Oracle® iPlanet Web Server 7.0.9 Installation and Migration Guide

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Contents

Preface

This *Installation and Migration Guide* explains how to install Oracle iPlanet Web Server (Web Server) and how to migrate from a previous version of the product. This guide also includes basic information about getting started with Web Server.

The following topics are addressed here:

Who Should Use This Book

This book is intended for administrators and developers who want to install Web Server or migrate from a previous version of the product.

Web Server Documentation Set

The Web Server documentation set describes how to install and administer the Web Server. The URL for Web Server documentation is `http://docs.sun.com/coll/1653.9`.

For an introduction to Web Server, refer to the books in the order in which they are listed in the following table.

TABLE P–1 Web Server Documentation

Document Title	Contents
Documentation Center	Web Server documentation topics organized by tasks and subject
Release Notes	■ Late-breaking information about the software and documentation ■ Supported platforms and patch requirements for installing Web Server

TABLE P–1 Web Server Documentation *(Continued)*

Document Title	Contents
Installation and Migration Guide	Performing installation and migration tasks: ■ Installing Web Server and its various components ■ Migrating data from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0
Administrator's Guide	Performing the following administration tasks: ■ Using the Administration and command-line interfaces ■ Configuring server preferences ■ Using server instances ■ Monitoring and logging server activity ■ Using certificates and public key cryptography to secure the server ■ Configuring access control to secure the server ■ Using Java Platform, Enterprise Edition (Java EE) security features ■ Deploying applications ■ Managing virtual servers ■ Defining server workload and sizing the system to meet performance needs ■ Searching the contents and attributes of server documents, and creating a text search interface ■ Configuring the server for content compression ■ Configuring the server for web publishing and content authoring using WebDAV
Developer's Guide	Using programming technologies and APIs to do the following: ■ Extend and modify Web Server ■ Dynamically generate content in response to client requests and modify the content of the server
NSAPI Developer's Guide	Creating custom Netscape Server Application Programmer's Interface (NSAPI) plug-ins
Developer's Guide to Java Web Applications	Implementing Java Servlets and JavaServer Pages (JSP) technology in Web Server
Administrator's Configuration File Reference	Editing configuration files
Performance Tuning, Sizing, and Scaling Guide	Tuning Web Server to optimize performance

TABLE P–1 Web Server Documentation *(Continued)*

Document Title	Contents
Troubleshooting Guide	Troubleshooting Web Server
CLI Reference Manual	Administration commands that allow you to administer the Web Server through the CLI

Documentation Conventions

This section describes the following conventions used in Web Server documentation:

Typographic Conventions

The following table describes the typographic changes that are used in this book.

TABLE P–2 Typographic Conventions

Typeface	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories, and onscreen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% you have mail.`
`AaBbCc123`	What you type, contrasted with onscreen computer output	`machine_name%` **`su`** `Password:`
AaBbCc123	A placeholder to be replaced with a real name or value	The command to remove a file is `rm` *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized (note that some emphasized items appear bold online)	Read Chapter 6 in the *User's Guide*. A *cache* is a copy that is stored locally. Do *not* save the file.

Symbol Conventions

The following table explains symbols that might be used in this book.

TABLE P–3 Symbol Conventions

Symbol	Description	Example	Meaning
`[ ]`	Contains optional arguments and command options.	`ls [-l]`	The `-l` option is not required.
`{ | }`	Contains a set of choices for a required command option.	`-d {y|n}`	The `-d` option requires that you use either the `y` argument or the `n` argument.
`${ }`	Indicates a variable reference.	`${com.sun.javaRoot}`	References the value of the `com.sun.javaRoot` variable.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.
→	Indicates menu item selection in a graphical user interface.	File → New → Templates	From the File menu, choose New. From the New submenu, choose Templates.

Shell Prompts in Command Examples

The following table shows default system prompts and superuser prompts.

TABLE P–4 Shell Prompts

Shell	Prompt
C shell on UNIX and Linux systems	`machine_name%`
C shell superuser on UNIX and Linux systems	`machine_name#`
Bourne shell and Korn shell on UNIX and Linux systems	`$`
Bourne shell and Korn shell superuser on UNIX and Linux systems	`#`

Default Paths and File Names

The following tables describe the default paths and file names used in Web Server documentation.

TABLE P–5 Default Paths and File Names

Placeholder	Description	Default Value
install-dir	Represents the base installation directory for Web Server.	Installation as the `root` user on the Solaris, Linux, AIX, and HP-UX platforms: `/opt/oracle/webserver7` Installation as a non-root user on the Solaris, Linux, AIX, and HP-UX platforms: *user-home-dir*`/oracle/webserver7` All installations on the Windows platform: *SystemDrive*`:\Program Files\Oracle\Webserver7`
instance-dir	Directory that contains the instance-specific subdirectories.	For all installations, the same as *install-dir*.

The following table shows the default paths and file names for Web Server when installed as a component of Sun Java Enterprise System (Java ES).

TABLE P–6 Default Paths and File Names for Java ES Installations

Placeholder	Description	Default Value

install-dir	Represents the base installation directory for Web Server.	On the Solaris platform:
		`/opt/SUNWwbsvr7`
		On the Linux and HP-UX platforms:
		`/opt/sun/webserver7`
		On the Windows platform:
		SystemDrive`:\Program Files\Sun\JavaES5\WebServer7`

instance-dir	Directory that contains the instance-specific subdirectories.	On the Solaris platform:
		`/var/opt/SUNWwbsvr7`
		On the Linux and HP-UX platforms:
		`/var/opt/sun/webserver7`
		On the Windows platform:
		SystemDrive`:\Program Files\Sun\JavaES5\WebServer7`

Documentation, Support, and Training

The Oracle web site provides information about the following additional resources:

- Documentation (`http://docs.sun.com/`)
- Support (`http://www.sun.com/support/`)
- Training (`http://education.oracle.com/`)

Searching Oracle Product Documentation

Besides searching Oracle product documentation from the docs.sun.com web site, you can use a search engine by typing the following syntax in the search field:

search-term `site:docs.sun.com`

For example, to search for "proxy," type the following:

```
proxy site:docs.sun.com
```

To include other Oracle web sites in your search (for example, java.sun.com, www.sun.com, and developers.sun.com), use `sun.com` in place of `docs.sun.com` in the search field.

Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

Note – Oracle is not responsible for the availability of third-party web sites mentioned in this document. Oracle does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Oracle will not be responsible or liable for any actual or alleged damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

◆ ◆ ◆ CHAPTER 1

Installation Overview

This chapter provides an overview of Web Server installation. For detailed installation instructions, see Chapter 2, "Installing the Web Server."

This chapter contains the following sections:

Installation Enhancements and Changes

This section provides a brief list of the major installation-related enhancements and changes in Web Server 7.0. For complete information about new features in this release, see the *Oracle iPlanet Web Server 7.0.9 Release Notes*.

Web Server 7.0 provides the following features:

- A new look and improved installation experience
- Graphical install and uninstall wizards
- A robust command-line interface for installing, migrating, and administering the Web Server
- Three installation modes that provide interactive and non-interactive installation options on all supported platforms
- A 64-bit version of the Web Server for large-scale deployments (Solaris SPARC and AMD64, and Linux only)
- Enhanced distributed management across servers in a server farm
- A start-on-system-boot option for all supported platforms

- Java Software Development Kit, Standard Edition bundled with the product (version 1.5.0_09)

New Administration Framework

Web Server 7.0 includes a new administration framework that provides enhanced distributed management across servers in a server farm. Robust administration capabilities enable Web Server configurations to be managed and deployed remotely using both graphical and command-line interfaces. Server configurations can be managed on a central location in a server farm and distributed to one or more nodes to create server instances. Monitoring and lifecycle management of these server instances are also provided.

Server farms, clusters, and this new administration framework are described in detail in the *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*, but a general understanding of related terms will be helpful as you perform the installation:

- *Node* refers to a server or host in a network.
- *Configuration* refers to a set of metadata that configures the runtime services of a Web Server. Serving web pages from a given document root is an example of a runtime service. The configuration metadata is used by the server runtime to load built-in services (SAFs) and third party plug-ins, and to configure other server extensions such as database drivers. All of these services help serve web pages and dynamic web applications.

  The metadata for a configuration is stored in the Config Store, which contains the configuration files, applications, and other elements that are part of a configuration. The configuration files managed by the administration framework are `magnus.conf`, `server.xml`, `obj.conf`, `mime.types`, `keyfile` and `digestfile`, `acl` files, and the certificate database files. These files are described in detail in the *Oracle iPlanet Web Server 7.0.9 Administrator's Configuration File Reference*.

  Web applications are uploaded as WAR files during deployment and expanded into the Config Store. Third-party NSAPI plug-ins and third-party Java Archive (JAR) files are also stored in the Config Store, as are search collections if the search collection index directory is not specified during migration (for more information, see "Search" on page 73). The Config Store is located in the `config-store` directory under the `instance_dir` directory of the Administration Server instance. For detailed information about the contents of the `config-store` directory, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Configuration File Reference*.

Caution – Do not edit any file under `config-store` directory. The files under this directory are created by Web Server for internal use.

- *Instance* refers to the environment of a Web Server daemon on a given node, including its configuration, log files, deployed applications and the resources needed by them, and other runtime artifacts such as lock databases, caches, and temporary files. Server instances are created from configurations.
- *Cluster* refers to a set of instances spanning one or more nodes, all running an identical configuration and offering an identical set of runtime services. All instances in a cluster must be homogeneous, that is, run on an identical operating system version and patches, use an identical Web Server configuration, and offer identical services.

Note – It is important to note the distinction between a *configuration* and an *instance*. In Web Server 7.0, a server *instance* is created by deploying a *configuration* to one or more nodes in a server farm. A configuration is a virtual representation of an instance.

Web Server Components

During installation you will make choices about the Web Server components to be installed. In general, these choices are based on the role the server will play in a server farm environment and on other administration considerations. Component choices are made only if you are performing a Custom installation. For Express installations, default components are installed automatically, as listed in Table 2–2. Web Server 7.0 includes the following components:

- Server Core
- Server Core 64–Bit Binaries (Solaris SPARC, AMD64, and Linux only)
- Administration Command Line Interface
- Sample Applications

Note – You can install the administration command-line interface without installing server core, but you cannot install server core without installing the administration command-line interface.

Server Core

Server core refers to the core binaries required for the Web Server environment. If Server Core is selected, an Administration instance is created and it can be configured as either the Administration Server or the Administration Node, both of which are described below. If the Administration instance is configured as Administration Server, a default Web Server instance is installed. These installation options are used in server farm environments in which a centralized Administration Server resides on one of the nodes and Administration Nodes reside on the rest.

- **Administration Server**

The Administration Server is a specially configured Web Server instance used only for administration purposes and on which administration applications are deployed. Each node in a server farm or cluster environment has an Administration Server running on it. Of these nodes, one is configured to be the master server, referred to as the Administration Server, and the rest are configured to be slave servers, referred to as Administration Nodes (described below). The Administration Server is used to administer all Web Server instances in a server farm and to push configurations to the various nodes. The master Administration Server runs the graphical administration console and command-line administration interface, while the nodes in the farm run just the Administration Node application. The Administration Server maintains the configuration repository for all instances.

- **Administration Node**

  The Administration Node is a Web Server instance without the features and functionality of the Administration Server (no graphical console, for instance). The Administration Node receives commands from the designated Administration Server and performs limited actions on that particular node, such as creating, deleting, starting, and stopping Web Server instances. Instances can be created on Administration Nodes only by the Administration Server. The nodes within a server farm or cluster cannot be configured independently.

  The Administration Node must be registered with the Administration Server, either during the installation (see the related steps in Chapter 2, "Installing the Web Server") or after installation (see "Registering the Administration Node From the Command-Line" on page 57). The Administration Server must be running during the registration.

When considering the options described above, use the following general guidelines:

- If you are not setting up a server farm and want just a straightforward Web Server, choose to configure the Administration instance as the Administration Server. A default Web Server instance will also be created.
- If you are setting up a server farm, first configure the centralized Administration Server instance. Then configure the rest of the nodes in the server farm as Administration Nodes by selecting the option to configure the Administration instance as an Administration Node. If you configure the Administration instance as the Administration Server, a default Web Server instance is also created.

Server Core 64–bit Binaries (Solaris SPARC, AMD64, Linux Only)

If this option is selected, the 64–bit binaries required for setting up the 64–bit runtime for the default Web Server instance are installed. This option is selected by default and displays only if the system on which you are installing has 64-bit support. If this option is selected, both 64- and 32-bit binaries are installed. For more information about 64-bit support in Web Server 7.0, see "64-bit Support" on page 17.

