ACTIVANT

Getting Started with Business Connect XML

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Eclipse Business Connect XML Overview

Using Eclipse Business Connect XML (referred to in this documentation as Business Connect XML) you can take advantage of real-time collaboration between systems, no matter how similar or dissimilar they may be. Use the integrated mapping utility to establish electronic trading relationships with your customers and vendors, as well as other distributors using XML. You can receive transactions, such as orders, from your customers in any XML format and translate outgoing XML transactions, such as order confirmations, into a format your customers' systems can understand. Using the HTTPs transport protocol, you can ensure your transactions and data are traded securely.

Use Business Connect XML to:

- Eliminate EDI VAN and portal charges by linking directly with customers, vendors, and other distributors.
- Improve your customer service by making it easier for your customers to get what they want, when they want it.
- Reduce costs associated with manual transactions and their potential errors.
- Increase inventory visibility of slow-moving items and dead stock.
- Sell excess inventory to other distributors, optimizing the use of your warehouse space.
- Fill orders from other wholesalers' inventory.
- Save time by taking advantage of existing resources.
- Save on mapping costs by setting up your own trading partner relationships.
- Receive orders and inquiries from your customers through supply-chain marketplaces such as Ariba, DataStream, MRO, MROSoup, Commerce One®, and Pantellos®.

You might have electronic trading relationships established with customers and vendors that also use Eclipse through the Eclipse B2B Commerce companion product. If you conduct electronic business with other Eclipse users, you can still use B2B Commerce to complete those transactions. Use Business Connect XML to complete XML transactions with customers and vendors who are not using Eclipse.

Use this guide to learn about the Business Connect XML application. Use the online Help available from the **Contents** option under the **Help** menu in the mapping utility to learn more about using entire Business Connect XML application, its components, and how to send and receive customer and vendor transactions using XML.

> **Note:** The content of this guide assumes you have a working knowledge of XML and Windows applications, and the Eclipse system.

What's New in Business Connect XML 2.0

The following functionality is new in the Business Connect XML 2.0 release.

NEW Send direct shipments using XML from within sales order entry. For more information, see Sending XML Direct Orders to Your Vendors.

NEW Access any user-defined files that you create beyond the standard files in Eclipse. For example, you may want to store or send additional information about a transaction that you have defined in a user-defined file. Modifying the existing XML schemas to include your user-defined files makes those files available in the XML mapping utility. For more information, see Creating XML Database Schemas.

NEW Add HTTP header information to any XML document you send to a trading partner. For more information, see Adding HTTP Headers to XML Transaction Maps.

NEW Include a document type declaration to any XML document you send to a trading partner. For more information, see Indicating the Document Type in XML Transaction Maps.

Getting Started with Business Connect XML

Consider the following when setting up an XML document trading relationship with your trading partners:

- What are my trading partner's e-commerce capabilities?
- What documents and transactions do I want to exchange with my trading partners?
- Do my trading partners conduct business through an online portal, such as the Ariba Supplier Network?
- What manual processes will this new relationship automate?
- Who will manage the trading partner relationships going forward?

Your answers to these questions dictate how and when you implement each trading relationship.

What Do I Need From My Trading Partners?

Before exchanging XML documents with your trading partners, obtain the following items for each transaction you plan to trade:

- **Document type definition (DTD) files** – For each transaction type, the DTD is required to complete the transaction map using the Business Connect XML mapping utility.
- **Document specifications** – Defines required elements, what data is contained in each element, and element descriptions.
- **Sample XML documents** – Use sample XML documents to determine which fields from the DTD the trading partner uses and to test transactions after creating the transaction map.

Meet with your trading partners to discuss the best way to map their transaction data in and out of Eclipse and work with them to determine the following:

- Transactions to trade.
- Definitions of all data fields in the XML documents.
- The intended purpose or use of each field in the XML document.
- Post URL for each document.
- Workflow procedures that both parties use when processing transactions.

How Do I Get Started?

After you determine which transactions you are going to trade using XML and have obtained the necessary documents from your trading partner, complete the following tasks to get started using the Business Connect XML application.

Note: See the table of contents for page numbers to reference information about the following tasks.

1. Learn how XML documents flow from your trading partner through the Eclipse system.
   - How XML documents flow through the system.
   - Example XML data flow .
   - Example XML data flow with marketplace diagram.
2. Set system, customer, and vendor parameters in Eclipse.
3. Learn about XML database schemas and how they form transactions.
4. Use the Business Connect XML mapping utility to create transaction maps for each transaction you complete with your trading partners.
   - Learn about the Business Connect XML mapping utility and its symbols.
   - Add trading partners to the mapping utility.
   - Learn about transaction maps.
   - Create an XML transaction map for each transaction.
   - Define XML mapping selection criteria.
   - Modify incoming and outgoing data, if necessary.
5. Send and receive transactions from your customers and vendors.

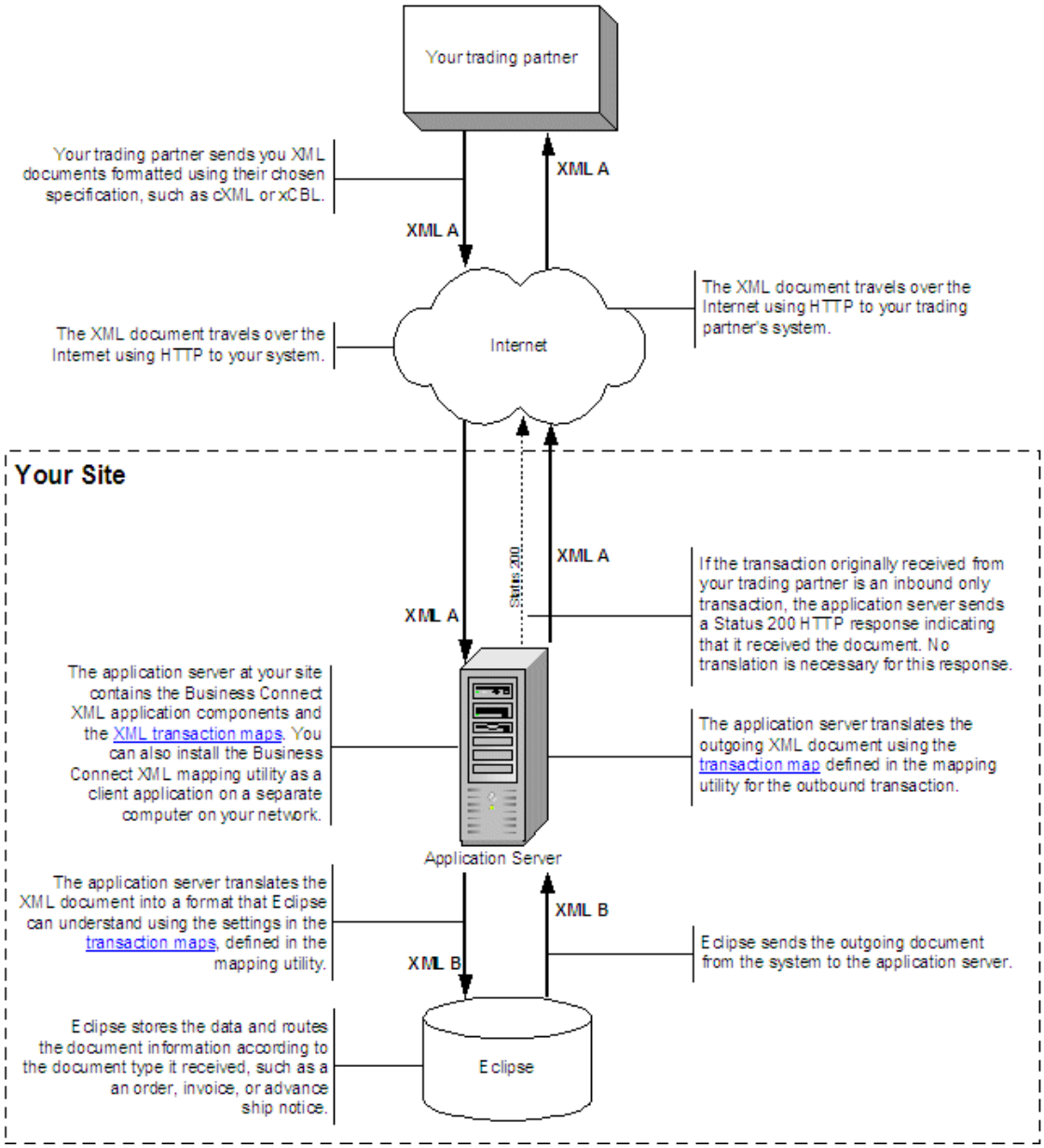
See Also:

Eclipse Business Connect XML Overview

How XML Documents Flow Through the System

The following diagram illustrates how XML documents flow from your trading partner through your application server and on to Eclipse.

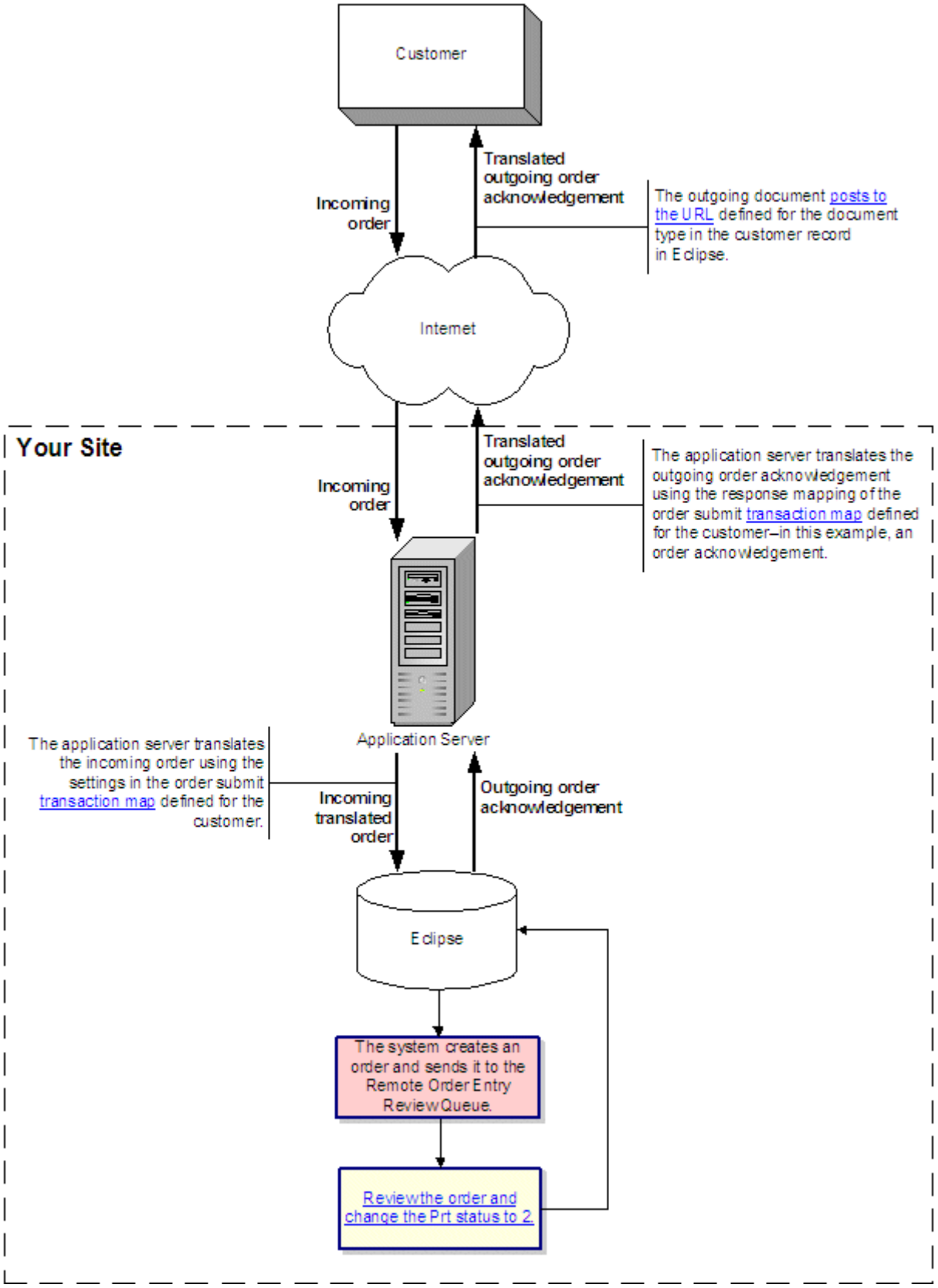
If you are sending an outbound only transaction, such as an invoice to your customer, the XML document originates in Eclipse with no inbound component. In the diagram below, start with the Eclipse symbol at the bottom and follow the flow up the right side to the trading partner.



Example XML Data Flow

The following diagram illustrates how XML documents for an order submit transaction flow from a customer flow through the system to the application server and on to Eclipse.

In the example below, you have a transaction map defined for an order submit transaction that contains a received document map for an order submit transaction type, and sent document map for an order acknowledgement transaction type.

