



Sun Java System Web Server 7.0 Update 3 Release Notes



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

Part No: 820-4848
June 2008

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more U.S. patents or pending patent applications in the U.S. and in other countries.

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.

This distribution may include materials developed by third parties.

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, the Solaris logo, the Java Coffee Cup logo, docs.sun.com, SPARC, N1, JSP, JDBC, NetBeans, Java, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries 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™ 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.

Products covered by and information contained in this publication are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical or biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

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 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Sun Microsystems, Inc. détient les droits de propriété intellectuelle relatifs à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et ce sans limitation, ces droits de propriété intellectuelle peuvent inclure un ou plusieurs brevets américains ou des applications de brevet en attente aux Etats-Unis et dans d'autres pays.

Cette distribution peut comprendre des composants développés par des tierces personnes.

Certains composants de ce produit peuvent être dérivées du logiciel Berkeley BSD, licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays; elle est licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, le logo Solaris, le logo Java Coffee Cup, docs.sun.com, SPARC, N1, JSP, JDBC, NetBeans, Java et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc., ou ses filiales, 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.

Les produits qui font l'objet de cette publication et les informations qu'il contient sont régis par la législation américaine en matière de contrôle des exportations et peuvent être soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucléaires, des missiles, des armes chimiques ou biologiques ou pour le nucléaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou réexportations vers des pays sous embargo des Etats-Unis, ou vers des entités figurant sur les listes d'exclusion d'exportation américaines, y compris, mais de manière non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations des produits ou des services qui sont régis par la législation américaine en matière de contrôle des exportations et la liste de ressortissants spécifiquement désignés, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFACON.

Contents

Sun Java System Web Server Release Notes	7
What's New in This Release	7
AIX Platform Support	8
Auto-Deploying Web Applications	8
Features and Enhancements in Update 2 Release	8
PKCS11 Bypass Support	8
Service Management Facility (SMF) Support	9
Asynchronous Accelerator Cache Support	9
Enhanced Web Container	9
Improved Administration Experience	10
Red Hat 4.0 64-bit Support	10
NetBeans 6.0 IDE Support	10
Features and Enhancements in Update 1 Release	11
Java Servlet 2.5 and JavaServer Pages (JSP) 2.1 Support	11
JavaServer Pages Standard Tag Library and JavaServer Faces 1.2 Support	12
Java SE 5.0 and 6 Support	12
Accelerator Cache Technology	13
Administration Support for Configuring FastCGI	13
NetBeans Support	14
Admin Console Support for Configuring Regular Expressions	14
GUI and CLI Support for Pattern Matching	14
Features and Enhancements in Web Server 7.0	15
JMX Based Management Infrastructure	15
Redesigned Administration Server Interface	15
Command-Line Interface Support	16
Sun N1 Service Provisioning System Support	16
Consolidated Configuration Files	17
JNDI Support	17

Java Database Connectivity and Connection Pooling Support	17
Integrated Java Web Services Developer Pack 2.0 Technologies	17
Lightweight Session Replication Support	18
URL Redirection and Rewriting with Regular Expressions	18
Extensive Real-Time Monitoring Support	19
Integrated Reverse Proxy	19
Enhanced Security	20
Elliptic Curve Cryptography Support	20
Sun Java Studio Enterprise Support	21
Localization Support	21
Supported Platforms	22
System Virtualization Support	23
Required Patches	24
Solaris Patches	24
HP-UX Patches	26
Impact of US DST Changes 2007	27
Supported Browsers	28
Installation, Migration, and Upgrade Notes	28
Installation	28
Migration	29
Upgrade	29
Product Documentation	30
Resolved Issues	30
Known Issues	47
Administration	47
Core	52
FastCGI	53
Installation	54
Migration and Upgrade	55
Sample Applications	55
Search	56
Security	56
Session Replication	57
Web Container	57
Localization	58
Java Enterprise System	58

How to Report Problems and Provide Feedback	60
Sun Welcomes Your Comments	60
Additional Sun Resources	61
Searching Sun Product Documentation	61

Sun Java System Web Server Release Notes

These release notes contain important information about the Sun Java™ System Web Server 7.0 Update 3 (Web Server) release. These notes address new features and enhancements, installation notes, known problems, and other late-breaking issues. Read this document before you begin using Web Server Update 3.

