

IBM WebSphere Business Integration Adapters



Migrating Adapters to Adapter Framework, Version 2.6

V 2.6

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Note!

Before using this information and the product it supports, read the information in "Notices" on page 23.

1November2004

This edition of this document applies to IBM WebSphere Business Integration Adapter Framework (5724-G92), version 2.6.0, and to all subsequent releases and modifications until otherwise indicated in new editions.

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Contents

About this document	v
Audience	v
Prerequisites for this document	v
Related documents	v
Typographic conventions	vi
New in this release	vii
New in release 2.6	vii
Chapter 1. Overview	1
Migration task roadmap	1
Terminology	5
Overview of Adapter Framework changes	7
Chapter 2. Upgrading pre-2.4 adapters	9
Overview of upgrading pre-2.4.x adapters	9
Overview of upgrading adapters in an InterChange Server environment	9
Overview of upgrading adapters in non-InterChange Server environments	12
Chapter 3. Migrating adapters to Adapter Framework 2.6	15
Overview of migrating adapters to Adapter Framework 2.6	15
Overview of migrating adapters to an InterChange Server environment	16
Overview of migrating adapters to a non-InterChange Server environment	17
Linking to TechNotes	17
Overview of custom ODA modification	19
Supported data handlers	19
Index	21
Notices	23
Programming interface information	24
Trademarks and service marks	25

About this document

The IBM[®] WebSphere[®] Business Integration Adapter portfolio supplies integration connectivity for leading e-business technologies, enterprise applications, legacy, and mainframe systems. The product set includes tools and templates for customizing, creating, and managing components for business process integration.

This document describes the how to migrate adapters to Adapter Framework V2.6.

Audience

This document is for consultants, developers, and system administrators who support and manage the WebSphere Business Integration product at customer sites.

Prerequisites for this document

Users of this document should be familiar with the WebSphere Business Integration system.

Related documents

The complete set of documentation available with this product describes the features and components common to all WebSphere Business Integration Adapters installations, and includes reference material on specific components.

This document contains many references to two other documents: the *System Installation Guide for Windows or for UNIX* and the *System Implementation Guide for WebSphere InterChange Server*. If you choose to print this document, you may want to print these documents as well.

You can install related documentation from the following sites:

- For general adapter information; for using adapters with WebSphere message brokers (WebSphere MQ Integrator, WebSphere MQ Integrator Broker, WebSphere Business Integration Message Broker); and for using adapters with WebSphere Application Server:
<http://www.ibm.com/websphere/integration/wbiadapters/infocenter>
- For using adapters with InterChange Server:
<http://www.ibm.com/websphere/integration/wicserver/infocenter>
<http://www.ibm.com/websphere/integration/wbicollaborations/infocenter>
- For more information about message brokers (WebSphere MQ Integrator Broker, WebSphere MQ Integrator, and WebSphere Business Integration Message Broker):
<http://www.ibm.com/software/integration/mqfamily/library/manualsa/>
- For more information about WebSphere Application Server:
<http://www.ibm.com/software/webservers/appserv/library.html>

These sites contain simple directions for downloading, installing, and viewing the documentation.

Note: Important information about this product may be available in Technical Support Technotes and Flashes issued after this document was published.

These can be found on the WebSphere Business Integration Support Web site, <http://www.ibm.com/software/integration/websphere/support/>. Select the component area of interest and browse the Technotes and Flashes sections. Additional information might also be available in IBM Redbooks at <http://www.redbooks.ibm.com/>.

Typographic conventions

This document uses the following 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.
bold	Indicates a new term the first time that it appears.
<i>italic, 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.
{ }	In a syntax line, curly braces surround a set of options from which you must choose one and only one.
[]	In a syntax line, square brackets surround an optional parameter.
...	In a syntax line, ellipses indicate a repetition of the previous parameter. For example, <code>option[,...]</code> means that you can enter multiple, comma-separated options.
< >	In a naming convention, angle brackets surround individual elements of a name to distinguish them from each other, as in <code><server_name><connector_name>tmp.log</code> .
/, \	In this document, backslashes (\) are used as the convention for directory paths. For UNIX installations, substitute slashes (/) for backslashes. All product pathnames are relative to the directory where the product is installed on your system.
<code>%text%</code> and <code>\$text</code>	Text within percent (%) signs indicates the value of the Windows text system variable or user variable. The equivalent notation in a UNIX environment is <code>\$text</code> , indicating the value of the <code>text</code> UNIX environment variable.
<code>ProductDir</code>	Represents the directory where the product is installed.

New in this release

New in release 2.6

This is a new document. It describes how to migrate adapters installed using Adapter Framework 2.4 to the 2.6 version of the Framework. Not all adapters can be migrated.

Chapter 1. Overview

- “Migration task roadmap”
- “Terminology” on page 5
- “Overview of Adapter Framework changes” on page 7

This guide is designed to help you migrate WebSphere Business Integration adapters to Adapter Framework 2.6. That framework supports migration of most adapters running with Adapter Framework 2.4.x.

The way you migrate adapters depends on the configuration of your installed WebSphere Business Integration environment and on the version of the adapter or adapters that you want to migrate to the 2.6 framework.

This guide provides the following:

- An overview of the changes to and requirements of the new adapter framework. For further information, see “Overview of Adapter Framework changes” on page 7.
- A task-oriented roadmap to migration scenarios. For further information, see “Migration task roadmap.”
- A procedure for upgrading adapters released prior to Adapter Framework 2.4. See Chapter 2, “Upgrading pre-2.4 adapters,” on page 9.