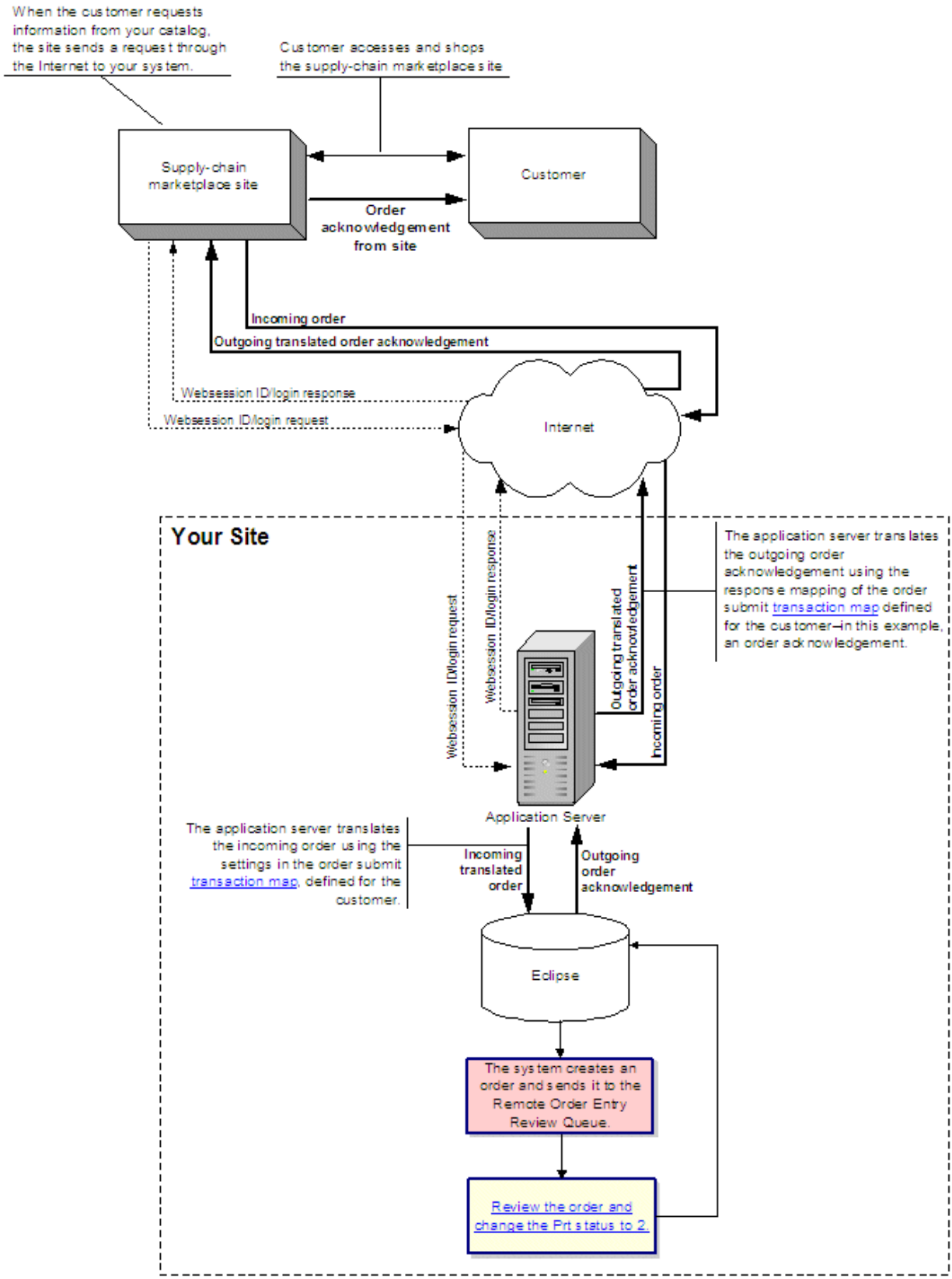


Example XML Data Flow with Marketplace

The following diagram illustrates how XML documents for an order submit transaction flow from a supply chain marketplace site, or portal, through the system to the application server and on to Eclipse.

In the example below, you have a transaction map defined for the following:

- A websession transaction for the marketplace site that contains a received document map for an websession request and a sent document map for a websession response.
- An order submit transaction that contains a received document map for an order submit transaction type, and sent document map for an order acknowledgement transaction type.



Business Connect XML Setup

Set the following parameters before sending or receiving XML documents:

- XML related control maintenance records.
- XML Product Not Found product.
- Remote document details.

Set the following parameters before sending or receiving XML documents to or from *customers*:

- Activity triggers for XML documents.
- System notifications.
- Document post locations.
- Pricing variance parameters.
- E-commerce IDs.

Set the following parameters before sending or receiving XML documents to or from *vendors*:

- Vendor access information.
- Activity triggers for XML documents.
- Document post locations.

See the online Help for detailed instructions about how to define each of the items above.

Remote Document Details

For each customer or vendor with whom you have a remote trading relationship, define additional document settings for each transaction you trade with them. Additional settings include but are not limited to indicating who the system notifies when it receives a transaction of a given type and setting the initial order status.

Use Remote Trading Partner Maintenance to define details for each document type that you receive or send to each customer and vendor.

For customers, some of the document details that you can set in Remote Trading Partner Maintenance, such as who to notify about a certain document transmissions and pricing variances can also be set in the customer record. Setting document details in Remote Trading Partner Maintenance overrides the settings defined at the customer level.

Define details for the following remote document types:

- Orders
- Advanced ship notices
- Change order requests
- Quote requests
- Order acknowledgements
- Invoices

XML Schema Maintenance

Use XML Schema Maintenance to define and access data stored in any file in Eclipse when using Business Connect XML to receive and send transactions. XML database schemas are similar to Eclipse dictionaries, in that they display data file information so you can easily view and understand it. XML database schemas provide additional information specific to the XML interface and translation of data to and from the database. Each data file in Eclipse can have a corresponding XML database schema.

The system uses XML database schemas to store data when receiving transactions via XML, such as order submits or stock inquiries, and to retrieve data to send out using XML. Each XML transaction type calls one or more XML database schemas, grouped into *transaction* schemas. For example, an OrderSubmit transaction schema uses the Order and OrderDetail database schemas to store and retrieve the data required to submit an order in the system using XML. For more information, see How XML Database Schemas Form Transactions.

> **Note:** Business Connect XML includes a set of predefined XML transaction types such as order submits and remittance advice. For a complete list of the supported customer and vendor transactions, see Sending and Receiving Customer Transactions Using XML and Sending and Receiving Vendor Transactions Using XML.

Your system administrator has the ability to add or modify data definitions to a schema or add additional schemas required for your business relationships. Eclipse personnel set up the following default XML database schemas.

- Contact
- Entity
- Order
- OrderAdditional
- OrderChange
- OrderDetail
- OrderDetailChange
- Product
- Territory

How XML Database Schemas Form Transactions

A transaction schema is one or more XML database schemas that define an XML transaction type. For example, Business Connect XML includes the following XML database schemas:

- Order – Includes items such as the bill-to address and the payment terms.
- OrderDetail – Contains the items being ordered, including product ID and total order quantities.

An order in the system includes the information required to ship the order and the information about what is being purchased or sold. The OrderSubmit *transaction* schema contains both the Order and OrderDetail *database* schemas to create a complete order submit transaction. An XML database schema can be included in more than one transaction schema. For example, the Order and OrderDetail schemas are also used to create an invoice transaction.

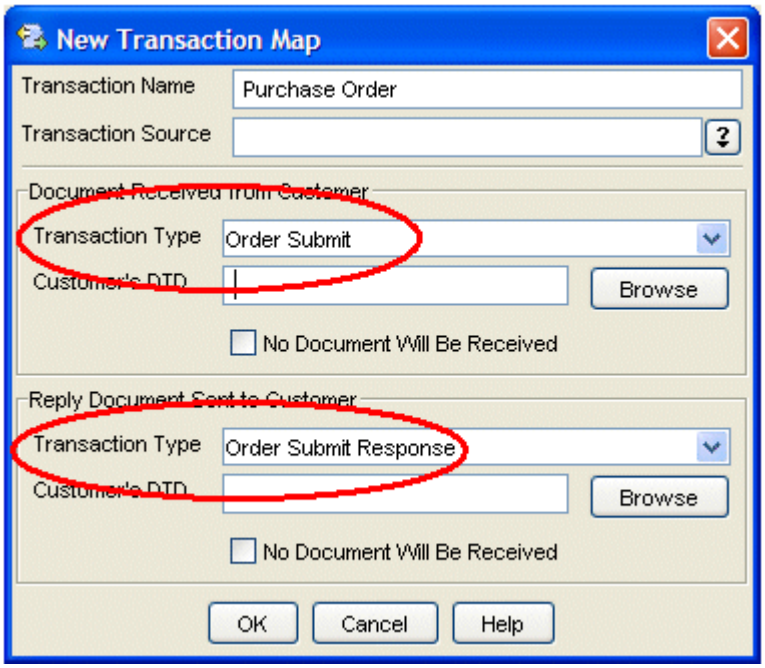
> **Note:** Business Connect XML includes a set of predefined XML transaction types such as order submits and invoices. For a complete list of the supported customer and vendor transactions, see Sending and Receiving Customer Transactions Using XML and Sending and Receiving Vendor Transactions Using XML. You cannot create your own transaction schemas.

A transaction can be one of the following types:

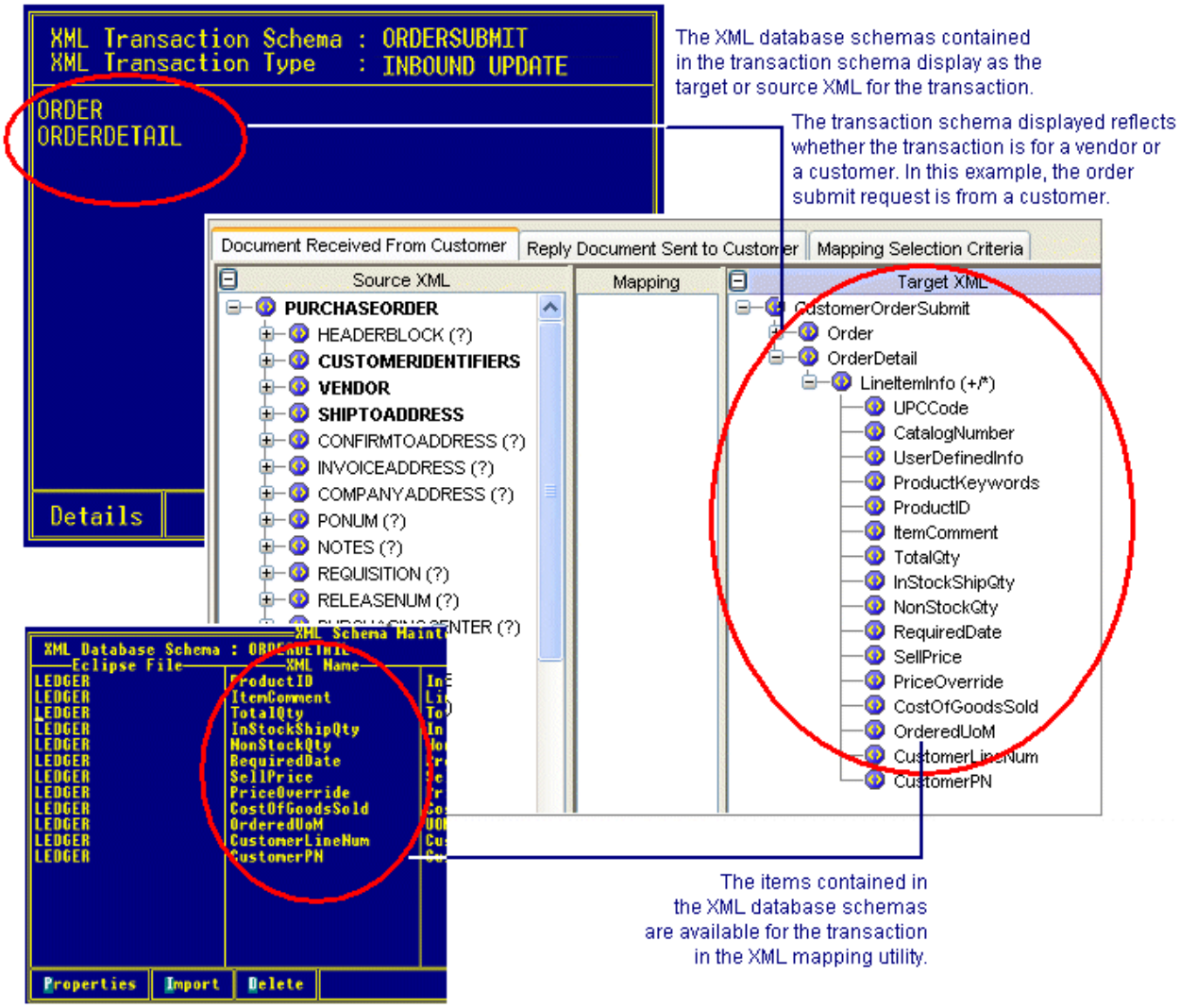
- Inbound inquiry, such as a price and availability check.
- Inbound update, such as an order submit or change order from a customer or an invoice from a vendor.
- Outbound, such as a purchase order you are sending to a vendor.

Transaction Schemas and the XML Mapping Utility

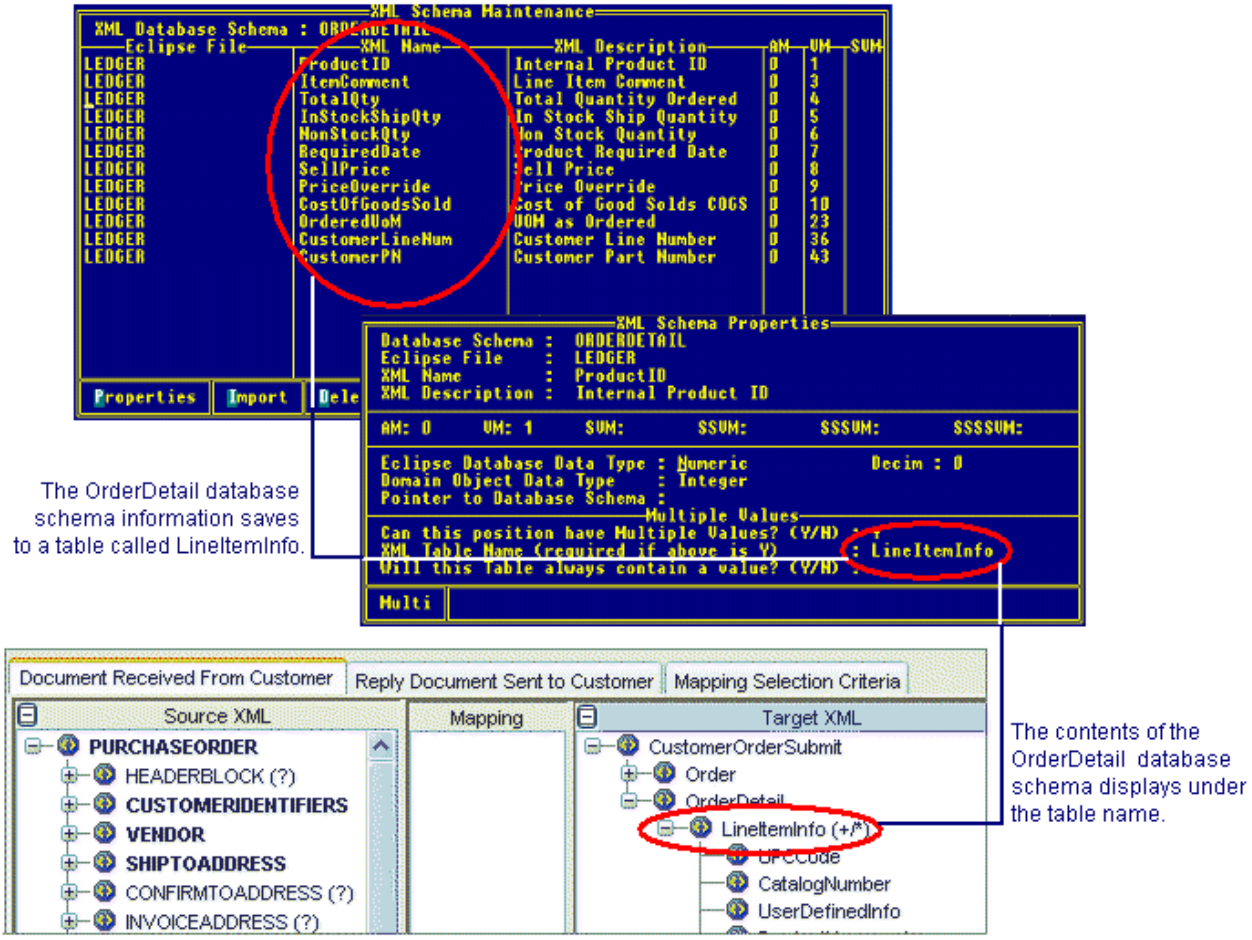
Transaction schemas defined in Eclipse are available for selection as transaction types in the Business Connect XML mapping utility. When you create a new transaction map in the mapping utility, select the transaction type, or schema, in the **Transaction Type** fields for both the received and sent documents:



The contents of the transaction schema display as the target or source XML in the mapping utility, depending on the type of transaction you are creating and whether you are viewing the received or sent to map. In the following example, the OrderSubmit transaction schema contains the Order and OrderDetail XML database schemas.



