

SeeBeyond ICAN Suite

e*Xchange Partner Manager User's Guide

Release 5.0.5 for Schema Run-time Environment (SRE)



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Introduction

This user's guide provides instructions and background information for all users of the e*Xchange Partner Manager application. It covers setting up and maintaining information, and performing various other activities, in the following GUI applications:

- e*Xchange Web Interface
- e*Xchange Repository Manager

For information on implementation of e*Xchange projects, and setting up e*Gate components to create a running e*Xchange schema, refer to the *e*Xchange Partner Manager Implementation Guide*.

1.1 Intended Audience

This book assumes the reader is familiar with the Microsoft Windows operating system and standard graphical user interface (GUI) concepts. It also assumes familiarity with the eBusiness protocols used by your company and your trading partners.

Some parts of the book are for all users, and some parts are intended only for the administrator or other person who will be performing certain setup procedures. A user with restricted security rights cannot access certain parts of the user interface. However, this book covers setup and use of all the user interfaces associated with e*Xchange, and provides procedures for all users.

1.2 Compatible Systems

Windows Systems—The SeeBeyond eBusiness Integration Suite is fully compliant with Windows XP and Windows 2000 platforms. When this document references Windows, such statements apply to both Windows platforms.

UNIX Systems—This guide uses the backslash (“\”) as the separator within path names. If you are working on a UNIX system, please make the appropriate substitutions.

Note: For a full list of supported operating systems, refer to the *e*Xchange Partner Manager Installation Guide*.

1.3 Organization of Information

The e*Xchange™ Partner Manager User's Guide includes the following information:

Chapter	Contents
List of Tables	A complete list of all the tables in the <i>e*Xchange Partner Manager User's Guide</i> .
List of Figures	A complete list of all the figures (illustrations and diagrams) in the <i>e*Xchange Partner Manager User's Guide</i> .
Chapter 1, Introduction	Introduction to the various applications included in the SeeBeyond eBusiness Integration Suite and the components of each.
Chapter 2, Overview and Administration	Instructions for logging in to the e*Xchange Partner Manager Web interface and for using the System Administration and User Administration functions.
Chapter 3, Security	Instructions on setting security for trading partner profiles in the e*Xchange Partner Manager Web Interface.
Chapter 4, Profile Management	Instructions for setting up and working with trading partner profiles (other than the protocol-specific Message Profile level).
Chapter 5, Profile Setup for X12	Instructions on setting up X12 message profiles.
Chapter 6, Profile Setup for NCPDP-HIPAA	Instructions on setting up NCPDP message profiles.
Chapter 7, Profile Setup for UN/EDIFACT	Instructions on setting up UN/EDIFACT message profiles.
Chapter 8, Profile Setup for RosettaNet	Instructions on setting up RosettaNet message profiles.
Chapter 9, Profile Setup for CIDX	Instructions on setting up CIDX message profiles.
Chapter 10, Message Tracking	Instructions for using the Message Tracking features of the Web interface.
Chapter 11, e*Xchange Repository Manager	Instructions for using the e*Xchange Repository Manager user interface.
Appendix A, Troubleshooting	Provides information on resolving problems that might occur when running the e*Xchange Web interface or e*Xchange Repository Manager graphical user interfaces.
Appendix B, Using the Validation Rules Builder	An overview of the Validation Rules Builder command-line tool, instructions on converting EDI implementation guides and loading them into e*Gate™, and troubleshooting information.

Chapter	Contents
Appendix C, e*Xchange Partner Manager Database Tables	An explanation of the e*Xchange message tracking database tables, with information on each column in each table.
Glossary	Definitions of technical terms specific to the e*Xchange Partner Manager, as well as some industry terms.
Index	An index to the guide.

1.4 Writing Conventions

The writing conventions listed in this section are observed throughout this document.

Hypertext Links

When you are using this guide online, cross-references are also hypertext links and appear in **blue text** as shown below. Click the **blue text** to jump to the section.

For information on these and related topics, see **[“Parameter, Function, and Command Names” on page 19.](#)**

Command Line

Text to be typed at the command line is displayed in Courier as shown below.

```
java -jar ValidationBuilder.jar
```

Variables within a command line are set in the same font and bold italic as shown below.

```
stcregutil -rh host-name -rs schema-name -un user-name  
-up password -ef output-directory
```

Code and Samples

Computer code and samples (including printouts) on a separate line or lines are set in Courier as shown below.

```
Configuration for BOB_Promotion
```

However, when these elements (or portions of them) or variables representing several possible elements appear within ordinary text, they are set in *italics* as shown below.

path and *file-name* are the path and file name specified as arguments to **-fr** in the **stcregutil** command line.

Notes and Cautions

Points of particular interest or significance to the reader are introduced with *Note*, *Caution*, or *Important*, and the text is displayed in *italics*, for example:

Note: *The Actions menu is only available when a Properties window is displayed.*

User Input

The names of items in the user interface such as icons or buttons that you click or select appear in **bold** as shown below.

Click **Apply** to save, or **OK** to save and close.

File Names and Paths

When names of files are given in the text, they appear in **bold** as shown below.

Use a text editor to open the **ValidationBuilder.properties** file.

When file paths and drive designations are used, with or without the file name, they appear in **bold** as shown below.

In the **Open** field, type **D:\setup\setup.exe** where **D:** is your CD-ROM drive.

Parameter, Function, and Command Names

When names of parameters, functions, and commands are given in the body of the text, they appear in **bold** as follows:

The default parameter **localhost** is normally only used for testing.

The Monk function **iq-put** places an Event into an IQ.

You can use the **stccb** utility to start the Control Broker.

1.5 Online Documents

The documentation for the SeeBeyond eBusiness Integration Suite is distributed as a collection of online documents. These documents are viewable with the Acrobat Reader application from Adobe Systems. Acrobat Reader can be downloaded from:

<http://www.adobe.com>

***Note:** When downloading Acrobat Reader, make sure to download the version that includes the option for searching **.pdf** files. This option is required in order to view the searchable master index.*

Searching the Online Documents

The collection of online documents includes a searchable master index. This index is a convenient way to find a topic when you are not sure which document to consult. The index requires activation of the SeeBeyond master index.

To activate the SeeBeyond master index

- 1 If you have not already done so, download and install Acrobat Reader; take care to install the version that includes the option for searching **.pdf** files.
- 2 Start Acrobat Reader.
- 3 On the **Edit** menu, point to **Search**, and then click **Select Indexes**.
- 4 In the **Index Selection** dialog box, click **Add**.

- 5 Locate and open the `<eGate>\client\docs\` folder, where `<eGate>` is the location where e*Gate is installed.
- 6 Double-click **SeeBeyond_Index.pdx**.
- 7 Click **OK** to close the **Index Selection** dialog box.

To search the master index

- 1 On the Acrobat Reader **Edit** menu, point to **Search**, and then click **Query**.
- 2 Type the term or phrase you want to find, and then click **Search**.
A list of documents matching the search criteria appears.
- 3 Select a title from the list, and then click **View**.
- 4 Press CTRL+] and CTRL+[to view the next and previous highlighted results.

1.6 Supporting Documents

The following documents support the e*Xchange Partner Manager. You can find these documents in the `\<eGate>\client\docs` folder for your e*Gate installation, or on the `\docs` folder on the installation CD.

- *e*Xchange Partner Manager Release Notes*
- *e*Xchange Partner Manager Installation Guide*
- *e*Xchange Partner Manager Implementation Guide*
- *RosettaNet ETD Library User's Guide*
- *ASC X12 ETD Library User's Guide*
- *UN/EDIFACT ETD Library User's Guide*
- *CIDX ETD Library User's Guide*
- *HIPAA ETD Library User's Guide*
- *HIPAA Implementation Guide*
- *NCPDP-HIPAA ETD Library User's Guide*
- *Secure Messaging Extension User's Guide* (Monk version)

1.7 SeeBeyond eBusiness Integration Suite

This section provides an overview of the SeeBeyond eBusiness Integration Suite and its parts. It also provides a detailed overview of the e*Xchange Partner Manager and eSecurity Manager components.

One of the biggest challenges today in conducting eBusiness is dealing with complex and dynamic partner relationships and coordinating control of the various activities participating in the eBusiness process. Both organizations and their trading partners are faced with the problem of managing disparate component applications and aligning proprietary software requirements. In addition, organizations and their trading partners must agree on data exchange and security standards.

The SeeBeyond eBusiness Integration Suite merges traditional Enterprise Application Integration (EAI) and Business-to-Business (B2B) interactions into a multi-enterprise eBusiness Integration (eBI) product suite. This suite allows you to:

- leverage your existing technology and applications
- create an eApplication consisting of component applications that are managed by your organization or your trading partners
- rapidly execute eBusiness strategies
- create and manage virtual organizations across the entire value chain
- rapidly implement industry standard business protocols
- quickly and easily establish new, or update existing, business partners
- automatically secure transmissions sent over the public domain

This suite also provides:

- extensive and flexible back-office connectivity
- powerful data transformation and mapping facilities
- content-based routing
- unparalleled scalability based on a fully distributed architecture

1.7.1. SeeBeyond eBusiness Integration Suite Components

The SeeBeyond eBusiness Integration Suite includes the following components and sub-components:

- eBusiness Integration Solutions:
 - ◆ e*Insight™ Business Process Manager
 - ◆ e*Xchange Partner Manager
 - ◆ eSecurity Manager
 - ◆ e*Index Global Identifier
- e*Gate™ Integrator:
 - ◆ e*Way™ Intelligent Adapters
 - ◆ IQ™ Intelligent Queues
 - ◆ Business Object Brokers (BOBs)

Figure 1 SeeBeyond eBusiness Integration Suite



eBusiness Integration Solutions

The eBusiness Integration Solutions suite includes features and functions to facilitate effective business process management, provide eBusiness protocol support, allow effective partner management, and ensure secure eBusiness communications.

e*Insight Business Process Manager

The e*Insight Business Process Manager facilitates the automation and administration of business process flow across eBusiness activities. Through graphical modeling and monitoring, business analysts can instantly assess the detailed state of a business process instance and identify bottlenecks in the process.

e*Xchange Partner Manager

The e*Xchange Partner Manager manages trading partner profiles and supports standard eBusiness message format and enveloping protocols, including X12, UN/EDIFACT, RosettaNet, and CIDX. The e*Xchange Partner Manager includes a Validation Rules Builder to aid in the creation of X12 and UN/EDIFACT message validation based on industry implementation guides.

eSecurity Manager

The eSecurity Manager authenticates and ensures full integrity of message data sent to and from trading partners, which is imperative when conducting eBusiness over the

public domain. The eSecurity Manager uses public key infrastructure (PKI) to ensure origin authentication of the sender.

e*Index Global Identifier

e*Index Global Identifier (e*Index) is a global cross-indexing application that provides a complete solution for automated person-matching across disparate source systems, simplifying the process of sharing member data between systems.

e*Index centralizes information about the people who participate throughout your business enterprise. The application provides accurate identification and cross-referencing of member information in order to maintain the most current information about each member. e*Index creates a single, consistent view of all member data by providing an automatic, common identification process regardless of the location or system from which the data originates.

e*Gate Integrator Components

The e*Gate Integrator enables the flow of information across an extended enterprise by providing comprehensive connectivity to applications and datastores across a network. e*Gate is based on a distributed architecture with an open design that deploys flexible load balancing options. e*Gate processes events according to user-defined business logic and integrates business processes between applications, ensuring end-to-end data flow into back-office systems.

e*Way Intelligent Adapters

e*Way Intelligent Adapters provide specialized application connectivity and also provide support for robust data processing such as business collaborations, transformation logic, and publish/subscribe relationships. e*Way adapters are multi-threaded to enable high-performance distributed processing capabilities. This multi-threaded processing allows for ultimate deployment flexibility and load balancing.

IQ Intelligent Queues

IQ Intelligent Queues are open queue services for SeeBeyond or third-party queuing technology, that provide robust data transport with guaranteed once-only message delivery.

Business Object Brokers

Business Object Brokers (BOBs) enable routing and load balancing between queues for implementing multi-step business processes.

1.8 Introducing e*Xchange Partner Manager

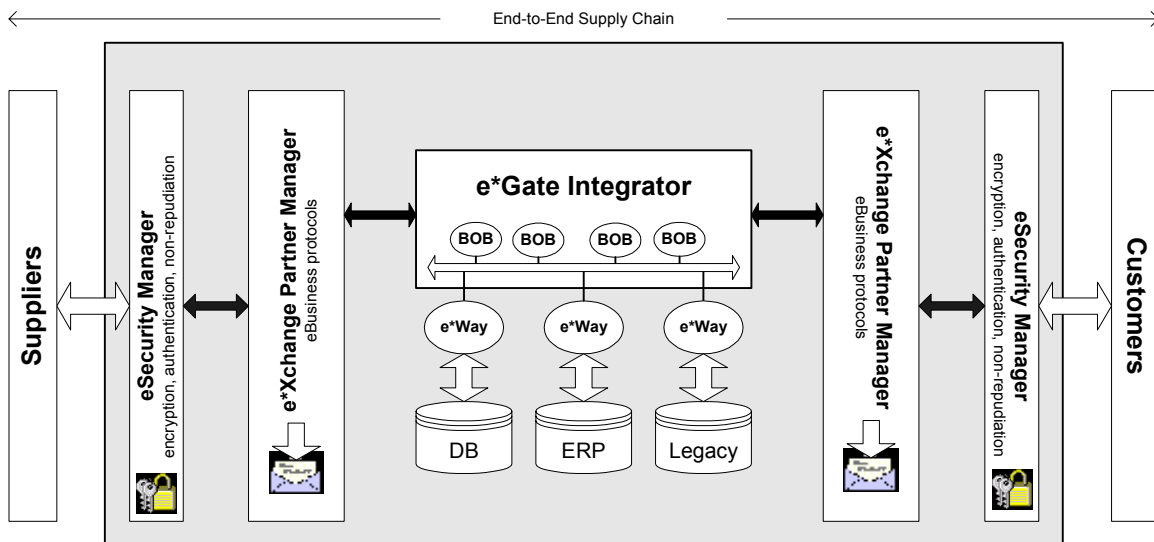
The e*Xchange Partner Manager (e*Xchange) manages trading partner profiles and supports standard eBusiness protocols such as RosettaNet, UN/EDIFACT, ASC X12, NCPDP-HIPAA, and CIDX. e*Xchange also includes a command-line utility, the Validation Rules Builder, which converts EDI implementation guide files into files that are compatible for use with e*Xchange—X12 and UN/EDIFACT Validation Collaboration Rules (.tsc) files and Event Type Definition (.ssc) files.

Specifically, e*Xchange Partner Manager provides the following functionality:

- Receives, processes, and routes inbound and outbound messages in batch, fast batch, and interactive transmission modes.
- Validates messages based on libraries of Event Type Definitions (ETDs; templates of data to be exchanged, including fields, field sequences, and delimiters) and Collaboration scripts that conform to eBusiness protocols such as X12, UN/EDIFACT, RosettaNet, and CIDX.
- Stores trading partner information, messages, acknowledgments, and errors in a database.
- Automatically generates and reconciles acknowledgments.
- Handles and reports errors.
- Allows users to define trading partner profiles.
- Allows users to view messages.
- Allows users to resend messages from the Message Tracking feature.
- Allows tracking of access to messages (audit tracking)
- Automatically supports message enveloping as specified by the supported standards.

See Figure 2 for a graphical representation of e*Xchange Partner Manager.

Figure 2 e*Xchange Partner Manager



1.9 Introducing eSecurity Manager

The eSecurity Manager (eSM) is an optional component that provides security features, allowing the secure transmission of business-to-business (B2B) exchanges over public domains such as the Internet. It provides the ability to use Public Key Infrastructure (PKI) technology to digitally sign and encrypt messages as they are sent to trading partners, and conversely to decrypt and authenticate messages when they are received from trading partners.

The eSM, in tandem with secure e*Ways (for example, the HTTPS e*Way), secures the data channel used to exchange sensitive information with trading partners.

The eSM can be separated into two parts: a front end and a back end. The front end is integrated with the e*Xchange Partner Manager (e*Xchange), and provides the ability to keep track of all the security configuration parameters. At the B2B protocol level, you can import the keys and certificates needed to encrypt and decrypt messages exchanged with trading partners.

The e*Xchange e*Gate schema manipulates the messages. It is composed of a specially designed Monk extension that performs the encryption, decryption, signing, and authentication of messages using the S/MIME standard.

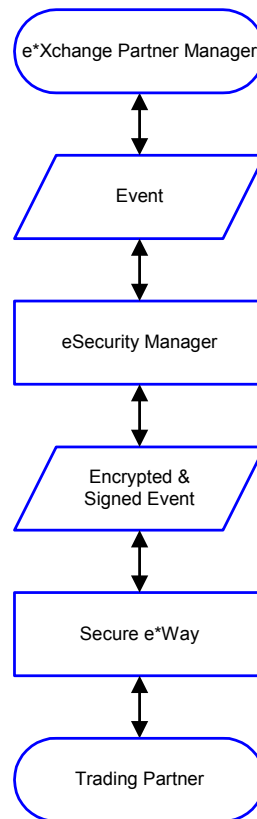
1.9.1. Where the eSM fits into e*Xchange

The eSecurity Manager acts as an interface for dealing with secure messages sent between the e*Xchange Partner Manager and the trading partners. Specifically, eSM performs two functions:

- Processes outbound messages as the last step before the messages are forwarded to a secure e*Way for transmission to a trading partner's system.
- Processes inbound messages as the first step after the messages are received by a secure e*Way.

Figure 3 shows the flow of information between e*Xchange Partner Manager and a trading partner when eSecurity Manager is in use.

Figure 3 eSecurity Manager



1.9.2. Features

The eSecurity Manager provides a comprehensive solution to security requirements for B2B exchanges and partnerships. It provides the following services:

- Encryption

Messages can be encrypted using public key infrastructure (PKI) to ensure the confidentiality of the exchange.

- Exchange content integrity

Data integrity is ensured through the use of standard one-way hash algorithms. This mechanism ensures that no modifications (additions, changes, or deletions) are made to the message while it is in transit between partners.

- Origin authentication

The identity of the sender of a message is verified through the use of digital signatures using PKI. This ensures that the message was actually sent by the entity who claims to have sent it.

- Non-repudiation of transmission and receipt

The eSecurity Manager provides the appropriate facilities for tracking all exchanges (messages) according to the defined parameters of the supported business protocol

(for example, X12, UN/EDIFACT, RosettaNet, and CIDX) for the purpose of ensuring indisputable confirmation of both transmission and receipt.

- Key management

Because all the above security functions are supported through the use of PKI, the e*Xchange Partner Manager also provides appropriate facilities for storing your own private key and the public keys for each trading partner.

1.9.3. Sending and Receiving a Digitally Signed Message

The following steps describe how to send and receive a digitally signed message.

- 1 The message is put through a “hash” function; that is, a function that creates a short, unique mathematical representation of the original message called the message digest (for example, MD5 or SHA).
- 2 The message digest is encrypted using the sender’s private key to create a digital signature.
- 3 The original message and the digital signature are sent together as a signed message to the recipient.
- 4 The recipient takes the message portion of the signed message and puts it through the same hash function used by the sender to create a message digest.
- 5 The recipient takes the digital signature portion of the signed message and decrypts it using the sender’s public key to create another copy of the message digest.
- 6 The recipient compares the message digests from steps 4 and 5. If they are equal, the message has arrived unaltered and was sent by the trading partner who holds the private key corresponding to the public key we have for the trading partner. In this way the authenticity of both the sender and the message can be verified.

1.9.4. eSM Outbound Event Processing Overview

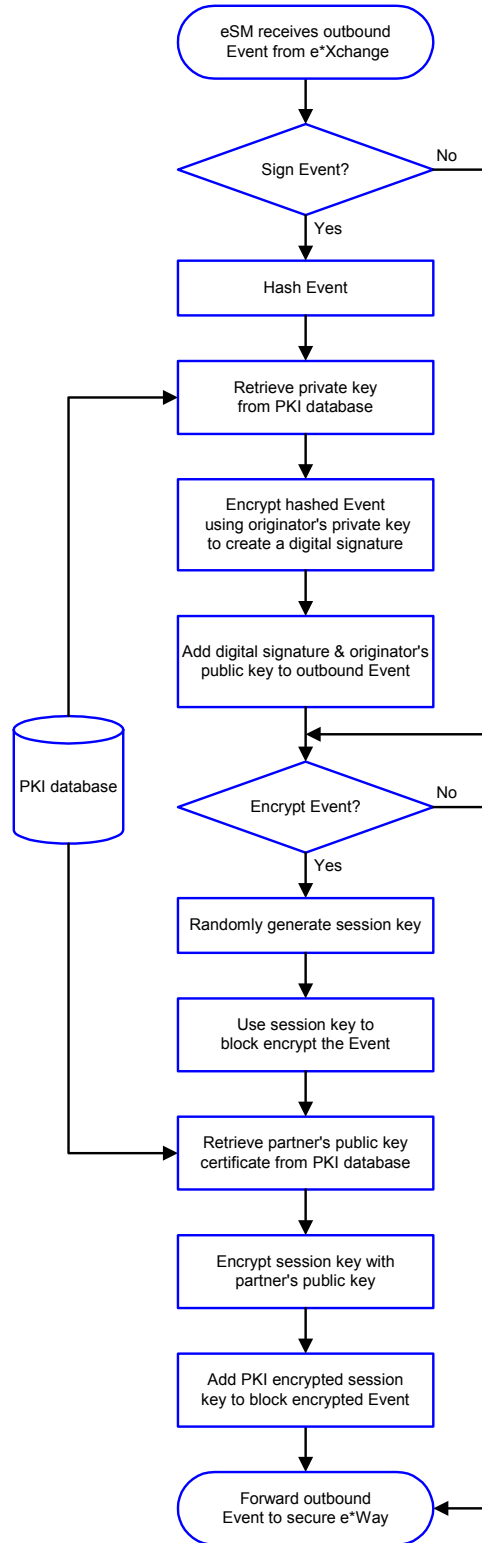
Figure 4 shows the processing of an outbound Event (message) as it passes through the eSM module.

If a digital signature is required, the eSM makes a logical hash of the Event and then encrypts it using your private key. The encrypted hash is the digital signature. Upon receipt of the message, the trading partner deciphers the hash using your public key. Since the hash correlates to the actual message content, any alterations to the message after it is signed would also invalidate the signature.

If encryption is required, the eSM randomly generates a session key. The session key is used to encrypt the Event. The session key itself is then encrypted using the trading partner’s public key, and the encrypted key is added to the Event.

Once all necessary steps have been completed, the Event is forwarded to the secure e*Way.

Figure 4 eSM Outbound Event Processing



1.9.5. eSM Inbound Event Processing Overview

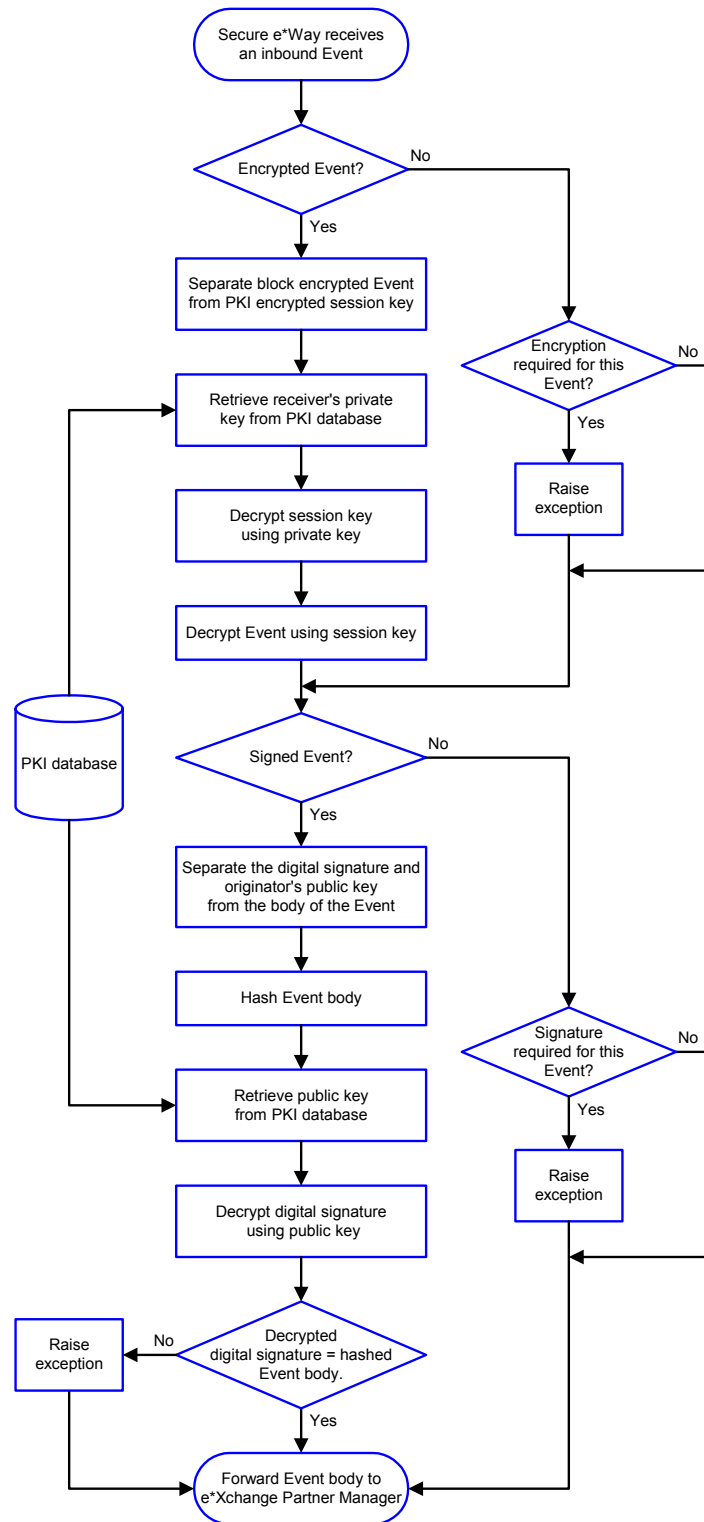
Figure 5 shows the processing of an inbound Event as it passes through the eSM module.

If the Event is encrypted, the eSM locates the encrypted session key within the Event and decrypts it using your private key. It then uses the decrypted session key to decrypt the body of the Event.

If the Event has a digital signature attached to it, the eSM decrypts the digital signature using the sender's public key. It also hashes the Event body with the hash algorithm, which is part of the digital signature. It then compares the decrypted digital signature with the hashed Event body. If they match, the signature has been verified.

Once all necessary steps have been completed, the Event is forwarded to the secure e*Way.

Figure 5 eSM Inbound Event Processing



1.9.6. For More Information on eSecurity Manager

For more information on the security features of e*Xchange, refer to the white paper *eSecurity: Providing Internet Security for eBusiness* at the following URL:

<http://www.seebeyond.com/products/whitepapersProducts.asp>

For more detailed information on the implementation of PKI technology in the e*Gate/e*Xchange environment, refer to the *Secure Messaging Extension User's Guide* (Monk version).

Overview and Administration

e*Xchange Partner Manager user interface is browser-based so that you can set up and maintain trading partner profiles over the Web.

From the Web interface you can complete the activities listed below.

- Profile Management; you can add, edit, or delete any of the four layers that comprise a trading partner profile:
 - ♦ Company layer
 - ♦ Trading partner layer
 - ♦ B2B protocol layer (inbound or outbound)
 - ♦ Message profile layer

In addition, for each of these layers, you can:

- ♦ Set or change security
- ♦ Add, edit, or delete contacts
- Message Tracking; you can:
 - ♦ View any messages that have been processed by e*Xchange
 - ♦ Use the various search fields to narrow down your search before viewing message details
 - ♦ For any message, view an error list, extended attributes, or actual text of the original message, enveloped message, or acknowledgment message.
 - ♦ Resend certain messages that have not been sent due to errors.
 - ♦ View a list of users who have viewed specific messages (audit tracking feature).
- System Administration; you can:
 - ♦ Set system defaults
 - ♦ Add or modify values to system code tables
 - ♦ Configure database connections for the Web interface
- User Administration; you can:
 - ♦ Add users
 - ♦ Expire and reinstate user access rights
 - ♦ Create user groups

- ◆ Assign users to user groups

Having a Web-based user interface offers significant advantages. The Web interface is a three-tiered application that allows access from anywhere in the world. It is a “thin client” application and also reduces the complexities of working through firewalls and DMZs (De-Militarized Zones).

Note: In the Web interface, an asterisk (*) on a field indicates that it is a required field.

2.1 Supported Browsers

The e*Xchange Partner Manager Web interface works with the following browser versions:

- Microsoft Internet Explorer 5.0
- Microsoft Internet Explorer 5.5

2.2 User Permissions: An Overview

There is only one user for the e*Xchange Web interface at the database level; the schema/database owner. This user is assigned to all default application administration groups. The schema/database owner can set up additional users via the Web interface. These users are only created at the application level, and have no default database access privileges. When a new user logs in to the application, the application logs into the database as the schema owner and authenticates the new username and password from user information stored in the database tables.

The schema/database owner username and password are stored in the database connection definition file, **epm.std**. The default location for this file is `\eXchange\tomcat-3.2.1\webapps\stcepmweb\web-inf`. It is in XML format. Each database connection is described by a set of XML tags. The `<username>` and `<password>` tags store the encrypted version of the schema/database owner username and password. After initial installation, the value for each of these two tags is set to a default of six asterisks (*****). When the connection is called for the first time from the Web interface, the user is asked to enter the schema owner’s username and password information. e*Xchange encrypts this information and stores it in the **epm.std** file. Once those encrypted values are set up, any application users that have been defined in the database can log in to the Web interface directly. When each user logs on, e*Xchange verifies the username and password against the user information stored in the database tables.

This approach provides tight security for the information stored in the e*Xchange schema/database. It also reduces the database-level privileges required for the schema/database owner. For Oracle, this allows for more than one schema per database instance.

When installing a second schema, make sure that tablespace names and locations are unique for the new schema.

2.3 Logging In to the e*Xchange Partner Manager Web Interface

To run the e*Xchange Partner Manager Web interface, you must specify your login ID, password, and the database instance you want to use.

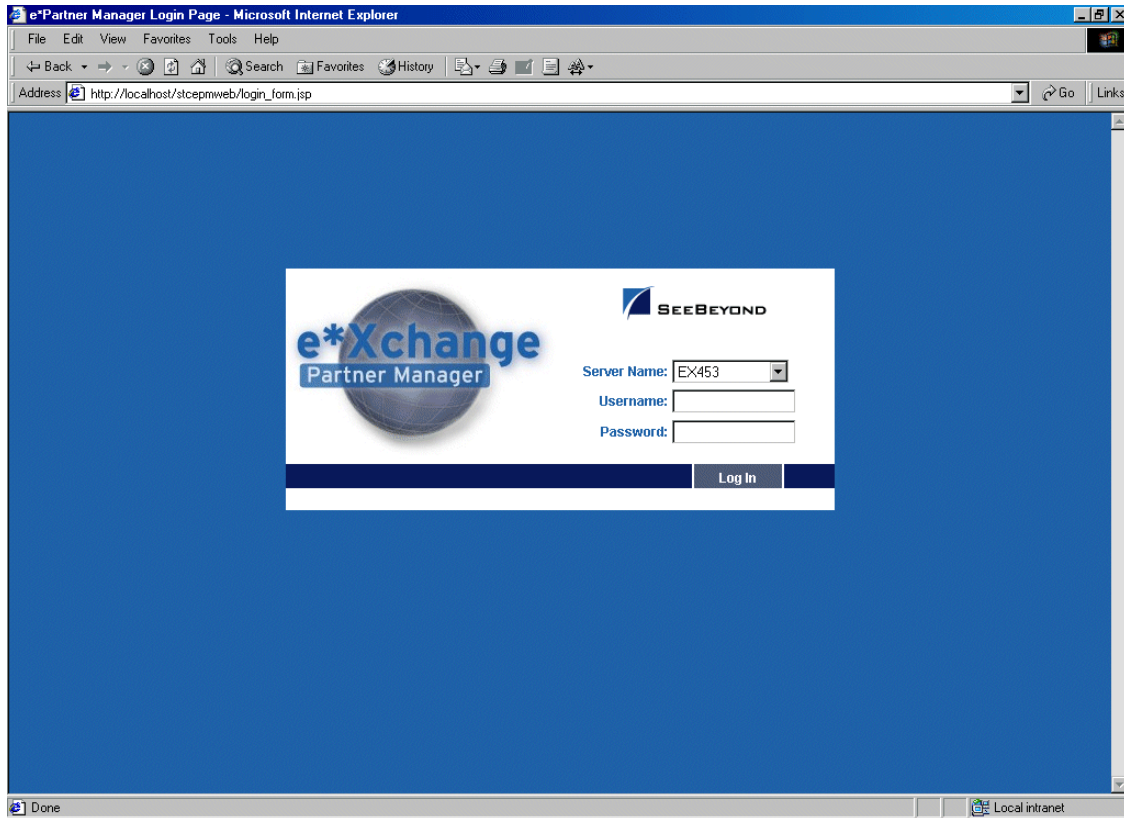
To log in to the e*Xchange Partner Manager Web interface

- 1 Start Tomcat (run the file `\eXchange\tomcat-3.2.1\bin\startup.bat`).

Note: *If you are using DB2 UDB, the e*Xchange e*Gate schema and the Web interface cannot run on the same machine. This is because the Web interface uses JDBC and the e*Xchange e*Gate schema uses ODBC. If you have already installed both on the same machine, refer to the **e*Xchange Installation Guide**, Chapter 12, **Installing the Web Interface and e*Gate schema for e*Xchange**, for a workaround.*

- 2 Start your browser and go to the `http://localhost/stcepmweb/login_form.jsp` page.
- 3 The e*Xchange Partner Manager login page appears (see Figure 6).

Figure 6 e*Xchange Web Interface Login Page



- 4 In the **Server Name** field, select the database from the drop-down list.
- 5 Enter the username and password.

Note: The username is not case sensitive, but the password is.

- 6 Click **Log In**.
- 7 One of two things occurs:
 - ♦ If this is the first connection to the database, the **Database Connection Information** page appears and you must set up the password for the first time; refer to [“To set up the database connection information” on page 36](#).
 - ♦ If you have logged in before, the **Main** page appears (see [Figure 10 on page 39](#)).

Note: If you have problems logging in, refer to [“Troubleshooting” on page 270](#).

2.3.1. Logging In for the First Time

If the e*Xchange Partner Manager Web interface has not previously been used to connect to the e*Xchange database, or if you have reset the password in the **epm.std** file (see [“Editing the epm.std File” on page 64](#)), e*Xchange verifies your access rights, and the database connection, via the **Database Connection Information** page before allowing you access to the e*Xchange Web interface.

This does not apply to each user's first connection, but to the first connection from the Web interface to the e*Exchange database. Once the connection is set up, any user can connect to the Web interface providing he/she has been set up as an authorized user.

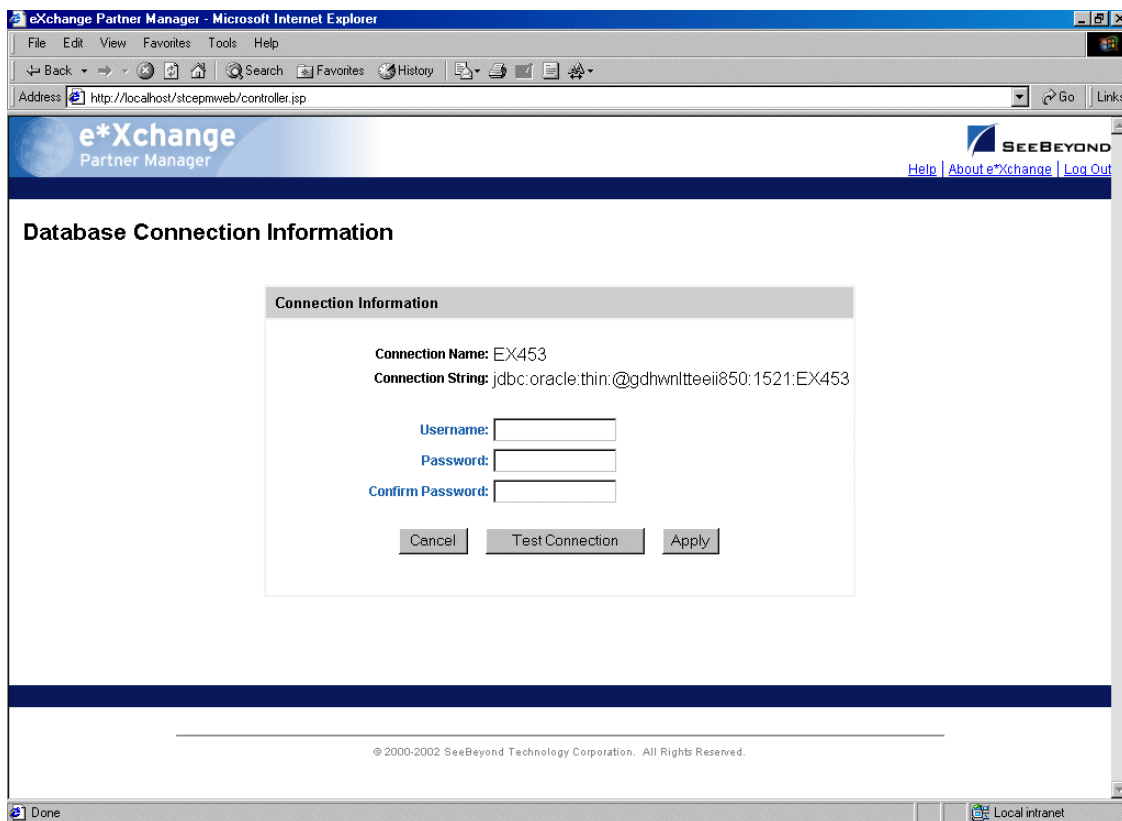
Note: You must be the schema/database owner to set up the database connection.

To set up the database connection information

- 1 Log in (see ["To log in to the e*Exchange Partner Manager Web interface" on page 34](#)).

The **Database Connection Information** page appears (see Figure 7).

Figure 7 Database Connection Information



- 2 Type the schema/database owner username.
- 3 Type the schema/database owner password once, and then again to confirm.
- 4 Click **Test Connection**.

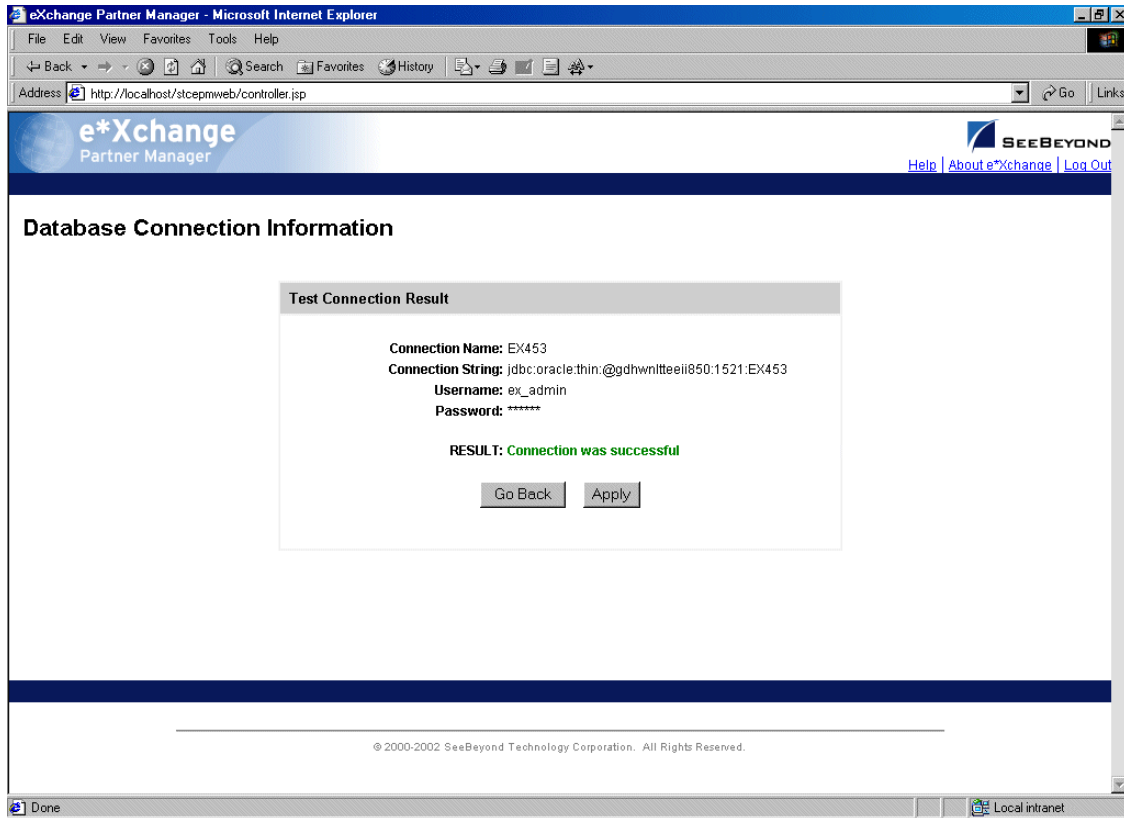
The **Test Connection Result** page appears (see Figure 8).

If you get a failure message, check the following:

- ♦ Is the database currently up and running?

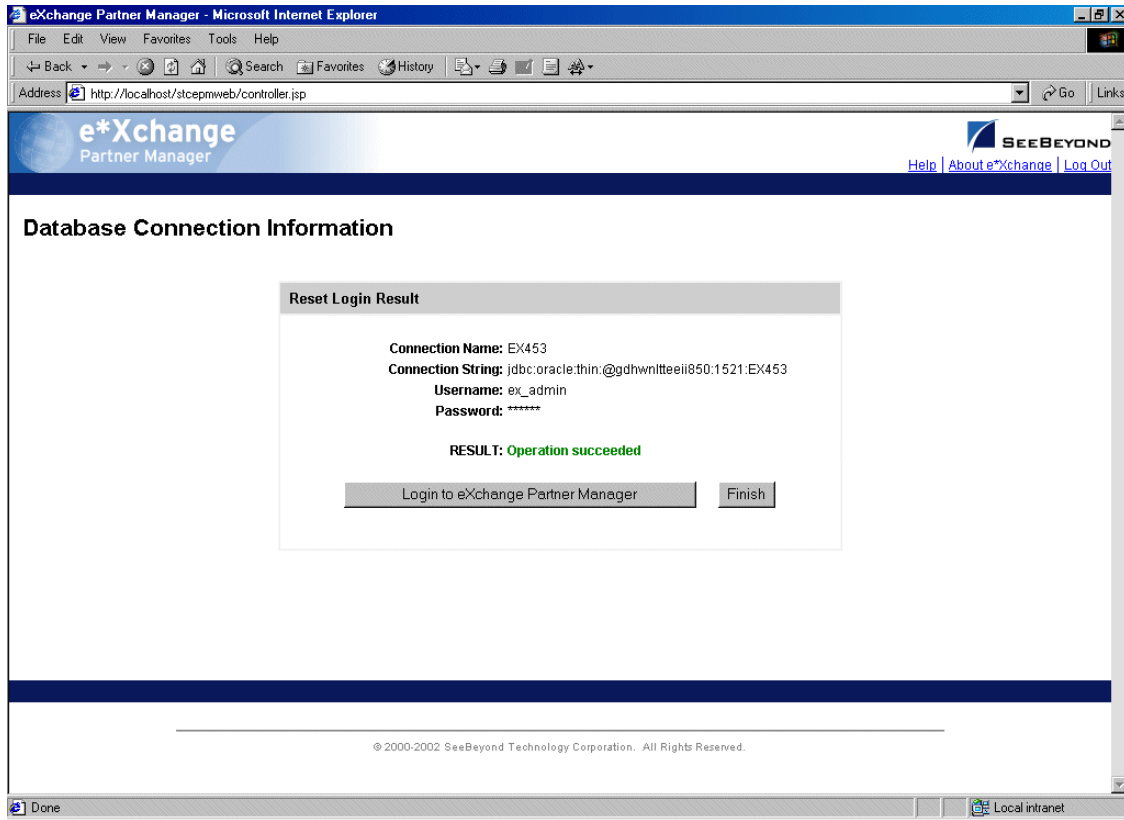
- ◆ Are the username and password correct? To test this, make sure that you can log in to the database directly; for example, for Oracle, try to log in at the SQL Plus prompt.

Figure 8 Database Connection Information: Test Connection Result



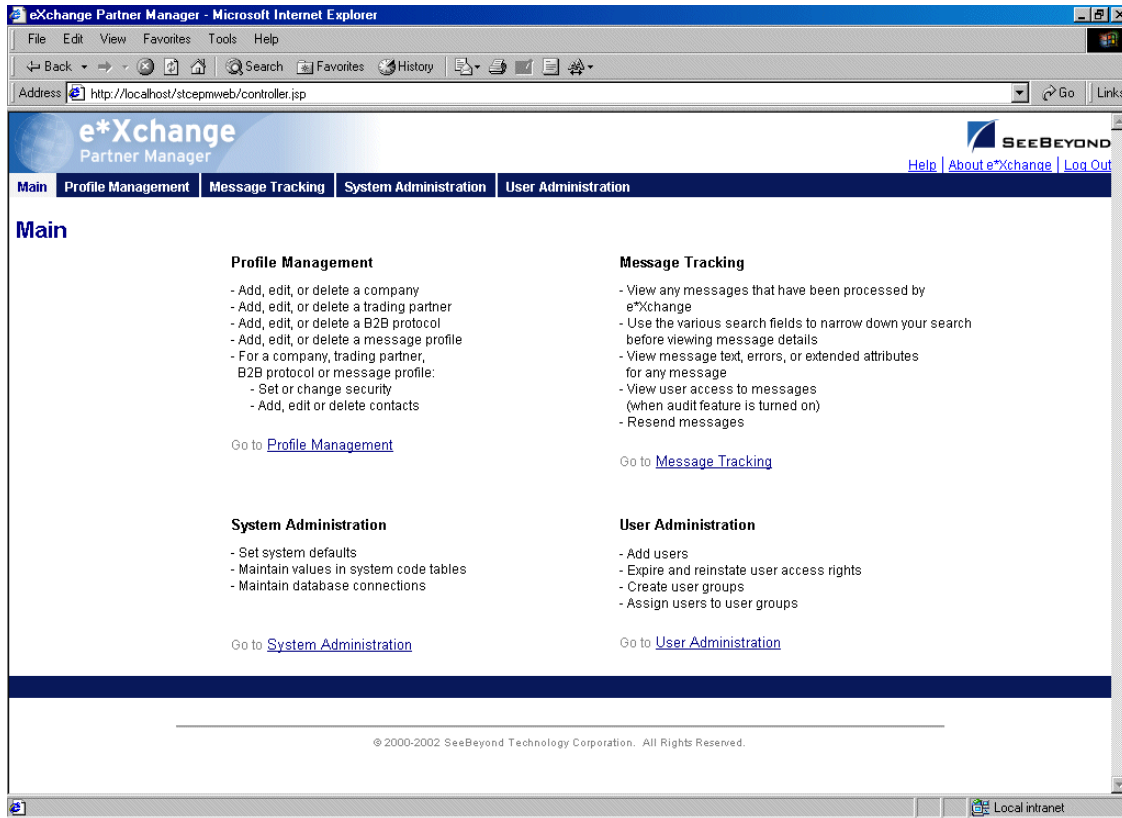
- 5 Click **Apply**.
- 6 The **Database Connection Information: Reset Login Result** page appears (see Figure 9).

Figure 9 Database Connection Information: Reset Login Result



- 7 Click **Login to e*Xchange Partner Manager**.
The **Main** page appears (see Figure 10).

Figure 10 e*Xchange Partner Manager Web Interface Main Page



From this page you can access all the functions provided by the e*Xchange Partner Manager Web Interface. These break down into four main groups:

- Profile Management (see “[Profile Management](#)” on page 73)
- Message Tracking (see “[Using the Message Tracking Feature](#)” on page 238)
- System Administration (see “[System Administration](#)” on page 40)
- User Administration (see “[User Administration](#)” on page 55)

2.3.2. Logging In If the URL Changes

If for any reason the URL for accessing the e*Xchange Partner Manager Web interface changes, you must first update the Web interface login file, **epm.std**, and then log in. For example, if there are changes to the driver you use for connecting to the database, or you move the database to a different machine, the URL will change. Then, when the database owner first logs in using the new URL, the database is automatically updated.

Note: You must be the schema/database owner to update the URL.

To update the URL for the e*Xchange Web interface

- 1 Manually update the **epm.std** file with the new database URL (see “[Editing the epm.std File](#)” on page 64).

```
<url>jdbc:oracle:thin:@dell850:1521:EX453</url>
```

- 2 Save and close the file.
- 3 Log in as the e*Xchange schema/database owner.

The value for the URL is automatically updated in the STC_CONFIG table in the e*Xchange database.

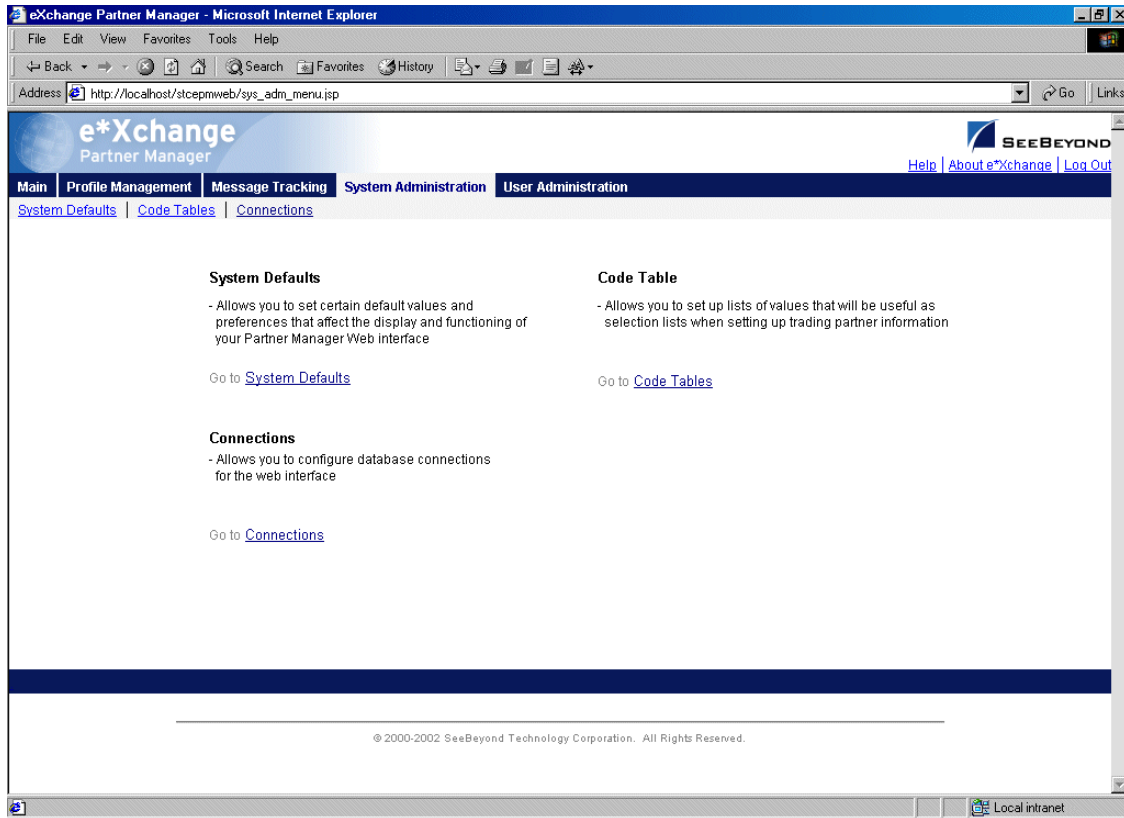
2.4 System Administration

The System Administration page allows you to perform the following administrative tasks, providing you have access rights as a member of the eX Administrator user group:

- Setting various system defaults.
- Specifying the number of trading partner profiles to be cached in memory when e*Xchange is running.
- Setting up code tables so that you can add values to support a communications protocol other than HTTP, HTTPS, SMTP, and FTP (Batch).
- Setting up, changing, and testing database connections.

From the Web Interface **Main** page, click **System Administration** to access the System Administration main page (see Figure 11).

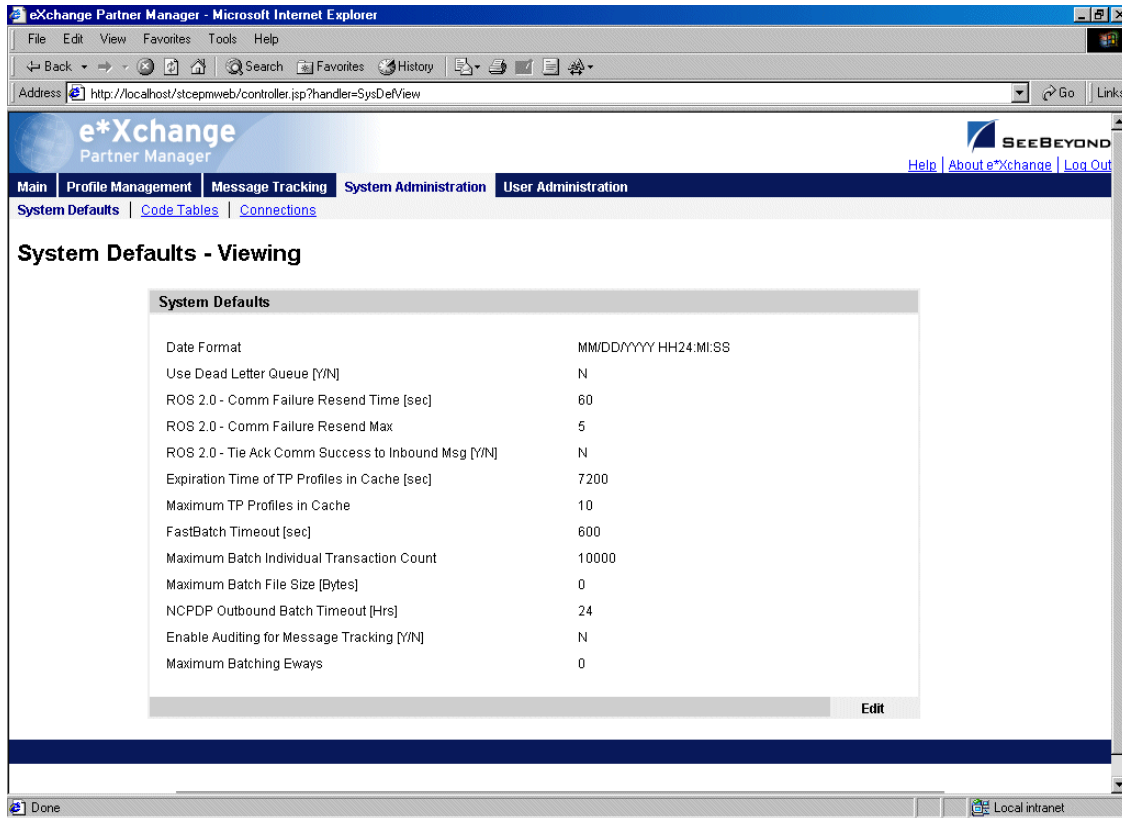
Figure 11 System Administration Main Page



2.4.1. System Defaults

From the System Administration main page, click **System Defaults** to access the **System Defaults - Viewing** page (see Figure 12).

Figure 12 System Defaults - Viewing



To change system defaults

If you need to change any of the default settings, follow the steps below.

- 1 From the **System Defaults - Viewing** page, click **Edit** to access the **System Defaults - Editing** page (see Figure 13).

Note: You can only access this page if you are a member of the eX Administrator user group.

- 2 Change the values as needed.
For more information on specific fields, refer to Table 1.
- 3 Click **OK** to save the changes.

Figure 13 System Defaults - Editing

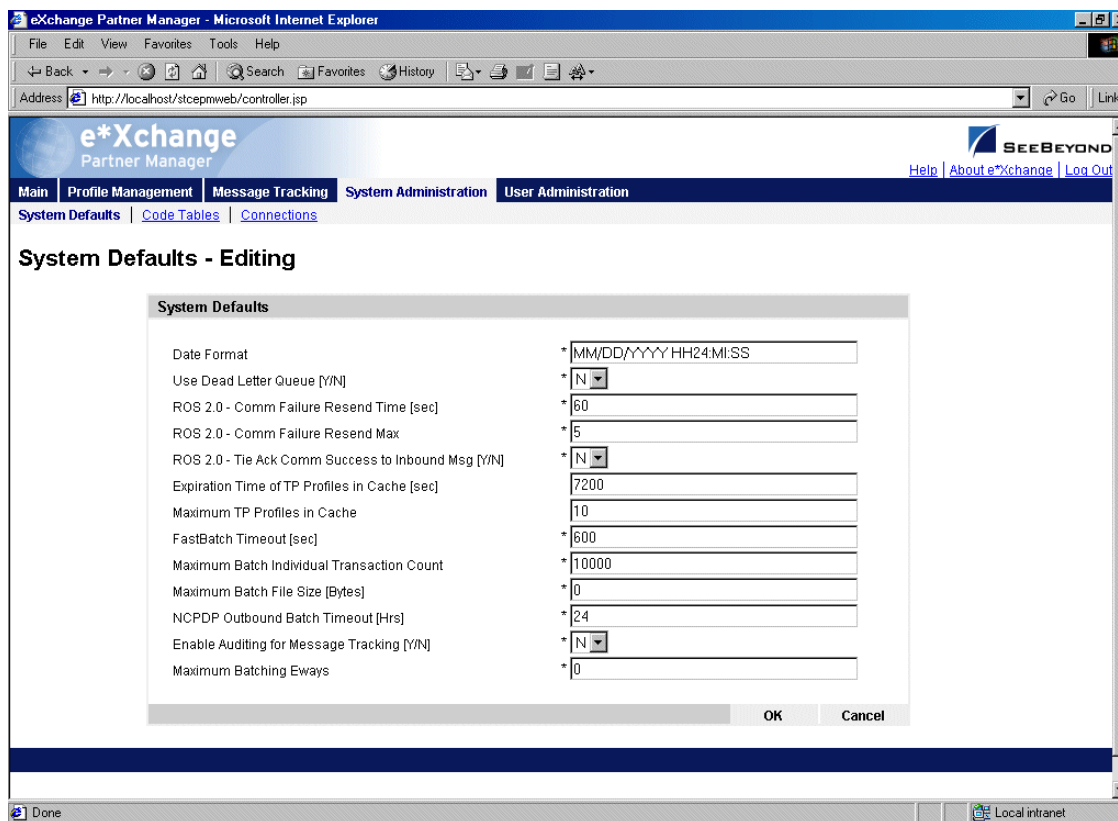


Table 1 System Defaults: Fields

Name	Description
Date Format (Oracle only)	The date format used in the database and used for all dates displayed in the e*Xchange Partner Manager. The default is displayed; you can change it to any other date format supported by Oracle.
Use Dead Letter Queue [Y/N]	Set this field to Y to send messages to the Dead Letter Queue if e*Xchange encounters errors sufficient that it cannot process the message. Some examples (for X12) are given below. <ul style="list-style-type: none"> Invalid interchange information in a message from the trading partner Invalid data in the ST/SE segments in a message from the trading partner Duplicate message, either inbound or outbound Note: If you set this to Y , you must create a BOB or e*Way component in the e*Xchange e*Gate schema to subscribe to the eX_Error Event. If set to N , the Dead Letter Queue is not used.
ROS 2.0 - Comm Failure Resend Time	For messages sent via HTTP or HTTPS, this controls the resend time for messages if the HTTP or HTTPS post was not successful. (For RosettaNet 2.0 only.)
ROS 2.0 - Comm Failure Resend Max	For messages sent via HTTP or HTTPS, this controls the number of times a message is resent if the HTTP or HTTPS post was not successful. (For RosettaNet 2.0 only.)

Table 1 System Defaults: Fields (Continued)

Name	Description
ROS 2.0 - Tie Ack Comm Success to Inbound Message [Y/N]	If you set this to Y , e*Xchange Partner Manager stores incoming messages sent by HTTP or HTTPS, sends the acknowledgment back to the trading partner, and waits to ensure that the HTTP or HTTPS post was successful before sending the message on to the internal system. (For RosettaNet 2.0 only.)
Expiration Time of TP Profiles in Cache [sec]	The amount of time, in seconds, for which a trading profile held in memory cache is used before being refreshed. Default: 7200 seconds (2 hours). <ul style="list-style-type: none"> ▪ If you want TP profiles to be refreshed every time the profile is accessed, not cached in memory at all, set this value to 0. ▪ If you do not want TP profiles to be refreshed at all once cached in memory for the session, set this value to -1.
Maximum TP Profiles in Cache	The maximum number of trading partner profiles to be held in memory. If a greater number of trading partner profiles is accessed during one session, the profile that has been in memory longest is discarded. Caching of trading partner profiles speeds up performance by reducing interaction with the database. Default: 10. If you want all profiles to be stored in cache, with no upper limit, set this value to 0 and ensure that a valid expiration time is set for Expiration Time of TP Profiles in Cache.
FastBatch Timeout [sec]	The maximum amount of time, in seconds, that items for a batch are held before being sent out. As soon as e*Xchange receives all the messages for a batch, the batch is sent out. However, if one or more messages for a specific batch does not reach e*Xchange for any reason (for example, because of errors), the incomplete batch is sent out when the FastBatch Timeout value is reached.
Maximum Batch Individual Transaction Count	For batched transactions only: The maximum number of transactions of one type (for example, X12 version 4010 850) that can be sent in one batch. Note: Maximum Batch Individual Transaction Count and Maximum Batch File Size work together to ensure batches are not too large. The first of these limits that is reached determines the maximum batch size.
Maximum Batch File Size	For batched transactions only: The maximum total file size for one batch. Note: Maximum Batch Individual Transaction Count and Maximum Batch File Size work together to ensure batches are not too large. The first of these limits that is reached determines the maximum batch size.

Table 1 System Defaults: Fields (Continued)

Name	Description
NCPDP Outbound Batch Timeout [Hrs]	<p>This setting works in conjunction with the normal batch settings specified in the trading partner profile, and affects outbound transactions that are responses to an inbound NCPDP batch. e*Xchange holds the outbound batch until responses to all messages in the inbound batch have been received, but only until this setting times out. If the outbound batch is not complete (missing one or more messages) and no more messages have been received for the timeout time period, the batch is sent out at the next scheduled batch time for the trading partner.</p> <p>For example: an inbound batch has 10 messages; the 9th response message was received at 8am, and the NCPDP Batch Timeout is set to 2 hours. If the 10th message is not received by 10am, the timeout comes into effect and the batch is no longer held. However, it is not sent out immediately, but at the regularly scheduled batch time for the trading partner profile. If the normal batch scheduling is set up to send out batches at noon and midnight, this batch would be sent out at noon. If the 10th message is received during the additional wait for the normal scheduled batch time, it is included in the batch; if not, the incomplete batch is sent out at noon.</p>
Enable Auditing for Message Tracking [Y/N]	<p>Set this flag to Y to turn on the Message Tracking audit feature. For more information, refer to “Reviewing Message Access (Audit Feature)” on page 249.</p>
Maximum Batching e*Ways	<p>The maximum number of Batch e*Ways that can be running at one time (maximum is 10).</p>

2.4.2. Code Tables

e*Xchange Partner Manager provides various drop-down selection lists for your use when setting up communications protocol parameters. The items available for selection from these lists are determined by the code tables.

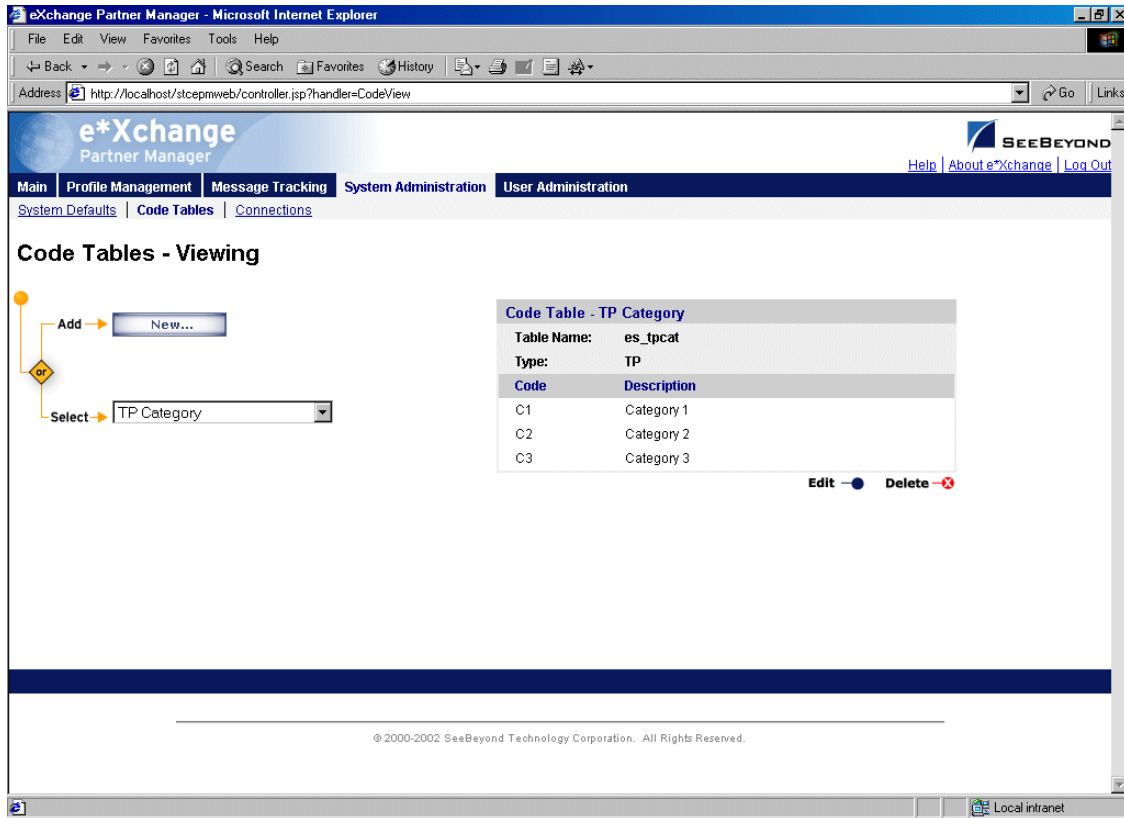
Some code table values are provided with e*Xchange. In addition, you can add a new code table, edit an existing code table, or delete a code table (if user-defined).

To have access to these functions, you must be a member of the eX Administrator user group.

Note: *To add support of a communications protocol, you must make changes to the e*Xchange e*Gate schema as well as adding a new code table. For more information, refer to the **Advanced Configuration** chapter of the **e*Xchange Implementation Guide**.*

From the System Administration main page, click **Code Tables** to access the **Code Tables - Viewing** page (see Figure 14).

Figure 14 Code Tables - Viewing



To add a code table

- 1 From the **Code Tables - Viewing** page, click **New** to access the **Code Tables - Adding** page (see Figure 15).

Note: You can only access this page if you are a member of the eX Administrator user group.

- 2 Enter the values as needed.
For more information on specific fields, refer to Table 2.
- 3 Click **OK** to save the changes.

Figure 15 Code Tables - Adding

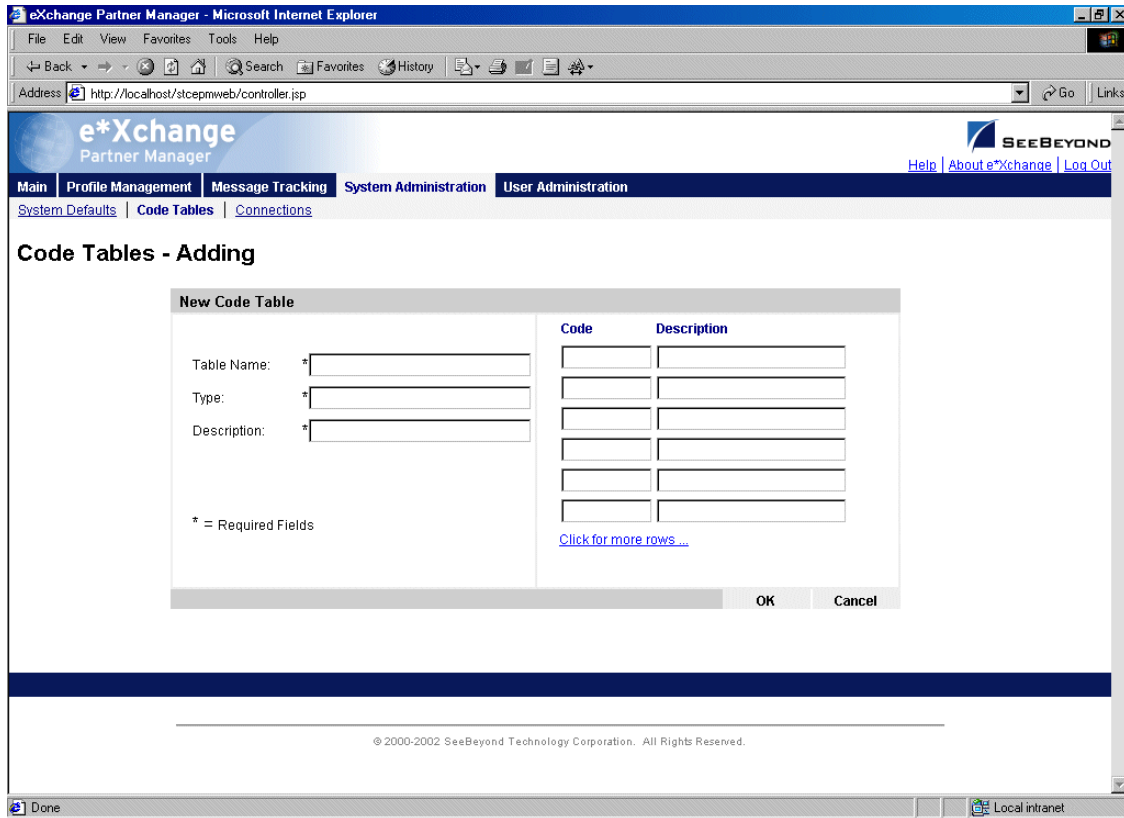


Table 2 Code Tables: Fields

Name	Description
Table Name	A short name for the code table; for example, the table name for the Error Severity table is ER. The table name must be unique.
Type	A description of the type of table; for example, the type for the Error Severity table is "severity." The table type must be unique.
Description	A short description of the code table. This is the name by which the code table is sorted when it is added to the code tables list and displayed in the left pane.
Code/Description	Each line in the code table includes the following information: <ul style="list-style-type: none"> Code-The code assigned to a specific list item. Description-The description of a specific list item. This is the value that will show up on the system list. To add more rows, as needed, click on the Click for more rows... link. To delete a row, click the Delete link to the right of the row.

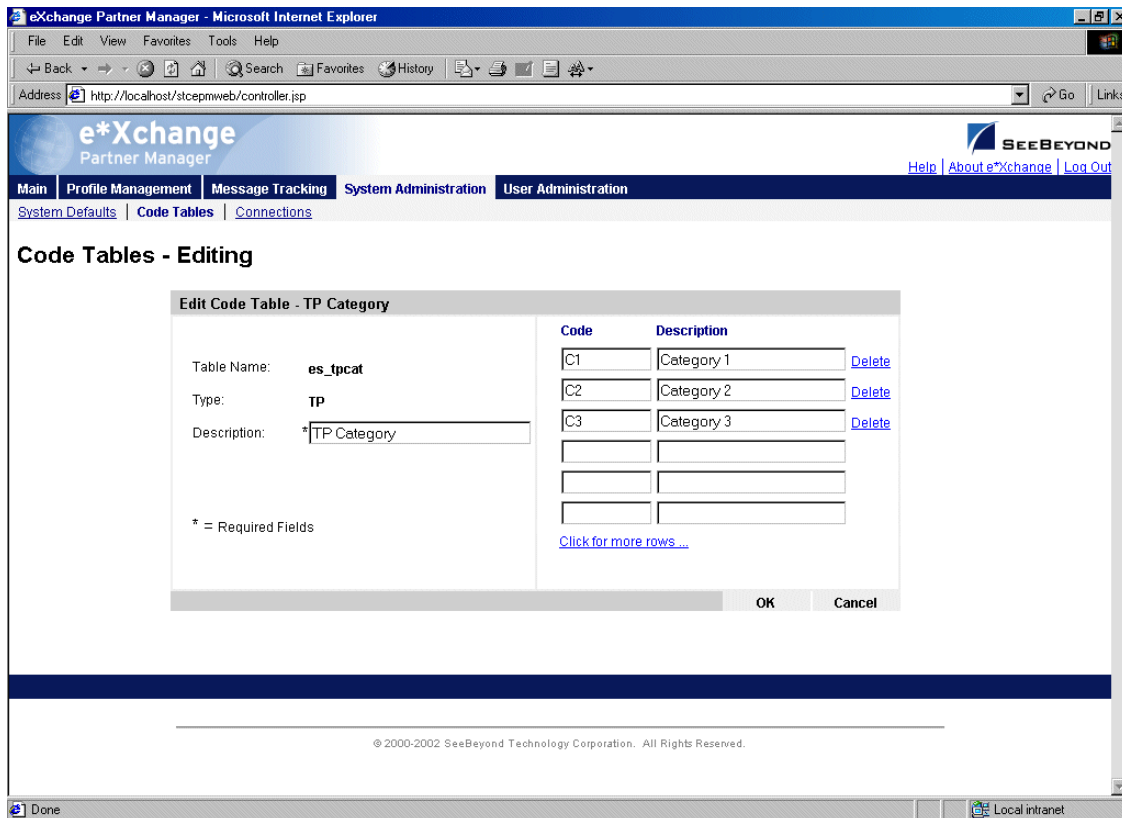
To edit a code table

- 1 From the **Code Tables - Viewing** page, select a code table, and then click **Edit** to access the **Code Tables - Editing** page (see Figure 16).
- 2 Edit the values as needed.

For more information on specific fields, refer to Table 2.

- 3 If you need to delete a row, click the **Delete** link to the right of the row.
- 4 Click **OK** to save the changes.

Figure 16 Code Tables - Editing



2.4.3. Connections

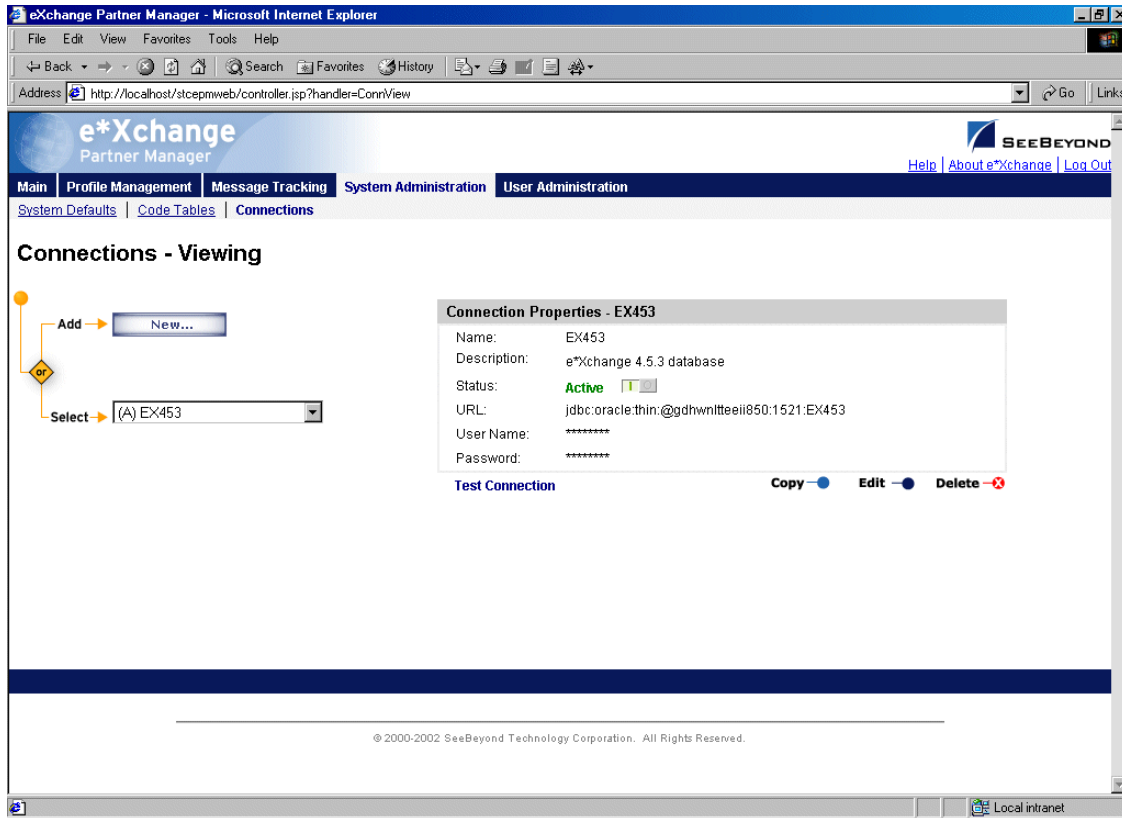
You can set up database connections via the e*Xchange Partner Manager Web interface. When you do this, e*Xchange modifies the **epm.std** file in the background. The default location for this file is `\eXchange\tomcat-3.2.1\webapps\stcepmweb\web-inf`.

Each time you change settings via the Web interface, e*Xchange backs up the **epm.std** file with a different name before making changes to the file.

You can also set up your database connections directly in the **epm.std** file, as covered in [“Editing the epm.std File” on page 64](#).

From the System Administration main page, click **Connections** to access the **Connections - Viewing** page (see Figure 17).

Figure 17 Connections - Viewing



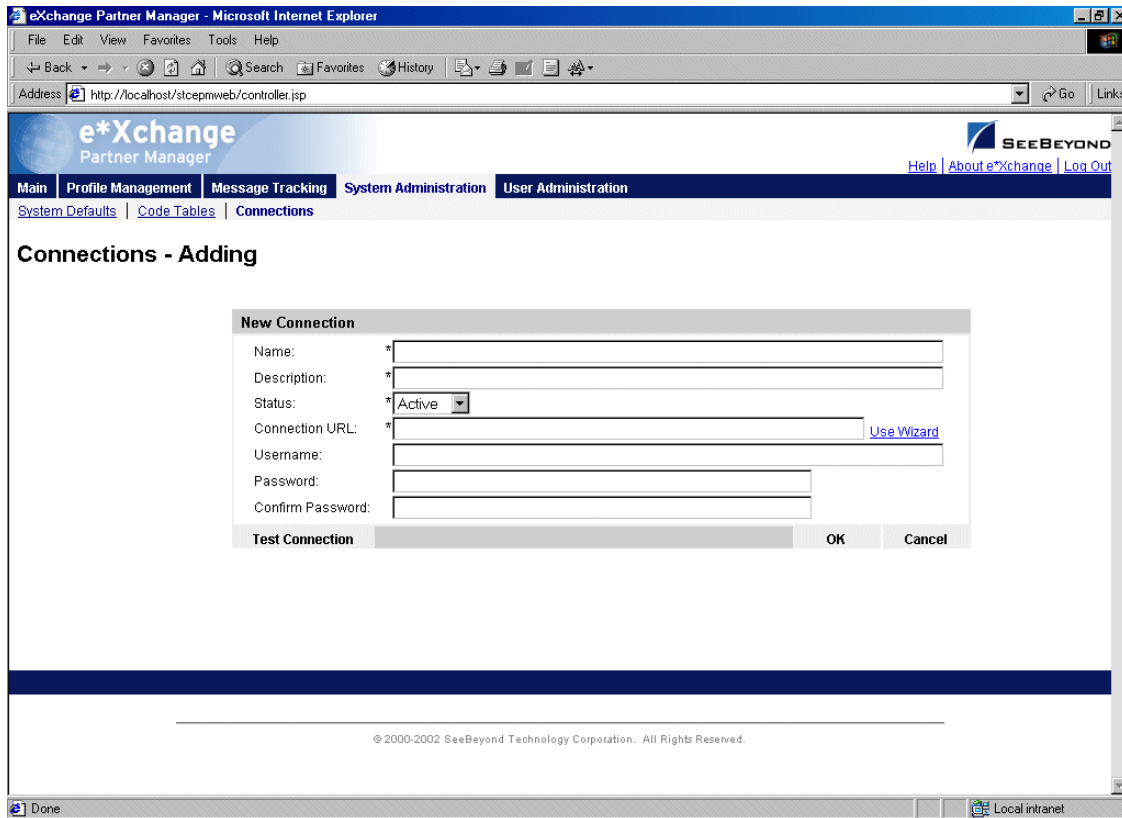
From the **Connections - Viewing** page you can complete the following activities:

- Add a connection (see [“To add a connection” on page 50](#)).
- Select a connection for viewing: choose from the drop-down list. The connection properties are displayed on the right side of the page.
- Test a connection (see [“To test a connection” on page 52](#)).
- Edit the selected connection (see [“To edit a connection” on page 52](#)).
- Create a new connection based on the selected one (see [“To copy a connection” on page 53](#)).
- Delete the selected connection (see [“To delete a connection” on page 54](#)).
- Activate or inactivate the selected connection (see [“To inactivate or reactivate a connection” on page 54](#)).

To add a connection

- 1 From the **Connections - Viewing** page, click **New** to access the **Connections - Adding** page (see Figure 18).

Figure 18 Connections - Adding



Note: You can only access this page if you are a member of the eX Administrator user group.

- 2 Enter the values as needed.
For more information on specific fields, refer to Table 3.
- 3 Click **OK** to save the changes and return to the **Connections - Viewing** page.

Table 3 Connections - Adding: Fields

Name	Description
Name	The server name (must be unique for e*Xchange).
Description	A written description of the entry. This is for your information only.
Status	The current status of the entry: D for deactivated or A for Active. An entry with a status of D does not show up on the Server Name drop-down list on the e*Xchange Web Interface login page.

Table 3 Connections - Adding: Fields (Continued)

Name	Description
Connection URL	<p>The URL for access to the database. This is a string comprised of several elements. Click Use Wizard to access the URL Help pages:</p> <ol style="list-style-type: none"> 1 On the Choose Database Type page, choose the database type (see Figure 19) and then click Next. 2 On the Specify Database Information page (see Figure 20 for an example), enter the following values: <ul style="list-style-type: none"> ♦ For Oracle: Host Name, Port, and SID. ♦ For Microsoft SQL Server or Sybase: Host Name, Port, and Database Name. ♦ For IBM DB2: Database Name. 3 Click Finish.
Username	The user name for database access.
Password	The password for database access.
Confirm Password	Confirmation of the database access password.
Test Connection	Click this link to test the connection to the database. The Test Connection Result dialog box displays the results.

Figure 19 Choose Database Type

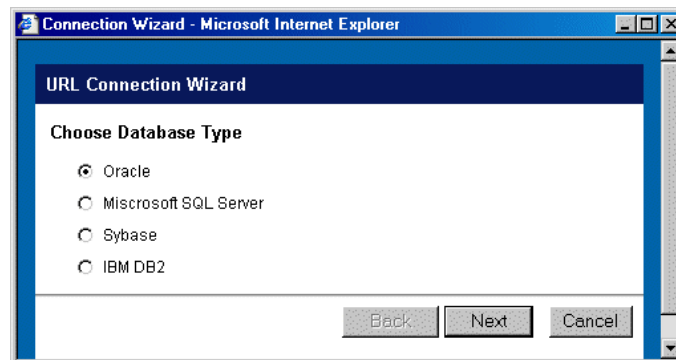
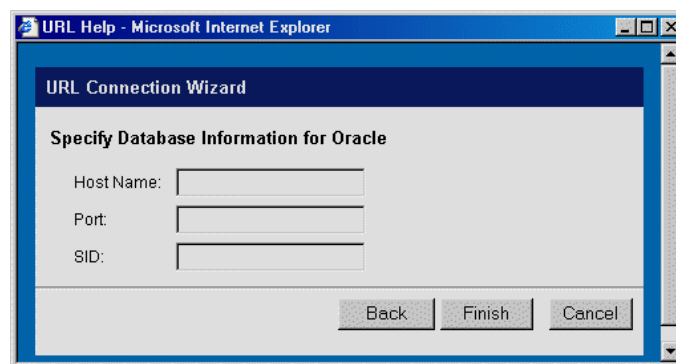


Figure 20 Specify Database Information (Oracle)



To test a connection

When you have set up the values for a connection entry, either before or after saving the connection, you should test the entry to make sure the connection works. Follow the instructions below to test after saving.

- 1 From the **Connections - Viewing** page, select the connection from the drop-down list.
The connection properties are displayed on the right side of the page.
- 2 Click **Test Connection**.
- 3 A **Connection Test Result** message appears, stating either **Connection was Successful** or **Connection Failed**.
- 4 Troubleshoot if needed.

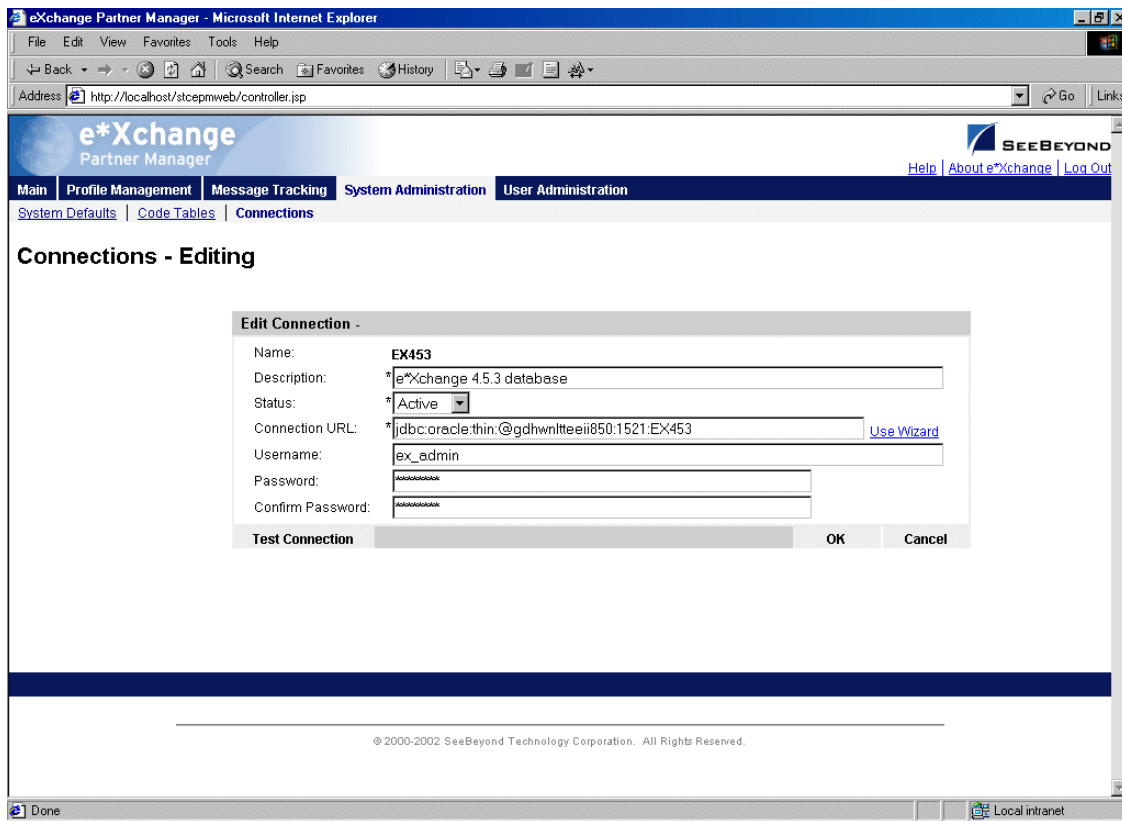
If the connection fails, check the following:

- ♦ Make sure the database is up and running.
- ♦ Check that the username and password are correct. To test this, make sure that you can log in to the database directly; for example, for Oracle, try to log in at the SQL Plus prompt.
- ♦ Make sure the host name is correct.

