

# **IBM Sterling Gentran:Server for Microsoft Windows**

## **FPI Gateway Configuration Guide**

Version 5.3



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# About This Guide

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# Introduction

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**Overview**

This document contains the tasks you must follow to:

- configure the IBM® Sterling Gentran:Server® for Microsoft Windows FPI Gateway
  - create Sterling Gentran:Server FPI Gateway mailboxes for your Trading Partners
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**Intended audience**

The intended audience for this document is:

- system administrators
  - advanced Sterling Gentran:Server for Microsoft Windows users
  - users with a basic knowledge of the X.400 communications protocol
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**Prerequisite knowledge**

The audience using this software should be familiar with:

- Microsoft® Windows
  - Sterling Gentran:Server for Microsoft Windows
  - Communications protocols
  - X.400 Message Handling System
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# Description of Contents

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**Introduction**

This guide is organized into the tasks that you complete when configuring communications for the Sterling Gentran:Server FPI Gateway.

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**Organization of chapters**

The guide is organized into chapters. A brief description of each chapter's contents follows.

- *About This Guide* explains the content and organization of this guide.
  - *FPI Gateway Overview*, chapter 1, provides a high-level overview of the Sterling Gentran:Server FPI Gateway.
  - *Configuring Communications*, chapter 2, explains the process for configuring Sterling Gentran:Server FPI Gateway communications. This chapter also provides the procedures you must follow to configure your Sterling Gentran:Server FPI Gateway mailboxes.
  - *Frequently Asked Questions*, appendix A, provides answers to common Sterling Gentran:Server FPI Gateway questions.
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## How To Get Help

IBM® Sterling Customer Center provides a wealth of online resources that are available around the clock to enrich your business experience with IBM® Sterling Gentran®. By using Sterling Customer Center, you gain access to many self-support tools, including a Knowledge-Base, Documentation, Education, and Case Management. Access this site at: Sterling Customer Center. (<http://customer.sterlingcommerce.com>)

Once logged in, select **Support Center** from the top navigation menu, and then locate Sterling Gentran product-specific support information from the left navigation menu.

Additionally, our Customer Support Reference Guide outlines our support hours, contact information, and key information that will enhance your support experience with us. For detailed information about Customer Support, please refer to the Customer Support Reference Guide accessible from the login page. (<http://customer.sterlingcommerce.com>)

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# Sterling Gentran:Server FPI Gateway Overview

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# Overview

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**In this chapter**

This chapter provides you with a high-level overview of the Sterling Gentran:Server FPI Gateway.

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**What is a Gateway?**

Gateways are software components that control the transmission of messages between two parties. The gateway is responsible for using the correct protocols to transfer messages between the sender and receiver. In a paper mail system, the gateway is the letter carrier who moves letters from senders to receivers. The letter carrier ensures that each letter has an address and proper postage before delivering the letter. The letter carrier also transfers the letter using the correct protocol: priority mail, first class, or bulk mail. You are responsible for defining gateway properties.

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**What is a Mailbox?**

Mailboxes store messages that are being transferred between mail recipients. Like a mailbox for paper mail, the messages are stored in the mailbox until they are transferred to the addressee.

There are two types of Sterling Gentran:Server mailboxes:

- non-gateway mailboxes
- gateway mailboxes

**Non-gateway mailboxes**

When you installed Sterling Gentran:Server, a default, non-gateway mailbox was created called the Gentran Application mailbox. This mailbox is used by Mailbox Server to hold messages that are being transferred between Sterling Gentran:Server for Microsoft Windows and your Trading Partners.

**Gateway mailboxes**

You are responsible for creating gateway mailboxes. When you create gateway mailboxes you associate the mailbox with a gateway. The properties you define for each gateway mailbox determines how messages are transferred to your Trading Partners.

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**Related Topic**

See the “Communications Overview” chapter of the *IBM® Sterling Gentran:Server® for Microsoft Windows Communications User Guide* for information on the Mailbox Server system.

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# FPI Gateway

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## Introduction

The Sterling Gentran:Server FPI Gateway provides a flexible, secure link between Mailbox Server and different types of communication applications using a standard file interface protocol.

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## What is FPI?

The File Programmatic Interface (FPI) is a standard file interface protocol that is used to control message exchanges between Sterling Gentran:Server and external communication applications (or Access Units). The protocol is based on two types of text command files:

- Information File (used to communicate between Sterling Gentran:Server and the communication application/Access Unit)
  - Result File (used to communicate between the communication application/Access Unit and Sterling Gentran:Server)
- 

## Configuring the Gateway

When you configure the gateway, you define the:

- Periodic Scan Interval
  - Audit level for the FPI log
  - Maximum log file size
  - Post audit file specifications
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# FPI Gateway Mailbox

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**Introduction** Sterling Gentran:Server FPI Gateway mailboxes are communications- or partner-specific mailboxes for incoming and outgoing messages. The Sterling Gentran:Server FPI Gateway can manage one or more FPI mailboxes.

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**FPI Gateway mailboxes** When you configure a mailbox to be used with the Sterling Gentran:Server FPI Gateway, you define the:

- FPI Syntax for Result and Information files
  - Operating system specifications for the communications queue
  - Send options
  - Message priority level
  - Local and Remote queue path
-

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# Configuring Communications

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## Introduction

### In this chapter

This chapter describes the tasks that you must complete to configure Sterling Gentran:Server FPI Gateway and FPI Gateway mailbox.

### Before you Begin

Before you begin, verify that:

- Sterling Gentran:Server for Microsoft Windows has been successfully installed and tested.
- Sterling Gentran:Server FPI Gateway has been successfully installed.

### Key Terms

This table describes key terms used in this chapter.

Term	Definition
Access Unit	<p>An Access Unit is an external software module that links the FPI Gateway with an external communication application.</p> <p><b>Example</b> The ISOTRADE Access unit from ISOCOR is the link between the X.400 Message Handling system and the FPI Gateway.</p>
Communications Queue	<p>The Communications Queue serves as a link between the FPI Mailbox and the communications application. The Communications Queue stores inbound messages and reports (Result files) and outbound messages and transmission jobs (Information files).</p> <p>A Communications Queue consists of a root directory and the following sub-directories:</p> <ul style="list-style-type: none"> <li>• IN - Directory where inbound messages (*.edi) and Result files (*.res) are saved.</li> <li>• OUT - Directory where transmission jobs, called Information files (*.inf), are saved. Defective Information files are renamed by the linked Access Unit as BAD files (*.bad). These must be handled manually.</li> <li>• DATA - Directory where outbound Interchanges are saved as "t&lt;number&gt;" files.</li> <li>• UNDEL - Directory where defective Result files and associated, received Interchanges are saved in a separate sub-directory.</li> </ul>
FPI Gateway	<p>Sterling Gentran:Server FPI Gateway provides a flexible, secure link between Mailbox Server and different types of communication applications using a standard file interface protocol.</p>
FPI Mailbox	<p>Sterling Gentran:Server FPI Gateway mailboxes are communications- or partner-specific mailboxes for incoming and outgoing messages.</p>

<b>Term</b>	<b>Definition</b>
Information File	Outbound messages and transmission jobs. These files are stored in OUT directory of the Communications Queue.
Result File	Inbound messages and reports. These files are stored in IN directory of the Communications Queue.

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# Properties

## Configuration Process

**Introduction** This table lists the stages in configuring your communications for use with the FPI Gateway.

### Stop

General Mailbox Properties (General tab) configuration is recommended for most Sterling Gentran:Server FPI Gateway users. Only advanced users who are extremely familiar with FPI should ever attempt to change ResFieldMap or InfFieldMap properties.

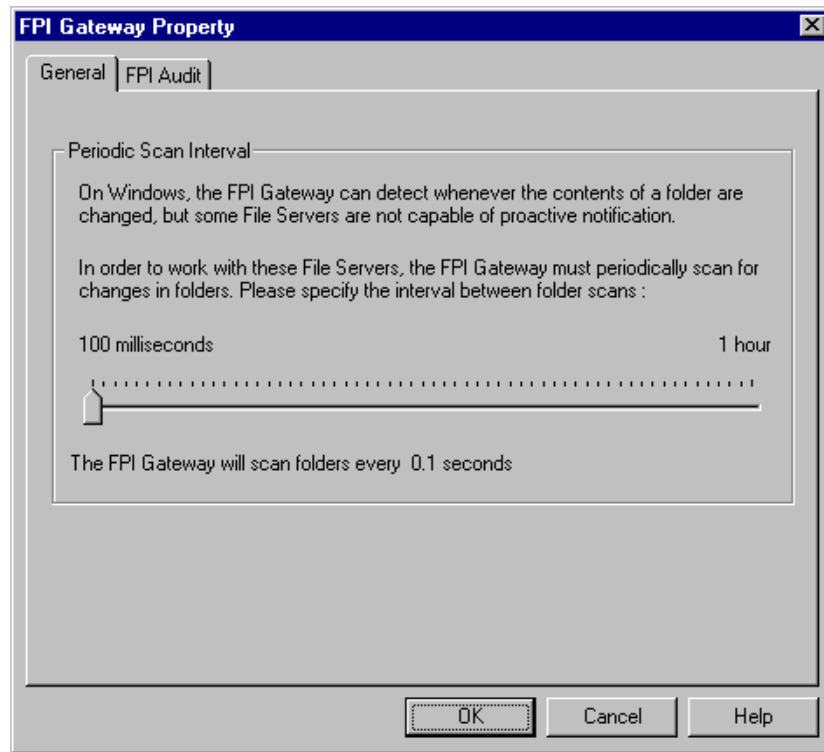
Stage	Description
1	Install Sterling Gentran:Server FPI Gateway.
2	<p>Will your Communications Queue physically reside on a UNIX machine?</p> <ul style="list-style-type: none"> <li>▶ If yes, complete the following:           <ul style="list-style-type: none"> <li>— Map the UNIX drive where the Communications Queue will reside to the Microsoft Windows machine using NFS.</li> </ul> </li> </ul> <p><b>Reference</b> See <i>Configuring Communications Queues on UNIX</i> on page 2 - 36 for more information.</p> <ul style="list-style-type: none"> <li>— Proceed to the next Stage.</li> </ul> <ul style="list-style-type: none"> <li>▶ If no, proceed to the next Stage.</li> </ul>
3	<p>Configure Sterling Gentran:Server FPI Gateway in the Mailbox Server Manager.</p> <p><b>Reference</b> See <i>How to Configure Sterling Gentran:Server FPI Gateway Mailboxes</i> on page 2 - 40 for instructions.</p>
4	<p>Create and configure the FPI Gateway mailboxes that you intend to use.</p> <p><b>Reference</b> See <i>How to Configure Sterling Gentran:Server FPI Gateway</i> on page 2 - 38 for instructions.</p>
5	<p>Associate the mailbox with a Sterling Gentran:Server trading partner.</p> <p><b>Reference</b> See <i>How to Configure the Trading Partner</i> on page 2 - 50 for instructions.</p>



# Sterling Gentran:Server FPI Gateway Properties

**Introduction** The FPI Gateway Property dialog box defines the properties of the FPI gateway.

**Gateway Property General Tab** This illustration shows an example of the FPI Gateway Property General tab.

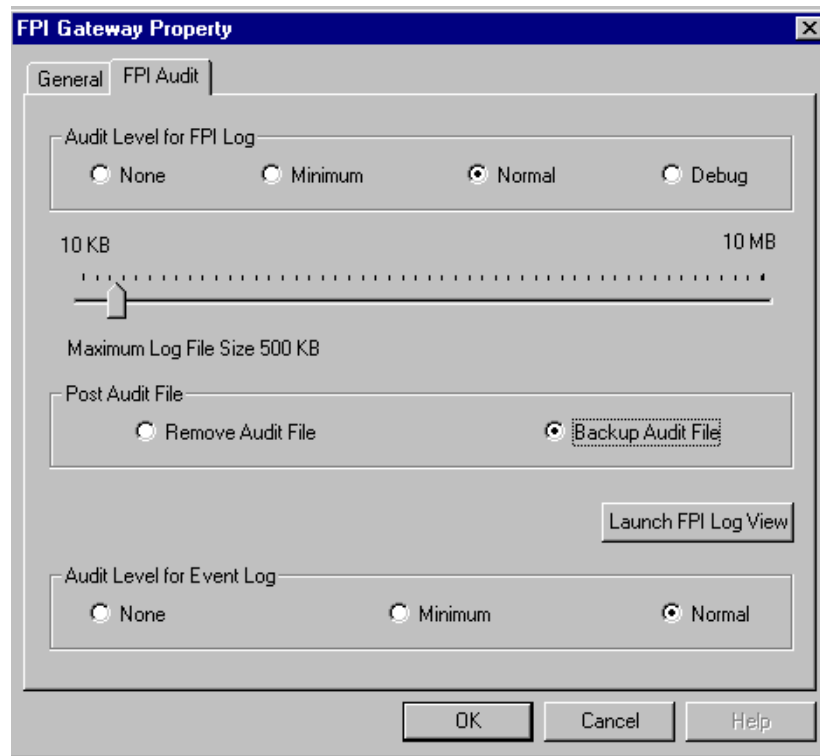


**Parts and functions** This table describes the parts of the FPI Gateway Property General tab and their functions.

Part	Function
Periodic Scan Interval	<p>Defines the polling interval for the FPI Mailbox Input Queues. The minimum range is 1/10 second; the maximum range is 1 hour. A one second polling interval is recommended.</p> <p>To adjust an interval range in precise increments, use the up and down arrows on the keyboard.</p>

### FPI Gateway Property FPI Audit Tab

This illustration shows an example of the FPI Gateway Property FPI Audit tab.



