



BEA WebLogic Server Virtual Edition

Installation Guide

Version 9.2 v1.1
Revised: January 2008

Contents

1. Preparing for the Installation

Installation Overview and Roadmap	1-2
Installation Modes	1-2
Main Installation Steps	1-3
Planning Your Virtualized Installation	1-3
Verifying That Your Environment Supports WLS-VE	1-4
Determining Appropriate Applications for WLS-VE	1-4
Understanding Machine Roles	1-5
Using an NFS Share	1-5
Designing a File Storage Solution	1-6
Understanding the WLS-VE Storage Architecture	1-6
Storage Requirements	1-6
WLS-VE ISO Image Considerations	1-7
Planning System Capacity	1-8
Determine Physical Disk Space Requirements	1-8
Determine the Number of Physical Machines	1-9
Determine Physical Memory Requirements	1-9
Downloading WLS-VE	1-9
DVD Distribution	1-9
Windows and Linux Installers	1-10
Understanding WLS-VE Installation Directories	1-10
The BEA Home Directory	1-10

Sharing the BEA Home Directory on the Launcher Machine with Other BEA Products	1-11
Structure of the WLS-VE BEA Home Directory.	1-11
The WLS-VE Product Installation Directory	1-13
Structure of the WLS-VE Product Installation Directory	1-14
The Installation Directory for the WLS-VE ISO Image	1-14
The WLS-VE Windows Shortcuts	1-15

2. Installing the Software

Before You Start.	2-2
Specifying WLS-VE Directory Locations	2-2
Specifying Optional Startup Settings	2-2
Generating a Verbose Installation Log.	2-3
Specifying Temporary Disk Space.	2-3
Starting the Installation Program on Windows Platforms	2-5
Starting in Graphical Mode.	2-5
Starting in Console Mode	2-5
Starting the Installation Program on Linux Platforms	2-6
Starting in Graphical-Mode.	2-7
Starting in Console-Mode	2-7
Starting the Installation Program in Silent Mode.	2-8
Creating the silent.xml File	2-9
What's Next?	2-10

3. Post-Installation Information

Copying the WLS-VE ISO Image	3-2
Licensing	3-3
Downloading and Applying Patches	3-5
Run Smart Update on an Ordinary OS and Copy the Patches	3-5

Run Smart Update on a BEA Home on an NFS Share	3-5
WebLogic Server Service Packs	3-6
What's Next?	3-6

4. Uninstalling the Software

About the Uninstallation Program	5-2
Uninstalling Your Software in Graphical Mode.	5-2
Uninstalling Your Software in Console Mode	5-4
Deleting the ISO Image File	5-5
Reinstalling Your Software	5-6

Preparing for the Installation

The following sections describe actions to take before you run the installation program:

- [“Installation Overview and Roadmap” on page 1-2](#)
- [“Planning Your Virtualized Installation” on page 1-3](#)
- [“Downloading WLS-VE” on page 1-9](#)
- [“Understanding WLS-VE Installation Directories” on page 1-10](#)

Installation Overview and Roadmap

WebLogic Server Virtual Edition (WLS-VE) combines WLS with LiquidVM, a Java Virtual Machine (JVM) that works with hypervisor software and provides only the set of operating system (OS) features that WLS needs to offer its full range of services.

Before installing WLS-VE, you should familiarize yourself with the basic concepts of LiquidVM provided in [Understanding LiquidVM](#) in *WLS-VE Configuration and User Guide*.

Installation Modes

You can use the BEA Products installation program in one of 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 [“Starting in Graphical Mode” on page 2-5](#) for Windows platforms and [“Starting in Graphical-Mode” on page 2-7](#) for Linux platforms.
- *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 installation procedures, see [“Starting in Console Mode” on page 2-5](#) for Windows platforms and [“Starting in Console-Mode” on page 2-7](#) for Linux platforms.
- *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 installation procedures, see [“Starting the Installation Program in Silent Mode” on page 2-8](#).

Main Installation Steps

The following steps summarize the overall process for installing WLS-VE.

Table 1-1 Main Installation and Configuration Steps

Step	Description
1. Plan your virtualized installation	<p>Before you install WLS-VE, you need to:</p> <ul style="list-style-type: none"> • Ensure that your applications are suited for a virtualized environment. See “Determining Appropriate Applications for WLS-VE” on page 1-4. • Ensure that your environment meets the WLS-VE requirements. See “Planning Your Virtualized Installation” on page 1-3 • Design your WLS-VE solution and determine your file storage solution and capacity requirements. “Designing a File Storage Solution” on page 1-6 and “Planning System Capacity” on page 1-8. • Obtain the WLS-VE software from the BEA download center or on DVD. See “Downloading WLS-VE” on page 1-9.
2. Install the WLS-VE software	Install the software on the launcher machine, specifying the local disk drive on the launcher machine as the location for the BEA Home directory, as described in Chapter 2, “Installing the Software.”
3. Copy the ISO image to the ESX server	After you install WLS-VE, you must copy the ISO image containing the WLS classes and LiquidVM executables used to run WLS-VE from the launcher machine to the hypervisor host (VMware ESX server). See Chapter 3, “Post-Installation Information.”
4. Configure and administer WLS-VE	After you have installed the software and copied the ISO to the hypervisor host, you need to configure your environment, create WLS-VE instances, and upgrade the evaluation license to a production license. See the WLS-VE Configuration and User Guide , which provides details for configuring, using, and administering WLS-VE.