To edit a connection

- 1 From the **Connections - Viewing** page, select the connection from the drop-down list.
The connection properties are displayed on the right side of the page.
- 2 Click the **Edit** button to access the **Connections - Editing** page (see Figure 21).

Figure 21 Connections - Editing



- 3 Edit the values as needed.

For more information on specific fields, refer to [Table 3 on page 50](#).

- 4 Click **OK** to save changes and return to the **Connections - Viewing** page.

To copy a connection

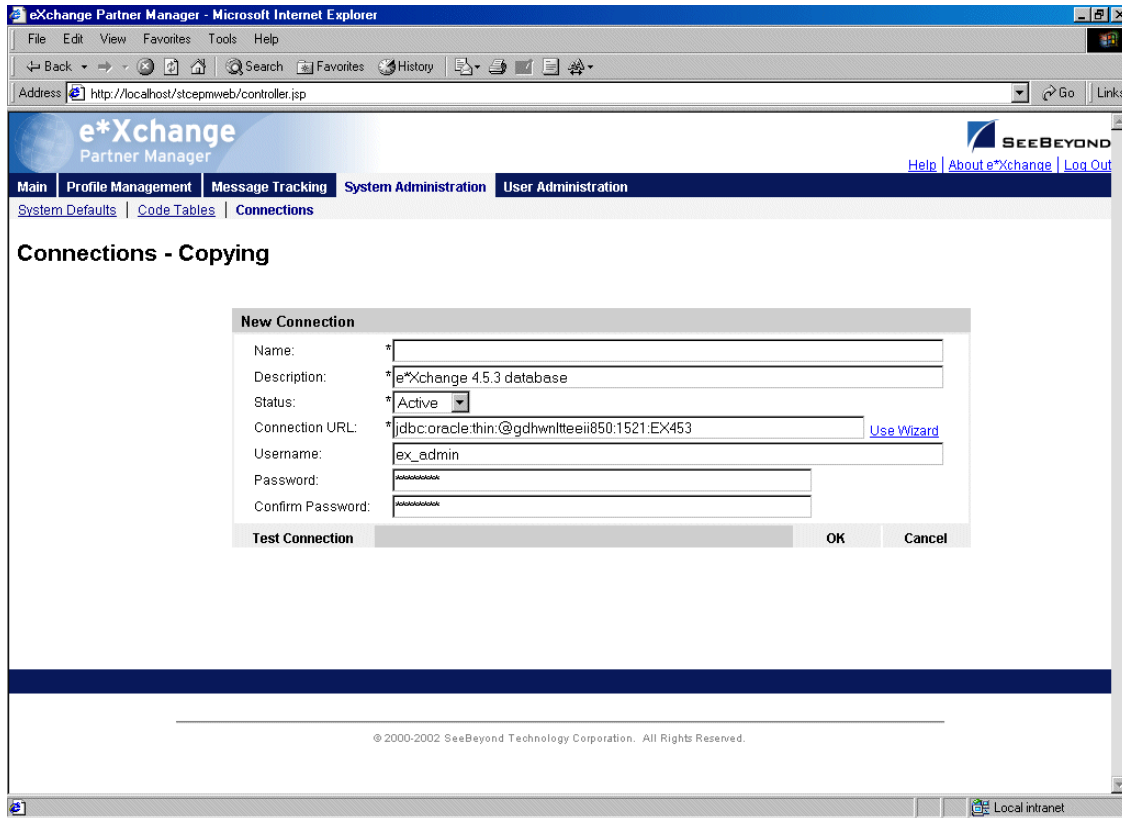
- 1 On the **Connections - Viewing** page, select the connection that you want to copy.

The connection properties are displayed on the right side of the page.

- 2 Click the **Copy** button.

The **Connections - Copying** page appears (see Figure 22).

Figure 22 Connections - Copying



- 3 Type a name for the new connection, and change any other values as needed. If necessary, use the Wizard.
- 4 Optional: click **Test Connection** to ensure the connection works.
For more information, refer to [Table 3 on page 50](#).
- 5 Click **OK** to save and return to the **Connections - Viewing** page.
The new connection is now on the drop-down selection list.



To delete a connection

- 1 On the **Connections - Viewing** page, select the connection from the drop-down list.
The connection properties are displayed on the right side of the page.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 Click **OK**.
The connection is deleted. The Web interface creates a backup copy of the **epm.std** file and then updates the file.

To inactivate or reactivate a connection

- 1 On the **Connections - Viewing** page, select the connection from the drop-down list.
The connection properties are displayed on the right side of the page.

2 In the **Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:

- ◆  Connection is active: click to inactivate.
- ◆  Connection is inactive: click to reactivate.

2.5 User Administration

e*Xchange controls user access to various features by means of users and groups. Access rights to the user interface can be assigned to specific users. For convenience, you can also create user groups and assign users to them. By granting access to a group, you automatically grant access to all users within that group.

e*Xchange comes with several default user groups:

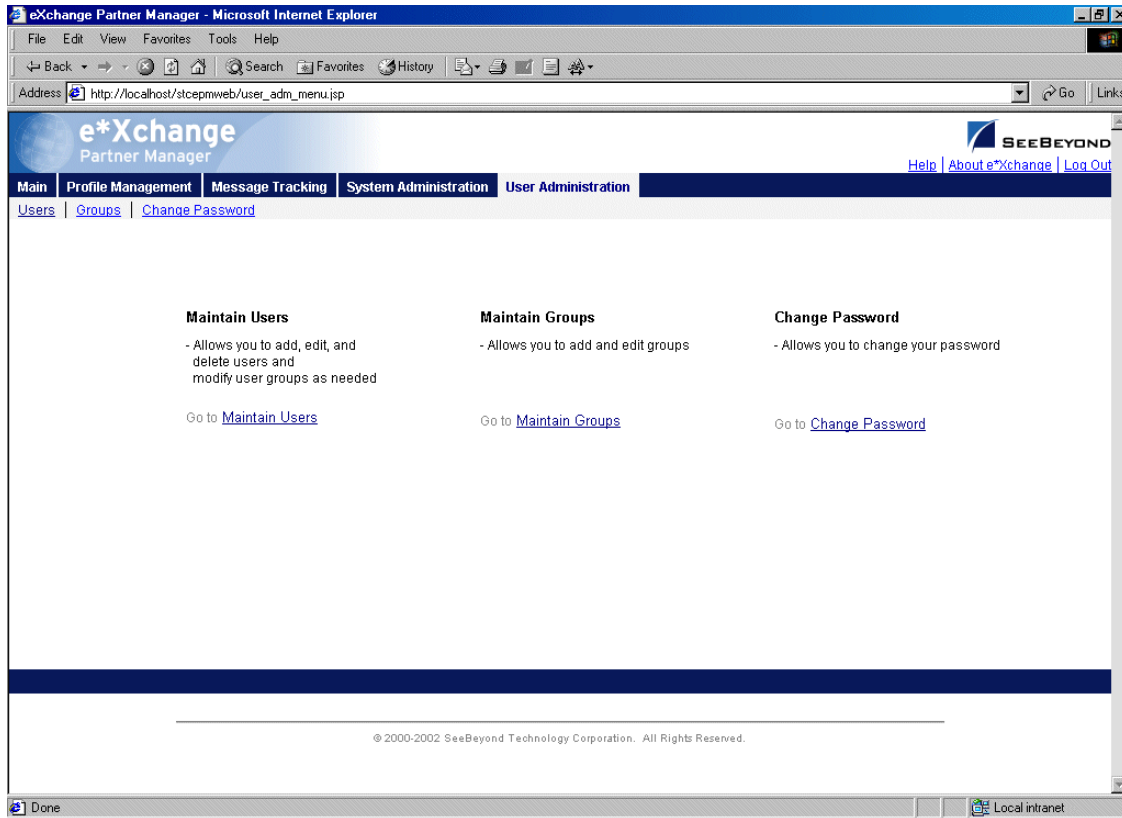
- User Administration
- eX Administrator
- ePartner Manager Access
- Partner Management

The User Administration features allow you to do the following:

- Add users
- Expire and reinstate user access rights
- Create user groups
- Assign users to user groups

From the **Main** page, click **User Administration** to access the User Administration main page (see Figure 23).

Figure 23 User Administration Main Page



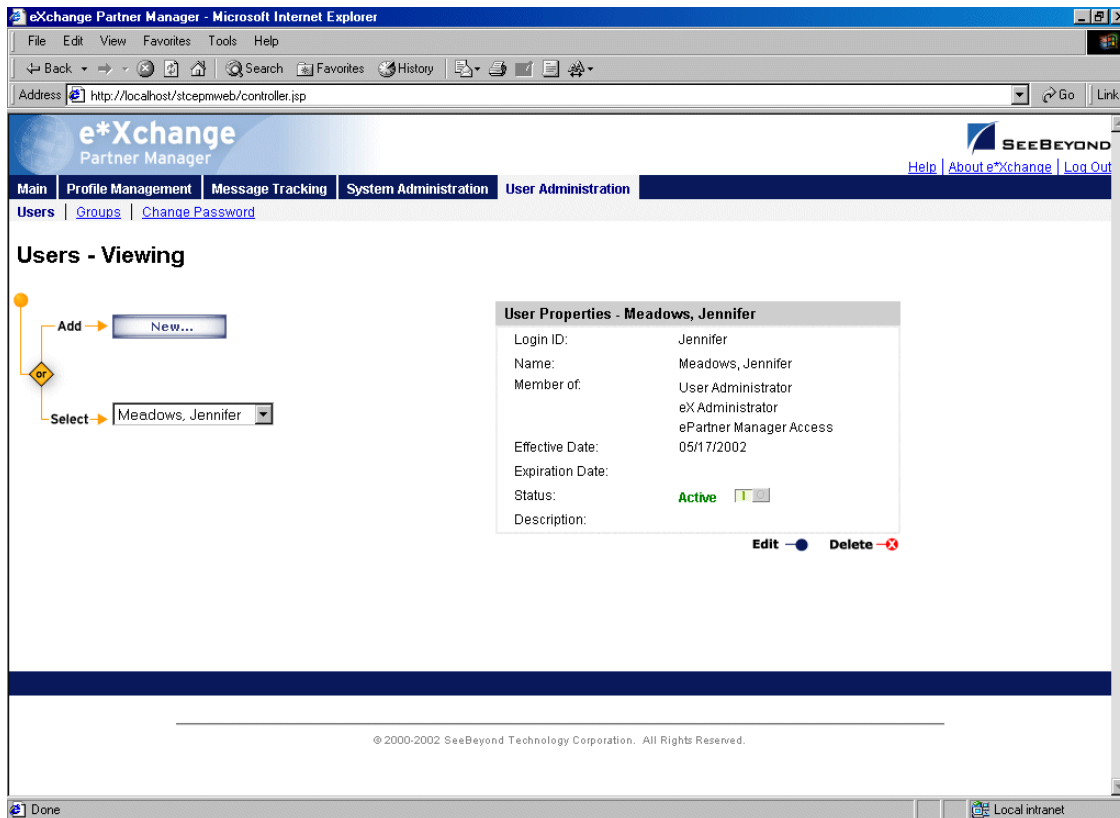
Some of these selections might not be available to you, as follows:

- If you are logged in as the schema owner, the Change Password feature is not available to you. You must change your password in the database itself.
- If you are not a member of the User Administrator group, the Maintain Users and Maintain Groups features are not available to you. You do not have sufficient access rights for these activities.

2.5.1. Working With Users

From the User Administration main page, click **Maintain Users** to access the **Users - Viewing** page (see Figure 24).

Figure 24 Users - Viewing



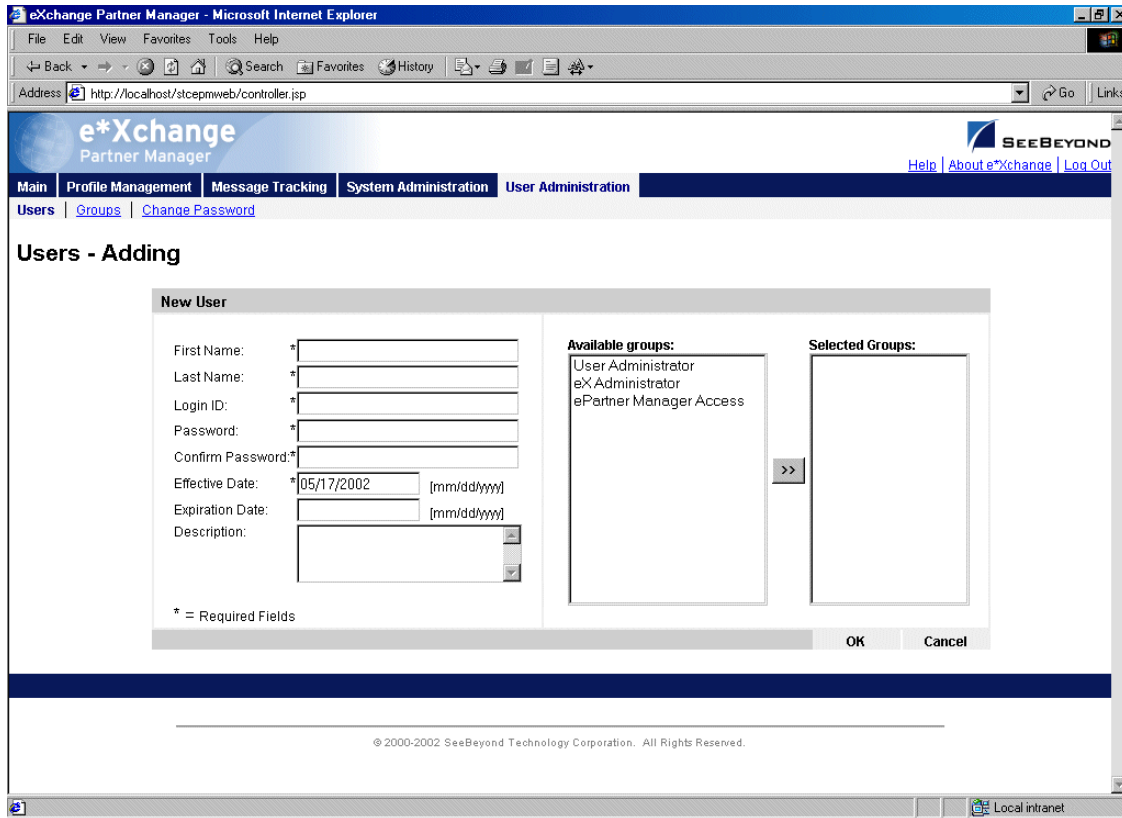
From the **Users - Viewing** page you can complete the following activities:

- Add a user (see [“To add a user” on page 57](#)).
- Select a user: choose from the drop-down list. The user properties are displayed on the right side of the page.
- Edit properties for the selected user; first select the user that you want to edit, and then click the **Edit** button to access the **Users - Editing** page (see [“To edit user properties” on page 59](#)).
- Delete the selected user (see [“To delete a user” on page 59](#)).
- Activate or inactivate the selected user (see [“To activate or inactivate a user” on page 60](#)).

To add a user

- 1 From the **Users - Viewing** page, click the **New** button to access the **Users - Adding** page (see Figure 25).

Figure 25 Users - Adding



- 2 Enter or select values for the user.
For more information on specific fields, refer to Table 4.
- 3 Click **OK** to save the new information and return to the **Users - Viewing** page.
The new user information is now displayed.

Table 4 Users - Adding: Fields

Name	Description
First Name	The user's first name.
Last Name	The user's last name.
Login ID	The user's login ID for accessing e*Xchange.
Password	The password the user must enter to access e*Xchange. e*Xchange user passwords must be 5–20 characters long.
Confirm Password	You must type the password a second time.
Effective Date	The first date on which the user can log in to e*Xchange. Default: The current date.
Expiration Date	The date on which the user's access rights expire. On this date, the user will not be able to log in to e*Xchange. Defaults to 00/00/00, which means that no expiration date is currently set.

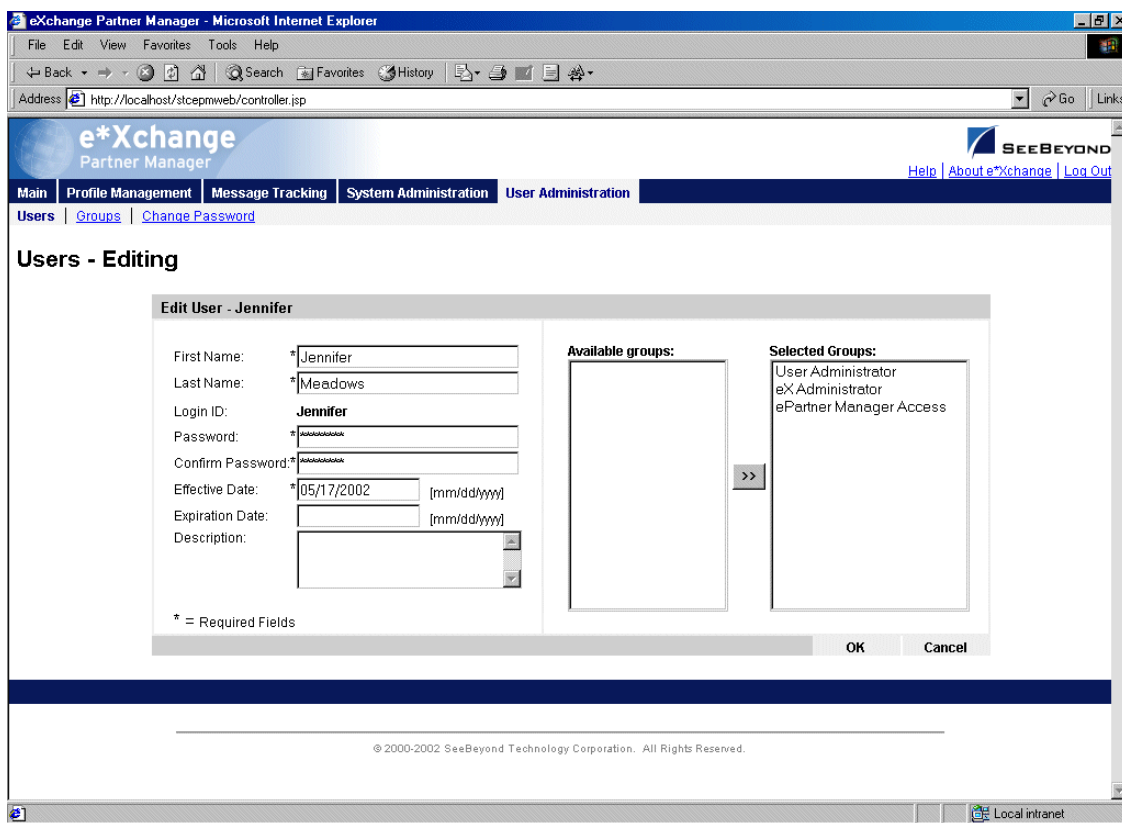
Table 4 Users - Adding: Fields (Continued)

Name	Description
Description	A description of the user; for example, you could add a statement of the primary tasks or responsibilities performed by this user.

To edit user properties

- 1 From the **Users - Viewing** page, select the user from the drop-down list.
The user properties are displayed on the right side of the page.
- 2 Click the **Edit** button to access the **Users - Editing** page (see Figure 26).

Figure 26 Users - Editing



- 3 Edit the user properties as needed.
For more information on specific fields, refer to [Table 4 on page 58](#).
- 4 Click **OK** to save changes and return to the **Users - Viewing** page.

To delete a user

- 1 On the **Users - Viewing** page, select the user from the drop-down list.
The user properties are displayed on the right side of the page.
- 2 Click the **Delete** button.

A warning message appears asking if you are sure you want to delete.

3 Click **OK**.



The user is deleted.

To activate or inactivate a user

1 On the **Users - Viewing** page, select the user from the drop-down list.

The user properties are displayed on the right side of the page.

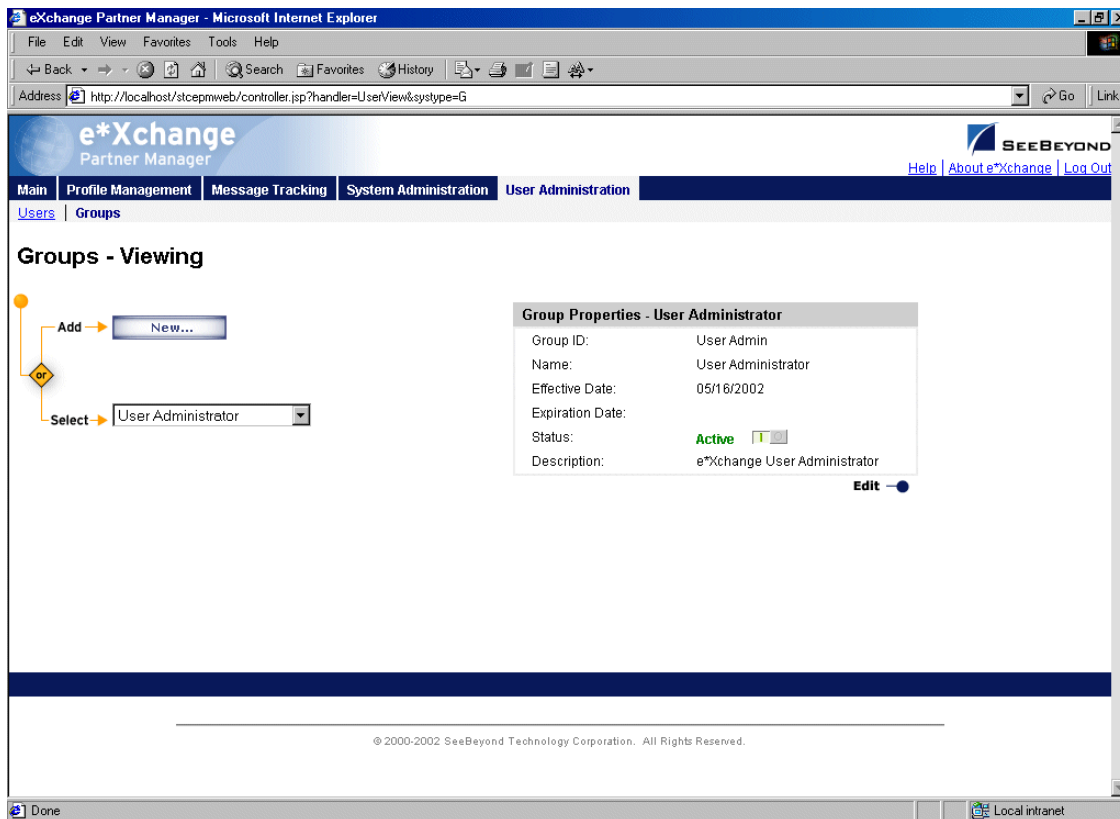
2 In the **Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:

- ◆  User is active: click to inactivate.
- ◆  User is inactive: click to reactivate. You are offered the option to cascade the current access rights to the lower levels.

2.5.2. Working With Groups

From the User Administration main page, click **Maintain Groups** to access the **Groups - Viewing** page (see Figure 27).

Figure 27 Groups - Viewing



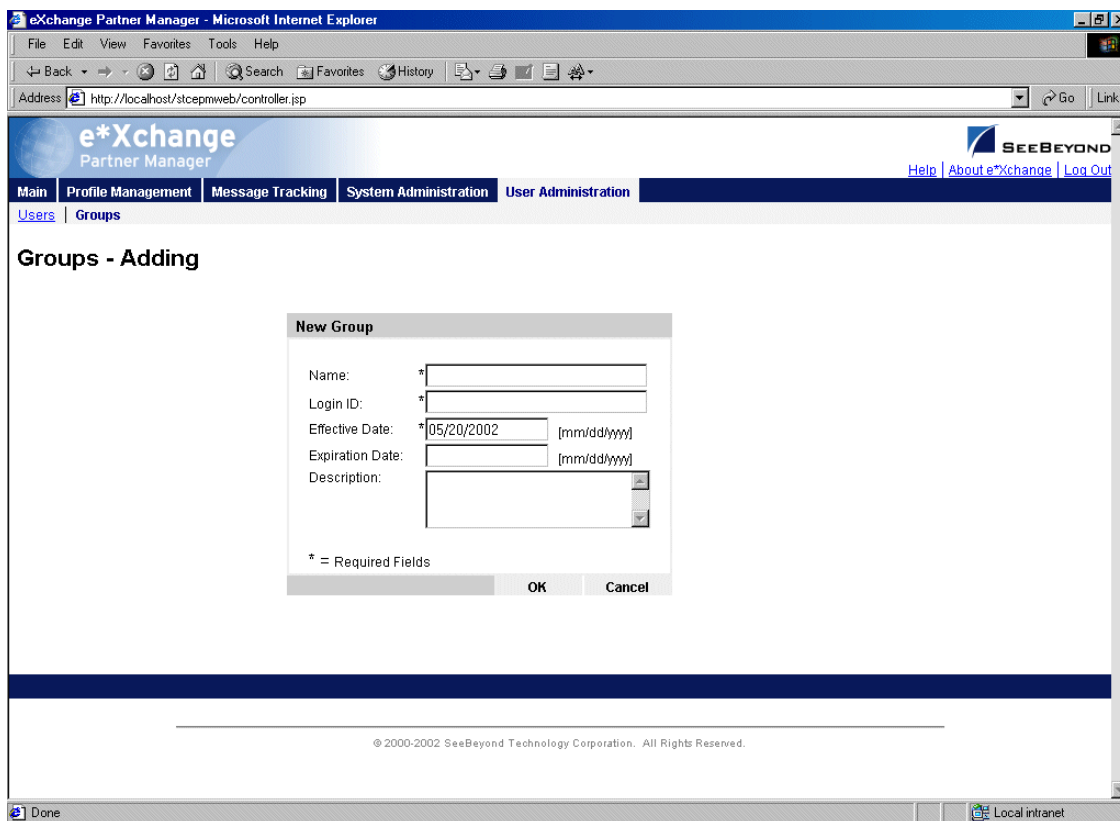
From the **Groups - Viewing** page you can complete the following activities:

- Add a group (see [“To add a group” on page 61](#)).
- Select a group: choose from the drop-down list. The group properties are displayed on the right side of the page.
- Edit properties for the selected group: first select the group that you want to edit, and then click the **Edit** button to access the **Groups - Editing** page (see [“To edit group properties” on page 62](#)).
- Activate or inactivate the selected group (see [“To activate or inactivate a group” on page 63](#)).

To add a group

- 1 From the **Groups - Viewing** page, click the **New** button to access the **Groups - Adding** page (see Figure 28).

Figure 28 Groups - Adding



- 2 Enter or select values for the group.
For more information on specific fields, refer to Table 5.
- 3 Click **OK** to save the new information and return to the **Groups - Viewing** page.
The new group information is now displayed.

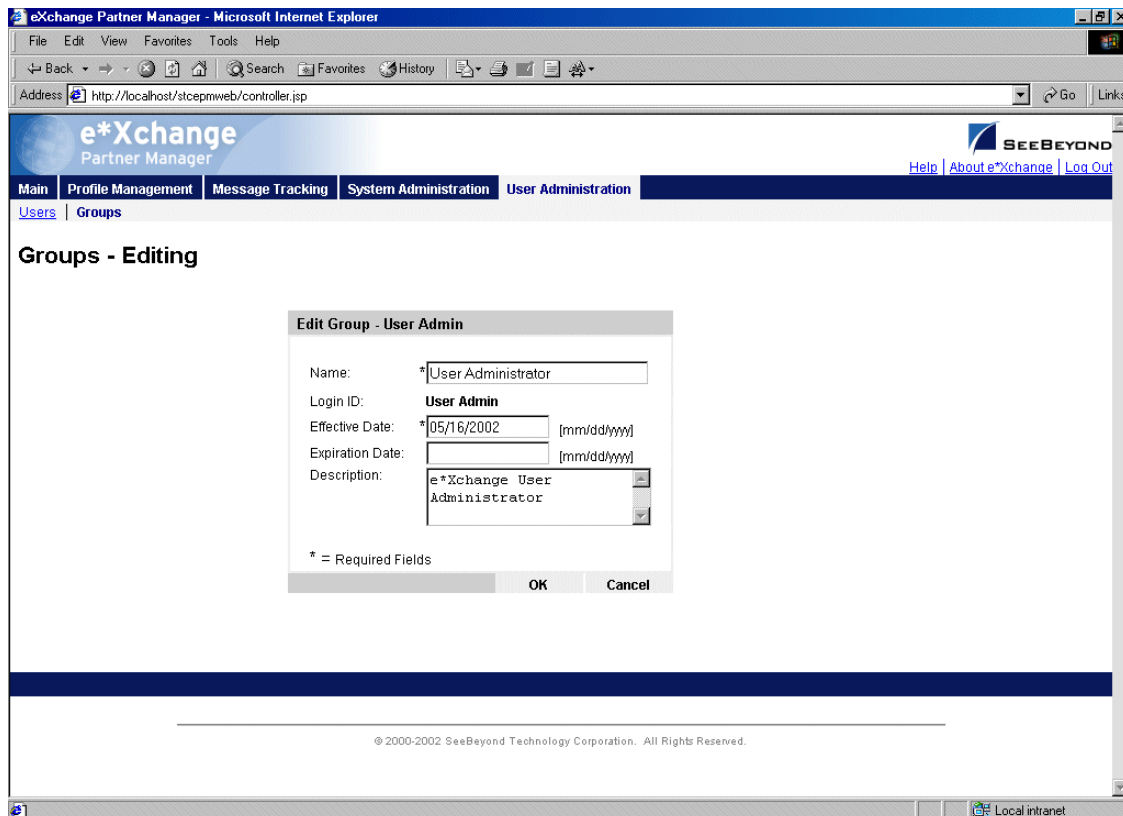
Table 5 Groups - Adding: Fields

Name	Description
Name	The name of the user group. This is the name that will appear in the Groups list.
Login ID	An identification code for the user group.
Effective Date	The first date on which a user assigned to this user group can log in to e*Xchange. Default: The current date.
Expiration Date	The date on which the group's access rights expire. On this date, users assigned to this group will not be able to log in to e*Xchange unless they are also assigned to another group that has access. Defaults to 00/00/00, which means that no expiration date is currently set.
Description	A description of the primary tasks or responsibilities performed by users associated with this group.

To edit group properties

- 1 From the **Groups - Viewing** page, select the group from the drop-down list.
- 2 Click the **Edit** button to access the **Groups - Editing** page (see Figure 29).

Figure 29 Groups - Editing



- 3 Edit the group properties as needed.

- 4 Click **OK** to save changes and return to the **Groups - Viewing** page.

To activate or inactivate a group

- 1 On the **Groups - Viewing** page, select the group from the drop-down list.
The group properties are displayed on the right side of the page.
- 2 In the **Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:



- ♦ Group is active: click to inactivate.



- ♦ Group is inactive: click to reactivate. You are offered the option to cascade the current access rights to the lower levels.

2.6 Changing Your Password

It is a good idea to change your password from time to time.

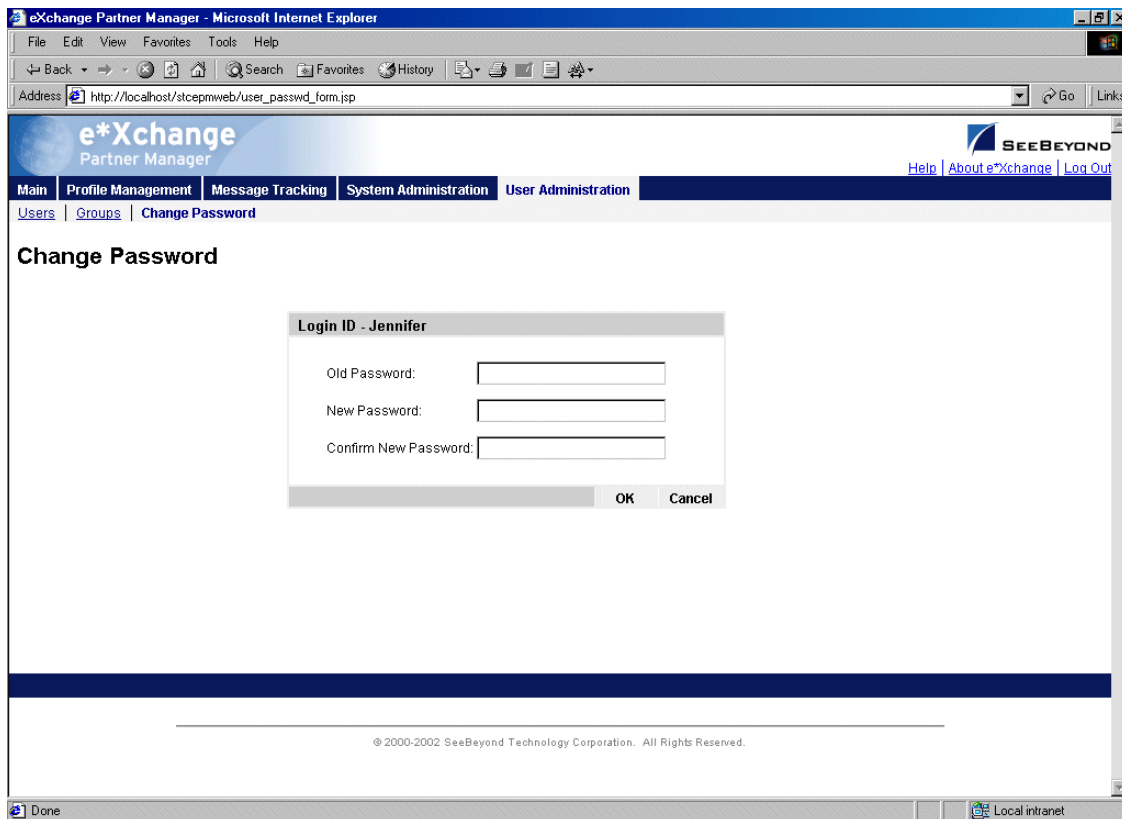
Note: *If you are logged in as the schema owner, this option is not available to you. You must change your password in the database itself.*

Follow the procedure below to change your password.

To change your password

- 1 From the e*Xchange Web Interface **Main** page, go to **User Administration**.
- 2 From the User Administration main page, click **Change Password** to access the **Change Password** page (see Figure 30).

Figure 30 Change Password



Note: This option is also available as a link from the Users and Groups pages.

- 3 Type the old password.
- 4 Type the new password.
- 5 Retype the new password for verification.
- 6 Click **OK**.

e*Xchange displays the following message:

Password for user: [name of current user] has been changed successfully.

2.7 Editing the epm.std File

Installation of the e*Xchange Web interface automatically creates a file, **epm.std**, which contains the information required so that the Web interface can access your database.

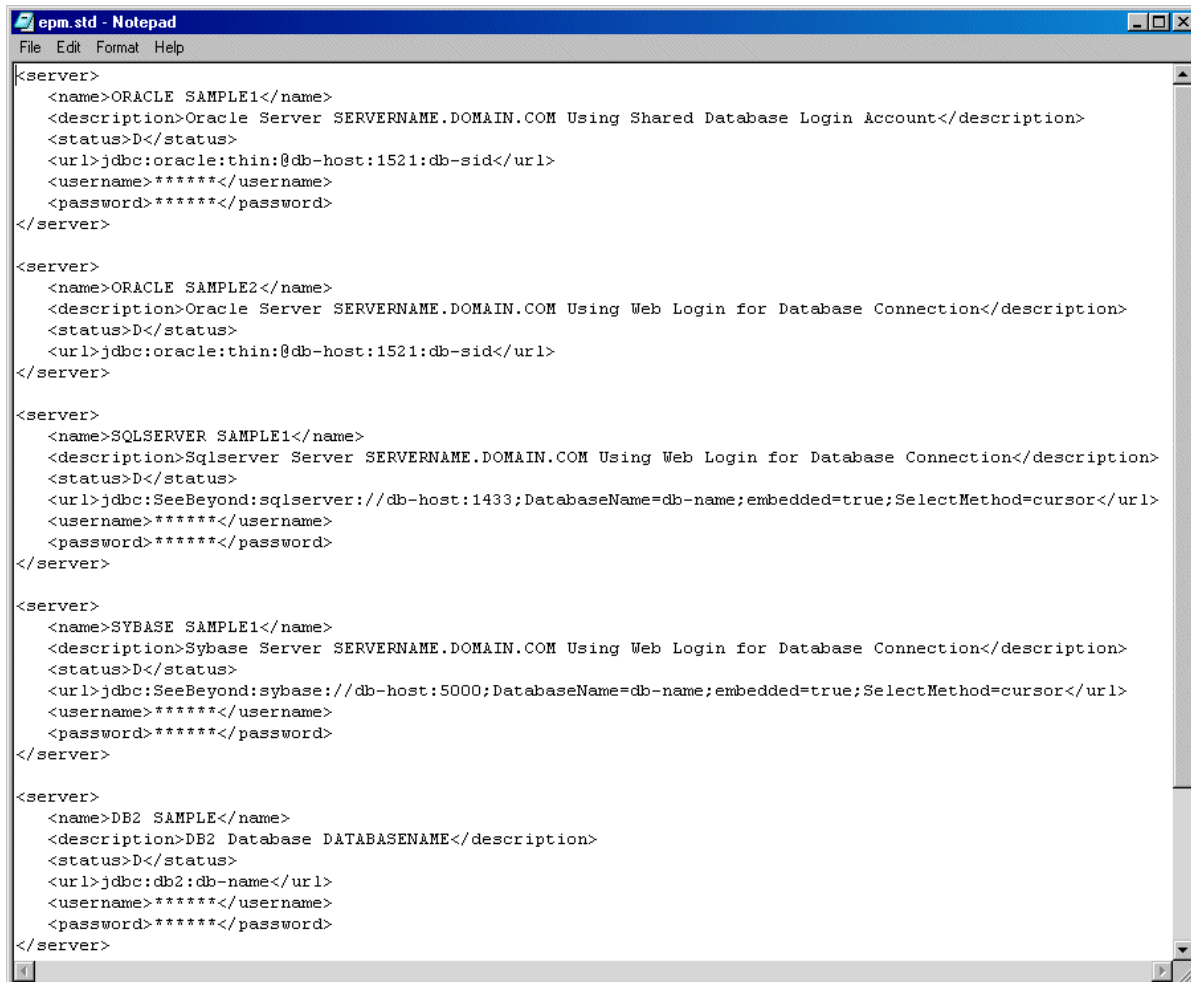
The default file includes sample entries for each database type. In addition, the database value that you enter during the installation process are used to create a new entry that is valid for your database. If you want to add access to additional databases, or change the settings for any reasons, you can edit the settings file directly.

By default, the **epm.std** file is located in the following folder:

\eXchange\tomcat-3.2.1\webapps\stcepmweb\web-inf

A sample default entry in **epm.std** is shown in Figure 31.

Figure 31 Default Entries in epm.std File



```
<server>
  <name>ORACLE SAMPLE1</name>
  <description>Oracle Server SERVERNAME.DOMAIN.COM Using Shared Database Login Account</description>
  <status>D</status>
  <url>jdbc:oracle:thin:@db-host:1521:db-sid</url>
  <username>*****</username>
  <password>*****</password>
</server>

<server>
  <name>ORACLE SAMPLE2</name>
  <description>Oracle Server SERVERNAME.DOMAIN.COM Using Web Login for Database Connection</description>
  <status>D</status>
  <url>jdbc:oracle:thin:@db-host:1521:db-sid</url>
</server>

<server>
  <name>SQLSERVER SAMPLE1</name>
  <description>Sqlserver Server SERVERNAME.DOMAIN.COM Using Web Login for Database Connection</description>
  <status>D</status>
  <url>jdbc:SeeBeyond:sqlserver://db-host:1433;DatabaseName=db-name;embedded=true;SelectMethod=cursor</url>
  <username>*****</username>
  <password>*****</password>
</server>

<server>
  <name>SYBASE SAMPLE1</name>
  <description>Sybase Server SERVERNAME.DOMAIN.COM Using Web Login for Database Connection</description>
  <status>D</status>
  <url>jdbc:SeeBeyond:sybase://db-host:5000;DatabaseName=db-name;embedded=true;SelectMethod=cursor</url>
  <username>*****</username>
  <password>*****</password>
</server>

<server>
  <name>DB2 SAMPLE</name>
  <description>DB2 Database DATABASENAME</description>
  <status>D</status>
  <url>jdbc:db2:db-name</url>
  <username>*****</username>
  <password>*****</password>
</server>
```

Each default entry includes the following XML tags:

- **SERVER** begin and end tag indicating that each entry lists a server.
- **NAME** tag for the server name (must be unique in the file).
- **DESCRIPTION** tag for a written description of the entry. This is for your information only.
- **STATUS** tag for the current status of the entry: D for deactivated or A for Active. An entry with a status of D does not show up on the **Server Name** drop-down list on the e*Xchange Web Interface login page.
- **URL** tag: The URL for access to the database. This is a string comprised of several elements. Replace the **db-host** value (for example, **db-host:5000**) with the host name and port number for the database, separated by a colon. Replace **db-name**

with the SID name (for Oracle) or database name (for SQL Server, Sybase, or DB2 UDB).

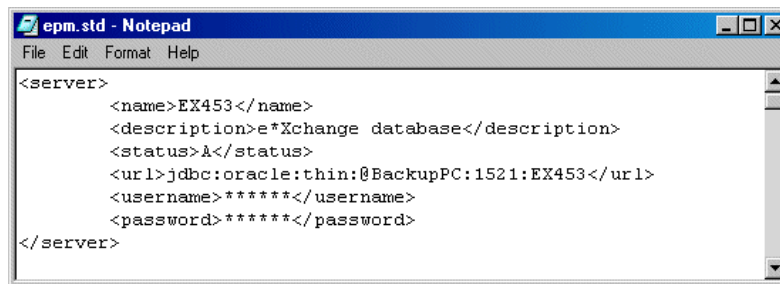
- Username tag: The user name for access to the database.
- Password tag: The password for access to the database.

For example, actual values might be as follows:

- Server type is Oracle, server name is EX453
- Description tag is "Main Database."
- Status is Active.
- Host name is BackupPC, port is 1521, Oracle SID is EX453.
- Username and password are both Jane (though these values cannot be read in the file).

With the above values, the entry in the **epm.std** file is shown in Figure 32.

Figure 32 Sample epm.std File



```
<server>
  <name>EX453</name>
  <description>e*Xchange database</description>
  <status>A</status>
  <url>jdbc:oracle:thin:@BackupPC:1521:EX453</url>
  <username>*****</username>
  <password>*****</password>
</server>
```

Note that the default value for both the username and password tags is six asterisks. For security reasons, username and password are never stored as plain text. Instead, when the schema/database owner sets the username and password in the e*Xchange Web interface, the encrypted values are stored in the **epm.std** file.

The schema/database owner has the option to test the database connection as well as setting the username and password. If the username and password are valid, e*Xchange allows the user access to the Web interface.

Some points to note about this file:

- You can reset the username and password by opening the file, deleting the encrypted values, and replacing them with six asterisks for each tag. The next time you log on, e*Xchange verifies the username and password against the database and stores the encrypted values in the **epm.std** file.
- The server name must be unique for the file; two identical server names might cause a problem.
- Entries with a status of D are not available on the drop-down list on the Login page.
- If you remove the **username** and **password** tags from the entry in the **epm.std** file entirely, e*Xchange expects that the user logging in exists both at the application level (entries in the user tables in the e*Xchange database) and also at the database level.

2.8 Extending the Session Inactivity Setting

The length of time an inactive database connection is kept open before timing out is determined by a setting in the **web.xml** file. If you want to extend (or reduce) the time your connection is kept open when you are not using it, you can do so by changing this setting.

By default, the **web.xml** file is located in the following folder:

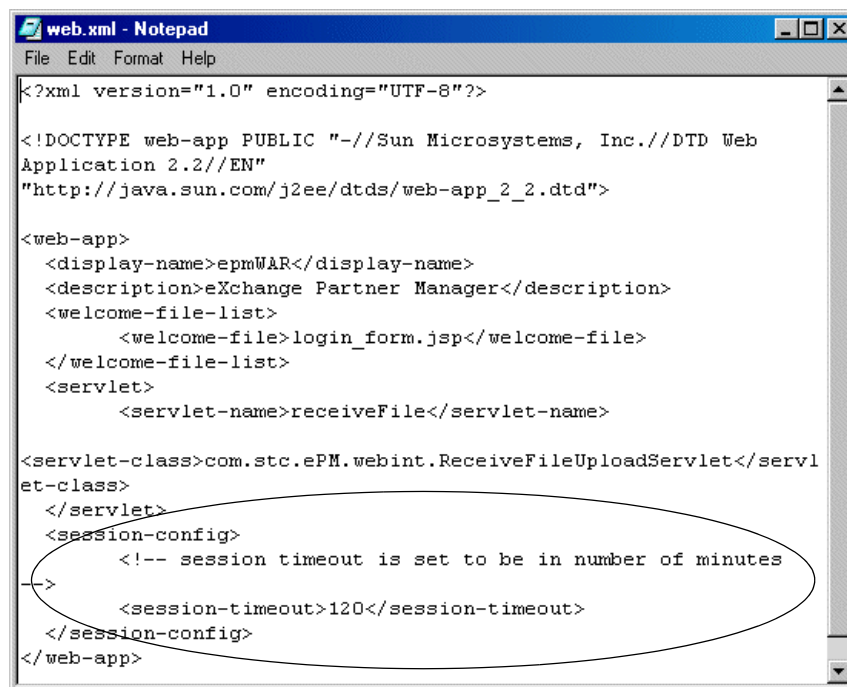
`\eXchange\tomcat-3.2.1\webapps\stcepmweb\web-inf`

To change the session time

- 1 Open `\eXchange\tomcat-3.2.1\webapps\stcepmweb\web-inf\web.xml` in a text editor such as Notepad.

The session timeout value, in minutes, is set in the `session-timeout` tag. The default is 120 minutes (2 hours) (see Figure 33).

Figure 33 The web.xml File



- 2 Change the numerical setting for the session-timeout value.
- 3 Save and close the file.
- 4 Restart Tomcat and the Web interface.

Security

This chapter provides information on using the user security features in the e*Xchange Partner Manager Web interface.

When adding a company or other component, you can specify the groups or individuals who will have access privileges to the information and what specific access rights they will have. The defining of access privileges is not required, but is recommended to protect the security of your information.

Setup of users and groups is covered in [“Overview and Administration” on page 32](#).

The user security feature for the e*Xchange Partner Manager Web interface works the same at all four levels:

- Company
- Trading Partner
- B2B Protocol
- Message Profile

From the **Security Management** page for a specific component, you can do the following:

- Add group or user access to the component
- Specify customized access rights for a user or group, including:
 - ♦ Add access
 - ♦ Expire access
 - ♦ Reinstate access that has been expired

3.1 What Are Access Control Permissions?

A member of the eX Administrator user group adds companies to e*Xchange and indicates which users and groups can access information associated with each company, and what the specific access rights are (read, add, edit, or full control).

If your administrator has allowed you “Add” access for a particular company, you can add new trading partner components to that company. In addition, you can specify user access rights for all components set up for that company; trading partners, B2B protocols, and message profiles.

The following table describes each kind of access permission and how each type of permission controls access to various trading partner profile components.

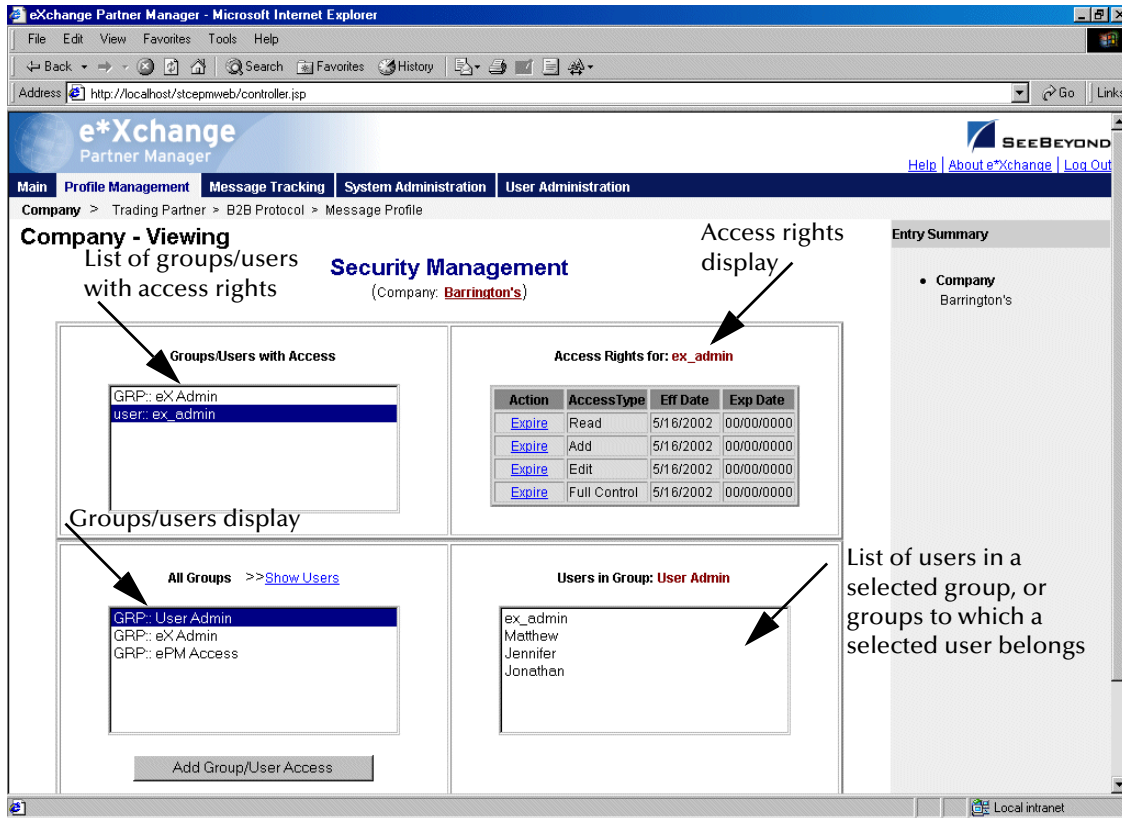
Table 6 Trading Partner Profile Access Permission Types

This type of permission...	allows a user to...
Read	<ul style="list-style-type: none"> ▪ Access the component to view the information ▪ Display a list of sub-components set up for this component (for example, message profiles set up for a B2B protocol)
Add	Perform all functions allowed with read access and also: <ul style="list-style-type: none"> ▪ Add a new component ▪ When adding a component, grant other users access to the component
Edit	Perform all functions allowed with read access and also: <ul style="list-style-type: none"> ▪ Change existing information and save changes ▪ Grant access to existing company information to other users at any time
Full Control	Perform all functions allowed with read, edit, and add access.

To set up security

- 1 From the main page for any level, click the **Security** icon.
The **Security Management** page appears (see Figure 34).

Figure 34 Security Management Page



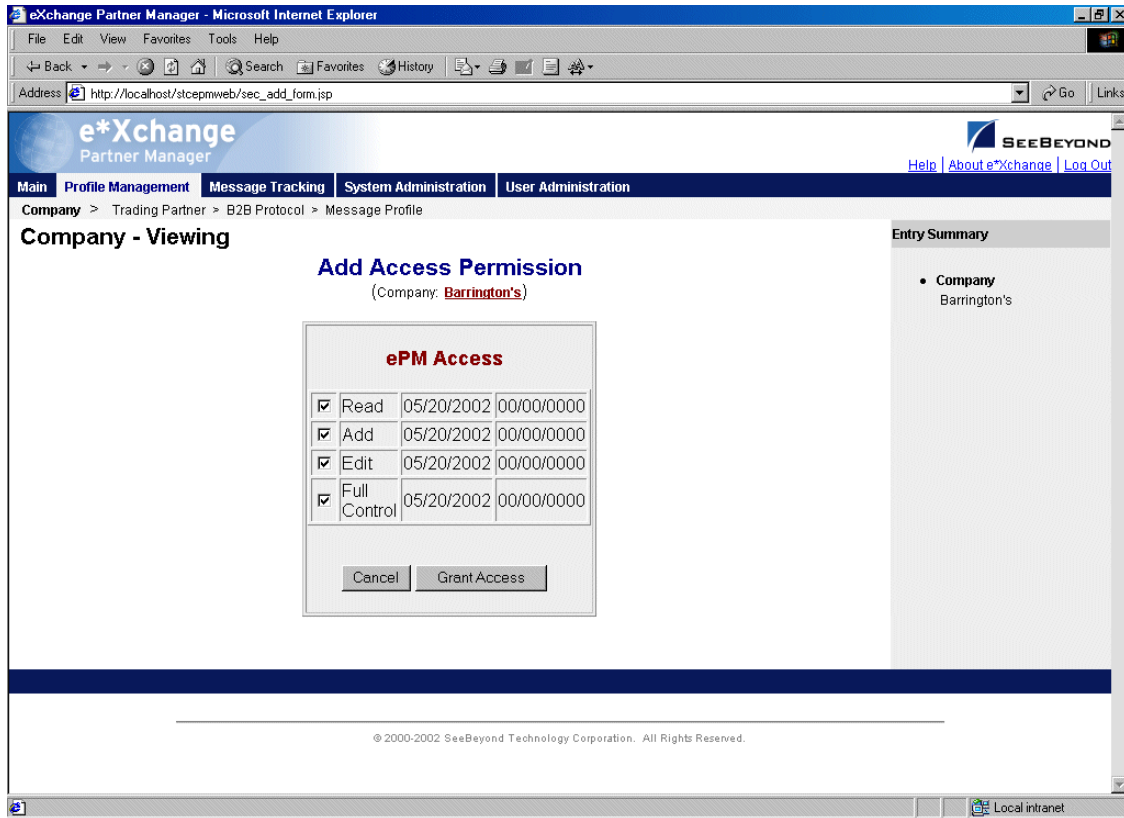
- 2 Set the security values appropriately.
- 3 If needed, set access permissions for a specific group or user by following the procedure provided in ["To add access permission" on page 70](#).
- 4 When done, click the **Done** button, or click the component name at the top of the page, to return to the **Properties** page for the component level.

Note: To show users as well as groups, click **Show Users**.

To add access permission

- 1 From the **Security Management** page, click the **Add Group/User Access** button to access the **Add Access Permission** page (see Figure 35).

Figure 35 Add Access Permission Page



- 2 Set the values as needed.
- 3 Click the **Grant Access** button to save the changes and return to the **Security Management** page.

Profile Management

The e*Xchange Partner Manager Web interface allows you to set up all the information you need to exchange eBusiness messages with trading partners, via a browser interface.

From the Web interface you can complete the following activities relating to profile management:

- Add, edit, or delete a company
- Add, edit, or delete a trading partner
- Add, edit, or delete an eBusiness protocol (B2B protocol)
- Add, edit, or delete a message profile
- Set or change security for a company, trading partner, eBusiness protocol, or message profile.

Note: *In the Web interface, an asterisk (*) on a field indicates that it is a required field. An at sign (@) indicates that changes made to the field will be applied to all other message profiles within the same B2B protocol automatically.*

This chapter provides information on working with the company, trading partner, and eBusiness protocol levels. The message profile level is addressed separately for each eBusiness protocol in the following chapters:

- X12—[“Profile Setup for X12” on page 107](#)
- NCPDP-HIPAA—[“Profile Setup for NCPDP-HIPAA” on page 136](#)
- UN/EDIFACT—[“Profile Setup for UN/EDIFACT” on page 151](#)
- RosettaNet—[“Profile Setup for RosettaNet” on page 188](#)
- CIDX—[“Profile Setup for CIDX” on page 218](#)

For information on setting up security at all levels, and for all eBusiness protocols, refer to [“Security” on page 68](#).

4.1 Profile Management

Profile setup and management is divided into four component levels:

- Company (see [“Setting Up Company Information” on page 74](#))

The company component is the highest level of the trading partner profile. It includes the name of the company and any related information that your business requires you to store about the partner company.

The only information required at the company level is the company name.

- Trading Partner (see [“Setting Up Trading Partner Information” on page 80](#))

Information about your trading partner. This could be a subdivision of a company, it could be the same as the company, or you could set up your various trading partners under a “dummy” umbrella company.

The only information required at the trading partner level is the trading partner name. Security is automatically inherited from the upper (company) level, although you can change it.

- B2B Protocol (see [“Setting Up B2B Protocol Information” on page 89](#))

This level allows you to define eBusiness protocol values that are unique to the trading partner but independent of the message being sent or received. This includes items such as the communications protocol to be used, encryption information (if applicable), and SSL information (if you are using HTTPS).

For each trading partner, you would define one inbound B2B protocol and one outbound, for each message standard version.

B2B protocol attributes are grouped into three sections:

- ♦ General
- ♦ Transport Component
- ♦ Message Security

- Message Profile (see [“Setting Up Message Profile Information” on page 106](#))

This level, the final step in trading partner setup, allows you to define the values required so that you can successfully send and receive specific eBusiness messages. This includes items such as the Global Process Code and the Global Partner Role Classification Code for RosettaNet, the Transaction Set ID and Functional ID Code for X12, and the Message Type Identifier for UN/EDIFACT.

You must define one message profile for each type of message you will send to the trading partner and one for each type of message you will receive from the trading partner.

4.2 Supported Communications Protocols

The communications protocols supported by the e*Xchange Partner Manager Web interface are shown in Table 7.

Table 7 Supported Communications Protocols

eBusiness Protocol	FTP (Batch)	HTTP	HTTPS	SMTP
RosettaNet 1.1	No	Yes	Yes	No
RosettaNet 2.0	No	Yes	Yes	Yes
UN/EDIFACT	Yes	Yes	Yes	Yes
X12	Yes	Yes	Yes	Yes
CIDX	No	Yes	Yes	No
NCPDP-HIPAA	Yes	Yes	Yes	Yes

4.3 Setting Up Company Information

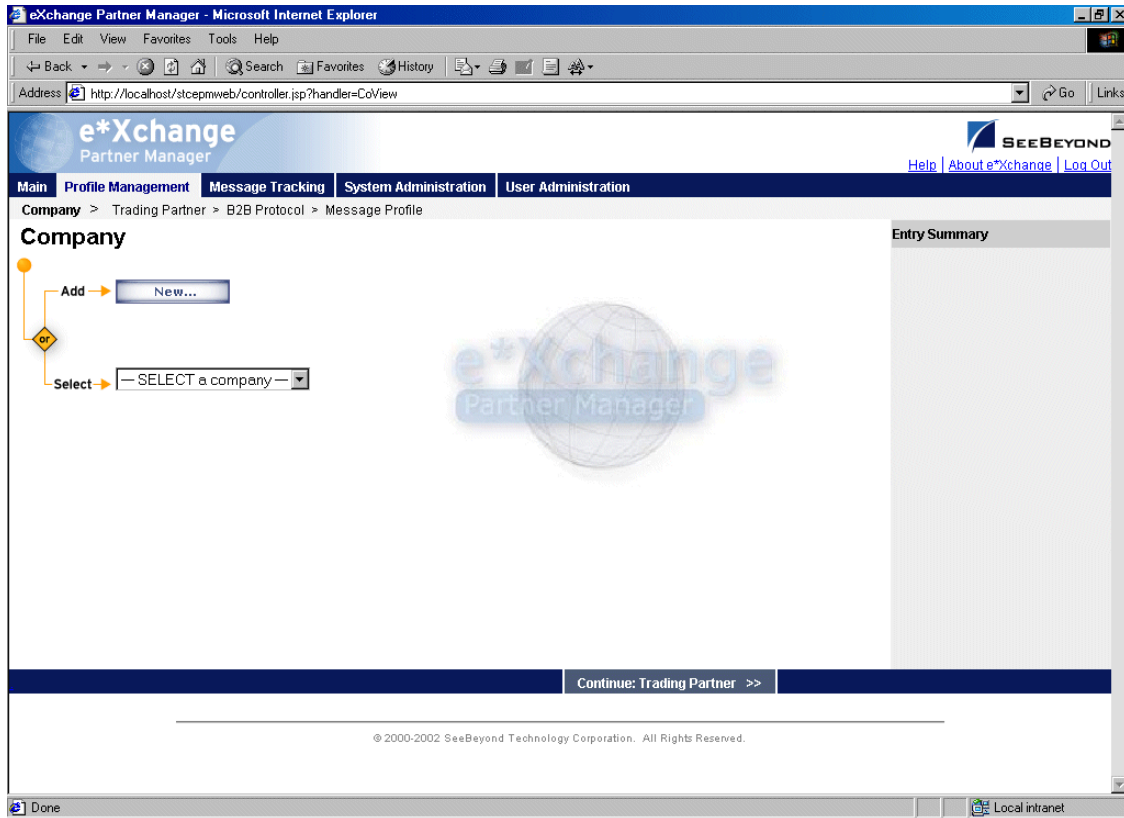
The Company List is the starting point for all the profile management functions provided by the e*Xchange Partner Manager Web interface.

To access the Company List

- From the **Main** page, click **Profile Management**.

The **Company** page appears (see Figure 36).

Figure 36 Company Page



From the **Company** page you can complete the following activities:

- Add a company (see [“To add a company” on page 76](#)).
- Select a company: choose from the drop-down list. The company properties are displayed on the right side of the page.
- Edit the selected company (see [“To edit a company” on page 77](#)).
- Create a new company based on the selected one (see [“To copy a company” on page 78](#)).
For general information on the copy feature, refer to [“Copying Components” on page 104](#).
- Delete the selected company (see [“To delete a company” on page 80](#)).
- Set or change security for the selected company (see [“To set up security” on page 80](#)).
- Add, change, or delete contacts for the selected company (see [“To set up contacts” on page 80](#)).
- Go on to trading partner activities: select a company and then click **Continue: Trading Partner** to access the **Trading Partner** page.

To add a company

- 1 From the **Company** page, click the **New** button to access the **Company - Adding** page (see Figure 37).
- 2 Enter the company information.
For more information, refer to Table 8.
- 3 Click **Next** to save the new information and return to the **Company** page.
The new company information is now displayed, as shown in Figure 38.

Figure 37 Company - Adding

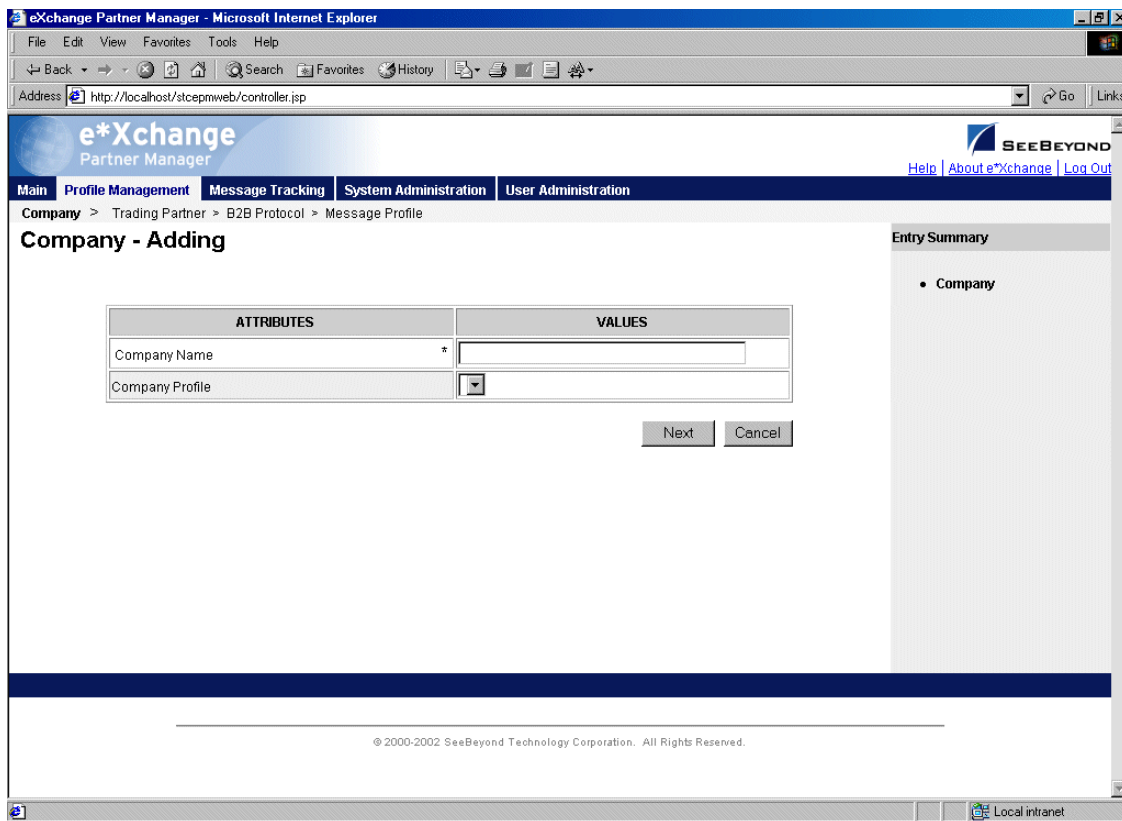
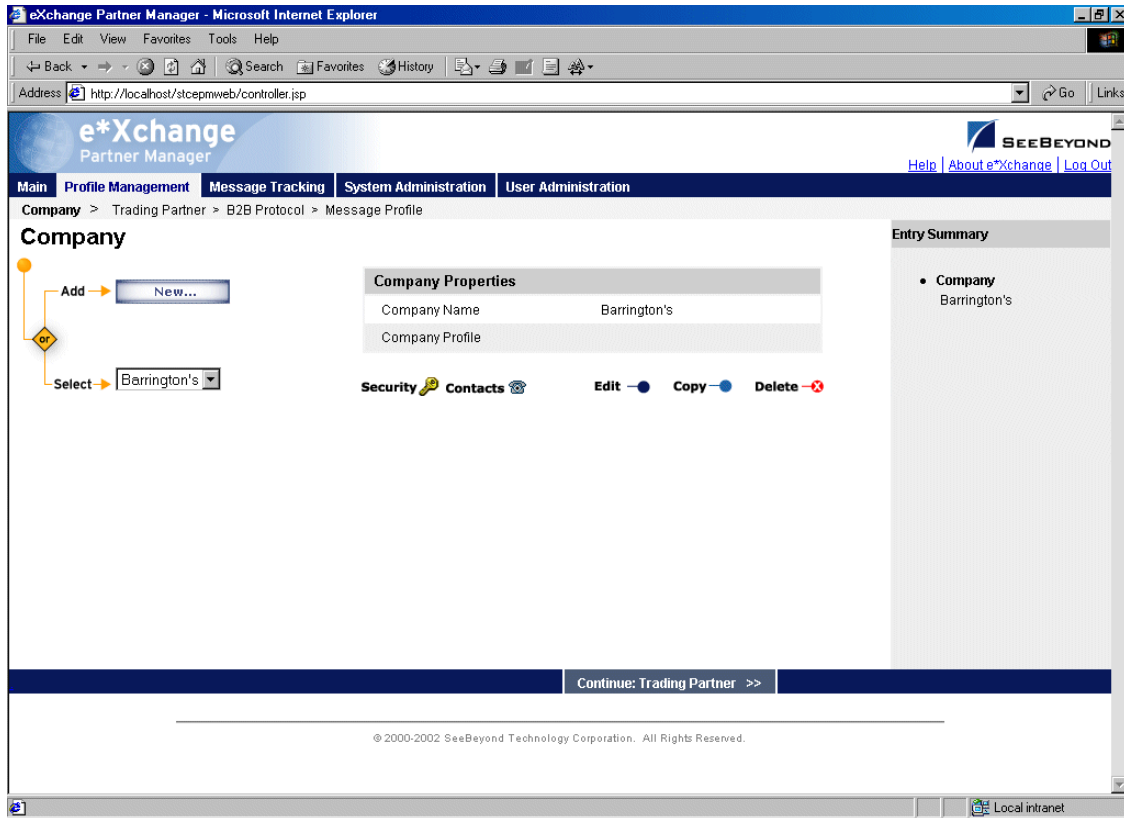


Table 8 Company - Adding, Editing, Copying: Fields

Name	Description
Company Name	The name of the company.
Company Profile	Not yet supported in the Web interface.

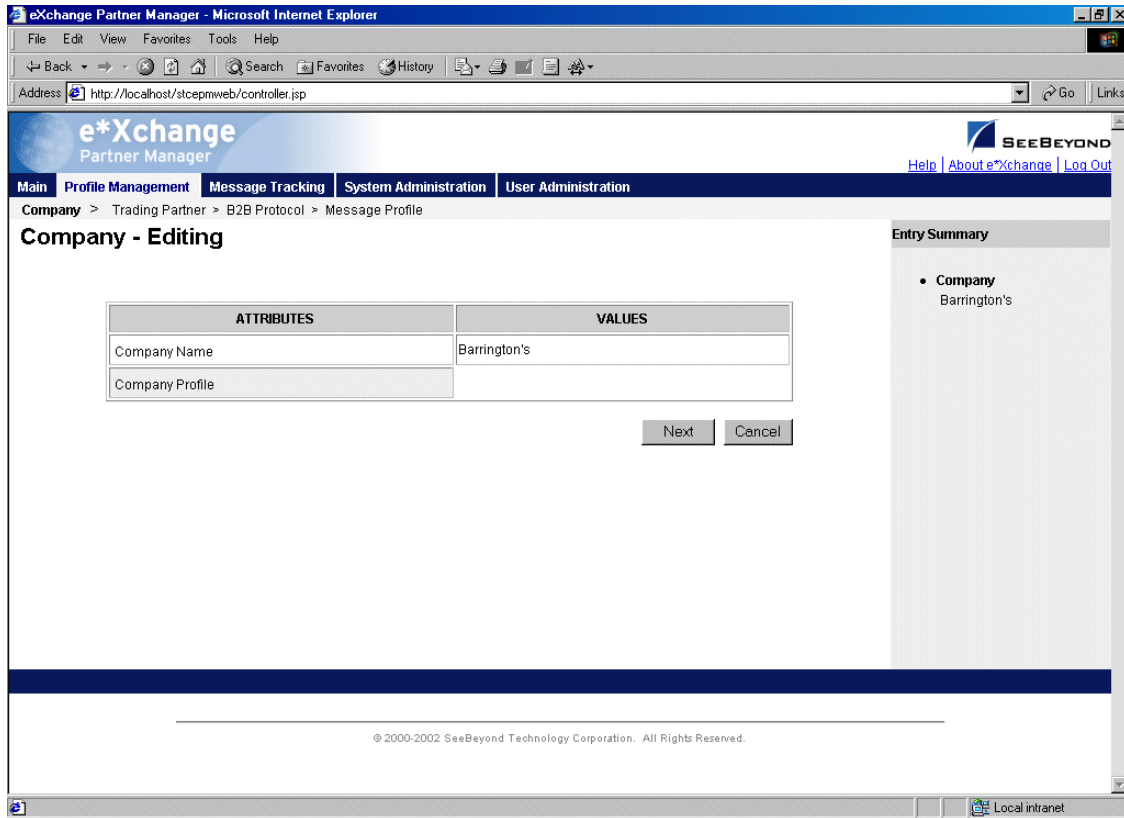
Figure 38 Company Page Showing Company Information



To edit a company

- 1 From the **Company** page, select the company from the drop-down list.
The company properties are displayed on the right side of the page.
- 2 Click the **Edit** button to access the **Company - Editing** page (see Figure 39).

Figure 39 Company - Editing



3 Change the values as needed.

For more information, refer to [Table 8 on page 76](#).

4 Click **Next** to return to the **Company** page.

To copy a company

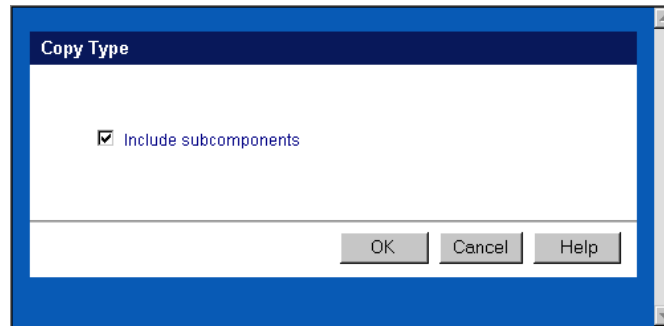
1 On the **Company** page, select the company that you want to copy.

The company properties are displayed on the right side of the page.

2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 40).

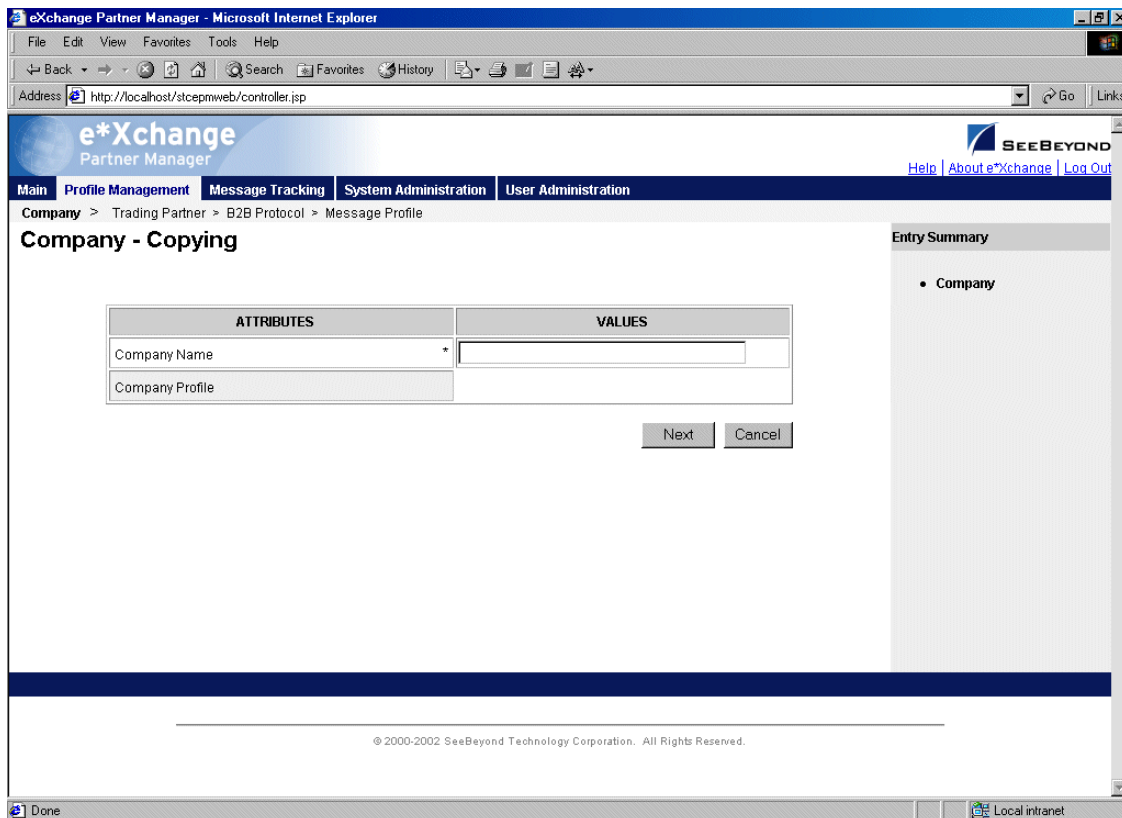
Figure 40 Copy Type (Copying a Company)



- 3 Optional: if you do not want to copy subcomponents (trading partners, B2B protocols, and message profiles), clear the **Include subcomponents** check box.
- 4 Click **OK**.

The **Company - Copying** page appears (see Figure 41).

Figure 41 Company - Copying



- 5 Type the new company name, and any other values as needed.
For more information, refer to [Table 8 on page 76](#).
- 6 Click **Next** to save and return to the **Company** page.

The new company is now on the drop-down company list.

To delete a company

- 1 On the **Company** page, select the company from the drop-down list.
The company properties are displayed on the right side of the page.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the company, click **OK**.
The company is deleted.

To set up security

- 1 On the **Company** page, select the company from the drop-down list.
The company properties are displayed on the right side of the page.
- 2 Click the **Security** icon.
The **Security Management** page appears.
- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Company** page, click the **Contacts** icon.
The **Company - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.
 - ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
 - ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

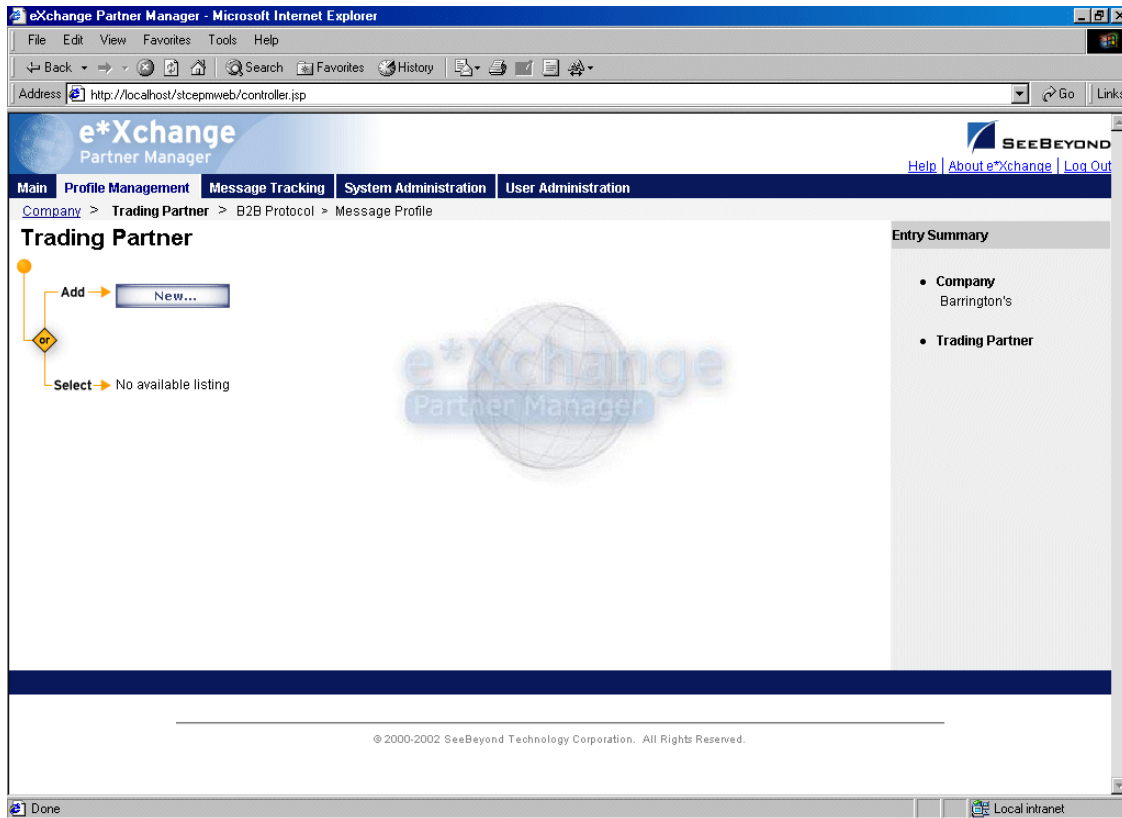
For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

4.4 Setting Up Trading Partner Information

Once you have set up a company, the next step is to set up trading partners for that company. For example, if you do business with several divisions of the same company, you can set up each one as a separate trading partner.

From the **Company** page, select a company and click **Continue: Trading Partner** to access the **Trading Partner** page (see Figure 42).

Figure 42 Trading Partner Page



From the **Trading Partner** page you can complete the following activities:

- Add a trading partner for the selected company (see [“To add a trading partner” on page 82](#)).
- Select a trading partner: choose from the drop-down list. The trading partner properties are displayed on the right side of the page.
- Edit the selected trading partner (see [“To edit a trading partner” on page 83](#)).
- Create a new trading partner based on the selected one (see [“To copy a trading partner to the same company” on page 85](#) or [“To copy a trading partner to another company” on page 86](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

- Delete the selected trading partner (see [“To delete a trading partner” on page 88](#)).
- Activate or inactivate the selected trading partner (see [“To inactivate or reactivate a trading partner” on page 88](#)).
- Set or change security for the selected trading partner (see [“To set up security” on page 88](#)).

- Add, change, or delete contacts for the selected trading partner (see “[To set up contacts](#)” on page 88).
- Go on to B2B protocol activities: select a trading partner and then click **Continue: B2B Protocol** to access the **B2B Protocol** page.

To add a trading partner

- 1 From the **Trading Partner** page, click **New** to access the **Trading Partner - Adding** page (see Figure 43).
- 2 Enter or select values for the trading partner.
For more information, see Table 9.
- 3 Click **Next** to save the new information and return to the **Trading Partner** page.
The new trading partner information is now displayed, as shown in Figure 44.

Figure 43 Trading Partner - Adding

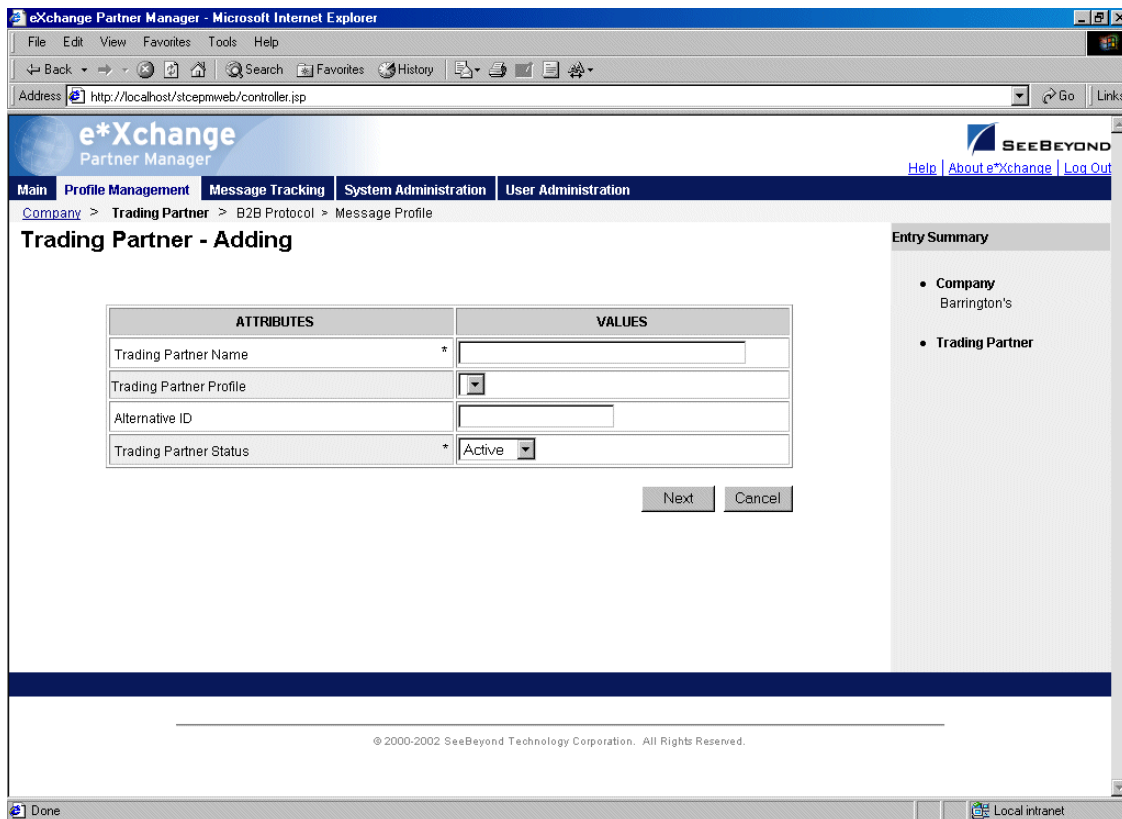


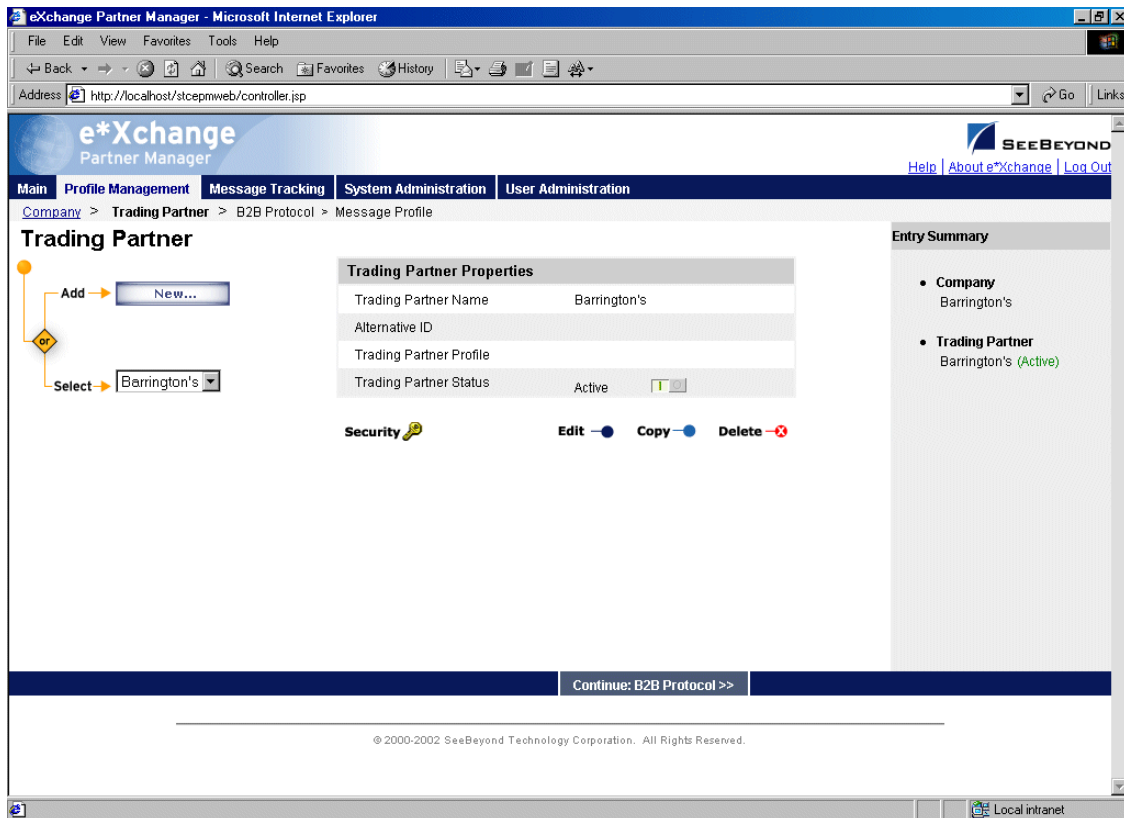
Table 9 Trading Partner - Adding, Editing, Copying: Fields

Name	Description
Trading Partner Name	The name of the trading partner.
Trading Partner Profile	Not yet supported in the Web interface.

Table 9 Trading Partner - Adding, Editing, Copying: Fields (Continued) (Continued)

Name	Description
Alternative ID	An optional alternative ID. This is not currently used.
Trading Partner Status	The status of the trading partner: Active or Inactive . Default: Active .