Administration Command-Line Interface

If you specify Administration Command-Line Interface in the component selection portion of the installation, just the command-line administration interface is installed. This tool is used to administer and configure all Administration Server and Web Server instances in a server farm remotely from the command line. For detailed information about the command-line tool and the powerful new command-line administration interface, see the Web Server 7.0 *CLI Man Pages* document. For basic information that will help you get started, also see "Using the Administration Command-Line Interface" on page 56 in this document.

Note – You can install the administration command-line interface without installing server core, but you cannot install server core without installing the administration command-line interface.

Sample Applications

If you select Sample Applications in the component selection portion of the installation, sample applications demonstrating Web Server features and functionality are installed. The default installation location is *install-dir*`/samples`. For more information about the sample applications, see "Sample Applications in Web Server" in *Oracle iPlanet Web Server 7.0.9 Developer's Guide to Java Web Applications*.

64-bit Support

Web Server 7.0 provides the option of installing a 64-bit version of the Web Server on Solaris SPARC and Solaris AMD64. If the installer detects a 64-bit system, you have the option to install the 64-bit binaries. This option is available only for the following platforms:

- Oracle Enterprise Linux 4 U8+
- Oracle Enterprise Linux 5 U4+
- Oracle Solaris 8, 9, and 10 on SPARC v9
- Oracle Solaris 10 on AMD64
- Red Hat Enterprise Linux 4 64–bit
- Red Hat Enterprise Linux 5 64–bit
- SuSE Enterprise Linux 10.2 64–bit
- SuSE Enterprise Linux 11 64–bit

Also note the following considerations:

- The 64-bit binaries are bundled with the 32-bit binaries, and both are installed if the 64-bit option is selected during installation. You cannot install just the 64-bit binaries.
- If you choose to install the 64-bit binaries during installation, all internal binaries are placed in the *install-dir*`/lib/`*architecture* directory, for example, `/opt/oracle/webserver7/lib/sparcv9`.

- To determine if your Solaris operating system is 32- or 64-bit, use the `isainfo -v` command.
- Following installation, the Web Server runs in 32-bit mode by default. For information about actions that must be taken to run the Web Server in 64-bit mode, see "Enabling 64–bit Support" on page 56.
- When the server is configured to run in 32-bit mode (the default), 32-bit NSAPI plug-ins will continue to work even if 64-bit runtime is installed. Existing 32-bit plug-ins, however, will need to be recompiled as 64-bit plug-ins to work with a 64-bit server. In some cases, code changes will also be necessary. For more information, see the *Oracle iPlanet Web Server 7.0.9 NSAPI Developer's Guide*.
- Pure Java code does not need to be recompiled for the 64-bit architecture. If the Java code uses native Java Native Interface (JNI) user code, only the JNI code needs to be compiled. No changes are required for any JAR files. For more information about migrating Java Web applications to the 64-bit architecture, see the *Oracle iPlanet Web Server 7.0.9 Developer's Guide to Java Web Applications*.
- The Administration Server is a 32-bit application, but manages both the 32- and 64-bit Web Server instances.

Note – ASP 4.0.3 is supported in Web Server 7.0.

- Web Server 64-bit Linux is a separate stand alone distribution and cannot exist with Web Server 7.0 32-bit Linux. Web Server 7.0 64-bit Linux requires 64-bit JDK 5.0 Update 12 or above. Both Administration Server and server instance only are in 64-bit server

Directory Structure

For detailed information about the directory structure created when you first install the Web Server, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Configuration File Reference*.

◆ ◆ ◆ CHAPTER 2

Installing the Web Server

This chapter provides instructions for installing Web Server. Before you begin, make sure your system meets the requirements specified in the *Oracle iPlanet Web Server 7.0.9 Release Notes*.

Note – UNIX installation supports both root and non-root user installations. Non-administrator installation is not supported on Windows. Windows users must have power user or administrator access.

This chapter contains the following sections:

Installation Requirements

Your system must meet the installation requirements specified in the *Oracle iPlanet Web Server 7.0.9 Release Notes*. Review that document before beginning the installation.

Installation Modes

There are three installation modes: graphical, command-line, and silent. These modes enable you to choose the interactive or non-interactive option that best suits your needs.

This section provides a brief overview of the installation modes. For installation instructions, see Chapter 2, "Installing the Web Server." Graphical, command-line, and silent modes are also available for uninstallation. For uninstallation instructions, see Chapter 4, "Uninstalling the Web Server."

Graphical Mode

The graphical mode is an interactive graphical wizard that walks you through the installation process with a series of screens, prompting for installation information and preferences. This is the default mode when the installation program is started without options (`./setup`). For more information, see "Installing in Graphical Mode" on page 24.

Note – On UNIX systems, the installation interface defaults to command-line mode if the `DISPLAY` environment variable has not been exported to your local machine and if X Windows is not supported.

Command-Line Mode

The command-line mode is an interactive, text-based interface that prompts for responses in a terminal window. To activate the command-line mode, start the installation program using the `--console` option (`./setup --console`). For more information, see "Installing in Command-Line Mode on UNIX and Linux" on page 29.

Silent Mode

Silent installation is a non-interactive mode that enables you to run the installer on multiple hosts using an installer configuration file called a state file. The state file is created when the `--savestate` option is used with the `setup` command. The state file is saved in the installation directory, *install-dir*. The default name of the file is `statefile`, but the file name can be changed if desired.

To activate the silent mode, create the state file and then start the installation program using the `--silent` option (`./setup --silent` *state_file*). After the silent mode is activated, installation takes place without additional input. For more information about creating a state file and installing the Web Server using silent installation, see "Installing in Silent Mode" on page 42.

Selecting the Installation Mode

There are three installation modes: graphical, command-line, and silent. For more information about each mode, see "Installation Modes" on page 20. The `setup` command is used to specify the installation mode. The syntax is as follows:

`./setup [--help] [--console] [--silent` *state_file*`] [--savestate] [--javahome` *java_dir*`] [--id]`

Note – Ensure that the required patches are installed before installation can complete successfully on Solaris. For more information on patch requirement see, *Oracle iPlanet Web Server 7.0.9 Release Notes*

The following table lists the `setup` command options.

TABLE 2–1 Options for the `setup` Command

Option	Description
`./setup --help`	Displays the options for the `setup` command.
`./setup`	Runs the installer in graphical mode.
`./setup --console`	Runs the installer in command-line mode.
`./setup --savestate`	Runs the installer in graphical mode and also creates an installation configuration file (state file) based on this installation, to be used for silent installation. The state file is created and saved in the installation directory, *install-dir*. The default name of the file is `statefile`, but the file name can be changed if desired.
`./setup --console --savestate`	Runs the installer in command-line mode and also creates an installation configuration file (state file) based on this installation, to be used for silent installation.
`./setup --silent` *state_file*	Runs the installer in silent mode. Installation parameters are read from the specified state file (*state_file*), which was first created using the `--savestate` option.
`./setup --javahome` *java_dir*	Defines the location of the JDK installation that should be used for the installer Java Virtual Machine (JVM), in graphical mode.

TABLE 2–1 Options for the `setup` Command *(Continued)*

Option	Description
`./setup --console --javahome` *java_dir*	Defines the location of the JDK installation that should be used for the installer JVM, in command-line mode.
`./setup --id`	Shows the unique identifier for the installer build. This option is provided to simplify reuse of installer state files between builds, if necessary. Each installer build has a unique identifier. To reuse installer state files created by different installer builds, the unique identifier referenced in the installer state file must match the one in the current installer build. The `--id` option enables you to determine this value so you can edit the value in the state file.

Installation Types

There are two types of installation: Express (the default) and Custom. The installation type is specified at the start of the installation process. This section briefly describes each type. For more information about specific settings, see the installation instructions in Chapter 2, "Installing the Web Server."

Express Installation

Express installation enables you to quickly install the Web Server using the most common options and predefined defaults. Express installation is the default installation type and makes assumptions regarding host name, port numbers, and Java Development Kit (JDK) installation. If you select Express, you do not specify these settings during installation. Settings will be configured automatically using the defaults listed in the following table. Use Express installation if you are new to the Web Server or for evaluation purposes. Choose Custom installation if you want to customize your installation.

TABLE 2–2 Express Installation Defaults

Setting	Default
Administration instance	Configured as Administration Server.
JDK	Installs the JDK bundled with the Web Server.

TABLE 2–2 Express Installation Defaults *(Continued)*

Setting	Default
Components	Installs the following: ■ Server Core: Installs the core binaries needed to set up the Web Server environment. ■ Server Core 64–bit Binaries: (Solaris SPARC, AMD64, and Linux only) The 64–bit binaries required for setting up the 64–bit runtime for Web Server instances. This option is available only if the system on which you are installing has 64-bit support. Both the 64- and 32-bit binaries are installed. ■ Administration Command Line Interface: The command-line administration client used to manage and configure the Web Server and its hosted applications from the commandline. ■ Sample Applications: Sample applications that demonstrate Web Server features and functionality. For more information about each component, see "Web Server Components" on page 15.
Start on boot	No.
Administration Server Settings	
Server host	Fully qualified domain name of the computer on which you are installing the Administration Server.
SSL port	8989 if available; otherwise defaults to the next highest available port.
Non-SSL Port	8800 if available; otherwise defaults to the next highest available port.
Runtime User ID (UNIX)	For `root` installation, default is `root`. For non-root installation default is the user that is performing the installation.
Web Server Instance Settings	
Server name	The name of the computer on which you are installing the default Web Server instance.

TABLE 2–2 Express Installation Defaults *(Continued)*

Setting	Default
HTTP port	Default value depends upon the run-time user ID of Administration Server instance. If the Administration Server instance's runtime user ID is non-root, the default is 8080. If the Administration Server instance's runtime user ID is `root`, the default is 80.
Runtime User ID (UNIX)	If the Administration Server instance's runtime user ID is non-root, the default is same as Administration Server instance's runtime user id. If the Administration Server instance's runtime user ID is `root`, the default is `webservd`.
Document root directory	*install-dir*`/https-`*server_name*`/docs`
64–bit configuration (Solaris SPARC AMD64, and Linux only)	No.

Custom Installation

Custom installation provides more flexibility and enables you to configure settings that are not specified during Express installation, such as Administration Server and Web Server port numbers and which JDK to use. Use Custom installation if you are an experienced Web Server user and want to customize your installation.

Installing in Graphical Mode

The graphical interface is an interactive graphical wizard that walks you through the installation process with a series of screens, prompting for installation information and preferences. This is the default mode when the installation program is started without options (`./setup`).

Installing in Graphical Mode on UNIX and Linux

The following procedure describes how to install the Web Server in graphical mode on UNIX and Linux.

Note – On UNIX systems, the installation interface defaults to command-line mode if the `DISPLAY` environment variable has not been exported to your local machine and if X Windows is not supported. To install in command-line mode, follow the instructions in "Installing in Command-Line Mode on UNIX and Linux" on page 29.

▼ To Install in Graphical Mode on UNIX and Linux

1 **Download the installer file for your platform to a temporary directory. The file format is:**

`Oracle-iPlanet-Web-Server-7.0.9-`*platform*`.zip`

2 **Unzip the server files. You will see the following:**

- `Legal` directory
- `README.txt`
- `setup`
- `WebServer` directory

3 **Start the installation with the following command:**

```
./setup
```

The graphical installation wizard displays. General navigation is as follows:

- Click Back to return to the previous screen.
- Click Next to move to the next screen.
- Click Cancel to cancel the installation.
- Click Help to display documentation specific to the current screen.

4 **Specify the installation directory.**

The default is `/opt/oracle/webserver7` for the `root` user and *user-home*`/oracle/webserver7` for non-root users.

Web Server components are installed in the directory specified. If the directory does not exist, you have the option to create it.

5 **Select the installation type, Express (the default) or Custom. For more information about each type, see "Installation Types" on page 22.**

6 **Proceed based on installation type:**

- For Express installations, specify the user name (`admin` by default) and password for the Administration Server user, click Next, and go to Step 13 to finish the installation. Steps 9-13 pertain to Custom installations only. For more information about the default settings used for Express installations, see "Express Installation" on page 22.
- For Custom installations, go to Step 7.

7 **Select the components to install.**

Note – Server Core and Administration Command Line Interface (and Server Core 64–bit Binaries, if applicable for your system) are selected by default. You can install the administration command-line interface without installing server core, but you cannot install server core without installing the administration command-line interface. For more information, see "Web Server Components" on page 15.

