

IBM CrossWorlds
WebSphere® Business Integration for
Retail Distribution



Process_Reviewed_Item 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 13.

First Edition (October 2002)

This edition applies to Version 4, Release 1, Modification 1, of *IBM® CrossWorlds®* (5724-C12) and to all subsequent releases and modifications until otherwise indicated in new editions.

IBM welcomes your comments. You can send them to the following address:

IBM Canada Ltd. Laboratory
Information Development
8200 Warden Avenue
Markham, Ontario, Canada L6G 1C7

Include the title and order number of this book, and the page number or topic related to your comment.

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 2002. All rights reserved.

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

Contents

Process_Reviewed_Item collaboration	1
Required documents	1
Collaboration setup	1
Port information	1
Setting up the collaboration	3
Synchronization process	4
Overall process logic	4
Configuration properties	7
Collaboration-specific properties	7

Viewing collaboration messages	12
See also	12

Notices and Trademarks 13

Notices	13
Programming interface information	14
Trademarks and service marks	15

Process_Reviewed_Item collaboration

The Process_Reviewed_Item collaboration is used to synchronize a Retail_Item business object to back-end applications based on the status of the object. The collaboration also sends the Retail_Item business object to a port to notify the source application of the status of the processed business object. The Process_Reviewed_Item collaboration can also be configured to do the following:

- Save or delete the Retail_Item business object from a persistent store
- Log the processing business object.
- Initiate the notification of the status of the business object processing (Approved, Rejected, or Error).

Required documents

The Process_Reviewed_Item collaboration has features, ports, and configuration properties that are unique to it. To create and configure a Process_Reviewed_Item collaboration object, use the following documents:

- This document for the Process_Reviewed_Item collaboration-specific information.
- Collaboration Development Guide 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 the Process_Reviewed_Item collaboration’s ports, as they are displayed in IBM® CrossWorlds® System Manager (CSM):

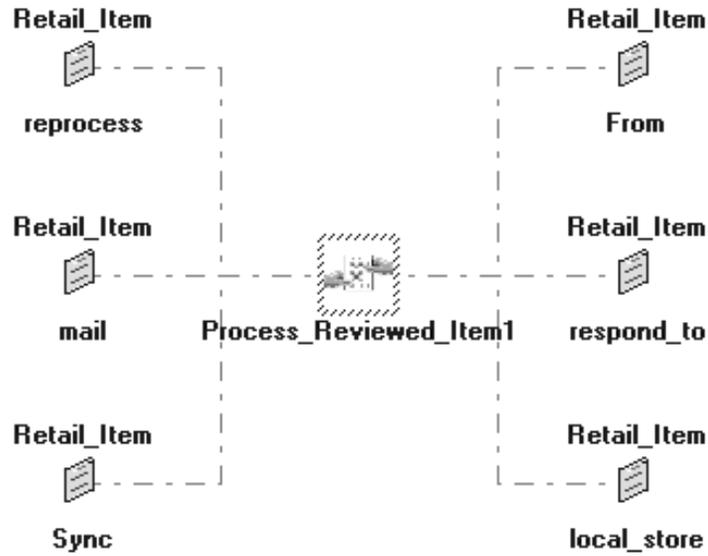


Figure 1. Process_Reviewed_Item collaboration's ports

Table 1. Port name: From

Business object	Bound to	Function	Verbs used
Retail_Item	Retail_Item from an object source collaboration, such as ItemCollector.	Receives the triggering business object. The business object contains a status of Approved, Rejected, or Error. At the end of the collaboration processing, this port returns the business object to the triggering collaboration or connector.	Create

Table 2. Port name: Sync

Business object	Bound to	Function	Verbs used
Retail_Item	A collaboration or connector used to synchronize a Retail_Item with a status of Approved to a back-end application.	Sends the business object with a status of Approved for synchronization to the back-end application.	Create

Table 3. Port name: reprocess

Business object	Bound to	Function	Verbs used
Retail_Item	A collaboration or connector (such as the ItemValidation collaboration) that evaluates the Retail_Item to ensure it contains all required attribute data.	Sends the business object, which has been modified to include previously missing and required attribute data, back through the item validation process.	Create