Note: You cannot run a pre-2.4.x framework adapter on the new 2.6 framework. Instead, you must upgrade the adapter to the latest version released with framework 2.4.x. Then you can migrate the adapter to the 2.6 framework.

- A description of script modifications to migrate adapters and Object Discovery Agents (ODA’s) to the new adapter framework that also includes links to TechNotes. The TechNotes provide adapter-specific start scripts for adapters and ODAs. You use these scripts to replace those installed with the latest, 2.4.x framework compatible, version of the adapter. For further information, see “Linking to TechNotes” on page 17.

Note: This guide is not a substitute for the adapter or integration broker installation, implementation, or administration guides. Instead, this guide supplements these documents, which include the following:

- *Installing WebSphere Business Integration Adapters, V.2.6*
- *System Installation Guide for Windows* (InterChange Server broker)
- *System Installation Guide for Unix* (InterChange Server broker)
- *Implementing Adapters with WebSphere Business Integration Message Broker*
- *Implementing Adapters with WebSphere Application Server*

The rest of this chapter provides a task roadmap to migrating adapters and an overview of the changes to the WebSphere Business Integration Adapter Framework, Version 2.6. It also explains terms you need to know.

Migration task roadmap

This section describes migration tasks at a high level. It also includes a table describing the Adapter Framework 2.6 environments you can migrate to. The table provides links and references to step-by-step procedures.

Before you begin, **Is there a 2.6 framework version of the adapter you wish to migrate?** If so, install it and skip the migration procedure. Here are the WebSphere Business Integration adapters released with the 2.6 framework:

- Adapter for eMail
- Adapter for i2
- Adapter for JDBC
- Adapter for JMS
- Adapter for JText
- Adapter for Lotus Domino
- Adapter for mySAP.com (for SAP R/3 V. 3.x)
- Adapter for mySAP.com (for BASIS 4.0--4.6, SAP Web AS 6.20)
- Adapter for PeopleSoft (Version 7)
- Adapter for PeopleSoft (Version 8)
- Adapter for Siebel 2000 (for Siebel Version 6.x)
- Adapter for Siebel eBusiness Applications
- Adapter for Web Services
- Adapter for WebSphere MQ
- Adapter for WebSphere Business Integration Message Broker
- Adapter for WebSphere MQ Workflow
- Adapter for XML

If the adapter you want to migrate is on this list, install it after you install the 2.6 framework. For further information, including directions on installation sequence, see the *Installing WebSphere Business Integration Adapters, V.2.6* guide.

Note: If the adapter framework version of the adapter you want to migrate is 2.3.x, you must first upgrade the adapter to the latest version released with framework 2.4.x. Then you can migrate the adapter to the 2.6 framework.

The high-level tasks involved in migrating adapters from previous releases to Adapter Framework 2.6 are as follows:

1. **Identify adapters you want to migrate** Note the version of each adapter, and the version of the adapter framework. You may need both versions to determine whether you have the latest release of the adapter running on the 2.4.x framework.
For example, Adapter for HTTP 1.1 is the latest version of the adapter running on Adapter Framework 2.4.x.
To determine the adapter and Adapter Framework versions, you can do either of the following:
 - Open the log file created when you start the adapter. The version of the framework and adapter should be listed there.
or
 - Do the following:
 - a. Open a pdf or hardcopy of the adapter user guide.
 - b. Obtain the adapter version by viewing the front cover as shown in Figure 1. The adapter version is listed below the main title for the document.