### Parts and functions

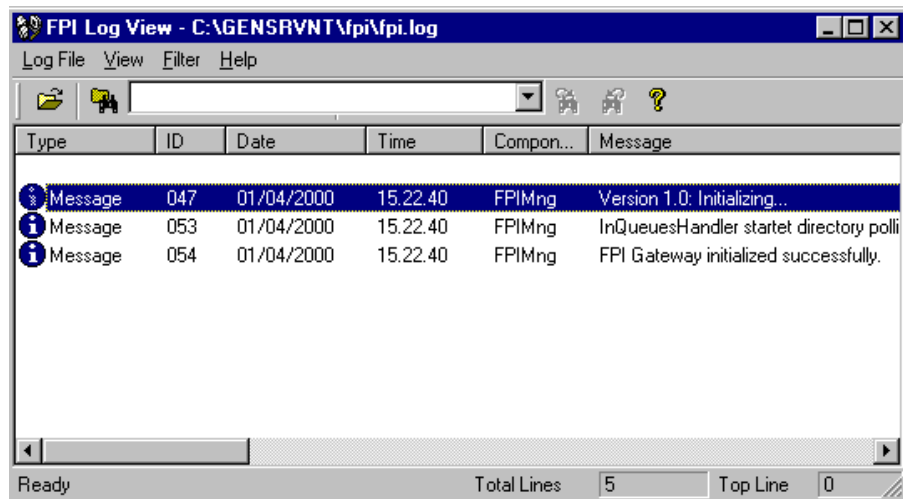
This table describes the parts of the FPI Gateway Property FPI Audit tab and its function.

Part	Function
Audit Level for FPI Log	<p>Defines the level at which messages display on the Log file.</p> <p>Valid audit levels are:</p> <ul style="list-style-type: none"> <li>• None - No messages display on the Log file.</li> <li>• Minimum - Only messages in the Warning, Error and Fatal classes display on the Log file.</li> <li>• Normal (recommended) - All messages in the Message, Warning, Error and Fatal classes display on the Log file.</li> <li>• Debug - All messages in the Message, Warning, Error and Fatal classes, as well as messages that are helpful in debugging errors display in the log file.</li> </ul>
Maximum Log File slider	<p>Limits the maximum size of the Log file. The file size depends on how your system is used, however 500k is recommended. Large Log files can significantly increase the time it takes to load the Log file Viewer.</p>

<b>(Contd) Part</b>	<b>Function</b>
Launch FPI Log View button	Launches the Log file browser.  <b>Reference</b> See the FPI Log View dialog box and Parts and Functions later in this section for a complete description of this browser.
Post Audit File	Describes what action to take when the maximum Log file size is exceeded. Options are: <ul style="list-style-type: none"> <li>• Remove Audit File - The Log file is deleted.</li> <li>• Backup Audit File - The existing Log file is renamed and marked with a date/time stamp. All subsequent Log outputs are written into a new Log file.</li> </ul>
Audit Level for Event Log	Defines the level at which messages are displayed in the Microsoft Windows Event Viewer. All FPI Gateway entries are identified by the source name GSMFPIGateway.  Valid audit levels are: <ul style="list-style-type: none"> <li>• None - No messages display in the Event Viewer.</li> <li>• Minimum - Only messages in the Warning, Error and Fatal classes display in the Event Viewer.</li> <li>• Normal (recommended) - All messages in the Message, Warning, Error and Fatal classes display in the Event Viewer.</li> </ul> <b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information on the Event Viewer.

**FPI Log View**

This illustration shows an example of the FPI Log View.



**Parts and functions**

This table describes the parts of the FPI Log View and its functions.

Part	Function
<b>Main Menu items</b>	
Log File	Contains these functions: <ul style="list-style-type: none"> <li>• Open - enables you to view a selected Sterling Gentran:Server FPI Gateway log file.</li> <li>• Exit - exits the FPI Log View program.</li> </ul>
View	Contains these functions: <ul style="list-style-type: none"> <li>• Search - enables you to search for keywords and patterns in the log file.</li> </ul> Valid search expression syntax: <ul style="list-style-type: none"> <li>• ? Exactly one character</li> <li>• * Sequence of characters (0..n characters)</li> <li>• [character set ] One character that is member of the character set.</li> <li>• [!character set] A character that is not member of the character set.</li> <li>• ^search pattern Find a search pattern at the beginning of a column.</li> <li>• Search pattern\$ Find a search pattern at the end of a column.</li> </ul> <p><b>Example</b> (Search Pattern): *[eE]rror[123]*</p> In a column an arbitrary character string is followed by the character string "error" or "Error". This string is followed by at least one character, but no "1", "2" or "3". <ul style="list-style-type: none"> <li>• Toolbar - displays or hides the Main toolbar.</li> <li>• Status Bar - displays or hides the Status bar.</li> <li>• Tail Mode - displays new log file entries at the end of the log file.</li> </ul>
Filter	Defines what messages display.
Help	Displays version information.

<b>(Contd) Part</b>	<b>Function</b>
<b>Log Viewer</b>	
Type	<p>Denotes the Log message type. The level at which messages display is defined on the Audit Level for FPI Log section of the FPI Gateway Property FPI Audit tab. Types of messages are:</p> <ul style="list-style-type: none"> <li>• Message - Informational message that describes Sterling Gentran:Server FPI Gateway activity.</li> <li>• Warning - Denotes an error that does not terminate the current processing task.</li> <li>• Error - Denotes an error that terminates the current processing task.</li> <li>• Fatal - Denotes an error that shuts down Sterling Gentran:Server FPI Gateway. Insufficient memory (RAM or hard disk) is an example of why this happens.</li> </ul>
ID	Defines the error message ID.
Date	Defines the date the message was recorded; uses the format MM/DD/YYYY.
Time	Defines the time the message was recorded; uses the format hh.mm.ss.
Component	Specifies the Sterling Gentran:Server FPI Gateway component.
Message	Describes the event.

# Mailbox Properties

**Introduction** The Mailbox Properties defines general mailbox properties.

**Mailbox Properties Addressing tab**

This illustration shows an example of the Mailbox Properties Addressing tab.

The screenshot shows a window titled "Mailbox Properties" with a close button (X) in the top right corner. Inside the window, there are four tabs: "Addressing" (selected), "Gateway", "Delivery Rules", and "Security". Below the tabs, there are two text input fields. The first is labeled "Name :" and the second is labeled "Gentran EMail Address :". Below these fields, there is a block of text: "The Gentran EMail address will appear on all messages sent from the mailbox. It is also used to route incoming messages to the mailbox." At the bottom of the window, there are three buttons: "OK", "Cancel", and "Help".

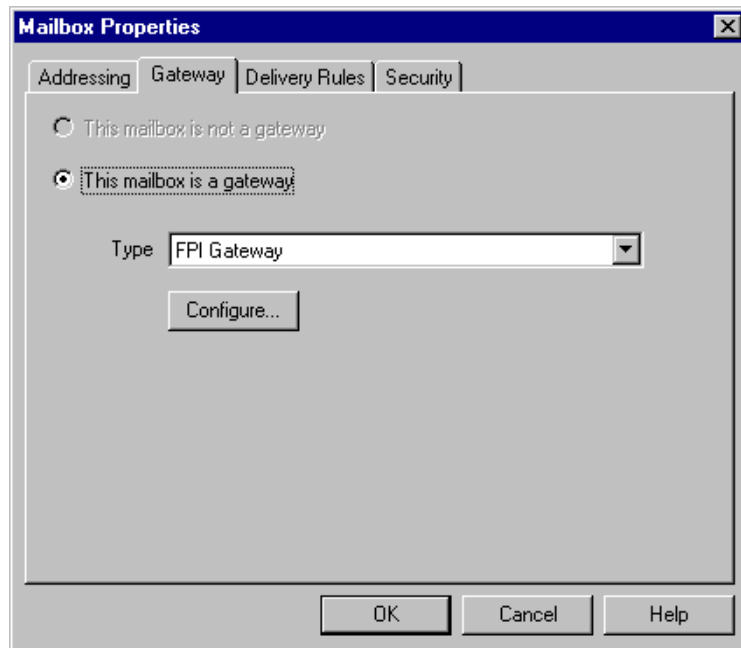
**Parts and functions**

This table describes the parts of the Mailbox Properties Addressing tab and its functions.

Part	Function
Name	Defines the name of the mailbox.
Gentran e-mail address	Defines the Sterling Gentran e-mail address for messages sent from the mailbox.

**Mailbox Properties Gateway tab**

This illustration shows an example of the Mailbox Properties Gateway tab.



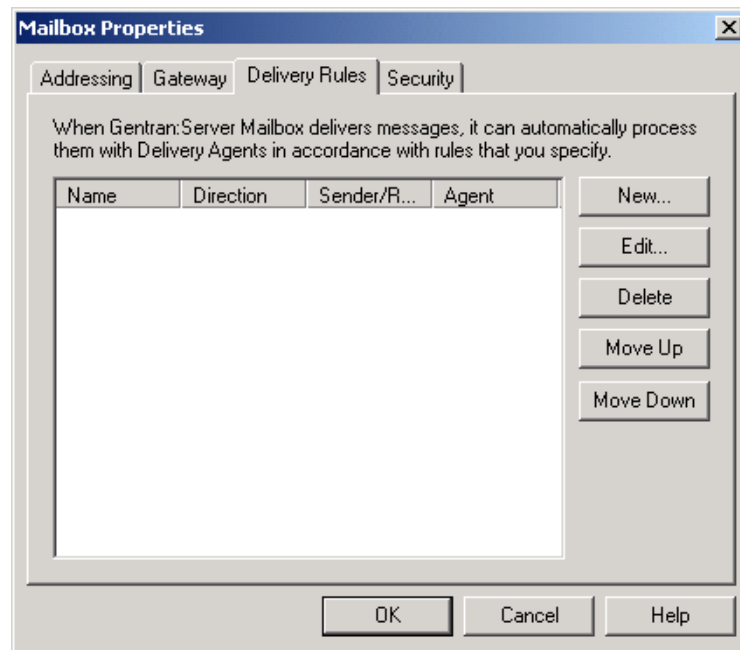
**Parts and functions**

This table describes the parts of the Mailbox Properties Gateway tab and its functions.

Part	Function
Gateway	Specifies whether the mailbox is or is not a gateway.  Options are: <ul style="list-style-type: none"> <li>▶ This mailbox is not a gateway.</li> <li>▶ This mailbox is a gateway.</li> </ul>
Type	Specifies type of gateway. Active when “This mailbox is a gateway” radio button is selected.
<b>Configure</b>	Enables you to configure properties for a selected gateway.

## Mailbox Properties Delivery Rules tab

This illustration shows an example of the Mailbox Properties Delivery Rules tab.



## Parts and functions

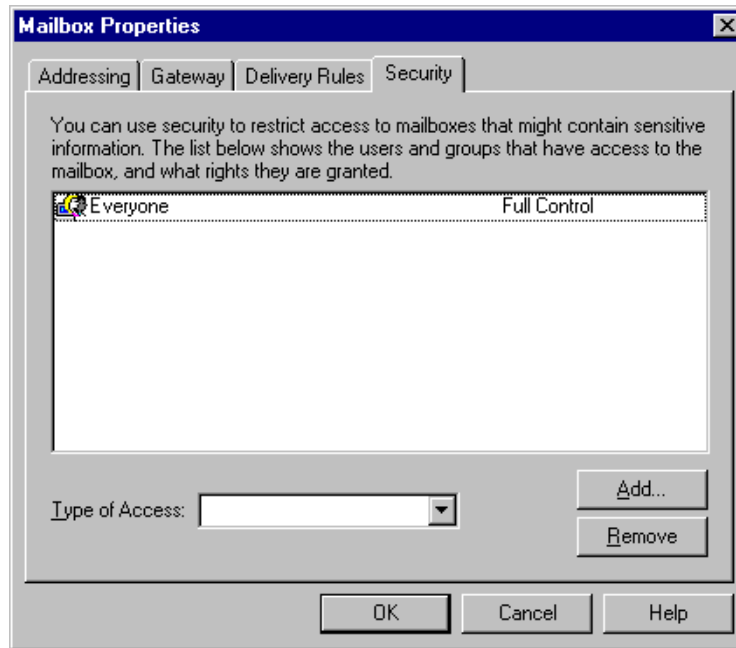
This table describes the parts of the Mailbox Properties Delivery Rules tab and their function.

