IBM CrossWorlds
WebSphere® Business Integration for
Retail Distribution

UCCnetMessageSend Collaboration

Version 4.1.1

> **Note!**
>
> Before using this information and the product it supports, be sure to read the general information under "Notices and Trademarks" on page 9.

Contents

UCCnetMessageSend collaboration

The UCCnetMessageSend collaboration composes messages for and responds to UCCnet according to the values set in the business object. This collaboration can be instantiated from any collaboration or connector that needs to communicate an Item Authorization command to UCCnet.

Item Authorization commands are used by a demand-side trading partner to do the following:

- Communicate to both UCCnet and the supply-side trading partner the actions to be taken with the supply-side trading partner's data.
- Determine if item changes should be sent to that particular demand-side trading partner.

This collaboration currently supports only UCCnet Item Authorization commands required for item synchronization, which include the following:

Pended
> Used to notify the supply-side trading partner that the demand-side trading partner has reviewed the item data but elects to take no action. The Item Pend response leaves an item status open for future approval by the demand-side trading partner.

Rejected
> Used to notify the supply-side trading partner that the demand-side trading partner has reviewed the item data and has rejected the item. As a result, the item is not added to the demand-side trading partner's systems.

Authorized
> Used to notify the supply-side trading partner that the demand-side trading partner has reviewed the item data and has authorized the item. As a result, the item is added to the demand-side trading partner's systems.

If a demand-side trading partner does not reject an item, it continues to receive updates on that item. If no authorization command is issued, item changes are received until the subscription, which allows the demand-side trading partner to receive that item, is removed from UCCnet. The UCCnetMessageSend collaboration handles the complete set of item description fields used by UCCnet.

Required documents

The UCCnetMessageSend collaboration is based on CollaborationFoundation and uses its features, ports, and configuration properties. UCCnetMessageSend also has features, ports, and configuration properties unique to it.

To create and configure a UCCnetMessageSend collaboration object, use the following documents:

- This document for the UCCnetMessageSend collaboration-specific information.
- Standard Collaboration Processes for information about business processes inherited from CollaborationFoundation.
- Standard Collaboration Properties for information about configuration properties inherited from CollaborationFoundation.

- Collaboration Development Guide for information about CollaborationFoundation, and for general information about creating and configuring collaboration objects.

Collaboration setup

This section includes the following information:
- "Port information"
- "Setting up the collaboration" on page 3

Port information

The following figure illustrates UCCnetMessageSend's ports, as they are displayed in IBM® CrossWorlds® System Manager (CSM):
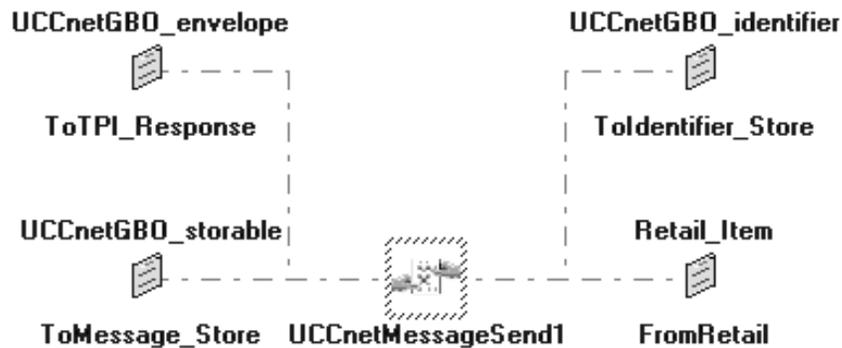
Figure 1. UCCnetMessageSend collaboration's ports

Note: In the tables throughout this section, spaces have been inserted in some values in the Business object, Bound to, and Function columns to enable the entries to fit in the table cells. The actual values do not include spaces.

Table 1. Port name: FromRetail

Business object	Bound to	Function	Verbs used
Retail_Item	A collaboration or connector that initiates processing (such as the UCCnetMessage Receive collaboration).	Receives the triggering business object. At the end of a synchronous call, this port also returns the triggering business object to the source application when the collaboration ends successfully.	Create

Table 2. Port name: ToTPI_Response

Business object	Bound to	Function	Verbs used
UCCnetGBO _envelope	TPI connector	Sends the response message out of the collaboration to the TPI connector and UCCnet.	Create

Table 3. Port name: ToMessage_Store

Business object	Bound to	Function	Verbs used
UCCnetGBO_storable	A persistent storage mechanism, such as an implementation instance of the IBM CrossWorlds Collaboration for Data Storage.	Retrieves and removes the UCCnetGBO_storable business object from a local message store.	Retrieve, Delete

Table 4. Port name: ToIdentifier_Store

Business object	Bound to	Function	Verbs used
UCCnetGBO _identifier	A persistent storage mechanism, such as an implementation instance of the IBM CrossWorlds Collaboration for Data Storage.	Removes the UCCnetGBO _identifier business object from a local identifier store.	Retrieve, Delete

Setting up the collaboration

To set up UCCnetMessageSend as a stand-alone collaboration object, complete the following steps:

1. Create the UCCnetMessageSend collaboration object.
2. Bind the ports as described in "Port information" on page 2.
3. Set the "Configuration properties" on page 5 for UCCnetMessageSend.

