# Gentran:Server® for UNIX® and Workstation

## XML User's Guide

Version 6.1

Sterling Commerce
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# About This Guide

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# Introduction

**Welcome**

Welcome to the *Gentran:Server® for UNIX® and Workstation XML User's Guide*.

**Purpose**

The purpose of the *XML User's Guide* is to serve as a companion to the *Gentran:Server for UNIX and Workstation Application Integration Guide*. The manual is intended to assist you in performing various XML related-tasks in the Application Integration subsystem. This task-oriented approach is intended to answer any questions you may have about creating and maintaining XML maps.

**Note**
This manual is not intended to explain or define XML.

**Who should use this guide**

The *Gentran:Server for UNIX and Workstation XML User's Guide* is for Gentran:Server users who create maps using the XML format for the input files, output files, or both.

# Before you Begin

**Client/PC Knowledge required**

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.
- Windows-specific attributes, such as dialog boxes, icons, windows, and buttons.

This manual also assumes that you are familiar with your internal application format, data mapping concepts, XML structure and format, and the Gentran:Server for UNIX or Workstation product.

**XML knowledge required**

This book also assumes that you are familiar with XML structure and format.

**Reference**
See the most recent XML specification (available from the World Wide Web Consortium W3C: http:\\www.w3c.org) for more information about the XML language.

**Prerequisites**

This list describes the software prerequisites to use XML with Gentran:Server for UNIX.

- You must have Gentran:Server for UNIX or Workstation version 6.0 currently installed.
- You must have installed the XML translation option from the Gentran:Server for UNIX or Workstation 6.0 Options Pack CD.
- To use the Data Definition Format, you must have Internet Explorer 5.0 or greater installed on your machine.

# What's in This Manual

## Description of contents

The *XML User's Guide* is organized into chapters. This table describes the contents.

| Chapter | Description |
|---|---|
| About This Guide | Introduces the content, organization, and conventions in this guide. This chapter also describes how to get technical support. |
| Basics of XML Translation | Introduces XML and XML file format concepts. |
| Designing your Map for XML | Explains how to create and define a new map using the XML file format. |
| Creating XML Trading Partnership Records | Explains how to create Trading Partnership records using the translation option. |
| Configuring for XML | Explains how to configure your system to receive and send XML files. |
| Glossary | Contains mapping and Gentran:Server terms and concepts. |
| Index | Provides you with a list of terms, concepts, functions, and processes to enable you to quickly find them in this guide. |

## Online Help System

Additional documentation for Gentran:Server for UNIX is contained in the online Help system. The online Help documentation includes all the dialog box element definitions, detailed processing information, and all the "how to" information contained in this manual.

# Related Publications

**Gentran:Server documentation**

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

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

| (Contd) Document | Description |
|---|---|
| GENCOD User's Guide | Instructions for mapping and translating GENCOD files with the Application Integration system and the Visual Mapper. |
| VDA User's Guide | Instructions for mapping and translating VDA files with the Application Integration system and the Visual Mapper. |
| Technical Reference Guide | Describes processes, lists command-line commands in alphabetical order, and describes file record layouts and data type formats. |
| Data Flow Administration Guide | User instructions for configuring data flows using the Gentran:Server for UNIX software.<br>**Note**<br>This guide is provided only if you have the Gentran:Server EC Workbench or higher product level. |
| Maintenance and Troubleshooting Guide | Instructions for maintaining your Gentran:Server installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur. |
| Advanced Data Distribution Guide | Instructions for configuring and using the Gentran:Server Advanced Data Distribution product.<br>**Note**<br>This guide is provided only if you have Gentran:Server with Advanced Data Distribution. |
| FTP Daemon User's Guide | Instructions for configuring and using the FTP Daemon tool with the Advanced Data Distribution product. |
| Online Help | Context-sensitive help screens describing the Gentran:Server dialog boxes for the mapping and translation features. Also includes procedures for using the mapping and translation and the data flow administration software. |
| Readme file | Information about recent enhancements included with this software release. This file is in the */readme* directory on the Windows client computer. |

## Other documentation

This table lists other documentation you may need to refer to when installing and setting up Gentran:Server.

| Description | Source |
|---|---|
| Instructions for installing and using the operating system on your computer. | Your hardware vendor<br><br>The computer manufacturer |

# Documentation Conventions

## Typographic conventions

This table describes the typographic conventions used in this guide.

| Convention | Use |
|---|---|
| Italics | This typeface is used for titles of other manuals and documents, names of files and file extensions, and to emphasize important information.<br><br>**Example**<br>*Gentran:Server for UNIX Getting Started Guide* |
| Bold | Bold type is used for key terms, icons or buttons receiving an action, and entries you are to make on-screen.<br><br>**Example**<br>A **password** is a set of characters a user must enter to gain access to a system. |

CHAPTER
1

# Basics of XML Translation

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**Overview**

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# Overview

# Introduction

**In this chapter**

This chapter introduces you to the XML mapping concepts, the XML file definition components, and XML map types for Gentran:Server with the XML translation option.

**References**

See the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for mapping concepts, map components, and map types for the EDI standard, application file definition, and ODBC file formats.

**Key terms**

This table lists the key terms used in this chapter.

| Term | Description |
|---|---|
| compile | The process used to convert a map into a translation object. |
| DDF (Data Definition Format) | A file that defines a file format used in a map. It includes the hierarchical and looping structure of the data, the map objects and the attributes of the objects. |
| DTD (Document Type Definition) | The set of rules governing the tags in an XML document. A DTD file describes the elements and attributes that are allowed in your documents. |
| links | The visual lines that connect each field on the input side of the map to a field on the output side of the map. |
| loop | A sequence of repeating XML objects. |
| map | A file object that defines the corresponding relationship between document components in two different formats. |
| map version | The incremented number that indicates the rendition of the map. A lower number represents an earlier version; a higher number represents a later version. |

(Continued on next page)

| (Contd) Term | Description |
|---|---|
| root element | The unique first element in an XML document that contains all other elements in the document. |
| translation object | A file containing information that instructs the translator how to convert a file from one format to another. When you compile a map you created, the result is a translation object. |
| translator | The Gentran:Server subsystem that translates data from one format into another. |
| XML (eXtensible Markup Language | A text-based language that provides a standard approach for describing, capturing, processing, and publishing information. |
| XML document | A document in XML format. An XML document is modeled after a tree, in which each element in the tree is considered a node. |
| XML parser | The processor that categorizes the characters in an XML document as either markup or character data. |

# XML with Gentran:Server

## Introduction

In addition to handling application and standard formats, Gentran:Server enables you to create maps that translate XML (eXtensible Markup Language) documents.

## What is XML

XML is a computer language that provides a standard approach for describing, capturing, processing, and publishing information.

## Why use XML

XML is a flexible, standardized way to define document content.

Gentran:Server's XML capability enables you to manage and translate documents regardless of the document format. This means that you can exchange information with your business partners independent of platform or system compatibility.

## XML specification and exceptions

Gentran:Server's XML implementation conforms to the rules of the XML language 1.0 specification published by the World Wide Web Consortium, with a few exceptions. Gentran:Server diverges from the Consortium's base 1.0 XML specification in these ways:

### Repeating items

In Gentran:Server, you can:

- Specify the number of times that a group can repeat.
- Specify the number of times an element in a mixed group can repeat. (A mixed group is an XML content particle that contains both pcdata and other XML elements.)
- Repeat an element in a different part of the document as long as it has a different structure than the original element.

(Continued on next page)

### Example

You can define an “address” element twice—once under “Ship To” and once under “Bill To.”

### No DTD validation

A Document Type Definition (DTD) is a set of rules that define what tags are allowed in an XML document, what attributes the tags have, and what relationship the tags have with each other. It declares which components a document must have for complete processing.

Gentran:Server does not validate against the Document Type Definition (DTD). However, you can use the Gentran:Server map to validate an XML document, and you can base the map on the DTD.

### Components supported

Gentran:Server supports both:

- Internal parameter entities
- External parameter entities.

### Components not supported

In this release, Gentran:Server does *not* support these XML components:

- External entities
- Notations
- Elements of type “ANY”
- Processing instructions
- Namespace (except to distinguish one document from another in XML configuration)

## Well-formed requirement

The XML documents you use with Gentran:Server must meet the well-formed document criteria specified in the XML language 1.0 specification. Well-formed means that the XML must have the proper structure and syntax. If the document is not well-formed, Gentran:Server generates an error message.

# XML File Definition Map Components

## Introduction

Gentran:Server uses a set of icons to represent XML map components (objects).

## Map icons

This table describes the map icons that Gentran:Server uses to visually represent the XML file:

| Icon | Description |
|---|---|
|  | The **XML File icon** represents the XML document that Gentran:Server is mapping, including the root element. The XML document is a looping structure that contains elements and content particles 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. |
|  | An **XML element** contains related elements and content particles. In addition, an element can contain one Pcdata object and one attribute container object. These objects repeat in sequence until either the element data ends or the maximum number of times that the loop is allowed to repeat is exhausted.<br><br>**Nested looping structure**<br>A repeating element that contains another repeating element corresponds to a nested looping structure. |
|  | A **content particle** contains related elements and content particles that define either a choice between elements or a sequence of elements. A content particle can also contain one pcdata object. These contained objects can repeat until either the content particle data ends or the maximum number of times that the loop is allowed to repeat is exhausted.<br><br>**Mixed group**<br>An XML content particle that contains both pcdata and other XML elements is called a **mixed group**.<br><br>**Nested looping structure**<br>A content particle that is subordinate to another content particle corresponds to a nested looping structure (a loop within a loop).<br><br>(Continued on next page) |

| (Contd) Icon | Description |
|---|---|
|  | A **pcdata** object contains character data. You can have only one pcdata object defined per element or content particle.<br><br>Gentran:Server automatically names the pcdata object with the name of the parent element or content particle.<br><br>**Note**<br>When a pcdata object has an operation performed against it (link, standard rule, or as an extended rule storage field), the system displays a red check mark over the pcdata icon. |
|  | An **attribute container object** stores the attributes of an XML element. An attribute container object has no properties of its own.<br><br>When you create the first attribute of an XML element, the system automatically creates an attribute container object. The system places the subsequent attribute objects you create in the existing attribute container object.<br><br>**Note**<br>The attribute container is not stored in XML format during translation. Only the attributes themselves are written during translation. |
|  | The **attribute object** specifies information associated with an element that further defines the element. When you create the first attribute of an XML element, the system automatically creates an attribute container object with an attribute object in it. The system places the subsequent attribute objects you create for the element in the existing attribute container object.<br><br>**Note**<br><br>When an attribute has an operation performed against it (link, standard rule, or as an extended rule storage field), the system displays a red check mark over the attribute icon. |

# XML Map Types

## Introduction

XML can be used as the input or output file when mapping to another XML format or a standard, an application file definition, or an ODBC format.

## XML map types

This table lists the map types that are available using Gentran:Server with the XML translation option.

| Map type | Defines the relationship between components of a document in… |
|---|---|
| standard-to-XML | Standard format and a XML format. |
| application-to-XML | Application file format and a XML format. |
| ODBC-to-XML | ODBC format and a XML format. |
| XML-to-application | XML format and an application file format. |
| XML-to-standard | XML format and a standard format. |
| XML-to-ODBC | XML format to an ODBC file format. |
| XML-to-XML | XML format and another XML format. |

**Reference**
See the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on map types.

CHAPTER
2

# Designing Your Map for XML

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# Overview

# Introduction

**In this chapter**

This chapter explains the basic mapping functions for XML:

- Analyzing mapping requirements
- Creating a map
- Defining file formats

**Key terms**

This table lists the key terms used in this chapter.

| Term | Description |
|---|---|
| activate | The process of turning on groups, segments, composites, and elements that a standard does not define as mandatory, but that you have determined that you need to use in mapping. |
| attribute | A piece of information associated with an XML element.<br><br>In an XML document, an attribute is a name-value pair separated by an equal sign. |
| attribute container object | An object that contains the attributes of an XML element. The object itself does not have properties. |
| attribute object | An object that specifies additional information to further define an element. |
| Auto-trim | The Application Integration feature that enables you to automatically activate and deactivate map components on the EDI standard side of a map by using a sample EDI standard file as a model. |
| content particle | A map object that defines a relationship between the elements it contains. |

(Continued on next page)

| (Contd) Term | Description |
|---|---|
| element | The primary building block of the hierarchical structure in an XML document. Elements have start- and end-points denoted by start- and end-tags. |
| entity | A physical file or building block in the structure of an XML document. An entity is a unit of text. |
| file definition | A file that defines how data needs to be formatted for an application to process it. These files have a .DDF extension.<br><br>File definitions contain a layout of the records, fields, and groups in an application file. |
| loop | A sequence of repeating XML objects. |
| many-to-many mapping relationships | A mapping relationship that has a looping structure. |
| map object | A component object of a map. For example:<br>◗ XML, Positional, or Delimited EDI file<br>◗ group<br>◗ segment<br>◗ record<br>◗ element<br>◗ pcdata<br>◗ attribute<br>◗ attribute container<br>◗ content particle |
| nested looping structure | A mapping structure that has a loop within another loop. |
| one-to-one mapping relationship | A mapping relationship in which the input and output side loop structures are the same and directly link to one another. |
| pcdata object | An object that contains character data. |
| prolog | The XML Declaration plus the Document Type Definition (DTD). |
| promote | To extract one iteration (instance) of a group or repeating record from a loop. |

(Continued on next page)

| (Contd) Term | Description |
|---|---|
| string-type field or element | A field or element that contains one or more printable characters. A syntax token defines the format of a string-type field or element. |
| syntax token | A symbol or expression that defines ranges of characters and numbers that are allowed to be used for a string-type field. |
| URL (Uniform Resource Locator) | An internet address that locates an individual resource file on the internet. |
| XML file object | The highest level object in the XML map hierarchy. |
| XML tag | A portion of XML code that indicates the type of data within a set of start- and end- tags. Tags are enclosed in brackets.<br><br>**Example**<br>In the following example, the XML start tag is <Name> and the end tag is </Name>.<br><br><Name>N. C. Paige</Name> |

# Building a Map Process

## Before you begin

The first time you use the Gentran:Server Application Integration subsystem, you should set global default values to control the way the system displays your maps. At the least, you should specify the default date format you want the system to use.

**Reference**
See the topic Setting Preferences and Default Values in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on setting global default values.

## Process Table

This topic provides the stages in building a map with the Gentran:Server Application Integration subsystem.

| Stage | Description |
|---|---|
| 1 | Analyze your mapping requirements.<br>◗ Obtain a layout of your input file and determine how it corresponds with the layout of the output file.<br>◗ Determine how you want to move data to or from each field.<br>**Reference**<br>See the Analyzing Mapping Requirements topic for information. |
| 2 | Create a new map.<br>**Reference**<br>See the How to Create a New Map topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on creating a map.<br>(Continued on next page) |

| (Contd) Stage | Description |
|---|---|
| 3 | If a side of your map is a standard format, manually activate the appropriate groups, segment, and elements or use auto trim to automatically activate components based on a sample EDI standard file.<br><br>**References**<br>◗ See the How to Manually Activate EDI Standard Map Components topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on activation.<br>◗ See the How to Automatically Activate Standard Map Components topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on auto trim. |
| 4 | If a side of your map is an application, load or create the application file format.<br><br>**References**<br>See the How to Create a New Map and How to Load a File Definition topics in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on loading an existing file definition.<br><br>See the Defining a Fixed-Format Application File section in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on defining a fixed-format application.<br><br>See the Defining a Standard File Format or Variable-Length Application File topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on defining an application file with variable-length fields.<br><br>(Continued on next page) |

| (Contd) Stage | Description |
|---|---|
| 5 | If you have the XML translation option and if a side of your map is in XML format, load or build the XML format definition.<br><br>**References**<br>See the How to Create a New Map and How to Load a File Definition topics in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on loading an existing file definition.<br><br>See the The XML File Object and Entities topic for information about XML map objects.<br><br>See the Defining an XML File Format topic for instructions on creating map objects to define an XML file format.<br><br>See the How to Create a New Map topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on customizing a standard format to define an XML format. |
| 6 | Complete the input and output structures of your map by creating and removing loops.<br><br>**References**<br>See the Structuring Your Map topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on using loops. |
| 7 | Map the appropriate data for each application field.<br><br>**References**<br>See the How to Create Simple Links topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on simple mapping (linking).<br><br>See the Using Standard Rules chapter in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for information on using standard rules to apply mapping operations.<br><br>See the Using Extended Rules chapter in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for information on using extended rules to apply mapping operations. |
| 8 | Compile the map to create a translation object.<br><br>**Reference**<br>See the How to Compile a Map topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions.<br><br>(Continued on next page) |

| (Contd) Stage | Description |
|---|---|
| 9 | Print the mapping report. Validate and review the map, and make modifications as needed.<br><br>**Reference**<br>See the How to Print a Mapping Report topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on printing the mapping report. |
| 10 | Create the Trading Partner records.<br><br>**References**<br>See the Working with Trading Partnerships topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions to create interchange and group organization records.<br><br>See Creating XML Trading Partnership Records for instructions. |
| 11 | Are you are using Gentran:Server for UNIX (client/server)?<br>◗ If YES, copy the translation object to the user directory on the host and then continue with Step 12.<br>◗ If NO, continue with Step 12.<br><br>**Reference**<br>See the How to Copy a Translation Object to the Host topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on moving the translation object. |
| 12 | Translate sample data files to locate potential problems.<br><br>**Reference**<br>See the Running Translation chapter in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions.<br><br>(Continued on next page) |

| (Contd) Stage | Description |
|---|---|
| 13 | View the archive records for EDI data.<br><br>**Note**<br>You must configure your system to archive data to use this feature.<br><br>**Reference**<br>See the Archiving Translation Data in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* chapter for instructions. |
| 14 | View inbound and outbound functional acknowledgments.<br><br>**Note**<br>You must configure your system to send and receive functional acknowledgments to use this feature.<br><br>**Reference**<br>See the Archiving Translation Data in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* chapter for instructions. |

# Analyzing Mapping Requirements

## Overview

### Introduction

The first stage in creating a map is to analyze the mapping requirements. This is the most important step in creating a successful map. A complete analysis provides you with all the information you need to create the map efficiently and logically.

### Analysis process

This table lists the stages of mapping analysis for both inbound and outbound processing.

| Stage | Description |
|---|---|
| 1 | If the processing input or output file is an application file format, analyze the application file format.<br><br>**Reference**<br>See the How to Analyze Your Application File Format topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions. |
| 2 | If the processing input or output file is a standard file format, analyze your trading partner's EDI standard file format.<br><br>**Reference**<br>See the How to Analyze the Standard File Format topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions. |
| 3 | If your company purchased the XML option and if the processing input or output file is an XML file format, analyze the file format.<br><br>**Reference**<br>See the How to Analyze the XML Format topic for instructions. |
| 4 | Correlate the two formats.<br><br>**Reference**<br>See the How to Correlate the Formats topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions. |

# How to Analyze the XML Format

## Introduction

If the input or output file is an XML file, you must analyze the XML file format. Since XML documents are flexible in format, you must meet with each of your trading partners to jointly decide on the structure of each document you will exchange.

## No enveloping

XML files do not have an enveloping structure.

## XML restrictions

Because this release of Gentran:Server does not support external entities, notations, elements of type ANY, and processing instructions, the Wizard:

- Raises a warning if it encounters attributes that use entities or notations.
- Changes attributes of type ENTITY or ENTITIES to type CDATA.
- Changes attributes of type NOTATION to type ENUMERATED.
- Ignores comments and processing instructions.
- Discards external entities and notations

In addition, the Wizard:

- Does *not* support XML conditional sections.
- Supports external parameter entities that reference a URL only if you have Internet Explorer 4.01 or higher installed on the machine.

## Procedure

Use this procedure to analyze the XML file format.

| Step | Action |
|---|---|
| 1 | With a trading partner, determine the information that will identify each document you exchange in XML format. |
| 2 | List the XML Declaration. |
| 3 | Determine whether the XML documents you exchange will be sent and received alone or whether they will include a DTD or Style Sheet. List the name of the DTD or Style Sheet. |

(Continued on next page)

| (Contd) Step | Action |
|---|---|
| 4 | If the documents will include a DTD, will the DTD contain declarations? List the declarations for elements and attributes. |
| 5 | Determine which elements (tags) your company requires. List the data contained in each element. |
| 6 | Determine which elements require attributes. List the attribute name and value for the elements. |
| 7 | If you have more than one trading partner sending you the same type of document, list the namespace that you will use with the element name to distinguish the URL.This helps the system find the correct Trading Partnership Code. |
| 8 | Determine which entity references, if any, are required. |
| 9 | List the map components that you need to activate. |
| 10 | Continue with the How to Correlate the Formats topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide*. |

# Creating a Map

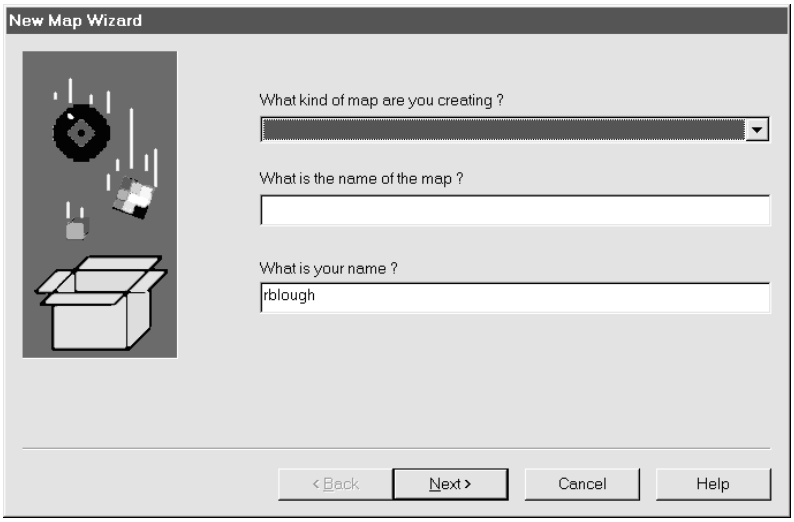
## How to Create a New Map

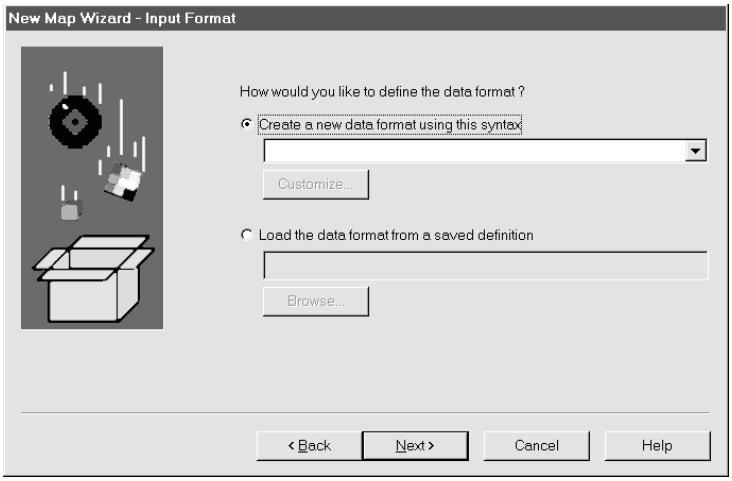
**Introduction**

This topic explains how to use the New Map Wizard to create a new map.

