field 'VATP_TEMP'. The 'Name' field contains 'VATP_TEMP' and the 'Description' field contains 'VAT RATE PERCENTAGE'. The 'Data Validation' section is expanded, showing a table with columns for 'Mandatory', 'Min', 'Max', 'Type', 'Screen Format', and 'EDl Format'. The 'Mandatory' checkbox is checked. The 'Min' field contains '1', the 'Max' field contains '6', the 'Type' dropdown is set to 'Number', the 'Screen Format' dropdown is set to 'N3', and the 'EDl Format' dropdown is set to 'N3'. On the right side of the dialog, there are buttons for 'OK', 'Cancel', 'Advanced >>', 'Conditions...', and 'Display...'.

	Min	Max	Type	Screen Format	EDl Format
<input checked="" type="checkbox"/> Mandatory	1	6	Number	N3	N3

2. Click the Mandatory check box to make this element conditional.
3. In the Min field, type "0" for the minimum number of digits allowed for this element.
4. From the Type drop-down list box, select "String" to allow a string data type in this element. Gentran:Director prompts you that changing the field's data type will invalidate its format.
5. Click YES to proceed with modifying the properties of this element.

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



- Click the Hidden radio button to prevent the field from being displayed in the translation object.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Converting Strings into Real Numbers

You created the ILD:2 VATP_TEMP element as a temporary element for converting strings into numbers. The first step in converting strings into elements, in this tutorial, was to create the ILD:2 VATP_TEMP element so that the system will use that element to look up the VAT rate percentage (a string data type) in the VATCODES table, then map the string to the ILD:2 VATP_TEMP element. The next step is to use an extended rule in the ILD group to convert the string in the ILD:2 VATP_TEMP element into a real number that can be used in the ILD:2 VATP element, and then delete any data left in the temporary element (ILD:2 VATP_TEMP).

Complete the following steps to define an extended rule to convert strings into numbers:

1. Click the ILD group (in the ODD group) with the right mouse button to access the shortcut menu.
2. Select Extended Rules... from the shortcut menu. The Loop Level Extended Rules dialogue is displayed.
3. Click the On Store radio button to indicate that you want the rule to be executed when you store a group. (The extended rule you added to calculate an extended price is displayed in the Editor list box of the Loop Level Extended Rules dialogue.) When the screen entry users click STORE on the Line Items frame in Gentran:Director, all On Store extended rules in the Loop Level Extended Rules dialogue will be executed.
4. On the next two lines in the Editor list box, type the following extended rule:

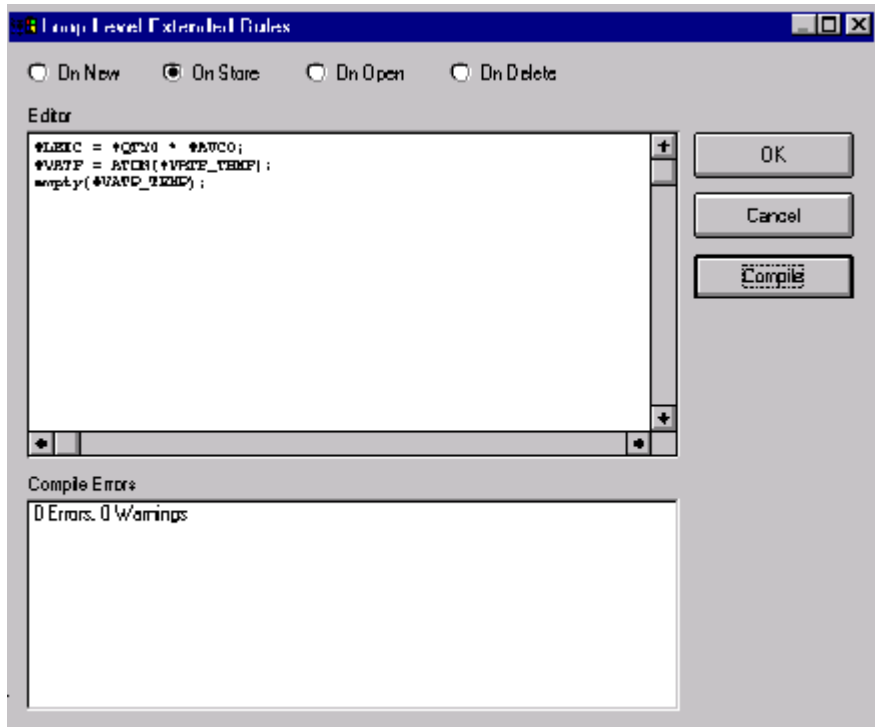
```
#VATP = ATON(#VATP_TEMP);  
empty(#VATP_TEMP);
```

The **ATON** function tells the system to convert the string data in the ILD:2 VATP_TEMP element into a real number.

The calculation you typed on the first line places the number data in the ILD:2 VATP element.

The **empty** function sets the value of the ILD:2 VATP_TEMP field to null.

- Click **COMPILE** to compile the extended rule and verify that this rule does not cause errors or warnings. The Loop Level Extended Rules dialogue now should look like this:



If you receive any errors or warnings when you compile the rule, verify that you typed the rule exactly as it is written in step 4 above. After you make any change to the extended rule to correct it, click **COMPILE** again. Repeat this process until there are no errors generated.

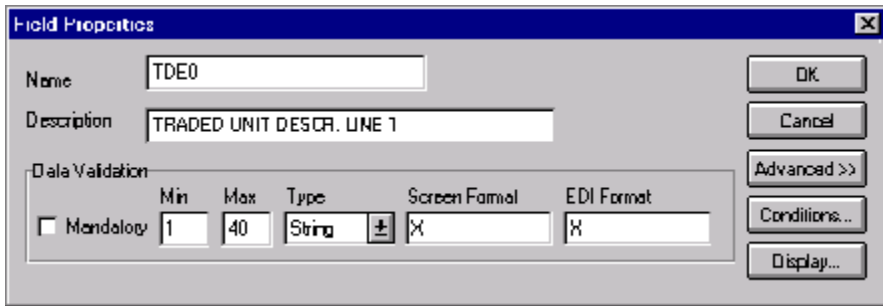
- Click **OK** to add the extended rule to the form and exit the Loop Level Extended Rules dialogue.

Customising the ILD:2 TDES TDE0 Element

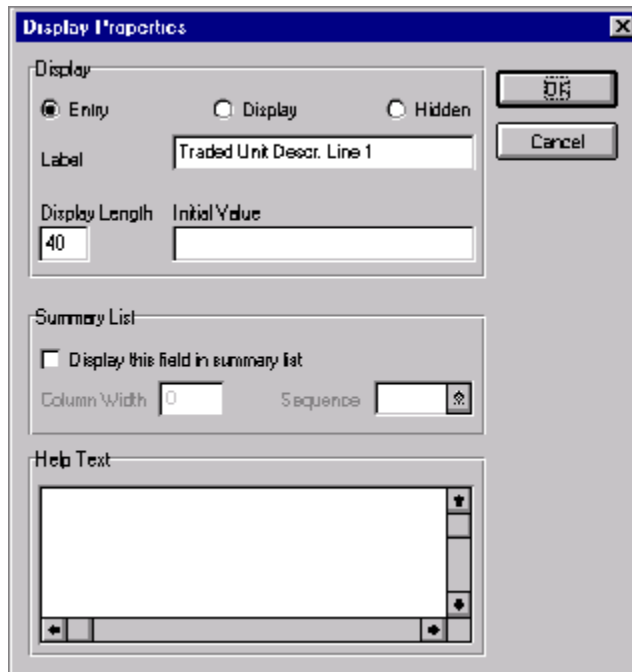
The ILD:2 TDES TDE0 element (Traded Unit Descr. Line 1) contains the description of the invoiced item. You will rename the field label to shorten it and add Help text to this element.

Complete the following steps to rename the field label and add Help text to the Traded Unit Descr. Line 1 field:

1. Double-click the ILD:2 TDES TDE0 element. The Field Properties dialogue is displayed.



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



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

4. In the Help Text list box, type the following text (press **ENTER** at the end of each line of text below):
 “Type the description of the invoiced item. The description may not exceed 40 alphanumeric characters.”
5. Click **OK** to exit the Display Properties dialogue.
6. Click **CLOSE** to exit the Field Properties dialogue.



7. Click **Generate Layout** on the Main Toolbar to refresh the display of the screen entry form.

The Line Items frame now should look like this:

 A screenshot of a software form titled "Invoice Details". The form is set against a dotted background and contains several input fields:

- Address Line 1, Address Line 2, Address Line 3, and Address Line 4: Four horizontal text boxes stacked vertically.
- Post Code: A smaller horizontal text box.
- Invoice No.: A horizontal text box.
- Invoice Date: A horizontal text box.
- Taxpoint Date: A horizontal text box.
- Payment Terms: A horizontal text box.
- Invoice Notes: Four horizontal text boxes stacked vertically.
- First Level Sequence Number: A horizontal text box at the bottom.

 The form has a scroll bar on the right side.

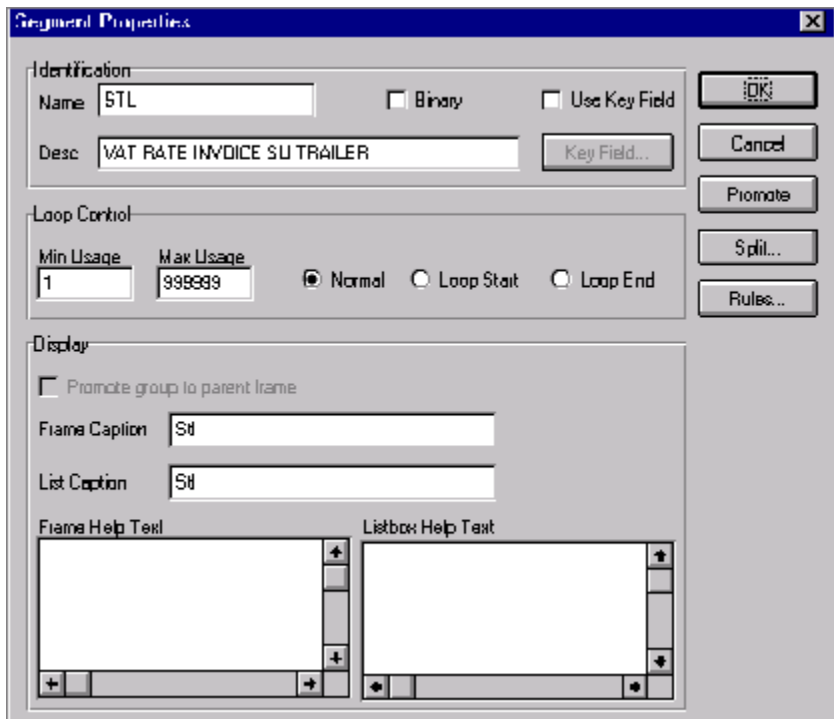
Customising the STL Segment

The STL segment (VAT Rate Invoice Sub Trailer) contains the invoice amounts relating to the VAT rate. All monetary values in this segment are in pounds. You will use an extended rule to perform the calculations that will be displayed in the fields in the STL segment. Screen entry translation object users will be able to view the values in these fields (in the VAT Summary frame), but will not be able to change the values. See *Producing the VAT Summary and the Invoice Trailer* on page 267 for details on how to add the extended rule.

The fields associated with the STL segment are arranged on the Stl frame. Your users will complete the fields on the STL frame for each VAT rate calculation. The list of all VAT rates in the invoice will be displayed in a list box on the Invoice Details frame. In that list box, the VAT rates will be displayed for each line item, forming columns of information.

Complete the following steps to rename the STL frame and list box, provide a description for the STL segment, and add Help text to the list box:

1. Click the STL segment with the right mouse button to access the shortcut menu.
2. Select Properties... from the shortcut menu. The Segment Properties dialogue is displayed.



3. In the Frame Caption field, type “VAT Summary” to rename the frame.
4. In the List Caption field, type “VAT Summary” to rename the list box that is displayed on the Invoice Details frame (listing the VAT rates entered on the VAT Summary frame).
5. In the Frame Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

“This frame contains VAT summary information. All the fields on this frame are display-only. You may view the values in these fields, but you cannot change any of the values. All calculations will be updated when you click the Recalculate button on the Invoice Details frame.”
6. In the Listbox Help Text list box, type the following text (press **ENTER** at the end of each line of text below):

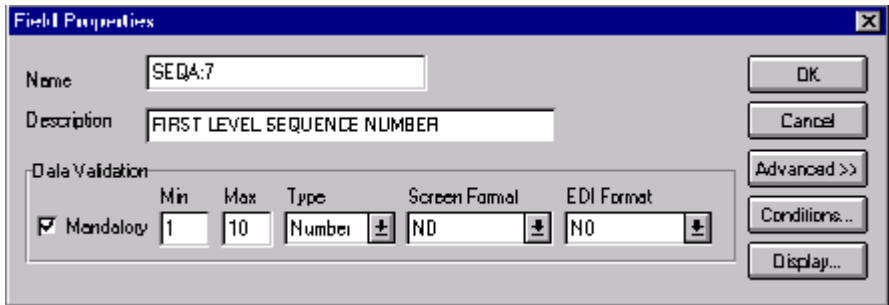
“This list box contains VAT summary information. To view details about a VAT rate listed in the VAT Summary list box, click that VAT rate and click Open. You will be able to view the values in these fields, but you will not be able to change any of them. All calculations will be updated when you click the Recalculate button on the Invoice Details frame.”
7. Click OK to exit the Segment Properties dialogue.

**Customising the
STL SEQA:7
Element**

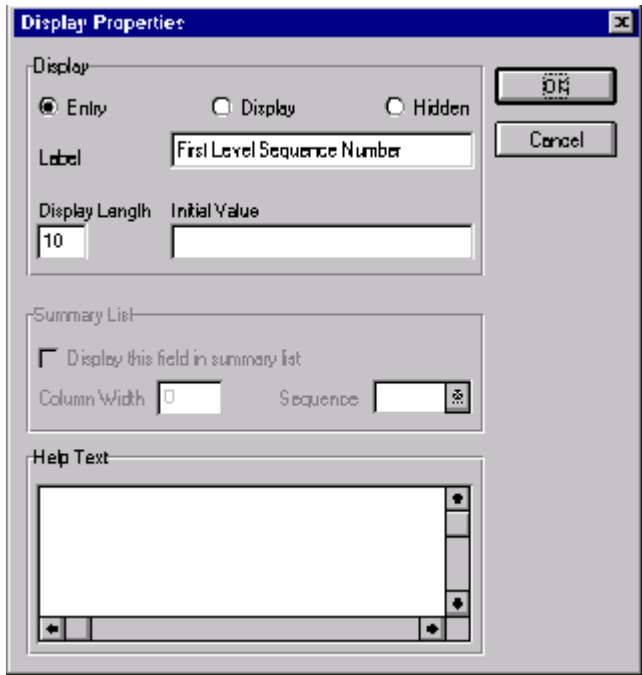
The STL SEQA:7 element (First Level Sequence Number) contains the sequence number for the STL segment. This element is mandatory, but your screen entry translation object users will not need to enter a value in this field (the value will be assigned in the extended rule you add later in this tutorial in the INVOIC file). Therefore, you will prevent this field from being displayed in the screen entry translation object, since users will not need to enter a value in this field.

