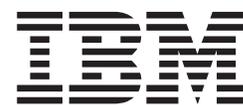


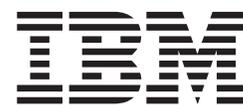
IBM WebSphere Business Integration Express for
Item Synchronization



Quick Start Guide

Version 4.3

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Item Synchronization



Quick Start Guide

Version 4.3

Note!

Before using this information and the product it supports, read the information in "Notices" on page 39.

30September2003

This edition of this document applies to IBM WebSphere InterChange Server, version 4.3, and to all subsequent releases and modifications until otherwise indicated in new editions.

To send us your comments about this document, email doc-comments@us.ibm.com. We look forward to hearing from you.

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About this document

The IBM^(R) WebSphere^(R) Business Integration Express for Item Synchronization product includes InterChange Server Express, the associated Toolset Express product, the Item Synchronization collaboration, and a set of software integration adapters. Together they provide business process integration and connectivity among leading e-business technologies and enterprise applications as well as integration with the UCCnet GLOBALregistry.

This document provide an overview of the configuration procedures required after you have installed WebSphere Business Integration Express for Item Synchronization.

Audience

This document is for anyone who develops components for WebSphere Business Integration Express for Item Synchronization system.

Related documents

The complete set of documentation describes the features and components common to all WebSphere Business Integration Express for Item Synchronization installations, and includes reference material on specific components.

You can install the documentation or read it directly online at one of the following site:

<http://www.ibm.com/websphere/wbiitemsync/express/infocenter>

The site contains simple directions for downloading, installing, and viewing the documentation.

Conventions used in this guide

This document uses these abbreviations and style conventions:

- Abbreviations are used for some words and some variables in syntax statements. These abbreviations are used:

App = name of application	Gen = generic
Attr = name of attribute	ICS = InterChange Server Express
BO* = business object (prefix to a BO file)	ObjectName* = variable name for business object
Collab = collaboration	Src = source
Dest = destination application	

* BO is the prefix to a BO file; the term BO generally refers to the business object definition text files. *ObjectName* refers to the variables used to represent business objects.

- The term “camelcase,” used in this document, refers to a style of capitalization whereby the spaces between words are eliminated, and the first letter of each word (or more than one letter if using acronyms) is capitalized. For example, the collaboration template name DemandForecastVer2 is in camelcase.

In addition, this document uses the following typographical conventions:

<code>courier font</code>	Indicates a literal value, such as a command name, filename, information that you type, or information that the system prints on the screen.
<i>italic</i>	Indicates a variable name or a cross-reference.
blue outline	A blue outline, which is visible only when you view the manual online, indicates a cross-reference hyperlink. Click inside the outline to jump to the object of the reference.

Quick Start Guide

Important: Before you begin using this guide, be certain that you have downloaded the most recent version of this guide from the WebSphere Business Integration Express for Item Sync InfoCenter:
<http://www.ibm.com/websphere/wbiitemsync/express/infocenter>

You should be using a version dated 10October2003 or later.

This document provides a roadmap of the required procedures for configuring your WebSphere Business Integration Express for Item Synchronization system. This document assumes that you have successfully installed the WebSphere Business Integration Express for Item Synchronization product. If you have not yet installed the WebSphere Business Integration Express for Item Synchronization product, see *Installing WebSphere Business Integration Express for Item Synchronization*.

This chapter includes the following sections:

- “Contacting IBM WebSphere Business Integration Express for Item Synchronization Support”
- “Finding help”
- “Configuration required after installation” on page 2
- “Administration” on page 38

Contacting IBM WebSphere Business Integration Express for Item Synchronization Support

For support issues relating to the WebSphere Business Integration Express for Item Synchronization product, you can contact IBM Customer Support in one of the following ways:

- Visit the IBM WebSphere Business Integration Express for Item Synchronization technical support Web site at: www.ibm.com/software/support/.
- To contact IBM WebSphere Business Integration Express for Item Synchronization support via phone, call: 1-800-IBM-SERV (USA/Canada) or (for non-USA) refer to <http://techsupport.services.ibm.com/guides/contacts.html> for number in your geographic area.

Finding help

If you need more information regarding your WebSphere Business Integration Express for Item Synchronization system, refer to:

- “Tools help,” or
- “WebSphere Business Integration Express for Item Synchronization documentation” on page 2

Tools help

To access context sensitive help for any of the Express tools, click **F1**.

WebSphere Business Integration Express for Item Synchronization documentation

To access both the documentation and the content-sensitive help for WebSphere Business Integration Express for Item Synchronization, you must download the document viewer, and the documentation files, and the help from the IBM InfoCenter. If you have not already done so, go and download that documentation from the following Web site:

<http://www.ibm.com/websphere/wbiitemsync/express/infocenter>

The IBM WebSphere Business Integration Express for Item Synchronization documentation set includes:

Table 1. WebSphere Business Integration Express for Item Synchronization documentation set

Title	Description
Map Development Guide	Describes how to use Map Designer Express and Relationship Designer Express for creating and modifying maps and relationships.
Business Object Development Guide	Describes how to use Business Object Designer Express to create business object definitions, both manually and using an Object Discovery Agent (ODA).
User Guide for WebSphere Business Integration Express for Item Synchronization	Provides an overview of the product and describes how to monitor and operate WebSphere Business Integration Express for Item Synchronization.
Installing WebSphere Business Integration Express for Item Synchronization	Describes the installation process for WebSphere Business Integration Express for Item Synchronization.
Quick Start Guide	Describes the required procedures for configuring your WebSphere Business Integration Express for Item Synchronization system.
Adapter for JDBC User Guide	Describes the configuration and business object development for the adapter for JDBC.
Adapter for JText User Guide	Describes the configuration and business object development for the adapter for JText.
Adapter for JMS User Guide	Describes the configuration and business object development for the adapter for JMS.
Adapter for WebSphere MQ User Guide	Describes the configuration and business object development for the adapter for WebSphere MQ.
Adapter for XML User Guide	Describes the configuration and business object development for the adapter for XML.
Adapter for Web Services User Guide	Describes the configuration and business object development for the adapter for Web Services.
Adapter for iSoft/MQ User Guide	Describes the configuration and business object development for the adapter for iSoft.
Adapter for e-Mail User Guide	Describes the configuration and business object development for the adapter for e-Mail.

Configuration required after installation

This section provides a high-level overview of the configuration procedures required after you have successfully installed WebSphere Business Integration Express for Item Synchronization software:

- “Starting System Manager” on page 3
- “Verifying your components” on page 3
- “Creating the logging table” on page 4
- “Configuring the XML data handler” on page 6

- “Configuring other business objects” on page 10
- “Developing business objects” on page 13
- “Modifying an existing business object” on page 15
- “Configuring the connectors” on page 16
- “Creating collaboration objects” on page 24
- “Deploying the solution” on page 35
- “Populating the relationships after deployment” on page 37
- “Restarting ICS Express and starting your Adapter” on page 38

Starting System Manager

After you have finished running the Installer, you are ready to perform the final tasks for setting up your business integration system.

1. Start System Manager

The System Manager interface is the starting point for most of the tasks needed to complete the setup of your business integration system. To begin, do this:

- Choose Start > Programs > IBM WebSphere Business Integration for Item Sync Express. v4.3 > InterChange Server Express to start InterChange Server Express. In order for System Manager to move data into and out of the repository that defines your business integration components, InterChange Server Express must be running, and System Manager must connect to it.
- After InterChange Server Express has started, choose Start > Programs > IBM WebSphere Business Integration for Item Sync Express. v4.3 > Tools > Administrative > System Manager.

The System Manager environment displays.

Note: The first time you start up, you might see the Resource environment displayed, instead of System Manager. If this happens, in the Resource menu choose Window > Open Perspective > Other, and choose System Manager from the Select Perspective dropdown list.

In the InterChange Server Express panel at the lower left portion of the display, right-click on the displayed InterChange Server Express to verify that it is connected. If it is not connected, you may need to register the server (by choosing Server > Register Servers from the menu) and then connect to it. By default, the server you are using is named WebSphereICS, and the username/password combination for registering and connecting to it is:

```
admin/null
```

For more information regarding System Manager, see the following: *User Guide for WebSphere Business Integration Express for Item Synchronization.*

Verifying your components

Most of the components necessary for implementing the ItemSync solution have already been created for you and are loaded into InterChange Server Express and imported into System Manager when you run the Installer. There are some additional components that you must create.

After you have connected to InterChange Server Express, you can view the integration components that the Installer has already made available to you. To do

so, in the upper left panel of System Manager, expand the icon for the ItemSyncLibrary integration component library, which resides under the Integration Component Libraries folder.

Three types of content are provided for you in ItemSyncLibrary: business objects, collaboration templates, and maps. To complete the setup of your business integration system, you will create some additional components, save them in ItemSyncLibrary, and then create a System Manager user project that contains the components. Then you will deploy that user project to InterChange Server Express.

In addition to the components already visible in ItemSyncLibrary, several connector configuration templates are provided to you. These include the templates for the iSoft connector (used for sending data to and receiving data from a UCCnet-compliant trading partner), the eMail connector (used primarily for administrative and error messages), and the JText connector (typically used for extracting data from and sending data to your legacy application). Icons for these connectors will become visible in the Integration Components Library after you have configured them, as described in “Configuring the connectors” on page 16, later in this chapter.

You will need to create or configure some additional components. These tasks are described later in this guide.

Creating the logging table

The WebSphere Business Integration Express for Item Sync system uses a database table called `audit_log` to track events associated with UCCnet activities. For more information on the use of this table, see the Collaboration for UCCnet Item Synchronization.

To create the `audit_log` table, complete the following steps:

1. Create the `audit_log` table in the ICS repository. Use the script appropriate to your database server.

DB2 Database Server

- a. Move to the following directory:

```
ProductDir\collaborations\dependencies\UCCnet\db2
```

- b. Start a DB2 session by entering the following command:

```
db2
```

- c. At the prompt, enter the following comment

```
connect to SMB_DB
```

- d. After you are connected, enter the following command to run the script that creates the `audit_log` table:

```
audit_log.sql
```

Microsoft SQL Server

- a. Start the Query Analyzer with Start > Programs > Microsoft SQL Server > Query Analyzer. Query Analyzer displays the Connect to SQL Server dialog.
- b. Make sure that the SQL Server authentication radio button is selected and log into the ICS database server with the following default account information:

```
Account: smbadmin
```

```
Password: smbP4$$word
```

Note: This account information is the default database user account that the WebSphere Business Integration Express for Item Sync Installer creates. If you have modified this account since it was created, use the current account information.