Synchronization process

This section illustrates the following business processes for this collaboration:

- "Overall process logic"
- "Inherited process logic" on page 5

Overall process logic

The following flow shows the process logic for this collaboration's Create verb:

1. A calling collaboration or connector instantiates the UCCnetMessageSend collaboration with a Retail_Item business object, which represents the item and contains the Item Authorization command and item data.
2. The UCCnetMessageSend collaboration extracts the Item Authorization command from the Retail_Item business object. It then retrieves the UCCnet_envelope layer information from the local message store by converting the Retail_Item to a UCCnetGBO_storable business object and passing it to its ToMessage_Store port. This port is bound to the appropriate persistence

mechanism, such as an implementation of the IBM CrossWorlds DataStore Collaboration, which performs the retrieval.

3. The UCCnetMessageSend collaboration handles the item according to its status value, its original command type, and the values of certain properties:

   - If the original command to the demand-side trading partner was a PUB_RELEASE_NEW_ITEM, PUB_RELEASE_DATA_CHANGE, or PUB_RELEASE_INITIAL_ITEM_LOAD, and one of the following is true:

     – The status of the Retail_Item is Approved
     – The status is Rejected and the collaboration property SEND REJECT is set to `true`
     – The status is Pending and the collaboration property SEND PEND is set to `true`

     then the UCCnetMessageSend collaboration composes the UCCnetGBO_envelope business object by first converting the Retail_Item business object to a UCCnetGBO_RI_S business object and then passing this object through the map specified in the TOTPI_RESPONSE_MAP configuration property (see "TOTPI_RESPONSE_MAP" on page 6 for more information on this property). The resulting UCCnetGBO_envelope business object contains all of the information needed for the UCCnet message.

   - If the original command to the demand-side trading partner was a PUB_RELEASE_DELIST, PUB_RELEASE_WITHDRAW, or PUB_RELEASE_CORRECTION, the collaboration does not create a UCCnetGBO_envelope and stops processing.

   Regardless of the original command type, if the status of the item is Error, the UCCnetMessageSend collaboration does the following:

   - If the value of the FILTER_DUPLICATE configuration property is `true` (see "FILTER_DUPLICATE" on page 6 for more information on this property), the collaboration checks if an item with an identical gtin, version, and topic exists in the identifier store. If an identical item does exist, the collaboration maintains the identifier store by removing the entry. It does this by converting the business object to a UCCnetGBO_identifier business object and passing this object to its ToIdentifier_Store port. This port is bound to the appropriate persistence mechanism, such as an implementation of the IBM CrossWorlds DataStore Collaboration, which performs the actual deletion.

   - It deletes the entry from the message store by converting the business object to a UCCnetGBO_storable business object and passing this object to its ToMessage_Store port. This port is bound to the appropriate persistence mechanism, such as an implementation of the IBM CrossWorlds DataStore Collaboration, which performs the actual deletion.

   - It stops further processing of the authorization command so that no response is returned to UCCnet.

4. The UCCnetMessageSend collaboration passes the UCCnetGBO_envelope business object to the TPI connector through the UCCnet_envelopeGBO_to_UCCnet_envelope map.

5. The TPI connector calls the IBM CrossWorlds XML Data Handler to produce the XML message and passes this message to the TPI server.

6. The UCCnetMessageSend collaboration returns a success notification to the collaboration that invoked the authorization message.

Inherited process logic

This collaboration inherits the following business process from the
CollaborationFoundation template:

- Exception handling

For information on this process, see Standard Collaboration Processes.

Configuration properties

This section describes the following properties for this collaboration:
- "Standard properties"
- "Collaboration-specific properties"

Standard properties

This collaboration inherits the following standard configuration properties from the
CollaborationFoundation template:
- ADDITIONAL_RETRIEVE
- 1_FILTER_ATTRIBUTE
- INFORMATIONAL_EXCEPTIONS
- 1_INCLUDE_VALUES
- 1_FAIL_ON_INVALID_VALUE
- CONVERT_UPDATE
- USE_RETRIEVE
- 1_EXCLUDE_VALUES
- SEND_EMAIL
- CONVERT_CREATE

For information on these configuration properties, see Standard Collaboration
Properties.

Note: Do not enable inherited configuration properties within this collaboration.
Changing default values for these inherited properties can cause processing
to malfunction.