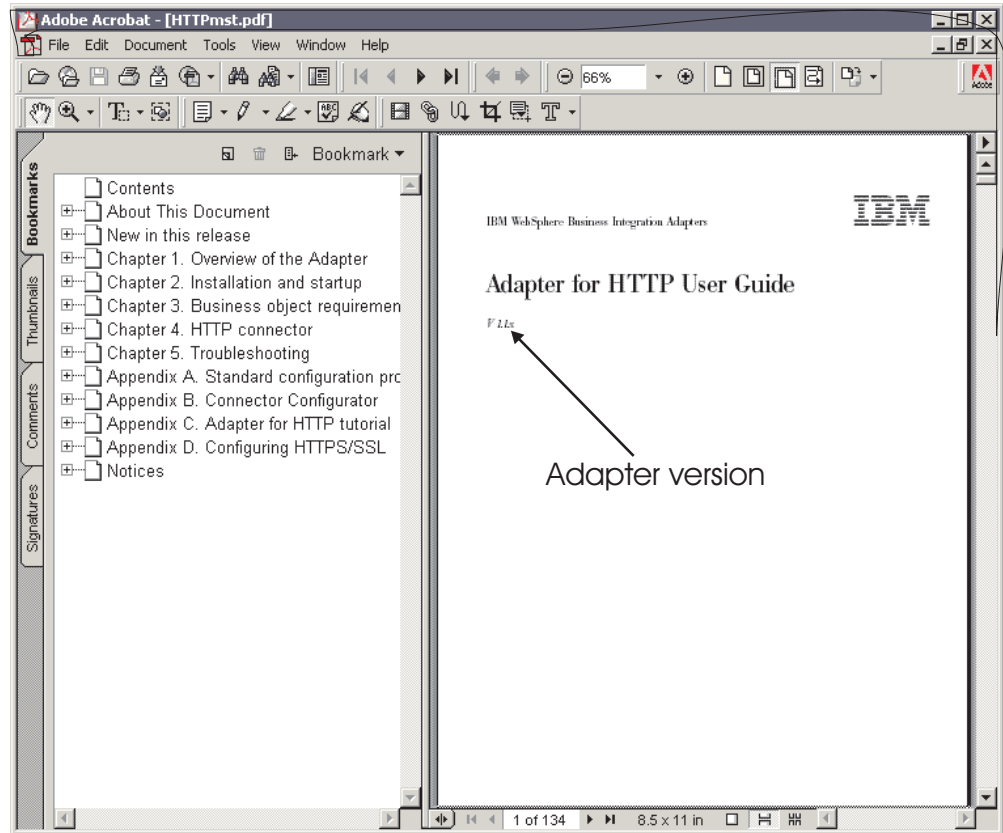


Figure 1. Adapter version

- c. Determine the adapter framework version by viewing the last line in the last page of the adapter user guide as shown in Figure 2.

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IBM WebSphere Business Integration Adapter Framework, V2.4.0

Adapter Framework version

An arrow pointing from the text "Adapter Framework version" to the IBM WebSphere Business Integration Adapter Framework logo.

Figure 2. Adapter Framework version

2. **Install Adapter Framework 2.6** See the *Installing WebSphere Business Integration Adapters, V.2.6* guide for specific procedures that reflect your environment requirements. After installing, note the following:
 - the machine on which the framework is installed
 - the integration broker, the machine on which it is installed, and the broker directory path
3. **Migrate adapters** Follow the links in Table 1 to see if and how you can migrate adapters to the new framework. Migrating adapters involves swapping modified adapter and ODA start scripts. These scripts are supplied in adapter-specific TechNotes. For further information, see Chapter 2, “Upgrading pre-2.4 adapters,” on page 9.

Table 1 describes the migration procedures that apply to a variety of WebSphere Business Integration environments. Each row of the table ends with pointers to step-by-step instructions for completing the procedure.

Note: For a summary of installation requirements and for step-by-step installation instructions for the adapter framework, see *Installing WebSphere Business Integration Adapters, V.2.6*.

Table 1. Migrating adapters to WebSphere Business Integration Adapter Framework 2.6 task roadmap

Existing WebSphere Business Integration adapter environment	Associated migration procedure(s)	For more information (see...)
New installation: no WebSphere Business Integration Adapter Framework or adapter artifacts	No migration required	See the <i>Installing WebSphere Business Integration Adapters, V.2.6</i> guide
Adapter Framework 2.4.x and InterChange Server 4.3	1. Install Adapter Framework 2.6 on a separate machine or uninstall earlier adapter framework; then install Adapter Framework 2.6 and most recent available version of adapters. 2. Migrate adapters.	1. See the <i>Installing WebSphere Business Integration Adapters, V.2.6</i> guide 2. See Chapter 3, "Migrating adapters to Adapter Framework 2.6," on page 15.
Adapter Framework 2.4.x and InterChange Server 4.2.2	1. Install Adapter Framework 2.6 on a separate machine or uninstall earlier adapter framework; then install Adapter Framework 2.6 and most recent available version of adapters. Note: If you are running Adapter Framework 2.6 with InterChange Server 4.2.2, certain InterChange Server 4.3 features in Adapter Framework 2.6 are unavailable. 2. Migrate adapters.	1. See the <i>Installing WebSphere Business Integration Adapters, V.2.6</i> guide 2. See Chapter 3, "Migrating adapters to Adapter Framework 2.6," on page 15.
Adapter Framework 2.4.x with WBI MB or WAS	1. Install Adapter Framework 2.6 on a separate machine or uninstall earlier adapter framework; then install Adapter Framework 2.6 and most recent available version of adapters. 2. Migrate adapters.	1. See the <i>Installing WebSphere Business Integration Adapters, V.2.6</i> guide 2. See Chapter 3, "Migrating adapters to Adapter Framework 2.6," on page 15.
Adapter Framework 2.3.x or earlier	1. Uninstall earlier adapter framework; then install Adapter Framework 2.6 and most recent available version of adapter(s). 2. Migrate adapters as needed (if most recent adapter version runs with Adapter Framework 2.4.x, you must migrate).	1. See <i>Installation Guide for WebSphere Business Integration Adapters</i> and Chapter 2, "Upgrading pre-2.4 adapters," on page 9. 2. See Chapter 3, "Migrating adapters to Adapter Framework 2.6," on page 15.

