



BEA WebLogic Collaborate

Installation Guide

BEA WebLogic Collaborate 1.0.1
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March 2001

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BEA WebLogic Collaborate Installation Guide

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About This Document

This document explains how to install the BEA WebLogic Collaborate™ 1.0 software on Windows NT and UNIX systems. It is organized as follows:

- Chapter 1, “Installation Overview,” lists the contents of the WebLogic Collaborate product box, summarizes the installation steps, and explains how to install the software license.
- Chapter 2, “WebLogic Collaborate Installation on Windows Systems,” explains how to install the WebLogic Collaborate software on Windows NT systems.
- Chapter 3, “WebLogic Collaborate Installation on UNIX Systems,” explains how to install the WebLogic Collaborate software on UNIX systems.

What You Need to Know

This document is intended for programmers who are interested in creating secure, scalable, transaction-based server applications. It is assumed that you have a working knowledge of the BEA WebLogic Server, XML, Enterprise JavaBeans, and Java programming.

How to Print the Document

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

A PDF version of this document is available on the BEA WebLogic Collaborate documentation CD. You can open the PDF in Adobe Acrobat Reader and print the entire document, or a portion of it, in book format. To access the PDFs, open the BEA WebLogic Collaborate documentation Home page, click the PDF Files button, and select the document you want to print.

If you do not have Adobe Acrobat Reader installed, you can download it for free from the Adobe Web site at <http://www.adobe.com/>.

Related Information

For more information about WebLogic Server, XML, or Java 2 Enterprise Edition (J2EE), see the [Bibliography](#) in the BEA WebLogic Collaborate online documentation.

Contact Us!

Your feedback on 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 BEA WebLogic Collaborate release 1.0.1.

If you have questions about this version of WebLogic Collaborate, or if you have problems installing and running WebLogic Collaborate, contact BEA Customer Support at <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
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
<i>italics</i>	Indicates emphasis or book titles.
monospace text	Indicates code samples, commands and their options, data structures and their members, data types, directories, and filenames and their extensions. Monospace text also indicates text that you must enter from the keyboard. <i>Examples:</i> <pre>#include <iostream.h> void main () the pointer psz chmod u+w * \tux\data\ap .doc tux.doc BITMAP float</pre>
<i>monospace</i> <i>italic</i> text	Identifies variables in code. <i>Example:</i> <pre>String expr</pre>
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators. <i>Examples:</i> <pre>LPT1 SIGNON OR</pre>
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.

Convention	Item
[]	Indicates optional items in a syntax line. The brackets themselves should never be typed. <i>Example:</i> <code>buildobjclient [-v] [-o name] [-f file-list]... [-l file-list]...</code>
	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.
...	Indicates one of the following in a command line: <ul style="list-style-type: none">■ 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. <i>Example:</i> <code>buildobjclient [-v] [-o name] [-f file-list]... [-l file-list]...</code>
.	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.



1 Installation Overview

This section lists the contents of the BEA WebLogic Collaborate™ 1.0.1 package and summarizes the installation steps. It includes the following topics:

- Your Software Package
- Platform Support
- Installation Steps
- Installing Your Software License

Your Software Package

The BEA WebLogic Collaborate 1.0.1 software is available for downloading from the BEA Web site and from the software CD ROM delivered in the product package.

WebLogic Collaborate Product Package

The product package contains the following components:

- WebLogic Collaborate software CD
The software CD includes the BEA WebLogic Process Integrator and the Apache XML Server software.
- WebLogic Collaborate documentation CD

The documentation CD contains the following documents:

- *BEA WebLogic Collaborate Installation Guide* (this document)
- *BEA WebLogic Collaborate Getting Started*
- *BEA WebLogic Collaborate C-Hub Administration Guide*
- *BEA WebLogic Collaborate C-Enabler Administration Guide*
- *BEA WebLogic Collaborate Developer Guide*
- *BEA WebLogic Process Integrator Studio User Guide*
- *BEA WebLogic Process Integrator Worklist User Guide*
- *BEA WebLogic Process Integrator Tutorial*
- *BEA WebLogic Collaborate Glossary*
- Javadoc

The Javadoc for the WebLogic Collaborate API is automatically installed as part of the WebLogic Collaborate installation at the following location:

```
%WLC_HOME%\classdocs
```

WLC_HOME represents the environment variable that is set to the WebLogic Collaborate root directory on your system.

To read the Javadoc, open the `index.html` start page in the root directory in a web browser.

You do not need to install the BEA WebLogic Collaborate online documentation CD. You can either browse the contents of the CD directly, or copy the contents onto your hard drive and then browse the local copy. The top-level HTML file, from which you can start browsing, is named `index.htm`. It is located in the `docs/wlc/v1_0_1` directory.

- Hardcopy documentation:
 - *BEA WebLogic Collaborate Installation Guide* (this document)
 - *BEA WebLogic Collaborate Release Notes*
- You will receive a license by email when you purchase the WebLogic Collaborate software. The license is valid for the WebLogic Collaborate, WebLogic Process Integrator, and Apache XML Server software. For more information about installing the WebLogic Collaborate software license, see the section “Installing Your Software License” on page 1-4.

WebLogic Collaborate Web Distribution

WebLogic Collaborate is available as a downloadable distribution for both Windows and UNIX systems from the BEA Web site. It contains the following components:

- Installation script for your Windows or UNIX system

The WebLogic Collaborate installation includes installation of the BEA WebLogic Process Integrator and the Apache XML Server software.

- Evaluation license included in the installed evaluation software

- Documentation:

- *BEA WebLogic Collaborate Installation Guide* (this document)
- *BEA WebLogic Collaborate Release Notes*

Note: You can access the complete WebLogic Collaborate documentation set at the following URL:

http://edocs.bea.com/wlcollab/v1_0_1/index.htm

Platform Support

WebLogic Collaborate is available on the following platforms.

Platform	Version
Microsoft Windows NT	4.0 with Service Pack 5 or later
Microsoft Windows	2000
Sun Solaris	2.7
IBM AIX	4.3.3
Hewlett-Packard HP-UX	11.0

For current information about platform support, see BEA WebLogic® Collaborate Supported Product Information at the following URL:

<http://www.bea.com/products/weblogic/collaborate/platforms.shtml>

Installation Steps

To install the WebLogic Collaborate software, complete the following steps:

1. Make sure your machine has the required hardware and software configuration.
2. Install the WebLogic Collaborate software and license.
3. Run the installation verification sample application.

To install the WebLogic Collaborate software and run the installation verification, follow the instructions provided for your operating system.

Windows	See Chapter 2, “WebLogic Collaborate Installation on Windows Systems.”
----------------	--

UNIX	See Chapter 3, “WebLogic Collaborate Installation on UNIX Systems.”
-------------	---

Installing Your Software License

Your WebLogic Collaborate distribution requires a valid license to run. The WebLogic Collaborate license is valid for the entire WebLogic Collaborate distribution, including the WebLogic Process Integrator and Apache Software Foundation software.

If you download WebLogic Collaborate from the BEA Web site, an evaluation license is automatically generated and merged into your existing license file. If you purchase WebLogic Collaborate on a CD, you will receive a license by email from BEA.