- c. Select the ICS repository database by selecting the SMB_DB database from the dropdown menu in the Query Analyzer toolbar.
 - d. Load the audit_log.sql SQL script into the Query Analyzer with File > Open. This script is located in the following directory:
`ProductDir\collaborations\dependencies\UCCnet\mss`
 - e. Run the audit_log.sql script with Query > Execute.
 - f. Leave Query Analyzer open for use in a later step.
2. Add the UCCnet property to the ICS configuration file, InterchangeSystem.cfg. The audit_log feature requires that these properties exist and have values for it to execute correctly.

- a. Create a backup copy of your InterchangeSystem.cfg file, which resides in the ProductDir directory. A suggested name for the backup copy is:

`InterchangeSystem_orig.cfg`

- b. Bring up the following file in an editor:

`ProductDir\samples\UCCnet\InterchangeSystem.UCCnet`

Note: You can use a text editor or an XML editor to edit this file. However, do not use the Notepad editor.

- c. Copy the entire contents of this InterchangeSystem.UCCnet file into an editor buffer. This file contains the XML definition of the UCCnet property and its subproperties.
- d. Bring up the InterchangeSystem.cfg file into the editor.
- e. Move to the bottom of the InterchangeSystem.cfg file and paste the contents of the editor buffer (the definition of the UCCnet property) into this file, just before the `</cw:ServerConfig>` tag near the end of the file.
- f. Modify the values for the UCCnet subproperties as shown in Table 2 to identify your ICS repository.

Table 2. UCCnet subproperties

UCCnet subproperty	Value
USER_NAME	smbadmin
PASSWORD	smbP4\$word
DRIVER	For a DB2 database:COM.ibm.db2.jdbc.app.DB2Driver
DATA_SOURCE_NAME	For a MicrosoftSQL Server database: com.ibm.jdbc.sqlserver.SQLServerDriver For a DB2 database: jdbc:db2:SMB_DB For a Microsoft SQL Server database: jdbc_ibm.crossworlds:sqlserver://machine_name:1433; DatabaseName=SMB_DB (where machine_name is the name of the host machine on which your ICS repository resides)

- g. Save the InterchangeSystem.cfg file and exit the editor.

Note: The new UCCnet properties do not take effect until you reboot your InterChange Server.

Configuring the XML data handler

To enable the WebSphere Business Integration Express for Item Sync system to properly process UCCnet XML messages, you must configure meta-objects for the Data Handler for XML (the XML data handler). Several components of the system use the XML data handler. This data handler uses a meta-object, which is a kind of business object, to hold its configuration information.

To configure use of the XML data handler, complete the following steps:

1. Create the meta-object for the UCCnet version of the XML data handler, `MO_DataHandler_UCCnetXMLConfig`:
 - a. Within Windows Explorer, navigate to the following folder on your system:
`ProductDir\repository\DataHandlers`
 - b. Copy the text representation of the meta-object file for the XML data handler (`MO_DataHandler_XML.txt`) and rename it to:
`MO_DataHandler_UCCnetXML.txt`
 - c. Bring up the `MO_DataHandler_UCCnetXML.txt` file into a text editor and change the second line (the line after "[BusinessObject Definition]") from:
`MO_DataHandler_DefaultXMLConfig`

to
`MO_DataHandler_UCCnetXMLConfig`
 - d. Launch Business Object Designer. If the New Business Object Definition dialog appears, click Cancel.
 - e. Import the meta-object file for the UCCnet XML data handler into Business Object Designer with File > Open From File. For information on how to import a text representation of a business object into Business Object Designer, see "Developing business objects" on page 13.
Once you import this text file, Business Object Designer displays the `MO_DataHandler_UCCnetXMLConfig` business object definition.
 - f. Edit the `MO_DataHandler_UCCnetXMLConfig` meta-object by setting the Default values of the attributes shown in Table 3.

Table 3. Default values for properties in `MO_DataHandler_UCCnetXMLConfig`

Attribute name	Default value
BOPrefix	For DTD support: UCCnetDTD For schema-document support: UCCnetXSD

Table 3. Default values for properties in MO_DataHandler_UCCnetXMLConfig (continued)

Attribute name	Default value
DTDPath	Full path to the XML-structure document: For DTD XML definition type: Envelope.dtd For schema-document support XML definition type: Envelope.xsd The Envelope structure document is available from the UCCnet web site. To download these files, you must have a valid UCCnet user ID and password.
Validation	false
DefaultEscapeBehavior	true
IgnoreUndefinedElements	true

- g. Save the MO_DataHandler_UCCnetXMLConfig meta-object with File > Save.
- h. Close the MO_DataHandler_UCCnetXMLConfig meta-object with File > Close. However do not exit Business Object Designer.
2. Create the meta-object for the UCCnet XML configuration, MO_DataHandler_UCCnet_envelope:
 - a. Within Windows Explorer, navigate to the following folder on your system:
ProductDir\repository\DataHandlers
 - b. Copy the text representation of the meta-object file for the all data handlers (MO_DataHandler_Default.txt) and rename it to:
MO_DataHandler_UCCnet.txt
 - c. Bring up the MO_DataHandler_UCCnet.txt file into a text editor and change the second line (the line after "[BusinessObject Definition]") from:
MO_DataHandler_Default

to
MO_DataHandler_UCCnet_envelope
 - d. In Business Object Designer, import the meta-object file for the UCCnet XML data handler with File > Open From File. For information on how to import a text representation of a business object into Business Object Designer, see "Developing business objects" on page 13. Once you import this text file, Business Object Designer displays the MO_DataHandler_UCCnet_envelope business object definition.
 - e. Edit the MO_DataHandler_UCCnet_envelope meta-object by setting the Type value text_xml of the attribute, as shown in Table 4.

Table 4. Attribute type for MO_DataHandler_UCCnet_envelope

Attribute name	Type value
text_xml	MO_DataHandler_UCCnetXMLConfig

- f. Remove all other attributes in the MO_DataHandler_UCCnet_envelope meta-object. The only attribute remaining should be text_xml.
- g. Save the MO_DataHandler_UCCnet_envelope meta-object with File > Save.
- h. Close the MO_DataHandler_UCCnet_envelope meta-object with File > Close. However, do not exit Business Object Designer.

3. Create the meta-object for the JTextRWL XML configuration, MO_JTextRWLConnector_Default:
 - a. Within Windows Explorer, navigate to the following folder on your system:
ProductDir\repository\JText
 - b. Copy the text representation of the meta-object file for the JText data handler (MO_JText_Default.txt) and rename it to:
MO_JTextRWLConnector.txt
 - c. Bring up the MO_JTextRWLConnector.txt file into a text editor and change the second line (the line after "[BusinessObject Definition]") from:
MO_JTextConnector_Default

to
MO_JTextRWLConnector_Default
 - d. In Business Object Designer, import the meta-object file for the JTextRWL XML data handler with File > Open From File. For information on how to import a text representation of a business object into Business Object Designer, see "Developing business objects" on page 13. Once you import this text file, Business Object Designer displays the MO_JTextRWLConnector_Default business object definition.
 - e. Edit the MO_JTextRWLConnector_Default meta-object by setting the Type value of the attributes shown in Table 5.

Table 5. Attribute types for MO_JTextRWLConnector_Default

Attribute name	Type value
EventDataHandler	MO_DataHandler_UCCnetXMLConfig
OutputDataHandler	MO_DataHandler_UCCnetXMLConfig

- f. Edit the MO_JTextISoftConnector_Default meta-object by setting the Default values of the attributes shown in the following table.

Table 6. Default property values for MO_JTextRWLConnector_Default

Attribute name	Default value
OutputDir	Name of the directory where the JTextRWLConnector is to write the XML files it generates. For example: C:\IBM\WebSphereItemSync\UCCnet\JTextRWL\out
OutputExt	If the output directory you specify does not already exist, create it. xml
ArchiveDir	Name of the directory where the JTextRWLConnector archives events (XML files). For example: C:\IBM\WebSphereItemSync\UCCnet\JTextRWL\archive
EventDir	If the archive directory you specify does not already exist, create it. Name of the directory from which the JTextRWLConnector obtains input events (XML files). For example: C:\IBM\WebSphereItemSync\UCCnet\JTextRWL\event
EventExt	If the event directory you specify does not already exist, create it. xml
EndBODElimiter	EOF

- g. Save the MO_JTextRWLConnector_Default meta-object with File > Save.

- h. Close the MO_JTextRWLConnector_Default meta-object with File > Close. However, do not exit Business Object Designer.
 - i. Save the MO_JTextISoftConnector_Default meta-object with File > Save.
 - j. Close the MO_JTextISoftConnector_Default meta-object with File > Close. However, do not close Business Object Designer.
4. If you are exchanging messages through the UCCnet CLU or testing your installation, you must create a meta-object for the JTextISoft XML configuration, MO_JTextISoftConnector_Default:
- a. Within Windows Explorer, navigate to the following folder on your system:
ProductDir\repository\JText
 - b. Copy the text representation of the meta-object file for the JTextRWL data handler (MO_JTextRWLConnector.txt) and rename it to:
MO_JTextISoftConnector.txt
 - c. Bring up the MO_JTextISoftConnector.txt file into a text editor and change the second line (the line after "[BusinessObject Definition]") from:
MO_JTextRWLConnector_Default

to
MO_JTextISoftConnector_Default
 - d. In Business Object Designer, import the meta-object file for the JTextISoft XML data handler with File > Open From File.
Once you import this text file, Business Object Designer displays the MO_JTextISoftConnector_Default business object definition.
 - e. Edit the MO_JTextISoftConnector_Default meta-object by setting the Type value of the attributes shown in Table 5 on page 8.
 - f. Edit the MO_JTextISoftConnector_Default meta-object by setting the Default values of the attributes shown in Table 7.