Part	Function
Name	Defines the name of the Delivery Rule.
Direction	Identifies if the rule is run when sending or receiving a message.
Sender/Recipient	Identifies the mailbox of the sender or recipient. The mail address can be specified in addition to the mailbox name.
Agent	Identifies the name of the delivery agent to be run.
<b>New</b>	Creates new Delivery Rules.
<b>Edit</b>	Edits existing Delivery Rules.
<b>Delete</b>	Deletes Delivery Rules.
<b>Move Up</b>	Moves the selected Delivery Rule up.
<b>Move Down</b>	Moves the selected Delivery Rule down.



**Mailbox Properties Security tab**

This illustration shows an example of the Mailbox Properties Security tab.



**Parts and functions**

This table describes the parts of the Mailbox Properties Security tab and their function.

Part	Function
User's list	Defines users and groups that have access to mailbox.
Type of Access	Designates level at which a user can interact with a mailbox. Values are: <ul style="list-style-type: none"> <li>▶ Full control</li> <li>▶ Read</li> <li>▶ Write</li> </ul>
<b>Add</b>	Enables you to grant users or groups mailbox access.
<b>Remove</b>	Enables you to take away user or group mailbox access.
<b>OK</b>	Saves changes; exits dialog box.
<b>Cancel</b>	Closes dialog box without saving changes.
<b>Help</b>	Enables access to online help.

# FPI Mailbox Properties

## Introduction

The FPI Mailbox Property dialog box defines the properties of the FPI Mailbox.

## Warning: Changing FPI Gateway Property Configurations

Before changing any Mailbox property configurations, consider the following:

### • Mailbox tab

The Mailbox tab contains settings that control the processing of incoming messages in the Sterling Gentran:Server Mailbox.

The default values are recommended for initial operation of Sterling Gentran:Server FPI Gateways and should be changed only when necessary by a qualified system administrator.

Changing the default values may prevent messages from being delivered to Sterling Gentran:Server.

### Res Field Map

Result Field Map settings allow an exceptionally flexible configuration of the reception jobs (Result files) either processed, or to be processed, by Sterling Gentran:Server FPI Gateway. These settings should only be changed only by a qualified system administrator with an in-depth understanding of FPI.

### Warning

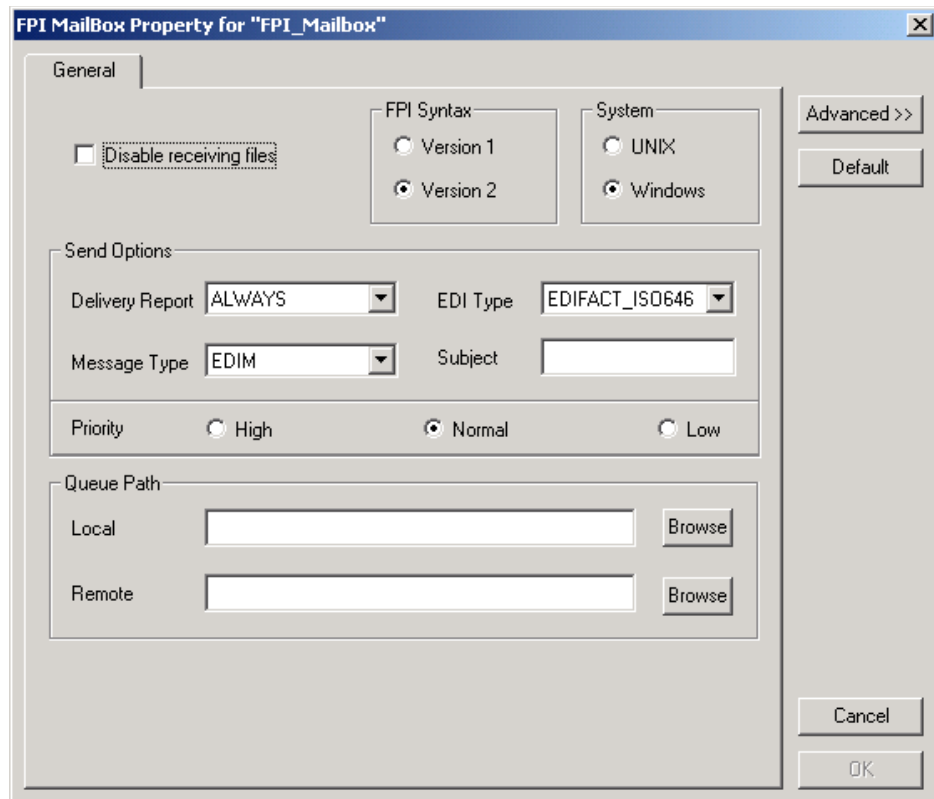
As a rule, the default values must not be changed for linking of ISOTRADE 3.4.1 (NT) / 4.3.4 (UNIX), Syntax version 1 and 2. A change in the default values may result in Sterling Gentran:Server FPI Gateway reception jobs generated by a linked communications application, to process incorrectly. In particular, changing the configuration to identify mandatory FPI fields (M = mandatory) as "ignored" (I = ignore) or "not used" (U = unused) is strongly discouraged. The configuration will not be subjected to a plausibility test.

### • Inf Field Map

A change in Information Field Map default values can result in inaccurate processing by the linked communications application. In particular, suppressing mandatory FPI field generation (M = mandatory) by changing the configuration is strongly discouraged. The configuration will not be subjected to any plausibility test.

**FPI Mailbox Property General tab**

This illustration shows an example of the FPI Mailbox Property General tab.



**Parts and functions**

This table describes the parts of the FPI Mailbox Property General tab and its functions.

Part	Function
Disable Receiving Files	<p>Starts or stops the receipt of FPI Mailbox messages. A selected check box (the default setting) means that the FPI Mailbox is stopped and processing tasks on messages received (Result files) are not performed. For configuration and maintenance purposes, this check box should be selected.</p> <p>A cleared check box means that processing tasks for Result files is performed.</p>

<b>(Contd) Part</b>	<b>Function</b>
FPI Syntax Version	<p>Defines the Sterling Gentran:Server FPI Gateway interface Result and Information files syntax version.</p> <p>Options are:</p> <ul style="list-style-type: none"> <li>• Version 1 - ISOTRADE Version 2.0 and earlier; does not include inbound or outbound messages with multiple attachments. Typical fields are INTERCHANGE_NAME, INTERCHANGE-PATH and EDI_TYPE.</li> <li>• Version 2 (default) - ISOTRADE Version 3.x; allows for multiple receivers and attachments, and information for each receiver.</li> </ul>
System	<p>Defines the operating system where the Communications Queue resides. Options are:</p> <ul style="list-style-type: none"> <li>• Windows - Select this option if the Communications Queue will reside on a Microsoft Windows machine.</li> <li>• UNIX - Select this option if the Communications Queue will physically reside on a UNIX machine.</li> </ul>
Send Options Delivery Report	<p>Defines when you receive delivery confirmation from your trading partner.</p> <p>Options are:</p> <ul style="list-style-type: none"> <li>• ALWAYS - A delivery confirmation (Delivery Report DR or Non Delivery Report NDR) is always requested for every message. This setting is recommended for networks that provide delivery reports (e.g. X.400-Networks).</li> <li>• NONE - A delivery confirmation (Delivery Report DR or Non Delivery Report NDR) is not requested. This setting is used for networks or Access Units that provide neither a transmission report nor a delivery report. As a rule, the use of such networks is not advised for security reasons.</li> <li>• NON_DELIVERY - A delivery confirmation (Non Delivery Report, NDR) is requested only for messages that cannot be accurately sent to the communications partner.</li> </ul> <p><b>Note</b> The system displays the message transmission status on the Sterling Gentran:Server Interchanges Browser as a colored antenna symbol. The color indicates the success or failure of delivery.</p>

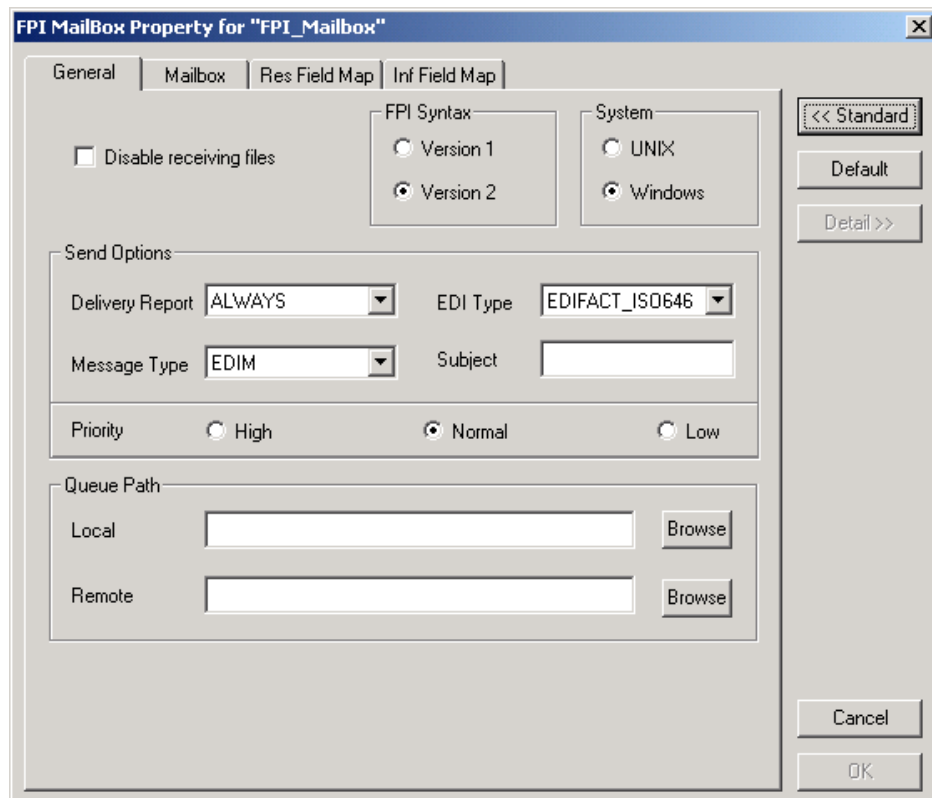
<b>(Contd) Part</b>	<b>Function</b>
Send Options EDI Type	<p>Specifies the EDI Interchange and character set format. The EDI format consists of a prefix and a suffix. The prefix defines the EDI interchange format, the suffix defines the character set. This is a mandatory value.</p> <p>EDI-Interchange formats:</p> <ul style="list-style-type: none"> <li>• EDIFACT - Electronic Data Interchange for Administration, Commerce and Transport. Definition in Standard ISO9735</li> <li>• ANSIX12 - American National Standard Institute X12 EDI Standard</li> <li>• UNTDI - United Nations Trade Data Interchange. Defined in the UNTDI Standard.</li> <li>• PRIVATE - Bilateral EDI-format established between communications partners</li> <li>• UNDEF - All other EDI-Interchange formats</li> </ul> <p>Character sets:</p> <ul style="list-style-type: none"> <li>• ISO646 - ISO Standard which describes a modification of the ASCII-character set which is defined in SIO646</li> <li>• T61 - Teletex character set, defined by the CCITT in the T.61Recommendation</li> <li>• OCTET - 8-bit binary character set</li> <li>• EBCDIC - Extended Binary Coded Decimal Interchange Code character set defined by IBM.</li> <li>• IA5 - International Alphabet Number 5 is a standard identical with ISO646 for the representation of textual and numeric information.</li> </ul>
Send Options Message Type	<p>Specifies what message type to send. This field is mandatory.</p> <p>Options are:</p> <ul style="list-style-type: none"> <li>• EDIM - EDIFACT-Message (P35) Links ISOTRADE 3.4.1 for sending EDIFACT-messages.</li> <li>• EDIN - EDIFACT-Notification (reserved for future use).</li> <li>• FFM - Free Formatted Text (reserved for future use).</li> <li>• IPM - InterPersonal Message (P2) Use: Links ISOTRADE versions prior to 3.4.1. IPM is no longer supported for sending ISOTRADE 3.4.1.</li> <li>• QUERY- Active Status queries (reserved for future use).</li> </ul>
Send Options Subject	<p>Appends additional information to a message. This field is optional.</p>

<b>(Contd) Part</b>	<b>Function</b>
Priority	<p>Specifies the priority of FPI Mailbox transmissions. The priority affects the order in which the transmitted messages are processed by the linked communications application.</p> <p>Options are:</p> <ul style="list-style-type: none"> <li>• High - Denotes a transmission with above-average priority; Access Unit processes High priority transmissions before all other transmissions in the OUT queue. Information files with high priority begin with the prefix "h."</li> <li>• Normal - Denotes transmissions with average priority; Access Unit processes Normal priority transmissions before transmissions with low priority. Information files with normal priority begin with the prefix "n."</li> <li>• Low - Denotes transmissions with low priority; Access Unit processes Low priority transmissions after all transmissions with a higher priority. Information files with low priority begin with the prefix "l."</li> </ul>
Queue Path Local	<p>Defines the root directory path of a Communications Queue seen by the Microsoft Windows machine where Sterling Gentran:Server FPI Gateway is installed.</p> <p><b>Example</b> C:\COMM\FPI</p>
Browse	Enables you to browse to or to create a local queue directory.
Queue Path Remote	<p>Defines the root directory path of a Communications Queue seen by the remote machine (UNIX or Microsoft Windows) where the communications application (Access Unit) is installed.</p> <p><b>Example</b> /HOME/COMM/FPI</p>
<b>Browse</b>	Enables you to browse to or to create a remote queue directory.
<b>Advanced</b>	<p>Displays additional FPI Mailbox Property tabs. Those tabs are:</p> <ul style="list-style-type: none"> <li>• Mailbox - Contains settings that control the inbound message processing in the Sterling Gentran:Server Mailbox. The default values are recommended for FPI Gateway operation and should only be changed by a qualified system administrator.</li> <li>• Res Field Map - Provides an alphabetically sorted view of FPI Result files.</li> <li>• Inf Field Map - The Information Field Definition table provides an alphabetically sorted overview of all fields of an Information file defined in the FPI.</li> </ul>

(Contd) Part	Function
<b>Default</b>	Restores default FPI Mailbox settings except for the following: <ul style="list-style-type: none"> <li>▶ Queue Path</li> <li>▶ System</li> <li>▶ FPI Syntax</li> </ul>
<b>Detail</b>	Unavailable
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box; disregards configuration changes.
<b>OK</b>	Unavailable until valid Local and Remote Communications Queue path information is entered. This prevents you from saving invalid Communications Queue paths.