To modify your existing license after you install the WebLogic Collaborate software:

1. Execute the `setEnv` script in the root directory in which you installed the WebLogic Collaborate 1.0.1 software.
2. Copy the new license file into the BEA home directory on your machine.
3. Change to the BEA home directory.
4. To merge the new license file into your existing license, enter the following command, where `new_license` represents the name of the license file you received from BEA:

```
UpdateLicense new_license
```

2 WebLogic Collaborate Installation on Windows Systems

This section provides the information needed to install and uninstall WebLogic Collaborate on a Windows platform. Specifically, it includes the following topics:

- Installation Prerequisites
- Installing the BEA WebLogic Collaborate Software Package
- Verifying the Software Installation
- Troubleshooting Your Installation
- Uninstalling the BEA WebLogic Collaborate Software Package

Installation Prerequisites

Before installing the WebLogic Collaborate software, make sure you have the following software and hardware installed for your machine:

■ Hardware:

- Intel Pentium II processor or later required
- 400 MHz recommended
- 256 MB RAM required (512 MB recommended)

Note: 256 MB RAM are recommended for one instance of WebLogic Server, where the c-hub and c-enabler are colocated. If you run two instances of WebLogic Server, the machine will need more memory.

- 100 MB free disk space

■ One of the following Microsoft Windows operating systems:

- Windows NT 4.0 with Service Pack 5 or later
- Windows 2000

■ Correct path to JDK 1.3.0

Verify that the path to JDK 1.3.0 is at the beginning of your `PATH` statement. The `PATH` statement should begin with `<drive:\wls_6.0>\jdk1.3\bin`. `<drive:\wls_6.0>` represents the location on the local machine in which WebLogic Server 6.0 is installed.

■ BEA WebLogic Server Version 6.0 with Service Pack 1

WebLogic Collaborate is supported on selected platforms that are certified and approved for WebLogic Server Version 6.0. For details about WebLogic Server Version 6.0 platforms, refer to the following URL:

<http://edocs.bea.com/wls/platforms/index.html>.

■ Enterprise JavaBeans (EJB) 2.0 Upgrade

You need `EJB20.jar` to activate the BEA WebLogic Server implementation of Sun Microsystems's Enterprise JavaBeans 2.0 specification. You can download it from BEA WebLogic Server Downloads at the following URL:

http://commerce.bea.com/downloads/weblogic_server.jsp.

Choose the EJB 2.0 download option to download a zip file that contains the `EJB20.jar` file and the `README` file.

■ One of the following databases:

● Cloudscape 3.5.1

BEA ships the Cloudscape software—a pure-Java relational database management system (RDBMS)—with WebLogic Server.

● Oracle 8i (8.1.6)

The Oracle 8i (8.1.6) client libraries must be installed on the machine running WebLogic Server 6.0. You must also have access to an Oracle 8.1.5 or 8.1.6 server. WebLogic Collaborate uses the Oracle thin driver, which is bundled with your WebLogic Server distribution and installed with WebLogic Server.

For more information about configuring the Oracle thin driver with WebLogic Server, see *Using Third-Party Drivers with WebLogic Server* at the following URL:

<http://e-docs.bea.com/wls/docs60/jdbc/thirdparty.html>

Note: Before you can use an Oracle database, you must define the following variables for the user you create for WebLogic Collaborate. Contact your Oracle database Administrator for more information.

```
ORACLE_HOME=directory_where_Oracle_is_installed
PATH=$PATH:$ORACLE_HOME/bin
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib
```

● Microsoft SQL Server 7.0 and WebLogic jDriver for Microsoft SQL Server (MSSQLServer4 Kit Version 7).

For more information about configuring Microsoft SQL Server with WebLogic Server, see

http://www.weblogic.com/docs51/classdocs/API_jmsq4.html.

For details about using the JDBC specification for database access, see Programming WebLogic JDBC at the following URL:

<http://edocs.bea.com/wls/docs60/jdbc/index.html>.

- Access to a CD reader (if you get the WebLogic Collaborate software on a CD ROM)
- Network connection
- Web browser
 - Microsoft Internet Explorer 5.x or above
 - Netscape Navigator 4.7 or above

Installing the BEA WebLogic Collaborate Software Package

The WebLogic Collaborate installation procedure installs the following components:

- BEA WebLogic Collaborate, including examples and Javadoc API descriptions
- BEA WebLogic Process Integrator (Studio and run-time engine)
- Apache XML Server (XSLT and XPath):
 - Xalan 1.0.1
 - Xerces 1.2.0

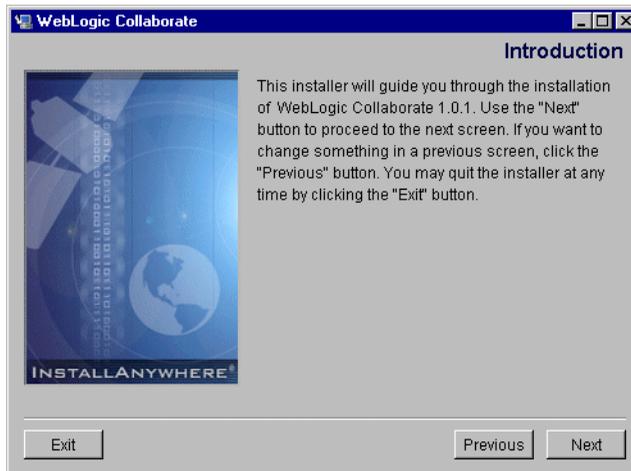
To install the BEA WebLogic Collaborate software, complete the following steps:

1. Confirm that your system has all of the prerequisites as described in “Installation Prerequisites” on page 2-2.
2. If you choose not to uninstall any previous versions of WebLogic Collaborate, be sure to install each newer version with a unique directory name. To uninstall a previous version, see “Uninstalling the BEA WebLogic Collaborate Software Package” on page 2-17.

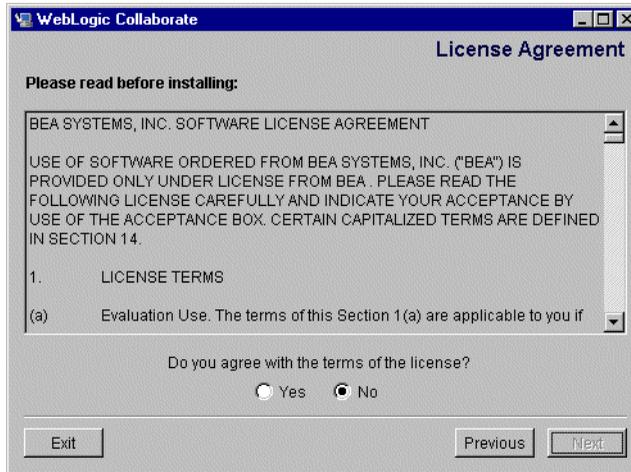
3. Download the WebLogic Collaborate installation program, `install.exe`, from <http://www.bea.com>, or locate the `install.exe` program in the Windows folder on your WebLogic Collaborate software CD.
4. Double-click the `install.exe` program to display the Setup window.



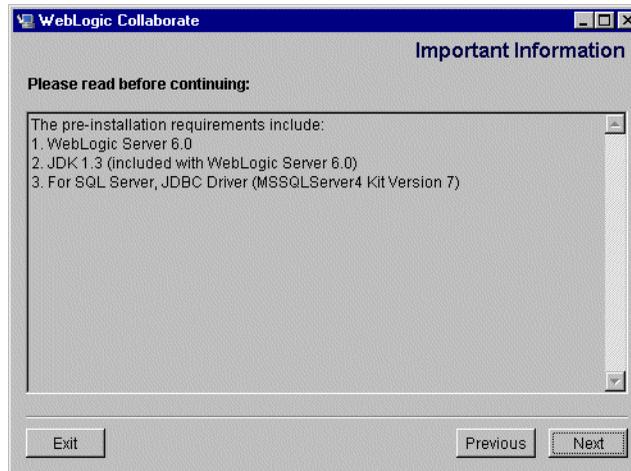
5. Click OK to continue the WebLogic Collaborate installation.
The WebLogic Collaborate Introduction window is displayed.