Terminology

To understand the adapter framework, you must understand these terms:

adapter

The component in the WebSphere business integration system that supports communication between an integration broker and either an application or a technology. An adapter always includes a connector, message files, and configuration tools. It can also include an Object Discovery Agent (ODA). Some adapters also may require a data handler.

adapter framework

The software that IBM provides to configure and run an adapter. The runtime components of the adapter framework include the Java™ runtime environment, the connector framework, and the Object Discovery Agent (ODA) runtime. This connector framework includes the connector libraries (C++ and Java) needed to develop new connectors. The ODA runtime includes the library in the Object Development Kit (ODK) needed to develop new ODAs. The configuration components include the following tools:

- Business Object Designer
- Connector Configurator
- Log Viewer
- System Manager
- Adapter Monitor
- Test Connector
- (optional) any Object Discovery Agents (ODAs) associated with an adapter

Adapter Development Kit (ADK)

A development kit that provides some samples for adapter development, including sample connectors and Object Discovery Agents (ODAs).

adapter migration

The process of making it possible to run an adapter on a newer adapter framework.

adapter upgrade

Replacing an adapter with a subsequently released version.

integration broker

The component in the WebSphere business integration system that integrates data among heterogeneous applications. An integration broker typically provides a variety of services that include: the ability to route data, a repository of rules that govern the integration process, connectivity to a variety of applications, and administrative capabilities that facilitate integration. Examples of integration brokers include the WebSphere Business Integration Message Broker, WebSphere Business InterChange Server, and WebSphere Application Server

WebSphere Application Server

Web application server software that runs on a Web server and that can be used to deploy, integrate, execute, and manage e-business applications.

WebSphere business integration system

An enterprise solution that moves information among diverse sources to perform business exchanges, and that processes and routes information among disparate applications in the enterprise environment. The business integration system consists of an integration broker and one or more adapters.

WebSphere Business Integration Message Broker, WebSphere MQ Integrator Broker

Message broker products that transform and route messages between WebSphere MQ queues. The technology enables applications to communicate asynchronously by delivering messages to and receiving messages from potentially remote queues. A major change with WebSphere Integration Message Broker is the addition of message flows that add the ability to format, store, and route messages based on user-defined logic.

Overview of Adapter Framework changes

Unlike previous releases of the adapter framework, Adapter Framework 2.6 software is bundled separately from the InterChange Server integration broker. This makes possible separate installations and a more flexible enhancement path for both the adapter framework and InterChange Server. It also isolates the adapter framework from releases prompted solely by server enhancements, and vice versa. This section discusses these and other changes to the adapter framework that may affect adapter installation by discussing the following topics:

- .jar files and separate directories
- environment variables
- JRE 1.4.2 compatibility
- Start scripts: generic and adapter-specific for adapters and ODAs.
- Connector agent parallelism

.jar files and directories

Through release 2.4.x the adapter framework was shipped in a CrossWorlds.jar file that also contained ICS. ICS continues to be packaged and delivered in the CrossWorlds.jar file; however, the adapter framework, beginning with version 2.6, is packaged and delivered in wbiart.jar.

Note: The change in .jar file names may have implications if you are upgrading from a 2.3.x to a 2.4.x adapter prior to migrating to Adapter Framework 2.6.

Environment variables

Previously released adapters and adapter frameworks were installed in the same directory as ICS. The task of migrating adapters and ODAs to the new adapter framework begins with changing environment variables in adapter and ODA scripts to point to the new file and location of the 2.6 version of the adapter framework (where you install the wbiart.jar file). Because the new adapter framework resides in a file and in a directory other than that of ICS, the environment variables in start scripts for adapters and ODAs issued as part of previous releases must be modified. For further information and links to TechNotes containing updated start scripts, see Chapter 3, “Migrating adapters to Adapter Framework 2.6,” on page 15.

If you are configuring Adapter Framework 2.6 with an integration broker that resides on a separate machine, you must also modify the adapter start script to point to the remote integration broker. Alternatively, you can modify the adapter configuration file to point to the queue manager of the remote integration broker. For further information, see the *Connector Development Guide* and the Connector Configurator section of any adapter guide.

JRE 1.4.2 compatibility

Adapter Framework 2.6 uses Java Runtime Environment (JRE) 1.4 and higher. Adapters released with previous versions of the framework used earlier versions of the JRE. For example, Adapter Framework 2.4.x supported JRE 1.3.1. Some previously released adapters cannot be migrated because their application or technology libraries are not supported on JRE 1.4.2

Start scripts

If you want to migrate adapters and ODAs released with Adapter Framework 2.4.x, you must substitute modified start scripts that point to the new location and

file name of Adapter Framework 2.6. For a high-level description of these changes, see “Environment variables” on page 7. For a detailed account of adapter- and ODA-specific changes to those scripts, see “Overview of migrating adapters to Adapter Framework 2.6” on page 15.

Connector agent parallelism CAP deprecation

The connector agent parallelism (CAP) feature that some C++ adapters used is deprecated in the 2.6 version of Adapter Framework. If your 2.4.x or earlier framework adapters are configured to use the CAP feature, you may want to consider a Java-based adapter as a solution.

Chapter 2. Upgrading pre-2.4 adapters

This chapter describes how to upgrade adapters released with Adapter Framework 2.3.x.

- “Overview of upgrading pre-2.4.x adapters”
- “Steps for upgrading adapters in an InterChange Server environment” on page 10
- “Steps for upgrading adapters in non-InterChange Server environments” on page 12

Overview of upgrading pre-2.4.x adapters

If the adapter framework version of the adapter you want to migrate is 2.3.x, you must first upgrade the adapter to the latest version released with framework 2.4.x. Then you can migrate the adapter to the 2.6 framework.

You may need to perform additional tasks when you install adapters released with Adapter Framework 2.4.x. These tasks depend on the location and kind of integration broker you use with Adapter Framework 2.6. The sections in this chapter describe those tasks.