Planning Your Virtualized Installation

This section describes some aspects you should consider in planning your WLS-VE installation:

- [“Verifying That Your Environment Supports WLS-VE” on page 1-4](#)
- [“Determining Appropriate Applications for WLS-VE” on page 1-4](#)

- [“Understanding Machine Roles” on page 1-5](#)
- [“Using an NFS Share” on page 1-5](#)
- [“Designing a File Storage Solution” on page 1-6](#)
- [“Planning System Capacity” on page 1-8](#)

Verifying That Your Environment Supports WLS-VE

Before planning any WLS-VE 9.2 v1.1. implementation, you must verify that your environment has a supported configuration of hardware, operating system, application server, and database. See the [BEA Products Supported Configurations](#) documentation.

Note: LiquidVM itself is a 32-bit VM (meaning that it cannot have a Java heap larger than 4GB).

Determining Appropriate Applications for WLS-VE

For most applications, deploying and serving from WLS-VE is indistinguishable from WLS; that is, WLS-VE is no more CPU-intensive, memory-intensive, or network-intensive than WLS. On the other hand, certain applications will not perform as well in a virtualized environment as in a non-virtualized one. Consider the following factors in deciding whether using WLS-VE is appropriate for your applications:

- A key feature of WLS-VE is that it frees applications from the need for an operating system. Consequently, WLS-VE is solely focused on pure Java applications. If your application requires execution of any non-BEA native code in order to work, it will not work in a virtualized environment.
- Memory-intensive applications that need a full physical machine to themselves are not good candidates to virtualize. As a general rule, any application that requires more than 3.5 GB (roughly) of heap is not a good candidate for virtualization. This is because WLS-VE is currently designed to run on 32-bit systems, which have a maximum physical memory of 4 GB. Since Java needs some memory for its native code and generated Java code, a heap of more than 3.5 GB might not leave enough memory for those processes, resulting in out of memory exceptions and system failure.
- Applications that launch startup scripts or classes that attempt to start additional processes on the same machine, but outside the JVM (such as, a database, a Perl script, or monitoring software), will not work in a virtualized environment. For example, you cannot start a Perl script by invoking `System.exec` from your WLS.

- Applications that require a local GUI will not run on WLS-VE as it does not provide a platform for displaying a window. If you need to run a GUI-based program in conjunction with an application running on WLS-VE (for example, one of the BEA JRockit Mission Control tools), you must run it on a separate machine running a normal OS.

Understanding Machine Roles

Installing and using WLS-VE involves multiple machines. It is important to understand the roles and requirements of each.

- **Launcher machine** — The Windows or Linux machine on which you execute the WLS-VE installation program and initiate the creation of virtual machines on the VMWare ESX machine.
- **VMWare ESX machine** — The hypervisor machine with VMware installed and CPUs available for the creation of virtual machines. The LiquidVM launcher accesses the ESX server through the VirtualCenter.
- **VMWare VirtualCenter machine** — The primary controller for configuring and managing the virtual environment. Users can connect to the VirtualCenter server using the Virtual Infrastructure Client (VI Client).

For more detailed information, see [Configuration Overview and Roadmap](#) in the *WLS-VE Configuration and User Guide*.

Using an NFS Share

WLS-VE v1.1 provides a virtual local disk for each virtual machine, which removes the dependence on NFS and provides faster and more secure file transfers. The local disk can be mapped to a SAN attached to the ESX server. Each virtual machine contains a `/bea` directory on the local disk, which serves as the BEA Home directory for that machine.

However, if you prefer to use an NFS file server as the location for the BEA Home directory, refer to the [Creating and Sharing Directories](#) section in the *WLS-VE v1.0 Installation and Configuration Guide*.

Note: When using NFS, applications that use file stores extensively (or that frequently write files directly to the file system) could experience some performance degradation if you use a NFS file server for reading and writing files. Generally, input and output with a local disk is faster than with a file server.

Designing a File Storage Solution

Because of the importance of non-local storage to WLS-VE, there are some critical questions you need to address before you can successfully run WLS-VE:

- How will the application and data be stored?
- What sort of storage solution—or combination of storage solutions—will best support your version of WLS-VE?
- What affect does running on VMware have on how you configured your storage?

This section describes WLS-VE's requirements for storage and offers ideas for successfully implementing these solutions.

Understanding the WLS-VE Storage Architecture

The underlying implementation in VMware is a large file. To the virtual machine (LiquidVM), however, VMware's underlying storage architecture looks like a normal physical disk drive and, therefore, it performs the corresponding I/O instructions necessary to write to a physical disk drive. VMware detects these I/O instructions and transforms them into corresponding writes to the large file. Since the representation of the virtual disk is a file, writes to this file will eventually be stored somewhere on the physical storage. The location of this storage is under the control of the VMware administrator. Similar to a typical OS case, the administrator has three choices: the ESX machine's physical hard disk, a disk-partition on a SAN (best practice), or a large file on a NAS.

Storage Requirements

Due to its virtualized nature, the storage requirements for WLS-VE somewhat differ from those you need to address for a non-virtualized WLS. The basic requirement is accessibility of storage locations: for some of its data storage activities, WLS-VE requires exclusive access, while for other activities, it assumes that other processes might access the data (as in a standard file system).

Storage for Exclusive File Access

WLS-VE requires exclusive access to a storage system for the following activities:

- To access the WLS-VE ISO image that contains the LiquidVM executables and WLS classes.

Note: Because the ISO image is read-only, it can be stored on a SAN disk allowing multiple machines to have simultaneous access to the same ISO image without violating its exclusivity. See [“WLS-VE ISO Image Considerations” on page 1-7](#).

- To write internal, temporary files that are used to maintain runtime state, caches, etc.
- If you are using a virtual local disk, files that contain domain and application configuration data.

To store its exclusive data, WLS-VE needs to use the virtual disk that is made available by the hypervisor layer. Generally, a SAN implementation is optimal for WLS-VE because it usually performs at a higher level than a NAS due to NAS requiring a higher protocol overhead than a SAN. Moreover, it is more expensive to reference a file somewhere in a NAS’s potentially deep directory structure than it is to just access a certain block on a certain disk partition, as a SAN stores data. Finally, a SAN requires less state on the storage side than a NAS does.

