



# Sun Java System Application Server 9.1 Installation Guide

Beta



Sun Microsystems, Inc.  
4150 Network Circle  
Santa Clara, CA 95054  
U.S.A.

Part No: 819-3670-07  
July 2007

Copyright 2007 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, docs.sun.com, AnswerBook, AnswerBook2, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun<sup>TM</sup> Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

---

Copyright 2007 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Des parties de ce produit pourront être dérivées du système Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, docs.sun.com, AnswerBook, AnswerBook2, et Solaris sont des marques de fabrique ou des marques déposées, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APTITUDE DE LA PUBLICATION A REpondre A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.

# Contents

---

- Preface .....9**
  
- 1 Installing Application Server Software ..... 15**
  - Distribution Types and Their Components ..... 15
  - Installing GlassFish v2 ..... 16
    - ▼ To Install GlassFish Application Server ..... 16
    - ▼ To Install the Load Balancing Plugin (standalone) ..... 16
  - Sun Java System Application Server 9.1 with Java ES 5 Update 1 ..... 17
  - Installing Sun Java System Application Server 9.1 ..... 18
    - ▼ To Install Sun Java System Application Server 9.1 ..... 18
    - Installing Sun Java System Application Server 9.1 in Silent Mode ..... 21
  - Application Server and Solaris 10 Zones ..... 27
  
- 2 Uninstalling Application Server Software ..... 29**
  - Running the Uninstallation Program ..... 29
    - ▼ To Run the Uninstallation Program on UNIX or Linux ..... 30
    - ▼ To Run the Uninstallation Program on Windows ..... 30
  
- Index .....31**



# Tables

---

TABLE 1-1      Installation Configuration File Variables ..... 23



# Examples

---

EXAMPLE 1-1      Installation Configuration File Example ..... 22





# Preface

---

This Installation Guide contains instructions for installing and uninstalling GlassFish Application Server or Sun Java™ System Application Server.

## Application Server Documentation Set

The Application Server documentation set describes deployment planning and system installation. The Uniform Resource Locator (URL) for Application Server documentation is <http://docs.sun.com/coll/1343.4>. 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>Documentation Center</i>	Application Server documentation topics organized by task and subject.
<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>Application Deployment Guide</i>	Deployment of applications and application components to the Application Server. Includes information about deployment descriptors.
<i>Developer's Guide</i>	Creating and implementing Java Platform, Enterprise Edition (Java EE platform) applications intended to run on the Application Server that follow the open Java standards model for Java EE components and APIs. Includes information about developer tools, security, debugging, and creating lifecycle modules.
<i>Java EE 5 Tutorial</i>	Using Java EE 5 platform technologies and APIs to develop Java EE 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 Admin 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.x, and 8.x. 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 Sun Java Enterprise System (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/1286.2>. The URL for all documentation about Java ES and its components is <http://docs.sun.com/prod/entsys.5>.

For documentation about other stand-alone Sun Java System server products, go to the following:

- [Message Queue documentation \(http://docs.sun.com/coll/1343.4\)](http://docs.sun.com/coll/1343.4)
- [Directory Server documentation \(http://docs.sun.com/coll/1224.1\)](http://docs.sun.com/coll/1224.1)
- [Web Server documentation \(http://docs.sun.com/coll/1308.3\)](http://docs.sun.com/coll/1308.3)

A Javadoc tool reference for packages provided with the Application Server is located at <http://glassfish.dev.java.net/nonav/javaee5/api/index.html>. Additionally, the following resources might be useful:

- The [Java EE 5 Specifications \(http://java.sun.com/javaee/5/javatech.html\)](http://java.sun.com/javaee/5/javatech.html)
- The [Java EE 5 Tutorial \(http://java.sun.com/javaee/5/docs/tutorial/doc/index.html\)](http://java.sun.com/javaee/5/docs/tutorial/doc/index.html)
- The [Java EE Blueprints \(http://java.sun.com/reference/blueprints/index.html\)](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.	Java ES installations on the Solaris™ operating system: /opt/SUNWappserver/appserver Java ES installations on the Linux operating system: /opt/sun/appserver/ Other Solaris and Linux installations, non-root user: user's-home-directory/SUNWappserver Other Solaris and Linux installations, root user: /opt/SUNWappserver Windows, all installations: SystemDrive:\Sun\AppServer
<i>domain-root-dir</i>	Represents the directory containing all domains.	Java ES Solaris installations: install-dir/appserver/domains/ Java ES Linux installations: install-dir/domains/ All other installations: install-dir/domains/
<i>domain-dir</i>	Represents the directory for a domain. In configuration files, you might see <i>domain-dir</i> represented as follows: \${com.sun.aas.instanceRoot}	<i>domain-root-dir/domain-dir</i>
<i>instance-dir</i>	Represents the directory for a server instance.	<i>domain-dir/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.
<b>AaBbCc123</b>	What you type, contrasted with onscreen computer output	<code>machine_name%</code> <b>su</b> 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><b>AaBbCc123</b></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/>)
- Support (<http://www.sun.com/support/>)
- Training (<http://www.sun.com/training/>)

## Searching Sun Product Documentation

Besides searching Sun product documentation from the docs.sun.com<sup>SM</sup> 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](http://java.sun.com), [www.sun.com](http://www.sun.com), and [developers.sun.com](http://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** – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun 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. Sun 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.

---

## Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. To share your comments, go to <http://docs.sun.com> and click Send Comments. In the online form, provide the full document title and part number. The part number is a 7-digit or 9-digit number that can be found on the book's title page or in the document's URL. For example, the part number of this book is 819-3670.

# Installing Application Server Software

---

This chapter provides instructions for installing the Sun Java System Application Server software. The following topics are discussed:

- “Distribution Types and Their Components” on page 15
- “Installing GlassFish v2” on page 16
- “Sun Java System Application Server 9.1 with Java ES 5 Update 1” on page 17
- “Installing Sun Java System Application Server 9.1” on page 18
- “Application Server and Solaris 10 Zones” on page 27

## Distribution Types and Their Components

You can download GlassFish Application Server from <https://glassfish.dev.java.net/public/downloadsindex.html>. The GlassFish v2 distribution includes the Application Server software, the Sun Java System Message Queue 4.1, Java DB, and ant 1.6.5.

The standalone Application Server 9.1 product distribution includes the load balancing plugin, Java Development Kit (JDK) 5, HADB, Java DB, and the Sun Java System Message Queue 4.1. The standalone Application Server 9.1 is available at <http://www.sun.com/download>

The Java ES 5 Update 1 distribution includes a Application Server 9.1 distribution in the accessories folder.

# Installing GlassFish v2

This section provides instructions for installing Glassfish v2 distribution and for installing the load balancing plugin for GlassFish v2.

- “To Install GlassFish Application Server ” on page 16
- “To Install the Load Balancing Plugin (standalone)” on page 16

## ▼ To Install GlassFish Application Server

### 1 Download the GlassFish v2 distribution

<https://glassfish.dev.java.net/public/downloadsindex.html>.

### 2 Set the environment variable `JAVA_HOME` to point to the directory in which JDK 5 is installed. Set `ANT_HOME` to point to the ant 1.6.5 installation, which is at *install-dir/glassfish/lib/ant* directory.

### 3 Run the following command:

```
java -Xmx256m -jar <filename>.jar
```

### 4 Navigate to the glassfish directory:

```
cd glassfish
```

### 5 If you do not want clustering capabilities, run the following command:

```
ant -f setup.xml
```

- If you want to use GlassFish with clustering, change the command to:

```
ant -f setup-cluster.xml
```

Use the version of ant included in the .