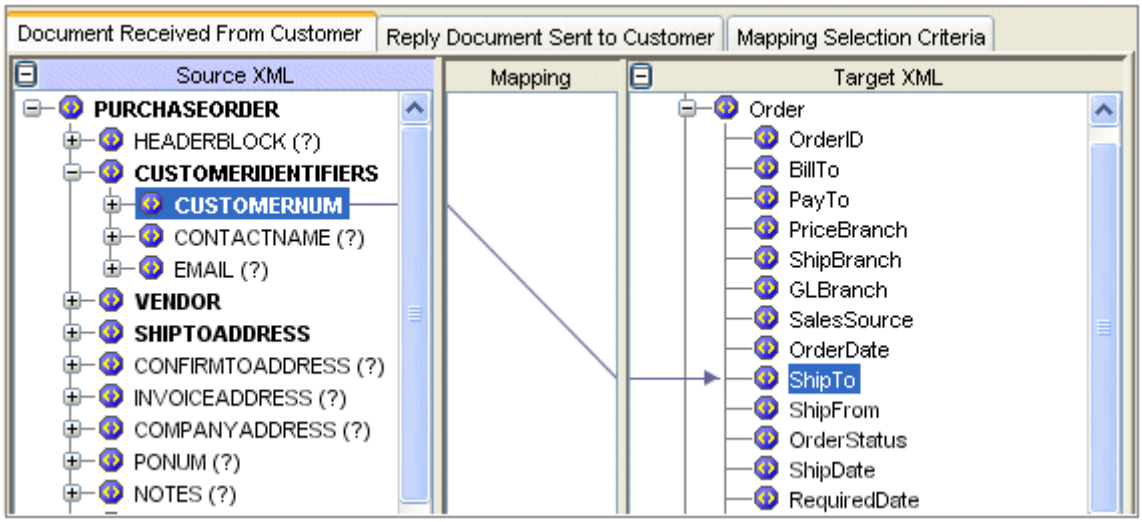
The order detail data is stored in the table called LineItemInfo defined for the OrderDetail XML database schema's properties, and displays nested in the XML mapping utility.



Business Connect XML Mapping Utility Overview

Use the Business Connect XML mapping utility to define how the system translates data transmitted using XML from your trading partners' format to a format that Eclipse can understand. Also use the mapping utility to define how the system translates data stored in Eclipse to a format that your trading partners' systems can understand.

For example, you receive orders from a trading partner in XML. You can map data in a customer order submit request from a trading partner to corresponding data elements in Eclipse that make up an Eclipse sales order. The trading partner sends data in an XML element called PurchaseOrder/CustomerIdentifiers/CustomerNum. To process the information, map that element to the OrderSubmit/Order/ShipTo data element in Eclipse.



To create an order acknowledgement response to the order request, map the Eclipse data you send to an XML element the trading partner can understand.

Adding and Editing XML Trading Partners

Before you can create transaction maps, add the XML trading partners with whom you are doing business to the Trading Partners Tree in the mapping utility. The Trading Partners Tree is a way to organize your trading partners and their associated transaction maps.

The trading partners display in the tree in the order that you add them. The system validates any trading partners you enter against the entity records in Eclipse. You can only enter customers or vendors that have a record defined within Eclipse.

To make any changes to an XML trading partner's profile, access the customer or vendor record within Eclipse. To edit the name of the trading partner in the Trading Partner Tree within the mapping utility, use the instructions below.

If a trading partner in the tree does not have any transactions defined, the system deletes the trading partner from the tree when you exit the mapping utility.

> **Note:** Editing a trading partner name is transaction map specific. That is, you can use the editing function to move a transaction map to a different trading partner in the tree. For additional information, see the procedure below.

To add an XML trading partner in the mapping utility:

1. Access the Business Connect XML mapping utility.
2. From the **File** menu, select **New Trading Partner** to display the Trading Partner dialog box.
3. Enter the name of the customer or vendor defined in Eclipse that you want to add as an XML trading partner.

   You can also enter the entity ID or the first few letters of the name and click the arrow to search for the customer or vendor.
4. Click **OK** to add the trading partner to the Trading Partners Tree on the left side of the main window.

   The system validates the trading partner you entered against the existing customer and vendor records. If a match is not found, No Entity Found displays.

To edit the name of an XML trading partner in the mapping utility:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. From the **Edit** menu, select **Edit Trading Partner** to display the Edit Trading Partner dialog box.
4. Enter a new trading partner name and click **OK**.

   The system renames the trading partner, and places the selected transaction under the new name in the Trading Partner Tree, and removes it from the original trading partner name.

Note: The system validates the trading partner you entered against the Eclipse customer and vendor records. If a match is not found, No Entity Found displays.

XML Transaction Maps Overview

Before you can begin using Business Connect XML to do business with your trading partners using XML, you need to determine what XML standard each trading partner is going to use. All XML standards have associated document type definition (DTD) files that explain the data elements in the XML documents they send you. DTD files determine what data elements your trading partners can receive from you.

What is an XML Transaction?

An XML transaction can consist of the following components:

- An inbound request (received document), such as an order from a customer that contains the customer data required to enter and ship the order plus the line items for products on the order.
- An outbound request (reply document), such as an order acknowledgement that lets a customer know that you successfully received their order request.

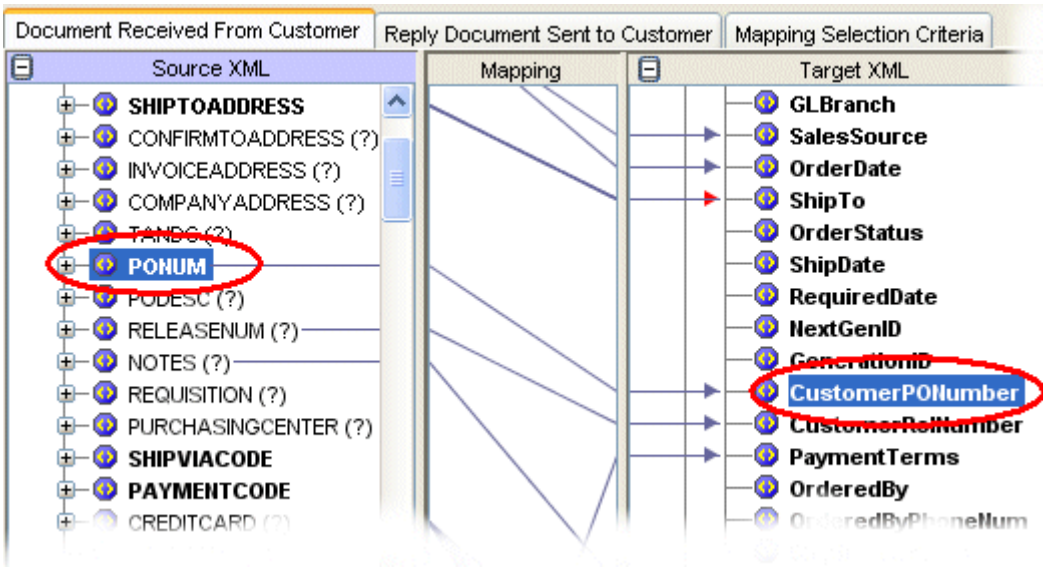
A transaction can be an inbound-only transaction (such as an invoice you receive from a vendor) with no outbound reply document, or an outbound-only transaction (such as an invoice you send to your customer) with no inbound received document.

What is a Transaction Map?

A transaction map creates an XQuery, which the system uses to translate data from an XML document to a format Eclipse can understand, or to translate Eclipse data to XML. A valid transaction map includes a received document, sent document, or both, and mapping selection criteria.

The elements defined in the DTD files from your trading partners might contain elements that are not named the same as Eclipse elements. Therefore, when you receive XML data from a trading partner or send data from Eclipse to a trading partner the system needs to know which elements to associate with elements in Eclipse. A transaction map associates the elements from a trading partner's XML document to the elements in Eclipse.

For example, your trading partner sends the purchase order number information in an order request in an element called PONum. Eclipse stores PO number or order number address information in the CustomerPONumber element in the database. Therefore, you need to associate the element from the DTD file to the corresponding element in Eclipse. Using the Business Connect XML mapping utility, you can make that association by drawing a line between the two elements, as shown in the following illustration:



Define a transaction map for each transaction type for each trading partner with which you do business using XML. For instructions to create a complete transaction map, see Creating XML Transaction Maps.

What if the Data Sent and Received is in Different Formats?

At times, your trading partners might define data in a different format than how Eclipse can store it. For example, you have a trading partner that defines dates in the mm/dd/yy format, where Eclipse stores dates in the mm/dd/yyyy format. Or, you have a trading partner that defines the unit of measure of each as "each" where Eclipse stores the same unit of measure as "ea."

To process XML transactions successfully, you might need to manipulate incoming or outgoing data to match the intended format. The system translates the data to the new format before saving it or sending it. You can modify each element in the **Target XML** column of a transaction for both the received document map and the sent document map using operations such as concatenation, adding, subtracting, and defining table-based conversions. For additional information about how to manipulate the XML data for translation, see Modifying Incoming and Outgoing XML Data.

How Does the System Know to Use the Map I Defined?

You might have trading relationships with many customers and vendors, therefore receiving and sending multiple XML documents to and from different trading partners in one day. As the system receives and sends XML transactions, it scans the XML documents for an element or a value that you define per transaction for each trading partner. This element or value tells the system which trading partner is sending or receiving the XML document and which transaction map to use to translate the XML.

For example, trading partner ABC Company sends you order requests with the following data elements within the XML:

HeaderBlock

From

To

CustomerIdentifiers

CompanyName

CustomerNum

Email

ItemList

.

.

If ABC Company is the only trading partner you have that sends you an XML document with the CustomerNum element, you can tag that element in the transaction map as the indicator. When the system receives the XML, it scans the content of the request and knows it is from ABC Company when it reaches the CustomerNum element and also knows to use the map you have defined for an order request transaction from ABC Company. However, if ABC Company sends you multiple XML documents that contain the CustomerNum element, defining the element itself does not provide the system enough information to distinguish the map. In this case, or if you have another trading partner that uses the same element, define a value sent in the element as the map indicator.

For each transaction map that you create, define an element tag as the indicator or a value as the indicator.

Mapping XML and Eclipse Data Elements

The Business Connect XML mapping utility provides a way to connect source and target elements using drag and drop functionality. The mapping utility represents each connection using a line that you draw from the **Source XML** column to the **Target XML** column. Each connection is also represented in the preview pane of the mapping utility main window. For more information about the mapping utility, see Business Connect XML Mapping Utility Overview. For more information about transaction maps, see XML Transaction Maps Overview.

Bold elements in a trading partner's DTD indicate elements that are required for the transaction.

See the following instructions to map elements:

- Map source and target elements (one-to-one, one-to-many, and many-to-one relationships).
- Map repeating groups to non-repeating groups (many-to-one relationships).
- Delete element mappings.

To map source and target elements (one-to-one, one-to-many, and many-to-one relationships):

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.

   Note: Expand the elements as necessary to access nested elements.

3. In the **Source XML** column, select the element you want to connect to a target element.
4. Click and drag the selected source element to the element in the **Target XML** column to which you want to connect the source element.

   The system draws a line from the source element through the **Mapping** column to the target element and highlights the elements mapped together.

   Note: You can also view the map in column format using the Mapping Preview pane.

To map repeating groups (many-to-one relationships):

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.

   Note: Expand the elements as necessary to access nested elements.

3. In the **Source XML** column, select the repeating element you want to connect to a target element.

Note: Repeating groups are identified in a DTD file with a plus (+) after the element.

4. Click and drag the selected source element to the element in the **Target XML** column to which you want to connect the source element.

   The Repeating Group Selection dialog box displays with the source element listed in the **Group Name** field.

5. In the **Occurrence** field, indicate the occurrence number that you want to map to the target element.

   For example, a trading partner sends you contact telephone numbers in an element called ContactNumber nested in an element called Contact. The ContactNumber is a repeating group that can occur one or multiple times:

   - The first time it occurs, the telephone number it contains is the contact's business phone number.
   - The second time it occurs, the telephone number it contains is the contact's mobile phone number.
   - The third time it occurs, the telephone number it contains is the contact's home phone number.

   You want to map the contact's business phone number to a target data element. In this example, enter **1** in the **Occurrence** field to indicate that you want to map the first occurrence of the repeating group to capture the business telephone number.