Storage for Shared File Access

Optionally, you can use an NFS client for files that require or expect shared access; for example:

- Monitoring applications that want to read log files
- Files that contain domain and application configuration data

LiquidVM can access only (virtual) disk drives and (virtual) network cards, which are configured by the LiquidVM launcher when creating a WLS-VE instance.

Note: If you are using an NFS share, the communication between the NFS client and the NFS server is not secure. The NFS client authenticates itself to the NFS server by using user-provided credentials, but this traffic is not encrypted, which makes it vulnerable to security breaches. Please refer to [NFS Security Measures](#) section in the WLS-VE v1.0 *Installation and Configuration Guide* for details on how to work around this situation.

WLS-VE ISO Image Considerations

BEA recommends that you store the WLS-VE ISO image on a SAN. The ISO image is a CD drive that appears as a large file in VMware. It also differs from normal local disks because it is read-only. This implies that no one can modify it; therefore, multiple machines can have simultaneous access to the same ISO image without violating its exclusivity, and thereby reducing disk footprint.

Planning System Capacity

How much system capacity to plan for is greatly dependent on the applications you are running on WLS-VE. This section provides information that can help you make decisions about your minimal capacity requirements as they apply to WLS-VE. However, you will need to factor in the needs of your application to fully determine the appropriate amount of disk space, number of machines, and physical memory allocation.

- [Determine Physical Disk Space Requirements](#)
- [Determine the Number of Physical Machines](#)
- [Determine Physical Memory Requirements](#)

Determine Physical Disk Space Requirements

The amount of physical disk space that you need to configure on the ESX server depends upon the size of your application and the amount of data you anticipate processing. At a minimum, you need to provide enough disk space for writing images when hibernating an instance of WLS-VE, which is generally an amount equal to your Java heap plus some native memory (for a large application, 300MB should be a reasonable amount of native memory, but the amount of memory you should reserve is very workload dependent). In addition, you also need to plan for database requirements and other storage needs.

In addition, LiquidVM provides a virtual local disk for each virtual machine. The local disk can be mapped to a SAN disk attached to the ESX server. You specify the size of the disk by passing the `diskSize` parameter as a startup option to the LiquidVM launcher. By default, the size of the local disk is specified as 1GB (1024). BEA recommends that the amount of physical storage capacity, in MB, that you have available be equal to the size of the VM plus the size of the local disk. For instructions about specifying the local disk size, see [Using the Virtual Disk](#) in *WLS-VE Configuration and User Guide*.

If you are using an NFS share, be sure to reserve sufficient space for the domain on the NFS server. How much data the domain needs is very application-dependent. Before taking a server into production you should check the size of the domain in a development environment and make sure you have at least that much space left on the production server. Normally, the storage space requirements for most applications running on top of WebLogic Server are modest. The storage requirements for the domain are identical for normal WLS and WLS-VE.

Determine the Number of Physical Machines

Determining how many physical cores your implementation requires is based upon your actual system needs; that is, how many virtual CPUs does your environment require to handle your data load? By rule, you can only have one virtual CPU per logical core; for example, a hyperthreaded, dual core hardware can support four virtual CPUs or two virtual CPUs for each hyperthreaded core; were the cores not hyperthreaded, they would each support a single virtual CPU, or a total of two virtual CPUs on the hardware. Thus, if you believe you will need 50 virtual CPUs, you need to plan for 50 physical cores, in whatever combination is most appropriate for your budget and your physical layout.

Determine Physical Memory Requirements

Much like disk space requirements, physical memory requirements depend significantly on the applications you are running on the machine. Because WLS-VE is available only as a 32-bit application, the maximum amount of physical memory available to the virtual machine is 4 GB. Ideally, you should plan to allow enough heap space to run your application, without making it resort to swapping or paging during processing, plus some additional memory for native application code and generated Java code. If you don't allow enough space for Java to run, you will quickly encounter out of memory exceptions and system failure.

Downloading WLS-VE

You can download WebLogic Server Virtual Edition from the BEA Web site at <http://commerce.bea.com>.

DVD Distribution

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

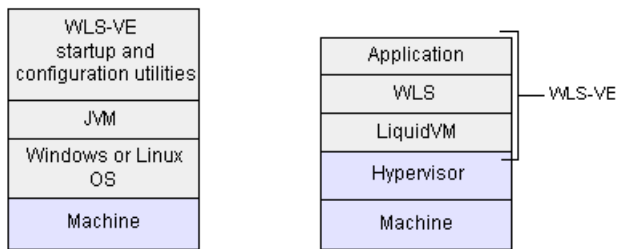
- DVDs containing the product software for Windows and Linux
- The following printed documents:
 - *BEA Software License and Limited Warranty* pamphlet
 - *Customer Support Quick Reference and Other Important Information* card
 - A flyer that provides a list of URLs for the online documentation for each product

Windows and Linux Installers

You can download an installer that runs on a Windows platform or one that runs on a Linux platform. The Windows installation program enables you to install WLS-VE, configure WLS domains, and configure and start WLS-VE appliances from a Windows machine. The Linux installation program enables you to complete these tasks from a Linux machine.

Regardless of which installer you download, WLS-VE always runs directly on a hypervisor platform (see [Figure 1-1](#)).

Figure 1-1 Utilities Run on OS, WLS-VE Runs on Hypervisor



Understanding WLS-VE Installation Directories

The following sections describe details about the WLS-VE installation program and the files and directories that the installer creates:

- [“The BEA Home Directory” on page 1-10](#)
- [“The WLS-VE Product Installation Directory” on page 1-13](#)
- [“The Installation Directory for the WLS-VE ISO Image” on page 1-14](#)
- [“The WLS-VE Windows Shortcuts” on page 1-15](#)

The BEA Home Directory

The BEA Home directory serves as a repository for your BEA license file and other files that facilitate any future upgrades or installation of patches. During installation of your BEA software, the WLS-VE installer prompts you to choose an existing BEA Home directory or specify a path to create a new one. If you already have a BEA Home directory (either on the local disk of the launcher machine or on an NFS server), you can choose the existing directory. If you choose to create a new directory, the installation program automatically creates it at the specified pathname.