**Mailbox tab**

This illustration shows an example of the FPI Mailbox Property Mailbox tab. This tab displays when **Advanced** button is selected on the FPI Mailbox Property General tab.



**Parts and functions**

This table describes the parts of the FPI Mailbox Property Mailbox tab and its functions.

<b>Part</b>	<b>Function</b>
Content Type for all messages	Defines the content and sub-content type for all messages. The default is Application/EDI.
Content Type for all attachments	Defines the content and sub-content type for all attachments. The default is Application/EDI.  <b>Reference</b> See the Configuration Program topic in the Sterling Gentran:Server for Microsoft Windows online documentation for additional information on content types.
Recipient	Forwards messages received in an FPI Mailbox to the specified Mailbox. Generally, this is the standard (non-gateway) Sterling Gentran:Server Application Mailbox, which stores messages transferred between Mailbox server and Sterling Gentran:Server. However all mailboxes and distribution lists available in Sterling Gentran:Server Mailbox are listed in the drop-down box.

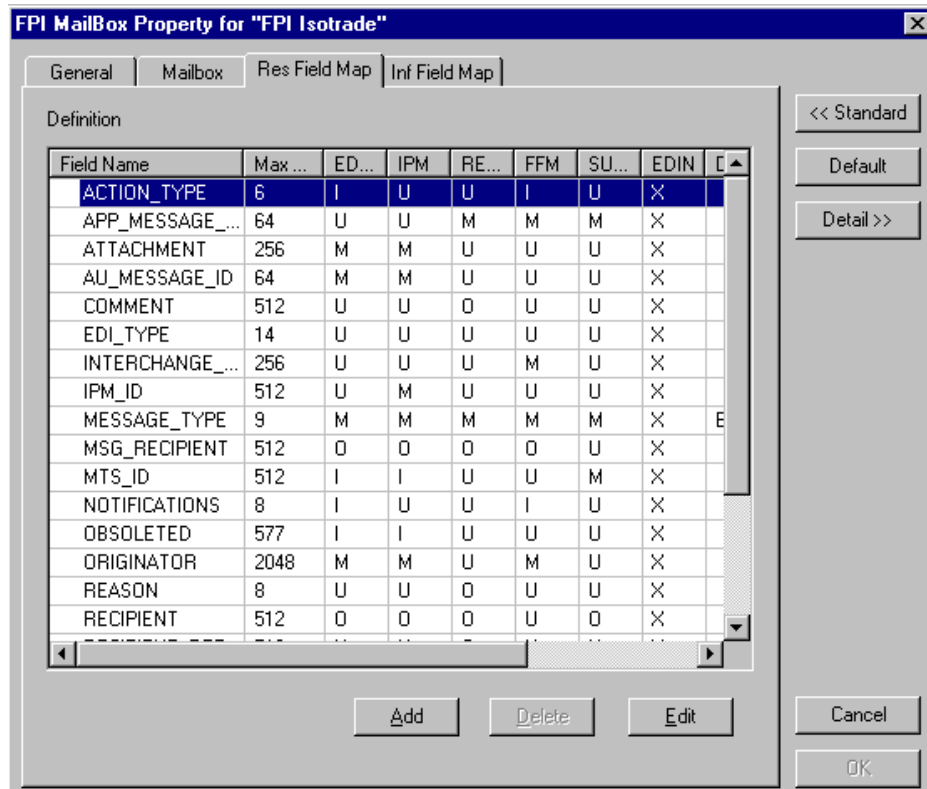


<b>(Contd) Part</b>	<b>Function</b>
Post processing message handling	<p>Determines how the transmitted data files are to be handled in the DATA directory of a Communications Queue. These files pertain to copies of the message attachments (e.g., EDI-Interchange) which are managed in the Sterling Gentran:Server Mailbox. Valid values are:</p> <ul style="list-style-type: none"> <li>• Delete after Delivery Report (Default) - Deletes an EDI Interchange file from the DATA directory upon receipt of a network-generated positive Transport-reception report. This setting is recommended for all networks (e.g., X.400-Network, ISOTRADE-link) that provide transport-reception reports for a message sender.</li> <li>• Delete after Submission Confirmation - Deletes an EDI Interchange file from the DATA directory upon receipt of a transport-delivery report created by the linked communications application. This transport-delivery report is a positive report that is sent to the message sender when the message has been forwarded from the linked communications application to the network. This setting is for all networks that only create transport-delivery reports.</li> <li>• Delete after &lt;n&gt; Days - Files in the DATA directory are deleted after a defined number of days.</li> </ul> <p><b>Note</b> This setting is recommended for networks that do not create transport-delivery or transport-reception reports. This setting reduce errors that occur due to insufficient hard disk space.</p> <ul style="list-style-type: none"> <li>• Never - Files are never deleted from the DATA directory. This setting should be selected only when the DATA directory size is maintained by deleting or archiving the old messages (see also the Delete after &lt;n&gt; Days mode).</li> </ul> <p><b>Stop</b> If None is selected and DATA directory messages are not deleted or archived, errors may occur due to insufficient hard disk space.</p>
<b>Standard</b>	Closes Advanced properties.
<b>Default</b>	Restores the default FPI Mailbox settings <u>except</u> for the following: <ul style="list-style-type: none"> <li>• Queue Path</li> <li>• System</li> <li>• FPI Syntax</li> </ul>
<b>Detail</b>	Unavailable

(Contd) Part	Function
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box; discards configuration changes.
<b>OK</b>	Saves changes; exits the dialog box.  <b>Note</b> The <b>OK</b> button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.

**Res Field Map tab  
(List View)**

This illustration shows an example of the FPI Mailbox Property Res Field Map tab in List view. This tab displays when the **Advanced** button is selected on the FPI Mailbox Properties General tab.



**Note**

Result Field Map settings allow an exceptionally flexible configuration of the reception jobs (Result files) either processed, or to be processed, by Sterling Gentran:Server FPI Gateway. These settings should only be changed only by a qualified system administrator with an in-depth understanding of FPI.

**STOP**

As a rule, the default values must not be changed for linking of ISOTRADE 3.4.1 (NT) / 4.3.4 (UNIX), Syntax version 1 and 2. A change in the default values may result in Sterling Gentran:Server FPI Gateway reception jobs generated by a linked communications application, to process incorrectly. In particular, changing the configuration to identify mandatory FPI fields (M = mandatory) as "ignored" (I = ignore) or "not used" (U = unused) is strongly discouraged. The configuration will not be subjected to a plausibility test.

**Parts and functions**

This table describes the parts of the Res Field Map tab in List view and their functions.

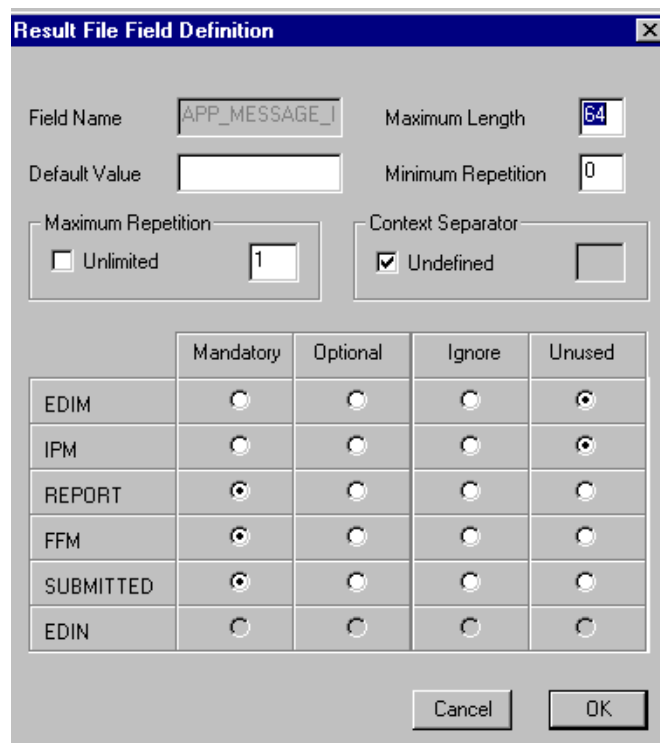
<b>Part</b>	<b>Function</b>
Field Name	Describes the field name.
Max Len.	Denotes the maximum field length.
EDIM	Denotes EDI Message (reserved for future use).
IPM	Denotes Inter Personal Message.
REPORT	Message-type report that identifies a delivery report, negative delivery report, or an Access Unit report.
FFM	Denotes Free Formatted Message (reserved for future use).
SUBMITTED	Identifies the notification "delivered to network," which is generated by the Access Unit.
EDIN	Denotes EDI Notification (reserved for future use).
Default	Describes the default value for empty fields.
MinRep	Describes the minimum repetition frequency of the field.
MaxRep	Describes the maximum repetition frequency of the field.
Sep	Describes the Separator character for the elements of the value list of a field.

<b>(Contd) Part</b>	<b>Function</b>
Optional/ Mandatory values	<p>Defines whether a field is mandatory or optional. Values can only be changed in Edit mode.</p> <p><b>Note</b> Changing optional or mandatory values is not recommended unless you have in-depth understanding of FPI.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> <li>• M - Mandatory. The field must be created in a reception job for the particular message type. An error is generated if the field is not present. The Result file is moved into the UNDEL directory.</li> <li>• O - Optionally used field. The field can occur in the context of the message type. The user can specify that the field is to be parsed and taken into the field list, if it is present. This is a necessary, but does not ensure that the field is later evaluated by the Sterling Gentran:Server FPI Gateway Result file processor.</li> <li>• U - Optional unused field. The field is permitted in the context of the message type, but should not be used. The user can specify that this field will generate an error (regardless of whether the syntax is correct). The Result file will be moved to the UNDEL directory.</li> <li>• I - Optional, ignored field. The field is allowed in the context of the message type, but should be ignored. The user can specify that this field will never generate an error (even if it is syntactically incorrect).</li> <li>• X - Unacceptable field Use. A field that is generally not allowed in the context of message type. For internal use by the Sterling Gentran:Server FPI Gateway system. If a field has the default value X, then the user cannot change it.</li> </ul>
<b>Standard</b>	Closes Advanced properties.
<b>Default</b>	Restores default values.
<b>Detail</b>	Enables you to view a field's properties. When in Detail mode, the left side of the screen displays a list of FPI fields. By clicking a field, the field properties display on the right side of the screen. This view is described later in this chapter.
<b>Add</b>	<p>Adds fields to the Res Field Map.</p> <p>Types of fields:</p> <ul style="list-style-type: none"> <li>• System Fields - fields that cannot be deleted or renamed</li> <li>• User Defined Fields - fields the user adds that can be added, changed or deleted.</li> </ul>

(Contd) Part	Function
<b>Delete</b>	Deletes user defined field definition.
<b>Edit</b>	Enables you to edit a selected field definition.
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box; discards configuration changes.
<b>OK</b>	Saves changes; exits the dialog box.  <b>Note</b> The OK button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.

**Result File Field Definition (Add or Edit mode)**

This illustration shows an example of the Result File Field Definition dialog box. This dialog box displays when **Add** or **Edit** is selected on the Res Field Map List view tab.