6. Click **OK** to save the information and return to the mapping utility main window.

To delete element mappings:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.

   Note: Expand the elements as necessary to access nested elements.

3. In the **Target XML** column, right-click the element whose connection you want to remove and select **Remove Mapping**.

   The system removes the connection between the source element and the target element.

See Also:

Creating XML Transaction Maps

Valid XML Mappings and Precautions

Duplicating XML Elements for Repeating Groups

Valid XML Mappings and Precautions

When creating maps between XML elements and Eclipse database elements, every line you draw represents a movement of data from an XML document to Eclipse, or from Eclipse to an XML document being sent to your customers' or vendors' systems.

You can create maps from almost any source element to almost any target element. Be sure to make the connections in a logical manner. For example, do not map elements to the BillTo element in Eclipse. Any data you map to the BillTo element overwrites the BillTo information you have stored in the customer record for the trading partner. Instead, map a *customer number* or *ID* to the ShipTo element. The system verifies that the incoming number or ID is valid and matches a customer ID or e-commerce ID in the system and then populates the BillTo information from the customer record.

> **Note:** If an XML element in the document type definition (DTD) file for a received or sent document has nested elements, the mapping utility might not allow you to draw a connection from or to the parent element. Expand the element to map the nested children, if necessary.

The symbols that display for a DTD file in the mapping utility indicate what types of data can be transmitted in the corresponding XML document. For example, items on an order request might be indicated with a plus sign (+) in the mapping utility, indicating that they are a repeating group. The repeating group symbol means that the element can occur multiple times within the XML document.

Mapping Fields with Modified Data

As you create your transaction maps, note that any field that you map and add data modifications to must be contained in the XML document you send or receive. The field in the XML document can be blank; however, if the tag does not exist in the XML document for a mapped field, the system gives you an error.

Mapping Repeating Groups

In creating your transaction maps, take into consideration how repeating groups are stored in Eclipse. For example, the data element called Item in a customer's DTD file likely contains additional nested elements such as ItemNum and Description. You can logically map these elements to the ProductID and ProductKeywords database elements in Eclipse, thus, creating a logical map where the system can store the information from the repeating group.

You can map the following:

- A single element from the source to a single element in the target (one-to-one mapping).
- A single element from the source to multiple elements in the target (one-to-many mapping).
- Multiple elements from the source to a single field in the target (many-to-one mapping). The system concatenates each element from the source into the target element.

Note: A valid transaction map includes an inbound request, an outbound request, or both, and mapping selection criteria. Inbound and outbound documents can be one directional, that is, inbound only or outbound only.

See Also:

Required Transaction Data

Creating XML Transaction Maps

Creating XML Transaction Maps

Use the Business Connect XML mapping utility to create a relationship between the document type definition (DTD) files you receive from your trading partners and Eclipse data. Define the relationship by creating a transaction map.

Creating an XML transaction map requires completing the following tasks:

- Defining transaction types and selecting DTD files.
- Mapping the received XML.
- Mapping the sent or reply XML.
- Defining mapping selection criteria.

To better understand the layout of the mapping utility, see Business Connect XML Mapping Utility Main Window Aspects.

> **Note:** If you need to modify the XML data, modify the mapping characteristics after creating the XML transaction map.

Defining Transaction Types and Selecting DTD Files

Create transaction maps for each transaction you want to trade with each trading partner. Before you can create a transaction map, you must work with your trading partner to obtain DTD files and document specifications. DTD files define the data that is contained within each document you trade using XML. For more information, see Getting Started with Business Connect XML.

A transaction can be a received-only transaction with no reply document, or a sent-to only transaction with no received document.

To define the transaction type and select the DTD files:

1. Access the Business Connect XML mapping utility and select the trading partner for which you want to define a transaction.
2. Right-click the trading partner and select **New Transaction Map** to display the New Transaction Map dialog box.
3. In the **Transaction Name** field, enter the name of the transaction, such as Purchase Order. The name you enter here displays in the Trading Partners Tree under the trading partner.
4. In the **Transaction Source** field, enter the portal or marketplace the trading partner uses for the transaction. Entering a transaction source allows you to sort by the source in the remote review queues within Eclipse.

5. Based on the trading partner for which you are creating the transaction map, the New Transaction Map dialog box displays fields specific to customers or vendors. Enter the transaction type and DTD information in the fields for a customer or vendor transaction.

Vendor Transaction Type	Description
Document *sent to* the vendor and a reply document *received from* the vendor (outbound with an inbound response)	1. In the **Transaction Type** field in the **Document Sent to Vendor** area of the New Transaction Map dialog box, select the transaction type of the document you receive from your vendor. For example, if you are creating a map for a purchase order transaction, select **Order Submit** as the type in the **Transaction Type** field. Your selection populates the **Source XML** column in the mapping utility's main window for the sent document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 2. In the **Vendor's DTD** field in the **Document Sent to Vendor** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Target XML** column in the mapping utility's main window for the sent document map. Click **Browse** to select the field. 3. In the **Transaction Type** field in the **Reply Document Received from Vendor** area, select the transaction type of the reply document your vendor sends to you. For example, if you are creating a map for a purchase order transaction, select **Order SubmitResponse** as the type in the **Transaction Type** field. Your selection populates the **Target XML** column in the mapping utility's main window for the received document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 4. In the **Vendor's DTD** field in the **ReplyDocument Received from Vendor** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Source XML** column in the mapping utility's main window for the received document map. Click **Browse** to select the file.

Vendor Transaction Type	Description
Document *sent to* the vendor, but no reply document *received from* the vendor (outbound only)	1. In the **Transaction Type** field in the **Document Sent to Vendor** area of the New Transaction Map dialog box, select the transaction type of the document you receive from your vendor. For example, if you are creating a map for a purchase order transaction, select **Order Submit** as the type in the **Transaction Type** field. Your selection populates the **Source XML** column in the mapping utility's main window for the sent document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 2. In the **Vendor's DTD** field in the **Document Sent to Vendor** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Target XML** column in the mapping utility's main window for the sent document map. Click **Browse** to select the file. 3. In the **Reply Document Received from Vendor** area, select the **No Reply Will Be Received** check box to indicate that the vendor does not send a reply to your request. When your vendor's system receives your XML document, it sends an immediate HTTP Status 200 message back to your system. The Status 200 message indicates that the system received your request. The **Document Received From Vendor** tab is disabled for the transaction map.

Vendor Transaction Type	Description
Document *received from* the vendor, but no document *sent to* the vendor (inbound only)	1. In the **Document Sent to Vendor** area of the New Transaction Map dialog box, select the **No Document Will Be Sent** check box to indicate that you are not sending an XML document to your vendor. The **Reply Document Sent To Vendor** tab is disabled for the transaction map. 2. In the **Transaction Type** field in the **Document Received from Vendor** area, select the transaction type of the document your vendor sends to you. For example, if you are creating a map for an invoice transaction, select **Invoice** as the type in the **Transaction Type** field. Your selection populates the **Target XML** column in the mapping utility's main window for the received document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 3. In the **Vendor's DTD** field in the **Document Received from Vendor** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Source XML** column in the mapping utility's main window for the received document map. Click **Browse** to select the file.

Customer Transaction Type	Instructions
Document *received from* the customer and a reply document *sent to* the customer (inbound with an outbound response)	1. In the **Transaction Type** field in the **Document Received from Customer** area of the New Transaction Map dialog box, select the transaction type of the document you receive from your customer. For example, if you are creating a map for a purchase order transaction, select **Order Submit** as the type in the **Transaction Type** field. Your selection populates the **Target XML** column in the mapping utility's main window for the received document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 2. In the **Customer's DTD** field in the **Document Received from Customer** area of the New Transaction Map dialog box, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Source XML** column in the mapping utility's main window for the received document map. Click **Browse** to select the file. 3. In the **Transaction Type** field in the **Reply Document Sent to Customer** area, select the transaction type of the reply document you send to your customer. For example, if you are creating a map for a purchase order transaction, select **Order Submit Response** as the type in the **Transaction Type** field. Your selection populates the **Source XML** column in the mapping utility's main window for the sent document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in the XML transaction schemas. 4. In the **ReplyDocument Sent to Customer** area enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Target XML** column in the mapping utility's main window for the sent document map. Click **Browse** to select the file.

Customer Transaction Type	Instructions
Document *received from* the customer, but no reply document *sent to* the customer (inbound only)	1. In the **Transaction Type** field in the **Document Received from Customer** area of the New Transaction Map dialog box, select the transaction type of the document you receive from your customer. Your selection populates the **Target XML** column in the mapping utility's main window for the received document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 2. In the **Customer's DTD** field in the **Document Received from Customer** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Source XML** column in the mapping utility's main window for the received document map. Click **Browse** to select the file. 3. In the **Reply Document Sent to Customer** area, select the **No Reply Will Be Sent** check box to indicate the transaction type does not require a response. When your system receives the XML document from your customer, it sends an immediate HTTP Status 200 message back to the system that sent the document. The Status 200 message indicates that your system received the request The **Reply Document Sent To Customer** tab is disabled for the transaction map.

Customer Transaction Type	Instructions
No document *received from* the customer, but a document is *sent to* the customer (outbound only)	1. In the **Document Received from Customer** area of the New Transaction Map dialog box, select the **No Document Will Be Received** check box to indicate the transaction does not have an inbound transaction type, such as sending an invoice to your customer. The **Document Received From Customer** tab is disabled for the transaction map. 2. In the **Transaction Type** field in the **Document Sent to Customer** area, select the transaction type for the document you send to your customer. For example, if you are creating a map to send an invoice to your customer, select **Invoice** as the type in the **Transaction Type** field. Your selection populates the **Source XML** column in the mapping utility's main window for the sent document map and determines which elements in Eclipse are available. For additional information about how your selections display in the main window, see Understanding the Business Connect XML Mapping Utility. The options available in the **Transaction Type** field are defined in XML database schemas. 3. In the **Customer's DTD** field in the **Document Sent to Customer** area, enter the path to the DTD file your trading partner provided you for this transaction type. The DTD you enter here populates the **Target XML** column in the mapping utility's main window for the sent document map. Click **Browse** to select the file.

7. Click **OK** to add the transaction under the trading partner in the Trading Partner Tree.
8. If the transaction has a received document, continue with Mapping the Received XML. If the transaction does not have a received document, continue with Mapping the Reply/Sent XML.

Mapping the Received XML

If the transaction you are mapping contains a received document, map the received DTD elements from your trading partner to the Eclipse database elements available for the transaction type. If the transaction you are mapping does not contain a received transaction type, the **Document Received From Customer/Vendor** tab of the mapping utility is disabled.

Note: The tab name changes based on whether you are creating a customer or vendor transaction map.

To map the request XML:

1. If the transaction you want to map is not open, right-click the transaction in the Trading Partners Tree and select **Edit Transaction Map**.
2. Select the **Document Received From Customer/Vendor** tab to display the DTD for the source XML and the elements in Eclipse to which you can map the data.
3. Map elements from the **Source XML** column to elements in the **Target XML** column. For additional information about how to map and guidelines for creating valid mapping connections, see Mapping XML and Eclipse Data Elements.
4. Modify the mapping characteristics, as necessary.
5. If the transaction has an outgoing transaction type, continue with Mapping the Reply/Sent XML. If the transaction is a received-only transaction type, continue with Defining XML Mapping Selection Criteria.

Mapping the Reply/Sent XML

If the transaction you are mapping contains a document you are sending to a customer or vendor, map Eclipse elements available for the transaction type to the elements in the response DTD from your trading partner. If the transaction you are mapping does not contain a reply/sent transaction type, the **Document Sent to Customer/Vendor** tab of the mapping utility is disabled.

Note: The tab name changes based on whether you are creating a customer or vendor transaction map.

To map the reply/sent XML:

1. If the transaction you want to map is not open, right-click the transaction in the Trading Partners Tree and select **Edit Transaction Map**.
2. Select the **Document Sent To Customer/Vendor** tab to display the DTD for the reply/sent XML and the data elements in Eclipse from which you map the outgoing data.
3. Map Eclipse database elements in the **Source XML** column to the data elements in the response DTD in the **Target XML** column. For additional information about how to map and guidelines for creating valid mapping connections, see Mapping XML and Eclipse Data Elements.
4. Modify the mapping characteristics, as necessary.
5. Define the XML mapping selection criteria.
6. From the **File** menu, select **Save Transaction Map** to save the map.

Required XML Transaction Data

When creating maps between XML elements and Eclipse database elements, some transaction types have data that is required to send the transaction through the system.

- Required data for customer transactions.
- Required data for vendor transactions.

Required Data for Customer Transactions

The following data is required for transactions you send to or receive from your customers:

Transaction Type	Required Data Mapped to Eclipse
Order Submit Request for Quote	• ShipTo – Can be either the Eclipse ID or the customer e-commerce ID. • ProductIdentifier – Can be the UPC, product keywords, product ID, or the customer part number. • TotalQty – Defaults to one each for each product if you do not map data to this element, or if this element is mapped but the XML document contains no data.
Product Inquiry	• ProductIdentifier – Can be the UPC, product keywords, product ID, or customer part number.
Order Inquiry	• OrderID.
Change Order Request	• ChangeType – Free form text is allowed. • OrderID or CustomerPONumber. • Any elements that identify the changes to the order.

Required Data for Vendor Transactions

The following data is required for transactions you send to or receive from your vendors:

Transaction Type	Required Data Mapped to Eclipse
Order Acknowledgement Advance Ship Notice Invoice	• OrderID. • PayTo or ShipFrom. • ProductIdentifier – Can be the UPC code, product ID, customer part number, or vendor catalog number. • TotalQty – The total quantity on the order. When creating a transaction map for an order acknowledgement that you receive from your vendor, map the full ordered quantity from the vendor's DTD to TotalQty in Eclipse. If the full order quantity is not filled in and not correct, the system cannot match the acknowledgement to an order in your system. When creating a transaction map for an invoice that you receive from your vendor, map the number being shipped from the vendor's DTD to TotalQty in Eclipse. **Note:** TotalQty and InStockShipQty are located under OrderDetail in the Vendor Order Acknowledgement transaction type. • InStockShipQty - Quantity available for shipment. When creating a transaction map for ab order acknowledgements that you receive from your vendor, map the total number of items being acknowledged from the vendor's DTD to the InStockShipQty in Eclipse. If the full order quantity is not filled in and not correct, the system cannot match the acknowledgement to an order in your system. **Note:** TotalQty and InStockShipQty are located under OrderDetail in the Vendor Order Acknowledgement transaction type.
Direct Order Submit	• ShipTo. Located under the CustomerSalesOrderID element in a vendor direct order submit transaction. The CustomerSalesOrderID element references the header information specific to the customer receiving the items on the direct order. • BillTo. Located under the CustomerSalesOrderID element in a vendor direct order submit transaction. The CustomerSalesOrderID element references the header information specific to the customer receiving the items on the direct order.