- **Server Core.** Installs the core binaries needed to set up the Web Server environment.
- **Server Core 64-bit Binaries.** (Solaris SPARC, AMD64 and Linux only) Installs the 64–bit binaries required for setting up the 64–bit runtime for the default Web Server instance. This option is selected by default and displays only if the system on which you are installing has 64-bit support. If this option is selected, the 64- and 32-bit binaries are installed. For more information about 64-bit support in Web Server 7.0, see "64-bit Support" on page 17.
- **Administration Command Line Interface.** Installs the command-line administration client used to manage and configure Web Server and its hosted applications from the command line. Specify Java configuration information as described in Step 8, and then go to Step 13 to finish the installation.
- **Sample Applications.** Installs the sample applications that demonstrate Web Server features and functionality.

For more information about each component, see "Web Server Components" on page 15.

8 Specify Java configuration information.

Choose to install the JDK bundled with Web Server 7.0 (the default) or specify the absolute path to an existing JDK.

9 Specify configuration settings.

Specify whether to configure the administration instance as the Administration Server (the default) or the Administration Node (as described in "Server Core" on page 15). For more information about these choices, see "Web Server Components" on page 15. For Custom installations performed as root, also specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown. The default is No (the option is not selected).

- If you select Configure Administration Instance as Administration Server (the default), go to Step 11.
- **Enable SMF.** Select this option to enable Service Management Facility in both Administration and default instance server. This flag is valid only for Solaris 10. For more information about Service Management Facility for Java Platform, see "Integrating Service Management Facility for the Java Platform with Web Server" in *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*
- If you select Configure Administration Instance as Administration Node, specify the Administration Node settings listed below and then go to Step 13 to finish the installation:

- **Host Name.** Specify the fully qualified domain name of the computer on which you are installing the Administration Node instance.
- **SSL Port.** Specify the SSL port for the Administration Node instance or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
- **Runtime User ID.** (UNIX, `root`) Specify the UNIX user name to use when running the Administration Server. For root installations, the default is `root`. For non-root installations, the default is the user name that you used at login.
- **Register Node with Remote Administration Server.** Specify whether this Administration Node instance should be registered with the Administration Server instance at the time of installation (the default), or later (as described in "Registering the Administration Node From the Command-Line" on page 57). If registration is selected, specify the following settings and then go to Step 13 to finish the installation:

Note – When registering an Administration Node with an Administration Server, ensure that the system date and time of the Administration Node is same as or later than that of the Administration Server.

  - **Administration Server Host Name.** Specify the fully qualified domain name of the remote host on which the Administration Server is installed.
  - **Administration Server SSL Port.** Specify the SSL port on which the remote Administration Server is listening. The default is 8989.
  - **Administrator User Name.** Specify the administrator user name used to log in to the remote Administration Server.
  - **Administrator Password.** Specify the administrator user password used to log in to the remote Administration Server.

10 For Custom installations performed as `root`, specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown (the default is No). For Custom installations performed as `non-root`, go to Step 11.

11 If configuring the administrations instance as the Administration Server, specify Administration Server settings.

- **Host Name.** Specify the fully qualified domain name of the computer on which you are installing the Administration Server.
- **SSL Port.** Specify the SSL port for the Administration Server or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
- **Non- SSL Port.** Specify the non-SSL port for the Administration Server. The default is 8800 unless that port is unavailable, in which case this defaults to the next highest available port.

Note – SSL port is default for Administration Server. However, you can also choose to use the Non-SSL port. When you choose to install through SSL port, use *https://* to access the Administration Server.

- **Runtime User ID.** (UNIX, `root`) Specify the UNIX user name to use when running the Administration Server. For root installations, the default is `root`. For non-root installations, the default is the user you logged in as to perform the installation.
- **Administrator User Name.** Specify the Administration Server user name. The default is `admin`.
- **Administrator Password.** Specify the Administration Server user password.
- **Retype Password.** Retype the Administration Server user password.

12 Specify Web Server settings.

- **Server Name.** Specify the fully qualified domain name of the computer on which you are installing the default Web Server instance.
- **HTTP Port.** Default value depends upon the runtime user ID of the Administration Server instance. If the Administration Server instance's runtime user ID is non-root, the default is 8080. If the Administration Server instance's runtime user ID is root, the default is 80.

Note – `root` user can bind to any port in Solaris 10 OS. However, on other version of Solaris `root` only can bind to ports lesser than 1024. Solaris 10 provides an alternative way for non-root users to bind to ports less then 1024. On Solaris 10, you need to provide `net_privaddr` privileges to a non-root user and start the server. For example, you can start the server as `webservd`. Log in as `root` and execute the following command: `/usr/sbin/usermod -K defaultpriv=basic,net_privaddr webservd`. To start the server as another user, you need to change the user name in the above command. For more information on `usermod` see, `http://docs.sun.com/app/docs/doc/816-5166/6mbb1kqk6?a=view`. For more information on `privileges` see, `http://docs.sun.com/app/docs/doc/816-5175/6mbba7f30?a=view`.

- **Runtime User ID.** (`root` only) If the Administration Server instance's runtime user ID is non-root, the default is the same as Administration Server instance's runtime user ID. If the Administration Server instance's runtime user ID is `root`, the default is `webservd`.
- **Enable a 64–bit runtime.** Specify whether the 64–bit runtime should be enabled for the default Web Server instance. The default is No (the option is not selected).
- **Create a document Root.** Specify whether the default document root should be created during installation. The default is *install-dir*`/https-`*server_name*`/docs`. The server's content files reside in this directory.

- **Use the following directory as document Root.** Specify a document root other than the default.

13 On the Ready to Install screen, click Install Now to install the Web Server software.

A progress bar displays status. Click Stop at any time to stop the installation.

When the installation process is complete, a screen indicates whether installation succeeded or failed, and provides information about using the Administration Server and reviewing the installation log file. Make note of this information for future reference.

Installing in Command-Line Mode on UNIX and Linux

The command-line interface is an interactive, text-based interface that prompts for responses in a terminal window. To activate the command-line mode, start the installation program using the `--console` option (`./setup --console`).

The following procedure describes how to install the Web Server in command-line mode on UNIX and Linux.

▼ To Install in Command-Line Mode on UNIX and Linux

1 Download the file for your platform to a temporary directory. The file format is:

`Oracle-iPlanet-Web-Server-7.0.9-`*platform*`.zip`

2 Unzip the server files. You will see the following:

- `Legal` directory
- `README.txt`
- `setup`
- `WebServer` directory

3 Start the installation with the following command:

```
./setup --console
```

The command-line installation interface displays. General navigation is as follows:

- Press Enter or Return to move forward in the installation.
- Type **<** to move back in the installation.
- Type **!** to exit the installation.
- Default values are shown in brackets: [ ]. To accept the default, press Enter or Return. To provide a different value, type the value at the command prompt and then press Enter or Return.

4 **Proceed through the introductory information and then specify the installation directory.**

The default is `/opt/oracle/webserver7` for the `root` user and *user-home*`/oracle/webserver7` for non-root users.

Web Server components will be installed in the directory specified. If the directory does not exist, you have the option to create it. If a Web Server installation exists in the directory, you have the option to upgrade that installation or specify a different directory.

5 **Specify the installation type, Express (the default) or Custom. For more information about each type, see "Installation Types" on page 22.**

6 **Proceed based on installation type:**

- For Express installations, specify the user name (`admin` by default) and password for the Administration Server user, press Enter, and then go to Step 13 to finish the installation. Steps 9–14 pertain to Custom installations only. For more information about the default settings used for Express installations, see "Express Installation" on page 22.
- For Custom installations, go to Step 7.

7 **Specify the components to install, separated by commas.**

Note – You can install the administration command-line interface without installing server core, but you cannot install server core without installing the administration command-line interface.

- **Server Core.** Installs the core binaries needed to setup the Web Server environment.
- **Server Core 64–bit Binaries.** (Solaris SPARC, AMD64 and Linux only) Installs the 64–bit binaries required for setting up the 64–bit runtime for the default Web Server instance. This option is available only if the system on which you are installing has 64-bit support. If this option is selected, the 64- and 32-bit binaries are installed. For more information about 64-bit support in Web Server 7.0, see "64-bit Support" on page 17.
- **Administration Command Line Interface.** Installs the command-line administration client used to manage and configure Web Server and its hosted applications from the command line. If Administration Command Line Interface is selected and Server Core is not, specify Java configuration information as described in Step 8, and then go to Step 13 to finish the installation.

  Note – `wdeploy` command only supports the backward compatibility with Web Server 6.0 and 6.1 releases. This command will work only on the Administration Node.

- **Sample Applications.** Installs the sample applications that demonstrate Web Server features and functionality.

For more information about each component, see "Web Server Components" on page 15.

8 Specify Java configuration information.

Choose to install the JDK bundled with Web Server 7.0 (the default) or specify the absolute path to an existing JDK.

9 Specify configuration settings.

Specify whether to configure the administration instance as the Administration Server (the default) or the Administration Node (as described in "Server Core" on page 15). For more information about these choices, see "Web Server Components" on page 15.

Note – This option is available only for UNIX custom installation performed as root. Specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown, (default is No).

- If you select Configure Administration Instance as Administration Server (the default), go to Step 10.
- **Enable SMF.** Select this option to enable Service Management Facility in both Administration and default instance server. This flag is valid only for Solaris 10. For more information about Service Management Facility, see
- If you select Configure Administration Instance as Administration Node, specify the Administration Node settings listed below and then go to Step 13 to finish the installation:
  - **Host Name.** Specify the fully qualified domain name of the computer on which you are installing the Administration Node instance.
  - **SSL Port.** Specify the SSL port for the Administration Node instance or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
  - **Runtime User ID.** Specify the UNIX user name to use when running the Administration Server. For root installations, the default is `root`. For non-root installations, default is the user name that you used at login to perform the installation.
  - **Register Node with Remote Administration Server.** Specify whether this Administration Node instance should be registered with the Administration Server instance at the time of installation (the default), or later (as described in "Registering the Administration Node From the Command-Line" on page 57). If registration is selected, specify the following settings and then go to Step 13 to finish the installation:

    Note – When registering an Administration Node with an Administration Server, ensure that the system date and time of the Administration Node is same as or later than that of the Administration Server.

- **Administration Server Host Name.** Specify the fully qualified domain name of the remote host on which the Administration Server is installed.
- **Administration SSL Server Port.** Specify the SSL port on which the remote Administration Server is listening. The default is 8989.
- **Administrator User Name.** Specify the administrator user name used to log in to the remote Administration Server.
- **Administrator Password.** Specify the administrator user password used to log in to the remote Administration Server.

10 For Custom installations performed as `root`, specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown (the default is No). For Custom installations performed as non-root, go to Step 11.

11 Specify Administration Server settings.

- **Server Host.** Specify the fully qualified domain name of the computer on which you are installing the Administration Server.
- **SSL Port.** Specify the SSL port for the Administration Server or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
- **Non-SSL Port.** Specify the non-SSL port for the Administration Server. The default is 8800 unless that port is unavailable, in which case this defaults to the next highest available port.

Note – SSL port is default for Administration Server. However, you can also choose to use the Non-SSL port. When you choose to install through SSL port, use *https://* to access the Administration Server.

- **Runtime User ID.** (UNIX, `root` only) Specify the UNIX user name to use when running the Administration Server. For root installations, the default is `root`. For non-root installations, default is the user name that you used at login to perform the installation.
- **Administrator User Name.** Specify the Administration Server user name. The default is `admin`.
- **Administrator Password.** Specify the Administration Server user password.
- **Retype Password.** Retype the Administration Server user password.

12 Specify Web Server settings.

- **Server Name.** Specify the fully qualified domain name of the computer on which you are installing the default Web Server instance.

- **HTTP Port.** Default value depends upon the runtime user ID of the Administration Server instance. If the Administration Server instance's runtime user ID is non-root, the default is 8080. If the Administration Server instance's runtime user ID is root, the default is 80.

Note – `root` user can bind to any port in Solaris 10 OS. However, on other version of Solaris `root` only can bind to ports lesser than 1024. Solaris 10 provides an alternative way for non-root users to bind to ports less then 1024. On Solaris 10, you need to provide `net_privaddr` privileges to a non-root user and start the server. For example, you can start the server as `webservd`. Log in as `root` and execute the following command: `/usr/sbin/usermod -K defaultpriv=basic,net_privaddr webservd`. To start the server as another user, you need to change the user name in the above command. For more information on `usermod` see, `http://docs.sun.com/app/docs/doc/816-5166/6mbb1kqk6?a=view`. For more information on `privileges` see, `http://docs.sun.com/app/docs/doc/816-5175/6mbba7f30?a=view`.

- **Runtime User ID.** Specify the UNIX user name to use when running the default instance of the Web Server. For root installations, the default is `webservd` on all UNIX platforms. For non-root installations, default is the user name that you used at login to perform the installation.
- **Document Root Directory.** Specify the document root directory. The default is *install-dir*`/https-`*server_name*`/docs`. The server's content files reside in this directory.