Complete the following steps to hide the First Level Sequence Number field:

1. Double-click the STL SEQA:7 element. The Field Properties dialogue is displayed.



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



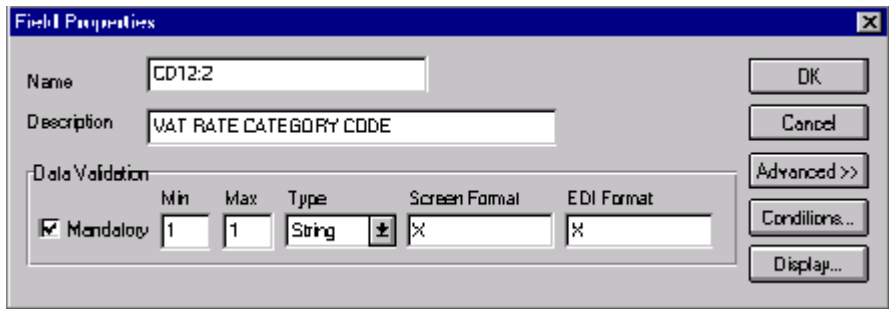
3. Click the Hidden radio button to prevent the field from being displayed in the translation object.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

**Customising the
STL CD12:2
Element**

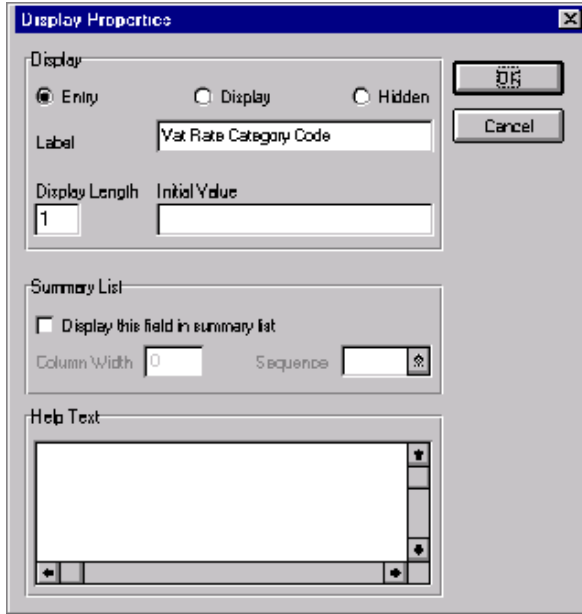
The STL CD12:2 element (VAT Rate Category Code) contains the VAT rate category as listed in Code Values List 12. You will create a list box definition for this element to include the VAT rate category code in the VAT Summary list box on the Invoice Details frame. You will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. (The values in this field will be assigned in the extended rule you add later in this tutorial in the INVOIC file.) Also, you will rename the field label.

Complete the following steps to rename the field label, make this field display-only, and create the list box definition for the VAT Rate Category Code field:

1. Double-click the STL CD12:2 element. The Field Properties dialogue is displayed.



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



3. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
4. In the Label field, type “VAT Code” to replace the existing field label.
5. In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the VAT Code field will be displayed in a column in the VAT Summary list box on the Invoice Details frame.
6. In the Column Width field, type “4” to set the width of this column in the VAT Summary list box.



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 width for each column is the exact width of the data, then there will not be space separating the columns of data.

7. From the Sequence drop-down list box, select “1” to indicate that this field will be the first column in the list box.
8. Click OK to exit the Display Properties dialogue.
9. Click CLOSE to exit the Field Properties dialogue.

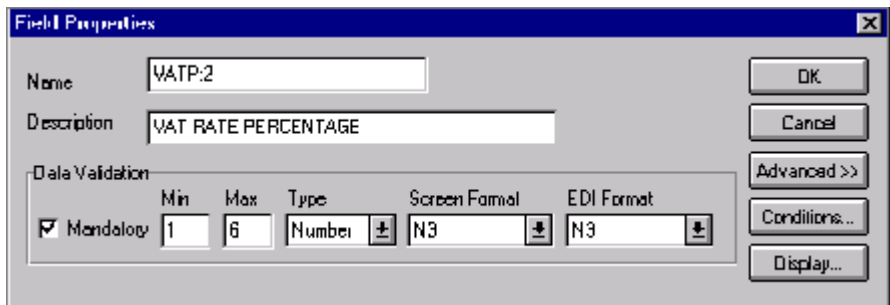
**Customising the
STL VATP:2
Element**

The STL VATP:2 element (VAT Rate Percentage) contains the percentage rate for the VAT category code (in the STL CD12:2 element). The EDI data will be formatted in N3 format (formatted with an implicit decimal point and three decimal places), but you want the VAT rate percentage to be displayed in the translation object in R3 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object.

You will create a list box definition for this element to include the VAT rate percentage in the VAT Summary list box on the Invoice Details frame. You will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

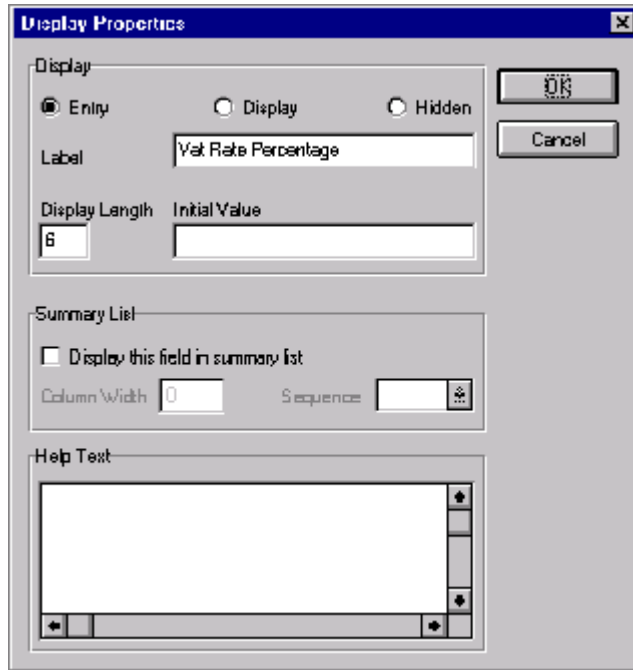
Complete the following steps to change the screen format, make the field display-only, rename the field label, and create the list box definition for the VAT Rate Percentage field:

1. Double-click the STL VATP:2 element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R3” to indicate that this field will display a number with an explicit decimal point and up to three decimal places.

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



4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “VAT Rate” to replace the existing field label.
6. In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the VAT Rate field will be displayed in a column in the VAT Summary list box on the Invoice Details frame.
7. In the Column Width field, type “9” to set the width of this column in the VAT Summary list box.



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 width for each column is the exact width of the data, then there will not be space separating the columns of data.

8. From the Sequence drop-down list box, select “2” to indicate that this field will be the second column in the list box.

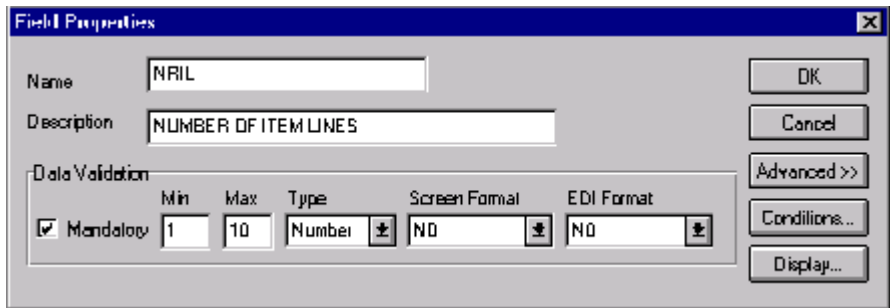
9. Click OK to exit the Display Properties dialogue.
10. Click CLOSE to exit the Field Properties dialogue.

Customising the STL NRIL Element

The STL NRIL element (Number of Item Lines) contains the number of ILD segments with the VAT category code specified in the STL CD12:2 element. You will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

Complete the following steps to make the field display-only and rename the field label for the Number of Item Lines field:

1. Double-click the STL NRIL element. The Field Properties dialogue is displayed.



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

The screenshot shows the 'Display Properties' dialog box. The 'Display' section has three radio buttons: 'Entry' (selected), 'Display', and 'Hidden'. The 'Label' field contains 'Number Of Item Lines'. The 'Display Length' field contains '10'. The 'Summary List' section has a checkbox 'Display this field in summary list' which is unchecked. The 'Help Text' section is empty. The 'OK' and 'Cancel' buttons are on the right.

3. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
4. In the Label field, type “Number of Line Items” to replace the existing field label.
5. Click OK to exit the Display Properties dialogue.
6. Click CLOSE to exit the Field Properties dialogue.

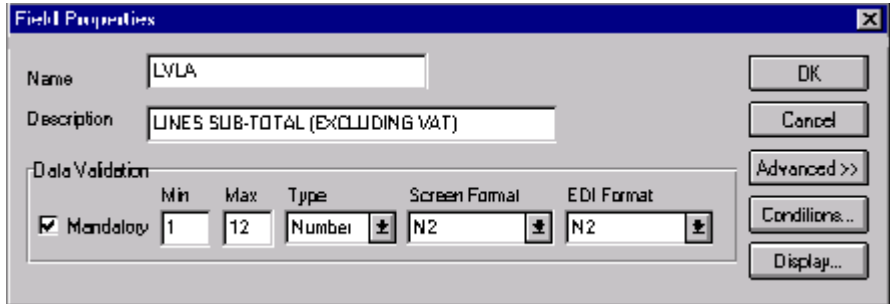
Customising the STL LVLA Element

The STL LVLA element (Lines Sub-Total (Excluding VAT)) contains the subtotal for this line item, before VAT has been applied. The value in this field equals the total of the extended line cost (in the ILD:2 LEXC element) for line items with this VAT category code. The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the lines subtotal (excluding VAT) to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object.

You will create a list box definition for this element to include the lines subtotal (excluding VAT) in the VAT Summary list box on the Invoice Details frame. You will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

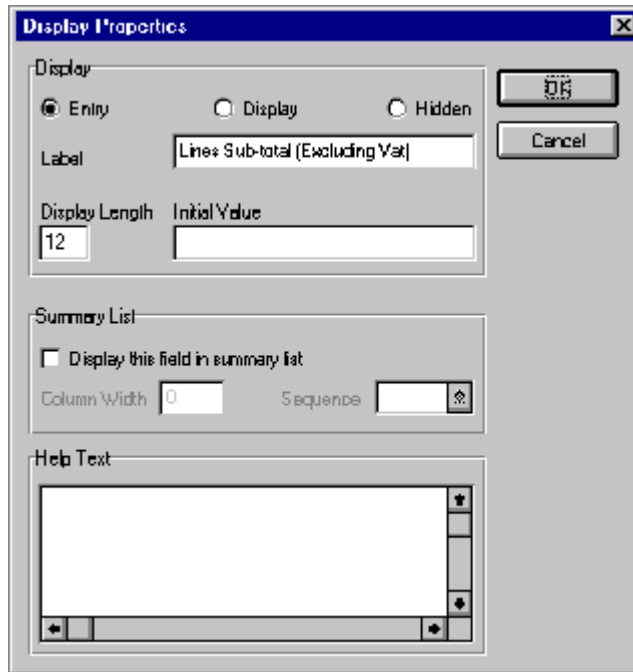
Complete the following steps to change the screen format, make the field display-only, rename the field label, and create the list box definition for the Lines Sub-Total (Excluding VAT) field:

1. Double-click the STL LVLA element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Lines Subtotal (Excluding VAT)” to replace the existing field label. (Making these slight changes to the field label maintains the consistency of labelling in this form.)
6. In the Summary List section, click the Display this field in summary list check box to turn this option on. The value in the Lines Subtotal (Excluding Vat) field will be displayed in a column in the VAT Summary list box on the Invoice Details frame.
7. In the Column Width field, type “12” to set the width of this column in the VAT Summary list box.



You do not need to make the column width for this field wider than the actual content of the column. The data from this field will form the last column in the list box, and you do not need to leave white space between the last column and the side of the list box.

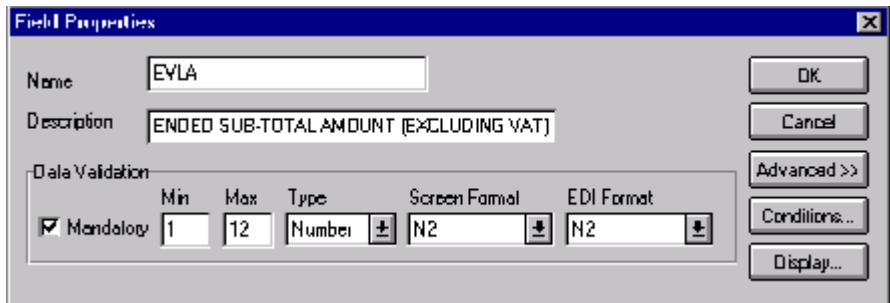
8. From the Sequence drop-down list box, select “3” to indicate that this field will be the third column in the list box.
9. Click OK to exit the Display Properties dialogue.
10. Click CLOSE to exit the Field Properties dialogue.

Customising the STL EVLA Element

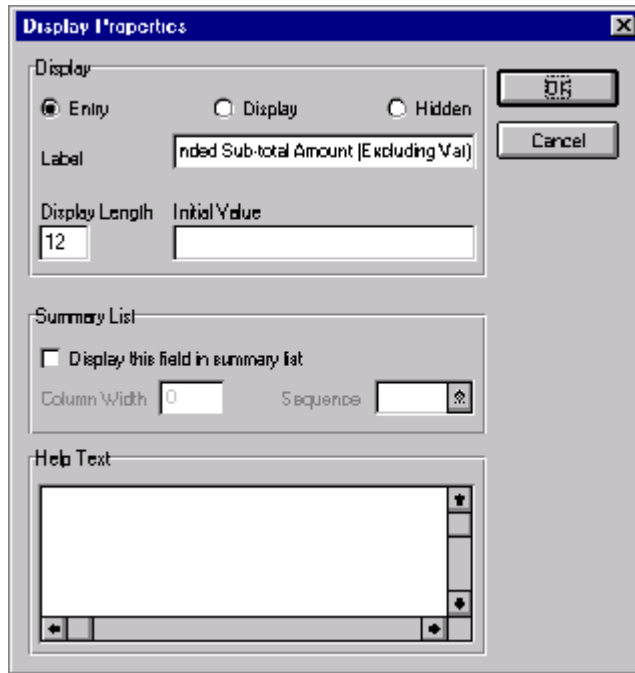
The STL EVLA element (Extended Sub-Total Amount (Excluding VAT)) contains the extended subtotal before the VAT has been applied. In this tutorial, the value in the STL EVLA element equals the value in the STL LVLA element (because we are not using settlement discounts in this tutorial). For this reason, you do not need to display the STL EVLA element (the STL LVLA element *will* be displayed). Therefore, you will prevent this field from being displayed in the screen entry translation object, since users will not need to enter or view a value in this field (the value will be assigned in the extended rule you add later in this tutorial in the INVOIC file).