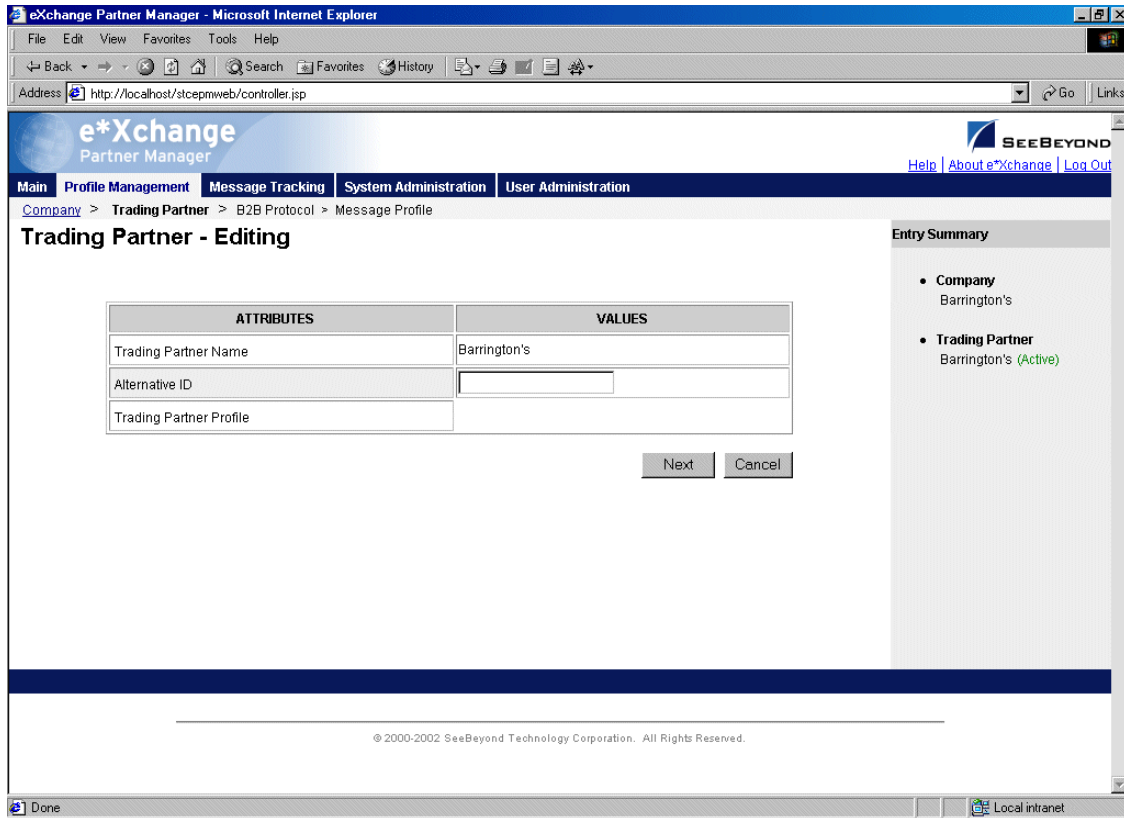
Figure 44 Trading Partner Page Showing Trading Partner Information



To edit a trading partner

- 1 From the **Trading Partner** page, select the trading partner from the drop-down list. The trading partner properties are displayed on the right side of the page.
- 2 Click the **Edit** button to access the **Trading Partner - Editing** page (see Figure 45).

Figure 45 Trading Partner - Editing

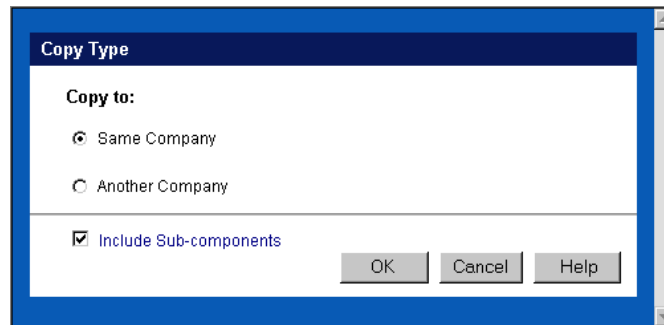


- 3 Edit the trading partner properties as needed.
For more information, see [Table 9 on page 82](#).
- 4 Click **Next** to save changes and return to the **Trading Partner** page.

To copy a trading partner to the same company

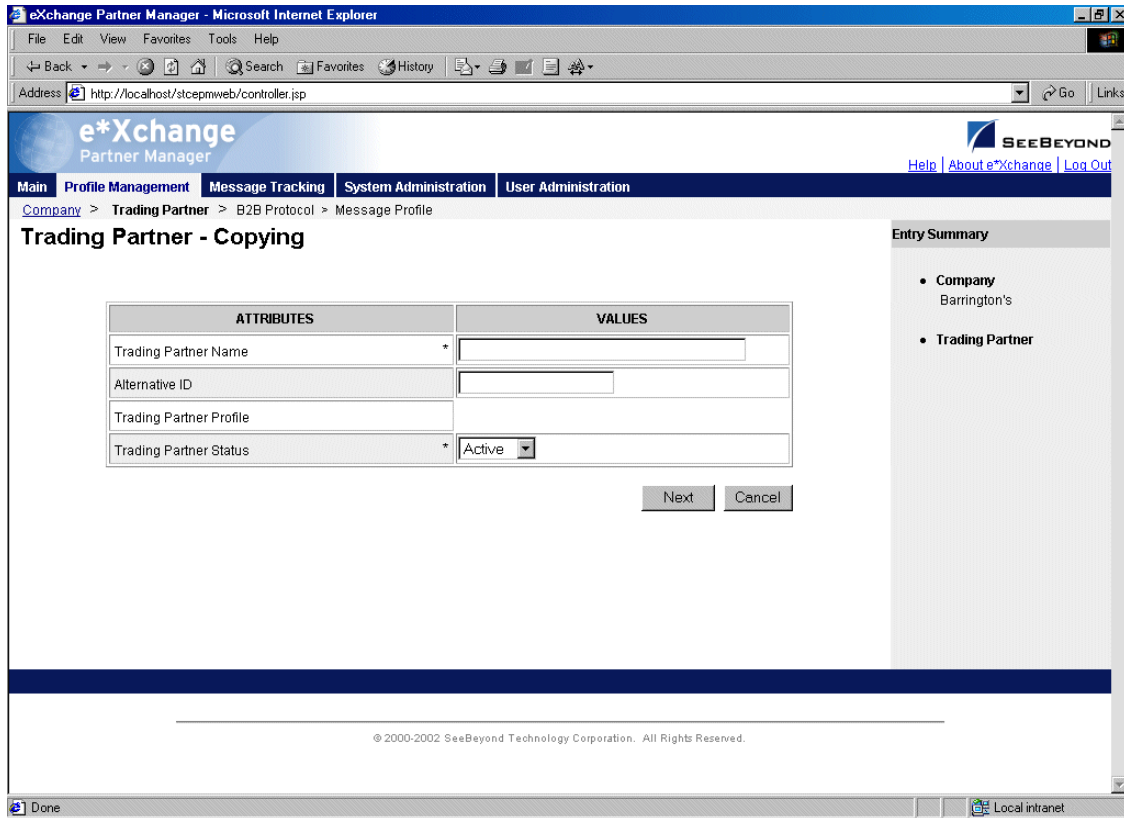
- 1 On the **Trading Partner** page, select the trading partner that you want to copy.
The trading partner properties are displayed on the right side of the page.
- 2 Click the **Copy** button.
The **Copy Type** page appears (see Figure 46).

Figure 46 Copy Type (Copying a Trading Partner)



- 3 Make sure **Same Company** is selected.
- 4 Optional: if you do not want to copy subcomponents (B2B protocols and message profiles), clear the **Include subcomponents** check box.
- 5 Click **OK**.
The **Trading Partner - Copying** page appears (see Figure 47).

Figure 47 Trading Partner - Copying



6 Change the values as needed.

For more information, see [Table 9 on page 82](#).

7 Click **Next** to save changes and return to the **Trading Partner** page.

The new trading partner is now on the drop-down trading partner list.

To copy a trading partner to another company

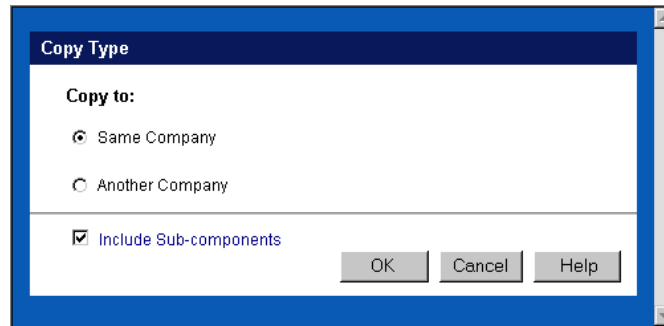
1 On the **Trading Partner** page, select the trading partner that you want to copy.

The trading partner properties are displayed on the right side of the page.

2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 48).

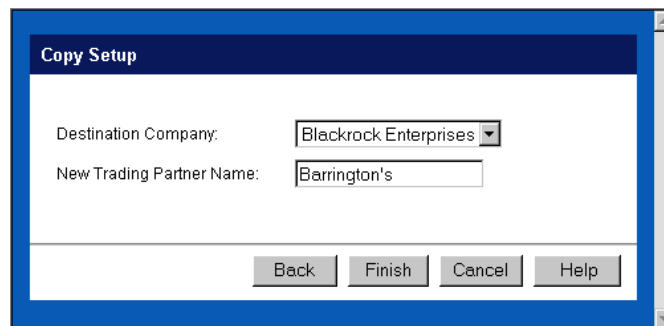
Figure 48 Copy Type (Copying a Trading Partner)



- 3 Select **Another Company**.
- 4 Optional: if you do not want to copy subcomponents (message profiles), clear the **Include subcomponents** check box.
- 5 Click **OK**.

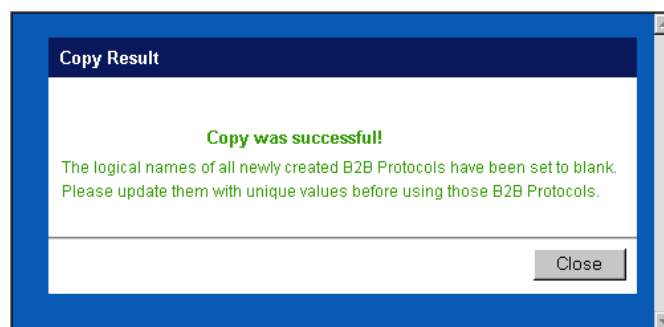
The **Copy Setup** page appears (see Figure 49).

Figure 49 Copy Setup (Copying a Trading Partner to Another Company)



- 6 Select the destination company from the drop-down list.
- 7 If you want to change the trading partner name, type the new name.
- 8 Click **Finish**.

The trading partner information is copied to the selected company. When done, e*Xchange displays a message letting you know that the copy was successful:




To delete a trading partner


- 1 On the **Trading Partner** page, select the trading partner from the drop-down list.
The trading partner properties are displayed on the right side of the page.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the profile, click **OK**.
The trading partner is deleted.

To inactivate or reactivate a trading partner

- 1 On the **Trading Partner** page, select the trading partner from the drop-down list.
The trading partner properties are displayed on the right side of the page.
- 2 In the **Trading Partner Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:

- ♦  Trading partner is active: click to inactivate.

Note: If you attempt to inactivate a trading partner when there are active messages (either in the queue or waiting for acknowledgment) for the trading partner, e*Xchange gives a warning that the messages will be deleted if you continue.

- ♦  Trading partner is inactive: click to reactivate. You are offered the option to cascade the current access rights to the lower levels.

To set up security

- 1 On the **Trading Partner** page, select the trading partner from the drop-down list.
The trading partner properties are displayed on the right side of the page.
- 2 Click the **Security** icon.
The **Security Management** page appears.
- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to **“Security” on page 68**.

To set up contacts

- 1 On the **Trading Partner** page, click the **Contacts** icon.
The **Trading Partner - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Trading Partner - Contacts Adding** page and then click **Apply**.

- ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Trading Partner - Contacts Editing** page and then click **Apply**.
- ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Trading Partner - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

4.5 Setting Up B2B Protocol Information

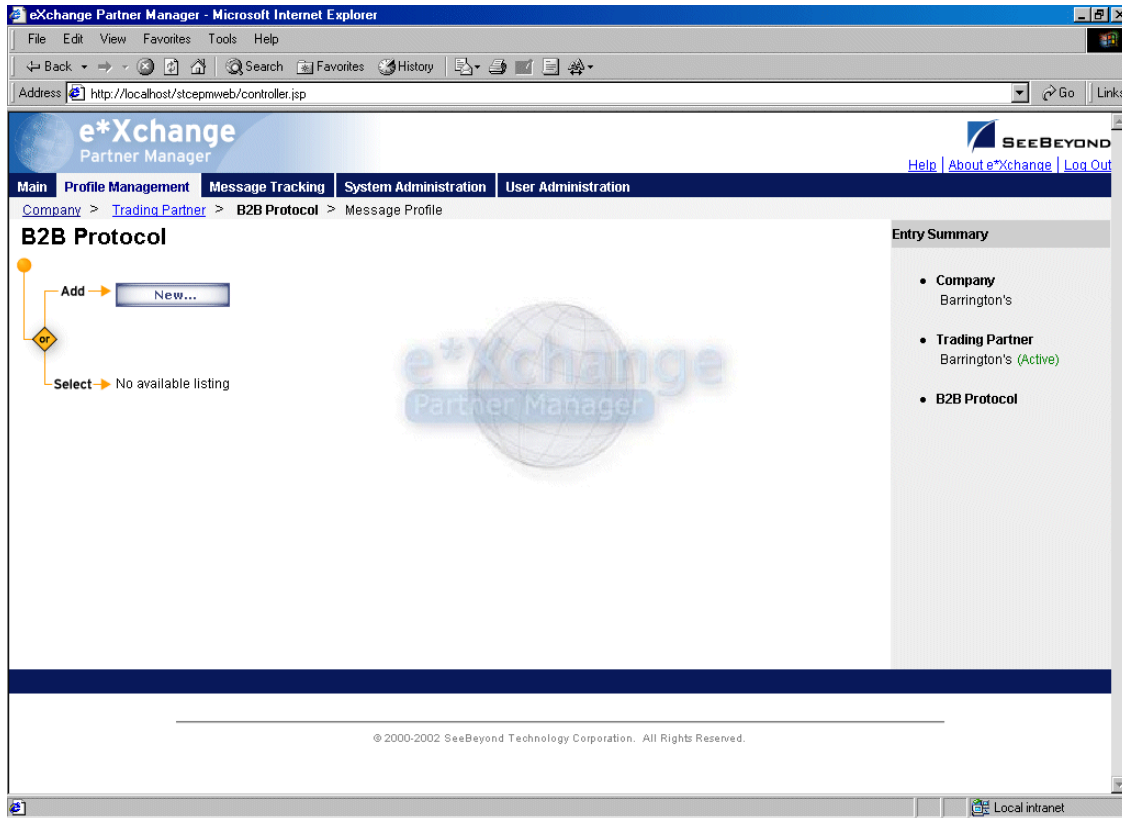
Once you have set up a trading partner, the next step is to enter B2B protocol information for that trading partner. For each eBusiness protocol, you must set up the outbound and inbound values separately.

The B2B protocol attributes that you must enter are grouped into three sections:

- General
- Transport Component
- Message Security

From the **Trading Partner** page, select a trading partner and click **Continue: B2B Protocol** to access the **B2B Protocol** page (see Figure 50).

Figure 50 B2B Protocol Page



From the **B2B Protocol** page you can complete the following activities:

- Add a B2B protocol for the selected trading partner (see [“To add a B2B protocol on page 91”](#))
- Select a B2B protocol: choose from the drop-down list. The B2B protocol **General** properties are displayed on the right side of the page. Click on the **Transport Component** or **Message Security** links above the properties display to view those additional properties.
- Edit the selected B2B protocol; first select the section that you want to edit (**General**, **Transport Component**, or **Message Security**), and then click the **Edit** button to access the **B2B Protocol - Editing** page for that section (see [“To edit a B2B protocol on page 99”](#))
- Create a new B2B protocol based on the selected one (see [“To copy a B2B protocol to the same trading partner on page 100”](#) and [“To copy a B2B protocol to another trading partner on page 102”](#))

For general information on the copy feature, refer to [“Copying Components on page 104.”](#)

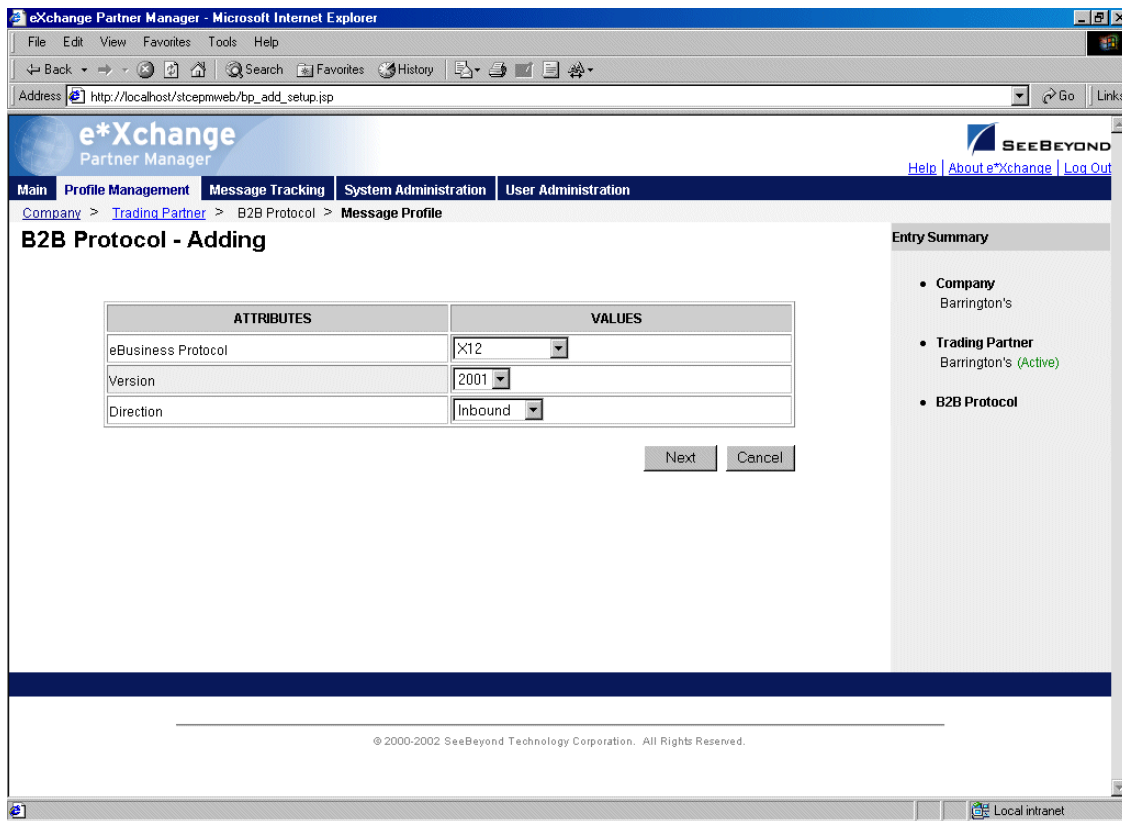
- Delete the selected B2B protocol (see [“To delete a B2B protocol for a trading partner on page 103”](#))
- Activate or inactivate the selected B2B protocol (see [“To inactivate or reactivate a B2B protocol on page 104”](#))

- Set or change security for the B2B protocol (see [“To set up security” on page 104](#))
- Add, change, or delete contacts for the selected B2B protocol (see [“To set up contacts” on page 104](#)).
- Select an existing B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page.

To add a B2B protocol

- 1 From the **B2B Protocol** page, click the **New** button to access the **B2B Protocol - Adding** page (see Figure 51).

Figure 51 B2B Protocol - Adding

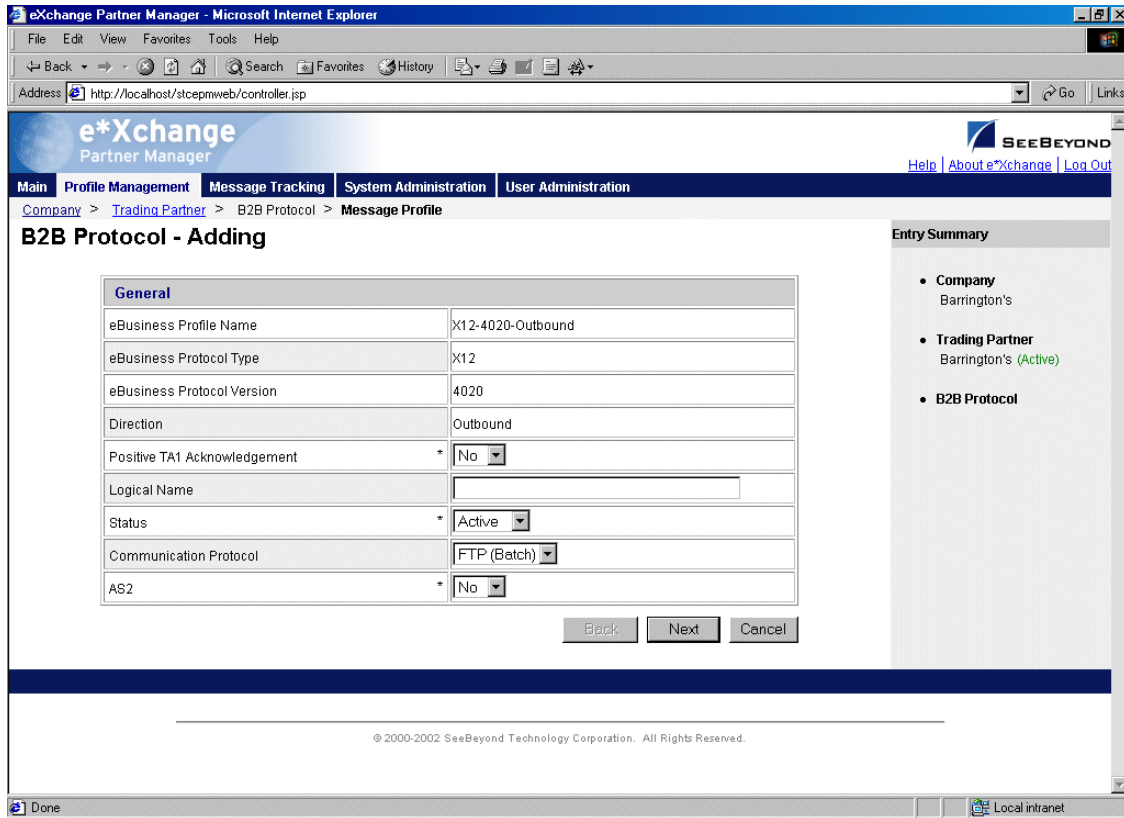


- 2 Select an eBusiness protocol, version, and direction, and then click **Next** to access the next **B2B Protocol - Adding** page, **General** section (see Figure 52).

The specific fields might vary according to the B2B protocol you have selected.

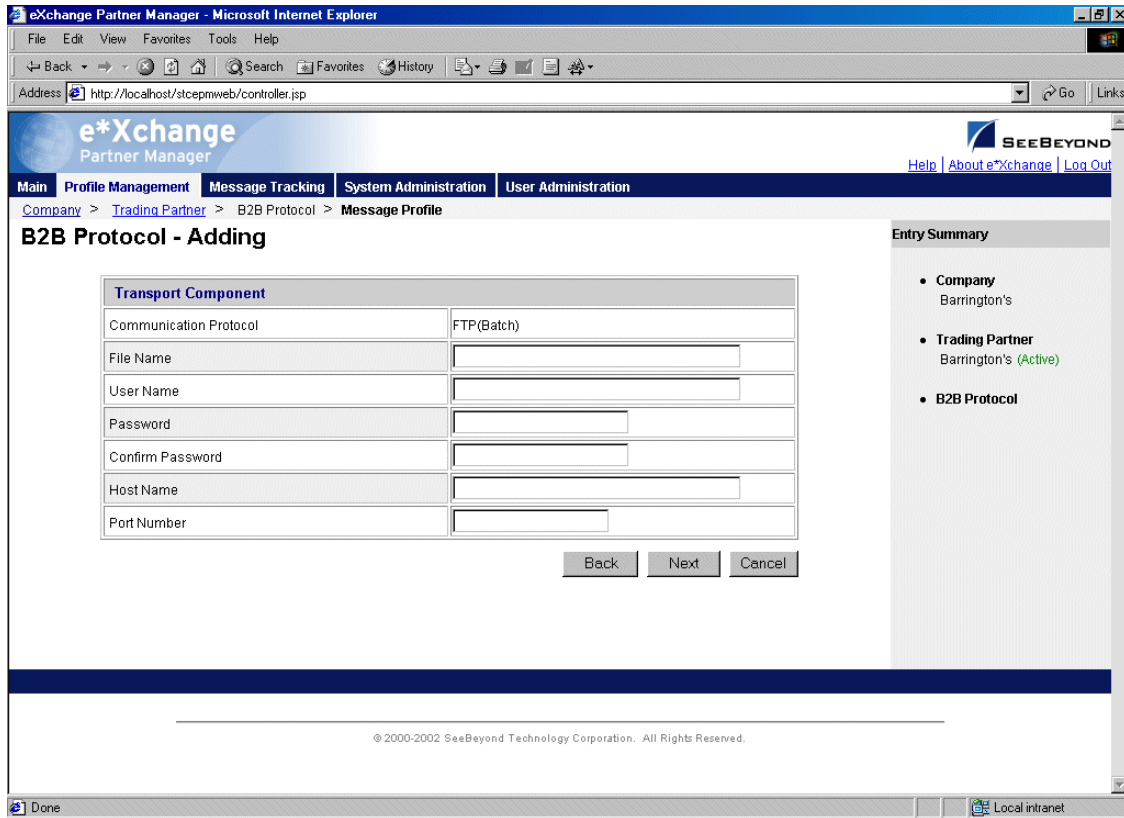
For UN/EDIFACT, note that the selection list offers envelope versions only: version 3 Batch, 4 Batch, and 4 Interactive. The specific EDIFACT transaction versions are used by the e*Exchange back end but are not visible within the e*Exchange user interface.

Figure 52 B2B Protocol - Adding (General section)



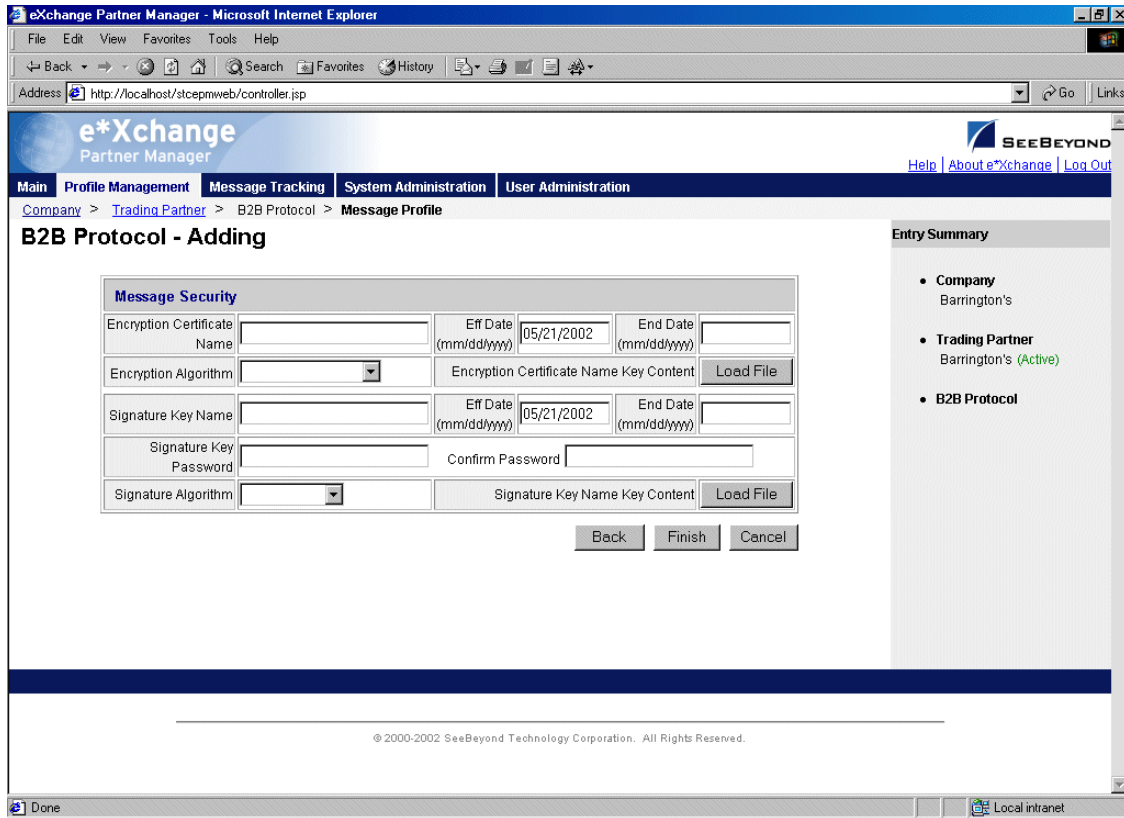
- 3 Enter the values for the **General** attributes.
For more information, see [Table 10 on page 95](#).
- 4 Click **Next** to access the **Transport Component** section (see Figure 53).

Figure 53 B2B Protocol - Adding (Transport Component section)



- 5 Enter the values for the **Transport Component** attributes.
For more information, see [Table 11 on page 96](#).
- 6 Click **Next** to access the **Message Security** section (see Figure 54).

Figure 54 B2B Protocol - Adding (Message Security section) (outbound)



Note: The values you chose for *Communications Protocol* and *Direction*, together with the eBusiness protocol being used, determine the selection of fields available on the *Message Security* page. Figure 54 is only an example.

- 7 Enter the values for the **Message Security** attributes.
For more information, refer to [Table 12 on page 97](#) for outbound messages, or [Table 13 on page 98](#) for inbound messages.
- 8 Click **Finish** to save the information and return to the **B2B Protocol** page.

Table 10 B2B Protocol, General Section

Name	Description
eBusiness Profile Name	The name of the profile. This is automatically created out of the selected eBusiness protocol, version, and direction you chose on the first B2B Protocol - Adding page; for example, X12-4010-Inbound. However, you can change it.
eBusiness Protocol Type	An indication of the selected eBusiness protocol; X12, EDF (for UN/EDIFACT), NCPDP, ROS (for RosettaNet), or CIDX.
eBusiness Protocol Version	The version of the eBusiness protocol, as selected on the first B2B Protocol - Adding page.
Direction	The direction for the messages you are currently setting up; Inbound or Outbound .
Positive TA1 Acknowledgment (X12 only)	Indicates whether a positive TA1 is to be transmitted to the trading partner (for inbound) or received from the trading partner (for outbound); Y or N .
Logical Name	<p>A value that is used by e*Xchange, during message processing, to locate the appropriate B2B protocol in the database. There are several important conditions for the logical name:</p> <ul style="list-style-type: none"> ▪ For X12 and UN/EDIFACT, the Logical Name, Version, Sender ID, and Receiver ID for the outbound B2B protocol must match the Logical Name, Version, Receiver ID, and Sender ID for the inbound B2B protocol. For example, if you are using X12 version 4020, use the same logical name value for the inbound and outbound envelopes for that version. ▪ It must be unique for each inbound/outbound B2B protocol set. For example, if you are using X12 versions 4020 and 4030, use one value for the 4020 inbound and outbound envelope set, and another for the 4030 inbound and outbound envelopes. If you have only one B2B protocol set per company, you can use the company name. You could also use a numerical value, or any other value as long as it is unique to the inbound/outbound envelope set. ▪ For outbound messages, unless you specify a Message ALT ID at the Message Profile level, the logical name is the primary value used when e*Xchange receives a message from an internal system to identify the trading partner to which the message is routed. The value in this field must be identical, including case, to the value set in the eX_Standard_Event structure's Partner Name node. For more information, refer to the <i>e*Xchange Partner Manager Implementation Guide</i>.
Status	Select a status for the B2B protocol; Active or Inactive . Default: Active .
Communication Protocol	The communications protocol to be used for sending or receiving messages using this B2B protocol; FTP (Batch), HTTP, HTTPS, or SMTP.
AS2 (X12, NCPDP, and UN/EDIFACT only)	If you are using AS2, select Yes . Additional fields become available at the Message Profile level for your AS2 settings.

Table 10 B2B Protocol, General Section (Continued)

Name	Description
Internal Format (RosettaNet 2.0 and CIDX only)	<p>A code used only for messages that will be sent to or received from the internal system, not to the trading partner. The internal format code indicates the message format.</p> <p>Acceptable values for RosettaNet 2.0:</p> <ul style="list-style-type: none"> ▪ GEN for a message in RosettaNet 2.0 generic format (the default). ▪ RNBM for a message in RosettaNet 2.0 Business Message format. <p>Acceptable values for CIDX:</p> <ul style="list-style-type: none"> ▪ GEN for a message in CIDX generic format (the default). ▪ CIXO for a CIDX Object.

Table 11 B2B Protocol, Transport Component Section

Name	Description
Communication Protocol	<p>The communications protocol used for this B2B protocol component.</p> <ul style="list-style-type: none"> ▪ FTP (Batch)—Messages are transmitted using the FTP protocol. Note: If you want the files to be stored on the local machine, supply the File Name but leave the User Name, Password, Host, and Port boxes empty. ▪ HTTP—Messages are transmitted with HTTP. ▪ HTTPS—Messages are transmitted using HTTP with SSL. ▪ SMTP—Messages are transmitted using the Simple Mail Transfer Protocol.
File Name (FTP)	<p>For inbound—type the complete file name, including path and extension, of the file from which inbound B2B protocols based on this profile are read, or to which outbound B2B protocols are written. You can use wild cards in the filename or at the beginning of the extension but not at the end; for example, use *.dat or *.at but not *.da*.</p> <p>For outbound—type the complete file name, including path and extension, using variables as needed. %d adds a two-digit day (for example, 05 for the fifth day of the month) to the file name, and %# adds a sequential number (for example, 01, 02, and so forth); for example, TP01%d_%#.dat.</p> <p>Windows: If the FTP server is set up on a Windows machine, the path must be relative to the FTP server default directory. For example, if the FTP server default directory is c:\<eGate> and your full path for inbound messages is c:\<eGate>X12\input*.in, type only X12\input.*in.</p> <p>UNIX: If the FTP server is set up on a UNIX machine, use forward slashes. For example, your full path for outbound messages might be /home/<eGate>/EFT/output/1400_EDF48_%d_%#.dat.</p>
URL (HTTP, HTTPS)	<p>If the communication protocol is HTTP or HTTPS, enter the full URL, including prefix. For example: http://www.WebAddress.com or https://www.SecureWebAddress.com.</p>
User Name (FTP, HTTP, HTTPS)	<p>The user name to be used to access the host on which messages are stored. If the communications protocol is FTP (Batch), the user name and password are required for successful transfer of files to and from the FTP server. Note: To store the files on the local machine, leave this field empty.</p>

Table 11 B2B Protocol, Transport Component Section (Continued)

Name	Description
Password (FTP, HTTP, HTTPS)	The password to be used to access the host used for storage and retrieval of messages. If the communication protocol is FTP (Batch), the user name and password are required for successful transfer of files to and from the FTP server. Note: To store the files on the local machine, leave this field empty.
Confirm Password (FTP, HTTP, HTTPS)	Type the password again. This helps prevent errors in entering a password.
Host Name (FTP)	The name of the host on which messages are stored. For inbound messages, this is the source of the messages; for outbound messages, it is the destination. If the communication protocol is FTP (Batch), this field is required for successful transfer of files to or from the host. If files are stored locally, leave empty.
Port Number (FTP)	You have the option to specify the port to be used to access the host. Leave this field blank to use the default port.
Sender Email Address (SMTP)	The e-mail address of the message sender.
Receiver Email (SMTP)	The e-mail address of the message recipient.
MailHost/IP Address (SMTP) (Outbound only)	The host name of the mail server.
MailHost Port (SMTP) (Outbound only)	The port for the mail server.

Table 12 B2B Protocol, Message Security Section (Outbound)

Name	Description
The following fields are only available for RosettaNet 2.0, X12, and UN/EDIFACT:	
Encryption Certificate Name	The name for your encryption certificate.
Eff Date/End Date	Set the effective date and expiration date for the encryption certificate.
Encryption Algorithm	The algorithm used for the message security. Choose DES_CBC, RC2_128, RC2_40, or DES_EDE3_CBC.
Encryption Certificate Name Key Content	To load the key content into the database, click the Load File button to access the File Upload page. Browse for the file, and then click the Upload button. When upload is complete, click OK .
The following fields are available for all:	
Signature Key Name	The name for your signature key.
Eff Date/End Date	Set the effective date and expiration date for the signature key.

Table 12 B2B Protocol, Message Security Section (Outbound) (Continued)

Name	Description
Signature Key Password (Optional)	Type the password for the signature key, if it has one.
Confirm Password	Type the signature key password again, to confirm it.
Signature Algorithm	The algorithm used for the signature encryption. Choose RSA_MD5 or RSA_SHA1.
Signature Key Name Key Content	To load the key content into the database, click the Load File button to access the File Upload page. Browse for the file, and then click the Upload button. When upload is complete, click OK .
The following fields are only available if the Communications Protocol is HTTPS:	
SSL Keystore Value	The value for the SSL keystore file, used for authentication using SSL.
Eff Date/End Date	Set the effective date and expiration date for the SSL keystore.
SSL Keystore Password	Type the password for the SSL keystore, if any.
Confirm Password	Type the SSL keystore password again, to confirm it.
SSL Keystore Type	The type of keystore: JKCS or PKCS12.
SSL Keystore Value Key Content	To load the key content into the database, click the Load File button to access the File Upload page. Browse for the file, and then click the Upload button. When upload is complete, click OK .

Table 13 B2B Protocol, Message Security Section (Inbound)

Name	Description
The following fields are only available for RosettaNet 2.0, X12, and UN/EDIFACT:	
Decryption Key Name	The name for the decryption key.
Eff Date/End Date	Set the effective date and expiration date for the decryption key.
Decryption Key Password	The password for the decryption key.
Confirm Password	Type the decryption key password again, to confirm it.
Decryption Key Name Key Content	To load the key content into the database, click the Load File button to access the File Upload page. Browse for the file, and then click the Upload button. When upload is complete, click OK .
The following fields are available for all:	
Signature Verification Certificate Name	The name for your signature verification certificate.
Eff Date/End Date	Set the effective date and expiration date for the signature verification certificate.

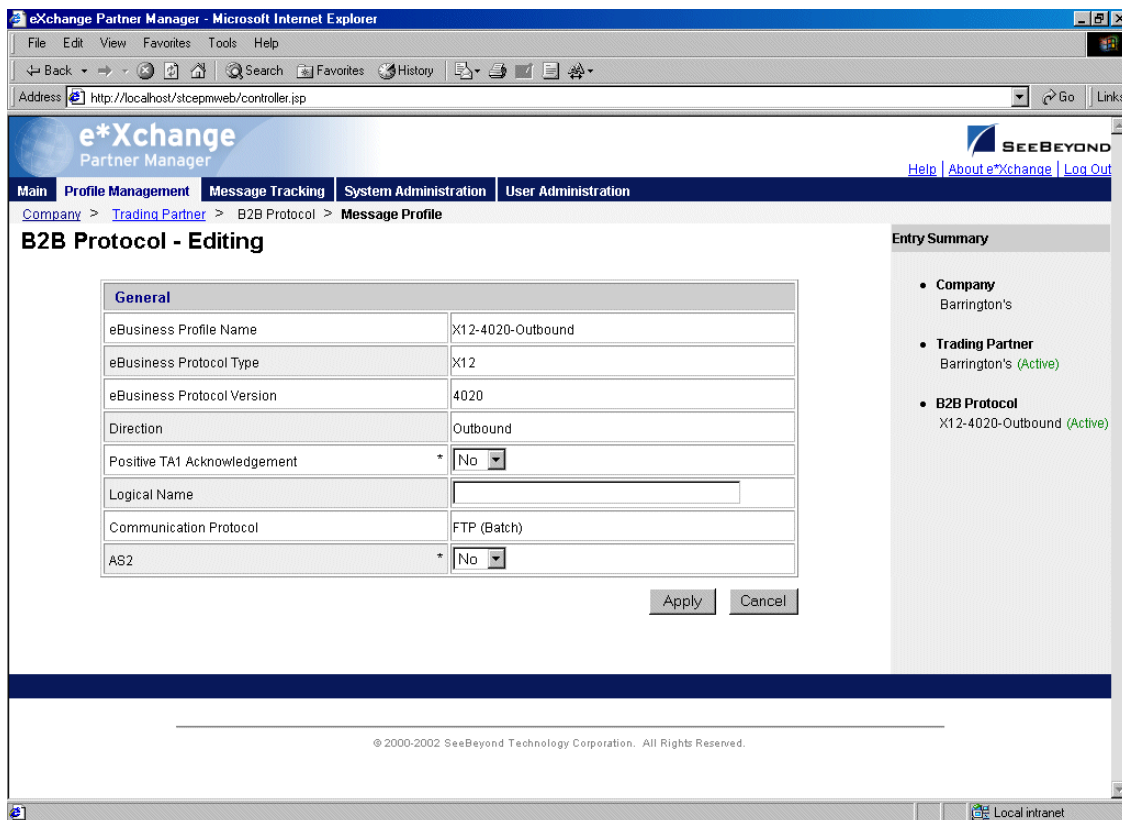
Table 13 B2B Protocol, Message Security Section (Inbound) (Continued)

Name	Description
Signature Verification Certificate Name Key Content	To load the key content into the database, click the Load File button to access the File Upload page. Browse for the file, and then click the Upload button. When upload is complete, click OK .

To edit a B2B protocol

- 1 From the **B2B Protocol** page, select the B2B protocol from the drop-down list.
The B2B protocol properties are displayed on the right side of the page.
- 2 Click the link for the section you want to edit: **General**, **Transport Component**, or **Message Security**.
- 3 Click the **Edit** button to access the **B2B Protocol - Editing** page listing the attribute section that you selected (see Figure 55).

Figure 55 B2B Protocol - Editing (General page)



- 4 Change the values as needed.

For more information on specific values, refer to the appropriate table:

- ♦ General—[Table 10 on page 95](#)
- ♦ Transport Component—[Table 11 on page 96](#)

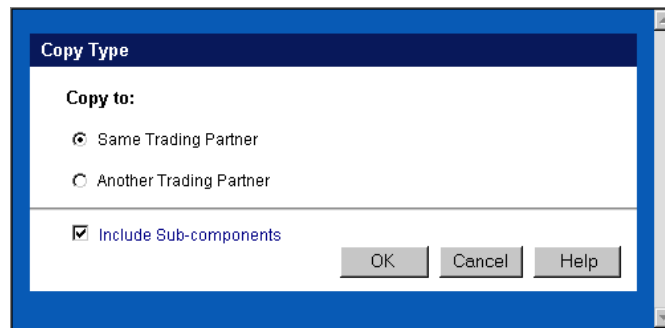
- ♦ Message Security (outbound)—[Table 12 on page 97](#)
- ♦ Message Security (inbound)—[Table 13 on page 98](#)

5 Click **Apply** to save the changes and return to the **B2B Protocol** page.

To copy a B2B protocol to the same trading partner

- 1 On the **B2B Protocol** page, select the B2B protocol that you want to copy.
The B2B protocol properties are displayed on the right side of the page.
- 2 Click the **Copy** button.
The **Copy Type** page appears (see Figure 56).

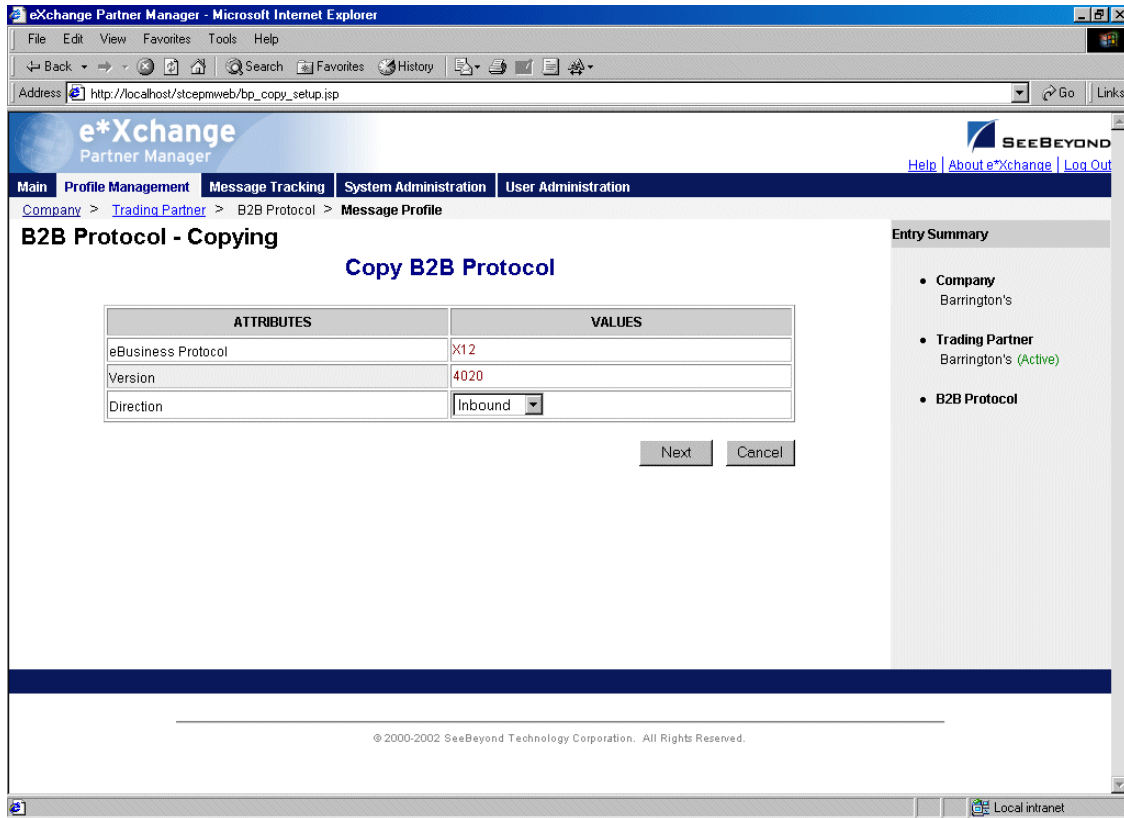
Figure 56 Copy Type (Copying a B2B Protocol)



- 3 Make sure **Same Trading Partner** is selected.
- 4 Optional: if you do not want to copy subcomponents (message profiles), clear the **Include subcomponents** check box.
- 5 Click **OK**.

The **B2B Protocol - Copying** page appears (see Figure 57).

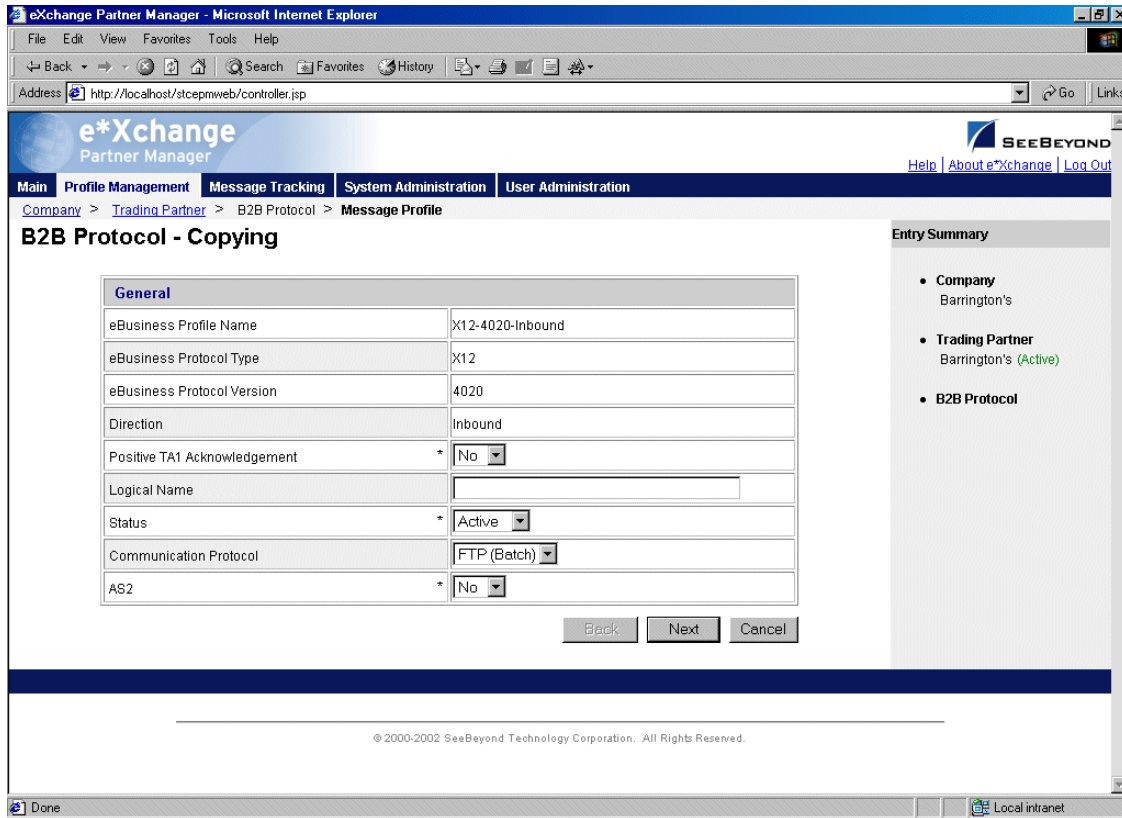
Figure 57 B2B Protocol - Copying



Note: The Web interface automatically changes the direction.

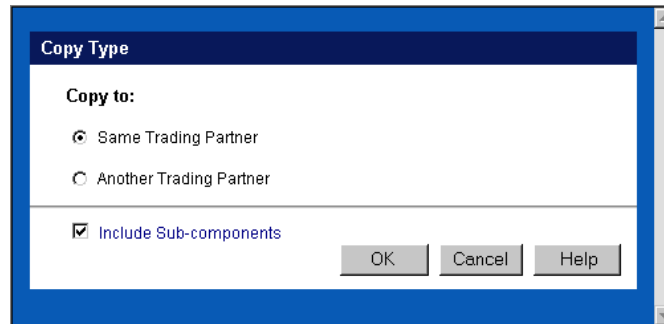
- 6 Click **Next** to access the **B2B Protocol - Copying** page showing the **General** section (see Figure 58).

Figure 58 B2B Protocol - Copying (General page)



- 7 Change the values for the **General** attributes as needed.
For more information, see [Table 10 on page 95](#).
 - 8 Click **Next**.
 - 9 Change the values for the **Transport Component** attributes as needed.
For more information, see [Table 11 on page 96](#).
 - 10 Click **Next**.
 - 11 Change the values for the **Message Security** attributes as needed.
For more information, refer to [Table 12 on page 97](#) for outbound messages, or [Table 13 on page 98](#) for inbound messages.
 - 12 Click **Finish** to save the new B2B protocol and return to the **B2B Protocol** page.
- To copy a B2B protocol to another trading partner
- 1 On the **B2B Protocol** page, select the B2B protocol that you want to copy from the drop-down list.
The B2B protocol properties are displayed on the right side of the page.
 - 2 Click the **Copy** button.
The **Copy Type** page appears (see Figure 59).

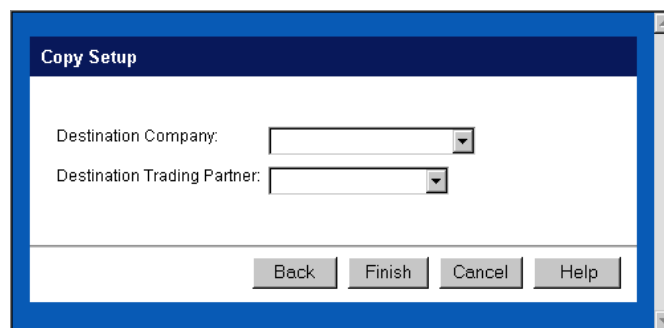
Figure 59 Copy Type (Copying a B2B Protocol)



- 3 Select **Another Trading Partner**.
- 4 Optional: if you do not want to copy subcomponents (message profiles), clear the **Include subcomponents** check box.
- 5 Click **OK**.

The **Copy Setup** page appears (see Figure 60).

Figure 60 Copy Setup (Copying a B2B Protocol to Another Trading Partner)





- 6 On the **Copy Setup** page, select the destination company.
- 7 Select the destination trading partner.
- 8 Click **OK**.

The B2B protocol information is copied to the selected company/trading partner. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a B2B protocol for a trading partner

- 1 On the **B2B Protocol** page, select the B2B protocol from the drop-down list.
The B2B protocol properties are displayed on the right side of the page.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the protocol, click **OK**.
The B2B protocol is deleted.

To inactivate or reactivate a B2B protocol

- 1 On the **B2B Protocol** page, select the B2B protocol from the drop-down list.
The B2B protocol properties are displayed on the right side of the page.
- 2 In the **B2B Protocol Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:
 - ◆  B2B protocol is active: click to inactivate.
 - ◆  B2B protocol is inactive: click to reactivate. You are offered the option to cascade the current access rights to the lower levels.

To set up security

- 1 On the **B2B Protocol** page, select the B2B protocol from the drop-down list.
The B2B protocol properties are displayed on the right side of the page.
- 2 Click the **Security** icon.
The **Security Management** page appears.
- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **B2B Protocol** page, click the **Contacts** icon.
The **B2B Protocol - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ◆ To add a contact, click the **Add** button in the appropriate row. Type the information in the **B2B Protocol - Contacts Adding** page and then click **Apply**.
 - ◆ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **B2B Protocol - Contacts Editing** page and then click **Apply**.
 - ◆ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **B2B Protocol - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

4.6 Copying Components

Once you have set up some components, e*Xchange allows you to copy the information that you have set up, so that the existing information can be reused in making new components.

e*Xchange provides several copying options that can help you to streamline the setup of your trading partner information.

By copying a component and using that as a basis for a new component, you can reuse information that you have already set up, modifying only those values that are unique for the new component. For example, for a specific trading partner you can set up inbound values at the B2B Protocol level and then copy this information as a basis for the outbound values. Alternatively, if you have two trading partners that use the same eBusiness protocol and the same transactions, you can set up one trading partner, all the way down to the message profiles, and then copy the trading partner and all subcomponents to a new company. You can then modify the values as needed. For example, if you copy the B2B protocol level, be sure to update the Sender ID and Receiver ID.

Copying of components is available at each level as follows:

- Company
 - ♦ You can copy only the company itself, or you can include all subcomponents (trading partners, B2B protocols and message profiles that have been set up for that company) at the same time.
 - ♦ You must enter a new company name before saving.
- Trading Partner
 - ♦ You can copy to the same company or to a different company.
 - ♦ You must enter a new trading partner name before saving.
 - ♦ When copying to the same company, you have the option to change other trading partner parameters before saving.
 - ♦ You can copy only the trading partner itself, or you can include all subcomponents (B2B protocols and message profiles that have been set up for that trading partner) at the same time.
- B2B Protocol
 - ♦ You can copy to the same trading partner or to a different trading partner.
 - ♦ If you are copying to the same trading partner, the new B2B protocol automatically takes the opposite direction (if you are copying the outbound B2B protocol, the values are copied to the inbound B2B protocol).
 - ♦ If you are copying to a different trading partner, the new B2B protocol is the same direction as the one that was copied (for example, inbound to inbound).
 - ♦ When copying to the same trading partner, you have the option to change other B2B protocol parameters before saving.
 - ♦ You have the option to copy only the B2B protocol itself, or to copy all subcomponents (message profiles that have been set up for that B2B protocol) at the same time.

Note: *When copying B2B protocols, the Logical Name is not copied, since it must be unique for each inbound/outbound pair at the B2B Protocol level. After copying, you must set the logical name for each new B2B Protocol. In addition, the existing*

Sender ID (ISA06) and Receiver ID (ISA08) are copied when you copy the B2B Protocol. Be sure to update them.

- Message Profile
 - ♦ You can copy to the same B2B protocol or to a different B2B protocol.
 - ♦ If you are copying to the same B2B protocol, you must provide a name for the new B2B protocol.
 - ♦ If you are copying to a different Company/Trading Partner/B2B protocol, you can only copy to a trading partner that has B2B protocols already set up for the eBusiness protocol for which the message profiles apply.
 - ♦ When copying to the same B2B profile, you have the option to change other message profile parameters before saving.

4.7 Setting Up Message Profile Information

The next step is to set up values for individual messages, at the message profile level.

Since the values are considerably different for each eBusiness protocol, message profile setup is addressed in separate chapters, as follows:

- X12—[“Profile Setup for X12” on page 107](#)
- NCPDP-HIPAA—[“Profile Setup for NCPDP-HIPAA” on page 136](#)
- UN/EDIFACT (versions 3 Batch, 4 Batch, and 4 Interactive)—[“Profile Setup for UN/EDIFACT” on page 151](#)
- RosettaNet (versions 1.1 and 2.0)—[“Profile Setup for RosettaNet” on page 188](#)
- CIDX—[“Profile Setup for CIDX” on page 218](#)

4.7.1. Entering Return Message Information

You must specify one or more message profile that will be expected in response to the current message profile. You can select more than one return message profile.

Profile Setup for X12

This chapter provides information on setting up X12 transactions in the e*Xchange Partner Manager, at the Message Profile level.

The Company, Trading Partner, and B2B Protocol (inbound and outbound) levels must be set up first. For information on setting up these components, refer to [“Profile Management” on page 72](#).

This chapter includes information on the following:

- Setting the values for:
 - ♦ Interchange envelope (ISA and IEA segments)
 - ♦ Functional group (GS and GE segments)
 - ♦ Transaction set (ST and SE segments)
- Specifying the messaging protocol used to relay the messages
- Using the special files provided for HIPAA transactions
- Handling errors

5.1 Template Libraries

If you are using X12, you must install the X12 templates provided by SeeBeyond. If you are using HIPAA, install the HIPAA templates. Both of these template libraries are available during e*Gate installation via the “Add-Ons” option. For installation instructions, refer to the [X12 ETD Library User’s Guide](#) or the [HIPAA ETD Library User’s Guide](#).

5.2 X12 Header and Trailer Segment Values

You must enter values for the X12 header and trailer segments so that e*Xchange can successfully interpret and route messages to and from a trading partner.

Most of the header and trailer segment values are set up in the message profile. Some other values are counted or tracked automatically by e*Xchange, or are provided by e*Gate.

Generally speaking, X12 envelope layers are set up in the e*Xchange Web interface as follows:

- B2B Protocol level—used to set up values specific to the trading partner but general to all messages to and from the trading partner. This includes interchange segment values, delimiters, Include IC/FG Envelope, and some functional group segments.
- Message Profile level—used to set up values specific to an individual X12 transaction. This includes some functional group segments, all the transaction set segments, and batch settings.

Table 14 shows the values required by the interchange header and footer segments for X12 version 4010. These values are either recorded in the Interchange Control Envelope section or taken automatically from system data (such as the date and time).

Other X12 versions might have slightly different segments or values.

Table 14 Interchange Header and Footer Values (X12 Version 4010)

Segment	Name	Section	Extended Attribute Name
ISA Interchange Header			
ISA01	Author Info Qualifier	IC envelope	ISA01 AUTHOR INFO QUAL
ISA02	Author Information	IC envelope	ISA02 AUTHOR INFORMATION
ISA03	Security Info Qual	IC envelope	ISA03 SEC INFO QUAL
ISA04	Security Information	IC envelope	ISA04 SECURITY INFORMATION
ISA05	Interchange ID Qual	IC envelope	ISA05 IC SENDER ID QUAL
ISA06	Interchange Sender ID	IC envelope	ISA06 INTERCHANGE SENDER ID
ISA07	Interchange ID Qual	IC envelope	ISA07 IC RCVR ID QUAL
ISA08	Interchange Receiver ID	IC envelope	ISA08 INTERCHANGE RCVR ID
ISA09	Interchange Date		Taken automatically from the e*Gate time stamp.
ISA10	Interchange Time		Taken automatically from the e*Gate time stamp.
ISA11	Inter Ctrl Stand Ident	IC envelope	ISA11 IC STANDARDS ID
ISA12	Inter Ctrl Version Num	IC envelope	ISA12 IC VERSION NUMBER
ISA13	Inter Ctrl Number	IC envelope	ISA13 IC CONTROL NUMBER
ISA14	Ack Requested		Taken from Positive TA1 Acknowledgment on the General tab, B2B protocol layer: <ul style="list-style-type: none"> ▪ If user selects Yes, value is set to 1 ▪ If user selects No, value is set to 0
ISA15	Usage Indicator	IC envelope	ISA15 USAGE INDICATOR
ISA16	Component Elem Sepera	IC envelope	ISA16 COMP ELE SEP
IEA Interchange Trailer (Footer)			
IEA01	Number of Incl Funct Group		Counted automatically by e*Xchange.

Table 14 Interchange Header and Footer Values (X12 Version 4010) (Continued)

Segment	Name	Section	Extended Attribute Name
IEA02	Inter Ctrl Number	IC envelope	Same as ISA13

Table 15 shows the values required by the functional group header and footer segments. These values are either recorded in the Functional Group Envelope section or taken automatically from system data (such as the date and time).

Table 15 Functional Group Header and Footer Values

Segment	Name	Layer	Extended Attribute Name
GS Functional Group Header			
GS01	Functional ID Code	FG Envelope	GS01 FUNCTIONAL ID CODE
GS02	Application Sender's Code	FG Envelope	GS02 APPLICATION SENDER CODE
GS03	Application Receiver's Code	FG Envelope	GS03 APPLICATION RCVR CODE
GS04	Date		Taken automatically from the e*Gate time stamp.
GS05	Time		Taken automatically from the e*Gate time stamp.
GS06	Group Control Number	FG Envelope	GS06 GROUP CONTROL NUM
GS07	Responsible Agency Code	FG Envelope	GS07 RESP AGENCY CODE
GS08	Ver/Release ID Code	FG Envelope	GS08 VERS/REL/INDUST ID CODE
GE Functional Group Trailer (Footer)			
GE01	Number of Transaction Sets Included		Counted automatically by e*Xchange.
GE02	Group Control Number		Same as GS06

Table 16 shows the values required by the transaction set header and footer segments. These values are either recorded in the Transaction Set Envelope section or taken automatically (for example, counted by the system).

Table 16 Transaction Set Header And Footer Values

Segment	Name	Section	Extended Attribute Name
ST Transaction Set Header			
ST01	TS ID Code	TS Envelope	ST01 TRAN SET ID CODE
ST02	TS Control Number	TS Envelope	ST02 TS CONTROL NUM
SE Transaction Set Trailer (Footer)			
SR01	Number of Inc Segs		Counted automatically by e*Xchange.
SE02	TS Control Number		Same as ST02

5.3 X12 Delimiters

For X12, delimiters are set up at the Message Profile level, in the Interchange Control Envelope section.

It is important to note the specific use of delimiters in the extended attributes and how it affects default use of delimiters in messages processed by e*Xchange.

For inbound messages, e*Xchange uses the delimiters specified in the message. Even if other values are specified in the Extended Attributes, these are ignored.

For an outbound message, e*Xchange replaces the delimiters used by the internal application with those specified in the Extended Attributes before forwarding the message to the trading partner.

If the message received from the internal application does not include all the envelope layers, including ISA, GS, GE, and IEA segments, e*Xchange requires the default delimiters:

- Tilde (~) as the segment delimiter
- Asterisk (*) as the element delimiter
- Colon (:) as the composite element delimiter

If the internal application includes the full ISA IEA envelope structure, the message can use the delimiters specified in the ISA segment. e*Xchange uses these delimiters to parse the message. e*Xchange then replaces these delimiters with those specified in the Extended Attributes of the trading partner profile.

5.4 Transfer Modes in X12

X12 offers three alternatives in terms of how frequently messages are sent:

- **Interactive** (single-item batching in real time)—messages are sent as soon as they are generated or received. Typically, messages that are used in a real time mode are those that require an immediate response. The sender sends a request message to the receiver and remains connected while the receiver processes the request message and returns a response message.
- **Batch**—messages of all types are sent in groups called batches. In batch mode, the frequency of batch transmission is normally determined by a user-specified time setting.
- **Fast Batch**—messages of a certain type are accumulated and sent to the trading partner as a group of messages, all of the same transaction type, at a preset point. Fast batch has one interchange, one functional group, and a preset number of transactions. The point at which a fast batch is sent is determined by the setting in the Standard Event Structure for the message profile.

5.4.1. Fast Batch Settings

If you are using Fast Batch, you must set the following values in the `eX_Standard_Event.ssc` file:

- Set the string value “FB_UNIQUE_ID” (Fast Batch unique ID) in the Name node of the first NameValuePair in the TPAttribute node.

The Fast Batch unique ID is unique for each fast batch, but the same for each message within the fast batch.

- Set the fast batch unique value in the Value node of the first NameValuePair in the TPAttribute node.

The actual value for the fast batch unique ID is user-defined.

- Set the string value “FB_COUNT” (Number of messages to be included in the batch) in the Name node of the Second NameValuePair in the TPAttribute node.
- Set the total fast batch record count in the Value node of the second NameValuePair in the TPAttribute node.

The actual value for the fast batch record count is user-defined.

For an example, refer to the *e*Xchange schema Component* chapter of the *e*Xchange Implementation Guide*.

5.5 Communications Protocols for X12

The communications protocols supported by e*Xchange for X12 are:

- FTP (Batch)

The FTP (Batch) setting at the B2B protocol level indicates use of FTP (file transfer protocol) for transmission of messages. Within e*Gate, this uses the ePM Batch e*Way to transfer files. Files can also be stored on the local machine.

Note: *In e*Xchange it is important to distinguish between the two uses of the word **Batch**—the FTP (Batch) protocol, and the Batch transfer mode for batching of messages.*

- HTTP

This setting indicates use of the HTTP protocol.

- SMTP

This setting indicates use of the Simple Mail Transfer Protocol.

5.6 Setting Up X12 Message Profile Information

Once you have set up B2B protocol information for a trading partner, the next step is to set up message profiles.

5.6.1. Setup Sequence

Part of setting up a message profile is to specify the expected response message, if any.

During initial setup, you will find that you cannot select the appropriate response messages because you have not yet created the message profiles for those response messages.

One approach to this is to first set up all message profiles, both inbound and outbound, and then go back into each message profile to select the return messages.

5.6.2. Large Message Support for X12

e*Xchange includes a facility for dealing with large outbound messages effectively by breaking them up into manageable portions during processing. Files above a certain size cause errors unless you use the large message feature. For example, you might find that there is a problem with files larger than 60 MB unless you use the large message feature. In some cases larger files might process smoothly, and in some cases smaller files might cause errors, depending on available disk size, memory, message volume, and other factors.

An example is provided for HIPAA 835, including a Collaboration.

To use the large message support feature, specific settings are required at the Message Profile level. You must set the following values in the General section:

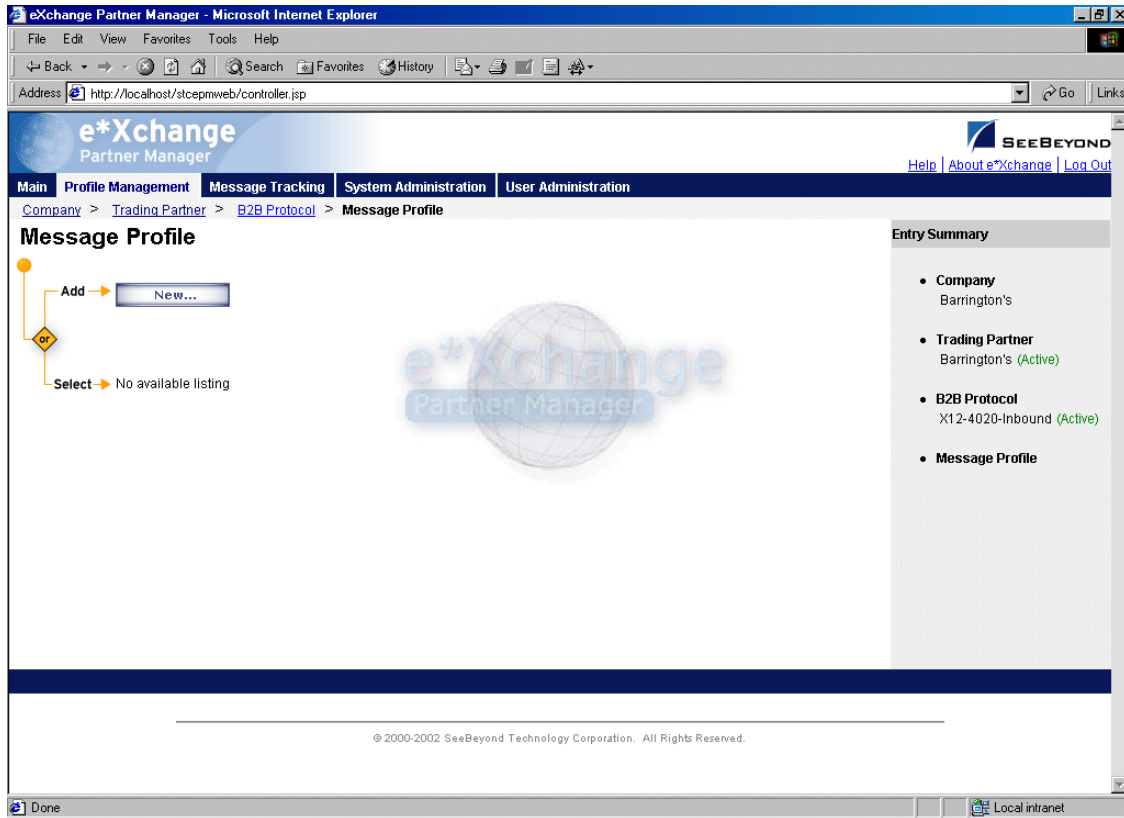
- Message ALT ID: it must exactly match the value set in the MSG_ALT_ID attribute in the eX_Standard_Event structure.
If you are using large message support, e*Xchange uses the Message ALT ID, rather than the Logical Name, to identify the trading partner.
- Validation Collaboration: it must be set to **HIPAA_2K_835_Outb_validation**.

For more information on X12 large message support, refer to the *HIPAA Implementation Guide*.

5.6.3. Setting Up a Message Profile

From the **B2B Protocol** page, select a B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page (see Figure 61).

Figure 61 Message Profile Page



From the **Message Profile** page you can complete the following activities:

- Add a message profile for the selected B2B protocol (see [“To add a message profile” on page 114](#)).
- Select a message profile: choose from the drop-down list. The message profile **General** properties are displayed on the right side of the page. To view additional properties, click on the appropriate link above the properties display (specific property groups vary according to the eBusiness protocol).
- Edit the selected message profile; first select the section that you want to edit, and then click the **Edit** button to access the **Message Profile - Editing** page (see [“To edit a message profile” on page 125](#)).
- Create a new message profile based on the selected one (see [“To copy a message profile to the same B2B protocol” on page 126](#) and [“To copy a message profile to another B2B protocol” on page 128](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

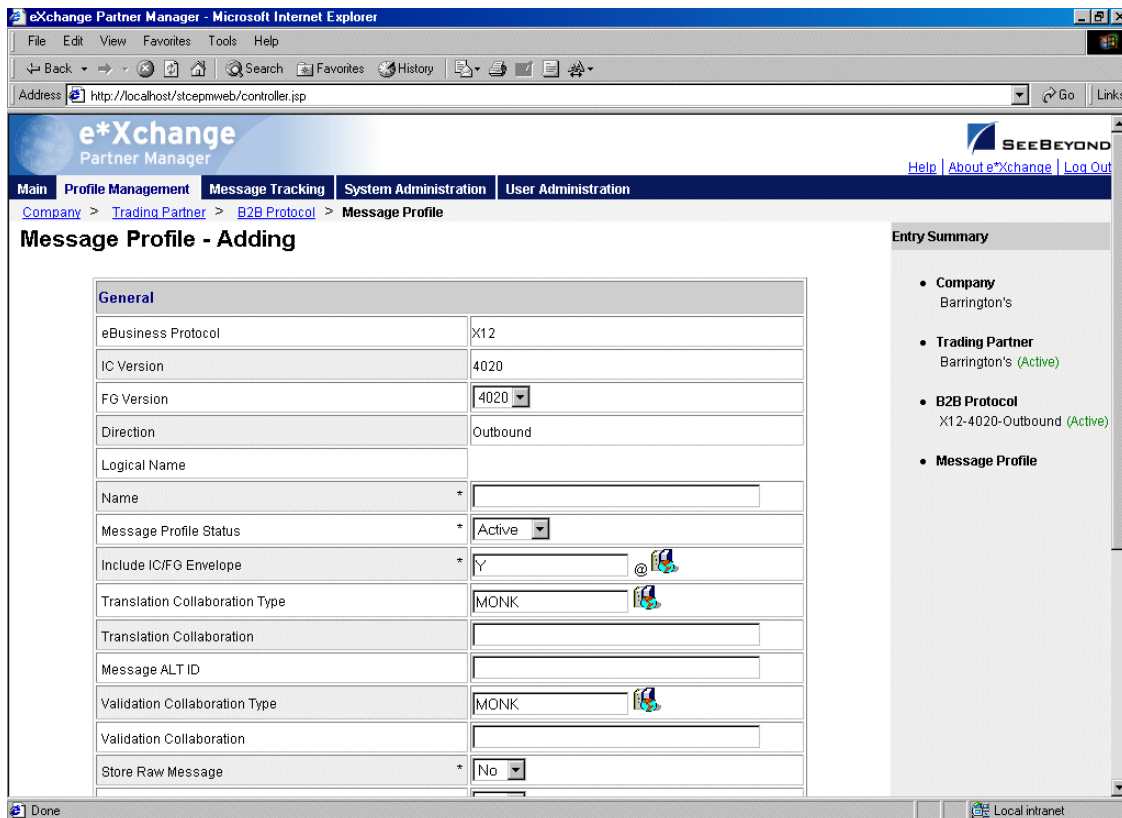
- Delete the selected message profile (see [“To delete a message profile” on page 129](#)).
- Activate or inactivate the selected message profile (see [“To inactivate or reactivate a message profile” on page 129](#)).

- Set or change security for the selected message profile (see **“To set up security” on page 129**).
- Add, change, or delete contacts for the selected message profile (see **“To set up contacts” on page 130**).

To add a message profile

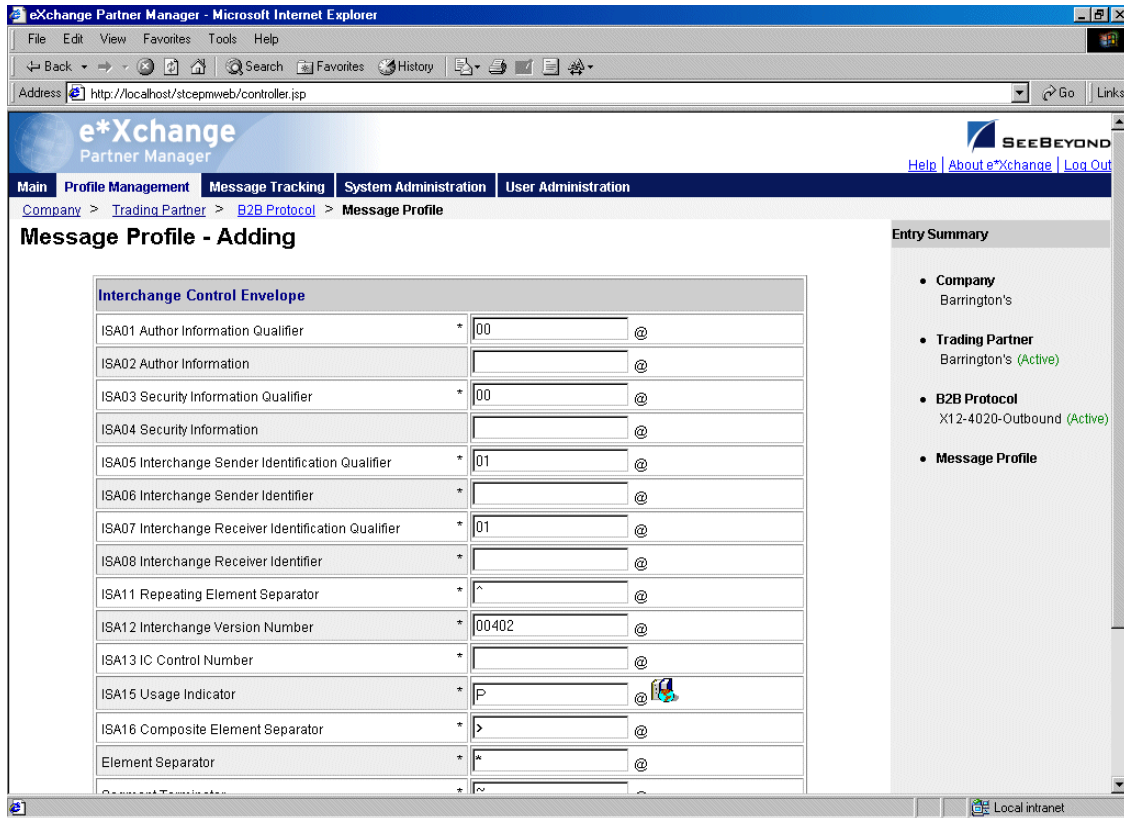
- 1 From the **Message Profile** page, click the **New** button to access the **Message Profile - Adding** page (General section) (see Figure 62).

Figure 62 Message Profile - Adding (General section) (X12)



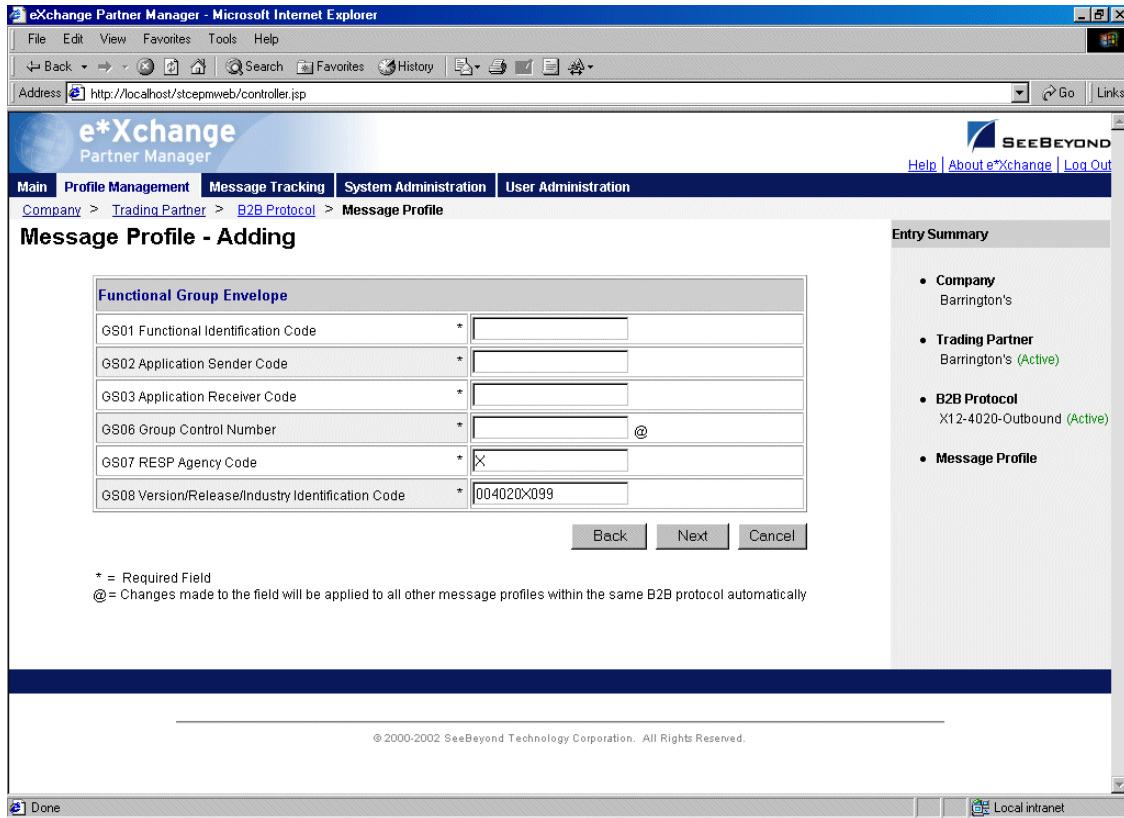
- 2 Enter or select values for the **General** section.
For more information, refer to **Table 17 on page 118**.
- 3 Click **Next** to access the **Interchange Control Envelope** section (see Figure 63).

Figure 63 Message Profile - Adding (Interchange Control Envelope section) (X12)



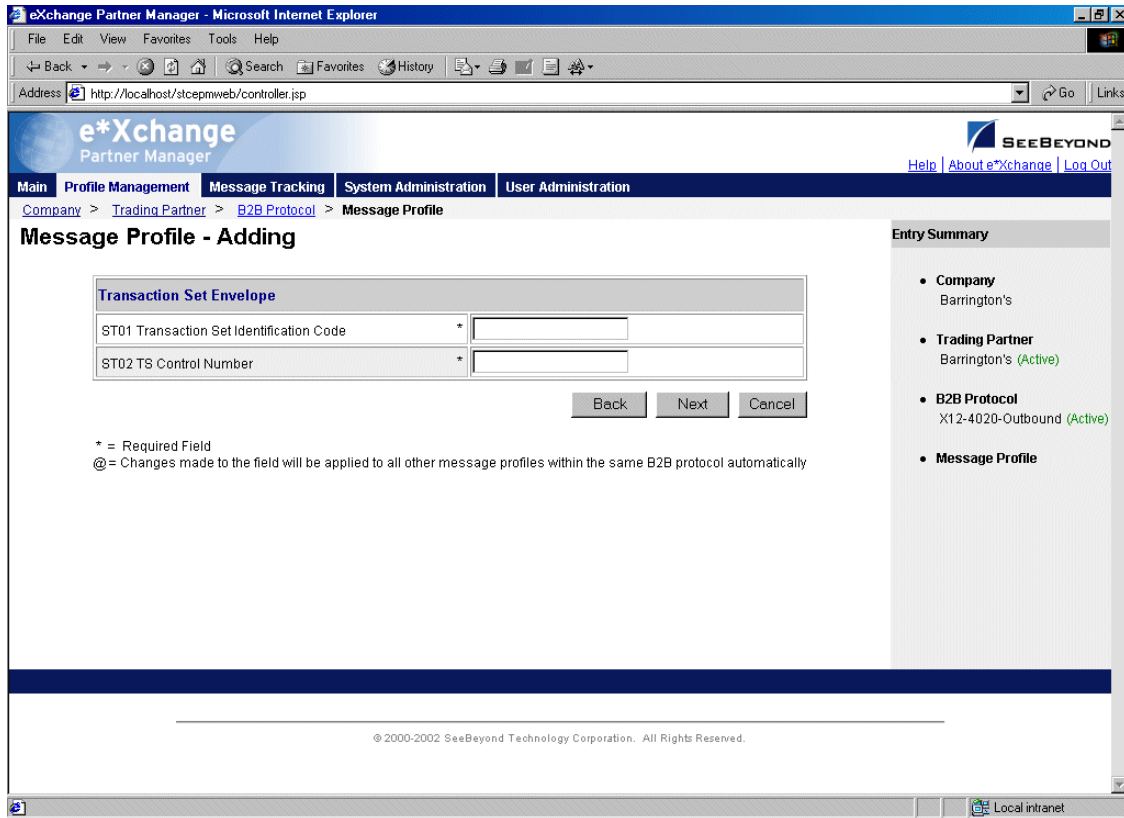
- 4 Enter or select values for the **Interchange Control Envelope** section.
For more information, refer to [Table 18 on page 121](#).
- 5 Click **Next** to access the **Functional Group Envelope** section (see Figure 64).

Figure 64 Message Profile - Adding (Functional Group Envelope section) (X12)



- 6 Enter or select values for the **Functional Group Envelope** section.
For more information, refer to [Table 19 on page 123](#).
- 7 Click **Next** to access the **Transaction Set** section (see Figure 65).

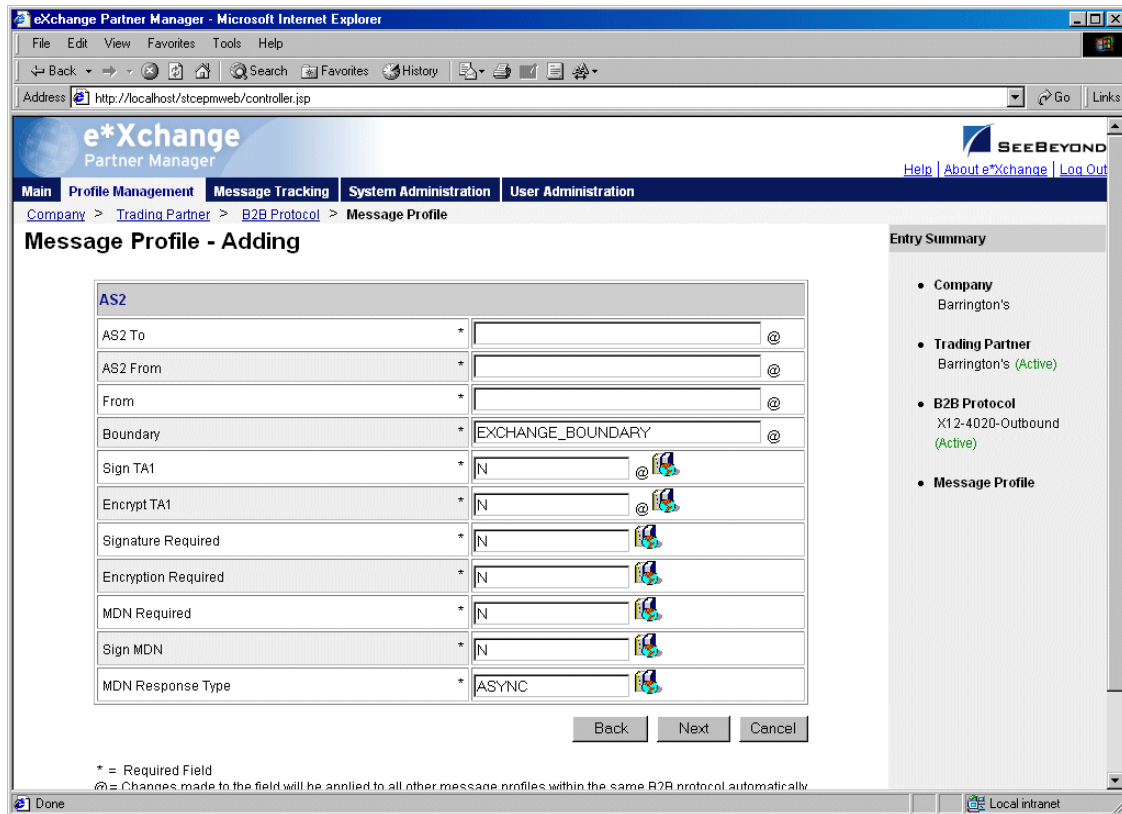
Figure 65 Message Profile - Adding (Transaction Set section) (X12)



For more information, refer to [Table 20 on page 124](#).

- 8 Click **Next**. One of the following pages appears:
 - ◆ AS2—if you selected **Y** in the **AS2** field at the B2B Protocol level, in the **General** section) the **AS2** section appears (see Figure 66). Go to Step 9.
 - ◆ No AS2—if you selected **N** in the **AS2** field at the B2B Protocol level, in the **General** section) the **Return Messages** section appears. Go to Step 11.

Figure 66 Message Profile - Adding (AS2 section) (X12)



9 Enter or select values for the **AS2** section.

For more information, refer to [Table 21 on page 124](#).

10 Click **Next** to access the **Return Messages** section.

11 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.

For more information on defining X12 return messages, refer to [“About Return Message Profiles for X12” on page 130](#).

Note: Define all message profiles for the B2B protocol, both inbound and outbound (acknowledgment and response messages), before defining return messages.

