



BEA WebLogic® Real Time

Installing WebLogic Real Time

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About This Document

This document explains how to use the BEA Products installation program on both Windows and Unix platforms.

It is organized as follows:

- [Chapter 1, “Preparing for Your Installation,”](#) provides the basic information you need to know before installing your BEA software.
- [Chapter 2, “Starting the Installation Program,”](#) describes how to start the installation program in graphical, console, and silent modes on Windows and Unix platforms.
- [Chapter 3, “Running the Installation Program in Graphical Mode,”](#) describes how to install your BEA software on Windows and Unix platforms using a Java-based graphical user interface (GUI).
- [Chapter 4, “Running the Installation Program in Console Mode,”](#) discusses how to install your BEA software on Windows and Unix platforms using a text-based interface.
- [Chapter 5, “Running the Installation Program in Silent Mode,”](#) describes how to install your BEA software without user intervention by using an XML properties file to specify the installation options.
- [Chapter 6, “Installing and Updating License Files,”](#) describes the license types available and explains how to update your license file.

- [Chapter 7, “Post-Installation Information,”](#) explains what you should do after you install the software.
- [Chapter 8, “Uninstalling the Software,”](#) provides procedures for uninstalling your BEA software in graphical, console, and silent modes.

What You Need to Know

This document is intended for system administrators or application developers who are installing BEA Products software. It is assumed that readers are familiar with Web technologies and have a general understanding of Windows and Unix platforms.

Product Documentation on the dev2dev Web Site

BEA product documentation, along with other information about BEA software, is available from the BEA dev2dev Web site at <http://dev2dev.bea.com>.

To view the documentation for a particular product, select that product from the list on the dev2dev page; the home page for the specified product is displayed. From the menu on the left side of the screen, select Documentation for the appropriate release. The home page for the complete documentation set for the product and release you have selected is displayed.

Related Information

Other BEA documents that you may find helpful when installing the software are:

- *Introduction to WebLogic Real Time*
- *BEA JRockit Memory Management Guide*
- *Introduction to WebLogic Server and WebLogic Express*
- *Getting Started with WebLogic Event Server*
- *Creating WebLogic Domains Using the Configuration Wizard*

Contact Us!

Your feedback on the BEA Products 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 Real Time documentation.

In your e-mail message, please indicate which release of the WebLogic Real Time documentation you are using.

If you have any questions about these versions of the BEA software, or if you have problems installing and running the software, contact BEA Customer Support at <http://support.bea.com>. You can also contact Customer Support by using the contact information provided on the quick reference sheet titled “BEA Customer Support,” 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.

Table 0-1

Convention	Item
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
<i>italics</i>	Indicates emphasis or book titles.
monospace text	<p>Indicates <i>user input</i>, as shown in the following examples:</p> <p>Filenames: <code>config.xml</code></p> <p>Pathnames: <code>BEAHOME/config/examples</code></p> <p>Commands: <code>java -Dbea.home=BEA_HOME</code></p> <p>Code: <code>public TextMsg createTextMsg(</code></p>
	<p>Indicates <i>computer output</i>, such as error messages, as shown in the following example:</p> <pre>Exception occurred during event dispatching:java.lang.ArrayIndexOutOfBoundsException: No such child: 0</pre>

Table 0-1

Convention	Item
monospace boldface text	Identifies significant words in code. <i>Example:</i> void commit ()
<i>monospace italic text</i>	Identifies variables in code. <i>Example:</i> String <i>expr</i>
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.
[]	Indicates optional items in a syntax line. The brackets themselves should never be typed. <i>Example:</i> java utils.MulticastTest -n <i>name</i> [-p <i>portnumber</i>]
	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed. <i>Example:</i> java weblogic.deploy [list deploy update]
...	Indicates one of the following in a command line: That an argument can be repeated several times in a command line That the statement omits additional optional arguments That you can enter additional parameters, values, or other information The ellipsis itself should never be typed. <i>Example:</i> buildobjclient [-v] [-o <i>name</i>] [-f "file1.cpp file2.cpp file3.cpp . . ."]
.	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

Preparing for Your Installation

The following sections provide information that you need to know before installing your BEA WebLogic® Real Time software:

- [Installation Overview](#)
- [Installable Product Components](#)
- [Product Distribution Methods](#)
- [Installation Prerequisites](#)
- [Selecting Directories for Your Installation](#)
- [Generating a Verbose Installation Log](#)
- [Generating a Verbose Installation Log](#)

Installation Overview

The WebLogic Real Time installation program provides a complete framework for the installation and uninstallation of WebLogic Real Time or individual components, as desired.

Installation Modes

The WebLogic Real Time installation program can be used in the following modes:

- *Graphical mode*

Graphical-mode installation is an interactive, GUI-based method for installing your software. It can be run on both Windows and Unix systems. For installation procedures, see [Chapter 3, “Running the Installation Program in Graphical Mode.”](#)

Note: If you want to run graphical-mode installation, the console attached to the machine on which you are installing the software must support a Java-based GUI. All consoles for Windows systems support Java-based GUIs, but not all consoles for Unix systems do. If you attempt to start the installation program in graphical mode on a system that cannot support a graphical display, the installation program automatically starts console-mode installation.

- *Console mode*

Console-mode installation is an interactive, text-based method for installing your software from the command line, on either a Unix system or a Windows system. For instructions for using this method, see [Chapter 4, “Running the Installation Program in Console Mode.”](#)

- *Silent mode*

Silent-mode installation is a noninteractive method of installing your software that requires the use of an XML properties file for selecting installation options. You can run silent-mode installation in either of two ways: as part of a script or from the command line. Silent-mode installation is a way of setting installation configurations only once and then using those configurations to duplicate the installation on many machines. For instructions, see [Chapter 5, “Running the Installation Program in Silent Mode.”](#)

Installable Product Components

WebLogic Real Time supports Java applications running in WebLogic Event Server 2.0, WebLogic Server 10.0 (and later), and WebLogic Server 8.1 (SP2 and later) environments, as well as supporting standalone Java applications or Spring-Framework based applications running on J2SE 1.4.2 or 5.0 runtime environments.

Using the WebLogic Real Time installation program, you can install the following WebLogic Real Time 2.0 software on your system:

- **BEA JRockit 1.4.2 R27.3 JDK for WebLogic Server 8.1 (SP2 and later)** — Includes the Deterministic Garbage Collector (GC) and the JRockit Runtime Analyzer (JRA) tool, as well as a WebLogic domain configuration template (`wl-realtime.jar`) for creating an 8.1 SP2 or later domain with Deterministic GC enabled. The installer also includes sample startup scripts, `startRealTime (.cmd/.sh)`, that demonstrate how to start BEA JRockit with Deterministic GC enabled, which may be useful for Spring-based applications that are using some WebLogic Server facilities.
- **BEA JRockit 5.0 R27.3 JDK for WebLogic Event Server 2.0 and WebLogic Server 10.0 (and later)** — Includes the Deterministic Garbage GC and the JRA tool, as well as a WebLogic domain configuration template (`wl-realtime.jar`) for creating a 10.0 or later domain with Deterministic GC enabled. The installer also includes sample startup scripts, `startRealTime (.cmd/.sh)`, that demonstrate how to start BEA JRockit with Deterministic GC enabled, which may be useful for Spring-based applications that are using some WebLogic Server facilities.
- **Standalone JRockit 1.4.2 or 5.0 R27.3 JDK for J2SE Runtime Environments** — For standalone Java applications or Spring Framework-based applications, both the 1.4.2 and 5.0 JDK versions of the installers can install WebLogic Real Time in standalone mode if the target WebLogic Server instance is not found in the specified BEA Home directory. When run in standalone mode, the installer includes the JRockit Deterministic GC and the JRA tool, and also provides the sample startup scripts. However, in standalone mode, the WebLogic domain template is not installed.

For additional information about:

- The features and capabilities of WebLogic Real Time, see the *Introduction to WebLogic Real Time* at http://e-docs.bea.com/wlrt/docs20/intro_wlrt/index.html
- Operating systems and hardware supported by your software, see “WebLogic Real Time 2.0 Supported Configurations” at http://e-docs.bea.com/wlrt/docs20/intro_wlrt/intro.html#wlrt_supported_configs
- The features and capabilities of BEA JRockit, see *Introduction to JRockit JDK* at <http://e-docs.bea.com/jrockit/geninfo/genintro/index.html>
- The features and capabilities of WebLogic Server, see *Introduction to WebLogic Server and WebLogic Express* at:
 - <http://e-docs.bea.com/wls/docs100/intro/index.html>

WebLogic Real Time

WebLogic Real Time includes the BEA JRockit® R27.3 JVM, with *deterministic garbage collection* and the JRockit Runtime Analyzer (JRA) tool.