13 Specify whether you want to install the product (the default), start over, or exit the installation.

Following installation, text displays indicating whether the installation succeeded or failed, and providing information about using the Administration Server and reviewing the installation log file. Make note of this information for future reference.

Installing in Graphical Mode on Windows

The following procedure describes how to install the Web Server in graphical mode on Windows. You must be logged in with administrator privileges. Non-administrator installation is not supported on Windows.

Note – On Windows XP SP2 and Windows server 2003 SP1 onwards, only one instance listens on the same port.

▼ To Install in Graphical Mode on Windows

1 **Download the installer file to a temporary directory. The file format is:**

`Oracle-iPlanet-Web-Server-7.0.9-windows.zip`

2 **Unzip the server files. You will see the following:**

- `Legal` directory
- `README.txt`
- `setup.exe`
- `WebServer` directory

3 **Start the installation by double-clicking `setup.exe`, or by typing `setup` from the command line.**

The graphical installation wizard displays. General navigation is as follows:

- Click Back to return to the previous screen.
- Click Next to move to the next screen.
- Click Cancel to cancel the installation.
- Click Help to display documentation specific to the current screen.

4 **Proceed from the Welcome screen and specify the installation directory.**

The default is `C:\Program Files\Oracle\Webserver7`.

Web Server components are installed in the directory specified. If the directory does not exist, you have the option to create it. If a Web Server installation exists in the directory, you have the option to upgrade that installation. Otherwise, you must uninstall the existing installation. Only one Web Server 7.0 installation is permitted.

5 **Select the installation type, Express (the default) or Custom. For more information about each type, see "Installation Types" on page 22.**

6 **Proceed based on installation type:**

- For Express installations, specify the user name (`admin` by default) and password for the Administration Server user, click Next, and go to Step 12 to finish the installation. Steps 8–12 pertain to Custom installations only. For more information about the default settings used for Express installations, see "Express Installation" on page 22.
- For Custom installations, go to Step 7.

7 **Select the components to install.**

Note – You can install the administration command-line interface without installing the server core, but you cannot install the server core without installing the administration command-line interface. For more information, see"Web Server Components" on page 15.

- **Server Core.** Installs the core binaries needed to set up the Web Server environment.
- **Administration Command Line Interface.** Installs the command-line administration client used to manage and configure Web Server and its hosted applications from the command line. If Administration Command Line Interface is selected and Server Core is not, specify Java configuration information as described in Step 8, and then go to Step 12 to finish the installation.
- **Sample Applications.** Installs the sample applications that demonstrate Web Server features and functionality.

For more information about each component, see "Web Server Components" on page 15.

8 Specify Java configuration information.

Choose to install the JDK bundled with Web Server 7.0 (the default) or specify the absolute path to an existing JDK.

9 Specify configuration settings.

Specify whether to configure the administration instance as the Administration Server (the default) or the Administration Node (as described in "Server Core" on page 15). For more information about these choices, see "Web Server Components" on page 15. Also specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown. The default is No (the option is not selected).

- If you select Configure Administration Instance as Administration Server (the default), go to Step 10.
- If you select Configure Administration Instance as Administration Node, specify the Administration Node settings listed below and then go to Step 12 to finish the installation:
  - **Host Name.** Specify the fully qualified domain name of the computer on which you are installing the Administration Node instance.
  - **SSL Port.** Specify the SSL port for the Administration Node instance or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
  - **Register Node with Remote Administration Server.** Specify whether this Administration Node instance should be registered with the Administration Server instance at the time of installation (the default), or later (as described in "Registering the Administration Node From the Command-Line" on page 57). If registration is selected, specify the following settings and then go to Step 12 to finish the installation:

Note – When registering an Administration Node with an Administration Server, ensure that the system date and time of the Administration Node is same as or later than that of the Administration Server.

- **Administration Server Host Name.** Specify the fully qualified domain name of the remote host on which the Administration Server is installed.
- **Administration Server SSL Port.** Specify the SSL port on which the remote Administration Server is listening. The default is 8989.
- **Administrator User Name.** Specify the administrator user name used to log in to the remote Administration Server.
- **Administrator Password.** Specify the administrator user password used to log in to the remote Administration Server.

10 Specify Administration Server settings.

- **Server Host.** Specify the fully qualified domain name of the computer on which you are installing the Administration Server.
- **SSL Port.** Specify the SSL port for the Administration Server or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
- **Non-SSL Port.** Specify the non-SSL port for the Administration Server. The default is 8800 unless that port is unavailable, in which case this defaults to the next highest available port.

Note – SSL port is default for Administration Server. However, you can also choose to use the Non-SSL port. When you choose to install through SSL port, use *https://* to access the Administration Server.

- **Administrator User Name.** Specify the Administration Server user name. The default is `admin`.
- **Administrator Password.** Specify the Administration Server user password.
- **Retype Password.** Retype the Administration Server user password.

11 Specify Web Server settings.

- **Server Name.** Specify the fully qualified domain name of the computer on which you are installing the default Web Server instance.
- **HTTP Port.** Default value depends upon the runtime user ID of the Administration Server instance. If the Administration Server instance's runtime user ID is non-root, the default is 8080. If the Administration Server instance's runtime user ID is root, the default is 80.

- **Create a default document root.** Specify whether the default document root directory should be created during installation. The default is *install-dir*`\https-`*server_name*`\docs`. The server's content files reside in this directory.
- **Use the following directory as document Root.** Specify a document root other than the default.

12 On the Ready to Install screen, click Install Now to install the Web Server software.

A progress bar displays status. Click Stop at any time to stop the installation.

When the installation process is complete, a screen displays indicating whether installation succeeded or failed, and providing information about using the Administration Server and reviewing the installation log file. Make note of this information for future reference.

13 Click Finish to exit the installation wizard.

Installing in Command-Line Mode on Windows

The following procedure describes how to install the Web Server in command-line mode on Windows. You must be logged in with administrator privileges. Non-administrator installation is not supported on Windows.

▼ To Install in Command-Line Mode on Windows

1 Download the installer file to a temporary directory. The file format is:

```
Oracle-iPlanet-Web-Server-7.0.9-windows.zip
```

2 Unzip the server files. You will see the following:

- `Legal` directory
- `README.txt`
- `setup.exe`
- `WebServer` directory

3 Start the installation with the following command:

```
setup --console
```

The command-line installation interface displays. General navigation is as follows:

- Press Enter or Return to move forward in the installation.
- Type **<** to move back in the installation.
- Type `!` to exit the installation.

- Default values are shown in brackets: [ ]. To accept the default, press Enter or Return. To provide a different value, type the value at the command prompt and then press Enter or Return.

4 **Proceed through the introductory information and then specify the installation directory.**

The default is `C:\Program Files\Oracle\Webserver7`.

Web Server components are installed in the directory specified. If the directory does not exist, you have the option to create it. If a Web Server installation exists in the directory, you have the option to upgrade that installation. Otherwise, you must uninstall the existing installation. Only one Web Server 7.0 installation is permitted.

5 **Specify the installation type, Express (the default) or Custom. For more information about each type, see "Installation Types" on page 22.**

6 **Proceed based on the installation type:**

- For Express installations, specify the user name (`admin` by default) and password for the Administration Server user, press Enter, and then go to Step 13 to finish the installation. Steps 8–13 pertain to Custom installations only. For more information about the default settings used for Express installations, see "Express Installation" on page 22.
- For Custom installations, go to Step 7.

7 **Specify the components to install, separated by commas.**

Note – You can install the administration command-line interface without the installing server core, but you cannot install server core without installing the administration command-line interface.

- **Server Core.** Installs the core binaries needed to set up the Web Server environment.
- **Administration Command Line Interface.** Installs the command-line administration client used to manage and configure Web Server and its hosted applications from the command line. If Administration Command Line Interface is selected and Server Core is not, specify Java configuration information as described in Step 8, and then go to Step 13 to finish the installation.
- **Sample Applications.** Installs the sample applications that demonstrate Web Server features and functionality.

For more information about each component, see "Web Server Components" on page 15.

8 **Specify Java configuration information.**

Choose to install the JDK bundled with Web Server 7.0 (the default) or specify the absolute path to an existing JDK.

9 Specify configuration settings.

Specify whether to configure the administration instance as the Administration Server (the default) or the Administration Node (as described in "Server Core" on page 15). For more information about these choices, see "Web Server Components" on page 15.

- If you select Configure Administration Instance as Administration Server (the default), go to Step 10.
- If you select Configure Administration Instance as Administration Node, specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup (the default is No), specify the Administration Node settings listed below, and then go to Step 13 to finish the installation.
  - **Host Name.** Specify the fully qualified domain name of the computer on which you are installing the Administration Node instance.
  - **SSL Port.** Specify the SSL port for the Administration Node instance or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
  - **Register Node with Remote Administration Server.** Specify whether this Administration Node instance should be registered with the Administration Server instance at the time of installation (the default), or later (as described in "Registering the Administration Node From the Command-Line" on page 57). If registration is selected, specify the following settings and then go to Step 13 to finish the installation. If registration is not selected, go to Step 13 to finish the installation.

    Note – When registering an Administration Node with an Administration Server, ensure that the system date and time of the Administration Node is same as or later than that of the Administration Server.

    - **Administration Server Host Name.** Specify the fully qualified domain name of the remote host on which the Administration Server is installed.
    - **Administration Server SSL Port.** Specify the SSL port on which the remote Administration Server is listening. The default is 8989.
    - **Administrator User Name.** Specify the administrator user name used to log in to the remote Administration Server.
    - **Administrator Password.** Specify the administrator user password used to log in to the remote Administration Server.

10 Specify whether the Web Server and its associated Administration Server should be started and stopped automatically on system startup and shutdown (the default is No).

11 Specify Administration Server settings.

- **Server Host.** Specify the fully qualified domain name of the computer on which you are installing the Administration Server.
- **SSL Port.** Specify the SSL port for the Administration Server or accept the default. The default is 8989 unless that port is unavailable, in which case this defaults to the next highest available port.
- **Non-SSL Port.** To create Non-SSL port, select the checkbox `Create non-ssl port` for the Administration Server. The default is 8800 unless that port is unavailable, in which case this defaults to the next highest available port.

Note – SSL port is default for Administration Server. However, you can also choose to use the Non-SSL port. When you choose to install through SSL port, use *https://* to access the Administration Server.

- **Administrator User Name.** Specify the Administration Server user name to use for authentication. The default is `admin`.
- **Administrator Password.** Specify the Administration Server user password to use for authentication.
- **Retype Password.** Retype the Administration Server user password.

12 Specify Web Server settings.

- **Server Name.** Specify the fully qualified domain name of the computer on which you are installing the default Web Server instance.
- **HTTP Port.** Default value depends upon the runtime user ID of Admin Server instance. If the Administration Server instance's runtime user ID is non-root, the default is 8080. If the Administration Server instance's runtime user ID is root, the default is 80.
- **Document Root Directory.** Specify the document root directory. The default is *install-dir*`\https-`*server_name*`\docs`. The server's content files reside in this directory.

13 Specify whether you want to install the product (the default), start over, or exit the installation.

Following installation, text displays indicating whether the installation succeeded or failed, and providing information about using the Administration Server and reviewing the installation log file. Make note of this information for future reference.

If you have completed installation successfully. For more information see Chapter 3, “Getting Started”

Windows Entries

Start menu and registry entries are created during installation, as described in the following sections.

Start Menu

The following Start menu folder is created:

Start > All Programs > Oracle Corporation > Web Server 7.0

If you configure it as Admin Server, the folder contains the following:

- Start Admin Server
- Start Admin Console
- Uninstall

If you configure it as Admin Node, the folder contains the following:

- Start Admin Node
- Start Admin Console
- Uninstall

Registry Entries

Registry entries are modified as follows:

- A registry key is created under `HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Uninstall`, which adds Web Server to the list of applications that can be uninstalled using the Add or Remove Programs functionality accessed from the Control Panel. This key is removed when the product is uninstalled using the uninstaller.
- Entries are added for the Web Server service key: `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\https-admserv70` for the Administration Server, and `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\https-`*config_name* (for example, `https-`*config_name* would be `https-test` for a configuration named `test`).

Upgrading Web Server from 7.0 to 7.0.9

You can upgrade from Web Server 7.0 to Web Server 7.0.9 using the installation program (`setup`). While executing the installation program it will detect the existing installation directory, and prompt you to confirm the installation location. Click `Yes` to continue the upgrade. The remaining steps are similar to the installation steps for more information, see "Installing in Graphical Mode" on page 24.