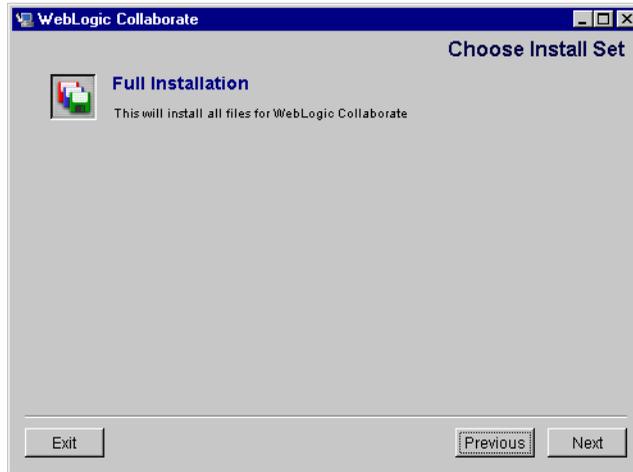
6. Click Next to display the Software License Agreement window.



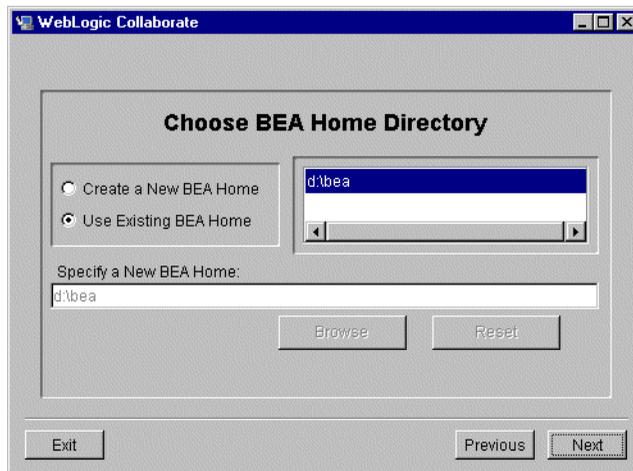
7. Click Yes to accept the software license agreement. Then click Next to display a list of the installation prerequisites.



- Verify that your system meets the installation prerequisites, then click Next to display the Choose Install Set dialog box.



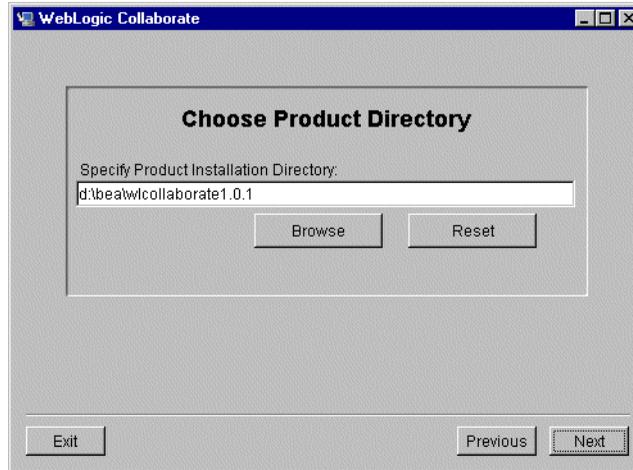
- Click Next to display the Choose BEA Home Directory dialog box, prompting you to choose a product home directory.



An existing BEA home directory containing WebLogic Server 6.0 is selected by default.

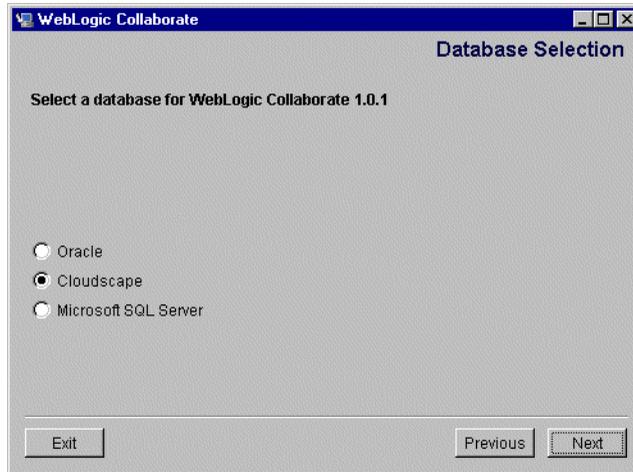
Warning: You must install WebLogic Collaborate in an existing BEA home directory. This home directory can reside anywhere on the system. It must contain the `registry.xml` file, which holds descriptions of all BEA products that are installed in the BEA home directory.

10. In the Choose BEA Home Directory dialog box, click Next to display a dialog box that prompts you to choose a product directory.



11. In the Choose Product Directory dialog box, specify the product installation directory. The same directory can serve as both the Product Directory and the BEA Home Directory.

12. Click Next. A dialog box prompts you to select a database.



13. Select a database and click Next.

14. Follow the appropriate instructions for the database you selected.

If you selected . . .	Then . . .
------------------------------	-------------------

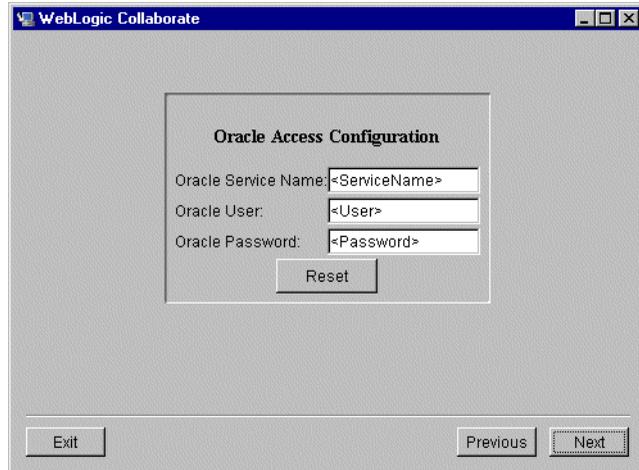
Cloudscape	The installation begins immediately. Skip to step 16.
------------	---

Note: Cloudscape is the default database. It is a pure-Java relational database management system delivered with BEA WebLogic Server. It requires no configuration.

Oracle	Go to step 15.
--------	----------------

Microsoft SQL	Go to step 15.
---------------	----------------

15. If you selected the Oracle database or the Microsoft SQL Server database, a database configuration dialog box is displayed prompting you to enter Oracle or SQL Server access configuration information, as in the following example.

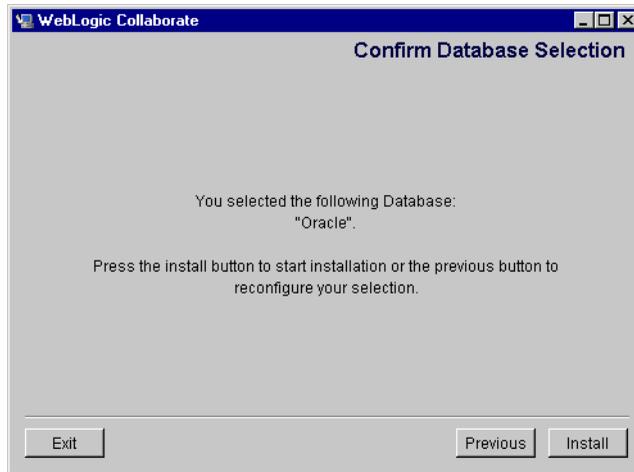


If you selected ...	Then ...
----------------------------	-----------------

Oracle	Enter the Oracle Service name, user, and password in the appropriate fields. Then click Next.
--------	---

Microsoft SQL	Enter the Microsoft SQL Server host name, SQL user, and SQL password in the appropriate fields. Then click Next.
---------------	--

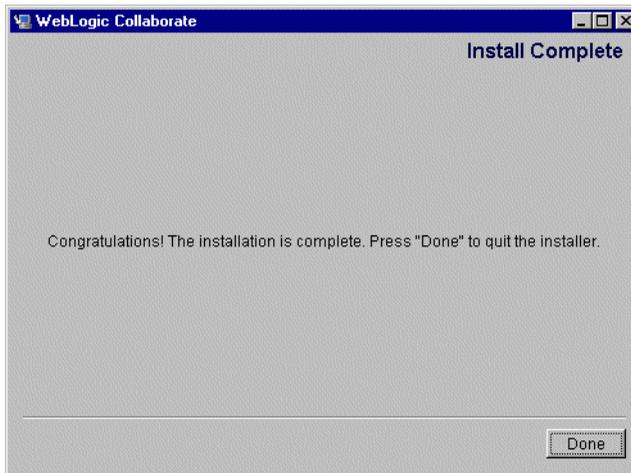
16. The installation procedure displays the Confirm Database Selection dialog box, as in the following example.