BEA JRockit JVM With Deterministic Garbage Collection

Memory management relies on effective *garbage collection* (GC), which is the process of clearing dead objects from the heap, thus releasing that space for new objects. The BEA JRockit R27.3 JVM included with WebLogic Real Time features *deterministic garbage collection* (DGC), a dynamic garbage collection priority that ensures extremely short pause times and limits the total number of those pauses within a prescribed window.

For more information on the Deterministic GC, see “[Minimal Transaction Latency \(The “Deterministic” Garbage Collector\)](#)” in the BEA JRockit *Memory Management Guide*.

BEA JRockit Runtime Analyzer (JRA)

The JRockit Runtime Analyzer (JRA) tool is an application that helps you profile your application and the Java runtime. It provides a wealth of useful metrics that are useful when using BEA JRockit as your runtime VM.

The JRocking Runtime Analyzer is packaged as part of the BEA JRockit Mission Control 3.0 tools suite. Documentation for Mission Control 3.0 is bundled with the tools as online documentation. For general information about Mission Control 3.0, see [Introduction to BEA JRockit Mission Control](#).

Product Distribution Methods

Your BEA software is distributed on both the BEA Web site and CD-ROM.

Web Distribution

You can download your software from the BEA Web site at <http://commerce.bea.com>.

This includes the BEA Products installation program for WebLogic Real Time and WebLogic Server, which includes all of the software described in “[Installable Product Components](#)” on [page 1-2](#).

CD-ROM Distribution

If you purchased your software from your local sales representative, you will find the following items in the product box:

- CD-ROMs containing the product software for Windows, Solaris, and Linux
- *BEA Software License and Limited Warranty* pamphlet

Installation Prerequisites

The following sections specify the installation prerequisites:

- [System Requirements](#)
- [Temporary Disk Space Requirements](#)
- [Administrator Privileges](#)
- [Licensing](#)

System Requirements

The system requirements for your installation are given in the following table.

Table 1-1 System Requirements

Component	Requirement
Platform configuration	A supported configuration of hardware and operating system is required. See WebLogic Real Time 2.0 Supported Configurations .
Processor	1-GHz CPU recommended
Hard disk drive	A complete installation requires approximately 150 MB of disk space.
Memory	2 GB of RAM minimum

Table 1-1 System Requirements (Continued)

Component	Requirement
Color bit depth display and size	For graphical user interface (GUI) mode installation, 8-bit color depth (256 colors) is required. For console-mode and silent-mode installation, there is no color bit depth requirement.
JDK	The BEA Products installation program requires a Java run-time environment (JRE) to run. A JRE is bundled in the Windows installation program and in some Unix installation programs (those with filenames ending in <code>.bin</code>). For other Unix platforms, the installation program does not install a JDK. Filenames for these installation programs end in <code>.jar</code> . To run the <code>.jar</code> installation programs, you must have the appropriate version of the JDK installed on your system, and include the <code>bin</code> directory of the JDK at the beginning of the <code>PATH</code> variable definition. It is important that you use a JDK because the installation process assigns values to <code>JAVA_HOME</code> and related variables to point to the JDK directory.

Temporary Disk Space Requirements

The BEA installation program uses a temporary directory into which it extracts the files necessary to install the software on the target system. During the installation process, your temporary directory must contain sufficient space to accommodate the compressed Java run-time environment (JRE) bundled with the installation program and an uncompressed copy of the JRE that is expanded into the temporary directory. The extracted files are deleted from the temporary directory at the end of the installation process. As a general rule, installation programs require approximately 2.5 times the amount of temporary space that is ultimately required by the installed files.

By default, the installation program uses the following temporary directories:

- Windows platforms—directory referenced by the `TMP` system variable
- Unix platforms—system-dependent temporary directory

Note: If you do not have enough temporary space to run the installation program, you are prompted to specify an alternate directory or exit the installation program.

To make sure that you have adequate temporary space, you may want to allocate an alternate directory for this purpose. To do so, follow the instructions provided in the following table.

Table 1-2 Setting Temporary Disk Space

On this platform . . .	Perform this step . . .
Windows	<p>Do one of the following:</p> <ul style="list-style-type: none"> Set the TMP system variable to a directory of your choice. If starting the installation program from the command line, include the <code>-Djava.io.tmpdir=tmpdirpath</code> option, replacing <i>tmpdirpath</i> with the full path of the directory that you want to designate as a temporary storage area for the BEA Products installation program. For example, on Windows with the BEA JRockit 5.0 JDK-based installer: <pre>realtime20_jdk1.5.0_win32.exe -mode=console -Djava.io.tmpdir=D:\Temp</pre>
Unix	<p>Enter the following option on the command line when you start the installation program:</p> <pre>-Djava.io.tmpdir=tmpdirpath</pre> <p>Here, <i>tmpdirpath</i> is the full path of the directory that you want to designate as a temporary storage area for the BEA Products installation program.</p>

Administrator Privileges

On Windows systems, Administrator privileges are required to create Start menu shortcuts in the All Users folder.

When you are installing the software as a user with Administrator privileges, you are presented with the option to create the Start menu shortcuts in the All Users folder, or in the Local user's Start menu folder. The following table describes the options available.

Table 1-3 Creating Start Menu Shortcuts

If you select . . .	The following occurs . . .
All Users	All users registered on the machine are provided with access to the installed software. Subsequently, if users without Administrator privileges use the Configuration Wizard from this installation to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired.
Local user	Other users registered on this machine will not have access to the Start menu entries for this installation.

If a user without Administrator privileges installs the software, the Start menu entries are created in the user's local Start menu folder.

Licensing

Your WebLogic Real Time software cannot be used without a valid license. When you install your software, the installation program installs a 60-day evaluation development license (license.bea) into the `BEA_HOME/jrockit-realtime20_XXX/jre/` directory, to allow you to start using the product immediately.

To use your software in a full-scale production environment, you must purchase a production license. To find out how to do so, contact your sales representative or visit the BEA corporate Web site at <http://www.bea.com>.

For more information about development and production licenses, see “[About BEA Product Licenses](#)” on page 6-1.

Selecting Directories for Your Installation

During the installation process, you need to specify locations for the following directories:

- [BEA Home directory](#)
- [Product installation directory](#)

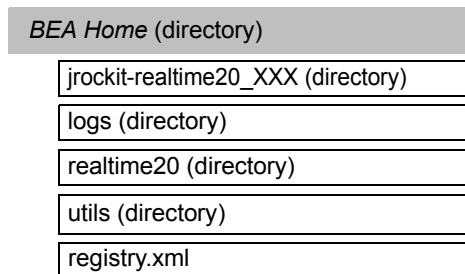
Choosing a BEA Home Directory

When you install your BEA software, you are prompted to specify a BEA Home directory. This directory serves as a repository for common files that are used by multiple BEA products installed on the same machine. For this reason, the BEA Home directory can be considered a *central support directory* for all the BEA products installed on your system.

The files in the BEA Home directory are essential to ensuring that BEA software operates correctly on your system. They perform the following types of functions:

- Ensure that licensing works correctly for the installed BEA products
- Facilitate checking of cross-product dependencies during installation
- Facilitate Service Pack installation

The following illustration shows the structure of a sample BEA Home directory, on a Windows platform, created by the WebLogic Real Time installation program when run in *standalone mode*, which includes the BEA JRockit JVM for WebLogic Real Time.



This illustration depicts only the files and directories required in a new BEA Home directory for WebLogic Real Time. If you choose an existing product installation directory, however, you will see additional directories in the BEA Home directory, such as `weblogic81` and/or `weblogic100` (and later), and the WebLogic Server license and license update utility. Although the default location for the product installation directory is within the BEA Home, you can select a different location outside the BEA Home directory.

During installation of your BEA software, you are prompted to choose an existing BEA Home directory or specify a path to create a new BEA Home directory. If you choose to create a new directory, the installation program automatically creates it for you.

Notes: BEA recommends that you do not exceed a maximum of 12 characters when naming your BEA Home directory. If the name of this directory has more than 12 characters, the `CLASSPATH` may not be resolved properly.

If WebLogic Real Time is installed into a BEA Home directory where multiple WebLogic Server 10.0 and later instances exist, the WebLogic Real Time domain creation template and sample scripts are installed into latest WebLogic Server instance.

Understanding the Functions of the BEA Home Directory

The files and directories in the BEA Home directory when WebLogic Real Time is installed in standalone mode are described in the following table.