12 Click **Apply** to save the profile and return to the **Message Profile** page.

Table 17 Message Profile, General Section (X12): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected earlier is displayed.
IC Version	The eBusiness protocol version that you selected at the B2B Protocol level is displayed.
FG Version	The eBusiness protocol version that you are using at the functional group level. Select from the drop-down list.

Table 17 Message Profile, General Section (X12): Fields (Continued)

Name	Description
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	<p>The status of the message profile. Choose one of the following values:</p> <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. <p>Default: Active.</p> <p>Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 129).</p>
Include IC/FG Envelope	<p>Inbound only: If your internal system expects the ISA/IEA and GS/GE segments on incoming transactions, set this value to Y. If your internal system does not use these segments, set to N. If set to N, e*Xchange relays only the ST/SE header and footer with the message.</p> <p>Note: For inbound messages, if your internal system expects the ISA/IEA and GS/GE segments on incoming messages, this flag must be set correctly for the messages to be read successfully.</p> <p>Outbound: This parameter does not affect outbound messages. If the ISA/IEA and GS/GE segments are included on messages coming from the internal system, e*Xchange uses the delimiter information from the ISA segment to parse the message, then uses the delimiters specified in the trading partner profile for the outbound message. If the message coming from the internal system includes only ST/SE enveloping, the delimiters used must be the defaults. Again, in this case, e*Xchange uses the default delimiters to parse the message, then uses the delimiters specified in the trading partner profile for the outbound message.</p>
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension).</p> <p>Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.</p>

Table 17 Message Profile, General Section (X12): Fields (Continued)

Name	Description
Message ALT ID (Outbound only)	<p>This is important under either, or both, of the following conditions. In either of these scenarios, e*Xchange uses the Message ALT ID for the specific message type, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is routed.</p> <ul style="list-style-type: none"> ▪ If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format. ▪ If you are using X12 835 outbound large message support for HIPAA. <p>If either (or both) of these conditions apply, the value specified in this field must exactly match the value set in the MSG_ALT_ID attribute, in the Name/Value pair element of the TP Event section in the eX_Standard_Event. If neither of these conditions apply, leave this field blank.</p>
Event Type (Inbound only)	<p>(Optional) If specified, this is the Event Type to which the inbound message will be published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM.</p> <p>Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.</p>
Validation Collaboration Type	<p>The language for the validation Collaboration. For X12 4010, Monk and HIPAA are the choices. For all other versions of X12, Monk is the only available option.</p>
Validation Collaboration	<p>The Collaboration that is used to validate the eBusiness protocol message (no extension).</p> <p>For X12 and UN/EDIFACT:</p> <ul style="list-style-type: none"> ▪ Inbound—This field is required. ▪ Outbound—This field is required if a unique-id is not provided in the eX_Standard_Event MessageID field. <p>For HIPAA X12:</p> <ul style="list-style-type: none"> ▪ If you are using large message support for HIPAA 835 outbound, it must be set to HIPAA_2K_835_Outb_validation. ▪ For all other HIPAA X12 transactions, make sure you use the name of the Collaboration Rule as defined in the ewHipaaValidation e*Way in the e*Gate GUI, rather than the actual validation Collaboration file name. For more information, refer to “Troubleshooting Tips for HIPAA” on page 277. <p>Note: The message enveloping is automatically validated by e*Xchange. The validation Collaboration addresses only the message body.</p>
Store Raw Message	<p>If you want to store the raw message in the database as well as the translated message, type Y in this field.</p> <p>If you store the raw message, it is available for viewing in Message Tracking.</p>
Message Compress (required)	<p>Indicates whether the messages will be compressed before they are stored in the database. Default: No.</p> <p>Note: Compressed messages cannot be viewed in Message Tracking.</p>
Transfer Mode	<p>The way in which the eBusiness messages are transmitted to, or received from, the trading partner: Batch, Fast Batch, or Interactive.</p>

Table 17 Message Profile, General Section (X12): Fields (Continued)

Name	Description
Repeat Batch Last Check Time (batch only)	Once the first batch has been sent out, this field is automatically updated by e*Xchange. Display-only. Maximum 255 characters.
Batch Repeat Time/ Batch Repeat Granularity (batch only)	To send batches at regular intervals, use these two attributes. BATCH REPEAT TIME sets the numerical value, and BATCH REPEAT GRANULARITY sets the time period: H for hours, MI for minutes, and D for days. For example, BATCH REPEAT TIME of 4 and BATCH REPEAT GRANULARITY of H means that batches are sent out every four hours; values of 30 and MI mean that batches are sent out every 30 minutes. Note: If you want to send batches at a preset daily time, do not set values for these attributes. Use BATCH TIME. If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence. Note: If you use these fields to control batching, you can have a maximum of 10 Batch e*Ways running. This is because the display-only Repeat Batch Last Check Time field has a maximum of 255 characters.
Batch Time (batch only)	To send batches at a preset daily time, enter the time in the format hh:mm:ss (military time); for example, 09:00:00 for 9am or 15:30:00 for 3pm. If the batch is being set at a preset daily time, you do not need to set any other attributes. You can also set multiple batch times, using the pipe symbol as the delimiter (up to 50 characters). For example, 09:00:00 17:30:00 24:00:00 sends out batches at 9am, 5:30pm, and midnight. The values must be in ordered sequence, from the earliest time to the latest. Note: If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.

Table 18 Message Profile, Interchange Control Envelope Section (X12): Fields

Name	Description
ISA01 Author Information Qualifier	The Authorization Information Qualifier; a code to identify the type of information in the Authorization Information (ISA02).
ISA02 Author Information	The Authorization Information; information used for additional identification or authorization of the interchange sender or the data in the interchange. The type of information is set by the Authorization Information Qualifier (ISA01).
ISA03 Security Information Qualifier	The code that identifies the type of information in the Security Information (ISA04).
ISA04 Security Information	Used for identifying the security information about the interchange sender or the data in the interchange. The type of information is set by the Security Information Qualifier (ISA03).

Table 18 Message Profile, Interchange Control Envelope Section (X12): Fields (Continued)

Name	Description
ISA05 Interchange Sender Identification Qualifier	The code that designates the system/method of code structure used to designate the sender or receiver ID element being qualified (ISA06).
ISA06 Interchange Sender Identifier	The identification code published by the sender for other parties to use as the receiver ID to route data to them. The sender always codes this value in the Sender ID element. Note: When setting up inbound message profiles, be sure to use a different Sender ID for each trading partner.
ISA07 Interchange Receiver Identification Qualifier	Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified.
ISA08 Interchange Receiver Identifier	Identification code published by the receiver of the data. When sending, it is used by the sender as the sending ID. Other parties sending to them will use this as a receiving ID to route data to them. Note: When setting up outbound messages, be sure to use a different Receiver ID for each trading partner.
ISA11 IC Standards Identifier (below 4020)	A code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer.
ISA11 Repeating Element Separator (4020 and above)	The delimiter used to separate repeating elements (must be different from the other delimiters specified). Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
ISA12 Interchange Version Number	The version number for the interchange control segments.
ISA13 IC Control Number	Interchange control number: a control number assigned by the sender. This setting in the partner profile affects outbound messages only. e*Xchange does the following: <ul style="list-style-type: none"> ▪ Checks the number stored in the database ▪ Increments by one (which ensures that the value is always unique) ▪ Uses that value, stores the value in the IC segment of the message ▪ Updates the database. Note: Since the interchange control number must be unique for each interchange, it is important that this value is <i>not</i> set to a negative number. The initial value must be 0 or greater.
ISA15 Test Indicator or ISA15 Usage Indicator (depending on X12 version)	A code to indicate whether the data enclosed in the interchange envelope is test or production.

Table 18 Message Profile, Interchange Control Envelope Section (X12): Fields (Continued)

Name	Description
ISA16 Composite Element Separator	Component element separator: The delimiter used to separate component data elements within a composite data structure (must be different from the data element separator and the segment terminator). Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Element Separator	The separator symbol used to separate data elements. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Segment Terminator	The symbol used to indicate the end of the segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .

Table 19 Message Profile, Functional Group Envelope Section (X12): Fields

Name	Description
GS01 Functional Identification Code	The two-letter code that identifies a specific transaction within the transaction set. For example, for a 997, Functional Acknowledgment, the functional ID code is FA.
GS02 Application Sender Code	The code that identifies the sender of the transmission. The codes are agreed upon by trading partners.
GS03 Application Receiver Code	The code that identifies the receiver of the transmission. The codes are agreed upon by trading partners.
GS06 Group Control Number	Functional group control number: a control number assigned by the message sender. The group control number must be unique within the interchange. This setting in the partner profile affects outbound messages only. Note: Make sure the initial value is 0 or greater. e*Xchange checks the number stored in the database, increments by one, uses that value, and updates the database. Note: The Functional Group control number GS06 in the header must be identical to the same data element in the associated Functional Group trailer, GE02.
GS07 RESP Agency Code	Responsible Agency Code: The code used in conjunction with GS08.
GS08 Version/Release/Industry Identification Code	This code indicates the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments. This segment will have the following values, according to the values in GS07: GS07 code X-positions 1-3 are the version number, positions 4-6 are the release and subrelease level of the version, and positions 7-12 are the industry or trade association identifiers (optionally assigned by the user). GS07 code T-other formats are allowed.

Table 20 Message Profile, Transaction Set Section (X12): Fields

Name	Description
ST01 Transaction Set Identification Code	The identification number assigned to the transaction set; for example, 850 for a Purchase Order or 837 for a Health Care Claim.
ST02 TS Control Number	<p>Transaction set control number: a control number assigned by the sender. This setting in the partner profile affects outbound messages only.</p> <p>Note: The control number in ST02 must be identical with that in SE02, and must be unique within a Functional Group (GS-GE). The number also aids in error resolution research. For example, start with the number 0001 and increment from there.</p> <p>The ST02 works a little differently depending on the Transfer Mode, as follows:</p> <ul style="list-style-type: none"> ▪ For Batch or Fast Batch messages, e*Xchange does the following: Regardless of the value set in this field, e*Xchange always sets the Transaction Set control number to 1 within each Functional Group. This is due to conflicts in control numbers if more than one transaction set type is included in a single Functional Group. ▪ For Interactive messages, e*Xchange does the following: <ul style="list-style-type: none"> ♦ Transaction Set Control Number 0 or greater—e*Xchange increments from the initial value. ♦ Transaction Set Control Number less than 0—Control number always starts at 1, within each Functional Group.

Table 21 Message Profile, AS2 Section: Fields

Name	Description
AS2 To	The identity of the receiving system. This can be company-specific, such as a DUNS number, or an identification string agreed upon between the trading partners.
AS2 From	The identity of the sending system. This can be company-specific, such as a DUNS number, or it can be an identification string agreed upon between the trading partners.
From	The Web address for the message sender; for example: sender@tradingpartner.com.
Boundary	The string that you want to use as the boundary between the various parts of the message. This should be a string that will definitely not be found elsewhere in the message content; for example: -----Message Boundary-----
(X12 only) Sign TA1	This field determines whether a TA1 response to this message should include a digital signature. Choose Y or N (the default is N). Note: If you set the Positive TA1 Acknowledgment field at the B2B Protocol level to No , this setting applies only to negative TA1 acknowledgments.
(X12 only) Encrypt TA1	This field determines whether a TA1 response to this message should be encrypted. Choose Y or N (the default is N). Note: If you set the Positive TA1 Acknowledgment field at the B2B Protocol level to No , this setting applies only to negative TA1 acknowledgments.

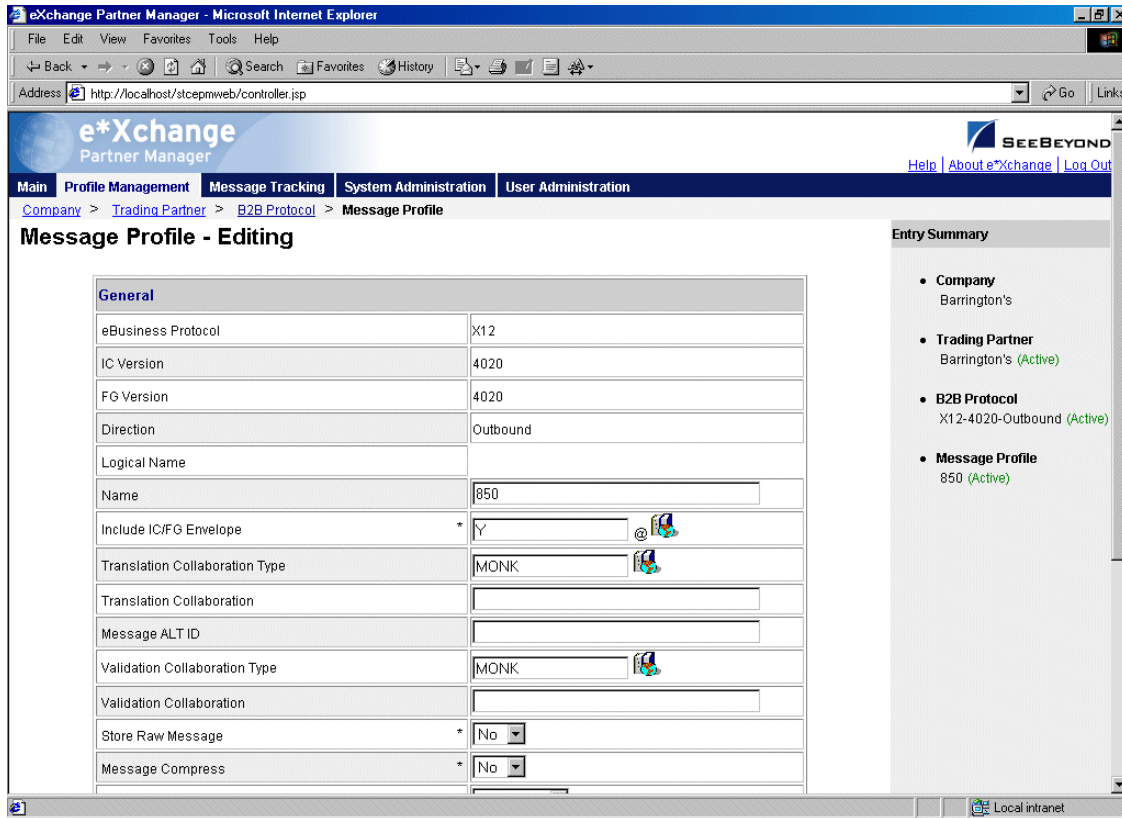
Table 21 Message Profile, AS2 Section: Fields (Continued)

Name	Description
Signature Required	If a digital signature is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Encryption Required	If encryption is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Required	If MDN (Message Disposition Notification) is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Sign MDN	If a digital signature is required on the MDN (Message Disposition Notification), enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Response Type	Enter the response type for the Message Disposition Notification: ASYNC (Asynchronous) or SYNC (Synchronous). Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.

To edit a message profile

- 1 From the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the Message Profile Properties section, click the link for the section you want to edit: **General**, **Interchange Control Envelope**, **Functional Group Envelope**, **Transaction Set Envelope**, or **Return Messages**.
- 3 Click the **Edit** button to access the **Message Profile - Editing** page listing the attribute section that you selected (see Figure 67 for an example).

Figure 67 Message Profile - Editing (General section) (X12)



4 Change the values as needed.

For more information on specific values, refer to the appropriate table:

- ◆ **General**—[Table 17 on page 118](#)
- ◆ **Interchange Control Envelope**—[Table 18 on page 121](#)
- ◆ **Functional Group Envelope**—[Table 19 on page 123](#)
- ◆ **Transaction Set Envelope**—[Table 21 on page 124](#)

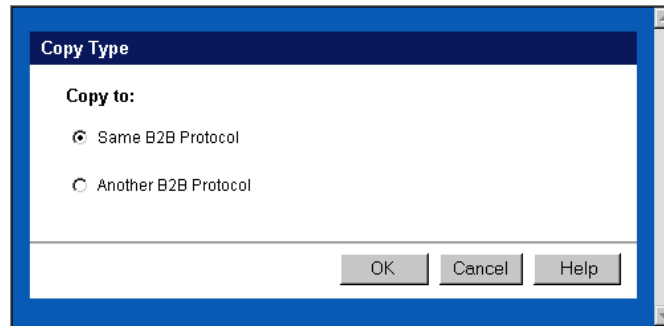
5 Click **Apply** to save the changes and return to the **Message Profile** page.

To copy a message profile to the same B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 68).

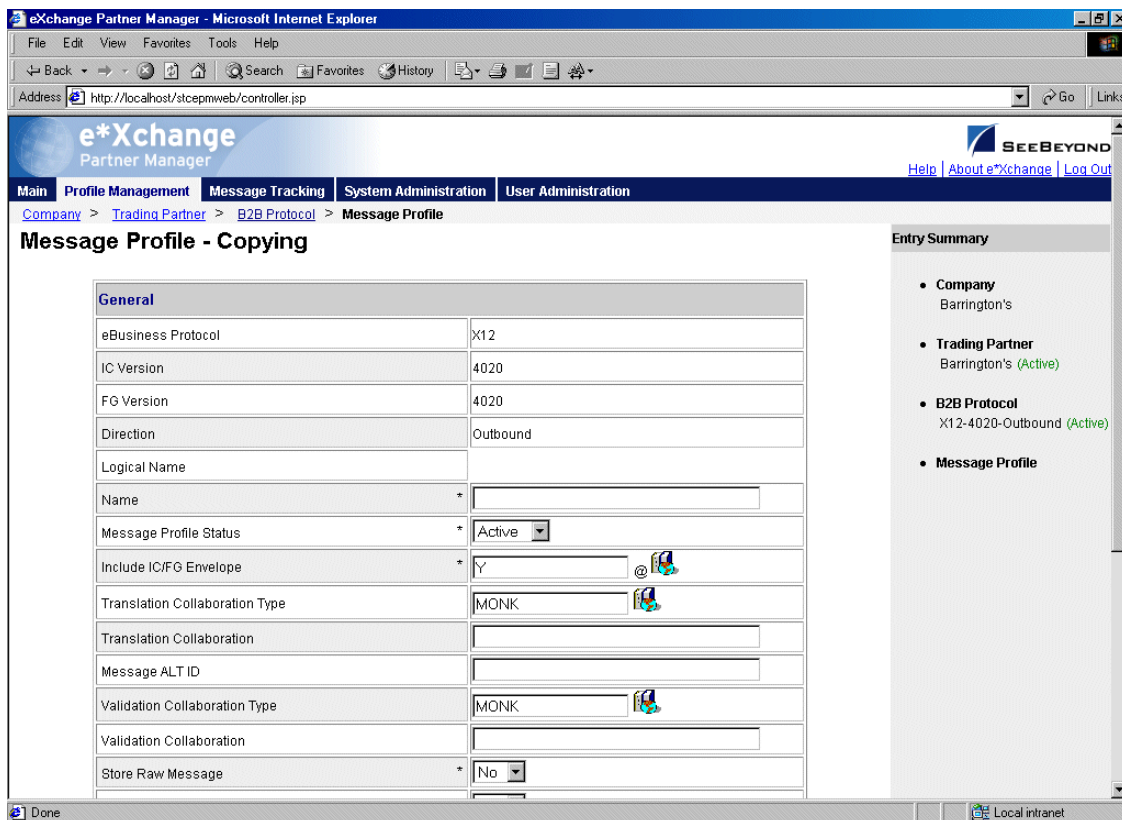
Figure 68 Copy Type (Copying a Message Profile)



- 3 Make sure **Same B2B Protocol** is selected.
- 4 Click **OK**.

The **Message Profile - Copying** page (**General** section) appears (see Figure 69).

Figure 69 Message Profile - Copying (General section) (X12)



- 5 Change the values for the **General** attributes as needed.
For more information, see [Table 17 on page 118](#).
- 6 Click **Next**.
- 7 Change the values for the **Interchange Control Envelope** as needed.

For more information, see [Table 18 on page 121](#).

- 8 Click **Next**.
- 9 Change the values for the **Functional Group Envelope** as needed.
For more information, see [Table 19 on page 123](#).
- 10 Click **Next**.
- 11 Change the values for the **Transaction Set Envelope** as needed.
For more information, see [Table 21 on page 124](#).
- 12 Click **Next**.
- 13 Change the values for return messages as needed.

Note: Define all message profiles for the B2B protocol, both inbound and outbound (acknowledgment and response messages), before defining return messages.

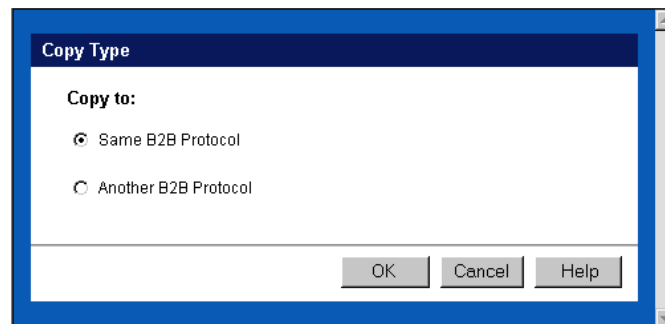
- 14 Click **Finish** to return to the **Message Profile** page.
The new message profile is now on the drop-down list.

To copy a message profile to another B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

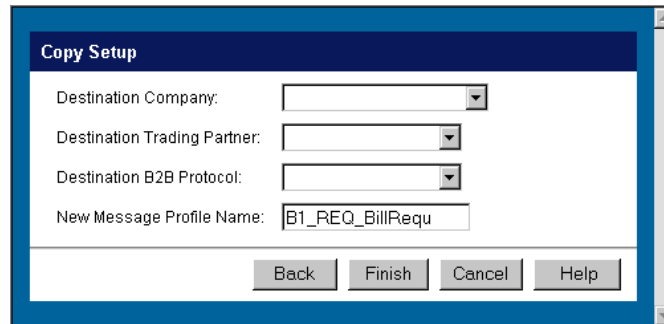
The **Copy Type** page appears (see Figure 70).

Figure 70 Copy Type (Copying a Message Profile)



- 3 Select **Copy to another B2B Protocol**.
- 4 Click **OK**.
The **Copy Setup** page appears (see Figure 71).

Figure 71 Copy Setup (Copying a Message Profile to Another B2B Protocol)





- 5 On the **Copy Setup** page, select the destination company.
- 6 Select the destination trading partner.
- 7 Select the destination B2B Protocol.
- 8 If you want to change the message profile name, type the new name.
- 9 Click **Finish**.

The message profile information is copied to the selected B2B protocol. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the profile, click **OK**.
The message profile is deleted.

To inactivate or reactivate a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:
 - ◆  Message profile is active: click to inactivate.
 - ◆  Message profile is inactive: click to reactivate.

To set up security

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 Click the **Security** button.
The **Security Management** page appears.

- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Message Profile** page, click the **Contacts** icon.

The **Company - Contacts Viewing** page appears.

- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.
 - ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
 - ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

5.7 About Return Message Profiles for X12

e*Xchange allows you to specify one or more return message profiles that will be valid for a specific incoming or outgoing message profile. However, some setup is required before the correct selections are available in the **Return Messages** section. You must create all message profiles for the trading partner, both inbound and outbound, so that the correct selections will be available to you.

For example, suppose you are using X12 and have a trading partner, ABC Company. You will receive only transaction 850, Purchase Order, from this trading partner. In response you might send 855, Purchase Order Acknowledgment, 856, Ship Notice/Manifest, or 997, Functional Acknowledgment.

To set this up, do the following:

- Define outbound message profiles for transactions 997, 855, and 856.
- Define the inbound message profile for transaction 850. Because you defined the outbound envelopes first, 997, 855, and 856 are all available for selection in the **Return Message** section.

5.8 HIPAA Translation ETDs

e*Xchange installation includes translation files—a version of the HIPAA ETD files that include the GS/GE and ISA/IEA enveloping. These are suitable for use outside e*Xchange when a complete Event structure is required; for example, when translating from X12 to a business application’s proprietary data format.

These files are stored in the following location:

```
\<eGate>\server\registry\repository\default\monk_scripts\eXchange\HIPAA
```

The file names have “_xlate” (for May 1999 files) or “_xlat” (for May 2000 files) appended to the file name to indicate that these are the translation files and include the interchange control and functional group header and footer.

Note: These files use dynamic delimiters, and can only be used in translating from X12 to a proprietary format.

May 1999 Files

For the May 1999 HIPAA implementation, the file names are as follows:

May 2000 Files

For the May 2000 HIPAA implementation, the file names are as follows:

- X12_270EligibCoverageBenefitInquiry_4010X092_00_hipaa_xlat.ssc
- X12_271EligibCoverageBenefitInfo_4010X092_00_hipaa_xlat.ssc
- X12_276HealthCareClaimStatusRequest_4010X093_00_hipaa_xlat.ssc
- X12_277HCClaimStatusNotification_4010X093_00_hipaa_xlat.ssc
- X12_278HCServicesReviewInfo_4010X094_00_hipaa_a1_xlat.ssc
- X12_278HCServicesReviewInfo_4010X094_00_hipaa_a3_xlat.ssc
- X12_820PaymentOrderRemittanceAdvice_4010X061_00_hipaa_xlat.ssc
- X12_834BenefitEnrollmentandMaint_4010X095_00_hipaa_xlat.ssc
- X12_835HealthCareClaimPaymentAdvice_4010X091_00_hipaa_xlat.ssc
- X12_837HealthCareClaim_4010X098_00_hipaa_q1_xlat.ssc
- X12_837HealthCareClaim_4010X097_00_hipaa_q2_xlat.ssc
- X12_837HealthCareClaim_4010X096_00_hipaa_q3_xlat.ssc

5.8.1. Translating from a Proprietary Format to HIPAA

The files listed above work for translation from X12 to a proprietary format. However, if you want to translate messages from a proprietary format to X12, you must manually set the delimiters so that they can be read by e*Xchange.

There are two ways to do this:

- Create another version of the ETD file for the appropriate transaction, and then edit the default delimiters. Be sure to save the .ssc file under a new file name.
- Change the dynamic delimiters to static delimiters in the .tsc file. To do this, follow the steps given below.

To redefine the delimiters in the .tsc file

- 1 Open up the .tsc file in the e*Gate Collaboration Rules Editor.
- 2 Edit the delimiters in the Function line of the Collaboration.
- 3 Change the output structure using the new delimiters.

The translation structure name must match the name of the translation structure used in the .ssc file referenced by this .tsc file. An example of an .SC file is shown in Figure 73 (this example matches the .tsc file shown in Figure 72).

- 4 Do the mapping.

You can check the results of your changes by opening up the .tsc file in a text editor. The part of the file in which you defined the new delimiters should look similar to the code shown in Figure 72; your edits add the last two lines to your .tsc file.

Figure 72 HIPAA Transactions tsc File Shown in Text Editor

```
(define test_270
  (let ((input ($make-event-map root-delm root-struct))
        (output ($make-event-map X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate-delm X12_270EligibCoverageBenef:
  )
    (lambda (message-string)
      ($event-parse input message-string)
      ($event-clear output)
      (begin
        (define new_delims (list (list "j") (list "k") (list "l")))
        (set! output ($make-event-map new_delims X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate-struct)))
```

- j Segment delimiter
- k Data element separator
- l Component separator
- m Translation structure name

Figure 73 Translation Structure Name in .ssc File

```

X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate.ssc - Notepad
File Edit Search Help
;-- STC MsgStruct Version 3.1
;-- MsgStructure Header
;-- MsgStructure "X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate"
;-- UserComment "Created by Validation Rules Builder "
;-- Version "e*Gate Version 4.1.2"
;-- FormatOption DELIMITED
;-- RepSeparator "Repetition Delimiter " " "
;-- Escape "Escape Character Delimiter " ""
;-- DefaultDelimiters "X12"
;-- End MsgStructure Header

;-- Delimiter Structure
(define X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate-delim '(
(105 separator)
(103 separator)
(104 separator)
))

;-- Global Template Reference
;-- End Global Template Reference

;-- Local Template Definition
;-- End Local Template Definition

;-- MsgStructure Definition
(define X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate-struct ($resolve-event-definition (quote
(X12_270EligibCoverageBenefitInquiry_004010X092_hipaa_xlate 0S 1 1 und und und -1

```

5.8.2. Tracking Responses to 276 HIPAA Transactions

e*Xchange can only relate a specific 276 claim with its 277 response message if the claims in the ST/SE segment of the 277 Health Care Claim Status Notification response message are in the same sequence as the claims in the ST-SE segment of the original 276 Health Care Claim Status Request.

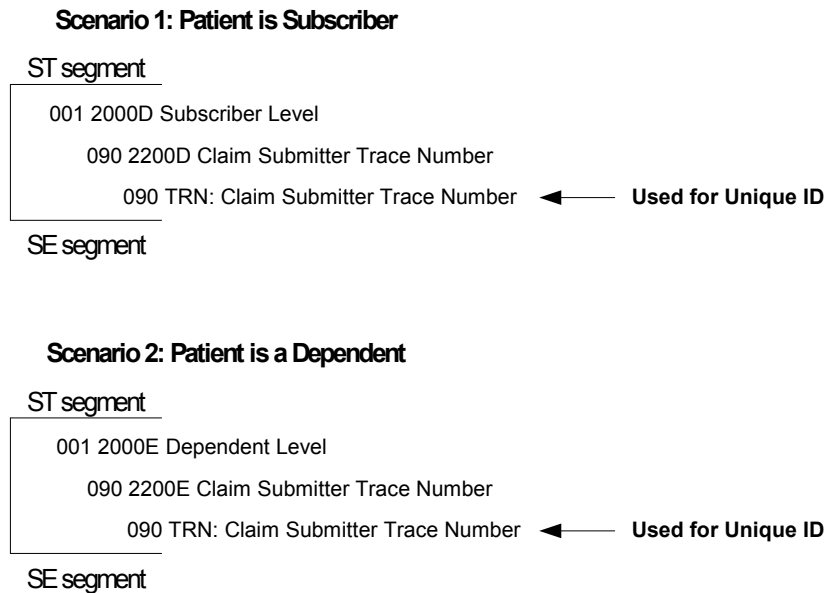
If the response claims will *not* be in the same position in the ST-SE segment as the original 276 claims, do not specify 277 as the expected return transaction. e*Xchange will correctly process the response 277 and forward it; however, the Ack Monitor will continue polling for the response even after it has arrived; and it will eventually error out, since it cannot associate the response with the original message. Instead, do not specify a return message.

5.8.3. Modifying the Unique ID for 276 and 277 Transactions

In the 276 and 277 HIPAA files provided with e*Xchange, the unique ID is based on either the first TRN_02 value for the first subscriber (if the patient is also the subscriber) or the first TRN_02 value from the first dependent (if the patient is not the subscriber).

The segments used for the unique ID are illustrated in Figure 74.

Figure 74 Segments Used for Unique ID in HIPAA 276 and 277 Transactions



If you want to use a different unique ID, you must modify the code in the .tsc file.

The code that is currently used for the 276 (line 12465) is as follows:

```

(if (node-has-data?
~input%X12_276HealthCareClaimStatusRequest_004010X093_00_hipaa.Loop_2
000A_10[0].Loop_2000B_25[0].Loop_2000C_40[0].Loop_2000D_55[0].Loop_22
00D_63[0].TRN_63_Trace.TRN_2_ReferenceIdentification)
  (begin
    (vector-set! uid_vec 0 (get
~input%X12_276HealthCareClaimStatusRequest_004010X093_00_hipaa.Loop_2
000A_10[0].Loop_2000B_25[0].Loop_2000C_40[0].Loop_2000D_55[0].Loop_22
00D_63[0].TRN_63_Trace.TRN_2_ReferenceIdentification)
    )
  )
  (begin
    (vector-set! uid_vec 0 (get
~input%X12_276HealthCareClaimStatusRequest_004010X093_00_hipaa.Loop_2
000A_10[0].Loop_2000B_25[0].Loop_2000C_40[0].Loop_2000D_55[0].Loop_20
00E_72[0].Loop_2200E_80[0].TRN_80_Trace.TRN_2_ReferenceIdentification
    ))
  )
)
)

```

The code that is currently used for the 277 (line 17551) is as follows:

```

(if (node-has-data?
~input%X12_277HealCareClaiStatNoti_004010X093_00_hipaa.Loop_2000A_10[
0].Loop_2000B_36[0].Loop_2000C_64[0].Loop_2000D_90[0].Loop_2200D_98[0
].TRN_98_Trac.TRN_2_RefeIden)
  (begin
    (vector-set! uid_vec 0 (get
~input%X12_277HealCareClaiStatNoti_004010X093_00_hipaa.Loop_2000A_10[
0].Loop_2000B_36[0].Loop_2000C_64[0].Loop_2000D_90[0].Loop_2200D_98[0
].TRN_98_Trac.TRN_2_RefeIden)
    )
  )
  (begin

```

```
(vector-set! uid_vec 0 (get
~input%X12_277HealCareClaiStatNoti_004010X093_00_hipaa.Loop_2000A_10[
0].Loop_2000B_36[0].Loop_2000C_64[0].Loop_2000D_90[0].Loop_2000E_119[
0].Loop_2200E_127[0].TRN_127_Trac.TRN_2_RefeIden)
)
)
```

5.9 Error Handling in X12

If e*Xchange is unable to successfully process an X12 message, the error is handled in one of a number of ways, according to the circumstances.

The various error scenarios and their treatment are shown in Table 22.

Table 22 Error Handling for X12 Messages

Error Scenario	Error Handling
Cannot parse message from external system based on delimiters.	Sends negative TA1, stores the message with only the ISA/IEA segments.
Invalid information in ISA or IEA; missing IEA; extra IEA.	Sends TA1.
Functional error, invalid nodes in ST or SE segments.	Sends negative 997, stores message (ST–SE)
Message fails to map data to the validation structure.	Sends negative 997, stores message (ST–SE)
Message maps to the structure, but validation detects invalid data in the message.	Sends 997 with appropriate information, stores message.
Cannot retrieve the trading partner profile based on the sender ID, receiver ID, version, and functional ID code values in the functional group.	Sends negative TA1, stores the message with only the ISA/IEA segments.

Note: e*Xchange can be set up to routinely send a 997 or other acknowledgment in response to an incoming message (in the **Return Messages** section). However, negative messages are automatically generated where errors are encountered whether or not the **Return Messages** section has been set up. Additionally, if 997 has been selected as the normal, expected response to an incoming message in the **Return Messages** section, e*Xchange still only sends out one negative 997 if the message contains errors.

Profile Setup for NCPDP-HIPAA

This chapter provides information on setting up NCPDP-HIPAA transactions in the e*Xchange Partner Manager, at the Message Profile level.

The Company, Trading Partner, and B2B Protocol (inbound and outbound) levels must be set up first. For information on setting up these components, refer to [“Profile Management” on page 72](#).

6.1 Setting Up NCPDP-HIPAA Message Profile Information

Once you have set up B2B protocol information for a trading partner, the next step is to set up message profiles.

6.1.1. Setup Sequence

Part of setting up a message profile is to specify the expected response message, if any.

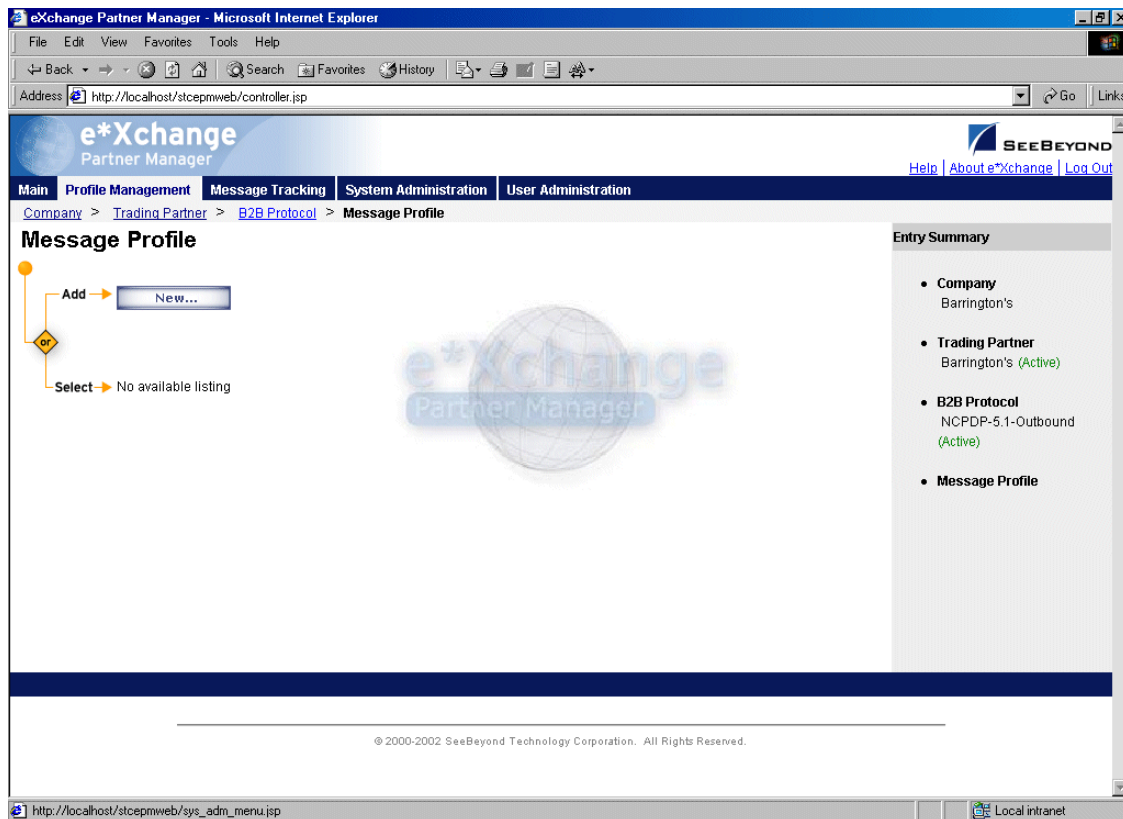
During initial setup, you will find that you cannot select the appropriate response messages because you have not yet created the message profiles for those response messages.

One approach to this is to first set up all message profiles, both inbound and outbound, and then go back into each message profile to select the return messages.

6.1.2. Setting Up a Message Profile

From the **B2B Protocol** page, select a B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page (see Figure 75).

Figure 75 Message Profile Page



From the **Message Profile** page you can complete the following activities:

- Add a message profile for the selected B2B protocol (see [“To add a message profile” on page 138](#)).
- Select a message profile: choose from the drop-down list. The message profile **General** properties are displayed on the right side of the page. To view additional properties, click on the appropriate link above the properties display (specific property groups vary according to the eBusiness protocol).
- Edit the selected message profile; first select the section that you want to edit, and then click the **Edit** button to access the **Message Profile - Editing** page (see [“To edit a message profile” on page 145](#)).
- Create a new message profile based on the selected one (see [“To copy a message profile to the same B2B protocol” on page 146](#) and [“To copy a message profile to another B2B protocol” on page 148](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

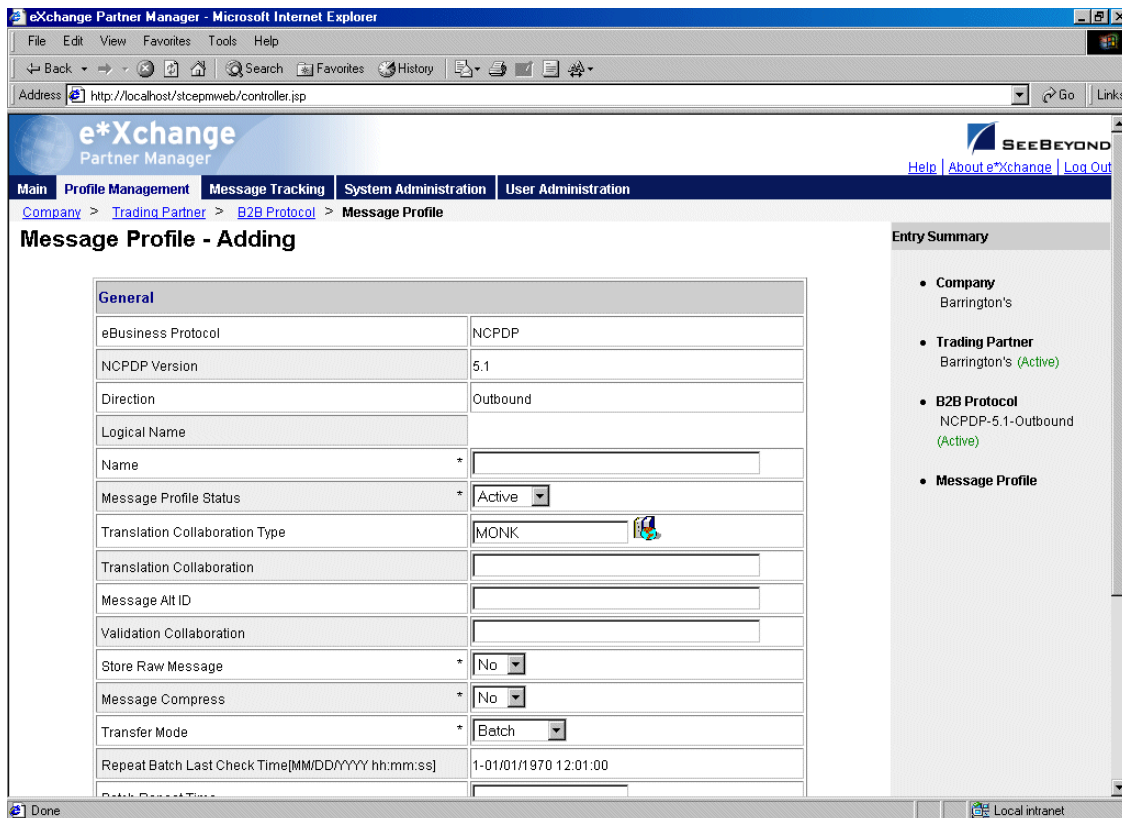
- Delete the selected message profile (see [“To delete a message profile” on page 149](#)).
- Activate or inactivate the selected message profile (see [“To inactivate or reactivate a message profile” on page 149](#)).

- Set or change security for the selected message profile (see **“To set up security” on page 149**).
- Add, change, or delete contacts for the selected message profile (see **“To set up contacts” on page 150**).

To add a message profile

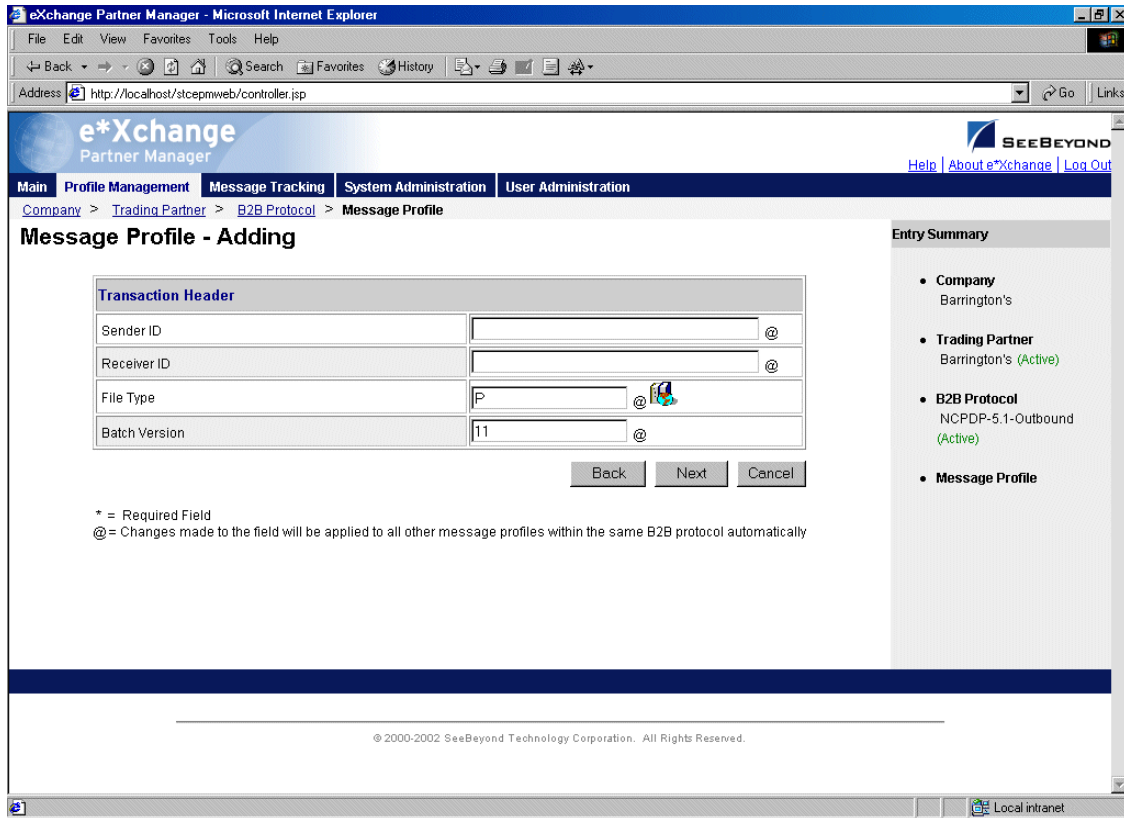
- 1 From the **Message Profile** page, click the **New** button to access the **Message Profile - Adding** page (General section) (see Figure 76).

Figure 76 Message Profile - Adding (General section) (NCPDP-HIPAA)



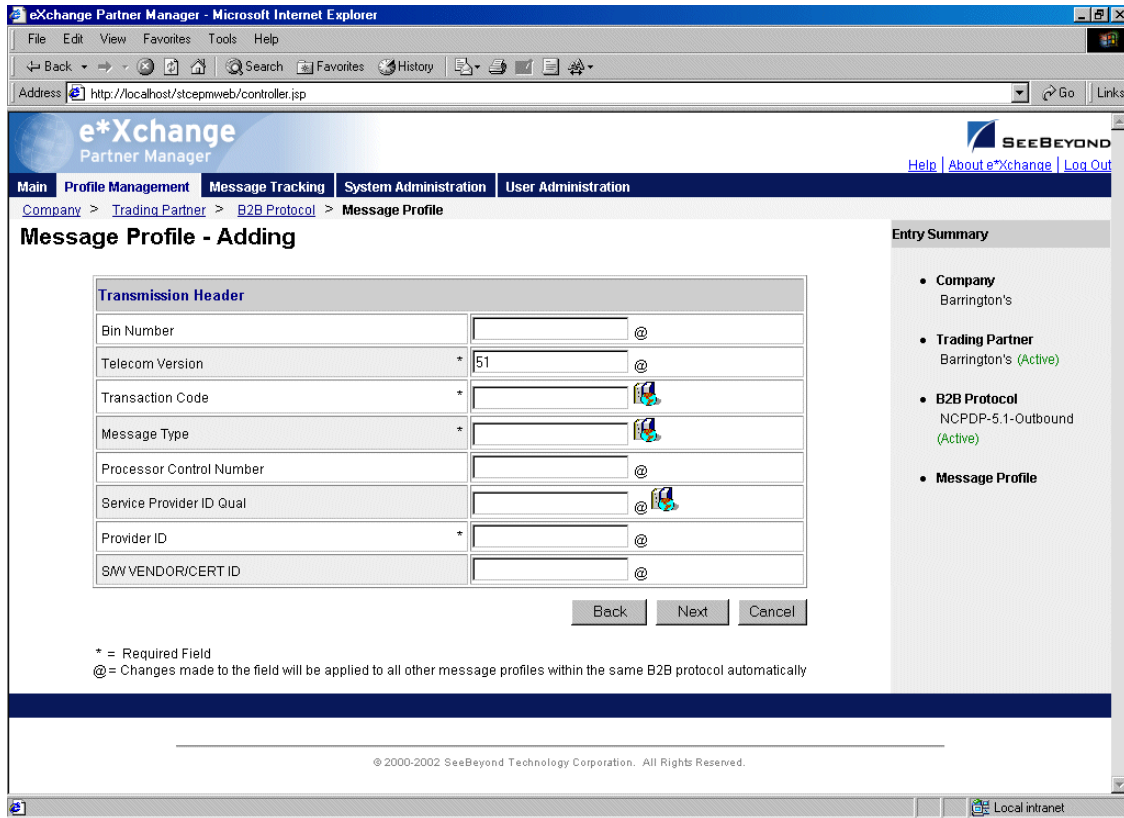
- 2 Enter or select values for the **General** section.
For more information, refer to **Table 23 on page 141**.
- 3 Click **Next** to access the **Transaction Header** section (see Figure 77).

Figure 77 Message Profile - Adding (Transaction Header section) (NCPDP-HIPAA)



- 4 Enter or select values for the **Transaction Header** section.
For more information, refer to [Table 24 on page 143](#).
- 5 Click **Next** to access the **Transmission Header** section (see Figure 78).

Figure 78 Message Profile - Adding (Transmission Header section) (NCPDP)



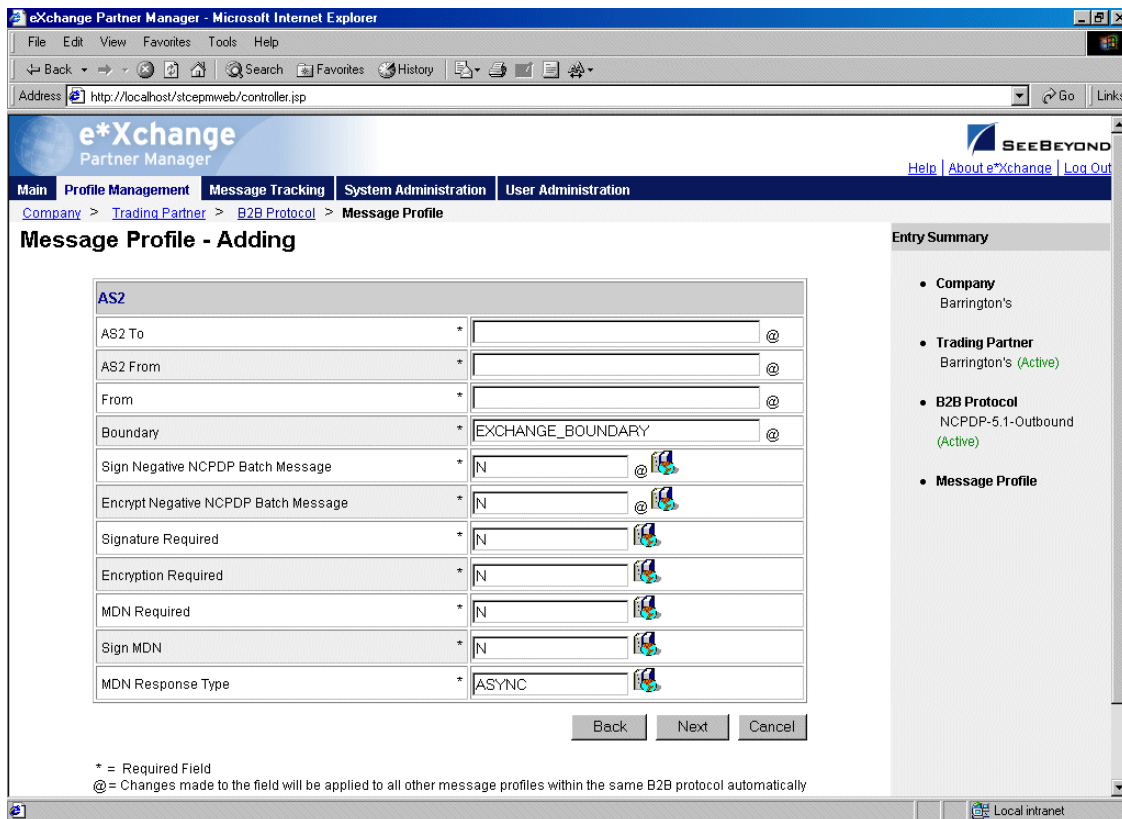
6 Enter or select values for the **Transmission Header** section.

For more information, refer to [Table 25 on page 144](#).

7 Click **Next**. One of the following pages appears:

- ♦ **AS2**—if you selected **Y** in the **AS2** field at the B2B Protocol level, in the **General** section) the **AS2** section appears (see Figure 79). Go to Step 8.
- ♦ **No AS2**—if you selected **N** in the **AS2** field at the B2B Protocol level, in the **General** section) the **Return Messages** section appears. Go to Step 10.

Figure 79 Message Profile - Adding (AS2 section) (NCPDP-HIPAA)



8 Enter or select values for the **AS2** section.

For more information, refer to [Table 26 on page 144](#).

9 Click **Next** to access the **Return Messages** section.

10 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.

Note: Define all message profiles for the B2B protocol, both inbound and outbound (acknowledgment and response messages), before defining return messages.

11 Click **Apply** to save the profile and return to the **Message Profile** page.

Table 23 Message Profile, General Section (NCPDP): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected earlier is displayed.
NCPDP Version	The eBusiness protocol version that you selected at the B2B Protocol level is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.

Table 23 Message Profile, General Section (NCPDP): Fields (Continued)

Name	Description
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	<p>The status of the message profile. Choose one of the following values:</p> <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. <p>Default: Active.</p> <p>Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 149).</p>
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension).</p> <p>Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires values for Message ALT ID and Validation Collaboration.</p>
Message ALT ID (Outbound only)	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed.</p> <p>Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file.</p> <p>If you are not receiving messages from the internal system in raw data format, leave this field blank.</p>
Event Type (Inbound only)	<p>(Optional) If specified, this will be the Event Type to which the inbound message will be published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM.</p> <p>Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.</p>
Validation Collaboration	<p>The Monk Collaboration that is used to validate the eBusiness protocol message.</p> <p>For X12, UN/EDIFACT, and NCPDP:</p> <ul style="list-style-type: none"> ▪ Inbound—This field is required. ▪ Outbound—This field is required if a unique-id is not provided in the eX_Standard_Event MSG_ALT_ID field. <p>Note: The message enveloping is automatically validated by e*Xchange. The validation Collaboration addresses only the message body.</p>

Table 23 Message Profile, General Section (NCPDP): Fields (Continued)

Name	Description
Store Raw Message	If you want to store the raw message in the database as well as the translated message, type Y in this field. If you store the raw message, it will be available for viewing in Message Tracking.
Transfer Mode	The way in which the eBusiness messages are transmitted to, or received from, the trading partner. For NCPDP the choices are Batch or Interactive .
Repeat Batch Last Check Time (batch only)	Once the first batch has been sent out, this field is automatically updated by e*Xchange. Display-only. Maximum 255 characters. Default: 1-01/01/1970 12:01:00 .
Batch Repeat Time/ Batch Repeat Granularity (batch only)	To send batches at regular intervals, use these two attributes. BATCH REPEAT TIME sets the numerical value, and BATCH REPEAT GRANULARITY sets the time period: H for hours, MI for minutes, and D for days. For example, BATCH REPEAT TIME of 4 and BATCH REPEAT GRANULARITY of H means that batches will be sent out every four hours; values of 30 and MI mean that batches will be sent out every 30 minutes. Note: If you want to send batches at a preset daily time, do not set values for these attributes. Use BATCH TIME. If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence. Note: If you use these fields to control batching, you can have a maximum of 10 Batch e*Ways running. This is because the display-only Repeat Batch Last Check Time field has a maximum of 255 characters.
Batch Time (batch only)	To send batches at a preset daily time, enter the time in the format hh:mm:ss (military time); for example, 09:00:00 for 9am or 15:30:00 for 3pm. If the batch is being set at a preset daily time, you do not need to set any other attributes. You can also set multiple batch times, using the pipe symbol as the delimiter (up to 50 characters). For example, 09:00:00 17:30:00 24:00:00 sends out batches at 9am, 5:30pm, and midnight. The values must be in ordered sequence, from the earliest time to the latest. Note: If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.

Table 24 Message Profile, Transaction Header Section (NCPDP): Fields

Name	Description
Sender ID	The identification number for the sender of the data, as assigned by the receiving entity (Processor or Switch). Optional: only applicable if you are batching messages.
Receiver ID	The ID assigned by the processor or switch receiving the message file. According to NCPDP guidelines, the Receiver ID reflects valid enrollment between trading partners for batch file submission. Optional: only applicable if you are batching messages.
File Type	A code to indicate whether the file is test or production. Optional: only applicable if you are batching messages.

Table 24 Message Profile, Transaction Header Section (NCPDP): Fields (Continued)

Name	Description
Batch Version	The NCPDP Version/Release Number applicable to the batch enveloping. This is a two-character code; for example 11 for batch version 1.1. For detailed information on acceptable values, refer to the NCPDP Data Dictionary. Optional: only applicable if you are batching messages. Only version 1.1 is currently supported.

Table 25 Message Profile, Transmission Header Section (NCPDP): Fields

Name	Description
Bin Number	(Required for a request message, ignored for a response message) The Bank Information Number for the processor of the message. This is either the Card Issuer ID or the Bank ID Number.
Telecom Version	(Required for both request and response messages) The NCPDP Version/Release Number applicable to the message. This is a two-character code; for example, 51 for version 5.1. For detailed information on acceptable values, refer to the NCPDP Data Dictionary.
Transaction Code	(Required for both request and response messages) A code identifying the type of transaction; for example, E1 for Eligibility Verification.
Message Type	A code to indicate the type of message: REQUEST or RESPONSE.
Processor Control Number	(Required for a request message, ignored for a response message) The control number assigned by the processor.
Service Provider ID Qual	(Optional for both request and response messages) The Service Provider ID Qualifier: The code qualifying the Service Provider ID (next field); for example, 04 for Medicare or 13 for State Issued. Optional.
Provider ID	(Optional for both request and response messages) The Service Provider ID: The unique ID that is assigned to the pharmacy or provider. For detailed information on acceptable values, refer to the NCPDP Data Dictionary.
S/W VENDOR/CERT ID	(Required for a request message, ignored for a response message) Software Vendor Certification ID: The ID assigned by the switch or processor to identify the source of the software.

Table 26 Message Profile, AS2 Section (NCPDP): Fields

Name	Description
AS2 To	The identity of the receiving system. This can be company-specific, such as a DUNS number, or an identification string agreed upon between the trading partners.
AS2 From	The identity of the sending system. This can be company-specific, such as a DUNS number, or it can be an identification string agreed upon between the trading partners.

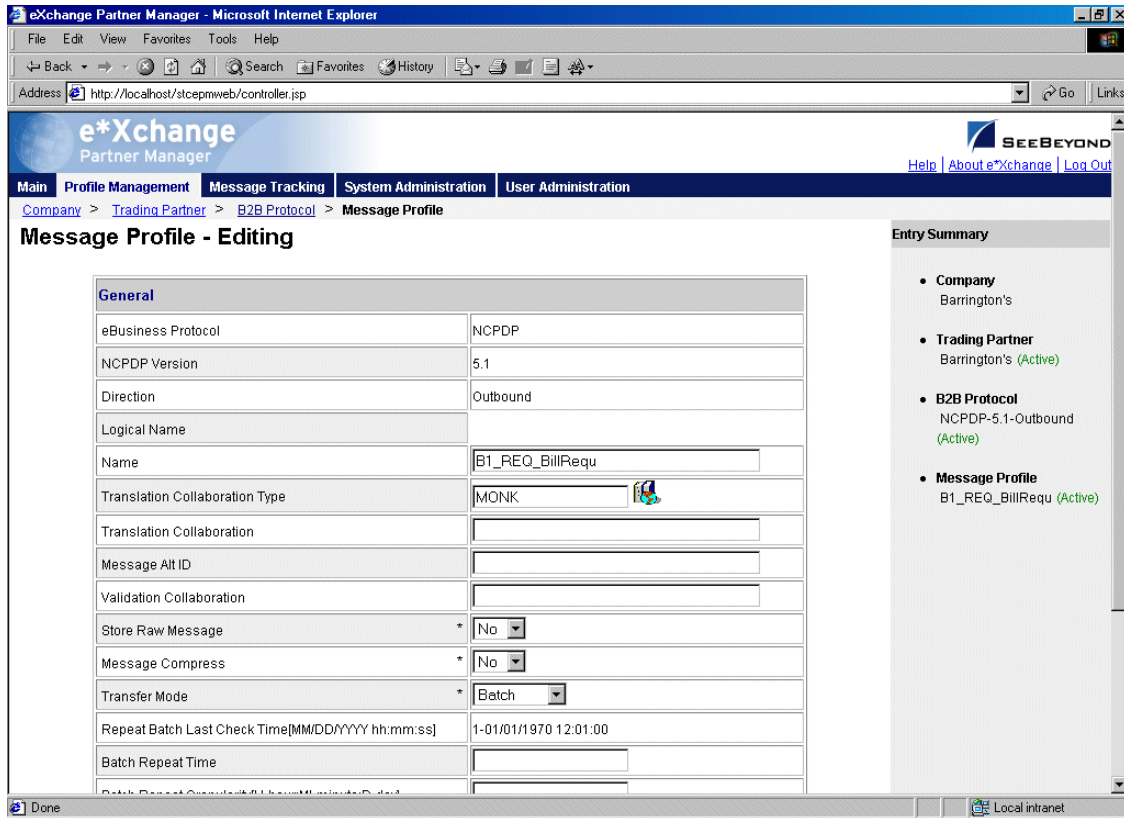
Table 26 Message Profile, AS2 Section (NCPDP): Fields (Continued)

Name	Description
From	The Web address for the message sender; for example: sender@tradingpartner.com.
Boundary	The string that you want to use as the boundary between the various parts of the message. This should be a string that will definitely not be found elsewhere in the message content; for example: -----Message Boundary-----
(NCPDP only) Sign Negative NCPDP Batch Message	In a situation where there is a problem with an inbound NCPDP batch and an error message needs to be sent, this field determines whether the error message includes a digital signature. Choose Y or N (the default is N).
(NCPDP only) Encrypt Negative NCPDP Batch Message	In a situation where there is a problem with an inbound NCPDP batch and an error message needs to be sent, this field determines whether the error message is encrypted. Choose Y or N (the default is N).
Signature Required	If a digital signature is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Encryption Required	If encryption is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Required	If MDN (Message Disposition Notification) is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Sign MDN	If a digital signature is required on the MDN (Message Disposition Notification), enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Response Type	Enter the response type for the Message Disposition Notification: ASYNC (Asynchronous) or SYNC (Synchronous). Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.

To edit a message profile

- 1 From the **Message Profile** page, select the message profile from the drop-down list. The message profile properties are displayed on the right side of the page.
- 2 In the Message Profile Properties section, click the link for the section you want to edit: **General**, **Transaction Header**, **Transmission Header**, or **Return Messages**.
- 3 Click the **Edit** button to access the **Message Profile - Editing** page listing the attribute section that you selected (see Figure 80 for an example).

Figure 80 Message Profile - Editing (General section) (NCPDP-HIPAA)



4 Change the values as needed.

For more information on specific values, refer to the appropriate table:

- ◆ **General**—[Table 23 on page 141](#)
- ◆ **Transaction Header**—[Table 24 on page 143](#)
- ◆ **Transmission Header**—[Table 25 on page 144](#)

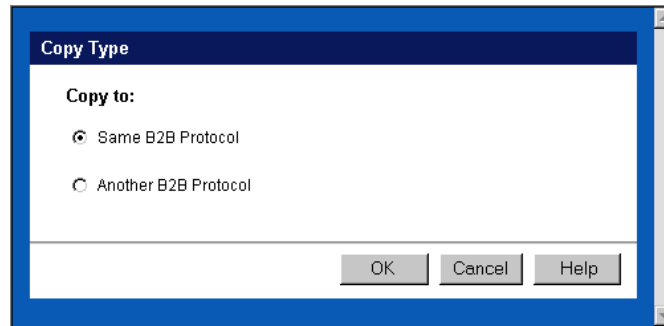
5 Click **Apply** to save the changes and return to the **Message Profile** page.

To copy a message profile to the same B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 81).

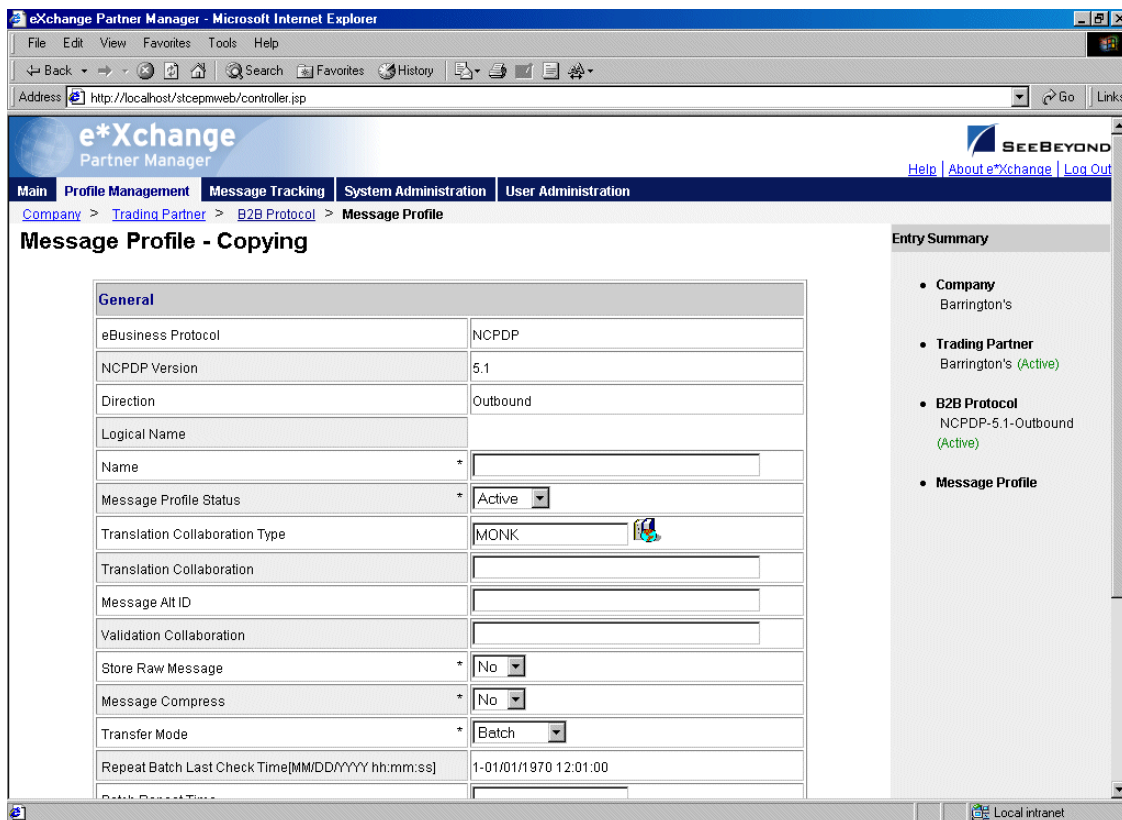
Figure 81 Copy Type (Copying a Message Profile)



- 3 Make sure **Copy to the same B2B Protocol** is selected.
- 4 Click **OK**.

The **Message Profile - Copying** page (**General** section) appears (see Figure 82).

Figure 82 Message Profile - Copying (General section) (NCPDP)



- 5 Change the values for the **General** attributes as needed.
For more information, see [Table 23 on page 141](#).
- 6 Click **Next**.
- 7 Change the values for the **Transaction Header** as needed.

For more information, see [Table 24 on page 143](#).

- 8 Click **Next**.
- 9 Change the values for the **Transmission Header** as needed.

For more information, see [Table 25 on page 144](#).

- 10 Click **Next**.
- 11 Change the values for return messages as needed.

Note: Define all message profiles for the B2B protocol, both inbound and outbound (acknowledgment and response messages), before defining return messages.

- 12 Click **Finish** to return to the **Message Profile** page.

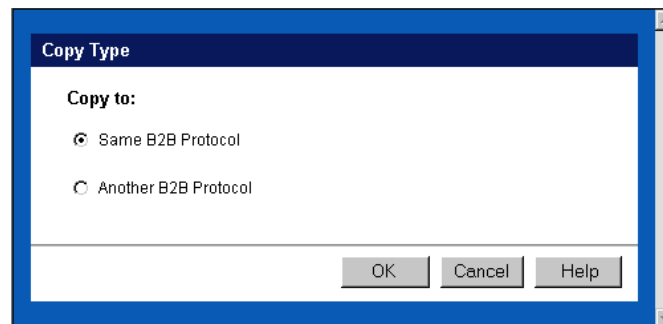
The new message profile is now on the drop-down list.

To copy a message profile to another B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 83).

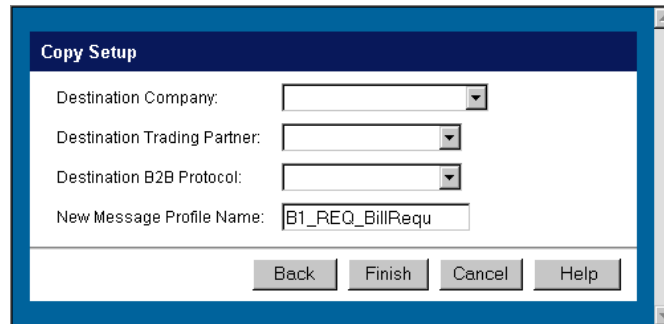
Figure 83 Copy Type (Copying a Message Profile)



- 3 Select **Copy to another B2B Protocol**.
- 4 Click **OK**.

The **Copy Setup** page appears (see Figure 84).

Figure 84 Copy Setup (Copying a Message Profile to Another B2B Protocol)





- 5 On the **Copy Setup** page, select the destination company.
- 6 Select the destination trading partner.
- 7 Select the destination B2B Protocol.
- 8 If you want to change the message profile name, type the new name.
- 9 Click **Finish**.

The message profile information is copied to the selected B2B protocol. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the profile, click **OK**.
The message profile is deleted.

To inactivate or reactivate a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:
 - ◆  Message profile is active: click to inactivate.
 - ◆  Message profile is inactive: click to reactivate.

To set up security

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 Click the **Security** button.
The **Security Management** page appears.

- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Message Profile** page, click the **Contacts** icon.
The **Company - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.
 - ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
 - ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

Profile Setup for UN/EDIFACT

This chapter provides information on setting up UN/EDIFACT messages in the e*Xchange Partner Manager, at the Message Profile level.

The Company, Trading Partner, and B2B Protocol (inbound and outbound) levels must be set up first. For information on setting up these components, refer to [“Profile Management” on page 72](#).

For UN/EDIFACT, note that the e*Xchange Web interface selection list at B2B Protocol and Message Profile levels offers envelope versions only: version 3 Batch, 4 Batch, and 4 Interactive. The specific EDIFACT transaction versions are used by the e*Xchange back end but are not visible within the e*Xchange user interface.

This chapter includes information on the following:

- Setting the values for:
 - ♦ Interchange envelope (UNB and UNZ segments)
 - ♦ Group (UNG and UNE segments)
 - ♦ Message (UNH and UNT segments)
- Specifying the messaging protocol used to relay the messages
- Handling errors

Note: *If you are using UN/EDIFACT, you must install the UN/EDIFACT templates provided by SeeBeyond. They are available during e*Gate installation via the “Add-Ons” option. For installation instructions, refer to the **UN/EDIFACT ETD Library User’s Guide**.*

7.1 UN/EDIFACT Delimiters

For UN/EDIFACT, delimiters are set up at the message profile level, in the **Interchange Control Envelope** section.

It is important to note the specific use of delimiters in the extended attributes and how it affects default use of delimiters in messages processed by e*Xchange.

Treatment of delimiters in the messages and in the partner profile for both inbound and outbound is explained below.

7.1.1. Inbound

For an inbound message, there are two possible scenarios:

- If the message includes a UNA segment—e*Xchange compares the delimiters defined in the UNA segment with those recorded in the partner profile. If they match, e*Xchange uses those delimiters for the message, and returns an error if they do not match.
- If the message does not include a UNA segment—e*Xchange uses the delimiters specified in the partner profile to parse the message, and returns an error if they do not match.

7.1.2. Outbound

For an outbound message, there are two possible scenarios:

- If the message coming from the internal application includes a UNA segment—e*Xchange uses the delimiters defined in the UNA segment to parse the message, replaces them with the delimiters defined in the partner profile, and sends the message on to the trading partner.
- If the message coming from the internal application does not contain a UNA segment—e*Xchange uses the default UN/EDIFACT delimiters (see Table 27) to parse the message, replaces them with the delimiters defined in the partner profile, and sends the message on to the trading partner.

7.1.3. Default UN/EDIFACT Delimiters

The default delimiters for UN/EDIFACT are shown in Table 27.

Table 27 UN/EDIFACT Default Delimiters

Delimiter Type	Name	Symbol
Segment terminator	Apostrophe	'
Element delimiter	Plus Sign	+
Component data element separator	Colon	:
Release character	Question mark	?
Repetition separator	Asterisk	*

7.2 Transfer Modes in UN/EDIFACT

UN/EDIFACT offers three alternatives in terms of how frequently messages are sent:

- **Batch**—messages of different types are sent in groups, called batches. In batch mode, the frequency of batch transmission is normally determined by a user-specified time setting.

- **Interactive (single-item batching in real time)**—messages are sent as soon as they are generated or received. Typically, messages that are used in a real time mode are those that require an immediate response. The sender sends a request message to the receiver and remains connected while the receiver processes the request message and returns a response message.

Note: Do not confuse this term with the FTP (Batch) communications protocol (for more information, see “[Communications Protocols for UN/EDIFACT](#)” on [page 153](#)).

- **Fast Batch**—messages of a certain type are accumulated and sent to the trading partner as a group of messages, all of the same transaction type, at a preset point. Fast batch has one interchange, one group, and a preset number of messages. The point at which a fast batch is sent is determined by the settings in the Standard Event Structure for the message profile.

7.2.1. Fast Batch Settings

If you are using Fast Batch, you must set the following values in the `eX_Standard_Event.ssc` file:

- Set the string value “FB_UNIQUE_ID” (Fast Batch unique ID) in the Name node of the first NameValuePair in the TPAttribute node.

The Fast Batch unique ID is unique for each fast batch, but the same for each message within the fast batch.

- Set the fast batch unique value in the Value node of the first NameValuePair in the TPAttribute node.

The actual value for the fast batch unique ID is user-defined.

- Set the string value “FB_COUNT” (Number of messages to be included in the batch) in the Name node of the Second NameValuePair in the TPAttribute node.

- Set the total fast batch record count in the Value node of the second NameValuePair in the TPAttribute node.

The actual value for the fast batch record count is user-defined.

For an example, refer to the *e*Xchange schema Component* chapter of the *e*Xchange Implementation Guide*.

7.3 Communications Protocols for UN/EDIFACT

The communications protocols supported by e*Xchange for UN/EDIFACT are:

- FTP (Batch)

The FTP (Batch) setting at the B2B protocol level indicates use of File Transfer Protocol for transmission of messages. Within e*Gate, this uses the e*Xchange BATCH e*Way to transfer files. Files can also be stored on the local machine.

- HTTP
This setting indicates use of the HTTP protocol.
- SMTP
This setting indicates use of the Simple Mail Transfer Protocol.

7.4 Setting Up UN/EDIFACT Message Profile Information

Once you have set up B2B protocol information for a trading partner, the next step is to set up message profiles.

7.4.1. Setup Sequence

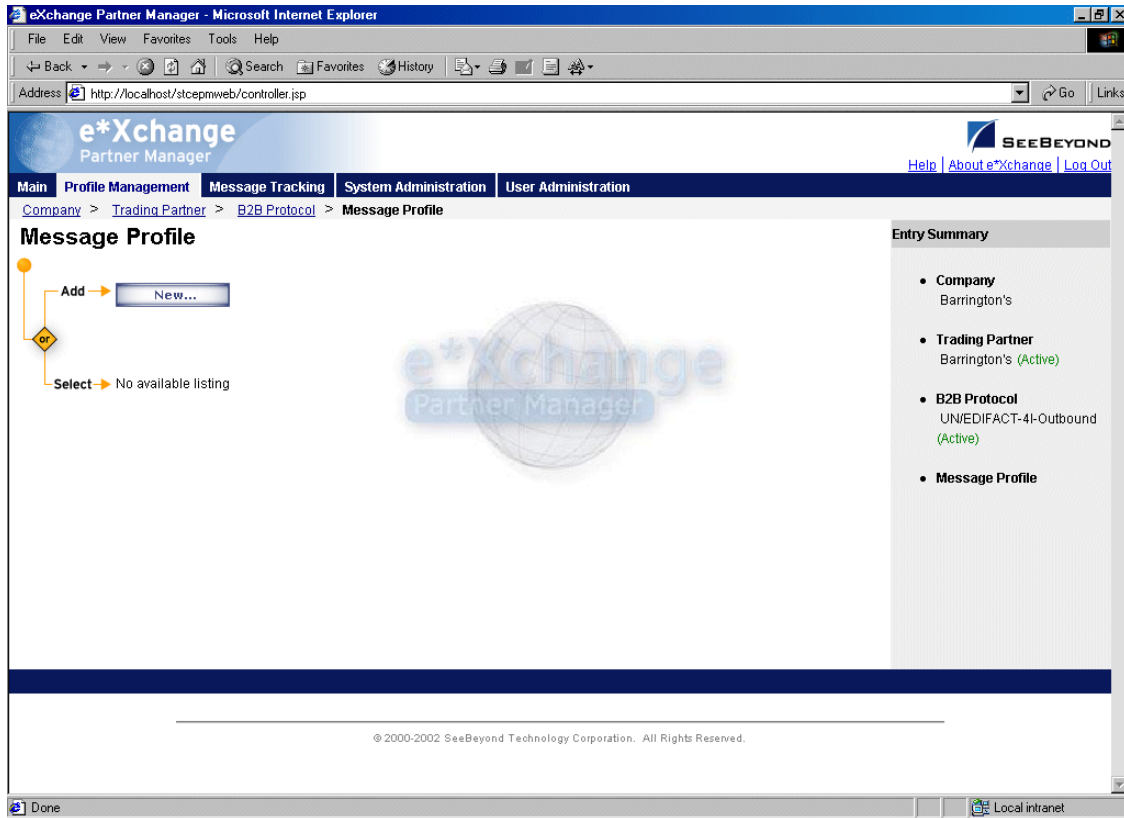
Part of setting up a message profile is to specify the expected response message, if any. During initial setup, you will find that you cannot select the appropriate response messages because you have not yet created the message profiles for those response messages.

One approach to this is to first set up all message profiles, both inbound and outbound, and then go back into each message profile to select the return messages.

7.4.2. Setting Up a Message Profile

From the **B2B Protocol** page, select a B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page (see Figure 85).

Figure 85 Message Profile Page



From the **Message Profile** page you can complete the following activities:

- Add a message profile for the selected B2B protocol (see [“To add a message profile” on page 156](#)).
- Select a message profile: choose from the drop-down list. The message profile **General** properties are displayed on the right side of the page. To view additional properties, click on the appropriate link above the properties display (specific property groups vary according to the eBusiness protocol).
- Edit the selected message profile; first select the section that you want to edit, and then click the **Edit** button to access the **Message Profile - Editing** page (see [“To edit a message profile” on page 160](#)).
- Create a new message profile based on the selected one (see [“To copy a message profile to the same B2B protocol” on page 161](#) and [“To copy a message profile to another B2B protocol” on page 163](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

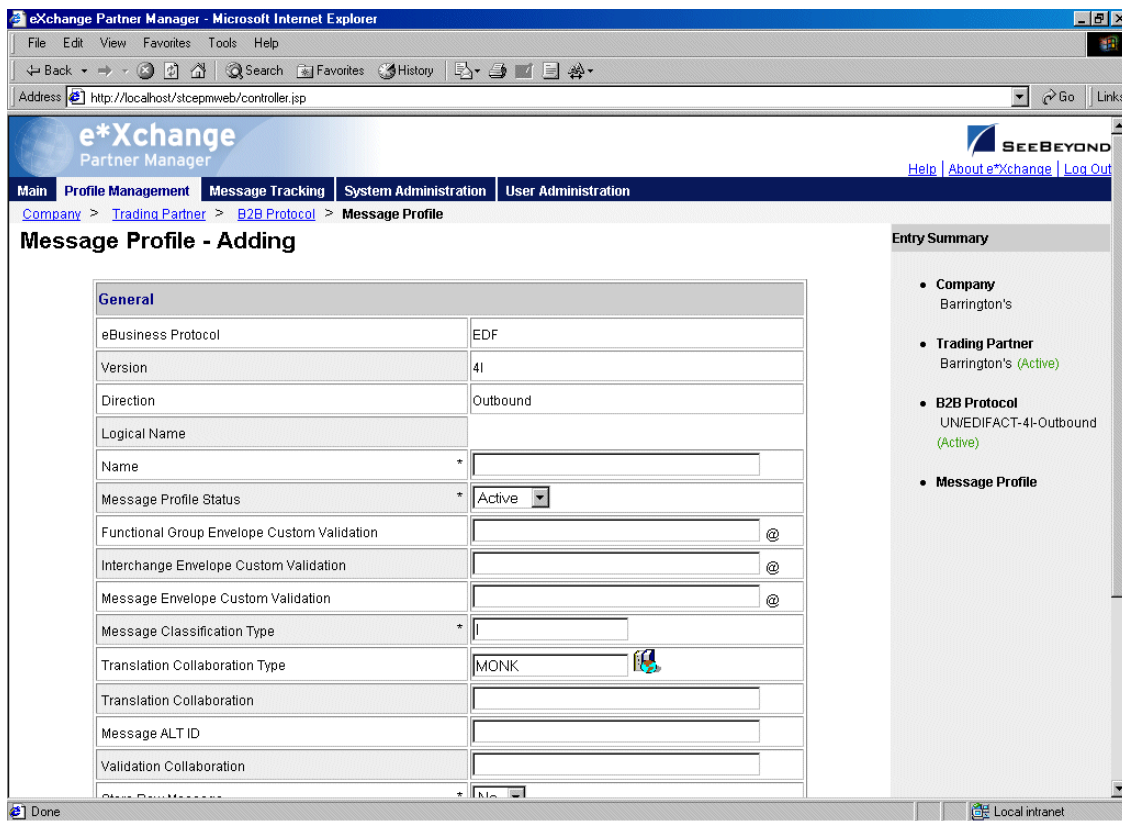
- Delete the selected message profile (see [“To delete a message profile” on page 164](#)).
- Activate or inactivate the selected message profile (see [“To inactivate or reactivate a message profile” on page 165](#)).

- Set or change security for the selected message profile (see [“To set up security” on page 165](#)).
- Add, change, or delete contacts for the selected message profile (see [“To set up contacts” on page 165](#)).

To add a message profile

- 1 From the **Message Profile** page, click the **New** button to access the **Message Profile - Adding** page (**General** section). An example (for version 4B) is shown in Figure 86.

Figure 86 Message Profile - Adding (General section) (UN/EDIFACT) (4B)

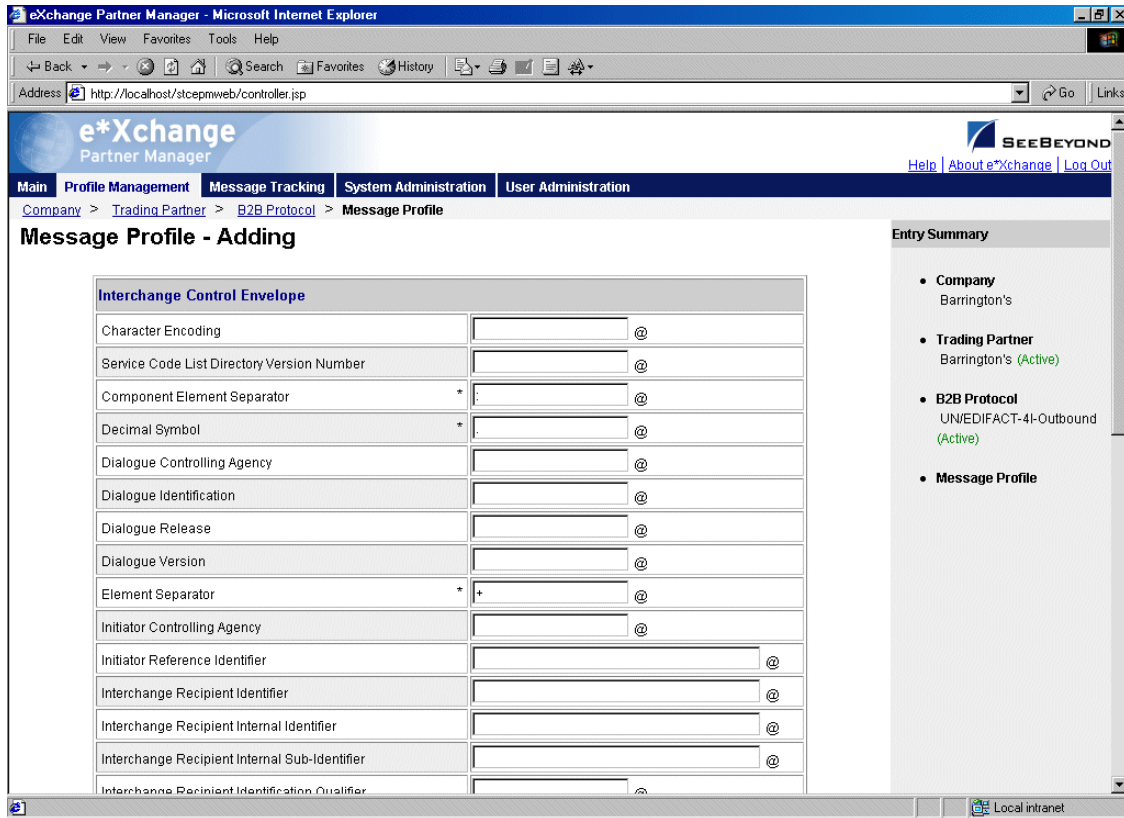


- 2 Enter or select values for the **General** section.

For more information, refer to [Table 29 on page 166](#) (for version 3B), [Table 34 on page 173](#) (for version 4B), or [Table 38 on page 180](#) (for version 4I).

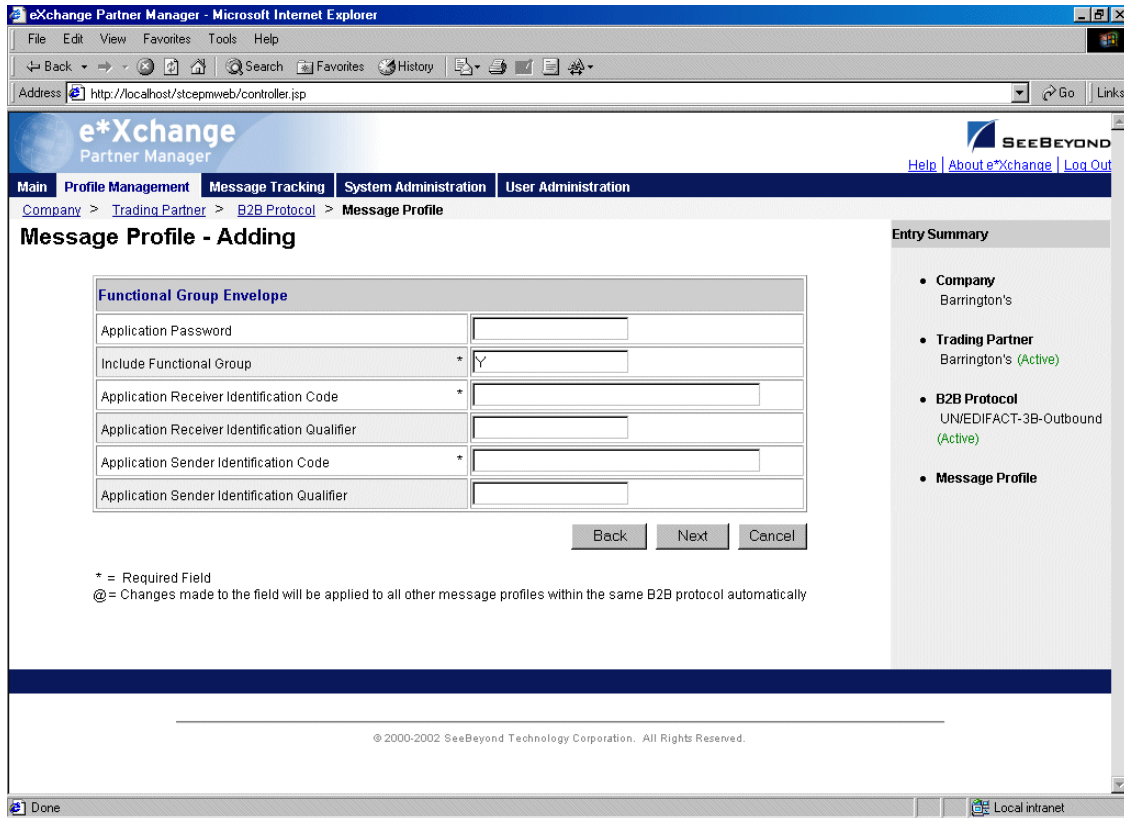
- 3 Click **Next** to access the **Interchange Control Envelope** section (see Figure 87).