17. In the Confirm Database Selection dialog box, click Install to confirm your database selection and continue installation procedure.
18. Monitor installation progress by noting the initial and final messages displayed by the installation program. When installation begins, the following window is displayed.



After all WebLogic Collaborate components are installed, the Install Complete dialog box is displayed, indicating that the installation procedure is complete.



19. Click Done.

20. Install the software license.

If this is your first installation of WebLogic Collaborate, an evaluation license is included in the evaluation software and is installed automatically. If your installation is an upgrade to a previous version of WebLogic Collaborate, you will receive a new license file from BEA. To upgrade your existing license after you install the WebLogic Collaborate 1.0.1 software:

- a. Execute the `setEnv` script that exists in the root directory in which you installed the WebLogic Collaborate software; for example, in

```
d:\bea\wlcollaborate1.0.1.
```

- b. Copy the new license file into the BEA home directory on your machine.
- c. Change to the BEA home directory; for example:

```
cd d:\bea
```

- d. Merge this new license file into your existing license by entering the following command in the `bea` home directory, where `new_license` represents the name of the license file you received from BEA:

```
UpdateLicense new_license
```

Verifying the Software Installation

An installation verification example is provided to ensure that the installation of WebLogic Collaborate is successful. This section explains what the installation verification example does and how you run it.

How the Installation Verification Example Works

The installation verification example is a simple application that is configured automatically during the WebLogic Collaborate installation. You can run this example immediately after the installation procedure to verify that WebLogic Collaborate was installed successfully on your system.

The verification example does the following:

- Starts a c-hub and two c-enablers colocated on a single WebLogic Server instance.
- From an HTML page, allows you to access a servlet that sends messages from one c-enabler to another c-enabler.
- When the verification example runs, the following actions occur:
 - a. One c-enabler, identified as Partner1, sends an uppercase string to the second c-enabler, Partner2.
 - b. The Partner2 c-enabler converts the string to lowercase and returns it to the Partner1 c-enabler.

Running the Installation Verification Example

After you complete installation of WebLogic Collaborate (as described in “Installing the BEA WebLogic Collaborate Software Package” on page 2-4), verify that the installation is successful by completing the following procedure:

1. From the Start menu on the Microsoft Windows Task Bar, go to the folder in which you installed WebLogic Collaborate.

Note: In this example, we assume that the folder is in the default location:
Programs\BEA WebLogic E-Business Platform\WebLogic Collaborate
1.0.1.

2. Select Programs\BEA WebLogic E-Business Platform\WebLogic Collaborate 1.0.1.

3. Choose Repository→Create Database Schema.

A Command window is opened and the database schemas are created in the repository. Wait until this step is complete.

4. Choose Start→Programs→<BEA WebLogic E-Business Platform>→WebLogic Collaborate 1.0.1→Repository→Bulkload Repository Data.

A Command window is opened and the database repository data is loaded into the repository. Wait for this step to complete.

5. Choose Start→Programs→<BEA WebLogic E-Business Platform>→WebLogic Collaborate 1.0.1→C-Hub→Start C-Hub.

A Command window is opened. WebLogic Server and one c-hub are started. Wait until the message `WebLogic Server started` appears in the window.

6. Choose Start→Programs→<BEA WebLogic E-Business Platform>→WebLogic Collaborate 1.0.1→Verifier→Start Verifier.

The Verifier application is invoked and, in turn, it launches a Web browser with the following URL:

```
http://localhost:7001/Verifier.html
```

Here `localhost` represents the machine on which you are running WebLogic Server.

7. Click the Start WLC Verification button displayed in the Web browser.

The verification example starts. During verification, the Partner1 c-enabler sends a message to the Partner2 c-enabler. The message sent by Partner1 is the string `ABCDEFGHI`, and the message returned by Partner2 is `abcdefghi`.

If the verification sample is executed successfully, a report containing a `verification SUCCESS` message is displayed in the browser. The report identifies the process flow and the status of the verifier application.

The following is an extract from a typical report:

```
Partner1 process flow:
Starting enabler... done.
Creating conversation... done.
Sending message: conversation
id=verifierConversation:1.0:requestor_http://127.0.0.1:7001/Enabler1_0_98279
4402436
send string=ABCDEFGHJI
status=success
Waiting for response... done.
Processing reply:
received string=abcdefghi
Verification SUCCESS
Terminating
conversation:verifierConversation:1.0:requestor_http://127.0.0.1:7001/Enable
r1_0_982794402436
status=success
Shutting down session... done.
```

8. If errors occur, check the WebLogic Server log for more information.

Troubleshooting Your Installation

The following information can help you troubleshoot your WebLogic Collaborate software installation.

Accessing Verifier.html

If your Web browser is unable to connect to the Verifier Web page, the reason may be that your browser is using a proxy server and is preventing you from connecting to your local WebLogic Server.

To bypass the proxy server, change your browser's proxy settings so that the browser does not use the proxy server to access the servlet. For example, in Netscape:

1. Choose Edit→Preferences→Advanced→Proxies, and select Manual proxy configuration view.
2. In the Exceptions text field, specify a value for the local host and the listening port as follows:

localhost:listening_port

In the preceding line, *listening_port* is the listening port number specified in the WebLogic Server Administration Console. The default listening port number is 7001.

Note: If you are using Microsoft Internet Explorer, you can access the proxy settings by selecting Tools→Internet Options→Connections in your browser window.

Also check for error messages in the command prompt window in which WebLogic Server was started.

Starting the C-Hub

If the c-hub fails to start, the license may not be installed. Check for error messages in the command prompt window in which WebLogic Server was started. (For instructions, see step 4 in “Running the Installation Verification Example” on page 2-13.)

Running the Verification Example

Confirm that your system meets the installation prerequisites described in “Installation Prerequisites” on page 2-2, and that the required software is installed in the correct locations.

After installing WebLogic Collaborate, in a Command window, run the `set` command to confirm that the following environment variables are correct.

Environment Variable	Setting	Example
JAVA_HOME	Location of the Java 2 SDK V1.3 software on your machine.	JAVA_HOME=D:\bea\jdk130\bin
WL_HOME	Location of the WebLogic Server 6 software on your machine.	WL_HOME=D:\bea\wlserver6.0

Environment Variable	Setting	Example
WLC_HOME	Location of the WebLogic Collaborate software on your machine.	WLC_HOME=D:\bea\wlcollaborate1.0.1

Uninstalling the BEA WebLogic Collaborate Software Package

To remove the WebLogic Collaborate software from your system:

1. Invoke the Uninstall script by using one of the following methods:

- Choose Uninstall from the WebLogic Collaborate folder.

For example, on the Microsoft Windows Task Bar choose Start→Programs→<BEA WebLogic E-Business Platform>→WebLogic Collaborate 1.0.1→Uninstall WebLogic Collaborate 1.0.1.