Table 1-4 BEA Home Directory Description

Component	Description
<code>jrockit-realtime20_xxx</code> directory	Contains the software for the BEA JRockit JDK for WebLogic Real Time. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications running in either J2SE 1.4.2 (standalone or WebLogic 8.1 SP2 and later) or J2SE 5.0 (standalone or WebLogic 10.0 and later) environments. In this directory name, <code>xxx</code> indicates the version of the JRockit JDK installed on your system, such as <code>jrockit-realtime20_150_11</code> or <code>jrockit-realtime20_142_14</code> . It also contains the JRockit R27.3 license (<code>license.bea</code>) with the necessary Deterministic GC and JRockit Runtime Analyzer tool keys in the <code>/jre</code> directory. For more information, see “Licensing” on page 1-8 .
<code>logs</code> directory	Contains a history file of installation and uninstallation for the BEA Home directory.
<code>realtime201</code> directory	Contains the sample startup scripts, <code>startRealTime(.cmd/.sh)</code> , in the <code>common/bin</code> directory, which demonstrate how to start BEA JRockit with Deterministic GC enabled.
<code>utils</code> directory	Contains utilities that are used to support the installation of all BEA products installed in this BEA Home directory. The <code>utils.jar</code> file contains code that supports the <code>UpdateLicense</code> utility.

Table 1-4 BEA Home Directory Description (Continued)

Component	Description
registry.xml file	<p>A registry file that contains a persistent record of all BEA products installed on the target system. This registry contains product-related information, such as version number, service pack number, and location of the installation directory.</p> <p>Note: Do not edit this file manually. Doing so may cause operating problems for the currently installed BEA products, or result in installation problems when future BEA products or maintenance upgrades are installed.</p> <p>For more information about the BEA registry file, see “Using the BEA Registry API” in <i>ISV Partners’ Guide</i> at the following URL: http://e-docs.bea.com/common/docs100/isv/detect.html</p>

Creating Multiple BEA Home Directories

Although it is possible to create more than one BEA Home directory, we recommend that you avoid doing so. In almost all situations, a single BEA Home directory is sufficient. There may be circumstances, however, in which you prefer to maintain separate development and production environments, with a separate product stack for each. With two directories, you can update your development environment (in a BEA Home directory) without modifying the production environment until you are ready to do so.

Choosing a Product Installation Directory

The product installation directory contains all the software components that you choose to install on your system, including program files and examples. You are prompted during your initial installation to choose a product installation directory. If you accept the default on a Windows system, for example, your software is installed in the following directory:

```
C:\bea\realtime20
```

Here, `C:\bea` is the BEA Home directory and `realtime20` is the product installation directory for the WebLogic Real Time 2.0 software. However, you can specify any name and location on your system for your product installation directory; there is no requirement that you name the directory `realtime20` or create it under the BEA Home directory.

The installation program installs the software components in a product installation directory represented by the `WLRT_HOME` variable. If, during your initial installation, you choose to install WebLogic Server only, and not all of the products available for installation, and you later decide

to install additional products, such as AquaLogic Service Bus (using the same BEA Home directory), you are *not* prompted, during the subsequent installations, to specify a product installation directory. The installation program detects the `WLRT_HOME` directory and installs the additional products under it.

A description of the WebLogic Real Time directory structure is provided in [“Understanding the Product Directory Structure” on page 7-2](#).

Generating a Verbose Installation Log

If you launch the installation from the command line or from a script, you can specify the `-log` option to generate a verbose installation log. The installation log stores messages about events that occur during the installation process, including informational, warning, error, and fatal messages. This type of file can be especially useful for silent installations.

Note: You may see some warning messages in the installation log. However, unless a fatal error occurs, the installation program completes the installation successfully. The installation user interface indicates the success or failure of each installation attempt, and the installation log file includes an entry indicating that the installation was successful.

Syntax

To create a verbose log file during installation, include the `-log=full_path_to_log_file` option in the command line. For example, on Windows using the BEA JRockit 5.0 JDK-based installer:

```
realtime20_jdk1.5.0_win32.exe -log=C:\logs\server_install.log
```

The path must specify a file. You cannot create a folder simply by including a name for it in a pathname; your path should specify only existing folders. If your path includes a nonexistent folder when you execute the command, the installation program does not create the log file.

Starting the Installation Program

The following sections describe how to start the installation program on Windows and UNIX platforms:

- [Before You Start](#)
- [Starting the Installation Program on Windows Platforms](#)
- [Starting the Installation Program on UNIX Platforms](#)
- [What's Next?](#)

Before You Start

WebLogic Real Time supports Java applications running on WebLogic Event Server 2.0, WebLogic Server 10.0 (and later), and WebLogic Server 8.1 (SP2 and later) environments, as well as supporting standalone Java applications running on J2SE 1.4.2 or 5.0 runtime environments.

Therefore, before you start installing the software, please review the following information:

- Make sure that you are installing your software on a hardware/software configuration that is supported by your WebLogic Real Time software. A complete list of documents that describe the configurations supported by WebLogic Real Time can be found at http://e-docs.bea.com/wlrt/docs20/intro_wlrt/intro.html#wlrt_supported_configs.
- Read [Chapter 1, “Preparing for Your Installation.”](#)

- You cannot reinstall any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install WebLogic Server during one installation, and AquaLogic Service Bus during a separate installation. However, to reinstall the same version of one of the products, you must first uninstall the previous installation, as described in [Chapter 8, “Uninstalling the Software.”](#)

Starting the Installation Program on Windows Platforms

The following sections describe how to start the installation program on a Windows platform:

- [Starting in Graphical Mode](#)
- [Starting in Console Mode](#)
- [Starting in Silent Mode](#)

Note: If you are installing the software on a Windows system that supports more than one monitor, you must disable all but one monitor before starting the installation program.

Starting in Graphical Mode

To start the graphical-mode installation process on a Windows platform, follow these steps:

1. Log in to the Windows system.
2. Go to the directory where you downloaded the installation program.
3. Complete the appropriate procedure in the following table.

If you are installing from . . .	Perform the following action . . .
Web download	Go to the directory where you downloaded the installation program.
CD-ROM	<ol style="list-style-type: none">1. Insert the software CD into the CD-ROM drive.2. If the installation program does not start automatically, open Windows Explorer and double-click the CD-ROM icon.3. Navigate to the folder for the Windows installation.

4. Double-click the appropriate installation file for your environment:

- `realtime20_jdk1.5.0_win32.exe` (BEA Products installation program for WebLogic Real Time for use with WebLogic Server 10.0 and later, or with standalone J2SE 5.0 applications).
- `realtime20_jdk1.4.2_win32.exe` (BEA Products installation program for WebLogic Real Time for use with WebLogic Server 8.1 SP2 and later, or with standalone J2SE 1.4.2 applications).

The installation program begins to install the software.

5. Proceed to [Chapter 3, “Running the Installation Program in Graphical Mode.”](#)

Starting in Console Mode

To start the console-mode installation process on a Windows platform, follow these steps:

1. Log in to the target Windows system.
2. Complete the appropriate procedure in the following table:

If you are installing from . . .	Perform the following action . . .
Web download	<ol style="list-style-type: none"> 1. Open an MS-DOS command prompt window. 2. Go to the directory where you downloaded the installation program.
CD-ROM	<ol style="list-style-type: none"> 1. Insert the software CD into the CD-ROM drive. 2. Open an MS-DOS command prompt window. 3. Go to the CD-ROM directory and navigate to the folder for the Windows installation program.

3. Launch the installation by entering one of the following commands:

- `realtime20_jdk1.5.0_win32.exe -mode=console`
(BEA Products installation program for WebLogic Real Time for use with WebLogic Server 10.0 and later, or with standalone J2SE 5.0 applications)
- `realtime20_jdk1.4.2_win32.exe -mode=console`
(BEA Products installation program for WebLogic Real Time for use with WebLogic Server 8.1 SP2 and later)
- You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
realtime20_jdk1.5.0_win32.exe -mode=console
-log=C:\logs\server_install.log
```

For more information, see [“Generating a Verbose Installation Log”](#) on page 1-12.

After a few moments, a BEA Installer window opens and the installation program begins to install the software.

- 4. Proceed to [Chapter 4, “Running the Installation Program in Console Mode.”](#)

Starting in Silent Mode

For details about silent-mode installation, see [“What Is Silent-Mode Installation?”](#) on page 5-1.

To start the silent-mode installation process on a Windows platform, follow these steps:

- 1. Log in to the Windows system.
- 2. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode installation. For information about creating a `silent.xml` file, see [“Creating a silent.xml File for Silent-Mode Installation”](#) on page 5-3.

Note: Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, we recommend that you create a log file when you start the installation.

- 3. Complete the appropriate procedure in the following table.

If you are installing from ...	Perform the following action ...
Web download	<ul style="list-style-type: none">1. Open an MS-DOS command prompt window.2. Go to the directory where you downloaded the installation program.
CD-ROM	<ul style="list-style-type: none">1. Insert the software CD into the CD-ROM drive.2. Open an MS-DOS command prompt window.3. Go to the CD-ROM directory and navigate to the folder for the Windows installation program.

- 4. Launch the installation by entering the following command:

```
filename.exe -mode=silent -silent_xml=path_to_silent.xml
```

Here, *filename.exe* is the name of the WebLogic Real Time installation file, and *path_to_silent.xml* is the *full* pathname of the *silent.xml* file.

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
realtime20_jdk1.5.0_win32.exe -mode=console -mode=silent
-silent_xml=C:\silent.xml -log=C:\logs\server_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

A BEA Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

For more information, see [Chapter 5, “Running the Installation Program in Silent Mode.”](#)

Starting the Installation Program on UNIX Platforms

The BEA Products installation program requires a Java run-time environment (JRE) to run. A JRE is bundled in the Windows installation program, and in some Unix installation programs (those with filenames ending in `.bin`). For other UNIX platforms, the installation program does not include a JRE. Filenames for these installation programs end in `.jar`. To run the `.jar` installation programs, you must have an appropriate version of a JDK installed on your system, and include the `bin` directory of the JDK at the beginning of your `PATH` system variable.

Notes: It is important that you use a JDK because the installation process assigns values to `JAVA_HOME` and related variables to point to this directory. All scripts installed by your installation program use this JDK by default, including scripts to start sample applications, the Configuration Wizard, and other development tools.

To run graphical-mode installation, your console must support a Java-based GUI. If the installation program determines that your system cannot support a Java-based GUI, it automatically starts running in console mode. For details, see [Chapter 4, “Running the Installation Program in Console Mode.”](#)

Using Installers with Filenames Ending in `.bin`

The following sections describe how to start the installation program on UNIX platforms using filenames that end in `.bin`:

- [Starting Graphical-Mode Installation](#)
- [Starting Console-Mode Installation](#)

- [Starting Silent-Mode Installation](#)

Starting Graphical-Mode Installation

To start the graphical-mode installation process for installation files with names ending in `.bin`, follow these steps:

1. Log in to the target UNIX system.
2. Complete the appropriate procedure in the following table.

If you are installing from . . .	Perform the following action . . .
Web download	Go to the directory where you downloaded the installation program.
CD-ROM	<ol style="list-style-type: none">1. Insert the software CD into the CD-ROM drive and go to the CD-ROM directory.2. Navigate to the directory that contains the installation program for your platform.

3. Launch the installation by entering the following commands:

```
chmod a+x filename.bin
./filename.bin
```

In these commands, `filename.bin` is the name of the installation program specific to your platform, for example, `realtime20_jdk1.5.0_linux32.bin` or `realtime20_jdk1.4.2_linux32.bin`.

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
realtime20_jdk1.5.0_linux32.bin -log=/home/logs/BEA_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

The installation program begins to install the software.

4. Proceed to [Chapter 3, “Running the Installation Program in Graphical Mode.”](#)

Starting Console-Mode Installation

To start the console-mode installation process for installation files with names ending in `.bin`, follow these steps:

1. Log in to the target UNIX system.
2. Complete the appropriate procedure in the following table.

If you are installing from . . .	Perform the following action . . .
Web download	Go to the directory where you downloaded the installation program.
CD-ROM	<ol style="list-style-type: none"> 1. Insert the software CD into the CD-ROM drive and go to the CD-ROM directory. 2. Navigate to the directory that contains the installation program for your platform.

3. Launch the installation by entering the following commands:

```
chmod a+x filename.bin
./filename.bin -mode=console
```

Here *filename.bin* is the name of the installation program specific to your platform, for example, for example, `realtime20_jdk1.5.0_linux32.bin` or `realtime20_jdk1.4.2_linux32.bin`.

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
realtime20_jdk1.5.0_linux32.bin -mode=console
-log=/home/logs/BEA_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

4. Proceed to [Chapter 4, “Running the Installation Program in Console Mode.”](#)

Starting Silent-Mode Installation

For details about silent-mode installation, see [“What Is Silent-Mode Installation?” on page 5-1](#).

To start the silent-mode installation process for installation files with names ending in `.bin`, follow these steps:

1. Log in to the target UNIX system.
2. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode

installation. For information about creating a `silent.xml` file, see [“Creating a silent.xml File for Silent-Mode Installation” on page 5-3](#).

Note: Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, we recommend that you create a log file when you start the installation.

3. Complete the appropriate procedure in the following table.

If you are installing from . . .	Perform the following action . . .
Web download	Go to the directory where you downloaded the installation program.
CD-ROM	<ol style="list-style-type: none">1. Insert the software CD into the CD-ROM drive and go to the CD-ROM directory.2. Navigate to the directory that contains the installation program for your platform.

4. Launch the installation program by entering the following command:

```
chmod a+x filename
./filename.bin -mode=silent -silent_xml=/path_to_silent.xml
```

Here `filename.bin` is the name of the installation file, for example, either `realtime20_jdk1.5.0_linux32.bin` and `path_to_silent.xml` is the *full* pathname of the `silent.xml` template file.

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
realtime20_jdk1.5.0_linux32.bin -mode=silent
-silent_xml=/home/silent.xml -log=/home/logs/BEA_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

A BEA Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

For more information, see [Chapter 5, “Running the Installation Program in Silent Mode.”](#)

What's Next?

For details about running the installation program, see one of the following, depending on your selected installation mode:

- [Chapter 3, “Running the Installation Program in Graphical Mode”](#)
- [Chapter 4, “Running the Installation Program in Console Mode”](#)
- [Chapter 5, “Running the Installation Program in Silent Mode”](#)

Starting the Installation Program

Running the Installation Program in Graphical Mode

The following sections describe how to run the installation program in graphical mode:

- [Running the Installation Program](#)
- [What's Next?](#)

Running the Installation Program

Start the installation program as described in [Chapter 2, “Starting the Installation Program.”](#)

The installation program prompts you to enter specific information about your system and configuration. For instructions on responding to the prompts during installation, see the following table.

Table 3-1 GUI Installation Prompts

In this window . . .	Perform the following action . . .
Welcome	Click Next to proceed with the installation. You may cancel the installation at any time by clicking Exit .
BEA License Agreement	Read the BEA Software License Agreement and indicate your acceptance of the terms of the agreement by selecting Yes . To continue with the installation, you must accept the terms of the license agreement and then click Next .

Table 3-1 GUI Installation Prompts

In this window . . .	Perform the following action . . .
Choose BEA Home Directory	Specify the BEA Home directory that will serve as the central support directory for all BEA products installed on the target system. If you already have a BEA Home directory on your system, you can select that directory (recommended) or create a new BEA Home directory. If you choose to create a new directory, the installation program automatically creates one for you. For details about the BEA Home directory, see “Choosing a BEA Home Directory” on page 1-9 .
Choose Product Directory This window is not displayed if you are adding components to an existing installation. Instead, you are prompted to confirm the product installation directory. If you do so, the selected components are installed in the product installation directory you specified during the initial installation.	Specify the directory in which you want to install the software and click Next. You can accept the default product directory (<code>realtime20</code>) or create a new product directory. For additional information, see “Choosing a Product Installation Directory” on page 1-11 . If you choose to create a new directory, the installation program automatically creates one for you.
Choose Shortcut Location This window is displayed only under the following conditions: <ul style="list-style-type: none"> You have Administrator privileges. You are performing an initial installation. You are installing on a Windows platform. 	Specify the Start menu folder in which you want the Start menu shortcuts created. You can select from the following options: <ul style="list-style-type: none"> All Users Start menu folder Selecting this option provides all users registered on the machine with access to the installed software. However, only users with Administrator privileges can create shortcuts in the All Users folder. Therefore, if a user without Administrator privileges uses the Configuration Wizard to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired. Local user’s Start menu folder Selecting this option ensures that other users registered on this machine will not have access to the Start menu entries for this installation.
Status	Read the information displayed about BEA products and services. When the installation program has finished copying the specified files to your system, click Next .
Installation Complete	Click Done to exit the installation program

What's Next?

For additional post-installation information, as understanding the product directory structure, see [Chapter 7, “Post-Installation Information.”](#)

For specific information about your software release, see the appropriate release notes:

- The features and capabilities of WebLogic Real Time, see *Introduction to WebLogic Real Time* at http://e-docs.bea.com/wlrt/docs20/intro_wlrt/index.html
- The features and capabilities of BEA JRockit, see *Introduction to JRockit JDK* at <http://e-docs.bea.com/jrockit/geninfo/genintro/index.html>
- Operating systems and hardware supported by your software, see “WebLogic Real Time 2.0 Supported Configurations” at http://e-docs.bea.com/wlrt/docs20/intro_wlrt/intro/intro.html#wlrt_supported_configs
- The features and capabilities of WebLogic Server, see *Introduction to WebLogic Server and WebLogic Express* at <http://e-docs.bea.com/wls/docs100/intro/index.html>

Running the Installation Program in Graphical Mode

Running the Installation Program in Console Mode

The following sections describe how to run the installation program in console mode:

- [Running Console-Mode Installation](#)
- [What's Next?](#)

Running Console-Mode Installation

Start the installation program in console mode as described in [Chapter 2, “Starting the Installation Program.”](#)

To complete the console-mode installation process, respond to the prompts in each section by entering the number associated with your choice or by pressing Enter to accept the default. To exit the installation process, enter `exit` (or `x`, for short) in response to any prompt. To review or change your selection, enter `previous` (or `p`, for short) at the prompt. To proceed to the following window, enter `next` (or `n`, for short).

Note: In the sample console text and directory pathnames provided in this section, Windows conventions (such as backslashes in pathnames) are used, for example, `C:\bea\realtime20`. When entering pathnames on a Unix system, be sure to use UNIX conventions, instead. For example, use forward slashes in pathnames, such as `/home/bea/realtime20`.

The following procedure steps you through the installation program. Use this procedure after you have started the installation program in console mode, as described in [Chapter 2, “Starting the Installation Program.”](#)

1. At the `Welcome` prompt, type `next` (or `n` for short) or press `Enter` to continue with the installation process.

The BEA Systems License Agreement prompt is displayed.

2. Read the Agreement and indicate your acceptance or rejection of its terms by doing one of the following at the prompt:
 - Type `1` to indicate your agreement with the terms of the license and proceed with the installation. To review the entire agreement, press `Enter` or type `Down` several times. Type `Up` to scroll back through sections previously displayed.
 - Type `2` if you do not agree with the terms of the license. If you type `2`, the installation process terminates.

The `Choose BEA Home directory` prompt is displayed.

3. Specify the BEA Home directory that will serve as the central support directory for all WebLogic Real Time software installed on the target system. For details about the BEA Home directory, see [“Choosing a BEA Home Directory” on page 1-9](#).

One of the following is displayed on your system:

- If you have existing BEA Home directories on your system, a list of the directories is displayed, as shown in the following example:

```
Choose BEA Home Directory:
```

```
-----
```

```
->1|* Create a new BEA Home
   2|C:\bea
   3|C:\bea_prod
   4|C:\bea_qa
```

```
Enter index number to select OR [Exit][Previous][Next]>
```

To use an existing BEA Home directory, type the number associated with the desired BEA Home directory.

To create a new BEA Home directory, type `1` or press `Enter`.

- If there are no BEA Home directories on your system, or you have selected to create a new BEA Home, the installation program displays the following prompt:

```
Choose BEA Home Directory:
```

```
-----
```

```
"BEA Home" = [Use default "C:\bea
```

```
Input BEA Home OR [Exit][Previous][Next]>
```

Do one of the following:

- To use the default BEA Home directory, type `next` (or `n` for short), or press `Enter`.
- To create a new BEA Home directory, enter the *full path* of the BEA Home directory, for example `C:\beahome2`. If you specify a directory that does not exist, the installation program creates it for you.

The installation program displays the BEA Home directory you have specified, as shown in the following example:

```
Choose BEA Home Directory:
```

```
-----
```

```
"BEA Home" = [C:\beahome2]
```

```
Select Option:
```

- ```
1 - Input BEA Home
2 - Use default [C:\bea]
```

```
Enter option number to select OR [Exit][Previous][Next]>
```

On the command line, press `Enter` to accept your selection. Otherwise, type `1` or `2` to return to the Choose BEA Home Directory panel, where you can modify your entry.

After you have selected your BEA Home directory and confirmed your selection, type `Next` or press `Enter`. One of the following occurs:

- If you are adding components to an existing installation, the `Choose Components to install` panel is displayed. Go to step 5.
  - If you are performing an initial installation, the `Choose Install Type` prompt is displayed.
4. Specify the directory in which you want to install the software. You can accept the default product directory (`bea_home\realtime20`) or create a new product directory.

**Note:** If you are adding components to an existing installation, you are prompted to confirm the product installation directory.

If you specify a new directory, the installation program automatically creates it for you.

The following example shows the choices displayed in this section:

## Running the Installation Program in Console Mode

Choose Product Directory:

-----  
Product Installation Directory= [Use default C:\beahome2\realtime20]

Input Product Installation Directory OR [Exit][Previous][Next]>

Do one of the following:

- Press Enter or type *next* (or *n* for short) to accept the current selection.
- Enter the *full path* to the directory in which you want to install the software, and press Enter.

You are prompted to confirm your selection as shown in the following text:

Choose Product Directory:

-----

->1| Yes, use this product directory [C:\beahome2\realtime20]  
2| No, select another product directory

Enter index number to select OR [Exit][Previous][Next]>

Verify that your entry is correct, then type 1 or press Enter to proceed with the installation. Otherwise, type 2 to return to the Choose Product Directory panel, where you can modify your entry.

5. Specify the folder in which you want to create the Start menu shortcuts. Select the All Users folder or the local user's folder, as shown in the following sample text:

Choose Shortcut Location:

-----

\*The installer creates shortcuts to BEA components, samples, and tools.  
\*As a user with administrative privileges, you can specify where these  
\*shortcuts are created.

->1|"All Users" Start menu folder> (recommended)  
|If a user without administrative privileges uses the BEA  
|Configuration Wizard in this installation to create domains, the user  
|may have to create Start menu shortcuts manually. Refer to the  
|documentation for more information.

2|Local user's Start Menu folder  
|Select this option if you need to ensure that other profiles  
|registered on this machine will not have access to these shortcuts.

Enter index number to select OR [Exit][Previous][Next]>

Do one of the following:



- Type 1 or press Enter to create Start menu shortcuts in the All Users folder. This provides all users registered on the machine with access to the installed software. However, only users with Administrator privileges can create shortcuts in the All Users folder. Therefore, if a user without Administrator privileges uses the Configuration Wizard to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired.
- Type 2 to create shortcuts in your local user's Start menu folder. If you do so, other users registered on this machine will not have access to the Start menu entries for this installation.

You are prompted to confirm your selection, as shown in the following text:

Choose Shortcut Location:

-----

\*The installer creates shortcuts to BEA components, samples, and tools.  
 \*As a user with administrative privileges, you can specify where these  
 \*shortcuts are created.

```
->1|"All Users" Start menu folder> (recommended)
 |If a user without administrative privileges uses the BEA
 |Configuration Wizard in this installation to create domains, the
 |user may have to create Start menu shortcuts manually. Refer to
 |the documentation for more information.
```

```
2|Go back to the previous screen and make another choice.
```

Enter index number to select OR [Exit][Previous][Next]>

Verify that your entry is correct, then type 1 or press Enter to proceed with the installation. Otherwise, type 2 to return to the previous panel, where you can modify your entry.

6. Verify that your installation details are correct, then type `next` (or `n`, for short) or press Enter to proceed with the installation. Otherwise, type `previous` (or `p`, for short) to return to the previous panel, where you can modify your installation choices.

Review Installation Details:

-----