Table 7. Default property values for MO_JTextISoftConnector

Attribute name	Default value
OutputDir	Name of the directory where the JTextISoftConnector is to write the XML files it generates. For example: C:\IBM\WebSphereItemSync\UCCnet\JTextISoft\out
OutputExt	If the output directory you specify does not already exist, create it. xml
ArchiveDir	Name of the directory where the JTextISoftConnector archives events (XML files). For example: C:\IBM\WebSphereItemSync\UCCnet\JTextISoft\archive
EventDir	If the archive directory you specify does not already exist, create it. Name of the directory from which the JTextISoftConnector obtains input events (XML files). For example: C:\IBM\WebSphereItemSync\UCCnet\JTextISoft\event
EventExt	If the event directory you specify does not already exist, create it. xml
EndBODelimiter	EOF

- g. Save the MO_JTextISoftConnector_Default meta-object with File > Save.

- h. Close the MO_JTextISoftConnector_Default meta-object with File > Close. However, do not close Business Object Designer.

Configuring other business objects

In addition to the creation and configuration of business objects for the XML data-handler meta-objects, you also need to configure business objects for the following other components:

- SoftConnector
- EMailConnector

Configuring a business object for iSoftConnector

If you are exchanging messages with UCCnet through an AS2/EDIINT interface protocol, you must create a meta-object called MO_ISoftAdapterConfig for the iSoft connector:

1. In Business Object Designer, create the new meta-object for the iSoft adapter with File > New. In the Business Object Name field, enter MO_ISoftAdapter_Config and click OK.
2. Add the attributes in Table 8 to the MO_ISoftAdapter_Config meta-object:

Table 8. Attributes in MO_ISoftAdapter_Config

Attribute name	Type	Key	Application-specific information
Default	String	Yes	The output queue, where messages derived from the business object definitions listed in this meta-object are delivered. For example: <code>OutputQueue=queue://crossworlds.queue.manager/outbox_queue_name; DataEncoding=Text</code> (where outbox_queue_name identifies where these messages are delivered) The output queue specified in this Default attribute applies to all business-object conversions.
UCCnet_envelope_Create	String	No	If the application-specific information that you provided for the Default attribute (above) is insufficient to identify the business-object configuration properties for the UCCnet_envelope business object, you can provide any additional information that might be required here. For more information about the format of this application-specific information, see the Adapter Guide for iSoft.

For more information on how to create a new business object definition in Business Object Designer, see “Developing business objects” on page 13.

3. Save the MO_ISoftAdapterConfig meta-object with File > Save.
4. Close the MO_ISoftAdapterConfig meta-object with File > Close. However, do not exit Business Object Designer.

Configuring a business object for EMailConnector

The EmailConnector handles messages for events that occur during the execution of the Item Sync collaboration. It uses a business object definition called EmailNotification to hold its configuration information.

To configure the EmailConnector, complete the following steps:

1. Bring up the EmailNotification business object definition in Business Object Designer. For information on how to edit an existing business object definition, see “Developing business objects” on page 13.

- Set the Default Values for the following attributes to identify where the Item Sync collaboration directs email messages during its execution.

Table 9. Default property values for EmailNotification

Attribute name	Default value	Required
RecipientName	Email address of recipient	Yes. For information on how to specify the message recipients, see the <i>Adapter Guide for e-Mail</i> .
FromAddress	Email address of undelivered messages	No

- Save the business object definition to the ItemSyncLibrary project with the File > Save menu option.
- Close the EmailNotification business object definition with File > Close. However, do not exit Business Object Designer.

Creating the ERP-source components

Your item information originates from your Enterprise Resource Planning (ERP) application. As the first step to sending this item information to UCCnet, an ERP-source connector receives information from your ERP application and takes the following steps:

- It formats this information into the appropriate application-specific business object. For this step to be possible, a business object definition for this application-specific business object must exist and must define the item information that the ERP-source connector receives.
- It converts the data in the application-specific business object to its equivalent format in the generic business object, ItemBasic. For this step to be possible, a map must exist to define the data transformations necessary.

Note: As part of creating ERP-source components, you must also create an ERP-source connector. For more information, see “Creating the ERP-source components.”

Creating ERP-source business objects

The ERP-source business object is an application-specific business object that contains the item information your ERP application needs sent to UCCnet. For the ERP-source connector to create such a business object, it must be able to locate an associated business object definition, which the connector uses as a template for the business object creation. Therefore, as part of the Item Sync configuration process, you must create business object definitions to represent the item information that your ERP application must send to UCCnet.

To create a business object definition, use the Business Object Designer tool. This tool provides a graphical interface that assists you in naming the business object definition and defining its attributes. When you design your ERP-source business object definition, you must determine which item information needs to be sent to UCCnet. To assist in this determination, you can examine the information in the generic item-information business object, ItemBasic.

The basic steps to creating the business object definition for your application-specific business object are as follows:

1. Launch Business Object Designer to create a new business object definition. In System Manager, you can right-click on the Business Objects folder under the ItemSyncLibrary project. Alternatively, you can select the Tools > Business Object Designer menu option.
2. Specify the name of the business object definition in Business Object Name field and click OK. Business Object Designer displays a template for you to define the attributes of the business object definition.
3. Define the required attributes, including their names, types, and any application-specific information. One attribute with the business object definition must be designated as the key, whose value contains information to uniquely identify one business object of this type from another.
4. Save the business object definition with File > Save.
5. If your business object definition requires child business objects, repeat these steps to define each of the child business objects.

For a more complete description of Business Object Designer and how to create a business object definition, see “Developing business objects” on page 13.

Creating ERP-source maps

Once the ERP-source connector has created the application-specific business object, the item information is ready to be sent to InterChange Server Express. There, any application-specific formats of data in this business object are converted to the data format used by the associated generic business object, ItemBasic. It is the generic business object that InterChange Server Express routes to various components of the Item Sync system. To provide this data conversion, you must create a map that describes the data transformations necessary to convert the data from any application-specific formats to their generic equivalents.

To create a map, use the Map Designer tool. This tool provides a graphical interface that assists you in naming the map and defining its transformation. When you design your ERP-source map, you must determine which item information is currently in an application-specific format; that is, which data is in a format different from its equivalent in the generic business object. To assist in this determination, you can examine the information in the generic item-information business object, ItemBasic.

The basic steps to creating the map from your application-specific business object to the ItemBasic generic business object are as follows:

1. Launch Map Designer to create a new map. In System Manager, you can right-click on the Maps folder under the ItemSyncLibrary project. Alternatively, you can select the Tools > Map Designer menu option.
2. Select ItemSyncLibrary as the project in which to store the map and click Next.
3. Choose the name of the business object definition that is the source for the map and Click Next. This source business object definition is the name of the application-specific business object that holds your ERP item information.
4. Choose the name of the business object definition that is the destination for the map and Click Next. For the top-level ERP-source map, the destination business object definition is ItemBasic.
5. In the Save map dialog, take the following steps:
 - a. Specify a name for the map in the Name field. Map names usually identify both the source and destination business objects in the following format:
`CwSource_to_CwDestination`

where Source and Destination are the names of your source and destination business object definitions, respectively. For example, if your application-specific business object was named JDBCS_ERPItem, the associated ERP-source map name could be:

```
CwJDBCS_ERPItem_to_CwItemBasic
```

- b. Make sure that the Mapping Direction box has the Application-Specific to Generic radio button selected.
- c. Click Finish. Map Designer displays the working area, with your source business object definition on the left and your destination business object definition (ItemBasic) on the right.
- d. To define the data transformations between attributes in the source and destination business objects, you can use the basic transformations (such as Move, Split, and Join). You can also perform transformations on dates and times. If you need to perform a transformation for which there is no existing transformation, you can define a custom transformation.
- e. When you have completed the definition of transformations, save the map to the ItemSyncLibrary project with File > Save > To Project.
- f. Answer Yes to the prompt that asks if you want to compile the map.
- g. If your application-specific business object definition contains child business objects, you must create a map for each of the child business objects. Repeat these steps to define maps for each of the child business objects. Map names for child business objects usually start with the "Sub" prefix to indicate a submap.

For a more complete description of Map Designer and how to create a map, see the *Map Development Guide*.

Developing business objects

This section provides a roadmap of the basic steps for creating a business object definition. For complete details about developing a business object definition, see the *Business Object Development Guide*.

Creating a business object definition

In the WebSphere business integration system, information sent or received between components is packaged in the form of a *business object*. For data that is transferred between a connector and an integration broker, you design *application-specific business objects* that model the appropriate application entities. Application-specific business objects are modeled during design-time as *business object definitions*, which are stored in the business integration system, specifically in the System Manager Integration Component Library (ICL). At runtime, data is populated in a *business object instance* (often just called a "business object") that is based on the proper definition, and is moved through the business integration system as dictated by its routing and business logic rules.

For details about the business object requirements of your specific adapter, refer to your adapter's user guide.

There are two ways to create a business object definition:

- Manually—Useful when creating a simple business object, or when modifying a definition generated by an Object Discovery Agent. Business Object Designer Express provides a graphic interface for manually creating a business object definition.
- Using an Object Discovery Agent—Useful when creating an application-specific business object. The *Object Discovery Agent* examines specified entities in the

application, “discovers” the elements of those objects that correspond to business object attributes and the properties of each attribute, and generates the business object definition.

Creating a business object manually

1. Launch Business Object Designer Express from System Manager, using a Windows shortcut, or from another development tool. For details, see *Business Object Development Guide*.
2. From the File menu, select **New**. Business Object Designer Express displays the New Business Object dialog.
3. Enter the name for the new business object definition.
4. Click OK. Business Object Designer Express displays the business object definition dialog.
5. Add attributes for each piece of information in the business object.
6. Click the **General** tab of the business object definition dialog to display the screen in which you specify the verbs.
7. Specify the verbs that this business object will support. These verbs represent the triggering events that the business object sends to the integration broker.
8. When you finish defining the business object, click **File > Save** from the menu bar to save your changes to the ICL.

Using an Object Discovery Agent to create a business object definition

An Object Discovery Agent (ODA) is an optional component of an adapter. When you install a pre-defined adapter that has an ODA, its ODA is installed automatically. Business Object Designer Express provides a graphical interface in the form of a wizard, called *Business Object Wizard*, to interact with the ODA. The purpose of Business Object Wizard is to display a series of dialogs to the user. These dialogs obtain information from the user that the ODA needs to generate the business object content. The ODA is the component that “discovers” objects in the data source and generates the content. The ODA receives information that the user provides in the dialogs of Business Object Wizard. It then sends information (such as the generated content) to the ODA runtime, the intermediary component between Business Object Wizard and the ODA.