Table 4. Port name: mail

Business object	Bound to	Function	Verbs used
Retail_Item	A collaboration or connector that provides notification processing for items with Approved or Rejected status, or for items in error. This notification step is optional.	Sends the business object containing a message indicating that the object has a status of Approved or Rejected, or that an error was detected, to a notification process.	Create

Table 5. Port name: local_store

Business object	Bound to	Function	Verbs used
Retail_Item	A persistent storage mechanism, such as an implementation of the IBM CrossWorlds Data Storage collaboration.	Sends the business object to be saved or deleted from a local item store.	Create, Delete

Table 6. Port name: respond_to

Business object	Bound to	Function	Verbs used
Retail_Item	A collaboration or connector that notifies the source application of the status of the Retail_Item processing.	Sends the business object, containing an attribute indicating whether the item status is Approved, Rejected, or Error, for creation of a response to the source application.	Create

Setting up the collaboration

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

1. Create the Process_Reviewed_Item collaboration object.
2. Bind the ports as described in “Port information” on page 1.
3. Set the “Configuration properties” on page 7 for Process_Reviewed_Item.

Synchronization process

This section illustrates the overall business process logic for the Process_Reviewed_Item collaboration.

Overall process logic

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

1. The Process_Reviewed_Item collaboration is triggered by the receipt of a Retail_Item business object in its From port. The Retail_Item must contain a status in the attribute specified in the ITEM_STATUS_ATTRIBUTE configuration property, indicating the state of the processing of the item, such as Pending, Approved, Rejected, or Error. By default, this attribute is `internals.item_status`. See "ITEM_STATUS_ATTRIBUTE" on page 9 for more information on this property.
2. If the value of the DELETE_FROM_LOCAL_STORE configuration property is set to true, the Process_Reviewed_Item collaboration enables deletion of the Retail_Item from the local item store by sending the business object and the Delete verb to the local_store port. See the section "Persisting items in and deleting items from the local item store" on page 5 for more information on this process, and "DELETE_FROM_LOCAL_STORE" on page 8 for more information on the DELETE_FROM_LOCAL_STORE property.
3. The Process_Reviewed_Item collaboration processes a Retail_Item business object based on the value of the attribute specified in the ITEM_STATUS_ATTRIBUTE property, as follows:
 - If the status is Approved, the Retail_Item is sent to the Sync port to be synchronized in the back-end application. The item is also sent to the respond_to port to notify the source application of the Approved status of the item processing.
 - If the status is Rejected or Error, the Retail_Item is sent to the respond_to port to notify the source application of the Rejected or Error status of the item processing.
 - If the status is Re-process or Pending, the Retail_Item is sent to the reprocess port and the Process_Reviewed_Item collaboration waits for a response from the validating collaboration. An item returned from the validating collaboration on the reprocess port is then processed, as follows:
 - If the status of the returned item is Pending, it indicates that the item was accepted by the validating collaboration and sent on to the next appropriate step in the validation process. At this point, the Process_Reviewed_Item collaboration processing ends. When the process triggered by the validation collaboration completes, the Retail_Item will again be sent to the Process_Reviewed_Item From port.
 - If the status of the returned item is Rejected or Error, the Retail_Item is sent to the respond_to port to notify the source application of the Rejected or Error status of the item processing.
4. If the value of the RETAIN_ITEM_IN_LOCAL_STORE configuration property is set to true, the Process_Reviewed_Item collaboration rewrites the Retail_Item to the local item store by sending the business object and the Create verb to the local_store port. Note that the default value of this configuration property is false. See the section "Persisting items in and deleting items from the local item store" on page 5 for more information on this process.

If error conditions are encountered during any stage of processing, the Process_Reviewed_Item collaboration sets the Retail_Item business object's

attribute value named in the collaboration configuration property `ITEM_STATUS_ATTRIBUTE` to Error, logs the error, and returns the object to the calling collaboration through its From port.