See Also:

Creating XML Transaction Maps

Valid XML Mappings and Precautions

Defining XML Mapping Selection Criteria

You might have trading relationships with many customers and vendors, therefore receiving and sending multiple XML documents to and from different trading partners in one day. As the system receives and sends XML transaction requests, it scans the XML for an element or a value that you define per transaction for each trading partner. This element or value tells the system which trading partner is sending or receiving the XML document and which transaction map to use to translate the XML.

Note: You must define the mapping selection criteria before you can save a transaction map.

For each transaction map for each trading partner, define one of the following:

- Element tag as the selection indicator.
- Value as the selection indicator.

  Note: For a purchase order that you send to your vendor, use only the PayTo and ShipFrom elements as selection criteria.

To define an element tag as the selection indicator:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Select the **Mapping Selection Criteria** tab to display the available elements to define as map indicators.

   If the transaction map is a received transaction type, the content of the DTD for the received document displays in this tab. If the transaction map is a sent-only transaction type, the content of the DTD for the sent document displays.
4. Right-click the element to use as the indicator and select **Set Selection Criteria** to display the Selection Criteria dialog box.
5. Select the **This Tag Exists** option to indicate that the system should look only for this tag, not a value associated with this tag.
6. Click **OK** to save the setting and return to the **Mapping Selection Criteria** tab.

   The option you selected displays with a red highlight.
7. From the **File** menu, select **Save Transaction Map** to save the map settings.

   Note: To change the indicator, repeat steps 3 through 6.

To define a value as the selection indicator:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Select the **Mapping Selection Criteria** tab to display the available elements to define as map indicators.

   If the transaction map is a received transaction type, the content of the DTD for the received document displays in this tab. If the transaction map is a sent-only transaction type, the content of the DTD for the sent document displays.
4. Right-click the element to use as the indicator and select **Set Selection Criteria** to display the Selection Criteria dialog box.
5. Select the **This Tag Exists With Values** option to indicate that the system should look for values defined within the element.
6. In the **Value** field, enter the value the system uses to identify this trading partner and press **Enter** to add the value to the list.
7. Repeat steps 5 and 6 to add additional values, as necessary.

   Note: To delete a value from the list, select the value and click the X button.
8. Click **OK** to save the setting and return to the Mapping Selection Criteria tab.

   The option you selected displays with a red highlight.
9. From the **File** menu, select **Save Transaction Map** to save the map settings.

   Note: To change the indicator, repeat steps 3 through 8.

Adding HTTP Headers to XML Transaction Maps

Your trading partners might require that you add security or other information to an XML document in the form of an HTTP header. Including an HTTP header section in an XML document allows your trading partner's system to examine the information in the header prior to opening the XML document. An XML document can include more than one HTTP header section.

When you preview the XML translation for the transaction map containing an HTTP header, the HTTP header displays as part of the XML in the response document. When the XML is transformed and sent to your trading partner, the system extracts the information and adds it to the HTTP headers in the HTTP transaction.

> **Note:** You can add HTTP header information only to transaction maps for outgoing XML documents.

To add an HTTP header to an XML transaction map:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Click the **Document Sent to Customer/Vendor** tab to display the DTD for the reply/sent XML.
4. In the **Target XML** column, right-click any element and select **Add HTTP Header Info** to display the Add HTTP Header Info dialog box.

   The default element name displays.
5. Update the element name, as needed. We recommend you use the default element name.
6. Click **OK** to add the HTTP header element to the **Target XML** column.
7. Map the element, as needed.
8. Modify the mapping characteristics, as needed.
9. From the **File** menu, select **Save Transaction Map** to save the map.

To delete an HTTP header from an XML transaction map:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Click the **Document Sent to Customer/Vendor** tab to display the DTD for the reply/sent XML.
4. In the **Target XML** column, right-click the HTTP header element you want to delete and select **Remove HTTP Header Info**.
5. From the **File** menu, select **Save Transaction Map** to save the map.

Indicating the Document Type in XML Transaction Maps

Your trading partners might require that you declare the document type in a DOCTYPE element in XML documents you send. The DOCTYPE declaration contains a URL to the document type definition (DTD) or schema that defines the XML document, and tells your trading partner's system which DTD or schema to use to validate the XML.

Note: You can add a DOCTYPE declaration only to transaction maps for XML documents you are sending to a trading partner. XML documents that you receive from your trading partners do not require a DOCTYPE declaration.

To indicate the document type in an XML transaction map:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Click the **Document Sent to Customer/Vendor** tab to display the reply/sent transaction map.
4. In the **Target XML** column, right-click any element and select **Add DOCTYPE Reference** to display the Add DOCTYPE Reference dialog box.
5. In the **System ID Reference** field, complete the URL to the DTD or schema the XML document uses.
   - **http://y.com** – The URL path to the location that contains the DTD or schema.
   - **/*.dtd** – The DTD file name or schema name. An XML schema's file extension is .xsd.

   For example, if the XML document uses the basic commerce XML (cXML) DTD, complete the URL to read **http://xml.cxml.org/schemas/cXML/<*version*>/cXML.dtd**, where <*version*> is the full cXML versions number, such as 1.2.014.

   The declaration must be in the correct upper and lower case for the reference to work.
6. Click **OK** to add the DOCTYPE reference to the transaction map.

   The first element in the **Target XML** column displays with a yellow icon, indicating that the XML document now contains the DOCTYPE element.
7. From the **File** menu, select **Save Transaction Map** to save the map.

   To verify the DOCTYPE in the outgoing XML, preview the XML translation for transaction map's response XML document. To test the document post the XML to Eclipse. You must save the transaction prior to posting.

To remove the document type declaration from an XML transaction map:

1. Access the Business Connect XML mapping utility.
2. Right-click a transaction in the Trading Partner Tree and select **Edit Transaction Map** to display the transaction map.
3. Click the **Document Sent to Customer/Vendor** tab to display the reply/sent transaction map.
4. In the **Target XML** column, right-click any element and select **Remove DOCTYPE Reference**.

   The system removes the DOCTYPE element and the yellow icon no longer displays in the first element in the **Target XML** column.
5. From the **File** menu, select **Save Transaction Map** to save the map.

See Also:

Creating XML Transaction Maps

Defining Logical Expressions for XML Data

Mapping XML and Eclipse Data Elements

Modifying Incoming and Outgoing XML Data

Lines drawn from source to target elements in a transaction map represent a movement of data. At times, your trading partners might define data in a format different than how Eclipse can store it or the data in Eclipse might not be in a format your trading partner can understand. For example, you might have a trading partner that defines dates using the mm/dd/yy format, where Eclipse stores dates using the mm/dd/yyyy format; or you might have a trading partner that defines the unit of measure of each as "each," but Eclipse stores the same unit of measure as "ea".

To process XML transactions successfully, modify this type of data to match the required format. The system translates the data to the new format before saving it or sending it. You can manipulate each target element of a transaction for both the received document map and the sent document map using operations such as concatenation, adding, subtracting, and table-based conversions.

You can also add sources, such as literal statements to help identify data. For example, you might store e-mail addresses and other information in the **Internal Notes** field of an order. To better identify data stored and displayed in the field, you can concatenate a literal statement, such as **Email:** to the incoming data address.

Using a combination of sources and operations, you can create a stacked operation to modify any XML data, even if the element does not have source data mapped to it.

You can add the following sources to an expression:

Source	Description
Literal	Adds a text string to the XML data. For example, you can store e-mail addresses and other information in the **Internal Notes** field of an order. To better identify data stored and printed in the field, add literal statements to identify the data.
New Line	Inserts a line break in the XML data, for better readability.

You can add the following operations to an expression:

Operation	Description
Concatenate	Links or joins data together. For example, if you are mapping several pieces of data to the **Internal Notes** field of an order, link the data together to form a valid expression.
Substring	Copies one part of a string, and assigns it to a variable or element. For example, you can extract the first four digits of a credit card number to identify the bank. If the string of data contains delimiters, you can also use the extract field operation.
Extract fields	Extracts data from a substring of data separated by delimiters into numbered field names. For example, if you have a string of three values separated by a comma (the delimiter), and you need to save the middle value, use the extract field operation to indicate which field within the delimited string you want to save.

Operation	Description
Table-based conversions	Converts data from one format to another. For example, your trading partner might use the unit of measure of "each." Eclipse stores units of measure as two characters. Using a table-based conversion, you can tell the system to change the unit of measure "each" to "ea" for incoming data, and to change "ea" to "each" for outgoing data.
Decimal conversions	Tells the system how many decimal places to use in numeric values. Use decimal conversions if your trading partner sends dollar amounts or other numbers in a format that does not contain decimals in the actual data.
Date conversions	Converts dates into different formats. For example, your trading partner sends date information using the mm/dd/yy format, but Eclipse stores dates using the mm/dd/yyyy format. Define a date conversion operation to convert the format of the date element.
Mathematical operations	Adds, subtracts, multiplies, divides, or sums amounts within XML data.
Encode or decode Base64	Encodes or decodes Base64 data. Use this type of encoding to preserve special characters that you might receive or send using XML. **Note:** Base64 encoding does not encrypt data.
Extract current date and time	Extracts the date and time the transaction was received or sent. Use this operation to extract all or a portion of a date or time stamp.
Inversion	Divides a number into 1, making a reciprocal. For example, if you received the number 42, assigning this operation changes the number to 1/42.
Uppercasing and lowercasing letters	Uppercases or lowercases letters in a string of XML data.
XPath selection	Defines an if-then-else operation for XML data that identifies the element to use instead of another element if the correct conditions exist.
Repeating group selection	Defines an if-then-else operation for XML data that identifies one specific piece of data within an XML repeating element.
Logical If-Then-Else	Defines a basic if-then-else operation for XML data. For example, use this logical expression type to define a condition in which you would need to change data.

Business Connect XML Mapping Utility Main Window Aspects

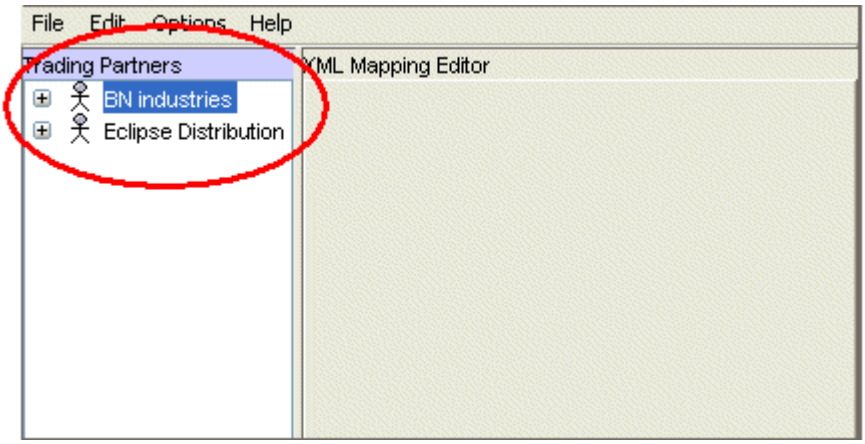
As you select document type definition (DTD) files and identify what transaction types comprise a trading partner transaction, the system populates the Business Connect XML mapping utility with data from your selections. This topic illustrates how each field in the New Mapping Transaction dialog box relates to the data you use to create transaction maps within the mapping utility.

See the following sections for information about what data displays in each:

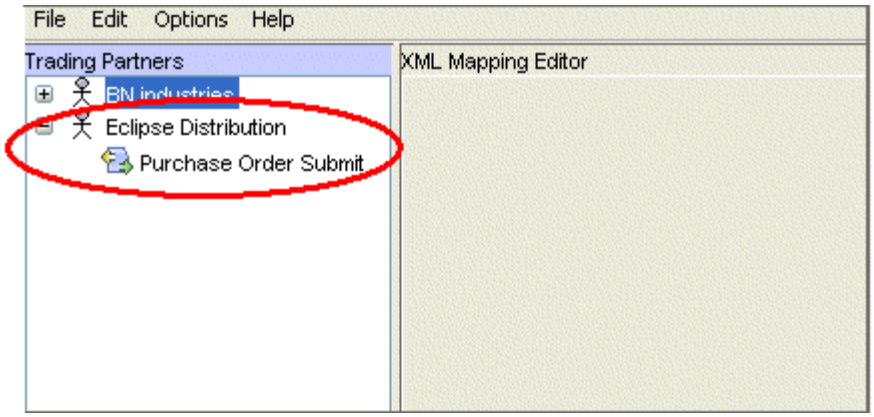
- Trading Partners Tree
- Tabs for Customer Transactions
- Tabs for Vendor Transactions
- Mapping Selection Criteria Tab for Customer and Vendor Transactions

Trading Partners Tree

When you add a new trading partner, the system adds the trading partner name to the Trading Partners Tree:



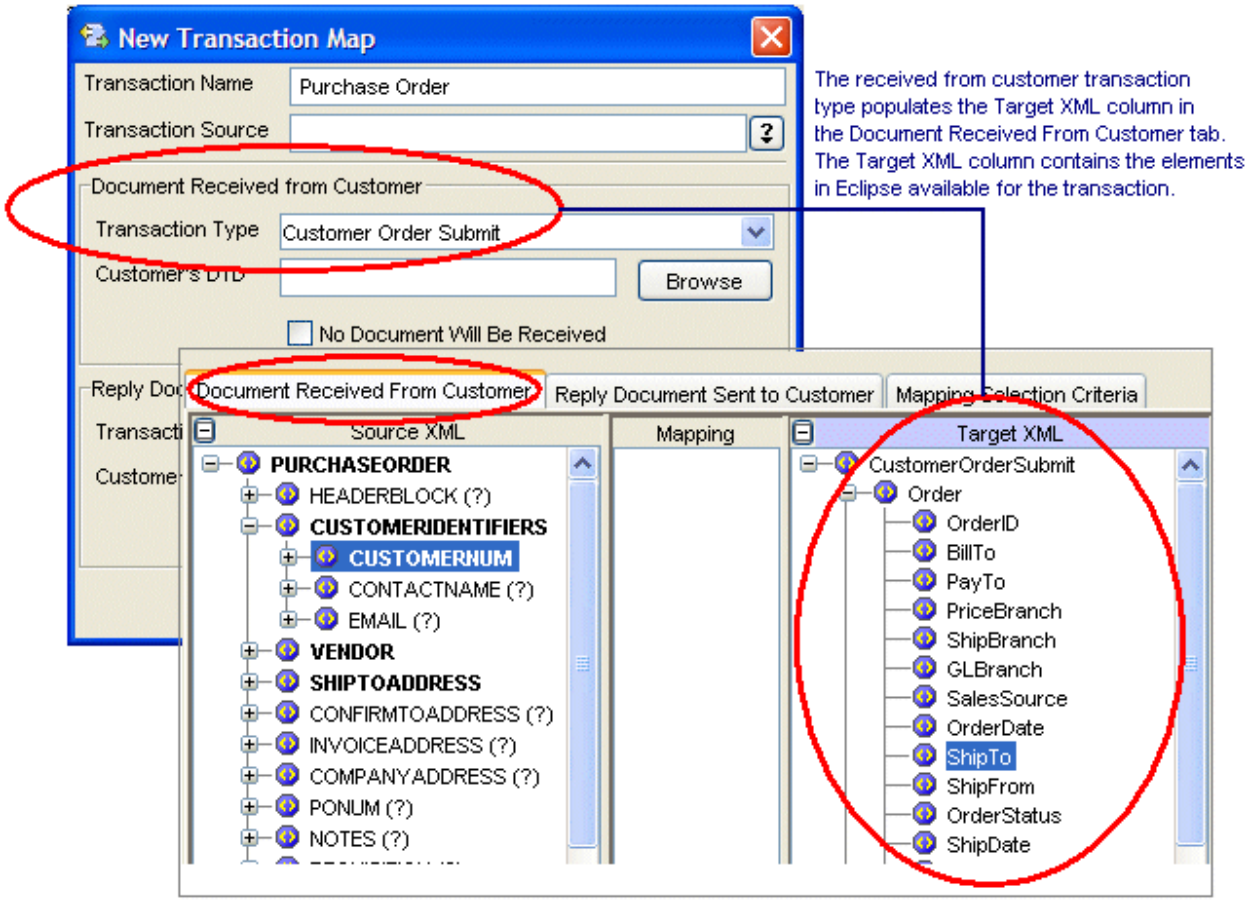
As you define transaction maps for each trading partner, the transactions display nested under the partner to which they belong:



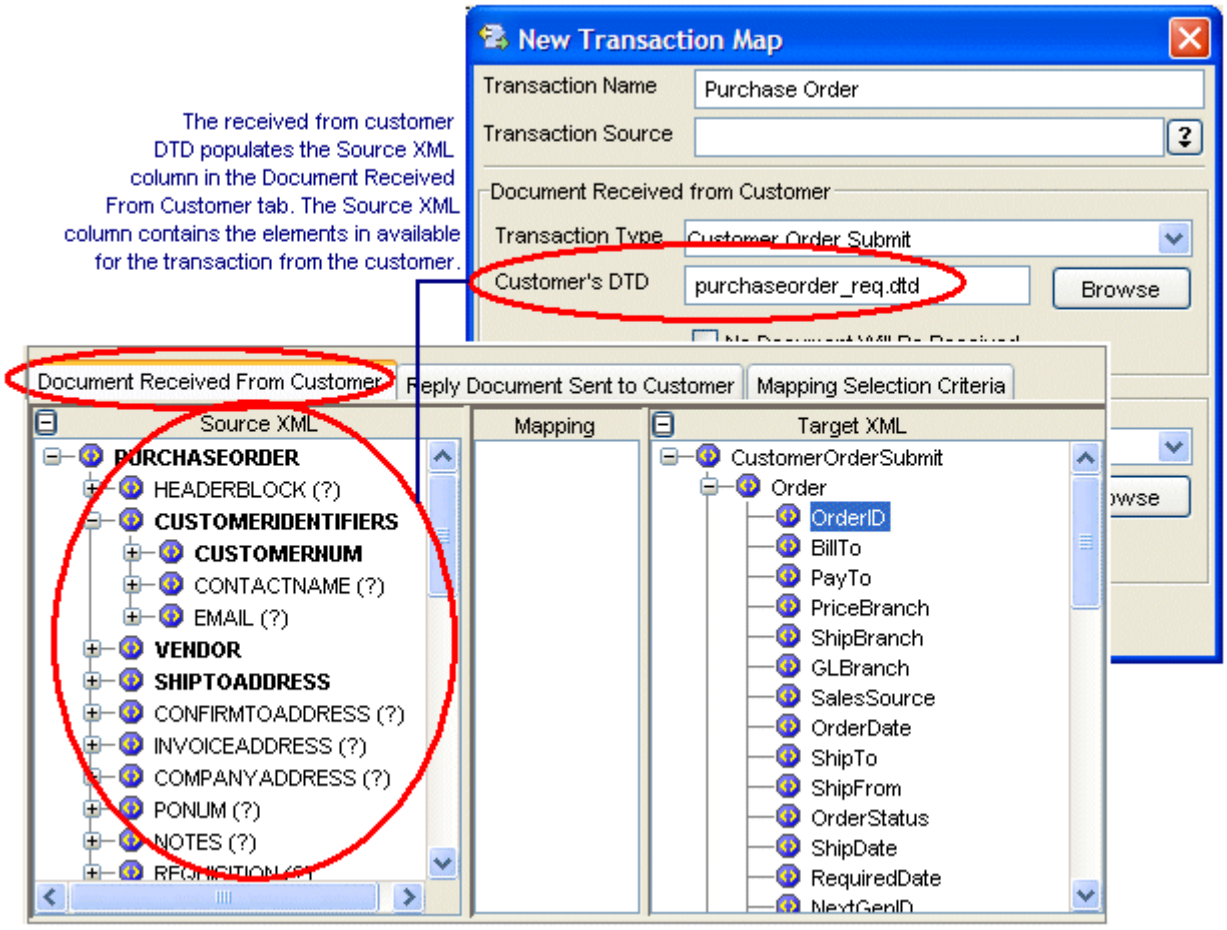
Tabs for Customer Transactions

The **Document Received from Customer** tab displays the elements in Eclipse for inbound documents that you receive from your customer. When defining a customer transaction map, the transaction type you select in the **Document Received from Customer** area of the New Mapping Transaction dialog box populates the **Target XML** column in the **Document Received from Customer** tab. The target XML for this transaction type contains the data elements in Eclipse that are available for the transaction. The elements available are defined in XML database schemas.

Note: If the customer transaction does not contain a received document, such as an invoice, and you select the **No Document Will Be Received** check box in the **Document Received from Customer** area of the New Transaction Map dialog box, the **Document Received From Customer** tab is disabled.

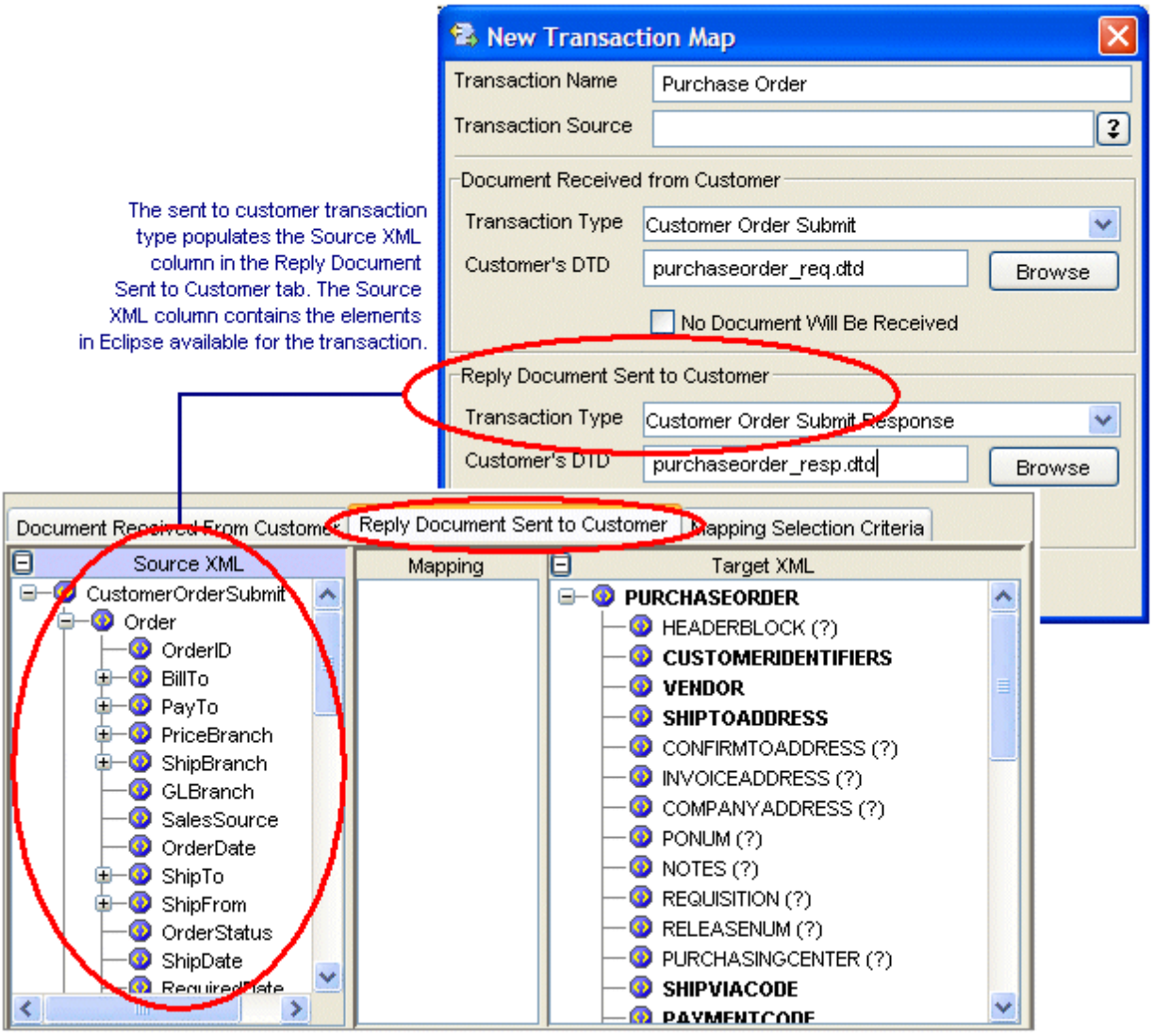


The DTD you select in the **Document Received from Customer** area of the New Transaction Map dialog box populates the **Source XML** column in the **Document Received From Customer** tab. The source XML for this transaction type contains the data elements defined in the DTD from your trading partner. The data elements display in the order they are defined in the DTD.

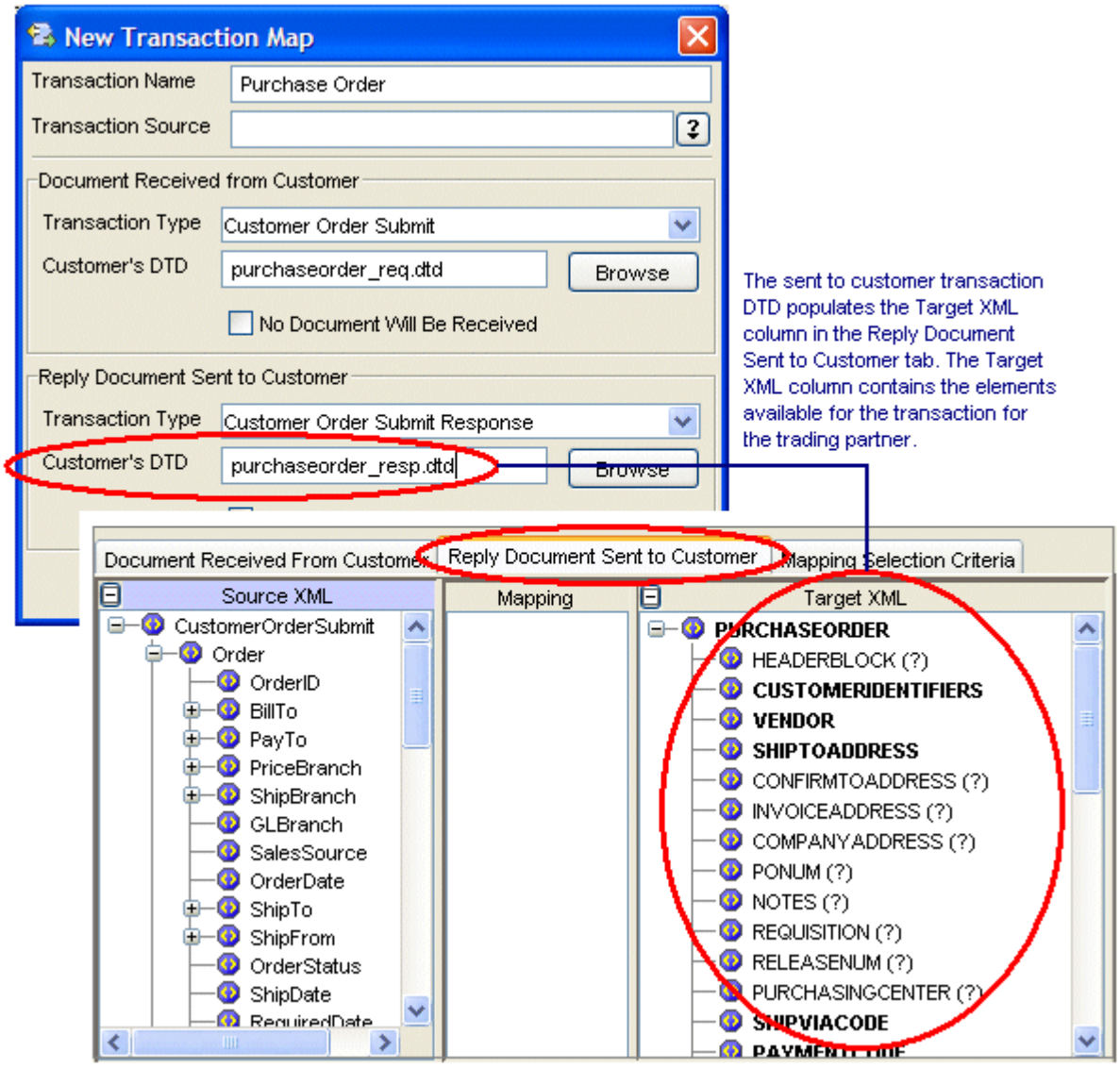


The **Reply Document Sent to Customer** tab displays the data elements in Eclipse for documents you send to your customer. When defining a transaction map, the transaction type you select in the **Reply Document Sent to Customer** area of the New Transaction Map dialog box populates the **Source XML** column in the **Reply Document Sent to Customer** tab. The source XML for a sent document contains the data elements in Eclipse available for the transaction. The elements available are defined in XML database schemas.

