



Sun Java System Application Server Enterprise Edition 8.2 Installation Guide



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Preface

This Installation Guide contains instructions for installing and uninstalling the Sun Java System Application Server.

This preface contains information about and conventions for the entire Sun Java™ System Application Server documentation set.

Application Server Documentation Set

The Application Server documentation set describes deployment planning and system installation. The Uniform Resource Locator (URL) for stand-alone Application Server documentation is <http://docs.sun.com/app/docs/coll/1310.4>. The URL for Sun Java Enterprise System (Java ES) Application Server documentation is <http://docs.sun.com/app/docs/coll/1310.3>. For an introduction to Application Server, refer to the books in the order in which they are listed in the following table.

TABLE P-1 Books in the Application Server Documentation Set

Book Title	Description
<i>Release Notes</i>	Late-breaking information about the software and the documentation. Includes a comprehensive, table-based summary of the supported hardware, operating system, Java Development Kit (JDK™), and database drivers.
<i>Quick Start Guide</i>	How to get started with the Application Server product.
<i>Installation Guide</i>	Installing the software and its components.
<i>Deployment Planning Guide</i>	Evaluating your system needs and enterprise to ensure that you deploy the Application Server in a manner that best suits your site. General issues and concerns that you must be aware of when deploying the server are also discussed.
<i>Developer's Guide</i>	Creating and implementing Java 2 Platform, Enterprise Edition (J2EE™ platform) applications intended to run on the Application Server that follow the open Java standards model for J2EE components and APIs. Includes information about developer tools, security, debugging, deployment, and creating lifecycle modules.
<i>J2EE 1.4 Tutorial</i>	Using J2EE 1.4 platform technologies and APIs to develop J2EE applications.

TABLE P-1 Books in the Application Server Documentation Set (Continued)

Book Title	Description
<i>Administration Guide</i>	Configuring, managing, and deploying Application Server subsystems and components from the Administration Console.
<i>High Availability Administration Guide</i>	Post-installation configuration and administration instructions for the high-availability database.
<i>Administration Reference</i>	Editing the Application Server configuration file, <code>domain.xml</code> .
<i>Upgrade and Migration Guide</i>	Migrating your applications to the new Application Server programming model, specifically from Application Server 6.x and 7. This guide also describes differences between adjacent product releases and configuration options that can result in incompatibility with the product specifications.
<i>Performance Tuning Guide</i>	Tuning the Application Server to improve performance.
<i>Troubleshooting Guide</i>	Solving Application Server problems.
<i>Error Message Reference</i>	Solving Application Server error messages.
<i>Reference Manual</i>	Utility commands available with the Application Server; written in man page style. Includes the <code>asadmin</code> command line interface.

Related Documentation

Application Server can be purchased by itself or as a component of Java ES, a software infrastructure that supports enterprise applications distributed across a network or Internet environment. If you purchased Application Server as a component of Java ES, you should be familiar with the system documentation at <http://docs.sun.com/coll/1286.3>. The URL for all documentation about Java ES and its components is <http://docs.sun.com/prod/entsys.5>.

For other Sun Java System server documentation, go to the following:

- Message Queue documentation
- Directory Server documentation
- Web Server documentation

Additionally, the following resources might be useful:

- The J2EE 1.4 Specifications (<http://java.sun.com/j2ee/1.4/docs/index.html>)
- The J2EE 1.4 Tutorial (<http://java.sun.com/j2ee/1.4/docs/tutorial/doc/index.html>)
- The J2EE Blueprints (<http://java.sun.com/reference/blueprints/index.html>)

Default Paths and File Names

The following table describes the default paths and file names that are used in this book.

TABLE P-2 Default Paths and File Names

Placeholder	Description	Default Value
<i>install-dir</i>	Represents the base installation directory for Application Server.	<p>Sun Java Enterprise System (Java ES) installations on the Solaris™ platform:</p> <p>/opt/SUNWappserver/appserver</p> <p>Java ES installations on the Linux platform:</p> <p>/opt/sun/appserver/</p> <p>Other Solaris and Linux installations, non-root user:</p> <p><i>user's home directory</i>/SUNWappserver</p> <p>Other Solaris and Linux installations, root user:</p> <p>/opt/SUNWappserver</p> <p>Windows, all installations:</p> <p><i>SystemDrive</i>: \Sun\AppServer</p>
<i>domain-root-dir</i>	Represents the directory containing all domains.	<p>Java ES installations on the Solaris platform:</p> <p>/var/opt/SUNWappserver/domains/</p> <p>Java ES installations on the Linux platform:</p> <p>/var/opt/sun/appserver/domains/</p> <p>All other installations:</p> <p><i>install-dir</i>/domains/</p>
<i>domain-dir</i>	<p>Represents the directory for a domain.</p> <p>In configuration files, you might see <i>domain-dir</i> represented as follows:</p> <p><code>\${com.sun.aas.instanceRoot}</code></p>	<i>domain-root-dir</i> / <i>domain-dir</i>
<i>instance-dir</i>	Represents the directory for a server instance.	<i>domain-dir</i> / <i>instance-dir</i>