- You can only upgrade Web Server 7.0 to Web Server 7.0 update releases.
- In express installation, only existing components are upgraded. For more information on express installation, see "Express Installation" on page 22. In custom installation, existing components are upgraded and you can also install components, which were not installed during Web Server 7.0. You cannot deselect the existing components. For more information on custom installation, see "Custom Installation" on page 24.

- During upgrade, installer stops the server instances. You must restart the server instances once the upgrade is done.
- If you have installed JDK, which was bundled with Web Server 7.0 and trying to upgrade to Web Server 7.0.9, installation program installs the new version of JDK and it overwrites the existing JDK installation. Ensure to take a backup of the existing JDK installation folder, if you have made any changes to it. If you have used your existing JDK installation during 7.0, then upgrade will continue to use the same JDK.
- During upgrade, no change is made to configuration. If you have configured the Administration Server in the Web Server 7.0 installation, then no change is made to it. Only the bits are upgraded.

Advanced Installation Options

The following procedure describes how to install Web Server in silent mode.

Installing in Silent Mode

Silent installation is a non-interactive mode that enables you to run the installer on multiple hosts using an installer configuration file (state file). To install in silent mode, generate a state file as described in "Creating a State File" on page 42, and then start the installation program using the `--silent` option (`./setup --silent` *state_file*). After the silent mode is activated, installation takes place without additional user input.

Creating a State File

The installer configuration file (state file) is created when the `savestate` option is used with the `setup` command to start an interactive installation. Settings are captured during the interactive installation and saved in a state file. This file forms the template for silent installation, which can be used to install the product on one or more systems. The state file can be modified later if necessary, as described in "Changing the State File" on page 43.

▼ To Create a State File

1. **Navigate to the directory that contains the `setup` script and other installation files.**
2. **Start the installation program.**
   - Graphical installation mode:
     - `./setup --savestate` (UNIX)
     - `setup --savestate` (Windows)
   - Command line installation mode:

- `./setup --console --savestate` (UNIX)
- `setup --console --savestate` (Windows)

3 **Perform the installation as described in the installation steps in "Installing in Graphical Mode" on page 24 or "Installing in Command-Line Mode on UNIX and Linux" on page 29.**

The state file is created and saved in the installation directory, *install-dir*. The default name of the file is `statefile`, but the file name can be changed if desired. For information about using the state file for silent installation, see "Running the Installer in Silent Mode" on page 48.

Example State File

A state file on the UNIX platform might look as follows. For details about variables in the state file, see "Changing the State File" on page 43.

```
# Install Wizard Statefile section for Oracle iPlanet Web Server
#
#
[STATE_BEGIN Oracle iPlanet Web Server ad59442e831d7bbf70ae3df748d67c910fca5296]
defaultInstallDirectory = /opt/oracle/webserver7
currentInstallDirectory = /export/home/user1/oracle/webserver7state
UPGRADE = false
SELECTED_COMPONENTS = svrcore,admincli,devsupport
USE_BUNDLED_JDK = true
JDK_LOCATION =
IS_ADMIN_NODE = false
STARTUP_ONBOOT = false
ADMIN_HOST = amar
ADMIN_SSL_PORT = 8989
ADMIN_PORT = 8800
ADMIN_UID = vg157348
ADMIN_NAME = admin
ADMIN_PASSWD = a
NODE_HOST =
NODE_SSL_PORT =
REGISTER_NODE =
WEB_SERVERNAME = amar
WEB_PORT = 8080
WEB_UID = vg157348
WEB_DOCROOT =
SIXTYFOURBIT_INSTALL = false
CONFIG_NAME = amar
SKIP_INSTANCE_CREATION =
[STATE_DONE Oracle iPlanet Web Server ad59442e831d7bbf70ae3df748d67c910fca5296]
```

Changing the State File

You can change the state file after it has been generated by editing its values and variables. The following table lists the variables in the state file, in alphabetical order.

Note – Ensure you only edit the values and variables. The structure of the state file should not be modified.

In Web Server 7.0, the values supported for the selected components property were `admincli_l10` and `svrcore_l10n`.

TABLE 2–3 Variables in the State File

Variable Name	Valid Values (If Applicable)	Description
`ADMIN_PORT`	0-65535	Valid port to run the Administration Server.
`ADMIN_SSL_PORT`	0–65535	Valid port for secure connections.
`ADMIN_UID`	Valid UNIX user ID	Valid UNIX user ID to run the Administration Server.
`CREATE_SERVICE`	True or false	Creates a SMF instance for the server instance. This flag is valid only for Solaris 10.
`NODE_HOST`		Fully qualified domain name of the computer on which you are installing the Administration Node.
`NODE_SSL_PORT`	0–65535	Valid port for secure connections.
`CONFIG_NAME`		Default configuration name used by the Web Server to create a configuration, associate it with a node, and create an instance. The default for the Administration Server is `https-config1`.
`IS_ADMIN_NODE`	True or false	Valid only for Administration Server and Administration Node installations; null for Administration Command Line installations.
`currentInstallDirectory`		Specified installation directory path.
`defaultInstallDirectory`	`/opt/oracle/webserver7` on UNIX; `C:\Program Files\Oracle\Webserver7` on Windows	Default installation directory path.

TABLE 2–3 Variables in the State File *(Continued)*

Variable Name	Valid Values (If Applicable)	Description
JDK_LOCATION		Selected Java Platform, Standard Edition (Java SE) installation directory path.
REGISTER_NODE	True or false	Specifies whether the Administration Node instance should be registered with the Administration Server instance at the time of installation or later.

TABLE 2–3 Variables in the State File *(Continued)*

Variable Name	Valid Values (If Applicable)	Description
SELECTED_COMPONENTS	svrcore, svrcore64, admincli, devsupport	Comma-separated list of product components selected for installation. Installs the following: ■ Server Core: Installs the core binaries needed to set up the Web Server environment. In silent mode, it corresponds to svrcore. ■ Server Core 64–bit Binaries: (Solaris SPARC,AMD64 and Linux only) The 64–bit binaries required for setting up the 64–bit runtime for Web Server instances. This option is available only if the system on which you are installing has 64-bit support. Both the 64- and 32-bit binaries are installed. In silent mode, it corresponds to svrcore64. ■ Administration Command Line Interface: The command-line administration client used to manage and configure the Web Server and its hosted applications from the command line. In silent mode, it corresponds to admincli. ■ Sample Applications: Sample applications that demonstrate Web Server features and functionality. In silent mode, it corresponds to devsupport.
SIXTYFOURBIT_INSTALL	True or false	Identifies a 64-bit installation.
SKIP_INSTANCE_CREATION	True or false	True will not create default instances.
STARTUP_ONBOOT	True or false	Start on system boot option.

TABLE 2–3 Variables in the State File *(Continued)*

Variable Name	Valid Values (If Applicable)	Description
UPGRADE	True or false	Identifies the existing installation.
USE_BUNDLED_JDK	True or false	Install the JDK bundled with the installer; if false, JDK_LOCATION cannot be empty.
WEB_DOCROOT		The primary document directory for the Web Server instance; if this is empty, a default document directory is created.
WEB_PORT	0–65535	Valid default port to run the Web Server instance server under HTTP mode.
WEB_SERVERNAME		Fully qualified domain name of the computer on which the default Web Server instance is installed.
WEB_UID	Valid UNIX user ID	Valid UNIX user ID to use when running the default Web Server instance.

Variables such as ADMIN_HOST ADMIN_PORT ADMIN_NAME and ADMIN_PASSWD act differently based on the configuration. The table below has more information that you have installed.

TABLE 2–4 Configuration for Administration Server Instance

Variable name	Valid values (if applicable)	Description
ADMIN_HOST		Fully qualified domain name of the computer on which the Administration Server is installed
ADMIN_PORT	0-65535	Non-SSL port for the Administration Server
ADMIN_NAME		Administrator user name for the initial server instance
ADMIN_PASSWD		Administrator user password for the initial server instance, stored as plain text

The following fields are displayed when you configure Administration Node to an Administration Server.

TABLE 2–5 Configuration for Administration Node Instance

Variable name	Valid values (if applicable)	Description
`ADMIN_HOST`		Fully qualified domain name of the computer on which the Administration instance is installed
`ADMIN_SSL_PORT`	0-65535	SSL port for the Administration Server
`ADMIN_NAME`		Administrator user name to log in to remote admin server
`ADMIN_PASSWD`		Administrator user password to log into remote admin server

Running the Installer in Silent Mode

The following procedure applies to all supported platforms.

▼ To Run the Installer in Silent Mode

1. **Review the installer configuration file (state file) and verify that it contains the settings you want to use for silent installation.**
2. **Copy the state file to each system on which you plan to install the Web Server software.**
3. **Copy the Web Server installation files to each system on which you plan to install the Web Server software.**
4. **Navigate to the directory where you copied the state file and the installation files.**
5. **Start silent installation at the command line using the following syntax:**

   - `./setup --silent` *state_file* (UNIX)
   - `setup --silent` *state_file* (Windows)

   where *state_file* is the installer configuration file. The installer program reads the*state_file*, checks for adequate disk space, and then installs the product based on the data in *state_file*.

   When the prompt is returned, silent installation is complete and the installation components have been installed.

Configure Later Mode (Java ES Only)

To change the configuration settings after Java Enterprise System (Java ES) installation, edit the `configuration.properties` file in the path `install-dir/webserver7/setup/configurator.properties`

Note – Ensure you only edit the values and variables. The structure of the properties file should not be changed. Do not edit `WS_IS_JES` and `WS_JDK_HOME` values.

TABLE 2–6 Post Installation Configuration Settings

Variable	Valid values (if applicable)	Description
`WS_IS_JES`		Set this flag to true (Java ES environment only).
`WS_JDK_HOME`		Selected Java SE Installation directory path.
`WS_INSTALL_ROOT`		(Required) Specify whether the default installation root should be created during installation.
`WS_INSTANCE_ROOT`		(Required) Specify whether the default instance root should be created during installation.
`WS_DOCROOT`		(Optional) Specify whether the default document root should be created during installation.
`WS_SERVER_NAME`		(Required) Fully qualified domain name of the computer on which the default Java ES instance is installed.
`WS_SERVER_USER`	Valid UNIX user ID	(Required only on UNIX/Linux platforms) Valid UNIX user ID to use when running the default Java ES instance. If the Administration Server instance's runtime userID is `root`, the default is `webservd`.
`WS_HTTP_PORT`	0–65535	(Required) Valid default port to run the Java ES instance server under HTTP mode.
`WS_ADMIN_SSL_PORT`	0–65535	(Required) Specify the SSL port for the Administration Server or accept the default.

TABLE 2–6 Post Installation Configuration Settings *(Continued)*

WS_ADMIN_HOST		(Required) Fully qualified domain name of the computer on which the Java ES Administration server is installed.
WS_CONFIG_NAME		(Required) Default configuration name used by the Java ES to create a configuration and associate it with a node to create an instance.
WS_ADMIN_SERVER_USER		(Required only on UNIX/Linux platforms) Valid UNIX/Linux user ID to use when running the default Java ES instance.
WS_ADMIN_LOGIN_USER		(Required) Specify the administrator user name used to log in to the Administration Server.
WS_ADMIN_LOGIN_PASSWORD		(Required) Specify the administrator user password used to log in to the Administration Server.
WS_ADMIN_HTTP_PORT	0–65535	(Optional) Non-SSL port of the Administration server. The default is 8800.
WS_CREATE_SERVICE	True or false	True will create SMF instance for a server instance.
WS_START_ON_BOOT	True or false	(Optional) Start on system boot option.
WS_SKIP_INSTANCE_CREATION	True or false	(Optional) True will not create default instances.
WS_64BIT_INSTALL	True or false	(Optional) Identifies 64-bit installation. True will configure the server in 64 bit mode 6. False will configure the server in 32 bit mode .
WS_ADMIN_IS_SERVER_MODE	True or false	(Optional) True will configure server as Administration Server. False will configure server as Administration Node.

TABLE 2–6 Post Installation Configuration Settings *(Continued)*

WS_REGISTER_NODE	True or false	(Optional) Specifies whether the Administration Node instance should be registered with the Administration Server instance at the time of installation or later. Required only if WS_ADMIN_IS_SERVER_MODE is set to false. If set to true, you must provide the name of the remote admin server host for registration.
WS_NODE_SSL_PORT	0–65535	(Optional) SSL port of the Administration server. Required only if WS_ADMIN_IS_SERVER_MODE is set to false.
WS_NODE_HOST		(Optional) Fully qualified domain name of the computer on which the Administration instance is installed.