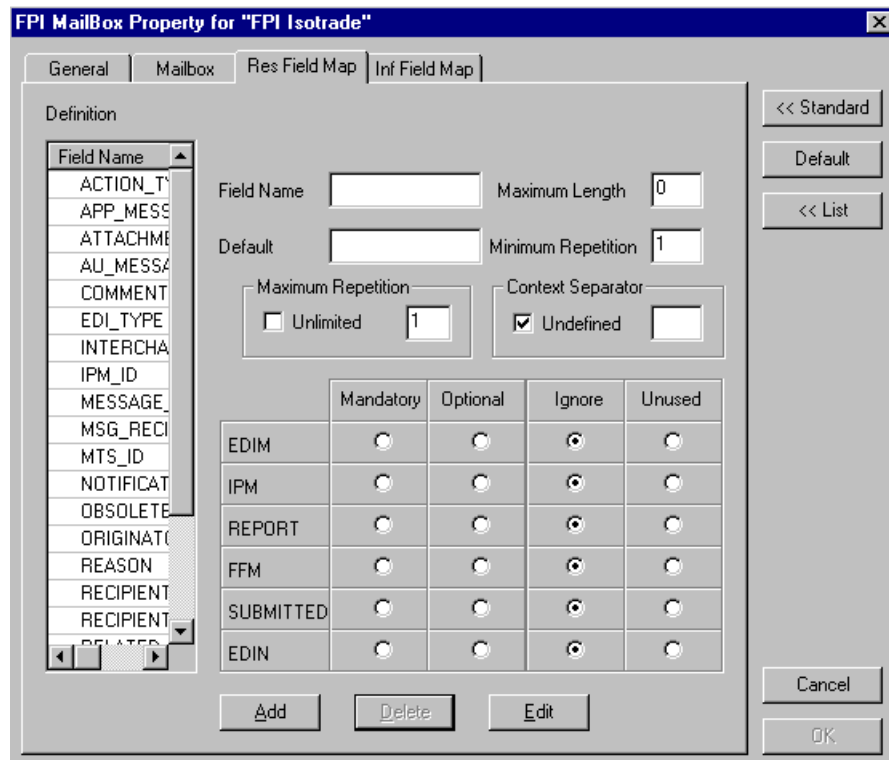
**Parts and functions**

This table describes the parts of the Result File Field Definition and their functions.

<b>Part</b>	<b>Function</b>
Field Name	Describes the field name. This name in this field cannot be changed in Edit mode.
Maximum length	Describes the maximum field length.
Default Value	Describes the default value for empty fields. The values in this field overwrite the default values of a communications application.
Minimum Repetition	Specifies the minimum number of times a Results File field may repeat.
Maximum Repetition Unlimited	Specifies that a Result File field may repeat without limitation.
Maximum Repetition	Specifies how many times a field repeats in a Result File.
Context Separator Undefined	Specifies that the character separator for the elements of the value list have not been defined.
Context Separator	Specifies a character separator for the elements of the value list.
Mandatory	Denotes that field is mandatory; displays as M in Table view.
Optional	Denotes optional field; displays as O in Table view.
Ignore	Denotes optional, ignored field; displays as I in Table view.
Unused	Denotes optional, unused field; displays as U in Table view.
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box without saving configuration changes.
<b>OK</b>	Saves changes; exits the dialog box.  <b>Note</b> The OK button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.

**Res Field Map Tab (Detail View)**

This illustration shows a Detail view of the FPI Mailbox Properties Res Field Map tab.



**Parts and functions**

This table describes the parts of the FPI Mailbox Properties Res Field Map tab in Detail view and their functions.

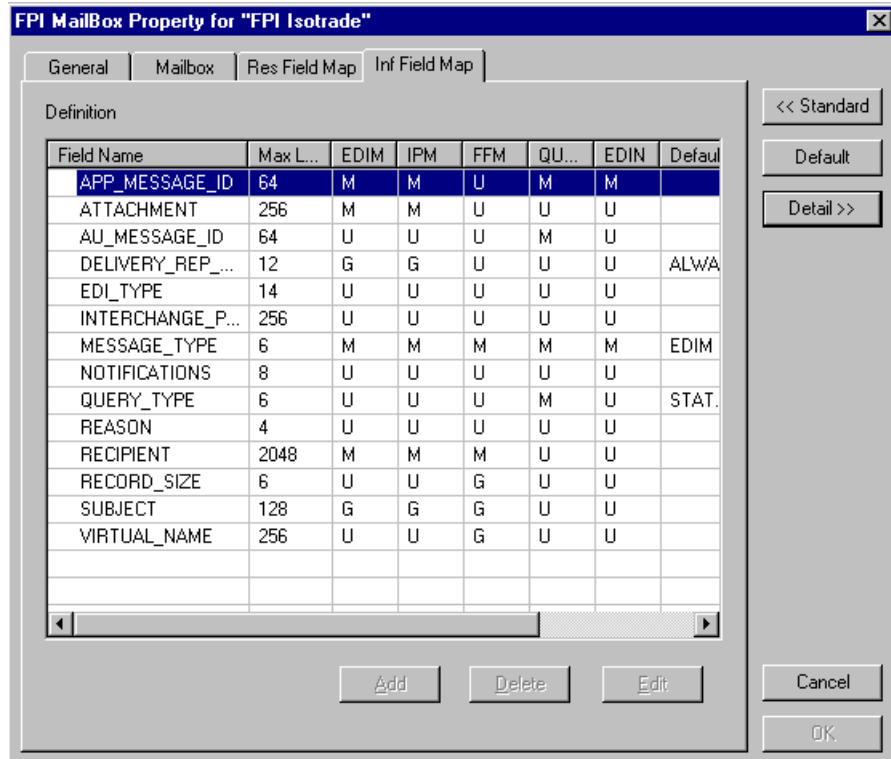
Part	Function
Field Name	Describes the field name. This name in this field cannot be changed.
Maximum length	Describes the maximum field length.
Default	Describes the default value for empty fields. The values in this field overwrite the default values of a communications application.
Minimum Repetition	Specifies the minimum number of times a Results File field may repeat.
Maximum Repetition Unlimited	Specifies that a Results File field may repeat without limitation.
Maximum Repetition	Specifies how many times a field repeats in a Result File.

<b>(Contd) Part</b>	<b>Function</b>
Context Separator Undefined	Specifies that the character separator for the elements of the value list have not been defined.
Context Separator	Specifies a character separator for the elements of the value list.
Mandatory	Denotes that field is mandatory; displays as M in Table view.
Optional	Denotes optional field; displays as O in Table view.
Ignore	Denotes optional, ignored field; displays as I in Table view.
Unused	Denotes optional, unused field; displays as U in Table view.
<b>Standard</b>	Closes Advanced properties.
<b>Default</b>	Default value for empty fields.
<b>List</b>	Switches to Table view.
<b>Add</b>	Enables you to add a field definition in Detail view.
<b>Delete</b>	Activated when at least one user-defined field is created. Otherwise, this option is unavailable.
<b>Edit</b>	Enables you to edit a selected field definition in Detail view.
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box without saving configuration changes.
<b>OK</b>	Saves changes; exits the dialog box.  <b>Note</b> The OK button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.



**Inf Field Map Tab (List View)**

This illustration shows an example of the FPI Mailbox Properties Inf Field Map tab. It is displayed when the Advanced button is selected on the FPI Mailbox Properties General tab.



**Parts and functions**

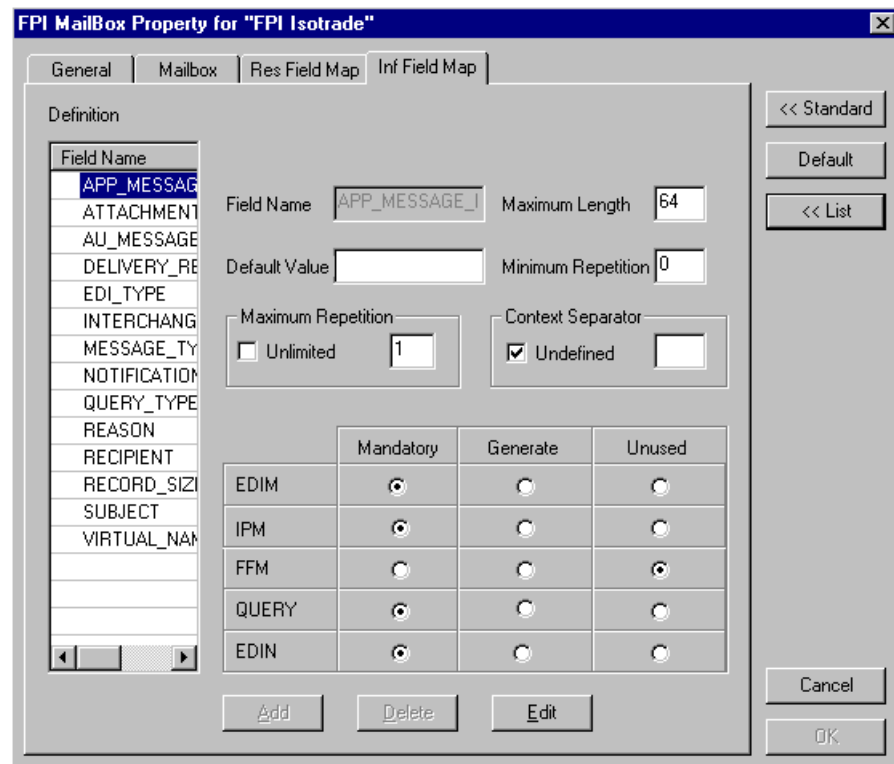
This table describes the parts of the FPI Mailbox Properties Inf Field Map tab and their functions.

Part	Function
Field Name	Describes the field name.
Max Len.	Describes the maximum field length.
EDIM	Describes the EDI Message (reserved for future use).
IPM	Describes the Inter Personal Message.
FFM	Describes the Free Formatted Message (reserved for future use).
QUERY	Describes the Active Status queries (reserved for future use).
EDIN	Describes the EDI Notification (reserved for future use).
Default	Describes the default value for non-filled fields.

<b>(Contd) Part</b>	<b>Function</b>
Max Rep	Specifies how many times that an Information File field may repeat.
Min Rep	Specifies the minimum number of times an Information File field may repeat.
Sep	Describes the Separator character for the elements of the value list of a field, which in the syntax of FPI are found in square brackets.
Optional/ Mandatory values	<p>Defines whether a field is optional or mandatory.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> <li>• M - Mandatory; this field must be created in a transmit job for the particular message type.</li> <li>• G - Optional, generated field; This field is allowed in the context of the message type, and should be created.</li> <li>• U - Optional unused field; This field is allowed in the context of the message type, but should not be created.</li> <li>• X - A field that is generally not allowed in the context of the message type; for internal Sterling Gentran:Server FPI Gateway system use. If a field has a default value of X, it cannot be changed.</li> </ul>
<b>Standard</b>	Closes Advanced properties.
<b>Default</b>	Restores default settings.
<b>Detail</b>	Enables you to view a field's properties. When in Detail mode, the left side of the screen displays a list of FPI fields. By clicking a field, the field properties display on the right side of the screen. This view is described later in this chapter.
<b>Add</b>	Unavailable.
<b>Delete</b>	Unavailable.
<b>Edit</b>	Enables you to edit a selected field definition. Only active when a field definition is highlighted.
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box; discards configuration changes.
<b>OK</b>	<p>Saves changes; exits the dialog box.</p> <p><b>Note</b> The OK button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.</p>

**Inf Field Map  
Tab (Detail View)**

This illustration shows the FPI Mailbox Properties Inf Field Map tab in Detail view.



**Parts and  
functions**

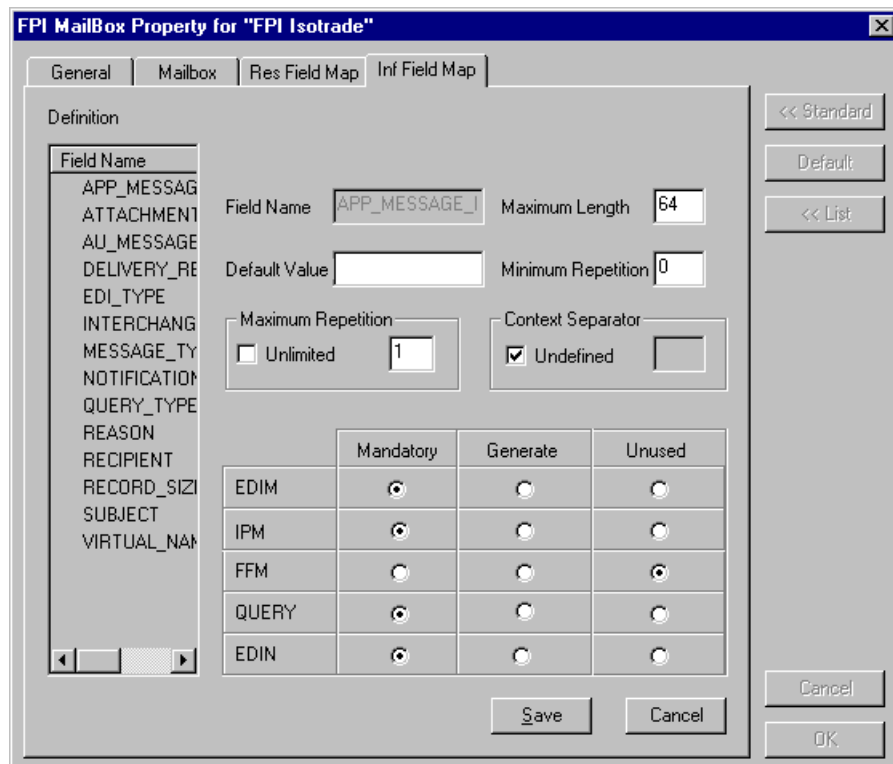
This table describes the parts of the Inf Field Map tab in Detail view and their functions.

