Installation Guide

WebObjects 4.5 Deployment

 Apple Computer, Inc.

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This manual describes WebObjects Deployment version 4.5.

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Welcome to WebObjects Deployment

WebObjects Deployment allows you to deploy powerful and robust client/server applications for corporate intranets or the World Wide Web that were created using WebObjects Developer.

This installation guide describes how to install WebObjects Deployment on Mac OS X Server (page 5), on Microsoft's Windows NT (page 8), and on computers running the Solaris or HP-UX operating systems (page 13). The WebObjects 4.5 Deployment CD-ROM accompanying this guide contains the software you need for either of these installations.

System Requirements

WebObjects 4.5 Deployment can only be installed on one of the following:

- a Power Macintosh computer running Mac OS X Server with at least 64 MB of RAM and at least 500 MB of available hard-disk space.
- a 100% Pentium-compatible computer running Microsoft's Windows NT with at least 64 MB of RAM and at least 500 MB of available hard-disk space (on NTFS; on a FAT file system you'll need considerably more space).
- A computer running Solaris Release 2.6 (or an upwardly-compatible release).
- A computer running HP-UX Release 11 (or an upwardly-compatible release).

To deploy WebObjects applications that use the Enterprise Objects Framework, you will also need the appropriate database client libraries.

Installing WebObjects Deployment on Mac OS X Server

Before You Install

Before you install WebObjects Deployment on Mac OS X Server, you must remove any previously-installed WebObjects components. Refer to the installation guide for the previously-installed software, or visit Apple's Enterprise Web site at **http://www.apple.com/enterprise/** for instructions.

Installing WebObjects Deployment

1. Start up your computer in Mac OS X Server. (Refer to your *Mac OS X Server Installation Manual* for more information.)

2. Log in to an account (typically, "root") that has Administrator privileges. Installation doesn't work from accounts with lesser privileges.

   The software you install will be available to all users.

3. Insert the WebObjects 4.5 Deployment CD into your computer's CD-ROM drive. You may need to double-click the CD's icon to open its main window.

4. Locate the WebObjectsDeployment.mpkg icon on the CD, in the MacOS_X_Server folder. Double-click the icon. The installer for WebObjects Deployment starts and opens the Package Selection dialog box.

5. Apple recommends that you perform a Complete installation, as described next. If you want to select the components to install, follow the Custom installation option instead.

   Warning: Installation of WebObjects Deployment for Mac OS X Server requires a valid serial number.

   You can find the product serial number on the CD envelope, in the format "A-999-AAA-999-AAA-999-AAA-999-AAA-999".

Complete Installation In the Package Selection dialog box, click Install. For each package, the installer checks for existing files on your disk and then installs the package files. You get everything you need to use WebObjects Deployment.

The installer may need to run scripts or over-write existing files. In these cases it presents one or more alerts. To proceed with installation, click OK. (Click Cancel to quit the installer.)

If the installer asks for your serial number, enter it into the text field and then click OK.

Custom Installation If you want to exclude one or more components, un-check them before clicking Install. To use WebObjects Deployment, you must install, at least, the *WebObjects Deployment* and *WebObjects License* packages.

The installer may need to run scripts or over-write existing files. In these cases it presents one or more alerts. To proceed with installation, click OK. (Click Cancel to quit the installer.)

If the installer asks for your serial number, enter it into the text field and then click OK.

6. When all the files are installed, the legend in the installer dialog box changes to Installation Completed. Quit the installer by choosing the Package:Quit menu item, and then restart your computer.

After Installation

The installer puts the WebObjects CGI adaptor into the Apache CGI Bin directory and configures WebObjects to use it. WebObjects also includes other HTTP server adaptors; to use one of these, see the online instructions in **/System/Library/WebObjects/Adaptors/InstallationInstructions.html**. Adaptors are provided in source form and can be customized; for instructions on rebuilding the WebObjects HTTP server adaptors, see **/System/Developer/Examples/WebObjects/Source/Adaptors/BuildingInstructions.html**.

For instructions on configuring WebObjects to work with a database server, as well as additional steps you may want to take after installing WebObjects, see the *WebObjects Post-Installation Instructions*. This document is included with

WebObjects Developer as part of the online documentation set, and can also be found at **http://developer.apple.com/techpubs/webobjects/**.

Upgrading Your License

To apply a newly-purchased deployment license to an existing development or deployment installation, you need only change the installed serial number using the WebObjects License Upgrader application (in the Apple menu, in the Server Administration submenu). Log in as **root**, start the license upgrader, and enter the new serial number (found on the CD envelope or obtained from Apple).

Installing WebObjects Deployment on Windows NT

Before You Install

Before you install WebObjects Deployment on Microsoft Windows NT, you must remove any previously-installed WebObjects components. Refer to the installation guide for the previously-installed software, or visit Apple's Enterprise Web site at **http://www.apple.com/enterprise/** for instructions.