When you run the WLS-VE installer on the launcher machine, by default, WLS-VE installs the software into a BEA Home directory on the local disk of the launcher machine. When you create a local disk on a virtual machine (VM) instance, a BEA Home directory that is local to the VM instance (/bea) is also created.

Note: Optionally, you can also create your BEA Home directory on an NFS file server that is accessible to the WLS-VE installer through an NFS mount. For instructions on using an NFS file server, see the [Creating and Sharing Directories](#) section in the WLS-VE v1.0 *Installation and Configuration Guide*.

If the BEA Home is not on an NFS share, to update the evaluation license to a production license or to install update patches on the VM instance, you first need to install them on the local disk of the launcher machine, and then copy them to the local disk of each VM. For more information, see [Copying a Production License to the Virtual Machine](#) in the *WLS-VE Configuration and User Guide* and “[Downloading and Applying Patches](#)” on page 3-5.

Note: The copy process is only necessary for installing update patches and production licenses. Non-expiring evaluation licenses are included in the WLS-VE ISO image on each WLS-VE instance.

Sharing the BEA Home Directory on the Launcher Machine with Other BEA Products

The BEA Home directory can be considered a *central support directory* for all the BEA products installed on your system. For example, if you use WLS, WLW, and WLS-VE, you can maintain a single BEA Home directory for all products on the launcher machine. However, each WLS-VE instance has its own BEA Home directory, /bea, by default.

Structure of the WLS-VE BEA Home Directory

[Table 1-2](#) describes the files and directories in the BEA Home directory.

Table 1-2 BEA Home Directory Description

Component	Description
jrockit<version> directory	Contains the software for the BEA JRockit JDK installed with your software. The JDK provides the Java run-time environment (JRE) for the WLS-VE configuration, startup, licensing, and installation utilities.
logs directory	Contains a history file of installation and uninstallation for the BEA Home directory.

Table 1-2 BEA Home Directory Description (Continued)

Component	Description
modules directory	Contains WLS components that are referenced by the <code>weblogic.jar</code> archive file, but which are included in separate modules. The <code>weblogic.jar</code> archive refers to the components in this directory from its manifest classpath.
tools directory	Contains the LiquidVM Configuration Wizard and WLS-VE startup utilities.
utils directory	Contains installation utilities. The <code>utils.jar</code> file contains code that supports the <code>UpdateLicense</code> utility.
<code>weblogic<version></code>	Contains the BEA WebLogic Configuration Wizard and Template Builder, the Domain Upgrade Wizard, the WebLogic Scripting Tool, and other files that are used to support the WLS-VE configuration, startup, licensing, and installation utilities.
<code>license.bea</code> file	<p>An XML file that contains the license keys for all the BEA products installed in the BEA Home directory. Licenses are release specific. You must have a valid license file for the version of BEA products you are using.</p> <p>When you install WLS-VE, a non-expiring evaluation license file is installed on your system, and copied into the ISO image. By default, WLS-VE uses the evaluation license so that you can start using the software immediately. To use your software in a full-scale production environment, you must purchase a production license.</p> <p>For more information, see “Licensing” on page 3-3.</p> <p>Note: Do not edit the <code>license.bea</code> file manually. Doing so may cause operating problems for the currently installed BEA products, or result in problems later when BEA products are installed for maintenance upgrades.</p>

Table 1-2 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, patch or 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/docs92/isv/detect.html</p>
patch_weblogicNNN	This directory is created when BEA patches are installed after running Smart Update, where <i>NNN</i> specifies the WLS release (e.g., 922 for 9.2 MP2).

The WLS-VE Product Installation Directory

The product installation directory for WLS-VE contains the BEA WebLogic Configuration Wizard and Template Builder, the Domain Upgrade Wizard, and the WebLogic Scripting Tool.

During installation of your BEA software, the WLS-VE installer prompts you to choose a product installation directory. Typically, you can locate this directory below the BEA Home directory, but you can specify any name and location on your system for your product installation directory; there is no requirement that you name the directory weblogic92 or create it under the BEA Home directory.

If you are using an NFS file server, you can also locate the product directory outside the BEA Home directory as long as it is accessible to the WLS-VE installation, configuration, and startup utilities through an NFS or SMB mount. For more information on using NFS shares, refer to the [Creating and Sharing Directories](#) section in the *WLS-VE v1.0 Installation and Configuration Guide*.

Structure of the WLS-VE Product Installation Directory

Table 1-3 describes the files and directories in the WLS-VE product installation directory. By default, the directory itself is named `weblogic<version>`.

Table 1-3 Product Installation Directory Structure

This directory . . .	Contains . . .
beehive	Files used to support the BEA utilities in the product installation directory.
common	Scripts used for setting environment attributes for the utilities and template JAR files used by the Configuration Wizard and WLST offline when creating domains.
javelin	A 100% Java/JSP compiler that is used by the component products for compiling .java and other source files generated by development tools.
platform	Files used to support the BEA utilities in product installation directory.
server	<p>Files used to support the BEA utilities in product installation directory.</p> <p>Note: This directory contains <code>weblogic.jar</code> because the JAR file contains classes that are used to upgrade domains and to assist with the installation of patches. While <code>weblogic.jar</code> also contains WLS classes, your WLS-VE license does not support running these WLS classes (instead, a WLS-VE license enables you to run the WLS-VE classes that are in the ISO image file).</p>
uninstall	Code required to uninstall the BEA Products software
workshop	Files used to support the BEA utilities in product installation directory.