**Starting the map**

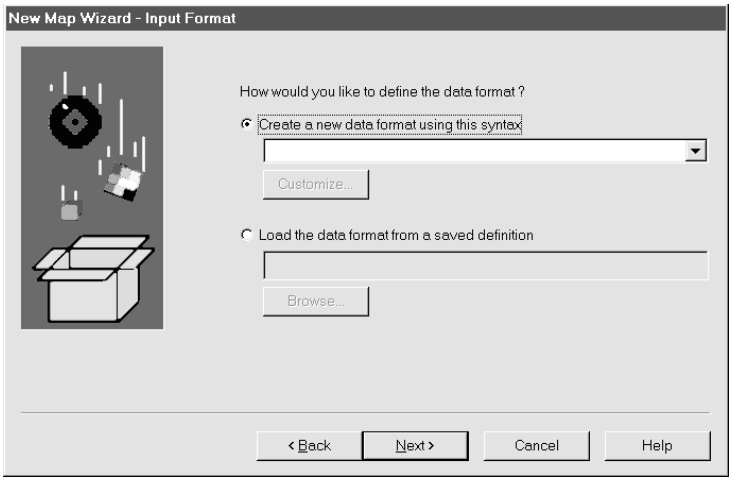
Use this procedure to start a new map.

| Step | Action |
|---|---|
| 1 | From the Application Integration File menu, select **New**.<br><br>**System Response**<br>The system displays the New Map Wizard.<br>  <br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 2 | Answer the following questions.<br>◗ *What kind of map are you creating?*<br>Select the type of map (for example, application-to-standard, standard-to-application, or standard-to-standard, XML-to application, etc.).<br>◗ *What is the name of the map?*<br>Type the unique name of the map. Omit the .MAP extension; the system will add the extension for you.<br>◗ *What is your name?*<br>Type your name if it differs from the user name that the system supplied. |
| 3 | Click **Next.**<br>**System Response**<br>The system displays the New Map Wizard - Input Format dialog box.<br>  |
| 4 | Use this table to determine how to create the input side of the map. |

| IF you want to… | THEN go to… |
|---|---|
| create a new data format using a syntax that you define | the next step in this procedure. |
| load the data format from a saved file definition (.DDF) | Loading a saved file definition |

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>2</td><td>Answer the following questions.<ul><li>What kind of map are you creating?<br>Select the type of map (for example, application-to-standard, standard-to-application, or standard-to-standard, XML-to application, etc.).</li><li>What is the name of the map?<br>Type the unique name of the map. Omit the .MAP extension; the system will add the extension for you.</li><li>What is your name?<br>Type your name if it differs from the user name that the system supplied.</li></ul></td></tr>
<tr><td>3</td><td>Click Next.<br><br>System Response<br>The system displays the New Map Wizard - Input Format dialog box.<br> 
</td></tr>
<tr><td>4</td><td>Use this table to determine how to create the input side of the map.<table><tr><th>IF you want to…</th><th>THEN go to…</th></tr><tr><td>create a new data format using a syntax that you define</td><td>the next step in this procedure.</td></tr><tr><td>load the data format from a saved file definition (.DDF)<br>(Continued on next page)</td><td>Loading a saved file definition</td></tr></table></td></tr>
</table>

| (Contd) Step | Action | | |
|---|---|---|---|
| 5 | Click **Create a new data format using this syntax**, and then select one of the following format options for the input side of your map: | | |
| | **IF your input file format is…** | **THEN select…** | **AND then…** |
| | EDI standard | Delimited EDI | GO TO Specifying an EDI standard |
| | Variable-length application file | Delimited EDI | GO TO Specifying a variable-length application file format |
| | Fixed-length application file | Positional | Click **Next** and GO TO Defining the output format |
| | VDA or GENCOD | Positional | Click **Next** and GO TO Defining the output format |
| | Database | Database | Click **Next** and GO TO Defining the output format |
| | XML | XML | GO TO Defining an XML File Format |

## Loading a saved file definition

Use this procedure to load a saved file definition.

| Step | Action |
|---|---|
| 1 | From the Input Format or the Output format dialog box, select **Load the data format from a saved definition**. |
| 2 | Click **Browse** to display the Open File Definition dialog box. |
| 3 | From the Open File Definition dialog box, select the file definition (.DDF file) you want to load. |

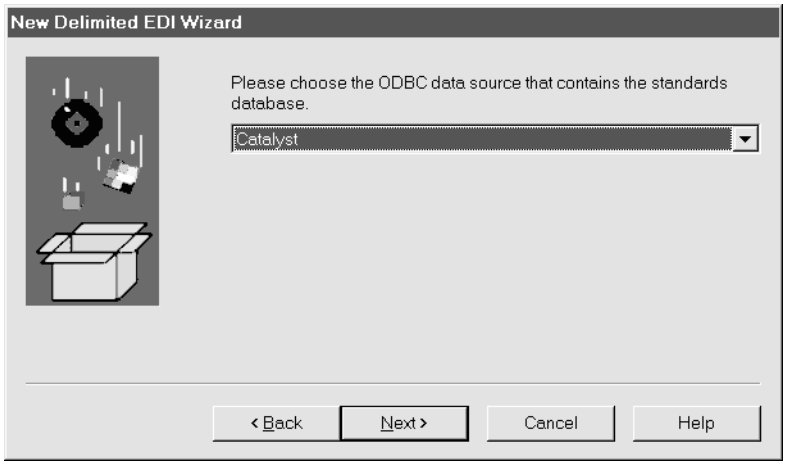
(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="3">Action</th></tr>
<tr><td rowspan="5">4</td><td colspan="3">Click Open.<br><br>System Response</td></tr>
<tr><td>IF the file definition format you loaded was…</td><td>THEN you…</td><td>AND…</td></tr>
<tr><td>for the input side of the map, and is valid</td><td>click Next to display the Output Format dialog box</td><td>GO TO Defining the output format</td></tr>
<tr><td>for the output side of the map, and is valid</td><td>click Next</td><td>click Finish to create the map.<br><br>GO TO What to do next</td></tr>
<tr><td>invalid</td><td>displays a message box that explains the problem and terminates the process.</td><td>Make sure that the .DDF file is in a format that the Application Integration subsystem understands.<br><br>Repeat Steps 1 through 4, selecting a valid file definition.</td></tr>
</table>

(Continued on next page)

## Specifying an EDI standard

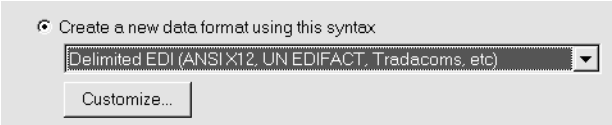
Use this procedure to specify a new EDI standard for the map.

| Step | Action |
|---|---|
| 1 | Do you want to choose a pre-defined EDI standard for this side of the map?<br>◗ If YES, click **Customize** on the Input Format or Output Format dialog box; then continue with the next step.<br>**System Response**<br>The system displays the New Delimited EDI Wizard dialog box.<br>◗ If NO, GO TO Step 6. |
| 2 | On the New Delimited EDI Wizard dialog box, click **Next**. |
| 3 | Select the ODBC data source that points to the standards database.<br>  |
| 4 | Click **Next**.<br>**Note**<br>If the system displays a select or browse dialog box, select the directory folder that contains the standard. |
| 5 | Select the standards agency, version, and transaction set, and (for TRADACOMS only) the release. |
| 6 | Click **Next**. |
| 7 | Click **Finish**.<br>(Continued on next page) |

| (Contd) Step | Action | | |
|---|---|---|---|
| 8 | Click **Next**.<br>**System Response** | | |
| | **IF you specified the format for…** | **THEN the system…** | **AND you should…** |
| | the input side of the map | displays the New Map Wizard - Output Format dialog box. | GO TO Defining the output format |
| | the output side of the map | displays the last dialog box in the wizard | Click **Finish**.<br>GO TO What to do next |

## Specifying a variable-length application file format

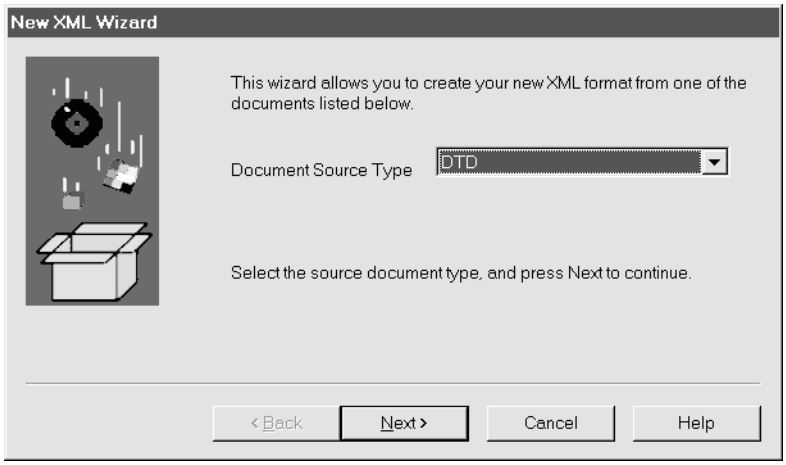
Use this procedure to specify a variable-length application file data format for the map.

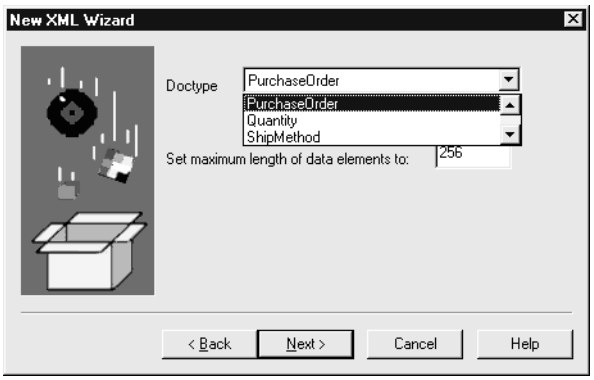
| Step | Action | | |
|---|---|---|---|
| 1 | Make sure that you selected **Delimited EDI** for the format.<br>  | | |
| 2 | Click **Next**. | | |
| 3 | Click **Next**.<br>**System Response** | | |
| | **IF you specified the format for…** | **THEN the system…** | **AND you should…** |
| | the input side of the map | displays the New Map Wizard - Output Format dialog box | GO TO the Defining the output format topic. |
| | the output side of the map | displays the last dialog box in the wizard | Click **Finish.**<br>GO TO the What to do next topic. |

(Continued on next page)

## Specifying an XML format

Use this procedure to specify an XML file format.

| Step | Action |
|---|---|
| 1 | Do you want to create your XML format from a predefined document input type (a DTD)?<br>◗ If YES, click **Customize** on the Input Format or Output format dialog box and continue with the next step.<br>**System Response**<br>The system displays the New XML Wizard dialog box.<br>◗ If NO, GO TO Step 5.<br>**System Response**<br>The system displays the New Map Wizard - Output Format dialog box. |
| 2 | From the New XML Wizard dialog box, select the document input type and click **Next**.<br>  |
| 3 | Type the name of your DTD file or a URL pointing to the DTD and click **Next**.<br>(Continued on next page) |

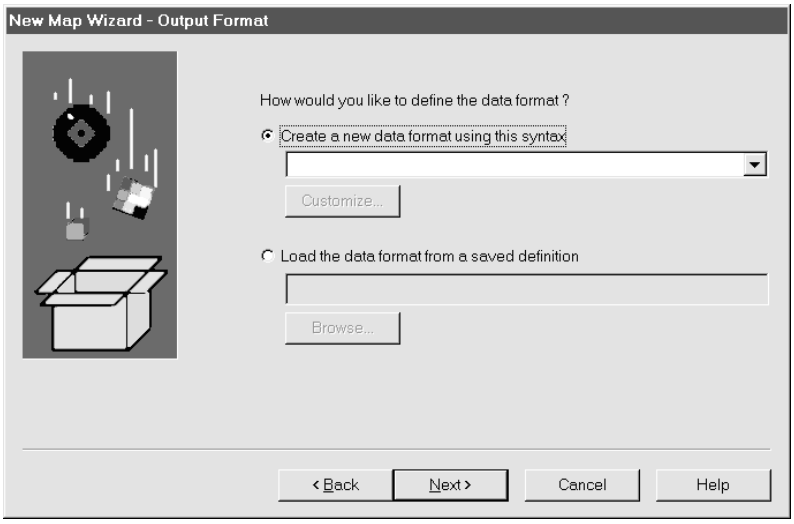
<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>4</td><td>Select the doctype, set the maximum length of data elements, and then click Next.<br><br>System Response<br>The system displays the New XML Wizard (Doctype) dialog box.<br> 
</td></tr>
<tr><td>5</td><td>Click Finish.<br><br>System Response<br>The system returns to the New Map Wizard - Input Format dialog box.</td></tr>
<tr><td>6</td><td>Click Next.<br><br>System Response
<table>
<tr><th>IF you specified the format for…</th><th>THEN the system…</th><th>AND you should…</th></tr>
<tr><td>the input side of the map</td><td>displays the New Map Wizard - Output Format dialog box.</td><td>GO TO the Defining the output format topic.</td></tr>
<tr><td>the output side of the map</td><td>displays the final wizard dialog box</td><td>click Finish to create the map.<br><br>GO TO the What to do next topic.</td></tr>
</table></td></tr>
</table>

(Continued on next page)

## Defining the output format

Use this procedure to define the output side of the map.

| Step | Action |
|---|---|
| 1 | On the New Map Wizard - Output Format dialog box, specify the format for the output side of the map. |




| IF you want to… | THEN go to… |
|---|---|
| load the data format from a saved file definition | the Loading a saved file definition topic. |
| create a new data format using a syntax that you define | the next step in this procedure. |

(Continued on next page)

<table>
<tr><th>(Contd) Step</th><th colspan="3">Action</th></tr>
<tr><td>2</td><td colspan="3">Select one of the following format options for the output side of your map:</td></tr>
<tr><td></td><td>IF your output file format is…</td><td>THEN select…</td><td>AND then…</td></tr>
<tr><td></td><td>EDI standard</td><td>Delimited EDI</td><td>GO TO the Specifying an EDI standard topic.</td></tr>
<tr><td></td><td>Variable-length application file</td><td>Delimited EDI</td><td>GO TO the Specifying a variable-length application file format topic.</td></tr>
<tr><td></td><td>Fixed-length application file</td><td>Positional</td><td>Click Next.<br><br>Click Finish.<br><br>GO TO the What to do next topic.</td></tr>
<tr><td></td><td>VDA or GENCOD</td><td>Positional</td><td>Click Next and GO TO the What to do next topic.</td></tr>
<tr><td></td><td>ODBC</td><td>ODBC</td><td>Click Next.<br><br>Click Finish.<br><br>GO TO the What to do next topic.</td></tr>
<tr><td></td><td>XML</td><td>XML</td><td>GO TO the Defining an XML File Format topic.</td></tr>
</table>

(Continued on next page)

## What to do next

After you create your map, you must define the input and output sides of the map. The steps you take are different, depending on the type of format you specified. Use this table to determine what to do next.

| IF you want to… | THEN go to… |
|---|---|
| manually activate non-mandatory EDI standard groups, segments, and elements | How to Manually Activate EDI Standard Map Components in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* |
| define a variable-length application file | Defining a Standard File Format or Variable-Length Application File in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* |
| automatically activate EDI standard components based on a sample EDI file | How to Automatically Activate Standard Map Components in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* |
| define a fixed-length application file | Defining a Fixed-Format Application File in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* |
| define a standard file definition | Defining a Standard File Format or Variable-Length Application File in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* |
| define a XML file definition | Defining an XML File Format in this guide |
| define an ODBC application file | Defining a Database File Format in the *Gentran:Server for UNIX and Workstation Application Integration ODBC User's Guide*. |

# Defining an XML File Format

## Overview

### Introduction

The New Map Wizard enables you to quickly and easily create a map that uses XML format as the input format, the output format, or both. You can manually create the XML objects to create a new format, or create the format from a selected predefined document input type, such as a DTD.

### Using a DTD

When you use a DTD:

- The DTD does not explicitly define the root element, so you can choose from all the elements defined in the DTD. By default, the wizard selects the first element encountered in the DTD as the root element.
- You can specify the maximum length of data elements because this is not defined in the DTD.
- If the system needs to make changes to the DTD to make it compliant with Gentran:Server, the system informs you of the changes and allows you to stop or continue.

### Process

This table describes the process of defining an XML file format.

| Stage | Description |
|---|---|
| 1 | Obtain the XML format from your trading partner or determine which map components your company requires. |
| 2 | Modify the XML file properties.<br>**Reference**<br>See the How to Modify XML File Properties topic in this chapter for instructions.<br>(Continued on next page) |

| (Contd) Stage | Description |
|---|---|
| 3 | Create the entities.<br><br>**Reference**<br>See the How to Create an Entity topic in this chapter for instructions. |
| 4 | Create the elements.<br><br>**Reference**<br>See the How to Create an XML Element topic in this chapter for instructions. |
| 5 | Create the content particles.<br><br>**Reference**<br>See the How to Create a Content Particle topic in this chapter for instructions. |
| 6 | Create the pcdata objects.<br><br>**Reference**<br>See the How to Create a Pcdata Object topic in this chapter for instructions. |
| 7 | Create the attributes.<br><br>**Reference**<br>See the How to Create an XML Attribute topic in this chapter for instructions. |

## Saving the XML file format as a DDF

After you build your file format, Gentran:Server enables you to save the individual file format definition of the selected side of a map as a DDF file. You can use the file definition in future maps to quickly build either side of your map.

**Reference**

See the How to Save a File Definition topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on saving a format definition as a file definition (.DDF) file.

See the How to Load a File Definition topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on loading a previously save file definition (.DDF).

# The XML File Object and Entities

**XML file object**

The XML file object represents the XML document that you are mapping, including the root element. The root element is the element in an XML document that contains all other elements in the document. The XML file object contains properties that are global to the XML doucment.

**Note**
You cannot reference the XML file object by standard rules or links.

**How the object is created**

The Gentran:Server Application Integration System automatically creates this object when you create a map that uses the XML format.

**Entities**

Entities are physical files that contain a unit of text. They serve as building blocks in the structure of an XML document.

**Using entities**

Gentran:Server allows you to define internal general parsed entities, according to the XML definition.

**Note**
This version of Gentran:Server does not support external entities.

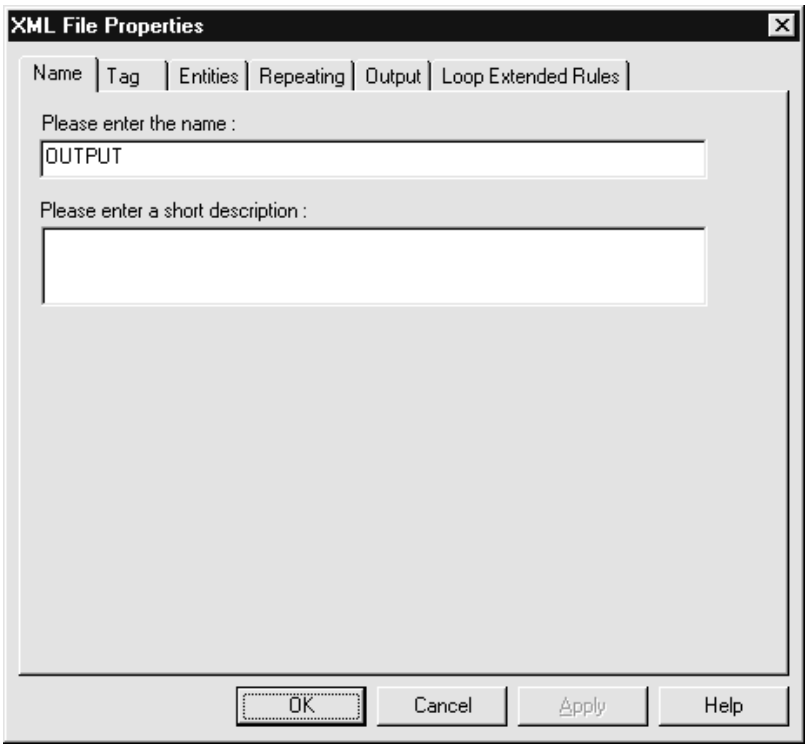
# XML File Properties Dialog Box

## Introduction

The XML File Properties dialog box enables you to define entities and file-level extended rules and format specification.

## Name tab

This illustration shows the Name tab of the XML File Properties dialog box on the output side of the map.




## Name tab parts and functions

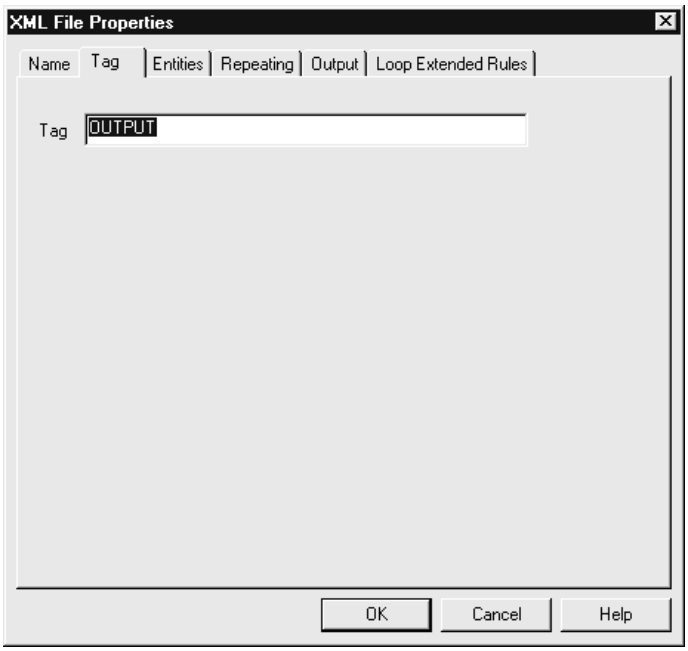
This table lists the parts of the Name tab of the XML File Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Identifies the XML file. |
| Description | Describes the XML file. This box is used to differentiate the XML file from similar files. |

(Continued on next page)

## Tag tab

This illustration shows the Tag tab of the XML File Properties dialog box on the output side of the map.




## Tag tab parts and functions

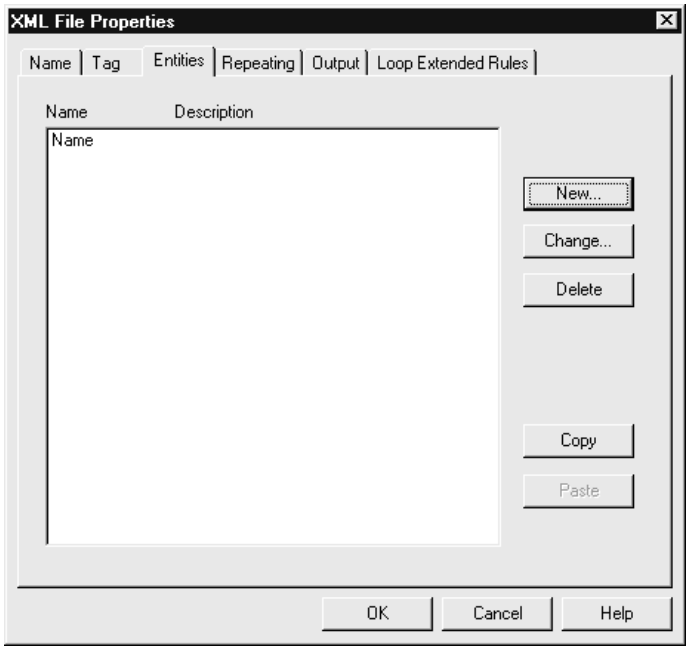
This table lists the parts of the Tag tab of the XML File Properties dialog box and their functions.

| Part | Function |
|---|---|
| Tag | Identifies the XML tag for the root element of the document.<br><br>**Default**<br>INPUT or OUTPUT. The default corresponds to the type of file you are creating. |

(Continued on next page)

## Entities tab

This illustration shows the Entities tab of the XML File Properties dialog box on the output side of the map.




## Entities tab parts and functions

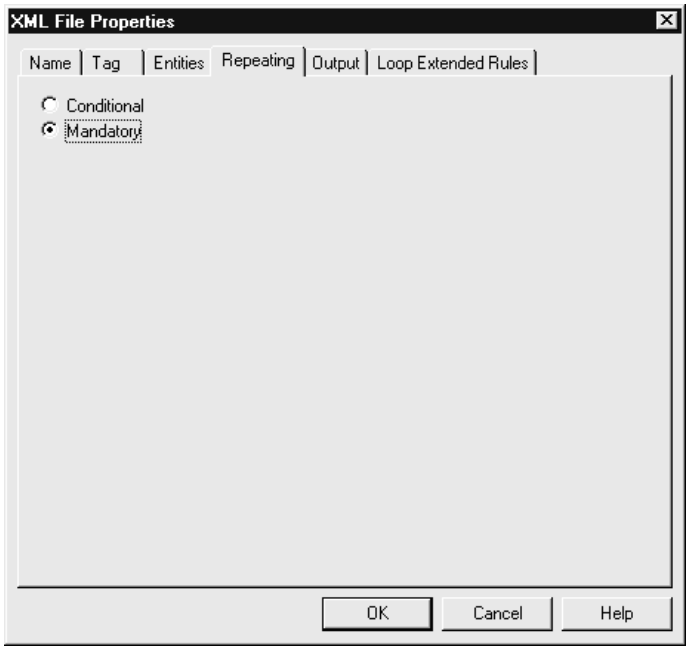
This table lists the parts of the Entities tab of the XML File Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Specifies the name of the entity. |
| Description | Specifies a brief description of the entity. |
| **New** | Accesses the Entity Properties dialog box, which enables you to create an entity. |
| **Change** | Accesses the Entity Properties dialog box, which enables you to edit the selected entity. |
| **Delete** | Deletes the selected entity. |
| **Copy** | Copies the selected entity. This enables you to copy an existing entity for use in another map. |
| **Paste** | Pastes a previously-copied entity. This enables you to copy entities from one map to another. |

(Continued on next page)

## Repeating tab

This illustration shows the Repeating tab of the XML File Properties dialog box on the output side of the map.




## Repeating tab parts and functions

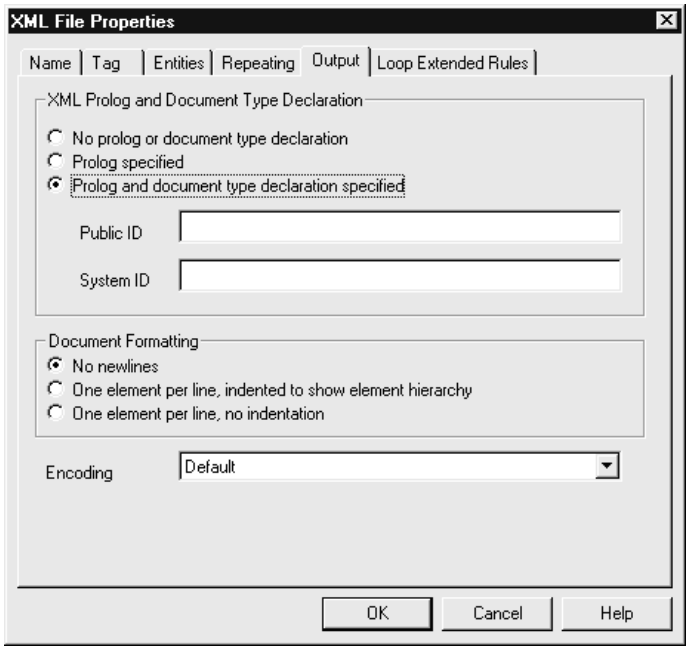
This table lists the parts of the Repeating tab of the XML File Properties dialog box and their functions.

| Part | Function |
|---|---|
| Conditional | Indicates that the XML file object is not mandatory. |
| Mandatory | Indicates that the XML file object must appear in the map. |

(Continued on next page)

## Output tab

This illustration shows the Output tab of the XML File Properties dialog box on the output side of the map.




## Output tab parts and functions

This table lists the parts of the Output tab of the XML File Properties dialog box and their functions.