Complete the following steps to hide the Extended Sub-Total Amount (Excluding VAT) field:

1. Double-click the STL EVLA element. The Field Properties dialogue is displayed.



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



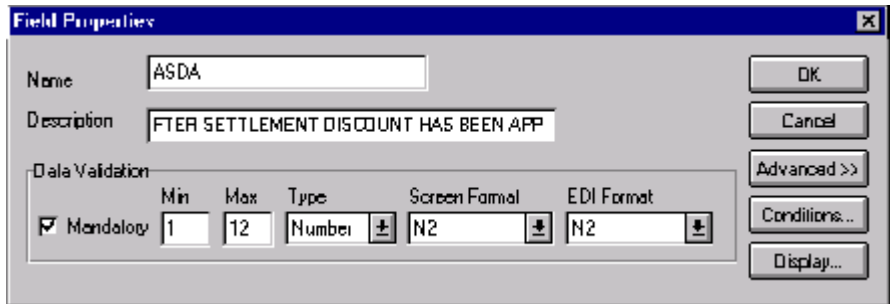
3. Click the Hidden radio button to prevent the field from being displayed in the translation object.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the STL ASDA Element

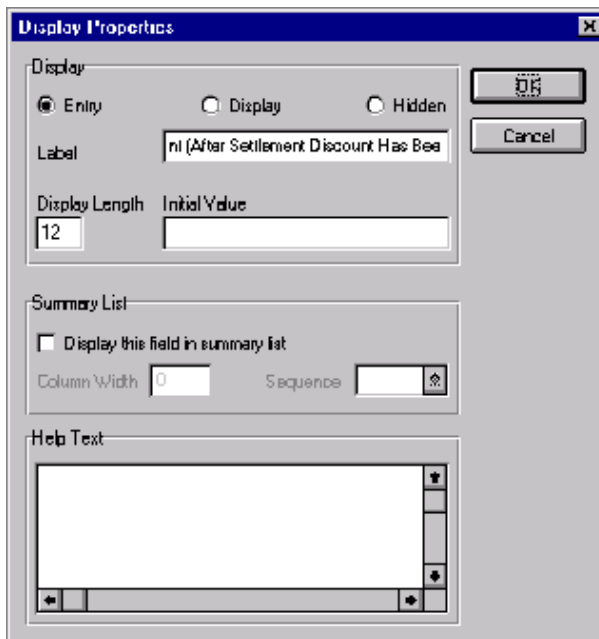
The STL ASDA element (Extended Sub-Total Amount (After Settlement Discount Has Been Applied)) contains the extended subtotal amount before VAT has been applied. In this tutorial, the value in the STL ASDA element equals the value in the STL EVLA element (which is equal to the STL LVLA element), because we are not using settlement discounts in this tutorial. For this reason, you do not need to display the STL ASDA element (the STL LVLA element *will* be displayed). Therefore, you will prevent this field from being displayed in the screen entry translation object, since users will not need to enter or view a value in this field (the value will be assigned in the extended rule you add later in this tutorial in the INVOIC file).

Complete the following steps to hide the Extended Sub-Total Amount (After Settlement Discount Has Been Applied) field:

1. Double-click the STL ASDA element. The Field Properties dialogue is displayed.



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



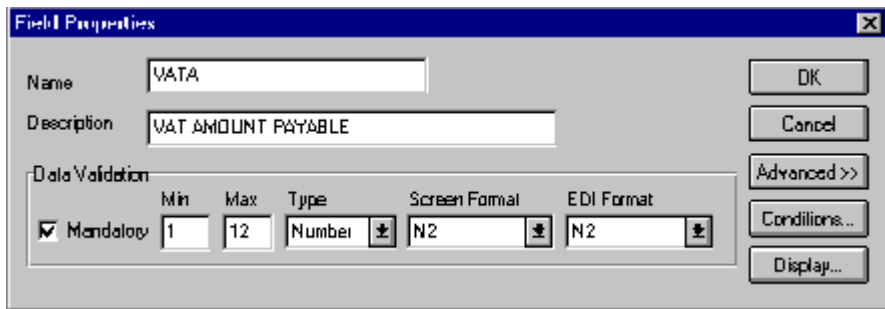
3. Click the Hidden radio button to prevent the field from being displayed in the translation object.
4. Click OK to exit the Display Properties dialogue.
5. Click CLOSE to exit the Field Properties dialogue.

Customising the STL VATA Element

The STL VATA element (VAT Amount Payable) contains the VAT amount at the quoted VAT rate. The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the VAT amount payable to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

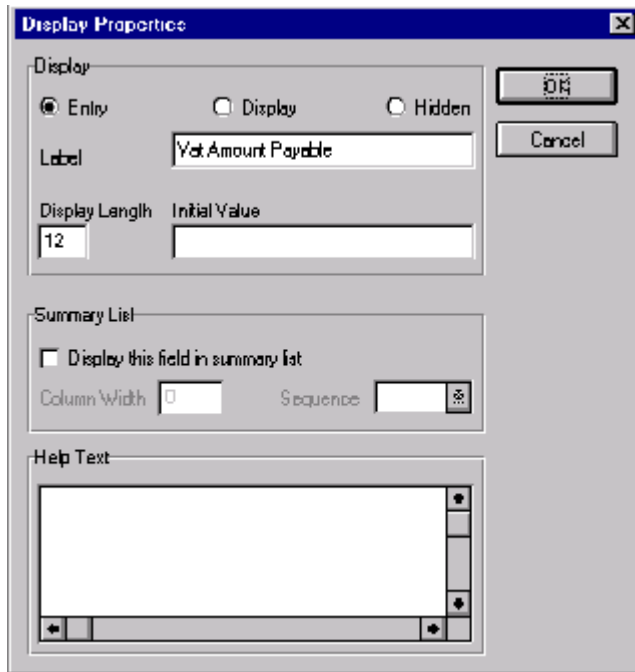
Complete the following steps to change the screen format, make the field display-only, and rename the field label for the VAT Amount Payable field:

1. Double-click the STL VATA element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



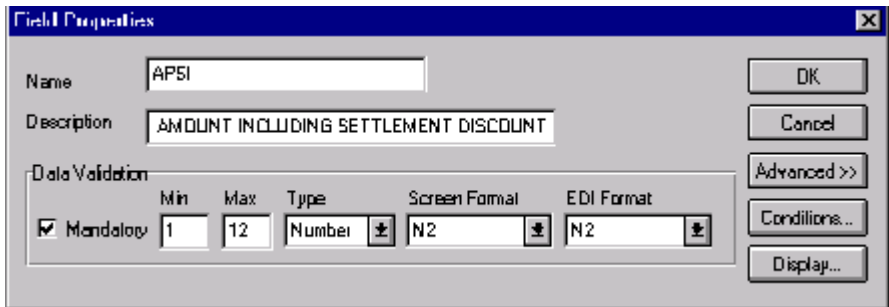
- Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
- In the Label field, type “VAT Amount Payable” (note that “VAT” contains all capital letters) to replace the existing field label. Making these slight changes to the field label maintains the consistency of labelling in this form.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the STL APSI Element

The STL APSI element (Payable Sub-Total Amount Including Settlement Discount) contains the amount after VAT has been applied. The value in this element equals the sum of the values in the STL ASDA and STL VATA elements. The EDI data will be formatted in N2 format (formatted with an implicit decimal point and three decimal places), but you want the VAT amount payable to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

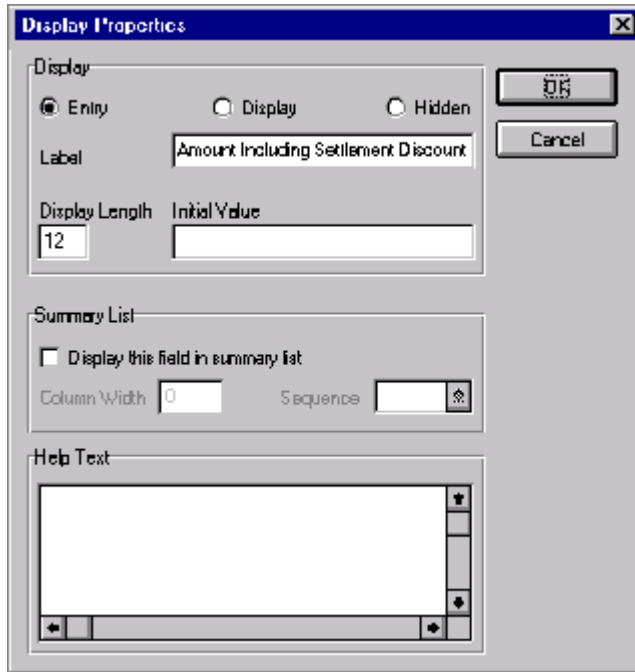
Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Payable Sub-Total Amount Including Settlement Discount field:

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



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Payable Subtotal (Inc. Sett. Disc.)” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.



8. Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.

The VAT Summary frame now should look like this:

The screenshot shows a window titled "VAT Summary" with a dotted background. It contains the following fields:

- VAT Code: A small rectangular input field.
- VAT Rate: A rectangular input field.
- Number of Line Items: A rectangular input field.
- Lines Subtotal (Excluding VAT): A rectangular input field.
- VAT Amount Payable: A rectangular input field.
- Payable Subtotal (Inc. Sett. Disc.): A rectangular input field.

Customising the TLR Segment

The TLR segment (Invoice Trailer) contains the total invoice amounts. All monetary values in this segment are in pounds. You will use an extended rule to perform the calculations that will be displayed in the fields in the TLR segment. Screen entry translation object users will be able to view the values in these fields (on the Invoice Details frame), but will not be able to change the values. See *Producing the VAT Summary and the Invoice Trailer* on page 267 for details on how to add the appropriate extended rule.

Customising the TLR NSTL Element

The TLR NSTL element (Number of Total Segments) contains the number of STL segments in the invoice. You do not need to display this element, as the screen entry translation object users will not need to enter or view a value in this field.

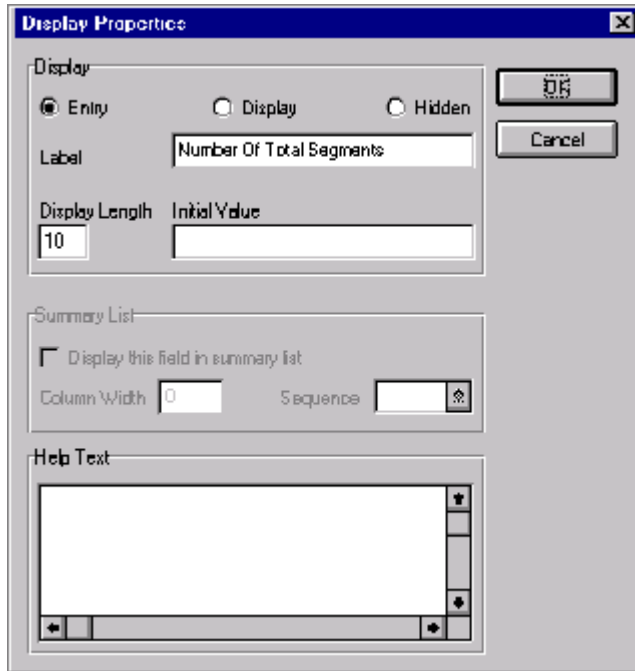
Complete the following steps to hide the Number of Total Segments field:

1. Double-click the TLR NSTL element. The Field Properties dialogue is displayed.

The screenshot shows the "Field Properties" dialog box with the following details:

- Name: NSTL
- Description: NUMBER OF TOTAL SEGMENTS
- Data Validation:
 - Mandatory:
 - Min: 1
 - Max: 10
 - Type: Number
 - Screen Format: NO
 - EDI Format: NO

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



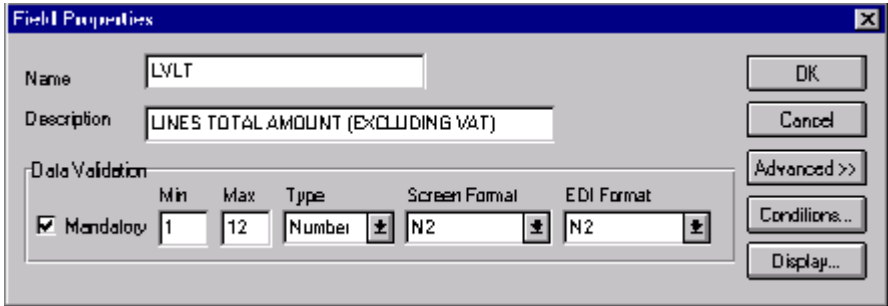
- Click the Hidden radio button to prevent the field from being displayed in the translation object.
- Click OK to exit the Display Properties dialogue.
- Click CLOSE to exit the Field Properties dialogue.

Customising the TLR LVLT Element

The TLR LVLT element (Lines Total Amount (Excluding VAT)) contains the sum of the STL LVLA elements in the preceding STL segments (before VAT is applied). The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the total amount (excluding VAT) to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Lines Total Amount (Excluding VAT) field:

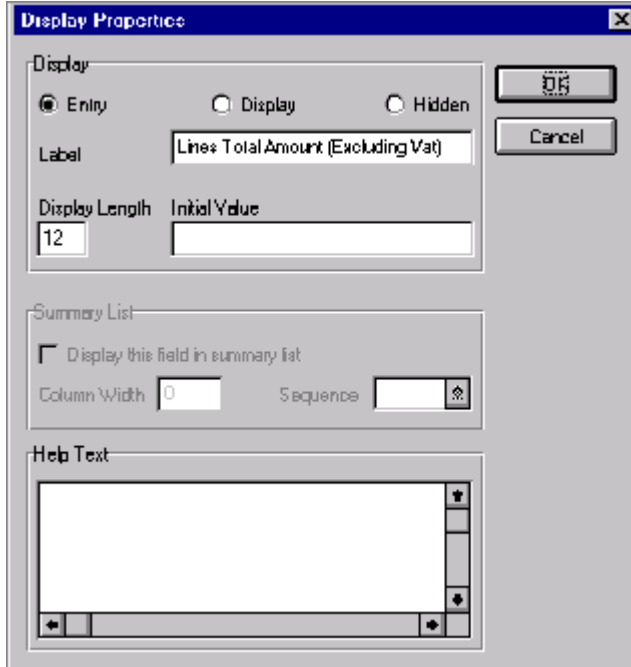
1. Double-click the TLR LVLVT element. The Field Properties dialogue is displayed.