Before using an ODA: Before you run an ODA, verify that the following steps have occurred (for details, see *Business Object Development Guide*):

- System startup files (the ODA startup script: `start_ODAname.bat` and the ODA environment file: `CWODAEnv.bat`) are available and correct.
- The ODA has been launched (run `start_srcDataNameODA.bat`).
- Business Object Designer Express has been launched.

Using the ODA to create business object definitions:

1. Open Business Object Designer Express.
2. From the File menu, click the “New Using ODA” menu item.
Business Object Designer Express invokes Business Object Wizard, which displays the first dialog in the wizard, Select Agent.
3. Select the ODA to which Business Object Wizard connects.
4. Click Next. Business Object Wizard attempts to connect to the specified ODA.
5. Once Business Object Wizard is connected to the ODA, it displays the second wizard dialog, Configure Agent.

6. Specify ODA configuration values or select a profile to display previously saved values.
7. Click Next. Business Object Wizard displays the third wizard dialog, Select Source.
8. Select objects in the source-code hierarchy for which you want the ODA to generate business object definitions.
9. After you select the source nodes for which business object definitions are to be generated, click Next. Business Object Wizard displays the fourth wizard dialog, which allows you to confirm your selection of source nodes.
10. After confirming your selection, click Next. Business Object Wizard displays the wizard's fifth screen, Generating Business Objects.
After the ODA completes the generation of business object definitions, Business Object Wizard displays the final dialog in the wizard, Save Business Objects.
11. Click Finish to save the business object definitions to the ICL-based project

For more detailed information, see the following: *WebSphere Business Integration Express for Item Synchronization Business Object Development Guide.*

Modifying an existing business object

Some application-specific business objects are provided to you. In some implementations, you may need to modify them.

You can open a business object definition provided by the adapter and modify it as needed using Business Object Designer Express. You can also modify any business object definition you have created. New objects are created in Business Object Designer Express, with or without the assistance of the ODA. To modify an existing object, use Business Object Designer Express directly (the ODA cannot be used to modify an existing business object).

To modify a business object definition:

1. From the list of business object definitions in the project, highlight the name of the definition you want to open.
2. To select multiple business object definitions in the project, do one of the following:
 - When selecting consecutive names, select the first name and, while pressing the Shift key, click the last name.
 - When selecting non-consecutive names, press the Ctrl key and click as you select each name.
3. After selecting the definitions to be opened, right-click and then click Open. Business Object Designer Express displays a window for each selected definition.
4. Edit the business object definition as needed. For details about the business object definitions provided with your adapter and the modifications you make to each, see the documentation of the specific adapter.
5. Save the business object definition:
 - If the project is ICL-based, the business object definition is saved in the project where it originated.
 - If the project is local, the business object definition is saved to its existing file (where it was saved when it was created).

Configuring the connectors

Connector Configurator Express allows you to configure the connector component of your adapter for use with InterChange Server Express.

You use Connector Configurator Express to:

- Create a connector configuration file -- you must create one configuration file for each of required connector.
- Set properties in a configuration file -- you may need to modify the default values that are set for properties in this file. You must also specify supported business object definitions and, optionally, maps for use with the Item Synchronization Collaboration.

You use Connector Configurator Express to create this configuration file and to modify its settings.

Creating required connector configuration files

Your WebSphere Business Integration Express for Item Synchronization system may require that you install and configure the following connector components:

Table 10. Connectors in the Item Sync solution

Connector	Adapter	Required?
JTextRWLConnector	Based on the Adapter for JText	Yes
iSoftConnector	Adapter for iSoft	Yes
JTextISoftConnector	Based on the Adapter for JText	Yes, if you are using UCCNet Command Line Utility (CLU) to communicate with the iSoft Peer-to-Peer Agent
ERP-source connector	One of the following adapters: <ul style="list-style-type: none">• Adapter for JText• Adapter for JMS• Adapter for JDBC• Adapter for XML• Adapter for Web Services• Adapter for WebSphere MQ	Yes
EmailConnector	Adapter for e-Mail	Yes, if your UCCnet Item Synchronization collaboration uses the "notify by email" feature
PortConnector	None	Yes

You use Connector Configurator Express to create these files. You start and run Connector Configurator Express from System Manager. For information on how to launch, run, and use this tool, see the Connector Configurator Express appendix in your adapter user guide. If you are configuring files for other connectors, see the corresponding adapter user guides.

Configuring the JTextRWLConnector

The JTextRWLConnector is the input connector for a UCCnet_requestWorklist collaboration object. The UCCnet_requestWorklist collaboration object passes a UCCnet worklist request to UCCnet from a filesystem folder. To poll for the worklist, a scheduler operation (which the operating system performs) must be configured to periodically drop a fresh copy of the request XML file into the event file-system folder for the JTextRWLConnector.

1. To create the JTextRWLConnector, complete the following steps:
 - a. In the Windows taskbar, right-click **Start** and select **Open All Users**
 - b. Navigate to the folder on your system that contains the installed adapters: **Programs > IBM WebSphere Business Integration Express for Item Sync v4.3 > Adapters > Connectors**
 - c. Copy the startup shortcut for the JText connector (JText Connector) and rename it to: JTextRWL Connector
 - d. Right-click the new JTextRWL connector's startup shortcut and select **Properties**
 - e. Click the Shortcut tab, edit the **Target** field to set the first command-line argument to JTextRWL. The following line shows the JText target before you edit the argument:


```
ProductDir\connectors\JText\start_JText.bat JText WebSphereICS
```

For example, if WebSphere Business Express for Item Sync is installed in your C: partition, then the initial text for the new startup shortcut would be:

```
C:\IBM\WebSphereItemSync\connectors\JText\start_JText.bat JText WebSphereICS
```

In this case, you would change the shortcut so it reads:

```
C:\IBM\WebSphereItemSync\connectors\JText\start_JText.bat JTextRWL WebSphereICS
```
 - f. Click **OK**.
2. Create the connector configuration file for the JTextRWLConnector using Connector Configurator Express. For general information on how to launch and use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter user guide.
 - a. Open System Manager (for further information, see "Starting System Manager" on page 3)
 - b. In the System Manager window, expand the **Integration Component Libraries** icon and highlight **Connectors**.
 - c. From the System Manager menu bar, click **Tools > Connector Configurator Express**. The Connector Configurator Express window opens and displays a **New Connector** dialog box.
 - d. In the New Connector dialog, specify JTextRWLConnector in the **Name** field. To select the JText connector template, highlight the entry for JText in the **Template Name** table. The properties from the JText connector template display in the **Property Template Preview** section. When you click OK, Connector Configurator Express displays the configuration tabs.
 - e. In the **Standard Properties** tab, verify that the ApplicationName property is set to JTextRWLConnector.
 - f. In the **Supported Business Objects** tab, add the business object definitions listed in Table 11.

Table 11. Supported business objects for JTextRWLConnector

Business object definition	Agent support required?
MO_JTextRWLConnector_Default	Yes
MO_DataHandler_UCCnet_envelope	Yes

Table 11. Supported business objects for JTextRWLConnector (continued)

Business object definition	Agent support required?
The UCCnet envelope: <ul style="list-style-type: none"> • For DTD XML definition type: UCCnetDTD_envelope • For schema-document support XML definition type: UCCnetXSD_envelope 	Yes
UCCnetGBO_envelope	No

- g. Save the connector configuration file to the ItemSyncLibrary project with the **File > Save > To Project** menu option.
- h. In the **Associated Maps** tab, add the maps listed in Table 12 to the specified business object definitions.

Table 12. Associated maps for JTextRWLConnector

Business object definition	Name of map
UCCnetDTD_envelope	UCCnetDTD_envelope_to_UCCnetGBO_envelope
UCCnetXSD_envelope	UCCnetXSD_envelope_to_UCCnetGBO_envelope
UCCnetGBO_envelope	For DTD XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetDTD_envelope
	For schema-document XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetXSD_envelope

3. Save the connector configuration file to the ItemSyncLibrary ICL project with **File > Save > To Project**. Close Connector Configurator Express.

Configuring the iSoft Connector

The iSoftConnector is the connector that exchanges messages with UCCnet through an AS2/EDIINT interface protocol. You need to create a connector configuration file for the iSoftConnector and configure it to include the appropriate business objects.

To create the iSoftConnector, complete the following steps:

1. Create the connector configuration file for the iSoftConnector using Connector Configurator Express. For general information on how to use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter guide.
 - a. In the New Connector dialog, specify iSoftConnector in the **Name** field. To select the iSoft connector template, highlight the entry for iSoft in the **Template Name** table. The properties from the iSoft connector template display in the **Property Template Preview** section. When you click OK, Connector Configurator Express displays the configuration tabs.
 - b. In the **Connector-Specific Properties** tab, verify that the connector-specific properties are set as shown in Table 13 on page 19.

Table 13. Connector-specific properties for iSoftConnector

Connector-specific property	Value
ArchiveQueue	Queue to which copies of successfully processed messages are sent. For example: queue://crosswor1ds.queue.manager/MQCONN.ARCHIVE
Channel	WebSphere MQ server connector channel for your iSoft Peer-to-Peer Agent queue manager
ConfigurationMetaObject	MO_ISoftAdapterConfig
DataHandlerConfigMO	MO_DataHandler_UCCnet_envelope
DefaultVerb	Create Note: If this connector-specific property does not appear in the list, add it.
ErrorQueue	Queue to which messages that could not be processed are sent. For example: queue://crosswor1ds.queue.manager/MQCONN.ERROR
HostName	The name of the host on which the iSoft Peer-to-Peer Agent WebSphere MQ queue manager is running
InputQueue	List of queues that the connector polls for new messages. Queue names are delimited with a semicolon (;). For example: queue://crosswor1ds.queue.manager/MQCONN.IN1; queue://crosswor1ds.queue.manager/MQCONN.IN2
InProgressQueue	Queue where messages are held during processing. For example: queue://crosswor1ds.queue.manager/MQCONN.IN_PROGRESS
Port	The port established for the WebSphere MQ Listener of the iSoft Peer-to-Peer Agent's queue manager
ReplyToQueue	Queue to which replies are sent. For example: queue://crosswor1ds.queue.manager/MQCONN.REPLY
UnsubscribedQueue	Queue to which messages that are not subscribed are sent. For example: queue://crosswor1ds.queue.manager/MQCONN.UNSUBSCRIBED
UseDefaults	True Note: If this connector-specific property does not appear in the list, add it.