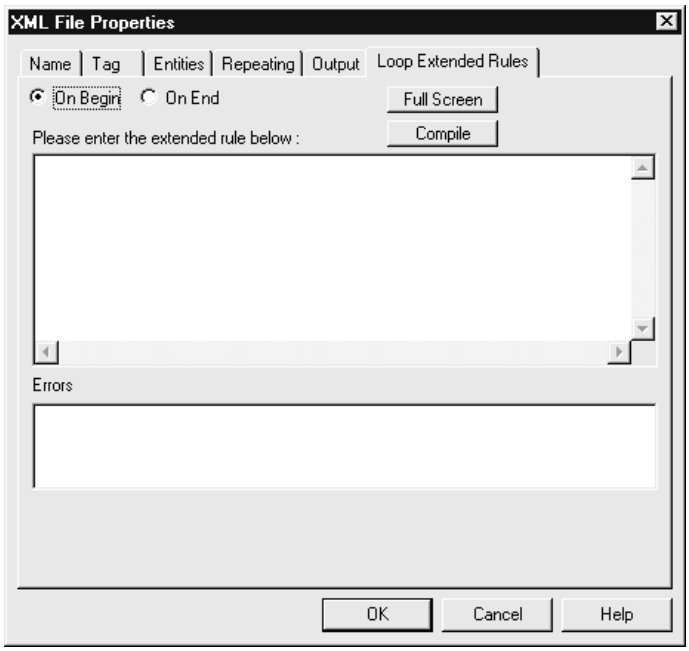
| Part | Function |
|---|---|
| No prolog or document type declaration | Indicates that the system does not generate any header information for the XML document (neither a prolog nor a document type declaration). |
| Prolog specified | Indicates that the system generates a prolog at the start of the XML document. |
| Prolog and document type declaration specified | Indicates that the system generates both a prolog and a document type declaration at the start of the XML document.<br>**Note**<br>This is the default.<br>(Continued on next page) |

| (Contd) Part | Function |
|---|---|
| Public ID | Specifies the public identifier that the system uses to create the document type declaration.<br><br>**Note**<br>This box is available only if you select the "Prolog and document type declaration" option. |
| System ID | Specifies the system identifier that the system uses to create the document type declaration.<br><br>**Note**<br>This box is available only if you select the "Prolog and document type declaration" option. |
| No Newlines | Instructs the system to format the output data with one segment following another, without a carriage return or line feed between segments. This means that the lines are formatted as wraparound or streamed lines.<br><br>If you do not select this option, each segment in the output will end with the segment terminator followed by a carriage return or line feed. This is the default. |
| One element per line, indented | Indicates that the output data is to be formatted hierarchically and indented. |
| One element per line, no indentation | Indicates that the output data is to be formatted hierarchically but not indented. |
| Encoding | Determines how the data in the XML output file is represented. |

(Continued on next page)

## Loop Extended Rules tab

This illustration shows the Loop Extended Rules tab of the XML File Properties dialog box on the output side of the map.




## Loop Extended Rules tab parts and functions

This table lists the parts of the Loop Extended Rules tab of the XML File Properties dialog box and their functions.

| Part | Function |
|---|---|
| On Begin | Specifies that the extended rule is executed before the system processes the map object. |
| On End | Specifies that the extended rule is executed after the system concludes processing the map object. |
| **Full Screen** | Maximizes the dialog box. |

(Continued on next page)

| (Contd) Part | Function |
|---|---|
| **Compile** | Compiles the extended rule. Any warnings or errors are displayed in the Errors list.<br><br>**Note**<br>This function gives you immediate feedback about the accuracy of your rule. The system compiles the rule when you compile the entire translation object. |
| Extended rule | Defines the extended rule. |
| Errors | Displays any errors generated when you clicked **Compile** to compile the extended rule. |

# How to Modify XML File Properties

**Procedure** Use this procedure to modify the properties of an XML file.

| Step | Action |
|---|---|
| 1 | Right-click the XML File icon and select **Properties** from the shortcut menu.<br><br>**System Response**<br>The system displays the XML File Properties dialog box with the Name tab displayed. |
| 2 | Do you want to create an entity?<br>◗ If YES, select the Entities tab to access entity options.<br><br>**Reference**<br>See the topic How to Create an Entity in this chapter for more information.<br><br>◗ If NO, continue with the next step. |
| 3 | Do you want to modify the output options for the XML file?<br>◗ If YES, select the Output tab and continue with the next step.<br>◗ If NO, GO TO Step 5. |
| 4 | On the Output tab, specify the following:<br>◗ whether the system generates a prolog and/or document type declaration,<br>◗ public ID (if applicable),<br>◗ system ID (if applicable), and<br>◗ how the XML elements are output to the file. |
| 5 | Do you want to specify an extended rule for the XML file?<br>◗ If YES, select the Loop Extended Rules tab, define the rule, and continue with the next step.<br>◗ If NO, continue with the next step. |
| 6 | Click **OK**.<br><br>**System Response**<br>The system saves your changes and closes the XML File Properties dialog box. |

# How to Create XML Components

## Introduction

To create map components, you use one of these Gentran:Server functions:

- Insert (to create a component at the same level)
- Create Sub (to create a subordinate component)

You access both functions from a map component's shortcut menu.

## Creating a component at the same level

Use this procedure to create a map component at the same level as the selected map component.

| Step | Action |
|---|---|
| 1 | Right-click the map component that is just above the component you want to create.<br><br>**Note**<br>The map component currently selected (has focus in the map) determines which map component that you can create.<br><br>**System Response**<br>The system displays the component's shortcut menu. |
| 2 | Select **Insert** from the shortcut menu.<br><br>(Continued on next page) |

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>3</td><td>
From the shortcut menu, select the type of component you want to create.<br><br>
This table describes the available options.<br><br>
Note<br>
N/A indicates that you cannot create a map component when the specified component is selected.
<table>
<tr><th>IF the currently-selected object is a...</th><th>THEN you can create...</th></tr>
<tr><td>XML File</td><td>◗ Element<br>◗ Content Particle<br>◗ Pcdata<br>◗ Attribute</td></tr>
<tr><td>Element</td><td>◗ Element<br>◗ Content Particle<br>◗ Pcdata<br>◗ Attribute</td></tr>
<tr><td>Content Particle</td><td>◗ Element<br>◗ Content Particle<br>◗ Pcdata</td></tr>
<tr><td>Pcdata</td><td>N/A</td></tr>
<tr><td>Attribute Container</td><td>Attribute</td></tr>
<tr><td>Attribute</td><td>N/A</td></tr>
</table>
System Response<br>
The system creates the new component and inserts it below the selected component.
</td></tr>
</table>

(Continued on next page)

### Creating a subordinate component

Use this procedure to create an XML component at a subordinate level to the map object currently selected.

| Step | Action |
|---|---|
| 1 | Right-click the map component that is just above the component you want to create.<br><br>**System Response**<br>The system displays the component's shortcut menu. |
| 2 | Select **Create Sub** from the shortcut menu. |
| 3 | Select the type of component you want to create from the submenu.<br><br>**System Response**<br>The system creates the new component and inserts it below the selected component. |

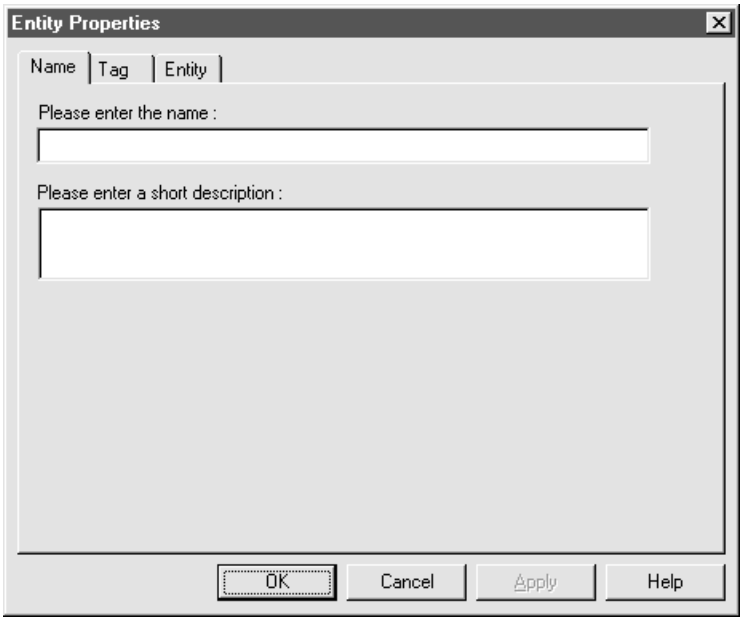
# Entity Properties Dialog Box

## Introduction

The Entity Properties dialog box enables you to define entities. You access the dialog box through the XML File Properties dialog box.

## Name tab

This illustration shows the Name tab of the Entity Properties dialog box.




## Name tab parts and functions

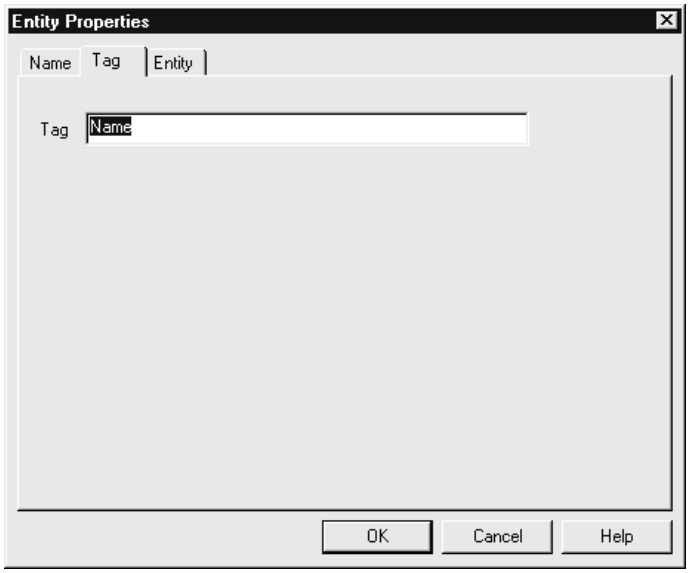
This table lists the parts of the Name tab of the Entity Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Identifies the entity.<br><br>**Note**<br>This is a descriptive name. |
| Description | Describes the entity. This box is used to differentiate the entity from similar entities. |

(Continued on next page)

## Tag tab

This illustration shows the Tag tab of the Entity Properties dialog box.




## Tag tab parts and functions

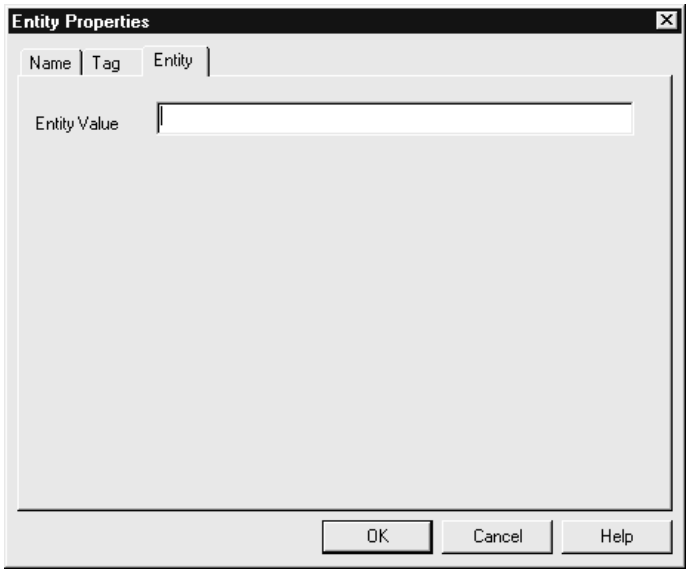
This table lists the parts of the Tag tab of the Entity Properties dialog box and their functions.

| Part | Function |
|---|---|
| Tag | Defines the entity identification tag, as it appears in the XML document.<br><br>**Default**<br>The system uses the entity name by default. |

(Continued on next page)

## Entity tab

This illustration shows the Entity tab of the Entity Properties dialog box.




## Entity tab parts and functions

This table lists the parts of the Entity tab of the Entity Properties dialog box and their functions.

| Part | Function |
|---|---|
| Entity Value | Specifies the entity data.<br><br>**Note**<br>This is the text that the system inserts when it encounters the entity. |

# How to Create an Entity

**Procedure** Use this procedure to create an entity.

| Step | Action |
|---|---|
| 1 | Right-click the XML File icon and select **Properties** from the shortcut menu.<br><br>**System Response**<br>The system displays the XML File Properties dialog box with the Name tab displayed. |
| 2 | Select the Entities tab to access the entity options. |
| 3 | Click **New**.<br><br>**System Response**<br>The system displays the Entity Properties dialog box. |
| 4 | On the Name tab, specify the following:<br>◗ unique entity name and<br>◗ description (if applicable). |
| 5 | If necessary, select the Tag tab and change the value in the **Tag** box.<br><br>**Note**<br>The tag must match the entity tag in the XML document. |
| 6 | Select the Entity tab to access the entity options. |
| 7 | In the **Entity Value** box, type the entity data. |
| 8 | Click **OK**.<br><br>**System Response**<br>The system saves the entity and closes the Entity Properties dialog box. |
| 9 | Click **OK**.<br><br>**System Response**<br>The system closes the XML File Properties dialog box. |

# XML Elements

**Definition**

An XML element is an element that contains related elements and/or content particles. In addition, an XML element can contain one pcdata object, one attribute container object, or one of each.

These objects repeat in sequence until either:

- The element data ends, or
- The loop repeats the maximum number of times.

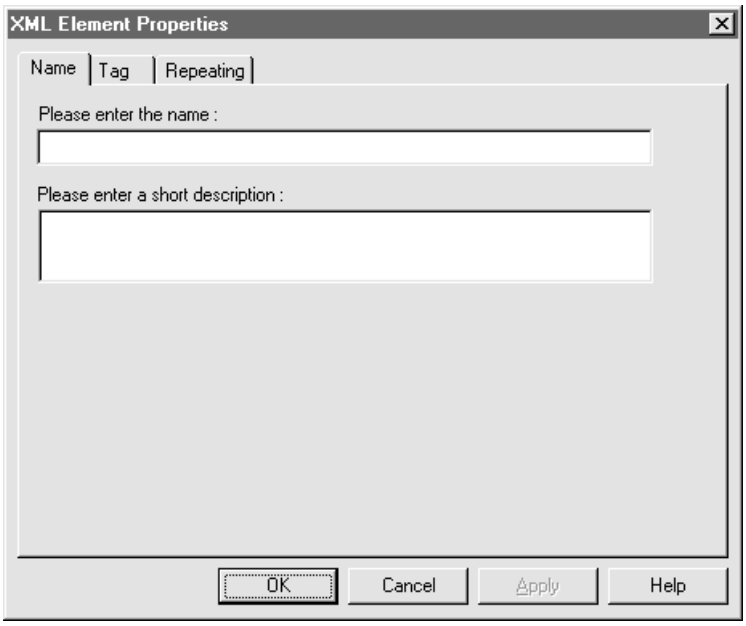
**Restrictions**

You cannot reference the XML element object with standard rules or links.

# XML Element Properties Dialog Box

## Name tab

This illustration shows the Name tab of the XML Element Properties dialog box.




## Name tab parts and functions

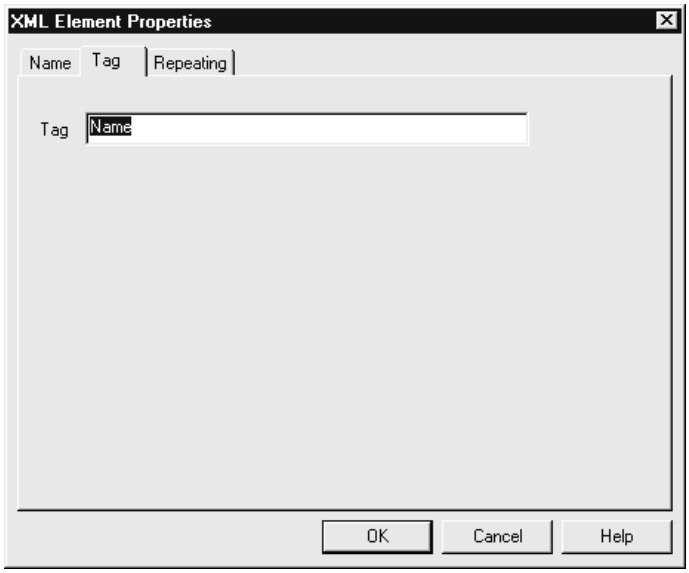
This table lists the parts of the Name tab of the XML Element Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Defines the element name.<br>**Notes**<br>◗ Each element must have a unique name.<br>◗ Do not use spaces or dashes (-) for the element name.<br>◗ You can use the underscore (_) to separate words. |
| Description | Describes the element. This box is used to provide a brief explanation of the element that allows you to differentiate it from similar elements. |

(Continued on next page)

## Tag tab

This illustration shows the Tag tab of the XML Element Properties dialog box.




## Tag tab parts and functions

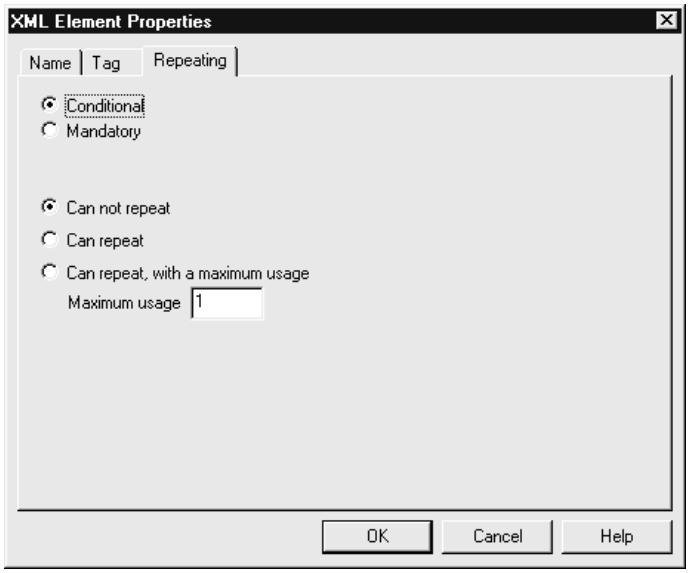
This table lists the parts of the Tag tab of the XML Element Properties dialog box and their functions.

| Part | Function |
|---|---|
| Tag | Defines the element identification tag, as it appears in the XML document.<br><br>**Note**<br>Gentran:Server validates the tag against the characters that XML allows for element names.<br><br>If you are receiving an XML document, then the characters for the tag are case sensitive and must match the case of the element in the input data file.<br><br>**Default**<br>The system uses the element name by default. |

(Continued on next page)

## Repeating tab

This illustration shows the Repeating tab of the XML Element Properties dialog box.




## Repeating tab parts and functions

This table lists the parts of the Repeating tab of the XML Element Properties dialog box and their functions.

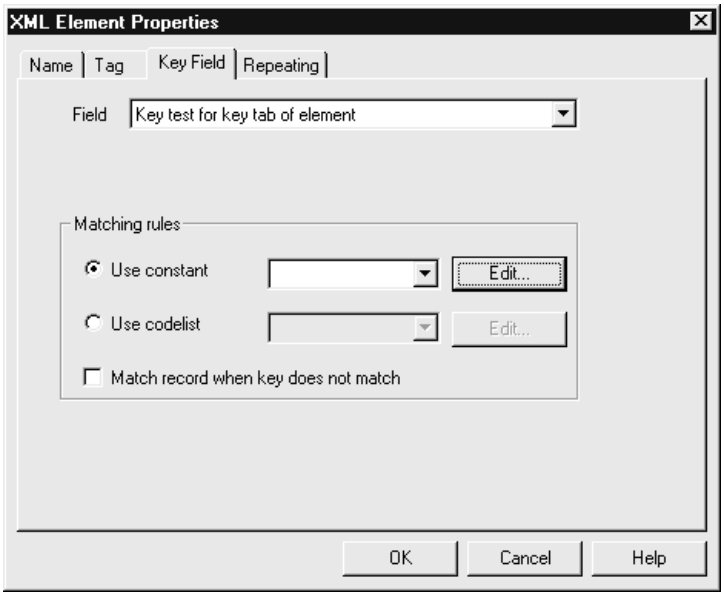
| Part | Function |
|---|---|
| Conditional | Indicates that the element is not mandatory.<br><br>**Note**<br>This is the default value. |
| Mandatory | Indicates that the element must appear in the map. |
| Can not repeat | Indicates that the element does not repeat (is a single instance). |
| Can repeat | Indicates that the element can repeat (loop) as many times as necessary. |
| Can repeat, with a maximum usage | Indicates that the element can repeat (loop) as many times as is designated in the **Maximum usage** box. |
| Maximum usage | Defines how many times the element can repeat (loop). |

(Continued on next page)

## Key field tab

This illustration shows the Key Field tab of the XML Element Properties dialog box.

**Note**
This tab is displayed only if the element contains one or more attributes




## Key Field tab parts and functions

This table lists the parts of the Key Field tab of the XML Element Properties dialog box and their functions.

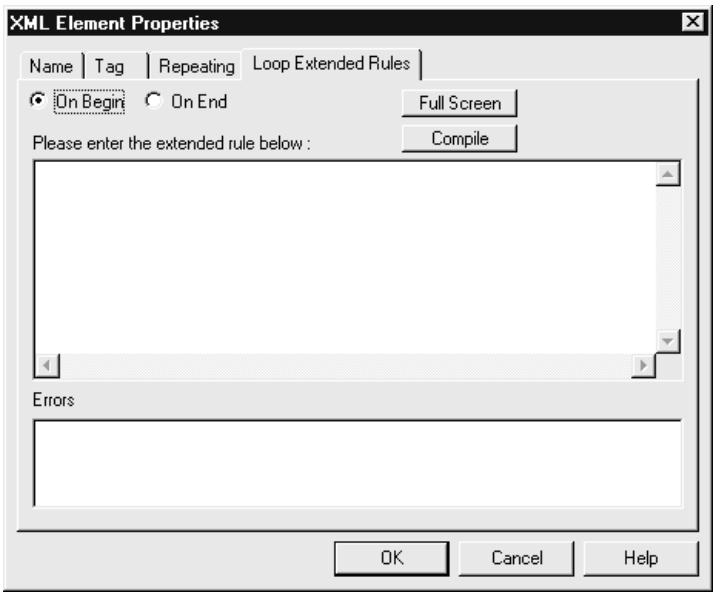
| Part | Function |
|---|---|
| Field | Specifies all the attributes that are defined for this element.<br><br>**Note**<br>The key field tab enables you to specify a second qualification in selecting an element. The element name is the first qualification. |
| Use constant/<br><br>**Edit** | Indicates that the system must match the element if the contents of the selected attribute match the literal constant selected from the list.<br><br>**Note**<br>The **Edit** button at the right of the Use constant list accesses the Translation Object Constants dialog box.<br><br>(Continued on next page) |

| (Contd) Part | Function |
|---|---|
| Use codelist/<br><br>**Edit** | Indicates that the system must match the element if the contents of the selected attribute match the selected code list.<br><br>**Note**<br>The **Edit** button at the right of the Use constant list accesses the Code Lists dialog box. |
| Match record when key does not match | Indicates that the system will match the element if the contents of the selected attribute does not contain the value specified in the Matching rules section.<br><br>**Note**<br>If the specified condition is not met, the element does not conform to the definition, and processing continues. |

## Loop Extended Rules tab

This illustration shows the Loop Extended Rules tab of the XML Element Properties dialog box.

**Note**
This tab is displayed only if the element repeats.




(Continued on next page)

## Loop Extended Rules tab parts and functions

This table lists the parts of the Loop Extended Rules tab of the XML Element Properties dialog box and their functions.

| Part | Function |
|---|---|
| On Begin | Specifies that the extended rule is executed before the system processes each occurrence of the element. |
| On End | Specifies that the extended rule is executed after the system concludes processing each occurrence of the element. |
| **Full Screen** | Maximizes the dialog box. |
| **Compile** | Compiles the extended rule. Any warnings or errors are displayed in the Errors list.<br>**Note**<br>This function gives you immediate feedback about the accuracy of your rule. The system compiles the rule when you compile the entire translation object. |
| Extended rule | Defines the extended rule. |
| Errors | Displays any errors generated when you clicked **Compile** to compile the extended rule. |

# How to Create an XML Element

**Procedure** Use this procedure to create an element.

| Step | Action |
|---|---|
| 1 | Right-click a map object and select either **Create Sub** or **Insert** from the shortcut menu. |
| 2 | From the shortcut menu, select **Element**.<br><br>**System Response**<br>The system displays the XML Element Properties dialog box. |
| 3 | On the Name tab, specify the following:<br>◗ unique element name<br>◗ description (if applicable). |
| 4 | If necessary, select the Tag tab and change the value in the Tag box.<br><br>**Note**<br>The characters for this value are case sensitive and must match the element in the XML document. |
| 5 | Select the Repeating tab to access the occurrence options. |
| 6 | Select either the Conditional or Mandatory option to specify whether the element is required in the map. |
| 7 | Select the appropriate repeating option for the element. |
| 8 | Do you need to specify the number of times the element can repeat (loop)?<br>◗ If YES, type that number in the **Maximum usage** box.<br>◗ If NO, continue to the next step. |
| 9 | Did you specify that the element repeats (loops)?<br>◗ If YES, continue with the next step.<br>◗ If NO, GO TO Step 11.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 10 | Do you want to specify an extended rule for this element?<br>◗ If YES, select the Loop Extended Rules tab, define the rule, and then continue with the next step.<br>**Reference**<br>See the Using Extended Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on extended rules.<br>◗ If NO, continue with the next step. |
| 11 | Click **OK**.<br>**System Response**<br>The system saves the element and closes the XML Element Properties dialog box. |

# Content Particles

**Definition**

In Gentran:Server, a content particle object contains child objects that define either a choice between elements or a sequence of elements.

**Example**
In this example, **a** contains either **b** or **c**, while **b** contains **d**, **e**, and **f**, in that order.

```
<!ELEMENT a (b|c)>
<!ELEMENT b (d,e,f)>
```

**Contents**

A content particle can contain:

- Related elements or content particles
- One Pcdata object.

These objects repeat in sequence until either:

- The content particle data ends
- The loop repeats the allowed maximum number of times.