Figure 87 Message Profile - Adding (Interchange Control Envelope section) (UN/EDIFACT)



- 4 Enter or select values for the **Interchange Control Envelope** section.
For more information, refer to [Table 30 on page 168](#) (for version 3B), [Table 35 on page 175](#) (for version 4B), or [Table 39 on page 182](#) (for version 4I).
- 5 Click **Next** to access the **Functional Group Envelope** section (see Figure 88) if you are using version 3B or 4B, or the **Message Envelope** section (see Figure 89) if you are using version 4I.

Figure 88 Message Profile - Adding (Functional Group Envelope section) (UN/EDIFACT)

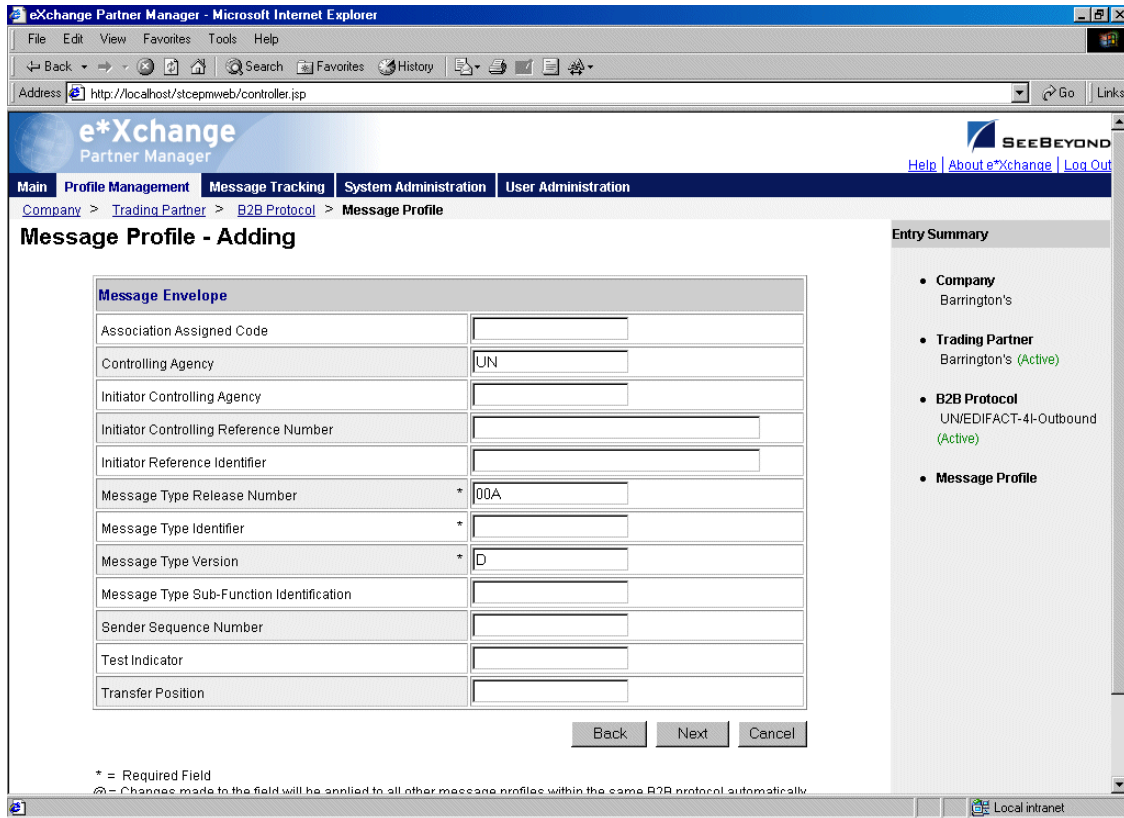


6 If you are using version 3B or 4B, enter or select values for the **Functional Group Envelope** section.

For more information, refer to [Table 31 on page 170](#) (for version 3B) or [Table 36 on page 178](#) (for version 4B).

7 Click **Next** to access the **Message Envelope** section (see Figure 89).

Figure 89 Message Profile - Adding (Message Envelope section) (UN/EDIFACT)



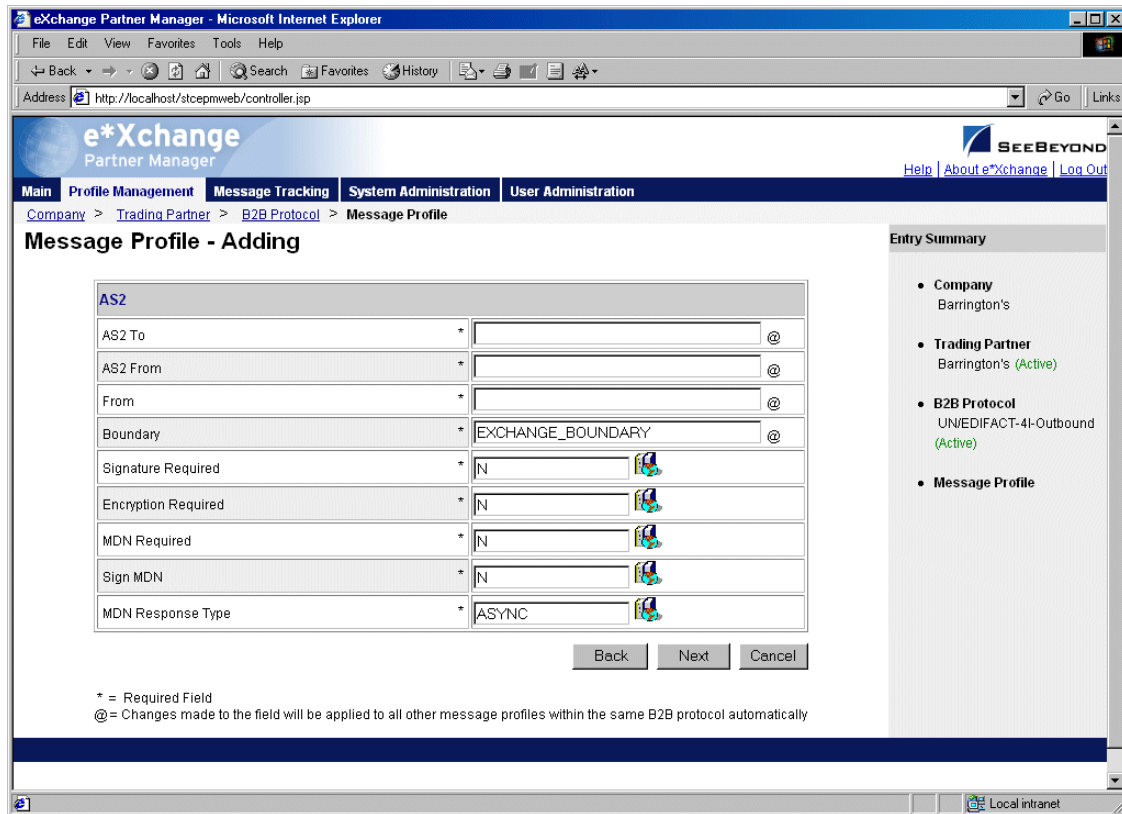
8 Enter or select values for the **Message Envelope** section.

For more information, refer to [Table 32 on page 171](#) (for version 3B), [Table 37 on page 179](#) (for version 4B), or [Table 40 on page 185](#) (for version 4I).

9 Click **Next**. One of the following pages appears:

- ◆ **AS2**—if you selected **Y** in the **AS2** field at the B2B Protocol level, in the **General** section) the **AS2** section appears (see Figure 90). Go to Step 10.
- ◆ **No AS2**—if you selected **N** in the **AS2** field at the B2B Protocol level, in the **General** section) the **Return Messages** section appears. Go to Step 12.

Figure 90 Message Profile - Adding (AS2 section) (UN/EDIFACT)

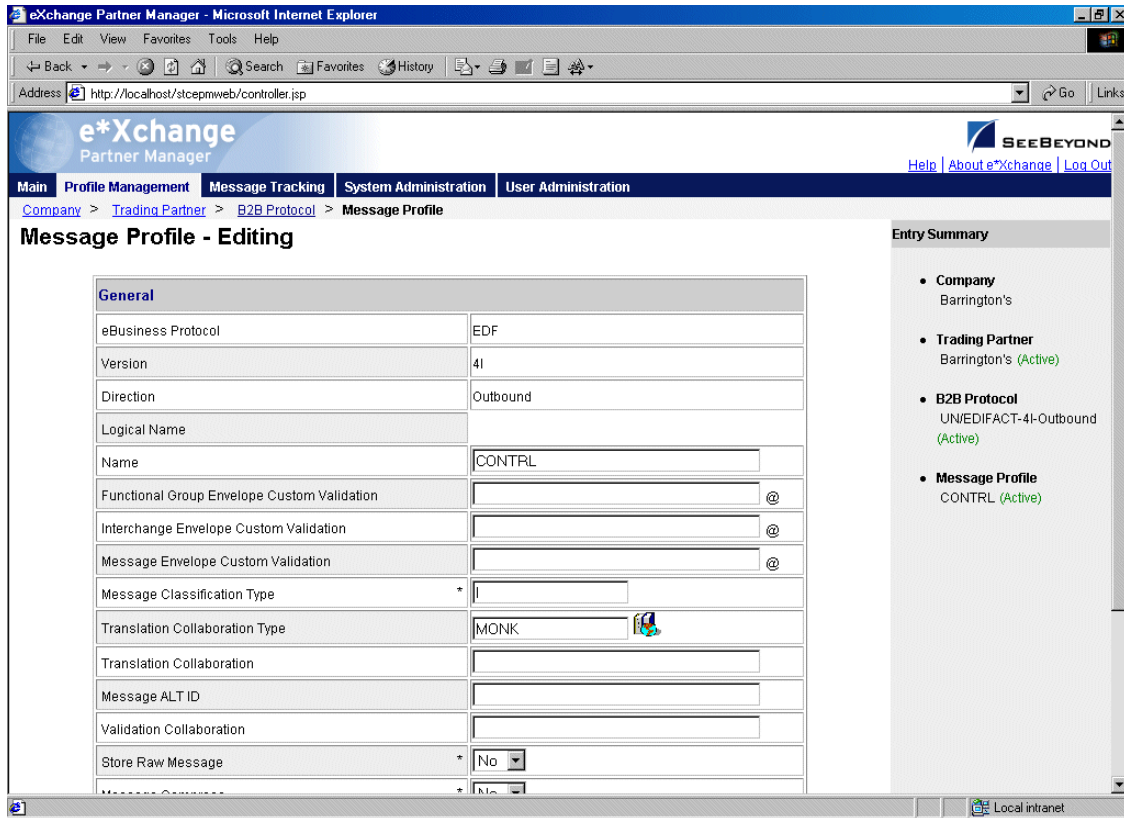


- 10 Enter or select values for the **AS2** section.
For more information, refer to [Table 33 on page 172](#).
- 11 Click **Next** to access the **Return Messages** section.
- 12 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.
For more information on defining UN/EDIFACT return messages, refer to [“About Return Message Profiles for UN/EDIFACT” on page 186](#).
- 13 Click **Apply** to save the profile and go to the **Message Profile** page.

To edit a message profile

- 1 From the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Properties** section, click the link for the section you want to edit: **General**, **Interchange Control Envelope**, **Functional Group Envelope** (3B or 4B only), **Message Envelope**, or **Return Messages**.
- 3 Click the **Edit** button to access the **Message Profile - Editing** page listing the attribute section that you selected (see Figure 91).

Figure 91 Message Profile - Editing (General section) (UN/EDIFACT)



4 Change the values as needed.

For more information, refer to the section for the appropriate UN/EDIFACT version, as shown in Table 28.

Table 28 Cross-References to UN/EDIFACT Parameter Values

Section	Version 3B	Version 4B	Version 4I
General	Table 29 on page 166	Table 34 on page 173	Table 38 on page 180
Interchange Control Envelope	Table 30 on page 168	Table 35 on page 175	Table 39 on page 182
Functional Group Envelope	Table 31 on page 170	Table 36 on page 178	N/A
Message Envelope	Table 32 on page 171	Table 37 on page 179	Table 40 on page 185

5 Click **Apply** to save changes and return to the **Message Profile** page.

To copy a message profile to the same B2B protocol

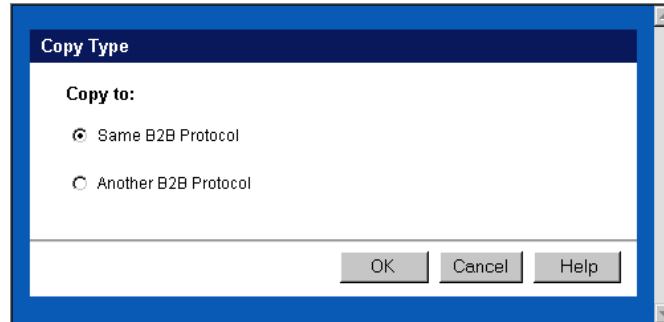
1 On the **Message Profile** page, select the message profile that you want to copy.

The message profile properties are displayed on the right side of the page.

- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 92).

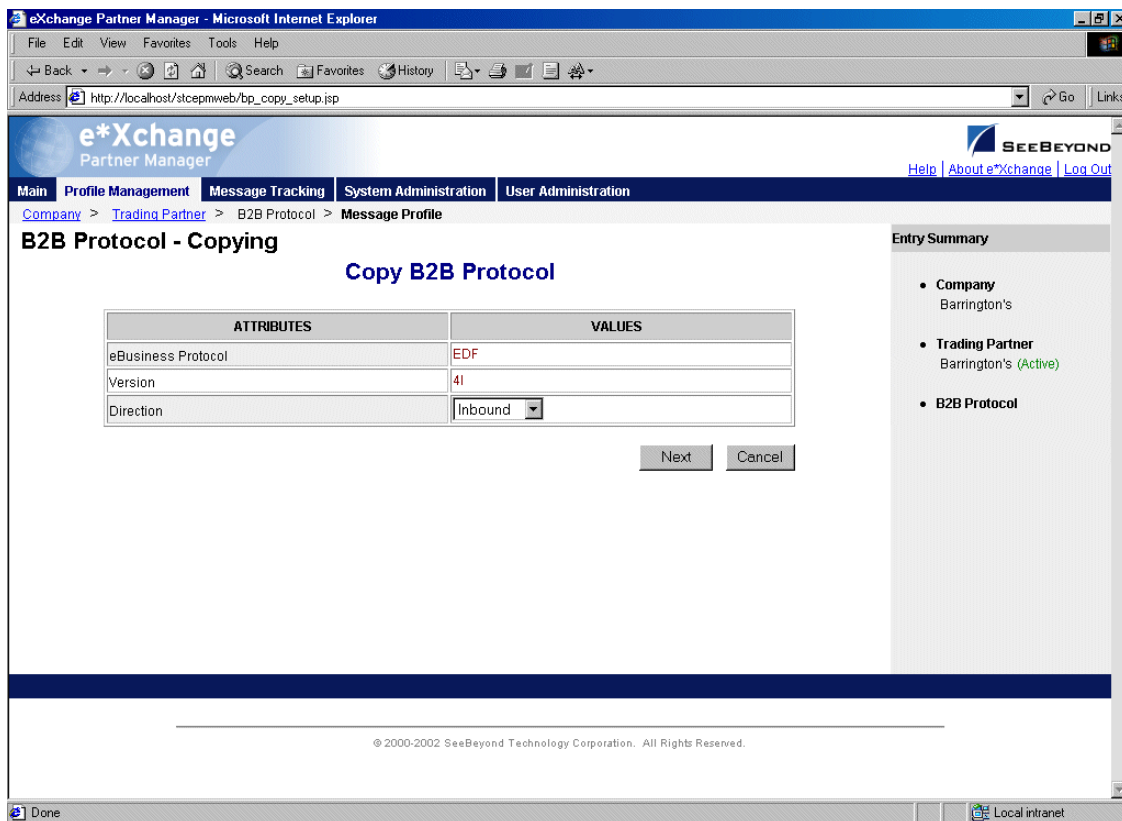
Figure 92 Copy Type (Copying a Message Profile)



- 3 Make sure **Same B2B Protocol** is selected.
- 4 Click **OK**.

The **Message Profile - Copying** page (**General** section) appears (see Figure 93).

Figure 93 Message Profile - Copying (General section) (UN/EDIFACT)



- 5 Change the values for the **General** attributes as needed.

For more information, refer to one of the following tables:

- ♦ For version 3B—[Table 29 on page 166](#)
- ♦ For version 4B—[Table 34 on page 173](#)
- ♦ For version 4I—[Table 38 on page 180](#)

6 Click **Next**.

7 Change the values for the **Interchange Control Envelope** as needed.

For more information, refer to one of the following tables:

- ♦ For version 3B—[Table 30 on page 168](#)
- ♦ For version 4B—[Table 35 on page 175](#)
- ♦ For version 4I—[Table 39 on page 182](#)

8 Click **Next**.

9 Change the values for the **Functional Group Envelope** as needed.

For more information, refer to one of the following tables:

- ♦ For version 3B—[Table 31 on page 170](#)
- ♦ For version 4B—[Table 36 on page 178](#)

10 Click **Next**.

11 Change the values for the **Message Envelope** as needed.

For more information, refer to one of the following tables:

- ♦ For version 3B—[Table 32 on page 171](#)
- ♦ For version 4B—[Table 37 on page 179](#)
- ♦ For version 4I—[Table 40 on page 185](#)

12 Click **Next**.

13 Change the values for return messages as needed.

14 Click **Finish**.

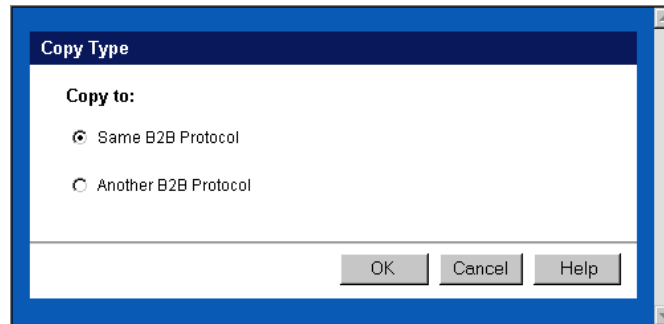
You are returned to the **Message Profile** page. The new message profile is now on the drop-down list.

To copy a message profile to another B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 94).

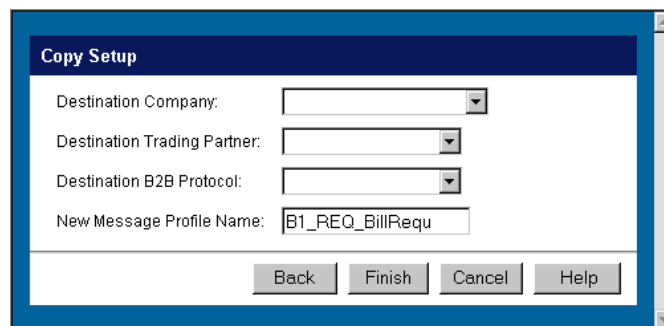
Figure 94 Copy Type (Copying a Message Profile)



- 3 Select **Copy to another B2B Protocol**.
- 4 Click **OK**.

The **Copy Setup** page appears (see Figure 95).

Figure 95 Copy Setup (Copying a Message Profile to Another B2B Protocol)





- 5 On the **Copy Setup** page, select the destination company.
- 6 Select the destination trading partner.
- 7 Select the destination B2B Protocol.
- 8 If you want to change the message profile name, type the new name.
- 9 Click **Finish**.

The message profile information is copied to the selected B2B protocol. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the profile, click **OK**.
The message profile is deleted.

To inactivate or reactivate a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:
 - ♦  Message profile is active: click to inactivate.
 - ♦  Message profile is inactive: click to reactivate.

To set up security

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 Click the **Security** button.
The **Security Management** page appears.
- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Message Profile** page, click the **Contacts** icon.
The **Company - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.
 - ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
 - ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

7.5 UN/EDIFACT Message Profile Parameter Values

This section lists field descriptions for the UN/EDIFACT values required for setting up a message profile.

Field descriptions are listed separately for each version:

- Version 3 Batch—See [“Version 3 Batch” on page 166](#)
- Version 4 Batch—See [“Version 4 Batch” on page 173](#)
- Version 4 Interactive—See [“Version 4 Interactive” on page 180](#)

7.5.1. Version 3 Batch

This section includes field descriptions for UN/EDIFACT version 3 Batch, for the following Message Profile setup sections:

- **General** section—[Table 29 on page 166](#)
- **Interchange Control Envelope** section—[Table 30 on page 168](#)
- **Functional Group Envelope** section—[Table 31 on page 170](#)
- **Message Envelope** section—[Table 32 on page 171](#)

Table 29 Message Profile, General Section (UN/EDIFACT 3B): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected earlier is displayed.
Version	The eBusiness protocol version that you selected earlier is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	The status of the message profile. Choose one of the following values: <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. Default: Active . Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 165).
Functional Group Envelope Custom Validation	Not implemented at this time.
Interchange Envelope Custom Validation	Not implemented at this time.
Message Envelope Custom Validation	Not implemented at this time.

Table 29 Message Profile, General Section (UN/EDIFACT 3B): Fields (Continued)

Name	Description
Message Classification Type	A flag to specify the message type for the message: B for batch, I for interactive. Certain types of UN/EDIFACT messages are not batched. Since this is version 3 Batch, this field defaults to B . Do not change it.
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension). Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.
Message ALT ID (Outbound only)	If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed. Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file. If you are not receiving messages from the internal system in raw data format, leave this field blank.
Event Type (Inbound only)	(Optional) If specified, this is the Event Type to which the inbound message is published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM . Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.
Validation Collaboration	The Monk Collaboration that is used to validate the eBusiness protocol message (no extension). For X12 and UN/EDIFACT: <ul style="list-style-type: none"> ▪ Inbound— This field is required. ▪ Outbound— This field is required if a unique-id is not provided in the eX_Standard_Event MSG_ALT_ID field. Note: The message enveloping is automatically validated by e*Xchange. The validation Collaboration addresses only the message body.
Store Raw Message	If you want to store the raw message in the database as well as the translated message, type Y in this field. If you store the raw message, it will be available for viewing in Message Tracking.
Message Compress (required)	Indicates whether the messages will be compressed before they are stored in the database. Default: No. Note: Compressed messages cannot be viewed in Message Tracking.

Table 29 Message Profile, General Section (UN/EDIFACT 3B): Fields (Continued)

Name	Description
Transfer Mode	The way in which the eBusiness messages are transmitted to, or received from, the trading partner: Batch, Fast Batch, or Interactive.
Repeat Batch Last Check Time (Batch transfer mode only)	Once the first batch has been sent out, this field is automatically updated by e*Xchange. Display-only.
Batch Repeat Time/ Batch Repeat Granularity (Batch transfer mode only)	<p>To send batches at regular intervals, use these two attributes. BATCH REPEAT TIME sets the numerical value, and BATCH REPEAT GRANULARITY sets the time period: H for hours, MI for minutes, and D for days. For example, BATCH REPEAT TIME of 4 and BATCH REPEAT GRANULARITY of H means that batches are sent out every four hours; values of 30 and MI mean that batches are sent out every 30 minutes.</p> <p>Note: If you want to send batches at a preset daily time, do not set values for these attributes. Use BATCH TIME. If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.</p> <p>Note: If you use these fields to control batching, you can have a maximum of 10 Batch e*Ways running. This is because the display-only Batch Last Send Time field has a maximum of 255 characters.</p>
Batch Time (Batch transfer mode only)	<p>To send batches at a preset daily time, enter the time in the format hh:mm:ss (military time); for example, 09:00:00 for 9am or 15:30:00 for 3pm. If the batch is being set at a preset daily time, you do not need to set any other attributes.</p> <p>You can also set multiple batch times, using the pipe symbol as the delimiter (up to 50 characters). For example, 09:00:00 17:30:00 24:00:00 sends out batches at 9am, 5:30pm, and midnight. The values must be in ordered sequence, from the earliest time to the latest.</p> <p>Note: If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.</p>

Table 30 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Acknowledgment Request	UNB 090 0031	An optional one-digit code requesting acknowledgment for the interchange.
Application Reference	UNB 070 0026	<p>An optional value identifying the application area assigned by the sender, to which the messages in the interchange relate; for example, the message type, if all the messages in the interchange are of the same type.</p> <p>Whether or not this field is used, and if so the exact nature of the data, is specified in the trading partner Interchange Agreement.</p>
Communication Agreement Identification	UNB 100 0032	An optional name or code indicating the type of agreement under which the interchange takes place. 1–35 characters.

Table 30 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Component Element Separator	UNA 010	<p>The Component Data Element Separator: The symbol used as a component data element separator (delimiter). Default: colon (:).</p> <p>Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.</p> <p>Note: For hex delimiters, precede the delimiter with 0x. For example, for a hex delimiter with the value 2F, type 0x2F.</p>
Decimal Symbol	UNA 030	<p>Decimal mark: The symbol used to indicate a decimal point. Default: period (.).</p> <p>Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.</p>
Element Separator	UNA 020	<p>The Data Element Separator: The symbol used as a separator between data elements (delimiter). Default: plus sign (+).</p> <p>Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.</p> <p>Note: For hex delimiters, precede the delimiter with 0x. For example, for a hex delimiter with the value 2F, type 0x2F.</p>
Processing Priority Code	UNB 080-0029	<p>Optional: A single-character code determined by the sender requesting processing priority for the interchange.</p> <p>Note: The Interchange Agreement must state whether the field is to be used. If it is used, a list of codes and meanings must be provided.</p>
Interchange Recipient Identifier	UNB 030 0010	<p>(Required) The receiver's name or ID code, as specified in the Interchange Agreement.</p>
Interchange Recipient Identifier Qualifier	UNB 030 0007	<p>An optional qualifier referring to the receiver's identification code. Up to four characters.</p>
Recipient Reference Password	UNB 060 0022	<p>The reference or password required for the sender to access the recipient's system. Up to 14 characters.</p>
Recipient Reference Qualifier	UNB 060 0025	<p>An optional qualifier for the recipient's reference or password. Up to four characters.</p>
Release Character	UNA 040	<p>The symbol used as a release character. Default: question mark (?). The release character, immediately preceding one of the other separators, restores its normal meaning. For example, 10?+10=20 means 10+10=20.</p> <p>Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.</p>

Table 30 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Repetition Separator	UNA 050	The symbol used as a repetition separator (delimiter). Default: asterisk (*). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Reverse Receiver Routing Address	UNB 030 0014	The routing address; the address that the recipient has specified the sender should include in the interchange. This is used by the recipient to facilitate routing of incoming messages.
Reverse Sender Routing Address	UNB 020 0008	The address for reverse routing; an address specified by the sender of an interchange to be included by the recipient in the response interchanges. This facilitates internal routing.
Segment Terminator	UNA 060	The symbol used to indicate the end of a segment (delimiter). Default: apostrophe ('). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Interchange Sender Identifier	UNB 020 0004	The sender's name or ID code, as specified in the Interchange Agreement.
Interchange Sender Identifier Qualifier	UNB 020 0007	The qualifier for the Interchange Sender ID name or code. A qualifier code may refer to an organization identification, as in ISO 6523.
Interchange Syntax Identifier	UNB 010 0001	The syntax level used: UNOA for the basic level A UNOB for level B
Interchange Syntax Version	UNB 010 0002	The EDIFACT version used at the interchange level. e*Xchange supports versions 3 and 4. For the current version, ISO 9735-1, use 4. Use 3 for the 1988 version amended and reprinted in 1990 plus Amendment 1 of 1992.
Test Indicator	UNB 110 0035	An optional single-digit numeric code (1, 2, 3, or 4) indicating that this is a test.

Table 31 Message Profile, Functional Group Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Application Password	UNG 080 0058	Optional: The reference or password required for the sender to access the recipient's division, department, or sectional application system/process (additional to the recipient's reference password at the interchange level, which is required). Up to 14 characters.

Table 31 Message Profile, Functional Group Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Include Functional Group	N/A	Only applicable to outbound messages sent by Interactive transfer mode. This field indicates whether the trading partner requires functional group information (UNG/UNE segments) in the message.
Application Receiver Identification Code	UNG 030 0044	Required: An additional ID code (for example, of a division, branch, or computer system or process), specified by the recipient to facilitate internal routing. Up to 35 characters.
Application Receiver Identification Qualifier	UNG 030 0007	Optional: A qualifier to the recipient's ID code. Four characters.
Application Sender Identification Code	UNG 020 0040	Required: An additional ID code (for example, of a division, branch, or computer system or process), specified by the sender to facilitate internal routing. Up to 35 characters.
Application Sender Identification Qualifier	UNG 020 0007	An optional qualifier to the sender's ID code. Four characters.

Table 32 Message Profile, Message Envelope Section (UN/EDIFACT 3B): Fields

Name	Ref #	Description
Association Assigned Code	UNH 020 0057	Optional: A code that further identifies the message. Assigned by the association responsible for the design and maintenance of the message type concerned. Up to six characters.
Common Access Reference	UNH 030 0068	Optional: A reference serving as a key to relate all subsequent transfers of data to the same business case or file. Up to 35 characters.
Controlling Agency	UNH 020 0051	The code for the controlling agency. For UN/EDIFACT, this value is always UN.
Message Type Release Number	UNH 020 0054	Required: The release number within the current message version number. 1–3 characters.
Message Type Identifier	UNH 020 0065	Required: Message Type—A code identifying a type of message and assigned by its controlling agency. Up to six characters.
Message Type Version	UNH 020 0052	Required: The version number for the message type. Up to three characters.
Message Transfer Indicator	UNH 040 0073	Optional: First and Last Transfer: An indicator used for the first and last message in a sequence of messages related to the same topic. One character.

Table 32 Message Profile, Message Envelope Section (UN/EDIFACT 3B): Fields (Continued)

Name	Ref #	Description
Message Sequence	UNH 040 0070	The Sequence of Transfers: A number (up to two digits) assigned by the sender indicating the numerical sequence of one or more transfers.

Table 33 Message Profile, AS2 Section (UN/EDIFACT): Fields

Name	Description
AS2 To	The identity of the receiving system. This can be company-specific, such as a DUNS number, or an identification string agreed upon between the trading partners.
AS2 From	The identity of the sending system. This can be company-specific, such as a DUNS number, or it can be an identification string agreed upon between the trading partners.
From	The Web address for the message sender; for example: sender@tradingpartner.com.
Boundary	The string that you want to use as the boundary between the various parts of the message. This should be a string that will definitely not be found elsewhere in the message content; for example: -----Message Boundary-----
Signature Required	If a digital signature is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Encryption Required	If encryption is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Required	If MDN (Message Disposition Notification) is required on the message, enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
Sign MDN	If a digital signature is required on the MDN (Message Disposition Notification), enter Y . If it is not required, enter N . You can also select from the drop-down list. Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.
MDN Response Type	Enter the response type for the Message Disposition Notification: ASYNC (Asynchronous) or SYNC (Synchronous). Note: All message profiles in a specific direction that have a transfer mode of Batch or Fast Batch must have matching values in this field.

7.5.2. Version 4 Batch

This section includes field descriptions for UN/EDIFACT version 4 Batch, for the following Message Profile setup sections:

- **General** section—[Table 34 on page 173](#)
- **Interchange Control Envelope** section—[Table 35 on page 175](#)
- **Functional Group Envelope** section—[Table 36 on page 178](#)
- **Message Envelope** section—[Table 37 on page 179](#)

Table 34 Message Profile, General Section (UN/EDIFACT 4B): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected earlier is displayed.
Version	The eBusiness protocol version that you selected earlier.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	The status of the message profile. Choose one of the following values: <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. Default: Active . Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 165).
Functional Group Envelope Custom Validation	Not implemented at this time.
Interchange Envelope Custom Validation	Not implemented at this time.
Message Envelope Custom Validation	Not implemented at this time.
Message Classification Type	A flag to specify the message type for the message: B for batch, I for interactive. Certain types of UN/EDIFACT messages are not batched. Since this is version 4 Batch, this field defaults to B . Do not change it.
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension). Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.

Table 34 Message Profile, General Section (UN/EDIFACT 4B): Fields (Continued)

Name	Description
Message ALT ID (Outbound only)	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed.</p> <p>Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file.</p> <p>If you are not receiving messages from the internal system in raw data format, leave this field blank.</p>
Event Type (Inbound only)	<p>(Optional) If specified, this will be the Event Type to which the inbound message will be published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM.</p> <p>Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.</p>
Validation Collaboration	<p>The Monk Collaboration that is used to validate the eBusiness protocol message (no extension).</p> <p>For X12 and UN/EDIFACT:</p> <ul style="list-style-type: none"> ▪ Inbound—This field is required. ▪ Outbound—This field is required if a unique-id is not provided in the eX_Standard_Event MSG_ALT_ID field. <p>Note: The message enveloping is automatically validated by e*Xchange. The validation Collaboration addresses only the message body.</p>
Store Raw Message	<p>If you want to store the raw message in the database as well as the translated message, type Y in this field.</p> <p>If you store the raw message, it will be available for viewing in Message Tracking.</p>
Message Compress (required)	<p>Indicates whether the messages will be compressed before they are stored in the database. Default: No.</p> <p>Note: Compressed messages cannot be viewed in Message Tracking.</p>
Transfer Mode	<p>The way in which the eBusiness messages are transmitted to, or received from, the trading partner: Batch, Fast Batch, or Interactive.</p>
Repeat Batch Last Check Time (Batch transfer mode only)	<p>Once the first batch has been sent out, this field is automatically updated by e*Xchange. Display-only.</p>

Table 34 Message Profile, General Section (UN/EDIFACT 4B): Fields (Continued)

Name	Description
Batch Repeat Time/ Batch Repeat Granularity (Batch transfer mode only)	<p>To send batches at regular intervals, use these two attributes. BATCH REPEAT TIME sets the numerical value, and BATCH REPEAT GRANULARITY sets the time period: H for hours, MI for minutes, and D for days. For example, BATCH REPEAT TIME of 4 and BATCH REPEAT GRANULARITY of H means that batches will be sent out every four hours; values of 30 and MI mean that batches will be sent out every 30 minutes.</p> <p>Note: If you want to send batches at a preset daily time, do not set values for these attributes. Use BATCH TIME. If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.</p> <p>Note: If you use these fields to control batching, you can have a maximum of 10 Batch e*Ways running. This is because the display-only Batch Last Send Time field has a maximum of 255 characters.</p>
Batch Time (Batch transfer mode only)	<p>To send batches at a preset daily time, enter the time in the format hh:mm:ss (military time); for example, 09:00:00 for 9am or 15:30:00 for 3:30pm. If the batch is being set at a preset daily time, you do not need to set any other attributes. You can also set multiple batch times, using the pipe symbol as the delimiter: for example, 09:00:00 17:30:00 24:00:00 sends out batches at 9am, 5:30pm, and midnight. The values must be in ordered sequence, from the earliest time to the latest.</p> <p>Note: If you set values for Batch Repeat Time/ Batch Repeat Granularity and also Batch Time, the Batch Time setting takes precedence.</p>

Table 35 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4B): Fields

Name	Ref #	Description
Acknowledgment Request	UNB 090 0031	An optional one-digit code requesting acknowledgment for the interchange.
Application Reference	UNB 070 0026	An optional value identifying the application area assigned by the sender, to which the messages in the interchange relate; for example, the message type, if all the messages in the interchange are of the same type. Whether or not this field is used, and if so the exact nature of the data, is specified in the trading partner Interchange Agreement.

Table 35 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4B): Fields

Name	Ref #	Description
Character Encoding	UNB 010 0133	(Optional) Character Encoding, Coded: The identification for the character encoding used in the interchange, as specified in the trading agreement. Acceptable values: any three-character code as defined in the trading agreement. If you do not specify a value, e*Xchange assumes the default encoding technique defined for the syntax version being used: 1—ASCII 7-bit code. 2—ASCII 8-bit code. 3—Code page 500 (EBCDIC Multinational No. 5) encoding schema for the repertoire as defined by the code page. 4—Code page 850 (IBM PC Multinational) encoding schema for the repertoire as defined by the code page.
Service Code List Directory Version Number	UNB 010 0080	The version number of the service code list directory.
Component Element Separator	UNA 010	The Component Data Element Separator: The symbol used as a component data element separator (delimiter). Default: colon (:). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Decimal Symbol	UNA 030	Decimal mark: The symbol used to indicate a decimal point. Default: period (.). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.
Element Separator	UNA 020	The Data Element Separator: The symbol used as a separator between data elements (delimiter). Default: plus sign (+). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Interchange Agreement Identification	UNB 100 0032	An optional name or code indicating the type of agreement under which the interchange takes place.
Processing Priority Code	UNB 080-0029	Optional: A single-character code determined by the sender requesting processing priority for the interchange. Note: The Interchange Agreement must state whether the field is to be used. If it is used, a list of codes and meanings must be provided.
Interchange Recipient Identifier	UNB 030 0010	(Required) The receiver's name or ID code, as specified in the Interchange Agreement.

Table 35 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4B): Fields

Name	Ref #	Description
Interchange Recipient Internal Identifier	UNB 030 0014	The identification specified by the recipient of the interchange (for example, a division or a computer system). If agreed, this is included in response interchanges by the sender, to facilitate internal routing. Up to 35 characters.
Interchange Recipient Internal Sub-Identifier	UNB 030 0046	An optional sub-level of the receiver's internal ID. Up to 35 characters.
Interchange Recipient Identification Qualifier	UNB 030 0007	A qualifier referring to the receiver's identification code. Up to four characters.
Recipient Reference Password	UNB 060 0022	The reference or password required for the sender to access the recipient's system. Up to 14 characters.
Recipient Reference Qualifier	UNB 060 0025	An optional qualifier for the recipient's reference or password. Up to four characters.
Interchange Sender Identifier	UNB 020 0004	The sender's name or ID code, as specified in the Interchange Agreement.
Interchange Sender Internal Identifier	UNB 020 0008	An ID (it could be used to indicate a division, branch, or computer system/process) specified by the sender of the interchange. This ID can be used by the recipient in response interchanges, for the purposes of internal routing.
Interchange Sender Internal Sub-Identifier	UNB 020 0042	An optional sub-level of the sender's internal ID. Up to 35 characters.
Interchange Sender Identification Qualifier	UNB 020 0007	A qualifier for the Interchange Sender ID name or code. A qualifier code may refer to an organization identification, as in ISO 6523. Up to four characters.
Release Character	UNA 040	The symbol used as a release character. Default: question mark (?). The release character, immediately preceding one of the other separators, restores its normal meaning. For example, 10?+10=20 means 10+10=20. Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.
Repetition Separator	UNA 050	The symbol used as a repetition separator (delimiter). Default: asterisk (*). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .

Table 35 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4B): Fields

Name	Ref #	Description
Segment Terminator	UNA 060	The symbol used to indicate the end of a segment (delimiter). Default: apostrophe ('). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Interchange Syntax Identifier	UNB 010 0001	The syntax level used: UNOA for the basic level A UNOB for level B
Interchange Syntax Version	UNB 010 0002	The EDIFACT version used at the interchange level. e*Xchange supports versions 3 and 4. For the current version, ISO 9735-1, use 4. Use 3 for the 1988 version amended and reprinted in 1990 plus Amendment 1 of 1992.
Test Indicator	UNB 110 0035	An optional single-digit numeric code (1, 2, 3, or 4) indicating that this is a test.

Table 36 Message Profile, Functional Group Envelope Section (UN/EDIFACT 4B): Fields

Name		Description
Application Password	UNG 080 0058	Optional: The reference or password required for the sender to access the recipient's division, department, or sectional application system/process (additional to the recipient's reference password at the interchange level, which is required). Up to 14 characters.
Include Functional Group	N/A	Only applicable to outbound messages sent by Interactive transfer mode. This field indicates whether the trading partner requires functional group information (UNG/UNE segments) in the message.
Application Receiver Identification Code	UNG 030 0044	Required: An additional ID code (for example, of a division, branch, or computer system or process), specified by the recipient to facilitate internal routing. Up to 35 characters.
Application Receiver Identification Qualifier	UNG 030 0007	Optional: A qualifier to the recipient's ID code. Four characters.
Application Sender Identification Code	UNG 020 0040	Required: An additional ID code (for example, of a division, branch, or computer system or process), specified by the sender to facilitate internal routing. Up to 35 characters.

Table 36 Message Profile, Functional Group Envelope Section (UN/EDIFACT 4B): Fields

Name		Description
Application Sender Identification Qualifier	UNG 020 0007	An optional qualifier to the sender's ID code. Four characters.

Table 37 Message Profile, Message Envelope Section (UN/EDIFACT 4B): Fields

Name		Description
Association Assigned Code	UNH 020 0057	Optional: A code that further identifies the message. Assigned by the association responsible for the design and maintenance of the message type concerned. Up to six characters.
Code List Directory Version Number	UNH 020 0110	Optional: The version number of the service code list directory.
Common Access Reference	UNH 030 0068	Optional: A reference serving as a key to relate all subsequent transfers of data to the same business case or file. Up to 35 characters.
Controlling Agency	UNH 020 0051	The code for the controlling agency. For UN/EDIFACT, this value is always UN.
Message Type Release Number	UNH 020 0054	Required: The release number within the current message version number. 1–3 characters.
Message Type Identifier	UNH 020 0065	Required: Message Type: A code identifying a type of message and assigned by its controlling agency. Up to six characters.
Message Type Version	UNH 020 0052	Required: The version number for the message type. Up to three characters.
Message Implementation Guideline Controlling Agency	UNH 060 0051	Optional: The controlling agency for the implementation guideline. For UN/EDIFACT, this value is always UN.
Message Implementation Guideline Identifier	UNH 060 0121	The coded identification of the message implementation guideline, assigned by its controlling agency.
Message Implementation Guideline Release Number	UNH 060 0124	The release number within the message implementation guideline version number.
Message Implementation Guideline Version	UNH 060 0122	Version number of the message implementation guideline.

Table 37 Message Profile, Message Envelope Section (UN/EDIFACT 4B): Fields (Continued)

Name		Description
Message Scenario Controlling Agency	UNH 070 0051	The code identifying the controlling agency for the message scenario.
Message Scenario Identifier	UNH 070 0127	The code identifying the scenario.
Message Scenario Release Number	UNH 070 0130	The release number within the scenario version number.
Message Scenario Version	UNH 070 0128	Version number of a scenario.
Message Subset Controlling Agency	UNH 050 0051	The code identifying the controlling agency for the message subset.
Message Subset Identifier	UNH 050 0115	Coded identification of a message subset, assigned by its controlling agency.
Message Subset Release Number	UNH 050 0118	The release number within the message subset version number.
Message Subset Version	UNH 050 0116	The version number of the message subset.
Message Transfer Indicator	UNH 040 0073	Optional: First and Last Transfer: An indication used for the first and last message in a sequence of messages related to the same topic. One character.
Message Type Sub-Function Identification	UNH 020 0113	The code identifying a sub-function of a message type.

7.5.3. Version 4 Interactive

This section includes field descriptions for UN/EDIFACT version 4 Interactive, for the following Message Profile setup sections:

- **General** section—[Table 38 on page 180](#)
- **Interchange Control Envelope** section—[Table 39 on page 182](#)
- **Message Envelope** section—[Table 40 on page 185](#)

Table 38 Message Profile, General Section (UN/EDIFACT 4I): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected earlier is displayed.
Version	The eBusiness protocol version that you selected earlier is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.

Table 38 Message Profile, General Section (UN/EDIFACT 4I): Fields (Continued)

Name	Description
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	<p>The status of the message profile. Choose one of the following values:</p> <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. <p>Default: Active.</p> <p>Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 165).</p>
Functional Group Envelope Custom Validation	Not implemented at this time.
Interchange Envelope Custom Validation	Not implemented at this time.
Message Envelope Custom Validation	Not implemented at this time.
Message Classification Type	<p>A flag to specify the message type for the message: B for batch, I for interactive.</p> <p>Certain types of UN/EDIFACT messages are not batched.</p> <p>Since this is version 4 Interactive, this field defaults to I. Do not change it.</p>
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension).</p> <p>Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.</p>
Message ALT ID (Outbound only)	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed.</p> <p>Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file.</p> <p>If you are not receiving messages from the internal system in raw data format, leave this field blank.</p>

Table 38 Message Profile, General Section (UN/EDIFACT 4I): Fields (Continued)

Name	Description
Event Type (Inbound only)	(Optional) If specified, this will be the Event Type to which the inbound message will be published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM . Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.
Validation Collaboration	The Monk Collaboration that is used to validate the eBusiness protocol message (no extension). For X12 and UN/EDIFACT: <ul style="list-style-type: none"> ▪ Inbound—This field is required. ▪ Outbound—This field is required if a unique-id is not provided in the eX_Standard_Event MSG_ALT_ID field. Note: The message enveloping is automatically validated by e*Xchange. The validation Collaboration addresses only the message body.
Store Raw Message	If you want to store the raw message in the database as well as the translated message, type Y in this field. If you store the raw message, it will be available for viewing in Message Tracking.
Message Compress (required)	Indicates whether the messages will be compressed before they are stored in the database. Default: No. Note: Compressed messages cannot be viewed in Message Tracking.
Transfer Mode	The way in which the eBusiness messages are transmitted to, or received from, the trading partner. Choose Interactive.

Table 39 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4I): Fields

Name	Ref #	Description
Character Encoding	UIB 010 0133	(Optional) The identification for the character encoding used in the interchange, as specified in the trading agreement (alphanumeric, up to three characters). Acceptable values: any three-character code as defined in the trading agreement. If you do not specify a value, e*Xchange assumes the default encoding technique defined for the syntax version being used: 1—ASCII 7-bit code. 2—ASCII 8-bit code. 3—Code page 500 (EBCDIC Multinational No. 5) encoding schema for the repertoire as defined by the code page. 4—Code page 850 (IBM PC Multinational) encoding schema for the repertoire as defined by the code page.
Service Code List Directory Version Number	UIB 010 0080	The version number of the service code list directory.

Table 39 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4I): Fields

Name	Ref #	Description
Component Element Separator	UNA 010	The Component Data Element Separator: The symbol used as a component data element separator (delimiter). Default: colon (:). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Decimal Symbol	UNA 030	Decimal mark: The symbol used to indicate a decimal point. Default: period (.). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.
Dialogue Controlling Agency	UIB 050 0051	The code identifying the controlling agency for the dialogue.
Dialogue Identification	UIB 050 0311	The code identifying the dialogue.
Dialogue Release	UIB 050 0344	The release number of the dialogue.
Dialogue Version	UIB 050 0342	The version number of the dialogue.
Element Separator	UNA 020	The Data Element Separator: The symbol used as a separator between data elements (delimiter). Default: plus sign (+). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Initiator Controlling Agency	UIB 020 0051	The code identifying the controlling agency for the dialogue reference.
Initiator Reference Identifier	UIB 020 0300	The Initiator Control Reference: a reference assigned by the dialogue initiator.
Interchange Recipient Identifier	UIB 070-0010	The receiver's name or ID code, as specified in the Interchange Agreement.
Interchange Recipient Internal Identifier	UIB 070 0014	The identification specified by the recipient of the interchange (for example, a division or a computer system). If agreed, this is included in response interchanges by the sender, to facilitate internal routing. Up to 35 characters.
Interchange Recipient Internal Sub-Identifier	UIB 070 0046	An optional sub-level of the receiver's internal ID. Up to 35 characters.

Table 39 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4I): Fields

Name	Ref #	Description
Interchange Recipient Identification Qualifier	UIB 070 0007	A qualifier for the recipient's reference or password. Up to four characters.
Release Character	UNA 040	The symbol used as a release character. Default: question mark (?). The release character, immediately preceding one of the other separators, restores its normal meaning. For example, 10?+10=20 means 10+10=20. Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment.
Repetition Separator	UNA 050	The symbol used as a repetition separator (delimiter). Default: asterisk (*). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Response Control Reference Number	UIB 020 0304	The reference number assigned by the dialogue responder.
Scenario Controlling Agency	UIB 040 0051	The code identifying the controlling agency for the message scenario.
Scenario Identifier	UIB 040 0127	The code identifying the scenario.
Scenario Release	UIB 040 0130	The release number within the scenario version number.
Scenario Version	UIB 040 0128	Version number of a scenario.
Segment Terminator	UNA 060	The symbol used to indicate the end of a segment (delimiter). Default: apostrophe ('). Note: If you specify a value other than the default, e*Xchange includes this information in the message as part of the UNA segment. Note: For hex delimiters, precede the delimiter with 0x . For example, for a hex delimiter with the value 2F, type 0x2F .
Interchange Sender Identifier	UIB 060 0004	The sender's name or ID code, as specified in the Interchange Agreement.
Interchange Sender Internal Identifier	UIB 060 0008	An ID (it could be used to indicate a division, branch, or computer system/process) specified by the sender of the interchange. This ID can be used by the recipient in response interchanges, for the purposes of internal routing.
Interchange Sender Internal Sub-Identifier	UIB 060 0042	An optional sub-level of the sender's internal ID. Up to 35 characters.

Table 39 Message Profile, Interchange Control Envelope Section (UN/EDIFACT 4I): Fields

Name	Ref #	Description
Interchange Sender Identification Qualifier	UIB 060-0007	The qualifier for the Interchange Sender ID name or code. A qualifier code may refer to an organization identification, as in ISO 6523.
Interchange Syntax Identifier	UIB 010 0001	The syntax level used: UNOA for the basic level A UNOB for level B
Interchange Syntax Version	UIB 10 0002	The EDIFACT version used at the interchange level. e*Xchange supports versions 3 and 4. For the current version, ISO 9735-1, use 4. Use 3 for the 1988 version amended and reprinted in 1990 plus Amendment 1 of 1992.
Test Indicator	UIB 100 0035	An optional single-digit numeric code (1, 2, 3, or 4) indicating that this is a test.
Transaction Control Agency	UIB 030 0051	The code identifying the controlling agency for the transaction reference.
Transaction Control Reference	UIB 030 0306	A reference number assigned by the transaction initiator.

Table 40 Message Profile, Message Envelope Section (UN/EDIFACT 4I): Fields

Name		Description
Association Assigned Code	UIH 010 0057	Optional: A code that further identifies the message. Assigned by the association responsible for the design and maintenance of the message type concerned. Up to six characters.
Controlling Agency	UIH 010 0051	The code for the controlling agency. For UN/EDIFACT, this value is always UN.
Initiator Controlling Agency	UIH 030 0051	The code identifying the controlling agency for the dialogue initiator.
Initiator Controlling Reference Number	UIH 030 0300	The code assigned by the dialogue initiator.
Initiator Reference Identifier	UIH 030 0303	The organization code or name assigned by the party that initiated the transaction or dialogue.
Message Type Release Number	UIH 010 0054	Required: The release number within the current message version number.
Message Type Identifier	UIH 010 0065	Required: Message Type: A code identifying a type of message and assigned by its controlling agency. Up to six characters.

Table 40 Message Profile, Message Envelope Section (UN/EDIFACT 4I): Fields (Continued)

Name		Description
Message Type Version	UIH 010 0052	Required: The version number for the message type. Up to three characters.
Message Type Sub-Function Identification	UIH 010 0113	The code identifying a sub-function of a message type.
Sender Sequence Number	UIH 040 0320	Identification of the sequence number of the message or package within the sender interchange.
Test Indicator	UIH 060 0035	An optional single-digit numeric code (1, 2, 3, or 4) indicating that this is a test.
Transfer Position	UIH 040 0323	An indication of the position of a transfer.

7.6 About Return Message Profiles for UN/EDIFACT

e*Xchange allows you to specify one or more return message profiles that will be valid for a specific incoming or outgoing message profile. However, some setup is required before the correct selections are available in the **Return Messages** section. You must create all message profiles for the trading partner, both inbound and outbound, so that the correct selections will be available to you.

For example, suppose you are using UN/EDIFACT and have a trading partner, ABC Company. You will send only transaction **ORDERS, Purchase Order Message**, to this trading partner. In response you might receive a control message, later receive a response to the purchase order message, and finally send an acknowledgment of the response.

To set this up, do the following:

- Define inbound message profiles for the Purchase Order Message and the Control Message.
- Define outbound message profiles for the Purchase Order Response Message and the Control Message.
- For the inbound Purchase Order Message, in the **Return Messages** section, select both the Purchase Order Response Message and the Control Message.
- For the outbound Purchase Order Response Message, select the Control Message.

Because you defined all the message profiles first, the appropriate return messages are available for selection in the **Return Messages** section.

Profile Setup for RosettaNet

This chapter provides information on setting up RosettaNet versions 1.1 and 2.0 transactions in the e*Xchange Partner Manager, at the Message Profile level. It includes information on the following:

- Setting the values for the various headers of a RosettaNet message:
 - ◆ For RNIF 1.1: Preamble, Service Header
 - ◆ for RNIF 2.0: Preamble, Delivery Header, Service Header
- Specifying the communication protocol used to relay the messages.
- Handling errors.

The Company, Trading Partner, and B2B Protocol (inbound and outbound) levels must be set up first. For information on setting up these components, refer to [“Profile Management” on page 72](#).

Note: *If you are using RosettaNet, you must install the RosettaNet templates provided by SeeBeyond. They are available during installation via the “Add-Ons” option. For installation instructions and general information on RosettaNet, refer to the [RosettaNet ETD Library User’s Guide](#).*

8.1 Communications Protocols for RosettaNet

The communications protocols supported by e*Xchange for RNIF 1.1 are:

- HTTP
- HTTPS

The communications protocols supported by e*Xchange for RNIF 2.0 are:

- HTTP
- HTTPS

- SMTP

8.1.1. HTTP and HTTPS

The e*Xchange RosettaNet implementation supports the HTTP transfer protocol, both with and without SSL. To use HTTP with SSL (HTTPS), complete the following setup steps:

- At the B2B Protocol level, in the **Message Security** section, enter the signature key information.
- At the B2B Protocol level for both inbound and outbound, in the **Transport Component** section:
 - ♦ Select **HTTPS** as the communications protocol.
 - ♦ In the **URL** box, set the URL to begin with **https://**.

To use HTTP without SSL, complete the following setup steps:

- At the B2B Protocol level for both inbound and outbound, in the **Transport Component** section:
 - ♦ Select **HTTP** as the communications protocol.
 - ♦ Enter the URL to which the message will be posted, beginning with **http://**.

8.1.2. SMTP

To use SMTP, complete the following setup steps:

- At the B2B Protocol level for both inbound and outbound, in the **Transport Component** section:
 - ♦ Select **SMTP** as the communications protocol.
 - ♦ Enter the sender and receiver e-mail addresses and the mailhost IP address and port.

8.2 Security in RosettaNet

e*Xchange provides several security features for use with RosettaNet.

8.2.1. Non-Repudiation

If non-repudiation of origin is required, set the Non-Repudiation attribute to **Y** in the **General** section for each message profile. If non-repudiation is not required, set this flag to **N**.

8.2.2. Digital Signatures (RNIF 1.1 and 2.0)

RNIF 1.1 and 2.0 both use S/MIME for signing RosettaNet business messages.

The RosettaNet PIP indicates whether or not a digital signature is required for a specific message. However, the trading partner agreement can specify that digital signatures are *not* to be used. If there is a conflict between the PIP and the trading partner agreement regarding the use of digital signatures, the trading partner agreement takes precedence.

If digital signatures are to be used, complete the following setup steps:

- Outbound B2B protocol: in the **Message Security** section, load the Signature Key and enter the Signature Algorithm to be used.
- Inbound B2B protocol: in the **Message Security** section, load the Signature Verification Certificate.

If digital signatures are *not* to be used, complete the following steps:

- Make sure there are no values set in the **Message Security** section for the inbound and outbound B2B protocols.
- Make sure the Non-Repudiation attribute in the **General** section for all related message profiles is set to N.

8.2.3. Encryption (RNIF 2.0 Only)

Encryption is a new feature offered with RNIF 2.0. In e*Xchange, the level of encryption is set as an extended attribute in the message profile, in the **General** section, Encryption Type attribute.

There are three choices:

- 0—No encryption
- 1—encryption of Service Content and any attachments
- 2—encryption of Service Header, Service Content, and any attachments

The preamble and delivery header are never encrypted, since they contain information necessary to the correct routing of the message.

Encryption of Inbound Messages

For an inbound message, e*Xchange uses the encryption setting from the partner profile to determine which parts of the inbound message have been encrypted. If the message does not have the correct portions encrypted, e*Xchange goes into the error handling process.

For more information on how e*Xchange handles errors with RosettaNet messages, refer to [“RosettaNet Error Handling” on page 215](#).

Encryption of Outbound Messages

For an outbound message, e*Xchange encrypts the message according to the encryption setting specified in the partner profile.

8.3 Setting Up RosettaNet Message Profile Information

Once you have set up B2B protocol information for a trading partner, the next step is to set up message profiles.

8.3.1. Setup Sequence

Part of setting up a message profile is to specify the expected response message, if any.

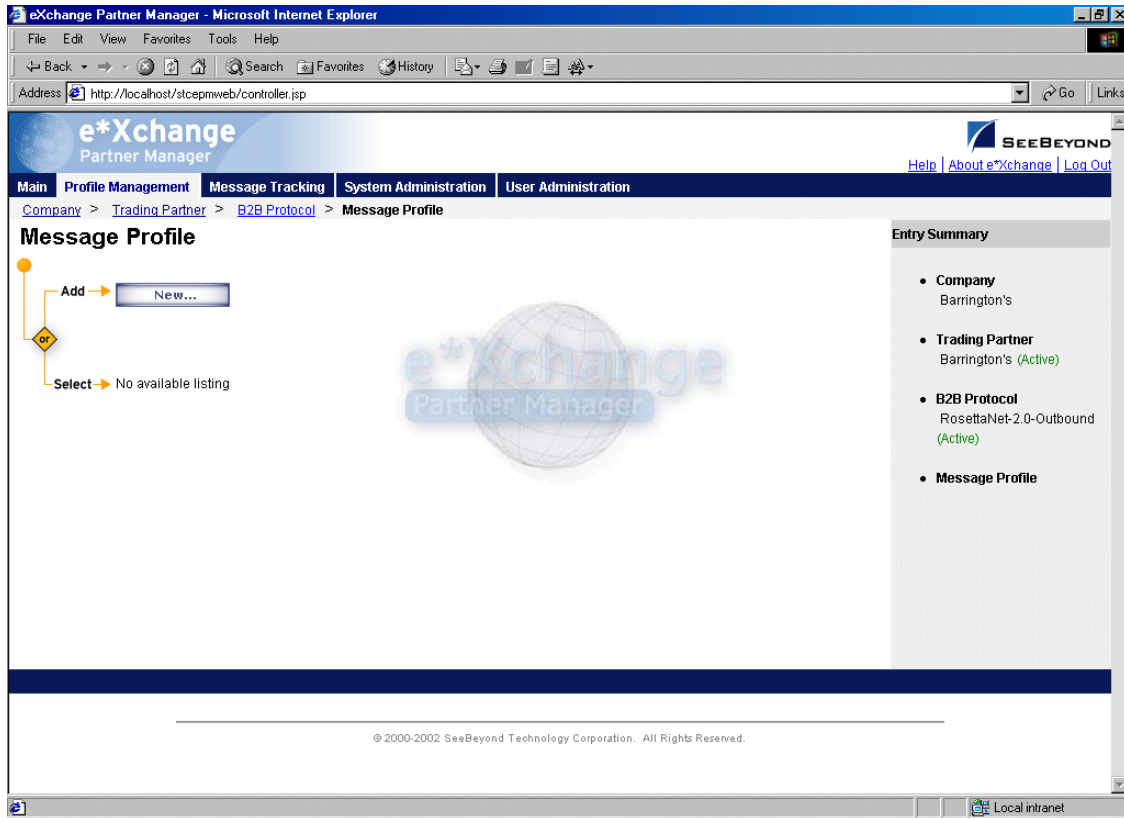
During initial setup, you will find that you cannot select the appropriate response messages because you have not yet created the message profiles for those response messages.

One approach to this is to first set up all message profiles, both inbound and outbound, and then go back into each message profile to select the return messages.

8.3.2. Setting Up a Message Profile

From the **B2B Protocol** page, select a B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page (see Figure 96).

Figure 96 Message Profile Page



From the **Message Profile** page you can complete the following activities:

- Add a message profile for the selected B2B protocol (see [“To add a message profile” on page 193](#)).
- Select a message profile: choose from the drop-down list. The message profile **General** properties are displayed on the right side of the page. To view additional properties, click on the appropriate link above the properties display (specific property groups vary according to the eBusiness protocol).
- Edit the selected message profile; first select the section that you want to edit, and then click the **Edit** button to access the **Message Profile - Editing** page (see [“To edit a message profile” on page 196](#)).
- Create a new message profile based on the selected one (see [“To copy a message profile to the same B2B protocol” on page 197](#) and [“To copy a message profile to another B2B protocol” on page 199](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

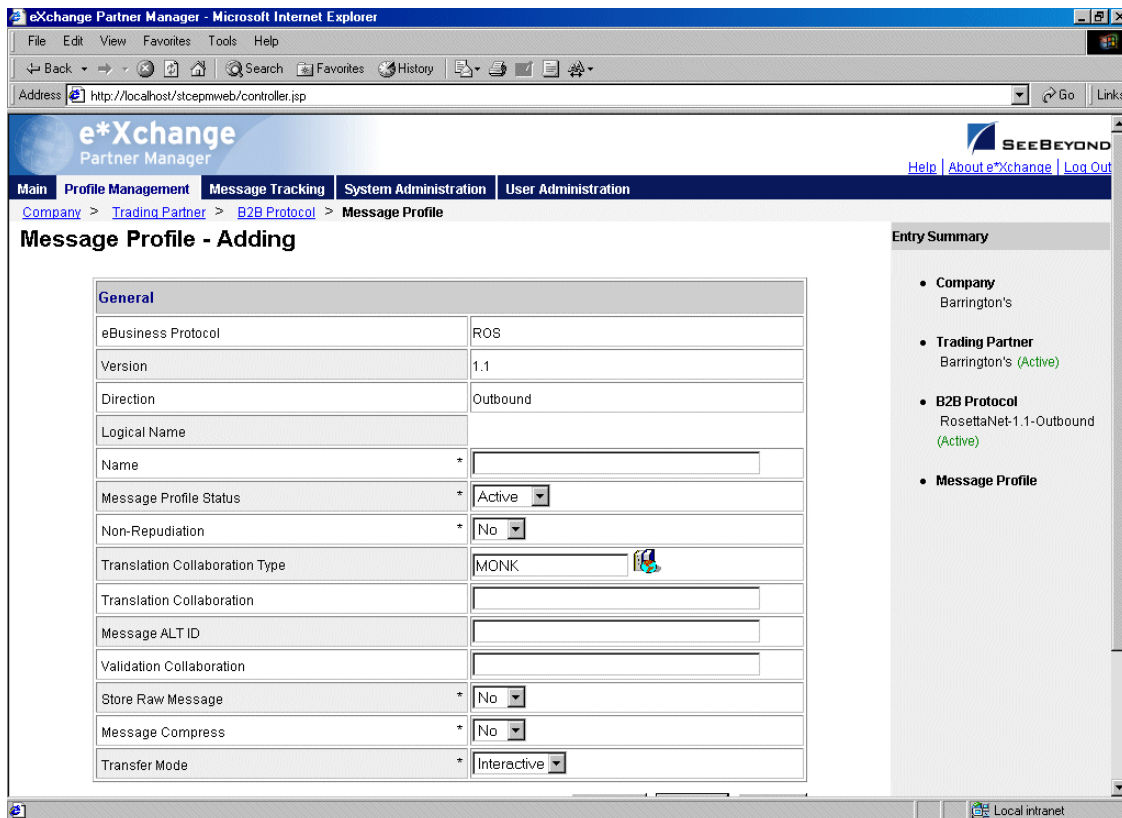
- Delete the selected message profile (see [“To delete a message profile” on page 200](#)).
- Activate or inactivate the selected message profile (see [“To inactivate or reactivate a message profile” on page 200](#)).

- Set or change security for the selected message profile (see [“To set up security” on page 200](#)).
- Add, change, or delete contacts for the selected message profile (see [“To set up contacts” on page 201](#)).

To add a message profile

- 1 From the **Message Profile** page, click the **New** button to access the **Message Profile - Adding** page (see Figure 97).

Figure 97 Message Profile - Adding (General section) (RosettaNet) (1.1)



- 2 Enter or select values for the **General** section.

For more information, refer to one of the following tables:

- ♦ For RNIF 1.1: [Table 41 on page 202](#)
- ♦ For RNIF 2.0: [Table 44 on page 205](#)

Note: For RosettaNet, if you are setting up a profile for a broadcast message not expecting any type of response, be sure to select *Asynchronous* in the *Transfer Mode* field (*General* section).

- 3 Click **Next** to access the **Preamble** section for RNIF 1.1 (see Figure 98) or the **Delivery Header** section for RNIF 2.0 (see Figure 99).

Figure 98 Message Profile - Adding (Preamble section) (RNIF 1.1)

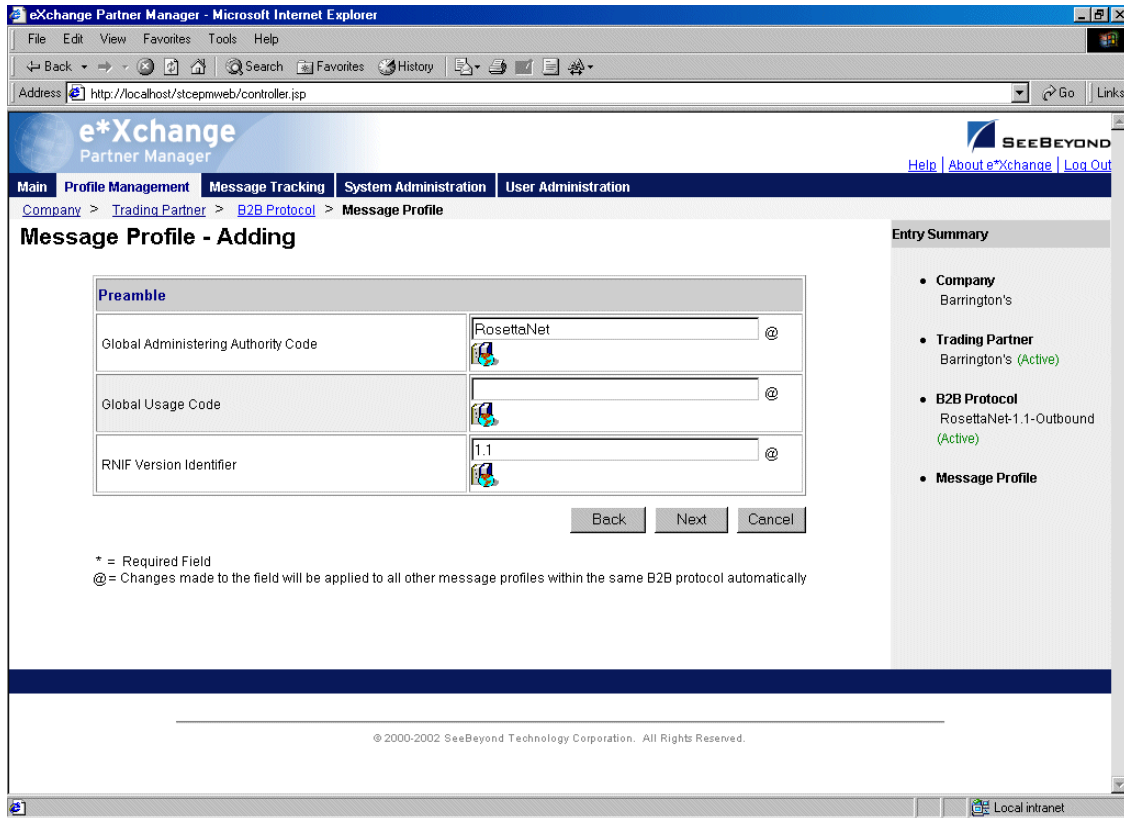
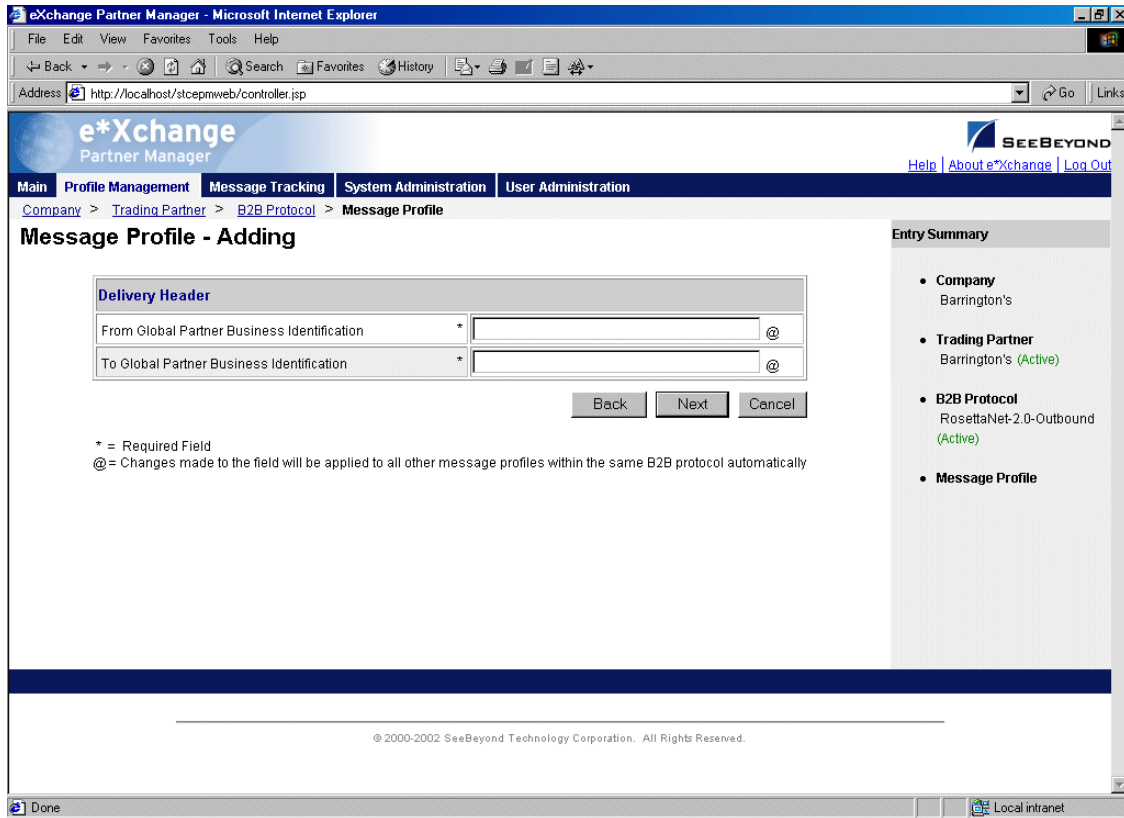


Figure 99 Message Profile - Adding (Delivery Header section) (RNIF 2.0)



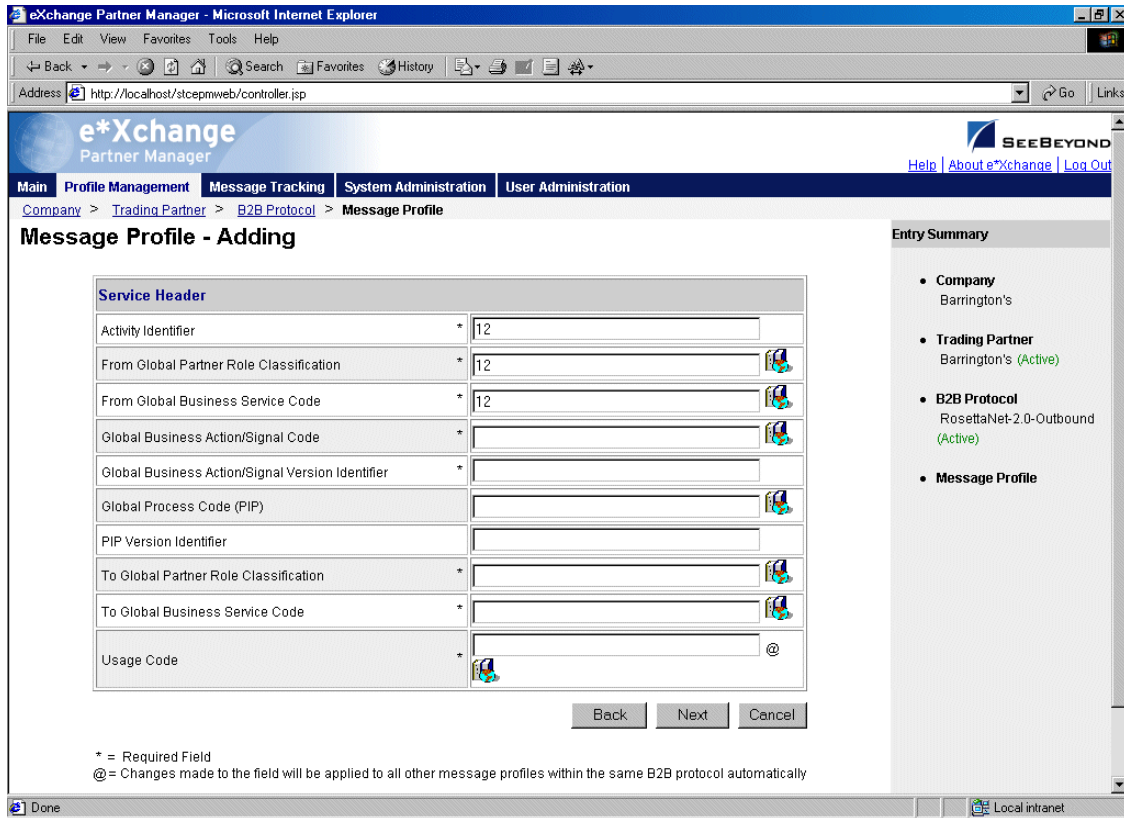
- 4 Enter or select values for the **Preamble** section (RNIF 1.1) or the **Delivery Header** section (RNIF 2.0).

For more information, refer to one of the following tables:

- ♦ For RNIF 1.1: [Table 42 on page 203](#)
- ♦ For RNIF 2.0: [Table 45 on page 207](#)

- 5 Click **Next** to access the **Service Header** section (see Figure 100).

Figure 100 Message Profile - Adding (Service Header section) (RNIF 2.0)



- 6 Enter or select values for the **Service Header** section.

For more information, refer to [Table 43 on page 203](#) for RNIF 1.1 or [Table 46 on page 208](#) for RNIF 2.0.

- 7 Click **Next**.

- 8 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.

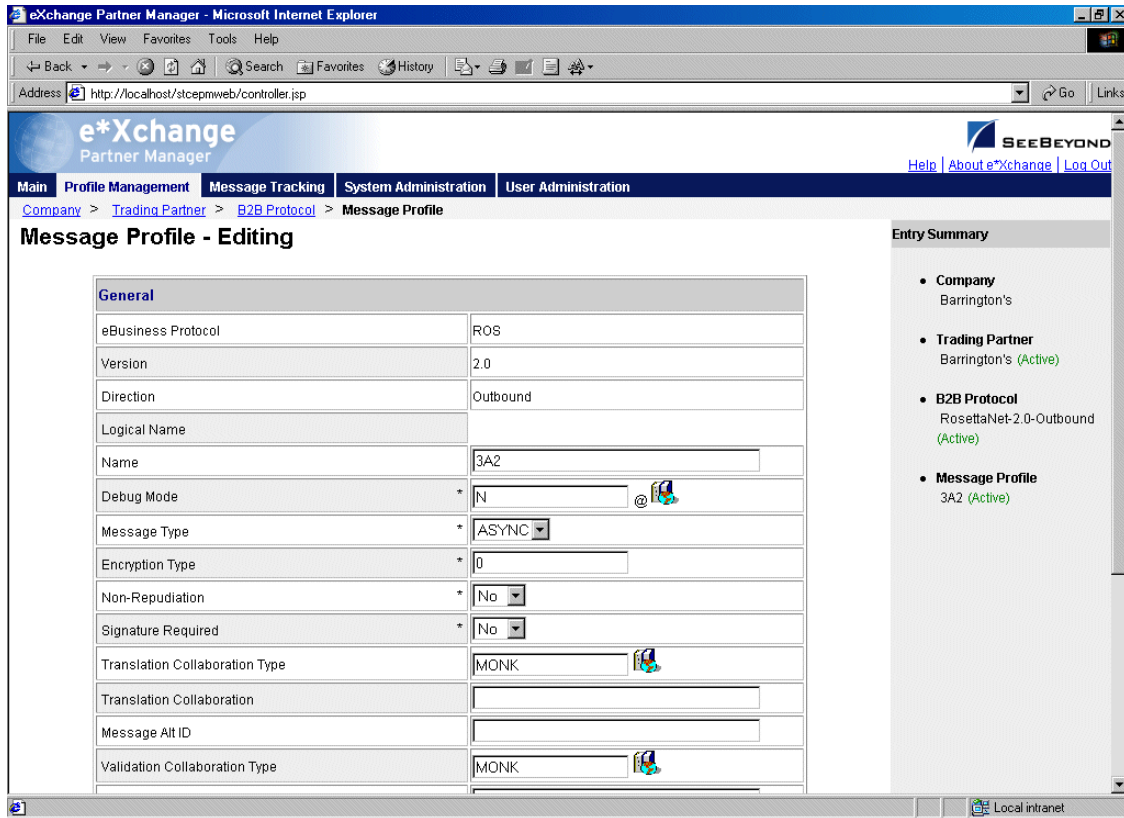
For more information on defining RosettaNet return messages, refer to [“About Return Message Profiles for RosettaNet” on page 209](#).

- 9 Click **Apply** to save the profile and return to the **Message Profile** page.

To edit a message profile

- 1 From the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Properties** section, click the link for the section you want to edit: **General**, **Preamble (RNIF 1.1 only)**, **Delivery Header (RNIF 2.0 only)**, **Service Header**, or **Return Messages**.
- 3 Click the **Edit** button to access the **Message Profile - Editing** page listing the attribute section that you selected (see Figure 101 for an example).

Figure 101 Message Profile - Editing (General) (RosettaNet) (2.0)



- 4 Change the values as needed.

For more information, refer to the section for the appropriate RosettaNet version, in **“RosettaNet Message Profile Parameter Values”** on page 201.

- 5 Click **Apply** to save the changes and return to the **Message Profile** page.

The new message profile is now on the drop-down list.

To copy a message profile to the same B2B protocol

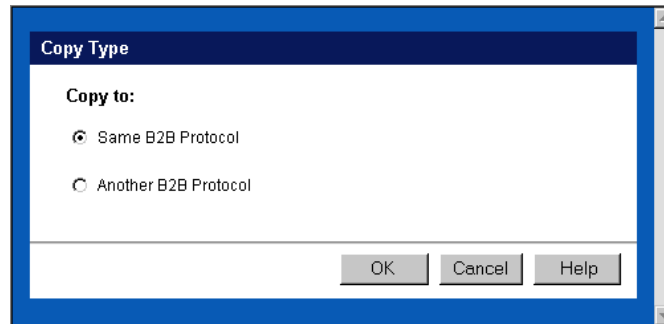
- 1 On the **Message Profile** page, select the message profile that you want to copy.

The message profile properties are displayed on the right side of the page.

- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 102).

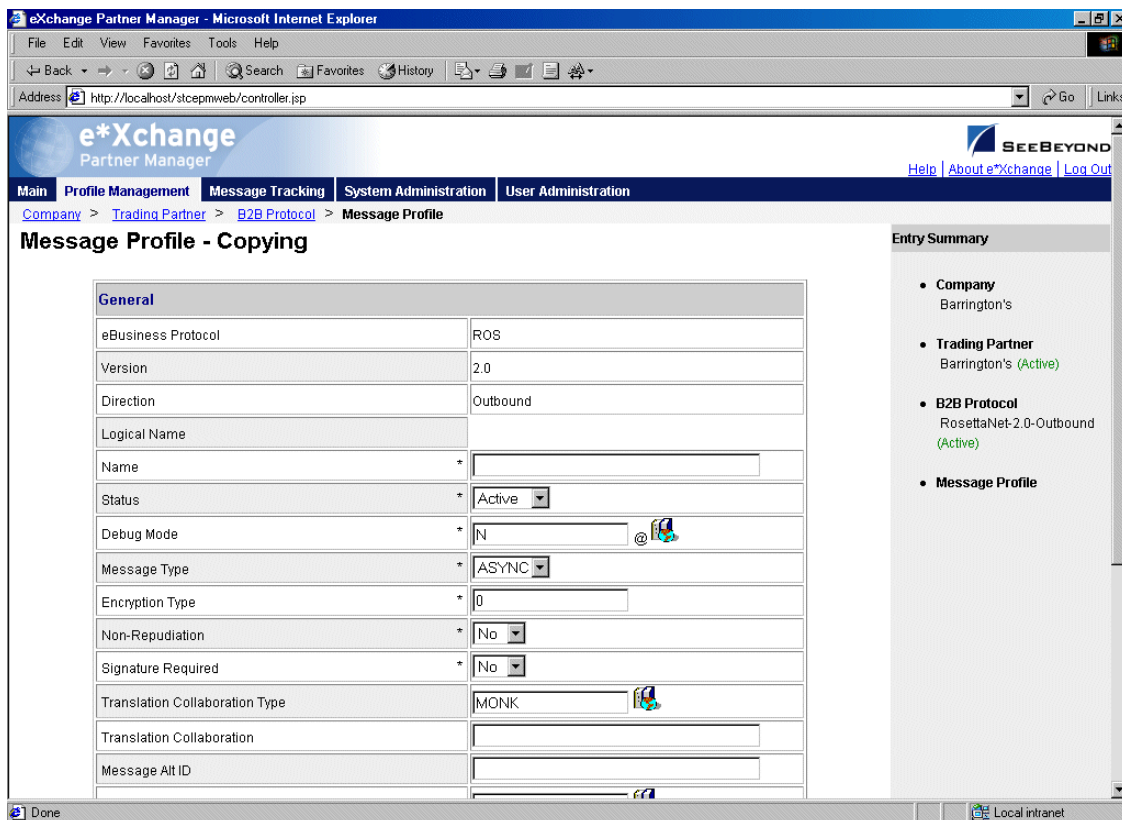
Figure 102 Copy Type (Copying a Message Profile)



- 3 Make sure **Same B2B Protocol** is selected.
- 4 Click **OK**.

The **Message Profile - Copying** page (**General** section) appears (see Figure 103).

Figure 103 Message Profile - Copying (General) (RosettaNet 2.0)



- 5 Type the new message profile name, and change any other values as needed.
- 6 Click **Next** to access the **Preamble** section for RNIF 1.1 (see Figure 98) or the **Delivery Header** section for RNIF 2.0 (see Figure 99).
- 7 Change values as needed for the **Preamble** section (RNIF 1.1) or the **Delivery Header** section (RNIF 2.0).

For more information, refer to one of the following tables:

- ♦ For RNIF 1.1: [Table 42 on page 203](#)
- ♦ For RNIF 2.0: [Table 45 on page 207](#)

8 Click **Next** to access the **Service Header** section (see Figure 100).

9 Change values as needed for the **Service Header** section.

For more information, refer to [Table 43 on page 203](#) for RNIF 1.1 or [Table 46 on page 208](#) for RNIF 2.0.

10 Click **Next**.

11 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.

12 Click **Finish** to save the new profile and return to the **Message Profile** page.

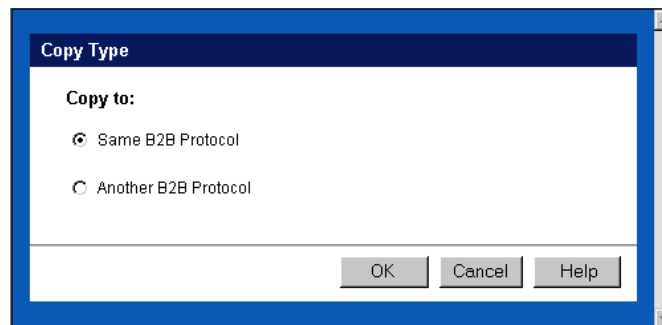
The new message profile is now on the drop-down list.

To copy a message profile to another B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 104).

Figure 104 Copy Type (Copying a Message Profile)

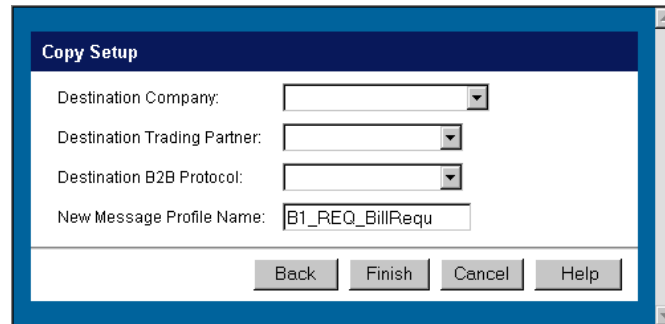


3 Select **Copy to another B2B Protocol**.

4 Click **OK**.

The **Copy Setup** page appears (see Figure 105).

Figure 105 Copy Setup (Copying a Message Profile to Another B2B Protocol)





- 5 On the **Copy Setup** page, select the destination company.
- 6 Select the destination trading partner.
- 7 Select the destination B2B Protocol.
- 8 If you want to change the message profile name, type the new name.
- 9 Click **Finish**.

The message profile information is copied to the selected B2B protocol. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
- 2 Click the **Delete** button.
A warning message appears asking if you are sure you want to delete.
- 3 To delete the profile, click **OK**.
The message profile is deleted.

To inactivate or reactivate a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:
 - ◆  Message profile is active: click to inactivate.
 - ◆  Message profile is inactive: click to reactivate.

To set up security

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 Click the **Security** button.
The **Security Management** page appears.

- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Message Profile** page, click the **Contacts** icon.

The **Company - Contacts Viewing** page appears.

- 2 Do one of the following:
 - ♦ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.
 - ♦ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
 - ♦ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

8.4 RosettaNet Message Profile Parameter Values

This section lists field descriptions for the RosettaNet values required for setting up a message profile.

Field descriptions are listed separately for each version:

- RNIF 1.1—See [“RNIF 1.1” on page 201](#)
- RNIF 2.0—See [“RNIF 2.0” on page 205](#)

8.4.1. RNIF 1.1

This section includes field descriptions for RosettaNet version 1.1 messages, for the following Message Profile setup sections:

- **General** section—[Table 41 on page 202](#)
- **Preamble** section—[Table 42 on page 203](#)
- **Service Header** section—[Table 43 on page 203](#)

Table 41 Message Profile, General Section (RNIF 1.1): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected at the B2B protocol level (ROS) is displayed.
Version	The eBusiness protocol version selected at the B2B protocol level (1.1) is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	<p>The status of the message profile. Choose one of the following values:</p> <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. <p>Default: Active.</p> <p>Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 200).</p>
Non-Repudiation (required)	<p>Indicates whether non-repudiation is required for the message: Y or N. The default is N.</p> <p>Note: For RosettaNet (both versions) and CIDX, if the message is a business signal, the non-repudiation setting is ignored. Since a business signal does not have a response, non-repudiation is not available.</p>
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension).</p> <p>Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.</p>
Message ALT ID (Outbound only)	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed.</p> <p>Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file.</p> <p>If you are not receiving messages from the internal system in raw data format, leave this field blank.</p>

Table 41 Message Profile, General Section (RNIF 1.1): Fields (Continued)

Name	Description
Event Type (Inbound only)	(Optional) If specified, this is the Event Type to which the inbound message is published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM . Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.
Validation Collaboration	The Monk Collaboration that is used to validate the eBusiness protocol message (no extension). For RosettaNet 1.1 and 2.0, and CIDX, the validation Collaboration is optional. Note: The message header is automatically validated by e*Xchange. The validation Collaboration addresses only the service content portion of the message.
Store Raw Message	If you want to store the raw message in the database as well as the translated message, type Y in this field. If you store the raw message, it is available for viewing in Message Tracking.
Message Compress (required)	Indicates whether the messages will be compressed before they are stored in the database. Default: No. Note: Compressed messages cannot be viewed in Message Tracking.
Transfer Mode	The way in which the eBusiness messages are transmitted to, or received from, the trading partner. Interactive is the only valid transfer mode for RosettaNet.