- c. In the **Supported Business Objects** tab, add the business object definitions listed in Table 14.

Table 14. Supported business objects for iSoftConnector

Business object definition	Agent support required?
MO_ISoftAdapterConfig	Yes
MO_DataHandler_UCCnet_envelope	Yes.

Table 14. Supported business objects for iSoftConnector (continued)

Business object definition	Agent support required?
The UCCnet envelope:	Yes
• For DTD XML definition type: UCCnetDTD_envelope	
• For schema-document support XML definition type: UCCnetXSD_envelope	
UCCnetGBO_envelope	No
ItemBasic	No

- d. Save the connector configuration file to the ItemSyncLibrary project with the **File > Save > To Project** menu option.
- e. In the **Associated Maps** tab, add the maps listed in Table 15 to the specified business object definitions.

Table 15. Associated maps for iSoftConnector

Business object definition	Name of map
UCCnetDTD_envelope	UCCnetDTD_envelope_to_UCCnetGBO_envelope
UCCnetXSD_envelope	UCCnetXSD_envelope_to_UCCnetGBO_envelope
UCCnetGBO_envelope	For DTD XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetDTD_envelope
	For schema-document XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetXSD_envelope
ItemBasic	For DTD XML definition type: RouterMap_CwItemBasic_to_UCCnetDTD_envelope
	For schema-document XML definition type: CwItemBasic_to_UCCnetXSD_envelope_registerCommand_itemAddChange

2. Save the connector configuration file to the ItemSyncLibrary ICL project with **File > Save > To Project**. Close Connector Configurator Express.

For further information, see the *Adapter for iSoft Peer-to-Peer Agent User Guide*.

Configuring the JTextISoftConnector

If you are using the UCCnet Command Line Utility (CLU) to communicate with UCCnet, you must create and configure the JTextISoftConnector. This connector is a copy of the JTextConnector that simulates the iSoftConnector. Like the iSoftConnector, the JTextISoftConnector uses the IBM WebSphere Business Integration Data Handler for XML and generates the same XML output.

To create the JTextISoftConnector, complete the following steps:

1. Create the Windows shortcut to start up this connector, as follows:
 - a. In the Windows taskbar, right-click **Start** and select **Open All Users**
 - b. Navigate to the folder on your system that contains the installed adapters: **Programs > IBM WebSphere Business Integration Express for Item Sync v4.3 > Adapters > Connectors**
 - c. Copy the startup shortcut for the JText connector (**JText Connector**) and rename it to: **JTextISoftConnector**

- d. Right-click the new JTextIsoft connector's startup shortcut and select **Properties**
- e. Click the **Shortcut** tab, edit the **Target** field to set the first command-line argument to JTextIsoft. The following line shows the JText target *before* you edit the argument:

```
ProductDir\connectors\JText\start_JText.bat JText WebSphereICS
```

where *ProductDir* is the name of the directory in which WebSphere Business Integration Express for Item Sync is installed. For example, if WebSphere Business Express for Item Sync is installed in your C: partition, then the initial text for the new startup shortcut would be:

```
C:\IBM\WebSphereItemSync\connectors\JText\  
start_JText.bat JText WebSphereICS
```

In this case, you would change the shortcut so it reads:

```
C:\IBM\WebSphereItemSync\connectors\JText\  
start_JText.bat JTextIsoft WebSphereICS
```

- f. Click **OK**.
2. Create the connector configuration file for the JTextIsoftConnector using Connector Configurator Express. For general information on how to use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter guide.
 - a. In the New Connector dialog, specify JTextIsoftConnector in the **Name** field. To select the JText connector template, highlight the entry for JText in the **Template Name** table. The properties from the JText connector template display in the **Property Template Preview** section. When you click OK, Connector Configurator Express displays the configuration tabs.
 - b. In the **Standard Properties** tab, verify that the ApplicationName property is set to JTextIsoftConnector.
 - c. In the **Supported Business Objects** tab, add the business object definitions listed in Table 16.

Table 16. Supported business objects for JTextIsoftConnector

Business object definition	Agent support required?
MO_JTextIsoftConnector_Default	Yes
MO_DataHandler_UCCnet_envelope	Yes
The UCCnet envelope:	Yes
• For DTD XML definition type: UCCnetDTD_envelope	
• For schema-document support XML definition type: UCCnetXSD_envelope	
UCCnetGBO_envelope	No
ItemBasic	No

- d. Save the connector configuration file to the ItemSyncLibrary project with the **File > Save > To Project** menu option.
- e. In the **Associated Maps** tab, add the maps listed in Table 17 to the specified business object definitions.

Table 17. Associated maps for JTextIsoftConnector

Business object definition	Name of map
UCCnetDTD_envelope	UCCnetDTD_envelope_to_UCCnetGBO_envelope

Table 17. Associated maps for JTextIsoftConnector (continued)

Business object definition	Name of map
UCCnetXSD_envelope UCCnetGBO_envelope	UCCnetXSD_envelope_to_UCCnetGBO_envelope For DTD XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetDTD_envelope For schema-document XML definition type: RouterMap_UCCnetGBO_envelope_to_UCCnetXSD_envelope
ItemBasic	For DTD XML definition type: RouterMap_CwItemBasic_to_UCCnetDTD_envelope For schema-document XML definition type: CwItemBasic_to_UCCnetXSD_envelope_registerCommand_itemAddChange

- f. Save the connector configuration file to the ItemSyncLibrary ICL project with **File > Save > To Project**. Close Connector Configurator Express.

Configuring the ERP-source connector

The ERP-source connector is the input connector for the UCCnet_ItemSync collaboration object. This connector receives information from your Enterprise Resource Planning (ERP) application and formats this information in the appropriate application-specific business object. It converts this application-specific business object to an ItemBasic business object, passing the ItemBasic business object to the UCCnet_ItemSync collaboration. The UCCnet_ItemSync collaboration delivers the ItemBasic business object to UCCnet through either the iSoftConnector or JTextIsoftConnector.

You choose the ERP-source connector based on the format that application-specific information can be obtained from your ERP application. WebSphere Business Integration Express for Item Sync provides the following adapters for use as possible ERP-source connectors:

Adapter	Purpose
Adapter for JDBC	Handles application-specific information using the Java Database Connectivity (JDBC) and converts between this format and an application-specific business object
Adapter for JMS	Handles application-specific information using the Java Message Service (JMS) and converts between this format and an application-specific business object
Adapter for JText	Handles application-specific information in file-system files and converts between this format and an application-specific business object
Adapter for WebSphere MQ	Handles application-specific information using WebSphere MQ queues and converts between this format and an application-specific business object
Adapter for XML	Handles application-specific information in XML and converts between this format and an application-specific business object

Adapter	Purpose
Adapter for Web Services	Handles application-specific information in SOAP and converts between this format and an application-specific business object

Once you have selected the appropriate ERP-source connector, you must create and configure it with the following steps:

Note: These steps assume that you have already created the application-specific business object definition and map for your ERP-source item information, as described in “Creating the ERP-source components” on page 11. If you have not yet completed these steps, you must do so before continuing with the creation of the ERP-source connector.

1. Create the connector configuration file for the ERP-source connector using Connector Configurator Express. For general information on how to use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter guide.
 - a. In the New Connector dialog, specify the name of your ERP-source connector in the **Name** field in the form ERPSourceConnector, where ERPSource can either be the literal string “ERPSource” or a string that identifies the format or source application of your ERP-source information. For example, if your ERP item information is obtained using the JDBC interface, you could use the JDBC connector and name this connector JDBCsourceERPConnector.
 - b. In the New Connector dialog, select the appropriate connector template from the **Template Name** table. For example, if your ERP-source connector is the Adapter for JDBC, highlight the entry for JDBC in the Template Name table. The properties from the JDBC connector template display in the **Property Template Preview** section. When you click **OK**, Connector Configurator Express displays the configuration tabs.
 - c. For the Standard Properties and Connector-Specific Properties tabs, provide the necessary values for the configuration properties. For information on the configuration properties for your ERP-source connector, see the associated adapter guide.
 - d. In the **Supported Business Objects** tab, add the business object definitions listed in Table 18.

Table 18. Supported business objects for ERP-source connector

Business object definition	Agent support required?
ERP-source application-specific business object definition (This is the business object definition that you created for the ERP-source connector. For more information, see “Creating ERP-source business objects” on page 11.)	Yes
ItemBasic	No

- e. Save the connector configuration file to the ItemSyncLibrary project with the **File > Save > To Project** menu option.
- f. In the **Associated Maps** tab, add the maps listed in Table 19 on page 24 to the specified business object definitions.

Table 19. Associated maps for ERP-source connector

Business object definition	Name of map
ERP-source application-specific business object (This is the map that you created for the ERP-source connector. For more information, “Creating ERP-source maps” on page 12.)	UCCnet_CwERPsource_to_CwItemBasic UCCnet_CwItemBasic_to_CwERPsource

2. Save the connector configuration file to the ItemSyncLibrary ICL project with **File > Save > To Project**. Close Connector Configurator Express.

Configuring the PortConnector

The PortConnector is a “dummy” connector to bind to collaboration ports that do not send a business object to a connector during the Item Sync business process. To create the PortConnector, you create a connector configuration file using Connector Configurator Express. For general information on how to use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter guide.

1. In the **Name** field of the New Connector dialog, specify PortConnector. To select the Port connector template, highlight the entry for Port in the **Template Name** table. When you click **OK**, Connector Configurator Express displays the configuration tabs.
2. For the **Standard Properties** and **Connector-Specific Properties** tabs, you need not set any properties.
3. In the **Supported Business Objects** tab, you need not add any business object definitions.
4. In the **Associated Maps** tab, you need not add any maps.
5. Save the connector configuration file to the ItemSyncLibrary ICL project with **File > Save > To Project**. Do not close Connector Configurator Express.

Configuring the EmailConnector

You create the connector configuration file for the EmailConnector using Connector Configurator Express. For general information on how to use this tool to create a connector configuration file, see the Connector Configurator Express appendix in your adapter user guide.