```
* BEA Home: C:\beahome2
* Product Directory: C:\beahome2\realtime20
* WebLogic Home c:\beahome2\weblogic100
* Installation Component List:
 - Real Time
 - Real Time Template
```

**Note:** The “Real Time Template” is only installed when WebLogic Real Time is installed as an add-on component to an existing WebLogic Server installation in the selected BEA Home directory, as indicated in this sample by the `WebLogic Home` directory.

After you have verified your selection, the installation program begins copying the components you specified to your system.

When the installation is complete, the Installation Complete panel is displayed.

7. Press Enter or type `Exit` to exit the installation program.

## What's Next?

For additional post-installation information, such as understanding the product directory structure, see [Chapter 7, “Post-Installation Information.”](#)

For specific information about your software release, see the appropriate release notes:

- The features and capabilities of WebLogic Real Time, see *Introduction to WebLogic Real Time* at [http://e-docs.bea.com/wlrt/docs20/intro\\_wlrt/index.html](http://e-docs.bea.com/wlrt/docs20/intro_wlrt/index.html)
- The features and capabilities of BEA JRockit, see *Introduction to JRockit JDK* at <http://e-docs.bea.com/jrockit/geninfo/genintro/index.html>
- Operating systems and hardware supported by your software, see “WebLogic Real Time 2.0 Supported Configurations” at [http://e-docs.bea.com/wlrt/docs20/intro\\_wlrt/intro/intro.html#wlrt\\_supported\\_configs](http://e-docs.bea.com/wlrt/docs20/intro_wlrt/intro/intro.html#wlrt_supported_configs)
- The features and capabilities of WebLogic Server, see *Introduction to WebLogic Server and WebLogic Express* at <http://e-docs.bea.com/wls/docs100/intro/index.html>

# Running the Installation Program in Silent Mode

The following sections describe how to run the installation program in silent mode:

- [What Is Silent-Mode Installation?](#)
- [Using Silent-Mode Installation: Main Steps](#)
- [Creating a silent.xml File for Silent-Mode Installation](#)
- [Sample silent.xml File for Silent-Mode Installation](#)
- [Returning Exit Codes to the Console](#)
- [What's Next?](#)

## What Is Silent-Mode Installation?

Silent-mode installation is a way of setting installation configurations only once and then using those configurations to duplicate the installation on many machines. During installation in silent mode, the installation program reads the settings for your configuration from an XML file that you create prior to beginning the installation. The installation program does not display any configuration options during the installation process. Silent-mode installation works on both Windows and Unix systems. Using silent-mode installation implies that you consent to the BEA License Agreement. You neither see a copy of the BEA Software License Agreement nor have any means of accepting the terms of the agreement.

The instructions in this section are based on the assumption that you have already acquired the installation program, either on CD or from the BEA Web site. For more information, see [“Product Distribution Methods” on page 1-4](#).

## Using Silent-Mode Installation: Main Steps

The silent-mode installation process has two primary steps:

1. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode installation. For example, values for the BEA Home directory, the product directory, and the components to be installed are supplied in a `silent.xml` file.

For a detailed procedure, see [“Creating a silent.xml File for Silent-Mode Installation” on page 5-3](#). For a sample `silent.xml` file, see [“Sample silent.xml File for Silent-Mode Installation” on page 5-4](#).

2. Start the silent-mode installation process using the values specified in the `silent.xml` file.

For details on starting the installation in silent mode, see [Chapter 2, “Starting the Installation Program.”](#)

## Important Considerations for Silent-Mode Installation

When you are performing an installation in silent mode, keep in mind the following considerations:

- Silent-mode installation requires the same amount of temporary disk space and uses the same temporary storage directories as a standard installation. For more information, see [“Temporary Disk Space Requirements” on page 1-6](#). The installation program does not alert you if there is not enough space in the temporary directory.
- A silent-mode installation takes the same amount of time as a standard installation. At the beginning of a silent-mode installation, an initial installation program window or message is displayed briefly, indicating that the installation has started. No messages are displayed to indicate that the installation is in progress or has completed successfully.
- Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, we recommend that you create a log file when you start the installation. For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

- The XML definition (`<?xml version="1.0" encoding="UTF-8"?>`) must be at the very beginning of the `silent.xml` file. There cannot be any spaces or line breaks before the XML definition.
- You cannot reinstall any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install WebLogic Server during one installation, and AquaLogic Service Bus during a separate installation. However, to reinstall the same version of one of the products, you must first uninstall the previously installed instance of it, as described in [Chapter 8, “Uninstalling the Software,”](#) or install the new instance in another location.

## Creating a silent.xml File for Silent-Mode Installation

When you install your WebLogic Real Time in silent mode, the installation program uses an XML file (`silent.xml`) to determine which installation options should be implemented. Therefore, before you can run the installation program in silent mode, you must first create a `silent.xml` file in which you specify the installation options that you want to have invoked.

**Note:** Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, we recommend that you create a log file when you start the installation.

To create a `silent.xml` file for use in the silent-mode installation process, follow these steps:

1. In a supported browser, display the sample `silent.xml` file for silent-mode installation. The sample file is available later in this chapter. See [“Sample silent.xml File for Silent-Mode Installation”](#) on page 5-4.
2. Save the sample XML file, with the name `silent.xml`, in the same directory that contains the installation program.

**Note:** The XML definition (`<?xml version="1.0" encoding="UTF-8"?>`) must be at the very beginning of the `silent.xml` file. There cannot be any spaces or line breaks before the XML definition.

3. In the `silent.xml` file that you saved on your system, edit the values for the keywords shown in [Table 5-1](#) to reflect your configuration.

**Note:** You must follow XML guidelines for characters when modifying values. That is, you cannot use characters reserved for use in XML, such as `<`, `>`, `[`, and `]`.

**Table 5-1 Values for the silent.xml File**

| For this data-value name . . .       | Enter the following value . . .                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BEAHOME                              | The full pathname for the BEA Home directory of your choice. For details about the BEA Home directory, see <a href="#">“Choosing a BEA Home Directory” on page 1-9</a> .                                                                                                                                                                                                                                                                          |
| USER_INSTALL_DIR                     | The full pathname for the directory where you want to install your WebLogic Real Time software. For details, see <a href="#">“Choosing a Product Installation Directory” on page 1-11</a> .                                                                                                                                                                                                                                                       |
| INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER | <ul style="list-style-type: none"> <li>• true, or yes, to create the shortcuts in the All Users folder. The default is true.</li> <li>• false, or no, to create the shortcuts in the local users folder.</li> </ul> <p>The user performing the installation must have Administrator privileges to install the Start menu shortcuts in the All Users folder. For more information, see <a href="#">“Administrator Privileges” on page 1-7</a>.</p> |

## Sample silent.xml File for Silent-Mode Installation

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Silent installer option: -mode=silent -silent_xml=C:\bea\silent.xml -->

<!-- Specify values for each data-value name as follows:

 BEAHOME Complete pathname to the BEA Home directory that
 will contain this installation.

 USER_INSTALL_DIR Complete pathname to the product installation
 directory in which to install the software.

 INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER
 The Windows Start menu folder in which you want the
 Start menu shortcuts created.
 The user performing the installation must have
 Administrator privileges to install the shortcuts
 in the All Users folder.
 Possible values:
 true/yes The shortcuts are created in
 the All Users folder (default)
 false/no The shortcuts are created in
 the local user's folder

 See the Installation Guide for more information. -->
```

```
<bea-installer>
 <input-fields>
 <data-value name="BEAHOME" value="C:\bea" />
 <data-value name="USER_INSTALL_DIR" value="C:\bea\realtime20" />
 <data-value name="INSTALL_SHORTCUT_IN_ALL_USERS_FOLDER" value="yes"/>
 </input-fields>
</bea-installer>
```

# Returning Exit Codes to the Console

When run in silent mode, the installation program generates exit codes that indicate the success or failure of the installation. These exit codes are shown in the following table.

Table 5-2 Exit Codes

Code	Description
0	Installation completed successfully
-1	Installation failed due to a fatal error
-2	Installation failed due to an internal XML parsing error

If you are launching the silent-mode installation process from a script, you can choose to have these exit codes displayed on the console. [Listing 5-1](#) provides a sample command file that invokes the installation program in silent mode and echoes the exit codes to the console from which the script is executed.

Listing 5-1 Sample Command File Displaying Silent-Mode Exit Codes

```
rem Execute the installer in silent mode
@echo off
realtime20_jdk1.5.0_win32.exe -mode=silent
-silent_xml=C:\downloads\silent.xml -log=C:\logs\products_silent.log

@rem Return an exit code to indicate success or failure of installation
set exit_code=%ERRORLEVEL%

@echo.
@echo Exitcode=%exit_code%
```

```
@echo.
@echo Exit Code Key
@echo -----
@echo 0=Installation completed successfully
@echo -1=Installation failed due to a fatal error
@echo -2=Installation failed due to an internal XML parsing error
@echo.
```

---

## What's Next?

For additional post-installation information, such as understanding the product directory structure, see [Chapter 7, “Post-Installation Information.”](#)

For specific information about your software release, see the appropriate release notes:

- The features and capabilities of WebLogic Real Time, see *Introduction to WebLogic Real Time* at [http://e-docs.bea.com/wlrt/docs20/intro\\_wlrt/index.html](http://e-docs.bea.com/wlrt/docs20/intro_wlrt/index.html)
- The features and capabilities of BEA JRockit, see *Introduction to JRockit JDK* at <http://e-docs.bea.com/jrockit/geninfo/genintro/index.html>
- Operating systems and hardware supported by your software, see “WebLogic Real Time 2.0 Supported Configurations” at [http://e-docs.bea.com/wlrt/docs20/intro\\_wlrt/intro/intro.html#wlrt\\_supported\\_configs](http://e-docs.bea.com/wlrt/docs20/intro_wlrt/intro/intro.html#wlrt_supported_configs)
- The features and capabilities of WebLogic Server, see *Introduction to WebLogic Server and WebLogic Express* at <http://e-docs.bea.com/wls/docs100/intro/index.html>



# Installing and Updating License Files

Your WebLogic Real Time software cannot be used without a valid license. When you install your software, the installation program installs an expiring production license (`license.bea`) into the `BEA_HOME/jrockit-realtime20_XXX/jre/` directory, to allow you to start using the product immediately.