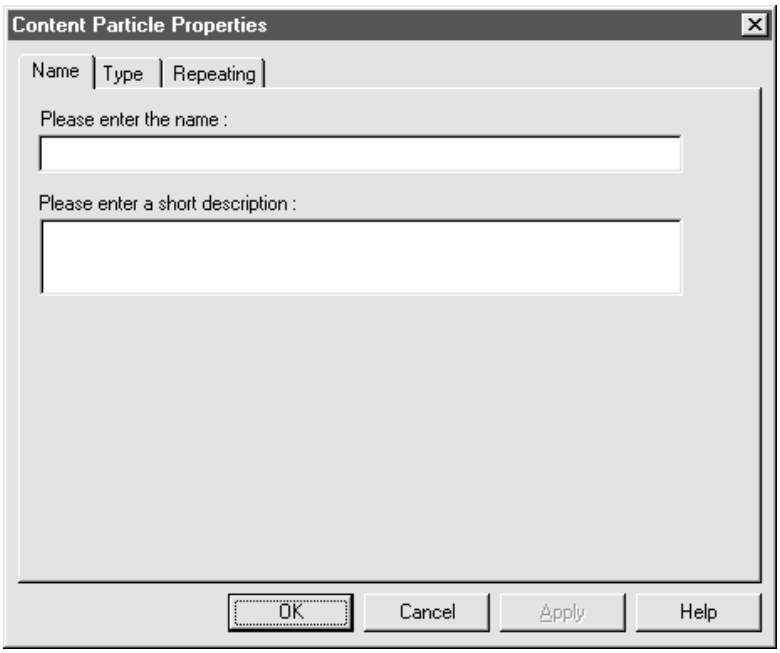
**Restrictions**

You cannot reference the Content Particle object with standard rules or links.

# Content Particle Properties Dialog Box

## Name tab

This illustration shows the Name tab of the Content Particle Properties dialog box.




## Name tab parts and functions

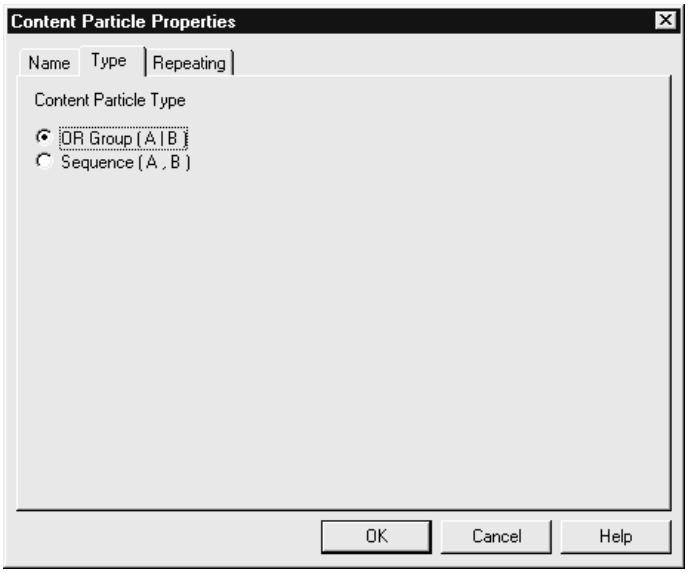
This table lists the parts of the Name tab of the Content Particle Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Defines the name of the content particle.<br><br>**Note**<br>Do not use spaces or dashes (-) for the content particle name. You can use the underscore (_) to separate words. |
| Description | Describes the content particle. This box is used to provide a brief explanation of the content particle that allows you to differentiate it from similar content particles. |

(Continued on next page)

## Type tab

This illustration shows the Type tab of the Content Particle Properties dialog box.




## Type tab parts and functions

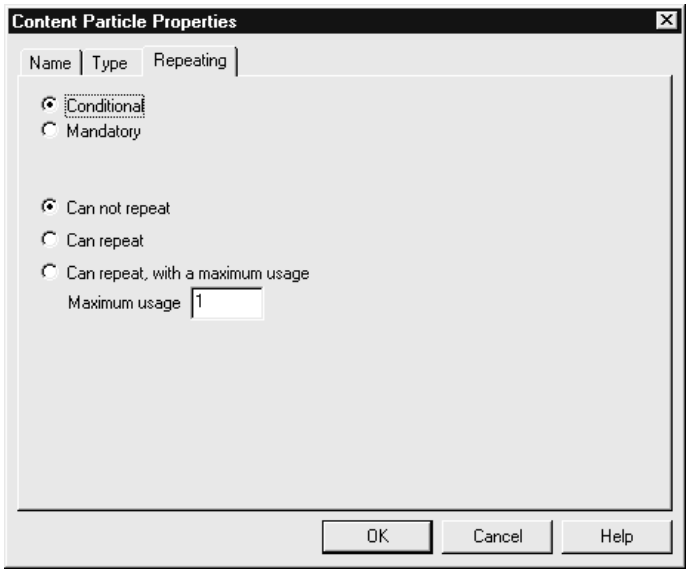
This table lists the parts of the Type tab of the Content Particle Properties dialog box and their functions.

| Part | Function |
|---|---|
| OR Group (A \| B) | Indicates that the child objects of the content particle represent a choice (a disjunction) of the child objects. They are mutually exclusive and only one can exist. |
| Sequence (A , B) | Indicates that the child objects of the content particle represent a sequence of the child objects. They must all occur, and they must occur in the order specified. |

(Continued on next page)

## Repeating tab

This illustration shows the Repeating tab of the Content Particle Properties dialog box.




## Repeating tab parts and functions

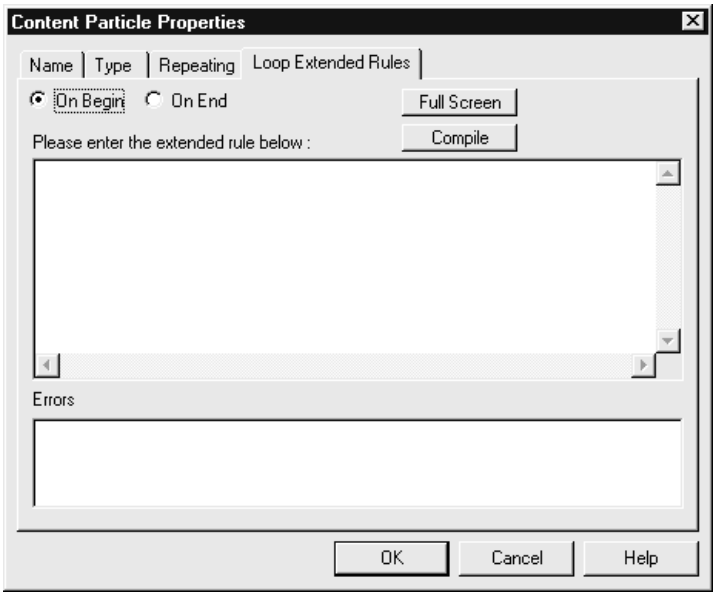
This table lists the parts of the Repeating tab of the Content Particle Properties dialog box and their functions.

| Part | Function |
|---|---|
| Conditional | Indicates that the child objects of the content particle do not have to occur in the data. |
| Mandatory | Indicates that the child objects of the content particle must occur within the data. |
| Cannot repeat | Indicates that the content particle does not repeat (is a single instance). |
| Can repeat | Indicates that the content particle can repeat (loop) as many times as necessary. |
| Can repeat, with a maximum usage | Indicates that the content particle can repeat (loop) as many times as is designated in the **Maximum usage** box. |
| Maximum usage | Defines how many times the content particle can repeat (loop). |

(Continued on next page)

## Loop Extended Rules tab

This illustration shows the Loop Extended Rules tab of the Content Particle Properties dialog box.




## Loop Extended Rules tab parts and functions

This table lists the parts of the Loop Extended Rules tab of the Content Particle Properties dialog box and their functions.

**Note**
The dialog box includes this tab only if the selected element repeats.

| Part | Function |
|---|---|
| On Begin | Specifies that the extended rule is executed before the system processes the content particle and for each occurrence of the content particle. |
| On End | Specifies that the extended rule is executed after the system concludes processing the content particle and for each occurrence of a content particle. |
| **Full Screen** | Maximizes the dialog box. |

(Continued on next page)

| (Contd) Part | Function |
|---|---|
| **Compile** | Compiles the extended rule. The Errors list displays any warnings or errors that result from compilation.<br><br>**Note**<br>This function gives you immediate feedback about the accuracy of your rule. The system compiles the rule when you compile the entire translation object. |
| Extended rule | Defines the extended rule. |
| Errors | Displays any errors generated when you compiled the extended rule. |

# How to Create a Content Particle

**Procedure** Use this procedure to create a content particle.

| Step | Action |
|---|---|
| 1 | Right-click a map object and select either **Create Sub** or **Insert** from the shortcut menu. |
| 2 | From the shortcut menu, select **Content Particle**.<br>**System Response**<br>The system displays the Content Particle Properties dialog box. |
| 3 | On the Name tab, specify the following:<br>◗ unique content particle name<br>◗ description (if applicable). |
| 4 | Select the Type tab to access the content particle type options. |
| 5 | Select the appropriate option to define what the child objects of the content particle represent (choice or sequence). |
| 6 | Select the Repeating tab to access the occurrence options. |
| 7 | Select either **Conditional** or **Mandatory** to specify whether the content particle is required in the map. |
| 8 | Select the appropriate repeating option for the content particle. |
| 9 | Did you select Can repeat, with maximum usage in Step 8?<br>◗ If YES, in the **Maximum usage** box, type the number of times the content particle can repeat (loop). Continue with Step 10.<br>◗ If NO, continue with Step 10. |
| 10 | Did you specify that the content particle repeats (loops)?<br>◗ If YES, continue with Step 11.<br>◗ If NO, GO TO Step 12.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 11 | Do you want to specify an extended rule for this content particle?<br>◗ If YES, select the Loop Extended Rules tab, define the rule, and continue with the next step.<br>**Reference**<br>See the Using Extended Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on extended rules.<br>◗ If NO, continue with the next step. |
| 12 | Click **OK**.<br>**System Response**<br>The system saves the content particle and closes the Content Particle Properties dialog box. |

# Pcdata Objects

**Definition**

A pcdata object is an object that contains character data. It is a child object of a parent element or content particle.

**Use restrictions**

You can define only one pcdata object per element or content particle.

**Name**

Gentran:Server automatically names the pcdata object with the name of the parent element or content particle.

**Map display**

When a pcdata object has an operation performed against it (link, standard rule, or as an extended rule storage field), the system displays a red check mark over the pcdata icon.

**Order of execution**

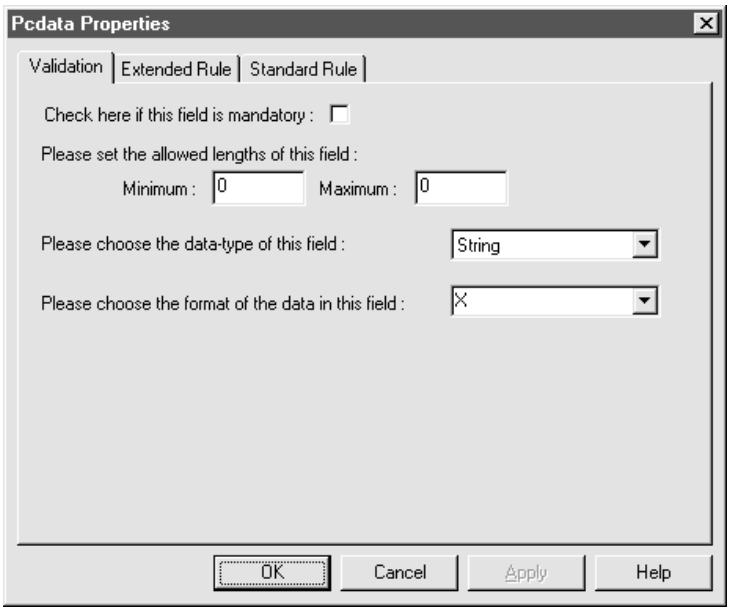
The order of execution for each Pcdata field is:

- validate field
- run standard rules
- run extended rules

# Pcdata Properties Dialog Box

## Validation tab

This illustration shows the Validation tab of the Pcdata Properties dialog box.




## Validation tab parts and functions

This table lists the parts of the Validation tab of the Pcdata Properties dialog box and their functions.

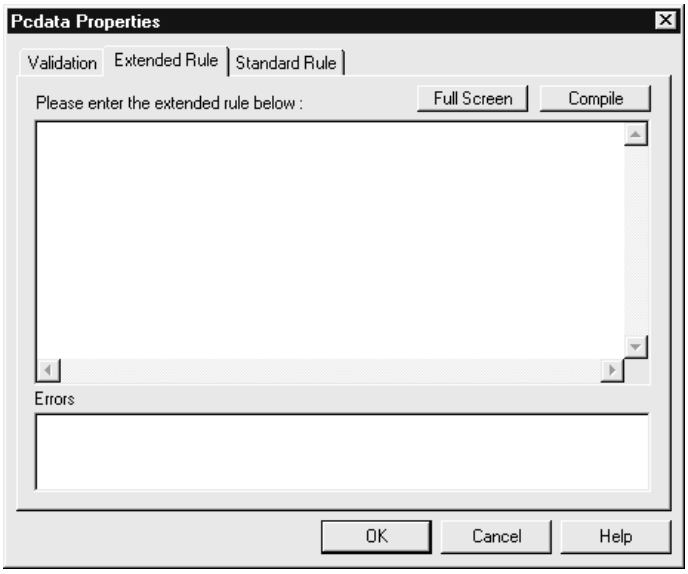
| Part | Function |
|---|---|
| Mandatory | Indicates whether the pcdata object is mandatory (must appear). |
| Minimum | Specifies the minimum length of the pcdata object. |
| Maximum | Specifies the maximum length of the pcdata object. |

(Continued on next page)

| (Contd) Part | Function |
|---|---|
| Data-type | Specifies the type of data. Valid values are:<br>◗ String (alphanumeric element)<br>◗ Number (numeric or real element)<br>◗ Date/Time (date or time element) |
| Format | Specifies how the pcdata object is formatted.<br>**Note**<br>Depending on which Data-type you selected, you can either:<br>◗ Select the data format from a list (if you choose Number or Date/Time in the Type field)<br>◗ Enter a Syntax Token to denote that this field must be formatted as the specified Syntax Token dictates. |

**Extended Rule tab**

This illustration shows the Extended Rule tab of the Pcdata Properties dialog box.




(Continued on next page)

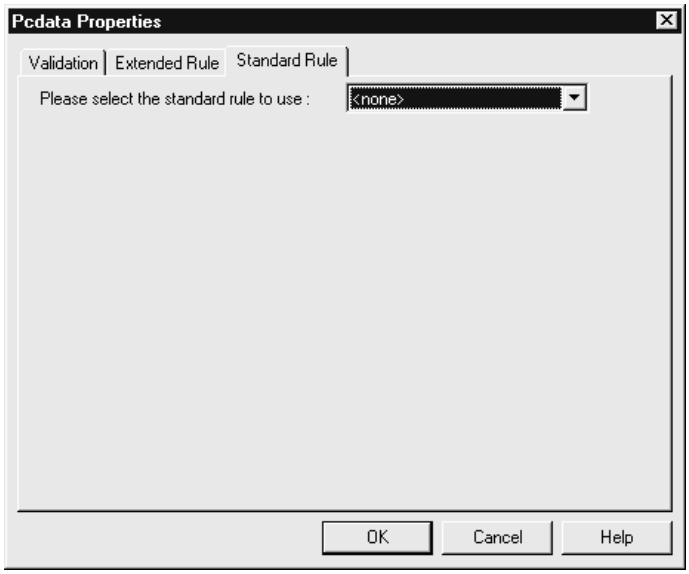
### Extended Rule tab parts and functions

This table lists the parts of the Extended Rule tab of the Pcdata Properties dialog box and their functions.

| Part | Function |
|---|---|
| **Full Screen** | Maximizes the dialog box. |
| **Compile** | Compiles the extended rule. Any warnings or errors are displayed in the Errors list.<br><br>**Note**<br>This function gives you immediate feedback about the accuracy of your rule. The system compiles the rule when you compile the entire translation object. |
| Extended rule | Defines the extended rule. |
| Errors | Displays any errors generated when you clicked **Compile** to compile the extended rule. |

### Standard Rule tab

This illustration shows the Standard Rule tab of the Pcdata Properties dialog box.




(Continued on next page)

## Standard Rule tab parts and functions

This table lists the parts of the Standard Rule tab of the Pcdata Properties dialog box and their functions.

| Part | Function |
|---|---|
| Standard rule | Specifies a standard rule that will affect this field or element during processing. Each of the rules are mutually exclusive.<br><br>**Reference**<br>See the Using Standard Rules chapter in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on standard rules. |

# How to Create a Pcdata Object

**Procedure** Use this procedure to create a pcdata object.

| Step | Action |
|---|---|
| 1 | Right-click a map object and select either **Create Sub** or **Insert** from the shortcut menu. |
| 2 | From the shortcut menu, select **Pcdata**.<br><br>**System Response**<br>The system displays the Pcdata Properties dialog box. |
| 3 | On the Validation tab, specify the following:<br>◗ whether the pcdata object is required or not<br>◗ minimum length<br>◗ maximum length<br>◗ type of data<br>◗ how the data is formatted. |
| 4 | Do you want to specify an extended rule for this pcdata object?<br>◗ If YES, select the Extended Rule tab, define the rule, and continue with the next step.<br><br>**Reference**<br>See the Using Extended Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on extended rules.<br><br>◗ If NO, continue with the next step.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Do you want to specify a standard rule for this Pcdata object?<br>◗ If YES, select the Standard Rule tab, define the rule, and continue with the next step.<br>**Reference**<br>See the Using Standard Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on standard rules.<br>◗ If NO, continue with the next step. |
| 6 | Click **OK**.<br>**System Response**<br>The system saves the Pcdata object and closes the Pcdata Properties dialog box. |

# XML Attributes

**Definition**

An attribute is a piece of information about an element.

**Relationship to attribute container object**

In Gentran:Server, each attribute is contained in an attribute container object. An element can only have one attribute container object, but the attribute container object can enclose many attribute objects.

**Attribute container object**

The attribute container object is a Gentran:Server concept and does not have a corresponding XML feature.

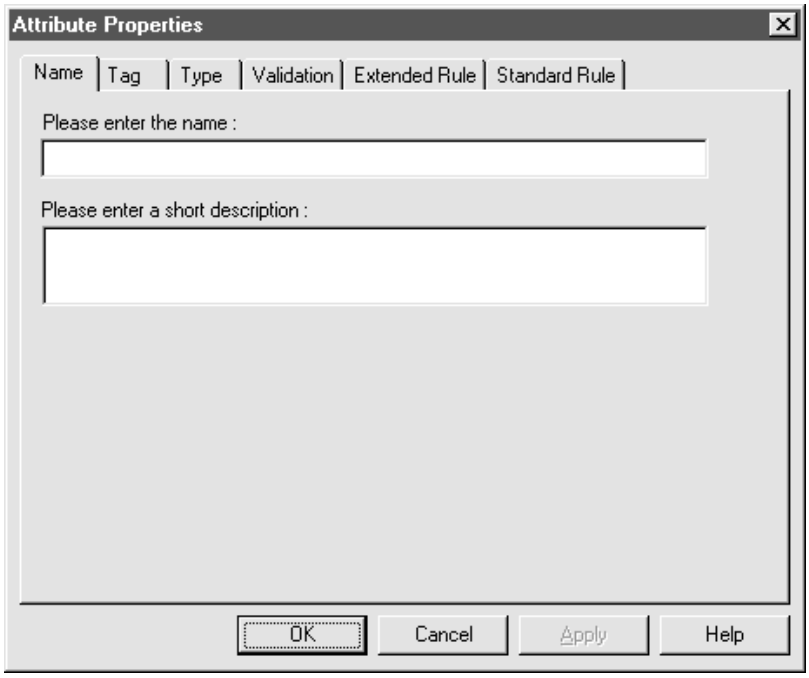
Because attribute container objects contain the attributes of an XML element, attribute containers do not have properties of their own.

The system automatically creates an attribute container object when you create the first attribute of an XML element. The system places subsequent attribute objects in the existing attribute container object.

# Attribute Properties Dialog Box

## Illustration

This diagram illustrates the Name tab of the Attribute Properties dialog box.




## Name tab parts and functions

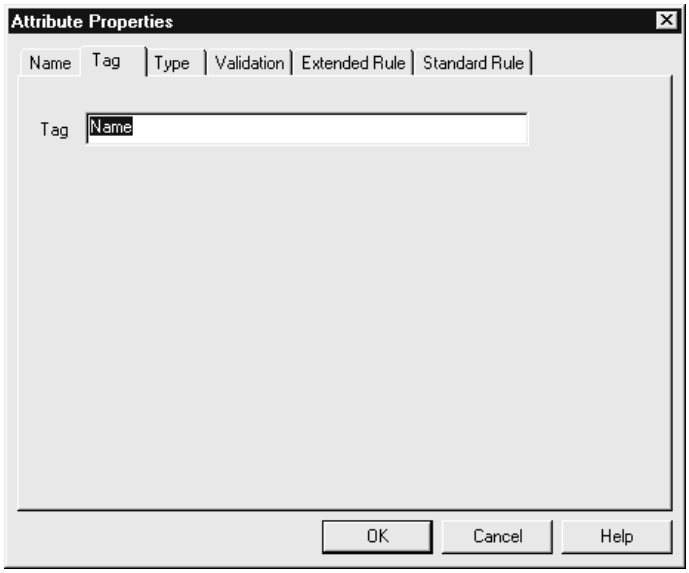
This table lists the parts of the Name tab of the Attribute Properties dialog box and their functions.

| Part | Function |
|---|---|
| Name | Defines the name of the attribute.<br><br>**Note**<br>Do not use spaces or dashes (-) for the record name. You can use the underscore (_) to separate words. |
| Description | Describes the attribute. This box is used to enter a brief explanation of the attribute to differentiate it from similar attributes. |

(Continued on next page)

## Tag tab

This diagram illustrates the Tag tab of the Attribute Properties dialog box.



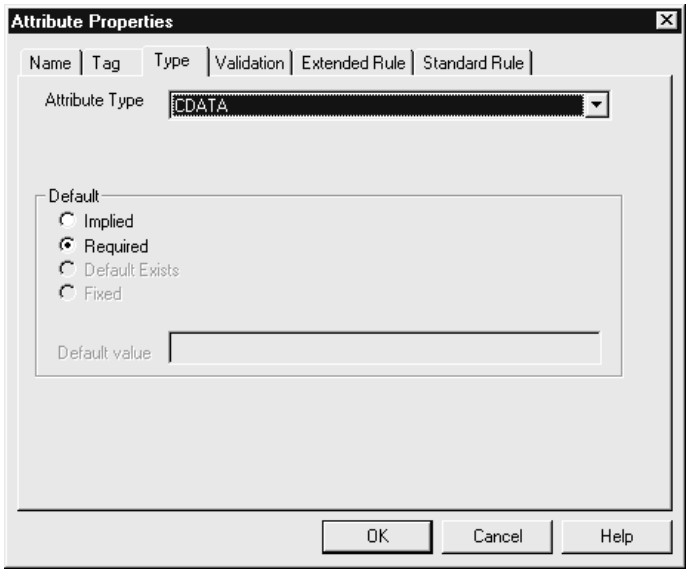

## Tag tab parts and functions

This table lists the parts of the Tag tab of the Attribute Properties dialog box and their functions.

| Part | Function |
|---|---|
| Tag | Defines the attribute identification tag, as it appears in the XML document.<br><br>**Note**<br>Gentran:Server validates the tag against the characters, which are case sensitive, that XML allows for element names. An XML tag must start with a letter, an underscore, or a colon, followed by valid XML name characters. The system uses the attribute name by default. |

(Continued on next page)

**Type tab** This diagram illustrates the Type tab of the Attribute Properties dialog box.




(Continued on next page)

## Type tab parts and functions

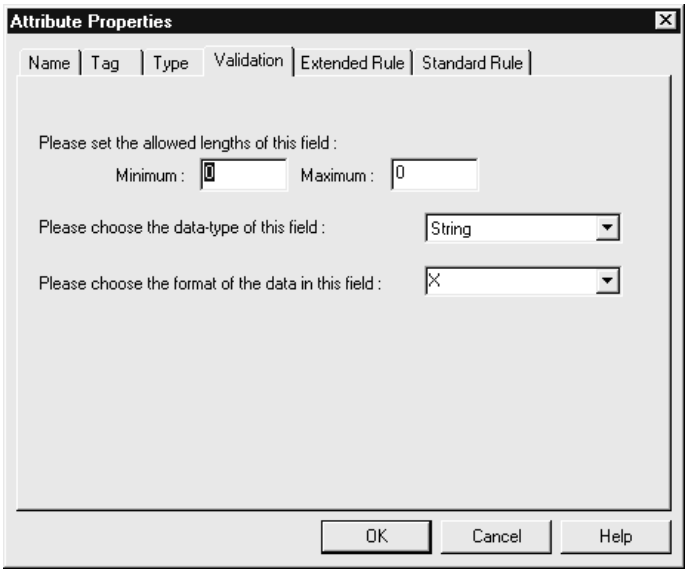
This table lists the parts of the Type tab of the Attribute Properties dialog box and their functions.

<table>
<tr><th>Part</th><th colspan="2">Function</th></tr>
<tr><td rowspan="8">Attribute Type</td><td colspan="2">Specifies the type of data that can be used in this attribute. This table describes the attribute types.</td></tr>
<tr><td>Attribute</td><td>Description</td></tr>
<tr><td>CDATA</td><td>Character data (a string of characters).</td></tr>
<tr><td>ENUMERATED</td><td>The value must match a value in the associated code list and all values in the code list must match the NMTOKEN production, as defined by the XML specification.<br><br>Note<br>To use an enumerated attribute, you must also create a code list and use a code list standard rule with the attribute.</td></tr>
<tr><td>ID</td><td>A valid and unique identifier.</td></tr>
<tr><td>IDREF</td><td>A reference to a unique identifier.</td></tr>
<tr><td>IDREFS</td><td>A list of references to unique identifiers.</td></tr>
<tr><td>NMTOKEN</td><td>The value follows the rules specified in XML for name tokens.</td></tr>
<tr><td>NMTOKENS</td><td>A list of name tokens.</td></tr>
<tr><td>Implied</td><td colspan="2">Indicates that this attribute is optional. If the document does not have a value set for the attribute, the document is still considered valid.</td></tr>
<tr><td>Required</td><td colspan="2">Indicates that this attribute is mandatory. If the document does not have a value set for the attribute, the document is not valid.</td></tr>
<tr><td>Default Exists</td><td colspan="2">Indicates that a default value exists for this attribute.<br><br>Note<br>You must define the default value. If the incoming data does not contain a value for this attribute, Gentran:Server creates it with the default value.<br><br>(Continued on next page)</td></tr>
</table>

| (Contd) Part | Function |
|---|---|
| Fixed | Indicates that the default value of this attribute is fixed and cannot be changed.<br><br>**Note**<br>You must define the default value. If the incoming data does not match this value, the document is not valid. |
| Default value | Specifies the default value for the attribute. |

## Validation tab

This diagram illustrates the Validation tab of the Attribute Properties dialog box.