1. In the New Connector dialog, specify EmailConnector in the **Name** field. To select the e-Mail connector template, highlight the entry for eMail in the **Template Name** table. The properties from the e-Mail connector template display in the **Property Template Preview** section. When you click **OK**, Connector Configurator Express displays the configuration tabs.
2. In the **Connector-Specific Properties** tab, set the SMTP_MailHost property to the hostname (or IP address) of the SMTP server in your system.
3. Save the connector configuration file to the ItemSyncLibrary project with the **File > Save > To Project** menu option.

Creating collaboration objects

The WebSphere Business Integration Express for Item Sync system requires runtime objects, called collaboration objects, for its collaboration templates. The following table lists the collaboration objects you must create, based on their associated collaboration template.

Table 20. Collaboration objects for Item Sync

Collaboration template	Collaboration object
UCCnet_ItemSync For schema-document XML definition type: • ItemCommandRouter • UCCnetXSD_CIN_DISPATCHER UCCnet_requestWorklist UCCnet_processWorklist Notify_by_eMail	UCCnet_ItemSyncObject UCCnetXSD_CIN_DISPATCHER_forICS_Obj UCCnetXSD_CIN_DISPATCHER_forRWL_Obj UCCnet_requestWorklistObject UCCnet_processWorklistObject UCCnet_processWorklist_ UNKNOWN_RESPONSEObject UCCnet_processWorklist_ AUTHORIZATION_RESPONSEObject UCCnet_processWorklist_ DEAD_LETTER_PUB_RECEIPTObject UCCnet_processWorklist_ CATEGORY_ADD_CHANGEObject UCCnet_processWorklist_ UNKNOWN_MESSAGEObject UCCnet_processWorklist_ SIMPLE_RESPONSEObject

You create collaboration objects in the System Manager tool. Before beginning the steps in the subsequent sections, start up System Manager and connect to the WebSphereICS instance of InterChange Server Express. For information on how to start up System Manager, see “Starting System Manager” on page 3.

Creating the collaboration for UCCnet_ItemSync

The collaboration object for the UCCnet_ItemSync collaboration template is called UCCnet_ItemSyncObject. You create a collaboration object from System Manager.

To configure this collaboration object, complete the following steps:

1. Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
2. In the Create New Collaboration dialog, enter the following information:
 - a. Highlight UCCnet_ItemSync in the Template name column of the table.
 - b. In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object: UCCnet_ItemSyncObject
 - c. Click Next to display the Bind ports dialog. Bind the ports of this collaboration object as shown in the following table.

Table 21. Port Bindings for UCCnet_ItemSync

Collaboration port	Type	Bind to
DestinationAppRetrieve From	Connector Connector	PortConnector Your ERP-source connector (for example, JDBCsourceERPConnector)

Table 21. Port Bindings for UCCnet_ItemSync (continued)

Collaboration port	Type	Bind to
To (For DTD XML definition type)	Connector	The connector that sends the ItemBasic business object to UCCnet (though the iSoft Peer-to-Peer Agent): <ul style="list-style-type: none"> • If you are using the iSoft connector: specify iSoftConnector • If you are using UCCnet CLU: specify JTextISoftConnector
To (For schema-document XML definition type)	Collaboration	ItemCommandRouter_Obj. From

Note: If you are configuring the ItemSync collaboration to work with schema-document XML definitions, you cannot bind the To port of this UCCnet_ItemSync collaboration object at this time. The collaboration object that contains the port to which this port is bound has not yet been created. You can bind this port later, once the ItemCommandRouter_Obj collaboration object exists. Continue with the steps outlined in this section. When you reach “Creating the collaboration objects for schema-based XML” on page 27”, instructions are provided for finishing the port binding for the UCCnet_ItemSyncObject collaboration object.

- d. Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
- e. Click Next again to display the Properties dialog, which shows the collaboration-specific properties. Set the collaboration-specific properties for this collaboration object as shown in the following table.

Table 22. Collaboration-specific properties for UCCnet_ItemSync

Property name	Property description	Required?
GtinDB_User	smbadmin	Yes
GtinDB_PASSWORD	smbP4\$\$word	Yes
JDBC_DRIVER	The name of the JDBC driver used to connect to the ICS repository database. For more information, see the description of the DRIVER property in “Creating the logging table” on page 4.	Yes, if InterChange Server Express does not register the driver in the Java Virtual Machine (JVM). The Microsoft SQL driver, for example, is already registered in the JVM.
JDBC_URL	The JDBC URL that corresponds to the driver that JDBC_DRIVER specifies. For more information, see the description of the DATA_SOURCE_NAME property in “Creating the logging table” on page 4.	Yes
SEND_EMAIL	Determines whether the Item Sync collaboration sends email when it generates certain messages To send email, set this property to the value “all”. Otherwise, set it to “none”.	Yes, if you want the Item Sync collaboration to send email
SEND_EMAIL_TO	Specifies the email address where the Item Sync sends email messages, assuming that the SEND_EMAIL property is set.	No. Requires: <ul style="list-style-type: none"> • the EmailConnector • The SEND_EMAIL property set to “all”

Table 22. Collaboration-specific properties for UCCnet_ItemSync (continued)

Property name	Property description	Required?
AUDITLOG_INSTANCE_NAME	UCCnet	Yes
SUPPLIER_NAME	Specifies the name of the partner that is synchronizing item information with UCCnet. This value is logged in audit entries.	No

- f. Click Finish to complete the definition of this collaboration object. System Manager displays the Graphical View of this collaboration object. Do not close this Graphical View of the UCCnet_ItemSyncObject collaboration object.

Creating the collaboration objects for schema-based XML

If your Item Sync solution uses the UCCnet Envelope that is based on the schema-document XML definition type (Envelope.xsd), you must create two special collaboration objects to handle routing of information:

- A collaboration object for the ItemCommandRouter collaboration template
- A collaboration object for the UCCnetXSD_CIN_DISPATCHER collaboration template

Note: If your Item Sync collaboration uses the UCCnet Envelope that is based on the DTD XML definition type (Envelope.dtd), you do not have to create the collaboration objects described in this section. You can skip this section and continue to the creation of the collaboration object for the UCCnet_processWorklist collaboration template.

Creating the collaboration object for ItemCommandRouter: The collaboration object for the ItemCommandRouter collaboration template is called ItemCommandRouter_Obj. You create a collaboration object from System Manager.

To configure this collaboration object, complete the following steps:

1. Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
2. In the Create New Collaboration dialog, enter the following information:
 - a. Highlight ItemCommandRouter in the Template name column of the table.
 - b. In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object: ItemCommandRouter_Obj
3. Click Next to display the Bind ports dialog. Bind the ports of this collaboration object as shown in the following table.

Table 23. Port bindings for ItemCommandRouter

Collaboration port	Type	Bind to
From	Collaboration	UCCnet_ItemSyncObject.To
TO_RCIR	Connector	iSoftConnector
TO_CIN	Collaboration	UCCnetXSD_CIN_DISPATCHER_forICR_Obj.From

Note: You cannot bind the TO_CIN port of this ItemRouterCommand_Obj collaboration object at this time. The collaboration object that contains

the port to which this port is bound has not yet been created. You can bind this port later, once the UCCnetXSD_CIN_DISPATCHER_forICR_Obj collaboration object exists. Continue with the steps outlined in this section. When you reach “Creating the collaboration object for UCCnet_XSD_CIN_DISPATCHER,” instructions are provided for finishing the port binding for the ItemCommandRouter_Obj collaboration object.

4. Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
5. Click Finish to complete the definition of this collaboration object. The ItemCommandRouter collaboration template does not have any collaboration-specific properties. Therefore, you can skip the Properties dialog.
6. System Manager displays in the Graphical View tab the ItemCommandRouter_Obj collaboration object. Do not close this collaboration object so you can return to it later.
7. Complete the binding for the UCCnet_ItemSyncObject with the following steps:
 - a. Open the collaboration object for UCCnet_ItemSyncObject in the Graphical View tab by clicking on its name in the heading of the tab. If you have already closed UCCnet_ItemSyncObject, double-click on its name in the Collaboration objects folder of System Manager to display it in the Graphical View tab.
 - b. Switch to the Tree View for the collaboration object and right-click on the To port. From the context menu, select Bind Port.
 - c. From the Configure Port dialog:
 - 1) Select Collaboration for BindWith
 - 2) Select ItemCommandRouter_Obj. From from the list of collaboration object ports.
 - d. Click OK to save the new binding.
 - e. Close the UCCnet_ItemSyncObject collaboration object.

Creating the collaboration object for UCCnet_XSD_CIN_DISPATCHER: When you are using the schema-document XML definition type, you need to create two collaboration objects for the UCCnetXSD_CIN_DISPATCHER collaboration template.

Complete the following steps:

1. Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
2. In the Create New Collaboration dialog, enter the following information:
 - a. Highlight UCCnetXSD_CIN_DISPATCHER in the Template name column of the table.
 - b. In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object:
UCCnetXSD_CIN_DISPATCHER_forIRC_Obj
3. Click Next to display the Bind ports dialog. Bind the ports of this collaboration object as shown in Table 24 on page 29.

Table 24. Port bindings for UCCnetXSD_CIN_DISPATCHER_forIRC_Obj

Collaboration port	Type	Bind to
DestinationAppReceive	Connector	PortConnector
From	Collaboration	ItemCommandRouter_Obj.TO_CIN
To	Connector	iSoftConnector

4. Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
5. Click Next again to display the Properties dialog, which shows the collaboration-specific properties. Set the collaboration-specific properties for this collaboration object as shown in the following table.