Typographic Conventions

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

TABLE P-3 Typographic Conventions

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

Symbol Conventions

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

TABLE P-4 Symbol Conventions

Symbol	Description	Example	Meaning
[]	Contains optional arguments and command options.	<code>ls [-l]</code>	The <code>-l</code> option is not required.
{ }	Contains a set of choices for a required command option.	<code>-d {y n}</code>	The <code>-d</code> option requires that you use either the <code>y</code> argument or the <code>n</code> argument.
\${ }	Indicates a variable reference.	<code>\${com.sun.javaRoot}</code>	References the value of the <code>com.sun.javaRoot</code> 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.

TABLE P-4 Symbol Conventions (Continued)

Symbol	Description	Example	Meaning
→	Indicates menu item selection in a graphical user interface.	File → New → Templates	From the File menu, choose New. From the New submenu, choose Templates.

Documentation, Support, and Training

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

- [Documentation \(http://www.sun.com/documentation/\)](http://www.sun.com/documentation/)
- [Support \(http://www.sun.com/support/\)](http://www.sun.com/support/)
- [Training \(http://www.sun.com/training/\)](http://www.sun.com/training/)

Searching Sun Product Documentation

Besides searching Sun product documentation from the docs.sun.comSM 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 “broker,” type the following:

```
broker site:docs.sun.com
```

To include other Sun 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.

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Installing Application Server Software

This chapter provides instructions for installing the Sun Java System Application Server Enterprise Edition software. You can install interactively or use silent mode to replicate an installation scenario on multiple machines.

If you want to use the Java Enterprise System (JES) installer to install Application Server, see the *Sun Java Enterprise System 5 Installation Guide for UNIX* and *Sun Java Enterprise System 5 Installation Guide for Microsoft Windows*.

The following topics are addressed:

- “Before You Read This Book” on page 16
- “An Overview of Application Server Installation” on page 16
- “Installing Application Server Software” on page 21
- “Installing the Load Balancing Plugin Component” on page 25
- “Installing in Silent Mode” on page 26

For any late-breaking updates to these instructions, check the *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes*.

For more information about configuring the application server after installation, see the *Sun Java System Application Server Enterprise Edition 8.2 Administration Guide*.

For troubleshooting information, see the *Sun Java System Application Server Enterprise Edition 8.2 Troubleshooting Guide*.

The following location contains product downloads and other useful information:

http://www.sun.com/software/products/appsrvr/home_appsrvr.html

Note – The Application Server is available in Platform, Enterprise, and Standard editions. This document covers both Standard and Enterprise Edition.

- Platform Edition is a lightweight, small footprint product intended for developer productivity and department-level production environments.
 - Enterprise Edition is designed for mission-critical services and large-scale production environments. It supports horizontal scalability and service availability with a load balancing plugin and cluster management. Enterprise Edition also supports reliable session state management with the high-availability database (HADB).
 - Standard Edition provides all the features of the Enterprise Edition except the session state failover feature.
-

Before You Read This Book

Before following the installation procedures described in this book, plan your topology using the *Sun Java System Application Server Enterprise Edition 8.2 Deployment Planning Guide*.

An Overview of Application Server Installation

You can install the Application Server software from the product CD or you can download the installation binaries from <http://www.sun.com/software/products/appsrvr/index.xml> (<http://www.sun.com/software/products/appsrvr/index.xml>).

The Application Server product consists of several software components and provides different installation choices.

This section addresses the following topics:

- “Installation Components” on page 16
- “Installation Scenarios” on page 18
- “Installation Methods” on page 19
- “Using Solaris 10 Zones for Application Server Installation” on page 20

Installation Components

You can choose not to install some of the components. Later, if you want to add a component that you initially chose not to install, you can do an incremental installation of that component, providing interdependencies among components are met.

Note – A partial installation can be followed by any number of incremental installations. For silent mode, you can do a partial initial installation, but any subsequent installations must be done using an interactive method.

The installation program enforces component dependencies as specified for each component. Component life cycles are independent. A particular component can be installed dynamically through incremental installation without corrupting other components. However, partial uninstallation is not supported.

An installation of Application Server includes the following components:

- Domain Administration Server and Administration Tool – The Domain Administration Server (DAS) acts as a central repository for applications and configuration information for server instances, even if they are located on a remote machine. It includes graphical and command-line administration tools, a bundled Java DB database, and Sun Java™ System Message Queue software. Sun Java System Message Queue software is automatically installed at the following location: *install-dir/imq*.
- Node Agent – The node agent communicates between application server instances and the Domain Administration Server. All machines that contain application server instances must have a node agent installed.