Note: “BEA WebLogic E-Business Platform” is the name of the default program group. If you changed the name of this program group, substitute your name for the default name provided.

- Choose the WebLogic Collaborate program from the Add/Remove Programs dialog box.

On the Microsoft Windows Task Bar, choose Start→Settings→Control Panel. Choose Add/Remove Programs and then choose the WebLogic Collaborate program name from the list of programs. Click Add/Remove.

When you invoke the Uninstall script, a window prompting you to confirm the removal of the software is displayed.



2. Click Uninstall to continue.

The WebLogic Collaborate software is uninstalled from your system. A window showing the status of the removal process is displayed.



When the uninstall process is complete, a notification message is displayed.



3. Click Exit.

The WebLogic Collaborate product is removed from your system and from the Windows Registry.

3 WebLogic Collaborate Installation on UNIX Systems

This section provides the information needed to install and uninstall WebLogic Collaborate on a UNIX platform. Specifically, it includes the following topics:

- Installation Prerequisites
- Installing the BEA WebLogic Collaborate Software Package
- Customizing the Run-Time Environment
- Verifying the Software Installation
- Troubleshooting Your Installation
- Uninstalling the BEA WebLogic Collaborate Software Package

Installation Prerequisites

Before installing the WebLogic Collaborate software, you must have the following software and hardware installed on your machine:

- One of the following operating systems:
 - Sun Solaris 2.7 running on an Ultra 5 or better with Solaris OS patches for the Java 2 JDK, including the Solaris OpenWindows Motif patches. For a complete list of required OS patches, see *BEA WebLogic Collaborate Release Notes*.
 - HP-UX 11.0 operating system
 - IBM AIX 4.3.3 operating system
- 256 MB RAM recommended (512 MB preferable)

Note: 256 MB RAM are recommended for one instance of WebLogic Server, where the c-hub and c-enabler are colocated. If you run two instances of WebLogic Server, the machine will need more memory.
- 100 MB free disk space
- Correct PATH to JDK 1.3.0

Verify that JDK 1.3.0 is at the beginning of your machine's PATH. The PATH should begin with `wls_6.0/jdk1.3/bin`. `wls_6.0` represents the location on the local machine in which WebLogic Server 6.0 is installed.
- BEA WebLogic Server Version 6.0 Service Pack 1 or later

WebLogic Collaborate is supported on platforms that are certified and approved for WebLogic Server Version 6.0. For details about WebLogic Server Version 6.0 platforms, see <http://edocs.bea.com/wls/docs60/index.html>.
- Enterprise JavaBeans (EJB) 2.0 Upgrade

You need `EJB20.jar` to activate the BEA WebLogic Server implementation of Sun Microsystems's Enterprise JavaBeans 2.0 specification. You can download it from BEA WebLogic Server Downloads at http://commerce.bea.com/downloads/weblogic_server.jsp. Choose the EJB 2.0 download option to download a zip file that contains the `ejb20.jar` file and the README file.

■ One of the following databases:

● Cloudscape 3.5.1

BEA ships the Cloudscape software—a pure-Java relational database management system (RDBMS)—with WebLogic Server.

● Oracle 8i (Oracle 8.1.6)

The Oracle 8i (8.1.6) client libraries must be installed on the machine running WebLogic Server 6.0. You must also have access to an Oracle 8.1.5 or 8.1.6 server. WebLogic Collaborate uses the Oracle thin driver, which is bundled with your WebLogic Server distribution and installed with WebLogic Server.

For more information about configuring the Oracle thin driver with WebLogic Server, see *Using Third-Party Drivers with WebLogic Server* at the following URL:

<http://e-docs.bea.com/wls/docs60/jdbc/thirdparty.html>

Note: Before you can use an Oracle database, you must define the following variables in the user you create for WebLogic Collaborate. Contact your Oracle Database Administrator for more information.

```
ORACLE_HOME=directory_where_Oracle_is_installed
PATH=$PATH:$ORACLE_HOME/bin
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib
```

For details about using the JDBC specification for database access, see *Programming WebLogic JDBC* at the following URL:

<http://edocs.bea.com/wls/docs60/jdbc/index.html>.

■ Access to a CD reader (if you get the WebLogic Collaborate software on a CD ROM and not from the BEA Web site)

■ Network connection

■ One of the following Web browsers:

- Netscape Navigator 4.7 (or above)
- Internet Explorer 5.0 (or above)

Installing the BEA WebLogic Collaborate Software Package

The WebLogic Collaborate installation procedure installs the following components:

- BEA WebLogic Collaborate, including examples and Javadoc API descriptions
- WebLogic Process Integrator (Studio and run-time engine)
- Apache XML Server (XSLT and XPath):
 - Xalan 1.0.1
 - Xerces 1.2.0

The following sections describe how to install WebLogic Collaborate using either a graphical user interface (available on Solaris) or a command-line text mode (available on Solaris, HP-UX, and AIX).

Installing WebLogic Collaborate on Solaris Systems

You can install WebLogic Collaborate on Solaris systems using either a graphical installation program or a text-based installation program. To install WebLogic Collaborate using a text-based installation program, see “Installing WebLogic Collaborate on UNIX Systems” on page 3-12.

To install WebLogic Collaborate on a Solaris system using the graphical installation program, complete the following procedure:

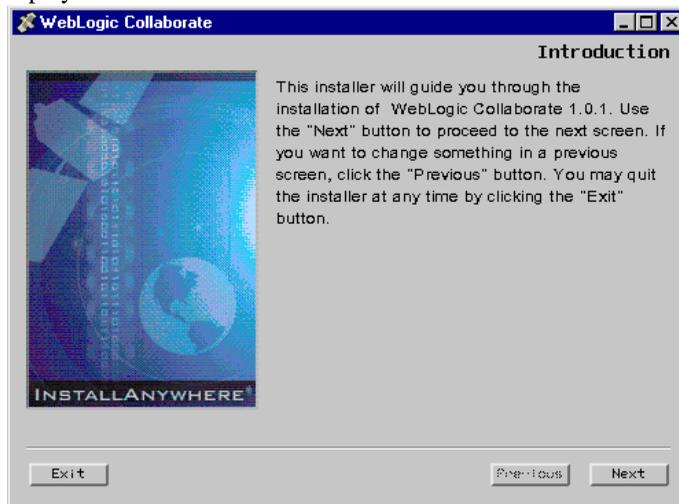
1. Confirm that your system meets all the prerequisites described in “Installation Prerequisites” on page 3-2.
2. Log on to the system with administrative privileges.
3. Create a UNIX user (for example, `wlc`) to install WebLogic Collaborate. By installing WebLogic Collaborate through such a user, you can control access to the distribution and set permissions for your WebLogic Collaborate software. You may also want to create a group with permissions to access the software.

4. Log in as the WebLogic Collaborate user you created in step 3.
5. Download the WebLogic Collaborate `install.bin` distribution from <http://www.bea.com>, or locate the `install.bin` program in the `unix` directory on your WebLogic Collaborate CD.

Consult your UNIX documentation for information about mounting and unmounting CDs.

Note: The Solaris Volume Management software automatically mounts CDs on `/cdrom/cdrom0/`. It is not necessary to unmount CDs on Solaris systems. To open the CD reader, however, you need to issue an `eject` command from the `root` directory.