The following sections explain how to acquire, install, and update your product licenses:

- [About BEA Product Licenses](#)
- [Reasons to Update Your WebLogic Real Time License](#)
- [Manually Updating Your BEA JRockit License](#)
- [Upgrading Licenses from Previous Software Releases](#)

## About BEA Product Licenses

BEA products use an XML-format license file called `license.bea`. In WebLogic Server environments, this license file is stored in the BEA Home directory and is used for the BEA products installed in that directory. Your BEA software checks this file at run time to determine which product components you are authorized to use.

For WebLogic Real Time, access to the JRockit Deterministic GC option and JRA tool require an additional license key in the `license.bea` file in the JRockit `/jre` directory. For instructions on updating this license, see [“Manually Updating Your BEA JRockit License” on page 6-3](#).

**Note:** See the End-User License Agreement for specific license terms and conditions.

When you install WebLogic Real Time, an expiring production license file (`license.bea`) is installed on your system. By default, your software uses the evaluation production license installed with the product so that you can start using it immediately.

The technical restrictions that WebLogic Real Time production license file imposes are:

- Can be used in full-scale production environments.
- May restrict functionality to the software components that you have purchased.
- Enables you to run your software on a single machine, even if it is running multiple instances of WebLogic Server
- Permits client connections from an unlimited number of IP addresses.
- Must be purchased separately. For information about purchasing a production license, contact your sales representative or visit the BEA corporate Web site at <http://www.bea.com>.
- Is tied to the IP address of the machine. A production license can be used only on a machine with the same IP address that is specified in the license file.

**Note:** The `license.bea` file conforms to the XML grammar definition. The XML definition (`<?xml version="1.0" encoding="UTF-8"?>`) must be at the very beginning of the `license.bea` file. There cannot be any spaces or line breaks before the XML definition.

## Reasons to Update Your WebLogic Real Time License

When you install WebLogic Real Time, the installation program generates an expiring 60-day evaluation `license.bea` file for use with the software and installs it in the `BEA_HOME/jrockit-realttime20_XXX/jre/` directory.

In some cases, however, you must update the `license.bea` file separately, independent of the installation process. For example, you must update your license file if at least one of the following is true:

- You purchase a product for production use and you receive a production license to replace your evaluation license.
- You want to upgrade production systems to a new release of the software. After installing the current release of the software, you must upgrade your license to the current version. To do so, see “[Upgrading Licenses from Previous Software Releases](#)” on page 6-4.

- You purchase a new release of a product you are already using in production and you want to use both the old and the new releases in production on the same system.
- You purchase additional WebLogic Real Time software with production licenses, and you want to add the production licenses for the new software to the production licenses for software already in production use on your system.
- You want to consolidate existing production licenses for different component products onto a single machine.
- You want to transfer existing production licenses from one machine to another machine with a different IP address.

In each of these cases, you will receive a new license file from BEA, the contents of which must be included in the `license.bea` file in the `BEA_HOME/jrockit-realtime20_XXX/jre/` directory.

## Manually Updating Your BEA JRockit License

To allow you to start using the product immediately, the installers installs an evaluation JRockit R27.3 production license (`license.bea`) with Deterministic GC and JRA keys, into the `BEA_HOME/jrockit-realtime20_XXX/jre/` directory. However, after 60 days, this evaluation license must be replaced with non-expiring JRockit R27.3 production license.

These steps explain how to update the evaluation JRockit license file with a non-expiring JRockit R27.3 production license:

1. Contact BEA Order Fulfillment and request a production license upgrade.
2. To install the production JRockit Deterministic GC and JRA tool license, simply copy it to:  
`BEA_HOME/jrockit-realtime20_XXX/jre/`  
**WARNING:** If you already have a JRockit Mission Control license, you should make a backup copy before overwriting it with the Deterministic GC and JRA tool license.
3. The name of the license should be `license.bea`, thus, the full path to the license should be:  
`BEA_HOME/jrockit-realtime20_XXX/jre/license.bea`
4. To enable the Deterministic GC option, you can:
  - For WebLogic Server domains, either:
    - Start the server with the `-Xgcprio:deterministic` option in the startup script.

- Use Start→BEA Home→Tools→Configuration Wizard to create a WebLogic domain with the Deterministic GC enabled.
- For standalone Java applications,
  - Enter the `-Xgcprio:deterministic` option from a Java command line.
  - Use the sample startup scripts, `startRealTime (.cmd/.sh)`, to see how to start BEA JRockit with Deterministic GC enabled.

**Note:** Follow steps 2-4 when updating the BEA JRockit license with either a WebLogic Real Time 2.0 CD-ROM kit evaluation production license or a WebLogic Real Time 2.0 non-expiring production license obtained from BEA.

## Upgrading Licenses from Previous Software Releases

The format of the `license.bea` file changes with each release of WebLogic Real Time software. To upgrade a `license.bea` file from a previous release to a license for the current release, complete the following steps:

1. Log in to the BEA eLicense Web site at <http://elicense.bea.com>.

**Note:** You need a BEA eLicense account to log in to this Web site. If you do *not* have a BEA eLicense account, click the Register link on the Customer Support site to register for one.

2. In the left navigation area of the Web page, click Upgrade/Downgrade and follow the instructions on the page. If the license you want to upgrade is not listed, click the Add a Missing License link. The BEA Licensing team will research the missing license for you.

You will receive an upgraded license file through e-mail. To update the `license.bea` file on your system, see “[Manually Updating Your BEA JRockit License](#)” on page 6-3.

# Post-Installation Information

This section covers the following topics:

- [Creating a New WebLogic Domain for WebLogic Real Time](#)
- [Understanding the Windows Shortcuts](#)
- [Understanding the Product Directory Structure](#)

## Creating a New WebLogic Domain for WebLogic Real Time

Before you can develop and run WebLogic-based applications with WebLogic Real Time, you must first create a domain. The WebLogic Configuration Wizard guides you through the process of creating a new domain quickly and easily, by using the WebLogic domain configuration template (`wl-realtime.jar`) to create a domain with deterministic garbage collection enabled.

- For WebLogic Server 10.0, see [Creating WebLogic Domains Using the Configuration Wizard](http://e-docs.bea.com/common/docs100/configwiz/intro.html) at <http://e-docs.bea.com/common/docs100/configwiz/intro.html>
- For WebLogic Server 8.1, see [Creating and Configuring Domains Using the Configuration Wizard](http://e-docs.bea.com/wls/docs81/adminguide/createdomain.html) at <http://e-docs.bea.com/wls/docs81/adminguide/createdomain.html>

## Understanding the Windows Shortcuts

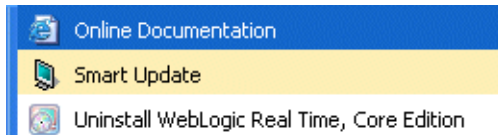
When you install your BEA Products software on a Windows system, the installation program automatically creates shortcut entries on the Start Menu.

**Note:** If the user performing the installation has Administrator privileges, the shortcut entries can be created in the All Users Start menu folder or in the user's local Start menu folder. For more information, see [“Administrator Privileges” on page 1-7](#).

Options on the Start Menu vary, according to the components you choose to install.

The BEA Products folder (Start→Programs→BEA Products) contains the shortcut files shown in the following figure.

**Figure 7-1 BEA Products Start Menu**



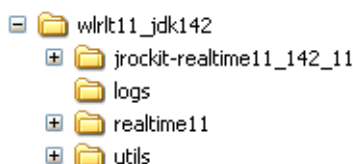
- *Online Documentation*—provides a link to the online documentation on the e-docs Web site.
- *Smart Update*—launches the Smart Update program, which checks for any updates available for installed BEA products, and installs the updates as required.
- *Uninstall BEA Products*—launches the uninstallation program. For more information, see [Chapter 8, “Uninstalling the Software.”](#)

## Understanding the Product Directory Structure

During the product installation, you are asked to select or create a BEA Home directory and a product installation directory. For information about the BEA Home directory, see [“Choosing a BEA Home Directory” on page 1-9](#). For a complete installation, the installation program creates a dedicated directory structure for the BEA Products software. It may or may not reside in the BEA Home directory.

The following diagram represents the directory tree structure for a complete product installation of the JRockit 1.4.2 JDK in standalone mode.

**Figure 7-2 BEA Products Start Menu**



[Table 7-1](#) describes the contents of each directory.

**Table 7-1 Product Installation Directory Structure**

This directory . . .	Contains . . .
<code>jrockit-realtime20_xxx</code> directory	Contains the software for the BEA JRockit JDK (R27.3) installed with WebLogic Real Time. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications. In this directory name, <code>xxx</code> indicates the version of the JRockit JDK installed on your system, such as <code>jrockit-realtime20_150_11</code> .
<code>logs</code> directory	Contains a history file of installation and uninstallation for the BEA Home directory.
<code>realtime20</code>	Folders containing the sample startup scripts that show how to enable deterministic garbage collection and for uninstalling WebLogic Real Time.
<code>utils</code> directory	Contains utilities that are used to support the installation of all BEA products installed in this BEA Home directory. The <code>utils.jar</code> file contains code that supports the <code>UpdateLicense</code> utility.