## Validation tab parts and functions

This table lists the parts of the Validation tab of the Attribute Properties dialog box and their functions.

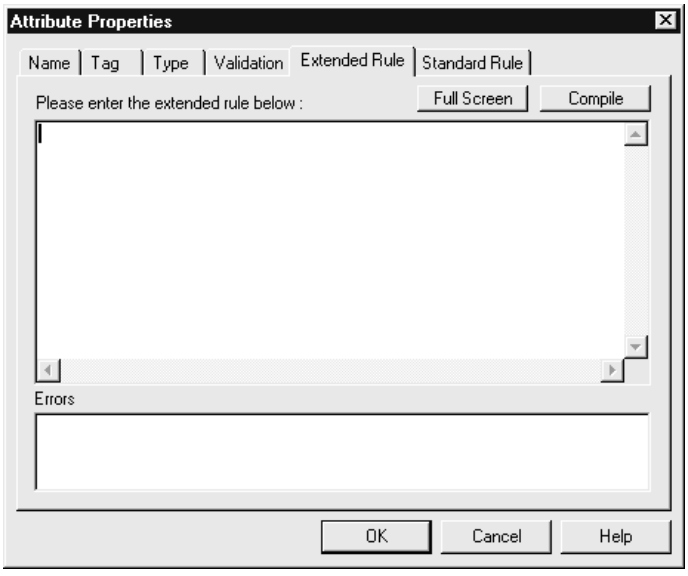
| Part | Function |
|---|---|
| Minimum | Specifies the minimum length of the attribute. |
| Maximum | Specifies the maximum length of the attribute. |

(Continued on next page)

| (Contd) Part | Function |
|---|---|
| Data-type | Specifies the type of data. Valid values are:<br>◗ String (alphanumeric element)<br>◗ Number (numeric or real element)<br>◗ Date/Time (date or time element) |
| Format | Specifies how the attribute is formatted.<br>**Note**<br>Depending on which Data-type you selected, you can either:<br>◗ Select the data format from a list (if you choose Number or Date/Time in the Type field)<br>◗ Enter a Syntax Token to denote that this field must be formatted as the specified Syntax Token dictates. |

## Extended Rule

This diagram illustrates the Extended Rule tab of the Attribute Properties dialog box.




(Continued on next page)

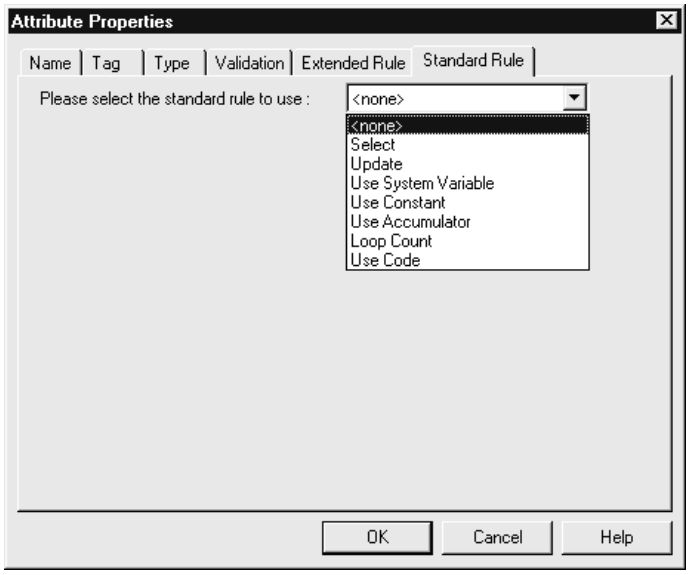
## Extended Rule tab parts and functions

This table lists the parts of the Extended Rule tab of the Attribute Properties dialog box and their functions.

| Part | Function |
|---|---|
| **Full Screen** | Maximizes the dialog box. |
| **Compile** | Compiles the extended rule. Any warnings or errors are displayed in the Errors list.<br><br>**Note**<br>This function gives you immediate feedback about the accuracy of your rule. The system compiles the rule when you compile the entire translation object. |
| Extended rule | Defines the extended rule. |
| Errors | Displays any errors generated when you compiled the extended rule. |

## Standard Rule tab

This diagram illustrates the Standard Rule tab of the Attribute Properties dialog box.




(Continued on next page)

## Standard Rule tab parts and functions

This table lists the parts of the Standard Rule tab of the Attribute Properties dialog box and their functions.

| Part | Function |
|---|---|
| Standard rule | Specifies a standard rule that will affect this field or element during processing. Each of the rules are mutually exclusive.<br><br>**Reference**<br>See the Using Standard Rules chapter in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on standard rules. |

# How to Create an XML Attribute

**Procedure** Use this procedure to create an XML attribute.

| Step | Action |
|---|---|
| 1 | Right-click a map object and select either **Create Sub** or **Insert** from the shortcut menu. |
| 2 | From the shortcut menu, select **Attribute**.<br>**System Response**<br>The system displays the Attribute Properties dialog box. |
| 3 | On the Name tab, specify the following:<br>◗ unique attribute name<br>◗ description (if applicable). |
| 4 | If necessary, select the Tag tab and change the value in the **Tag** box.<br>**Note**<br>The value must match the attribute tag in the XML document. |
| 5 | Select the Type tab to access the attribute type options. |
| 6 | On the Type tab, specify the following:<br>◗ attribute type<br>◗ default usage of the attribute<br>◗ default value (only if you selected “Default Exists” or Fixed”).<br>**Note**<br>If you select ENUMERATED as the attribute type, you must also create a code list and use a code list standard rule with the attribute. |
| 7 | Select the Validation tab to access the validation options. |
| 8 | On the Validation tab, specify this information for the attribute:<br>◗ minimum length<br>◗ maximum length<br>◗ type of data<br>◗ how the data is formatted.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 9 | Do you want to specify an extended rule for this attribute?<br>◗ If YES, select the Extended Rule tab, define the rule, and continue with the next step.<br>**Reference**<br>See the Using Extended Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on extended rules.<br>◗ If NO, continue with the next step. |
| 10 | Do you want to specify a standard rule for this attribute?<br>◗ If YES, select the Standard Rule tab, define the rule, and continue with the next step.<br>**Reference**<br>See the Using Standard Rules topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information on standard rules.<br>◗ If NO, continue with the next step. |
| 11 | Click **OK**.<br>**System Response**<br>The system saves the attribute and closes the Attribute Properties dialog box. |

CHAPTER
3

# Creating XML Trading Partnership Records

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# Overview

# Introduction

**In this chapter**

This chapter describes how to create Trading Partnership records when using the XML translation option with Gentran:Server.

**Before you begin**

Before you begin creating an application-to-XML Trading Partnership record, you will need to create an Interchange record and Group Organization record.

**Reference**
See the topic How to Create an Interchange Record and How to Create a Trading Partnership Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information.

**Key Terms**

This table lists the key terms used in this chapter.

| Term | Description |
|---|---|
| category | A user-definable record that enables you to group Trading Partnerships. |
| contact record | A record containing the name, address, and telephone numbers of an individual at your trading partner's business. |
| Group Organization record | A record containing all information specific to a single division or department in your trading partner's organization. |
| Interchange Organization record | A record containing all information specific to a single company. |
| Reconciliation ID record | A record containing a set of interchange and group IDs used with functional acknowledgments. |

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| (Contd) Term | Description |
|---|---|
| Standard Cross-Reference Table | The Gentran:Server feature that enables you to build a table of standard values. Gentran:Server can use these values to find the Trading Partner record for certain inbound documents. |
| TRADACOMS record | A record containing all of the supplementary Trading Partnership information for use with TRADACOMS standards. |
| Trading Partner record | One of the records maintained in trading partner files:<br>◗ Interchange Organization record<br>◗ Group Organization record<br>◗ Trading Partnership record<br>◗ Contact record<br>◗ Reconciliation ID record<br>◗ Category record<br>◗ TRADACOMS record. |
| Trading Partnership | An arrangement with a specific trading partner to exchange information in a specific document type and using a particular standard version. |
| Trading Partnership code | A code you define that uniquely identifies a Trading Partnership record. |
| Trading Partnership record | A record containing information about one of the Trading Partnerships you have established. |

# Creating Trading Partnerships

## The Flow of Work

### Introduction

Gentran:Server supports Trading Partnership records based on the types of translation.

### Process

The table describes the process of creating Trading Partnership records.

| Stage | Description |
|---|---|
| 1 | Create Interchange Organization records.<br><br>**Reference**<br>See the topic How to Create an Interchange Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on creating Interchange Organization records. |
| 2 | Create Group Organization records.<br><br>**Reference**<br>See the topic How to Create a Group Organization Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on creating Group Organization records.<br><br>(Continued on next page) |

| (Contd) Stage | Description | |
|---|---|---|
| 3 | Create Trading Partnership records. | |
| | **IF you want to translate from…** | **THEN create…** |
| | Application file definition to XML format | An application-to-XML Trading Partnership record. |
| | XML format to an application file definition | A XML-to-application Trading Partnership record |
| | EDI standard format to XML format | A standard-to-XML Trading Partnership record. |
| | XML format to another XML format | A XML-to-XML Trading Partnership record |
| | XML format to an EDI standard | A XML-to-standard Trading Partnership record |
| | ODBC file format to XML format | An application-to-XML Trading Partnership record. |
| | XML format to ODBC file format | An XML-to-application Trading Partnership record. |

**Reference**

See the chapter Working with Trading Partnerships in the *Gentran:Server for UNIX and Workstation Application User's Guide* to translate from or create a Trading Partnership record using an EDI standard, application file definition, or ODBC format.

(Continued on next page)

## Using wildcard characters

When you create a Trading Partnership record, you can enter a wildcard indicator into any of the six key fields that the system uses to identify the record. A wildcard indicator instructs Gentran:Server to accept any value for that field during a search for a Trading Partnership record. Wildcard indicators enable you to create more generic Trading Partnership records.

The Trading Partnership Editor accepts a dollar sign ($) as a wildcard indicator for these fields:

- Your Interchange ID
- Your Partner's Interchange ID
- Your Group/Application ID
- Your Partner's Group/Application ID
- Set ID
- Standard Version

**Note**
You can only use wildcards for the following trading partnership files:

- standard-to-XML
- XML-to-standard

## Sending outbound functional acknowledg-ments

When you create a Trading Partnership record, you can specify whether or not to send an outbound functional acknowledgment to your trading partner. The outbound functional acknowledgment notifies your trading partner that you received the data they sent to you.

**Reference**
See the The Trading Partnership Editor topic for more information on the Outbound Acknowledgment tab fields and their functions.

See How to Specify Outbound Acknowledgmentsin the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions.

# How to Create an Application-to-XML Trading Partnership Record

## Introduction

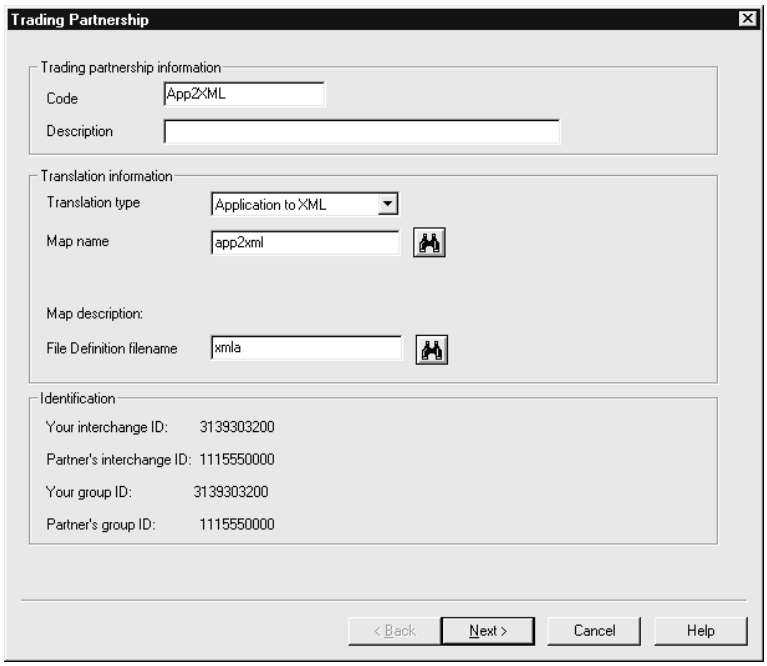
This topic contains the procedure for creating an application-to-XML Trading Partnership record.

## Procedure

Use this procedure to create a Trading Partnership record that is based on an application-to-XML translation scheme.

| Step | Action |
|---|---|
| 1 | Open **Trading Partnership Administration**. |
| 2 | Select the group organization record that you want to associate with this Trading Partnership. |
| 3 | Click **New** from the **File** menu. |
| 4 | Click **Trading Partnership**.<br><br>**System Response**<br>The system displays the Trading Partnership wizard.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields in the Trading Partnership dialog box and click **Next**. |

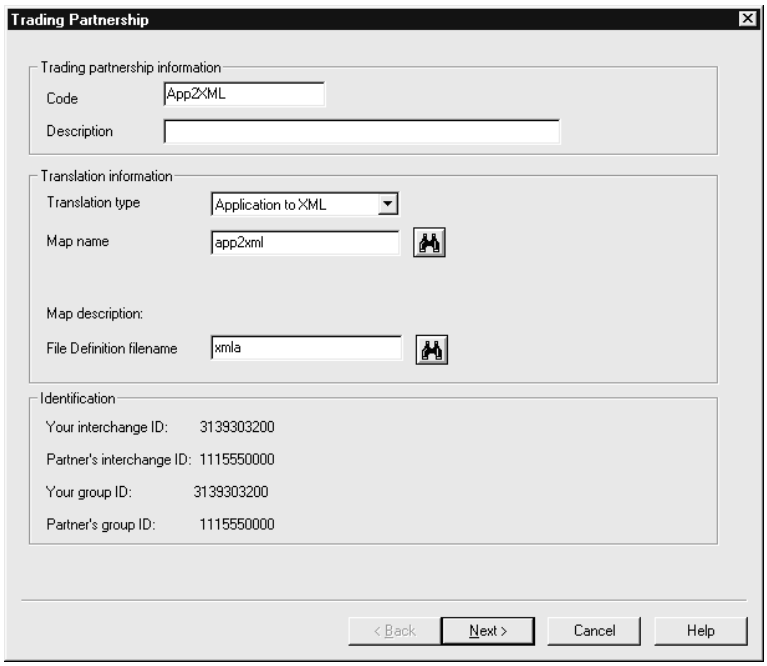



**Note**
You must complete the **File Definition Filename** box using the name of the .ddf used to represent your application layout.

**Reference**
See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.

(Continued on next page)

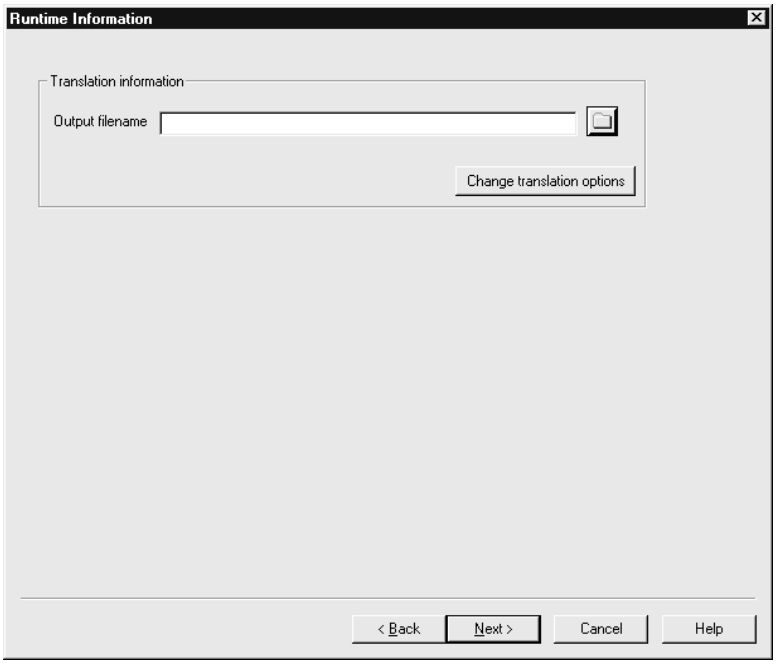
| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields in the Trading Partnership dialog box and click **Next**. |




**Note**
You must complete the **File Definition Filename** box using the name of the .ddf used to represent your application layout.

**Reference**
See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.

(Continued on next page)

| (Contd) Step | Action |
|---|---|
| 6 | Complete the fields on the Runtime Information dialog box and click **Next** or **Finish**.<br>  <br>**Reference**<br>See the Runtime Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>**Note**<br>If categories are defined, the Runtime Information dialog box displays the **Next** button to access the Categories dialog box. Continue with Step 7.<br>If categories are not defined, the Runtime Information dialog box displays the **Finish** button. |
| 7 | Did you click **Next** in Step 6?<br>◗ If YES, select appropriate categories for this Trading Partnership and click the **Finish** button.<br>◗ If NO, you are finished.<br>**Reference**<br>See the Categories tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |

# How to Create a XML-to-Standard Trading Partnership Record

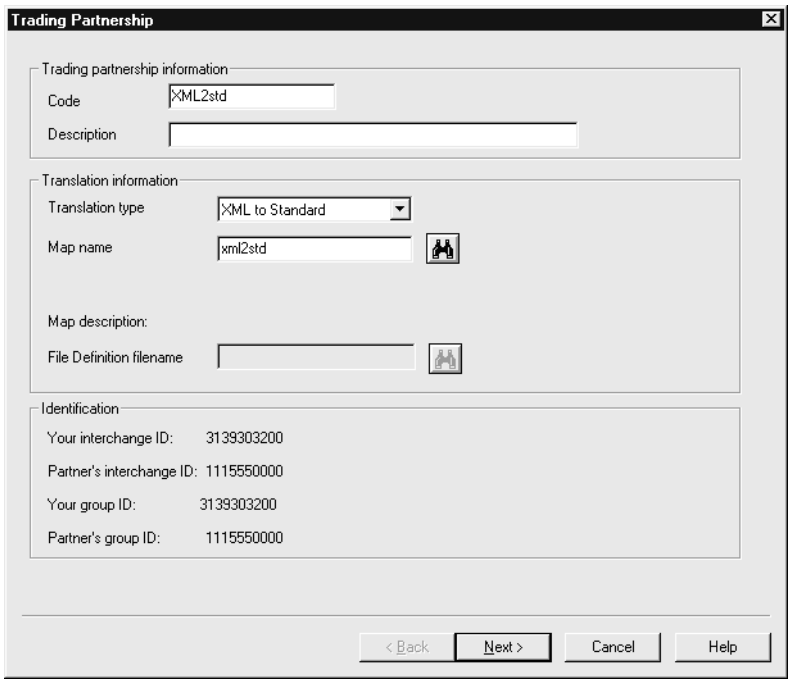
## Introduction

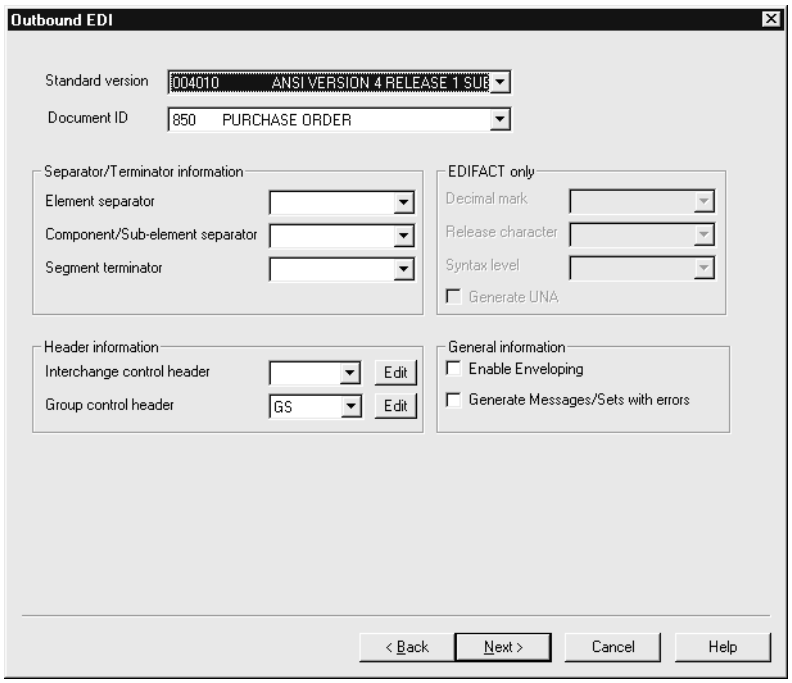
This topic contains the procedure for creating an XML-to-standard Trading Partnership record.

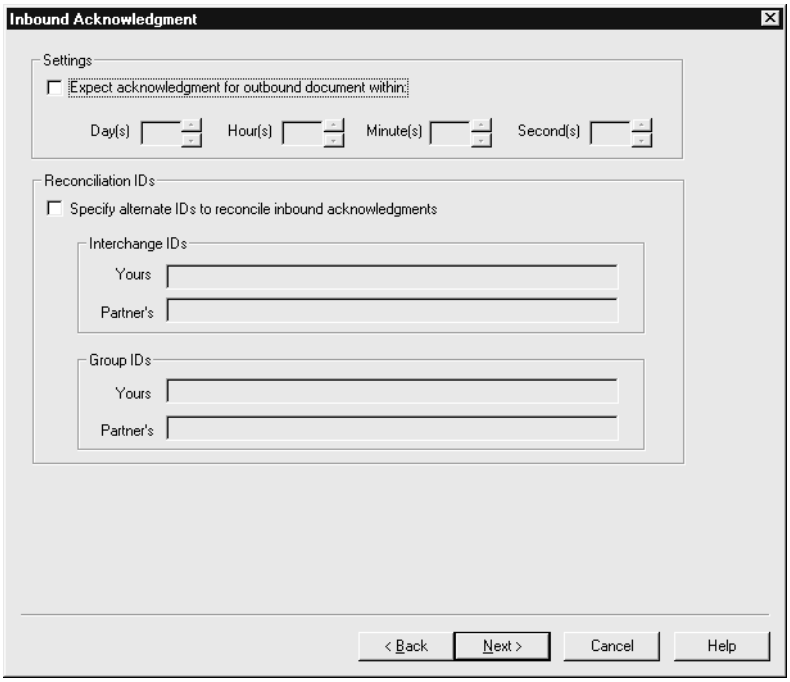
## Procedure

Use this procedure to create a Trading Partnership record that is based on a XML-to-standard translation scheme.

| Step | Action |
|---|---|
| 1 | Open **Trading Partnership Administration**. |
| 2 | Select the Group Organization record that you want to associate with this Trading Partnership. |
| 3 | Click **New** from the **File** menu. |
| 4 | Click **Trading Partnership**.<br><br>**System Response**<br>The system displays the Trading Partnership wizard.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields on the Trading Partnership dialog box and click **Next**.<br>  <br><br>**Reference**<br>See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Complete the fields on the Outbound EDI dialog box and click **Next**.<br>  <br>**References**<br>See the Outbound EDI tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>See the How to Modify the Outbound Envelope Segments topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for instructions on editing the interchange or group envelope segments. |
| 7 | Complete the fields on the Runtime Information dialog box and click **Next**.<br>**Reference**<br>See the Runtime Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 8 | Complete the fields on the Archive dialog box and click **Next**.<br><br>**Reference**<br>See the Archive tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |
| 9 | Complete the fields on the Inbound Acknowledgment dialog box and click **Next**.<br>  <br><br><br>**Reference**<br>See the Inbound Acknowledgent tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br><br>**Note**<br>If categories are defined, the Inbound Acknowledgment dialog box displays the **Next** button to access the Categories dialog box. Continue with Step 10.<br><br>If categories are not defined, the Inbound Acknowledgment dialog box displays the **Finish** button. |
| 10 | Click **Finish**. |

# How to Create an XML-to-Application Trading Partnership Record

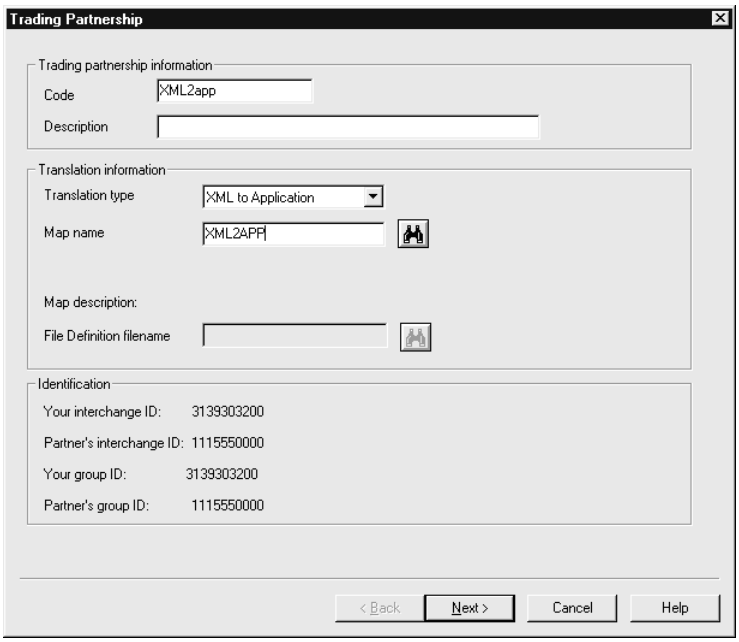
## Introduction

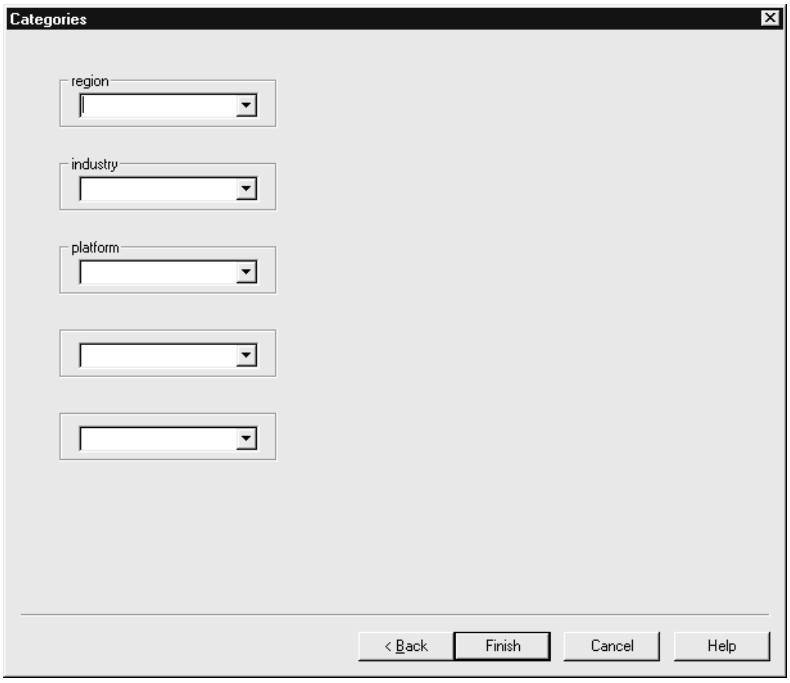
This topic contains the procedure for creating an XML-to-application Trading Partnership record.