The `Process_Reviewed_Item` collaboration can log the `Retail_Item` business object in the configured IBM CrossWorlds InterChange Server (ICS) log destination based on the value of the attributes named in the following collaboration configuration properties: `LOG_APPROVED_ITEM`, `LOG_REJECTED_ITEM`, and `LOG_ERROR_ITEM`. See “`LOG_APPROVED_ITEM`” on page 10, “`LOG_REJECTED_ITEM`” on page 10, and “`LOG_ERROR_ITEM`” on page 10 for more information on these properties.

The collaboration can also initiate notification of item status or if any error conditions are detected during processing, by sending the item to the mail port. See “Notifying of Approved or Rejected item status or of processing error conditions” for more information.

Persisting items in and deleting items from the local item store

The `Process_Reviewed_Item` collaboration can be configured to enable saving an item in the local item store after its processing is complete. The item is then available to be used later for validation or back-up. To enable persisting the item in the local item store, set the `Process_Reviewed_Item` configuration property `RETAIN_IN_LOCAL_STORE` to true. The collaboration passes the item with a Create verb to the `local_store` port to be passed to an implementation of the IBM Collaboration for Data Storage, which actually stores the item. The `Process_Reviewed_Item` collaboration enables saving the item to the item store after the item has been sent to the Sync port and to the `respond_to` port.

The `Process_Reviewed_Item` collaboration can enable deletion of the `Retail_Item` from the local item store. To enable deletion, set the `Process_Reviewed_Item` configuration property `DELETE_FROM_LOCAL_STORE` to true. The collaboration passes the item with a Delete verb to the `local_store` port to be passed to an implementation of the IBM Collaboration for Data Storage, which actually deletes the item.

Note: If the item has not been stored by another collaboration and, therefore, does not have to be deleted, set the property `DELETE_FROM_LOCAL_STORE` to false.

Notifying of Approved or Rejected item status or of processing error conditions

The `Process_Reviewed_Item` collaboration can be configured to initiate notification of Approved or Rejected item status, or if errors are detected during collaboration processing.

Alerting of Approved item status: The following collaboration properties enable notification if an item contains a status of Approved:

- `SEND_MAIL_ON_APPROVAL` (see “`SEND_MAIL_ON_APPROVAL`” on page 11 for more information)
- `APPROVED_EMAIL_ROLE` (see “`APPROVED_EMAIL_ROLE`” on page 8 for more information)
- `APPROVED_EMAIL_MSG` (see “`APPROVED_EMAIL_MSG`” on page 7 for more information)
- `APPROVED_EMAIL_SUBJECT` (see “`APPROVED_EMAIL_SUBJECT`” on page 8 for more information)

The SEND_MAIL_ON_APPROVAL and APPROVED_EMAIL_ROLE properties must be configured by the user. If the Retail_Item has a status of Approved and the SEND_MAIL_ON_APPROVAL and APPROVED_EMAIL_ROLE collaboration properties exist, the collaboration stores the values of the APPROVED_EMAIL_ROLE, APPROVED_EMAIL_MSG, and APPROVED_EMAIL_SUBJECT properties in attributes of the Retail_Item business object. The Retail_Item attributes into which these values are stored are identified by the EMAIL_ROLE_ATTRIBUTE, EMAIL_MSG_ATTRIBUTE, and EMAIL_SUBJECT_ATTRIBUTE configuration properties, respectively. (See “EMAIL_ROLE_ATTRIBUTE” on page 8, “EMAIL_MSG_ATTRIBUTE” on page 8, and “EMAIL_SUBJECT_ATTRIBUTE” on page 8 for more information on these properties.) The collaboration then sends the object to its mail port. If the APPROVED_EMAIL_ROLE property does not exist, a value of unknown is set in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item.