In addition, several additional components are available for installation:

- Java 2 Software Development Kit (SDK) – During installation, you can choose to reuse a preinstalled, supported version of Java 2 SDK. The installation location is *install-dir/jdk*. Refer to the *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes* to identify which version of the Java 2 SDK is supported.

Note – The Sun Java System Application Server product is certified to work only with Java 2 SDK from Sun Microsystems. Third-party Java development kits, even with appropriate version numbers, are not supported.

- Sample applications – Samples come with the source, schema, Ant build scripts, and EAR files. Any existing data associated with the database-related samples is available in the database. These sample applications are categorized as:
 - Technology samples – Introduce various technical aspects of the Java 2 Platform, Enterprise Edition (J2EE™) specification as well as the value-added features of the Application Server platform
 - Interoperability samples – Provide more detailed views on how these technologies come together on the Application Server platform

By default, the sample applications are installed at: *install-dir/samples*. More information about samples is at: *install-dir/samples/index.html*.

- High-Availability Database Server (Enterprise Edition) – HADB is installed at: *install-dir/hadb*.

For more information on this component, refer to Chapter 2, “Installing and Setting Up High Availability Database,” in *Sun Java System Application Server Enterprise Edition 8.2 High Availability Administration Guide*.

- Load balancing plugin – This component is dependent on a pre-installed Web server. Supported Web servers are listed in “Web Servers” in *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes*. For information on configuring web servers for use with the load balancing plugin, see Chapter 4, “Configuring Web Servers for Load Balancing,” in *Sun Java System Application Server Enterprise Edition 8.2 High Availability Administration Guide*.

If you are installing only the load balancing plugin, see [“Installing the Load Balancing Plugin Component” on page 25](#).

Installation Scenarios

You can choose to install components depending upon your deployment topology. The following examples show the options to select in the installer for specific types of installations.

Default Application Server installation:

- Node agent
- Domain Administration Server (includes administration tool)
- Samples

Load balancing plugin only:

- Load balancing plugin
- No administration tools

Application Server instances without Domain Administration Server:

- Node agent
- No administration tools

HADB without Application Server:

- HADB
- No administration tools

For more information on possible topologies, see *Sun Java System Application Server Enterprise Edition 8.2 Deployment Planning Guide*.

Installation Methods

The following methods of installation are available:

- Graphical (interactive) – The installation program prompts you using a sequence of graphical screens. This method is the default when you invoke the installation program without options:

./distribution-filename

On Windows, if you double-click the .exe file, you run the installer in graphical mode.

The *distribution-filename* changes depending upon the version and platform, in the format *sjas_ee-version-platform.type*. For example, for the Linux Application Server distribution, the file is *sjas_ee-8_2-linux.bin*, and for Windows, the file is *sjas_ee-8_2-windows.exe*.

- Command line (interactive) – The installation program prompts you using a sequence of command-line prompts and messages. To activate the interactive command-line mode, invoke the installation program using the `console` option:

./distribution-filename -console Use the command-line interface when installing:

- On remote servers, using the Telnet terminal emulation protocol
 - On “headless” systems without display devices
 - In hardened Solaris environments
- Silent mode – The installation program reads installation parameters from a supplied configuration file. See [“Installing in Silent Mode” on page 26](#) for more information on generating the configuration file.

The installation program allows you to specify the method of installation, and allows you to create a configuration file for silent installation. The syntax is:

distribution-filename [`-console`] [`-savestate configuration-filename`] [`-silent configuration-filename`] [`-javahome java-home-dir`] [`-h` | `-help`]

[Table 1–1](#) describes the command options.

TABLE 1–1 Options for Installation

Option	Description
<code>-console</code>	Runs the installation using the command-line method.

TABLE 1-1 Options for Installation (Continued)

Option	Description
-silent <i>configuration-filename</i>	Runs the installation in silent mode. Installation parameters are read from an existing installation configuration file. This option is mutually exclusive with the <i>savestate</i> option. The installation configuration file path must be explicitly provided; there is no default file path. Refer to “Installing in Silent Mode” on page 26 for further specifics on silent mode installation and the installation configuration file.
-savestate <i>configuration-filename</i>	Runs the installation using either the graphical or command-line method and creates an installation configuration file based on this installation. This option is mutually exclusive with the <i>silent</i> option. If you do not specify this option, no installation configuration file is created.
-javahome	Sets the <i>java-home-dir</i> if you are using an already installed JDK.
-h -help	Displays the usage for the installation command.

Table 1-2 identifies the command for each installation method.

TABLE 1-2 Installation Commands

Installation Method	Installation Command
Graphical interface (default)	<i>./distribution-filename</i>
Command-line interface	<i>./distribution-filename -console</i>
Graphical interface for creating the configuration file, which will be used for for silent mode installation	<i>./distribution-filename -savestate configuration-filename</i>
Silent mode based on an existing installation configuration file	<i>./distribution-filename -silent configuration-filename</i>

Using Solaris 10 Zones for Application Server Installation

If you are installing on a Solaris 10 system, you can use the Solaris 10 Zones facility.