The Installation Directory for the WLS-VE ISO Image

The WLS-VE ISO image (`wlsve922.iso`) contains the LiquidVM and WebLogic Server classes that you use to host your business applications. Each physical machine that hosts an instance of WLS-VE needs access to this ISO image file.

During installation of your BEA software, the installer prompts you to store the ISO image in the `/wlsve_iso` directory on the local disk of the launcher machine, but you can specify any directory you wish. After the installation process, you must copy the ISO file to the physical local disk of each WLS-VE host machine, or to a SAN or NAS that can be accessed from each WLS-VE host machine. See [Chapter 3, “Post-Installation Information.”](#)

The WLS-VE Windows Shortcuts

When you install your BEA Products software as an Administrator on a Windows system, the installation program offers to create shortcut entries on the Start Menu. You can select from the following options:

- **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. Press `ALT+Y` on the keyboard to select the All Users Start Menu.

- **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. Press `ALT+N` on the keyboard to select the Local User’s start menu.

Note: The installer offers to create shortcuts only if you are performing an initial installation. The BEA Products folder that the WLS-VE installer creates (**Start > All Programs > BEA Products**) contains the following shortcut files:

- *Tools*—contains shortcuts for the following utilities:
 - *Configuration Wizard*—Creates new WLS-VE domains or updates existing ones. See [Creating WebLogic Domains Using the Configuration Wizard](#).
 - *Domain Template Builder*—Guides you through the process of creating custom domain and extension templates based on existing domains. See [Creating Templates Using the Domain Template Builder](#).
 - *Domain Upgrade Wizard*—Upgrades a domain from a previous release of WLS (such as WLS 8.1) to WLS-VE 9.2. You do not need to upgrade domains that are currently running on WLS 9.2. See [“Upgrading and Promoting Domains”](#) in *WLS-VE Configuration and User Guide*.

- *LiquidVM Configuration Wizard*—Provides the WLS-VE startup utility with the information it needs to connect to VMware Virtual Center and an ESX Server host. See [Configuring LiquidVM Connection Parameters](#) in *WLS-VE Configuration and User Guide*.
 - *WebLogic Scripting Tool*—A command-line scripting interface that system administrators and operators use to monitor and manage WLS-VE instances and domains. See [WebLogic Scripting Tool](#).
- *Online Documentation*—provides a link to the [WLS-VE v1.1](#) 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. See [Installing Maintenance Updates and Service Packs](#).
- *Uninstall BEA Products*—launches the uninstallation program. For more information, see [Chapter 4, “Uninstalling the Software.”](#)

Installing the Software

This section covers the following topics:

- [“Before You Start” on page 2-2](#)
- [“Starting the Installation Program on Windows Platforms” on page 2-5](#)
- [“Starting the Installation Program on Linux Platforms” on page 2-6](#)
- [“Starting the Installation Program in Silent Mode” on page 2-8](#)
- [“What’s Next?” on page 2-10](#)

Before You Start

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 BEA Products software. See the [BEA Products Supported Configurations](#) documentation.
- Read [Chapter 1, “Preparing for the Installation.”](#)

Note: 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 WLS-VE 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 4, “Uninstalling the Software.”](#)

Specifying WLS-VE Directory Locations

The GUI and console-based installation program for Windows and Linux will prompt you to specify the following three directory locations. Before proceeding, you should review the documentation for these locations.

- The BEA Home directory. See [“The BEA Home Directory” on page 1-10.](#)
- The product installation directory. See [“The WLS-VE Product Installation Directory” on page 1-13.](#)
- The ISO image installation directory. See [“The Installation Directory for the WLS-VE ISO Image” on page 1-14.](#)

Specifying Optional Startup Settings

The following sections describe optional settings you can use when starting the WLS-VE installation program:

- [“Generating a Verbose Installation Log” on page 2-3](#)
- [“Specifying Temporary Disk Space” on page 2-3](#)

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.

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:

```
server922vcl1_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.

Specifying Temporary Disk Space

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.

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

- Windows platforms—directory referenced by the `TMP` system variable
- Linux 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 2-1 Setting Up 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: <pre>server922vcl1_win32.exe -mode=console -Djava.io.tmpdir=D:\Temp</pre>
Linux	<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>

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” on page 2-5](#)
- [“Starting in Console Mode” on page 2-5](#)

See [“Starting the Installation Program in Silent Mode” on page 2-8](#) for information about using the installation program 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

Graphical-mode installation is an interactive, GUI-based method for installing your software. To start the graphical-mode installation process on a Windows platform, follow these steps:

1. Log into the Windows system.
2. From the directory where you have downloaded the installation program, double-click the installation file:

`server922ve11_win32.exe`
The installation program begins to install the software.
3. After agreeing to the terms of the license agreement, the installation program prompts you to specify three directory locations for WLS-VE, as explained in [“Specifying WLS-VE Directory Locations” on page 2-2](#).
4. Select the Windows shortcut entries. See [“The WLS-VE Windows Shortcuts” on page 1-15](#).
5. Click **Done** to exit the installation program.
6. Perform post-installation steps, such as copying the ISO image to the ESX server, as described in [Chapter 3, “Post-Installation Information.”](#)

Starting in Console Mode

Console-mode installation is an interactive, text-based method for installing your software from the command line. To start the console-mode installation process on a Windows platform, follow these steps:

1. Log in to the target Windows system.
2. From the directory where you have downloaded the installation program, launch the installation by entering the following command:

```
server922ve11_win32.exe -mode=console
```

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:

```
server922ve11_win32.exe -mode=console  
-log=C:\logs\server_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 2-3](#).

After a few moments, a BEA Installer window opens and the installation program begins to install the software. It is normal for the installation program to pause for a fairly long time, especially toward the end. The installation program is still working when this occurs.