In this chapter

The tasks described in this chapter are as follows:

Table 2. Upgrading adapters: task roadmap

Task	Associated procedure(s)	For more information (see...)
Upgrading adapters in an InterChange Server environment	<ol style="list-style-type: none">1. Install Adapter Framework 2.62. Do the following:<ul style="list-style-type: none">• Download 2.4.x version of documentation• Create empty CrossWorlds.jar file• Install 2.4.x (framework) version of adapter	<ol style="list-style-type: none">1. See <i>Installing WebSphere Business Integration Adapters, V. 2.6</i>.2. See “Steps for migrating adapters to an InterChange Server environment” on page 16.
Upgrading adapters in a non-InterChange Server environment	<ol style="list-style-type: none">1. Install Adapter Framework 2.62. Do the following:<ul style="list-style-type: none">• Download 2.4.x version of documentation• As needed, create empty CrossWorlds.jar file• Install 2.4.x (framework) version of adapter	<ol style="list-style-type: none">1. See <i>Installing WebSphere Business Integration Adapters, V. 2.6</i>.2. See “Steps for migrating adapters to a non-InterChange Server environment” on page 17.

Overview of upgrading adapters in an InterChange Server environment

When you upgrade adapters from framework 2.3.x to 2.4.x, you must use a 2.4.x framework installer. This and other tasks are described in the sections that follow.

Steps for upgrading adapters in an InterChange Server environment

Before you begin, install Adapter Framework 2.6 and configure your WebSphere environment with one of the following integration brokers:

- InterChange Server 4.2.2
- InterChange Server 4.3

For further information, see the *Installing WebSphere Business Integration Adapters, V.2.6* guide. If you are installing the 2.6 framework to a machine that is currently running a 2.3.x framework, you must first uninstall the older framework.

To upgrade a 2.3.x adapter to the latest version released with the 2.4 framework, perform the following steps:

1. In Connector Configurator, open the .cfg definition file for the 2.3.x framework version of the adapter you want to upgrade. Save adapter configuration information to a renamed .cfg file. You may want to compare connector properties and other values with those of the upgraded version of the adapter.
2. In a browser, go to <http://www.ibm.com/software/integration/wbiadapters/library/infocenter/>
3. Under **Other versions**, click **Version 2.4 -June 2004 Update** as shown in Figure 3.

The screenshot shows the IBM WebSphere Business Integration Adapters library page. At the top, there is a navigation bar with links for Home, Products & services, Support & downloads, and My account. Below this is a breadcrumb trail: Software > Business Integration > WebSphere Business Integration > Library >. The main heading is 'WebSphere Business Integration Adapters' with a 'WebSphere software' logo to the right. The page is divided into two main sections: 'Library' and 'Other versions'. The 'Library' section contains 'Information Center product documentation' with a description of the technical documentation set for WebSphere Business Integration Adapter Framework Version 2.6. It includes links for 'View documentation online', 'Download documentation', and 'Quick Start Installation Kit'. The 'Other versions' section lists several versions: 'Version 2.4 - June 2004 Update', 'Version 2.4', 'Version 2.3.1', and 'Version 2.3.0 and prior versions'. A black arrow points from the 'Version 2.4 - June 2004 Update' link to the word 'Click' written in black text below the arrow. The 'Related links' section at the bottom right lists 'WebSphere InterChange Server', 'WebSphere Business Integration Message Broker', and 'WebSphere Application Server'.

Figure 3. Selecting 2.4 framework documentation

4. Under **Download documentation, Quick Start Installation Kit** click the installer language as shown in Figure 4 on page 11.

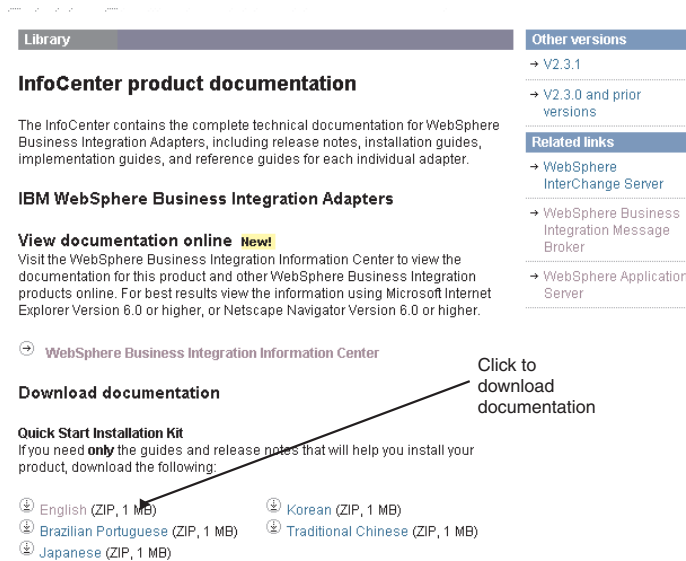


Figure 4. Downloading documentation

This downloads the installation guide and release notes for the 2.4.x framework. The file is named `wbia24install.zip`.