Note – When you configure in Configure Late Mode, you must execute `configureServer` script in the following location:

Solaris: *install-dir*`/setup/configureServer`

Linux/HP-UX: *install-dir*`/setup/configureServer`

Windows: `jes_install_dir\webserver7\setup\`

Disable Start on Boot Option

If you select Start on Boot during installation, the following scripts are created:

- Solaris: `/etc/init.d/webserver7–*`
- Linux:`/etc/init.d/webserver7–*`
- AIX:`/etc/rc.d/webserver7–*`
- HPUX`/sbin/init.d/webserver7–*`

An asterisk * in the script name refers to the unique hashcode generated during each installation, for example `webserver7–99bbdd`. The script contains the variable `WS_INSTANCE_ROOT` which is set to 1. To disable the Start on Boot option, `–-set WS_START_ONBOOT to 0`

Note – Be careful to choose the correct script for your system. Each installation includes its own script with a different hashcode.

Viewing Installation Log Files

Log files are created during the installation process. All installation steps are logged, providing valuable troubleshooting information.

Install Log

The install log file is located in the following directory:
install-dir`/setup/Oracle_iPlanet_Web_Server_install.log`

Install log file entries contain information about the attempted action, the outcome of the action, and the cause of failure if applicable. Entries fall into three categories: `INFO`, `WARNING`, and `ERROR`. The following table describes each category.

TABLE 2–7 Install Log Entry Categories

Category	Description
`INFO`	Marks normal completion of a particular installation task.
`WARNING`	Marks non-critical failures. Warning-level messages contain information about the cause and nature of the failure, and point to possible remedies.
`ERROR`	Marks critical failures and reports the installation status as failed. Error-level messages provide detailed information about the nature and cause of the problem.
`FINE` `FINEST`	Marks the extent of verbosity of debug messages. `FINEST` gives the maximum verbosity.

Low-Level Install Logs

Low-level install logs are located as follows, where *timestamp* is of the format *mmddHHMM*.

- Solaris (root installation)

  `/var/sadm/install/logs/Oracle_iPlanet_Web_Server_install.`*timestamp*
- Solaris (non-root installation)

`/var/tmp/Oracle_iPlanet_Web_Server_install.`*timestamp*

- Linux, HP-UX, AIX

  `/var/tmp/Oracle_iPlanet_Web_Server_install.`*timestamp*

- Windows

  `%tmp%\Oracle_iPlanet_Web_Server_install.`*timestamp*

◆ ◆ ◆ CHAPTER 3

Getting Started

This chapter provides basic information about getting started with Web Server.

This chapter contains the following sections:

Starting the Administration Server

This section describes how to start the Administration Server.

- To start the Administration Server on UNIX and Linux, go to *install-dir*/*admin_server*/`bin` and type `./startserv`.
- To start the Administration Server on Windows, do one of the following:
  - From the Start menu, select Programs > Oracle > Web Server 7.0 > Start Admin Server.
  - Start the Administration Server service on the Services page accessed from the Control Panel.
  - Execute `net start https-admserv70` from the command line.
  - Execute `startserv.bat` from *install-dir*`/admin-server/bin`.

Accessing the Administration Server

To access the web-based Administration Server console, open a browser and enter a URL of the format `https://`*server_name*`:`*administration_port*.

For example, if the server name specified during installation is `myserver` and the port is `8989`, the URL used to launch the Administration Server graphical interface is `https://myserver:8989`. You will be prompted for the Administration Server user name and password, which were also specified during installation.

Note – You must use *https://* in the URL prefix to access the Administration Server through SSL port.

Using the Administration Command-Line Interface

The command-line tool for Web Server 7.0 administration is called `wadm` (this was called `wsadmin` in Web Server 6.0 and 6.1) and is located in *install-dir*`/bin` directory. To use the CLI, the Administration Server must be running.

Use the `--help` option (`wadm --help`) to obtain top-level help for the CLI. Use `wadm` *sub_command* `--help` for command-specific help. For more information about the administration CLI, see the man pages and the *Oracle iPlanet Web Server 7.0.9 CLI Reference Manual*.

Note – `wdeploy` command only supports the backward compatibility with Web Server 6.0 and 6.1 releases. This command will work only on the Administration Node.

Enabling 64–bit Support

After the installation, by default Web Server runs in the 32-bit mode if the 64-bit runtime option is not selected. The following shows how to enable the 64-bit support after the installation.

Set the configuration property:

```
$ wadm set-config-prop --user=admin-user --host=host-name --port=admin-port
--config=config-name platform=64
```

Deploy the configuration:

```
$ wadm deploy-config config-name
```

Registering the Administration Node From the Command-Line

Use the `register-node` command to register the Administration Node with the Administration Server from the command line. Registration is necessary if registration was not performed during installation, or failed during installation. The Administration Node cannot be started unless registration is complete. The Administration Server must be running to use the CLI and register the Administration Node with the Administration Server.

Use the following command to register the Administration Node:

`($install-dir/bin/wadm register-node --user=`*user_name* `--host=`*host_name* `--port=`*port_name* `)`

Note – When registering an Administration Node with an Administration Server, ensure that the system date and time of the Administration Node is same as or later than that of the Administration Server.

- *user_name*: Administrator user name to log into remote Administration Server.
- *host_name*: Fully qualified domain name of the host on which the Administration Server is installed.
- *port_name*: SSL port on which the remote Administration Server is listening. The default is 8989.

Configuring Web Server

For detailed information about configuring Web Server, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Guide* and the online help that is available from the Admin console. You can also refer other books in the Web Server 7.0 documentation set.

Viewing Access and Error Log Files

The Administration Server log files record data about the server, including details about server access and the types of errors encountered during server operation.

The Access log records information about requests to and responses from the server. The Error log lists all errors that the server has encountered since the log file was created, and also contains informational messages about the server, such as when the server was started and who tried unsuccessfully to log in. By default, the access and server logs are located in *install-dir*`/admin-server/logs`.

For more information about the log files and their configuration, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*, and the online help that is available from the Admin console. You can also refer other books in the Web Server 7.0 documentation set.

◆ ◆ ◆ CHAPTER 4

Uninstalling the Web Server

This chapter describes how to uninstall the Web Server software, and contains the following sections:

Selecting the Uninstallation Mode

There are three uninstallation modes: graphical, command-line, and silent. Use the `uninstall` command to specify the uninstallation mode. The syntax is as follows:

```
./uninstall [--help] [--console] [--silent] [--javahome
java_dir][--saveinstances]
```

If you run the `uninstall` command without options, the uninstallation programs runs in graphical mode.

The following table lists the `uninstall` command options.

TABLE 4–1 Options for the `uninstall` Command

Option	Description
`./uninstall --help`	Displays the options for the `uninstall` command.
`./uninstall`	Runs the uninstaller in graphical mode.
`./uninstall --console`	Runs the uninstaller in command-line mode.
`./uninstall --silent`	Runs the uninstaller in silent mode.

TABLE 4–1 Options for the `uninstall` Command *(Continued)*

Option	Description
`./uninstall --javahome` *java_dir*	Defines the location of the JDK installation that should be used for the uninstaller JVM, in graphical mode.
`./uninstall --console --javahome` *java_dir*	Defines the location of the JDK installation that should be used for the uninstaller JVM, in command-line mode.
`./uninstall --saveinstances`	Captures configuration information for a server instance before it is uninstalled, in command-line mode. *All configuration information is removed during the uninstall process in silent mode.* In all other modes, you are prompted during the uninstall process.

Uninstalling in Graphical Mode

The graphical interface is an interactive graphical wizard that walks through the uninstallation process. This is the default mode when the uninstallation program is started without options (`./uninstall`).

General navigation is as follows:

- Click Back to return to the previous screen.
- Click Next to move to the next screen.
- Click Cancel to cancel the installation.
- Click Help to display documentation specific to the current screen.

Note – On UNIX systems, the uninstallation interface defaults to command-line mode if the `DISPLAY` environment variable has not been exported to your local machine and if X Windows is not supported. To uninstall in command-line mode, follow the instructions in "Uninstalling in Command-Line Mode" on page 61.

▼ To Uninstall in Graphical Mode

1. **Navigate to the** *install-dir*`/bin` **directory.**
2. **Start the uninstallation program**
   - (UNIX) Type `./uninstall`.
   - (Windows) Double-click `uninstall.exe` or type `uninstall` from the command line. You can also use the Control Panel > Add or Remove Programs option, or use Start > Programs > Oracle > Web Server 7.0 > Uninstall.

The uninstallation wizard appears.

3 **Click Next, and then specify whether to save instance configuration information.**

Selecting Save Instances (not selected by default) retains all the server instance directories in the Web Server's *install-dir*. Saving instances allows you to reuse the configurations by copying them to the config-store of the new Administration Server

4 **Click Next, and then Uninstall Now to proceed with the uninstallation.**

A progress bar shows status. Following uninstallation, a summary page displays. Click Details for more information, or Close to exit the uninstallation wizard.

Uninstalling in Command-Line Mode

The command-line interface is an interactive, text-based interface that prompts for responses in a terminal window. To activate the command-line mode, start the uninstallation program using the `--console` option (`./uninstall --console`).

▼ To Uninstall in Command-Line Mode

1 **Navigate to the *install-dir*`/bin` directory.**

2 **Start the uninstallation program with the following command:**

- (UNIX) `./uninstall --console`
- (Windows) `uninstall --console`

The command-line uninstall interface displays.

3 **Select Uninstall Now to proceed with the installation.**

Uninstalling in Silent Mode

- From the command line, navigate to the bin directory in the Web Server installation directory, *install-dir*, and start the uninstallation program with the following command:
  - (UNIX) `./uninstall --silent`
  - (Windows) `uninstall --silent`
  -

Note – Use `./uninstall --saveinstances –console` if you want to capture instance configuration information before the instance is uninstalled. Otherwise, all configuration information is removed during the uninstall process.

Viewing Uninstallation Log Files

Log files are created during the uninstallation process. All uninstallation steps are logged, providing valuable troubleshooting information.

Uninstall Log

The `uninstall` log file is located as follows:
install-dir`/setup/Oracle_iPlanet_Web_Server_uninstall.log`.

Uninstall log file entries contain information about the attempted action, the outcome of the action, and the cause of failure if applicable. Entries fall into three categories: `INFO`, `WARNING`, and `ERROR`. The following table describes each category.

TABLE 4–2 Uninstall Log Entry Categories

Category	Description
`INFO`	Marks normal completion of a particular uninstallation task.
`WARNING`	Marks non-critical failures. Warning-level messages contain information about the cause and nature of the failure, and point to possible remedies.
`ERROR`	Marks critical failures and reports the uninstallation status as failed. Error-level messages provide detailed information about the nature and cause of the problem.

Low-Level Uninstall Log

Low-level `uninstall` logs are located as follows, where *timestamp* is of the format *mmddHHMM*.

- Solaris (root installation)

  `/var/sadm/install/logs/Oracle_iPlanet_Web_Server_uninstall.`*timestamp*
- Solaris (non-root installation)

`/var/tmp/Oracle_iPlanet_Web_Server_uninstall.`*timestamp*

- Linux, HP-UX, AIX

  `/var/tmp/Oracle_iPlanet_Web_Server_uninstall.`*timestamp*

- Windows

  `%tmp%\Oracle_iPlanet_Web_Server_uninstall.`*timestamp*

◆ ◆ ◆ CHAPTER 5

Migrating to Web Server 7.0

This chapter describes the migration of Sun ONE Web Server 6.0 and Sun Java System Web Server 6.1 configurations to Web Server 7.0.

This chapter contains the following sections:

Migration Overview

Web Server 7.0 enables you to migrate server instances from Sun ONE Web Server 6.0 and Sun Java System Web Server 6.1. For a general overview of this terminology and distinction, see "New Administration Framework" on page 14.

You must first migrate the Web Server 6.0 and 6.1 *instance* to create a Web Server 7.0 *configuration*. The Web Server 7.0 configuration is then used to create a Web Server 7.0 instance. Web Server 7.0 includes a new command-line interface for migration, so migration can now be performed either from the graphical interface or from the command line. See "Migrating Using the Graphical Interface" on page 79 or "Migrating Using the Command-Line Interface" on page 80 for specific procedures.

Note – The server being migrated and the Web Server 7.0 Administration Server must reside on the same host. However, an instance can be created on an associated remote node.

Only Sun ONE Web Server 6.0 and Sun Java System Web Server 6.1 instances can be migrated. Direct migration from earlier product versions is not supported. To migrate earlier versions, first migrate them to Sun Java System Web Server 6.1 and confirm that the migration is successful. For information see the latest Sun Java System Web Server 6.1 documenation collection at `http://docs.sun.com/prod/sjs.websrv61#hic`.

Detailed migration information is provided during and after the migration process in the migration log file. It lists the settings and configurations that were and were not migrated, warns about required manual changes, and indicates whether the migration succeeded or failed. For more information about this file, see "Viewing the Migration Log File" on page 83. Many but not all settings are migrated, as described in "What Is and Is Not Migrated" on page 66.