3. After agreeing to the terms of the license agreement, the installation program prompts you to specify three directory locations for WLS-VE, as explained in [“Specifying WLS-VE Directory Locations” on page 2-2](#).
4. Select the Windows shortcut entries. See [“The WLS-VE Windows Shortcuts” on page 1-15](#).
5. Click **Done** to exit the installation program.
6. Perform post-installation steps, such as copying the ISO image to the ESX server, as described in [Chapter 3, “Post-Installation Information.”](#)

Starting the Installation Program on Linux Platforms

The following sections describe how to start the WLS-VE installation program on Linux platforms:

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

See [“Starting the Installation Program in Silent Mode” on page 2-8](#) for information about using the installation program in silent mode.

Note: The WLS-VE installation program bundles its own JRE.

Starting in Graphical-Mode

Graphical-mode installation is an interactive, GUI-based method for installing your software. To run graphical-mode installation, your console must support a Java-based GUI such as X-Windows and 8-bit color depth (256 colors).

If the installation program determines that your system cannot support graphical-mode installation, it automatically starts running in console mode. For details, see [“Starting in Console-Mode” on page 2-7](#)

To start the graphical-mode installation process, follow these steps:

1. Log in to the target Linux system.
2. Launch the installation by entering the following commands:

```
chmod a+x server922vell_linux32.bin
./server922vell_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:

```
server922vell_linux32.bin -log=/home/logs/BEA_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 2-3](#).

The installation program begins to install the software.

3. After agreeing to the terms of the license agreement, the installation program prompts you to specify directory locations for the software, as explained in [“Specifying WLS-VE Directory Locations” on page 2-2](#).
4. Click **Done** to exit the installation program.
5. Perform post-installation steps, such as copying the ISO image to the ESX server, as described in [Chapter 3, “Post-Installation Information.”](#)

Starting in Console-Mode

Console-mode installation is an interactive, text-based method for installing your software from the command line. To start the console-mode installation process, follow these steps:

1. Log in to the target Linux system.
2. Launch the installation by entering the following command:

```
chmod a+x server922ve11_linux32.bin
./server922ve11_linux32.bin -mode=console
```

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:

```
server922ve11_linux32.bin -mode=console
-log=/home/logs/BEA_install.log
```

For more information, see [“Generating a Verbose Installation Log” on page 2-3](#).

It is normal for the installation program to pause for a fairly long time, especially toward the end. The installation program is still working when this occurs.

3. After agreeing to the terms of the license agreement, the installation program prompts you to specify directory locations for the software, as explained in [“Specifying WLS-VE Directory Locations” on page 2-2](#).
4. Click **Done** to exit the installation program.
5. Perform post-installation steps, such as copying the ISO image to the ESX server, as described in [Chapter 3, “Post-Installation Information.”](#)

Starting the Installation Program in Silent Mode

On either Linux or Windows, you can run the installation program in silent mode. 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. Silent mode eliminates the need to respond to prompts from the installation program. 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.

To run the installation program in silent mode:

1. Create a `silent.xml` file that defines the configuration settings required for the installation program. See [“Creating the silent.xml File” on page 2-9](#).
2. Launch the installation program with this command on Windows:

```
server922ve11_win32.exe -mode=silent -silent_xml=path_to_silent.xml
```

Or this command on Linux:

```
chmod a+x server922ve11_linux32.bin
./server922ve11_linux32.bin -mode=silent -silent_xml=path_to_silent.xml
```

Here, `path_to_silent.xml` is the full pathname of the `silent.xml` file.

3. Configure WLS-VE, as described in [Configuration Overview and Roadmap](#) in *WLS-VE Configuration and User Guide*.

For more detailed information about silent mode installation, see [Running the Installation Program in Silent Mode](#) in the *WebLogic Installation Guide*.

Creating the silent.xml File

Your `silent.xml` file needs to define the configuration settings required for the installation program. The required information is included in a set of data-value elements in the `silent.xml` file, for example:

```
<data-value name="BEAHOME" value="c:\bea">
```

The required settings are described in [Table 2-2](#). For a sample `silent.xml` file, see [Listing 2-1](#).

Table 2-2 Data-value Settings in silent.xml

data-value name Attribute	Description
BEAHOME	The BEA Home directory. See “The BEA Home Directory” on page 1-10 .
USER_INSTALL_DIR	The product installation directory. See “The WLS-VE Product Installation Directory” on page 1-13 .
ISO_DIR	The ISO image installation directory. See “The Installation Directory for the WLS-VE ISO Image” on page 1-14 .

Listing 2-1 Sample silent.xml File for Silent Mode Installation

```
<bea-installer>
  <input-fields>
    <data-value name="BEAHOME" value="c:\bea" />
    <data-value name="USER_INSTALL_DIR" value="c:\bea\weblogic92" />
    <data-value name="ISO_DIR" value="c:\wlsve_iso" />
  </input-fields>
</bea-installer>
```

What's Next?

Refer to [Chapter 3, “Post-Installation Information,”](#) for information about post-installation steps, such as copying the ISO image to the ESX server and updating the license file, if appropriate.