Part	Function
Field Name	Describes the field name. This name in this field cannot be changed.
Maximum length	Describes the field length.
Default Value	Describes the default value for empty fields. The values in this field overwrite the default values of a communications application
Minimum Repetition	Specifies the minimum number of times an Information File field may repeat.
Maximum Repetition Unlimited	Specifies that as Information File field may repeat without limitation.
Max Repetition	Specifies the maximum number of times that an Information File field may repeat.

<b>(Contd) Part</b>	<b>Function</b>
Context Separator Undefined	Specifies that the character separator for the value list elements have not been defined.
Context Separator	Specifies a character separator for the elements of the value list.
Mandatory	Denotes that field is mandatory; displays as M in Table view.
Generate	Denotes an optional, generated field; displays as G in Table view.
Unused	Denotes an optional, unused field; displays as U in Table view.
<b>Standard</b>	Closes Advanced properties.
<b>Default</b>	Restores default settings.
<b>List</b>	Switches to Table view.
<b>Cancel</b>	Exits the FPI Mailbox Property dialog box; discards configuration changes.
<b>OK</b>	Saves changes; exits the dialog box.  <b>Note</b> The OK button is unavailable until valid Local and Remote Communications Queue path information is entered on the General tab of the FPI Mailbox Property dialog box. This prevents you from saving invalid Communications Queue paths.
<b>Add</b>	Unavailable.
<b>Delete</b>	Unavailable.
<b>Edit</b>	Enables you to edit a user-defined field definition. Only active when a field definition is highlighted.

**Inf Field Map  
Tab (Edit Mode)**

This illustration shows FPI Mailbox Properties Inf Field Map Detail view in Edit mode.



**Parts and  
functions**

This table describes the parts of Inf Field Map Tab in Edit mode and their functions.

Part	Function
Field Name	Describes the field name. This name in this field cannot be changed.
Maximum length	Describes the maximum field length.
Default Value	Describes the default value for empty fields. The values in this field overwrite the default values of a communications application
Minimum Repetition	Specifies the minimum number of times an Information File field may repeat.
Maximum Repetition Unlimited	Specifies that as Information File field may repeat without limitation.
Maximum Repetition	Specifies the maximum number of times that an Information File field may repeat.

<b>(Contd) Part</b>	<b>Function</b>
Context Separator Undefined	Specifies that the character separator for the value list elements have not been defined.
Context Separator	Specifies a character separator for the elements of the value list.
Mandatory	Denotes that field is mandatory; displays as M in Table view.
Generate	Denotes an optional, generated field; displays as G in Table view.
Unused	Denotes an optional, unused field; displays as U in Table view.
<b>Save</b>	Saves changes.
<b>Cancel</b>	Terminates Edit mode; disregards configuration changes to the selected field.

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# Configuration

## Overview

---

**Introduction** This section describes how to configure your Sterling Gentran:Server FPI Gateway and FPI Gateway mailbox.

---

**Where to Begin** Use this table to determine your starting procedure.

<b>IF your Communications Queue will be...</b>	<b>THEN start with procedure...</b>
Physically located on a UNIX machine,	<i>Configuring Communications Queues on UNIX</i> on page 2 - 36.
Will be physically located on a Microsoft Windows machine,	<i>How to Configure Sterling Gentran:Server FPI Gateway</i> on page 2 - 38.

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# Configuring Communications Queues on UNIX

**Introduction** This section describes the process of mapping the root directory of a Communication Queue located on a UNIX machine to a Microsoft Windows computer using NFS (Network File Sharing).

**NFS Product Examples** NFS product examples are:

- Omni NFS Gateway Version 4.0 by XLINK
- Intergraph Diskaccess NFS Client Version 04.01.00.07

**Note**

You must verify that your NFS product accurately maps Microsoft Windows User Rights to UNIX. Incorrect Access Rights can prevent Sterling Gentran:Server FPI Gateway from functioning properly.

**Stages** This table describes the stages of configuring a Communications Queue.

Stage	Description
1	Export a UNIX directory.
2	Map a UNIX drive. <b>Note</b> This procedure is based on an XLINK product.

**How to export a UNIX Directory**

Use this procedure to export a UNIX directory.

Step	Action
1	Verify that the NFS Server process is running.
2	Log on to the UNIX computer as root.
3	In the export table, enter the directory to be exported to your Microsoft Windows computer. Usually, this is the table <code>/etc/exports</code> .
4	Assign read, write, and execute privileges to the directory. <b>Example</b> (lines in <code>/etc/exports</code> ): <code>/home/smith- rw=pc1</code> <b>Note</b> The name of the Microsoft Windows computer must be entered together with the IP address in the file <code>/etc/hosts</code> .



<b>(Contd) Step</b>	<b>Action</b>
5	<p>Enter <b>&lt;ping &lt;computer_name&gt;&lt;/&gt;</b> to check whether the UNIX computer can map the name of the Microsoft Windows computer to an IP address.</p> <p><b>Where</b></p> <ul style="list-style-type: none"> <li>▶ <b>&lt;</b> and <b>&lt;</b> describe necessary formatting characteristics</li> <li>▶ Computer_name is the name of the Microsoft Windows computer.</li> </ul> <p><b>Example</b> ping computername</p>
6	<p>Enter <b>&lt;importfs -a&gt;</b> to process the export table a second time.</p> <p><b>Where</b></p> <ul style="list-style-type: none"> <li>▶ <b>&lt;</b> describes necessary formatting characteristics</li> </ul> <p><b>Example</b> importfs -a</p>

### How to map a UNIX Drive

Use this procedure to map a UNIX drive.

<b>Step</b>	<b>Action</b>
1	<p>Install the NFS Client software.</p> <p><b>Reference</b> See your Omni NFS Gateway and Omni NFS online Help systems for installation, configuration and mapping instructions.</p>
2	<p>Create a directory on the mapped NFS drive, then create and save a file to that directory to ensure that the mapping process was successful.</p>
3	<p>Proceed to <i>How to Configure Sterling Gentran:Server FPI Gateway</i> on page 2 - 38.</p>

# How to Configure Sterling Gentran:Server FPI Gateway

**Introduction** This section describes how to configure Sterling Gentran:Server FPI Gateway properties. The properties that you define apply to all FPI Gateway Mailboxes.

**Note**

We recommend that you use the default configuration settings.

**Before you begin** Before you begin configuring your Sterling Gentran:Server FPI Gateway you must:

- Install Sterling Gentran:Server FPI Gateway
- Verify that the following services are started:
  - IBM® Sterling Gentran:Server® Executive
  - Sterling Gentran:Server Mailbox
  - IBM® Sterling Gentran:Server® Communications (optional)

**Reference**

See the *IBM® Sterling Gentran:Server® for Microsoft Windows Communications User Guide* for instructions on how to start services.

**Procedure** Use this procedure to configure your Sterling Gentran:Server FPI Gateway.

Step	Action
1	Start <b>Mailbox Server Manager</b> .  <b>System Response</b> The system displays the Server Manager browser.
2	Select <b>Mailbox</b> in the Server Manager pane, and then right-click and select <b>Register Server</b> .  <b>System Response</b> The system displays the Register Server dialog box.
3	Enter the name of your Mailbox server, and click <b>OK</b> .
4	Select <b>FPI Gateway</b> from the Gateways folder icon.
5	Right-click to select <b>Properties</b> .  <b>System Response</b> The system displays the General tab of the FPI Gateway Property dialog box.
6	Define the Periodic Scan Interval setting.

<b>(Contd) Step</b>	<b>Action</b>
7	Click the <b>FPI Audit</b> tab.  <b>System Response</b> The system displays the FPI Audit tab dialog box.
8	Define the following: <ul style="list-style-type: none"><li>▶ Audit level for FPI Log</li><li>▶ Maximum Log File Size</li><li>▶ Post Audit File specifications</li><li>▶ Audit Level for Event Log</li></ul> <b>Note</b> We recommend that you use the default configuration settings.
9	Click <b>OK</b> to complete the configuration of this gateway. You are now ready to create Sterling Gentran:Server FPI Gateway Mailboxes.

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# How to Configure Sterling Gentran:Server FPI Gateway Mailboxes

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## Introduction

After you have configured the Sterling Gentran:Server FPI Gateway, you must create Sterling Gentran:Server FPI Gateway mailboxes.

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## Setting up the Communications Queue

For the Sterling Gentran:Server FPI Gateway to work properly, you must enter Local and Remote Communications Queue path information on the General tab of the FPI Mailbox Property dialog box. If valid paths are entered, the OK button on the Mailbox Property dialog box becomes enabled. If the paths are incorrect, the OK button remains unavailable. This prevents you from saving invalid Communications Queue paths.

---

## Example 1: Communications Queue is installed on same machine as the Sterling Gentran:Server FPI Gateway

Sterling Gentran:Server, Mailbox Server, Sterling Gentran:Server FPI Gateway and the Access Unit are all installed on the same Microsoft Windows machine named PC1. The Communications Queue is located on the Microsoft Windows directory C:\Comm\FPI

**Local:** C:\COMM\FPI

**Remote:** C:\COMM\FPI

Alternatively, you can enter this information in Universal Naming Convention (UNC) notation:

### Note

If you are linking the ISOTRADE Access Unit do not use UNC Notation, because ISOTRADE is not able to process directory paths given in UNC Notation.

**Local:** \\PC1\C\COMM\FPI

**Remote:** \\PC1\C\COMM\FPI

---

### Dialog box Example

The General tab of the FPI Mailbox Property dialog box should look like this:

### Example 2: Communications Queue is installed on a Network drive of a remote machine

Let "N" be the letter of the disk drive on the Microsoft Windows computer pc1, where the /HOME/SMITH directory exported by the UNIX-Workstation unixws1 is "mapped." The root directory of the Communications Queue is /HOME/COMM/FPI.

**Local:** N:\FPI

**Remote:** /HOME/COMM/FPI

Alternatively, this value can be entered in UNC notation:

#### Note

If you are linking the ISOTRADE Access Unit don't use UNC Notation, because ISOTRADE is not able to process directory paths given in UNC Notation.

**Local:** \PC1\N\FPI

**Remote:** /HOME/COMM/FPI

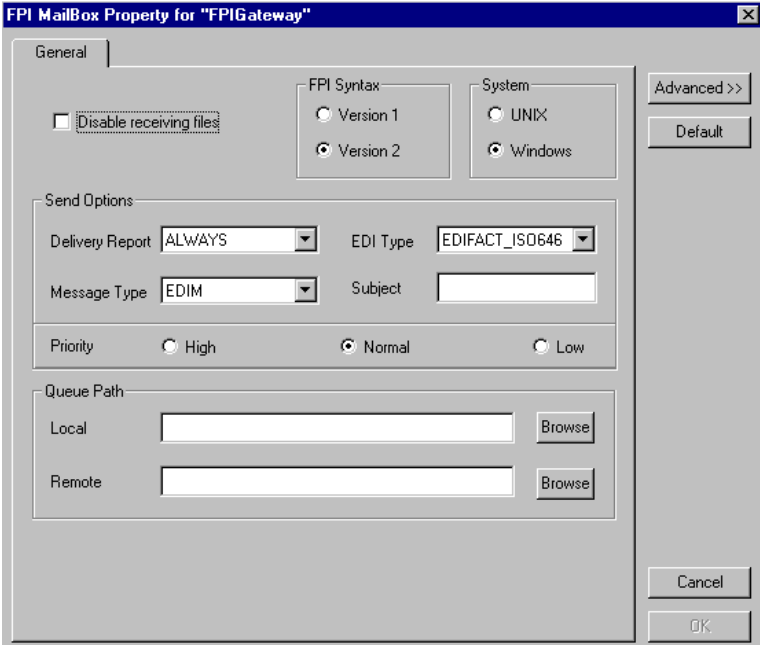
### Dialog Box Example

This is an example of what your dialog box should look like:

### Procedure

Use this procedure to create Sterling Gentran:Server FPI Gateway mailboxes.

Step	Action
1	Start <b>Mailbox Server Manager</b> .
2	Select the <b>Mailboxes</b> folder icon.
3	Right-click, and select <b>Create</b> .  <b>System Response</b> The system displays the Create Mailbox Wizard.
4	Enter the name of the FPI Mailbox you are creating.  <b>Note</b> The name you select should reflect the purpose of the FPI Mailbox.
5	Click <b>Next</b> twice.  <b>System Response</b> A system displays dialog box that asks whether you want to use this mailbox as a gateway to another messaging system.