By default, every Solaris 10 host contains a single global zone. The global zone is both the default zone for the host and the zone used for system-wide administrative control. You can also create non-global zones. One or more applications can run in a non-global zone without interacting with the rest of the host. Each non-global zone has its own instance of an installed Solaris 10 operating system with configuration and other information unique to that non-global zone.

Use these zones (also known as Solaris containers) to create virtualized operating system environments within an instance of Solaris OS. The zones allow one or more processes to run in isolation from other activities on the host. For example, a process running in a zone is only able to send signals to other processes in the same zone, regardless of user ID and other credential information.

You can install the Application Server in the global zone or in a non-global zone.

Installing Application Server Software

This section provides instructions for installing the Application Server software.

For information on supported platforms, see “Hardware and Software Requirements” in *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes*.

Tip – As you run the installation program, make a note of the user names, passwords, and the port numbers you enter, for future reference.

▼ To Install Application Server Software

Before You Begin On UNIX or Linux, if you are installing as a non-root user, you must have read/write access to the following directories:

- The installation directory you select
- The home directory of the installation user
- The /var/tmp directory
- The /tmp directory

- 1 After you have planned the topology, navigate to the location where the installation program resides and run the installation program.**

See [Table 1–2](#) for a list of installation commands for various installation methods. Refer [Table 1–1](#) for installation options. If you are installing the load balancing plugin, a web server must already be installed. Refer to “[Installing the Load Balancing Plugin Component](#)” on [page 25](#). For more information on planning topology, see *Sun Java System Application Server Enterprise Edition 8.2 Deployment Planning Guide*.

Note – If you do not have execute permission for this file, use the `chmod` command to grant yourself execute permissions.

- 2 Follow the installation wizard screens to accept the license agreement.**

3 Specify the path to the Application Server installation directory or accept the default installation directory.

4 Select the components to install.

If a component is disabled, the installation program has detected it as already installed on your system.

The following components are available for installation:

- Node Agent – All machines that contain application server instances should have a node agent installed.
- High Availability Database Server (Enterprise Edition only) - This component stores session information so requests can be failed over if you are using the load balancing plugin.
- Load Balancing Plugin - Install the load balancing plugin on the machine where a web server is installed. If you do not already have a web server installed on the machine where you are installing the load balancing plugin, you cannot continue to install the load-balancer plugin. Supported web servers are listed in “Web Servers” in *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes*.
- Domain Administration Server and Administration Tool - The Domain Administration Server (DAS) acts as a central repository for applications and configuration information for server instances, even if the instances are located on a remote machine. It includes graphical and command-line administration tools.
- Command Line Administration Tool Only - Install the Command Line Administration tool on machines which do not contain a DAS, but from which you want to communicate with the DAS or a node agent. For example, install the command-line administration tool on machines from which you plan to remotely administer the Application Server using the command-line administration tools.
- No Administration Tools - Use this option when installing components on a machine that already contains the administration tools, or on which no administration tools are required. For example, when installing the load balancing plugin on a machine with a web server, but no Application Server, no Application Server administration tools are required.
- Sample Applications - Samples come with the source, schema, Ant build scripts, and EAR files. Any existing data associated with the database-related samples is available in the included Java DB database.

5 Choose to install the Java 2 SDK, or use a preinstalled Java 2 SDK.

If you choose to install the Java 2 SDK, a private copy is installed. The default Java 2 SDK installation path for all platforms is *install-dir/jdk*.

Note – The Application Server software is certified to work with Java 2 SDK from Sun Microsystems. Third-party Java 2 SDK development kits, even with appropriate version number, are not supported.

- 6 If you selected the load balancing plugin component, identify your web server and its installation directory. For instructions on how to install the load balancing component, refer “[Installing the Load Balancing Plugin Component](#)” on page 25**
-

Note – If you are using a Web Server 7.0 installation, you need to provide Web Server 7.0 administration-specific information. For more details, refer “[Installing the Load Balancing Plugin Component](#)” on page 25.

- 7 In the Administration Configuration page (or at the command line), enter the following (and you proceed to Step 9):**

- Administration User Name - Name of the user who administers the server
 - Password - Administration user’s password to access the Domain Administration Server (8-character minimum)
 - Master Password - SSL certificate database password, used in operations such as Domain Administration Server startup
 - Administration Port - Port number to access the Domain Administration Server
 - HTTP Port - Port number to access the default server instance
 - HTTPS Port - Secure port number to access the default server instance
-

Note – The installation program automatically detects ports in use and suggests unused ports for the default settings.

The default ports are:

- Administration Server - The default is 4849
- HTTP server - The default is 8080
- HTTPS sever - The default is 8181

In addition, five other ports are automatically assigned. You can change the automatically assigned values after installation using the Admin Console. The default ports assigned are:

- Sun Java System Message Queue - The default is 7676
- IIOP - The default is 3700 for IIOP, and 3820 and 3890 for IIOP/SSL
- JMX - The default is 8686

If these default port numbers are in use, the installation program assigns random port numbers from the dynamic port range. This number may not be the next available port number.