A configuration is created during the migration process. Following migration, the configuration is available in the *install-dir*`/admin-server/config-store` directory. As mentioned earlier, Web Server 7.0 server instances are created from these configurations using either the administration GUI or CLI. If a configuration exists with the same name, *-x* is added to *config_name*, where *x* is an integer.

What Is and Is Not Migrated

Many but not all settings are migrated. This section lists what is and is not migrated during migration.

What Is Migrated

The following are migrated by the migration tool:

- ACL Files
- Configuration files
- Scheduler settings
- Configuration settings for file cache tuning
- Key & cert databases and certificate mappings
- Listen socket settings
- Mime files
- NSAPI information
- SHTML settings

- SNMP settings
- SSL information
- User databases
- Virtual server settings
- Web applications (see "Web Applications" on page 75 for more information)
- WebDAV settings, but not the physical collections and locks (see "WebDAV" on page 76 for more information)
- Web Server 6.1 search collections informations. see "Search" on page 73 for more information)

What Is Not Migrated

The following are not migrated by the migration tool:

- CGI directories
- Command-line scripts
- The docroot directory
- Legacy servlets
- Log files
- Simple Session Manager and Java DataBase Connectivity (JDBC) Session Manager
- User libraries
- WebDAV physical collections and locks
- Web Server 6.0 search configurations and collections. (see "Search" on page 73 for more information)

Files Requiring Manual Migration

Command-line scripts are not migrated to Web Server 7.0. The default command-line scripts will be created, and you must make any necessary changes in the relevant Web Server 7.0 command-line scripts.

The following command-line scripts are not migrated:

- `startsvr`, `startsvr.bat`
- `stopsvr`, `stopsvr.bat`
- `restart`
- `reconfig`, `reconfig.bat`

Configuration File Changes

In previous releases, server configuration was spread over multiple files. In Web Server 7.0, server configuration has been consolidated for better manageability. Many changes have been made to consolidate instance-specific configuration files in the `config` directory and to simplify and enhance existing configuration files. In general, no new configuration files have been added, some configuration files have been removed, and significant changes have been made to files carried forward from previous releases, such as `server.xml` and `magnus.conf`.

Some configuration file changes are briefly mentioned here but are not described in detail. For complete information about configuration file changes in Web Server 7.0, see the Web Server 7.0 *Administrator's Configuration File Reference*.

Configuration Files Removed

The following configuration files have been removed in Web Server 7.0:

- `dbswitch.conf`
- `nsfc.conf`
- `scheduler.conf`
- `schedulerd.conf`
- `snmp.conf`

For more information, see "File Layout Changes" on page 68.

File Layout Changes

The following table lists file layout changes between Sun Java System Web Server 6.1 and Web Server 7.0. These changes are made automatically during migration.

For information about changes made in Sun Java System Web Server 6.1 and earlier product versions, see the latest Sun Java System Web Server 6.1 documenation collection at `http://docs.sun.com/prod/sjs.websrv61#hic`.

TABLE 5–1 File Layout Changes

Web Server 6.1	Web Server 7.0
install_root`/alias/https-`*server_id*`-`*hostname*`-cert`*x*`.db`	*install-dir*`/https-`*server_id*`/config/cert`*x*`.db`, where *x*=7 or 8 (Web Server 7.0 supports both `cert7` and `cert8`)
install_root`/alias/https-`*server_id*`-`*hostname*`-key3.db`	*install-dir*`/https-`*server_id*`/config/key3.db`

TABLE 5–1 File Layout Changes *(Continued)*

Web Server 6.1	Web Server 7.0
install_root/alias/secmod.db	*install-dir*/https-*server_id*/config/secmod.db
install_root/httpacl/generated.https-*server_id*.acl	*install-dir*/https-*server_id*/config/default.acl
install_root/httpacl/genwork.https-*server_id*.acl	Removed
install_root/userdb/certmap.conf	*install-dir*/https-*server_id*/config/certmap.conf
install_root/userdb/dbswitch.conf	Removed; functionality moved to the auth-db element in server.xml.
instance-dir/config/nsfc.conf	Removed; functionality moved to the file-cache element in server.xml.
instance-dir/config/snmp.conf	Remove; functionality moved to the snmp element in server.xml.
admsrv_dir/config/scheduler.conf	Removed; functionality moved to the event element in server.xml and entries migrated to Web Server 7.0 (no manual changes are required).
admsrv_dir/config/schedulerd.conf	Removed
instance-dir/config/*.clfilter	Removed

TABLE 5–1 File Layout Changes *(Continued)*

Web Server 6.1	Web Server 7.0
instance-dir/config/magnus.conf	*install-dir*/https-*server_id*/config/magnus.conf Retained for NSAPI plug-in configuration, but all functionality not related to NSAPI plug-ins has been moved to server.xml. Support for some obsolete directives has been dropped. The magnus.conf file is copied into the new server configuration during migration. If any removed or obsolete directives are found, a warning is issued. The following new elements will be created in server.xml: ■ access-log ■ access-log-buffer ■ acl-cache ■ cgi ■ dns ■ dns-cache ■ http ■ keep-alive ■ localization ■ pkcs11 ■ qos ■ ssl-session-cache ■ stats ■ temp-path ■ thread-pool ■ user For detailed information about these changes, see the Web Server 7 *Administrator's Configuration File Reference*.
instance-dir/config/obj.conf	*install-dir*/https-*server_id*/config/obj.conf Retained. In Web Server 6.1, all virtual servers within a given VSCLASS shared a common obj.conf. In Web Server 7.0, each virtual server can have its own obj.conf, or can still share the same obj.conf. For detailed information about these changes, see Chapter 6, "Syntax and Use of obj.conf," in *Oracle iPlanet Web Server 7.0.9 Administrator's Configuration File Reference* and Chapter 2, "Configuration, Instances, and Nodes," in *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*

TABLE 5–1 File Layout Changes *(Continued)*

Web Server 6.1	Web Server 7.0
instance-dir/config/server.xml	*install-dir*/https-*server_id*/config/server.xml Most of the attribute names have changed. Some elements have been consolidated and some have split. For detailed information about these changes, see the Web Server 7.0 *Administrator's Configuration File Reference*. The Web Server 6.0 or 6.1 server.xml file is parsed and the values written in the new server.xml file, which is created during migration.
server_instance/config/mime.types	*install-dir/https-server_id/config/mime.type* During migration, the mime.types file of the old instance in the *server_instance*/config/mime.types directory is migrated into the new *server_instance*/config directory. Non-default mime.types (mime1.types, mime2.types, and so on) in the old *server_instance*/config directory and listed in the MIME element of server.xml are migrated into the new *server_instance*/config directory.

Other Migration-Related Changes

The following sections contain information on other migration-related changes when moving from Web Server 6.1 to Web Server 7.0. These changes are made automatically during migration.

Content-type Header

After migration from 6.1, Web Server 7.0 will not return Content-type:text/html when there is no message body, for instance, a redirection location header. Since response doesn't contain the message body, there's no reason to specify a Content-Type header hence this is a conscious change made in 7.0 as compared to 6.1. For customers who still depend on Content-type can make the following configuration changes in 7.0.

To add back the content-type in output stage

Add the following content into Web Server 7.0 obj.conf

```
Service method="(GET|HEAD)" type="magnus-internal/directory" fn="index-common"
Service method="(GET|HEAD|POST)" type="*~magnus-internal/*" fn="send-file"
Service method="TRACE" fn="service-trace"
<If $uri =~ ".jsp$">
```

```
Output fn="set-variable" insert-srvhdrs="Content-type: text/html"
</If>
Error fn="error-j2ee"
AddLog fn="flex-log"
</Object>
```

When `content-type` is 302

```
<If  $code = "302" >
Output fn="set-variable" insert-srvhdrs="content-type:text/html"
</If>
```

When `content-length` is zero

```
<If $srvhdrs{'content-length'} = "0">
Output fn="set-variable" insert-srvhdrs="content-type:text/html"
</If>
```

Config Store Directory

As described in "New Administration Framework" on page 14, Web Server 7.0 makes it easier to manage Web Server configurations across hardware nodes in a server farm. This administration framework provides necessary services to graphical and command-line clients to manage server configurations, and to replicate configurations across nodes within data centers or server farms.

Caution – Do not edit any files under `config-store` directory. The files under this directory are created by Web Server for internal use.

Metadata for the configurations managed by the administration infrastructure is stored within a directory called `config-store`, under the root directory of the Administration Server instance. When a server is migrated, data is transferred and a configuration is created under `config-store`. Configuration files, applications, and other elements that are part of a configuration are stored in `config-store`, as are search collections if a different search collection index directory is not specified during migration (for more information, see "Search" on page 73). Web Server 7.0 instances are created from these configurations.

For more information about the `config-store` directory structure and about configuration files, see the Web Server 7.0 *Administrator's Configuration File Reference*. For more information about managing Web Server configurations in data centers and server farms, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*.

JNDI and JDBC

The following table lists changes related to Java Naming and Directory Interface (JNDI) and JDBC.

TABLE 5–2 Changes Related to JNDI and JDBC

Change in Web Server 7.0	Description
`JDBCRESOURCE` and `JDBCCONNECTIONPOOL` element changes	The `JDBCRESOURCE` and `JDBCCONNECTIONPOOL` elements in `server.xml` have been consolidated into the `jdbc-resource` element. For each existing `JDBCRESOURCE`, a corresponding `jdbc-resource` element will be created in the new *server-instance*`/config/server.xml`.
Element name changes in `server.xml`	The following element names have changed: ■ `MAILRESOURCE` is now `mail-resource`. ■ `CUSTOMRESOURCE` is now `custom-resource`. ■ `EXTERNALJNDIRESOURCE` is now `external-jndi-resource`, and most of the attribute names have also changed.

Legacy Servlets

There are no changes to this functionality from Web Server 6.1 to Web Server 7.0. For more information on legacy servlets, see "Migrating Legacy Servlets" in *Oracle iPlanet Web Server 7.0.9 Developer's Guide to Java Web Applications*

Log Files

Log files are not migrated.

Search

When migrating search, necessary `server.xml` changes are made and the collections directory from the Web Server 6.1 server instance is moved to the search collection index directory specified during migration. If the directory is not specified, the search collection will not be migrated.

Also note the following considerations:

- The document root for search collections is not migrated and must be changed manually.
- Web Server 6.1 search collections are migrated, but Web Server 6.0 collections are not migrated.

The following table lists other changes related to search.

TABLE 5–3 Changes Related to Search

Changes in Web Server 7.0	Description
Element changes in `server.xml`	■ `SEARCH` is now called `search-app`. ■ `SEARCHCOLLECTION` is now called `search-collection-copy-path`. ■ The `PROPERTY` subelement has been removed from `SEARCHCOLLECTION`. ■ The `WEBAPP` subelement has been removed, a `uri` attribute has been added to point to the search web application, and most of the attribute names have changed.
`search-collection-copy-path`	Specifies the path to which search collection information will be copied when migrating search collections. The following migration scenarios are possible: If the Web Server 6.0 or 6.1 search collection path is outside the Web Server 6.0 or 6.1 instance, then the migrated search collection path will point to the Web Server 6.0 or 6.1 search collection path, and this option will be disregarded. If the Web Server 6.0 or 6.1 search collection path is within the Web Server 6.0 or 6.1 instance, and a valid path is specified for this option, then the search collection information will be copied to the following directory: `searchCollectionPath/configName/virtualServerName/collectionName`. If the specified path is not valid, an error message will be logged. If the Web Server 6.0 or 6.1 search collection path is within the Web Server 6.0 or 6.1 instance but no path is specified for this option, then the search collection information will not be copied. A message will be written to the migration log asking the user to manually copy the search collection information using the `wadm add-search-docs` command. In this case, the migrated search collection path will be the following: `WebServer7Config-base/https-configName/config/collections/virtualServerName/collectionName`.

Security

The following table lists changes related to security.

TABLE 5–4 Changes Related to Security

Changes in Web Server 7.0	Description
`SECURITY` element moved and renamed `security` (all lower case)	In Web Server 6.1, the `SECURITY` element was under the `JAVA` element in `server.xml`. In Web Server 7.0, the `JAVA` element has been split into two elements: `jvm` and `servlet-container`. In Web Server 7.0, the `security` element is under the `servlet-container` element and is called `security` (all lower case) instead of `SECURITY`. The necessary changes are made in the new *server_instance*`/config/server.xml`.

Servlet Container

The following table list changes related to servlet container.

TABLE 5–5 Changes Related to Servlet Container

Changes in Web Server 7.0	Description
Decode Cookies	In Web Server 6.1, + in cookie values were not decoded. However, in Web Server 7.0 the plus + is decoded to spaces. The default value is false.