Table 42 Message Profile, Preamble Section (RNIF 1.1): Fields

Name	Description
Global Administering Authority Code (Required)	The Global Administering Authority Code is RosettaNet.
Global Usage Code (Required)	There are two acceptable values: Test or Production .
RNIF Version Identifier	The RNIF version number. Select 1.1.

Table 43 Message Profile, Service Header Section (RNIF 1.1): Fields

Name	Description
Global From Business Identifier	The sender's unique business identifier. RosettaNet identifies this as the DUNS number. e*Xchange does not enforce the use of a DUNS number.
Global To Business Identifier	The receiver's unique business identifier. RosettaNet identifies this as the DUNS number. e*Xchange does not enforce the use of a DUNS number.

Table 43 Message Profile, Service Header Section (RNIF 1.1): Fields (Continued)

Name	Description
From Global Business Service Code	The sender's Global Business Service Code, which is the RosettaNet code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
From Global Partner Classification Code (Required)	The RosettaNet classification code identifying the sender's function in the supply chain: for example, Carrier, Distributor, Manufacturer, or Retailer. Click on the Attributes List icon to select from a list of valid values.
From Global Partner Role Classification Code (Required)	The sender's partner role classification code. This is the code for the partner role that uses product information to create or update enterprise systems and online promotion systems such as electronic catalog systems. Examples of valid codes are Buyer, Seller, Customer Manager, Supplier, and Shipment Information User. Click on the Attributes List icon to select from a list of valid values.
Global Business Action/Signal Code (Required)	If the message is a business action: The Global Business Action Code, such as Return Product Request Action, Financing Request Action, or Remittance Advice Notification Action. If the message is a signal: The Global Business Signal Code, such as General Exception or Receipt Acknowledge. Click on the Attributes List icon to select from a list of valid values.
Global Document Function Code (Required)	The code that indicates the type of document: either Request or Response. For example, for an OA1, Failure Notification, it should be set to Request. Click on the Attributes List icon to select from a list of valid values.
Global Process Code	The plain language name for the RosettaNet code assigned to the process; for example, Distribute New Product Information, or Query Price and Availability. Click on the Attributes List icon to select from a list of valid values.
Global Process Ind Code	The RosettaNet code assigned to the process; for example, 2A1 or 3A2. Click on the Attributes List icon to select from a list of valid values.
Global Tran Code	The RosettaNet Global Transaction Code. Examples: Process Return Product Request, Confirm Financing, or Create Remittance Advice. Click on the Attributes List icon to select from a list of valid values.
Signature INST Identifier	Not used.
To Global Business Service Code	The receiver's Global Business Service Code, which is the RosettaNet code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
To Global Partner Classification Code (Required)	The RosettaNet classification code identifying the receiver's function in the supply chain: for example, Carrier, Distributor, Manufacturer, or Retailer. Click on the Attributes List icon to select from a list of valid values.

Table 43 Message Profile, Service Header Section (RNIF 1.1): Fields (Continued)

Name	Description
To Global Partner Role Classification Code (Required)	The receiver’s partner role classification code. This is the code for the partner role that uses product information to create or update enterprise systems and online promotion systems such as electronic catalog systems. Examples of valid codes are Buyer, Seller, Customer Manager, Supplier, and Shipment Information User. Click on the Attributes List icon to select from a list of valid values.
Business Action/Signal Version Identifier (Required)	The PIP version number: for example, 1.0 or 2.0.

8.4.2. RNIF 2.0

This section includes field descriptions for RosettaNet version 2.0 messages, for the following Message Profile setup sections:

- **General** section—[Table 44 on page 205](#)
- **Delivery Header** section—[Table 45 on page 207](#)
- **Service Header** section—[Table 46 on page 208](#)

Table 44 Message Profile, General Section (RNIF 2.0): Fields

Name	Description
eBusiness Protocol	The name of the protocol selected at the B2B protocol level (ROS) is displayed.
Version	The eBusiness protocol version selected at the B2B protocol level (2.0) is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Status (required)	The status of the message profile. Choose one of the following values: <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. Default: Active . Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 200).
Debug Mode (required)	Select Y if you want to include extra information in the RosettaNet message headers, to help track the type of transaction flowing between e*Xchange Partner Manager and the trading partner. Default: N . Note: It is best to use debug mode only for initial setup and testing. It can cause problems if used during production. For more information, refer to “Debug Mode in RosettaNet 2.0” on page 210 .

Table 44 Message Profile, General Section (RNIF 2.0): Fields (Continued)

Name	Description
Message Type (HTTP/HTTPS only) (required)	<p>A flag for the message type: SYNC for synchronous or ASYNC for asynchronous.</p> <ul style="list-style-type: none"> ▪ Inbound— Indicates whether the incoming message is synchronous or asynchronous. ▪ Outbound— Indicates whether the message should be sent out as synchronous or asynchronous. <p>Note: When setting up a broadcast message that is not expecting any response, either receipt acknowledgment or business message (for example, a catalog update), if you are using HTTP, make sure you select ASYNC.</p> <p>If you select SYNC, the HTTP e*Way expects a post accepted response that includes a RosettaNet Business Message. The trading partner returns an empty string, and this causes errors.</p> <p>If you select ASYNC, the HTTP e*Way expects only the post accepted response, without the associated RosettaNet Business Message. It gets this from the receiving Web server.</p>
Encryption Type (required)	<p>The type of encryption to be used in the message (the default is no encryption). Enter one of the following values:</p> <p>0—no encryption 1—encryption of Service Content and any attachments 2—encryption of Service Header, Service Content, and any attachments</p> <p>The preamble and delivery header are never encrypted.</p>
Non-Repudiation (required)	<p>Indicates whether non-repudiation is required for the message: Y or N. The default is N.</p> <p>Note: For RosettaNet (both versions) and CIDX, if the message is a business signal, the non-repudiation setting is ignored. Since a business signal does not have a response, non-repudiation is not available.</p>
Signature Required (required)	<p>Indicates whether a digital signature is required: Y or N. The default is N.</p>
Translation Collaboration Type	<p>The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either <i>Monk</i> or <i>Java</i>.</p>
Translation Collaboration	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension).</p> <p>Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.</p>

Table 44 Message Profile, General Section (RNIF 2.0): Fields (Continued)

Name	Description
Message ALT ID (Outbound only)	<p>If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed.</p> <p>Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file.</p> <p>If you are not receiving messages from the internal system in raw data format, leave this field blank.</p>
Event Type (Inbound only)	<p>(Optional) If specified, this is the Event Type to which the inbound message is published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM.</p> <p>Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.</p>
Validation Collaboration Type	<p>The language for the validation Collaboration. For RosettaNet 2.0, the choices are Monk or JVSC (Java Service Content Collaboration).</p>
Validation Collaboration	<p>The Collaboration that is used to validate the eBusiness protocol message (no extension).</p> <p>For RosettaNet 1.1 and 2.0, and CIDX, the validation Collaboration is optional.</p> <p>Note: The message header is automatically validated by e*Xchange. The validation Collaboration addresses only the service content portion of the message.</p>
Store Raw Message	<p>If you want to store the raw message in the database as well as the translated message, type Y in this field.</p> <p>If you store the raw message, it is available for viewing in Message Tracking.</p>
Message Compress (required)	<p>Indicates whether the messages will be compressed before they are stored in the database. Default: No.</p> <p>Note: Compressed messages cannot be viewed in Message Tracking.</p>
Transfer Mode (required)	<p>The way in which the eBusiness messages are transmitted to, or received from, the trading partner. Interactive is the only valid transfer mode for RosettaNet.</p>

Table 45 Message Profile, Delivery Header Section (RNIF 2.0): Fields

Name	Description
From Global Partner Business Identification	<p>The sender's unique business identifier. RosettaNet identifies this as the DUNS number. e*Xchange does not enforce the use of a DUNS number.</p>

Table 45 Message Profile, Delivery Header Section (RNIF 2.0): Fields (Continued)

Name	Description
To Global Partner Business Identification	The receiver's unique business identifier. RosettaNet identifies this as the DUNS number. e*Xchange does not enforce the use of a DUNS number.

Table 46 Message Profile, Service Header Section (RNIF 2.0): Fields

Name	Description
Activity Identifier (required)	The RosettaNet Activity Control Business Activity identifier. This value is used as part of the unique ID for storing and tracking RNIF 2.0 messages in e*Xchange.
From Global Partner Role Classification (required)	The RosettaNet classification code identifying the sender's function in the supply chain: for example, Carrier, Distributor, Manufacturer, or Retailer. Click on the Attributes List icon to select from a list of valid values.
From Global Business Service Code (required)	The sender's Global Business Service Code, which is the RosettaNet code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
Global Business Action/Signal Code (required)	If the message is a business action: The Global Business Action Code; for example, Return Product Request Action, Financing Request Action, or Remittance Advice Notification Action. If the message is a signal: The Global Business Signal Code, such as General Exception or Receipt Acknowledge. Click on the Attributes List icon to select from a list of valid values.
Global Business Action/Signal Version Identifier (required)	The RosettaNet version number of the message guideline for the business action or signal.
Global Process Code (PIP)	The alphanumeric code for the PIP; for example, 3A2. Click on the Attributes List icon to select from a list of valid values.
PIP Version Identifier	The version identifier for the PIP.
To Global Partner Role Classification (required)	The receiver's partner role classification code. This is the code for the partner role that uses product information to create or update enterprise systems and online promotion systems such as electronic catalog systems. Examples of valid codes are Buyer, Seller, Customer Manager, Supplier, and Shipment Information User. Click on the Attributes List icon to select from a list of valid values.
To Global Business Service Code (required)	The receiver's Global Business Service Code, which is the RosettaNet code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
Usage Code (required)	The Global Usage Code. There are two acceptable values: Test or Production .

8.5 About Return Message Profiles for RosettaNet

This section provides additional information and tips for defining RosettaNet return messages.

8.5.1. Setup Sequence

e*Xchange allows you to specify one or more return message profiles that will be valid for a specific incoming or outgoing message profile. However, some setup is required before the correct selections are available in the **Return Messages** section. You must create all message profiles for the trading partner, both inbound and outbound, so that the correct selections will be available to you.

For example, suppose you are using RNIF 1.1 and have a trading partner, ABC Company. You will receive only a 3A2, Price and Availability Query, from this trading partner. In response you send a 3A2 Price and Availability Response. Receipt Acknowledgment signals are sent out upon receipt of message in either direction.

To set this up, do the following:

- Define outbound message profiles for 3A2 Price and Availability Response and Acknowledgment Signal.
- Define inbound message profiles for 3A2 Price and Availability Query Action and Acknowledgment Signal. Because you defined the outbound message profile first, the 3A2 Price and Availability Response and the Acknowledgment Signal are available for selection in the **Return Messages** section.
- Go back to the outbound message profile for 3A2 Price and Availability Response. You will now be able to select Acknowledgment Signal as the expected response.

8.5.2. Defining Message Profiles for All Conditions

When you are setting up RosettaNet message profiles, it is very important that you define *all* the action messages that might be possible, under any circumstances including error conditions, for both inbound and outbound. These message profile definitions are required for any positive action messages received or generated by e*Xchange. The exception action messages are also required for error handling conditions at various levels (for outbound) or for receiving exception action messages (for inbound).

Note: *Even though Negative Ack eBusiness messages must be defined in each direction for each trading partner, do not select these as an expected response. Only select response eBusiness messages that occur in the Go path of an eBusiness message exchange. For RosettaNet, you should never select a RosettaNet Receipt Ack Exception as the expected return message.*

Each version, 1.1 and 2.0, has a different set of action messages. Be sure you define all possible outcomes for the version you are using, as follows:

- RNIF 1.1:

- ◆ Receipt Acknowledgment
- ◆ Receipt Acknowledgment Exception
- ◆ Acceptance Acknowledgment
- ◆ Acceptance Acknowledgment Exception
- ◆ General Exception
- ◆ Failure Notification
- RNIF 2.0:
 - ◆ Receipt Acknowledgment
 - ◆ Receipt Acknowledgment Exception
 - ◆ Failure Notification

8.5.3. Additional Information for RosettaNet 1.1

For RosettaNet 1.1, if the inbound Action Message requires an Acceptance Acknowledgment, you must set up the internal system so that it responds properly. e*Xchange does not generate an Acceptance Acknowledgment or Acceptance Acknowledgment Exception automatically. It generates only the Receipt Acknowledgment and Receipt Acknowledgment Exception business signals and the Failure Notification action message.

Since the business content must be validated before an Acceptance Acknowledgment is generated, it must be originated by an internal application and sent to e*Xchange to be forwarded to the trading partner.

8.6 Debug Mode in RosettaNet 2.0

The Message Profile **General** Settings for RosettaNet 2.0 include a **Debug Mode** flag. Acceptable values are **Y** or **N**.

If debug mode is turned on, extra information is included in the RosettaNet 2.0 message headers to help track the type of transaction flowing between e*Xchange Partner Manager and the trading partner.

It is recommended that this only be used for initial setup and testing. With debug headers, the trading partner receiving a message can send an exception to e*Xchange, or e*Xchange send an exception to the trading partner, even if the service header was not successfully read. Additionally, debug mode only applies to RosettaNet business actions, not business signals.

Additionally, it should not be used in production mode for security reasons.

If **Y** is selected, e*Xchange includes the following extra values in the standard event TP Attribute section for all outbound RosettaNet 2.0 messages:

- PIP_CODE

- PIP_INSTANCE_ID
- ACTIVITY_CODE
- ACTION_CODE
- ACTION_INSTANCE_ID
- PARTNER_ID

The e*Way that communicates with the trading partner (HTTP/HTTPS or SMTP) checks for the DEBUG_MODE flag in the standard event. If the flag exists, e*Xchange checks the value. If the value is **Y**, extra headers are included in the message being sent to the trading partner.

If DEBUG_MODE = **Y**, e*Xchange includes the flag x-RN-Debug-Mode: Yes and looks for the following optional TP attributes in the standard event:

- PIP_CODE—if present, will include X-RN-PIP-Code
- PIP_INSTANCE_ID—if present, will include X-RN-PIP-Instance-ID
- ACTIVITY_CODE—if present, will include X-RN-Activity-Code
- ACTION_CODE—if present, will include X-RN-Action-Code
- ACTION_INSTANCE_ID—if present, will include X-RN-Action-Instance-ID
- PARTNER_ID—if present, will include X-RN-Partner-ID

8.7 RosettaNet Message Processing

This section outlines the sequence of events that occurs when a RosettaNet message is processed by e*Xchange. It is broken down as follows:

- RNIF 1.1: Inbound and Outbound
- RNIF 2.0: Inbound and Outbound

8.7.1. RNIF 1.1

Inbound RNIF 1.1 Message Processing

e*Xchange follows the following sequence of actions in processing an inbound RNIF 1.1 message:

- 1 Identifies the trading partner profile.
- 2 If non-repudiation is required for the message, attempts to verify the signature using the trading partner's public key.
- 3 Validates the Preamble.
- 4 Validates the Service Header.

- 5 Conditional: If a validation Collaboration (**tsc** file) is specified in the partner profile, validates the Service Content.
- 6 Stores the message in the database.
- 7 Establishes message tracking in the database.
- 8 Conditional: If a Receipt Acknowledgment to the message is required, sends the Receipt Acknowledgment.
- 9 If the message is an action message, forwards it to the internal application.

If there is an error with any of the above steps, e*Xchange generates an error and invokes the error handling routine. For more information on error handling, refer to **“Inbound RNIF 1.1 Error Handling” on page 215.**

Outbound RNIF 1.1 Message Processing

e*Xchange follows the following sequence of actions in processing an outbound RNIF 1.1 message:

- 1 Identifies the trading partner for the message.
- 2 Validates the message content if a validation Collaboration is specified.
- 3 Sets the header information based on partner profile.
- 4 Saves the message in the database.
- 5 Establishes message tracking in the database.
- 6 Adds a signature to the message if necessary.
- 7 Forwards the message to the trading partner.

8.7.2. RNIF 2.0

Inbound RNIF 2.0 Message Processing

e*Xchange follows the following sequence of actions in processing an inbound RNIF 2.0 message:

- 1 Parses the message and outputs a populated RosettaNet event message.
- 2 Loads the message profile.
- 3 If the trading partner profile indicates that a signature is required, checks that the signature is there.
- 4 For a response message, loads the message tracking attributes of the associated request message.
- 5 Validates the Preamble.
- 6 Validates the Delivery Header.
- 7 Validates the Service Header.
- 8 Validates the Service Content.

- 9 If there are no errors in any of the prior steps, sends the receipt acknowledgment if one is expected.
- 10 Checks for message duplication.
- 11 Stores the message in the database.
- 12 Establishes message tracking in the database.
- 13 For a response message, associates it with the request message.
- 14 Forwards the message to the internal application.

If there is an error with any of the above steps, e*Xchange generates an error and invokes the error handling routine. For more information on error handling, refer to [“Inbound RNIF 2.0 Error Handling” on page 216](#).

Outbound RNIF 2.0 Message Processing

e*Xchange follows the following sequence of actions in processing an outbound RNIF 2.0 message:

- 1 Validates the outbound header to ensure all the information needed to identify the envelope is present. At this level, e*Xchange just checks that the fields are populated; it does not look at the actual values.
- 2 Checks for duplicates and creates an error if found.
- 3 Loads the message profile.
- 4 For a response message, loads the message tracking attributes of the associated request message.
- 5 Populates the Preamble with attributes from the database.
- 6 Populates the Delivery Header with attributes from the database.
- 7 Populates the Service Header with attributes from the database.
- 8 Validates the service content if a validation Collaboration is specified.
- 9 Packs the message into a RosettaNet Business Message string.
- 10 Optional: Encrypts the message if encryption is specified in the trading partner profile.
- 11 Optional: Adds a digital signature if digital signatures are specified in the trading partner profile.
- 12 Stores the business message in the database.
- 13 Creates appropriate rows in the Message Tracking tables and in the database for the ack monitor.
- 14 Associates the response message with the request message.
- 15 Sets the standard event attributes and forwards the message to the trading partner.

If there is an error with any of the above steps, e*Xchange generates an error and invokes the error handling routine. For more information on error handling, refer to [“Outbound RNIF 2.0 Error Handling” on page 217](#).

8.8 Acknowledgment Monitoring

This section outlines the steps e*Xchange takes to monitor the sending and receiving of message acknowledgments. It is broken down as follows:

- RNIF 1.1
- RNIF 2.0

Important: *It is a common error to change the status of a trading partner profile to Inactive while there are still messages associated with it that are waiting to be processed. If you change the status to Inactive, the Ack Monitor cannot find the active trading partner profile and therefore cannot process the message correctly. Before changing the status of a profile to Inactive, be sure that all messages associated with the profile have been processed.*

8.8.1. RNIF 1.1

An outbound message might require multiple responses; for example, a Receipt Acknowledgment and an action response. The expected responses are specified in the **Properties** dialog box for the message profile, in the **Return Messages** section. They can be also specified in the data. The expected responses to an outbound message are flagged in the database and monitored by the Ack Monitor.

The Ack Monitor monitors the database for any overdue responses. When it detects that a response is overdue, it checks the maximum retry count for the message, and then takes one of the following actions:

- If the maximum retry count has not been reached, the Ack Monitor retrieves the original message, increments the Attempt Count in the message, and resends it to the trading partner through e*Xchange.
- If the maximum retry count has been reached, the Ack Monitor sends a RosettaNet Failure Notification to the trading partner and a failure Event to the internal application. A “response overdue” error is assigned to the original message in the database and all its expected responses are canceled.

8.8.2. RNIF 2.0

With RNIF 2.0, the processing logic for the Ack Monitor is similar to that of RNIF 1.1. However, in 2.0 there is no need to change the attempt count field and pack the message again before resending the message.

The Ack Monitor consults the database and creates a list of messages with overdue responses. It then processes each message in turn. For a RosettaNet message, it calls the RosettaNet 2.0 Ack Monitor, eX-ROS20-Ack-Mon, which does the following:

- 1 Retrieves the original message.
- 2 Loads the message profile for the original message.
- 3 Loads the message tracking attributes for the original message.

- 4 If the maximum number of retries for the message has already been reached:
 - ♦ Logs an error in Message Tracking
 - ♦ Creates a 0A1 Failure Notification
 - ♦ Packs the 0A1 Notification into a RosettaNet Business Message.
 - ♦ Sends the 0A1 message to the trading partner
 - ♦ Sends a failure message to the internal system
- 5 If the maximum number of retries has *not* been reached:
 - ♦ Resends the message to the trading partner
 - ♦ Updates the Last Send Time and Send Count in the database, and sets a value for the next send time

If there is an error with any of the above steps, e*Xchange generates an error and invokes the error handling routine. For more information on error handling, refer to [“RosettaNet Error Handling” on page 215](#).

8.9 RosettaNet Error Handling

This section outlines the sequence of events that occurs when a e*Xchange encounters a problem with a RosettaNet message. It is broken down as follows:

- RNIF 1.1: Inbound and Outbound
- RNIF 2.0: Inbound and Outbound

In any error situation, e*Xchange always does the following:

- Journals the message
- Sends the message to the error queue, where it can be picked up for further handling
- Sends an Alert message to the Schema Manager

8.9.1. RNIF 1.1

If e*Xchange is unable to successfully map a message to the RosettaNet structure, it generates an error which is recorded in the journal file (the specific file name and location is as specified in the ePM e*Way configuration). e*Xchange also sends an alert notification to the Schema Manager. You can view the journal file from within e*Gate.

Inbound RNIF 1.1 Error Handling

If an inbound message fails content validation, the message is logged in the database at the message level with the error flag set. A Receipt Acknowledgment Exception (or General Exception if the message is not expecting a Receipt Acknowledgment) is sent out to the trading partner.

After the data passes validation, any processing failure causes e*Xchange to send a General Exception to the trading partner if the message expects an action response (for example, a 3A2 query message), or a Failure Notification if the message does not expect an action response (for example, a 3A2 response message).

Outbound RNIF 1.1 Error Handling

If e*Xchange fails on an outbound message, a failure Event is sent to the internal application.

8.9.2. RNIF 2.0

Inbound RNIF 2.0 Error Handling

For an inbound RNIF 2.0 message, e*Xchange generates errors if any of the following conditions occurs:

- The service header cannot be parsed
- A duplicate message is received
- An unexpected message is received

If the error occurs when e*Xchange has not yet sent out an acknowledgment message, a Receipt Acknowledgment Exception is sent to the trading partner.

If the error occurs when e*Xchange has already sent out an acknowledgment message, a generic exception is sent to the trading partner.

Under any of the above conditions, if a receipt acknowledgment has not already been sent, e*Xchange sends a negative acknowledgment instead of a receipt acknowledgment.

If the data has not yet been stored in the database, e*Xchange saves the data with the associated error. If it has already been stored in the database, e*Xchange associates the error with the saved message.

Note: For a RosettaNet inbound message, once the Service Header has been successfully parsed, that means all other values within the message have also been successfully loaded.

Outbound RNIF 2.0 Error Handling

If e*Xchange encounters errors in processing outbound RNIF 2.0 messages, the original RNIF 2.0 generic message received from the internal system is journaled.

According to the type of error, e*Xchange takes the steps outlined in Table 47.

Table 47 RNIF 2.0 Outbound Error Handling

e*Xchange checks for the following conditions...	and takes the following steps...
The data has not been saved.	Saves the data with the associated error.
The data has been saved.	Associates the error with the already saved message.
The message has been sent on to the trading partner.	<ul style="list-style-type: none"> ▪ Sends a 0A1 to the trading partner. ▪ Sends a cancel message to the internal system.
The message has not yet been sent on to the trading partner.	Sends a failure message to the internal system. The next step is then up to the internal system: resend the message, or, if it is a response message, send a General Exception.

Profile Setup for CIDX

This chapter provides information on setting up CIDX version 2.0.1 transactions in the e*Xchange Partner Manager, at the Message Profile level.

The Company, Trading Partner, and B2B Protocol (inbound and outbound) levels must be set up first. For information on setting up these components, refer to [“Profile Management” on page 72](#).

9.1 Setting Up CIDX Message Profile Information

Once you have set up B2B protocol information for a trading partner, the next step is to set up message profiles.

9.1.1. Setup Sequence

Part of setting up a message profile is to specify the expected response message, if any.

During initial setup, you will find that you cannot select the appropriate response messages because you have not yet created the message profiles for those response messages.

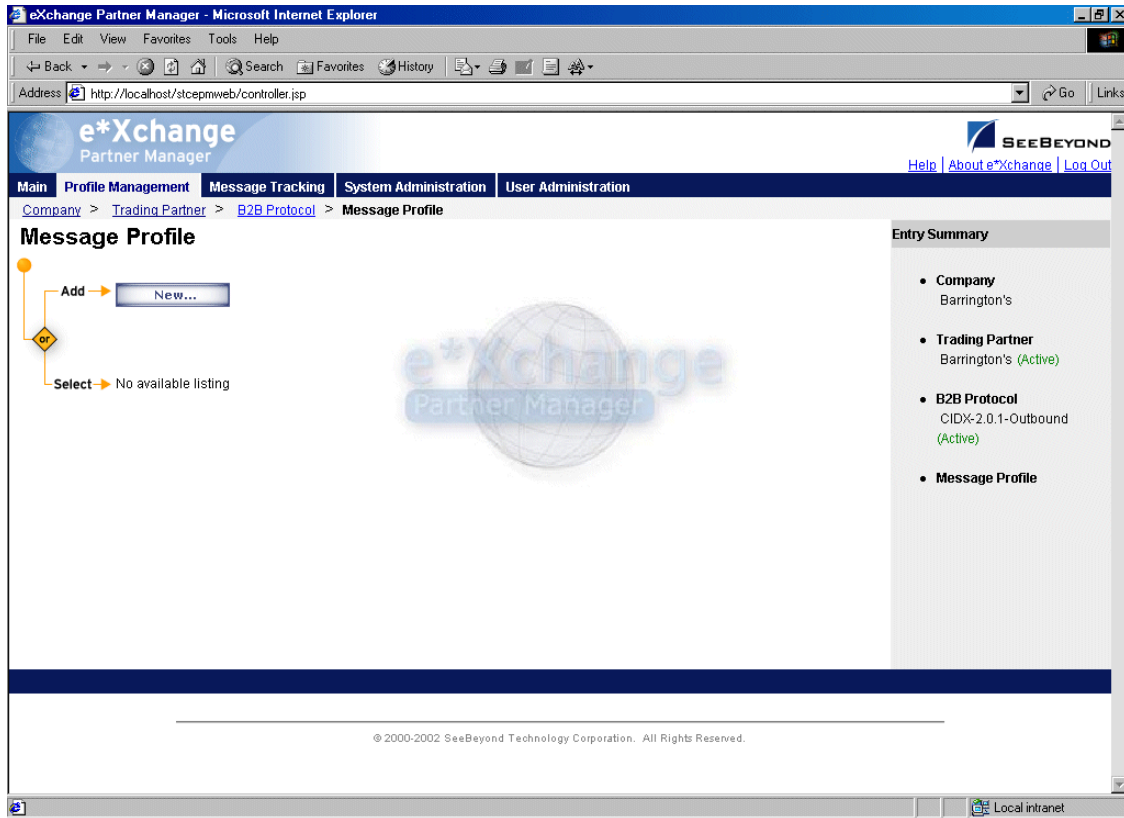
One approach to this is to first set up all message profiles, both inbound and outbound, and then go back into each message profile to select the return messages.

Note: *When setting up a CIDX profile, be especially careful that the Failure Notification transaction is configured correctly. If a situation occurs where both you and your trading partner have an error in the Failure Notification transaction, one Failure Notification from the trading partner can generate another Failure Notification from you, and yours generates another from the Trading Partner, in an infinite loop. If you do encounter this, check the setup of your Failure Notification and correct the error.*

9.1.2. Setting Up a Message Profile

From the **B2B Protocol** page, select a B2B protocol and click **Continue: Message Profile** to access the **Message Profile** page (see Figure 106).

Figure 106 Message Profile Page



From the **Message Profile** page you can complete the following activities:

- Add a message profile for the selected B2B protocol (see [“To add a message profile” on page 220](#)).
- Select a message profile: choose from the drop-down list. The message profile **General** properties are displayed on the right side of the page. To view additional properties, click on the appropriate link above the properties display (specific property groups vary according to the eBusiness protocol).
- Edit the selected message profile; first select the section that you want to edit, and then click the **Edit** button to access the **Message Profile - Editing** page (see [“To edit a message profile” on page 222](#)).
- Create a new message profile based on the selected one (see [“To copy a message profile to the same B2B protocol” on page 223](#) and [“To copy a message profile to another B2B protocol” on page 225](#)).

For general information on the copy feature, refer to [“Copying Components” on page 104](#).

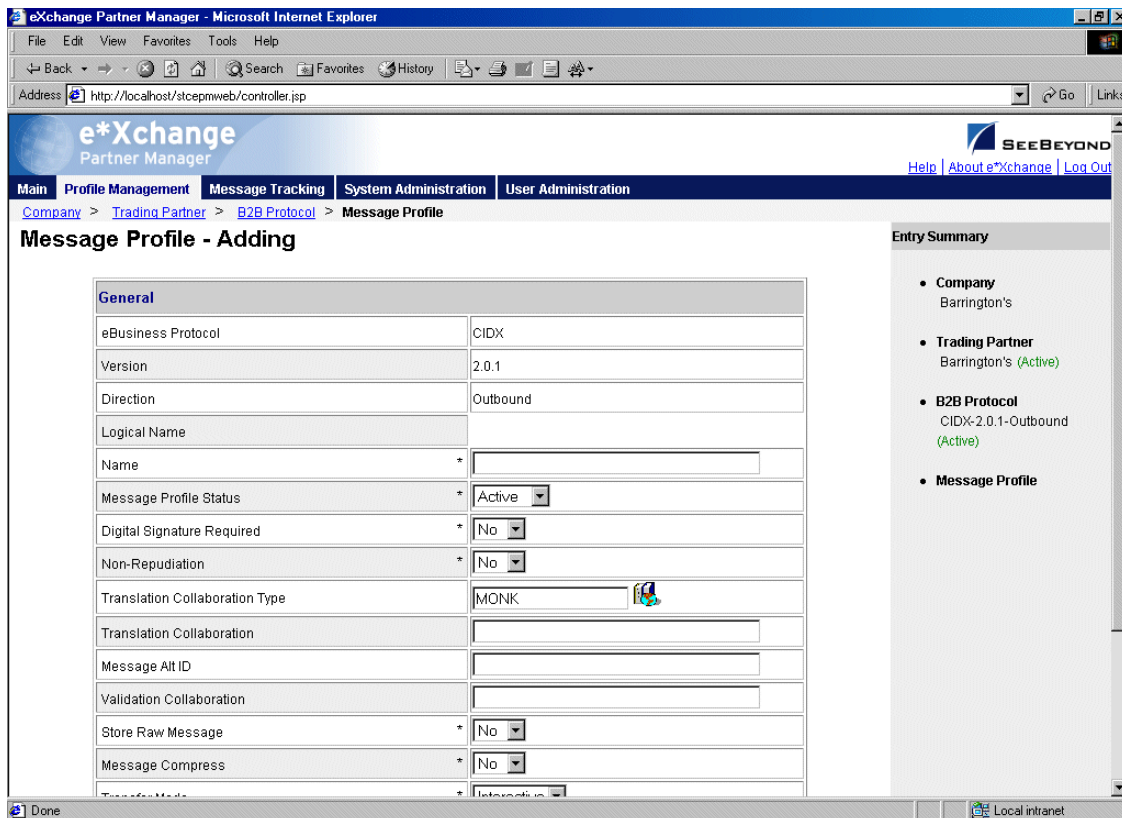
- Delete the selected message profile (see [“To delete a message profile” on page 226](#)).
- Activate or inactivate the selected message profile (see [“To inactivate or reactivate a message profile” on page 226](#)).

- Set or change security for the selected message profile (see **“To set up security” on page 226**).
- Add, change, or delete contacts for the selected message profile (see **“To set up contacts” on page 226**).

To add a message profile

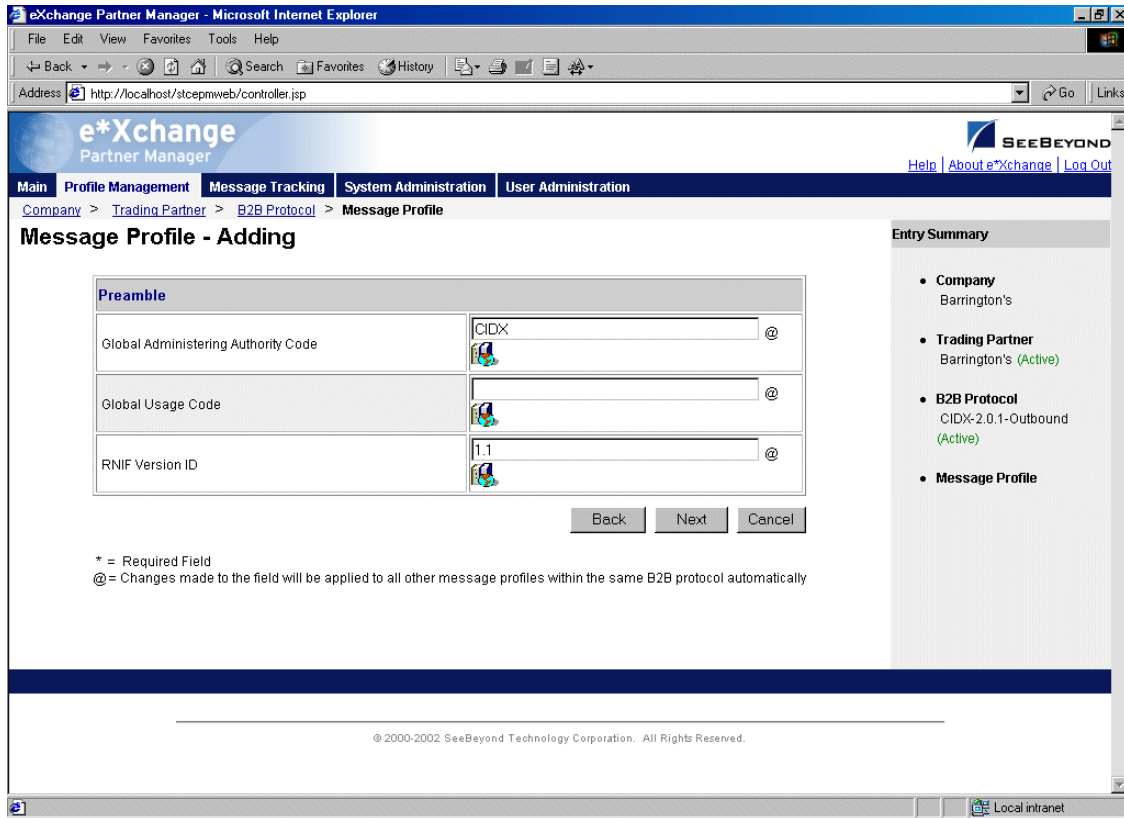
- 1 From the **Message Profile** page, click the **New** button to access the **Message Profile - Adding** page (see Figure 107).

Figure 107 Message Profile - Adding (General section) (CIDX)



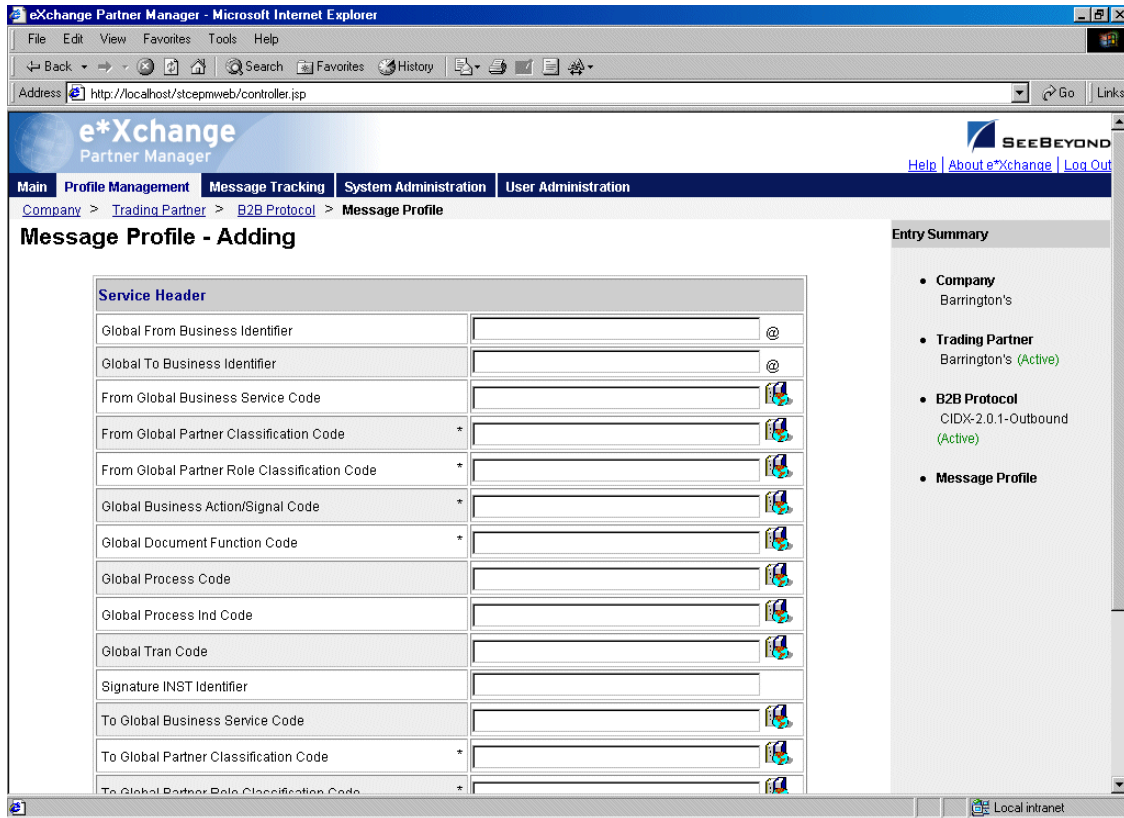
- 2 Enter or select values for the **General** section.
For more information, refer to **Table 48 on page 227**.
- 3 Click **Next** to access the **Preamble** section (see Figure 108).

Figure 108 Message Profile - Adding (Preamble section) (CIDX 2.0.1)



- 4 Enter or select values for the **Preamble** section.
For more information, refer to [Table 49 on page 229](#).
- 5 Click **Next** to access the **Service Header** section (see Figure 109).

Figure 109 Message Profile - Adding (Service Header section) (CIDX 2.0.1)

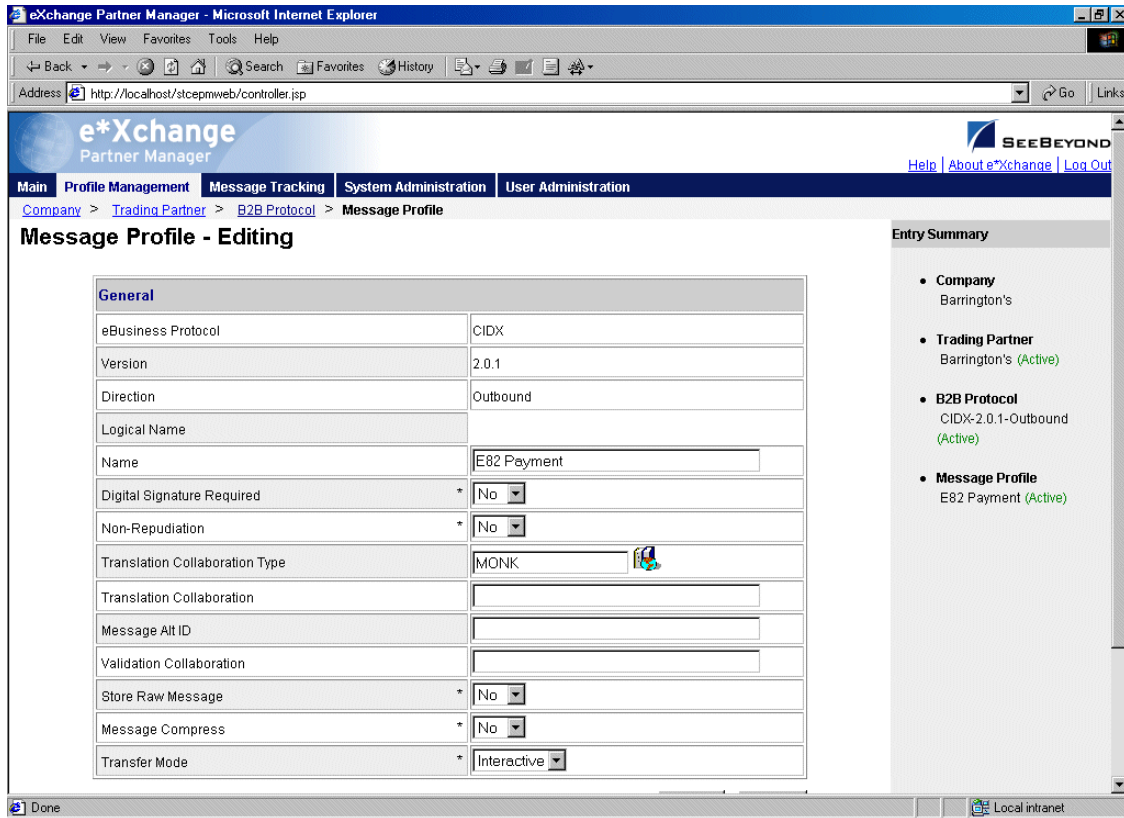


- 6 Enter or select values for the **Service Header** section.
For more information, refer to [Table 50 on page 229](#).
- 7 Click **Next**.
- 8 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.
- 9 Click **Apply** to save the profile and return to the **Message Profile** page.

To edit a message profile

- 1 From the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Properties** section, click the link for the section you want to edit: **General**, **Preamble**, **Service Header**, or **Return Messages**.
- 3 Click the **Edit** button to access the **Message Profile - Editing** page listing the attribute section that you selected (see Figure 110 for an example).

Figure 110 Message Profile - Editing (General) (CIDX)



- 4 Change the values as needed.

For more information, refer to [“CIDX Message Profile Parameter Values”](#) on page 227.

- 5 Click **Apply** to save the changes and return to the **Message Profile** page.

The new message profile is now on the drop-down list.

To copy a message profile to the same B2B protocol

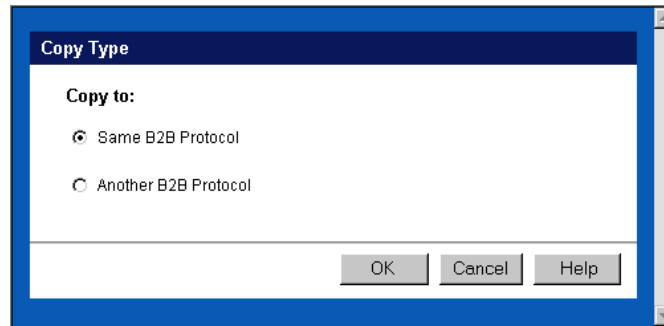
- 1 On the **Message Profile** page, select the message profile that you want to copy.

The message profile properties are displayed on the right side of the page.

- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 111).

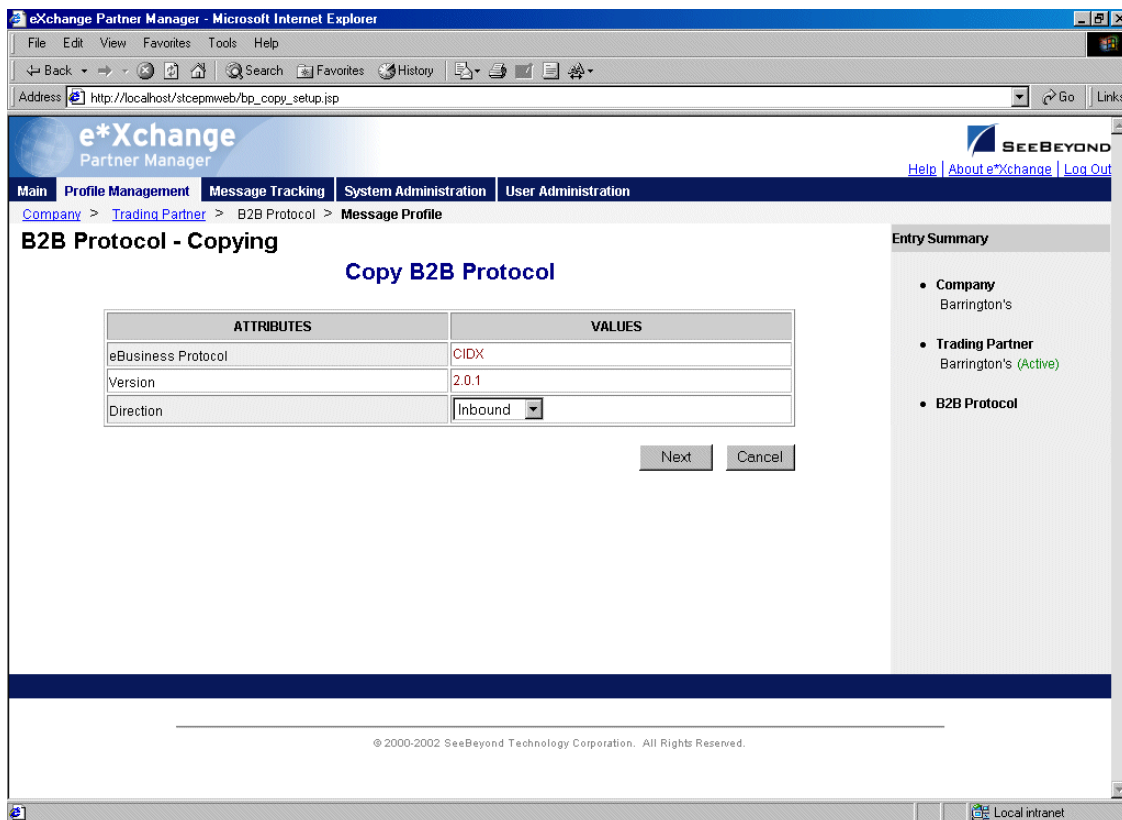
Figure 111 Copy Type (Copying a Message Profile)



- 3 Make sure **Same B2B Protocol** is selected.
- 4 Click **OK**.

The **Message Profile - Copying** page (**General** section) appears (see Figure 112).

Figure 112 Message Profile - Copying (General) (CIDX)



- 5 Type the new message profile name, and change any other values as needed.
- 6 Click **Next** to access the **Preamble** section (see Figure 108).
- 7 Change values as needed for the **Preamble** section.

For more information, refer to **Table 49 on page 229**.

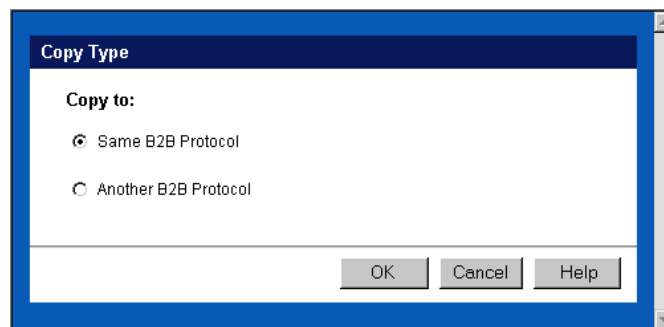
- 8 Click **Next** to access the **Service Header** section (see Figure 109).
- 9 Change values as needed for the **Service Header** section.
For more information, refer to [Table 50 on page 229](#).
- 10 Click **Next**.
- 11 Define return messages, or leave until later if you have not set up the message profiles for the return messages yet.
- 12 Click **Finish** to save the new profile and return to the **Message Profile** page.
The new message profile is now on the drop-down list.

To copy a message profile to another B2B protocol

- 1 On the **Message Profile** page, select the message profile that you want to copy.
- 2 Click the **Copy** button.

The **Copy Type** page appears (see Figure 113).

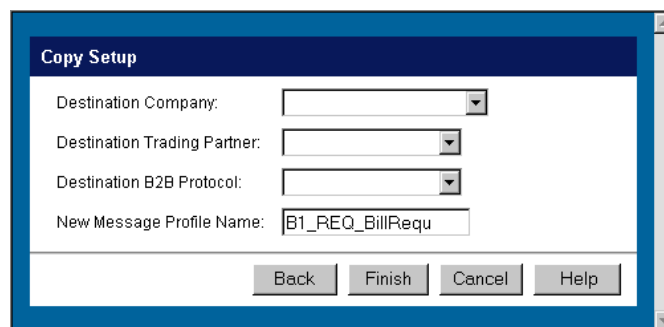
Figure 113 Copy Type (Copying a Message Profile)



- 3 Select **Copy to another B2B Protocol**.
- 4 Click **OK**.

The **Copy Setup** page appears (see Figure 114).

Figure 114 Copy Setup (Copying a Message Profile to Another B2B Protocol)



- 5 On the **Copy Setup** page, select the destination company.
- 6 Select the destination trading partner.

- 7 Select the destination B2B Protocol.
- 8 If you want to change the message profile name, type the new name.
- 9 Click **Finish**.

The message profile information is copied to the selected B2B protocol. When done, e*Xchange displays a message letting you know that the copy was successful.

To delete a message profile



- 1 On the **Message Profile** page, select the message profile from the drop-down list.
- 2 Click the **Delete** button.

A warning message appears asking if you are sure you want to delete.

- 3 To delete the profile, click **OK**.
The message profile is deleted.

To inactivate or reactivate a message profile

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 In the **Message Profile Status** field, toggle the **Active/Inactive** graphic to change the status. Values are as follows:

- ◆  Message profile is active: click to inactivate.
- ◆  Message profile is inactive: click to reactivate.

To set up security

- 1 On the **Message Profile** page, select the message profile from the drop-down list.
The message profile properties are displayed on the right side of the page.
- 2 Click the **Security** button.
The **Security Management** page appears.
- 3 Set the values as needed.
- 4 Click **OK**.

For detailed instructions on setting up security, refer to [“Security” on page 68](#).

To set up contacts

- 1 On the **Message Profile** page, click the **Contacts** icon.
The **Company - Contacts Viewing** page appears.
- 2 Do one of the following:
 - ◆ To add a contact, click the **Add** button in the appropriate row. Type the information in the **Company - Contacts Adding** page and then click **Apply**.

- ◆ To edit an existing contact, click the **View/Edit** button in the appropriate row. This button is only available when a contact has been entered. Edit the values in the **Company - Contacts Editing** page and then click **Apply**.
- ◆ To delete an existing contact, click the **View/Edit** button in the appropriate row. In the **Company - Contacts Editing** page, click the **Delete** button at the bottom left. At the “Are you sure...” message, click **OK**.

For detailed instructions on working with contacts, refer to [“Storing Contact Information” on page 231](#).

9.2 CIDX Message Profile Parameter Values

This section lists field descriptions for the CIDX version 2.0.1 values required for setting up the following Message Profile setup sections:

- **General** section—[Table 48 on page 227](#)
- **Preamble** section—[Table 49 on page 229](#)
- **Service Header** section—[Table 50 on page 229](#)

Table 48 Message Profile, General Section (CIDX 2.0.1): Fields

Name	Description
eBusiness Protocol	The name of the protocol that you selected at the B2B protocol level (CIDX) is displayed.
Version	The eBusiness protocol version selected at the B2B protocol level (2.0.1) is displayed.
Direction	The direction for the message profile, Inbound or Outbound, is displayed.
Logical Name	If you specified a logical name at the B2B protocol level, it is displayed.
Name	A label for the message profile. It should be descriptive, and unique for the trading partner.
Message Profile Status	The status of the message profile. Choose one of the following values: <ul style="list-style-type: none"> ▪ Active—The message profile is currently active, and can be used. ▪ Inactive—The message profile is not active, and cannot be used. Default: Active . Note: This is only available when adding a message profile. When editing, you can change the status on the Message Profile page (see “To inactivate or reactivate a message profile” on page 226).
Digital Signature Required	Indicates whether a digital signature is required: Y or N . The default is N . Select from the drop-down list.
Non-Repudiation (required)	Indicates whether non-repudiation is required for the message: Y or N . The default is N . Note: For RosettaNet (both versions) and CIDX, if the message is a business signal, the non-repudiation setting is ignored. Since a business signal does not have a response, non-repudiation is not available.

Table 48 Message Profile, General Section (CIDX 2.0.1): Fields (Continued)

Name	Description
Translation Collaboration Type	The language for the translation Collaboration. For all eBusiness protocols, translation Collaborations can be either Monk or Java.
Translation Collaboration	If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, you must specify the translation Collaboration that will be used to translate the messages to and from the appropriate eBusiness Protocol format. Type the file name (no extension). Outbound: If you provide a value in this field for an Outbound profile, e*Xchange also requires a value for Message ALT ID.
Message ALT ID (Outbound only)	If your internal system will be sending messages to e*Xchange in raw data format, or expecting messages from e*Xchange in raw data format, e*Xchange uses the Message ALT ID, rather than the Logical Name set at the B2B Protocol level, to identify the trading partner to which the message is to be routed. Because of this, if you are receiving messages from the internal system in raw data format you must specify the Message ALT ID. The value specified in this field must exactly match the value populated in the Name/Value pair element of the TP Event section in the eX_Standard_Event file. If you are not receiving messages from the internal system in raw data format, leave this field blank.
Event Type (Inbound only)	(Optional) If specified, this will be the Event Type to which the inbound message will be published. If left empty, e*Xchange uses the default Event Type, eX_to_eBPM . Note: If you specify a custom Event Type, you must modify the e*Xchange e*Gate schema accordingly. Modify the eX_from_ePM Collaboration properties to publish to the new Event Type. There must also be a module that subscribes to this Event Type.
Validation Collaboration	The Monk Collaboration that is used to validate the eBusiness protocol message (no extension). For RosettaNet 1.1 and 2.0, and CIDX, the validation Collaboration is optional. Note: The message header is automatically validated by e*Xchange. The validation Collaboration addresses only the service content portion of the message.
Store Raw Message	If you want to store the raw message in the database as well as the translated message, type Y in this field. If you store the raw message, it will be available for viewing in Message Tracking.
Message Compress (required)	Indicates whether the messages will be compressed before they are stored in the database. Default: No. Note: Compressed messages cannot be viewed in Message Tracking.
Transfer Mode	The way in which the eBusiness messages are transmitted to, or received from, the trading partner. Interactive is the only valid transfer mode for CIDX.

Table 49 Message Profile, Preamble Section (CIDX 2.0.1): Fields

Name	Description
Global Administering Authority Code (Required)	The Global Administering Authority Code is CIDX.
Global Usage Code (Required)	There are two acceptable values: Test or Production .
RNIF Version ID	The RosettaNet Implementation Framework version number. 1.1 is the only choice.

Table 50 Message Profile, Service Header Section (CIDX 2.0.1): Fields

Name	Description
Global From Business Identifier	The sender's unique business identifier (optional).
Global To Business Identifier	The receiver's unique business identifier (optional).
From Global Business Service Code	The sender's Global Business Service Code, which is the code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
From Global Partner Classification Code (Required)	The classification code identifying the sender's function in the supply chain: for example, Carrier, Distributor, Manufacturer, or Retailer. Click on the Attributes List icon to select from a list of valid values.
From Global Partner Role Classification Code (Required)	The sender's partner role classification code. This is the code for the partner role that uses product information to create or update enterprise systems and online promotion systems such as electronic catalog systems. Examples of valid codes are Buyer, Seller, Customer Manager, Supplier, and Shipment Information User. Click on the Attributes List icon to select from a list of valid values.
Global Business Action/Signal Code (Required)	If the message is a business action—the Global Business Action Code, such as Order Create, Order Response, or Order Change. If the message is a signal—the Global Business Signal Code, such as General Exception or Receipt Acknowledge. The Global Business Action/Signal Code must be unique for the trading partner. Click on the Attributes List icon to select from a list of valid values.
Global Document Function Code (Required)	The code that indicates the type of document: either Request or Response. For example, for a Failure Notification Action, it should be set to Request. Click on the Attributes List icon to select from a list of valid values.
Global Process Code	The plain language name for the code assigned to the process; for example, Delivery Receipt or Demand Plan. Click on the Attributes List icon to select from a list of valid values.

Table 50 Message Profile, Service Header Section (CIDX 2.0.1): Fields (Continued)

Name	Description
Global Process Ind Code	The CIDX code assigned to the process; for example, E41 for an Order Create or F15 for a Demand Plan. Click on the Attributes List icon to select from a list of valid values.
Global Tran Code	The Global Transaction Code. Examples: Delivery Receipt or Posting Accept Response. Click on the Attributes List icon to select from a list of valid values.
Signature INST Identifier	Not used.
To Global Business Service Code	The receiver's Global Business Service Code, which is the code for the business service: for example, Product Information Distributor Service, Seller Service, Product Supplier Service, or Buyer Service. Click on the Attributes List icon to select from a list of valid values.
To Global Partner Classification Code (Required)	The classification code identifying the receiver's function in the supply chain: for example, Carrier, Distributor, Manufacturer, or Retailer. Click on the Attributes List icon to select from a list of valid values.
To Global Partner Role Classification Code (Required)	The receiver's partner role classification code. This is the code for the partner role that uses product information to create or update enterprise systems and online promotion systems such as electronic catalog systems. Examples of valid codes are Buyer, Seller, Customer Manager, Supplier, and Shipment Information User. Click on the Attributes List icon to select from a list of valid values.
Business Action/Signal Version Identifier (Required)	The PIP version number: for example, 2.0.1.

Storing Contact Information

You can use e*Xchange to store information about the people you might need to contact in connection with the processing of messages to and from a specific trading partner.

For example, you could list your support contact at the trading partner's site. If there is one contact, you might store it at the company or trading partner level; if there is more than one contact you could store the information at different levels. If there is a contact for certain transactions, you could store that information at the inner envelope level.

10.1 About the Contacts Feature

You can store contact information at the following levels:

- Company
- Trading Partner
- B2B Protocol
- Message Profile

You can store information for up to four contacts per component:

- Primary Client Contact
- Primary Internal Contact
- Secondary Client Contact
- Secondary Internal Contact

Contact information is optional. You can add it at any point once you have created the component.

When you are setting up contacts for a subcomponent and have already set up contacts at a higher level, you can copy the contact information to the lower level. For example, if you already recorded a contact at the Company level and are setting up a Trading Partner, e*Xchange offers you the option of copying the contact information from the Company level. Just check the **Use default contact information** check box.

The procedures below explain how to perform various activities relating to contact information. The **Contacts** page works the same at all levels.

10.2 Working With Contacts

This section includes instructions for carrying out the following activities:

- Adding contacts: see [“To set up contacts” on page 232](#)
- Updating existing contact information: see [“To update contact information” on page 234](#)
- Deleting contacts: see [“To delete a contact” on page 235](#)
- Copying contact information from an existing component: see [“To copy contact information from an upper component level to a lower level” on page 235](#)

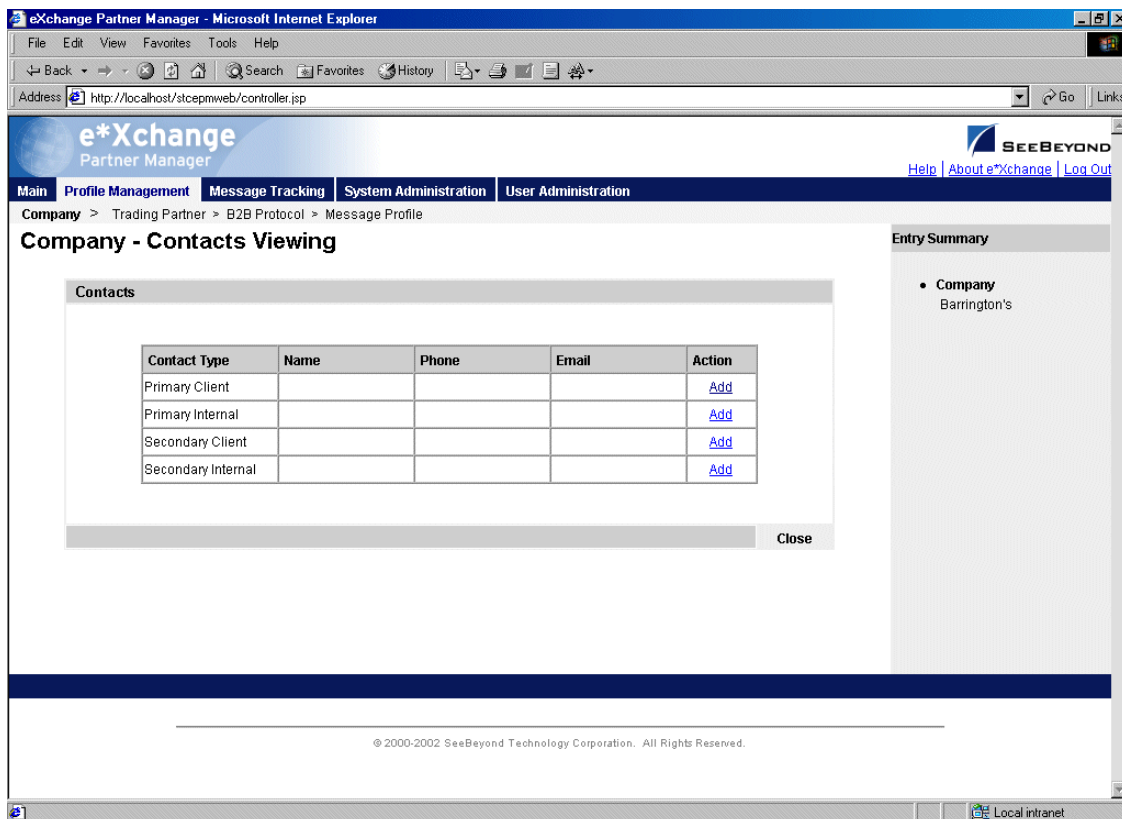
You can store information for up to four contacts per component (company, trading partner, B2B protocol, or message profile).

To set up contacts

- 1 From the main page for any level, click the **Contacts** icon.

The **Contacts Viewing** page for the component appears (see Figure 115).

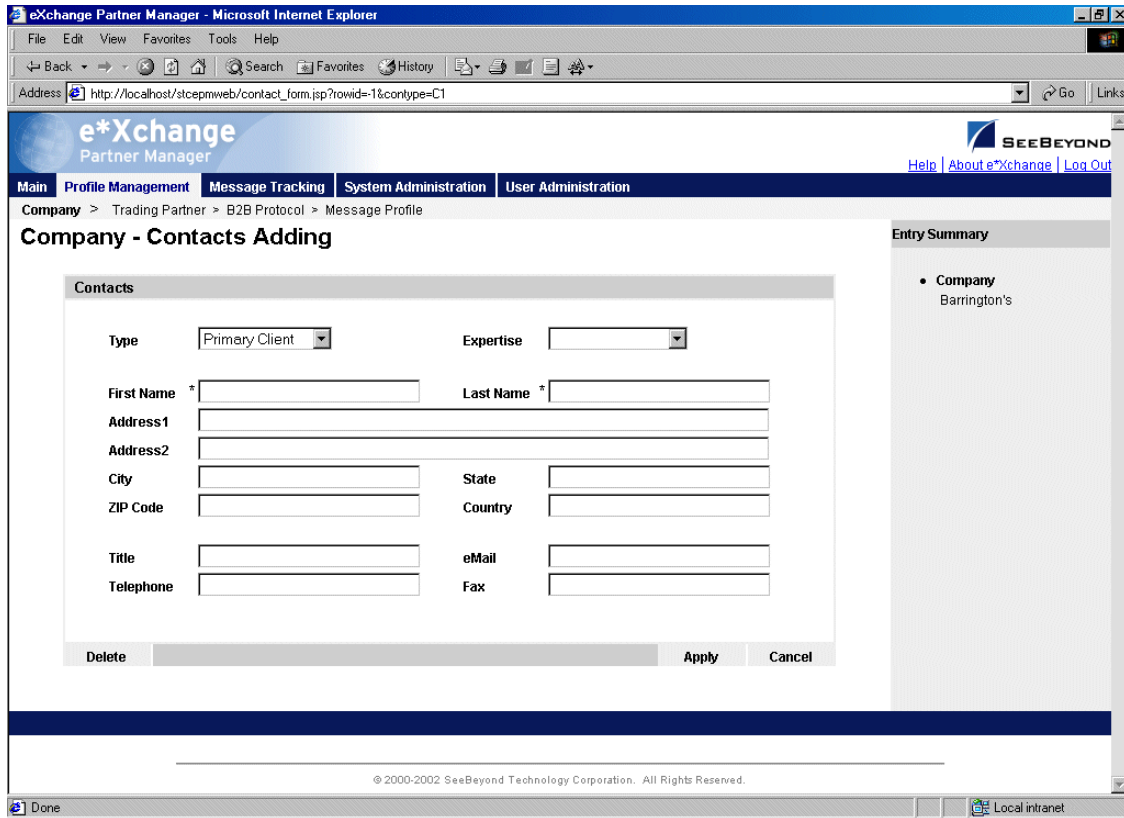
Figure 115 Contacts Viewing Page



- 2 For the appropriate contact level, click **Add**.

The **Contacts Adding** page for the component appears (see Figure 116).

Figure 116 Contacts Adding Page



- 3 Set the values as needed. Only first name and last name are required. For more information on specific fields, refer to Table 51.
- 4 Click **Apply** to save the changes.

Table 51 Contacts Adding: Fields

Name	Description
Type	A value that specifies the kind of contact. This is determined based on the row you selected on the previous page.
Expertise	The contact's primary area of knowledge and experience. Select from the drop-down list of eBusiness protocols.
First Name	The contact's first name.
Last Name	The contact's last name.
Address1	The first line of the contact's street address.
Address2	The second line of the contact's street address.
City	The city in which the contact is located.
State	The abbreviation or name of the state or province in which the contact is located, or the name or code for the province.
ZIP Code	The ZIP or postal code associated with the contact's street address.

Table 51 Contacts Adding: Fields (Continued)

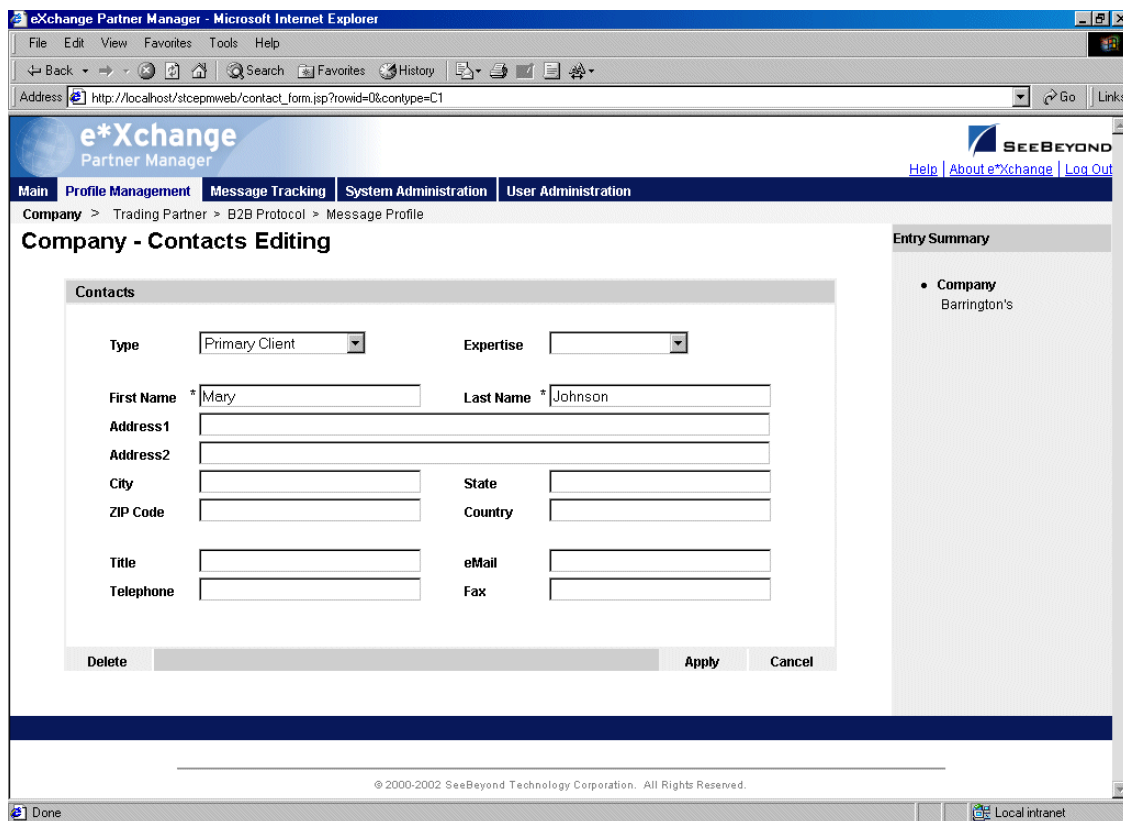
Name	Description
Country	The name or abbreviation for the country in which the contact is located.
Title	The contact's job title.
eMail	The contact's e-mail address.
Telephone	The telephone number for the contact. Include the area code.
Fax	The fax number for the contact. Include the area code.

To update contact information

You can update contact information at any point.

- 1 From the main page for any level, click the **Contacts** icon.
The **Contacts Viewing** page for the component appears (see [Figure 115 on page 232](#)).
- 2 For the appropriate contact level, click **View/Edit**.
The **Contacts Editing** page for the component appears (see [Figure 117](#)).

Figure 117 Contacts Editing Page



- 3 Change the values as needed.
For more information on specific fields, refer to [Table 51 on page 233](#).

- 4 Click **Apply** to save the changes.

10.2.1. Deleting Contact Information

You can delete contacts that are no longer valid or no longer needed.

To delete a contact

- 1 From the main page for any level, click the **Contacts** icon.
The **Contacts Viewing** page for the component appears (see [Figure 115 on page 232](#)).
- 2 For the appropriate contact level, click **View/Edit**.
The **Contacts Editing** page for the component appears (see [Figure 117 on page 234](#)).
- 3 Click the **Delete** button at the bottom left.
- 4 At the “Are you sure...” prompt, click **OK**.
- 5 The contact information is deleted.

10.2.2. Copying Contacts

To save time, you can copy contact information from a component that you have already added to a component directly below it. You can copy contacts:

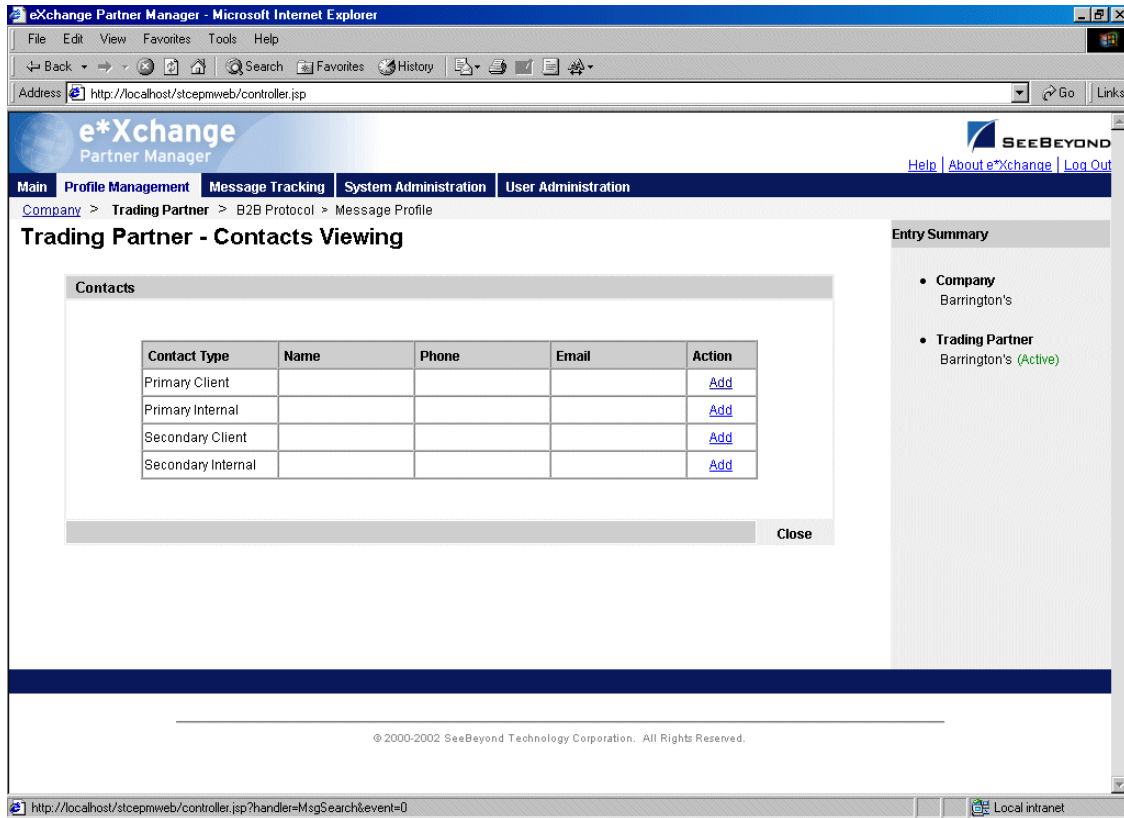
- From a company to a trading partner
- From a trading partner to a B2B protocol
- From a B2B protocol to a message profile

Once you have copied the information, you can modify it as needed.

To copy contact information from an upper component level to a lower level

- 1 From the main page for any level (other than Company), click the **Contacts** icon.
The **Contacts Viewing** page for the component appears (see [Figure 118](#)).

Figure 118 Contacts Viewing Page (Trading Partner)



2 For the appropriate contact level, click **Add**.

The **Contacts Adding** page for the component appears (see Figure 119).

Figure 119 Contacts Adding Page (Trading Partner)

The screenshot shows the 'e*Exchange Partner Manager' web application in Microsoft Internet Explorer. The browser address bar shows the URL: http://localhost/stcepmweb/contact_form.jsp?rowid=1&contype=C1. The application header includes the 'e*Exchange Partner Manager' logo and the 'SEEBEYOND' logo. The navigation menu includes: Main, Profile Management, Message Tracking, System Administration, and User Administration. The breadcrumb trail is: Company > Trading Partner > B2B Protocol > Message Profile. The main heading is 'Trading Partner - Contacts Adding'. The form contains the following fields and controls:

- Type: Primary Client (dropdown)
- Expertise: (dropdown)
- First Name: *
- Last Name: *
- Address1
- Address2
- City
- State
- ZIP Code
- Country
- Title
- eMail
- Telephone
- Fax
- Use default contact information
- Buttons: Delete, Apply, Cancel

The 'Entry Summary' sidebar on the right shows a list of contacts:

- Company: Barrington's
- Trading Partner: Barrington's (Active)

At the bottom of the page, there is a copyright notice: © 2000-2002 SeeBeyond Technology Corporation. All Rights Reserved.

- 3 Click the **Use default contact information** check box.
The contact information is automatically propagated from the higher level.
- 4 Click **Apply**.

Message Tracking

The e*Xchange Partner Manager Web interface includes Message Tracking features so that you can:

- View any messages that have been processed by e*Xchange
- Use the various search fields to narrow down your search before viewing message details
- For any message, view an error list, extended attributes, or actual text of the original message, enveloped message, or acknowledgment message.

It also includes a message audit feature. When this is turned on, the system maintains, with each message, a list of users that have looked at the message.

11.1 Using the Message Tracking Feature

The Message Tracking feature allows you to view any messages that have been processed by e*Xchange, including any errors that might be associated with a message. This useful tool helps you to pinpoint the source of an error so that it can be resolved.

You can use the various search fields to narrow down your search before viewing message details. For example, you might want to view all inbound RosettaNet 2.0 messages from a specific trading partner, or all outbound X12 batch message to a specific trading partner.

For any message, you can view message errors (if applicable), extended attributes, or the actual text of the message.

This tool can be used for troubleshooting message errors and monitoring message flow.

Searching for messages is a three-step process:

- 1 Enter general search criteria to view a list of message profiles that meet the criteria.
- 2 View the list and select the desired message profiles to view a list of messages that meet the criteria.
- 3 View the message information as needed.

This section includes the following step-by-step instructions:

- Entering general search criteria: see [“Entering General Search Criteria” on page 239](#)

- Choosing a range of message profiles for which you want to view messages: see [“Choosing the Messages to View” on page 240](#)
- Viewing message details: see [“Viewing the Message Details” on page 241](#)

11.1.1.Entering General Search Criteria

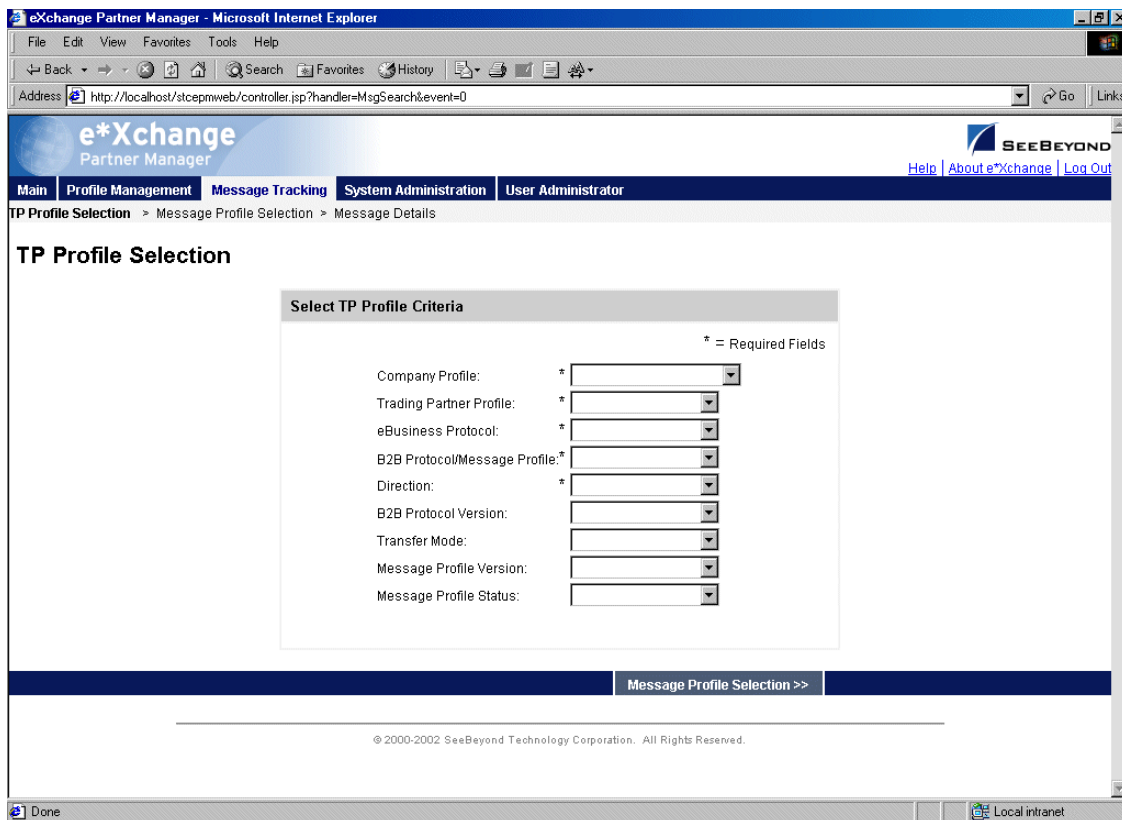
The first step is to enter general search criteria that e*Xchange will use to provide you with a list of message profiles.

To enter general search criteria

- 1 From the **Main** page, click **Message Tracking**.

The **TP Profile Selection** page appears (see Figure 120).

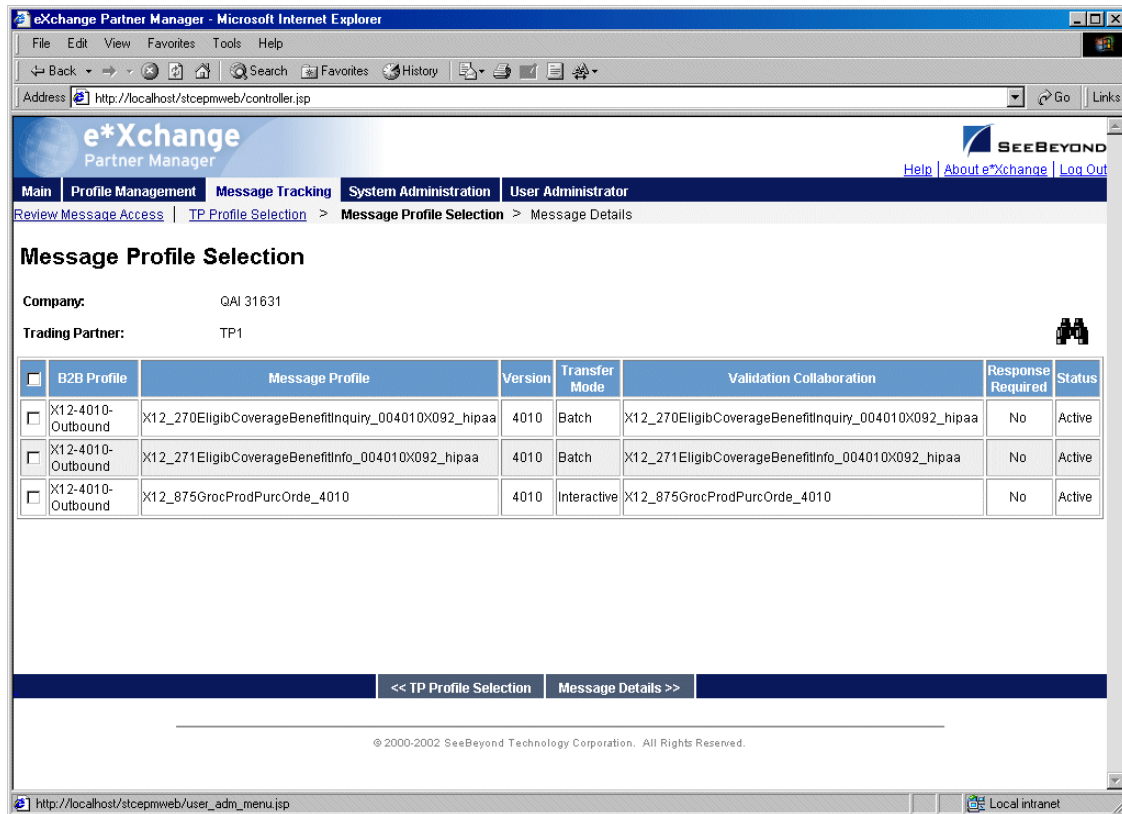
Figure 120 TP Profile Selection



- 2 Enter or select search criteria, and then click **Message Profile Selection** to create a list of message profiles matching the search criteria.

The **Message Profile Selection** page appears (see Figure 121).

Figure 121 Message Profile Selection



11.1.2. Choosing the Messages to View

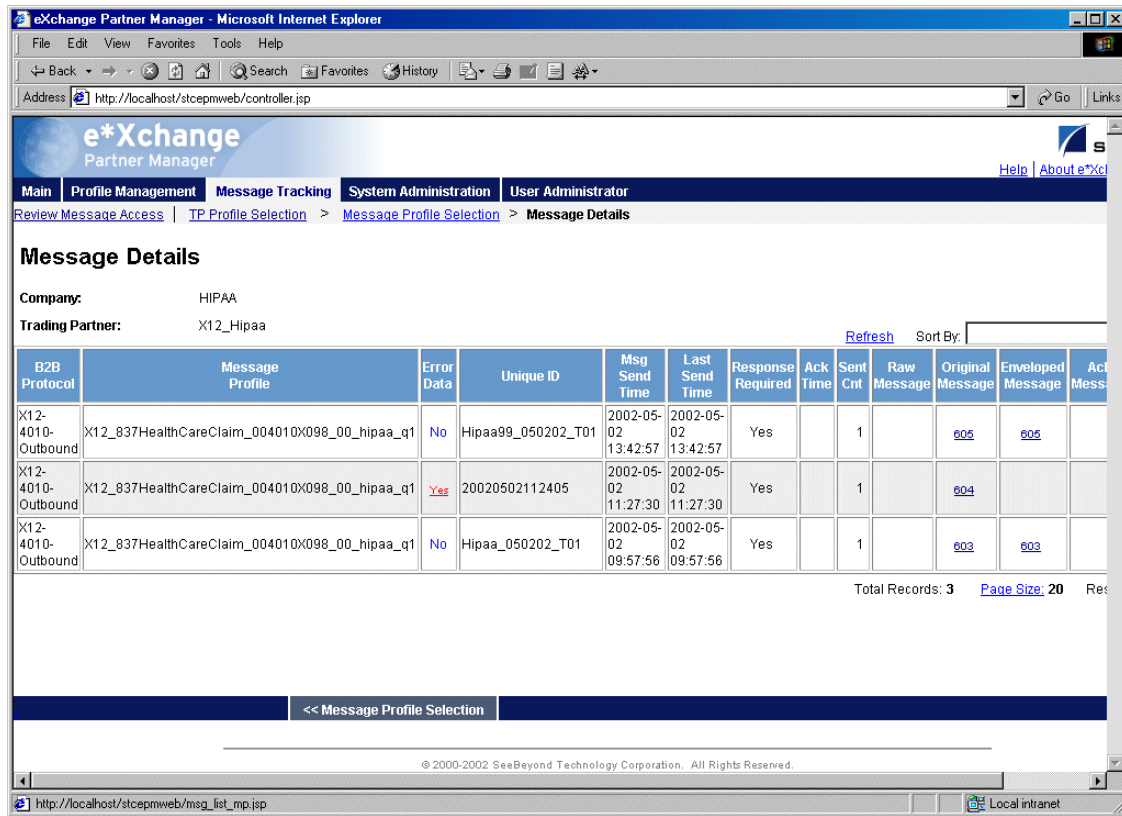
The **Message Profile Selection** list shows you the message profiles that match the search criteria you entered on the **TP Profile Selection** page. The next step is to select, from this list, one or more message profiles for which you want to view messages.

To choose the messages to view

- 1 At the **Message Profile Selection** list, do one of the following:
 - ♦ To select an individual profile for which you want to view messages, check the check box to the left of the message profile.
 - ♦ To select all profiles, check the check box in the column header. You can then clear individual check boxes as needed.
- 2 Click the **Message Details** link to view the resulting message list.

The **Message Details** page appears (see Figure 122).