8 Alternatively, if you are installing the node agent but not the Domain Administration Server, enter the following:

- Admin Host Name - Host name of the Domain Administration Server
- Admin User Name - Name of the user who administers the Domain Administration Server
- Password - Domain Administration Server administration user's password (8-character minimum)
- Master Password - Domain Administration Server's SSL certificate database password, used in operations such as node agent startup
- Admin Port - Port number to access the Domain Administration Server
- Node Agent Name - Defaults to the system host name

Note – In most cases, you must not change the node agent name, because node agent names must be unique within each server domain.

9 In the Installation Options page, select the options that you want.

If you select the “Upgrade from Previous Version” checkbox, the upgrade process begins after installation is completed. Upgrades from 7.x Enterprise Edition, 8.0 Platform Edition, 8.1 Platform Edition, 8.1 Enterprise Edition, and 8.2 Platform Edition are supported. For information about upgrading, see Chapter 2, “Upgrading an Application Server Installation,” in *Sun Java System Application Server Enterprise Edition 8.2 Upgrade and Migration Guide*.

10 The installation program verifies the available disk space on your machine.

If you do not have enough disk space, an error message is displayed. See the “Platform Requirements” in *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes* to identify the minimum disk space required.

11 In the Ready to Install page, verify the information on what is to be installed, and click Install Now to start the installation (or enter yes at the command line).

12 When the installation is complete, read the installation summary page to determine the status of the installation. If the installation is successful, click Finish.

Review the installation log files. For a list of these log files and their locations, see [“Installation Log Files”](#) on page 33.

13 Start the server.

See the *Sun Java System Application Server Enterprise Edition 8.2 Quick Start Guide* in the *install-dir/docs-ee* directory or online for information about starting the server.

14 If you selected the HADB components:

- a. **Verify that you have successfully installed the HADB on each host by typing: `hadbm --help`**
A list of all commands available using the `hadbm` utility is displayed. The `hadbm` utility is located at *install-dir/hadb/4/bin*.
- b. **Configure your system for high availability. See the *Sun Java System Application Server Enterprise Edition 8.2 High Availability Administration Guide* for information.**

Installing the Load Balancing Plugin Component

Use this procedure to install the load balancing plugin component without installing the other Application Server components.

▼ To Install the Load Balancing Plugin Component

- 1 **Check the system hosting the web server and load balancing plugin to see if a previously installed load balancing plugin or reverse proxy plugin is present. If it is, remove it using the uninstallation program.**
- 2 **Verify that the supported web server is installed on the machines where you are going to install the load balancing plugin.**

Note – You must install the web server and the load balancing plugin using the same user account.

See “Web Servers” in *Sun Java System Application Server Enterprise Edition 8.2 Standalone Installer Release Notes* to identify currently supported web server versions. Some web servers require additional configuration to run with the Application Server load balancing plugin. For more information, see Chapter 4, “Configuring Web Servers for Load Balancing,” in *Sun Java System Application Server Enterprise Edition 8.2 High Availability Administration Guide*.

- 3 **On the installer's Component Selection page, select Load Balancing Plugin and No Administration Tools.**
- 4 **Identify your web server and the web server instance path.**
- 5 **If you are installing the load balancing plugin on Web Server 7.0, the installer displays the Sun Java System Web Server 7.0 information page. Enter the following:**
 - Web Server Administrator User - Name of the user who administers the web server.

- Web Server Administrator Password - Password to access the Web Server administration server.
- Web Server Host Name - Name of the web server host.
- Web Server Administration Port - Port number to access the Web Server administration server. The default port is 8989.

Note –

- Ensure that you enter valid values for these fields related to Web Server 7.0 administration server. The installer does not validate these values.
- After you install load balancing plugin on Windows for Sun Java Systems Web Server 7.0, you need to reboot the machine, so that the installer updates the system PATH environment variable to add the path to the plugin libraries.
- You cannot perform a silent installation of the load balancing plugin on Web Server 7.0.

The Installation Summary page is displayed indicating the installation status.

Review the installation log files. For a list of these log files and their locations, see [“Installation Log Files” on page 33](#).

Installing in Silent Mode

Silent mode installation runs without any user input. This mode uses a configuration file for installation information. The following topics are discussed:

- [“Creating the Installation Configuration File” on page 26](#)
- [“Modifying the Installation Configuration File” on page 28](#)
- [“Using the Installation Configuration File to Install in Silent Mode” on page 32](#)

Creating the Installation Configuration File

The installation configuration file is created when you use the `savestate` option with the `setup` command to start an interactive installation. During the interactive installation, your input is collected and stored in the configuration file you specified. This forms the template for silent installation, which you can use later to install the product on one or more machines. If needed, you can modify the installation configuration file.