## ▼ To Install the Load Balancing Plugin (standalone)

Use the procedures in this section if the load balancing plugin is not part of the Application Server distribution you are using. If you are using the Sun Java System Application Server 9.1 (bundle with HADB), the following sections, “[To Install Sun Java System Application Server 9.1](#)” on page 18, include instructions for installing the load balancing plugin.

The load balancing plugin is not currently bundled with the Glassfish v2Application Server. If you want load balancing capabilities, you can download the load balancing plugin for Sun Java System Web Server 6.1 from the following locations:

- Solaris (SPARC): <http://download.java.net/javaee5/external/SunOS/aslb/jars/>



- Solaris (x86): [http://download.java.net/javaee5/external/SunOS\\_X86/aslb/jars/](http://download.java.net/javaee5/external/SunOS_X86/aslb/jars/)
  - Linux: <http://download.java.net/javaee5/external/Linux/aslb/jars/>
  - Windows: <http://download.java.net/javaee5/external/WINNT/aslb/jars/>
- 1 **Before you install the load balancer plugin, download and install Sun Java System Web Server 6.1/7.0** (<http://www.sun.com/download>) or Apache web server.
  - 2 **Create the lbplugin directory within <glassfish\_install\_dir>/lib.**
  - 3 **Unjar this file in the lbplugin directory. Run the following command:** `jar -xvf aslb-9.1-MS4-b1.jar.`
  - 4 **Unzip the following two files: SUNWaslb.zip and SUNWaspx.zip in the same directory. Delete the zip files.**
  - 5 **Change permissions on all shared libraries within lbplugin directory. Run the following command:** `chmod -R 755 ${glassfish.home}/lib/lbplugin/lib.`
  - 6 **Create a configuration for the load balancer. See “Setting up Load Balancing” in *Sun Java System Application Server 9.1 Quick Start Guide*.**
  - 7 **Restart the Web Server after creating a configuration for the load balancer.**

**Next Steps** You need to configure Web Server for load balancing. For detailed instructions on manually configuring Web Server for load balancing, see “Configuring Sun Java System Web Server” in *Sun Java System Application Server 9.1 High Availability Administration Guide*.

## Sun Java System Application Server 9.1 with Java ES 5 Update 1

If you are using the Sun Java System Application Server 9.1 distributed with the Java Enterprise System 5 Update 1 (Java ES 5 Update 1) release, use the following procedure:

1. Install Sun Java System Application Server 9.1. For instructions on how to install Application Server 9.1, see “[Installing Sun Java System Application Server 9.1](#)” on page 18.

---

**Note** – On Solaris or Linux, the Application Server 9.1 installer does not detect earlier versions of Application Server or other Java ES components existing on your system.

---

2. After the installation is complete, start the domain.

In Solaris, domains are located under the *install-dir/appserver/domains* directory. In Linux, domains are located under the *install-dir/domains* directory. In Windows, domains are located under the *install-dir\domains* directory.

3. Start Java ES 5 Update 1 Installation and select the components that you want to install. When prompted for a container choose Application Server 9.1 installation and domain directories. Provide the appropriate admin credentials.

---

**Note** – The Java ES Update installer could report that conflict were detected in Application Server components. Ignore these conflict messages and proceed with the installation.

---

Java ES 5 Update 1 installer validates the Application Server installation and then installs the selected Java ES components.

---

**Note** – Application Server 9.1 is not supported with Java ES 5 and needs the Java ES 5 U1 Portal Server.

---

## Installing Sun Java System Application Server 9.1

If you are using the Sun Java System Application Server 9.1 file-based installation, use one of the following procedures:

- [“To Install Sun Java System Application Server 9.1” on page 18](#)
- [“Installing Sun Java System Application Server 9.1 in Silent Mode” on page 21](#)

### ▼ To Install Sun Java System Application Server 9.1

**Before You Begin** Use this procedure if you are using the Sun Java System Application Server file—based installer. Verify that your system meets the requirements specified in “Hardware and Software Requirements” in *Sun Java System Application Server 9.1 Release Notes*.