Note: If the customer transaction does not contain a sent document and you select the **No Document Will Be Received** check box in the **Reply Document Sent to Customer** area of the New Transaction Map dialog box, the **Reply Document Sent to Customer** tab is disabled.



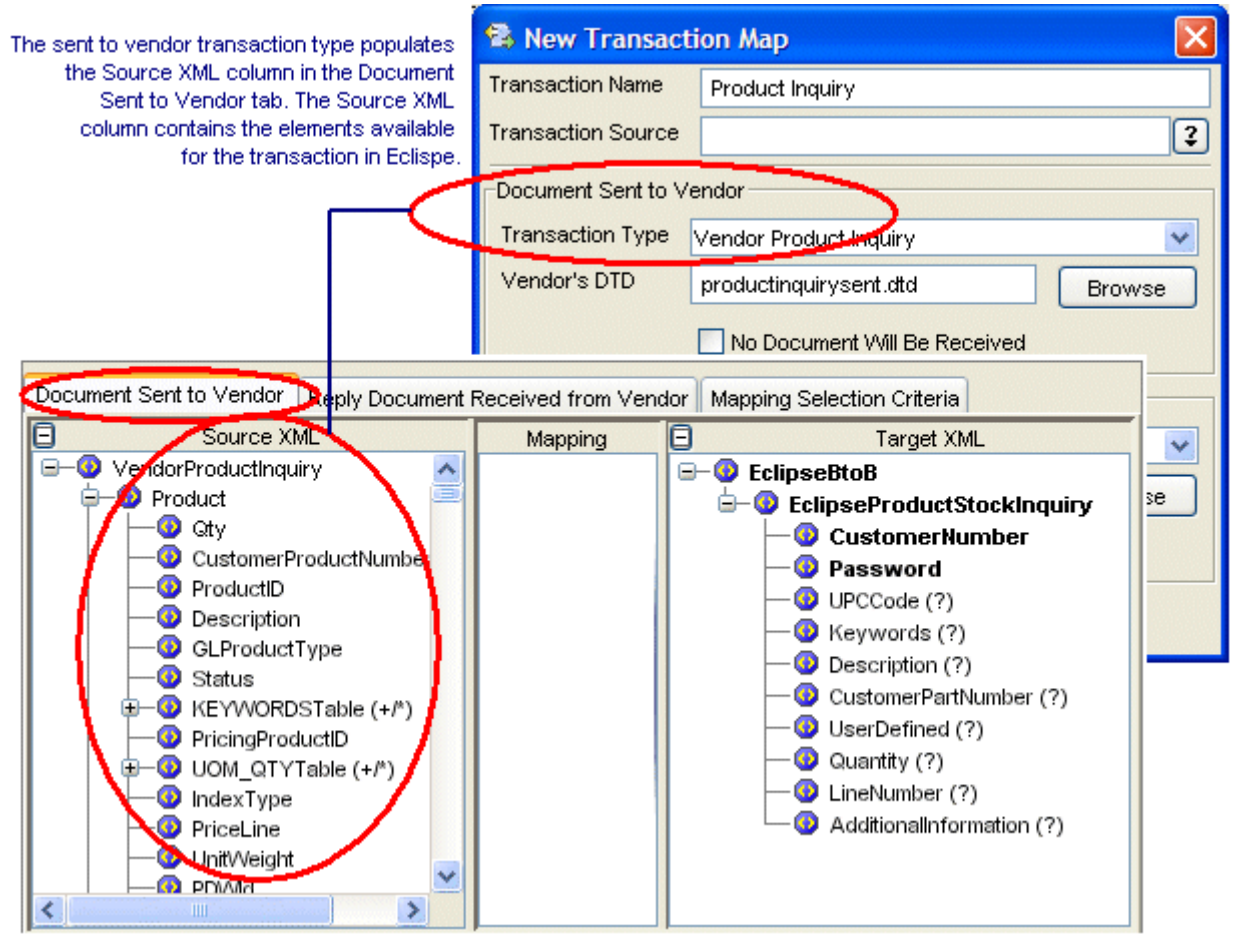
The DTD you select in the **Reply Document Sent to Customer** area of the New Transaction Map dialog box populates the **Target XML** column in the **Reply Document Sent to Customer** tab. The target XML for this transaction type contains the data elements defined in the DTD file from your trading partner. The data elements display in the order they are defined in the DTD.



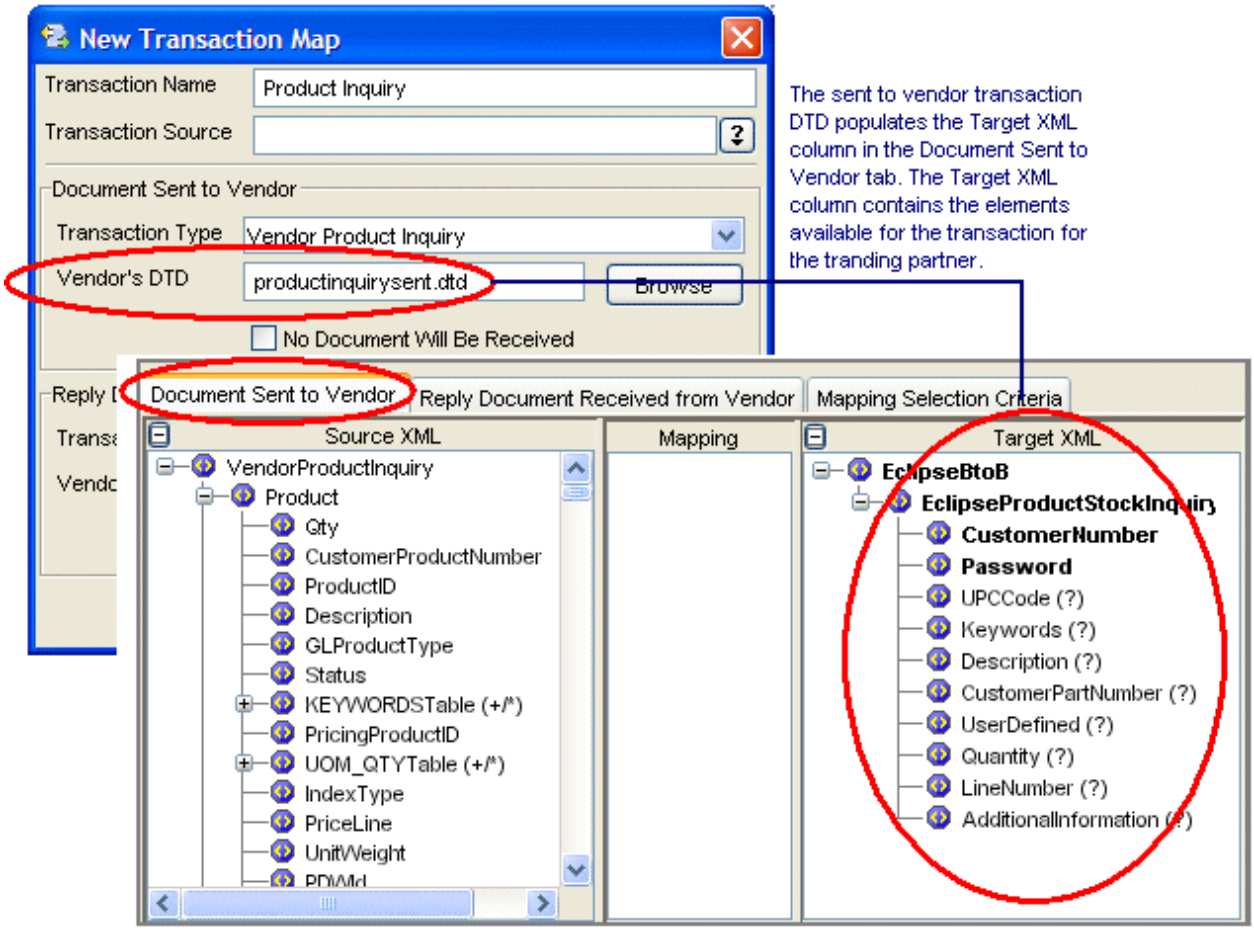
Tabs for Vendor Transactions

The **Document Sent to Vendor** tab displays the elements in Eclipse for documents you send to your vendor. When defining a transaction map, the transaction type you select in the **Document Sent to Vendor** area of the New Transaction Map dialog box populates the **Source XML** column in the **Document Sent to Vendor** tab. The source XML for a sent document contains the elements in Eclipse available for the transaction. The elements available are defined in XML database schemas.

Note: If the vendor transaction does not contain a sent document and you select the **No Document Will be Received** check box in the **Document Sent to Vendor** area of the New Transaction Map dialog box, the **Document Sent to Vendor tab** is disabled.

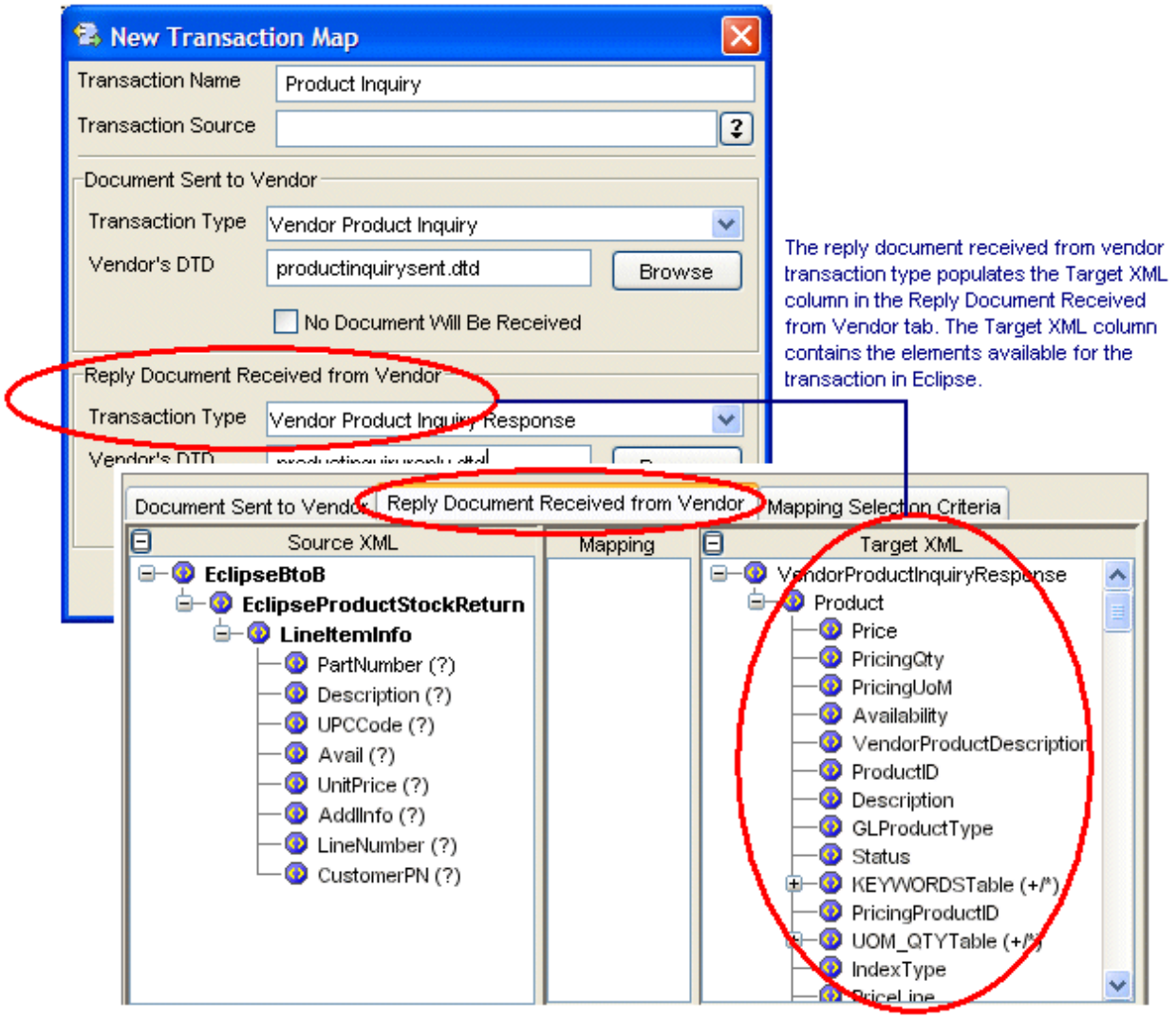


The DTD you select in the **Document Sent to Vendor** area of the New Transaction Map dialog box populates the **Target XML** column in the **Document Sent to Vendor** tab. The target XML for this transaction type contains the data elements defined in the DTD file from your trading partner. The data elements display in the order they are defined in the DTD.