The following topics are addressed:

- [“Creating the Installation Configuration File on Solaris and Linux” on page 27](#)
- [“Creating the Installation Configuration File on Windows” on page 27](#)
- [“Installation Configuration File Example” on page 27](#)

Note – You cannot use the silent installation procedure to install the load balancing plugin on Web Server 7.0.

Creating the Installation Configuration File on Solaris and Linux

To create an installation configuration file on Solaris or Linux:

1. Navigate to the location of the installation file.
2. Create the configuration file. For the graphical method, the syntax for creating the configuration file is: `./distribution-filename -savestate configuration-filename`
For the command-line method, the syntax is: `./distribution-filename -console -savestate configuration-filename`

If you do not include a path to the installation configuration file, the file is created in the directory where you are running the installation program. You must have write permissions for the directory where the installation configuration file is created, otherwise the installer will not be able to create the installation configuration file after the installation is complete.

Creating the Installation Configuration File on Windows

To create the installation configuration file on the Windows platform, start the installation program from the command line. Change to the directory where the installation file resides.

For the graphical method the syntax is: `distribution-filename -savestate configuration-filename`

For the command-line method, the syntax is: `distribution-filename -console -savestate configuration-filename`.

If you do not include a path to the installation configuration file, the file is created in the directory where you are running the installation program.

Installation Configuration File Example

EXAMPLE 1-1 Installation Configuration File

```
#
# Wizard Statefile created: Tue Mar 28 16:37:05 PST 2006
#           Wizard path: /var/tmp/sjsasAAAH7aarp/appserv.class
#
#
# Install Wizard Statefile section for J2EE 1.4 SDK
#
#
```

EXAMPLE 1-1 Installation Configuration File (Continued)

```
[STATE_BEGIN J2EE 1.4 SDK 2860414c861c7b95a1287502663618e16472fc40]
defaultInstallDirectory = /SUNWappserver
currentInstallDirectory = /export/SUNWappserver
SELECTED_COMPONENTS = Domain Admin Server#Node Agent#High Availability
Database Administration Client#Sample Applications#
USE_BUNDLED_JDK = TRUE
JDK_LOCATION = /usr/j2se
WEBSERVER_INSTALL_DIR =
PLUGIN_TYPE =
INST_ASADMIN_USERNAME = admin
INST_ASADMIN_PASSWORD = ngvismlhimdgfgqrrkqzvanqzva
INST_MASTER_PASSWORD = nwgxqgvqrhmeusidvuqzvanqzva
INST_ASADMIN_PORT = 4849
INST_ASWEB_PORT = 8080
INST_HTTPS_PORT = 8181
STORE_ADMIN_AUTH = FALSE
ADMIN_PASSWORD_ENCRYPTED = TRUE
INST_JMS_PORT = 7676
INST_ORB_PORT = 3700
INST_ORB_SSL_PORT = 3820
INST_ORB_MUTUALAUTH_PORT = 3920
INST_JMX_PORT = 8686
INST_DAS_HOSTNAME = localhost
INST_ASADMIN_USERNAME = admin
INST_ASADMIN_PASSWORD = ngvismlhimdgfgqrrkqzvanqzva
INST_ASADMIN_PORT = 4849
INST_MASTER_PASSWORD = nwgxqgvqrhmeusidvuqzvanqzva
CREATE_SAMPLES_DOMAIN = FALSE
CREATE_DESKTOP_SHORTCUT = FALSE
UPDATE_PATH = FALSE
[STATE_DONE J2EE 1.4 SDK 2860414c861c7b95a1287502663618e16472fc40]
```

Modifying the Installation Configuration File

You can modify the installation configuration file by editing the variables and values described in the following table.

TABLE 1-3 Installation Configuration File Variables

Variable Name	Valid Values (if applicable)	Content	Comments
Build ID		The string of characters following the distribution in the STATE_BEGIN and STATE_END sections. This value is automatically generated.	No need to alter this value unless installing a different distribution file than the one that produced the configuration file. To find the build ID, enter <i>distribution-filename -id</i> at the command prompt.
defaultInstallDirectory		Default installation directory path	
currentInstallDirectory		Selected installation directory path	
SELECTED_COMPONENTS		List of product components selected for installation	Modification is not recommended.
USE_BUNDLED_JDK	TRUE, FALSE	Whether to install JDK bundled with the product	If this value is set to FALSE, the J2SE path referenced by JDK_LOCATION is used.
JDK_LOCATION		JDK path	Preinstalled JDK path, relevant only if USE_BUNDLED_J2SE is set to FALSE.
WEBSERVER_INSTALL_DIR		Selected web server instance directory path	Relevant only if the load balancing plugin component is selected for installation.
PLUGIN_TYPE	Sun Java System Web Server, Microsoft IIS Web Server (Windows only), Apache HTTP Server		