Alerting of Rejected item status: The following collaboration properties enable notification if an item contains a status of Rejected:

- SEND_MAIL_ON_REJECTION (see “SEND_MAIL_ON_REJECTION” on page 12 for more information)
- REJECT_EMAIL_ROLE (see “REJECT_EMAIL_ROLE” on page 11 for more information)
- REJECT_EMAIL_MSG (see “REJECT_EMAIL_MSG” on page 10 for more information)
- REJECT_EMAIL_SUBJECT (see “REJECT_EMAIL_SUBJECT” on page 11 for more information)

The SEND_MAIL_ON_REJECTION and REJECT_EMAIL_ROLE properties must be configured by the user. If the Retail_Item has a status of Rejected and the SEND_MAIL_ON_REJECTION and REJECT_EMAIL_ROLE collaboration properties exist, the collaboration stores the values of the REJECT_EMAIL_ROLE, REJECT_EMAIL_MSG, and REJECT_EMAIL_SUBJECT in attributes of the Retail_Item business object. The Retail_Item attributes into which these values are stored are identified by the EMAIL_ROLE_ATTRIBUTE, EMAIL_MSG_ATTRIBUTE, and EMAIL_SUBJECT_ATTRIBUTE configuration properties, respectively. The collaboration then sends the object to its mail port. If the REJECT_EMAIL_ROLE property does not exist, a value of unknown is set in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item.

Alerting of processing errors: The following collaboration properties enable notification if errors are detected during collaboration processing:

- SEND_MAIL_ON_ERROR (see “SEND_MAIL_ON_ERROR” on page 11 for more information)
- ERROR_EMAIL_ROLE (see “ERROR_EMAIL_ROLE” on page 9 for more information)
- ERROR_EMAIL_MSG (see “ERROR_EMAIL_MSG” on page 9 for more information)
- ERROR_EMAIL_SUBJECT (see “ERROR_EMAIL_SUBJECT” on page 9 for more information)

The SEND_MAIL_ON_ERROR and ERROR_EMAIL_ROLE properties must be configured by the user. If an error is detected and the SEND_MAIL_ON_ERROR and ERROR_EMAIL_ROLE collaboration properties exist, the collaboration stores the values of the ERROR_EMAIL_ROLE, ERROR_EMAIL_MSG, and ERROR_EMAIL_SUBJECT in attributes of the Retail_Item business object. The Retail_Item attributes into which these values are stored are identified by the

EMAIL_ROLE_ATTRIBUTE, EMAIL_MSG_ATTRIBUTE, and EMAIL_SUBJECT_ATTRIBUTE configuration properties, respectively. The collaboration then sends the object to its mail port. If the ERROR_EMAIL_ROLE property does not exist, a value of unknown is set in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item.

Configuration properties

This collaboration has the following configuration-specific properties:

- "APPROVED_EMAIL_MSG"
- "APPROVED_EMAIL_ROLE" on page 8
- "APPROVED_EMAIL_SUBJECT" on page 8
- "DELETE_FROM_LOCAL_STORE" on page 8
- "EMAIL_MSG_ATTRIBUTE" on page 8
- "EMAIL_ROLE_ATTRIBUTE" on page 8
- "EMAIL_SUBJECT_ATTRIBUTE" on page 8
- "ERROR_EMAIL_MSG" on page 9
- "ERROR_EMAIL_ROLE" on page 9
- "ERROR_EMAIL_SUBJECT" on page 9
- "ITEM_IDENTIFICATION_ATTRIBUTE" on page 9
- "ITEM_STATUS_ATTRIBUTE" on page 9
- "LOG_APPROVED_ITEM" on page 10
- "LOG_ERROR_ITEM" on page 10
- "LOG_REJECTED_ITEM" on page 10
- "QUALIFICATION_FAILED_EMAIL_MSG" on page 10
- "REJECT_EMAIL_MSG" on page 10
- "REJECT_EMAIL_ROLE" on page 11
- "REJECT_EMAIL_SUBJECT" on page 11
- "RETAIN_ITEM_IN_LOCAL_STORE" on page 11
- "SEND_MAIL_ON_APPROVAL" on page 11
- "SEND_MAIL_ON_ERROR" on page 11
- "SEND_MAIL_ON_REJECTION" on page 12

Collaboration-specific properties

APPROVED_EMAIL_MSG

This property specifies the value that is placed in the EMAIL_MSG_ATTRIBUTE of the Retail_Item business object when an item has a status of Approved. This property can contain the actual message text.

Table 7. APPROVED_EMAIL_MSG configuration property

Possible values	Usage
The message text for notifying that an item has a status of Approved.	This property holds information that is passed to the mail port. The use of this information is dependent on that which is connected to that port.