Solaris and Linux installations support both root and non-root user installations. Users of Windows installations should have Power User or Administrator access. If you are installing as a non-root user on solaris or Linux, 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
- The web server installation directory and the web server instance directory, if applicable.

- 1 **Navigate to the directory where you downloaded the distribution file.**
- 2 **If you have downloaded a .bin file, change the permission of the distribution file so that you have execute access:**  
`chmod +x distribution_filename`
- 3 **Run the installation program.**
  - **If you are installing from a .bin file, use the following command to run the installation program :**  
`./distribution_filename`  
 Use the `-console` option to run the installation program in command-line mode.
  - **If you are installing from a .zip file, unzip the file, navigate to the extracted folder, and run the following command:**  
`./setup`  
 Use the `-console` option to run the installation program in command-line mode.
  - **If you are installing from an .exe file on Windows, double-click the file.**
- 4 **Specify the directory where you want to install the software or accept the default installation directory.**
- 5 **Select the components to install.**  
 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** -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 Sun Java System Web Server 6.1 and above (including 7.1), Apache 2.0.x, and IIS 5.0 and above.
  - **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.
  - **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.

---

**Note** – Before you run incremental installation of Application Server 9.1 components, ensure that server processes are stopped if Domain Administration Server or Node Agent component is pre-installed on the machine

---

- 6 **Specify the directory where you want to install JDK 5. If you already have JDK 5 installed, specify the path to the JDK 5 installation.**
- 7 **If you selected the load balancing plugin component:**
  - a. **Select the Web Server you have installed.**
  - b. **If you have Sun Java System Web Server, provide the *install-dir* and the *instance-dir*. If you have Apache web server or IIS, provide the *install-dir*.**
  - c. **If you have already created a DAS certificate, provide values for the following fields:**
    - Certificate file location: Location of the DAS certificate file.
    - Certificate DB password: Password of the web server certificate database.
    - Certificate file password: Password created while creating the DAS certificate.

---

**Note** – Automatic import of DAS certificate is supported only for Apache web server. If you are using Sun Java System Web Server or IIS, see For instructions on how to create/export DAS certificate, see Chapter 4, “Configuring Web Servers for Load Balancing,” in *Sun Java System Application Server 9.1 High Availability Administration Guide* for instructions on how to import the DAS certificate.

---

You need to specify the certificate details while installing load balancer so that the installer imports the DAS certificate details. You install Application Server without the load balancer component. After installing Application Server, you create a DAS certificate by using the `pk12util` utility, run the installer again to install the load balancing plugin. For instructions on how to create/export DAS certificate, see Chapter 4, “Configuring Web Servers for Load Balancing,” in *Sun Java System Application Server 9.1 High Availability Administration Guide*

Alternatively, you can choose to install load balancer without a DAS certificate. After installing the load balancing plugin, you can create a DAS certificate by using the `pk12util` utility in the `install-dir/lib/upgrade` directory.

- 8 **In the Administration Configuration page (or when prompted at the command line), enter the following:**
  - Admin User Name – Name of the user who administers the server.
  - Password – Admin user’s password to access the Admin Server (8-character minimum).

- Master Password — The master password (8-character minimum).
- Admin Port – Administration port number for initial server instance. The default value is 4848.
- Node agent name — A name for the node agent. You need to provide this value only if you had selected the Node Agent option.

**9 On the Ready to Install page, click Install Now.**

---

**Note** – To create a Windows service, the `sc.exe` utility must be available on the system. Windows 2000 users may need to install the Windows 2000 Resource Kit to get this utility. For other supported Windows versions, the utility is included in the operating system.

---

**10 After the installation completes, set the PATH environment variable to include the Application Server *install-dir/bin* directory.**

**11 Verify the installation by following the procedures in the *Sun Java System Application Server 9.1 Quick Start Guide*, located in *install-dir/docs/QuickStart.html* or on [docs.sun.com](http://docs.sun.com).**

If you have problems with your installation, see the known issues and limitations in “Installation” in *Sun Java System Application Server 9.1 Release Notes*.