TABLE 1-3 Installation Configuration File Variables *(Continued)*

Variable Name	Valid Values (if applicable)	Content	Comments
INST_ASADMIN_USERNAME		Administrator user name for initial domain	
INST_ASADMIN_PASSWORD		Administrator password for initial Domain Administration Server	This entry is obfuscated by default. See also description of ADMIN_PASSWORD_ENCRYPTED variable.
INST_MASTER_PASSWORD		SSL certificate database password for asadmin operations such as Domain Administration Server startup and Node Agent startup	This entry is obfuscated by default. See also description of ADMIN_PASSWORD_ENCRYPTED variable.
INST_ASADMIN_PORT	0 - 65535	Administration server port number for initial Domain Administration Server	
INST_ASWEB_PORT	0 - 65535	Server port number for initial Domain Administration Server instance	
INST_HTTPS_PORT	0 - 65535		
STORE_ADMIN_AUTH	TRUE, FALSE		

TABLE 1-3 Installation Configuration File Variables *(Continued)*

Variable Name	Valid Values (if applicable)	Content	Comments
ADMIN_PASSWORD_ENCRYPTED	TRUE, FALSE	Obfuscated admin password flag	<p>In the initial installation configuration file created by product installer, this flag is set to TRUE, since the admin password value is obfuscated for security reasons.</p> <p>To override the value for admin password, enter values of INST_ASADMIN_PASSWORD and INST_MASTER_PASSWORD in clear text and set this flag to FALSE to enable silent installation to process it correctly.</p>
INST_JMS_PORT	0 - 65535	JMS port number for initial Domain Administration Server	
INST_ORB_PORT	0 - 65535	ORB port number for initial Domain Administration Server	
INST_ORB_SSL_PORT	0 - 65535	Secure ORB port number for initial Domain Administration Server	
INST_ORB_MUTUALAUTH_PORT	0 - 65535	Mutual authentication ORB port number for initial Domain Administration Server	
INST_JMX_PORT	0 - 65535	JMX port number for initial Domain Administration Server	

TABLE 1-3 Installation Configuration File Variables (Continued)

Variable Name	Valid Values (if applicable)	Content	Comments
INST_DAS_HOSTNAME		Name of the Domain Administration Server to be used to administer the server	
CREATE_SAMPLES_DOMAIN	TRUE, FALSE	Whether to create additional samples server domain	This value is disregarded because Application Server Enterprise Edition does not support this feature.
CREATE_DESKTOP_SHORTCUT	TRUE, FALSE	Whether to create autodeploy folder desktop shortcut	Valid for Windows platforms only and is disregarded otherwise.
UPDATE_PATH	TRUE, FALSE	Whether to update PATH environment variable to include Application Server bin directory	Valid only for Windows platforms and is disregarded otherwise.

Note – You cannot reuse the configuration file created for a particular distribution on other distributions, editions, or versions of the Application Server software.

To view the results of the silent installation, refer to the log files.

Using the Installation Configuration File to Install in Silent Mode

▼ To Install in Silent Mode

- 1 Review configuration file and verify that it contains what you want to use for your silent installation.

- 2 **Copy your installation configuration file to each machine where you plan to install the Application Server software.**
- 3 **Copy the Application Server installation files to each machine where you plan to install the Application Server software.**
- 4 **Navigate to the directory where you copied the installation files and your installation configuration file.**

- 5 **Start silent installation at the command line using the following command format:**

`./distribution-filename -silent configuration-filename`

The installation program reads the specified *configuration-filename*, checks for adequate disk space, then installs the product based on the data in *configuration-filename*.

When you return to the shell prompt, the silent installation is complete and the installation components are installed on your systems.

Review the installation log files. For a list of these log files and their locations, see [“Installation Log Files” on page 33](#).

- 6 **Start the server.**

You can start the Application Server software by using the instructions in the Chapter 1, “Getting Started,” in *Sun Java System Application Server Enterprise Edition 8.2 Administration Guide*.

When the Admin Console is started, the initial page of the Application Server graphical interface is displayed.

You are now ready to configure your system for high availability. To begin this process, see the *Sun Java System Application Server Enterprise Edition 8.2 High Availability Administration Guide* for information.

Installation Log Files

You can review the installation log files at:

- For Solaris SPARC and x86 root user:
`/var/sadm/install/logs/Install_Application_Server_8EE_timestamp.log`
- For Solaris SPARC and x86 non-root user:
`/var/tmp/Install_Application_Server_8EE_timestamp.log`
- For Linux root and non-root user:
`/var/tmp/Install_Application_Server_8EE_timestamp.log`
- For Windows root and non-root user:
`%TEMP%\Install_Application_Server_8EE_timestamp.log`

You can review the low-level log files at:

- Solaris (root installation):
 /var/sadm/install/logs/Sun_Java_System_Application_Server_Enterprise_Edition_install.*Btimestamp*
- Solaris (non-root installation):
 /var/tmp/Sun_Java_System_Application_Server_Enterprise_Edition_install.*Btimestamp*
- Linux: /var/tmp/Sun_Java_System_Application_Server_Enterprise_Edition_install.*Btimestamp*
- Windows: %TEMP%\Sun_Java_System_Application_Server_Enterprise_Edition_install.*Btimestamp*

Uninstalling Application Server Software

All components in the current Application Server installation directory are automatically selected for uninstallation.