Table 25. Collaboration-specific properties for UCCnetXSD_CIN_DISPATCHER_forIRC_Obj

Property name	Property description	Required?
CIN_DISPATCHER_GLN_FILE	The fully qualified name of the file that holds the GLNs subscribed to each category code.	Yes
TO_UCCNETGBO_PROCESSING_MAP	By the UCCnet_CIN_DISPATCHER object to map incoming ItemBasic objects to the outgoing CATALOGUE_ITEM_NOTIFICATIONMessage.	Yes
SUPPLIER_NAME	The name of the partner responsible for synchronizing item information with UCCnet. This value is included in audit log entries.	No

6. Click Finish to complete the definition of this collaboration object. System Manager displays this collaboration object in the Graphical View. You can close the UCCnetXSD_CIN_DISPATCHER_forIRC_Obj collaboration object in the Graphical View.
7. Complete the binding for the ItemCommandRouter_Obj with the following steps:
 - a. Open the collaboration object for ItemCommandRouter_Obj in the Graphical View tab by clicking on its name in the heading of the tab. If you have already closed ItemCommandRouter_Obj, double-click on its name in the Collaboration objects folder of System Manager to display it in the Graphical View tab.
 - b. Switch to the Tree View for the collaboration object and right-click on the TO_CIN port. From the context menu, select Bind Port.
 - c. From the Configure Port dialog:
 - 1) Select Collaboration for BindWith.
 - 2) Select UCCnetXSD_CIN_DISPATCHER_forICR_Obj.From from the list of collaboration object ports.
 - d. Click OK to save the new binding.
 - e. Close the ItemCommandRouter_Obj collaboration object.
8. Repeat steps 1 and 2 to begin creation of the second collaboration object for UCCnetXSD_CIN_DISPATCHER, UCCnetXSD_CIN_DISPATCHER_forRWL_Obj:
 - a. Select UCCnetXSD_CIN_DISPATCHER as the collaboration template to use.
 - b. Name the collaboration object UCCnetXSD_CIN_DISPATCHER_forRWL_Obj.

- Click Next to display the Bind ports dialog. Bind the ports of this collaboration object as shown in the following table.

Table 26. Port bindings for UCCnetXSD_CIN_DISPATCHER_forRWL_Obj

Collaboration port	Type	Bind to
DestinationAppReceive	Connector	PortConnector
From	Collaboration	UCCnet_processWorklist.CIN_DISPATCHER
To	Connector	iSoftConnector

Note: You cannot bind the From port of this UCCnetXSD_CIN_DISPATCHER_forRWL_Obj collaboration object at this time. The collaboration object that contains the port to which this port is bound has not yet been created. You can bind this port later, once the UCCnet_processWorklistObject collaboration object exists. Continue with the steps outlined in this section. When you reach “Creating the collaboration object for UCCnet_processWorklist,” instructions are provided for finishing the port binding for the UCCnetXSD_CIN_DISPATCHER_forRWL_Obj collaboration object.

- Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
- Click Next again to display the Properties dialog, which shows the collaboration-specific properties. Set the collaboration-specific properties for this collaboration object the same as those shown in the table for UCCnetXSD_CIN_DISPATCHER_forIRC_Obj.
- Click Finish to complete the definition of this collaboration object. System Manager displays this collaboration object in the Graphical View. Do not close this Graphical View of the UCCnetXSD_CIN_DISPATCHER_forRWL_Obj collaboration object so you can return to it later.

Creating the collaboration object for UCCnet_processWorklist

The collaboration object for the UCCnet_processWorklist collaboration template is called UCCnet_processWorklistObject.

To configure this collaboration object, complete the following steps:

- Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
- In the Create New Collaboration dialog, enter the following information:
 - Highlight UCCnet_processWorklist in the Template name column of the table.
 - In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object: UCCnet_processWorklistObject
- Click Next to display the Bind ports dialog. Bind only the ports of this collaboration object that are shown in the following table.

Table 27. Initial port bindings for UCCnet_processWorklist

Collaboration port	Type	Bind to
From	Connector	iSoftConnector or JTextISoftConnector
ITEM_ADD_CHANGE	Connector	iSoftConnector or JTextISoftConnector

Table 27. Initial port bindings for UCCnet_processWorklist (continued)

Collaboration port	Type	Bind to
NEW_ITEM_PUBLICATION_REQUEST	Connector	iSoftConnector or JTextlSoftConnector
INITIAL_ITEM_LOAD_REQUEST	Connector	iSoftConnector or JTextlSoftConnector
CIN_DISPATCHER	Connector	UCCnetXSD_CIN_DISPATCHER_forRWL_Obj.From
DestinationAppReceive	Connector	PortConnector

Note: The table above lists only those ports of the UCCnet_processWorklistObject collaboration object that you can bind at this time. You cannot bind the following ports of this collaboration object:

- CATEGORY_ADD_CHANGE
- DEAD_LETTER_PUB_RECEIPT
- AUTHORIZATION_RESPONSES
- UNKNOWN_RESPONSE
- UNKNOWN_MESSAGE
- SIMPLE_RESPONSE
- CATALOGUE_ITEM_CONFIRMATION

All of these ports must be bound to a collaboration object based on the Notify_by_eMail collaboration template. You can bind these ports later, once these Notify_by_eMail collaboration objects exist. Continue with the steps outlined in this section. When you reach “Creating the collaboration objects for Notify_by_eMail” on page 32, instructions are provided for finishing the port binding for the UCCnet_processWorklistObject collaboration object.

4. Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
5. Click Next again to display the Properties dialog, which shows the collaboration-specific properties. Set the collaboration-specific properties for this collaboration object as shown in Table 28.

Table 28. Collaboration-specific properties for UCCnet_processWorklistObject

Property name	Property description	Required?
DB_USER	smbadmin	Yes
DB_PASSWORD	smbP4\$\$word	Yes
JDBC_DRIVER	The name of the JDBC driver used to connect to the ICS repository database. For more information, see the description of the DRIVER property in “Creating the logging table” on page 4.	Yes, if InterChange Server Express does not register the driver in the Java Virtual Machine (JVM). The Microsoft SQL driver, for example, is already registered in the JVM.
JDBC_URL	The JDBC URL that corresponds to the driver that JDBC_DRIVER specifies. For more information, see the description of the DATA_SOURCE_NAME property in “Creating the logging table” on page 4.	Yes

Table 28. Collaboration-specific properties for UCCnet_processWorklistObject (continued)

Property name	Property description	Required?
SEND_EMAIL_TO	Specifies the email address where the Item Sync sends email messages, assuming that the SEND_EMAIL property is set.	No.Requires: the EmailConnector The SEND_EMAIL property set to "all"
SEND_EMAIL	Determines whether the Item Sync collaboration sends email when it generates certain messages To send email, set this property to the value "all". Otherwise, set it to "none".	Yes, if you want the Item Sync collaboration to send email
AUDITLOG_INSTANCE_NAME	UCCnet	Yes
SUPPLIER_NAME	The name of the partner responsible for synchronizing item information with UCCnet. This value is included in audit log entries.	No
DTD_URL	Specifies the value for the DOCTYPE line in outgoing XML. The default value is: DOCTYPE envelope SYSTEM http://www.uccnet.net/xmlschema/2.2/envelope_file For the DTD XML definition type, replace envelope_file with: Envelope.dtd For the schema-document XML definition type, replace envelope_file with: Envelope.xsd	No, unless the default value is incorrect for the environment
AUTO_RESPOND	Controls whether an automatic response is set to UCCnet	Yes

6. Click Finish to complete the definition of this collaboration object. System Manager displays the collaboration object in the Graphical View. Do not close this Graphical View of the UCCnet_processWorklistObject collaboration object so you can return to it later.
7. If you are using the schema-document XML definition type for your UCCnet Envelope, complete the binding for the UCCnetXSD_CIN_DISPATCHER_forRWL_Obj with the following steps:
 - a. Open the collaboration object for UCCnetXSD_CIN_DISPATCHER_forRWL_Obj in the Graphical View tab by clicking on its name in the heading of the tab. If you have already closed UCCnetXSD_CIN_DISPATCHER_forRWL_Obj, double-click on its name in the Collaboration objects folder of System Manager to display it in the Graphical View tab.
 - b. Switch to the Tree View for the collaboration object and right-click on the From port. From the context menu, select Bind Port.
 - c. From the Configure Port dialog:
 - 1) Select Collaboration for BindWith.
 - 2) Select UCCnet_processWorklistObject.CIN_DISPATCHER from the list of collaboration object ports.
 - d. Click OK to save the new binding.
 - e. Close the UCCnetXSD_CIN_DISPATCHER_forRWL_Obj collaboration object.

Creating the collaboration objects for Notify_by_eMail

The Item Sync collaboration requires several collaboration objects for the Notify_by_eMail collaboration template.

To configure these collaboration objects, complete the following steps:

1. Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
2. In the Create New Collaboration dialog, enter the following information:
 - a. Highlight Notify_by_eMail in the Template name column of the table.
 - b. In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object and click Next. The following table lists the names of all collaboration objects based on the Notify_by_eMail collaboration template.
3. In the Bind ports dialog, bind the From port of each Notify_by_eMail collaboration object to a Collaboration, as shown in the following table.

Table 29. Port bindings for Notify_by_eMail

Collaboration object	Bind to collaboration object port
UCCnet_processWorklist_CATEGORY_ADD_CHANGEObject	UCCnet_processWorklistObject: CATEGORY_ADD_CHANGE
UCCnet_processWorklist_DEAD_LETTER_PUB_RECEIPT	UCCnet_processWorklistObject: DEAD_LETTER_PUB_RECEIPT
UCCnet_processWorklist_AUTHORIZATION_RESPONSES	UCCnet_processWorklistObject: AUTHORIZATION_RESPONSES
UCCnet_processWorklist_UNKNOWN_RESPONSE	UCCnet_processWorklistObject: UNKNOWN_RESPONSE
UCCnet_processWorklist_UNKNOWN_MESSAGES	UCCnet_processWorklistObject: UNKNOWN_MESSAGES
UCCnet_processWorklist_SIMPLE_RESPONSE	UCCnet_processWorklistObject: SIMPLE_RESPONSE
UCCnet_processWorklist_CATALOGUE_ITEM_CONFIRMATION	UCCnet_processWorklistObject: CATALOGUE_ITEM_CONFIRMATION

4. Click Next to display the Collaboration General Properties dialog. Set any general properties for this collaboration object. If you want to set a tracing level, specify a value for the system trace level or the collaboration trace level in this dialog.
5. Click Next again to display the Properties dialog, which shows the collaboration-specific properties. For each of the Notify_by_eMail collaboration objects, set the collaboration-specific properties for this collaboration object as shown in the following table.