## Procedure

Use this procedure to create a Trading Partnership record that is based on an XML-to-application translation scheme.

| Step | Action |
|---|---|
| 1 | Open **Trading Partnership Administration**. |
| 2 | Select the group organization record that you want to associate with this Trading Partnership. |
| 3 | Click **New** from the **File** menu. |
| 4 | Click **Trading Partnership**.<br><br>**System Response**<br>The system displays the Trading Partnership wizard.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields on the Trading Partnership dialog box and click **Next**.<br>  <br>**Reference**<br>See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |
| 6 | Complete the fields on the Runtime Information dialog box and click **Next** or **Finish**.<br>**References**<br>See the Runtime Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>**System Response**<br>If categories are defined, the Runtime Information dialog box displays the **Next** button to access the Categories dialog box. Continue with Step 7.<br>If categories are not defined, the Runtime Information dialog box displays the **Finish** button.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 7 | Did you click **Next** in Step 6?<br>◗ If YES, select appropriate categories for this Trading Partnership and click the **Finish** button.<br>◗ If NO, you are finished.<br>  <br>**Reference**<br>See the Categories tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |

# How to Create a Standard-to-XML Trading Partnership Record

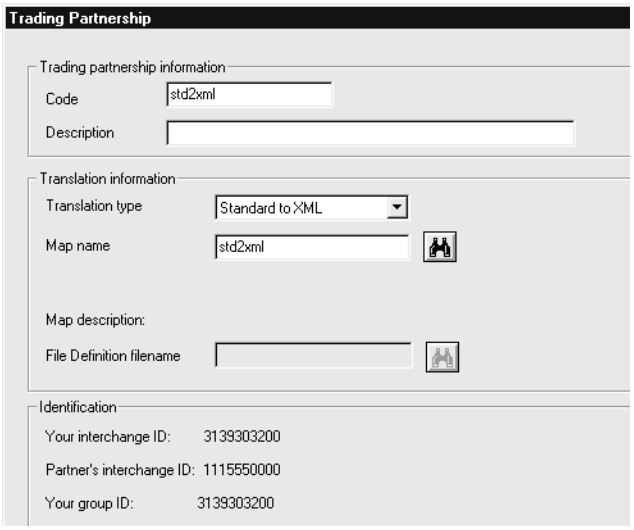
## Introduction

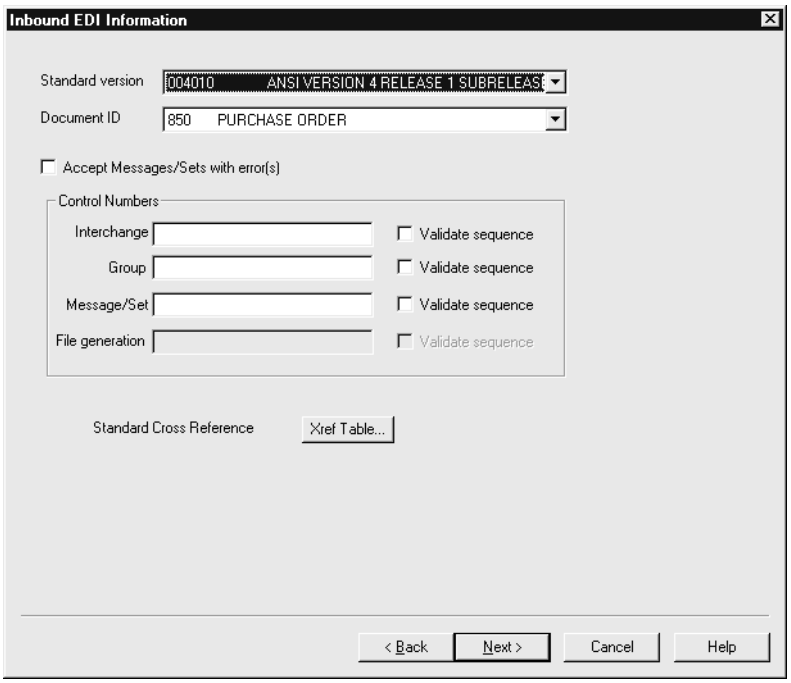
This topic contains the procedure for creating a standard-to-XML Trading Partnership record.

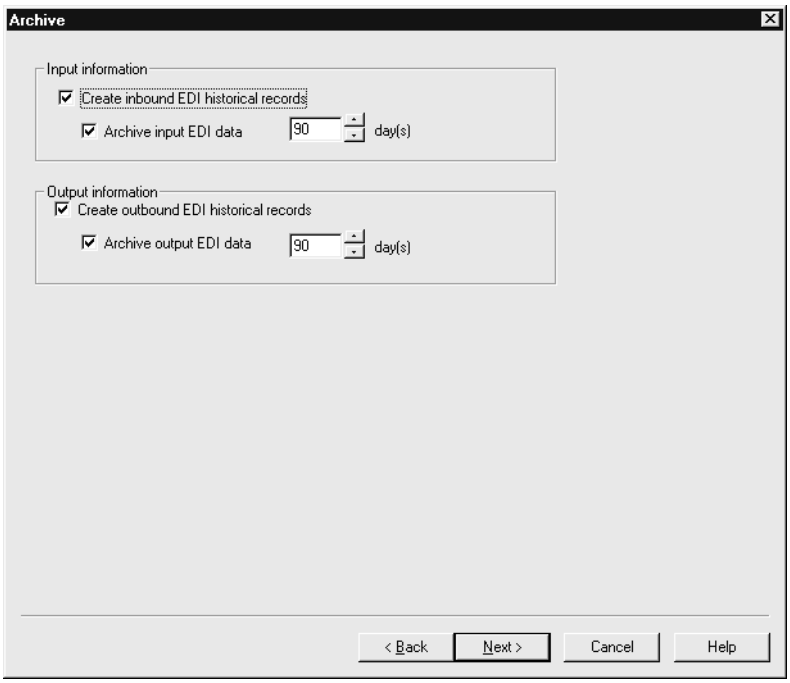
## Procedure

Use this procedure to create a Trading Partnership record that is based on a standard-to-XML translation scheme.

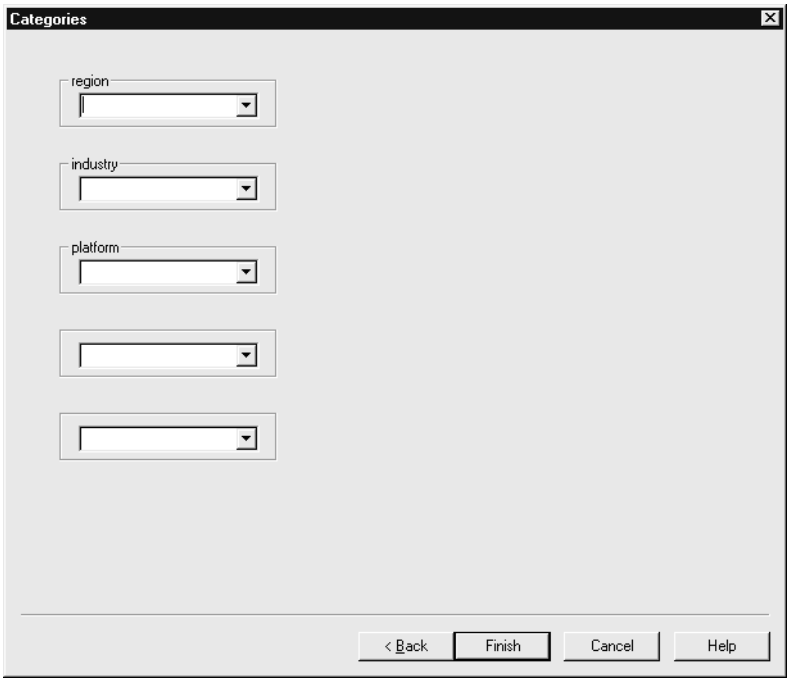
| Step | Action |
|---|---|
| 1 | Open **Trading Partnership Administration**. |
| 2 | Select the Group Organization record that you want to associate with this Trading Partnership. |
| 3 | Click **New** from the **File** menu. |
| 4 | Click **Trading Partnership**.<br><br>**System Response**<br>The system displays the Trading Partnership wizard.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields on the Trading Partnership dialog box and click **Next**.<br>  <br><br>**Reference**<br>See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Complete the fields on the Inbound EDI Information dialog box and click **Next**.<br>  <br>**Reference**<br>See the Inbound EDI Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>For information about how to add an entry to the Standard Cross Reference Table, see the How to Add a Record to the Standard Cross Reference Table topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide*. |
| 7 | Complete the fields on the Runtime Information dialog box and click **Next**.<br>**Reference**<br>See the Runtime Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 8 | Complete the fields on the Archive dialog box and click **Next**.<br>  <br><br>**Reference**<br>See the Archive tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 9 | Complete the fields on the Outbound Acknowledgment dialog box and click **Next** or **Finish**.<br><br>**Note**<br>If categories are defined, the Outbound Acknowledgment dialog box displays the **Next** button to access the Categories dialog box. Continue with Step 10.<br><br>If categories are not defined, the dialog box displays the **Finish** button.<br><br>**Reference**<br>See the Outbound Acknowledgment tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br><br>See the topic How to Specify Outbound Acknowledgments in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* to generate outbound acknowledgments.<br><br>**System Response**<br>If categories are currently defined, the system displays the Categories dialog box.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 10 | Did you click **Next** in Step 9?<br>◗ If YES, select appropriate categories for this Trading Partnership and click the **Finish** button.<br>◗ If NO, you are finished.<br>  <br>**Reference**<br>See the Categories tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |

# How to Create an XML-to-XML Trading Partnership Record

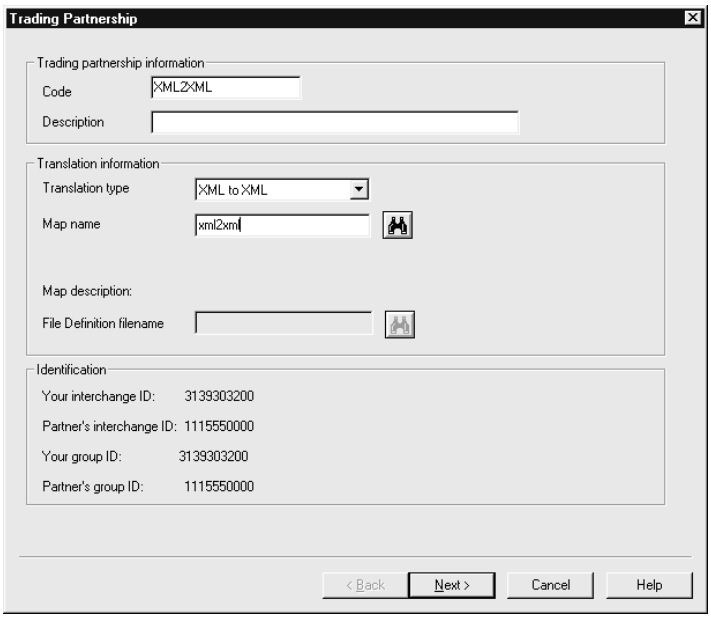
## Introduction

This topic contains the procedure for creating an XML-to-XML Trading Partnership record.

## Procedure

Use this procedure to create a Trading Partnership record that is based on an XML-to-XML translation scheme.

| Step | Action |
|---|---|
| 1 | Open **Trading Partnership Administration**. |
| 2 | Select the group organization record that you want to associate with this Trading Partnership. |
| 3 | Click **New** from the **File** menu. |
| 4 | Click **Trading Partnership**.<br><br>**System Response**<br>The system displays the Trading Partnership wizard.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 5 | Complete the fields on the Trading Partnership dialog box and click **Next**.<br>  <br>**Reference**<br>See the Trading Partnership tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Complete the fields on the Runtime Information dialog box and click **Next** or **Finish**.<br><br>**References**<br>For information about how to add an entry to the Standard Cross Reference Table, see the How to Add a Record to the Standard Cross Reference Table topic in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide*.<br><br>See the Runtime Information tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions.<br><br>**Note**<br>If categories are defined, the Runtime Information dialog box displays the **Next** button to access the Categories dialog box. Continue with Step 7.<br><br>If categories are not defined, the Runtime Information dialog box displays the **Finish** button. |
| 7 | Did you click **Next** in Step 6?<br><br>◗ If YES, select appropriate categories for this Trading Partnership and click the **Finish** button.<br><br>◗ If NO, you are finished.<br><br>**Reference**<br>See the Categories tab example in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for field descriptions. |

CHAPTER
4

# Configuring for XML

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# Overview

# Introduction

**In this chapter**

This chapter explains how to configure your system to handle XML (eXtensible Markup Language) files with Gentran:Server for UNIX and Gentran:Server Workstation.

Configuring for XML starts with defining the elements in an XML file that signal the start of a new document. This enables Gentran:Server to split the XML file if necessary. Next, you must configure your system to extract key information from XML documents and use the key information to find the appropriate Trading Partnership record. Trading Partnership records contain many operating instructions that control how data is routed, translated, and archived.

**Key terms**

This table lists the key terms used in this chapter.

| Term | Description |
|---|---|
| DDF (Data Definition Format) | A file that defines a file format used in a map. It includes the hierarchical and looping structure of the data, the map objects, and the objects' attributes. |
| DTD (Document Type Definition) | The set of rules governing the tags in an XML document. A DTD file describes the elements and attributes that are allowed in your documents. |
| element (in an XML document) | The primary building block of the hierarchical structure in an XML document. Elements have start- and end-points denoted by start- and end-tags. |
| root element | The unique first element in an XML document that contains all other elements in the document. |
| XML (eXtensible Markup Language | A computer language that provides a standard approach for describing, capturing, processing, and publishing information. |

(Continued on next page)

| (Contd) Term | Description |
|---|---|
| XML document | An XML element that can, but might not include nested XML elements. The XML document is modeled after a tree, in which each element in the tree is considered a node. |
| XML parser | The processor that categorizes the characters in an XML document as either markup or character data. |
| XML tag | A portion of XML code that indicates the type of data within a set of start- and end- tags. Tags are enclosed in brackets.<br><br>**Example**<br>In the following example, the XML start tag is <Name> and the end tag is </Name>.<br><br><Name>N. C. Paige</Name> |

# Configuration Process

## Introduction

This topic describes the process of configuring your system to:

- Split XML files into documents
- Extract key information from an XML document
- Use the key information to identify the appropriate Trading Partnership record.

## Stage table

This table describes the stages in the process.

| Stage | Description |
|---|---|
| 1 | Configure the XML elements used to split XML files into documents or sets.<br><br>**Reference**<br>See the Configuring XML Elements to Split Files section for instructions. |
| 2 | Apply string-building rules to the XML elements you configured and link them to a file definition (DDF).<br><br>**Reference**<br>See the Configuring XML Trading Partnership Rules section for instructions. |
| 3 | Build the XML TP Cross Reference table to link each unique string that results from applying the string-building rules to a Trading Partnership Code.<br><br>**Reference**<br>See the Linking Rules to a Trading Partnership Code section for instructions. |

# Configuring XML Elements to Split Files

## Overview

**Introduction**

The first stage in configuring your system to handle XML files is to configure the XML elements that you will use to split XML files into smaller documents or sets. You do this by specifying from one to three elements in the file that mark the start of a different document. Gentran:Server separates the data each time it finds the splitting elements you defined.

**Example**
You can configure Gentran:Server to divide XML data into segments, such as interchange (ISA), group (GS), or set (ST).

**Why split XML files?**

The translator uses one translation object (compiled map) per file. Splitting a large XML file enables you to use different translation objects to translate different documents in an XML file.

(Continued on next page)

## Element levels

You can define up to three levels of elements to split an XML file:

| Element Level | Description | Requirement |
|---|---|---|
| First-level | The topmost element of an XML document. | Mandatory |
| Second-level | The element after the topmost element in an XML document. | Optional |
| Third-level | The second element after the topmost element in an XML document. | Optional |

### Example

This example shows three element levels in an XML document.

```
<message version="1.0"
  guideline=" " xml:lang="en">
  <segment1 segment-id="ISA" area="transaction-header"
position="010" name="Interchange Control Header" >
    <element reference="ISA01" name="Authorization
Information Qualifier" >
      <code>00</code>
    </element>
```

## Splitting element tables

When you configure your system to split XML data, the system stores the information in three DISAM tables:

| This file… | Stores element identification information for the… |
|---|---|
| xmlspl1.idx/dat | topmost splitting element. |
| xmlspl2.idx/dat | second-level splitting element, if any. |
| xmlspl3.idx/dat | third-level splitting element, if any. |

### Reference

See the *Gentran:Server for UNIX and Workstation Technical Reference Guide* for the structure of these tables.

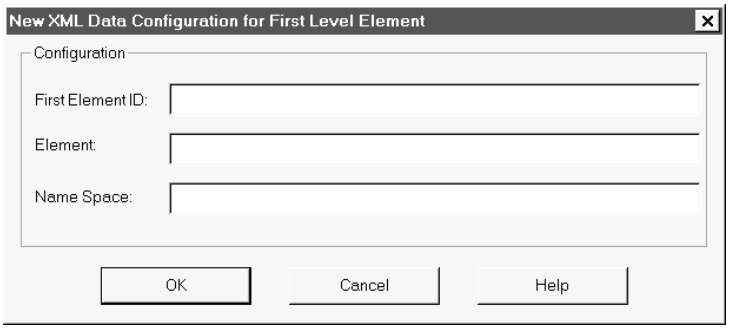
# New XML Data Configuration Dialog Boxes

## Introduction

The XML Data Configuration dialog boxes enable you to configure up to three elements that mark the start of a new document in an XML file.

## First Level Element

This illustration shows the XML Data Configuration dialog box for the First Level Element.




## First Level Element fields and functions

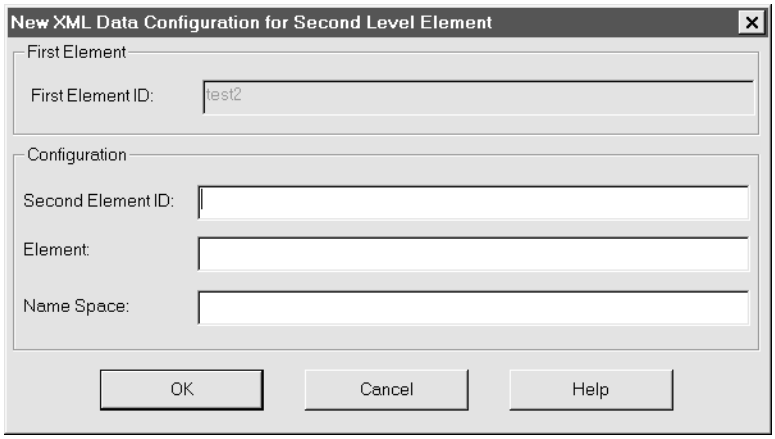
This table lists the fields of the New XML Data Configuration for First Level Element dialog box and their functions.

| Field | Function |
|---|---|
| First Element ID | Specifies the identifier that you want to assign to this element. Use up to 65 characters. Spaces are permitted. This box is required. |
| Element | Identifies the name of the element (tag) from the XML file that you want to associate with First Element ID. Do not include the tag brackets. This box is required. |
| Name Space | Identifies the shorthand or prefix that substitutes for the full name of the namespace that you want to use to further define the First Level Element. This box is optional.<br>**Notes**<br>The namespace helps identify the Trading Partnership Code.<br>The attribute "xmlns" is an XML keyword for a namespace declaration. |

(Continued on next page)

## Second Level Element

This illustration shows the XML Data Configuration dialog box for the Second Level Element.




## Second Level Element fields and functions

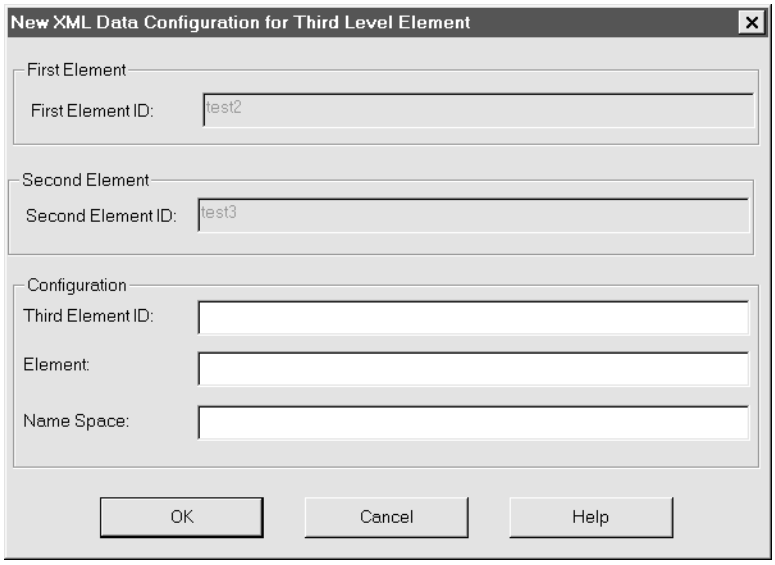
This table lists the fields of the New XML Data Configuration for Second Level Element dialog box and their functions.

| Field | Function |
|---|---|
| First Element ID | Displays the ID of the First Level Element. |
| Second Element ID | Specifies the identifier that you want to assign to this element. Use up to 65 characters. Spaces are permitted. This box is required. |
| Element | Identifies the name of the element (tag) from the XML file that you want to associate with Second Element ID. Do not include the tag brackets. This box is required. |
| Name Space | Identifies the shorthand or prefix that substitutes for the full name of the namespace that you want to use to further define the Second Level Element. This box is optional.<br><br>**Note**<br>The attribute "xmlns" is an XML keyword for a namespace declaration. |

(Continued on next page)

## Third Level Element

This illustration shows the XML Data Configuration dialog box for the Third Level Element.




## Third Level Element fields and functions

This table lists the fields of the New XML Data Configuration for Third Level Element dialog box and their functions.

| Field | Function |
|---|---|
| First Element ID | Displays the ID of the First Level Element. |
| Second Element ID | Displays the ID of the Second Level Element. |
| Third Element ID | Specifies the identifier that you want to assign to this element. Use up to 65 characters. Spaces are permitted. This box is required. |
| Element | Identifies the name of the element (tag) from the XML file that you want to associate with Third Element ID. Do not include the tag brackets. This box is required. |
| Name Space | Identifies the shorthand or prefix that substitutes for the full name of the namespace that you want to use to further define the Third Level Element. This box is optional.<br>**Note**<br>The attribute "xmlns" is an XML keyword for a namespace declaration. |

# XML Element Configuration Tree

**Introduction**

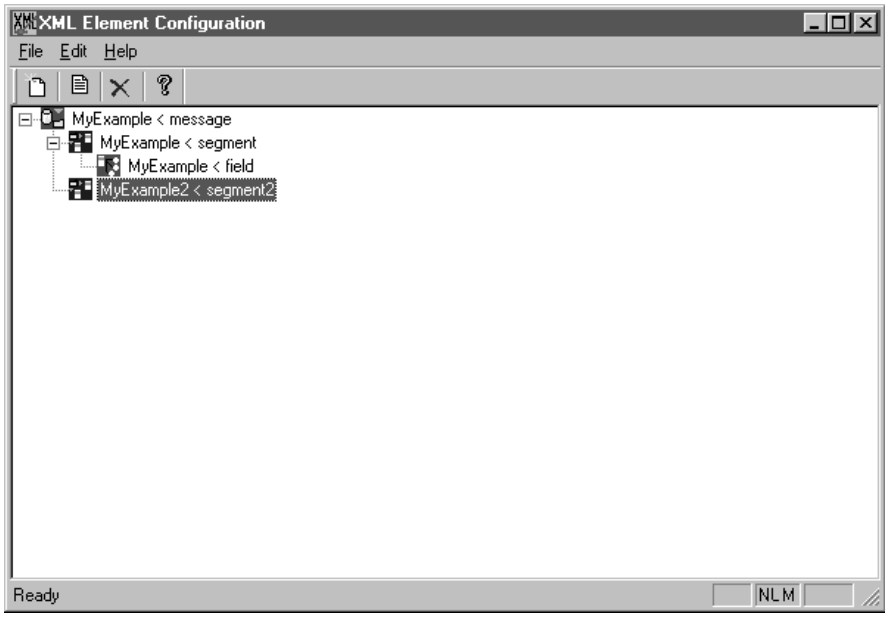
When you define a splitting element in the XML Element Configuration window, the system displays the element as a node on the XML element configuration tree.