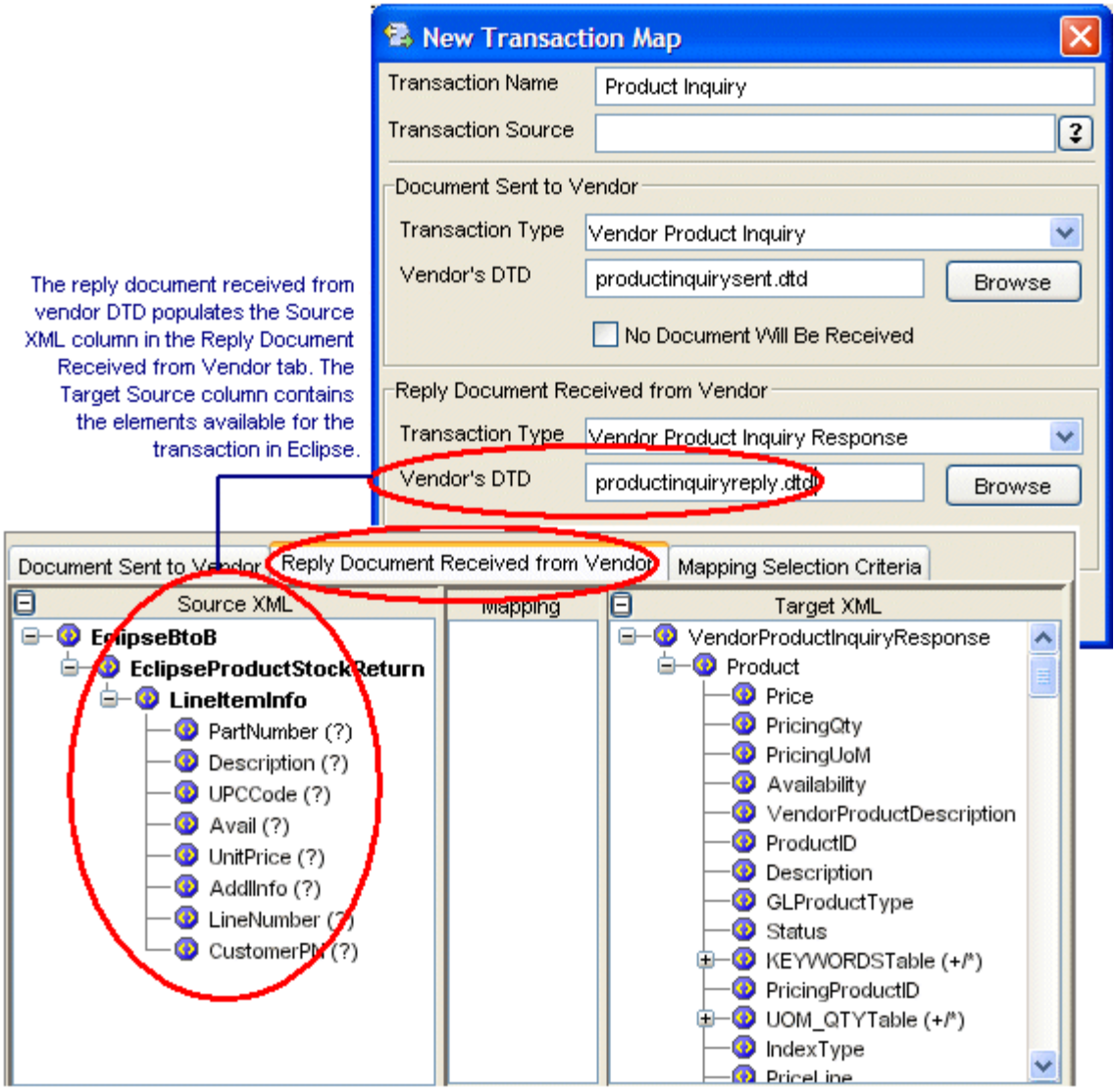


The **Reply Document Received from Vendor** tab displays the elements in Eclipse for documents that you receive from your vendor. When defining a vendor transaction map, the transaction type you select in the **Reply Document Received from Vendor** area of the New Transaction Map dialog box populates the **Target XML** column in the **Reply Document Received from Vendor** tab. The target XML for this transaction type contains the data elements in Eclipse that are available for the transaction. The elements available are defined in XML database schemas.

Note: If the vendor transaction does not contain a received document, and you select the **No Document Will Be Received** check box in the **Reply Document Received from Vendor** area of the New Transaction Map dialog box, the **Reply Document Received From Vendor** tab is disabled.

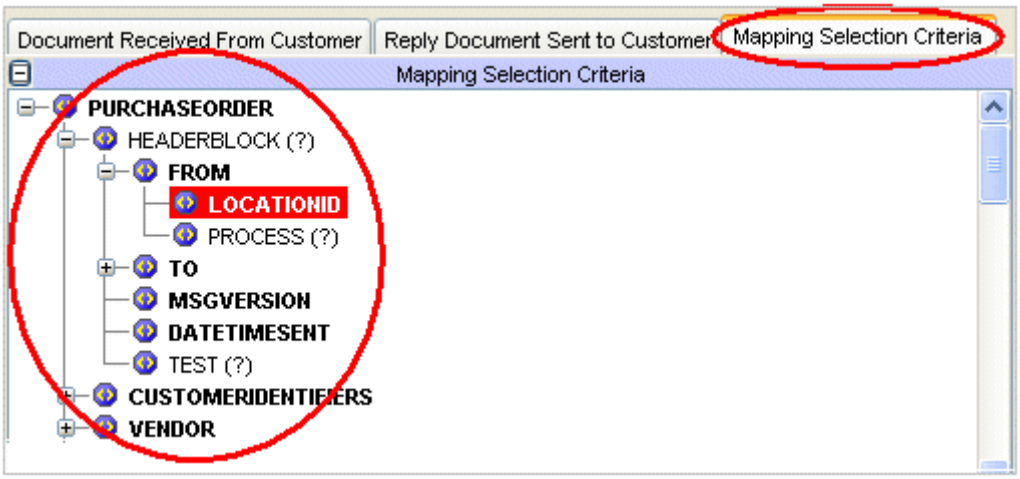


The DTD you select in the **Reply Document Received from Vendor** area of the New Transaction Map dialog box populates the **Source XML** column in the **Reply Document Received from Vendor** tab. The source XML for this transaction type contains the data elements defined in the DTD from your trading partner. The data elements display in the order they are defined in the DTD.



Mapping Selection Criteria Tab

Use the **Mapping Select Criteria** tab to indicate to the system which map to use when it receives or sends an XML document. If the transaction map contains an inbound, received transaction type, the DTD file you select for the received XML document in the New Transaction dialog box populates the **Mapping Selection Criteria** tab. If the transaction map does not contain an inbound transaction type and is outbound-only, the DTD you select for the outgoing, sent to document populates the **Mapping Selection Criteria** tab. For additional information, see Defining Mapping Selection Criteria.



Business Connect XML Mapping Utility Symbols

Your trading partners' document type definition (DTD) files might contain one or more of the following symbols that indicate the occurrence of each element in the DTD. These symbols display in the Business Connect XML mapping utility when you expand the source or target XML that represents the DTD from your trading partner:

Symbol	Description
*	A one-to-many relationship can be mapped for the element. The element can appear in the XML document once, more than once, or not at all.
+	A repeating group, that is, the element can occur in the XML document once or more than once, such as, items on an order.
?	An optional piece of data, such as an extension for a telephone number. The element might appear in the XML document zero or one time.
Blank	The element must appear only once in the XML document.
	An XML attribute associated with the element.
Bold	The element is required for the transaction.

The Business Connect XML mapping utility also contains the following symbols:

Symbol	Description
	Trading partner in the Trading Partner Tree. Transactions are listed under each trading partner.
	Transaction in the Trading Partner Tree, or a trading partner that does not have transactions defined yet.
	The target XML element has operations assigned to modify incoming or outgoing data.
	The target XML element has a source element mapped to it, with no additional data modifications.
	The target XML element has a nested element to which a source element is mapped. Expand the element to see the nested elements.
	Multiple target elements are mapped to a source element. This symbol displays in the Mapping Preview pane.
	The XML document contains a DOCTYPE declaration.
	The element has a single data conversion applied. This symbol displays in the Mapping Preview pane.
	The element has multiple data conversions applied. This symbol displays in the Mapping Preview pane.

Symbol	Description
	A source, such as a Literal, in the **Operation Stack** field in the XML Mapping Conversion Editor dialog box.
	An operation, such as concatenation, in the **Operation Stack** field in the XML Mapping Conversion Editor dialog box.

Sending and Receiving Customer Transactions Using XML

Using the settings you define in Eclipse and the transaction maps you set up for trading partners in the mapping utility, the system processes transactions and routes them to review queues where appropriate.

Before sending or receiving XML from customers, ensure you have completed the following setup for the customer records in Eclipse. For additional system setup requirements, see Business Connect XML Setup.

- Set system notifications for XML customer transactions.
- Set post locations for XML customer transaction documents.
- Set XML activity triggers.
- Define pricing variance for XML customer transactions.

Use Business Connect XML to *receive* the following transaction types from customers with whom you do business using XML documents:

- Order submits
- Product inquiries
- Change order requests
- Requests for quotes
- Punch-out setup requests
- B2B connection test

Use Business Connect XML to *send* the following transaction types to customers with whom you do business using XML documents:

- Order acknowledgements
- Advance ship notices
- Invoices

For information about additional setup considerations, and how to process these transactions using Eclipse, see the Business Connect XML online Help.

Processing B2B Connection Test Transactions From Your Customers

If you are using the Eclipse B2B Commerce companion product for electronic trading with customers who also run Eclipse, your system processes test transactions to verify the communication connection between your Eclipse system and your customer's Eclipse system. When a trading partner submits a B2B connection test to your company using XML, your system does the following:

- Translates the XML request according to the settings in the inbound customer B2B connection test transaction map for the trading partner.
- Verifies the basic credential information passed in the transaction.
- Sends a successful HTTP 200 response back to your customer.
- Archives the incoming XML document in Remote Archive Maintenance.

See Also:

Creating XML Transaction Maps

Remote Archive Maintenance Overview

Sending and Receiving Customer Transactions Using XML

Sending and Receiving Vendor Transactions Using XML

Using the settings you define in Eclipse and the transaction maps you set up for trading partners in the mapping utility, the system processes transactions and routes them to review queues where appropriate.

Before sending or receiving XML from vendors, ensure you have completed the following setup for vendor records in Eclipse. For additional system setup requirements, see Business Connect XML Setup.

- Set vendor access information for XML documents.
- Set vendor activity triggers for XML documents.
- Set post locations for XML vendor transaction documents.

Use Business Connect XML to *receive* the following transaction types from vendors with whom you do business using XML documents:

- Purchase order acknowledgements
- Advance ship notices
- Invoices
- Product inquiries

Use Business Connect XML to *send* the following transaction to vendors with whom you do business using XML documents:

- Purchase orders
- Change order requests
- Direct orders
- B2B connection tests

For information about additional setup considerations, and how to process these transactions using Eclipse, see the Business Connect XML online Help.

Sending XML Direct Orders to Your Vendors

A direct order is similar to a purchase order that you send to your vendor to request items for your warehouse to fill outstanding orders. However, using a direct order, you instruct the vendor to ship the ordered items directly to your customer, not to you.

The system transmits direct orders to vendors using XML when you set the print status on a direct sales order generation to **2** and select the **Direct Order Submit** transaction document. The direct sales order generation contains the items that you are acquiring from your vendor to fill the order. You can also send a direct order to your vendor using the Eclipse B2B Commerce screen in sales order entry if you are procuring items for an order and want to ship them directly to your customer.

> **Note:** Before the system can send a direct order to a vendor, create an XML transaction map for a direct order transaction type that contains the ship-to and bill-to information for the order, set activity triggers, and define document post locations for the vendor.

When you send a direct order using XML, the system verifies that the vendor has a transaction map defined for an outbound direct order transaction type and archives the XML sent in Remote Archive Maintenance.

To send an XML direct order to your vendor:

1. Display an open order in Sales Order entry.
2. Display the order's Status screen and select the direct order generation you want to send.
3. In the **Prt** field for that generation, enter **2** for B2B Transmit.

   Note: You can also send a direct order to your vendor using the Eclipse B2B Commerce screen in sales order entry if you are procuring items for an order and want to ship them directly to your customer.

4. Press **Esc** to exit the window, process the order, and send it to the vendor.
5. If prompted, select the **Direct Order Submit** document.

   The system verifies that a valid XML transaction map exists for a purchase order for the trading partner and translates the Eclipse data using the settings in the map.

See Also:

Creating XML Transaction Maps

Remote Archive Maintenance Overview

Sending and Receiving Vendor Transactions Using XML

Testing Vendor B2B Connections with XML

If you are using the Eclipse B2B Commerce companion product for electronic trading with your vendors who also run Eclipse, test the B2B communication connection between your Eclipse application and your vendors from the Vendor B2B Setup screen in Eclipse. When you test the vendor B2B communication, your system and your vendor's system do the following:

- Your system translates the XML request according to the settings in the outbound vendor B2B connection test transaction map.
- Your vendor's system verifies the basic credential information passed in the transaction and sends a message back to your system. If the connection test was successful, your vendor's system sends HTTP 200 response back to your system and Eclipse displays the following message in the Vendor B2B Setup screen: Good Customer Number and Password. Connection was successful.

  If the connection test was not successful, Eclipse displays troubleshooting information in the Vendor B2B Setup scree. For example, the message might indicate that the password you specified is invalid, or the web server would not allow a certain method. The message often displays detailed HTML information that you can use to determine the connection problem.
- Your system archives the outgoing XML document in Remote Archive Maintenance.

To send a vendor B2B connection test transaction:

1. From the **Files** menu, select **Vendor** to display the Vendor Maintenance screen.
2. Open or create a vendor maintenance record.
3. Use the **WWW** hot key to display the Internet Information Maintenance screen.
4. Use the **B2B Commerce** hot key to open the vendor's Eclipse B2B Commerce Vendor Maintenance screen.
6. Enter the login information you use to access the vendor’s web site:

Field	Description
Customer ID	Your company-assigned login identification.
Login	The login ID for the customer.
Password	Your company-assigned login password.

7. Use the **B2B Post URL** hot key and select **Connection Test**.

   The system uses the location in the **Default** transaction type if all transactions' posts go to the same location for the vendor. If the vendor requires the connection test posts to go to different locations, set the URL for the connection test URL. If not, use the default post URL.
8. In the **B2B Post URL** field, enter the post location for XML documents for the customer.
9. Press **Esc** until you return to the Vendor Maintenance screen.

10. Press **Esc** to save the vendor record and exit the screen.
11. Use the **Test Connection** hot key to test your connection access to the vendor. The system attempts to connect to the vendor's URL, using your login information.

See Also:

Creating XML Transaction Maps

Remote Archive Maintenance Overview

Sending and Receiving Vendor Transactions Using XML

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