Post-Installation Information

This section covers the following topics:

- [“Copying the WLS-VE ISO Image” on page 3-2](#)
- [“Licensing” on page 3-3](#)
- [“Downloading and Applying Patches” on page 3-5](#)
- [“What’s Next?” on page 3-6](#)

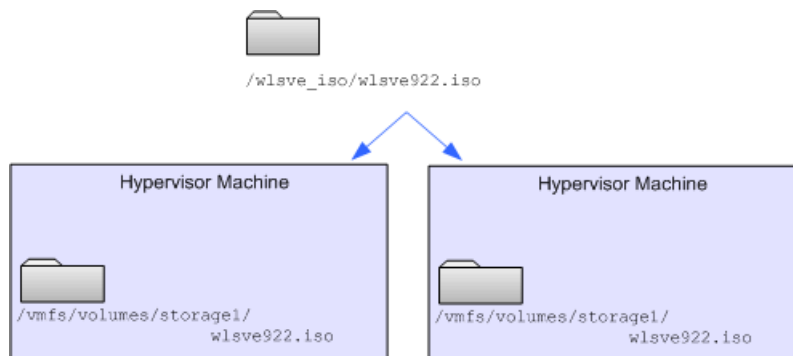
Copying the WLS-VE ISO Image

The WLS-VE ISO image is the boot image for WLS-VE. It contains the LiquidVM and WLS-VE classes that run on hypervisor software and host your Java applications. To give the ESX server access to these classes, after you install WLS-VE on the launcher machine, you need to copy the ISO image to a datastore on each ESX server that will run WLS-VE. (See [Figure 3-1](#).) A recommended best practice is to copy the image to a SAN that can be accessed from each ESX server host.

Notes: Copying the ISO image to a physical disk that is local to the ESX server may disable some VMware functionality, such as VMotion.

If you are using an NFS share, datastores will experience degraded performance when booting WLS-VE.

Figure 3-1 Copy the ISO Image to Datastores for Each ESX Server



To copy the WLS-VE ISO image to a datastore on a local disk or SAN, you can use the following secure copy (scp) command syntax:

```
scp -p source-file username@esxhost:/vmfs/volumes/datastore/path/
```

where:

- `-p` preserves modification times, access times, and modes from the original file.
- `source-file` is the relative or absolute path and file name of the WLS-VE ISO image file.
- `username` is the name of a user in your network who has write privileges on the hypervisor host machine.
- `esxhost` is the name of an ESX server host.

- `/vmfs/volumes/` is the directory within the VMware file system under which ESX Server stores datastores.
- `datastore` is the name of a datastore.
- `path` is one or more optional directory levels.

Note: The Linux operating system includes an `scp` client. For Windows, you can install (or download for free) third-party utilities that include `scp` clients. Also note that `scp`, is just one of many ways to copy the disk, depending on how you have configured your VMware environment.

Be sure to record the pathname that you specify. When you use the LiquidVM Configuration Wizard to configure virtual machines, you will need to provide this location. Note that the syntax in ESX Server for specifying this path is:

```
[datastore] /path/file
```

For example, you can use the following `scp` command to copy the WLS-VE ISO image from the current directory to the default `storage1` datastore (VMware creates the `storage1` datastore when you install ESX Server):

```
scp -p wlsve922.iso myusername@myESXHost:/vmfs/volumes/storage1/
```

With the above example, the pathname that you specify in the LiquidVM Configuration Wizard is:

```
[ storage1 ] /wlsve922.iso
```

Licensing

BEA products use an XML-format license file called `license.bea`. Licenses are release specific. For example, to use WLS-VE 9.2 v1.1, you must have a WLS-VE 9.2 v1.1 license file. For detailed information on BEA licenses, see [Installing and Updating License Files](#) in the *WLS Installation Guide*.

When you download the software from the BEA Product download page, the installation program installs a non-expiring evaluation license in the BEA Home directory on the launcher machine. A copy of the evaluation license is also included in the WLS-VE ISO image. The first time that you start a WLS-VE instance, the license file is copied from the ISO image to the BEA Home directory (`/bea` by default) on the local disk of the virtual machine. This evaluation license allows you to start using the product in a development environment immediately. To use your WLS-VE software in a full-scale production environment, however, you must purchase a production license.

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

Table 3-1 BEA Products License File Types

License Type	Description
Evaluation	<ul style="list-style-type: none">• Enables all WLS-VE product features.• Permits client connections from a maximum of five IP addresses. IP addresses are tracked from the time the server is started. When you restart the server, the count is reset.• Is installed in the BEA Home directory on the launcher machine as <code>license.bea</code>, and in the WLS-VE ISO image. When the WLS-VE instance is started, the <code>license.bea</code> file is copied to the BEA Home directory local to that instance.
Production	<ul style="list-style-type: none">• Used in full-scale production environments.• Enables all WLS-VE product features.• 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.

To update the evaluation license to a production license you first need to install it on the local disk of the launcher machine, and then copy it to the local disk of each VM. For more information, see [Copying a Production License to the Virtual Machine](#) in the *WLS-VE Configuration and User Guide*.

Downloading and Applying Patches

How WLS-VE is patched depends on where the issue occurs and how the WLS-VE instance is configured in your environment, as follows:

- If there is an LiquidVM issue, either in the OS-layer or in the JVM layer, then a new CD-ISO-image must be acquired from BEA Product Support and uploaded to the ESX Server. Also, the WLS-VE instance has to be configured to use the new ISO.
- If there is a WebLogic Server issue, then you can use the normal WebLogic Server patch mechanism. Follow the instructions provided in the following sections that are appropriate to your WLS-VE configuration.

For information about upgrading your software with maintenance patches and service packs, if available, see [Installing Maintenance Updates and Service Packs](#).

Run Smart Update on an Ordinary OS and Copy the Patches

If you created your BEA Home on the local disk of the launcher machine, follow these steps:

1. Run Smart Update on the OS using a BEA Home directory on that machine, as explained in [Starting Smart Update](#). This procedure will create a `patch_weblogic MMN` directory under the BEA Home, where MMN specifies the WLS release (e.g., 922 for 9.2 MP2).
2. Follow steps 1 and 2 in [Copying a Production License to the Virtual Machine](#) section, which explains how to use SSH to copy files to your WLS-VE instances.
3. Using SSH, copy the entire `patch_weblogic MMN` directory into the instance's `/bea` directory (where `/bea` is the BEA Home directory on your WLS-VE instance).