**One tree**

This single tree contains all the first-level, second-level, and third-level elements you configure.

**Illustration**

This illustration shows an example of an XML element configuration tree.




(Continued on next page)

**Tree nodes**

Each element level has its own icon in the tree.

| Icon | Element Level |
|---|---|
|  | First. This icon has a green background. |
|  | Second. This icon has a blue background. |
|  | Third. This icon has a red background. |

# How to Configure XML Elements

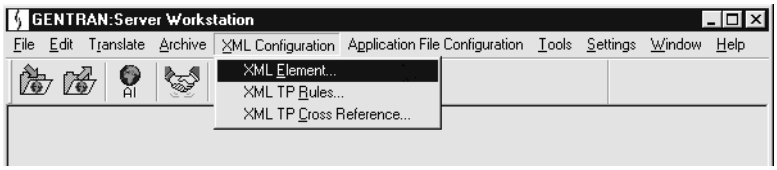
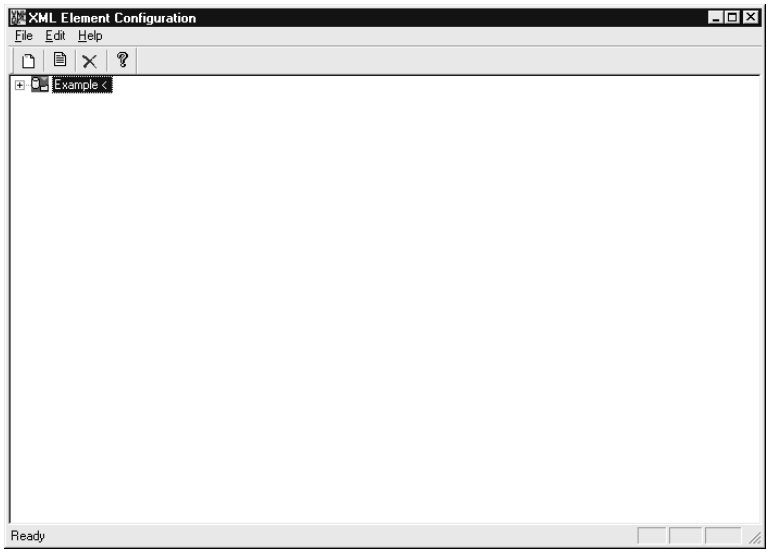
## Introduction

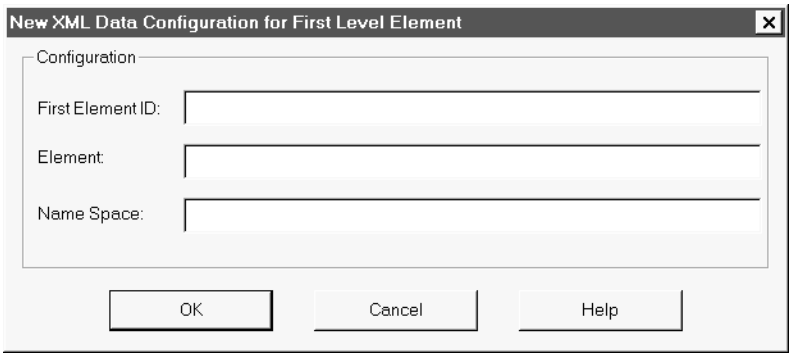
To configure an XML element, you:

- Give it a unique ID that will help you identify it
- Specify the name of the XML tag associated with the element
- Specify the shortcut or prefix of the namespace used in the element if you need to further identify the element.

## Procedure: Configuring a first-level element

Use this procedure to configure a first-level XML element.

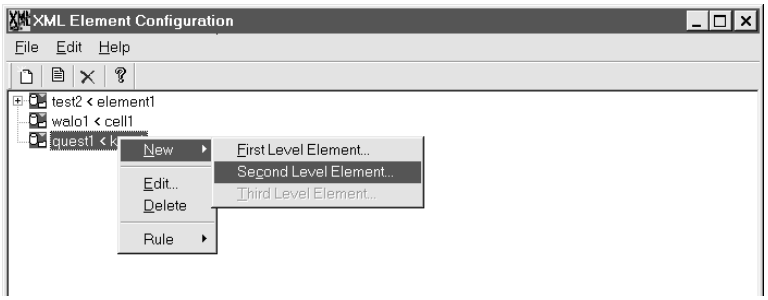
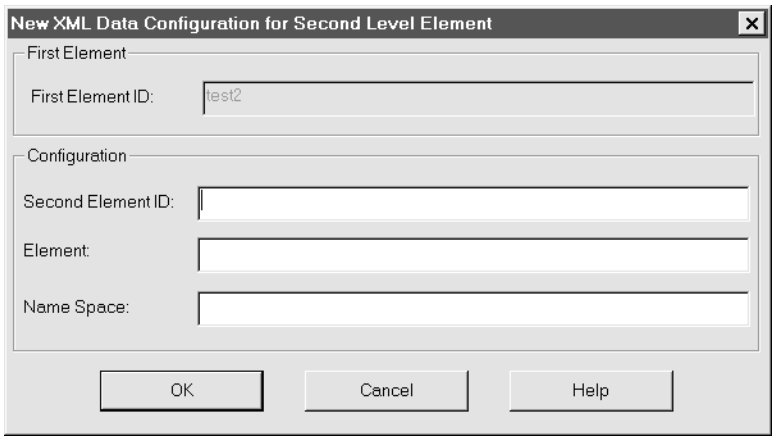
| Step | Action |
|---|---|
| 1 | From the XML Configuration menu, select **XML Element.**<br>  <br>**System Response**<br>The system displays the XML Element Configuration window.<br>  <br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 2 | From the File menu, select **New** and then click **First Level Element**.<br><br>**System Response**<br>The system displays the New XML Element Configuration for First Level Element dialog box.<br>  |
| 3 | Type the element identifier that you want to use into the **First Element ID** box.<br><br>**Note**<br>When you define the element names and how the XML file is to be split, you must start with the topmost element of any XML file to be processed within the product. |
| 4 | Type the element name (tag name) into the **Element** box. |
| 5 | Do you want to use the namespace to further qualify this element?<br>◗ If YES, type a value into the **Name Space** box.<br>◗ If NO, continue with the next step. |
| 6 | Click **OK**.<br><br>**System Response**<br>The system adds a node for the element to the XML configuration tree. |
| 7 | Do you want to configure a second-level element?<br>◗ If YES, continue with the next procedure, Configuring a second-level element in this topic.<br>◗ If NO, continue with Configuring XML Trading Partnership Rules in this chapter. |

(Continued on next page)

## Configuring a second-level element

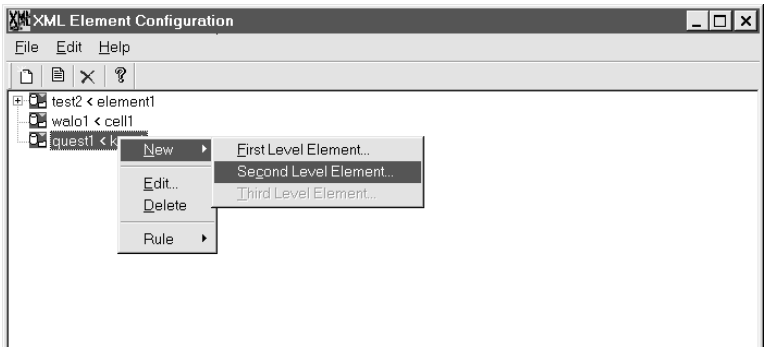
Use this procedure to configure a second-level XML element used to split XML data.

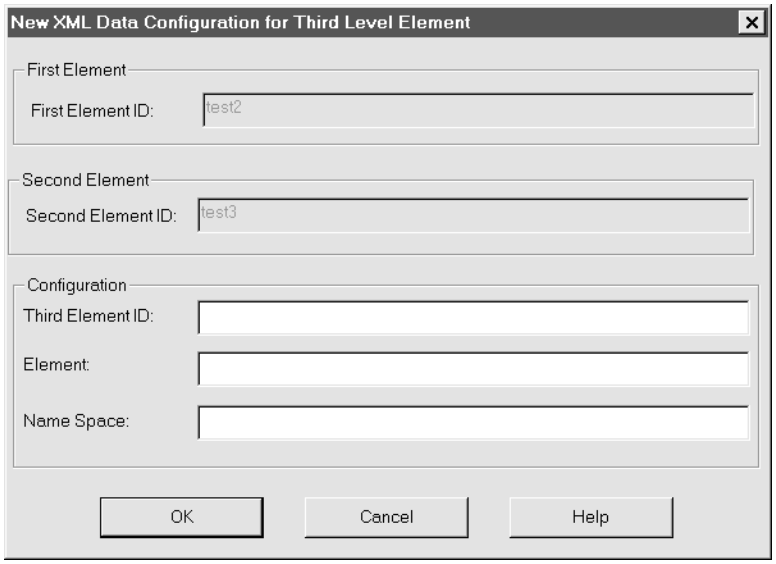
| Step | Action |
|---|---|
| 1 | From the XML Element Configuration window, right-click on the first-level element to which you want to add a second-level element.<br>  |
| 2 | Select **New** and then click **Second Level Element**.<br>**System Response**<br>The system displays the New XML Element Configuration for Second Level Element dialog box.<br>  |
| 3 | Type the element identifier into the **Second Element ID** box. |
| 4 | Type the element name (tag name) into the **Element** box. |
| 5 | Do you want to use the name space to further qualify this element?<br>◗ If YES, type a value into the **Name Space** box.<br>◗ If NO, continue with the next step.<br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Click **OK**.<br><br>**System Response**<br>The system adds a node for the element to the XML configuration tree. |
| 7 | Do you want to configure another second-level element?<br>◗ If YES, repeat Steps 1 through 6.<br>◗ If NO, continue with Step 8. |
| 8 | Do you want to configure a third-level element?<br>◗ If YES, continue with the next procedure, Configuring a third-level element in this topic.<br>◗ If NO, continue with Configuring XML Trading Partnership Rules in this chapter. |

## Configuring a third-level element

Use this procedure to configure a third-level XML element used to split XML data.

| Step | Action |
|---|---|
| 1 | From the XML Element Configuration window, right-click on the second-level element to which you want to add a third-level element.<br><br>  <br><br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 2 | Select **New** and then click **Third Level Element**.<br><br>**System Response**<br>The system displays the New XML Element Configuration for Third Level Element dialog box.<br><br>  |
| 3 | Type the element identifier into the **Third Element ID** box. |
| 4 | Type the element name (tag name) into the **Element** box. |
| 5 | Do you want to use the name space to further qualify this element?<br>◗ If YES, type a value into the **Name Space** box.<br>◗ If NO, continue with the next step. |
| 6 | Click **OK**.<br><br>**System Response**<br>The system adds a node for the element to the XML configuration tree. |
| 7 | Do you want to configure another third-level element?<br>◗ If YES, repeat Steps 1 through 6.<br>◗ If NO, you are finished. |

# How the System Splits an XML File

## Introduction

Gentran:Server uses the information stored in the splitting element tables to break a large XML file into smaller documents.

## Process

This table explains how the system splits an XML file.

| Stage | Description | |
|---|---|---|
| 1 | Gentran:Server receives XML data. | |
| 2 | Gentran:Server retrieves the topmost element. | |
| 3 | The system compares the element name to the xmlspl1 table. | |
| | **IF the system…** | **THEN processing…** |
| | finds a match | continues with Stage 4. |
| | does not find a match | stops. |
| 4 | Gentran:Server retrieves the second element name after the topmost element. | |
| 5 | Gentran:Server compares the element name to the xmlspl2. | |
| | **IF the system…** | **THEN processing…** |
| | finds a match | continues with Stage 6. |
| | does not find a match | splits the file based on the first-level element. |
| 6 | Gentran:Server retrieves the third element name after the topmost element. | |
| 7 | The system compares the element name to the xmlspl3. | |
| | **IF the system…** | **THEN processing…** |
| | finds a match | splits the file based on the third-level element. |
| | does not find a match | splits the file based on the second-level element. |

# Configuring XML Trading Partnership Rules

## Overview

**Introduction**

The second stage in configuring your system to handle XML files is to set up the XML Trading Partnership (string-building) rules for a particular file definition. In this stage, you must:

- link elements you configured in Stage 1 to a file definition (DDF)
- attach string-building rules to the elements you linked to the file definition.

The string-building rules enable Gentran:Server to build an identification string from an XML document and use the string to find the Trading Partnership Code.

**In this section**

This section describes:

- String-building rules
- How to define XML Trading Partnership rules

# String-building Rules

## Introduction

For each XML file definition you create within Application Integration, you must create rules that the system will use to derive a unique string from a XML document. Later, you will construct a table that cross-references the unique string with a unique 15-character Trading Partnership Code.

## Definition: Trading Partnership rule

A Trading Partnership rule is an instruction that specifies the type of information to extract from a tree node in a file definition. A rule stipulates that Gentran:Server is to use one of the following in the string:

- the element (tag) name
- the PCDATA (parseable character data within the tag)

## Guidelines for building rules

These are the guidelines for XML splitting elements and Trading Partnership rules:

- You apply rules to the first three segments (and all their descendant elements) in a file definition that are a level from the topmost or root level.
- You can use from one to six rules to produce set of strings.
- You can map multiple string combinations to the same Trading Partner Code as long as each combination is unique.
- You cannot use the same set or combination of strings more than once.
- Strings are case sensitive. For example, AyZ is NOT equal to AYZ.

## TP Rule table

The system stores the rules you define in a DISAM table named xmltptbl.dat/idx. This table contains eight fields:

- idname
- Application name
- TP Rule 1
- TP Rule 2
- TP Rule 3
- TP Rule 4
- TP Rule 5
- TP Rule 6

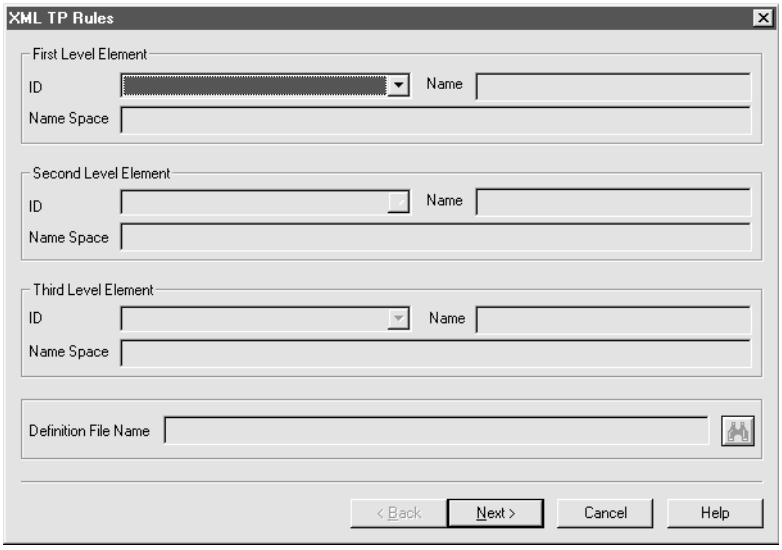
# XML TP Rules Wizard

## Introduction

The XML TP Rules wizard is used to create Trading Partnership rules that specify the type of information to extract from a tree node in a file definition.

## Illustration

This illustration shows the first dialog box in the XML TP Rules wizard.




## Fields and functions

This table lists the fields of the first XML TP Rules dialog box in the wizard and their functions.

| Field | Function |
|---|---|
| ID | Used to select the identifier for the First (topmost) Level Element, the Second Level Element, and the Third Level Element from the drop-down lists. |
| Name | Displays the name of the element (tag) from the XML file associated with the ID. |
| Name Space | Displays the shorthand or prefix that substitutes for the full name of the namespace. |

(Continued on next page)

| (Contd) Field | Function |
|---|---|
| Definition File Name | Identifies the File Definition that you want to associate with the TP Rules. |
| Back | Returns to the previous dialog box in this wizard. This button is available only on the second and third dialog boxes. |
| Next | Advances to the next dialog box in the wizard. |
| Cancel | Cancels the information you typed into this dialog box. |

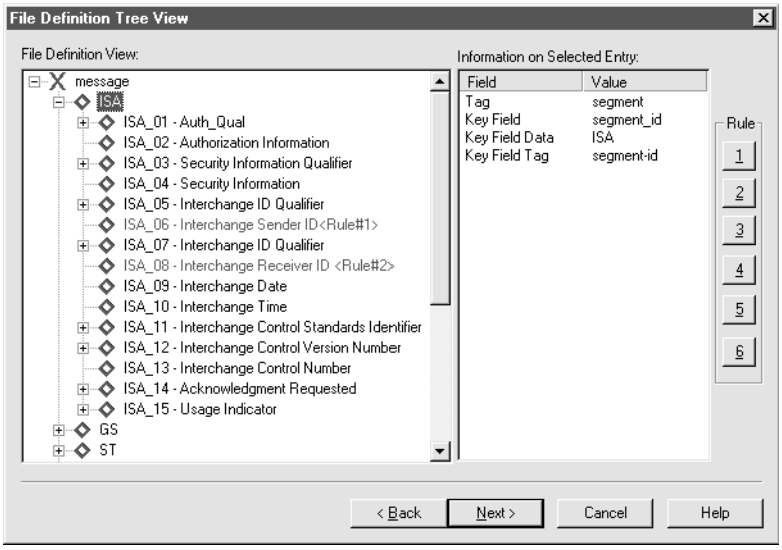
# File Definition Tree View Dialog Box

## Introduction

The File Definition Tree View dialog box is used to attach rules to tree nodes in the file definition.

## Illustration

This illustration shows the File Definition Tree View dialog box.




## Fields and functions

This table lists the fields of the File Definition Tree View dialog box and their functions.

| Field | Function |
|---|---|
| File Definition View | Displays the file definition in a tree view. |
| Information on selected entry | Displays the field type and value for the selected component in the file definition. |
| Rule 1 - 6 | Opens the Set TP Rule dialog box for the selected node in the file definition tree. |
| Back | Returns to the previous dialog box in this wizard. This button is available only on the second and third dialog boxes. |

(Continued on next page)

| (Contd) Field | Function |
|---|---|
| Next | Advances to the next dialog box in the wizard. |
| Cancel | Cancels the information you typed into this dialog box. |

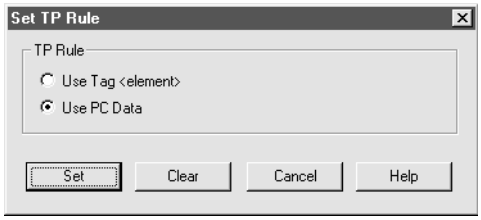
# Set TP Rule Dialog Box

## Introduction

The Set TP Rule dialog box is used to select the option that specifies the type of information you want the rule to look for in the XML document.

## Illustration

This illustration shows the Set TP Rule dialog box.




## Fields and functions

This table lists the fields of the Set TP Rule dialog box and their functions.

| Field | Function |
|---|---|
| Use tag | Selects the name of the tag as the type of information you want the rule to look for in the XML document. |
| Use PC Data | Selects the character data within the tag as the type of information you want the rule to look for in the XML document. |
| Set | Saves the rule. |
| Clear | Deletes the rule from the table. |
| Cancel | Cancels the last change you made. |

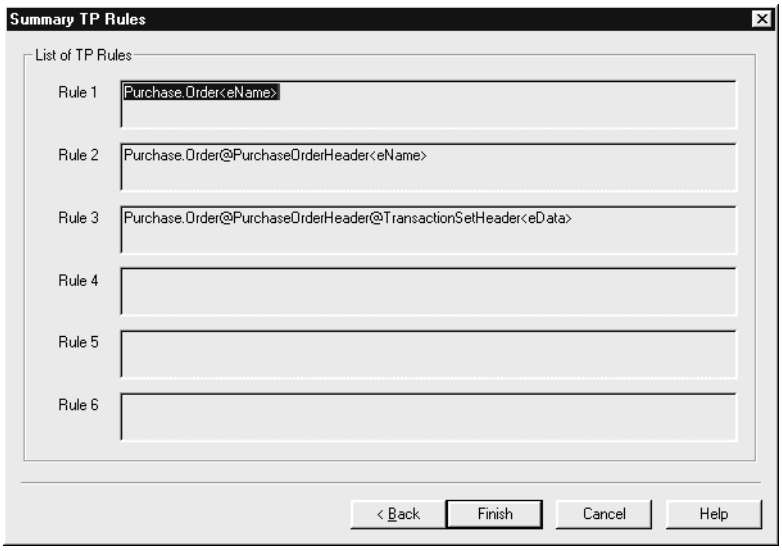
# Summary TP Rules Dialog Box

## Introduction

The Summary TP Rules dialog box displays the TP rules that you applied to the file definition.

## Illustration

This illustration shows an example of the Summary TP Rules dialog box




## Fields and functions

This table lists the fields of the Summary TP Rules dialog box and their functions.

| Field | Function |
|---|---|
| Rule 1 - 6 | Displays the TP rule |
| Back | Returns to the previous dialog box. |
| Finish | Saves the rules and closes the dialog box. |
| Cancel | Deletes all the rules you set and closes the dialog box. |

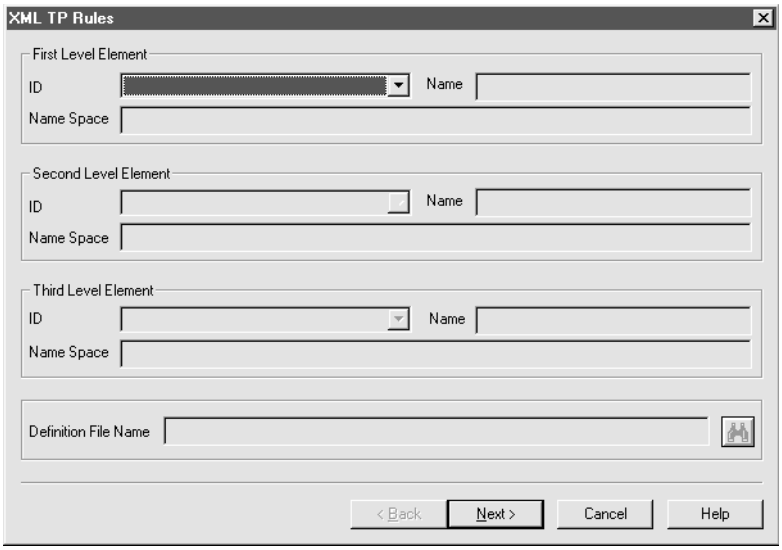
# How to Define XML TP Rules

## Introduction

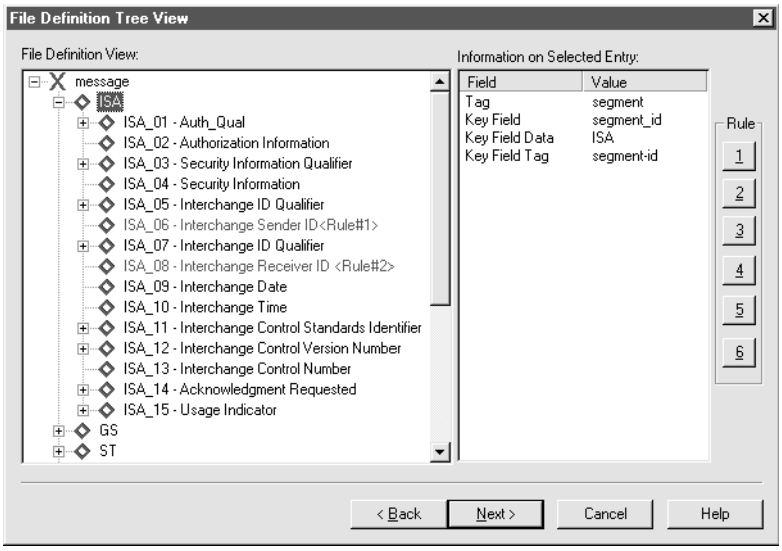
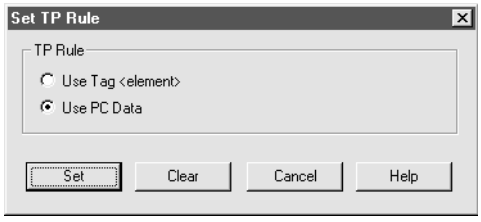
The second stage in configuring your system to handle XML files is to define the Trading Partnership rules used to build a unique string.

