BEA WebLogic Collaborate

A Component of BEA WebLogic Integration

Migrating BEA WebLogic Collaborate to Release 2.0

Migrating BEA WebLogic Collaborate to Release 2.0

Document Edition	Date	Software Version
2.0	July 2001	2.0

Contents

About This Document

This document explains how to migrate from WebLogic Collaborate Release 1.0 or 1.01 to WebLogic Collaborate Release 2.0.

This document covers the following topics:

- Chapter 1, "Migrating the Repository," describes how to migrate repository data from a previous release of WebLogic Collaborate to the repository for Release 2.0.

- Chapter 2, "Migrating Workflows," explains how to use the PIMigrate command file to convert a public workflow created with a previous version of WebLogic Collaborate to Release 2.0.

- Chapter 3, "Migrating Applications to the WebLogic Collaborate Messaging API," describes how to migrate applications from the C-Enabler API (provided in previous versions of WebLogic Collaborate) to the WebLogic Collaborate Messaging API.

What You Need to Know

This document is intended for system administrators and application developers who are upgrading a WebLogic Collaborate installation from Release 1.0 or 1.01 to Release 2.0. You need to be familiar with WebLogic Collaborate to perform the tasks described in this document.

e-docs Web Site

BEA product documentation is available at the following location:

http://e-docs.bea.com

How to Print the Document

You are reading the PDF version of this document, either online or a printout. You can print the entire document or any portion of the document from Adobe Acrobat Reader. If you do not have the Adobe Acrobat Reader, you can get it for free from the Adobe Web site at the following location:

http://www.adobe.com

Alternatively, you can print a copy of the HTML version of this document from a Web browser, one file at a time, by using the File—>Print option on your Web browser.

Contact Us!

Your feedback about the WebLogic Collaborate documentation is important to us. Send us e-mail at docsupport@bea.com if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the WebLogic Collaborate documentation.

In your e-mail message, please indicate that you are using the documentation for Release 2.0 of WebLogic Collaborate.

If you have any questions about this version of WebLogic Collaborate, or if you have problems installing and running WebLogic Collaborate, contact BEA Customer Support through BEA WebSupport at the following location:

http://www.bea.com

You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number

- Your company name and company address

- Your machine type and authorization codes

- The name and version of the product you are using

- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
key+key	Indicates that you must press two or more keys simultaneously.
italics	Indicates emphasis or book titles.
monospace text	Indicates code samples, commands and their options, data structures and their members, data types, directories, and file names and their extensions. Monospace text also indicates text that you must enter from the keyboard. *Examples*: `#include <iostream.h> void main ( ) the pointer psz` `chmod u+w *` `\tux\data\ap` `.doc` `tux.doc` `BITMAP` `float`

Convention	Item
monospace italic text	Identifies variables in code. *Example*: `String expr`
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators. *Example*s: LPT1 SIGNON OR
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.

[ ]	Indicates optional items in a syntax line. The brackets themselves should never be typed.
	Example:
	`buildobjclient [-v] [-o name] [-f file-list]...`
	`[-l file-list]...`

|	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.

...	Indicates one of the following in a command line:
	■ That an argument can be repeated several times in a command line
	■ That the statement omits additional optional arguments
	■ That you can enter additional parameters, values, or other information
	The ellipsis itself should never be typed.
	Example:
	`buildobjclient [-v] [-o name] [-f file-list]...`
	`[-l file-list]...`

. . .	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

1 Migrating the Repository

WebLogic Collaborate Release 2.0 provides a utility that helps you migrate repository data from a previous release of WebLogic Collaborate to the repository for Release 2.0. The Bulk Migrator utility converts a WebLogic Collaborate 1.0 or 1.0.1 repository data file to a WebLogic Collaborate Release 2.0 repository data file.

In WebLogic Collaborate Releases 1.0 and 1.01, the configuration data is distributed among the following components:

- Repository for the c-hub

- Configuration files for the c-enablers

- Run-time data, such as the data for conversations and roles

The following procedure for migrating repository data achieves only a partial migration; it migrates data from the c-hub repository. To modify and add data from the c-enabler configuration files and run-time data, you must use the WebLogic Collaborate Administration Console.