If you installed Application Server as part of a Java Enterprise System installation, see the *Sun Java Enterprise System 5 Installation Guide for UNIX* and *Sun Java Enterprise System 5 Installation Guide for Microsoft Windows* for uninstallation instructions.

If you installed the standalone version of Application Server, it is important to use the uninstall routine described here. If you attempt another method, problems arise when you try to reinstall the same version or when you install a new version.

Running the Uninstallation Program

To uninstall the Application Server software, perform the following steps.

▼ To Run the Uninstallation Program on Solaris or Linux

Before You Begin Make sure that you have stopped all domains and other related processes, including `deploytool`, command windows using the installation directory or its subdirectories, and any applications using Java™ 2 Platform, Standard Edition (J2SE™ platform) files bundled with the product.

If you do not stop all domains before the uninstallation, orphaned processes might exist on your system after the uninstallation. Identify the processes using the `ps -ef` command and terminate them using the `kill` command.

If you are using HADB, stop the HADB and any associated `ma` processes.

- 1 **Navigate to your Application Server installation directory.**

2 Invoke the uninstall program as follows:

- To uninstall by using the graphical interface, at the command prompt, type:
`./uninstall`
- To uninstall by using the command-line interface, at the command prompt, type:
`./uninstall -console`
- To uninstall in silent mode, at the command prompt, type:
`./uninstall -silent`

The Application Server directory is not automatically removed when you uninstall the product.

Uninstallation Log Files

After uninstalling the Application Server, you can review the log files.

You can review the uninstallation log files at:

- For Solaris SPARC and x86 root user:
`/var/sadm/install/logs/Uninstall_Application_Server_8EE_timestamp.log`
- For Solaris SPARC and x86 non-root user:
`/var/tmp/Uninstall_Application_Server_8EE_timestamp.log`
- For Linux root and non-root user:
`/var/tmp/Uninstall_Application_Server_8EE_timestamp.log`
- For Windows root and non-root user:
`%TEMP%\Uninstall_Application_Server_8EE_timestamp.log`

You can review the low-level log files at:

- Solaris (root installation):
`/var/sadm/install/logs/Sun_Java_System_Application_Server_Enterprise_Edition_uninstall.Btimestamp`
- Solaris (non-root installation):
`/var/tmp/Sun_Java_System_Application_Server_Enterprise_Edition_uninstall.Btimestamp`
- Linux: `/var/tmp/Sun_Java_System_Application_Server_Enterprise_Edition_uninstall.Btimestamp`
- Windows: `%TEMP%\Sun_Java_System_Application_Server_Enterprise_Edition_uninstall.Btimestamp`

▼ To Run the Uninstallation Program on Windows

Before You Begin Make sure that you have stopped all domains and other related processes, including `deploytool`, command prompts using the installation directory or its subdirectories, and any applications using Java 2 Platform, Standard Edition (J2SE platform) files bundled with the product.

If you do not stop all domains before the uninstallation, orphaned processes might exist on your system after the uninstallation. On Windows, these processes interfere with the uninstallation, because the uninstallation program is unable to remove files that are in use. Identify the processes using the Task Manager and terminate them using the End Task or End Process buttons.

If using the HADB, stop the HADB and any associated `ma` processes.

- **Invoke the uninstallation program in one of the following ways:**
 - Under the Sun Microsystems, Application Server EE program group in the Start Programs area of your desktop, click Uninstall.
 - In *install-dir*, double-click `uninstall.exe`.
 - Invoke the uninstall program through the Control Panel:
 - a. Navigate to the Control Panel.
 - b. Choose Add/Remove Programs.
 - c. From the list of installed programs, select Sun Java System Application Server Enterprise Edition.
 - d. Click Remove.

The Application Server directory is not automatically removed when you uninstall the product.

Uninstallation of Load Balancing Plugin

If you have the load balancing plugin for Sun Java System Web Server 7.0 installed on the system, application server the uninstallation program removes load-balancing-plugin-specific entries from Sun Java System Web Server 7.0 configuration files. However, these changes that are made to the web server instance configuration do not overwrite the configuration in the web server's `config-store`. Run the following `wadm` commands: `pull-config` and `deploy-config` commands to preserve the changes to Sun Java System Web Server 7.0 configuration files in the `config-store`. For more information on running these commands, refer to Sun Java System Web Server 7.0 CLI Reference Manual.



Caution – If you do not run these commands after the uninstallation of the load balancing plugin, web server will not start properly.

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