Session Manager

There are no changes to this functionality from Web Server 6.1 to Web Server 7.0.

User Libraries

User libraries are not migrated. A warning message is recorded in the migration log file.

Web Applications

The following table lists changes related to web applications.

TABLE 5–6 Changes Related to Web Applications

Changes in Web Server 7.0	Description
`WEBAPP` element changed in `server.xml`	The `WEBAPP` element is now called `web-app` and has been moved under the `virtual-server` element. The changes are made in the new *install-dir*`/admin-server/config-store/`*config_name*`/config/server.xml`. Changes are also be made in the `sun-web.xml` and `web.xml` files for the web applications. If the web application was located inside the old *install-dir*, it is physically migrated and changes are made in `sun-web.xml` and `web.xml` files of the web applications else, the web applications path element in the migrated `server.xml` is modified to point to the old web application directory. No changes will be made to `sun-web.xml` and `web.xml`. A warning message is recorded in the migration log file to manually edit these XML files.

WebDAV

The following table lists changes related to WebDAV.

TABLE 5–7 Changes Related to WebDAV

Changes in Web Server 7.0	Description
Element changes in `server.xml`	■ `DAV` is now called `dav`. ■ `DAVCOLLECTION` is now called `dav-collection`. ■ The `PROPERTY` subelement has been removed. ■ The `dav-collection` subelement has been moved under the `virtual-server` element and most of the attribute names have changed. The necessary changes are made in `server.xml`.

TABLE 5–7 Changes Related to WebDAV *(Continued)*

Changes in Web Server 7.0	Description

Changes to `obj.conf`	Necessary modifications are made in the `obj.conf file`. Specifically:
	■ `ACL` and `REPORTS` are added in the default object's `service-dav` list of methods. For example:
	`<Object name="default">`
	`...`
	`Service fn="service-dav"`
	`method="(OPTIONS|PUT|DELETE|COPY`
	`|MOVE|PROPFIND|PROPPATCH|LOCK`
	`|UNLOCK|MKCOL|ACL|REPORT)"`
	`Error fn="error-j2ee"`
	`AddLog fn="flex-log"`
	`name="access"`
	`<Object>`
	■ `ACL` and `REPORTS` are added in the `dav` object's `service-dav` list of methods. For example:
	`<Object name="dav"`
	`PathCheck fn="check-acl"`
	`acl="dav-src"`
	`Service fn="service-dav"`
	`method="(GET|HEAD|POST|PUT|DELETE`
	`|COPY|MOVE|PROPFIND|PROPPATCH|LOCK`
	`|UNLOCK|MKCOL|ACL|REPORT)"`
	`</Object>`

New ACL entry in `default.acl`	The following new ACL entry is added in `default.acl` only if the `dav-src` ACL exists in `generated.https-`*`server_id`*`.acl`:
	`acl uri=/magnus-internal/";`
	`deny (all) user="anyone";`
	`allow (list) user="all";`

Migrating From Web Server 6.0 and 6.1 to Web Server 7.0

This section describes how to migrate Web Server 6.0 and 6.1 to Web Server 7.0 using both the graphical and the command-line interfaces. Note the following considerations:

- The server being migrated and the Web Server 7.0 Administration Server must reside on the same host.
- Commit all pending configuration changes made to the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance through the Administration Server console GUI before migrating the instance.

- Confirm that the existing Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance is working correctly before migrating the instance.
- Stop the server you are migrating before the migrating settings.
- If migrating from a Web Server version lower than 6.0, you must first migrate your legacy server to Web Server to 6.1, and then to Web Server 7.0. Direct migration from versions lower than 6.0 is not supported. After migrating from iPlanet Web Server 4.0 to 6.1, ensure that Web Server 6.1 works, then migrate to Web Server 7.0.

To Migrate From Non-Supported Linux Version

Linux versions supported by the Web Server 7.0.9 are listed in Release Notes, see "Supported Platforms" in *Oracle iPlanet Web Server 7.0.9 Release Notes*

If you are using a non-supported Linux version, you must perform one of the following tasks to upgrade to the Web Server 7.0.9. You can perform the following task in Java ES environment as well.

1. Stop the Web Server 6.0 or 6.1 instances.
2. Upgrade the Linux operating system to one of the Web Server 7.0.9 supported Linux versions.
3. Migrate the Web Server 6.0 or 6.1 instances to Web Server 7.0.9.

Note – You must upgrade the Linux operating system to one of the supported versions.

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or

1. Archive the Web Server 6.0 or 6.1 installation directory, including all necessary resources like document root, libraries, and web applications.
2. Extract the archive to the system running Web Server 7.0.9.
3. Migrate the extracted Web Server 6.0 or 6.1 instances to Web Server 7.0.9.

Note – Ensure that the directory structure is the same as in Web Server 6.0 or 6.1.

Resolving Service ID Conflicts on Windows

On Windows, creating an instance for any configuration registers a `service-id` with Windows services. If the `service-id` exists, there is a `service-id` conflict and the instance creation fails. For example, you might migrate a 6.0 or 6.1 instance named `foo`. If the `foo` `service-id` exists, the creation fails.

To avoid the conflict, during migration, change the configuration name using either the CLI or the Admin Console. Another option is to copy the configuration to a new configuration that uses a unique `service-id`. Use either the `wadm> copy-config` command, or the Copy button on the Admin Console Configurations page to copy the configuration.

Migrating Using the Graphical Interface

The following procedure describes how to migrate server instances using the graphical interface. There are two distinct phases to the migration process. You first migrate data from a 6.0 or 6.1 instance to create a Web Server 7.0 configuration, and then deploy that configuration on a node to create a Web Server 7.0 instance.

Note – For detailed information about these and other tasks performed using the Administration Server console, see the *Oracle iPlanet Web Server 7.0.9 Administrator's Guide*.

▼ To Migrate Using the Graphical Interface

1. **Access the Administration Server console and click the Configurations tab.**
2. **In the Configuration Tasks table on the resulting Tasks screen, click Migrate Configuration.**

   The Migrate Instances Wizard displays.
3. **In the wizard:**

   a. **Supply the absolute path to the installation directory of the 6.0 or 6.1 Web Server you want to migrate, then click Next.**

   b. **The Instances selection screen appears.**

   This wizard creates a configuration in the `config-store` directory of the Web Server 7.0 Administration Server. You will then use this configuration to create a server instance, as described in the following steps.

Note – Before creating the instance from the migrated configuration, it is imperative that you review the migration log file and fix any issues. For information about accessing the migration log, see "Viewing the Migration Log File" on page 83.

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4. **In the Configuration Tasks table on the Tasks screen, click New Instance.**

   The New Instance Wizard displays.

5 **In the wizard:**

   a. **Select the configuration you migrated and click Next.**

   b. **Select the nodes on which to create an instance of the configuration and click Next.**

   Note – If you want to migrate to another host than while creating an instance select the remote node.

   c. **Verify the information on the summary page and click Finish.**

6 **Start the migrated server and ensure that the server is working properly.**

Migrating Using the Command-Line Interface

The `migrate-server` command is used to migrate server instances and create Web Server 7.0 configurations using the administration command-line interface (CLI).

The `wadm` utility is located in *install-dir*`/bin`. For detailed information about using the administration CLI, see the man pages and the *Oracle iPlanet Web Server 7.0.9 CLI Reference Manual* document. For basic information that will help you get started, also see "Using the Administration Command-Line Interface" on page 56 in this document.

The `migrate-server` syntax is as follows:

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory]
[--log-dir=directory]([--all|[--config=newconfigname[--instance=instancename])
--server-root=path
```

The following examples demonstrate how to use the command-line interface to migrate one or several server instances.

Migrating a Single Instance

The following is an example of using the CLI to migrate a single instance from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0 using the same name for the migrated configuration as the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance :

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
```

```
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory][
[--log-dir=directory]([--all|[--config=newconfigname[--instance=instancename])
--server-root=path

--instance=instance_name
--server-root=6.xwebserver_install_root
```

where, for example, *6.xwebserver_install_root* might be `/opt/SUNWwbsvr` and *instance_name* might be `https-foo.com`.

The following is an example of migrate a single instance from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0 using a different name from the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance for the migrated configuration:

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory][
[--log-dir=directory]([--all|[--config=newconfigname[--instance=instancename])
--server-root=path

--instance=instance_name
--config=new-foo
--server-root=6.xwebserver_install_root
```

where, for example, *6.x webserver_install_root* might be `/opt/SUNWwbsvr` and *instance_name* might be `https-foo.com`.

The following is an example to migrate single instance from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0 using a different name from the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance for the migrated configuration.

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory][
[--log-dir=directory]([--all|[--config=newconfigname[--instance=instancename])
--server-root=path

--instance=instance_name
--config=new-foo
--server-root=6.xwebserver_install_root
```

where, for example, *6.x webserver_install_root* might be `/opt/SUNWwbsvr` and *instance_name* might be `https-foo.com`.

The following is an example of migrate single instance from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0 using a different name from the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance for the migrated configuration.

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory]
[--log-dir=directory]([--all|
[--config=newconfigname[--instance=instancename]) --server-root=path

--instance=instance_name
--config=new-foo
--search-collection-copy-path=custom_path
--server-root=6.xwebserver_install_root
```

where, for example, *6.x webserver_install_root* might be `/opt/SUNWwbsvr` and *instance_name* might be `https-foo.com`.

The following is an example of migrate single instance from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0 using a different name from the Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 instance for the migrated configuration. Specify a different log directory for migration logs:

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory][[--log-dir=directory]([--all|[--config=newconfigname
[--instance=instancename]) --server-root=path

--instance=instance_name
--config=new-foo
--search-collection-copy-path=custom_path
--log-dir=log_path
--server-root=6.xwebserver_install_root
```

where, for example, *6.x webserver_install_root* might be `/opt/SUNWwbsvr` and *instance_name* might be `https-foo.com`.

Migrating All Instances

The following is an example of using the CLI to migrate all instances from Sun ONE Web Server 6.0 or Sun Java System Web Server 6.1 to Oracle iPlanet Web Server 7.0:

```
wadm> migrate-server [--user=admin-user]
[--password-file=admin-pswd-file][--host=admin-host][--port=admin-port][--no-ssl]
```

```
[--rcfile=rcfile][--echo][--no-prompt][--verbose]
[--search-collection-copy-path=directory][[--log-dir=directory]
([--all|[--config=newconfigname[--instance=instancename]) --server-root=path

-all=true
--server-root=6.xwebserver_install_root
```

where, for example, *6.x webserver_install_root* might be `/opt/SUNWwbsvr`.

Verifying Migration

To verify migration:

- Review the task completion message, indicating whether migration did or did not take place.
- Review the migration log file, accessed as described in "Viewing the Migration Log File" on page 83. This file contains detailed information about the migration and any files or components that must be migrated manually.

  Note – It is imperative that you review this information and fix any issues before creating a server instance from the migrated configuration.

- Verify that the configuration was created.
- After reviewing the migration log and fixing any issues, deploy the migrated configuration onto a node and start the server. The server should start without any problems.

Viewing the Migration Log File

Detailed migration information is provided during and after the migration process, listing the settings and configurations that were and were not migrated, warning about changes that need to be made manually, and indicating whether the migration succeeded or failed. This information is recorded in the migration log file. The syntax for the migration log file is as follows:

`MIGRATION_`*yyyymmddhhmmss*`.log`

For example, if the log directory specified during installation (`--logdir`) is `/ws7`, and the migration process was started on `01/08/2006` at `11:16 PM`, the following file is created under the `/ws7` directory: `MIGRATION_20060108111600.log`. If no log directory was specified during installation, the file with the same name is created under the *install-dir*`/admin-server/logs` directory.

Note – If you select the All Instances Migration option, all the instances migration log are stored in the same migration log file.

Creating a Server Instance from the Migrated Configuration

The `create-instance` command creates the Web Server instance from the configuration. So if `migrate-server` creates a configuration called `foo`, the `create-instance` command creates the instance `https-foo` using the configuration *install-dir*`/admin-server/config-store/foo` in the specified node. The syntax is `create-instance --config=`*config_name host_name*`.`*domain_name*.

The `migrate-server` CLI command removes the prefix `https-` from the old instance and uses that name as the configuration name, while the `create-instance` command adds the prefix `https-` to the configuration name and uses that name as the instance name.

Updating Your Sun Java Enterprise System Installation

For information about upgrading Web Server from a previous Java ES release to Sun Java Enterprise System Web Server (Java ES Release 5), see the Sun Java Enterprise System *Upgrade Guide* in the Java ES system documentation at `http://docs.sun.com/app/docs/prod/entsys#hic`.

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