These release notes contain the following sections:

- “What's New in This Release” on page 7
- “Features and Enhancements in Update 2 Release” on page 8
- “Features and Enhancements in Update 1 Release” on page 11
- “Features and Enhancements in Web Server 7.0” on page 15
- “Supported Platforms” on page 22
- “Required Patches” on page 24
- “Impact of US DST Changes 2007” on page 27
- “Supported Browsers” on page 28
- “Installation, Migration, and Upgrade Notes” on page 28
- “Product Documentation” on page 30
- “Resolved Issues” on page 30
- “Known Issues” on page 47
- “How to Report Problems and Provide Feedback” on page 60
- “Additional Sun Resources” on page 61
- “Searching Sun Product Documentation” on page 61

What's New in This Release

Web Server Update 3 is an update release to Web Server 7.0. In addition to the features and enhancements in Web Server 7.0 and Web Server 7.0 Update 1 and Update 2 releases, Web Server 7.0 Update 3 release brings the following value-added features and enhancements to the product. New features and enhancements are described in the sections below.

AIX Platform Support

AIX 5.3 and 6.1 platform support has been provided in Web Server Update 3 release.

Auto-Deploying Web Applications

This Web Server update release introduces auto-deployment functionality that enables you to deploy one or more web applications, just by copying them to a designated directory. The server auto-deploys web applications that are in the form of web archives (.war files) or in a directory in which a web archive has been exploded.

For more information about auto-deployment feature in Web Server, see [“Auto-Deploying Web Applications”](#) in *Sun Java System Web Server 7.0 Update 3 Developer’s Guide to Java Web Applications*

Features and Enhancements in Update 2 Release

Web Server Update 2 is an update release to Web Server 7.0. In addition to the features and enhancements in Web Server 7.0 and Web Server 7.0 Update 1 releases, Web Server 7.0 Update 2 release brings the following value-additional features and enhancements to the product. New features and enhancements are described in the sections below.

PKCS11 Bypass Support

This Web Server update release introduces an option to instruct NSS to bypass the PKCS#11 layer during parts of the SSL/TLS processing. Bypassing the PKCS#11 layer improves performance. By default, the PKCS#11 layer is bypassed. At the time of server startup, the server queries each token holding a server key to verify that each token can support PKCS#11 bypass. If any of the tokens cannot support bypass, bypass is disabled. Therefore, no user action is required to take advantage of the performance benefits of the PKCS#11 bypass. The server automatically takes advantage of the bypass and automatically disables the bypass if the token cannot be used given the current configuration.

Web Server provides CLI and Admin Console support to enable or disable the bypass. For more information about how to enable or disable PKCS11 bypass using the Admin Console or the CLI, see [“To Enable and Bypass PKCS#11 Tokens”](#) in *Sun Java System Web Server 7.0 Update 3 Administrator’s Guide*.

Service Management Facility (SMF) Support

This Web Server update release integrates with the Solaris 10 Service Management Facility for the Java platform (SMF). SMF is a new feature of the Solaris Operating System that creates a supported, unified model for services and service management on each Solaris system. It is a mechanism to define, deliver, and manage long-running application services for Solaris. A service is defined by a service manifest, an XML file which describes a service and any instances associated with that service.

For more information about SMF support in Web Server, see the [“Integrating Service Management Facility for the Java Platform with Web Server”](#) in *Sun Java System Web Server 7.0 Update 3 Administrator’s Guide*.

Asynchronous Accelerator Cache Support

This release of Web Server supports processing of requests that can be served from the accelerator cache asynchronously thereby improves the performance of the server. Value added features are:

- Handle dynamic reconfiguration
- Introduced flag `AsyncAccelerator` in the `magnus.conf` to turn off async cache.
- Requests are serviced through asynchronous accelerator to stats
- Batch up access log writes when requests are serviced by asynchronous accelerator

Enhanced Web Container

This Web Server update release introduces the ability to display the exception stack trace or JSP compiler errors in a browser. In the earlier releases of Web Server, when an exception occurs in the servlet container at the request time, a "Server Error" is displayed at the client without exposing internal application details. The exception is always logged in the error log with or without this feature enabled.

Note – Displaying exception stack trace or JSP compiler errors in a browser feature is not enabled by default. You can enable this feature through `set-servlet-container-prop` command or through the Display Exception checkbox in the Servlet Container tab of the Admin Console. This is useful for development purposes. It is strongly recommended not to enable this feature in production systems.

Improved Administration Experience

Administration experience is improved in this release of Web Server by introducing the following key features:

Roll Back Deployed Configuration Support

Web Server supports rolling back of deployed configuration. Web Server administration now enables administrators to take backups automatically on every deployed configuration. Using the administration CLI, it is possible to list backups and restore a specified backup.