Figure 122 Message Details



11.1.3. Viewing the Message Details

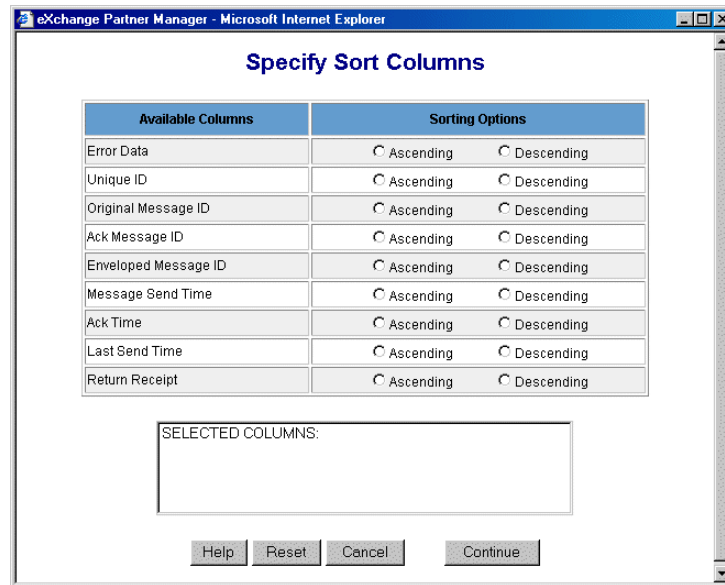
The next step is to look at the actual messages.

To view the message details

- 1 Select the message you want to view. To assist you in locating the message, you can sort the list by any of the following fields:
 - ◆ Unique ID
 - ◆ Original Message ID
 - ◆ Ack Message ID
 - ◆ Enveloped Message ID (outbound only)

You can also choose **Specify Sort Columns** to access the **Specify Sort Columns** page (Figure 123) and sort by multiple columns.

Figure 123 Message Tracking: Specify Sort Columns Page



- 2 If needed, change the display to show more messages per page (or fewer):
 - ♦ Click on the **Page Size** link as shown in Figure 124.

Figure 124 Changing the Display on the Message Tracking Details Page



- ♦ At the prompt, type the new record count (1–100).
 - ♦ Click **OK**.
- 3 If necessary, page through the message list by clicking on the **Next** link at the bottom of the **Message Details** page.
 - 4 Do any of the following, if available for the selected message:
 - ♦ View message errors—click the red underlined **Yes** in the **Error Data** column to view the error information in a separate window. For an example, see Figure 125.
Note: The database is designed to restrict error information to a maximum of 5000 characters per message. In practical terms, this might translate to approximately 50 errors, depending on the size of the individual errors. If the errors exceed the maximum allowed, the last error displayed might be truncated, and subsequent errors are not displayed. However, the entirety of the error information is still available in the journal file, if journaling is turned on (file name and location are defined in the configuration parameters for the eX_ePM e*Way).
 - ♦ View the raw message—click the blue underlined value in the **Raw Message** column to view the message in a separate window. For an example, see Figure 126.

- ◆ View the original message—click the blue underlined value in the **Original Message** column to view the message in a separate window. For an example, see Figure 127.
- ◆ View the enveloped message—click the blue underlined value in the **Enveloped Message** column to view the message in a separate window. For an example, see Figure 128. If you are using X12 835 large message support for HIPAA outbound messages, you will not see the message. Instead, you see a reference to the file, as shown in Figure 129.
- ◆ View the acknowledgment message—click the blue underlined value in the **Ack Message** column to view the message in a separate window. For an example, see Figure 130.
- ◆ View extended attributes—click the blue underlined value in the **Extended Attributes** column to view the attributes in a separate window. For an example, see Figure 131.

Figure 125 Message Tracking: “View Error Data” Window

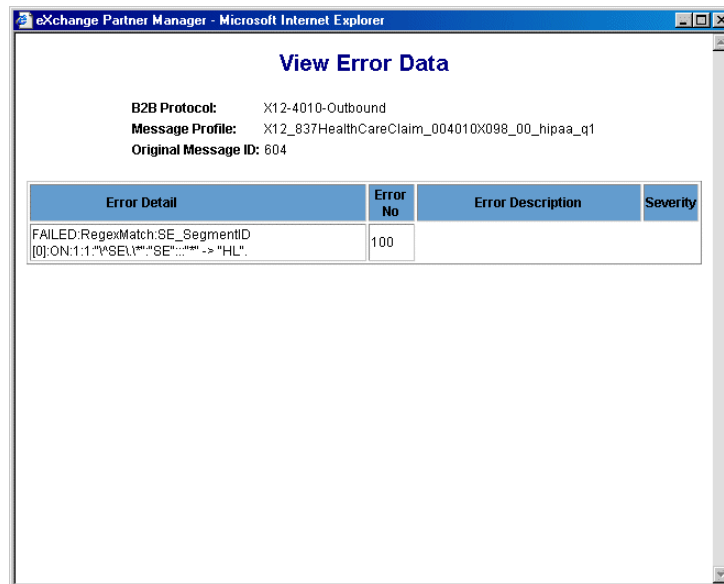


Figure 126 Message Tracking: "View Raw Message" Window

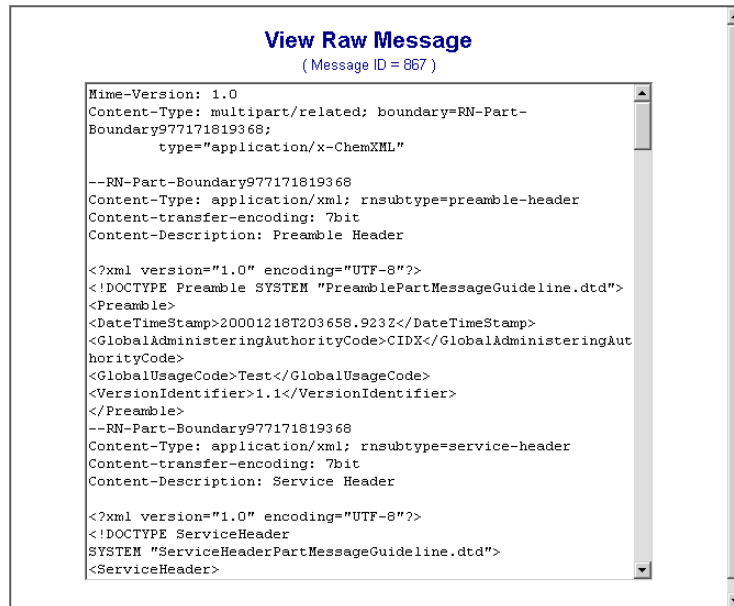
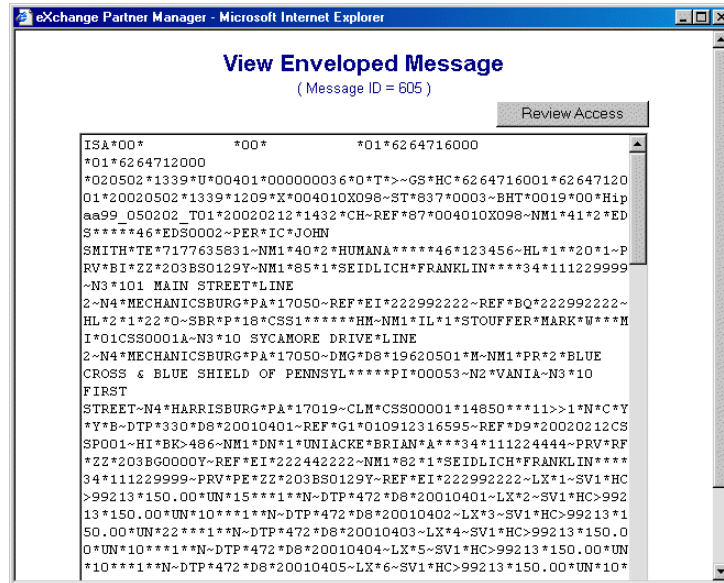


Figure 127 Message Tracking: "View Original Message" Window



Figure 128 Message Tracking: “View Enveloped Message” Window



Note: If the message is an X12 835 HIPAA message and you are using large message support, you cannot view the large message in the Message Tracking window. Instead, you will see a file reference such as the example shown in Figure 129.

Figure 129 Message Tracking: “View Enveloped Message” Window (Large Message)



Figure 130 Message Tracking: “View Acknowledgment Message” Window

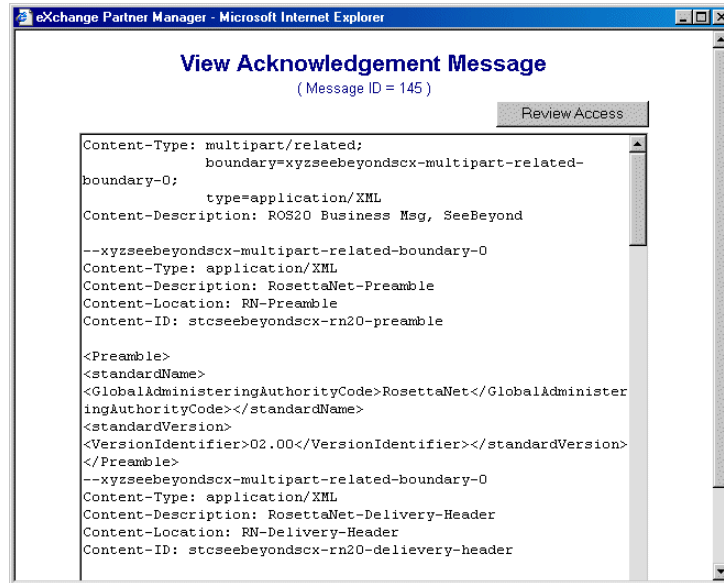
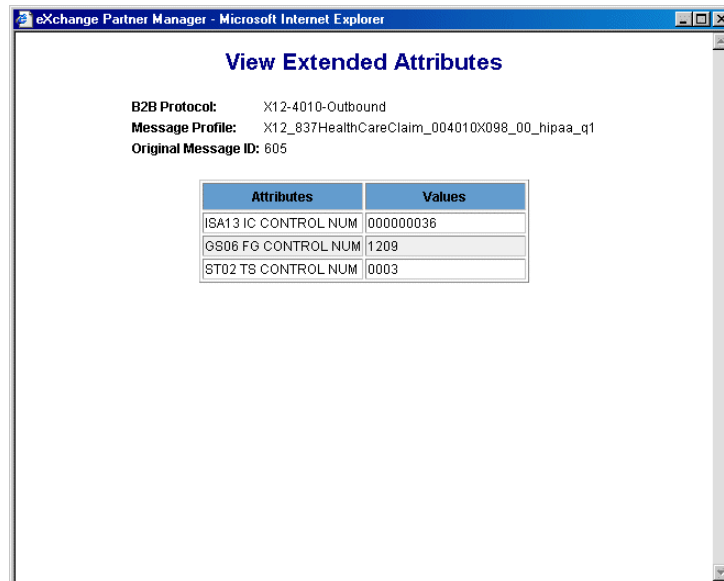


Figure 131 Message Tracking: “View Extended Attributes” Window



- 5 Optionally, review message access on any window (other than View Extended Attributes) by clicking the **Review Access** button. For more detailed information, refer to [“To review message access on an individual message” on page 249.](#)

11.2 Resending a Message

The e*Xchange Partner Manager Web interface allows you to manually resend a message to a trading partner from within the Message Tracking feature.

Certain conditions must be met, as outlined below.

- A message that is not expecting a response can always be resent.
- A message that is expecting a single response can be resent providing there is an error on the response and the error is one of the following types:
 - ♦ Response overdue
 - ♦ Hit max re-send limit (or any error beginning with this)
- A message that is expecting multiple responses can be resent providing there is an error on *each* response and each error is one of the following types:
 - ♦ Response overdue
 - ♦ Hit max re-send limit (or any error beginning with this)

A message that is part of a batch cannot be resent unless the resend conditions have been met for the entire batch and the batch is resent.

A message that has already been resent cannot be resent again until the resend process has been completed.

Acknowledgments can be resent.

When a message is resent, the send count and last send time are updated. A manual resend overrides the maximum send count setting.

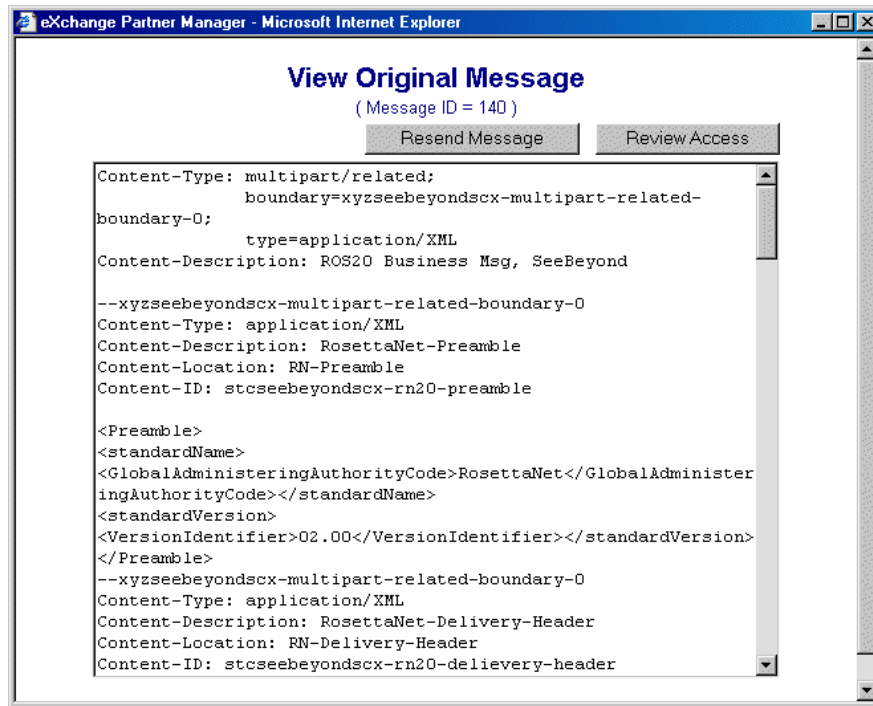
When a message is resent, it is resent once only, even if the Number of Retries for the message is set to more than one.

To resend a message to a trading partner

- 1 On the **Message Details** page, click on the link in the **Original Message** column for that message.

The **View Original Message** window appears, as shown in Figure 132.

Figure 132 Message Tracking: “View Original Message” Window with Resend

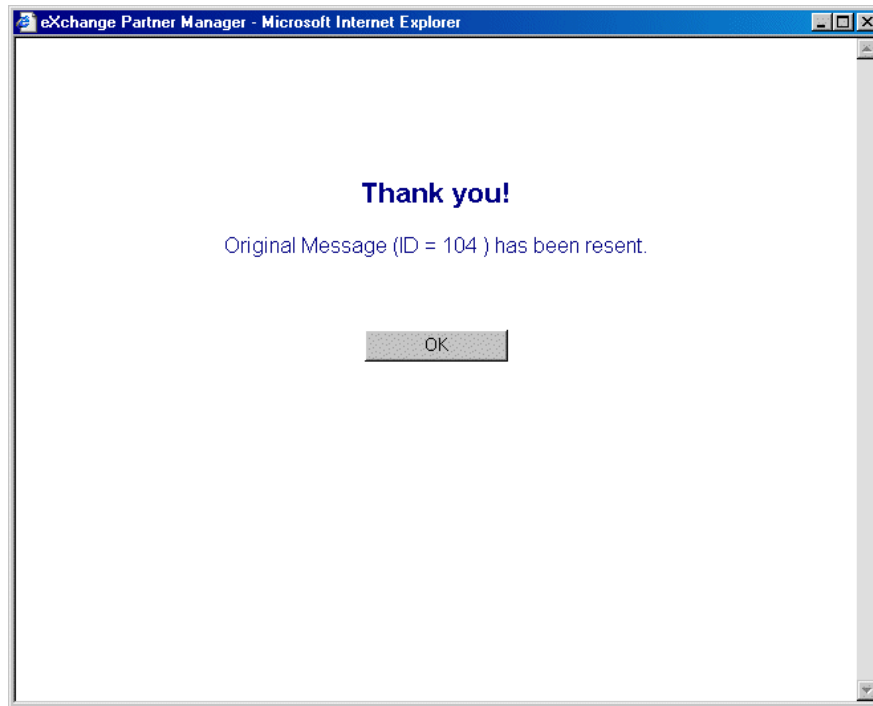


2 Click **Resend Message**.

Note: *If there is no Resend Message button on the message, the message does not meet the resend criteria and cannot be resent.*

A resend verification message appears, as shown in Figure 133.

Figure 133 Message Tracking: Resend Verification Message



- 3 Click **OK**.

11.3 Reviewing Message Access (Audit Feature)

The e*Exchange Partner Manager Web interface includes an optional Message Tracking Audit feature. This feature is turned on or off via the **System Defaults** page via the **Enable Auditing for Message Tracking** setting.

When Message Tracking Audit is turned on, an additional option is available in all the Message Tracking screens. You can review the audit log of all users that have accessed a specific message. Information recorded in the audit log includes user ID and timestamp for each time the message was viewed.

When turned on, this feature is available via a **Review Message Access** link on the following Message Tracking pages:

- TP Profile Selection
- Message Profile Selection
- Message Details

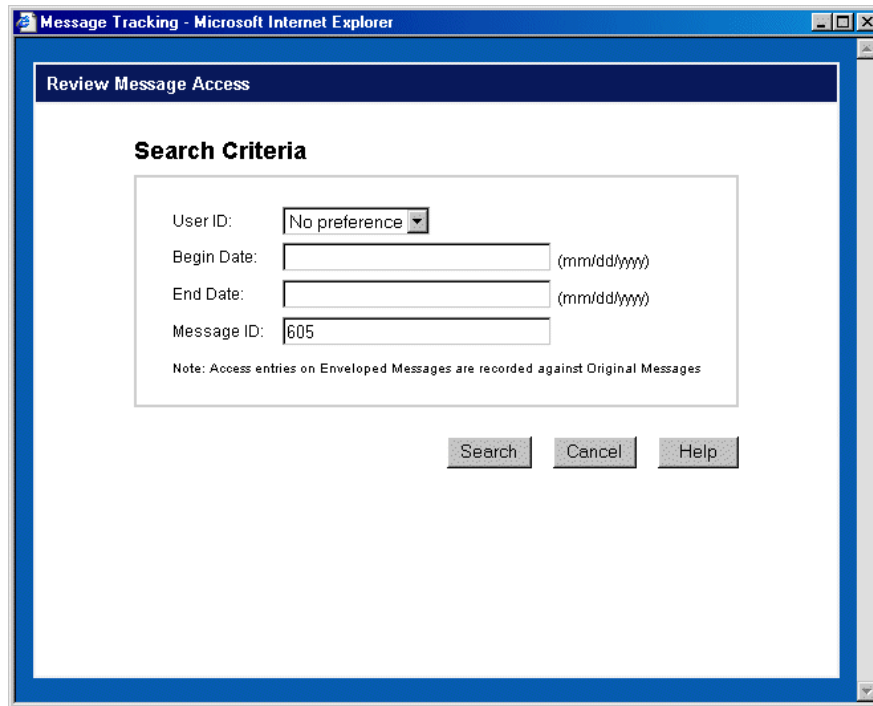
It is also available at the individual message level. From the **Message Details** page, click any message for which access information is available.

To review message access on an individual message

- 1 From one of the Message Tracking pages, click the **Review Message Access** link.

The **Search Criteria** page appears (see Figure 134).

Figure 134 Review Message Access: Search Criteria



The screenshot shows a web browser window titled "Message Tracking - Microsoft Internet Explorer". The main content area is titled "Review Message Access" and contains a "Search Criteria" section. This section includes four input fields: "User ID" with a dropdown menu set to "No preference", "Begin Date" and "End Date" with text boxes and "(mm/dd/yyyy)" labels, and "Message ID" with a text box containing "605". Below these fields is a note: "Note: Access entries on Enveloped Messages are recorded against Original Messages". At the bottom of the form are three buttons: "Search", "Cancel", and "Help".

- 2 Set search criteria as needed.

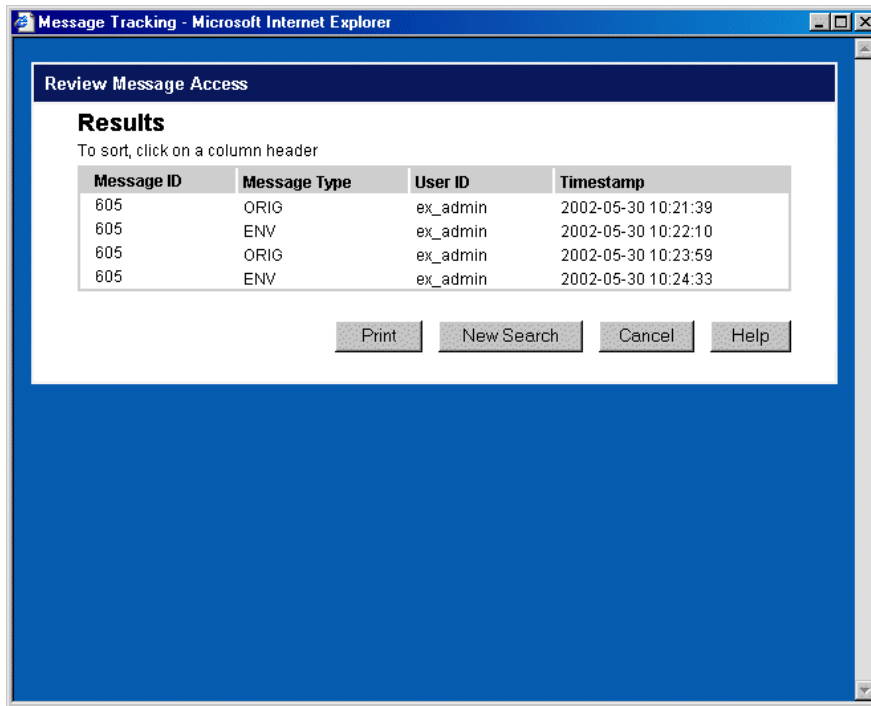
For more information, refer to [Table 52 on page 252](#).

- 3 Click the **Search** button.

e*Exchange creates a list of all messages that meet the viewing criteria you have set (see Figure 135 for an example).

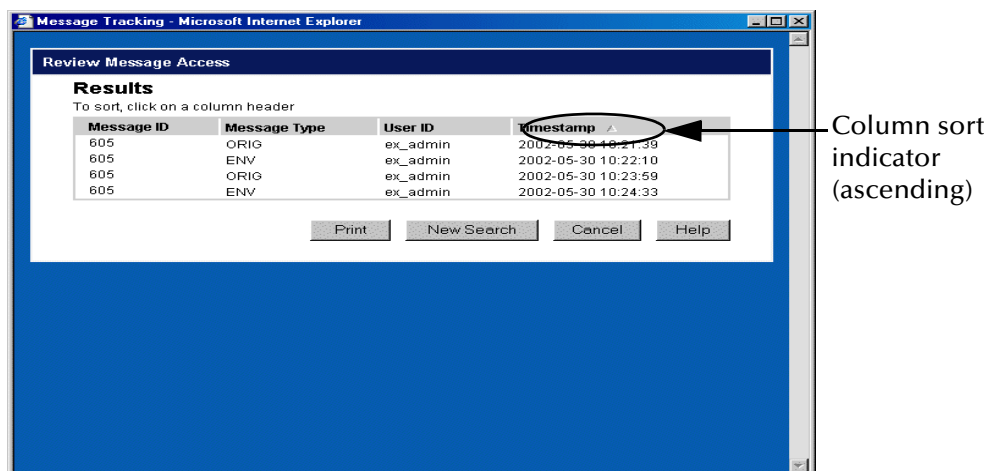
Note: *If you do not choose search criteria, the resulting message access report might be very large. Choose search criteria based on your knowledge of message volume. If the message list does not match your requirements, you can go back and redefine the criteria.*

Figure 135 Review Message Access: Results



- 4 View the message access list. You can sort the columns as needed:
 - ♦ To sort by a specific column, click the column heading. For example, to sort by timestamp, click the **Timestamp** column title. A triangle appears in the column heading, indicating that it is the sort column (see Figure 136). By default, columns are sorted in ascending order (lowest values at the top).

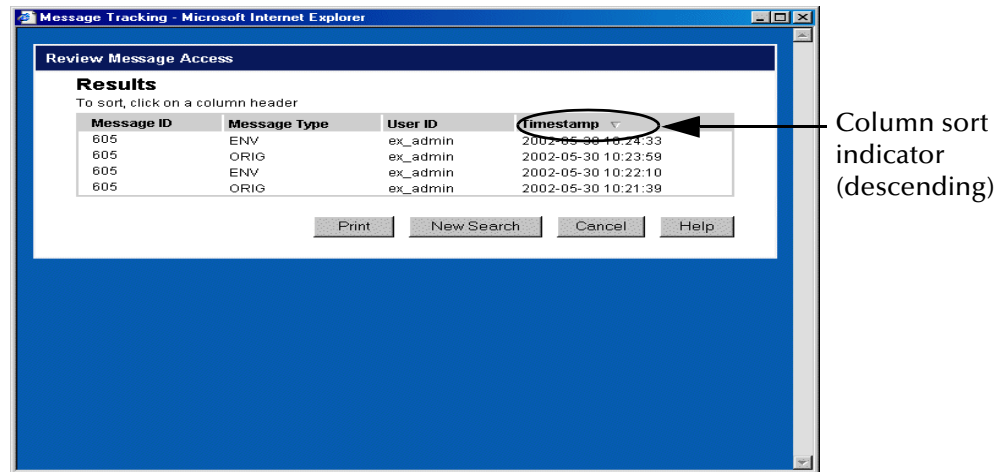
Figure 136 Sample List Sorted by Timestamp, Ascending Order



- ♦ To sort a column in descending order rather than ascending, first click the column heading once to select it as the sort column, and then click it again. The

triangle reverses, indicating that the column is sorted in descending order (see Figure 137).

Figure 137 Sample List Sorted by Timestamp, Descending Order



Note: For additional information on message IDs for outbound batch messages when message type is ENV (Enveloped Message ID), refer to [“Viewing Access Via Enveloped Message ID”](#) on page 253.

- 5 If the list does not match your requirements, click **New Search** to return to the **Search Criteria** page.
- 6 If you want to print the list, click **Print**.
- 7 When done, click **Cancel** to close the list window.

Table 52 Review Message Access, Search Criteria: Fields

Name	Description
User ID	Select a user ID from the drop-down list, or leave as No preference .
Begin Date/End Date	<p>Optionally, set begin and/or end dates, as follows:</p> <ul style="list-style-type: none"> ▪ If desired, type a begin date in the format MM/DD/YYYY; for example, 01/01/2001. ▪ If desired, type an end date in the format MM/DD/YYYY; for example, 12/31/2001. <p>Note: If you set only a begin date, e*Xchange includes everything from that date onwards. If you set only an end date, e*Xchange includes everything up to and including that date.</p>
Message ID	If desired, set a specific message ID.

To review message access (individual message view)

- 1 In Message Tracking, define message criteria so that the message is displayed on the **Message Details** page.

For more information, refer to [“To enter general search criteria” on page 239](#) and [“To choose the messages to view” on page 240](#).

- 2 Select the link in one of the available columns to view the message; for example, to view the original message, click the link in the **View Original Message** column.

The **View Original Message** page appears (or another page, according to your selection).

- 3 Click the **Review Access** button.

The **Review Message Access** page appears (see Figure 134).

- 4 Set search criteria as needed.

For more information, refer to [Table 52 on page 252](#).

- 5 Click **Search**.

The results are displayed (see Figure 135).

- 6 If desired, sort the columns as needed:

- ♦ To sort by a specific column, click the column heading. For example, to sort by timestamp, click the **Timestamp** column title. A triangle appears in the column heading, indicating that it is the sort column. By default, columns are sorted in ascending order (lowest values at the top).
- ♦ To sort a column in descending order rather than ascending, first click the column heading once to select it as the sort column, and then click it again. The triangle reverses, indicating that the column is sorted in descending order.
- ♦ To print, click **Print**.
- ♦ To modify the results list, click **New Search** to return to the **View Message** page and change the search criteria.

- 7 If the list does not match your requirements, click **New Search** to return to the **Search Criteria** page.

- 8 If you want to print the list, click **Print**.

- 9 When done, click **Cancel** to close the list window.

Viewing Access Via Enveloped Message ID

For outbound batch messages, e*Xchange Partner Manager assigns a new Enveloped Message ID each time the message is resent. For example, if a message is sent once and then resent twice, there are three separate Enveloped Message IDs for the same message.

However, whether a user views the original message or the enveloped message, access is always logged against the Original Message ID. This ensures that the access information for a specific message is stored in one place.

Because of this, if you try to review access using the Enveloped Message ID, e*Xchange provides audit information only for the Original Message ID. If you click the **Review Access** button, e*Xchange uses the corresponding Original Message ID to prepare the access list. This ensures that you see all instances of access to the message.

The Review Message Access **Results** page displays the Original Message ID in the **Message ID** column; however, the value in the **Message Type** column is **ENV** to indicate that the user viewed the enveloped message rather than the original message.

11.4 Message Tracking: Notes and Tips On Viewing Messages

This section includes some comments and general information that might help you interpret and understand the information you see in Message Tracking.

- NCPDP E1 Eligibility Verification messages—because of a limitation in NCPDP, the Request and Response messages are not associated in Message Tracking (unless you perform customization to circumvent this problem). Because of this limitation, you might see timeout errors on outbound Request messages when the responses have already been received.

e*Xchange Repository Manager

The e*Xchange Repository Manager is a Java-based graphical user interface, provided for import/export and archive/de-archive activities.

Because it is Java-based it has the following advantages:

- Can be run on platforms other than Microsoft Windows; for example, UNIX
- Supports DB2 UDB databases

The Repository Manager is provided as a separate option during e*Xchange Partner Manager installation.

From this user interface you can complete the following activities:

- Archiving of company profiles
- Dearchiving of previously archived company profiles
- Exporting of company information
- Importing of previously exported company information

12.1 Logging In to the e*Xchange Repository Manager

The Repository Manager is a separate user interface. To log in with e*Xchange Repository Manager installed on Microsoft Windows, follow the steps below.

Note: When you start the Repository Manager, a DOS window opens up as well as the GUI. The Repository Manager requires this DOS window to run in the background; do not close it. When you close the Repository Manager, the DOS window closes automatically.

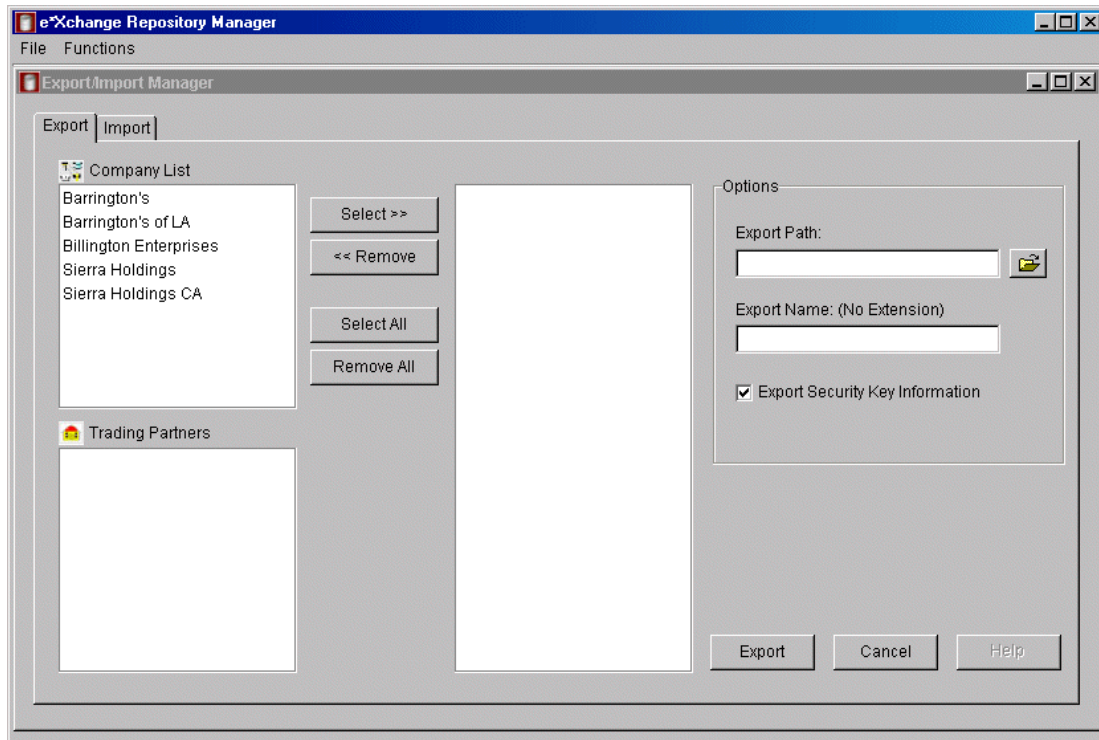
To log In to the Repository Manager

- 1 Start the Repository Manager in one of the following ways:
 - ♦ From the Start menu, select **Programs, e*Xchange Partner Manager, e*Xchange Repository Manager**.
 - ♦ Double-click the e*Xchange Repository Manager icon on your desktop.
- 2 Enter your database login ID.
- 3 Enter your database password.

- 4 Click the **Login** button.

The Repository Manager appears (see Figure 138).

Figure 138 e*Xchange Repository Manager



12.2 Export/Import from the e*Xchange Repository Manager

You can export data from the Repository Manager to an external file, and you can import information from the external file into another database.

The Export/Import feature allows importing and exporting between any supported database types; for example, you can take the export file created by exporting from a SQL Server database and import it into an Oracle database, or take a DB2 UDB export file and import it into a Sybase database.

12.2.1. Running the Export Feature

To export information

- 1 On the **Functions** menu, click **Export/Import**.
The **Export/Import Manager** appears.
- 2 Click the **Export** tab.

- 3 Set the values as needed.
For more information, refer to Table 53.
- 4 Click the **Export** button to start the export operation.
When done, the **View Log** button appears (see Figure 139).
- 5 If desired, click the **View Log** button to view the log.

Figure 139 Export/Import Manager, Export Tab

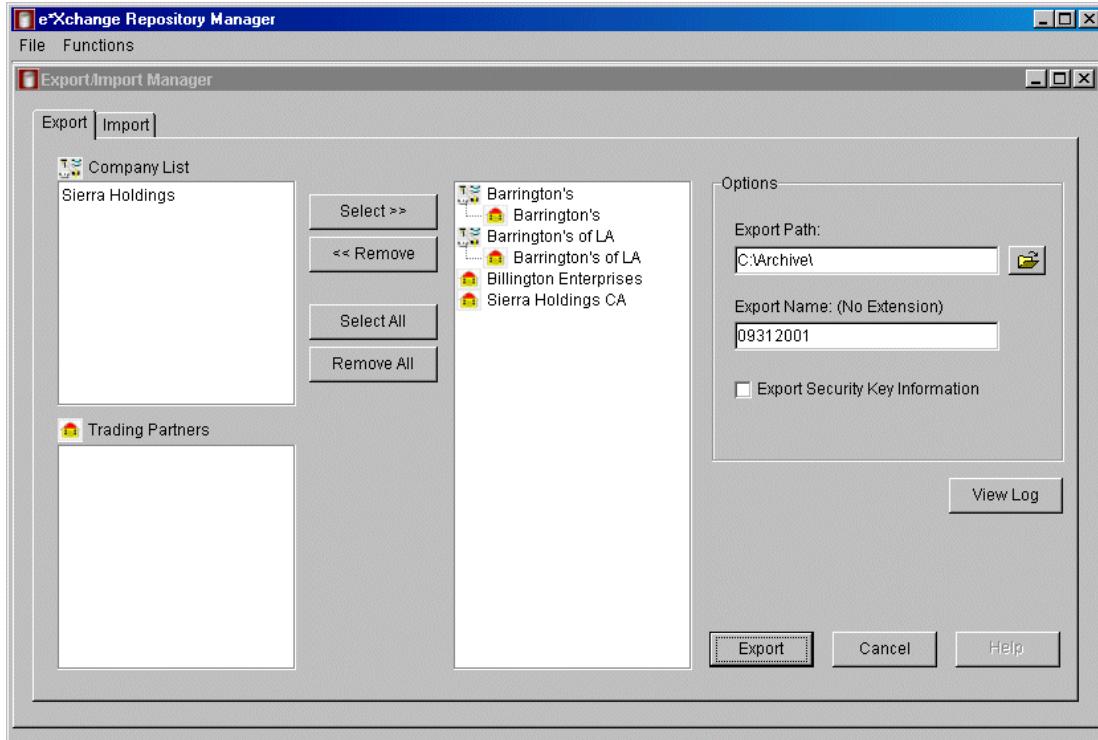


Table 53 Export/Import Manager, Export Tab

Name	Description
Company List	All companies are shown on the list.
Trading Partners list	When you click a company, all trading partners set up for that company are shown on the list.

Table 53 Export/Import Manager, Export Tab (Continued)

Name	Description
Selection Buttons	<p>Use the selection buttons to create a list of companies/trading partners whose messages you want to export, as follows:</p> <ul style="list-style-type: none"> ▪ To select a company and all its trading partners, highlight the company in the left pane, and then click Select. ▪ To select a trading partner and its parent company, highlight the trading partner on the Trading Partners list and then click Select. To select multiple trading partners, hold down the Shift or Ctrl keys when selecting. ▪ To remove a company and all its trading partners from the export list, highlight the company in the right pane and then click Remove. ▪ To remove a trading partner from the export list, highlight the trading partner in the right pane and then click Remove. To remove multiple trading partners, hold down the Shift or Ctrl keys when selecting. ▪ To select all companies and trading partners for the export list, click Select All. ▪ To remove all companies and trading partners from the export list, click Remove All.
Export Path	<p>Specify the path for the export file. Click on the icon to the right to access the Browse for Folder dialog box, and then choose a folder.</p> <p>Note: browse to the parent folder, <i>single-click</i> the folder in which you want to store the file, and then click OK.</p>
Export Name (No extension)	<p>Type the name of the export file, without extension. The Repository Manager exports the information to an ASCII file with the extension .exp.</p>
Export Security Key Information	<p>Clear this check box if you do <i>not</i> want security key information to be included in the export file. By default, security key information is exported.</p> <p>Note: Since this is sensitive information, be sure it is acceptable to include it in the export file before doing so.</p>
Export	<p>Click this button to start the export operation. When done, the Repository Manager displays an information message.</p>
View Log	<p>When the operation is complete, the View Log button appears. Click this button to view the log file.</p> <p>The log file is located in the folder specified in the Export Path and is always named epmExport.log. If for any reason you want to preserve a specific log file, back it up or rename it so that the next export process does not overwrite the file.</p>
Cancel	<p>Click this button to cancel the settings and close the dialog box.</p>

12.2.2. Before Importing

There are some important points to note before you start the import process:

- When you import the information, the associations between messages and responses might not be preserved. When you have imported, check the Return Envelope settings in the Web interface (Message Profile level) to ensure the correct return envelopes are selected.

- Make sure the import file was exported from an e*Xchange database that was up to date. Importing from a file that was exported from an earlier version database structure might cause problems. Run all database upgrade scripts on the database prior to exporting the file or the import might not be successful.

12.2.3. Running the Import Feature

To import information

- 1 On the **Functions** menu, click **Export/Import**.
The **Export/Import Manager** appears.
- 2 Click the **Import** tab (see Figure 140).
- 3 Set the values as needed.
For more information, refer to Table 54.
- 4 Click the **Import** button to start the import operation.
When done, the Repository Manager displays an information message.
- 5 Click **OK**.

Figure 140 Export/Import Manager, Import Tab

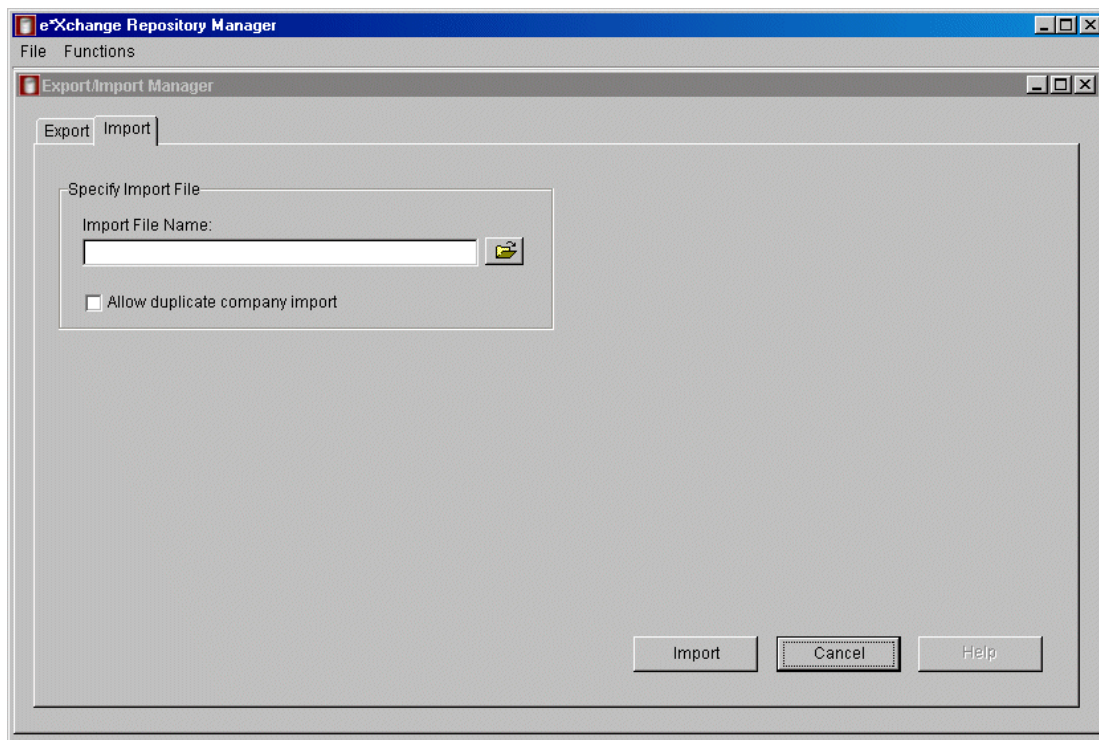


Table 54 Export/Import Manager, Import Tab

Name	Description
Import File Name	Specify the path for the file to be imported. Click on the icon to the right to access the Select Import File dialog box, navigate to the folder if needed, and then choose the file.
Allow duplicate company import	This check box controls whether duplicate information will be imported. If the import file contains components already in the database, and you want to import the duplicate information, check this check box. The Repository Manager appends a unique ID to the company name for any duplicates that are imported. Leave this check box clear to skip the duplicates when importing.
Import button	Click this button to start the import operation. When done, the Repository Manager displays an information message.
View Log	When the operation is complete, the View Log button appears. Click this button to view the log file. The log file is located in the folder where the import file is located and is always named epmlImport.log . If for any reason you want to preserve a specific log file, back it up or rename it so that the next import process does not overwrite the file.
Cancel	Click this button to cancel the settings and close the dialog box.

12.3 Archive/De-Archive from the e*Xchange Repository Manager

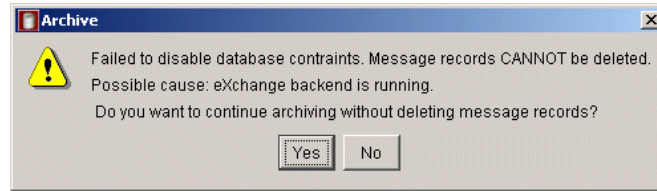
Using the Repository Manager, you can archive data from the e*Xchange Partner Manager database to an external file. You can also use the external file to de-archive the information into a new, empty database.

Archiving

Only companies for which there are no active messages within the selected date range are available for archiving. If there are any active messages (either in the queue to be sent, or expecting a response) within the date range, the company does not appear on the selection list.

You cannot archive when the database is in use; for example, when the e*Xchange back end is running. If you try, you will see the message shown in Figure 141.

Figure 141 Archiving Error Message



De-Archiving

The Archive/De-Archive feature allows archiving and de-archiving between any supported database types; for example, you can take the file created by archiving from a SQL Server database and de-archive it to an Oracle database, or take the file created by archiving from a DB2 UDB database and de-archive it to a Sybase database.

De-archived data is for reference only since the sequence numbers would not match the sequence numbers in a new database and only those Message Tracking attributes that are used by the de-archived file are available for use.

When you de-archive, e*Xchange always deletes any information already existing in the database. You cannot combine multiple archive files.

The archive file is in compressed format.

Caution: *This operation deletes information from your database. As with any major operation affecting your business information, you should back up your data before starting the archiving process. Make a full backup of your e*Xchange database tables using the standard backup procedure for your database.*

12.3.1. Changes to Settings During Archiving

It is important to realize that during the archive process certain logging features are turned off, and constraints dropped, in the interests of getting the archive completed as quickly as possible.

Changes to Logging and Constraints

The changes to the e*Xchange operation during archiving vary according to the type of database you are using. Refer to Table 55 for specific information on activities and tables that are affected during the archiving process.

Table 55 Changes to e*Xchange Operation During Archiving

Database	Changes
Oracle	<ul style="list-style-type: none"> ▪ Logging is disabled for the following tables: <ul style="list-style-type: none"> ♦ es_mtrk_inb ♦ es_mtrk_outb ♦ es_msg_storage ♦ es_msg_ascii ♦ es_msg_security ♦ es_msg_binary ♦ es_mtrk_error ♦ es_mtrk_outb_data ♦ es_mtrk_inb_data ▪ The following constraints are disabled: <ul style="list-style-type: none"> ♦ es_mtrk_inb_fk1 ♦ es_mtrk_inb_fk2 ♦ es_mtrk_inb_fk3 ♦ es_mtrk_outb_fk1 ♦ es_mtrk_outb_fk2 ♦ es_mtrk_outb_fk3 ♦ es_mtrk_outb_fk4 ♦ es_mtrk_outb_data_fk1 ♦ es_mtrk_outb_data_fk2 ♦ es_mtrk_inb_data_fk1 ♦ es_mtrk_inb_data_fk2
SQL Server	<ul style="list-style-type: none"> ▪ The following constraints are disabled: <ul style="list-style-type: none"> ♦ es_mtrk_inb_fk1 ♦ es_mtrk_inb_fk2 ♦ es_mtrk_inb_fk3 ♦ es_mtrk_outb_fk1 ♦ es_mtrk_outb_fk2 ♦ es_mtrk_outb_fk3 ♦ es_mtrk_outb_fk4 ♦ es_mtrk_outb_data_fk1 ♦ es_mtrk_outb_data_pk ♦ es_mtrk_inb_data_fk1 ♦ es_mtrk_inb_data_pk
Sybase	<ul style="list-style-type: none"> ▪ The following constraints are dropped during the archive and recreated later: <ul style="list-style-type: none"> ♦ es_mtrk_inb_fk1 ♦ es_mtrk_inb_fk2 ♦ es_mtrk_inb_fk3 ♦ es_mtrk_outb_fk1 ♦ es_mtrk_outb_fk2 ♦ es_mtrk_outb_fk3 ♦ es_mtrk_outb_fk4 ♦ es_mtrk_outb_data_fk1 ♦ es_mtrk_outb_data_pk ♦ es_mtrk_inb_data_fk1 ♦ es_mtrk_inb_data_pk

Table 55 Changes to e*Xchange Operation During Archiving

Database	Changes
DB2 UDB	<ul style="list-style-type: none"> ▪ The following constraints are dropped during the archive and recreated later: <ul style="list-style-type: none"> ♦ es_mtrk_inb_fk1 ♦ es_mtrk_inb_fk2 ♦ es_mtrk_inb_fk3 ♦ es_mtrk_outb_fk1 ♦ es_mtrk_outb_fk2 ♦ es_mtrk_outb_fk3 ♦ es_mtrk_outb_fk4 ♦ esmtrkotbdata_fk1 ♦ esmtrkotbdata_fk2 ♦ esmtrkinbdata_fk1 ♦ esmtrkinbdata_fk2

Restoring the Settings

Once the archiving procedure is complete, logging is re-enabled and the constraints are enabled.

However, if there is an error during archiving—for example, a power outage—you must make sure that your settings are restored so that you have the correct logging and constraints. To do this, follow the instructions below for each type of database.

To restore Oracle logging and constraints

- 1 At the Oracle prompt, re-enable logging by running the following command (substituting the specific table names from Table 55):

ALTER TABLE <table name> LOGGING

- 2 At the Oracle prompt, re-enable constraints by running the following command (substituting the specific table names and also constraint names from Table 55):

ALTER TABLE <table name> ENABLE CONSTRAINT <constraint name>

To restore SQL Server constraints

- At the SQL Server prompt, re-enable constraints by running the following command (substituting the specific table names and also constraint names from Table 55):

ALTER TABLE <table name> CHECK CONSTRAINT <constraint name>

To restore Sybase or DB2 UDB constraints

- At the Sybase or DB2 UDB prompt, re-enable constraints by running the following commands:

ALTER TABLE es_mtrk_inb ADD CONSTRAINT es_mtrk_inb_fk1 foreign key (orig_msg_id) references es_msg_storage (msg_storage_id)

ALTER TABLE es_mtrk_inb ADD CONSTRAINT es_mtrk_inb_fk2 foreign key (ack_msg_id) references es_msg_storage (msg_storage_id)

```
ALTER TABLE es_mtrk_inb ADD CONSTRAINT es_mtrk_inb_fk3 foreign key  
(raw_msg_id) references es_msg_storage (msg_storage_id)
```

```
ALTER TABLE es_mtrk_outb ADD CONSTRAINT es_mtrk_outb_fk1 foreign  
key (orig_msg_id) references es_msg_storage (msg_storage_id)
```

```
ALTER TABLE es_mtrk_outb ADD CONSTRAINT es_mtrk_outb_fk2 foreign  
key (env_msg_id) references es_msg_storage (msg_storage_id)
```

```
ALTER TABLE es_mtrk_outb ADD CONSTRAINT es_mtrk_outb_fk3 foreign  
key (ack_msg_id) references es_msg_storage (msg_storage_id)
```

```
ALTER TABLE es_mtrk_outb ADD CONSTRAINT es_mtrk_outb_fk4 foreign  
key (raw_msg_id) references es_msg_storage (msg_storage_id)
```

12.3.2. Running the Archive Feature

To archive information

- 1 On the **Functions** menu, click **Archive/De-archive**.

The **Archive/De-Archive Manager** appears.

- 2 Click the **Archive** tab (see Figure 142).
- 3 Set the values as needed. For more information, refer to Table 56.

Since companies with active messages cannot be archived, changing the date selection might increase or decrease the number of companies available for archiving.

- 4 Click the **Archive** button to start the archiving operation.

When done, the Repository Manager displays an information message.

Note: *If you have left **Delete Message Records** selected, the Repository Manager creates the archive file before deleting the message records. However, it does not close the archive file until the deletion operation is also complete. Wait for the entire process to be complete before attempting to do anything with the archive file. In addition, Repository Manager used a background DOS window; you must leave this window open. When you close Repository Manager, the DOS window closes automatically.*

- 5 Click **OK**.

Figure 142 Archive/De-Archive Manager, Archive Tab

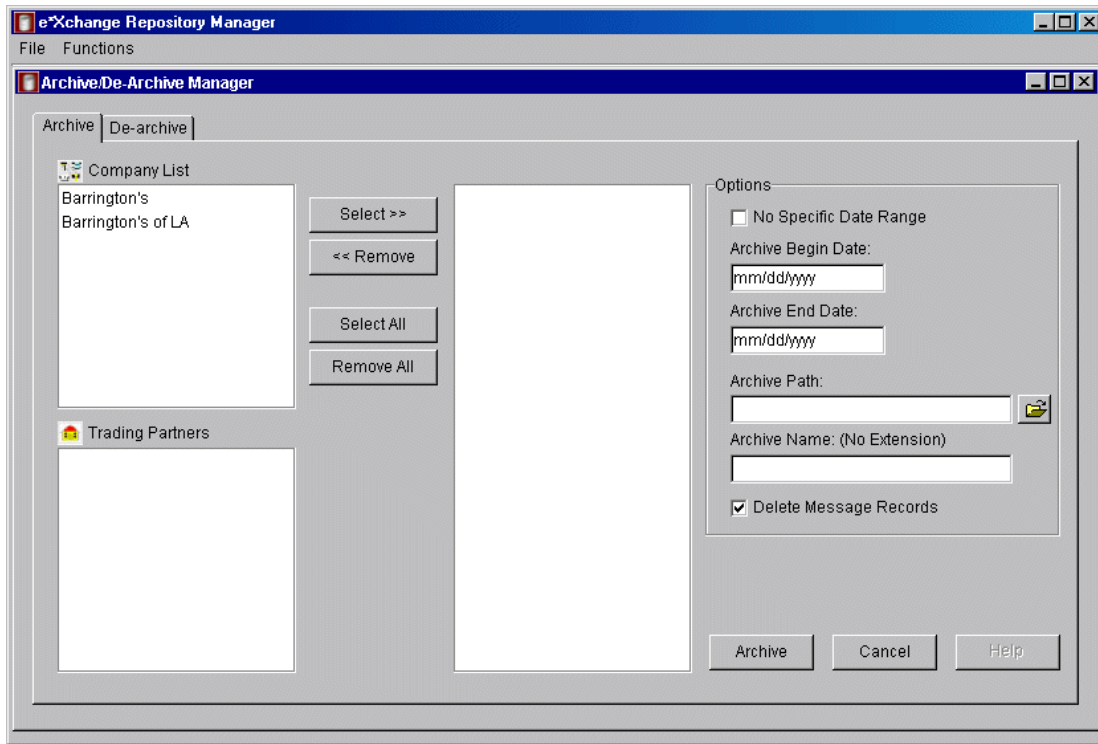


Table 56 Archive/De-Archive Manager, Archive Tab

Name	Description
Company List	All companies for which there are message profiles set up are shown on the list.
Trading Partners list	All trading partners for which there are message profiles set up are shown on the list.

Table 56 Archive/De-Archive Manager, Archive Tab (Continued)

Name	Description
Selection Buttons	<p>Use the selection buttons to create a list of companies/trading partners for message archiving, as follows:</p> <ul style="list-style-type: none"> ▪ To select a company and all its trading partners, highlight the company in the left pane, and then click Select. ▪ To select a trading partner and its parent company, highlight the trading partner on the Trading Partners list and then click Select. You can also select multiple trading partners by holding down the Shift or Ctrl keys when selecting. ▪ To remove a company and all its trading partners from the archiving list, highlight the company in the right pane and then click Remove. ▪ To remove a trading partner from the archiving list, highlight the trading partner in the right pane and then click Remove. You can also remove multiple trading partners by holding down the Shift or Ctrl keys when selecting. ▪ To select all companies and trading partners from the archiving list, click Select All. ▪ To remove all companies and trading partners from the archiving list, click Remove All.
No Specific Date Range	<p>To archive all companies and trading partners that do not have active messages, check this check box.</p> <p>Note: Companies or trading partners that have active messages (for example, expecting a response) within the selected date range cannot be archived.</p>
Archive Begin Date/Archive End Date	<p>To specify a date range for archiving, set beginning and ending dates. These values default to a date range that includes all the information in the database.</p>
Archive Path	<p>Specify the path for the archive file. Click on the icon to the right to access the Browse for Folder dialog box, and then choose a folder. Do not choose a file name.</p> <p>Note: browse to the parent folder, <i>single-click</i> the folder in which you want to store the file, and then click OK.</p>
Archive Name (No extension)	<p>Type the name of the archive file, without extension. The Repository Manager makes a compressed file with the extension .zip.</p> <p>Note: After archiving, do not change the name of the archive file. If you do, the de-archive process will not work.</p>
Delete Message Records	<p>If you want the archived messages to be deleted from the database, leave this as checked (the default). If you want to leave the messages in the database, clear this check box.</p>
Archive	<p>Click this button to start the archiving operation. When done, the Repository Manager displays an information message.</p>

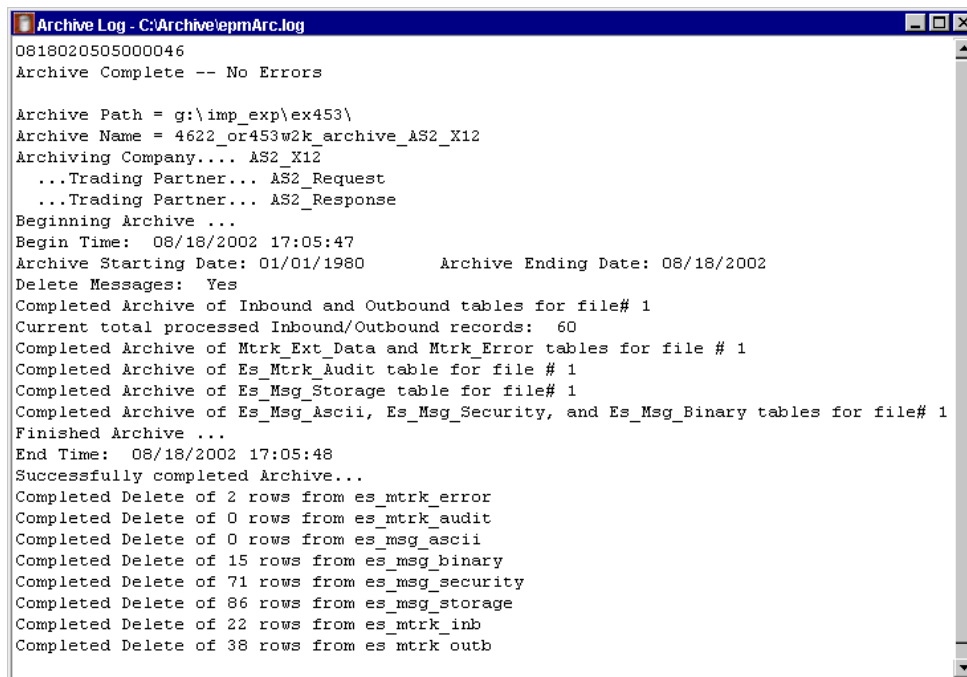
Table 56 Archive/De-Archive Manager, Archive Tab (Continued)

Name	Description
View Log	When the operation is complete, the View Log button appears. Click this button to view the log file. The log file is located in the folder specified in the Archive Path and is always named epmARC.log . If for any reason you want to preserve a specific log file, back it up or rename it so that the next archive process does not overwrite the file.

12.3.3. Viewing the Archive Log

The archive log provides details of the archiving activity performed. An example is shown in Figure 143.

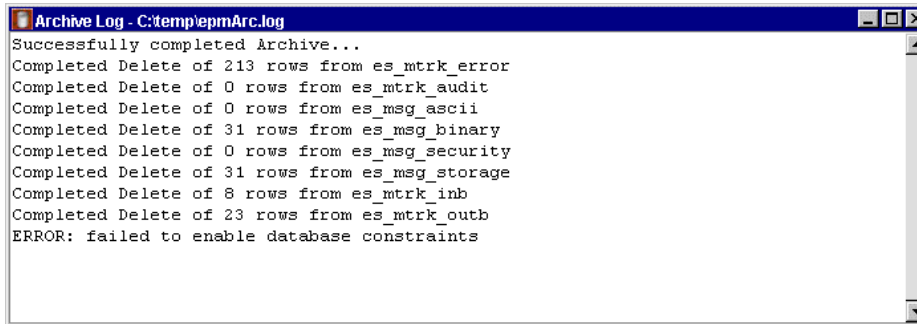
Figure 143 Sample Archive Log



Occasionally, there might be a problem with re-enabling the database constraints. For example, this can happen if the database is in use while the archiving process is being done. If this happens, you must remember to manually re-enable the constraints immediately after archiving.

If this problem occurs, you might see a message in the log file similar to the one shown in Figure 144.

Figure 144 Sample Archive Log Showing Database Constraints Error



If this occurs, re-enable the constraints via the SQL Plus prompt.

The constraints are listed in the following file:

```
\<eXchange root>\eRM\enable_constraints.txt
```

12.3.4. Running the De-Archive Feature

When you de-archive, e*Xchange always deletes any information already existing in the database. You cannot combine multiple archive files.

De-archived data is for reference only since the sequence numbers would not match the sequence numbers in a new database and only those Message Tracking attributes that are used by the de-archived file are available for use.

The de-archived database is useful for auditing information collected over a long period of time, perhaps years—for example, to meet HIPAA audit requirements.

To de-archive information

- 1 On the **Functions** menu, click **Archive/De-Archive**.
The **Archive/De-Archive Manager** appears.
- 2 Click the **De-Archive** tab (see Figure 145).
- 3 Set the values as needed.
For more information, refer to Table 57.
- 4 Click the **De-Archive** button to start the de-archiving operation.
When done, the Repository Manager displays an information message.
- 5 Click **OK**.

Figure 145 Archive/De-Archive Manager, De-Archive Tab

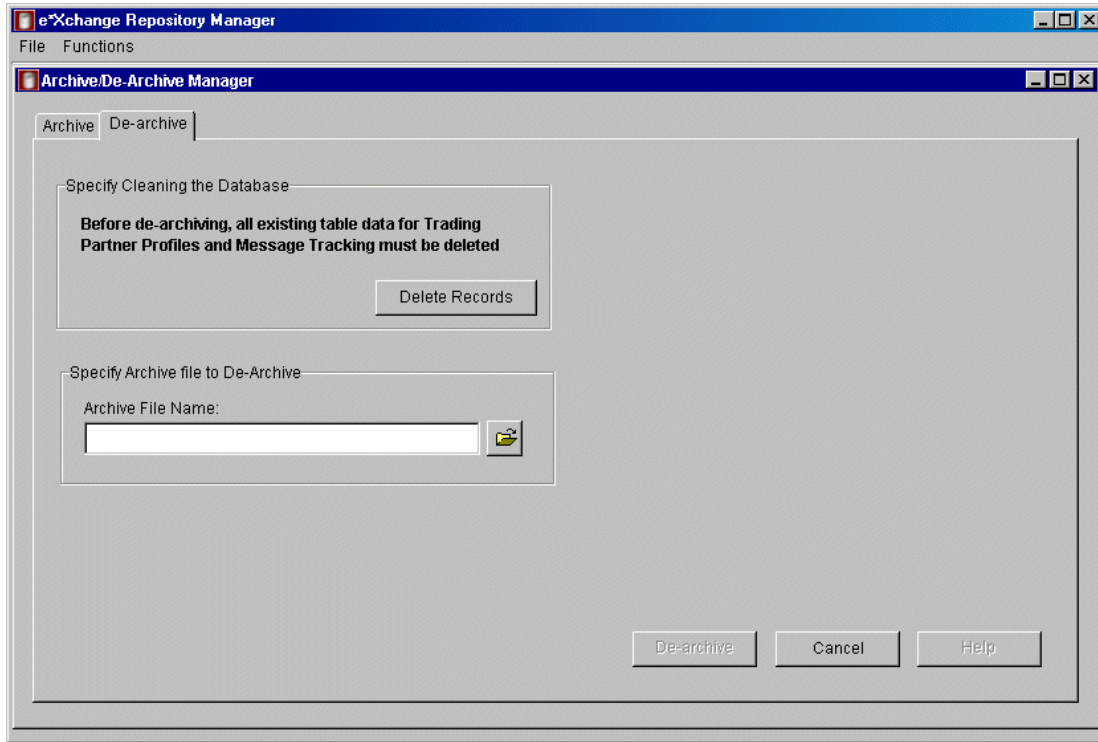


Table 57 Archive/De-Archive Manager, De-Archive Tab

Name	Description
Delete Records	You must click Delete Records before de-archiving the archive file. This ensures that the target database is empty.
Archive File Name	Specify the path for the archive file. Click on the icon to the right to access the Select Archive File dialog box, navigate to the folder if needed, and then choose the file. Note: The archive file name must be the name selected when you originally archived the information. If the archive file has been renamed, the de-archive process will not work.
De-Archive button	Click this button to start the de-archiving operation. When done, the Repository Manager displays an information message.
View Log	When the operation is complete, the View Log button appears. Click this button to view the log file. The log file is located in the folder where the archive file is located and is always named epmDearc.log . If for any reason you want to preserve a specific log file, back it up or rename it so that the next de-archive process does not overwrite the file.

Troubleshooting

This chapter provides information on resolving problems that might occur when running the e*Xchange Web interface or e*Xchange Repository Manager graphical user interfaces.

A.1 Troubleshooting the e*Xchange Repository Manager

This section lists errors you might encounter when running the e*Xchange Repository Manager.

Problem

Error in log file:

```
COM.ibm.db2.jdbc.DB2Exception: [IBM][CLI Driver][DB2/NT] SQL4304N
Java stored procedure or user-defined function "EX453.DATETOUDB",
specific name "SQL010913174148368" could not load Java class
"udbtools", reason code "". SQLSTATE=42724
```

Reason/Resolution

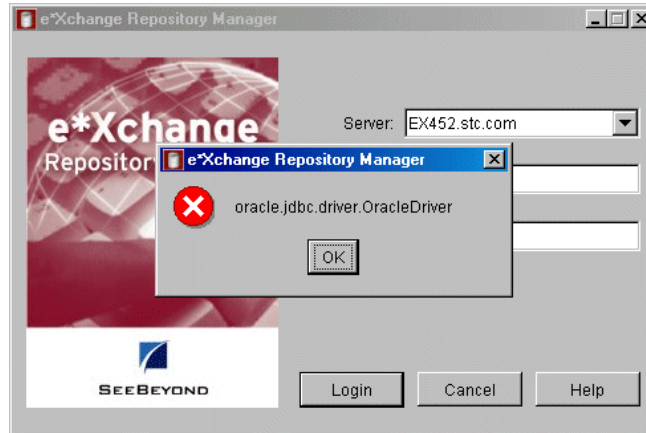
The file **udbtools.class** must be present on the server in the directory defined by the %DEBTEMPDIR% function environment variable.

Copy this file from \eXchange\eRM\DB2 to the appropriate directory on the server.

Problem

Oracle JDBC driver error when logging on (see Figure 146).

Figure 146 Oracle JDBC Driver Error



Reason/Resolution

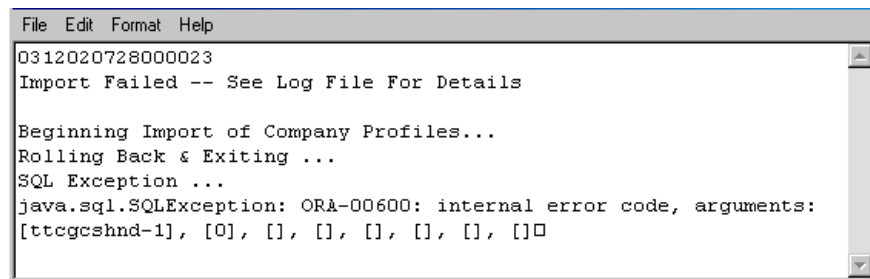
The **classes12.zip** file must be present in the `\eXchange\lib` folder.

Copy this file to the correct location. For more information, refer to the *e*Xchange Installation Guide (Installing the e*Xchange Repository Manager chapter)*.

Problem

Error in the import log file (see Figure 147).

Figure 147 Error in Import Log File



Reason/Resolution

If the server is running Oracle 9i, and the client is running Oracle 8i, you must install the Oracle 9i version of the **classes12.zip** file on the client machine.

Close the e*Xchange Repository Manager GUI, copy this file from the server to the `\eXchange\lib` folder on the client, and then restart the e*Xchange Repository Manager.

A.2 Troubleshooting the e*Xchange Web Interface

This section lists errors you might encounter with the e*Xchange Web interface, and also back-end processing problems that can be resolved via the e*Xchange Web interface.

A.2.1 Troubleshooting the e*Xchange Web Interface with DB2 UDB

This section lists errors you might encounter when running the e*Xchange Web interface with a DB2 UDB database.

Problem

Error when accessing certain fields in the Web interface:

```
COM.ibm.db2.jdbc.DB2Exception: [IBM][CLI Driver] CLI0150E Driver not capable.  
SQLSTATE=HYC00
```

Note: This error occurs when accessing fields with a BLOB or CLOB data type.

Reason/Resolution

You must run the e*Xchange e*Gate schema and the Web interface on separate computers if you are using DB2 UDB. This is because the Web interface uses JDBC and the e*Xchange e*Gate schema uses ODBC.

If you have already set them up on the same system, you can resolve the problem by editing the `%DB2TEMPDIR%/db2cli.ini` file. For more detailed information, refer to the *Creating the e*Xchange Database Schema - DB2 UDB* chapter of the *e*Xchange Installation Guide*.

Problem

Error 500 (java.lang.AbstractMethodError) when attempting to view message details in Message Tracking (see Figure 148).

Reason/Resolution

Go to the directory specified by the `%DB2TEMPDIR%/java12` environment variable and make sure there is an `inuse` file in the directory. If not, double-click the file `usejdbc2.bat`.

Figure 148 Error 500 in Message Tracking

```
Error: 500  
Location: /stcepmweb/controller.jsp  
Internal Servlet Error:  
  
javax.servlet.ServletException  
    at org.apache.jasper.servlet.JspServlet.service (JspServlet.java:399)  
    at javax.servlet.http.HttpServlet.service (HttpServlet.java:853)  
    at org.apache.tomcat.core.ServletWrapper.doService (ServletWrapper.java:404)  
    at org.apache.tomcat.core.Handler.service (Handler.java:286)  
    at org.apache.tomcat.core.ServletWrapper.service (ServletWrapper.java:372)  
    at org.apache.tomcat.core.ContextManager.internalService (ContextManager.java:797)  
    at org.apache.tomcat.core.ContextManager.service (ContextManager.java:743)  
    at org.apache.tomcat.service.connector.Ajp12ConnectionHandler.processConnection (Ajp12ConnectionHandler.java:166)  
    at org.apache.tomcat.service.TcpWorkerThread.runIt (PoolTcpEndpoint.java:416)  
    at org.apache.tomcat.util.ThreadPool$ControlRunnable.run (ThreadPool.java:498)  
    at java.lang.Thread.run (Unknown Source)  
  
Root cause:  
  
java.lang.AbstractMethodError  
    at com.stc.ePM.api.ePM_MessageTrackDetail.(ePM_MessageTrackDetail.java:91)  
    at com.stc.ePM.webint.RhMsgDetails.handleRequest (RhMsgDetails.java:99)  
    at com.stc.ePM.webint.RequestController.getNextPage (RequestController.java:143)  
    at _0002fcontroller_0002ejspcontroller_jsp_5._jspService(_0002fcontroller_0002ejspcontroller_jsp_5.java:88)  
    at org.apache.jasper.runtime.HttpJspBase.service (HttpJspBase.java:119)  
    at javax.servlet.http.HttpServlet.service (HttpServlet.java:853)  
    at org.apache.jasper.servlet.JspServlet$JspServletWrapper.service (JspServlet.java:177)  
    at org.apache.jasper.servlet.JspServlet.serviceJspFile (JspServlet.java:318)  
    at org.apache.jasper.servlet.JspServlet.service (JspServlet.java:391)
```

A.2.2 Troubleshooting the e*Xchange Web Interface with Oracle

This section lists errors you might encounter when running the e*Xchange Web interface with an Oracle database.

Problem:

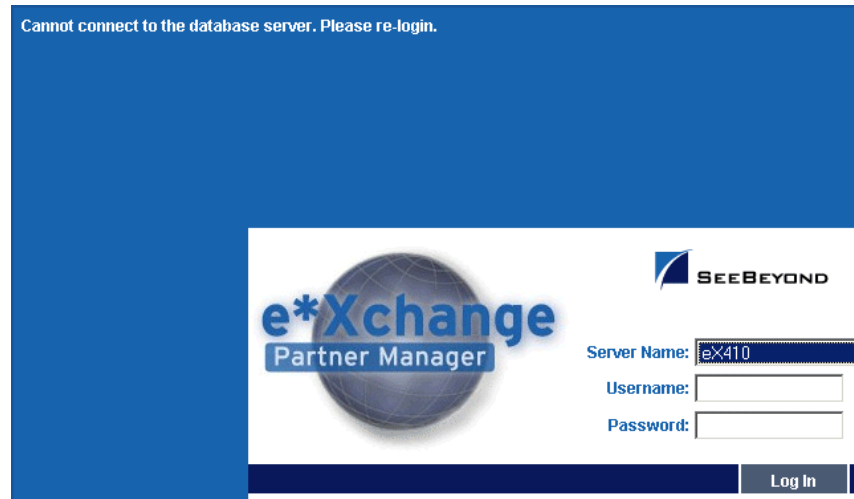
Error on login due to missing **classes12.zip** file:

Cannot connect to the database server (see Figure 149 for user interface error, Figure 150 for Tomcat error).

Reason/Resolution:

The **classes12.zip** file (normally in **\eXchange\lib**) is not in your classpath environment variable.

Copy **classes12.zip** from the Oracle JDBC path (for example, **c:\Oracle\Ora8i\jdbc\lib**) to **\eXchange\lib**, and then restart Tomcat and the e*Xchange Web interface.

Figure 149 Cannot Connect to the Database Server: Logon Error**Figure 150** Classes12.zip missing from classpath: Tomcat Error

```
Tomcat 3.2
com.stc.ePM.api.ePM_APIException:
{3}<SS0002> ePM_Session.<init><>
====> Database class <jdbc:oracle:thin:@db-host:1521:db-sid> not found
com.stc.ePM.api.ePM_APIException:
{2}<DB0003> ePM_Database.ePM_Database<>
====> Database class <jdbc:oracle:thin:@db-host:1521:db-sid> not found
com.stc.ePM.api.ePM_APIException:
{1}<DB0002> ePM_Database.connect<>
====> Database class <jdbc:oracle:thin:@db-host:1521:db-sid> not found
java.lang.ClassNotFoundException: oracle.jdbc.driver.OracleDriver
at java.net.URLClassLoader$1.run(URLClassLoader.java:200)
at java.security.AccessController.doPrivileged(Native Method)
at java.net.URLClassLoader.findClass(URLClassLoader.java:188)
at java.lang.ClassLoader.loadClass(ClassLoader.java:297)
at sun.misc.Launcher$AppClassLoader.loadClass(Launcher.java:286)
at java.lang.ClassLoader.loadClass(ClassLoader.java:253)
at java.lang.ClassLoader.loadClassInternal(ClassLoader.java:313)
at java.lang.Class.forName0(Native Method)
at java.lang.Class.forName(Class.java:120)
at com.stc.ePM.api.ePM_Database.connect(ePM_Database.java:64)
at com.stc.ePM.api.ePM_Database.ePM_Database(ePM_Database.java:48)
at com.stc.ePM.api.ePM_Session.<init><ePM_Session.java:18>
at com.stc.ePM.webhint.SessionBean.getEPMSession(SessionBean.java:207)
```

Problem:

Error when logging on to the e*Xchange Web interface due to incorrect **classes12.zip** version:

Cannot connect to the database server: Please re-login (see Figure 149 for user interface error, Figure 151 for Tomcat error).

Reason/Resolution:

If you are using Oracle 9i on the server and Oracle 8i on the client, you must copy the Oracle 9i version of **classes12.zip** to the client machine.

Shut down Tomcat, copy **classes12.zip** from the server to the **\eXchange\lib** folder on the client, and then restart Tomcat and the e*Xchange Web interface.

Figure 151 Wrong classes12.zip version: Tomcat Error

```

java.sql.SQLException: ORA-00600: internal error code, arguments: [ttcgcshnd-1], [0], [],
[], [], [], [], []
    at oracle.jdbc.dbaccess.DBError.throwSQLException(DBError.java:114)
    at oracle.jdbc.ttc7.TTIoer.processError(TTIoer.java:208)
    at oracle.jdbc.ttc7.Oall7.receive(Oall7.java:542)
    at oracle.jdbc.ttc7.TTC7Protocol.doOall7(TTC7Protocol.java:1311)
    at oracle.jdbc.ttc7.TTC7Protocol.fetch(TTC7Protocol.java:797)
    at oracle.jdbc.driver.OracleStatement.doExecuteQuery(OracleStatement.java:1608)
    at oracle.jdbc.driver.OracleStatement.doExecute(OracleStatement.java:1758)
    at oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:18
05)
    at oracle.jdbc.driver.OracleStatement.executeQuery(OracleStatement.java:410)
    at com.stc.ePM.api.ePM_OracleSpec.getOracleDateFormat(ePM_OracleSpec.java:164)
    at com.stc.ePM.api.ePM_StmtRegister.oracle_ins_stmt(ePM_StmtRegister.java:36)
    at com.stc.ePM.api.ePM_StmtRegister.<init>(ePM_StmtRegister.java:100)
    at com.stc.ePM.api.ePM_UserAccess.StatementBind(ePM_UserAccess.java:278)

```

A.2.3 Troubleshooting Tips for All Database Types

This section lists additional errors you might encounter when running the e*Xchange Web interface with any type of database.

Problem:

Error on running any jsp page (see Figure 152).

Figure 152 Tools.jar Missing from classpath

Error: 500

Location: /stcepmweb/login_form.jsp

Internal Servlet Error:

```

javax.servlet.ServletException: sun/tools/javac/Main
    at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:399)
    at javax.servlet.http.HttpServlet.service(HttpServlet.java:853)
    at org.apache.tomcat.core.ServletWrapper.doService(ServletWrapper.java:404)
    at org.apache.tomcat.core.Handler.service(Handler.java:286)
    at org.apache.tomcat.core.ServletWrapper.service(ServletWrapper.java:372)
    at org.apache.tomcat.core.ContextManager.internalService(ContextManager.java:797)
    at org.apache.tomcat.core.ContextManager.service(ContextManager.java:743)
    at org.apache.tomcat.service.connector.Ajp12ConnectionHandler.processConnection(Ajp12ConnectionHandler.java:166)
    at org.apache.tomcat.service.TcpWorkerThread.runIt(PoolTcpEndpoint.java:416)
    at org.apache.tomcat.util.ThreadPool$ControlRunnable.run(ThreadPool.java:498)
    at java.lang.Thread.run(Unknown Source)

```

Root cause:

```

java.lang.NoClassDefFoundError: sun/tools/javac/Main
    at org.apache.jasper.compiler.SunJavaCompiler.compile(SunJavaCompiler.java:128)
    at org.apache.jasper.compiler.Compiler.compile(Compiler.java:245)
    at org.apache.jasper.servlet.JspServlet.doLoadJSP(JspServlet.java:462)
    at org.apache.jasper.servlet.JasperLoader12.loadJSP(JasperLoader12.java:146)
    at org.apache.jasper.servlet.JspServlet.loadJSP(JspServlet.java:433)
    at org.apache.jasper.servlet.JspServlet$JspServletWrapper.loadIfNecessary(JspServlet.java:152)
    at org.apache.jasper.servlet.JspServlet$JspServletWrapper.service(JspServlet.java:164)
    at org.apache.jasper.servlet.JspServlet.serviceJspFile(JspServlet.java:318)
    at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:391)
    at javax.servlet.http.HttpServlet.service(HttpServlet.java:853)
    at org.apache.tomcat.core.ServletWrapper.doService(ServletWrapper.java:404)
    at org.apache.tomcat.core.Handler.service(Handler.java:286)
    at org.apache.tomcat.core.ServletWrapper.service(ServletWrapper.java:372)
    at org.apache.tomcat.core.ContextManager.internalService(ContextManager.java:797)

```

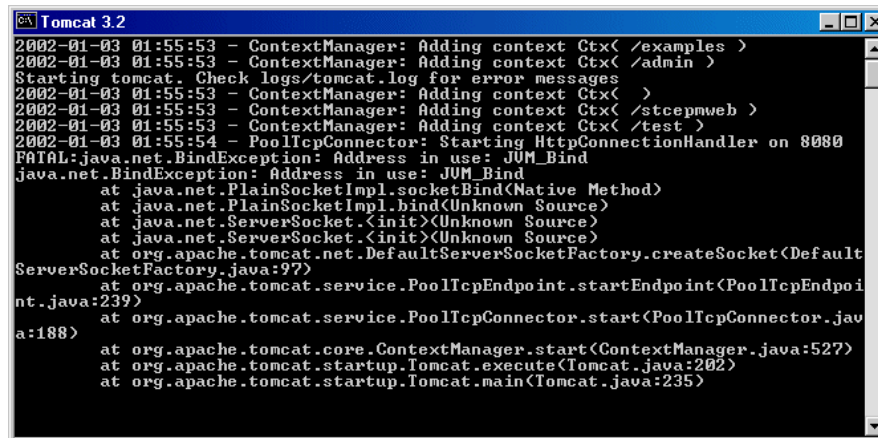
Reason/Resolution:

The **tools.jar** file is not in your classpath environment variable.

Resolution: Copy **tools.jar** from the JDBC path (for example, **c:\JDK1.3.1\lib\home**) to **\eXchange\lib**, and then restart the e*Xchange Web interface.

Problem:

Default port address is in use on your machine. The Tomcat window displays errors (see Figure 153). When trying to access the Web interface you get the message “Internal Server Error.”

Figure 153 Default Port Is In Use (Tomcat Window)

```
Tomcat 3.2
2002-01-03 01:55:53 - ContextManager: Adding context Ctx( /examples >
2002-01-03 01:55:53 - ContextManager: Adding context Ctx( /admin >
Starting tomcat. Check logs/tomcat.log for error messages
2002-01-03 01:55:53 - ContextManager: Adding context Ctx( >
2002-01-03 01:55:53 - ContextManager: Adding context Ctx( /stcepmweb >
2002-01-03 01:55:53 - ContextManager: Adding context Ctx( /test >
2002-01-03 01:55:54 - PoolTcpConnector: Starting HttpConnectionHandler on 8080
FATAL:java.net.BindException: Address in use: JVM_Bind
java.net.BindException: Address in use: JVM_Bind
    at java.net.PlainSocketImpl.socketBind(Native Method)
    at java.net.PlainSocketImpl.bind(Unknown Source)
    at java.net.ServerSocket.<init>(Unknown Source)
    at java.net.ServerSocket.<init>(Unknown Source)
    at org.apache.tomcat.net.DefaultServerSocketFactory.createSocket(Default
ServerSocketFactory.java:??)
    at org.apache.tomcat.service.PoolTcpEndpoint.startEndpoint(PoolTcpEndpoi
nt.java:239)
    at org.apache.tomcat.service.PoolTcpConnector.start(PoolTcpConnector.jav
a:188)
    at org.apache.tomcat.core.ContextManager.start(ContextManager.java:527)
    at org.apache.tomcat.startup.Tomcat.execute(Tomcat.java:202)
    at org.apache.tomcat.startup.Tomcat.main(Tomcat.java:235)
```

Reason/Resolution:

The default port number used by the e*Xchange Web interface, 8005, is in use on your machine.

Resolution: Change the default port number following the procedure below.

To change the default port number used by the e*Xchange Web interface

- 1 Open the file `\eXchange\Tomcat-3.2.1\conf\server.xml` in a text editor such as Notepad.
- 2 Search for the following text string:
`<Parameter name="port" value="8005"/>`
- 3 Change the number 8005 to another port number not in use on your system.
- 4 Save and close the file.
- 5 Open the file `\eXchange\Tomcat-3.2.1\conf\workers.properties` in a text editor such as Notepad.
- 6 Search for the following text string:
`worker.ajp12.port=8005`
- 7 Change the number 8005 to the new port number that you set in Step 3.
- 8 Save and close the file.
- 9 Restart the Apache service. For example, if you are using Windows 2000, go to the **Control Panel**, select **Administrative Tools**, select **Services**, find the entry for the Apache service, right-click, and select **Restart**.
- 10 Restart Tomcat by running the file `\eXchange\Tomcat-3.2.1\bin\startup.bat`.

11 Restart the e*Xchange Web interface.

A.2.4 Troubleshooting Tips for HIPAA

This section lists additional errors you might encounter when running HIPAA Java Collaborations, that can be resolved via the e*Xchange Web interface.

Problem:

Java exception: Collaboration Rule not found in the Registry (see Figure 154).

Figure 154 Java Exception: Collaboration Rule Not Found in the Registry

```

11:35:31.214 MNK I 2876 (monklog:406): Calling initialize()End of file reading from socket
Connection was probably closedjava.io.EOFException
com.stc.common.collabService.CollabDataException: RegistryAccessAPI (setTranslationAndCollabMaps) Given Collaboration Rule Name val_X12_004010X093_00_hipaa276_HealCareClaiStatRequ not found in the Registry. Please check the Registry using Enterprise Manager

    at com.stc.common.collabService.RegistryCollaborationRule.setTranslationAndCollabMaps(RegistryCollaborationRule.java:169)
    at com.stc.common.collabService.RegistryCollaborationRule.initialize(RegistryCollaborationRule.java:23)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.createCollabMapInfo(JavaCollabRuleExecutorImpl.java:327)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:295)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:248)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:274)
    at java.lang.reflect.Method.invoke(Native Method)
    at com.stc.common.jcsbootstrap.JavaCollaborationRule.initialize(JavaCollaborationRule.java:135)
com.stc.common.collabService.CollabConnException: RegistryCollaborationRule (setTranslationAndCollabMaps) Error during initialization of CollaborationRule information val_X12_004010X093_00_hipaa276_HealCareClaiStatRequ

    at com.stc.common.collabService.RegistryCollaborationRule.setTranslationAndCollabMaps(RegistryCollaborationRule.java:176)
    at com.stc.common.collabService.RegistryCollaborationRule.initialize(RegistryCollaborationRule.java:23)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.createCollabMapInfo(JavaCollabRuleExecutorImpl.java:327)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:295)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:248)
    at com.stc.common.collabService.JavaCollabRuleExecutorImpl.initialize(JavaCollabRuleExecutorImpl.java:274)
    at java.lang.reflect.Method.invoke(Native Method)
    at com.stc.common.jcsbootstrap.JavaCollaborationRule.initialize(JavaCollaborationRule.java:135)

11:35:31.386 MNK I 2876 (monklog:406): Returned from initialize()
11:35:31.401 MNK I 2876 (monklog:406): Resetting collaboration...
11:35:31.401 MNK I 2876 (monklog:406): JAVA_EXCEPTION : [
11:35:31.417 MNK I 2876 (monklog:391): [JavaCollabRuleExecutorImpl] Exception: com.stc.common.collabService.CollabConnE

11:35:31.433 MNK I 2876 (monklog:391): xception: RegistryCollaborationRule (setTranslationAndCollabMaps) Error during i

11:35:31.433 MNK I 2876 (monklog:391): nitialization of CollaborationRule information val_X12_004010X093_00_hipaa276_H

11:35:31.448 MNK I 2876 (monklog:406): ealCareClaiStatRequ
11:35:31.464 MNK I 2876 (monklog:406): ]
11:35:31.479 MNK E 2876 (monklog:406): >>L584:C26:"C:\eGate\client\monk_scripts\exchange\X12\ex-Validate-X12-Msg.monk"

```

Reason/Resolution:

The name of the validation Collaboration, as set up at the Message Profile level in the Web interface, must match the name of the Collaboration Rule as set up in the ewHipaaValidation e*Way in the e*Xchange schema.

For example, in the case of the HIPAA 276 Health Care Claim Status Request:

- The actual validation file name is:
val_X12_004010X093_00_hipaa276_HealCareClaiStatRequ.xxx (several file endings since each is a set of files)
- The name of the Collaboration Rule as set up in the ewHipaaValidation e*Way in the e*Xchange schema is:
validate_X12_004010X093_00_hipaa276_HealCareClaiStatRequ

- The value set up in the message profile for this message, General section, Validation Collaboration field, must be:
validate_X12_004010X093_00_hipaa276_HealCareClaiStatRequ

Resolution: Look at the name of the validation Collaboration in the ewHipaaValidation e*Way and set up the same value in the trading partner profile, Message Profile level for the specific message, in the Web interface.

Using the Validation Rules Builder

B.1 Overview

The Validation Rules Builder is a tool for converting X12 or UN/EDIFACT EDI implementation guide files into a format compatible for use with e*Xchange. This conversion tool accepts Standard Exchange Format (SEF) version 1.4 or 1.5 files and converts them into e*Gate Monk Event Type Definition (ETD) files (.ssc files) and Collaboration Rules files (.tsc files).

The Validation Rules Builder runs from a command line such as the UNIX command line or DOS.

Note: A full range of standard .ssc files for X12 and UN/EDIFACT is provided in the respective ETD Library. Each file includes the protocol name, transaction number, transaction name, and protocol version. For example, the ETD file for an X12 270 version 4020 transaction is *X12_4020_270.ssc*; the ETD file for a UN/EDIFACT version 3 control message is *contrl.ssc*.