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

- Name: LVLVT
- Description: LINES TOTAL AMOUNT (EXCLUDING VAT)
- Data Validation section:
 - Mandatory
 - Min: 1, Max: 12, Type: Number
 - Screen Format: N2
 - EDI Format: N2
- Buttons: OK, Cancel, Advanced >>, Conditions..., Display...

2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.
3. Click DISPLAY... to access the Display Properties dialogue.



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

- Display section:
 - Entry, Display, Hidden
 - Label: Lines Total Amount (Excluding Vat)
 - Display Length: 12, Initial Value: (empty)
- Summary List section:
 - Display this field in summary list
 - Column Width: 0, Sequence: (empty)
- Help Text section:
 - (Empty text area)
- Buttons: OK, Cancel

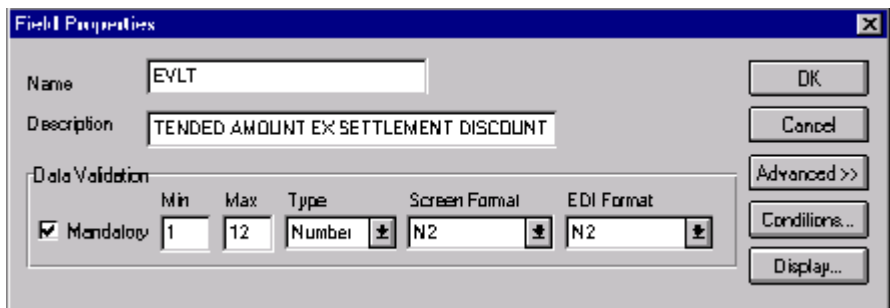
4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Invoice Amount (Excluding VAT)” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.

Customising the TLR EVLT Element

The TLR EVLT element (Total Extended Amount Ex Settlement Discount) contains the sum of the STL EVLA elements in the preceding STL segments (before VAT is applied). The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the total amount (excluding settlement discount and VAT) to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

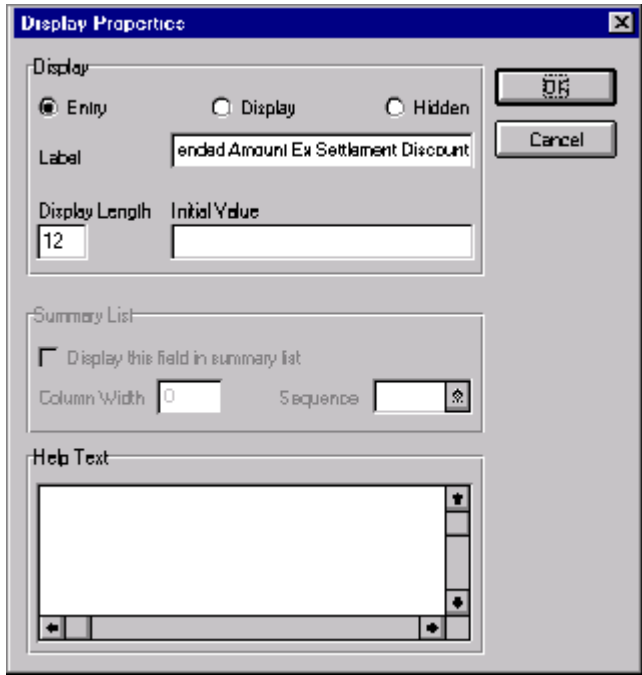
Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Total Extended Amount Ex Settlement Discount field:

1. Double-click the TLR EVLT element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



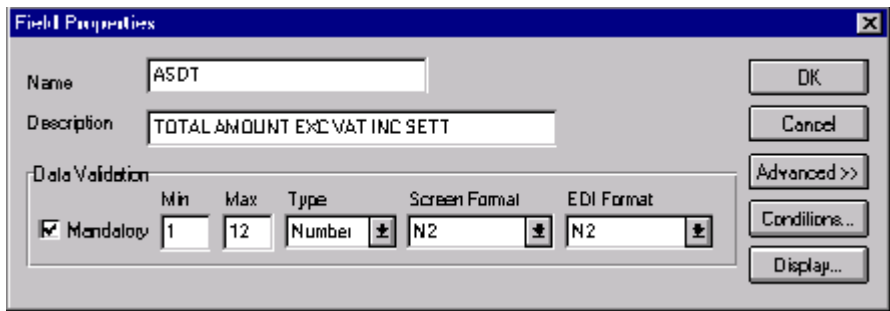
4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Invoice Amount (Ex. Settlement Disc.)” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.

**Customising the
TLR ASDT
Element**

The TLR ASDT element (Total Amount Exc VAT Inc Sett) contains the sum of the STL ASDA elements in the preceding STL segments (before VAT is applied). The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the total amount (excluding settlement discount and VAT) to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

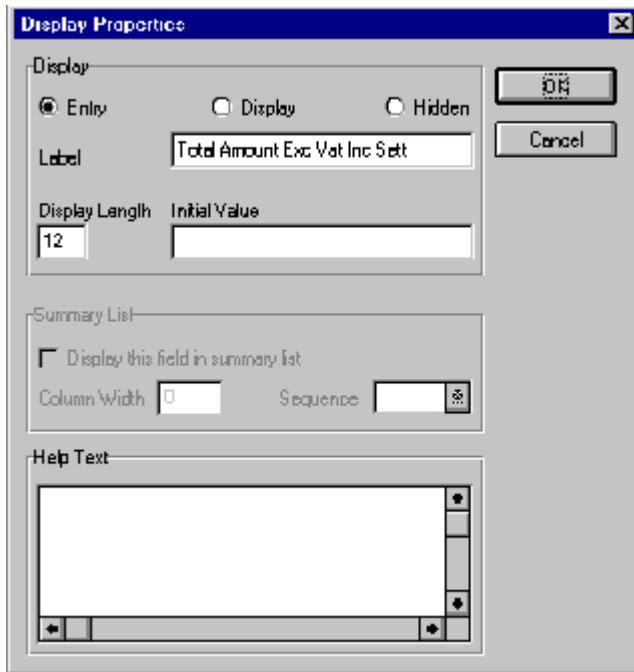
Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Total Amount Exc VAT Inc Sett field:

1. Double-click the TLR ASDT element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



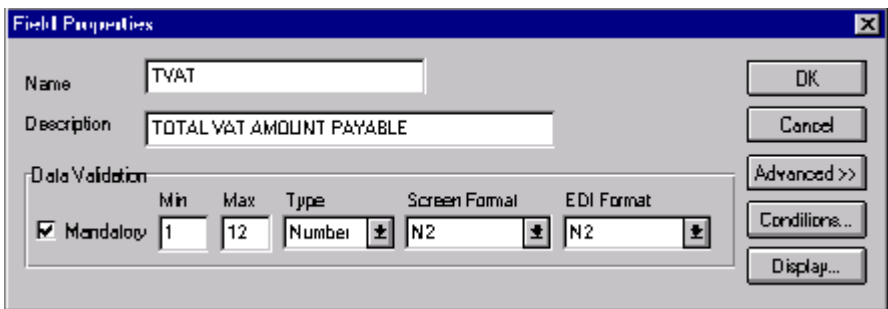
4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Invoice Amount (Ex. VAT Inc. Sett.)” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.

Customising the TLR TVAT Element

The TLR TVAT element (Total VAT Amount Payable) contains the sum of the STL VATA elements in the preceding STL segments. The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the total amount to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.

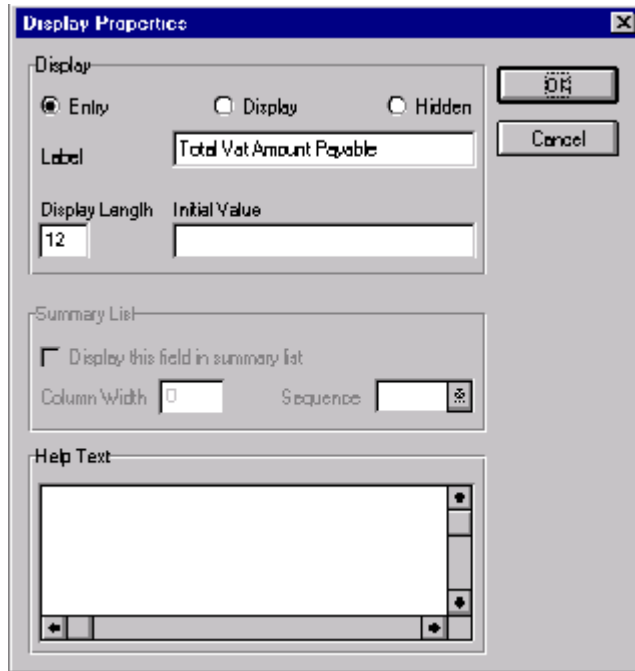
Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Total VAT Amount Payable field:

1. Double-click the TLR TVAT element. The Field Properties dialogue is displayed.



2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.

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



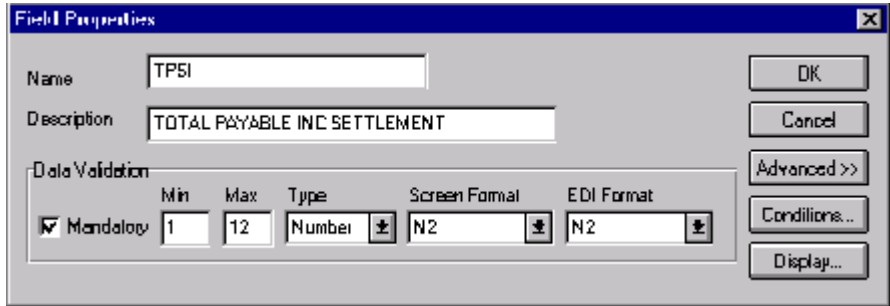
4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “VAT Total” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.

Customising the TLR TPSI Element

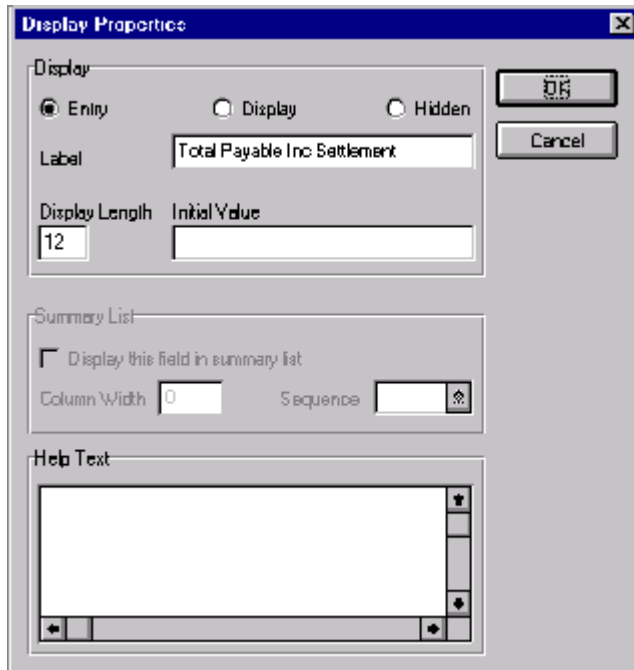
The TLR TPSI element (Total Payable Inc. Settlement) contains the sum of the STL APSI elements in the preceding STL segments. The EDI data will be formatted in N2 format (formatted with an implicit decimal point and two decimal places), but you want the total amount to be displayed in the translation object in R2 format (formatted with an explicit decimal point). Therefore, you will change the screen format to reflect how you want the amount to be formatted in the translation object. In addition, you will make this field display-only, as the screen entry translation object users who use this invoice translation object should be able to view, but not change, the value in this field. Also, you will rename the field label.


Complete the following steps to change the screen format, make the field display-only, and rename the field label for the Total Payable Inc. Settlement field:

1. Double-click the TLR TPSI element. The Field Properties dialogue is displayed.

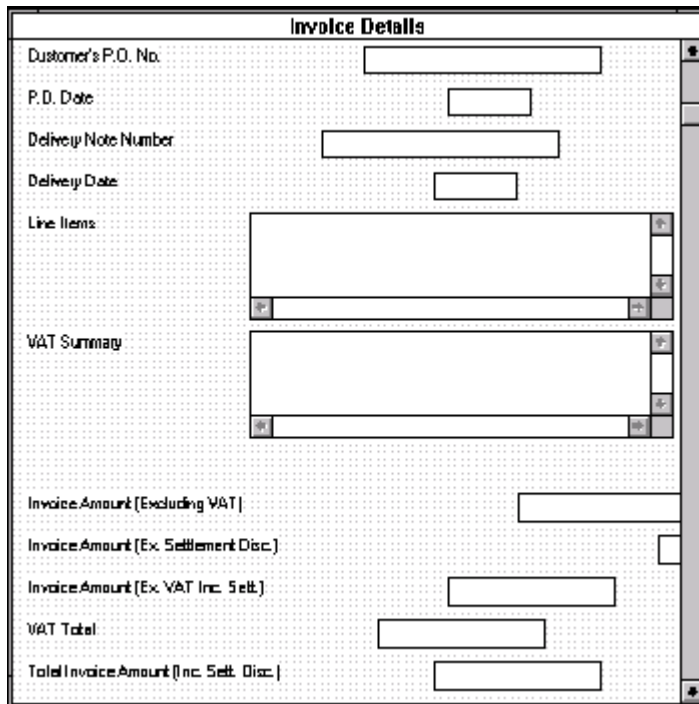


2. From the Screen Format drop-down list box, select “R2” to indicate that this field will display a number with an explicit decimal point and up to two decimal places.
3. Click DISPLAY... to access the Display Properties dialogue.



4. Click the Display radio button to make this field display-only. Users will be able to read the data in this field, but will not be able to enter or change a value in this field.
5. In the Label field, type “Total Invoice Amount (Inc. Sett. Disc.)” to replace the existing field label.
6. Click OK to exit the Display Properties dialogue.
7. Click CLOSE to exit the Field Properties dialogue.
8.  Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.