To migrate repository data, perform the following steps:

1. Use the Bulk Loader from the previous release of WebLogic Collaborate to export data from the old repository to a repository data file.

   Perform a repository export that is full and long. For instructions, see "Working with the Bulk Loader" in the *BEA WebLogic Collaborate C-Hub Administration Guide* in the documentation set for WebLogic Collaborate Release 1.0 or 1.01.

   As an alternative to running the Bulk Loader, you can use the C-Hub Administration Console from a previous version of WebLogic Collaborate to export the data. For instructions, see "Creating and Modifying C-Hubs" in the

BEA WebLogic Collaborate C-Hub Administration Guide in the documentation set for WebLogic Collaborate Release 1.0 or 1.01.

You can find the documentation sets for WebLogic Collaborate Releases 1.0 and 1.01 at the following URL:

http://e-docs.bea.com

2. Install Release 2.0 as described in *Installing BEA WebLogic Collaborate*.

3. Run the Bulk Migrator utility by entering the following command:

   bulkmigrator.cmd *prev_rep_data_file new_rep_data_file*

   This utility is delivered in the WLC_HOME\bin directory.

   In this command line:

   - *prev_rep_data_file* is the name of the repository data file that you created in step 1.

   - *new_rep_data_file* is the name of the new repository data file that will be created.

   The new repository data file includes a trading partner element for the old c-hub and for each trading partner that was configured in the old repository.

4. Set the end point values in the new repository data file.

   Each trading partner element in the new repository data file includes an end point value. The Bulk Migrator sets each end point value to <placeholder>. You must edit the new repository data file by setting each occurrence of <placeholder> to the correct end point value. The end point value specifies the trading partner end point. This end point is the URL for the trading partner.

   If you have access to a trading partner's c-enabler configuration file, you can get the URL from this file. The URL is the ref value for the enabler-url XML element. For information about the c-enabler configuration file, see "Configuring C-Enablers" in the *BEA WebLogic Collaborate C-Enabler Administration Guide* in the documentation set for WebLogic Collaborate Release 1.0 or 1.01. You can find these documentation sets at the following URL:

   http://e-docs.bea.com

5. Use the Bulk Loader for WebLogic Collaborate Release 2.0 to import data from the new repository data file to the repository for Release 2.0.

For instructions, see "Working with the Bulk Loader" in *Administering BEA WebLogic Collaborate*.

As an alternative to running the Bulk Loader, you can use the WebLogic Collaborate Administration Console to import the data. For instructions, see "Configuring WebLogic Collaborate" in the *BEA WebLogic Collaborate Administration Console Online Help*.

Note: After you migrate a WebLogic Collaborate Release 1.0 or 1.01 c-hub, the old c-hub is displayed in the WebLogic Collaborate Administration Console for Release 2.0 as a trading partner named C-Hub.

6. Modify files that access specific data elements in the repository. The following table shows the relationships between the repository data elements for WebLogic Collaborate Releases 1.0 and 1.01 and the repository data elements for WebLogic Collaborate Release 2.0.

Table 1-1 Relationships Between Repository Data Elements

WebLogic Collaborate Releases 1.0 and 1.01	WebLogic Collaborate Release 2.0
Business protocol	Transport and end point
Business protocol definition	Business protocol definition
C-hub	WebLogic Collaborate
Collaborator	Collaboration agreement
Conversation definition	Conversation definition
C-space	Delivery channel
Extended property set	Extended property set
Logic plug-in	Logic plug-in
Logic plug-in chain	Logic plug-in chain
Role	Role
Subscription	Party
Trading partner	Trading partner

Table 1-1 Relationships Between Repository Data Elements (Continued)

WebLogic Collaborate Releases 1.0 and 1.01	WebLogic Collaborate Release 2.0
Trading partner protocol	Party identifier
XPath expression	XPath expression

2 Migrating Workflows

This topic explains how to use the `PIMigrate` command script to convert workflows created with WebLogic Collaborate Release 1.0 to Release 2.0. It includes the following sections:

- Before You Convert Workflows
- Converting WebLogic Collaborate Release 1.0 Workflows

Before You Convert Workflows

Before you convert WebLogic Collaborate Release 1.0 workflows, make sure you have completed the following tasks:

- Installed the WebLogic Collaborate and WebLogic Process Integrator components of WebLogic Integration 2.0, as explained in the following documents:
  - *Installing BEA WebLogic Collaborate*
  - *BEA WebLogic Process Integrator Installation and Configuration Guide*
- Run the Hello Partner sample, as described in *Using BEA WebLogic Collaborate Samples*. This ensures that your environment is set up and that the WebLogic Collaborate plug-in to the WebLogic Process Integrator Studio is properly configured.