APPROVED_EMAIL_ROLE

This property specifies the value that is placed in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item business object when an item has a status of Approved. This property can contain the actual email address to which to send the approved email message. There is no default value for this property.

APPROVED_EMAIL_SUBJECT

This property specifies the value that is placed in the EMAIL_SUBJECT_ATTRIBUTE of the Retail_Item business object when an item has a status of Approved. This property can contain the actual subject text.

Table 8. APPROVED_EMAIL_SUBJECT configuration property

Possible values	Usage
item approved	The default item approved subject text.

DELETE_FROM_LOCAL_STORE

This property specifies whether the collaboration deletes the Retail_Item business object from the local item store at the start of collaboration processing.

Table 9. DELETE_FROM_LOCAL_STORE configuration property

Possible values	Usage
True (default)	The collaboration deletes the Retail_Item by sending it, along with the Delete verb, to its local_store port.
False	The collaboration does not delete the Retail_Item from the local item store.

EMAIL_MSG_ATTRIBUTE

This property specifies the attribute of the Retail_Item business object into which the text of a notification message is stored prior to the Retail_Item business object's being sent to the collaboration's mail port.

Table 10. EMAIL_MSG_ATTRIBUTE configuration property

Possible values	Usage
internals.message_text	The default Retail_Item attribute name.

EMAIL_ROLE_ATTRIBUTE

This property specifies the attribute of the Retail_Item business object into which the email address of a message to be emailed is stored, prior to the Retail_Item business object's being sent to the collaboration's mail port.

Table 11. EMAIL_ROLE_ATTRIBUTE configuration property

Possible values	Usage
internals.message_recipient_role	The default Retail_Item attribute name.

EMAIL_SUBJECT_ATTRIBUTE

This property specifies the attribute of the Retail_Item business object into which the text of a message subject is stored, prior to the Retail_Item business object's being sent to the collaboration's mail port.

Table 12. EMAIL_SUBJECT_ATTRIBUTE configuration property

Possible values	Usage
internals.message_subject	The default Retail_Item attribute name.

ERROR_EMAIL_MSG

This property specifies the value that is placed in the EMAIL_MSG_ATTRIBUTE of the Retail_Item business object when an error is detected during processing. This property can contain the actual message text.

Table 13. ERROR_EMAIL_MSG configuration property

Possible values	Usage
The message text for notifying that an error was detected during processing.	This property holds information that is passed to the mail port. The use of this information is dependent on that which is connected to that port.

ERROR_EMAIL_ROLE

This property specifies the value that is placed in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item business object when an error is detected during processing. This property can contain the actual email address to which to send the error email message. There is no default value for this property.

ERROR_EMAIL_SUBJECT

This property specifies the value that is placed in the EMAIL_SUBJECT_ATTRIBUTE of the Retail_Item business object when an error is detected during processing. This property can contain the actual subject text.

Table 14. ERROR_EMAIL_SUBJECT configuration property

Possible values	Usage
internal error occurred	The default error subject text.

ITEM_IDENTIFICATION_ATTRIBUTE

This property specifies the attribute of the Retail_Item business object that contains a unique identification value for the business object.

Note: The value in the Possible values column includes a space to allow it to fit into the table cell. The actual value does not include a space.

Table 15. ITEM_IDENTIFICATION_ATTRIBUTE configuration property

Possible values	Usage
item.itemInformation.globalTradeItem Number.gtin	The default Retail_Item attribute name.

ITEM_STATUS_ATTRIBUTE

This property specifies the attribute of the Retail_Item business object that contains the status of the business object being processed.

Table 16. ITEM_STATUS_ATTRIBUTE configuration property

Possible values	Usage
internals.item_status	The default Retail_Item attribute name.

LOG_APPROVED_ITEM

This property specifies whether the collaboration logs the business object being processed when the object status is Approved.

Table 17. LOG_APPROVED_ITEM configuration property

Possible values	Usage
True (default)	The collaboration logs the business object with a status of Approved.
False	The collaboration does not log the business object with a status of Approved.

LOG_ERROR_ITEM

This property specifies whether the collaboration logs the business object being processed when an error is detected during processing. Note that the detected error is logged if tracing is enabled for the collaboration.