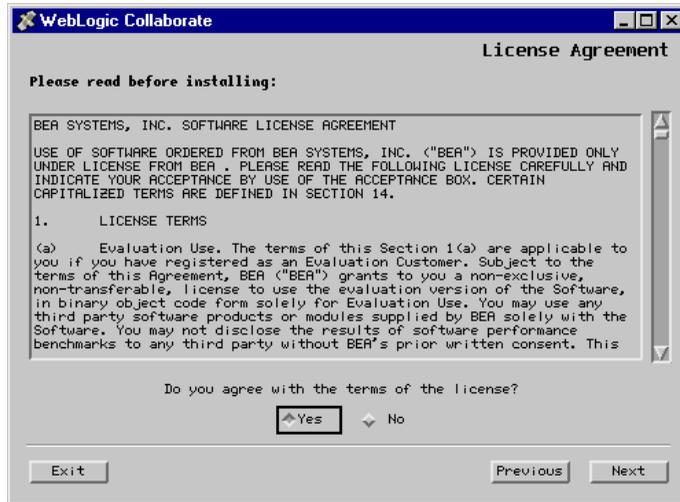
6. Invoke the `install.bin` command to start the installation procedure. The splash window appears and then the WebLogic Collaborate Introduction window is displayed.



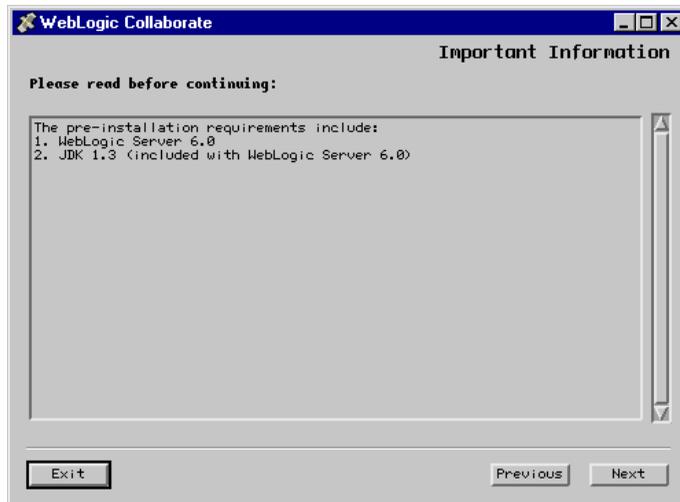
Warning: The installation fails if `$JAVA_HOME/bin` is not in your `PATH`. If necessary, update your `PATH` as follows:
`export PATH=$JAVA_HOME/bin:$PATH`

3 WebLogic Collaborate Installation on UNIX Systems

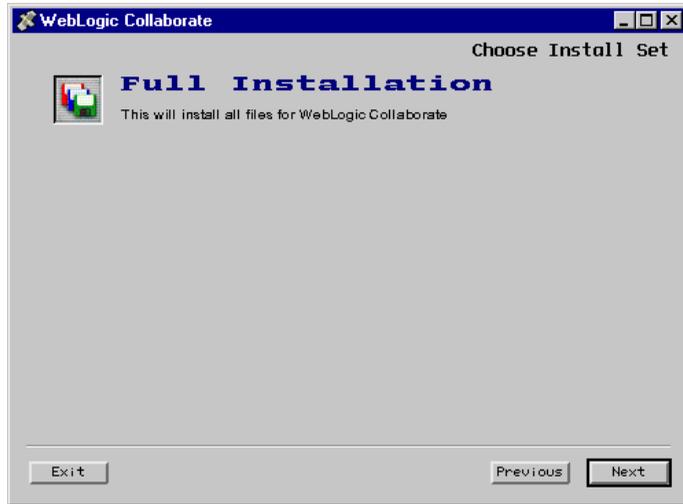
7. Click Next to display the Software License Agreement window.



8. Select Yes to accept the software license agreement. Then click Next to display a list of the installation prerequisites.

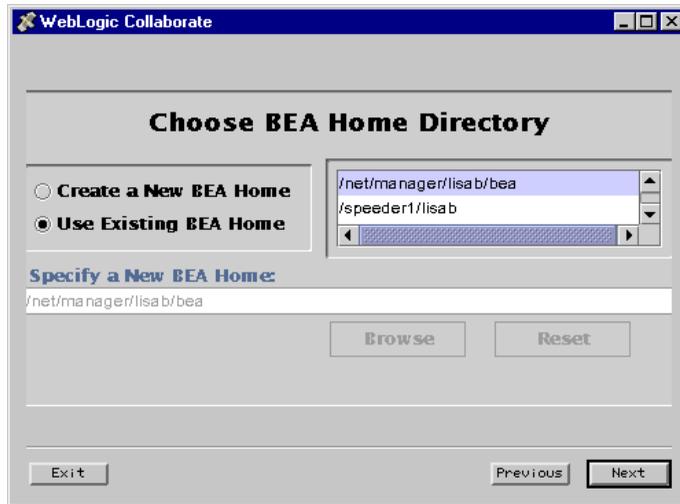


9. Click Next to display the Choose Install Set dialog box.

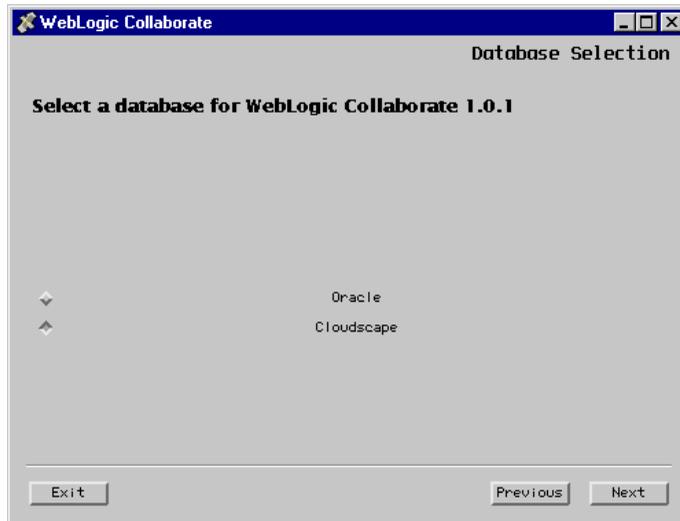


10. Click Next to display a dialog box that prompts you to specify a BEA home directory. An existing BEA home directory containing WebLogic Server 6.0 is selected by default.

Warning: You must install WebLogic Collaborate in an existing BEA home directory. This home directory can reside anywhere on the system. It must contain the `registry.xml` file, which holds descriptions of all BEA products that are installed in the BEA home directory.



11. Specify the home installation directory. Click Next. A dialog box prompts you to select a database.



12. Select a database and click Next.

The next window displayed in the installation process depends on the database you selected.

- If you selected the Cloudscape database, the installation begins. After you install all the WebLogic Collaborate components, the Install Complete window is displayed, indicating that the installation procedure is finished. Go to Step 15.

Cloudscape is the default database. It is a pure-Java relational database management system that BEA ships with WebLogic Server and requires no database configuration to use.

- If you selected the Oracle database, a database configuration dialog box is displayed before the WebLogic Collaborate installation begins.

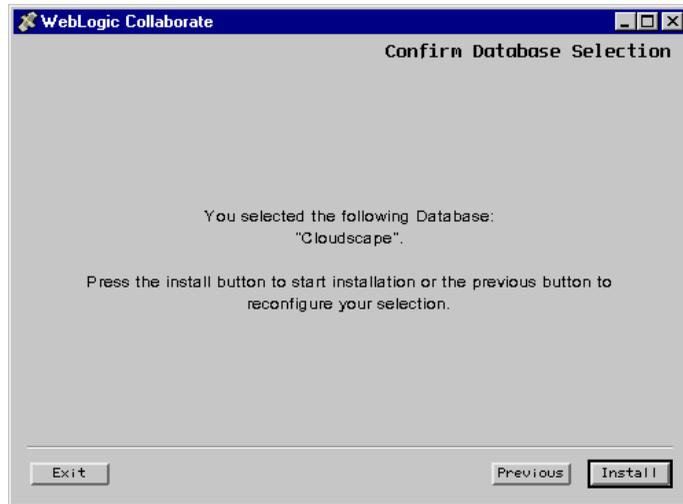


The screenshot shows a window titled "WebLogic Collaborate" with a standard Windows-style title bar. The main content area is titled "Oracle Access Configuration" in a blue, italicized font. Below the title, there are three input fields: "Oracle Service Name:" with a text box containing "<ServiceName>", "Oracle User:" with a text box containing "<User>", and "Oracle Password:" with a text box containing "<Password>". A "Reset" button is positioned below these fields. At the bottom of the dialog, there are three buttons: "Exit" on the left, "Previous" in the center, and "Next" on the right. The "Next" button is highlighted with a black border.