Collaboration-specific properties

This collaboration has the following collaboration-specific configuration properties:
- "DEBUG"
- "FILTER_DUPLICATE" on page 6
- "SEND_PEND" on page 6
- "SEND_REJECT" on page 6
- "TOTPI_RESPONSE_MAP" on page 6

DEBUG

This property allows debug messages to be sent to the IBM CrossWorlds
InterChange Server (ICS) trace log. Messages include variable values, object values,
and other run-time status.

Note: Use this property only for development testing purposes; do not use it in
production code.

Table 5. DEBUG configuration property

Possible values	Usage
False (default)	Prevents debug messages from being sent to the trace log of the ICS.
True	Allows debug messages to be sent to the trace log of the ICS. Do not use this setting for production operation.

FILTER_DUPLICATE

This property controls whether the collaboration removes items from the local identifier store.

Table 6. FILTER_DUPLICATE configuration property

Possible values	Usage
true (default)	The collaboration removes items from the identifier store.
false	The collaboration does not remove items from the identifier store.

SEND_PEND

This property determines if the collaboration sends a Pended message to UCCnet for a PUB_RELEASE_NEW_ITEM, PUB_RELEASE_DATA_CHANGE, or PUB_RELEASE_INITIAL_ITEM_LOAD if the status of a processed business object is Pending. It is recommended that this value always be set to true.

Table 7. SEND_PEND configuration property

Possible values	Usage
true (default)	Pended messages are sent.
false	Pended messages are not sent.

SEND_REJECT

This property determines if the collaboration sends a Rejected message to UCCnet for a PUB_RELEASE_NEW_ITEM, PUB_RELEASE_DATA_CHANGE, or PUB_RELEASE_INITIAL_ITEM_LOAD if the status of a processed business object is Rejected. It is recommended that this value always be set to true.

Table 8. SEND_REJECT configuration property

Possible values	Usage
true (default)	Rejected messages are sent.
false	Rejected messages are not sent.

TOTPI_RESPONSE_MAP

This property contains the name of the map used to convert a UCCnetGBO_RI_S business object into a UCCnetGBO_envelope business object. The default map name can be changed to any value desired. A space has been inserted in the value in the Possible values column to enable the entry to fit in the table cell. The actual value does not include a space.

Table 9. TOTPI_RESPONSE_MAP configuration property

Possible values	Usage
UCCnetGBO_RI_S_to _UCCnetGBO_envelope	The name of the map for ToTPI_Response port.

Viewing collaboration messages

To view an explanation of this collaboration's messages, invoke Message Browser and open the collaboration's message file.

To invoke Message Browser and open the collaboration message file, complete the following actions:

1. In the Start menu, click **Programs > CrossWorlds > Server and Tools > Message Browser**.
2. On the **File** menu, click **Open**.
3. Use the **Look In** field to change the current folder to:

   ```
   IBM_CrossWorlds_root_dir\collaborations\messages\
   UCCnetMessageSend.txt
   ```

See also

- DataStore Collaboration
- UCCnetMessageReceive Collaboration
- Retail_Item Business Object
- UCCnet_envelope Business Object
- UCCnetGBO_envelope Business Object
- UCCnetGBO_identifier Business Object
- UCCnetGBO_RI_S Business Object
- UCCnetGBO_storable Business Object

Notices and Trademarks

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created

programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM CrossWorlds Lab Director
IBM RTP Laboratory
3039 Cornwallis Road
P.O. BOX 12195
Raleigh, NC 27709-2195
U.S.A

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurement may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not necessarily tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information may contain examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples may include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

COPYRIGHT LICENSE This information may contain sample application programs in source language, which illustrates programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

Programming interface information

Programming interface information, if provided, is intended to help you create application software using this program.

General-use programming interfaces allow you to write application software that obtain the services of this program's tools.

However, this information may also contain diagnosis, modification, and tuning information. Diagnosis, modification and tuning information is provided to help you debug your application software.

Warning: Do not use this diagnosis, modification, and tuning information as a programming interface because it is subject to change.

Trademarks and service marks

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States or other countries, or both:

IBM
the IBM logo
AIX
CrossWorlds
the CrossWorlds logo
DB2
DB2 Universal Database
MQIntegrator
MQSeries
Tivoli
WebSphere

Lotus, Domino, Lotus Notes, and Notes Mail are trademarks of the Lotus Development Corporation in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

MMX, Pentium, and ProShare are trademarks or registered trademarks of Intel Corporation in the United States, other countries, or both.

Solaris, Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product or service names may be trademarks or service marks of others.

IBM CrossWorlds Servers V4.1.1

IBM CrossWorlds Full Toolset V4.1.1

IBM CrossWorlds Connectors V4.1.1

IBM CrossWorlds Collaborations V4.1.1