The section of the Invoice Details frame that contains the fields in the TLR segment now should look like this:



The screenshot shows a window titled "Invoice Details" with a dotted background. It contains several input fields and summary sections:

- Customer's P.O. No. (text field)
- P.O. Date (text field)
- Delivery Note Number (text field)
- Delivery Date (text field)
- Line Items (table with scroll bars)
- VAT Summary (table with scroll bars)
- Invoice Amount (Excluding VAT) (text field)
- Invoice Amount (Ex. Settlement Disc.) (text field)
- Invoice Amount (Ex. VAT Inc. Sett.) (text field)
- VAT Total (text field)
- Total Invoice Amount (Inc. Sett. Disc.) (text field)

Producing the VAT Summary and the Invoice Trailer

Now that you have customised the individual elements in the invoice, one last customising task remains: to produce the VAT summary and invoice trailer. The VAT summary and invoice trailer calculations include calculating the totals for the invoice for each of the different VAT rates and grouping the totals by VAT rate. To produce the VAT summary calculations for the invoice, you will use an extended rule to define operations with the Gentran:Director proprietary programming language.

There are two sections for extended rules: a *declarations* section and a *statements* section. The declarations section is used to declare the names and types of any variables you will use. The statements section is where you define the operations that you want the rule to execute. Within the statements section, you can leave blank lines to visually separate portions of an extended rule. (Blank lines are used more often in complex extended rules, rather than in simple one- or two-line extended rules.) Leaving a blank line does not affect the execution of extended rules.

As you define the operations for the VAT summary calculations, you will type many lines of rules in the Loop Level Extended Rules dialogue. This section describes each of the individual operations that you will define, and explains what you should type in order to execute each operation.



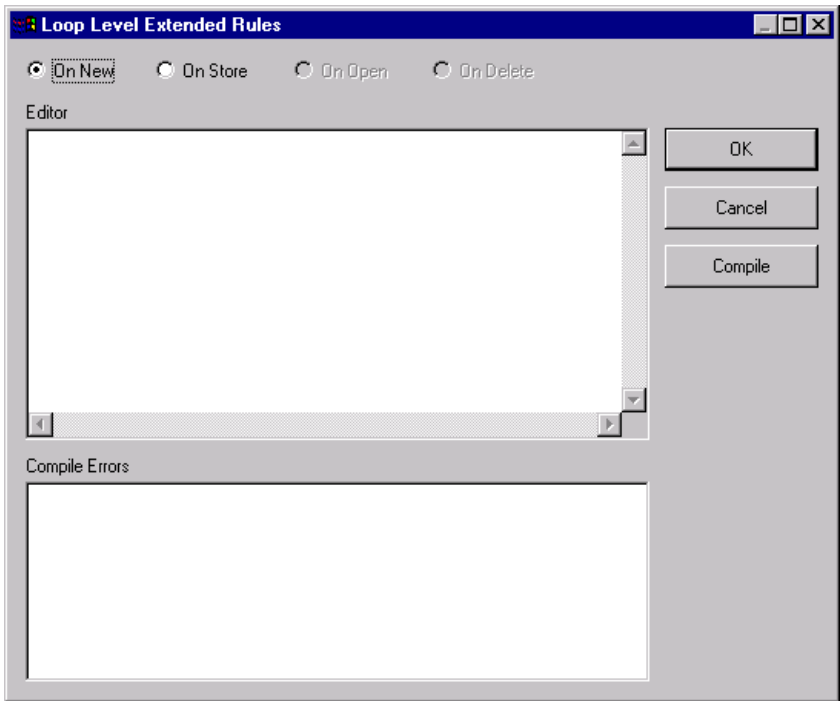
As an alternative to typing the extended rule yourself, you may copy the extended rule from the example form provided with the tutorial data in the C:\Program Files\Sterling Commerce\GENTRAN Director\TUTORIALS subfolder.

You will define the VAT summary and invoice trailer calculations on the INVOIC group so that the calculations are run when the screen entry translation object users in Gentran:Director either calculates or saves the file. After Gentran:Director stores the data in the fields, the system will run the calculations and store them in the appropriate VAT summary and invoice trailer fields. The extended rule will be used with the On Store function so the system will perform the calculations last, after the group is stored.

Complete the following steps to access the Loop Level Extended Rules dialogue to define the operations for the VAT summary calculations:

1. Click the INVOIC EDI file icon with the right mouse button to access the shortcut menu.

2. Select Extended Rules... from the shortcut menu. The Loop Level Extended Rules dialogue is displayed.



3. Click the On Store radio button to indicate that you want the rule to be executed when you save or recalculate the screen entry translation object. When the screen entry users save or recalculate the Invoice Details frame in Gentran:Director, all On Store extended rules in the Loop Level Extended Rules dialogue will be executed.

Declaring the Variables

Before you begin defining any operations in the statements section of the extended rule, you must first define the variables that you will use in the extended rule. Variables consist of a name and a data type, and they are used to store values.

For this extended rule, you will use these four variables (all of which have a data type of integer):

- **i** (temporary variable assigned any value you define in the extended rule)
- **j** (another temporary variable assigned any value you define in the extended rule)

- **ildlimit** (temporary variable that contains the number of ILD segments)
- **stllimit** (temporary variable that contains the number of STL segments)

Complete the following steps to declare the four integer variables listed above:

1. On the first line in the Editor list box, type the following declaration:
integer i,j,ildlimit,stllimit;
2. Press **ENTER** twice to insert a blank line after the declarations section.



It is not necessary to include a blank line after the declaration and statement sections. However, doing so may improve readability of the extended rule.

You are now ready to define the statements section of the extended rule.

Counting the STL Segments and Deleting Them

The STL segment is a repeating segment, so there is one STL segment for each VAT code used in the invoice. You want Gentran:Director to count the STL segments used in the invoice (the value from counting the STL segments will be placed in variable “i”). Next, you want the system to visit each STL segment and delete the segment. The reason you want the system to delete the STL segments is that the system makes the assumption that the form has been modified and, therefore, deletes the STL segments to reset the form before performing any calculations relating to the STL segments. Finally, you want the system to initialise the value of the last STL segment to zero.

Complete the following steps to define a statement that counts the STL segments and deletes them, then initialises the value of the last STL to zero:

1. On the next line in the Editor list box, type the following statement:

```
i=count($STL[*]);  
while i > 0 do  
begin  
  delete($STL[i]);  
  i=i-1;  
end  
stllimit = 0;
```

2. Press **ENTER** twice to insert a blank line after the statement.



It is not necessary to include a blank line after this statement. However, doing so may improve readability of the extended rule.

Counting the ILD Groups

The ILD group is a repeating group, so there is one ILD group for each line item in the invoice. You want Gentran:Director to count the ILD groups used in the invoice (the value from counting the ILD groups will be placed in variable “ildlimit”).

Complete the following steps to define a statement that counts the ILD groups:

1. On the next line in the Editor list box, type the following statement:
`ildlimit = count($ILD[1][*]);`
2. Press **ENTER** twice to insert a blank line after the statement.



It is not necessary to include a blank line after this statement. However, doing so may improve readability of the extended rule.

Finding Compatible VAT Codes in the STL Segments

Now that Gentran:Director has counted (and deleted) the STL segments and counted the ILD groups in the invoice, you want the system to determine which VAT code is used for each line item (each instance of the ILD group). Next, you want to group the line items that use the same VAT code so you can determine the VAT rate percentage (based on each VAT code) and then calculate the total VAT payable for each group of line items.

If the system finds a VAT code that is the same in both an ILD group and an STL segment (compatible VAT codes), then you want the system to execute the following operations:

- Add the extended line cost (ILD:2 LEXC element) into the lines subtotal (ILD:2 LVLA element) to add the line item from the ILD group to the compatible STL segment
- Increment a counter in the STL segment of how many of the existing ILD segments are compatible with that STL segment

If the system does not find an STL segment with the same VAT code as the ILD group it is visiting, then it executes the following operations:

- Creates an STL segment with the VAT code of the current ILD group
- Sets the number of STL segments (STL SEQA:7 element) to be the number of the last STL segment (the current segment, which was just created)
- Sets the VAT rate percentage of the STL segment (STL VATP:2 element) to equal the VAT rate percentage of the ILD group (ILD:2 VATP element)
- Sets the VAT code of the STL segment (STL CD12:2 element) to equal the VAT code of the ILD group (ILD:2 CD12 element)

- Sets the lines subtotal of the STL segment (STL LVLA element) to be the extended line cost of the ILD group (ILD:2 LEXC element)
- Sets the number of line items to be “1” (STL NRIL element)
- Sets the number of STL segments to be the number of the current STL segment (which was just created)

Finally, you want the system to repeat the process described above (finding compatible VAT codes in the STL segments and ILD segments) until it has no more ILD groups to count (each line item has been assessed).

Complete the following steps to define a statement that groups line items with the same VAT code:

1. On the next line in the Editor list box, type the following statement:

```

i=1;
while i <= ildlimit do
begin
  j=1;
  while j <= stllimit do
  begin
    if $ILD[1][i].#CD12 = $STL[j].#CD12:2 then
    begin
      $STL[j].#LVLA = $STL[j].#LVLA + $ILD[1][i].#LEXC;
      $STL[j].#NRIL = $STL[j].#NRIL + 1;
      break;
    end
    j=j+1;
  end
  if j > stllimit then
  begin
    $STL[j].#SEQA:7 = j;
    $STL[j].#VATP:2 = $ILD[1][i].#VATP;
    $STL[j].#CD12:2 = $ILD[1][i].#CD12;
    $STL[j].#LVLA = $ILD[1][i].#LEXC;
    $STL[j].#NRIL = 1;
    stllimit = stllimit + 1;
  end
  i=i+1;
end

```

2. Press **ENTER** twice to insert a blank line after the statement.



It is not necessary to include a blank line after this statement. However, doing so may improve readability of the extended rule.

Calculating the VAT Amount and Producing the Invoice Trailer

Up to this point, the extended rule you have defined instructs Gentran:Director to calculate the totals for the invoice for each of the different VAT rates. Now you will define a rule that calculates the total VAT amount and produces the invoice trailer.

First, the system will initialise the lines total amount (TLR LVLT element) and the total VAT amount payable (TLR TVAT element) to zero. Next, the system will perform the following calculations for every STL segment:

- Set the VAT amount payable (STL VATA element) equal to the product of the lines subtotal (STL LVLA element) and the VAT rate percentage (STL VATP:2 element), divided by one hundred (to calculate the VAT payable).
- Set the extended subtotal amount (STL EVLA element) equal to the lines subtotal (STL LVLA element), because you are not using settlement discounts in this tutorial.
- Set the extended subtotal amount (STL ASDA element) equal to the lines subtotal (STL LVLA element), because you are not using settlement discounts in this tutorial.
- Set the payable subtotal amount (STL APSI element) equal to the sum of the lines subtotal (STL LVLA element) and the VAT amount payable (STL VATA element).
- Set the lines total amount (TLR LVLT element) equal to the sum of the lines total amount (TLR LVLT element) and the extended subtotal amount (STL EVLA element).
- Set the total VAT amount payable (TLR TVAT element) equal to the sum of the total VAT amount payable (TLR VATA element) and the VAT amount payable (STL VATA element).

Finally, you want the system to repeat the calculations described above until all STL segments have been processed.

Complete the following steps to define a statement that groups the invoice totals by VAT rate:

1. On the next line in the Editor list box, type the following statement:

```
#LVLT = 0;
#TVAT = 0;
j=1;
while j <= stllimit do
begin
  $STL[j].#VATA = ($STL[j].#LVLA * $STL[j].#VATP:2) / 100.0;
  $STL[j].#EVLA = $STL[j].#LVLA;
  $STL[j].#ASDA = $STL[j].#LVLA;
  $STL[j].#APSI = $STL[j].#LVLA + $STL[j].#VATA;
```

```
#LVLV = #LVLV + $STL[j].#LVLA;
#TVAT = #TVAT + $STL[j].#VATA;
```

```
  j=j+1;
end
```

2. Press **ENTER** twice to insert one blank line after the statement.



It is not necessary to include a blank line after this statement. However, doing so may improve readability of the extended rule.

Completing the Trailer Calculations

The final operation that Gentran:Director will execute when processing the extended rule is to calculate the line value total and VAT. You want the system to perform these calculations:

- Set the number of total segments (TLR NSTL element) equal to the count of STL segments.
- Set the total extended amount (TLR EVLT element) equal to the lines total amount (TLR LVLV element).
- Set the total amount (TLR ASDT element) equal to the lines total amount (TLR LVLV element).
- Set the total amount payable (TLR TPSI element) equal to the sum of the lines total amount (TLR LVLV element) and the total VAT amount payable (TLR TVAT element).

To calculate the line value total and VAT, on the next line in the Editor list box, type the following statement:

```
#NSTL = stllimit;
#EVLT = #LVLV;
#ASDT = #LVLV;
#TPSI = #LVLV + #TVAT;
```

Checking What You Typed

Now that you have typed the entire extended rule that will be processed for the INVOIC group, your extended rule should look like this:

```
integer i,j,ildlimit,stllimit;

i=count($STL[*]);
while i > 0 do
begin
  delete($STL[i]);
  i=i-1;
end
stllimit = 0;
```

```

ildlimit = count($ILD[1][*]);

i=1;
while i <= ildlimit do
begin
  j=1;
  while j <= stllimit do
  begin
    if $ILD[1][i].#CD12 = $STL[j].#CD12:2 then
    begin
      $STL[j].#LVLA = $STL[j].#LVLA + $ILD[1][i].#LEXC;
      $STL[j].#NRIL = $STL[j].#NRIL + 1;
      break;
    end
    j=j+1;
  end
  if j > stllimit then
  begin
    $STL[j].#SEQA:7 = j;
    $STL[j].#VATP:2 = $ILD[1][i].#VATP;
    $STL[j].#CD12:2 = $ILD[1][i].#CD12;
    $STL[j].#LVLA = $ILD[1][i].#LEXC;
    $STL[j].#NRIL = 1;
    stllimit = stllimit + 1;
  end
  i=i+1;
end

#LVLT = #TVAT = 0;
j=1;
while j <= stllimit do
begin
  $STL[j].#VATA = ($STL[j].#LVLA * $STL[j].#VATP:2) / 100.0;
  $STL[j].#EVLA = $STL[j].#LVLA;
  $STL[j].#ASDA = $STL[j].#LVLA;
  $STL[j].#APSI = $STL[j].#LVLA + $STL[j].#VATA;

  #LVLT = #LVLT + $STL[j].#LVLA;
  #TVAT = #TVAT + $STL[j].#VATA;

  j=j+1;
end

#NSTL = stllimit;

```



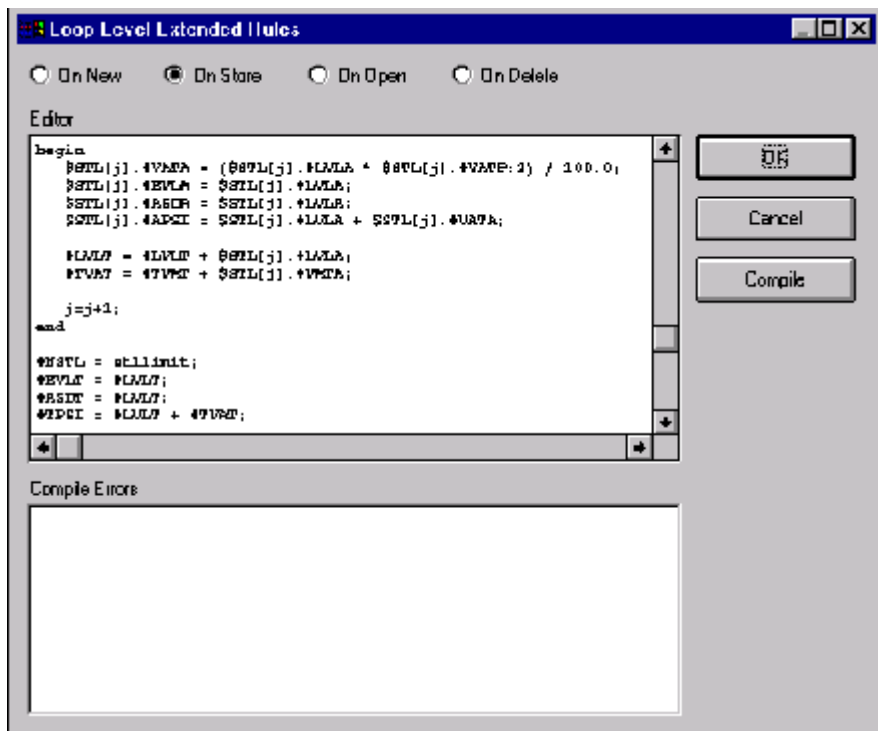
```
#EVLTL = #LVLTL;
#ASDT = #LVLTL;
#TPSI = #LVLTL + #TVAT;
```

Compiling the Extended Rule

Now that you have entered the extended rule to perform all the INVOIC group-level calculations for the invoice, you should compile the extended rule to verify that you have typed the rule correctly.