13. To configure the Oracle database, enter the Oracle Service name, user, and password in the appropriate fields and click Next.

3 *WebLogic Collaborate Installation on UNIX Systems*

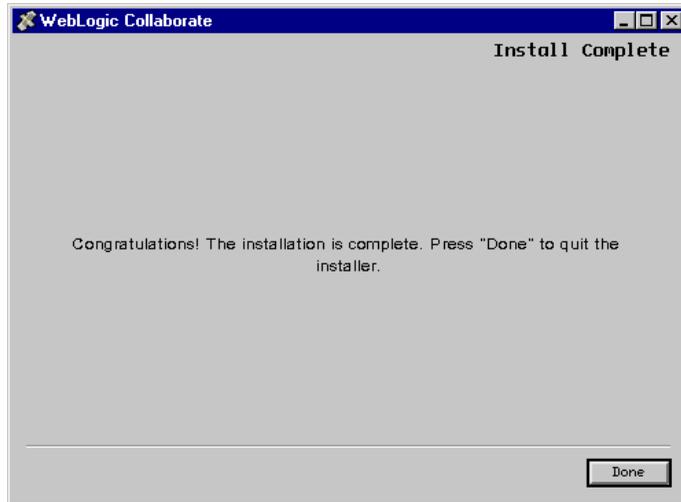
The Confirm Database Selection window appears.



14. Click Install to begin the installation. A window showing the status of the installation process is displayed.



After you install all the WebLogic Collaborate components, the Install Complete window is displayed, indicating that the installation procedure is finished.



15. Click Done.

16. Install the software license.

An evaluation license is included in the evaluation software and is installed automatically. If your installation is an upgrade to a previous version of WebLogic Collaborate, you will receive a new license file from BEA.

To modify your existing license after you install WebLogic Collaborate:

- a. Copy the new license file into the BEA home directory on your machine.
- b. Set the environment by running the `setenv` script as follows:

```
prompt> ksh
prompt> .<WLC_HOME>/setenv.sh
```

- c. Change directories to the BEA home directory.
- d. Merge this new license file into your existing license by entering the following command, where `new_license` represents the name of the license file you received from BEA:

```
prompt> UpdateLicense.sh new_license
```

Installing WebLogic Collaborate on UNIX Systems

You can use the console-mode to install WebLogic Collaborate on Solaris, HP-UX, and AIX operating systems. This is a text-based installation program that offers the same capabilities as the graphics-based installation program also available on Solaris.

To install WebLogic Collaborate in console mode, complete the following procedure:

1. Confirm that your system has all the prerequisites as described in “Installation Prerequisites” on page 3-2.
2. Log on to the system with administrative privileges.
3. Create a UNIX user, such as `wlc`, to install WebLogic Collaborate. Using a new user allows you to control access to the software and to set permissions for your WebLogic Collaborate software. You may also want to create a group that has permissions to access the software.
4. Log in as the WebLogic Collaborate user you created in step 3.
5. Download the WebLogic Collaborate `install.bin` distribution from <http://www.bea.com>, or locate the `install.bin` program in the `unix` directory on your WebLogic Collaborate CD.

For information about mounting and unmounting CDs, see your AIX, HP-UX, or Solaris documentation.

Note: The Solaris Volume Management software automatically mounts CDs on `/cdrom/cdrom0/`. It is not necessary to unmount CDs on Solaris systems. However, to open the CD reader, you must issue an `eject` command from the `root` directory.

6. Invoke the installation procedure:

```
prompt> sh install.bin -i console
```

A series of prompts is displayed.

Warning: The installation fails if `$JAVA_HOME/bin` is not defined in your `PATH`. If necessary, update your `PATH` as follows:

```
prompt> PATH=$JAVA_HOME/bin:$PATH
```

7. Respond to each prompt by entering the number associated with your choice, or by pressing Enter to accept the default. To exit the installation process, enter `quit` in response to any prompt. The console-based installation process is divided into the sections listed in the following table.

Section...	You Must...
Introduction	Press Enter to continue.
License Agreement	Read the BEA Software License Agreement and indicate your acceptance or rejection of the terms of the agreement by entering <code>Y</code> or <code>N</code> , respectively, at the prompt. To review the entire agreement, you must press <code>Enter</code> several times. To proceed with the installation, you must agree with the terms of the license. If you enter <code>N</code> , the installation process terminates.
Choose Install Set	Press Enter to accept the default choice.
Choose BEA Home Directory	Enter <code>1</code> to create a new BEA home directory, or <code>2</code> to use an existing home directory. Use the full pathname when specifying the name of the BEA Home directory. The BEA Home directory is the directory in which you want to install all BEA products.
Select a Database	Enter <code>1</code> to choose Oracle, or <code>2</code> to choose Cloudscape.
Enter Database Configurations	If you use an Oracle database, enter the Oracle Service Name, User ID, and Password. The Oracle Service Name is defined in the Oracle client <code>tnsnames.ora</code> file, and its value is usually the Oracle system ID.
Install Complete	Press Enter to exit the installation program.

8. Install the software license.

An evaluation license is included in the evaluation software. If you purchased the software on a CD or from the BEA Web site, your permanent license is sent to you by email.

To modify your existing license after you install WebLogic Collaborate:

- a. Copy the new license file into the BEA home directory on your machine.
- b. Set the environment by running the `setenv` script as follows:

```
prompt> ksh
prompt> .<WLC_HOME>/setenv.sh
```

- c. Change directories to the BEA home directory.

```
prompt> cd <BEA_HOME>
```

- d. Merge this new license file into your existing license by entering the following command, where *new_license* represents the name of the license file you received from BEA:

```
prompt> UpdateLicense.sh new_license
```

Customizing the Run-Time Environment

The installation procedure configures some components of your WebLogic Collaborate system. You should confirm the system configuration before you run the Installation Verifier example (see “Verifying the Software Installation” on page 3-17). The following sections describe the configuration elements you should set or confirm:

- Environment Variables
- Repository Data Files
- Configuration File Settings

Environment Variables

To set the environment variables in the `setenv.sh` and `createDB.sh` files, complete the following procedure:

1. Change to the root directory in which the BEA WebLogic Collaborate software was installed, such as, `/usr/local/bean/wlcollaborate1.0.1`.

2. Open the `setenv.sh` file in a text editor and set the following variables to match your environment:

Environment Variable	Setting	Example
JAVA_HOME	Location of the Java 2 SDK V1.3 software on your machine.	<code>set JAVA_HOME=/usr/local/jdk1.3</code>
WL_HOME	Location of the WebLogic Server 6 software on your machine.	<code>set WL_HOME=/usr/local/weblogic6</code>
WLC_HOME	Location of the WebLogic Collaborate software on your machine.	<code>set WLC_HOME=/usr/local/bea/wlcollaborate1.0.1</code>

3. If you are using an Oracle database, go to the `$WLC_HOME/bin` directory and open the `createDB.sh` file in a text editor.