Converting WebLogic Collaborate Release 1.0 Workflows

To convert WebLogic Collaborate Release 1.0 workflows, complete the following steps:

1. Go to the directory in which the WebLogic Collaborate command scripts are located. In the following pathnames, `WLI_HOME` represents the directory in which WebLogic Integration is installed. Use the pathname appropriate for your platform:

   - **Windows**

     `%WLI_HOME%\collaborate\bin`

   - **UNIX**

     `$WLI_HOME/collaborate/bin`

2. Enter the command appropriate for your platform:

   - **Windows**

     `prompt> PIMigrate.cmd workflow-1.0.xml workflow-2.0.xml`

   - **UNIX**

     `prompt> . ./PIMigrate.sh workflow-1.0.xml workflow-2.0.xml`

   In the preceding command lines:

   - `workflow-1.0.xml` represents the full pathname of the workflow created with WebLogic Collaborate Version 1.0.

   - `workflow-2.0.xml` represents the full pathname of the workflow to be converted so that it can be used with WebLogic Collaborate Release 2.0 and the WebLogic Process Integrator Release 2.0 Studio.

3 Migrating Applications to the WebLogic Collaborate Messaging API

The following sections describe how to migrate applications from the C-Enabler API (for WebLogic Collaborate Releases 1.0 and 1.01) to the Messaging API (for WebLogic Collaborate Release 2.0):

- Introduction

- Importing XOCP Applications

- Updating the Terminology

- Supporting the WebLogic Collaborate 1.0 and 1.0.1 C-Enabler API

- WebLogic Collaborate 1.0 and 1.0.1 C-Enabler API Implementation

Introduction

> **Note:** If you are migrating a Java messaging application that was written using the WebLogic Collaborate C-Enabler API to WebLogic Collaborate Release 2.0, the migrated application must be run in a separate JVM in nonpersistent mode.

XOCP is the default protocol used by WebLogic Collaborate for exchanging business messages. In WebLogic Collaborate Releases 1.0 and 1.01, XOCP messaging applications were written using the public XOCP C-Enabler application program interface (API). A message was packaged in an XOCP message envelope and associated with various message headers that specified how to deliver and process the message. In WebLogic Collaborate Release 2.0, the c-enabler and c-hub entities have been integrated. The integrated product is known simply as WebLogic Collaborate.

The WebLogic Collaborate Messaging API now supports the C-Enabler functionality, but continues to reflect the C-Enabler API run-time terminology so that XOCP applications developed using previous versions of the software will continue to work without additional customization.

The WebLogic Process Integrator Studio gives developers a seamless, reliable method of defining and managing the messaging protocols used during WebLogic Collaborate business message exchanges. As a result, programming requirements can be reduced considerably. However, the WebLogic Collaborate Messaging API is provided for developers who want to maintain their installations using a Java program as the interface. See *Programming BEA WebLogic Collaborate Messaging Applications*.

WebLogic Collaborate uses the XOCP protocol to manage distributed business processes that are being passed back and forth in conversations between trading partners. When appropriately configured, a WebLogic Collaborate installation verifies business roles and security, providing a central management point for the collaborative conversations that are taking place.

When a business process initiates a specific task (for example, issuing a request for a quote), a central management point is created for the collaborative conversations between the trading partners, and business roles and security are verified before a message exchange takes place.