5. Save the zip file, and then extract its contents.
6. Open the `installation_wbia.pdf` file and then open the release notes for your platform. Use the installation guide to help guide you through the installation of the adapter into your environment.
7. To obtain the 2.4.x framework version user guide for the adapter, follow the directions on the page shown in Figure 2 to do the following:
 - a. Download the documentation viewer (prerequisite)
 - b. Download the documentation
8. Review the user guide for the adapter, especially the “New in this release” section. Determine whether you need to upgrade or otherwise install prerequisite software for the 2.4.x framework version of the adapter. Obtain and install any prerequisite software as required.
9. Check the following directory for the presence of a `CrossWorlds.jar` file:
`<adapter framework 2.6 install location>\lib\`
 If no `CrossWorlds.jar` is listed there, create an empty file and save it as `CrossWorlds.jar`. Copy this file to the `adapter framework 2.6 install location>\lib\` directory.
10. Obtain the 2.4.x (framework) version of the adapter in either of the following ways:
 - If you are using Passport Advantage, do the following to prepare for installation:
 - On Windows, download the self-extracting executable file from Passport Advantage and then double-click it to extract the installation files.
 - On UNIX, download the compressed `.tar` file from Passport Advantage and then inflate it to extract the installation files.

Note: For information on obtaining Passport Advantage software, ask your IBM representative.

- See your IBM representative about obtaining a media pack that contains the adapter you need.

11. Launch the 2.4.x framework Adapters Installer for the adapter.
12. Install the adapter, using the 2.4.x installation guide you downloaded as needed.
13. Migrate the adapter to Adapter Framework 2.6. See Chapter 3, “Migrating adapters to Adapter Framework 2.6,” on page 15.

Note: You configure the installed 2.4.x version adapter to run with Adapter Framework 2.6. You perform this configuration by migrating the adapter to the 2.6 framework.

Overview of upgrading adapters in non-InterChange Server environments

When you upgrade adapters from framework 2.3.x to 2.4.x, you must use a 2.4.x framework installer. This and other tasks are described in the sections follow.

Steps for upgrading adapters in non-InterChange Server environments

Before you begin, install Adapter Framework 2.6 and configure your WebSphere environment with one of the following integration brokers:

- WebSphere MQ Integrator Broker, 2.1 CSD05
- WebSphere Business Integration Message Broker, 5.0 CSD02
- WebSphere Application Server, Enterprise Edition, 5.0.2

For further information, see the *Installing WebSphere Business Integration Adapters, V2.6* guide. If you are installing the 2.6 framework to a machine that is currently running a 2.3.x framework, you must first uninstall the older framework.

To upgrade a 2.3.x adapter to the latest version released with the 2.4.x framework, perform the following steps:

1. In Connector Configurator, open the .cfg definition file for the 2.3.x framework version of the adapter you want to upgrade. Save adapter configuration information to a renamed .cfg file. You may want to compare connector properties and other values with those of the upgraded version of the adapter.
2. In a browser, go to <http://www.ibm.com/software/integration/wbiadapters/library/infocenter/> Under **Other versions**, click **Version 2.4 -June 2004 Update** as shown in Figure 3.
3. Under **Download documentation Quick Start Installation Kit** click the installer language as shown in Figure 4 on page 11. This downloads the installation guide and release notes for the 2.4 framework in a file named wbia24install.zip
4. Save the zip file, and then extract its contents.
5. Open the installation_wbia.pdf and then open the release notes for your platform. Use the installation guide to help you install the adapter into your environment.
6. To obtain the 2.4.x framework version user guide for the adapter, follow the directions on the same web page to do the following:
 - a. Download the documentation viewer (prerequisite)

- b. Download the documentation
7. Review the user guide for the adapter, especially the “New in this release” section. Determine whether you need to upgrade or otherwise install prerequisite software for the 2.4.x framework version of the adapter. Obtain and install any prerequisite software as required.
8. If you included the toolset when installing Adapter Framework 2.6, skip this step. Otherwise, check the following directory for the presence of a CrossWorlds.jar file:
`<adapter framework 2.6 install location>\lib\
If no CrossWorlds.jar is listed there, create an empty file and save it as CrossWorlds.jar. Copy this file to the adapter framework 2.6 install location>\lib\ directory.`
9. Obtain the 2.4.x (framework) version of the adapter in either of the following ways:
 - If you are using Passport Advantage, do the following to prepare for installation:
 - On Windows, download the self-extracting executable file from Passport Advantage and then double-click it to extract the installation files.
 - On UNIX, download the compressed .tar file from Passport Advantage and then inflate it to extract the installation files.

Note: For information on obtaining Passport Advantage software, ask your IBM representative.

 - See your IBM representative about obtaining a media pack with the adapter you need.
10. Launch the 2.4.x framework Adapters Installer for the adapter.
11. Install the adapter, using the 2.4.x installation guide you downloaded as needed. You configure the installed 2.4.x version adapter to run with Adapter Framework 2.6.
12. Migrate the adapter to Adapter Framework 2.6. See Chapter 3, “Migrating adapters to Adapter Framework 2.6,” on page 15.

Chapter 3. Migrating adapters to Adapter Framework 2.6

- “Overview of migrating adapters to Adapter Framework 2.6”
- “Steps for migrating adapters to an InterChange Server environment” on page 16
- “Steps for migrating adapters to a non-InterChange Server environment” on page 17
- “Linking to TechNotes” on page 17
- “Steps for custom ODA modification” on page 19
- “Supported data handlers” on page 19

This chapter describes tasks associated with migrating adapters to Adapter Framework 2.6.

Overview of migrating adapters to Adapter Framework 2.6

The sections in this chapter describe how to migrate adapters released with Adapter Framework 2.4.x to Adapter Framework 2.6. The migration tasks depend on your WebSphere environment and integration broker. The tasks also reflect the changes made to the new framework.