B.2 Validation Rules Builder Files

Installation of the Validation Rules Builder includes the files listed in Table 58.

For complete installation instructions, refer to the *e*Xchange Partner Manager Installation Guide*.

Table 58 Validation Rules Builder Files

File Name	Description
ValidationBuilder.properties file	A text file containing several parameters that identify various processing options such as the locations of input and output files. Located in the ValidationRulesBuilder directory (normally <code>\eXchange\VRB</code> , but might be different depending upon your installation).

Table 58 Validation Rules Builder Files (Continued)

<p>X12_set_nnnn_desc for X12, edf_set_nnx_vn_desc for UN/EDIFACT</p>	<p>A set file (for example, X12_set_4010_desc or edf_set_99a_v4_desc) is a text file, located in the ValidationRulesBuilder directory, that provides the number, description, and ID code (for X12) or code and name (for UN/EDIFACT) for each transaction within the given X12 or UN/EDIFACT version. The file X12_set_4010_desc for X12, and set files for a number of versions of UN/EDIFACT, are provided with the installation of the Validation Rules Builder.</p> <p>You can use your own description file in place of the default; however, use the format listed below:</p> <ul style="list-style-type: none"> ▪ For X12: "NNN", "Description"\n; For example, one line might read: "104", "Air Shipment Information", "SA" ▪ For UN/EDIFACT: Three characters, the code, a space, the description, the revision number, \n; For example, one line might read: * APERAK Application error and acknowledgment message 1 2 <p>The Validation Rules Builder determines the expected file type based on the setting in the DefaultDelimiters property in the ValidationBuilder.properties file.</p> <p>The standards version is used to create the root node path in the ETD as well as the output ETD file name. You can give a set file any name and place it in any directory, as long as you specify the pathname in the ValidationBuilder.properties file. If you choose not to use this file, or if the pathname pointing to the file is incorrect, the descriptions are not included in the node paths and output file names.</p>
<p>???_sec_????_desc</p>	<p>A sec file (for example, X12_sec_4010_desc) is a text file that provides ID and name for each segment and composite within the specified version of X12 or UN/EDIFACT. The file X12_set_4010_desc for X12, and sec files for a number of versions of UN/EDIFACT, are provided with the installation of the Validation Rules Builder.</p> <p>You can use your own file in place of the default; however, use the format listed below:</p> <ul style="list-style-type: none"> ▪ For X12: "NNN", "Description"; For example, one line might read: "AAA", "Request Validation" ▪ For UN/EDIFACT, either of these: <ul style="list-style-type: none"> ♦ Four characters, the code, a space, description, \n ♦ Five characters, the code, two spaces, description, optional usage indicator, \n <p>A sample of each format is shown below: *# ARD Monetary amount function # 2000 Date value [I]</p> <p>The standards version is used to create the root node path in the ETD as well as the output ETD file name. You can give this file any name and place it in any directory, as long as you specify the pathname in the ValidationBuilder.properties file. Also, if you do not want to use this file, or if the pathname pointing to the file is incorrect, the descriptions are not included in the node paths and output file names.</p> <p>Located in the ValidationRulesBuilder directory.</p>

Table 58 Validation Rules Builder Files (Continued)

ValidationBuilder.jar	The file you execute to start the Validation Rules Builder tool. Normally located in the <code>\eXchange\VRB</code> directory.
PathtoVB.properties	A pointer that indicates where <code>ValidationBuilder.properties</code> is located. Stored in the user's home directory; for example, <code>c:\Documents and Settings\jdoe</code> for Windows 2000.
ValidationBuilder.ctl	Commits the Monk files used by the VRB Collaboration files to the e*Gate registry.

B.3 Limitations

The Validation Rules Builder currently does not support certain features, as listed below.

SEMREFS (semantic rules) section

The Validation Rules Builder does not support the following SEMREFS types:

- APPVALUE
- USAGE
- Exit routine

Currently, only the LOCALCODE type is supported.

CODES (numeric list of each element with its dictionary code value) section

The Validation Rules Builder does not support the following:

- Exclusion of characters ('-' within [])
- Partitioned codes in []
- No dictionary codes (no values before %)
- `{nnnn}` combination within [], for example as shown below:

1306=1,3,5%[(1)*{6,7,8}]+850/115///15

The asterisk (*) means that all dictionary values are in the code set. A situation where the asterisk is used, indicating that all dictionary values are used, followed by curly brackets indicating extra code values that are not from the dictionary, is not supported.

TEXT section

The Validation Rules Builder does not support rules described in the TEXT section.

Since any information in the TEXT section is free-form text and does not follow any guidelines, the VRB cannot properly parse this section.

B.4 Prerequisites for Running the Validation Rules Builder

In addition to the Validation Rules Builder, make sure the following software is installed before you attempt to convert any SEF files.

- The Java 1.3 runtime environment must be installed on the computer from which the Validation Rules Builder program is invoked.
- e*Gate Integrator must be installed to verify the output ETD files (.ssc files) and Collaboration Rules files (.tsc files).

B.5 Third-Party Implementation Guide Editors

Third-party implementation guide editors are designed specifically for the purpose of editing and converting electronic implementation guides for various eBusiness protocols to the Standard Exchange Format (SEF). These editors help make it easy to develop, migrate, print, test, and distribute EDI implementation guidelines.

Examples of third-party implementation guides are:

- EDISIM, produced by Foresight
- SpecBuilder, produced by Edifecs Commerce

When you open a file in one of these implementation guides editors, you must specify the standard being used; for example, X12. You must also specify the version and the transaction set. The third-party tool then opens the implementation guide in a table format.

With the implementation guide open, you can customize it for your own implementation of the standard. You can perform any of the following editing actions:

- Add or remove segments
- Add or remove loops
- Change repetitions
- Change the pre-loaded lists of valid coded values
- Change the formats for data in a field (data element)
- Add conditional rules; for example, "If field A is valued, then field B is required."

Once any needed editing is done, you can save the file and export it in SEF format.

You can use the third-party editor to create SEF files for all transactions in all standards used by your own company and your trading partners.

Once you have the SEF files, you can use the Validation Rules Builder to convert them to a format that can be read by e*Xchange.

B.6 Using the Validation Rules Builder

The Validation Rules Builder accepts Standard Exchange Format (SEF) version 1.4 or 1.5 files and converts them into e*Gate Integrator Event Type Definition (ETD) files (.ssc files) and Collaboration Rules files (.tsc files).

To convert electronic implementation guides into e*Xchange-compatible event type definitions and Collaboration Rules, you must complete the following steps:

- 1 Create input SEF files using a third-party implementation guide editor
- 2 Verify the Validation Rules Builder processing properties
- 3 Start the Validation Rules Builder
- 4 Verify the output event type definition and Collaboration Rules files

B.6.1. Creating Input Data Files

You can reformat EDI implementation guides into SEF format using a third-party implementation guide editor such as Edifecs (an EDI software productivity tool that allows users to reference EDI standards such as X12 and UN/EDIFACT) or EDISIM (a pre-production accelerator tool). Follow these guidelines:

- Since the Validation Rules Builder expects input files without ISA/IEA and GS/GE segments, you must remove these segments from the .SETS portion of the input SEF file if they exist.

SEF files produced with EDISIM do not include these segments, by default. However, SEF files produced with other implementation guide editors might include them, in which case you would have to remove them manually. To do this, open up the SEF file in the editor, go to the .SETS section of the file, and delete the ISA (Interchange control header), IEA (Interchange control trailer), GS (Functional Group header), and GE (Functional Group trailer) segments.

- You can include more than one transaction type in a single input SEF file. The Validation Rules Builder creates different ETD and Collaboration files for each transaction type.
- Copy or save the SEF files to a data directory of your choice.

B.6.2. Verifying Processing Properties

Before you start the Validation Rules Builder, you must verify the processing properties it will use to convert your input SEF files.

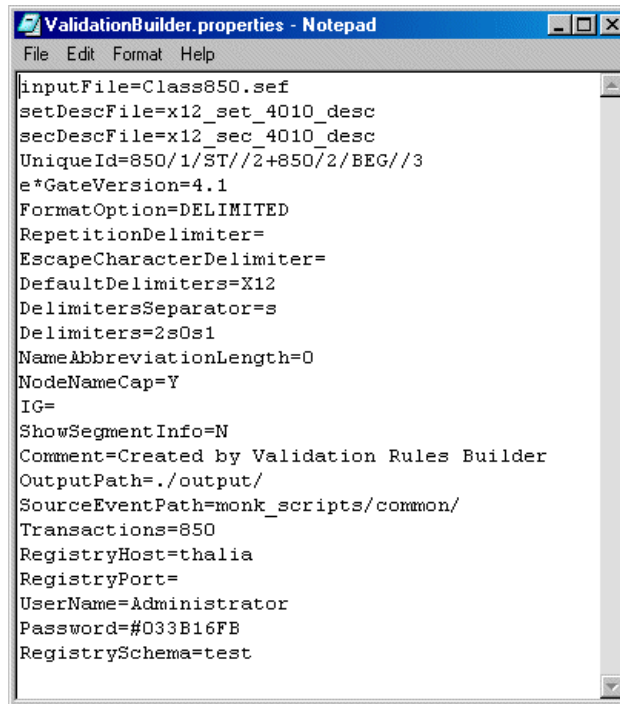
To verify the Validation Rules Builder properties file

- 1 Use a text editor to open the **ValidationBuilder.properties** file (see Figure 155).
- 2 Set or verify the file names, including paths (see [Table 59 on page 286](#)), for the following parameters:
 - ♦ inputFile

- ◆ setDescFile
 - ◆ secDescFile
 - ◆ OutputPath
- 3 Set or verify the parameters relating to the specific transaction or transactions for which you will be creating validation rules, as needed (see [Table 59 on page 286](#)), including the following:
 - ◆ setDescFile and secDescFile—Verify that you are referencing the correct files for the X12 version you are using.
 - ◆ UniqueId—Set the unique ID to a value appropriate for the transaction.
 - ◆ Transactions—Set the value to the transaction or transactions for which you will be creating validation rules.
 - ◆ Verify that the delimiters parameters are set appropriately for your installation.
 - 4 Set or verify the host parameters (see [Table 59 on page 286](#)), including the following:
 - ◆ RegistryHost
 - ◆ RegistryPort
 - ◆ UserName
 - ◆ Password
 - ◆ RegistrySchema
 - 5 Save the properties file.

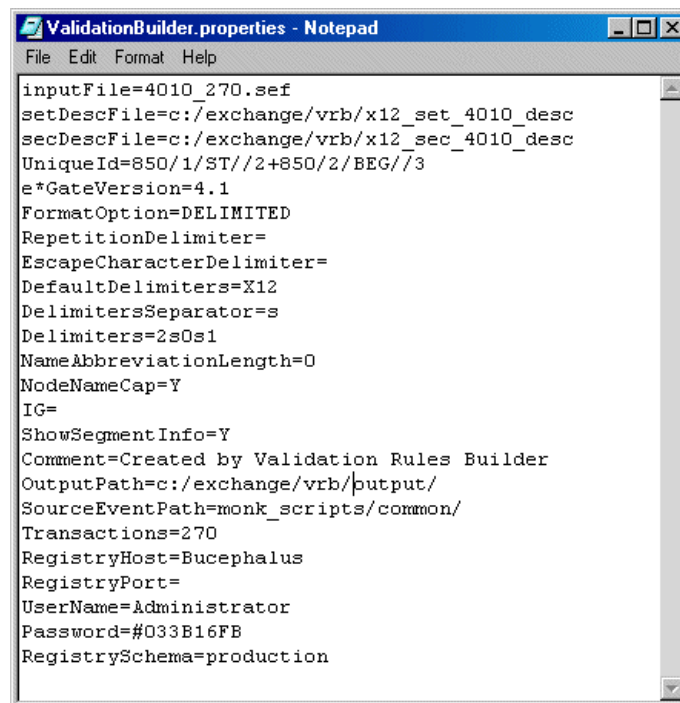
Note: *The name of the **ValidationBuilder.properties** file and the parameters you specify within it are case sensitive. Also, you must use forward slashes (/) for pathnames in the properties file regardless of whether you are running the Validation Rules Builder on Windows or UNIX.*

Figure 155 ValidationBuilder.properties Default File After Installation



```
ValidationBuilder.properties - Notepad
File Edit Format Help
inputFile=Class850.sef
setDescFile=x12_set_4010_desc
secDescFile=x12_sec_4010_desc
UniqueId=850/1/ST//2+850/2/BEG//3
e*GateVersion=4.1
FormatOption=DELIMITED
RepetitionDelimiter=
EscapeCharacterDelimiter=
DefaultDelimiters=X12
DelimitersSeparator=s
Delimiters=2s0s1
NameAbbreviationLength=0
NodeNameCap=Y
IG=
ShowSegmentInfo=N
Comment=Created by Validation Rules Builder
OutputPath=./output/
SourceEventPath=monk_scripts/common/
Transactions=850
RegistryHost=thalia
RegistryPort=
UserName=Administrator
Password=#033B16FB
RegistrySchema=test
```

Figure 156 Customized ValidationBuilder.properties File



```
ValidationBuilder.properties - Notepad
File Edit Format Help
inputFile=4010_270.sef
setDescFile=c:/exchange/vrb/x12_set_4010_desc
secDescFile=c:/exchange/vrb/x12_sec_4010_desc
UniqueId=850/1/ST//2+850/2/BEG//3
e*GateVersion=4.1
FormatOption=DELIMITED
RepetitionDelimiter=
EscapeCharacterDelimiter=
DefaultDelimiters=X12
DelimitersSeparator=s
Delimiters=2s0s1
NameAbbreviationLength=0
NodeNameCap=Y
IG=
ShowSegmentInfo=Y
Comment=Created by Validation Rules Builder
OutputPath=c:/exchange/vrb/output/
SourceEventPath=monk_scripts/common/
Transactions=270
RegistryHost=Bucephalus
RegistryPort=
UserName=Administrator
Password=#033B16FB
RegistrySchema=production
```

Table 59 ValidationBuilder.properties Parameters

Parameter Name	Description
inputFile	<p>The name of the input SEF file that will be converted when you run the Validation Rules Builder.</p> <p>You can specify the input file in the following ways:</p> <ul style="list-style-type: none"> ▪ A file name in the current directory (for example, Class850.sef) ▪ A path relative to the directory from which you start the Validation Rules Builder (for example, ../input/Class850.sef) ▪ A full path and file name (for example, d:/<eGate>/Client/ValidationRulesBuilder/Class850.sef). <p>Change the value provided, class850.sef, to an appropriate value for your operation; and make sure the corresponding input file is in the referenced directory.</p> <p>Note: If you provide only a file name, or a relative path, you will need to run the Validation Rules Builder from the directory in which the file is located, or from which the relative path is referenced.</p>
setDescFile	<p>The name of the file that associates descriptions with transaction set ID numbers. These descriptions are used to create the root node path in the ETD as well as the output ETD file name. You can enter a full path and file name, a file name in the directory from which you start the Validation Rules Builder, or a relative path starting at the Validation Rules Builder directory. The installation provides one of these files for X12 (X12_set_4010_desc, which could be used when converting 4010 files) and several for UN/EDIFACT; for example, edf_set_99b_v3_desc.</p>
secDescFile	<p>The name of the file that associates descriptions with segment codes, element/sub-element IDs, and composite IDs. The descriptions are used to create the node paths in the ETD, which are referenced from the Collaboration Rules. You can enter a full path and file name, a file name in the directory from which you start the Validation Rules Builder, or a relative path starting at the Validation Rules Builder directory. The installation provides one of these files for X12 (X12_sec_4010_desc, which could be used when converting 4010 files) and several for UN/EDIFACT; for example, edf_sec_99b_v3_desc.</p>
Uniqueld	<p>The fields that will be used as the unique identification code for each transaction generated using the output ETD.</p> <p>For detailed information on setting up the Unique ID, refer to “Working With Unique IDs” on page 289.</p>
e*Gate Version	<p>The version of the e*Gate Schema Designer you will be using to work with the output Collaboration. This value is required.</p>
FormatOption	<p>The data format of the transaction, which should be DELIMITED. This value is required.</p>
RepetitionDelimiter	<p>The character to use as a repetition delimiter. This parameter is required for the e*Gate ETD header, but the value can be empty.</p>
EscapeCharacterDelimiter	<p>The character to use as an escape delimiter. This parameter is required for the e*Gate ETD header, but the value can be empty.</p>

Table 59 ValidationBuilder.properties Parameters (Continued)

Parameter Name	Description
DefaultDelimiters	<p>The types of delimiters; one of the following:</p> <ul style="list-style-type: none"> ▪ X12 For X12 SEF files ▪ EDF For UN/EDIFACT SEF files <p>This value is also used to begin the name of the output ETD and Collaboration files, and also the ETD rootnode name. For example, if this value is X12, and the input file is Class850.sef (see Figure 155 on page 285), the output files are:</p> <p style="margin-left: 40px;">X12_850PurchaseOrder.tsc X12_850PurchaseOrder.ssc</p>
DelimitersSeparator	<p>The character you want to use to separate the delimiters that you specify on the Delimiters parameter. This value is required.</p>
Delimiters	<p>The delimiters to be used for the output ETD and Collaboration Rules files. The first delimiter separates segments, the second separates fields, and the third separates components or sub-elements. The value provided in the default file, 2s0s1, uses “s” to dynamically point to a position in the file. This indicates that the character in the third position in the message is the segment delimiter (the first position is the zero position), the character in the first position is the field delimiter, and the character in the second position is the component or sub-element delimiter. Delimiters can also be hard-coded; for example, ~s*s: indicates that you want to use a tilde for the first delimiter, an asterisk for the second delimiter, and a colon for the third delimiter.</p> <p>The character you specify for the DelimitersSeparator parameter separates the delimiter characters.</p> <p>To specify a Hex delimiter, code \xNN, where N is a digit (0–9) or a letter (A–F). To specify an Octal delimiter, code \oMNN, where M is a digit (0–3) and N is a digit (0–7). For example, a Hex parameter would look like this: Delimiters=\x21s\x2As\x1F.</p> <p>Note: The delimiters value 2s0s1 is the recommended value because it is flexible. You can change these values to characters but be sure that the characters match the delimiters used.</p> <p>An optional fourth position can be used to define a repetition separator. For more information, refer to “Setting Up a Repetition Delimiter” on page 289.</p>
NameAbbreviationLength	<p>This value determines how the name of each node is abbreviated in the output files and file names. For example, if it is set to 4, the Validation Rules Builder takes the first four letters of each word in the segment, transaction set, or data element name when creating nodes in the .ssc and .tsc files, and in the file names themselves. For example, if this parameter is set to 4, X12_850PurchaseOrder_4010.ssc is abbreviated to X12_850PurcOrde_4010.ssc; if it is set to 1, the file name is abbreviated to X12_850PO_4010.ssc. It is important that the node names are not too long since e*Gate allows a maximum of 63 characters in the node name.</p> <p>Note: The recommended value for this parameter is 4.</p> <p>If you do not want the words to be abbreviated, leave this value as 0 (the default).</p>

Table 59 ValidationBuilder.properties Parameters (Continued)

Parameter Name	Description
NodeNameCap	This value (Y or N) determines whether the Validation Rules Builder uses initial cap on each word in the names of the .ssc and .tsc files and in the node names within the files. If set to Y , the first letter of each word is capitalized in the node names and in the file names; for example, BegiOfHierTran. If set to N , it would be begiofhiertran.
IG	If you are not using HIPAA, leave this parameter empty. If you are using HIPAA, set the value of this parameter to HIPAA. This sets the Validation Rules Builder to apply an extra rule when building the ETD; if the value in the segment NM102 is 1, it checks that there is a value in element NM104.
ShowSegmentInfo	If this property is set to Y , detailed segment information is displayed when you run the Validation Rules Builder. This additional information can be useful in setting up the unique ID. The default value is N.
Comment	The main comment you want to include in the output ETD and Collaboration Rules. This parameter is required but it can be empty.
OutputPath	The path and directory where the Validation Rules Builder will place the output ETD and Collaboration files. Another copy of the files is also registered in the e*Gate Registry. You can specify the output path in two ways: <ul style="list-style-type: none"> ▪ Use a path relative to the directory from which you start the Validation Rules Builder (for example, ../output). ▪ Use a full path (for example, d:/<eGate>/Client/ValidationRulesBuilder/output). The Validation Rules Builder does not create the directory. If you want to set a path that does not currently exist, you must create it. Note: If you provide only a file name, or a relative path, you will need to run the Validation Rules Builder from the directory in which the file is located, or from which the relative path is referenced.
SourceEventPath	The pathname that you want to appear in the source comments at the beginning of the Collaboration header. The default value is taken from the setting in OutputPath. The recommended value is monk_scripts\common since that is where e*Gate normally stores the ETD and Collaboration files.
Transactions	The identification numbers of all transaction sets you want to convert. Each identification number must be separated by a comma. When you install the Validation Rules Builder, the 850 transaction is already listed. To run additional transactions, you must add unique identifiers for the transaction. For example, if you added a 270 transaction to the file in Figure 156 on page 285 , the Transactions line in the above file would read: Transactions=850,270 If a transaction set number is not listed, ETD and Collaboration Rules files are not generated for that transaction type.
RegistryHost	The name of the e*Gate registry host containing the e*Xchange schema.
RegistryPort	If needed, specify the port to be used to access the host. To use the default port, leave blank.
UserName	The user name, as defined in the e*Xchange registry schema.

Table 59 ValidationBuilder.properties Parameters (Continued)

Parameter Name	Description
Password	The password that will be required for access to the e*Gate registry. The password is associated with the UserName.
RegistrySchema	The name of the e*Xchange registry schema.

B.6.3. Setting Up a Repetition Delimiter

If you want to specify a repetition delimiter for an ETD generated by the Validation Rules Builder, you must complete the following two steps:

- 1 List the repetition delimiter position number or character as the third delimiter in the **Delimiters** property.
- 2 List either the position number or delimiter following the **RepetitionDelimiter** property.

This value must match the third value listed in the Delimiters property, as set in Step 1 above.

For example:

```
Delimiters=3s0s2s1
DelimitersSeparator=s
RepetitionDelimiter=2
```

In the above example, the character at position 2 in the incoming data is the repetition delimiter. The character at position 3 is the segment delimiter, the character at position 0 (the first character) is the field delimiter, and the character at position 1 is the sub-field delimiter.

B.6.4. Working With Unique IDs

This section provides information on setting up unique IDs.

Setting Up the Unique ID

The unique ID is a unique string by which an individual message is referenced in the database.

When setting up the ValidationBuilder.properties file to run the Validation Rules Builder, you must specify the segments from which e*Xchange will take values to composer the unique ID.

The unique ID is composed of a combination of the following, in sequence:

- transaction ID—the ID number, for example 850 for a Purchase Order.
- segment ordinal (optional)—the numerical position of the segment within the transaction. For example, within an 850 transaction, ST is the first segment, so the segment ordinal would be 1. The segment ordinal can be omitted, in which case e*Xchange will use the first occurrence of an ST segment. If there is more than one

occurrence of a specific segment within a transaction, and you want to refer to any occurrence other than the first, the segment ordinal is required.

- segment ID—the alphabetic ID code for the segment.
- element ID (optional)—the ID code for the element within the segment.
- element position—the numerical position of the element within the segment.
- optional sub-element position—the numerical position of the sub-element.

The following separators are used:

- Each identifier must be separated with a forward slash.
- Sets of identifiers for different transactions must be separated with a plus sign.
- Within the same transaction, the plus sign can be used to concatenate different values to create a multi-valued unique ID.
- A minus sign in the last field indicates element position-subelement position if a subelement is included in the unique ID.

The default **ValidationBuilder.properties** Unique ID is 850/1/ST//2+850//BEG//3. This means: For an 850 transaction, take the first element, ST, and use the second position (Transaction Set Control Number) for the first part of the unique ID. Take the BEG element, and use the third position (Purchase Order Number) for the second part of the unique ID. Concatenate these two values.

When you install the Validation Rules Builder, the properties for an 850 transaction are already set up in the file. To run additional transactions, you must add the unique identifier for each transaction. For example, if you added a 270 transaction the line in **Figure 155 on page 285** might read:

UniqueId=850/1/ST//2+850//BEG//3+270/BHT/3

Refer to Table 60 to see how the unique ID is built.

Table 60 Unique ID Examples

This specification ...	Indicates ...
270/1/BHT//3	You want to use field 3 of the BHT segment (Reference Identification) as the unique identifier for 270 transactions.
850/2/BEG//5-1	The unique identifier for 850 transactions will be the segment in the second position, BEG, element in the fifth position, sub-element 1. In this example, the unique ID would be a date. Note: You could also use 850//BEG//5-1.
271//BHT//3+850//ST//2	You want to do the following: a) use field 3 of the BHT segment (Reference Identification) as the unique identifier for 271 transactions b) use field 2 of the ST segment (Transaction Set Control Number) as the unique identifier for 850 transactions.
850//ST//2+850//BEG//3	You want to concatenate field 2 of the ST segment and field 3 of the BEG segment into a unique identifier for 850 transactions.

An example of a unique ID for UN/EDIFACT is:

APERAK/1/UNH//2+GENRAL/1/UNH//1

Additional Notes on Unique IDs

Bear the following points in mind when working with unique IDs:

- The maximum length for a unique ID is 150 characters. Extra characters are truncated automatically.
- If a specified field in the unique ID is not found in the data file, a timestamp value is used in the unique ID in place of the missing value.

Specifying Values Within Loops

You can also create a unique ID using any or all occurrences of any data element within a defined loop. For example, you can add a new section to an element in the unique ID definition. The new section defines the exact occurrence of the element that will be used to construct the unique id.

You can create a unique ID from any or all occurrences of any data element within a defined loop as follows:

- Add a new section to an element in the unique ID definition.
The new section defines the exact occurrence of the element used to construct the unique ID.
- Start the new section with @ to create either of the following two unique ID formats:
 - ♦ @ALL—take all occurrences of the element
 - ♦ @LOOP—loopname:occurrence#

In the above example, loopname is the name of a defined loop and occurrence# could be -1 for the last occurrence of the element in the loop, ALL for all occurrences of the element in the loop, or a number to refer to a specific occurrence of the element in the loop.

When occurrence# is defined as a number, if that particular occurrence# is not found in the data file, e*Xchange uses a timestamp value to construct the unique ID. No error is reported.

Refer to Table 61 to see how a unique ID using loop values is built.

Table 61 Unique ID Examples Using Values Within Loops

This specification ...	Indicates ...
940/1/ST//1+940/36/N1//4@ALL	N1 segment is inside a loop called N1LOOP. This appends all occurrences of element N104 of segment N1 (ordinal=36) of all loops to the unique ID.

Table 61 Unique ID Examples Using Values Within Loops

This specification ...	Indicates ...
940/1/ST//1+940/36/N1// 4@LOOP-N1LOOP:1	This uses the first occurrence of element N104 of segment N1 (ordinal=36) in N1LOOP to the unique ID.
940/1/ST//1+940/36/N1// 4@LOOP-N1LOOP:3	This uses the third occurrence of element N104 of segment N1 (ordinal=36) in N1LOOP to the unique ID.
940/1/ST//1+940/36/N1// 4@LOOP-N1LOOP:-1	This uses the last occurrence of element N104 of segment N1 (ordinal=36) in N1LOOP to the unique ID.
940/1/ST//1+940/36/N1// 4@LOOP-N1LOOP:ALL	This appends all occurrences of element of segment N1 (ordinal=36) in N1LOOP to the unique ID.

B.6.5. Starting the Validation Rules Builder

After you have verified that the properties are specified properly for the SEF file you want to convert, you can start the Validation Rules Builder.

To run the Validation Rules Builder

- 1 From a command line, run the following command:

```
java -jar ValidationBuilder.jar
```

Note: *If the **ValidationBuilder.jar** file is not in the current directory and is not in your path, you must precede the file name with the path so that your system can run the file (see Figure 157).*

The Validation Rules Builder reads the SEF file specified on the **inputFile** parameter in the properties file and uses it to create ETD and Collaboration Rules files.

- 2 If the conversion is successful, the Validation Rules Builder saves the appropriate ETD and Collaboration Rules files in your output directory and displays a message on your monitor (see Figure 157).

Figure 157 Running the Validation Rules Builder

```

D:\eXchange\ValidationRulesBuilder>java -Xms50M -Xmx100M -jar validationbuilder.jar
class com.stc.vrb.app.URB
Version: ValidationBuilder4.1
Build: Wed Sep 27 10:13:08 PDT 2000(Release Mode)
working on 810
Writing to file:./output/X12_810Invoice_4010.ssc
Writing to file:./output/X12_810Invoice_4010.tsc
Creating control file to commit files to e*Gate Registry
Writing to file:./output/VRB.ctl
home dir is C:\WINNT\Profiles\gwhitt
home dir is C:\WINNT\Profiles\gwhitt
Successfully acquired provider!
Read 21957bytes from file
Commit was successful
Read 296560bytes from file
Commit was successful
Successfully committed files to registry!
Returned = 810*X12_810Invoice_4010*X-4010+
D:\eXchange\ValidationRulesBuilder>_
    
```

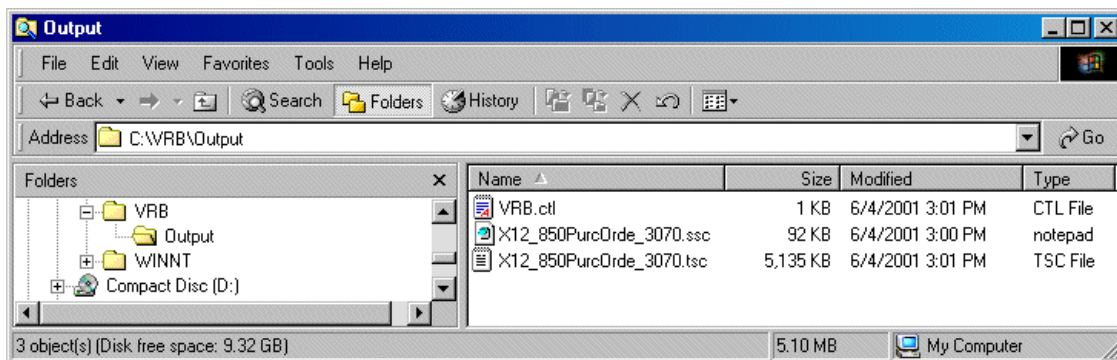
If the conversion is *not* successful, an error message appears. For information on error messages and actions to take, see Table 62.

Two sets of output files are produced:

- ◆ One set is placed in the output directory specified in the OutputPath parameter of the ValidationBuilder.properties file.
- ◆ The second set of files is automatically committed to the e*Gate Registry. The files are available the next time you run e*Gate.

The output files produced in the output directory as a result of running the Validation Rules Builder in Figure 157 are shown in Figure 158.

Figure 158 Sample Output Files



Memory Errors

If you have any problems with insufficient memory when running the Validation Rules Builder, you can add parameters that will increase the memory allocation, as shown below.

```
java -Xms50M -Xmx100M -jar ValidationBuilder.jar
```

An example of the Validation Rules Builder running with the additional parameters is shown in Figure 159.

Figure 159 Using the Validation Rules Builder Additional Memory Parameters

```

D:\eXchange\ValidationRulesBuilder>java -Xms50M -Xmx100M -jar validationbuilder.jar
class com.stc.vrb.app.URB
Version: ValidationBuilder4.1
Build: Wed Sep 27 10:13:08 PDT 2000<Release Mode>
working on 810
Writing to file:./output/X12_810Invoice_4010.ssc
Writing to file:./output/X12_810Invoice_4010.tsc
Creating control file to commit files to e*Gate Registry
Writing to file:./output/URB.ctl
home dir is C:\WINNT\Profiles\gwhitt
home dir is C:\WINNT\Profiles\gwhitt
Successfully acquired provider!
Read 21957bytes from file
Commit was successful
Read 296560bytes from file
Commit was successful
Successfully committed files to registry!
Returned = 810*X12_810Invoice_4010*X-4010+
D:\eXchange\ValidationRulesBuilder>_
    
```

Using the Debug Flag

If you want to see debug information, you can run the Validation Rules Builder with a debug flag. The debug information is displayed on the screen.

To run the Validation Rules Builder in debug mode, add the flag **-DDebug=true** to the command. For example:

```
java -DDebug=true -jar ValidationBuilder.jar
```

B.6.6. Verifying ETD and Collaboration Rules Files

To verify the output ETD and Collaboration Rules files, open the files in e*Gate.

To verify ETD and Collaboration Rules files

- 1 Open the file.
 - ◆ To open the Event Type Definition (ssc) file, use the ETD Editor.
 - ◆ To open the Collaboration Rules (tsc) file, use the Collaboration Rules Editor.
- 2 Navigate to the directory in which the Validation Rule Builder put the output files.
- 3 Using test data, process messages through the e*Gate Editor and the pertinent e*Way.

Note: There is a size limitation (approximately 6,500 lines) on files that can be opened in the e*Gate Collaboration Rules Editor. If you attempt to open a file that is larger than this, the Collaboration Rules Editor generates an error and the file does not open. If this happens, you must edit the file in another application that can open larger files and also accommodate long lines, such as the emacs text editor for UNIX, or Microsoft Word for PCs.

B.7 Troubleshooting Tips

This section includes information on the error messages generated by the Validation Rules Builder and what to do if you encounter an error.

B.7.1. General Validation Rules Builder Error Messages

You might encounter one of the error messages described in Table 62 while you are running the Validation Rules Builder.

Table 62 Validation Rules Builder Error Messages

Error Message	Reason for Error	Action
Empty INI line	The .INI section of the input SEF file does not contain any details.	Use your Edifecs or EDISIM tool to add details to the .INI section of the SEF file, and then restart the Validation Rules Builder.
Error parsing	There is an invalid entry in either the .CODES or .SEMREFS section of the input SEF file.	Use your Edifecs or EDISIM tool to add details to the .CODES or .SEMREFS sections of the SEF file, and then restart the Validation Rules Builder.
Error parsing location	There is an invalid location specified in the .CODES, .SEMREFS, .VALREFS, or .OBJVARS section of the input SEF file.	Use your Edifecs or EDISIM tool to correct the location path according to SEF specifications.
Error parsing <i>n</i> Invalid modifier	A line in the .VALLISTS section of the input SEF file does not begin with an ampersand (&) or quote (') character. <i>n</i> represents the invalid leading character found. Example: <i>Error parsing % Invalid modifier</i>	Use your Edifecs or EDISIM tool to correct the .VALLISTS line according to SEF specifications.
Error parsing SemanticRule	There is an invalid semantic rule in the .SEMREFS section of the input SEF file.	Use your Edifecs or EDISIM tool to correct the .SEMREFS semantic rule according to SEF specifications.
Error parsing transaction	One of the following is formatted incorrectly in the input SEF file: <ul style="list-style-type: none"> ▪ a segment in the .SETS section ▪ an element in the .SEGS section ▪ a sub-element in the .COMS section. 	Use your Edifecs or EDISIM tool to correct the invalid format according to SEF specifications.
Exception in thread "main" java.lang.NoClassDefFoundError: com/stc/common/registry/RegistryControlFile	The eGate.jar file is not in the appropriate location.	Copy the eGate.jar file to the \lib\ext folder for Java version 1.3; for example, \JRE\1.3.1\lib\ext.

Table 62 Validation Rules Builder Error Messages (Continued)

Error Message	Reason for Error	Action
Failed to load Main-Class manifest attribute from ValidationBuilder.jar	The Validation Rules Builder failed to load.	Check that the Validation Rules Builder is installed and that the directory containing the ValidationBuilder.jar file is referenced on the command line (see Figure 157 on page 293).
Header not found in SEF specs	A section header in the input SEF file is not recognized. For example, the .COMS header might be mistakenly specified as .CONS.	Use your Edifecs or EDISIM tool to either remove the invalid section or change the name of the section header to a name that complies with SEF specifications.
No such file or directory	The pathname that appears next to this error message is specified incorrectly in the ValidationBuilder.properties file.	Correct the pathname in the ValidationBuilder.properties file, and then restart the Validation Rules Builder.
SEF file invalid - missing xxx where <i>xxx</i> is either .SETS, .SEGS, .ELMS, or .CODES	The specified section of your input SEF file is missing.	Use your Edifecs or EDISIM tool to correct the SEF file, and then restart the Validation Rules Builder.
Transaction(s) <nnn> in properties file are not defined in sef file	The ValidationBuilder.properties file is missing the transaction code for transactions in the SEF file.	Add the transaction number to the Transactions parameter in the ValidationBuilder.properties file, and then restart the Validation Rules Builder.
UniqueID property <path> is invalid! Wrong number of path components.	The UniqueID parameter in the ValidationBuilder.properties file is not specified correctly; there are too few or too many elements in the parameter list.	Correct the UniqueID parameter in your ValidationBuilder.properties file, and then restart the Validation Rules Builder.
Uniqueid property <uidPath> is invalid! Does not include path for transaction nnn	The Unique ID parameter in the ValidationBuilder.properties file does not contain a specification that corresponds to a transaction in the input SEF file.	Add the appropriate specification to the UniqueID parameter in your ValidationBuilder.properties file, and then restart the Validation Rules Builder.
Uniqueid property is invalid! Cannot include unused segment <segCode>	A segment that is marked as unused in the input SEF file is referenced on the UniqueID parameter in the ValidationBuilder.properties file. Thus, the path for this segment is invalid and the segment is not included in the output ETD.	Change the UniqueID parameter in your ValidationBuilder.properties file to include only those segments that are “used” in the input SEF file.

Table 62 Validation Rules Builder Error Messages (Continued)

Error Message	Reason for Error	Action
Uniqueld property <nnn.xxx.n> is invalid! Does not include path for transaction <nnn> Unable to complete collaboration	A unique ID sequence is not specified for the transaction in the ValidationBuilder.properties file	Add the appropriate specification to the UniqueID parameter in your ValidationBuilder.properties file, and then restart the Validation Rules Builder.
Version not specified	The .VER section of the input SEF file does not contain a version number.	Use your Edifecs or EDISIM tool to include a version number in the .VER section of the input SEF file.
Unable to complete processing your file. Out of memory! Please rerun tool with -Xms50M -Xmx100M flags following java command. These flags give the tool more memory to process your file.	The java virtual machine has run out of memory and cannot convert the SEF file.	Restart the Validation Rules Builder, but this time, add the -Xms50M -Xmx100M flags to the end of the command sequence.

B.7.2. Validation Rules Builder Error Messages for UN/EDIFACT

If there are multiple errors, each error is separated by a tilde (~).

If there are errors, they are stored in the global error_data string buffer, and the global variable error is set to #t.

The global variable error tells the calling function if errors are found by the validation script. If error is #t, at least one error was found by the validation script for the data. If there are no errors, the value for error is #f (boolean false).

An example of an error data string is shown below.

```
"39^DTM^3^1^2^1~37^UNT^9^1^^1"
```

This example includes two separate errors, with the following meanings:

Table 63 Sample UN/EDIFACT VRB Error String

String	Meaning
39^DTM^3^1^2^1	The first occurrence of the second sub-element of the first element in the third segment (DTM) has a value that is too long.
37^UNT^9^1^^1	The first occurrence of the first element in the ninth segment (UNT) has an invalid type (expects all numeric).

If you are using both UN/EDIFACT and X12, make sure the following properties in the **ValidationBuilder.properties** file are correct before running the VRB:

- DefaultDelimiters (set to X12 or EDF)
- setDescFile (set_4010_desc for X12 4010 or edf_set_00b_desc for EDF 00b)
- secDescFile (sec_4010_desc for X12 4010 or edf_sec_00b_desc for EDF 00b)
- inputFile

The error messages specific to UN/EDIFACT are listed in Table 64.

Table 64 Validation Rules Builder Error Messages for UN/EDIFACT

Error Message	Reason for Error	Action
12 = INVALID_VALUE	Invalid date or time.	Put date/time in the correct format as shown below: Date: YYYYMMDD or YYMMDD Time: HHMM , HHMMSS , HHMMSSD , or HHMMSSDD
13 = MISSING	Mandatory or conditionally required elements are not present.	Put in the required element.
21 = INVALID_CHAR	Invalid codes.	Use a code from the code list.
37 = INVALID_TYPE	Invalid elements that are not supposed to be date or time formats.	Change the element so that it matches the specified type.
39 = TOO_LONG	Length of element exceeds specified limit.	Shorten the element.
40 = TOO_SHORT	Length of element does not meet specified minimum length.	Increase the length of the element.

e*Xchange Database Tables

This appendix contains information about the e*Xchange database tables used to generate reports.

Information is provided for each of the following tables:

- [“ES_MTRK_INB” on page 300](#)
- [“ES_MTRK_OUTB” on page 302](#)
- [“ES_WAITING_ACK” on page 304](#)
- [“ES_MTRK_ERROR” on page 305](#)
- [“ES_MTRK_OUTB_DATA” on page 306](#)
- [“ES_MTRK_EXT_HDR” on page 307](#)
- [“ES_MTRK_AUDIT” on page 307](#)
- [“ES_MSG_STORAGE” on page 308](#)
- [“ES_MTRK_EXT_DET” on page 309](#)
- [“ES_OUT_QUEUE” on page 309](#)
- [“ES_MTRK_INB_DATA” on page 310](#)
- [“ES_EXT_HDR” on page 310](#)
- [“ES_EXT_DETAIL” on page 311](#)
- [“ES_EXT_DATA” on page 312](#)
- [“ES_MSG_ASCII” on page 312](#)
- [“ES_TPIC” on page 313](#)
- [“ES_TPTS” on page 314](#)
- [“ES_MSG_SECURITY” on page 315](#)
- [“ES_TPCAT” on page 316](#)
- [“ES_TPH” on page 316](#)
- [“ES_COMPANY” on page 317](#)
- [“ES_MSG_BINARY” on page 317](#)

To find, for example, application references for the EDIFACT Message Profile, consult the ES_EXT_DETAIL and ES_EXT_DATA tables.

C.1 e*Xchange Tables

C.1.1. ES_MTRK_INB

The ES_MTRK_INB table stores information about all inbound messages from Trading Partners, whether they are requests, responses, or positive or negative functional acknowledgments.

The e*Xchange database stores compressed messages in ES_MSG_BINARY format and uncompressed messages in ES_MSG_ASCII format. ES_MTRK_INB references these messages, stored in other tables, via the MSG_STORAGE_ID table.

Primary Key: MTRK_INB_ID

Foreign Keys:

- ORIG_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- ACK_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- RAW_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- ENV_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)

Table 65 ES_MTRK_INB

Parameter	Name/Definition	Data Type	Required?	Length
MTRK_INB_ID	The primary key of the record inserted into the table.	Numeric	Y	10,0
ES_ID	The ID of the Trading Partner profile record with which this record is associated, in either the ES_TPIC (for a B2B protocol) or ES_TPTS (for a message profile) table.	Numeric	Y	10,0
ES_OPT	This indicates the Trading Partner profile table referenced by the value in the ES_ID column. If ES_OPT is TS then ES_ID points to a record in ES_TPTS. If ES_OPT is IC then ES_ID points to a record in the ES_TPIC table.	Varchar	Y	2
UNIQUE_ID	The unique identifier of the specific message. This unique identifier could come from either the body of the message or a value from the message envelope.	Varchar	Y	50
ORIG_MSG_ID (foreign key)	This column points to the record in the ES_MSG_STORAGE table that identifies where the complete inbound message is stored.	Numeric	Y	10,0

Table 65 ES_MTRK_INB (Continued)

Parameter	Name/Definition	Data Type	Required?	Length
MSG_RCPT_TM	The date and time at which the message was received.	Datetime	Y	
RTN_RCPT	This field stores Y or N to indicate whether the Trading Partner expects a return receipt when the message is received.	Char	Y	1
ACK_QUE_TM	If the value in RTN_RCPT is Y, this field indicates the date and time at which the acknowledgment was stored in the ES_OUT_QUEUE message queue.	Datetime	N	
ACK_MSG_ID (foreign key)	If the value in RTN_RCPT is Y, this field indicates the ID of the record in the ES_MSG_STORAGE table that identifies where the acknowledgment message is stored.	Numeric	N	10,0
RAW_MSG_ID (foreign key)	This column points to the record in the ES_MSG_STORAGE table that is in raw format; that is, the internal format of the message before it is translated to an eBusiness protocol format.	Numeric	N	10,0
ENV_MSG_ID (foreign key)	This column points to the record in ES_MSG_STORAGE that identifies where the enveloped message is stored.	Numeric	N	10,0
ERROR_DATA	This field stores Y or N to indicate whether there are errors associated with the message. If there are errors, the information is stored in ES_MTRK_ERROR; the DIRECTION column indicates that the message is inbound, and the MTRK_MSG_ID references this record in ES_MTRK_INB.	Char	Y	1
CREATED_BY	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"	Varchar	Y	15
CREATED_TIME	Creation date and time as generated automatically by the system in format determined by your database settings.	Varchar	Y	22

C.1.2. ES_MTRK_OUTB

The ES_MTRK_OUTB table stores information about outbound messages. Any message, whether it is an original outbound message being sent to a Trading Partner or an outbound response to an inbound message, is added to this table.

Primary Key: MTRK_OUTB_ID

Foreign Keys:

- ORIG_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- ACK_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- ENV_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)
- RAW_MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)

Table 66 ES_MTRK_OUTB

Parameter	Name/Definition	Data Type	Required?	Length
MTRK_OUTB_ID	The primary key of the table.	Numeric	Y	10,0
ES_ID	The ID of the Trading Partner profile record with which this record is associated, in either the ES_TPIC (for a B2B protocol) or ES_TPTS (for a message profile) table.	Numeric	Y	10,0
ES_OPT	This indicates the Trading Partner profile table with which the record is associated. Identifies which table the ES_ID column value points to. If ES_OPT is TS then ES_ID points to a record in ES_TPTS. If ES_OPT is IC then ES_ID points to a record in the ES_TPIC table.	Varchar	Y	2
UNIQUE_ID	The unique identifier of the specific message. This unique identifier could come from either the body of the message or a value from the message envelope.	Varchar	Y	50
TRAN_TYPE	The eBusiness protocol used for the message: X12, UN/EDIFACT, RosettaNet, or CIDX.	Varchar	Y	15
TRAN_MODE	The transaction mode (B for Batch or I for Interactive).	Char	Y	1
ORIG_MSG_ID (foreign key)	This column points to the record in the ES_MSG_STORAGE table that identifies where the message (as received by e*Xchange) is stored.	Numeric	Y	10,0

Table 66 ES_MTRK_OUTB (Continued)

Parameter	Name/Definition	Data Type	Required?	Length
ENV_MSG_ID	This column points to the record in ES_MSG_STORAGE that identifies where the message (enveloped and ready to be sent to the Trading Partner) is stored.	Numeric	N	10,0
RAW_MSG_ID (foreign key)	This column points to the record in the ES_MSG_STORAGE table that is in raw format; that is, the internal format of the message before it is translated to an eBusiness protocol format.	Numeric	N	10,0
MSG_SEND_TM	The date and time at which the message was sent the first time.	Datetime	N	
RTN_RCPT	This field stores Y or N to indicate whether a return receipt is expected when this message is sent.	Char	Y	1
ACK_TM	The date and time at which the acknowledgment message was received.	Datetime	N	
ACK_MSG_ID (foreign key)	The ID of the reciprocating inbound acknowledgment message for this outbound message (if an acknowledgment has been received), identified by ENV_MSG_ID.	Numeric	N	10,0
SEND_CNT	The number of times this message has been sent.	Numeric	Y	5,0
LAST_SEND_TM	The date and time the last resend occurred. If the message has only been sent once, this has the same value as MSG_SEND_TM; however, when a message is resent, LAST_SEND_TM is updated.	Datetime	N	
ERROR_DATA	This field stores Y or N to indicate whether there are errors associated with the message. The error messages are stored in ES_MTRK_ERROR and will point to this record in ES_MTRK_INB.	Char	Y	1
CREATED_BY	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"	Varchar	Y	15
CREATED_TIME	Creation date and time as generated automatically by the system in format determined by your database settings.	Varchar	Y	22

Table 66 ES_MTRK_OUTB (Continued)

Parameter	Name/Definition	Data Type	Required?	Length
RESP_ID	The tpts_id (message profile identifier) or tpic_id (B2B protocol identifier) for the expected response.	Numeric	N	10,0

C.1.3. ES_WAITING_ACK

The ES_WAITING_ACK table stores information about messages that have been sent and are waiting for an acknowledgment from the Trading Partner.

When the expected acknowledgment is received from the Trading Partner, the record in this table is deleted.

If the maximum number of retries occurs without an acknowledgment being received, the information is removed from this table. An error record is created in ES_MTRK_ERROR, and an error is recorded in the ERROR_DATA column of the ES_MTRK_OUTB table.

Primary Key: WAITING_ACK_ID

Foreign Key: MTRK_OUTB_ID (correlates to MTRK_OUTB_ID in ES_MTRK_OUTB)

Table 67 ES_WAITING_ACK

Parameter	Name/Definition	Data Type	Required?	Length
WAITING_ACK_ID	The primary key of the table.	Serial	Y	
MTRK_OUTB_ID	The record ID of the associated ES_MTRK_OUTB record.	Numeric	Y	10,0
NEXT_SEND_TM	The date and time at which the message will be sent out for the next retry if an acknowledgment is not received.	Datetime	Y	
ACK_RSP_TM_S	The timeout period, expressed in seconds. For example, if the user interface is set to resend every 5 minutes, the ACK_RSP_TM_S is 300.	Numeric	Y	10,0
SEND_CNT	The number of times that the message has been sent.	Numeric	Y	5,0
ACK_RSP_RETRY_MAX	The number of times the message will be sent before an error is logged.	Number	Y	5,0
COMM_SEND_STATUS	A status value that shows if an HTTP post was successful for either AS2 or RosettaNet 2.0. If set to F , the HTTP post returned a status code of 300 or greater, which means the post failed. This status is for communication protocol resends only.	Varchar	N	2,15

Table 67 ES_WAITING_ACK (Continued)

Parameter	Name/Definition	Data Type	Required?	Length
COMM_RESEND_CNT	The communication protocol resend count used for AS2 or RosettaNet 2.0 in terms of HTTP posts. If a message fails to be posted, this count is incremented on resend.	Number	Y	5
CREATED_BY	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"	Varchar	Y	15
CREATED_TIME	Creation date and time as generated automatically by the system in format determined by your database settings.	Varchar	Y	22

C.1.4. ES_MTRK_ERROR

The ES_MTRK_ERROR table stores information about errors that have been generated relating to messages; for example, if a message failed validation or did not receive an expected acknowledgment.

Primary Key: MTRK_ERROR_ID

Foreign Keys: None

Table 68 ES_MTRK_ERROR

Parameter	Name/Definition	Data Type	Required?	Length
MTRK_ERROR_ID	The primary key of the table.	Numeric	Y	10,0
MTRK_MSG_ID	The ID of the record containing the error; MTRK_INB_ID in ES_MTRK_INB for an inbound message or MTRK_OUTB_ID in ES_MTRK_OUTB for an outbound message.	Numeric	Y	10,0
DIRECTION	The direction of the message: I for inbound or O for outbound. This indicates whether MTRK_MSG_ID is pointing to a record in ES_MTRK_INB (for inbound) or ES_MTRK_OUTB (for outbound).	Char	Y	1
ERROR_NO	The standard error number, such as 024 or 019. This correlates to an error number set up in the ERROR_NO column of the ES_MSG_ERROR table.	Numeric	Y	10,0
ERROR_DETAIL	Information generated by the system about the error.	Varchar	Y	100

Table 68 ES_MTRK_ERROR (Continued)

Parameter	Name/Definition	Data Type	Required?	Length
CREATED_BY	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"	Varchar	Y	15
CREATED_TIME	Creation date and time as generated automatically by the system in format determined by your database settings.	Varchar	Y	22

C.1.5. ES_MTRK_OUTB_DATA

The ES_MTRK_OUTB_DATA table stores information about outbound data. Outbound data includes messages being sent to a Trading Partner and outbound responses to an inbound message.

Primary Key: MTRK_EXT_D_ID

Foreign Keys:

- MTRK_OUTBD_ID (correlates to MTRK_OUTBD_ID in ES_MTRK_OUTBD)
- MTRK_EXT_DET_ID (correlates to MTRK_EXT_DET_ID in ES_MTRK_EXT_DET)

Table 69 ES_MTRK_OUTB_DATA

Column Name	Data Type	Column Description
MTRK_EXT_D_ID	NUMBER(10)	The primary key of the table.
MTRK_EXT_DET_ID (foreign key)	NUMBER(10)	The ID for extended message detail.
MTRK_OUTB_ID (foreign key)	NUMBER(10)	The ID associated with an outbound message.
MTRK_DATA_VALUE	VARCHAR2(255)	A pointer to the actual data in the outbound message.
PID	VARCHAR2(50)	The process identifier number generated by the operating system and used for locking during fast batch operations.

C.1.6. ES_MTRK_EXT_HDR

The ES_MTRK_EXT_HDR table stores extended header information for messages sent between Trading Partners.

Primary Key: MTRK_EXT_HDR_ID

Foreign Keys: None

Table 70 ES_MTRK_EXT_HDR

Column Name	Data Type	Column Description
MTRK_EXT_HDR_ID	NUMBER(10)	The primary key of the table.
ES_OPT	CHAR(2)	The profile type (company or Trading Partner).
TRAN_TYPE	VARCHAR(15)	The transaction type (X12, UN/EDIFACT, RosettaNet, or CIDX).
VERSION	VARCHAR2(20)	The version of the transaction type.
DISPLAY_NAME	VARCHAR2(30)	The display name associated with the transaction type.
DIRECTION	CHAR(1)	Inbound (I) or Outbound (O).
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.7. ES_MTRK_AUDIT

The ES_MTRK_AUDIT table stores information about the message tracking access log.

Primary Key: AUDIT_ID

Foreign Key: MSG_ID (correlates to MSG_STORAGE_ID in ES_MSG_STORAGE)

Table 71 ES_MTRK_AUDIT

Column Name	Data Type	Column Description
AUDIT_ID	NUMBER(10)	The primary key of the table.
MSG_ID (foreign key)	NUMBER(10)	The message ID viewed by the user.
MSG_TYPE	CHAR(4)	Message type (ORIG, ACK, ENV, or RAW)
MTRK_ID	NUMBER(10)	The message tracking ID.
DIRECTION	CHAR(1)	Inbound (I) or Outbound (O).

Table 71 ES_MTRK_AUDIT (Continued)

Column Name	Data Type	Column Description
ES_ID	NUMBER(10)	The ID of the Trading Partner profile record with which this record is associated, in either the ES_TPIC (for a B2B protocol) or ES_TPTS (for a message profile) table.
ES_OPT	CHAR(2)	The Trading Partner profile table referenced by the value in the ES_ID column. If ES_OPT is TS, then ES_ID points to a record in ES_TPTS. If ES_OPT is IC, then ES_ID points to a record in ES_TPIC.
USER_ID	CHAR(15)	User ID of creator.
CREATED_TIME	DATE	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.8. ES_MSG_STORAGE

The ES_MSG_STORAGE table indexes the message storage database.

Primary Key: MSG_STORAGE_ID

Foreign Keys: None

Table 72 ES_MSG_STORAGE

Column Name	Data Type	Column Description
MSG_STORAGE_ID	NUMBER(10)	The primary key of the table.
COMPRESSED	VARCHAR2(2)	Whether a message is compressed (SY for Yes with Security, SN for No Security, B for binary uncompressed, Y for binary compressed, or N for No compression, which routes to the ASCII table).
MSG_ID	NUMBER(10)	The message ID.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.9. ES_MTRK_EXT_DET

The ES_MTRK_EXT_DET table stores extended detail about particular columns.

Primary Key: MTRK_EXT_DET_ID

Foreign Key: MTRK_EXT_HDR_ID (correlates to MTRK_EXT_HDR_ID in ES_MTRK_EXT_HDR)

Table 73 ES_MTRK_EXT_DET

Column Name	Data Type	Column Description
MTRK_EXT_DET_ID	NUMBER(10)	The primary key of the table.
MTRK_EXT_HDR_ID (foreign key)	NUMBER(10)	This column points to the record in ES_MTRK_EXT_HDR where associated header information is stored.
COL_NAME	VARCHAR2(75)	The column name.
COL_DSP_NAME	VARCHAR2(75)	The column name as displayed in the web interface description for this field.
COL_TYPE	CHAR(2)	The column type. Typically C for Character, but seldom used.
COL_REQ	CHAR(1)	Whether the column is required (Y or N).
MAX_SIZE	NUMBER(3)	Maximum column width in characters.
MIN_SIZE	NUMBER(3)	Minimum column width in characters.
ENABLED	CHAR(1)	Whether the column is enabled (Y or N).
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.10. ES_OUT_QUEUE

The ES_OUT_QUEUE table stores information about outbound messages.

Primary Key: QUEUE_ID

Foreign Keys: None

Table 74 ES_OUT_QUEUE

Column Name	Data Type	Column Description
QUEUE_ID	NUMBER(10)	The primary key.
MSG_STORAGE_ID	NUMBER(10)	The message storage ID number.
MTRK_OUTB_ID	NUMBER(10)	The ID number assigned to the message by the outbound queue.

Table 74 ES_OUT_QUEUE (Continued)

Column Name	Data Type	Column Description
SEND_TIME	DATE	When the message was sent.
AUTO_DELETE	CHAR(1)	Whether auto delete functionality is enabled (Y or N).
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.11.ES_MTRK_INB_DATA

The ES_MTRK_INB_DATA table stores information about the tracking of inbound message data.

Primary Key: MTRK_EXT_D_ID

Foreign Keys:

- MTRK_INB_ID (correlates to MTRK_INB_ID in ES_MTRK_INB)
- MTRK_EXT_DET_ID (correlates to MTRK_EXT_DET_ID in ES_MTRK_EXT_DET)

Table 75 ES_MTRK_INB_DATA

Column Name	Data Type	Column Description
MTRK_EXT_D_ID	NUMBER(10)	The primary key of the table.
MTRK_EXT_DET_ID	NUMBER(10)	The ID for extended detail.
MTRK_INB_ID	NUMBER(10)	The ID for the inbound message.
MTRK_DATA_VALUE	VARCHAR2(255)	A pointer to the data in the inbound message.

C.1.12.ES_EXT_HDR

The ES_EXT_HDR table stores information about the Trading Partner profile.

Primary Key: EXT_HDR_ID

Foreign Keys: None

Table 76 ES_EXT_HDR

Column Name	Data Type	Column Description
EXT_HDR_ID	NUMBER(10)	The primary key of the table.
SYS_OPT_TYPE	CHAR(2)	IC, which routes to the ES_TPIC table, or TS, which routes to the ES_TPTS table.

Table 76 ES_EXT_HDR (Continued)

Column Name	Data Type	Column Description
TRAN_TYPE	VARCHAR2(15)	The transaction type (X12, UN/EDIFACT, RosettaNet, or CIDX).
DISPLAY_NAME	VARCHAR2(30)	The name as displayed in the web interface.
VERSION	VARCHAR2(20)	The version of the transaction type.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.13.ES_EXT_DETAIL

The ES_EXT_DETAIL table stores extended detail about the Trading Partner profile.

Primary Key: EXT_DET_ID

Foreign Key: EXT_HDR_ID (correlates to EXT_HDR_ID in ES_EXT_HDR)

Table 77 ES_EXT_DETAIL

Column Name	Data Type	Column Description
EXT_DET_ID	NUMBER(10)	The primary key.
EXT_HDR_ID (foreign key)	NUMBER(10)	The extended header ID.
COL_NAME	VARCHAR2(75)	The column name as used internally by the e*Xchange engine.
COL_DSP_NAME	VARCHAR2(75)	The column name as displayed in the web interface. For example, in an Inbound 4010 X12 message, the column display name is "ISA401 Author Information Qualifier."
COL_TYPE	CHAR(2)	The column type. Typically C for Character, but seldom used.
COL_REQ	CHAR(1)	Whether the column is required (Y or N).
DEF_VALUE	VARCHAR2(255)	The default value of the Trading Partner profile, for example, "00" in an Inbound 4010 X12 message.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"

Table 77 ES_EXT_DETAIL

Column Name	Data Type	Column Description
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.14.ES_EXT_DATA

The ES_EXT_DATA table stores information about data in the Trading Partner profile.

Primary Key: EXT_DATA_ID

Foreign Key: EXT_DET_ID (correlates to EXT_DET_ID in ES_EXT_DETAIL)

Table 78 ES_EXT_DATA

Column Name	Data Type	Column Description
EXT_DATA_ID	NUMBER(10)	The primary key.
EXT_DET_ID (foreign key)	NUMBER(10)	The detail ID.
SYS_OPT_TYPE	CHAR(2)	IC, which routes to the ES_TPIC table, or TS, which routes to the ES_TPTS table.
ES_ID	NUMBER(10)	The Trading Partner profile ID, either TPIC or TPTS.
EXT_DATA_VALUE	VARCHAR2(255)	The actual data.
PID	VARCHAR2(250)	The process identifier number generated by the operating system and used for extended attribute locking.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.15.ES_MSG_ASCII

The ES_MSG_ASCII table stores information about ASCII-format (uncompressed) messages.

Primary Key: MSG_ID

Foreign Keys: None

Table 79 ES_MSG_ASCII

Column Name	Data Type	Column Description
MSG_ID	NUMBER(10)	The primary key.

Table 79 ES_MSG_ASCII (Continued)

Column Name	Data Type	Column Description
MSG_PARENT_ID	NUMBER(10)	A pointer to the message storage ID.
MSG_CONTENT	LONG	The actual message.
CREATED BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.16. ES_TPIC

The ES_TPIC table stores information about the profile (B2B protocol) associated with a particular Trading Partner.

Primary Key: TPIC_ID

Foreign Key: TPH_ID (correlates to TPH_ID in ES_TPH)

Table 80 ES_TPIC

Column Name	Data Type	Column Description
TPIC_ID	NUMBER(10)	The primary key.
TPH_ID (foreign key)	NUMBER(10)	The Trading Partner profile ID.
NAME	VARCHAR2(35)	The name of the container or envelope.
TRAN_TYPE	VARCHAR2(15)	The eBusiness protocol used for the message: X12, UN/EDIFACT, RosettaNet, or CIDX.
VERSION	VARCHAR2(20)	The version of the transaction type.
DIRECTION	CHAR(1)	Inbound (I) or Outbound (O).
RTN_RCPT	CHAR(1)	Return receipt (Y or N) on message sending.
TEST_IND	CHAR(1)	This column is not currently used.
SEC_KEY_TYPE	VARCHAR(25)	Security key type.
COMM_PORT	VARCHAR2(15)	Communication port.
LOGICAL_NAME	VARCHAR2(255)	Logical name of the Trading Partner.
FILE_NAME	VARCHAR2(255)	The full local path of the file as recorded in the e*Xchange schema.
USER_NAME	VARCHAR2(50)	The logged-on user, usually the person who created the database.

Table 80 ES_TPIC (Continued)

Column Name	Data Type	Column Description
PASSWORD	VARCHAR2(50)	The alphanumeric password automatically generated by FTP configuration settings.
HOST	VARCHAR2(50)	The name of the computer on which the e*Xchange schema runs.
PORT	VARCHAR2(20)	The number of the port used for FTP configuration.
STATUS	CHAR(1)	Active (A) or Inactive (I)
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.17.ES_TPTS

The ES_TPTS table stores information about Trading Partner message protocol types. It may be considered an "inner envelope" to the "outer envelope" represented by ES_TPIC.

Primary Key: TPTS_ID

Foreign Key: TPIC_ID (correlates to TPIC_ID in ES_TPIC)

Table 81 ES_TPTS

Column Name	Data Type	Column Description
TPTS_ID	NUMBER(10)	Primary key.
TPIC_ID (foreign key)	NUMBER(10)	The B2B protocol ID.
NAME	VARCHAR2(100)	The user-defined profile name.
ALT_ID	VARCHAR2(50)	The alternate ID, which can be used to initiate processing in cases where the rest of the message has already been translated.
VERSION	VARCHAR2(20)	The version of the transaction type.
TRAN_MODE	VARCHAR2(15)	The transaction mode (B for Batch or I for Interactive).
BUS_COLLAB	VARCHAR2(200)	The name of the business collaboration.
DB_COLLAB	VARCHAR2(200)	The name of the database collaboration.
MSG_COMPRESS	CHAR(1)	Whether the message is compressed (Y or N).

Table 81 ES_TPTS (Continued)

Column Name	Data Type	Column Description
RTN_TS_ID	NUMBER(10)	Return the ID of
RTN_RCPT	CHAR(1)	Whether to generate a return receipt (Y or N)
STATUS	CHAR(1)	Whether the profile is active (A) or inactive (I).
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.18.ES_MSG_SECURITY

The ES_MSG_SECURITY table stores information about message security protocols.

Primary Key: MSG_ID

Foreign Keys: None

Table 82 ES_MSG_SECURITY

Column Name	Data Type	Column Description
MSG_ID	NUMBER(10)	The primary key.
MSG_PARENT_ID	NUMBER(10)	The ID of the message to which this security information is applicable.
MSG_CONTENT	LONG RAW	The text of the message.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.19.ES_TPCAT

The ES_TPCAT table stores information about Trading Partner categories.

Primary Key: TPCAT_ID

Foreign Key: TPH_ID (correlates to TPH_ID in ES_TPH)

Table 83 ES_TPCAT

Column Name	Data Type	Column Description
TPCAT_ID	NUMBER(10)	The primary key.
TPH_ID (foreign key)	NUMBER(10)	The Trading Partner profile ID.
CATEGORY	VARCHAR2(50)	Not currently used.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.20.ES_TPH

The ES_TPH table stores information about Trading Partners.

Primary Key: TPH_ID

Foreign Key: COMPANY_ID (correlates to COMPANY_ID in ES_COMPANY)

Table 84 ES_TPH

Column Name	Data Type	Column Description
TPH_ID	NUMBER(10)	The primary key.
COMPANY_ID (foreign key)	NUMBER(10)	The company ID for a given Trading Partner.
ALT_ID	VARCHAR2(20)	The alternate ID.
NAME	VARCHAR2(200)	The user-defined profile name.
TP_PROFILE	VARCHAR2(200)	The Trading Partner profile.
STATUS	CHAR(1)	Whether the profile is active or inactive.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.21.ES_COMPANY

The ES_COMPANY table stores information about the company from which messages originate in a given scenario.

Primary Key: COMPANY_ID

Foreign Keys: None

Table 85 ES_COMPANY

Column Name	Data Type	Column Description
COMPANY_ID	NUMBER(10)	The primary key.
COMPANY_NAME	VARCHAR2(200)	The company name.
CO_PROFILE	VARCHAR2(200)	The company profile.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.1.22.ES_MSG_BINARY

The ES_MSG_BINARY table stores information about binary-format messages.

Primary Key: MSG_ID

Foreign Keys: None

Table 86 ES_MSG_BINARY

Column Name	Data Type	Column Description
MSG_ID	NUMBER(10)	The message ID.
MSG_PARENT_ID	NUMBER(10)	The message parent ID.
MSG_CONTENT	LONG RAW	The message content.
CREATED_BY	CHAR(15)	User ID of the creator (usually the database owner) as generated automatically by the system; for example, "ex_admin"
CREATED_TIME	VARCHAR2(22)	Creation date and time as generated automatically by the system in format determined by your database settings.

C.2 Diagram of Message Tracking Tables

The message tracking tables displayed below are part of the e*Xchange database structure. Foreign keys that connect these tables are indicated by an arrow connecting the related tables and a label indicating the foreign key. Arrows point from foreign keys to the primary keys with which they are associated. Primary keys in each table are underlined.

Figure 160 e*Xchange Database Structure (1 of 2)

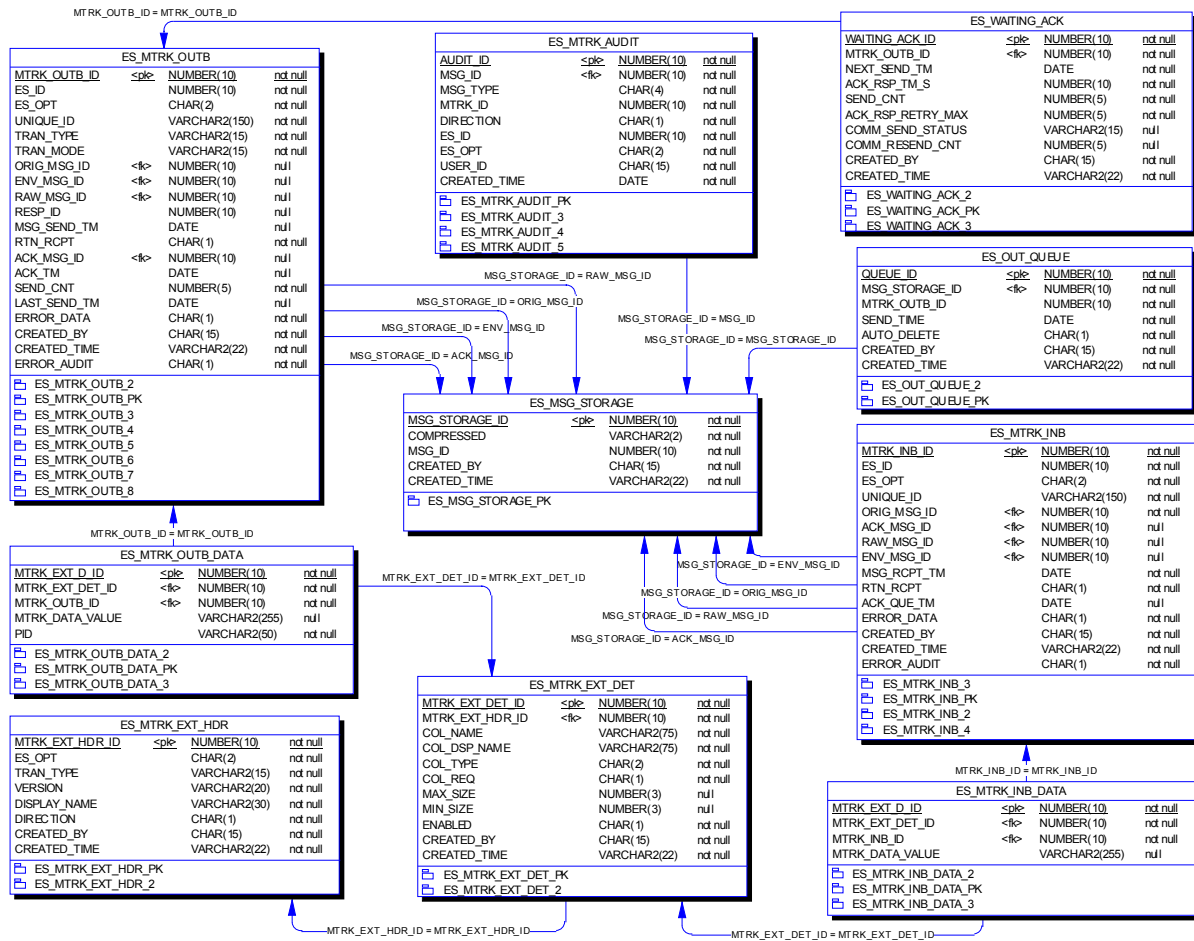
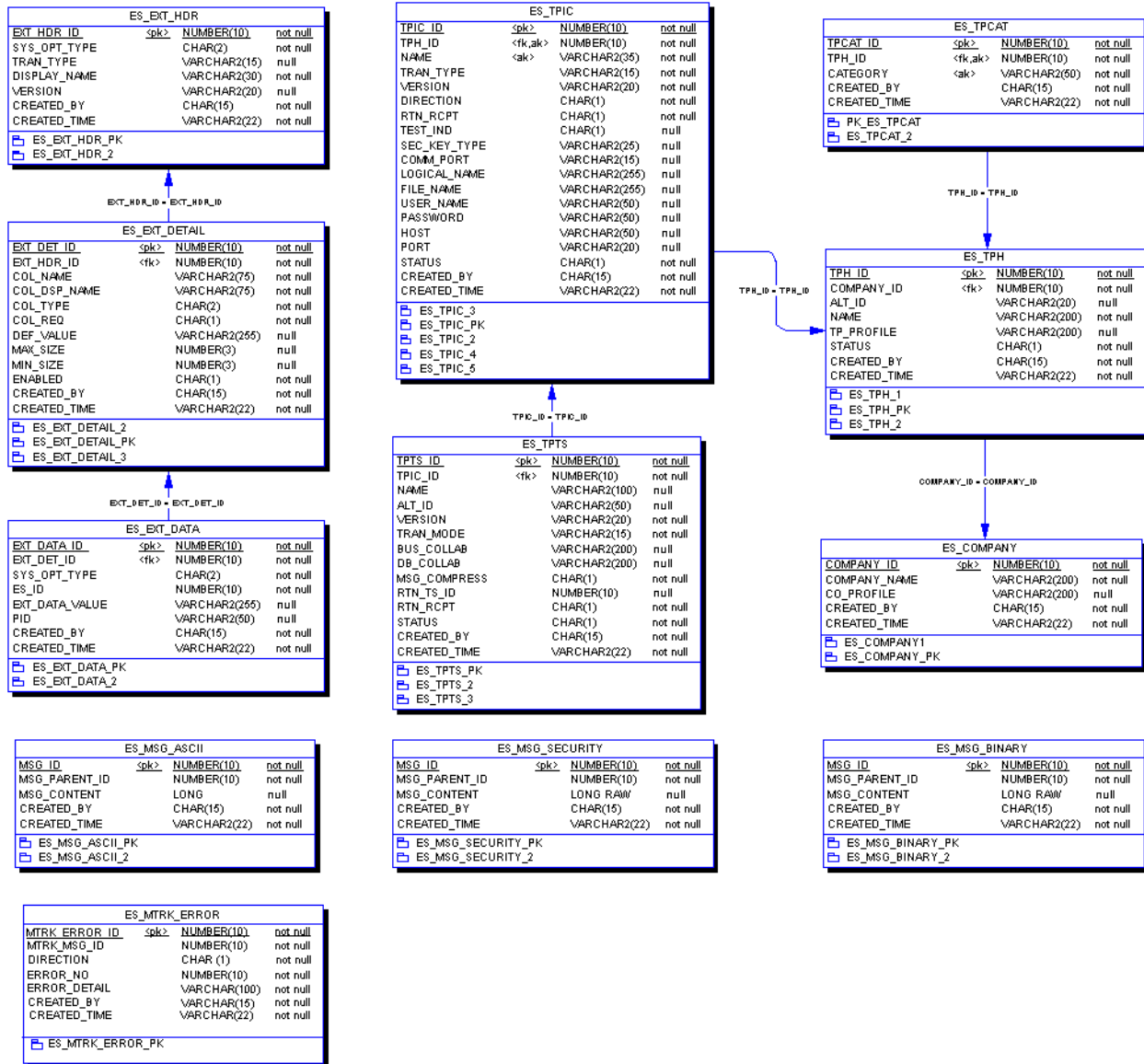


Figure 161 e*Exchange Database Structure (2 of 2)



Glossary

access control list

A list of information associated with a trading partner profile component (company, trading partner, B2B protocol, or message profile) that specifies which users and user groups have permission to access the components and what specific access rights they have (add, edit, full control, or read).

API

An acronym for Application Program Interface, which is a set of protocols, routines, and tools for building software applications. The e*Xchange API consists of a set of Monk functions that can be called from custom validation Collaborations to interface with the database.

AS2

Applicability Statement 2 (AS2) is a draft security standards defined by the IETF (Internet Engineering Task Force), designed to allow business transactions to move securely over the Internet.

AS2 is based on HTTP, HTTPS, and S/MIME, and has a strong emphasis on the following key aspects of data security:

- Privacy
- Data integrity
- Authenticity
- Non-repudiation of origin and receipt

AS2 specifies the means to connect and to deliver, validate, and reply to data, securely and reliably.

For more detailed information on AS2, refer to the Internet Engineering Task Force Web site. This link is current at time of going to press: <http://search.ietf.org/internet-drafts/draft-ietf-ediint-as2-11.txt>. If that link is no longer current, go to www.ietf.org and search for documents about AS2.

authentication

A process that guarantees that an electronic message came from a particular trading partner based on the electronic signature sent with the message.

B2B protocol level

In the e*Xchange Web interface, a B2B protocol is the trading partner profile component that you use to enter technical information about the exchange of messages between you and your trading partner. The type of eBusiness protocol you agree to use,

such as X12, UN/EDIFACT, RosettaNet, or CIDX, is an example of a B2B protocol characteristic.

CIDX

CIDX (Chemical Industry Data eXchange) is an organization whose members have worked together to develop commercial solutions for the chemical industry. As well as other standards, conventions, and processes, CIDX members have developed a set of electronic transactions specifically designed for the buying, selling, and delivery of chemicals, called Chem eStandards.

code tables

The mechanism used to customize values that appear in e*Xchange drop-down lists.

Collaboration

A component of an e*Way or BOB that receives and processes Events and forwards the output to other e*Gate components. Collaborations perform three functions: They subscribe to Events of a known type, they apply business rules to Event data, and they publish output Events to a specified recipient. Collaborations use Monk translation script files with the extension *.tsc* or Java translation script files with the extension *.xts* to do the actual data manipulation.

Company

An organization with which you conduct electronic business (eBusiness). A company can consist of one or more trading partners. See also *Trading partner*.

decryption key

The key used to decrypt an incoming encrypted message. See also *key*.

digital certificate

A digital certificate is an electronic certificate, issued by a certification authority, that establishes your credentials when exchanging eBusiness messages on the Web. Your digital certificate contains your name, a serial number, expiration dates, a copy of your public key (used for encrypting messages and validating digital signatures), and the digital signature of the certificate-issuing authority so that a recipient can verify that the certificate is real. Digital certificates can be kept in registries so that authenticated users can look up the public keys of other users.

DMZ

DMZ is an acronym for a “demilitarized zone” on the Internet. A DMZ is an area that is common to, or shared between, two different networks—for example, between a VAN (value added network) and the Internet.

A DMZ is sometimes used as a location for secure servers. Putting these in a DMZ allows access by outside entities (with appropriate permission) so that certain types of information can be shared; for example, inventory information. At the same time, it keeps them outside the private network. This has security advantages for the private network, since the information is shared outside of the VAN, it is not necessary to allow access to the VAN itself.

The DMZ is a more secure location than the Internet.

eBusiness protocol

An eBusiness protocol is a generally accepted standard for formatting and exchanging electronic messages between trading partners. X12, UN/EDIFACT, RosettaNet, and CIDX are examples of eBusiness protocols.

EDI

EDI (Electronic Data Interchange) is a standard format for controlling the exchange of business data. The standard, X12, was developed by the Data Interchange Standards Association (DISA). X12 is used in the United States; a closely related EDI standard, UN/EDIFACT, is used internationally.

An EDI message contains a string of data elements, each representing one piece of information such as a price, product model number, or customer name. Logical groups of elements form segments; for example, several address elements might form an address segment. Elements and segments are separated by delimiters. A logical grouping of elements and segments forming one or more messages is enveloped within header and trailer segments. EDI messages can be encrypted.

e*Xchange Partner Manager (e*Xchange)

An application within the SeeBeyond eBusiness Integration Suite that you use to set up and maintain trading partner profiles and view processed messages. e*Xchange also processes inbound and outbound messages according to certain eBusiness protocols and your validation Collaborations.

Error Table

The mechanism used to define error messages that you can use with custom validation Collaborations.

eSecurity Manager (eSM)

An add-on to e*Xchange that secures transmission of business-to-business exchanges over public domains such as the Internet.

Event (Message)

Data to be exchanged, either within e*Xchange or between e*Xchange and external systems, which has a defined data structure; for example, a known number of fields, with known characteristics and delimiters. Events are classified by type using Event Type Definitions.

Event Type Definition

An Event Type template, defining Event fields, field sequences, and delimiters. Event Type Definitions enable e*Xchange systems to identify and transform Event Types. An Event Type Definition is a Monk script file with an extension of `.ssc` or a Java script file with an extension of `.xsc`, indicating a message structure script file.

hash

Hashing is the transformation of a string of characters into a usually shorter, fixed-length value that represents the original string. The hash is a mathematical summary of the original message and is created by a hash function.

A cryptographically strong hash function has a number of requirements: It is easy to compute, one-way, and collision-free. This means that it is computationally infeasible to find a message that corresponds to a known hash, or to compose two messages whose hash values are the same.

The fixed-length hash value makes message authentication through the use of digital signatures possible, since only a small number of bytes must be used in a computationally expensive public key operation, rather than the entire message.

The most common cryptographic hash functions in use today are SHA-1 (the Secure Hash Algorithm Standard) and MD5 (Message Digest #5).

HIPAA

An acronym for the Health Insurance Portability and Accountability Act of 1996. HIPAA transactions conform to the rules mandated by this Act.

implementation guide

A document, published for a particular electronic message standard by an industry subcommittee, that describes the structure and content of a specific message type. You can use the Validation Rules Builder to convert electronic versions of ANSI X12 implementation guides to validation Collaborations used by e*Xchange.

key

In cryptography, a key is a variable value that is applied using an algorithm to a string or block of unencrypted text to produce encrypted text. The length of the key generally determines how difficult it would be for an eavesdropper to “crack” or decrypt the message without knowing the key.

A public-key cryptography system (see PKCS) uses a public and private key pair. The public key is made generally available and is used to encrypt messages being sent to the owner of the key pair. The owner then uses the private key to decrypt the messages.

message log

A record of inbound and outbound electronic messages processed by e*Xchange. This is implemented as the message tracking facility in e*Xchange.

MDN

Message Disposition Notification (MDN) is the equivalent of a return receipt; it is a notification, sent to the sender of a message, to say that the message was received. The MDN is generated by the client.

message profile

In the e*Xchange Web interface, a message profile is a set of parameters and other information you enter about each individual type of transaction that you process with e*Xchange. This definition associates the validation Collaborations that are needed to validate each kind of message.

message tracking attributes

A set of attributes you can define to identify messages stored in the e*Xchange database. Special message tracking extended attributes can be set up and associated

with a specific message type (protocol, version, and direction). Examples of attributes that are set up at the message tracking attribute level are Process Instance ID and Activity Instance ID for RosettaNet and FG and TS control numbers for X12.

message standard

The kind of eBusiness protocol you agree to use to exchange data and information with a particular trading partner. For example, ANSI X12 and RosettaNet are two different message standards.

non-repudiation

The inability of a sender to refute a message—that is, to claim at a later date that the sender was not the originator of the message. This is implemented through the use of a digital signature attached to the message. The signature can be used by the recipient to prove that the sender positively wrote the message, and that its contents were not tampered with after it was signed.

The sender of a message can also obtain irrefutable proof of receipt of the original message. Non-repudiation of receipt is implemented using an acknowledgment to the sender. This acknowledgment contains the digital signature of the message, and is also digitally signed by the receiver of the original message.

PKCS

An acronym for Public-Key Cryptography System. PKCS is a set of informal intervendor standard protocols developed by RSA Security, the licensers of the RSA public key cryptosystem, for making secure information exchange on the Internet possible. The standards include RSA encryption, password-based encryption, extended certificate syntax, and cryptographic message syntax for S/MIME, RSA's proposed standard for secure e-mail.

PKI

A PKI (public key infrastructure) enables users of a basically unsecure public network such as the Internet to securely and privately exchange data and money through the use of a public and a private cryptographic key pair that is obtained and shared through a trusted authority.

It is a networked system of certification authorities (CAs), registration authorities (RAs), certificate management systems (CMSs), and X.500 directories (specialized distributed databases). It enables two parties unknown to each other to exchange sensitive information and money over an unsecure network.

public key encryption

Encryption using PKCS. See *PKCS*.

raw data format

In e*Xchange, any format other than that of a supported eBusiness protocol. If an eBusiness message is received into e*Xchange in raw data format, e*Xchange must translate the information into the appropriate eBusiness protocol format using a translation Collaboration specified in the trading partner profile.

RNIF

RosettaNet Implementation Framework. There are two versions: 1.1 and 2.0.

SEF

See *Standard Exchange Format (SEF)*.

signature key

The key used to encode a message signature. The signature key might be the same as the encryption key; but when two different keys are used for different purposes, this is known as a dual-key system. See also *key*.

S/MIME

An acronym for Secure/Multipurpose Internet Mail Extensions; it is an Internet e-mail security standard that makes use of public key encryption.

.ssc file

A Monk Event Type Definition file. See *Event Type Definition (ETD)*.

Standard Exchange Format (SEF)

The Standard Exchange Format (SEF) is a flat file representation of an EDI implementation guideline. It is a standard that defines how data segments and data elements should be structured so that the message can be understood between trading partners. It also includes validation rules, for example what are the valid values for a data element, or conditions such as if Field A is present then Field B is required.

The purpose of SEF is to put the EDI implementation guidelines in a file in machine readable format so that translators can directly import the file and use the implementation guidelines to translate or map the EDI file. The file can also be used as a means to exchange the implementation guidelines between trading partners, and can be posted on a public bulletin board or on the company's Web site in the Internet to convey to the public the implementation guidelines used by the company.

The SEF format was developed by Foresight Corporation and is now in the public domain. Programs that can directly import SEF files can save users considerable time in developing new translations or maps.

TA1

In X12, a TA1 is an interchange acknowledgment. The TA1 acknowledgment verifies the interchange envelopes only. The TA1 is a single segment and is unique in the sense that this single segment is transmitted without the GS/GE envelope structures. A TA1 acknowledgment can be included in an interchange with other functional groups and transactions.

trading partner component

The trading partner profile component that you use to enter business information about your trading partner. The name of the trading partner, which could be a subdivision of a company, and the people you want to contact are examples of information you enter for a trading partner component.

transaction set

In X12, each business grouping of data is called a transaction set. For example, a group of benefit enrollments sent from a sponsor to a payer is considered a transaction set. Each transaction set contains groups of logically related data in units called segments. For example, the N4 segment conveys the city, state, ZIP code, and other geographic information.

A transaction set contains multiple segments, so the addresses of the different parties, for example, can be conveyed from one computer to the other. An analogy would be that the transaction set is like a freight train; the segments are like the train's cars, and each segment can contain several data elements in the same way that a train car can hold multiple crates.

Specifically, in X12, the transaction set is comprised of segments ST through SE.

.tsc file

A Monk Collaboration Rules file.

UN/EDIFACT

UN/EDIFACT stands for United Nations/Electronic Data Interchange for Administration, Commerce and Transport. It is a standard, developed for the electronic exchange of machine-readable information between businesses.

user group

User groups allow you to grant access permissions to a set of users with similar processing needs without having to specify individual privileges for each user. For example, the User Administrator can set up a group for users who need full access to a specific trading partner profile, but who should not be able to view information about any other profile. The User Administrator assigns each user that meets this criterion to a particular user group. Then, your eX Administrator (or another user who has been granted appropriate privileges) grants access privileges to this user group so that all members of the group can view and modify the desired information.

validation Collaboration

A Collaboration that you create to define the syntax and validate the content of electronic business-to-business (B2B) messages. One validation Collaboration is required for each type of electronic message to be processed by e*Xchange. You can use the Validation Rules Builder to automatically generate a validation Collaboration for a specific kind of X12 transaction, according to specific implementation guidelines.

Validation Rules Builder

An e*Xchange command-line utility for converting electronic EDI implementation guides into files that are compatible for use with e*Xchange. This conversion tool accepts Standard Exchange Format (SEF) version 1.4 or 1.5 files and converts them into e*Gate Integrator Event Type Definition (ETD) and Collaboration Rules files.

value added network (VAN)

A private network provider that offers secure electronic data interchange (EDI) services to companies. VANs often offer EDI translation, encryption, secure e-mail, management reporting, and other extra services for their customers.

XML

Extensible Markup Language. RosettaNet PIPs are written in XML. XML is different from String in that XML messages can contain both content and information about the content.

.xsc file

A Java Event Type Definition file. *See* Event Type Definition (ETD).

.xts file

A Java Collaboration Rules file.

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