Importing XOCP Applications

The WebLogic Collaborate C-Enabler API does not support the new functionality available in WebLogic Collaborate Release 2.0. However, the C-Enabler terminology has been mapped to WebLogic Collaborate Release 2.0 functions, and XOCP functions continue to be available from the WebLogic Collaborate Messaging API. For a complete terminology mapping, see the table titled "Terminology Mappings from WebLogic Collaborate 1.0 and 1.01 to WebLogic Collaborate 2.0" in the following section.

The WebLogic Collaborate Messaging API updates the C-Enabler API primarily in the following areas:

- C-enabler configuration

- Conversation management

- JavaDoc

XOCP applications that are being migrated to WebLogic Collaborate Release 2.0 must have:

- Database support

- All collaboration agreements defined in the repository

Updating the Terminology

Understanding the new terminology used in WebLogic Collaborate Release 2.0 is important when mapping the functionality in WebLogic Collaborate Releases 1.0 and 1.01 XOCP applications for migration purposes. The configuration characteristics of your WebLogic Collaborate installation will determine whether functionality previously associated with the c-enabler or the c-hub is invoked. The following table summarizes how the functionality is mapped.

Table 3-1 Terminology Mappings from WebLogic Collaborate 1.0 and 1.01 to WebLogic Collaborate 2.0

1.0 and 1.01 Term	2.0 Term	Definitions
Attachment	Attachment	Non XML payload part of a business message, for example, a GIF file.
Business Document	Business Document	XML-based payload part of the business message.
Business Message	Business Message	A multi part MIME message, consisting of one or more payload parts. A part can be an XML document (a Business Document) or non XML file (an Attachment).
Business Protocol Definition	Business Protocol Definition	The definition of a business transaction protocol, for example, `Name=XOCP`.
Collaborator	Trading Partner Session	In WebLogic Collaborate Releases 1.0 and 1.01, a collaborator is a trading partner that participates in a single c-space (delivery channel). In WebLogic Collaborate Release 2.0, a trading partner session is created to communicate with each trading partner, and its scope is bounded by a delivery channel.
Conversation	Conversation	A series of message exchanges between trading partners.
Conversation Definition	Conversation Definition	A set of roles and document definitions, for example, a purchase order.
Conversation Type	Not applicable	There is no corresponding term for *conversation type* in WebLogic Collaborate Release 2.0. In WebLogic Collaborate Releases 1.0 and 1.01, conversation type defined a conversation for a trading partner. It consisted of the following properties: ■ Conversation name (for example, purchase order) ■ Version ■ Role of a trading partner in that conversation (for example, buyer or seller)
C-Space	Delivery Channel	A grouping of Trading Partner, Subscription, and Business Protocol.
C-enabler Node	Spoke	A trading partner communicates with others with the help of a hub (intermediary).

Table 3-1 Terminology Mappings from WebLogic Collaborate 1.0 and 1.01 to WebLogic Collaborate 2.0 (Continued)

1.0 and 1.01 Term	2.0 Term	Definitions
C-enabler API	WebLogic Collaborate Messaging API	XOCP applications that used the C-enabler API can be migrated to use the WebLogic Collaborate Messaging API. The C-enabler API was the interface between the XOCP application and WebLogic Collaborate AT run time. This API was used, for example, to start c-enabler sessions, create and participate in conversations, and send and receive business messages.
C-enabler Session	Trading Partner Session	In WebLogic Collaborate Releases 1.0 and 1.01, a c-enabler session is a logical session between a c-enabler node and one c-hub for one particular c-space. In WebLogic Collaborate Release 2.0, a trading partner session occurs in the delivery channel.
C-hub	Intermediary	A hub is a WebLogic Server running a set of shared services. For example: ■ Repository ■ Administration ■ Conversation coordination, message routing, and mediation
Message	Message	A data entity that is used to communicate between hubs and spokes. It is a multi part MIME message.
Role	Role	Each conversation has two or more roles, for example, buyer and seller. A role is defined in terms of the documents that can be sent or received by a collaborator who has assumed that role in the conversation.
Send(Publish)-Side filter	Send(Publish)-Side filter	When sending a document, this filter (X-Path) is specified by an application to determine the list of recipient trading partners. For example: `//trading partner[@name= "Bea"`
Trading Partner	Trading Partner	A representation of an entity, such as a company, that wants to participate in one or more delivery channels.