**Next Steps** If you have installed load balancing plugin, you need to configure Web Server for load balancing. For detailed instructions on configuring Web Server for load balancing, see Chapter 4, “Configuring Web Servers for Load Balancing,” in *Sun Java System Application Server 9.1 High Availability Administration Guide*.

## Installing Sun Java System Application Server 9.1 in Silent Mode

You can use this procedure only with the Sun Java System Application Server 9.1 installer. Glassfish v2 does not offer Silent Mode installation. Silent mode installation is non-interactive. You must first provide a configuration file for information that the installer needs. The following topics are discussed:

- [“Creating the Installation Configuration File” on page 21](#)
- [“Modifying the Installation Configuration File” on page 23](#)
- [“Using the Installation Configuration File to Install in Silent Mode” on page 26](#)

### Creating the Installation Configuration File

The installation configuration file is created when you use the `savestate` option when starting an interactive installation. During the interactive installation, your input is collected and stored

in the configuration file you specified. This file 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.

On Solaris and Linux, for the graphical interface the syntax is:

```
./distribution_filename -savestate configuration_filename
```

On Solaris and Linux, for the command-line interface, the syntax is:

```
./distribution_filename -console -savestate configuration_filename
```

To create the installation configuration file on the Windows platform, start the installation program from the command line. Change to the directory where the executable file resides. For the graphical method the syntax is:

```
distribution_filename -savestate configuration_filename
```

On Windows, for the command-line method, the syntax is:

```
distribution_filename -console -savestate configuration_filename.
```

---

**Note** – 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.

---

#### EXAMPLE 1–1 Installation Configuration File Example

The following example shows an installation configuration file created by running the installation program with the `savestate` option.

```
#
# Wizard Statefile created: Mon Apr 30 11:42:36 IST 2007
#           Wizard path: /var/tmp/sjsasAAAvXaW4p/appserv.class
#

#
# Install Wizard Statefile section for Sun Java System Application Server
#
#
[STATE_BEGIN Sun Java System Application Server
b146d7a741e40985b9d99975a81c9741253346b6]
defaultInstallDirectory = /SUNWappserver
currentInstallDirectory = /space/programs/as9ee/temp
JDK_LOCATION = /space/programs/as9/jdk5/jdk
INST_ASADMIN_USERNAME = admin1
INST_ASADMIN_PASSWORD = ngghybgbednrreyatoqzvanqzva
INST_MASTER_PASSWORD = pgycyuakiequqlkurvunatrvg
```

**EXAMPLE 1-1** Installation Configuration File Example (Continued)

```

INST_ASADMIN_PORT = 44517
INST_ASWEB_PORT = 44514
INST_HTTPS_PORT = 44520
STORE_ADMIN_AUTH = TRUE
ADMIN_PASSWORD_ENCRYPTED = TRUE
INST_JMS_PORT = 44532
INST_ORB_PORT = 44529
INST_ORB_SSL_PORT = 44535
INST_ORB_MUTUALAUTH_PORT = 44538
INST_JMX_PORT = 44541
CREATE_DESKTOP_SHORTCUT = FALSE
UPDATE_PATH = FALSE
CREATE_UPDATE_ICON =
CREATE_WINDOWS_SERVICE = FALSE
CREATE_DAS = TRUE
[STATE_DONE Sun Java System Application Server
b146d7a741e40985b9d99975a81c9741253346b6]

```

## Modifying the Installation Configuration File

You can modify the installation configuration file by editing the variables and values described in the following table. This table has four columns showing variable names, valid values (if applicable), contents, and comments.

**TABLE 1-1** 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 <b>distribution_filename -id</b> at the command prompt.
defaultInstallDirectory		Default installation directory path.	
currentInstallDirectory		Selected absolute installation directory path.	
JDK_LOCATION		Selected JDK installation directory path.	This entry is needed only for distributions that do not contain a bundled JDK.