Complete the following steps to compile the extended rule.

1. Click **COMPILE** to compile the extended rule. The Loop Level Extended Rules dialogue now should look like this:



If you receive any errors or warnings when you compile the rule, verify that you typed the rule exactly as it is written in this tutorial. After you make any changes to the extended rule to correct it, click **COMPILE again. Repeat this process until there are no errors generated.**

2. Click OK to add the extended rule to the form and exit the Loop Level Extended Rules dialogue.
3. Click Save from the File menu to save the form.

Now that you have customised 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 customised the screen entry form for a TRADACOMS ANA001 INVOIC release 9 invoice that your users will use to enter data to invoice Pet Zone for items that were shipped to them. After successfully customising 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 Details 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 in each frame.



When you resize the frames of a screen entry form, you must resize based on the resolution of the target monitor (e.g. the monitor on which the end user will view the translation object). For example, if you size the frames of a screen entry form on a Super VGA monitor, the compiled translation object may not fit in the display area of a VGA monitor.

Complete the following steps to resize the Invoice Details frame:

1. Click the INVOIC file icon to display the Invoice Details frame in the Layout Window.



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

2. To display more of the form on your screen, click and drag the centre 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 Details 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.

The Invoice Details frame now should look like this:

The screenshot shows a window titled "Invoice Details" with a dotted background. The form contains the following fields:

- Location AHA Code:
- Location Own Code:
- Name:
- Address Line 1:
- Address Line 2:
- Address Line 3:
- Address Line 4:
- Post Code:
- Invoice No.:
- Invoice Date:
- Tax-point Date:
- Payment Terms:
- Invoice Notes:

Vertical scroll bars are visible on the right side of the form.

Arranging the Fields on the Invoice Details Frame

You will begin formatting the screen entry form by arranging the fields on the Invoice Details frame. You will 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 Details frame should look like the one in the example below (only part of the frame is shown below).

The screenshot shows a window titled "Invoice Details" with a dotted background. The fields are arranged as follows:

- Invoice No. [] Invoice Date []
- Customer's P.O. No. [] P.O. Date []
- Delivery Note Number [] Delivery Date []
- Taxpoint Date []
- CUSTOMER DETAILS**
- Location AHA Code [] Location Own Code []
- Name []
- Address Line 1 []
- Address Line 2 []
- Address Line 3 []
- Address Line 4 []
- Post Code []
- Payment Terms []
- Invoice Notes []
- []
- []
- []

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

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



If you forget which unlabelled field contains what data, you can click the field. Its associated element will be 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 Details 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. Click 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:



To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select.

- Location Own Code
- Name
- Invoice Date
- Tax-point Date
- P.O. Date
- Delivery Date



If any of these fields is not in the part of the Invoice Details 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. All selected fields will be resized to the lengths specified in the Display Length field of the Display Properties dialogue for each field.



If you accidentally 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 each field in the form individually and drag it closer to its respective label.
5. Select all of the items (fields, field labels, list boxes) on the frame and drag them a few centimetres lower on the frame. You will be arranging the fields at the top of the frame, so moving the fields and field labels out of the way initially will give you room to work with at the top of the frame.



To select a group of items, click and drag the mouse diagonally across all the fields/labels you want to select. When you release the mouse button, all the fields and field labels completely included within the space formed by dragging the mouse will have handles, indicating they were selected.



6. Click the Lock Labels button on the Main Toolbar to turn on the Lock Labels function. When you select a field, its corresponding field label will be selected also.
7. Select the Invoice No. label and field and drag them to the upper left corner of the Invoice Details frame. (Their field labels will be selected, too, because you have the Lock Labels function turned on.)
8. Select the Invoice Date label and field and drag them to the upper right corner of the Invoice Details frame (at approximately 8 cm on the horizontal ruler).
9. Select the Tax-point Date label and field and drag them under the Invoice Date label and field.
10. Select the Customer's P.O. No. label and field and drag them under the Invoice No. label and field (but not on the same line as the Tax-point Date label and field).
11. Select the P.O. Date label and field and drag them below the Tax-point Date label and field.
12. Select the Delivery Note Number label and field and drag them below the Customer's P.O. No. label and field.
13. Select the Delivery Date label and field and drag them below the P.O. Date label and field.
14. Select the Location ANA Code label and field and drag them below the Delivery Note Number label and field (and indented about half a centimetre).



You will add static text later in this tutorial to label all the fields providing customer details. Therefore, leave

extra space between the Delivery Note Number and Delivery Date labels and fields, and the Location ANA Code and Location Own Code labels and fields, to insert the static text between them.

15. Select the Location Own Code label and field and drag them to the right of the Location ANA Code label and field (at approximately 7 cm on the horizontal ruler).
16. Select the following fields and labels, and drag them below the Location ANA Code label and field:
 - Name
 - Address Line 1
 - Address Line 2
 - Address Line 3
 - Address Line 4
 - Post Code
17. Select the Payment Terms label and field and drag it below the Post Code field. (The left margin of the Payment Terms label should be aligned with the left margin of the Delivery Note Number label.)



Leave extra space between the Post Code field and label, and the Payment Terms field and label, to designate the end of the Customer Details section.

18. Select the Invoice Notes label and fields (there are four fields, three of which are unlabelled) and drag them below the Payment Terms label and field.
19. Select the Line Items label and list box and drag them below the fourth Invoice Notes field (the second, third, and fourth Invoice Notes fields are unlabelled).



Leave extra space above the Line Items field and list box to add column headings (using static text) to label the data in the list box.

20. Click and drag the right or left handle on the Line Items list box until the list box is approximately 11.25 cm wide. The list box must be at least 11.25 cm wide to be able to display all of the summary list data.



Use the horizontal ruler to help you measure width.

21. Select the VAT Summary label and list box and drag them below the Line Items label and list box.



Leave extra space above the VAT Summary field and list box to add column headings (using static text) to label the data in the list box.

22. Click and drag the right or left handle on the VAT Summary list box until the list box is approximately 4.5 cm wide. The list box must be approximately 4.5 cm wide to display all of the summary list data appropriately.
23. Select the following fields and labels and drag them below the VAT Summary list box (so that the fields and labels are approximately centred horizontally on the frame):
 - Invoice Amount (Excluding VAT)
 - Invoice Amount (Ex. Settlement Disc.)
 - Invoice Amount (Ex. VAT Inc. VAT)
 - VAT Total
 - Total Invoice Amount (Inc. Sett. Disc.)



24. Click the Lock Labels button on the Main Toolbar to turn off the Lock Labels function.

The Invoice Details frame now should look like this (only a portion of the frame is displayed below):

The screenshot shows a window titled "Invoice Details" with a dotted background. The form contains the following fields:

- Invoice No. [text box]
- Invoice Date [text box]
- Customer's P.O. No. [text box]
- Tapoint Date [text box]
- Delivery Note Number [text box]
- P.D. Date [text box]
- Delivery Date [text box]
- Location ANA Code [text box]
- Location Own Code [text box]
- Name [text box]
- Address Line 1 [text box]
- Address Line 2 [text box]
- Address Line 3 [text box]
- Address Line 4 [text box]
- Post Code [text box]
- Payment Terms [text box]
- Invoice Notes [text box]
- [text box]
- [text box]
- [text box]
- Line Items [table with scroll bar]
- VAT Summary [table with scroll bar]



Depending on the size of your monitor, you will see more or fewer of the fields in the example above. To see fields that are not displayed currently on the frame, use the scroll bar to scroll down the frame.

Aligning the Fields and Field Labels

Now that the fields in the Invoice Details 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 Details frame:

1. Select the following field labels:

- Invoice No.
- Customer's P.O. No.
- Delivery Note Number
- Payment Terms
- Invoice Notes
- Line Items
- VAT Summary



To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select.

2. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
3. Select the following field labels:

- Invoice Date
- Tax-point Date
- P.O. Date
- Delivery Date



To select a group of items, click and drag the mouse diagonally across all the fields/labels you want to select.

4. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
5. Select the following field labels:
 - Location ANA Code
 - Name
 - Address Line 1
 - Address Line 2

- Address Line 3
 - Address Line 4
 - Post Code
6. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
 7. Select the following field labels:
 - Invoice Amount (Excluding VAT)
 - Invoice Amount (Ex. Settlement Disc.)
 - Invoice Amount (Ex. VAT Inc. Sett.)
 - VAT Total
 - Total Invoice Amount (Inc. Sett. Disc.)
 8. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
 9. Select the following fields:
 - Invoice No.
 - Customer's P.O. No.
 - Delivery Note Number
 - Location ANA Code
 - Name
 - Address Line 1
 - Address Line 2
 - Address Line 3
 - Address Line 4
 - Post Code



Select the Location ANA Code field last, so that it is the *reference*. The reference is the item (field, field label, list box, or static text) relative to which all other selected items 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 selected in a group of selected items is the reference.

10. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected fields are aligned.

11. Select the Line Items and VAT Summary list boxes.



Select the VAT Summary field last, so that it is the reference.

12. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected list boxes are aligned.

13. Select the following fields:

- Invoice Date
- Tax-point Date
- P.O. Date
- Delivery Date



Select the Tax-point Date field last, so that it is the reference.

14. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected fields are aligned.

15. Select the following fields:

- Payment Terms
- Invoice Notes (all four fields)



Select the Payment Terms field last, so that it is the reference.

16. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected fields are aligned.

17. Select the following fields:

- Invoice Amount (Excluding VAT)
- Invoice Amount (Ex. Settlement Disc.)
- Invoice Amount (Ex. VAT Inc. Sett.)
- VAT Total
- Total Invoice Amount (Inc. Sett. Disc.)



Select the Total Invoice Amount (Inc. Sett. Disc.) field last, so that it is the reference.

18. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected fields are aligned.
19. To align the tops of all of the field labels, fields, and list boxes, select each row of items (one row at a time), select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The items in each row are listed below:
 - Invoice No. label and field, Invoice Date label and field
 - Tax-point Date label and field
 - Customer's P.O. No. label and field, P.O. Date label and field
 - Delivery Note Number label and field, Delivery Date label and field
 - Location ANA Code label and field, Location Own Code label and field
 - Name label and field
 - Address Line 1 label and field
 - Address Line 2 label and field
 - Address Line 3 label and field
 - Address Line 4 label and field
 - Post Code label and field
 - Payment Terms label and field
 - Invoice Notes label and field (first Invoice Notes field only)
 - Line Items label and list box
 - VAT Summary label and list box
 - Invoice Amount (Excluding VAT) label and field
 - Invoice Amount (Ex. Settlement Disc.) label and field
 - Invoice Amount (Ex. VAT Inc. Sett.) label and field
 - VAT Total label and field
 - Total Invoice Amount (Inc. Sett. Disc.) label and field

The Invoice Details frame now should look like this:

The screenshot shows a window titled "Invoice Details" with a dotted background. The form contains the following fields:

- Invoice No. (text box)
- Invoice Date (text box)
- Customer's P.O. No. (text box)
- P.O. Date (text box)
- Delivery Note Number (text box)
- Delivery Date (text box)
- Location ANA Code (text box)
- Location Own Code (text box)
- Name (text box)
- Address Line 1 (text box)
- Address Line 2 (text box)
- Address Line 3 (text box)
- Address Line 4 (text box)
- Post Code (text box)
- Payment Terms (text box)
- Invoice Notes (four stacked text boxes)
- Line Items (a large text area with scroll bars)
- VAT Summary (a table-like structure with a scroll bar)



Depending on the size of your monitor, you will see more or fewer of the fields in the example above. To see fields that are not displayed currently on the frame, use the scroll bar to scroll down the frame.

Adding Static Text to the Frame

You will add static text (text that is always included in the screen entry template) to the Invoice Details frame for these three purposes:

- To label the area of the frame containing customer detail fields
- To add column headings to the Line Items list box
- To add column headings to the VAT Summary list box

When you moved the fields on the frame, you already left space in the appropriate locations for the static text. In this section of the tutorial, you will add the static text and move it to the proper locations in the frame.

Adding the Customer Details Label

Complete the following steps to add static text that will label the group of customer detail fields on the frame:



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 field and type "CUSTOMER DETAILS", all in capital letters. The Text Properties dialog is displayed as you are typing. Click OK to add the text.

The text you added is displayed in the upper left corner of the frame.

3. Select the "CUSTOMER DETAILS" static text and drag it below the Delivery Note Number label and field (so it looks like the example on page 294). (The left margin of the static text should be aligned with the left margin of the Delivery Note Number label.)

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 Details 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.

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:

Item	Product	Qty.	Price

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 field 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, starting about 1 cm from the left margin of the list box (so it looks like the example on page 290).
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 field 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 290).
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 field and type “Qty.” (note the full stop 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, nearly 8 cm. from the left margin of the list box (so it looks like the example on page 290).
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 field 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, near the right margin of the list box (so it looks like the example on page 290).
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 cascading menu.