<b>(Contd) Step</b>	<b>Action</b>
6	Click <b>Yes, use this mailbox as a gateway.</b>
7	Select <b>FPI Gateway</b> as the type of gateway to use with this mailbox and click <b>Next</b> .  <b>System Response</b> The system displays the Create Mailbox Wizard - Summary dialog box.
8	Is the information that you entered correct? <ul style="list-style-type: none"> <li>▶ If yes, click <b>Finish</b>.</li> <li>▶ If no, click <b>Back</b> to correct the information.</li> </ul> <b>System Response</b> The system displays the FPI Mailbox Property dialog box.   <p><b>Note</b>                      If you attempt to create a mailbox and the data store is missing, the system generates an error message box informing you that the mailbox cannot be created. Click <b>OK</b> to exit the message box and click <b>Cancel</b> to exit the Create Mailbox Wizard.</p>
9	Verify that the Disable Receiving Files check box is cleared.
10	Under FPI Syntax, select the syntax version of the Result and Information files to be used for the FPI interface.  <b>Recommendation</b> We recommend Version 2.

<b>(Contd) Step</b>	<b>Action</b>
11	Under System, select the operating system on which the Communications Queue will reside.
12	<p>Under Send Options, define the following:</p> <p><b>Delivery Report:</b> ALWAYS is the default value.</p> <p><b>Message Type:</b> Select EDIM for ISOTRADE Version 3.4.1 or IPM for ISOTRADE releases prior to 3.4.1.</p> <p><b>EDI Type:</b> Select EDIFACT_646 if EDI interchanges will be sent; select UNDEF_OCTET if binary data is to be sent (for unchanged transmissions of Umlauts).</p> <p><b>Subject:</b> Enter additional information that will be used as the Subject header (optional).</p>
13	Select the priority level of the FPI Mailbox transmission.



<b>(Contd) Step</b>	<b>Action</b>	
14	Use the following table to determine your next Action.  <b>Note</b> If you are linking the ISOTRADE Access Unit do not use UNC Notation, because ISOTRADE is not able to process directory paths given in UNC Notation	
	<b>IF the Communications Queue will be installed...</b>	<b>THEN...</b>
	locally (on the same machine as the Sterling Gentran:Server FPI Gateway),	<ul style="list-style-type: none"> <li>▶ <b>Local:</b> Enter the drive and full path name of the Communications Queue seen by the Sterling Gentran:Server FPI Gateway.</li> <li>▶ <b>Remote:</b> Enter the drive and full path name of the Communications Queue seen by the Remote computer. The directory path will be the same as the Local path.</li> </ul>
	On a Network drive of a remote machine,	<ul style="list-style-type: none"> <li>▶ Verify that the Remote machine is mapped to your Microsoft Windows machine with appropriate Share and Access Rights permissions.</li> </ul> <p><b>Note</b>                      UNIX users see <i>Configuring Communications Queues on UNIX</i> on page 2 - 36 for instructions.</p> <ul style="list-style-type: none"> <li>▶ <b>Local:</b> Type the drive and full path name of the Communications Queue seen by the Sterling Gentran:Server FPI Gateway.</li> <li>▶ <b>Remote:</b> Type the drive and full path name of the Communications Queue seen by the Remote computer. The directory path will be different from the Local path.</li> </ul>

# How to Add, Edit or Delete Advanced Properties

---

**Introduction** Although you can edit Advanced Mailbox properties, as a general rule no configuration changes are required or recommended.

**Warning**

General Mailbox Properties (General tab) configuration is recommended for most Sterling Gentran:Server FPI Gateway users. Only advanced users who are extremely familiar with FPI should ever attempt to change ResFieldMap or InfFieldMap properties.

---

**Warnings** Before changing any Mailbox property configurations, consider the following:

• **Mailbox tab**

The Mailbox tab contains settings that control the processing of incoming messages in the Sterling Gentran:Server Mailbox. The default values are recommended for initial operation of the Sterling Gentran:Server FPI Gateways and should be changed only when necessary by a qualified system administrator.

Changing the default values may prevent messages from being delivered to Sterling Gentran:Server.

• **Res Field Map**

Result Field Map settings allow an exceptionally flexible configuration of the reception jobs (Result files) either processed, or to be processed, by the Sterling Gentran:Server FPI Gateway. These settings should only be changed only by a qualified system administrator with an in-depth understanding of FPI.

**Warning**

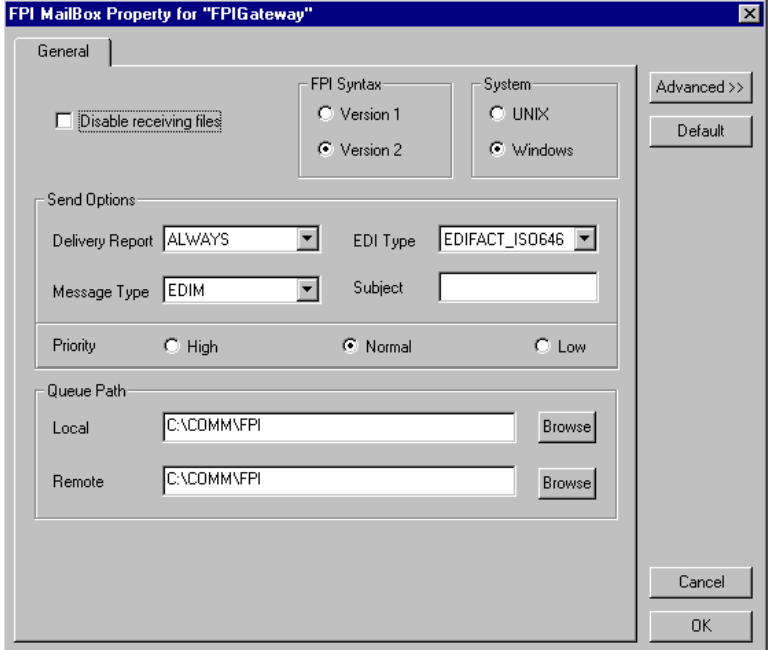
As a rule, the default values must not be changed for linking of ISOTRADE 3.4.1 (NT) / 4.3.4 (UNIX), Syntax version 1 and 2. A change in the default values may result in Sterling Gentran:Server FPI Gateway reception jobs generated by a linked communications application, to process incorrectly. In particular, changing the configuration to identify mandatory FPI fields (M = mandatory) as "ignored" (I = ignore) or "not used" (U = unused) is strongly discouraged. The configuration will not be subjected to a plausibility test.

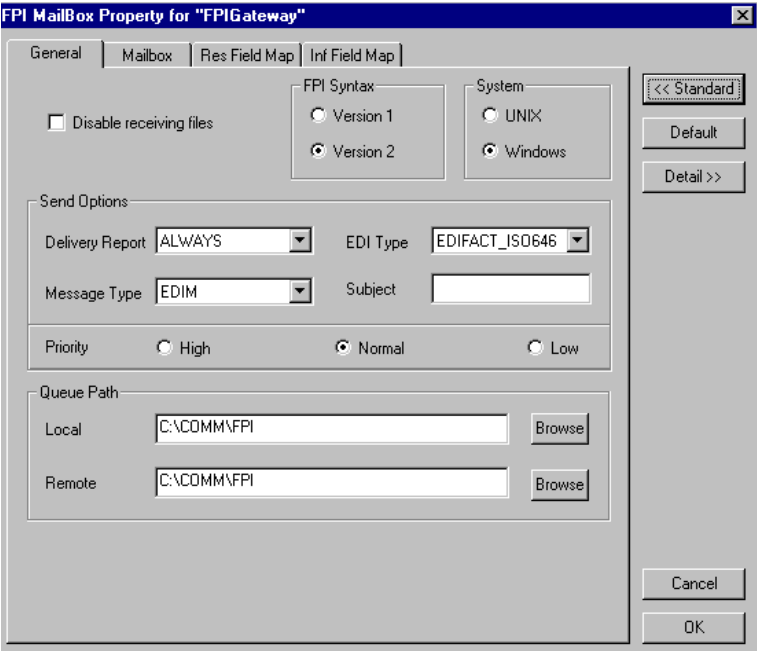
• **Inf Field Map**

A change in Information Field Map default values can result in inaccurate processing by the linked communications application. In particular, suppressing mandatory FPI field generation (M = mandatory) by changing the configuration is strongly discouraged. The configuration will not be subjected to any plausibility test.

---

**Procedure** Use this procedure to edit, add or delete Advanced Mailbox properties.

Step	Action
1	Start the <b>Mailbox Server Manager</b> .
2	Select the <b>Sterling Gentran:Server FPI Gateway</b> mailbox from the Mailboxes folder.
3	Right-click, and select <b>Properties</b> .  <b>System Response</b> The system displays the Mailbox Properties dialog box.
4	Select the <b>Gateway</b> tab and click <b>Configure</b> .  <b>System Response</b> The system displays the General Tab of the FPI Mailbox Property dialog box.  

<b>(Contd) Step</b>	<b>Action</b>
<p>5</p>	<p>Click <b>Advanced</b>.</p> <p><b>System Response</b> The system displays the Mailbox, ResFieldMap and InfFieldMap tabs.</p> 
<p>6</p>	<p>Use the following table to determine your next Action.</p>

<b>(Contd) Step</b>	<b>Action</b>	
7	<b>IF you want to...</b>	<b>THEN...</b>
	Edit Information or Result fields	Select the appropriate Property tab.  To edit from List view: <ul style="list-style-type: none"> <li>▶ Double-click the FPI field that you want edit.</li> </ul> To edit from Detail view: <ul style="list-style-type: none"> <li>▶ From List view, highlight the field definition that you want to edit, and click <b>Detail</b> to display that view.</li> <li>▶ Click <b>Edit</b> to switch to that mode.</li> <li>▶ Make your changes, and click <b>Save</b>.</li> </ul>
	To add a user-defined Result field	From FPI Gateway Advanced properties, select the Res Field Map tab.  To add in List view: <ul style="list-style-type: none"> <li>▶ Click <b>Add</b>.</li> <li>▶ Type the field Definition information</li> <li>▶ Click <b>OK</b>.</li> </ul> To add in Detail view: <ul style="list-style-type: none"> <li>▶ Click <b>Add</b>.</li> <li>▶ Type the field Definition information</li> <li>▶ Click <b>Save</b>.</li> </ul>
	Delete user-defined Result field	From FPI Gateway Advanced properties, select the Res Field Map tab.  To delete in List view: <ul style="list-style-type: none"> <li>▶ Highlight the field, click <b>Delete</b>.</li> <li>▶ Click <b>OK</b> to save your changes.</li> </ul> To delete in Detail view: <ul style="list-style-type: none"> <li>▶ Highlight the field.</li> <li>▶ Click <b>Delete</b>.</li> </ul>

## How to Configure the Trading Partner

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### Introduction

After you configure an FPI Mailbox, you must associate it with a trading partner in Sterling Gentran:Server. To do this, you must:

- define the trading relationship using the Sterling Gentran:Server Partner Editor
- assign a Sterling Gentran:Server FPI mailbox as the mailbox to use
- configure the EMail Address field to contain the symbolic alias name of the communications partner. The alias that you use should match what appears in the address book of the communications application. For example, ISOTRADE Access Unit maps the alias name found in the it\_addr.dat address book to the X.400 address of the communications partner.

### Reference

See the “Using Partners” chapter of the *IBM® Sterling Gentran:Server® for Microsoft Windows User Guide* for instructions on how to set up a trading partner relationship.

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## How to Modify Mailbox Properties

**Introduction** This section describes how to modify mailbox properties that were created using the Create Mailbox Wizard.

**Procedure** Use this procedure to modify mailbox properties.

Step	Action	
1	Start the <b>Mailbox Server Manager</b> .	
2	Expand the <b>Mailboxes</b> folder.	
3	Select the mailbox for which you want to add or modify properties.	
4	Right-click and select <b>Properties</b> from the short-cut menu.  <b>System Response</b> The system displays the Mailbox Properties dialog box.	
5	Use this table to determine your next step.	
	<b>IF you want to change the mailbox's...</b>	<b>THEN click this tab...</b>
	<ul style="list-style-type: none"> <li>▶ name</li> <li>▶ Gentran E-mail address</li> </ul>	Addressing
	<ul style="list-style-type: none"> <li>▶ Gateway properties</li> <li>▶ Configuration properties</li> </ul>	Gateway
	delivery rules	Delivery Rules
	user security permissions	Security
6	Make the appropriate modifications and click <b>OK</b> to save changes and to exit the dialog box.	





# Frequently Asked Questions

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## Information Files

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### Field Display

**Q:** Do all listed fields have to appear in an Information file?

**A:** The listed fields can, but need not appear in the Information file. Which fields are required in an Information file will depend on the linked communications application and on the FPI syntax version. The value that needs defined is found in the specification for the particular communications application.

---

### Information Files

**Q:** How can the user match the Information files created by the Sterling Gentran:Server FPI Gateway to the linked communications application ?