## Post-Installation Information



# Uninstalling the Software

The following sections provide procedures for uninstalling the software:

- [About the Uninstallation Program](#)
- [Uninstalling Your Software in Graphical Mode](#)
- [Uninstalling Your Software in Console Mode](#)
- [Uninstalling Your Software in Silent Mode](#)
- [Reinstalling Your Software](#)

## About the Uninstallation Program

The following sections describe how to uninstall your BEA software on Windows and UNIX systems. You can uninstall the software using graphical, console, or silent mode. To run the graphical-mode uninstallation program, your console must support a Java-based GUI. If the uninstallation program determines that your system cannot support a Java-based GUI, it automatically starts running in console mode.

You can uninstall individual components of your product distribution, or the entire installation. Dependency checking in the uninstaller ensures that the appropriate components are uninstalled.

The uninstallation program does not remove the BEA Home directory associated with the installation, the JDK, or any user-created domains. Only the components that were installed by the installation program can be removed. If you choose to uninstall the entire installation, the

uninstallation program also removes the product directory associated with the installation *unless* one of the following is true:

- The product directory contains user-created configuration or application files—*the uninstallation program does not delete user-created configuration files, application files, or domains.*
- The complete installation was not uninstalled. If an individual component is uninstalled, only the installation directory for that component is removed; the installation directories for other components are unaffected.
- The uninstallation program was invoked from within the product directory structure—specifically, from within the `uninstaller` directory.

## Uninstalling Your Software in Graphical Mode

Use the following procedure to uninstall the complete product installation, or individual components, in graphical mode:

1. Shut down any servers that are running. If any of these servers is configured as a Windows service, you should stop the service(s) before uninstalling the software.
2. Start the uninstallation program as described in [Table 8-1](#).

**Table 8-1 Starting the Uninstallation Program in Graphical Mode**

To start the uninstallation program on this platform . . .	Perform the following steps . . .
Windows	<ol style="list-style-type: none"> <li>1. From the Windows Start menu, choose Start→Programs→BEA Products→Uninstall BEA Products. The BEA Products Uninstaller Welcome window is displayed.</li> <li>2. Proceed to step 3.</li> </ol>
UNIX	<ol style="list-style-type: none"> <li>1. Go to the following directory: <i>WLRT_HOME</i>/uninstall Here <i>WLRT_HOME</i> represents the directory in which you installed your WebLogic Real Time software.</li> <li>2. Enter <code>uninstall.sh</code> at the prompt. The BEA Products Uninstaller Welcome window is displayed.</li> </ol> <p><b>Note:</b> If your system supports a graphical user interface, the uninstallation program starts in graphical mode. If your system does not support a graphical user interface, the uninstallation program starts in console mode. If console mode is started, see <a href="#">“Uninstalling Your Software in Console Mode” on page 8-3</a> for instructions.</p>

3. Click **Next** to start the uninstall program.

The Choose Components window is displayed.

4. Select the components to uninstall by selecting or clearing the appropriate check boxes. Then click **Next**. By default, all installed components are selected, indicating that they will be removed.
5. Optionally, click **Details** to view the log file that lists the uninstalled components.
6. Click **Done** in the **Uninstalling BEA Products** window to exit the uninstallation program.

## Uninstalling Your Software in Console Mode

Use the following procedure to uninstall the complete product installation, or individual components, using the command-line interface:

1. Shut down any servers that are running. If any of these servers is configured as a Windows service, you should stop the service(s) before uninstalling the software.
2. Start the uninstallation program as described in [Table 8-2](#).

**Table 8-2 Starting the Uninstallation Program in Console Mode**

To start the uninstallation program on this platform . . .	Perform the following steps . . .
Windows	<ol style="list-style-type: none"><li>1. Open a Command Prompt window and go to the following directory: <code>WLRT_HOME\uninstall</code> Here <code>WLRT_HOME</code> represents the directory in which you installed your WebLogic Real Time software, typically <code>C:\bea\realtime20</code>.</li><li>2. Enter the following command at the prompt: <code>uninstall -mode=console</code> The Welcome text is displayed.</li></ol>
UNIX	<ol style="list-style-type: none"><li>1. Go to the following directory: <code>WLRT_HOME/uninstall</code> Here <code>WLRT_HOME</code> represents the directory in which you installed WebLogic Server.</li><li>2. At the prompt, enter the following command: <code>sh uninstall.sh -mode=console</code> The Welcome text is displayed.</li></ol>

3. Press Enter or type `next` to proceed to the next panel of the uninstallation program.  
**Note:** Instead of typing complete words when you want to enter `[Exit]`, `[Previous]`, and `[Next]`, you can use the following one-letter shortcuts: `x`, `p`, and `n`, respectively.

The Choose Components to uninstall panel is displayed.

4. Select the components you want to uninstall. The available components are displayed as follows:

```
Check the BEA Products components you want to uninstall.

Release 2.0.0.0
+----Real Time [1] v
 +----Real Time [2.0] v
```

Enter number exactly as it appears in brackets to toggle selection OR  
[Exit] [Previous] [Next]>

By default, all installed components are selected, indicating that they will be removed.

**Note:** For WebLogic Real Time, all components must be uninstalled and so cannot be deselected.

5. Press Enter or type `next` to proceed with the uninstallation process.
6. When the uninstallation process is complete, press Enter or type `exit` to complete the uninstallation and exit the uninstallation program.

## Uninstalling Your Software in Silent Mode

When you uninstall your BEA Products software in silent mode, the complete installation of your software is uninstalled.

When you run the uninstallation program in silent mode, it leaves behind the same files and directories as when you run the uninstallation program in graphical and console modes, including:

- The `WLRT_HOME` directory in which you installed your WebLogic Real Time software, typically `C:\bea\realtime20`.
- The BEA JRockit JDK directory, typically either:
  - `c:\bea\jrockit-realtime20_150_11`
  - `c:\bea\jrockit-realtime20_142_14`
- Any other file created or modified after your BEA software was installed

You can manually delete these files and directories.

Although you can use silent-mode uninstallation to manually uninstall your software, silent-mode uninstall is intended for use in scripts. You can adapt the steps in [Table 8-3](#) for use in scripts.

Use the following procedure to uninstall your BEA Products software in silent mode:

1. Shut down any servers that are running. If you configured any of the servers as a Windows service, you must stop the service(s) before uninstalling the software.
2. Start the uninstallation program as described in [Table 8-3](#).

Table 8-3 Starting the Uninstallation Program in Silent Mode

To start the uninstallation program on this platform . . .	Perform the following steps . . .
Windows	<div>1. Open a Command Prompt window and go to the following directory: <code>WLRT_HOME\uninstall</code> Here <i>WLRT_HOME</i> represents the directory in which you installed your WebLogic Real Time software, typically <code>C:\bea\realtime20</code>.</div> <div>2. Enter the following command at the prompt: <code>uninstall -mode=silent</code></div>
UNIX	<div>1. Go to the following directory: <code>WLRT_HOME/uninstall</code> Here <i>WLRT_HOME</i> represents the directory in which you installed WebLogic Real Time.</div> <div>2. At the prompt, enter the following command: <code>sh uninstall.sh -mode=silent</code></div>

**Notes:** When you run the uninstallation program in silent mode, no messages are displayed indicating the uninstallation is in progress or has completed successfully, even if errors are encountered.

You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
uninstall -mode=silent -log=C:\logs\weblogic_uninstall.log
```

For more information, see [“Generating a Verbose Installation Log” on page 1-12](#).

# Reinstalling Your Software

You cannot reinstall the same version of any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install WebLogic Server during one installation, and AquaLogic Service Bus during a separate installation.

To reinstall the same version of one of the product components or the entire BEA Products distribution in the same location, you must first uninstall the previous installation.

If you try to install a complete copy of the BEA Products software in a BEA Home directory that already contains a complete installation, an error message is displayed. Click or type **OK** to return to the Choose BEA Home directory prompt.

At the prompt, choose one of the following options:

- To continue installing the software using a different BEA Home directory, select an existing BEA Home directory that does not contain a previous installation, or create a new BEA Home directory.
- Exit the installation program. If you want to reinstall your BEA Products software in the same BEA Home, you must uninstall the previous installation. You can invoke the uninstall program appropriate for your platform, as described in one of the following sections:
  - [“Uninstalling Your Software in Graphical Mode” on page 8-2](#)
  - [“Uninstalling Your Software in Console Mode” on page 8-3](#)
  - [“Uninstalling Your Software in Silent Mode” on page 8-5](#)

Then reinstall the software as described in [Chapter 2, “Starting the Installation Program.”](#)

## Uninstalling the Software