In Adapter Framework 2.6, environment variables and .jar files were renamed and relocated. To migrate adapters released with framework 2.4.x to the new framework, adapter and ODA start scripts must be updated accordingly.

For most adapters, TechNotes provide instructions to download modified start scripts. This chapter provides links to those TechNotes as part of the migration procedure. You open the TechNote and follow instructions to download platform-specific start scripts for adapters and, where applicable, ODAs. Then you use these scripts to replace the 2.4.x framework start scripts.

Not all adapters released with Adapter Framework 2.4.x can be migrated to Adapter Framework 2.6. For further information, see “Adapter-specific TechNotes” on page 17.

Custom adapter script modifications

For custom adapters, you must also modify the start scripts. A TechNote for custom adapters provides step-by-step instructions to implement the modifications and includes examples of platform-specific modified scripts. The modifications to the start scripts include the following:

- Changing the location and name of the CrossWorlds.jar file that was released with the 2.4.x framework.
- Changing the CROSSWORLDS environment variable (Windows platforms only).
- Changing the name and location of the Java Runtime Environment.
- Optionally creating a configuration file to specify the prefix of the ODA message files. For more information, see “Overview of custom ODA modification” on page 19.

See “Custom adapter TechNote” on page 18 for a link to the TechNote for custom adapters.

In this chapter

The tasks described in this chapter are as follows:

Table 3. Migrating adapters to Adapter Framework 2.6 task roadmap

Task	Associated procedure (see)	For more information (see...)
Migrating adapters to an InterChange Server 4.3 or 4.2.2 environment	“Steps for upgrading adapters in an InterChange Server environment” on page 10	<i>System Administration Guide</i>
Migrating adapters to a WebSphere Business Integration Message Broker or WebSphere Application Server broker environment	“Steps for upgrading adapters in non-InterChange Server environments” on page 12	<i>Installing WebSphere Business Integration Adapters, V. 2.6</i> <i>Implementing Adapters with WebSphere Application Server</i> <i>Implementing Adapters with WebSphere Business Integration Message Broker</i>
Migrating custom ODAs	“Steps for custom ODA modification” on page 19	

Overview of migrating adapters to an InterChange Server environment

When you install Adapter Framework 2.6 in a WebSphere environment with an InterChange Server 4.3 or InterChange Server 4.2.2 integration broker, you can migrate adapters released with framework 2.4 to the new framework.

Note: If you want to migrate adapters released with a 2.3.x adapter framework, see Chapter 2, “Upgrading pre-2.4 adapters,” on page 9.

Steps for migrating adapters to an InterChange Server environment

This section describes tasks you must complete when you are migrating adapters to Adapter Framework 2.6 configured with an ICS 4.3 or 4.2.2 integration broker. You can migrate adapters released with the 2.4 framework only.

Before you begin If you have not already done so, install the latest version of the 2.4.x framework adapter that you want to migrate. For further information, see Chapter 2, “Upgrading pre-2.4 adapters,” on page 9.

1. Backup all existing files for the adapter you want to migrate.
2. Copy the adapter configuration template file or files to the ICS directory structure containing Connector Configurator:
 - a. Locate the connector configuration template file (<adapter_name>ConnectorTemplate) in the directory of the adapter you want to migrate. This file contains the template for the connector definition and is used by Connector Configurator. If necessary, consult the “Installed file structure” section in the adapter guide to locate this file.
 - b. Copy the <adapter_name>ConnectorTemplate to the ICS directory where Connector Configurator resides. The default location is as follows:
 - InterChange Server 4.3 *ProductDir/IBM/WebSphereICS/bin/Data/app*
 - InterChange Server 4.2.2 *ProductDir/IBM/WebSphereICS/bin/Data/app*

If your ICS broker was installed to a different location, simply search on ConnDesgner.exe -- the Connector Configurator executable. Copy the template file to the Data/app directory in this location.

3. Update the start script for the adapter and, if applicable, the ODA, so that they can run with Adapter Framework 2.6. Replacement scripts are available for download from TechNotes. For links to TechNotes for adapters, see “Linking to TechNotes.”
4. Configure the adapter for use in your WebSphere environment.

Overview of migrating adapters to a non-InterChange Server environment

You can migrate existing (2.4.x framework) adapters to Adapter Framework 2.6 configured with any of the following integration brokers:

- WebSphere Application Server, Enterprise Edition, 5.0.2, 5.1, 5.1.1
- IBM WebSphere MQ Integrator Broker, 2.1 CSD07
- WebSphere Business Integration Message Broker, 5.0 CSD03

Steps for migrating adapters to a non-InterChange Server environment

If you have not already done so, install the latest version of the 2.4.x framework adapter that you want to migrate. For further information, see Chapter 2, “Upgrading pre-2.4 adapters,” on page 9.

To migrate 2.4.x framework adapters to Adapter Framework 2.6 configured with WebSphere Application Server, IBM WebSphere MQ Integrator Broker, or WebSphere Business Integration Message Broker, do the following:

1. Back up all existing files for the adapter you want to migrate.
2. Update the start script for the adapter and, if applicable, the ODA, so that they can run with Adapter Framework 2.6. Replacement scripts are available for download from TechNotes. For links to TechNotes for adapters, see “Linking to TechNotes.”
3. Configure the adapter for use in your WebSphere environment.