**A:** The user has several options:

- For the optional FPI fields, the user can specify whether the Sterling Gentran:Server FPI Gateway should generate the fields in the information file (G = generate) or not use them (U = unused). For example, the SUBJECT field for EDIM transmission jobs belongs to the optional fields.
- Defining a default value for each FPI field - As a rule, this setting is made by the linked communications application, but can be overwritten by input of another value.
- Specification of a minimum and maximum repetition frequency for each field. As a rule, this setting is permanently defined by the particular communications application. For example, to send messages with multiple attachments, the ATTACHMENT field (syntax version 2) can be repeated as often as necessary.
- For each field of the FPI, a length restriction can be established. As a rule, this setting is permanently defined by the particular communications application.
- The OptMand value can be specified for each field of the FPI and for each message type.

---

### Field Expansion

**Q:** Can the list of fields of an Information file be expanded?

**A:** Yes. However, any expansion of the field list by use of the configuration screen, like that used for the fields of the Result file, was consciously omitted. The standard list already contains the fields defined in the FPI. New, user-defined fields may not conform to FPI.

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## Reference Material

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### **Additional Information**

For additional information, see the following:

- File Programmatic Interface (FPI) for EDI-X.435 (Pedi) & X.420 (P2), ISOCOR, Software Interface Specification, October 1995 (+ Update-Sheets )
  - ISOTRADE Access Unit, Administrator Guide, ISOCOR, December 1996
  - *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide, User Guide, and Communications User Guide.*
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# Glossary

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<b>action message</b>	A properly packaged business action message.
<b>asynchronous</b>	Communication among distributed processes when there is no expectation that the reply to a request comes within the time interval in which the communication session of the request is still “live.”
<b>authorization</b>	Permission to access a protected resource, a service, or sensitive information. This term is often confused with authentication, which is simply verification that a user is who he claims to be. You can be properly authenticated but not be authorized to access a protected resource, a service, or sensitive information.
<b>base 64 encoding</b>	A 65-character subset of US-ASCII is used, enabling 6 bits to be represented per printable character, and the extra 65th character (=) is used to signify a special processing function. The encoding process represents 24-bit groups of input bits as output strings of 4 encoded characters. Proceeding from left to right, a 24-bit input group is formed by concatenating 3 8-bit input groups and these 24 bits are then treated as 4 concatenated 6-bit groups, each of which is translated into a single digit in the base 64 alphabet. Each 6-bit group is used as an index into an array of 64 printable characters. The character referenced by the index is placed in the output string.
<b>BOV</b>	Business Operational View (BOV) is the first section of every PIP specification, which describes the business-related aspects of the PIP. This is information captured from business analysts during development of the PIP. The BOV is the PIP Blueprint as approved by the RosettaNet members.
<b>business action</b>	A message with content of a business nature such as a Purchase Order Request or a Request For Quote. The exchange of business actions and business signals comprise the message choreography necessary to complete a business activity specified by a PIP.
<b>business activity</b>	A PIP encapsulates one or more discrete business activities as specified by the business analysts during development of the PIP blueprint. The exchange of business actions and business signals comprise the message choreography necessary to complete a business activity specified by a particular PIP.  <b>Example</b> For example, PIP 3A4 (Manage Purchase Order) specifies three (3) separate business activities: Create Purchase Order, Change Purchase Order, and Cancel Purchase Order.

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<b>business message</b>	See <i>RosettaNet business message</i> on page 1 - 5.
<b>business signal</b>	A message exchanged between two RosettaNet network applications to communicate certain events within the execution of a PIP instance. Examples of signals include “receipt and successful validation of a message” (Receipt Acknowledgement) and “receipt of a message out of sequence” (General Exception). A signal is used to communicate an exception condition within the normal message choreography of a PIP. See also <i>process control PIP</i> on page 1 - 4.
<b>compliance</b>	A RosettaNet implementation is compliant if and only if it fully meets each and every requirement of the RNIF specification. In particular, each and every transaction, action, or data element transmitted by the implementation must be valid as defined in <i>validation</i> on page 1 - 6. Compliance testing is the act of comparing the operation of an implementation against the specified requirements to determine compliance or noncompliance.
<b>conformance</b>	The ability to unambiguously demonstrate that a particular implementation is correct with respect to its formal model.
<b>cryptographic keys</b>	Cryptographic keys are central to cryptographic operations and so they must be kept secret because whoever possesses a given key has access to any data with which the key is associated. For example, if a key is used to encrypt a file, anyone with a copy of that key can decrypt the file. Furthermore, anyone possessing a key used to sign messages can forge that message’s signature.
<b>data element</b>	A basic unit of identifiable and definable data (ISO 10324,1997), a basic unit of data for the purpose of recording and interchange (ISO 2146,1988).
<b>digital certificates</b>	The digital certificate is a common credential that provides a method of verifying identity. A certificate is a set of data that identifies an entity. A trusted organization assigns a certificate to an individual or entity that associates a public key with the individual. The individual or entity to which a certificate is issued is termed the subject of that certificate. The trusted organization that issues the certificate is a Certification Authority (CA) and is known as the certificate’s issuer. A trustworthy CA will only issue a certificate after verifying the identity of the certificate subject. Certificates use cryptographic techniques to limit the possibility of an unethical person intercepting, altering, or counterfeiting messages. These cryptographic techniques make certificates difficult to modify and thus, it is difficult for an entity to impersonate someone else. The data in a certificate includes the public cryptographic key from the certificate subject’s public/private key pair. The message recipient using the sender’s public key can only retrieve a message signed with its sender’s private key, which can be found on a copy of the sender’s certificate. Retrieving a signature with a public key from a certificate proves that the signature was produced using the certificate subject’s private key. If the sender is vigilant and keeps the private key secret, the receiver can be confident in the identity of the message sender.

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<b>DTD</b>	The Document Type Definition (DTE) is a type of schema used to specify the structure and semantics of an XML document or message.
<b>E-business</b>	An enterprise that conducts many of its business functions through electronic methods.
<b>framework</b>	A set of related architectural components.
<b>FSV</b>	Functional Service View (FOV) is the second section of every PIP specification. The FSV describes the PIP exchange protocol sometimes termed the message choreography or dialogue between trading partners during the execution of the PIP. The FSV is derived systematically from the BOV.
<b>guideline</b>	A set or collection of specifications, sometimes including specific implementation advice.
<b>header</b>	Control information prepended to content.
<b>IFV</b>	Implementation Framework View (IFV) provides the transfer protocol specific requirements for any given PIP, based upon the requirements in the BOV and FSV sections of the PIP, as well as the format of the service content. The mapping of the transfer protocol specific requirements is provided in an appendix in the RNIF: Core Specification 02.00, and the format of the service content is packaged with the PIP specification.
<b>implementation framework</b>	Guidelines for creating instances of related architectural components.
<b>manifest</b>	A component of the Service Header that provides information (in the form of a structured listing) about the payload. It describes certain characteristics of the Service Content and also lists the number of attachments included in the payload.
<b>message</b>	A properly packaged business action or business signal. See also <i>business action</i> on page 1 - 1, <i>business signal</i> on page 1 - 2, and <i>RosettaNet business message</i> on page 1 - 5.
<b>message choreography</b>	The exchange of business actions and business signals required to complete a business activity specified by a particular PIP.

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<b>message guideline</b>	A message guideline is part of a published RosettaNet specification which provides information that supports, but cannot be specified in, a particular declarative schema. Both the message guideline and the declarative schema (presently an XML DTD) are used to validate that a particular message or service content is properly formatted and uses expected values.
<b>non-repudiation</b>	The ability of a message transfer system to provide unforgeable evidence that a specific action occurred. The three types of the non-repudiation services which are most common are: non-repudiation of origin, non-repudiation of submission, and non-repudiation of delivery. Non-repudiation of origin protects against any attempt by a message originator to deny sending a message. Non-repudiation of submission protects against any attempt by a message transfer agent to deny that a message was submitted for delivery. Non-repudiation of delivery protects against any attempt by a message recipient to deny receiving a message.
<b>one-action activity</b>	A business activity comprised of the following message choreography is a one-action activity: Partner A sends a business action to Partner B and Partner B sends a Receipt Acknowledgement signal back to Partner A. When these messages have been exchanged successfully between these trading partners, the activity is deemed complete. PIP 2A1 (Distribute New Product Information) is an example of a PIP that specifies one-action activities.
<b>partner Interface Process (PIP)</b>	A model that depicts the activities, decisions, and partner Role Interactions that fulfill a business transaction between two partners in a given supply chain. Each partner participating in the partner interface process must fulfill the obligations specified in a PIP instance. If any one party fails to perform a service as specified in the PIP implementation guide, the business transaction is null and void.
<b>payload</b>	The Service Content plus any file attachments comprises the payload component of a RosettaNet Business Message. The payload is packaged together with the headers to form a complete RosettaNet Business Message.
<b>PIP</b>	See <i>partner Interface Process (PIP)</i> on page 1 - 4.
<b>preamble header</b>	An XML document that identifies the name and version of the standard with which the business message is compliant. This is packaged together with other headers and the payload to form a complete RosettaNet Business Message.
<b>process control PIP</b>	A type of PIP used to communicate process states outside the context of the process instance with which it is associated. For example, PIP 0A1 (Notification of Failure or NoF) is a process control PIP that is used to communicate an exception condition that occurs outside the normal message choreography of the subject PIP. See also <i>business signal</i> on page 1 - 2.

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<b>protocol</b>	A protocol is a formal set of rules and conventions that governs how computers exchange information over a network medium.
<b>receipt acknowledge-ment</b>	A positive business signal that acknowledges receipt of a message. The Receipt Acknowledgment is sent from the receiver of a valid business action message back to the sender. Validity of the message is determined by RNIF base-level validation or by additional validation requirements negotiated between trading partners.
<b>RosettaNet business message</b>	The logical grouping of the preamble header, delivery header, service header, and payload (only for business action messages).
<b>schema</b>	A specification for the structure and semantics of some related data. The schema is used to validate or otherwise understand a group of data. One type of schema is the XML-DTD.
<b>service</b>	A networked application that is capable of participating in a RosettaNet conversation.
<b>service message</b>	Messages exchanged between services.
<b>service content</b>	The primary component of the payload of a RosettaNet Business Message, which is an XML document that represents the business content specified by a particular PIP. The Service Content plus any file attachments comprises the payload component of the RosettaNet Business Message.
<b>service header</b>	An XML document that identifies the PIP, the business activity, and action with which the business message is associated: the sending and receiving services, partners, roles, etc. It is packaged together with other headers and the payload to form a complete RosettaNet Business Message.
<b>single action activity</b>	See <i>one-action activity</i> on page 1 - 4.
<b>solution partner</b>	An organization or company that produces an RNIF 2.0-compliant products.
<b>specification</b>	A detailed document that provides a definitive description of a system for the purpose of developing or validating the system.
<b>standard</b>	A set of clearly defined and agreed-upon conventions for specific programming interfaces which have been approved by a formally constituted standards-setting body.

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<b>structure</b>	Something composed of organized or interrelated elements or the manner in which the elements of something are organized or interrelated.
<b>synchronous</b>	A mode of coordination of communication among distributed processes that requires request-reply pairs to occur within the bounds of some time interval in which the communication session is “live.”
<b>syntax</b>	The patterns of formation of sentences and phrases from words and the rules for the formation of grammatical sentences in a language.
<b>TPA</b>	See Trading Partner Agreement.
<b>trading partner</b>	An organization or company that transacts business using RosettaNet specifications.
<b>Trading Partner Agreement (TPA)</b>	Information exchanged between trading partners that describes certain mutually agreed upon execution parameters and service level expectations that will be used when conducting business.
<b>two-action activity</b>	A business activity comprised of the following message choreography: Partner A sends a business action to Partner B, Partner B sends a Receipt Acknowledgement signal back to Partner A, then later Partner B sends a response business action to Partner A, and Partner A sends a Receipt Acknowledgement back to Partner B. When these messages have been exchanged successfully between these trading partners, the activity is deemed complete. PIP 3A4 (Manage Purchase Order) is an example of a PIP that specifies a two-action activity.
<b>valid XML document</b>	An XML document is valid if it has an associated document type declaration (DTD) and if the document complies with the constraints expressed therein.
<b>validation</b>	A data element, action, transaction, or process is valid if (and only if) it meets each and every requirement of the RNIF specification, as well as every requirement of the relevant PIP specification. Validation is the act of comparing such an entity against the specified requirements to determine validity or invalidity.  <b>Note</b> Each action within a transaction must meet the content and sequence requirements for that transaction. Similarly, each transaction within a process must meet the content and sequence requirements of that process. Such validation is an essential part of testing an implementation. It is also anticipated that the validation team will develop specific requirements for such validation during production use of an implementation.

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**vocabulary** The collection of words known to a particular person or group and used for a particular purpose.

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**well-formed XML document** An XML document that, in its entirety, matches the XML production labeled “document,” meets all the well-formedness constraints specified in the XML specification, and each of the parsed entities which is referenced directly or indirectly within the document is well-formed.

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**XML document** A data object made up of virtual storage units called entities that contain either parsed or unparsed data. Parsed data is comprised of characters, some of which form the character data in the document, and some of which form markup. Markup encodes a description of the document storage layout and logical structure.

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