WebObjects works in concert with your HTTP server software. If you haven't installed an HTTP server already, Apple recommends that you do so before installing WebObjects Deployment.

Installing WebObjects Deployment

1. Start up your computer in Microsoft Windows NT.
2. Log in to an account that has Administrator privileges. Installation doesn't work from accounts with lesser privileges.

   The software you install will be available to all users.
3. Insert the WebObjects 4.5 Deployment CD into your computer's CD-ROM drive. You may need to double-click the CD's icon to open its main window.
4. Locate the Setup.exe icon on the CD, in the Windows folder. (Depending on your system settings, the icon may appear instead as Setup.) Double-click the icon. The installer for WebObjects Deployment starts.
5. In the User Information dialog box, enter your name and company name, and the product serial number. Click Next.

   You can find the serial number on the CD envelope, in the format "A-999-AAA-999-AAA-999-AAA-999-AAA-999".

   Warning: Installation of WebObjects Deployment for Windows NT requires a valid serial number.

   ---

6. Read the software license agreement. If you agree to its terms, click Yes to continue with the installation.

   (If you disagree with the license terms, click No to exit the installer, and click Exit Setup to confirm. The installer quits.)

7. In the Choose Destination Location dialog box, review the default path for WebObjects Deployment. If you accept this path, click Next. Otherwise, click Browse and enter or navigate to a new path, click OK, and then click Next.

   If the folder that you specify doesn't exist, you are asked if you would like to create the folder. Click Yes.

   Warning: Do not install WebObjects Deployment into a system-related folder such as WinNT, directly to the root of a disk, or to any path or folder whose name contains spaces. If you do, the software may not work.

   ---

8. In the Setup Type dialog box, click Next to install everything you need for WebObjects Deployment.

   Alternatively, click the Custom radio button if you need to omit any of the packages installed by the Typical installation option. If you're installing on a system running the Japanese version of Windows NT, perform a Custom installation and choose the IME Support package.

   Warning: Apple recommends that you do not uncheck any of the default packages during a Custom installation.

   The installer will prevent you from violating package dependencies.

9. If the installer recognizes at least one web server on your Windows NT computer, it then displays the Available Web Servers dialog box (if it cannot, installation proceeds with step 10). In this dialog, indicate the web server you'll be using (if it is listed) or click the checkbox next to "Other." Click Next to proceed.

Warning: WebObjects works in concert with, and requires, HTTP server software.

10. In the HTTP Server CGI Bin Directory dialog box, enter the path to your HTTP server's CGI Bin or Scripts directory (or click Browse to navigate to it), and then click Next. Note that based upon your selection of a web server in the previous step, the installer may have filled this field in for you.

    If this computer does not yet have an HTTP server, specify a temporary location for the CGI Bin directory. Once you've specified the location, click Next to proceed.

    Once an HTTP server is installed, you can copy the files from your temporary directory to the server's CGI Bin (or Scripts) directory. Contact your system administrator, or refer to your HTTP server manual, for more information.

11. In the HTTP Server Document Root Directory dialog box, enter the path to your HTTP server's document root directory (or click Browse to navigate to it), and then click Next. Again, based upon your selection of a web server in step 9, the installer may have filled this field in for you.

    If this computer does not have an HTTP server, specify a temporary location for the Document Root directory. Once you've specified the location, click Next to proceed.

    Once an HTTP server is installed, you can copy the files from your temporary directory to the server's Document Root directory. Contact your system administrator, or refer to your HTTP server manual, for more information.

12. In the Select Program Group dialog box, you may rename the program group for the WebObjects software by replacing the text in the Program Folders box, or just click Next to proceed.

    The installation application installs the WebObjects Deployment components. Installation takes several minutes.

Warning: Clicking Cancel during installation is not recommended; a partial installation can interfere with subsequent attempts to install the product.

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13. Once the software is installed, the new WebObjects program group opens. In the Setup Complete dialog box, click Finish to restart your computer.

    Alternatively, click the "No, I will restart my computer later" radio button before you click Finish. Be sure to restart your computer before using WebObjects.

After Installation

The installer puts the WebObjects CGI adaptor into the CGI Bin directory you specified during installation and configures WebObjects to use it. WebObjects also includes a number of other HTTP server adaptors; to use one of these, see the online adaptor installation instructions in **Library\WebObjects\Adaptors\InstallationInstructions.html** (relative to the root directory specified in step 7). These adaptors are provided in source form and can be customized; for instructions on rebuilding one of these WebObjects HTTP server adaptors, see **Developer\Examples\WebObjects\Source\Adaptors\BuildingInstructions.html** (also relative to the root directory specified in step 7).

For instructions on configuring WebObjects to work with a database server, as well as additional steps you may want to take after installing WebObjects, see the *WebObjects Post-Installation Instructions*. This document is included with WebObjects Developer as part of the online documentation set, and can also be found at **http://developer.apple.com/techpubs/webobjects/**.