If necessary, replace the environment variables at the beginning of the file (`<ORACLE_USER>`, `<ORACLE_PASSWORD>`, and `<ORACLE_SERVICENAME>`) with the appropriate values for your system. `ORACLE_SERVICENAME` is defined in the Oracle client `tnsnames.ora` file; its value is usually the Oracle system ID.

Repository Data Files

XML files are used to configure the repository and load it with the data for the example verifier application. If you are using an Oracle database, confirm that the `BulkloadOracleConfig.xml` file is configured as follows:

1. Change directory to the `$WLC_HOME/examples` directory.

2. Open the `BulkloadOracleConfig.xml` file in a text editor and confirm that the `<ORACLE_USER>`, `<ORACLE_PASSWORD>`, and `<ORACLE_SERVICENAME>` values are set to the user ID, password, and `ORACLE_SERVICENAME` values for your system. `ORACLE_SERVICENAME` is defined in the Oracle client `tnsnames.ora` file and is usually the Oracle system ID.

Configuration File Settings

Confirm that the run-time environment is correctly configured, as described in this section. To configure the run-time environment, use the WebLogic Server Administration Console.

1. Open the WebLogic Server Administration Console.
2. Select the appropriate Connection Pool for your database environment.
3. Change the Connection Pool properties as required based on the database you are using.
4. When you complete the changes, your code in `<WLC_HOME>/hub/config/mydomain/config.xml`, will look like the following example (if Oracle is used):

```
<!-- Oracle settings -->
<JDBCConnectionPool
  CapacityIncrement="1"
  DriverName="oracle.jdbc.driver.OracleDriver"
  InitialCapacity="1"
  LoginDelaySeconds="1"
  MaxCapacity="10"
  Name="wlcPool"
  Properties="user=<ORACLE_USER>;password=<ORACLE_PASSWORD>"
  RefreshMinutes="0"
  ShrinkPeriodMinutes="15"
  ShrinkingEnabled="true"
  Targets="myserver"
  URL="jdbc:oracle:thin:@<ORACLE_HOSTNAME>:1521:<ORACLE_SERV
ICENAME>"
/>
```

For more information about configuring JDBC pools, see “[Managing JDBC Connectivity](#)” in the *BEA WebLogic Server Administration Guide* at <http://edocs.bea.com/wls/docs60/adminguide/jdbc.html>.

Verifying the Software Installation

An installation verification example is provided to ensure that the installation of WebLogic Collaborate is successful. This section explains what the installation verification example does and how you run it.

How the Installation Verification Example Works

Run this example immediately after the installation procedure to verify that WebLogic Collaborate was installed successfully on your system. The verification example starts a c-hub and two c-enablers colocated on a single WebLogic Server instance. Then it allows you to access, from your browser, a servlet that sends messages from one c-enabler to another c-enabler.

When you run the verification example, the following actions are performed:

1. One c-enabler, identified as Partner1, sends an upper-case string to the second c-enabler, Partner2.
2. The Partner2 c-enabler converts the string to lower-case and returns it to the Partner1 c-enabler.

Running the Installation Verification Example

After you complete the installation (as described in “Installing the BEA WebLogic Collaborate Software Package” on page 3-4) and customize your environment (as described in “Customizing the Run-Time Environment” on page 3-14), verify that the installation is successful by completing the following procedure:

1. Open a terminal window on your machine.
2. Change to the WebLogic Collaborate directory:

```
prompt> cd $WLC_HOME/hub/config/mydomain
```

3. Verify that you are running a Bourne or Korn shell. If you are using a C shell, change to the Korn shell by typing `ksh` at your UNIX prompt.

4. Prepare the environment by running the `setenv` script as follows:

```
prompt> . ./setenv.sh
```

For more information, see “Customizing the Run-Time Environment” on page 3-14.

5. Create the database schema:

```
prompt> createDB.sh [oracle|cloudscape]
```

Specify the database name that corresponds to your database.

6. Load the repository with the example data:

```
prompt> cd examples/verifier
```

```
prompt> bulkloader.sh \  
./[BulkloadOracleConfig.xml|BulkloadCloudscapeConfig.xml]
```

Be sure to specify the XML filename that corresponds to your database.

7. Build the verifier example to populate the compiled classes and required scripts:

```
prompt> build.sh
```

8. Start WebLogic Server and one c-hub:

```
prompt> cd $WLC_HOME/hub/config/mydomain
```

```
prompt> ./startWeblogic.sh
```

9. Start a Web browser and enter the following URL:

```
http://localhost:7001/Verifier.html
```

Here `localhost` represents the name of the machine on which you are running WebLogic Server.

10. Click the Start WLC Verification button displayed in the Web browser.

The verification example starts. During verification, the Partner1 c-enabler sends a message to the Partner2 c-enabler. The message sent by Partner1 is the string `ABCDEFGHI`, and the message returned by Partner2 is `abcdefghi`.

If the verification sample executes successfully, a report containing a `verification SUCCESS` message is displayed in the browser. The report identifies the process flow and the status of the verifier application.

The following is an extract from a typical report:

```
WLC Verifier
```

```
Partner 2 enabler started
```

```
Waiting for request...
```

```
Partner 1 process flow.
```

```
Starting enabler... done.
```

```
Creating conversation... done.
```

```
Sending message: conversation id=verifierConv ...
```

```
string=ABCDEFGH I
```

```
Status=success
```

```
Waiting for response... done.
```

```
Processing reply:
```

```
Received string=abcdefghi
```

```
Verification SUCCESS
```

```
Termination conversation:verifierConversation:1.0requ...
```

```
success
```

11. If errors occur, check the WebLogic Server log for more information.

Troubleshooting Your Installation

The following information can help you troubleshoot your WebLogic Collaborate software installation.

Starting the Installer

If the graphical installer fails to start, the reason may be that the necessary operating system patches for the JDK are not installed. For example, the graphical installer will not work if the Solaris OpenWindows Motif patches are not installed. For a list of OS patches required for this release of WebLogic Collaborate, see the *BEA WebLogic Collaborate Release Notes*. For more details about Solaris patches for the JDK, see Solaris Patches at the following location:

<http://www.java.sun.com/products/jdk/1.3/install-solaris-patches.html>

Starting the C-Hub

If the c-hub fails to start, the license may not be installed. Check for error messages in the window in which WebLogic Server was started.

Running the Verification Example

If you have problems running the installation verification example:

- Confirm that your system meets the installation prerequisites described in “Installation Prerequisites” on page 3-2, and that the required software is installed in the correct locations.
- Verify that your system configurations are set correctly. For details, see “Customizing the Run-Time Environment” on page 3-14.

Accessing Verifier.html

If your Web browser is unable to connect to the Verifier web page, the reason may be that your browser is using a proxy server and is preventing you from connecting to your local WebLogic server.

To bypass the proxy server, change your browser's proxy settings so the browser does not use the proxy server to access the servlet. For example, in Netscape:

1. Choose Edit—>Preferences—>Advanced—>Proxies, and select Manual proxy configuration view.
2. In the Exceptions text field, specify a value for the local host and the listening port as follows:

localhost:listening_port

In the preceding line, *listening_port* is the listening port number specified in the `config.xml` file. The default listening port number is 7001.

Also check for error messages in the terminal window in which WebLogic Server was started.

Uninstalling the BEA WebLogic Collaborate Software Package

You can remove the WebLogic Collaborate software from your system by deleting the directory in which you installed it.

Alternatively, you can invoke the Uninstall script as follows:

```
prompt> $WLC_HOME/uninstaller/uninstall
```

A window prompts you to confirm the removal of the software. Click Uninstall to continue, and WebLogic Collaborate is then uninstalled from your system.

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