Table 18. LOG_ERROR_ITEM configuration property

Possible values	Usage
False (default)	The collaboration does not log the business object in addition to the error log.
True	The collaboration logs the business object in addition to the error log.

LOG_REJECTED_ITEM

This property specifies whether the collaboration logs the business object being processed when the object status is Rejected.

Table 19. LOG_REJECTED_ITEM configuration property

Possible values	Usage
False (default)	The collaboration does not log the business object with a status of Rejected.
True	The collaboration logs the business object with a status of Rejected.

QUALIFICATION_FAILED_EMAIL_MSG

This property specifies the value that is placed in the EMAIL_MSG_ATTRIBUTE of the Retail_Item business object when the status of the Retail_Item returned from the validating collaboration is Rejected. This property can contain the actual message text.

Table 20. QUALIFICATION_FAILED_EMAIL_MSG configuration property

Possible values	Usage
The message text for notifying that the status of the Retail_Item returned from the validating collaboration is Rejected.	This property holds information that is passed to the mail port. The use of this information is dependent on that which is connected to that port.

REJECT_EMAIL_MSG

This property specifies the value that is placed in the EMAIL_MSG_ATTRIBUTE of the Retail_Item business object when the status of the item received in the From port is Rejected. This property can contain the actual message text.

Table 21. REJECT_EMAIL_MSG configuration property

Possible values	Usage
The message text for notifying that an item has a status of Rejected.	This property holds information that is passed to the mail port. The use of this information is dependent on that which is connected to that port.

REJECT_EMAIL_ROLE

This property specifies the value that is placed in the EMAIL_ROLE_ATTRIBUTE of the Retail_Item business object when the status of the item received on the From port is Rejected. This property can contain the actual email address to which to send the rejected email message. There is no default value for this property.

REJECT_EMAIL_SUBJECT

This property specifies the value that is placed in the EMAIL_SUBJECT_ATTRIBUTE of the Retail_Item business object when the status of the item received on the From port is Rejected. This property can contain the actual subject text.

Table 22. REJECT_EMAIL_SUBJECT configuration property

Possible values	Usage
item rejected	The default item rejected subject text.

RETAIN_ITEM_IN_LOCAL_STORE

This property specifies whether the collaboration saves the Retail_Item business object in a local item store at the end of collaboration processing.

Table 23. RETAIN_ITEM_IN_LOCAL_STORE configuration property

Possible values	Usage
False (default)	The collaboration does not save the item by sending it to its local_store port.
True	The collaboration saves the item by sending it, along with the Create verb, to its local_store port.

SEND_MAIL_ON_APPROVAL

This property specifies whether the collaboration sends the Retail_Item to the mail port if the business object status is Approved.

Table 24. SEND_MAIL_ON_APPROVAL configuration property

Possible values	Usage
False (default)	The collaboration does not send the Retail_Item business object to its mail port if it has a status of Approved.
True	The collaboration sends the Retail_Item business object containing an approval message to its mail port if the item has a status of Approved.

SEND_MAIL_ON_ERROR

This property specifies whether the collaboration sends the Retail_Item to the mail port if an error is detected during the processing of the Retail_Item business object.

Table 25. SEND_MAIL_ON_ERROR configuration property

Possible values	Usage
False (default)	The collaboration does not send the Retail_Item business object to its mail port if an error is detected during the processing of the item.
True	The collaboration sends the Retail_Item business object containing an error message to its mail port if an error is detected during the processing of the item.

SEND_MAIL_ON_REJECTION

This property specifies whether the collaboration sends the Retail_Item to the mail port if the business object status is Rejected.

Table 26. SEND_MAIL_ON_REJECTION configuration property

Possible values	Usage
False (default)	The collaboration does not send the Retail_Item business object to its mail port if the item has a status of Rejected.
True	The collaboration sends the Retail_Item business object containing a rejection message to its mail port if the item has a status of Rejected.

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\Process_Reviewed_Item.txt

See also

- DataStore Collaboration
- ItemCollector Collaboration
- ItemValidation Collaboration
- Retail_Item 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