Table 30. Collaboration-specific properties for Notify_by_eMail

Property name	Property description	Required
EMAIL_NOTIFICATION_RCPTS	Lists the email address of the message recipient	Yes
EMAIL_SUBJECT	Specifies the format of the subject line of the email message. For more information on the syntax that this property supports, see the description of this property in the reference page for the UCCnet Item Synchronization Collaboration.	Yes
EMAIL_MESSAGE	Specifies the format body of the email message. For more information on the syntax that this property supports, see the description of this property in the reference page for the UCCnet Item Synchronization Collaboration.	Yes

Table 30. Collaboration-specific properties for Notify_by_eMail (continued)

Property name	Property description	Required
DOCTYPE	<p>Specifies the value for the DOCTYPE line in outgoing XML. The default value is:</p> <p>DOCTYPE envelope SYSTEM http://www.uccnet.net/xmlschema/2.2/envelope_file</p> <p>For the DTD XML definition type, replace envelope_file with: Envelope.dtd For the schema-document XML definition type, replace envelope_file with: Envelope.xsd</p>	Yes

6. Click Finish to complete the definition of the collaboration object. System Manager displays the Graphical View of this collaboration object. Close the Graphical View for each of the Notify_by_eMail collaboration objects.
7. Complete the binding for the UCCnet_processWorklistObject with the following steps:
 - a. Open the collaboration object for UCCnet_processWorklistObject in the Graphical View tab by clicking on its name in the heading of the Graphical View tab. If you have already closed UCCnet_processWorklistObject, double-click on its name in the Collaboration objects folder of System Manager to display it in the Graphical View tab.
 - b. Switch to the Tree View for the collaboration object. For each of the ports listed in the following table, right-click on the port and select Bind Port from the context menu. Provide the information in the Configure Port dialog as listed in the following table.

Table 31. Final port bindings for UCCnet_processWorklist

Collaboration object port	Bind to collaboration object port
CATEGORY_ADD_CHANGE	UCCnet_processWorklist_CATEGORY_ADD_CHANGEObject.From
DEAD_LETTER_PUB_RECEIPT	UCCnet_processWorklist_DEAD_LETTER_PUB_RECEIPTObject.From
AUTHORIZATION_RESPONSES	UCCnet_processWorklist_AUTHORIZATION_RESPONSESObject.From
UNKNOWN_RESPONSE	UCCnet_processWorklist_UNKNOWN_RESPONSEObject.From
UNKNOWN_MESSAGES	UCCnet_processWorklist_UNKNOWN_MESSAGESObject.From
SIMPLE_RESPONSE	UCCnet_processWorklist_SIMPLE_RESPONSEObject.From
CATALOGUE_ITEM_CONFIRMATION	UCCnet_processWorklist_CATALOGUE_ITEM_CONFIRMATIONObject.From

- c. Once you have completed the port bindings for all the collaboration objects in the preceding table, you can close the UCCnet_processWorklistObject collaboration object.

Creating the collaboration object for UCCnet_requestWorklist

The collaboration object for the UCCnet_requestWorklist collaboration template is called UCCnet_requestWorklistObject. You create a collaboration object from System Manager.

To configure this collaboration object, complete the following steps:

1. Right-click on the Collaboration objects folder of the ItemSyncLibrary project (in System Manager). From the context menu, choose Create New Collaboration Object. System Manager displays the Create New Collaboration dialog.
2. In the Create New Collaboration dialog, enter the following information:
 - a. Highlight UCCnet_requestWorklist in the Template name column of the table.
 - b. In the Collaboration object name field at the bottom of the dialog, enter the name of this collaboration object: UCCnet_requestWorklistObject
3. Click Next to display the Bind ports dialog. Bind the ports of this collaboration object as shown in the following table.

Table 32. Port bindings for UCCnet_requestWorklist

Collaboration port	Type	Bind to
From	Connector	JTextRWLConnector
To	Connector	iSoftConnector or JTextISoftConnector

4. Click Next again to display the Properties dialog, which shows the collaboration-specific properties. Set the collaboration-specific properties for this collaboration object as shown in the following table.

Table 33. Collaboration-specific properties for UCCnet_requestWorklist

Property name	Property description	Required
DTD_URL	Specifies the value for the DOCTYPE line in outgoing XML. The default value is: DOCTYPE envelope SYSTEM http://www.uccnet.net/xmlschema/2.2/ envelope_file For the DTD XML definition type, replace envelope_file with: Envelope.dtd For the schema-document XML definition type, replace envelope_file with: Envelope.xsd	No, unless the default value is incorrect for the environment
SET_UNIQUE_IDS	Controls whether unique IDs (messageIdentifier and uniqueCreatorIdentification) are set in the output XML messages. Possible values are: <ul style="list-style-type: none"> • ALL: set all three unique IDs (default) • NONE • BLANK: set unique ID only if it is blank in the input 	No

5. Click Finish to complete the definition of this collaboration object. System Manager displays this collaboration object in the Graphical View. You can close the UCCnet_requestWorklistObject collaboration object in the Graphical View.

Deploying the solution

Once you have created all the components in the ItemSyncLibrary ICL project, you are ready to create a user project and deploy this project to the WebSphereICS instance of InterChange Server Express.

To deploy the solution, complete these steps:

1. Create a user project from System Manager:

- a. Right-click on the User Projects folder and select New User Project.
 - b. From the New User Project dialog, enter the name of your user project in the Project name field and click in the box next to the ItemSyncLibrary in the Available Integration Component Libraries box.
 - c. Click Finish. Once System Manager creates your user project, you will see a plus sign ("+") appear next to the User Projects folder. Under this folder you will find a folder called InterChange Server Projects, and under that folder will be the folder for your new user project.
2. Make sure your InterChange Server instance is in Design mode. You can check the InterChange Server view in System Manager to determine the mode of your ICS instance. If your instance does not list "Design" in its Mode column, you must bring down the ICS instance and bring it back up in Design mode. For information on how to bring up ICS in the different modes, see the *User Guide for WebSphere Business Integration Express for Item Synchronization*.
 3. Deploy the user project to the WebSphereICS ICS instance with the Deploy wizard.
 - a. Right-click on the WebSphereICS instance and select Add user project. Click on the new user project that you created.
 - b. The newly added user project appears under the WebSphereICS instance. Right-click on the WebSphereICS instance and select Deploy Project. The Deploy Wizard dialog displays.
 - c. Expand the user project that you are deploying, to see a list of project components.
 - d. Deploy the business object definitions by clicking in the box beside the Business Objects folder. Click Next and then click Finish to start the deployment of business object definitions.
 - e. Start the Deploy wizard again and deploy the maps by clicking in the box beside the Maps folder and checking the Compile option. Click Next, then click Finish to start the deployment of maps.
 - f. Start the Deploy wizard again and deploy the relationships by clicking in the box beside the Relationships folder and checking the Create schema option. Click Next, then click Finish to start the deployment of relationships.
 - g. Start the Deploy wizard again and deploy the connectors by clicking in the box beside the Connectors folder. Click Next, then click Finish to start the deployment of connectors.
 - h. Start the Deploy wizard again and deploy the collaboration templates by clicking in the box beside the Collaboration Templates folder. Click Finish to start the deployment of collaboration templates.
 4. At this point, all components of the Item Sync solution except the collaboration objects should be deployed to your WebSphereICS instance. Before you deploy collaboration objects, you must restart InterChange Server:
 - a. Right-click on your WebSphereICS instance in the InterChange Server view of System Manager. Select the Shutdown > Gracefully option.
 - b. Restart your ICS instance with the Start > Programs > IBM WebSphere Business Integration Item Sync Express v4.3 > InterChange Server Express > InterChange Server.
 - c. Reconnect to your WebSphereICS instance in System Manager.
 5. Launch System Monitor and start the relationships.
 6. Start the Deploy wizard again and deploy the collaboration objects by clicking in the box beside the Collaboration Objects folder. Click Finish to start the deployment of collaboration objects.

Populating the relationships after deployment

After the relationships have been deployed, you must then populate them with default values and make any necessary modifications to the default schemas. To populate the relationships, complete the steps appropriate for your database server.

DB2 Database Server

1. Move to the following directory:
ProductDir\collaborations\dependencies\UCCnet\db2
2. Start a DB2 session by opening a DB2 command window with the following menu option: Start > Programs > IBMDB2 > Command Line Tools > Command Window.
3. At the prompt, enter the following comment: db2 connect to SMB_DB USER smbadmin USING smbP4\$\$word
4. After you are connected, enter the following command to run the script that creates the audit_log table: audit_log.sql
5. After you are connected, run one of the following SQL scripts:
 - For solutions that use the DTD XML definition type, enter the command: InitializeRelationshipTables.sql
 - For solutions that use the schema-document XML definition type, enter the command: InitializeRelationshipTablesForXSD.sql

Microsoft SQL Server

1. If you have not left the Query Analyzer open from earlier configuration steps, start the Query Analyzer with Start > Programs > Microsoft SQL Server > Query Analyzer and enter the following information in the Connect to SQL Server dialog:
 - a. Make sure that the SQL Server authentication radio button is selected.
 - b. Log into the ICS database server with the following default account information:
Account: smbadmin
Password: smbP4\$\$word

Note: This account information is the default database user account that the WebSphere Business Integration Express for Item Sync Installer creates. If you have modified this account since it was created, use the current account information.
 - c. Select the ICS repository database by selecting the SMB_DB database from the dropdown menu in the Query Analyzer toolbar.
2. Load the appropriate relationship-table script into the Query Analyzer with File > Open.
 - For solutions that use the DTD XML definition type, enter the command: InitializeRelationshipTables.sql
 - For solutions that use the schema-document XML definition type, enter the command: InitializeRelationshipTablesForXSD.sql
This script is located in the following directory:
ProductDir\collaborations\dependencies\UCCnet\mss
3. Run the relationship-table script with Query > Execute.
4. Exit Query Analyzer.

Restarting ICS Express and starting your Adapter

After you have deployed the project, you will need to restart ICS Express. In addition, you will have to start your adapter.

1. To start ICS Express, choose Start > Programs > IBM WebSphere Business Integration for Item Sync Express v4.3 > InterChange Server Express.
2. To start the adapter, choose Start > Programs > IBM WebSphere Business Integration for Item Sync Express v4.3 > Adapters > Connectors > *name of your adapter*.

For more information, see the following: *User Guide for WebSphere Business Integration Express for Item Synchronization.*

Administration

Administration tasks for WebSphere Business Integration Express for Item Synchronization includes the following:

- Monitoring the system
- Operating ICS Express
- Operating connectors
- Operating maps
- Operating relationships

For detailed information regarding Administration, see the following: *User Guide for WebSphere Business Integration Express for Item Synchronization.*

Notices

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