Run Smart Update on a BEA Home on an NFS Share

If your server has configured a BEA Home on an NFS share, you can run the Smart Update tool from an ordinary OS that also has access to the same NFS share with the BEA Home on it. Smart Update will apply the patches and put them in the BEA Home on the NFS share. The next time you restart your WLS-VE instance the patches will get automatically loaded.

For more information on using NFS shares, refer to the [Creating and Sharing Directories](#) section in the WLS-VE v1.0 *Installation and Configuration Guide*.

WebLogic Server Service Packs

If you want to apply a WebLogic Server service pack, a new CD-ISO-image must be acquired from BEA Product Support and uploaded to the ESX Server. You must also reconfigure your WLS-VE instance to use the service pack ISO instead of the previous CD-ISO.

What's Next?

After you have installed the software and copied the ISO to the hypervisor host, you need to configure your environment, create WLS-VE instances, and upgrade the evaluation license to a production license. Configuration procedures are documented in the [WLS-VE Configuration and User Guide](#), which provides details for configuring, using, and administering WLS-VE, such as:

- Configure the LiquidVM connection parameters, as described in [Configuring LiquidVM Connection Parameters](#).
- Create the WLS-VE domain on the launcher machine and copy it to the WLS-VE instances, as described in [Configuring and Transferring WLS-VE Domains](#).
- Update the evaluation BEA license to a production license on the virtual machine, as described in [Copying a Production License to the Virtual Machine](#).
- Start and administer the WLS-VE environment (e.g., security, logging, and troubleshooting), as described in the [WLS-VE Configuration and User Guide](#).

For specific information about this WLS-VE release, see the [WLS-VE Release Notes](#).

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](#)
- [“Deleting the ISO Image File” on page 4-5](#)
- [Reinstalling Your Software](#)

About the Uninstallation Program

The following sections describe how to uninstall your BEA software on Windows and Linux systems. You can uninstall the software using graphical or console 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.

The uninstallation program removes the WLS-VE product installation directory *unless* one of the following is true:

- The product installation 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.

The uninstallation program does not remove the BEA Home directory associated with the installation, the JDK that the WLS-VE utilities use, any user-created domains, or any ISO image files that you copied to the local disks of hypervisor hosts.

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.
2. Start the uninstallation program as described in [Table 4-1](#).

Table 4-1 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"> 1. From the Windows Start menu, choose Start All Programs BEA Products Uninstall BEA Products. The BEA Products Uninstaller Welcome window is displayed. 2. Proceed to step 3.
Linux	<ol style="list-style-type: none"> 1. Go to the following directory: <i>WL_HOME</i>/uninstall Here <i>WL_HOME</i> represents the directory in which you installed your WebLogic Server software. 2. Enter <code>./uninstall.sh</code> at the prompt. The BEA Products Uninstaller Welcome window is displayed. <p>Note: 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 “Uninstalling Your Software in Console Mode” on page 4-4 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.

The Server component contains the BEA WebLogic Configuration Wizard and Template Builder, the Domain Upgrade Wizard, the WebLogic Scripting Tool, and other files that are used to support the WLS-VE configuration, startup, licensing, and installation utilities.

The ServerVE component contains the WLS-VE configuration and startup utilities and the WLS-VE ISO image that the installer created (not any copies of the ISO image that you create after running the installer).

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.
2. Start the uninstallation program as described in [Table 4-2](#).

Table 4-2 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"> 1. Open a Command Prompt window and go to the following directory: <code>WL_HOME\uninstall</code> Here <i>WL_HOME</i> represents the directory in which you installed your WebLogic Server software, typically <code>C:\bea\weblogic<version></code>. 2. Enter the following command at the prompt: <code>uninstall -mode=console</code> The Welcome text is displayed.
Linux	<ol style="list-style-type: none"> 1. Go to the following directory: <code>WL_HOME/uninstall</code> Here <i>WL_HOME</i> represents the directory in which you installed WebLogic Server. 2. At the prompt, enter the following command: <code>sh ./uninstall.sh -mode=console</code> The Welcome text is displayed.

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 9.2.2.0

```
+-----WebLogic Server [1] v
|      +-----Server [1.1] v
|      +-----ServerVE [1.2] v
```

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

The Server component contains the BEA WebLogic Configuration Wizard and Template Builder, the Domain Upgrade Wizard, the WebLogic Scripting Tool, and other files that are used to support the WLS-VE configuration, startup, licensing, and installation utilities.

The ServerVE component contains the WLS-VE configuration and startup utilities and the WLS-VE ISO image that the installer created (not any copies of the ISO image that you create after running the installer).

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

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.

Deleting the ISO Image File

The WLS-VE ISO image contains the LiquidVM and WLS-VE classes that run on hypervisor software and host your applications. Each physical machine that hosts the hypervisor software on which you run WLS-VE either has its own copy of ISO on its local disk or else it accesses the ISO image from a SAN or NAS.

To delete the WLS-VE ISO image:

1. Shut down any instances of WLS-VE that are running.

2. Do any of the following:

- From VMware Virtual Infrastructure Client, browse or search datastores for the `wlsve.iso` file. Then use Virtual Infrastructure Client commands to delete the file.
- Use a secure FTP (`sftp`) client to establish a session with each hypervisor's host machine. Then use the `sftp rm` command to delete the `wlsve.iso` file.
- Use a secure shell (`ssh`) client to establish a session with each hypervisor's host machine. Then use the `ssh rm` command to delete the `wlsve.iso` file.

For example:

```
ssh root@myESXHost
root@myESXHost's password:
...
myESXHost:home/pat/>rm /vmfs/volumes/storage1/myCDs/wlsve.iso
```

The Linux operating system includes an `sftp` and `ssh` client. For Windows, you can install (or download for free) third-party utilities that include the clients.

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.

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.