Supporting the WebLogic Collaborate 1.0 and 1.0.1 C-Enabler API

In WebLogic Collaborate Release 2.0, the configuration of a trading partner is predefined and entered in the system using the Administration Console. The trading partner retrieves a collaboration agreement from the WebLogic Collaborate repository.

To support migration to WebLogic Collaborate Release 2.0, a WebLogic Collaborate 1.0 or 1.01 C-Enabler application must have existing database support, and all of its trading partner collaboration agreements must be pre defined in the repository. In order to collaborate in business transactions using the XOCP protocol, the application must be aligned with the WebLogic Collaborate Messaging API to achieve as much backward compatibility as possible. Changes are required in the following areas in order for the existing XOCP applications to migrate to the WebLogic Collaborate Messaging API:

- C-enabler configuration

- Repository

C-Enabler Configuration

In WebLogic Collaborate Releases 1.0 and 1.01, the c-enabler configuration is retrieved from an XML file that defines the following variables:

- *session name*

- *c-space name*—Name of the intermediary delivery channel in the collaboration agreement.

- *hub-url*—One or more endpoint URLs of the intermediary delivery channel.

- *enabler-url*—One or more endpoint URLs of the spoke delivery channel.

- *security-info*—Security information in the document exchange elements of the delivery channels of both the spoke and the intermediary.

  - *trading partner name*

- *certificate*

- *role*

Then the c-enabler creates (or participates in) and manages the conversations with other trading partners.

In WebLogic Collaborate Release 2.0, the identification and configuration of a trading partner is predefined and entered in the system using the Administration Console. The trading partner retrieves its collaboration agreement from the WebLogic Collaborate repository.

Repository

Existing XOCP applications will work with the WebLogic Collaborate Release 2.0 repository with only one change: WebLogic Collaborate must have a repository, and all the trading partner collaboration agreements used by the XOCP applications must be predefined in the repository. To migrate WebLogic Collaborate Release 1.0 or 1.01 data repository to WebLogic Collaborate Release 2.0, use the Bulk Migrator utility described in Chapter 1, "Migrating the Repository."

WebLogic Collaborate 1.0 and 1.0.1 C-Enabler API Implementation

This section lists the WebLogic Collaborate Releases 1.0 and 1.01 public API packages, interfaces, and classes that must be reintegrated in the WebLogic Collaborate Release 2.0 run-time implementation in order to migrate XOCP applications.

Packages

```
com.bea.b2b
com.bea.b2b.enabler
com.bea.b2b.enabler.xocp
```

```
com.bea.b2b.protocol
com.bea.b2b.protocol.conversation
com.bea.b2b.protocol.messaging
com.bea.b2b.protocol.xocp.conversation.local
com.bea.b2b.protocol.xocp.messaging
```

Interfaces

```
com.bea.b2b.EnablerSession
com.bea.b2b.enabler.xocp.XOCPEnablerSession
com.bea.b2b.protocol.PlugIn
com.bea.b2b.protocol.conversation.State
com.bea.b2b.protocol.messaging.Message
com.bea.b2b.protocol.messaging.PayloadPart
com.bea.b2b.protocol.xocp.conversation.local.Conversation
com.bea.b2b.protocol.xocp.conversation.local.ConversationHandler
```

Classes

```
com.bea.b2b.enabler Enabler
com.bea.b2b.protocol.conversation.ConversationType
com.bea.b2b.protocol.messaging.Attachment
com.bea.b2b.protocol.messaging.BusinessDocument
com.bea.b2b.protocol.messaging.DeliveryStatus
com.bea.b2b.protocol.messaging.MessageBase
com.bea.b2b.protocol.messaging.MessageEnvelope
com.bea.b2b.protocol.messaging.MessageToken
com.bea.b2b.protocol.messaging.MiniParser
com.bea.b2b.protocol.xocp.messaging.Ping
com.bea.b2b.protocol.xocp.messaging.QualityOfService
com.bea.b2b.protocol.xocp.messaging.XOCPMessage
com.bea.b2b.protocol.xocp.messaging.XOCPMessageToken
```

Index

W

workflows, migrating 2-1

X

XOCP applications. *See* applications.