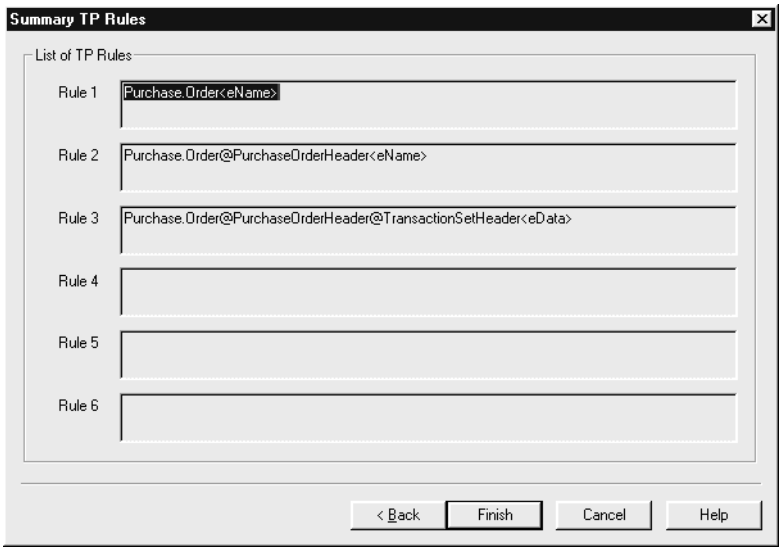
## Procedure

Use this procedure to create Trading Partnership rules for a file definition.

| Step | Action |
|---|---|
| 1 | Click **XML Configuration** on the Gentran:Server Main window and select **XML TP Rules**.<br><br>**System Response**<br>Gentran:Server displays the XML TP Rules wizard.<br>  <br><br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 2 | Select the identifier for the First (topmost) Level Element from the drop-down list in the **ID** box.<br><br>**System Response**<br>Gentran:Server displays the name of the element in the Name box, displays the shorthand for the namespace, in the Name Space box, and enables the ID box for the second level element.<br><br>**Note**<br>You cannot edit the namespace on this dialog box. If you need to change the namespace, see How to Configure XML Elements. |
| 3 | Do you want to split the XML document in the second level?<br><br>◗ If YES, select the identifier for the Second Level Element from the drop-down list in the ID box.<br><br>**System Response**<br>Gentran:Server displays the name of the second level element in the Name box and enables the ID box for the third element.<br><br>Continue with Step 4.<br><br>◗ If NO, go to Step 5. |
| 4 | Do you want to split the XML document in the third level?<br><br>◗ If yes, select the identifier for the Third Level Element from the drop-down list in the ID box.<br><br>**System Response**<br>Gentran:Server displays the name of the third level element in the Name box.<br><br>Continue with next step.<br><br>◗ If no, go to Step 5. |
| 5 | In the File Definition Name box, type the name of the file definition (DDF) or click search icon to display a search dialog box for the file definition.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Click **Next**.<br><br>**System Response**<br>Gentran:Server displays the File Definition Tree View.<br>  |
| 7 | Select an appropriate node from the tree and then click a Rule # button.<br><br>**Note**<br>You can right-click on a node to display a menu of rule numbers instead of using the Rule # buttons.<br><br>**System Response**<br>The system displays the Set TP Rule dialog box.<br>  <br><br>(Continued on next page) |

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>8</td><td>Select the option that specifies the type of information you want the rule to look for in the XML document.
<table>
<tr><th>IF you want the rule to look for…</th><th>THEN click…</th></tr>
<tr><td>the name of the tag</td><td>Use tag</td></tr>
<tr><td>character data within the tag</td><td>Use PC Data</td></tr>
</table></td></tr>
<tr><td>9</td><td>Click Set.<br><br>System Response<br>The system sets the rule parameters and returns to the File Definition Tree View.</td></tr>
<tr><td>10</td><td>Do you want to set another rule?<br>◗ If YES, repeat Steps 7 through 9.<br>◗ If NO, continue with Step 11.</td></tr>
<tr><td>11</td><td>When you are finished setting rules, click Next on the File Definition Tree View window.<br><br>System Response<br>The system displays the TP Rules Summary window.<br> 
</td></tr>
<tr><td>12</td><td>Click Finish.</td></tr>
<tr><td>13</td><td>GO TO Linking Rules to a Trading Partnership Code to complete your system configuration for XML.</td></tr>
</table>

# Linking Rules to a Trading Partnership Code

## Overview

**Introduction**

The last stage in configuring your system to handle XML files is to link the string that the system builds from the XML TP rules to a Trading Partnership Code. To do this, you use the XML Cross TP Lookup dialog box to build the XML Cross Reference table.

**Guidelines**

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

- Each set of strings built from applying XML Trading Partnership rules must be unique. You cannot have the same combination of strings point to different Trading Partnership Codes.
- You can link two or more sets of strings to one Trading Partnership Code as long as each string is unique.
- Strings are case-sensitive. "AbC" does NOT equal "ABC."

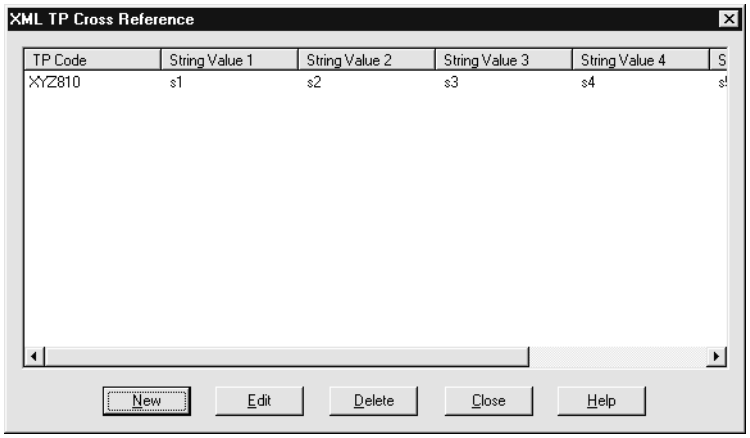
# XML TP Cross Reference Dialog Box

## Introduction

The XML TP Cross Reference dialog box is used to link the unique strings that the TP rules produce to a Trading Partnership Code. You use this dialog box to add entries to the XML TP Cross Reference table, modify existing entries, and delete entries from the table.

## Illustration

This illustration shows the XML TP Cross Reference dialog box.




## Fields and functions

This table describes the fields of the XML TP Cross Reference dialog box and their functions.

| Field | Function |
|---|---|
| TP Code | Specifies the Trading Partnership Code that you want the system to use when the string values match those derived from the XML document |
| String Value 1-6 | Identifies a value derived from applying Rules 1-6 to the XML document. |

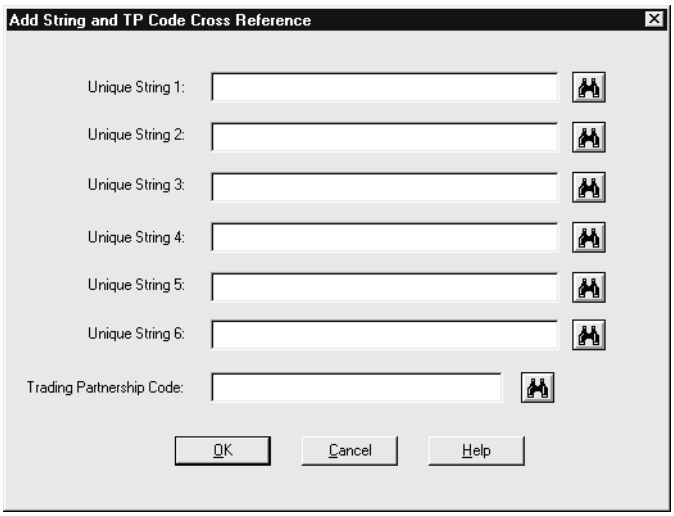
# Add String and TP Code Cross Reference Dialog Box

## Introduction

The Add String and TP Code Cross Reference dialog box is used to add entries to the XML TP Cross Reference table.

## Illustration

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




## Fields and functions

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

| Field | Function |
|---|---|
| Unique String 1 | Identifies a value derived from applying Rule 1 to the XML document. |
| Unique String 2 | Identifies a value derived from applying Rule 2 to the XML document. |
| Unique String 3 | Identifies a value derived from applying Rule 3 to the XML document. |
| Unique String 4 | Identifies a value derived from applying Rule 4 to the XML document. |

(Continued on next page)

| (Contd) Field | Function |
|---|---|
| Unique String 5 | Identifies a value derived from applying Rule 5 to the XML document. |
| Unique String 6 | Identifies a value derived from applying Rule 6 to the XML document. |
| Trading Partnership Code | Specifies the Trading Partnership Code that you want the system to use when the unique strings match those derived from the XML document. |

# XML TP Cross Reference Table

## Introduction

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

## XML TP Cross Reference table

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

These are the fields in the table.

| Name | Size | Offset | Description |
|---|---|---|---|
| str1 | 25 | 0 | Unique string 1 |
| str2 | 25 | 25 | Unique string 2 |
| str3 | 25 | 50 | Unique string 3 |
| str4 | 25 | 75 | Unique string 4 |
| str5 | 25 | 100 | Unique string 5 |
| str6 | 25 | 125 | Unique string 6 |
| tp_code | 16 | 150 | Trading Partnership Code |

## Table name

The XML TP Cross Reference table is a DISAM file named xmlxref.dat/idx.

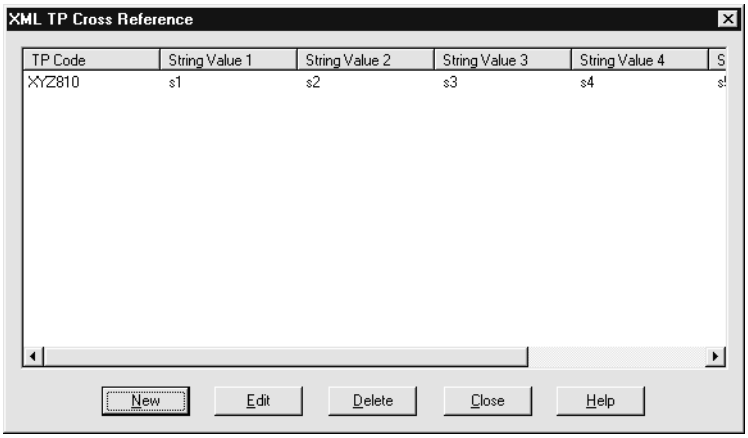
# How to Build the XML TP Cross Reference Table

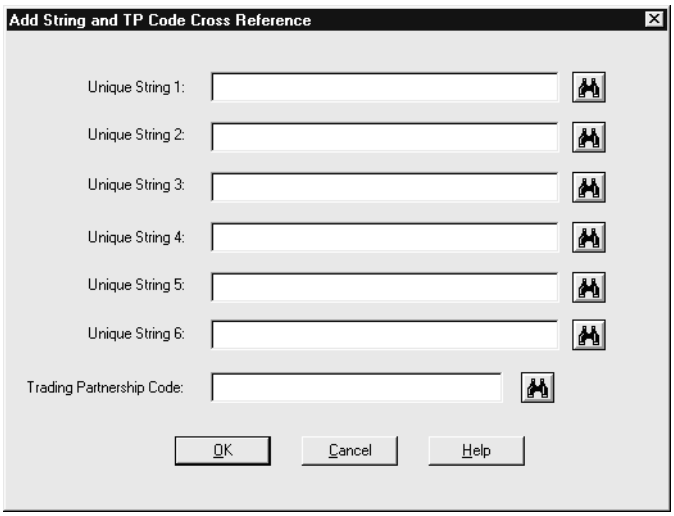
## Introduction

To add an entry to the XML TP Cross Reference table, you enter unique string values and a Trading Partnership Code into the Add String and TP Code Cross Reference dialog box.

## Procedure

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

| Step | Action |
|---|---|
| 1 | Click **XML Configuration** on the Gentran:Server Main window and select **XML TP Cross Reference**.<br><br>**System Response**<br>Gentran:Server displays the XML TP Cross Reference dialog box.<br><br>  <br><br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 2 | Click **Add**.<br><br>**System Response**<br>The system displays the Add String and TP Code Cross Reference dialog box.<br>  |
| 3 | In the Unique String 1 box, type the Pcdata value or tag name from Rule 1 that you want to associate with a particular Trading Partnership Code.<br><br>**Reference**<br>To use the search function to find a value that has already been configured, click the search icon (binoculars). |
| 4 | In the remaining Unique String boxes, type the Pcdata value or tag name resulting from Rules 2 through 6. |
| 5 | In the Trading Partnership Code box, type or browse for the Trading Partnership Code that you want to link to the concatenated string.<br><br>**Reference**<br>See How to Search for a Trading Partnership Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | Do you want to save this entry?<br>◗ If YES, click **OK** to add this entry to the XML TP Cross Reference table.<br>◗ If NO, click **Cancel.**<br>**System Response**<br>The system displays the XML TP Cross Reference dialog box |
| 7 | Do you want to add another entry?<br>◗ If YES, repeat Steps 3 through 6.<br>◗ If NO, click **Close**. |

# How to Use the Search Functions

## Introduction

The search functions are accessed from the XML Cross TP Lookup dialog box. This topic provides the following procedures:

- searching for a trading partnership code
- searching for string values

## Searching for a Trading Partnership Code

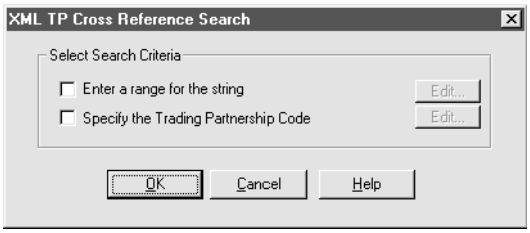
To display the Trading Partner Search dialog box, click the search icon (binoculars) next to the Trading Partnership Code box.

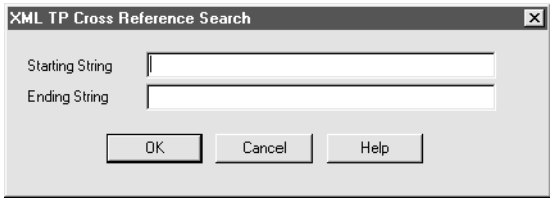
**Reference**

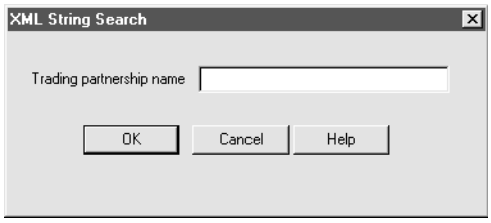
See How to Search for a Trading Partnership Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for detailed information.

## Searching for string values

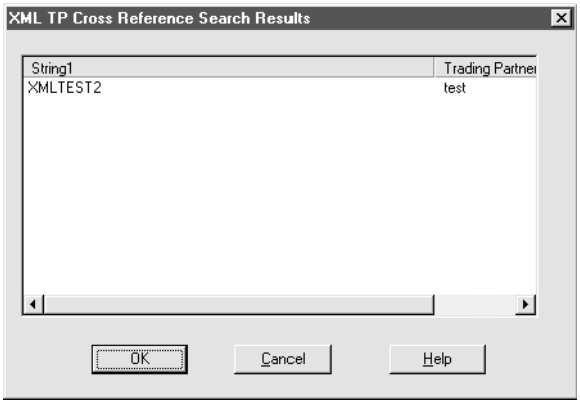
Use this procedure to search for string values.

| Step | Action |
|---|---|
| 1 | From the Add String and TP Code Cross Reference or Edit String and TP Code Cross Reference dialog box, click the search icon (binoculars) next to the Unique String box that you want to complete.<br>**System Response**<br>The system displays the XML TP Cross Reference Search dialog box.<br>  |
| 2 | Click the check box for the type of search criteria you will supply.<br>(Continued on next page) |

<table>
<tr><th>(Contd) Step</th><th>Action</th></tr>
<tr><td>3</td><td>Click the Edit button next to the option you checked.<br><br>System Response
<table>
<tr><th>IF you selected this option…</th><th>THEN the system displays a dialog box for…</th></tr>
<tr><td>Enter a range for the string</td><td>the XML TP Cross Reference Search dialog box for the starting and ending strings in the range</td></tr>
<tr><td>Specify the Trading Partnership Code</td><td>the XML String Search dialog box for the Trading Partnership Code.</td></tr>
</table>




</td></tr>
<tr><td>4</td><td>Type the search criteria into the appropriate boxes and then click OK.<br><br>System Response<br>The system displays the XML TP Cross Reference Search dialog box.<br><br>(Continued on next page)</td></tr>
</table>

| (Contd) Step | Action |
|---|---|
| 5 | Click **OK**.<br><br>**System Response**<br>The system displays the search results.<br><br>  |
| 6 | Do you want to use a value listed in the Search Results dialog box for the string?<br><br>◗ If YES, select the value and click **OK**.<br>◗ If NO, click **Cancel**.<br><br>**System Response**<br>The system returns to the Add String and TP Code Cross Reference or Edit String and TP Code Cross Reference dialog box dialog box. |

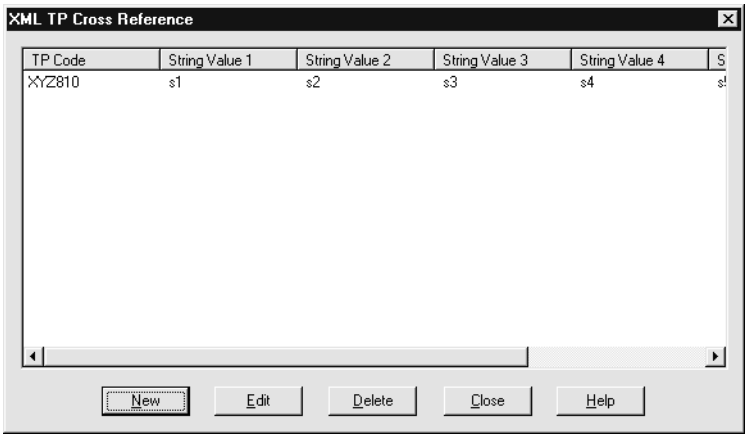
# How to Edit the XML TP Cross Reference Table

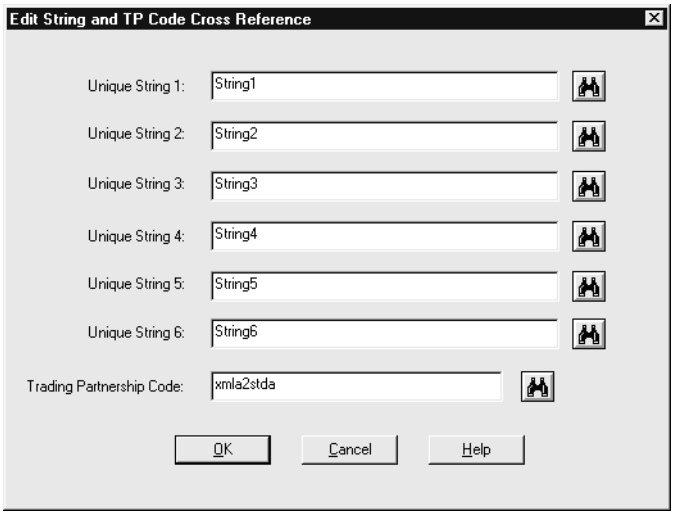
## Introduction

To edit an entry to the XML TP Cross Reference table, you enter unique string values and a Trading Partnership Code into the Edit String and TP Code Cross Reference dialog box.

## Procedure

Use this procedure to edit entries to the XML TP Cross Reference table.

| Step | Action |
|---|---|
| 1 | Click **XML Configuration** on the Gentran:Server Main window and select **XML TP Cross Reference**.<br><br>**System Response**<br>Gentran:Server displays the XML TP Cross Reference dialog box.<br>  |
| 2 | Select the entry in the XML TP Code Cross Reference that you want to edit.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 3 | Click **Edit**.<br><br>**System Response**<br>The system displays the Edit String and TP Code Cross Reference dialog box.<br>  <br><br><br>**Reference**<br>See the Add String and TP Code Cross Reference Dialog Box for a description of the fields in the Edit String and TP Code Cross Reference dialog box. |
| 4 | In the Unique String 1 box, type the Pcdata value or tag name from Rule 1 that you want to associate with a particular Trading Partnership Code.<br><br>**Note**<br>To use the search function to find a value, click the search icon (binoculars).<br><br>**Reference**<br>See How to Use the Search Functions topic in this chapter for information on searching for string values. |
| 5 | In the remaining Unique String boxes, type the Pcdata value or tag name resulting from Rules 2 through 6.<br><br>(Continued on next page) |

| (Contd) Step | Action |
|---|---|
| 6 | In the Trading Partnership Code box, type or browse for the Trading Partnership Code that you want to link to the concatenated string.<br><br>**Reference**<br>See How to Search for a Trading Partnership Record in the *Gentran:Server for UNIX and Workstation Application Integration User's Guide* for more information. |
| 7 | Do you want to save this entry?<br><br>◗ If YES, click **OK** to add this entry to the XML TP Cross Reference table.<br>◗ If NO, click **Cancel**.<br><br>**System Response**<br>The system displays the XML TP Cross Reference dialog box. |
| 8 | Do you want to edit another record?<br><br>◗ If YES, repeat Steps 2 through 7.<br>◗ If NO, click **Close**. |

# How to Delete an Entry from the Table

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

| Step | Action |
|---|---|
| 1 | Click **XML Configuration** on the Gentran:Server Main window and select **XML TP Cross Reference**.<br><br>**System Response**<br>Gentran:Server displays the XML TP Cross Reference dialog box. |
| 2 | Select the Trading Partner entry you want to delete. |
| 3 | Click **Delete**. |
| 4 | Do you wish to delete the record?<br>◗ If yes, click **YES** and continue to Step 5.<br><br>**System Response**<br>The system removes the Trading Partner record.<br><br>◗ If no, click **NO** and continue to Step 5. |
| 5 | Click **Close**.<br><br>**System Response**<br>The system closes the XML TP Cross Reference dialog box. |

# How the System Finds the TP Code in an XML Document

**Process**

This table explains how the system derives the Trading Partnership Code from an XML file.

| Stage | Description |
|---|---|
| 1 | Gentran:Server receives XML data and breaks it up into smaller documents according to the splitting information configured for XML elements. |
| 2 | Gentran:Server uses the element ID names to retrieve the Trading Partnership rules. |
| 3 | Gentran:Server reads the XML document and locates each string for each Trading Partnership rule. |
| 4 | Gentran:Server compares the set of strings to entries in the xmlxref table to find the 15-character Trading Partnership Code (tpcode) cross-referenced to the set of strings. |

# Glossary

**activate**

The process of turning on groups, segments, composites, and elements that a standard does not define as mandatory, but that you have determined that you need to use in mapping.

**attribute**

A piece of information associated with an XML element.

In an XML document, an attribute is a name-value pair separated by an equal sign.

**attribute container object**

An object that contains the attributes of an XML element. The object itself does not have properties.

**attribute object**

An object that specifies additional information to further define an element.

**Auto trim**

The Application Integration feature that enables you to automatically activate and deactivate map components on the EDI standard side of a map by using a sample EDI standard file as a model.

**category**

A user-definable record that enables you to group Trading Partnerships.

**compile**

The process used to convert a map into a translation object.

**contact record**

A record containing the name, address, and telephone numbers of an individual at your trading partner's business.

**content particle**

A map object that defines a relationship between the elements it contains.

| | |
|---|---|
| **DDF (Data Definition Format)** | A file that defines a file format used in a map. It includes the hierarchical and looping structure of the data, the map objects, and the objects' attributes. |
| **DTD (Document Type Definition)** | The set of rules governing the tags in an XML document. A DTD file describes the elements and attributes that are allowed in your documents. |
| **element** | The primary building block of the hierarchical structure in an XML document. Elements have start- and end-points denoted by start- and end-tags. |
| **element (in an XML document)** | The primary building block of the hierarchical structure in an XML document. Elements have start- and end-points denoted by start- and end-tags. |
| **entity** | A physical file or building block in the structure of an XML document. An entity is a unit of text. |
| **file definition** | A file that defines how data needs to be formatted for an application to process it. These files have a .DDF extension.<br><br>File definitions contain a layout of the records, fields, and groups in an application file. |
| **Group Organization record** | A record containing all information specific to a single division or department in your trading partner's organization. |
| **Interchange Organization record** | A record containing all information specific to a single company. |
| **links** | The visual lines that connect each field on the input side of the map to a field on the output side of the map. |

**loop**

A sequence of repeating XML objects.

**many-to-many mapping relationships**

A mapping relationship that has a looping structure.

**map**

A file object that defines the corresponding relationship between document components in two different formats.

**map object**

A component object of a map. For example:

- XML, Positional, or Delimited EDI file
- group
- segment
- record
- element
- pcdata
- attribute
- attribute container
- content particle

**map version**

The incremented number that indicates the rendition of the map. A lower number represents an earlier version; a higher number represents a later version.

**nested looping structure**

A mapping structure that has a loop within another loop.

**one-to-one mapping relationship**

A mapping relationship in which the input and output side loop structures are the same and directly links to one another.

**PCDATA object**

An object that contains character data.

| | |
|---|---|
| **prolog** | The XML Declaration plus the Document Type Definition (DTD). |
| **promote** | To extract one iteration (instance) of a group or repeating record from a loop. |
| **Reconciliation ID record** | A record containing a set of interchange and group IDs used with functional acknowledgments. |
| **root element** | The unique first element in an XML document that contains all other elements in the document. |
| **split (map components)** | A function used to split (break) a group or repeating record into to two loops. You typically use this function when you need more than one instance of the same map component that still occurs multiple times. |
| **split (XML file)** | A configuration process that enables the system to break an XML file into smaller documents or sets. |
| **Standard Cross-Reference Table** | The Gentran:Server feature that enables you to build a table of standard values. Gentran:Server can use these values to find the Trading Partner record for certain inbound documents. |
| **string-type field or element** | A field or element that contains one or more printable characters. A syntax token defines the format of a string-type field or element. |
| **syntax token** | A symbol or expression that defines ranges of characters and numbers that are allowed to be used for a string-type field. |
| **TRADACOMS record** | A record containing all of the supplementary Trading Partnership information for use with TRADACOMS standards. |

**Trading Partner record**

One of the records maintained in trading partner files:

- Interchange Organization record
- Group Organization record
- Trading Partnership record
- Contact record
- Reconciliation ID record
- Category record
- TRADACOMS record.

**Trading Partnership**

An arrangement with a specific trading partner to exchange information in a specific document type and using a particular standard version.

**Trading Partnership code**

A code you define that uniquely identifies a Trading Partnership record.

**Trading Partnership record**

A record containing information about one of the Trading Partnerships you have established.

**translation object**

A file containing information that instructs the translator how to convert a file from one format to another. When you compile a map you created, the result is a translation object.

**translator**

The Gentran:Server subsystem that translates data from one format into another.

**URL (Uniform Resource Locator)**

An internet address that locates an individual resource file on the internet.

**XML (eXtensible Markup Language**

A text-based language that provides a standard approach for describing, capturing, processing, and publishing information.

**XML document**

An XML element that can, but might not include nested XML elements. The XML document is modeled after a tree, in which each element in the tree is considered a node.

**XML file object**

The highest level object in the XML map hierarchy.

**XML parser**

The processor that categorizes the characters in an XML document as either markup or character data.

**XML tag**

A portion of XML code that indicates the type of data within a set of start- and end-tags. Tags are enclosed in brackets.

**Example**
In the following example, the XML start tag is <Name> and the end tag is </Name>.

<Name>N. C. Paige</Name>

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