TABLE 1-1 Installation Configuration File Variables (Continued)

Variable Name	Valid Values (If Applicable)	Content	Comments
INST_ASADMIN_USERNAME		Administrator user name for initial server instance.	
INST_MASTER_PASSWORD		SSL certificate database password for asadmin operations.	This entry is obfuscated by default.  See also: ADMIN_PASSWORD_ENCRYPTED.
INST_ASADMIN_PASSWORD		Administrator password for initial server instance.	This entry is obfuscated by default.  See also:ADMIN_PASSWORD_ENCRYPTED.
INST_ASADMIN_PORT	0 - 65535	Administration server port number for initial server instance.	Default value is 4848.
INST_ASWEB_PORT	0 - 65535	HTTP port number for initial server instance.	Default value is 8080.
INST_HTTPS_PORT	0 - 65535	HTTPS port number for initial server instance.	Default value is 8081.
STORE_ADMIN_AUTH	TRUE, FALSE	Whether to create admin authentication user preference file.	
ADMIN_PASSWORD_ENCRYPTED	TRUE, FALSE	Obfuscated admin password flag.	In the initial statefile created by the product installer, this flag is set to TRUE, since the admin password value is obfuscated for security reasons.  To override the value for admin password, enter INST_ASADMIN_PASSWORD value in clear text and set this flag to FALSE to enable silent installation to process it correctly.
INST_JMS_PORT	0 - 65535	JMS port number for initial server instance.	If the configuration file does not include this entry, default value of 7676 is used.
INST_ORB_PORT	0 - 65535	ORB port number for initial server instance.	If the configuration file does not include this entry, default value of 3700 is used.



TABLE 1-1 Installation Configuration File Variables (Continued)

Variable Name	Valid Values (If Applicable)	Content	Comments
INST_ORB_SSL_PORT	0 - 65535	Secure ORB port number for initial server instance.	If the configuration file does not include this entry, default value of 3820 is used.
INST_ORB_MUTUALAUTH_PORT	0 - 65535	Mutual authentication ORB port number for initial server instance.	If the configuration file does not include this entry, default value of 3920 is used.
INST_JMX_PORT	0 - 65535	JMX port number for initial server instance.	If the configuration file does not include this entry, default value of 8686 is used.
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.  If this entry is not present, default value of FALSE is used.
CREATE_WINDOWS_SERVICE	TRUE, FALSE	Whether to create the server as a Windows service.	Valid for Windows platforms only and is disregarded otherwise.
SELECTED_ADDONS	JB1	Add-ons selected for installation. If no add-ons are selected, the value is blank.	Valid for Java EE SDK SOA Starter Kit Preview installations only and is disregarded otherwise.
CREATE_DAS	TRUE, FALSE	Creates a DAS if set to TRUE. The default domain is named domain1 and is created under default <i>domain-root-dir</i> .	Equivalent to selecting "Domain Administration Server" component in component selection panel.
CREATE_NA	TRUE, FALSE	Creates a node agent if set to TRUE. The default node agent would be named agent1 and is created under default node agents root.	Equivalent to selecting "Application Server Node Agent" component in component selection panel.
WEBSERVER_INSTALL_DIR	A valid, read-writable directory location.	Installation directory of a supported Web server.	Used only when the load balancing plugin component is selected for installation.

TABLE 1-1 Installation Configuration File Variables (Continued)

Variable Name	Valid Values (If Applicable)	Content	Comments
WEBSERVER_INSTANCE_DIR	A valid read-writable directory location.	Instance directory of selected web server where the load balancing plugin will be configured.	used when load balancing plugin component is selected to be installed on Sun Java System Web Server. Not applicable for other web servers.
PLUGIN_TYPE	Sun ONE Web Server, Apache HTTP Server, or Microsoft IIS Web Server.	Type of web server on which the load balancing plugin will be installed/configured.	Used only when the load balancing plugin component is selected for installation.
PLUGIN_CERTIFICATE_FILE	A valid path to a certificate file.		Used only when Apache HTTP Server is selected for load balancing plugin installation. Not supported or is ignored for other web servers.