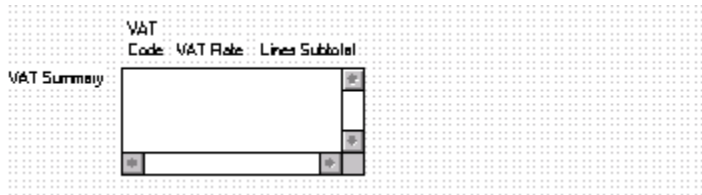


To select a group of items, click and drag the mouse diagonally across all the items you want to select.

Adding Column Headings to the VAT Summary List Box

Gentran:Director labels the fields on the VAT Summary frame, but does not label the column headings for the VAT Summary list box on the Invoice Details frame. The VAT Summary list box displays the information entered into the fields on the Line Items frame. To label the columns in the VAT Summary list box, you must add the column headings with static text.

After you add the column headings and move each column heading to its proper location, the VAT Summary 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 to add text to the current frame in the upper left corner.
2. Select the new text field and type "Code". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
3. Click and drag it to above the VAT Summary list box, immediately to the right of the left margin of the VAT Summary list box (so it looks like the example on page 292).
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 field and type "VAT". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
6. Click and drag it to above the "Code" static text (so it looks like the example on page 292).
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 field and type "VAT Rate". The Text Properties dialog is displayed as you are typing. Click OK to add the text.
9. Click and drag it to above the VAT Summary list box, about 1 cm from the left margin of the list box (so it looks like the example on page 292).
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 field and type “Lines Subtotal”. The Text Properties dialog is displayed as you are typing. Click OK to add the text.
12. Click and drag it to above the VAT Summary list box, nearly to the right margin of the list box (so it looks like the example on page 292).
13. To ensure that the column headings (static text) you just added are aligned properly, select the following static text:
 - Code
 - VAT Rate
 - Lines Subtotal
14. Select Align Controls from the Display menu, then select Top from the Align Controls cascading menu.



To select a group of items, click and drag the mouse diagonally across all the items you want to select.

15. Select the VAT and Code static text.
16. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu.

The Invoice Details frame now should look like this:

The screenshot shows a window titled "Invoice Details" with a dotted background. It contains several input fields and sections:

- Invoice No.:** [text box] **Invoice Date:** [text box]
- Customer's P.O. No.:** [text box] **P.O. Date:** [text box]
- Delivery Note Number:** [text box] **Delivery Date:** [text box]
- Customer's P.O. No.:** [text box] **Drop-Point Date:** [text box]
- CUSTOMER DETAILS**
- Location ANA Code:** [text box] **Location Own Code:** [text box]
- Name:** [text box]
- Address Line 1:** [text box]
- Address Line 2:** [text box]
- Address Line 3:** [text box]
- Address Line 4:** [text box]
- Post Code:** [text box]
- Payment Terms:** [text box]
- Invoice Notes:** [text box]
- Line Items:** A table with columns "Item Product", "Qty.", and "Price". It contains one row with a "+" button on the right.
- VAT Summary:** A table with columns "VAT Code", "VAT Rate", and "Lines Subtotal". It contains one row with "+" buttons on the right.



Depending on the size of your monitor, you will see more or fewer of the fields in the example above. To see fields that are not displayed currently on the frame, use the scroll bar to scroll down the frame.

Setting the Tab Sequence on the Invoice Details 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 Details 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.



Depending on the size of your monitor, you will see more or fewer of the fields in the example above. To see fields that are not displayed currently on the frame, use the scroll bar to scroll down the frame.

2. Click the fields and list boxes 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.

1. Invoice No.
2. Invoice Date
3. Tax-point Date
4. Customer's P.O. No.
5. P.O. Date
6. Delivery Note Number
7. Delivery Date
8. Location ANA Code
9. Location Own Code
10. Name
11. Address Line 1
12. Address Line 2
13. Address Line 3
14. Address Line 4
15. Post Code
16. Payment Terms
17. Invoice Notes (first field)
18. Invoice Notes (second field, unlabelled)
19. Invoice Notes (third field, unlabelled)
20. Invoice Notes (fourth field, unlabelled)
21. Line Items
22. VAT Summary
23. Invoice Amount (Excluding VAT)
24. Invoice Amount (Ex. Settlement Disc.)
25. Invoice Amount (Ex. VAT Inc. Sett.)

26. VAT Total

27. Total Invoice Amount (Inc. Sett. Disc.)



When you click the last field in the sequence (Total Invoice Amount (Inc. Sett. Disc.)), the tab sequence is set, and the tab sequence numbers no longer are displayed in the fields.

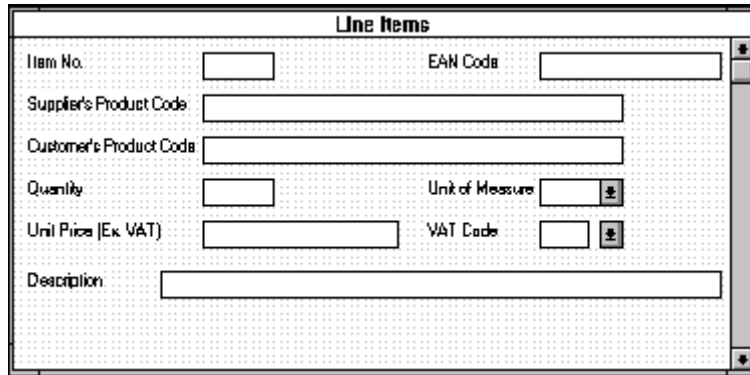
The new tab sequence should look like this:



Depending on the size of your monitor, you will see more or fewer of the fields in the example above. To see fields that are not displayed currently on the frame, use the scroll bar to scroll down the frame.

Arranging the Fields on the Line Items Frame

Now that the fields, labels, and static text are arranged on the Invoice Details 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 Details 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:

- Item No. (text box)
- EAN Code (text box)
- Supplier's Product Code (text box)
- Customer's Product Code (text box)
- Quantity (text box)
- Unit of Measure (dropdown menu)
- Unit Price (Ex. VAT) (text box)
- VAT Code (text box)
- Description (text box)

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 Details 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.



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

1. Click the ILD group (in the ODD 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 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.

- To display more of the form on your screen, click and drag the centre 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.

The Line Items frame now should look like this:

The screenshot shows a window titled "Line Items" with a dotted background. It contains the following fields:

- Item No. (text input)
- EAN Code (text input)
- Supplier's Product Code (text input)
- Customer's Product Code (text input)
- Quantity (text input)
- Unit of Measure (dropdown menu)
- Unit Price (Ex. VAT) (text input)
- Vat Code (dropdown menu)
- Description (text input)

Resizing the Fields

Complete the following steps to resize the fields on the Line Items frame of the screen entry form:

- Select the following fields:
 - Item No.
 - Quantity



To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select.

- Select Size to Length from the Display menu. All selected fields will be resized to the lengths specified in the Display Length field of the Display Properties dialogue 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 Unit of Measure field and 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).



Use the vertical ruler to the left of the frame to help you measure length.

2. Select the VAT Code and Unit of Measure fields (in that order).



Select the Unit of Measure field last, so that it is the reference.

3. Select Size Equally from the Display menu. The VAT Code field is the same size as the Unit of Measure field.



The Unit of Measure and VAT Code drop-down list boxes have slightly different appearances. When the Exclusive check box is marked in the Advanced section of the Field Properties dialogue, the text box is attached to the drop-down arrow. When the Exclusive check box is not marked, there is a gap between the text box and the drop-down arrow.

4. Select each field and list box on the frame individually and move it closer to its respective label.



5. Click the Lock Labels button on the Main Toolbar to turn on the Lock Labels function. When you select a field, its corresponding field label will be selected also.
6. Select the Item No. label and field and drag them to the upper left corner of the frame. (When you select the field, its label will be selected, too, because you have the Lock Labels function turned on.)
7. Select the EAN Code label and field and drag them to the upper right corner of the frame.
8. Select the following fields and labels and drag them below the Item No. label and field:
 - Supplier's Product Code
 - Customer's Product Code
 - Quantity

9. Select the Unit of Measure label and list box and drag them to the right of the Quantity label and field.
10. Select the Unit Price (Ex. VAT) label and field and drag them below the Quantity label and field.
11. Select the VAT Code label and field and drag them under the Unit of Measure label and list box.
12. Select the Description label and field and drag them below the Unit Price (Ex. VAT) label and field.



13. Click the Lock Labels button on the Main Toolbar to turn off the Lock Labels function.

Resizing the Line Items Frame

To resize the Line Items frame, click and drag the bottom of the frame to below the Description label and field.



Allow enough space between the Description label and field, and the bottom of the frame, for the VAT Code 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. It contains the following fields and labels:

- Item No. [text box]
- EAN Code [text box]
- Supplier's Product Code [text box]
- Customer's Product Code [text box]
- Quantity [text box]
- Unit Price (Ex. VAT) [text box]
- Unit of Measure [dropdown menu]
- VAT Code [text box]
- Description [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 field labels:
 - Item No.
 - Supplier's Product Code
 - Customer's Product Code
 - Quantity

- Unit Price (Ex. VAT)
- Description



To select more than one field, click the first field, then press CTRL and click the second field. Repeat the process of pressing CTRL and clicking the field for each subsequent field you want to select.

2. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
3. Select the following fields:
 - Item No.
 - Supplier's Product Code
 - Customer's Product Code
 - Quantity
 - Unit Price (Ex. VAT)



Select the Customer's Product Code field last, so that it is the reference.

4. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected fields are aligned.
5. Select the following labels:
 - EAN Code
 - Unit of Measure
 - VAT Code



To select a group of items, click and drag the mouse diagonally across all the fields and labels you want to select.

6. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.
7. Select the following field and list boxes:
 - EAN Code
 - Unit of Measure
 - VAT Code



Select the Unit of Measure list box last, so that it is the reference.

8. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected items are aligned.
9. Select the Description and EAN Code fields.



Select the EAN Code field last, so that it is the reference.

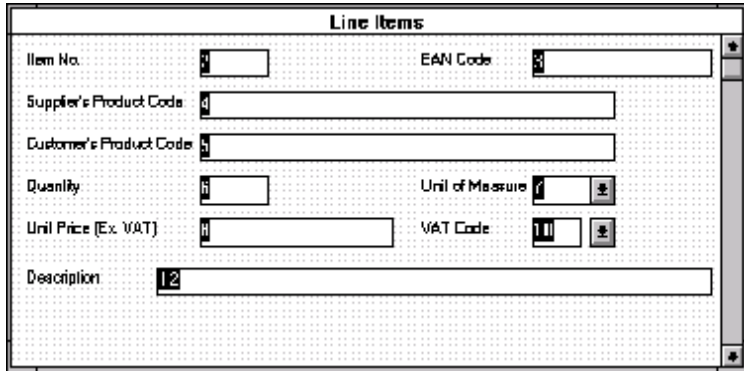
10. Select Align Controls from the Display menu, then select Right from the Align Controls cascading menu. The right margins of the of the selected fields are aligned.
11. To align the tops of all of the field labels, fields, and list boxes, select each row of items (one row at a time), select Align Controls from the Display menu, then select Top from the Align Controls cascading menu. The items in each row are listed below:
 - Item No. label and field and EAN Code label and field
 - Supplier's Product Code label and field
 - Customer's Product Code label and field
 - Quantity label and field and Unit of Measure label and drop-down list box
 - Unit Price (Ex. VAT) label and field and VAT Code label and drop-down list box
 - Description label and field

The Line Items frame now should look like this:

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.



2. Click the fields listed on the next page 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 you are now setting.



It is important to click each field in the order listed below. 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.

1. EAN Code
2. Supplier's Product Code
3. Customer's Product Code
4. Quantity
5. Unit of Measure
6. Unit Price (Ex. VAT)
7. VAT Code
8. Description
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 line item number (the line item number is generated by an extended rule in the ILD group). 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 EAN Code field, which is the first field into which users can enter a value.

The new tab sequence for the Line Items frame 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.: 0
- EAN Code: 1
- Supplier's Product Code: 2
- Customer's Product Code: 3
- Quantity: 4
- Unit of Measure: 5
- Unit Price (Ex. VAT): 6
- VAT Code: 7
- Description: 8



When you click the last field in the sequence (Item No.), the tab sequence is set, and the tab sequence numbers no longer are displayed in the fields.

Arranging the Fields on the VAT Summary Frame

Just as you arranged the fields, labels, and static text on the Invoice Details and Line Items frames, now you will arrange the items on the VAT Summary frame. You will place the fields in a logical order, then align the fields to give the frame a consistent and orderly appearance. When you finish arranging the fields, the VAT Summary frame in your form should look like the one in the example below.

A screenshot of a software window titled "VAT Summary". The window has a dotted background and a vertical scrollbar on the right. It contains six rows of labels and input fields:

- VAT Code: followed by a small square input field.
- VAT Rate: followed by a rectangular input field.
- Number of Line Items: followed by a rectangular input field.
- Lines Subtotal (Excluding VAT): followed by a rectangular input field.
- VAT Amount Payable: followed by a rectangular input field.
- Payable Subtotal (Inc. Sett. Disc.): followed by a rectangular input field.

Resizing the VAT Summary Frame

Before you begin arranging the fields on the VAT Summary frame, you should resize the frame so that it is the same width as the Invoice Details and Line Items frames. 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.



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

1. Click the STL segment to display the VAT Summary frame in the Layout Window.
2. To resize the VAT Summary frame, click and drag the right side of the frame to the 14 cm mark on the ruler, so that all the fields on the frame are visible. After you arrange the fields on this frame, you will resize the VAT Summary frame so that it matches the other frames in the invoice.



Use the horizontal ruler at the top of the frame to help you resize the frame.

- To display more of the form on your screen, click and drag the centre 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.

The VAT Summary frame now should look like this:

The screenshot shows a window titled "VAT Summary" with a dotted background. The fields are arranged as follows:

- VAT Code: A small rectangular input field.
- VAT Rate: A rectangular input field.
- Number of Line Items: A rectangular input field.
- Lines Subtotal (Excluding VAT): A rectangular input field.
- VAT Amount Payable: A rectangular input field.
- Payable Subtotal (Inc. Sell. Disc.): A rectangular input field.

Resizing the VAT Code Field

Gentran:Director bases the lengths of fields on the widths of lowercase letters. For example, if a field has a display length (defined on the Display Properties dialogue) of five, then Gentran:Director produces a field with a length able to accommodate the average width of lowercase letters.

The VAT Code field will contain a code in an uppercase letter. Therefore, you should adjust the width of the field to prevent the code in the VAT Code field from being truncated.

Complete the following steps to resize the VAT Code field:

- Select the VAT Code field.
- Drag its right or left handle so the field is approximately twice as wide as its original width.