If you're installing on a system running the Japanese version of Windows NT, configure the default character encoding by editing (or, if necessary, creating) the text file "CStringEncoding" located in **Library\Frameworks\Foundation.framework\Resources** (relative to the root directory specified in step 7). The first character of this text file should be set to "8".

Upgrading Your License

To apply a newly-purchased deployment license to an existing development or deployment installation, you need only change the installed serial number using the WebObjects License Upgrader application (Start ▸ Programs ▸ WebObjects ▸ WebObjects License Upgrader). Log in to an account that has Administrator privileges, start the license upgrader, and enter the new serial number (found on the CD envelope or obtained from Apple).

Installing WebObjects Deployment on Solaris or HP-UX

Before You Install

Before you install WebObjects Deployment on Solaris or HP-UX, you should remove any previously-installed WebObjects components. Refer to the installation guide for the previously-installed software, or visit Apple's Enterprise Web site at **http://www.apple.com/enterprise/** for instructions.

WebObjects works in concert with your HTTP server software. If you haven't installed an HTTP server already, Apple recommends that you do so before installing WebObjects Deployment.

Note: If you plan to use the Apache web server, you can obtain it from **www.apache.org**.

During installation you will be prompted to enter the path to your HTTP server's CGI Bin (or Scripts) and Documentation Root directories. While you can browse to these directories at the time, or specify a temporary directory for the installed files, you may want to note the paths now.

Installing WebObjects Deployment

1. **su** to **root**.
2. If necessary, mount the CD-ROM.
3. On Solaris, **cd** to **Solaris/WebObjects** in the mount directory for the CD-ROM. On HP-UX, **cd** to **HP-UX/WebObjects** in the mount directory for the CD-ROM.
4. Start the install script with this command:

   ```
   ./install.sh
   ```

   Note: If your system displays file names from the CD-ROM in upper case, you need to start the install script using upper case shell commands.

5. When prompted, enter your serial number. You can find the serial number on the CD envelope, in the format "A-999-AAA-999-AAA-999-AAA-999-AAA-999".

   Warning: Installation of WebObjects Deployment for Solaris or HP-UX requires a valid serial number.

6. You are now asked a series of questions—depending on the serial number you entered in the previous step—about optional components to install. For each, type "y" to specify that the given component should be installed, "n" to omit installation of that particular component, or "q" to cancel the installation entirely.

7. The script now asks you to specify your HTTP server's CGI Bin (script) directory. Specify your CGI Bin directory, or simply press Enter either if your server is on another machine or if you wish to specify this directory later.

8. You are now prompted for your HTTP server's *document root* directory. Specify your HTTP document root directory, or simply press Enter either if your server is on another machine or if you wish to specify this directory later.

9. At this point, the installer reiterates your answers to each of the previous questions and verifies that you want to proceed. Assuming that all is correct, type "y".

10. At the prompt, enter the name of a directory in which to install WebObjects, or just press Enter to use the default location displayed on your screen. Note that you cannot install to the root directory ("/").

    Note: You cannot install WebObjects into an existing directory. If you specify a directory that already exists, the installation script displays a warning and gives you the choice of either specifying a different directory or quitting the install.

11. The script then asks you which character encoding you'd like to use for C strings, and presents you with a list. Select the appropriate encoding for your installation. For instance, if you plan to develop applications that access Japanese language data, select Japanese EUC or Shift JIS.

At this point in the installation process, all of the necessary files are copied to the target computer, the CGI Bin and HTTP documents directories are created (if necessary), an uninstall script is created, and WebObjects services are started (if requested).

This completes the installation of WebObjects.

After Installation

Perform any needed manual steps as indicated by the installer.

If you specify a CGI Bin directory during installation, the installer puts WebObjects CGI adaptors into this directory and configures WebObjects to use them. WebObjects also includes a number of other HTTP server adaptors; to use one of these, see the online adaptor installation instructions in **Library/WebObjects/Adaptors/InstallationInstructions.html** (relative to the root directory specified in step 10). These adaptors are provided in source form and can be customized; for instructions on rebuilding one of these WebObjects HTTP server adaptors, see **Developer/Examples/WebObjects/Source/Adaptors/BuildingInstructions.html** (also relative to the root directory specified in step 10).

For instructions on configuring WebObjects to work with a database server, as well as additional steps you may want to take after installing WebObjects, see the *WebObjects Post-Installation Instructions*. This document is included with WebObjects Developer as part of the online documentation set, and can also be found at **http://developer.apple.com/techpubs/webobjects/**.

Upgrading Your License

To apply a newly-purchased deployment license to an existing deployment installation, you need only change the installed serial number. Using a text editor, edit **Library/Frameworks/WebObjects.framework/Resources/License.key** (relative to the root directory specified in step 10) and replace the serial number found there with the new serial number (found on the CD envelope or obtained from Apple).

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