## Using the Installation Configuration File to Install in Silent Mode

After creating the configuration file, use it to install Application Server in silent mode as many times as needed. Use the following procedure:

### ▼ To Install in Silent Mode

- 1 Review the installation configuration file and verify that it contains the values to use for your silent installation.
- 2 Copy your installation configuration file to each machine where you plan to install the software.
- 3 Copy the Application Server distribution file to each machine where you plan to install the software.
- 4 Navigate to the directory where you copied the distribution file and your installation configuration file.
- 5 Start silent installation at the command line using one of the following command formats:
  - **On Solaris or Linux:**  
`./distribution_filename -silent configuration_filename`
  - **On Windows:**  
`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 the prompt is returned, the silent installation is complete and the installation components are installed on your systems.

- 6 Start the Application Server software by using the instructions in the *Sun Java System Application Server 9.1 Administration Guide*.**

## Application Server and Solaris 10 Zones

If you are installing on a Solaris 10 system, Application Server can be installed either in the global zone or a non-global zone. For more information on zones, see the Solaris 10 documentation.

If you are installing Application Server 9.1 in a non-global zone, you need to ensure that you have Message Queue (MQ) 4.1 installed in the global zone. One way to install the MQ component (without installing Application Server) in the global zone is to run the Application Server in the global zone and select any Application Server component (such as Sample Applications).



# Uninstalling Application Server Software

---

If you installed Application Server as part of a Java Enterprise System installation, see the *Sun Java System Installation Guide* for uninstallation instructions. If you installed the stand-alone 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.

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

If you have installed Application Server 8.2 (from the JES 5 installer) and upgraded to Application Server 9.1, ensure that you run the JES 5 uninstaller before you run the Application Server 9.1 uninstaller.



---

**Caution** – Do not manually delete files or directories from your Application Server installation. Always use the uninstallation program.

---

## Running the Uninstallation Program

Before you run the uninstallation program, stop all domains. If you do not stop all domains before the uninstallation, orphaned processes might exist on your system after the uninstallation. On UNIX, identify the processes using the `ps -ef` command and terminate them using the `kill` command. Stop the HADB and any associated `ma` processes, if you are using HADB.

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

## ▼ To Run the Uninstallation Program on UNIX or Linux

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

- 1 **Navigate to your Application Server installation directory.**
- 2 **Invoke the uninstallation program as follows:**
  - To use the uninstallation that has a graphical interface, at the command prompt, type:  
`./uninstall`
  - To use the uninstallation that has a command-line interface, at the command prompt, type:  
`./uninstall -console`

---

**Note** – Use the `-javahome` option to provide a path to a JRE installation if the uninstaller is unable to locate it on your machine.

---

## ▼ To Run the Uninstallation Program on Windows

**Before You Begin** Make sure that you have stopped all domains and other related processes, and command prompts using the installation directory or its subdirectories, and any applications using Java SE files bundled with the product.

- **Invoke the Uninstallation program in one of the following ways:**
  - Under the Sun Microsystems, Application Server program group in the Start Programs area of your desktop, click Uninstall.
  - 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.

# Index

---

## A

Application Server  
distributions, 15

## B

bin directory, 21

## D

Domain Administration Server, 19

## G

GlassFish, 15  
with clustering capabilities, 16  
without clustering capabilities, 16

## H

High-Availability Database Server, 19

## I

Installing  
GlassFish, 16  
Sun Java System Application Server  
Solaris, 18-21

## L

load balancing plugin, 19  
Load Balancing Plugin, Installing, 16-17

## N

node agents, 19  
non-root users, 18

## P

PATH environment variable, changing, 21

## R

removing software installation, 29

## S

sample applications, 19  
Solaris 10, Zones, 27

## U

uninstalling, 29