Moving and Aligning the Fields

Complete the following steps to move and align the fields on the VAT Summary frame of the screen entry form:

1. Select the VAT Amount Payable and Payable Subtotal (Inc. Sett. Disc.) fields and labels, and drag them closer to the Lines Subtotal (Excluding VAT) field and label.



You may need to temporarily adjust the width of the frame so that the Payable Subtotal (Inc. Sett. Disc.) field is visible.

2. Select all of the fields on the frame.



Select the VAT Amount Payable field last, so that it is the reference.

3. Select Align Controls from the Display menu, then select Left from the Align Controls cascading menu. The left margins of the selected field labels are aligned.

Resizing the VAT Summary Frame

Complete the following steps to resize the VAT Summary frame:

1. Click and drag the bottom of the frame to below the Payable Subtotal (Inc. Sett. Disc.) label and field.

The VAT Summary frame now should look like this:

The screenshot shows a window titled "VAT Summary" with a dotted background. On the right side, there is a vertical scrollbar. The following fields are listed on the left, each with a corresponding input box on the right:

VAT Code:	<input type="text"/>
VAT Rate:	<input type="text"/>
Number of Line Items:	<input type="text"/>
Lines Subtotal (Excluding VAT):	<input type="text"/>
VAT Amount Payable:	<input type="text"/>
Payable Subtotal (Inc. Sett. Disc.):	<input type="text"/>


Whereas in the Invoice Details and Line Items frame you set the tab sequence for the fields on the frames, you do not need to set the tab sequence for the VAT Summary frame. All the fields on this frame (other than the hidden fields) are display-only. Screen entry translation object users will not be able to enter a value in any of the fields, so the tab sequence is irrelevant.

Changing the Invoice Details Frame Title

The system automatically 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 Details. You will 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 to access the shortcut menu.
2. Select Properties... from the shortcut menu. The File Format Properties dialogue is displayed.

3. In the Frame Caption field, type “TRADACOMS ANA001 INVOIC Release 9 - Pet Zone”.
4. Click the OK button. The new frame title is displayed in the frame title in the Layout Window.
5.  Click Generate Layout on the Main Toolbar to refresh the display of the screen entry form.
6. Select Save from the File menu to save the form. You have completed your Invoice form. Now, you are ready to finalise the form.

Finalising the Form

Now that you have created and customised 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.

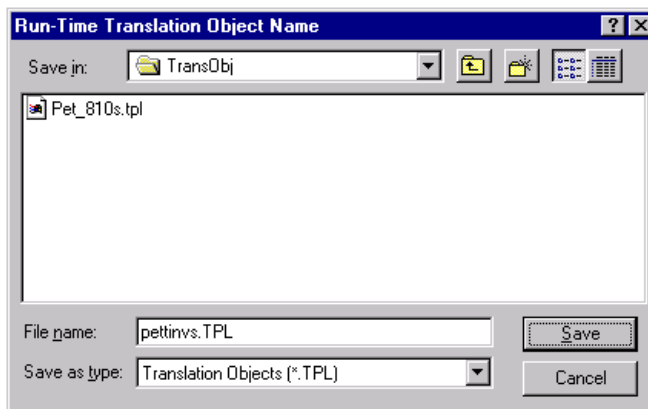
Compiling the Form

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

This translation object must be registered with the Gentran: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 dialogue.



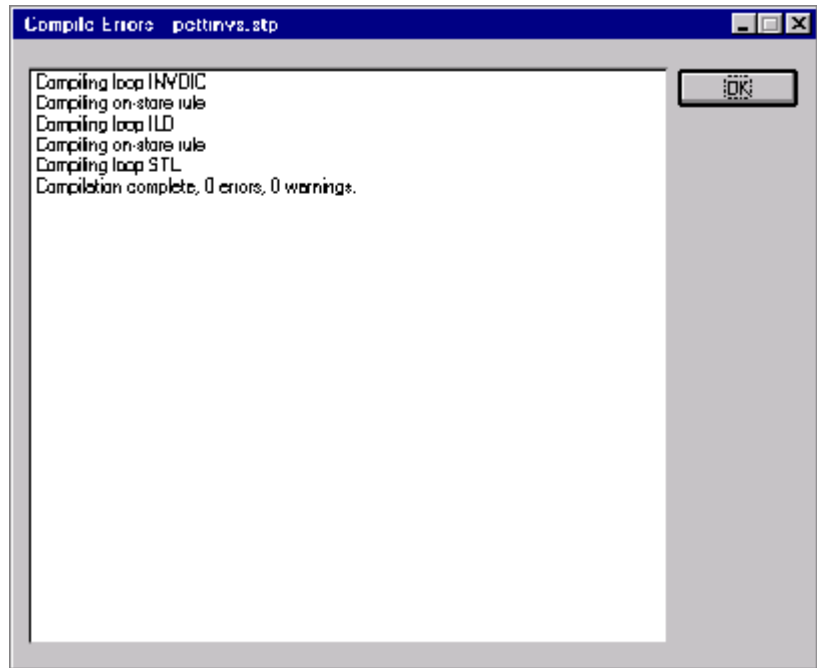
2. Click SAVE to accept the translation object name (pettinv.s.tpl) in the "File name" field.

This name for the compiled translation object (.TPL file) is the same filename as the source form (.STP file). Preserving the same filename (with different file extensions) ensures that the relationship between the source form and the compiled translation object remains evident.



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

The system will compile the form and generate an error report. The error report is displayed in the Compile Errors dialogue.



3. Click OK to exit the Compile Errors dialogue.



If the Compile Errors dialogue 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.

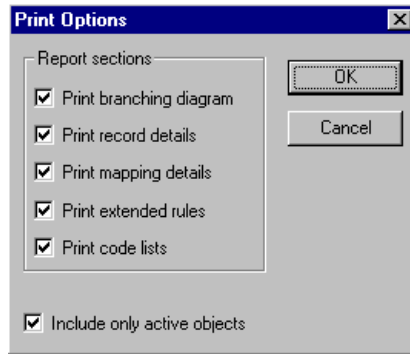
4. Select Save from the File menu to save the form. The date on which you compiled the form is loaded automatically into the Compiled on field on the Translation Object Details dialogue.

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 dialogue.



2. Click OK to accept the defaults on this dialogue (all options marked), so the report includes all sections and only the activated form components. The Print dialogue is displayed.
3. Set the appropriate options. Click OK if you do *not* need to change Setup options, and the report will be printed.

Click SETUP... if you need to access printer setup information (to select a specific printer, paper orientation, or size and source of paper). The Print Setup dialogue is displayed as follows:

4. Set the appropriate options. Click OK if you do *not* need to change Print Options (dithering, intensity control, or print true type as graphics), and you will return to the Print dialogue. Click OK on the Print dialogue and the report will be printed.

Click OPTIONS... if you need to access printer setup options information. The Options dialogue is displayed.

5. Set the appropriate options. Click OK to return to the Print Setup dialogue, then click OK on the Print Setup dialogue to return to the Print dialogue. Click OK on the Print dialogue and the report will be printed.

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.



The translation object must be registered with the Gentran:Director system before you can use it. See the Gentran:Director *User's Guide* for information on registering the translation object.

Complete the following steps to test the screen entry translation object you just created:

1. Register the PETTINVS.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 PETZONE4.PAR partner relationship into Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on importing a partner.
3. Import the division lookup table (INVATCO.LKP) for the system partner (<Internal System User>) into Gentran:Director. Please see the Gentran:Director *User's Guide* for more information on importing a table.

The default full path for the lookup table is:

C:\Program Files\Sterling Commerce\GENTRAN Director\TUTORIAL\INVATCO.LKP

4. Verify (in Partner Editor) that the Screen TRADACOMS 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.
5. Create a new document (partner PETZONE4 and relationship PETZONE4_TRADACOMS_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 messages 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 messages 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 message.
- 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 organisation for the United States.
- application file** If you are creating an import or export map, you must define your application to the Application Integration subsystem. In Gentran: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 message (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 fulfil 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 messages (transaction sets), interchanges, translation objects, etc. A message browser displays only messages.
- 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 utilising 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 colours to visually define the various map components. The use of colour is optional.
- communications session** Everything sent and received to/from one telephone number in one continuous period of connection. This could include sending two or three interchange envelopes to a network, each for a different trading partner.
- Communicator** This is the Gentran:Director communications software. The Communicator enables you to send, receive, resend, establish communication port definitions, establish communication profiles, establish communication scripts, and view and delete communication sessions.
- compile** This function compiles the form and creates a translation object. The form that you create using Gentran:Director 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 message 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 sub-elements.
- composite data element** A contains two or more component data elements or sub-elements. 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.
- dialogue box** A dialogue box (or dialogue) 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 dialogue boxes display warnings or messages indicating why a requested task cannot be accomplished. If the dialogue box has a title bar, you can move it to another location on your desktop.
- document (message)** One transaction set containing actual data and treated as a single entity. The amount of data does not affect whether something is a message 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 message.

If a trading partner sends you a communication containing 10 purchase orders, you have received 10 messages. If the communication contained 15 invoices, you have received 15 messages.

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 utilising right-handed or left-handed mouse operation.

drop-down combo box A drop-down combo box includes a text box and an attached, integrated drop-down list. Select an option from the drop-down list, or if the correct option is not available, type it in the text box.

drop-down list box A drop-down list box is displayed as a rectangular box with the current choice. Click the down-arrow icon or press the **UP** or **DOWN** arrow keys to move through the options, and a list of available choices is displayed. Scroll bars appear if there are more items than can fit in the box.

EANA International Article Numbering Association, Brussels, Belgium.

EDI Electronic Data Interchange (EDI) is the process by which companies can exchange business messages directly from application to application by computer without paper messages 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 message into an EDI message.

EDIA The Electronic Data Interchange Association, formerly known as the Transportation Data Coordinating Committee (TDCC).

EDIFACT This is the standards organisation of the United Nations Economic and Social Council. The acronym is short for the Electronic Data Interchange for Administration, Commerce, and Transport.

element The smallest piece of usable information defined by the standards. Examples might include a quantity, unit price, or description. An individual element can have somewhat different meanings depending on context. Therefore, elements are normally not considered to have useful meaning until they are

combined into segments. An element is the EDI map component that is mapped (linked) to a corresponding application field to move data to and from the EDI file.

There are three types of data elements, as illustrated in the table below:

Data Element	Definition
Simple data element	A single piece of information defined by the standards.
Composite data element	A data element that is made up of multiple component elements.
Component data element	A simple data element that belongs to a composite data element. Component data elements are also called sub-elements.

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 message) is contained within a transaction set envelope.

Functional Group

An envelope containing related business messages. 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 messages that your partners send you to your application file (flat file definition). An export map is necessary for inbound processing.
- export translation object** See export map.
- extended rules** These rules enable you to use a Gentran: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 sub-group), 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 sub-groups 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 messages, to the EDI standard-formatted messages that your partners expect to receive from you. An import map is necessary for outbound processing.
- import translation object
inbound mapping** See import map.
The system translates your trading partner's EDI standard formatted business message to your application file format, so you can receive messages from you partners. To translate inbound data, you need to create an export map.
- In Documents** This Gentran:Director browser contains a list of messages that the system received but that have not yet been processed by the user. Once the messages are processed (printed or exported) the messages will be transferred to the In Drawer.
- In Drawer** This Gentran:Director browser contains a list of messages that were received and processed.
- integer** An integer is a number that has an implied decimal point (e.g., "2.01" is formatted as "201").
- interchange** The interchange contains all the functional groups of messages (transaction sets) sent from one sender to one receiver in the same transmission.
- Interchanges browser** This Gentran:Director browser enables you to view a hierarchical list of all the interchanges that were sent or received. It contains status information about the interchanges, (e.g., whether or not a functional acknowledgement was received and the status of that acknowledgement). This browser also enables you to access the messages within the interchanges. The Interchanges browser can always be accessed.
- 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.

- list box** A list box displays a list of choices. Scroll bars are provided if there are more choices than can fit in the box.
- 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 Organisation 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 messages 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 messages that are ready to be sent. After the messages are successfully sent, they are automatically transferred to the Out Drawer.
- Out Drawer** This Gentran:Director browser contains a list of messages that were successfully sent out by the system.
- partner** Another firm with which your company trades messages. 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 messages 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 organises and formats the printout of EDI messages that are received from or sent to the trading partner(s) for which you have established a trading relationship (inbound or outbound) that utilises that print translation object. The print translation object enables you to view the EDI message 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 specialised 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.

real number A real number has an explicit decimal point (e.g., “2.01” is formatted as “2.01”), and truncates trailing zeroes.

receive This `Gentran: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 message (using the `Turn Around` translation object in the partner relationship) in response to one or more selected message(s) in the `In Drawer`.

responsible agency An organisation that develops and updates standards for EDI communications. These organisations include ANSI, EDIA, AIAG, UCS, EDIFACT, ODETTE, and VICS.

screen entry translation object A screen entry translation object provides a standardised format for keying an EDI message into the `Document Editor`, for translation and transmission to your trading partner(s), for which you have established an outbound trading relationship that utilises that screen entry translation object. The screen entry translation object ensures that your users key all the data necessary to create the required EDI message.

- 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 catalogue 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 messages are enveloped and sent. If no messages are selected, ALL messages will be sent. Successfully sent messages 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 or NUM for the “Num Lock” key, etc.).

- string** This type of field or element contains one or more printable characters. If you specify that a field or element 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 dialogue. This enables you to define what type of characters should be used while compliance checking each element/field (i.e., alphanumeric within a certain range, numeric within a certain range, etc.).
- system import map** The translator uses this map to determine which trading relationship (established in Partner Editor) corresponds to each message in the application file, so the system will know which import map to use to process the message. 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 message 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 messages 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 messages. Also referred to as a partner.
- transaction set (message)** 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 message is received, to create the natural response message that contains as many elements from the received message as possible.
- Export File:** This translation object indicates that when a message is received, it will be exported to a specified file format.
- Print:** This translation object is used to print messages.
- Outbound Translation Objects:**
- Import:** This translation object is used to import data from an application file.
- Print:** This translation object is used to print messages.
- Data Entry:** This translation object is used to enter data into the Message 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 message into which data elements from the source message have been automatically transferred using a turnaround map.

turnaround map A series of instructions that the system uses to create a turnaround message (a logical response message to the source) from an inbound (source) message, by transferring data from the source message to elements in the target message (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 message record, envelope segment, interchange, group, current partner, or message (if the map side format type is EDI), with the contents of the element or field.



Please note that this function updates the internal Gentran:Director database tables. We recommend that you use this function only if you are sure you really want to update the internal database tables.

Typically, you will *only* use this function if you want to update the message name and reference in the message table. Any other use of this function could have disastrous consequences!

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, message 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 message 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” messages. It also contains recently imported or data entry messages.

X12 The ANSI committee that sets and publishes standards for EDI.