Linking to TechNotes

This section shows you how to link to adapter-specific TechNotes that contain instructions and modified start scripts to complete your migration to Adapter Framework 2.6. For a high-level TechNote that describes the adapter-specific TechNotes listed below, click on Migration TechNote.

Adapter-specific TechNotes

Click on an adapter below to link to a TechNote that contains adapter-specific migration information. In addition to providing instructions and platform-specific start scripts, the TechNote describes any additional migration-related tasks.

- Adapter for ACORD XML
- Adapter for Ariba Buyer
- Adapter for Clarify CRM (on all originally supported platforms except HP UX)
- Adapter for EJB
- Adapter for eMatrix
- Adapter for Exchange
- Adapter for FIX Protocol
- Adapter for SunGard FRONT ARENA

- Adapter for i2
- Adapter for i2 Active Data Warehouse
- Adapter for iSeries
- Adapter for iSoft Commerce Suite Server
- Adapter for JD Edwards OneWorld
- Mainframe Adapter Suite, which integrates the following legacy applications with the WebSphere Business Integration environment:
 - Software AG ADABAS
 - IBM CICS
 - IBM DB2 Databases
 - Computer Associates IDMS Database
 - IMS Database Manager
 - IMS Transaction Manager
 - Software AG Natural
 - IBM VSAM
- Adapter for Manugistics
- Adapter for Oracle Applications
- Adapter for QAD MFG/PRO
- Adapter for Telcordia
- Adapter for WebSphere Commerce

Note: If your adapter does not appear in the list above, the adapter may have been released with Adapter Framework 2.6 and requires no migration. The adapters released with Adapter Framework 2.6 include the following:

- Adapter for Siebel eBusiness Applications
- Adapter for PeopleSoft
- Adapter for JMS
- Adapter for WebSphere Business Integration Message Broker
- Adapter for JDBC
- Adapter for WebSphere MQ
- Adapter for Web Services
- Adapter for e-Mail
- Adapter for JText
- Adapter for XML
- Adapter for WebSphere MQ WorkFlow
- Adapter for Lotus Domino
- Adapter for my.SAP (V 3.x and 4.x)

If you want to migrate an adapter that is not listed here or above, contact your IBM representative.

Custom adapter TechNote

If you want instructions and code samples to help you migrate a custom WebSphere adapter to Adapter Framework 2.6, click here: [Custom TechNote](#).

Overview of custom ODA modification

If you have a custom ODA and you modify its start script but the message files include a prefix, the ODA may not start with Adapter Framework 2.6. The procedure below describes how to complete the migration by fixing this problem.

Steps for custom ODA modification

To enable a custom ODA with prefixed message files to start with Adapter Framework 2.6, do the following:

1. Create a new file `oda.dd.xml` that contains the following:

```
<?xml version="1.0" encoding="utf-8" ?>
- <oda>
  - <startup>
    <messagefile prefix="<prefix_>" />
  </startup>
</oda>
```

where the values of the `prefix_` attribute specifies the prefix.

2. Save this file to the ODA directory.

Supported data handlers

In addition to the data handlers released with Adapter Framework 2.6, the following are supported on the new framework:

- IBM WebSphere Business Integration Data Handler for Complex Data V 1.0.0 supports all listed platforms except AIX 5.1. Click on the link for more information.
- IBM WebSphere Business Integration Data Handler for EDI V 2.2.0 supports all listed platforms except HP-UX. No changes are required for the data handler to run with Adapter Framework V 2.6

Index

Special characters

.cfg definition file 10
.jar files 7

A

adapter 5
 installing 9, 16
 migration 7
Adapter Development Kit (ADK) 6
adapter framework 6
 determining version 2
adapter migration 6
adapter upgrade 6

C

C++ adapters 8
ConnDesgner.exe 16
Connector agent parallelism (CAP) 8
Connector Configurator 10
Connector Configurator executable 16
ConnectorTemplate 16
crossworlds.jar file 7, 11, 13
custom adapter script modifications 15
custom adapter TechNote 18
custom ODA modification 19

E

environment variables 7

I

installing
 task roadmap 9, 16
integration broker 6
InterChange Server integration broker 7

J

JRE 1.3.1 7
JRE 1.4.2 7

L

linking to TechNotes 17

M

migrating adapters
 overview 15
migrating adapters to a non-ICS
 environment 17
migrating adapters to an ICS
 environment 16
migrating custom adapters 15

migration
 and ODA message files 15
 scenarios 1
 task roadmap 1

O

ODA message files 15
ODA scripts
 swapping to migrate 7

P

Passport Advantage 11

R

related documents v, 1
remote integration broker 7

S

start scripts
 swapping to migrate 4

T

task roadmap 1
tasks
 custom adapter script
 modifications 15
 custom ODA modification 19
 installing 9, 16
 linking to TechNotes 17
 migrating adapters to a non-ICS
 environment 17
 migrating adapters to an ICS
 environment 16
 upgrading adapters in an ICS
 environment 10
 upgrading adapters in non-ICS
 environments 12
TechNotes 1, 17
terminology 5
typographic conventions vi

U

upgrading adapters in an ICS
 environment 10
upgrading adapters in non-ICS
 environments 12

W

wbiart.jar file 7
WebSphere Application Server, Enterprise
 Edition 12, 17

WebSphere Business Integration Message
 Broker 12
WebSphere business integration
 system 6
WebSphere Integration Message Broker,
 Version 2.2 6

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