Support To Set Administration Server Password

This release of Web Server enables you to reset the administration server's user password. However, this functionality works only locally on the administration server's node.

Support for Managing CA Certificates

Administration Console enables you to install, delete, filter CA certificates, Cert chain, and the CRLs. Additionally, the server also warns the users about the certificates that are about to expire.

Registration with Sun Connection

You can use the Admin Console or the Update Center to register the Web Server with Sun Connection. By registering the Web Server with Sun Connection you receive benefits such as:

- Patch information and bug updates
- News and events
- Support and training offerings

For information about the administration features, see the [Sun Java System Web Server 7.0 Update 3 Administrator's Guide](#).

Red Hat 4.0 64-bit Support

Support for a 64-bit standalone version of Web Server is provided in this release. Web Server 7.0 64-bit Linux is a separate standalone only distribution and does not coexist with Web Server 7.0 32-bit Linux. Web Server 7.0 64-bit Linux requires 64-bit Java Development Kit 5.0 Update 12 or above. Both Administration Server and server instance are only 64-bit server. Migration from previous releases is not supported on Web Server 7.0 64-bit for Linux.

NetBeans 6.0 IDE Support

This update release of Web Server provides support to connect to the NetBeans 6.0 IDE and allows users to develop, debug, and deploy applications to the web server. The NetBeans plug-in can be downloaded from the update center using the NetBeans 6.0 IDE.

Note – In addition to the support for NetBeans 6.0 IDE, Web Server provides support for NetBeans 5.0 and 5.5.1 versions of the IDE.

Features and Enhancements in Update 1 Release

Web Server 7.0 Update 1 is an update release to the major release of Web Server 7.0.

In addition to the features and enhancements in Web Server 7.0 listed later in these release notes, Web Server 7.0 Update 1 supports the Java Platform, Enterprise Edition (Java EE) 5.0 and Web 2.0 technologies. The details of these features and enhancements are described in the sections below.

- “Java Servlet 2.5 and JavaServer Pages (JSP) 2.1 Support” on page 11
- “JavaServer Pages Standard Tag Library and JavaServer Faces 1.2 Support” on page 12
- “Java SE 5.0 and 6 Support” on page 12
- “Accelerator Cache Technology” on page 13
- “Administration Support for Configuring FastCGI” on page 13
- “NetBeans Support” on page 14
- “Admin Console Support for Configuring Regular Expressions” on page 14
- “GUI and CLI Support for Pattern Matching” on page 14

Java Servlet 2.5 and JavaServer Pages (JSP) 2.1 Support

Web Server includes a Java Platform, Enterprise Edition (Java EE™) 5 compliant implementation of the Java Servlet 2.5 and JavaServer Pages™ (JSP™) 2.1 technology specifications. Web Server provides the flexibility and reliability needed to design and deploy web applications that comply with Java technology standards.

Java Servlet technology provides web developers with a simple, consistent mechanism for extending the functionality of a Web Server and for accessing existing business systems. JSP technology provides a simplified and a fast way to create dynamic web content. JSP technology enables rapid development of web-based applications that are server and platform-independent.

For information about these technologies, see <http://java.sun.com/javaee/5/docs/tutorial/doc/>.

JavaServer Pages Standard Tag Library and JavaServer Faces 1.2 Support

The JavaServer Pages Standard Tag Library provides custom tags that encapsulate core functionality common to many web applications. JavaServer Pages Standard Tag Library has support for common, structural tasks such as iteration and conditionals. It provides tags for manipulating XML documents, internationalization tags, and SQL tags. It also provides a framework for integrating existing custom tags with JavaServer Pages Standard Tag Library tags.

Web Server supports JavaServer Faces™ technology. JavaServer Faces is a user interface framework for building web applications.

For information about these technologies, see: <http://java.sun.com/j2ee/1.4/docs/tutorial/doc/index.html>.

Java SE 5.0 and 6 Support

Web Server supports the 32-bit version of the Java Platform, Standard Edition (Java SE™) 5.0 and Java Platform, Standard Edition (Java SE) 6. For the 64-bit version of Web Server, the 64-bit version of Java Development Kit (JDK™) software support is available.

JDK 5.0 Update 15 is delivered on Solaris, Linux and Windows as part of Web Server 7.0 Update 3 release.

The following table lists the JDK versions supported on various platforms:

TABLE 1 Supported JDK Versions

Operating System	Supported Java SE Version	Whether Co-packaged With Web Server	64-bit Support (Yes/No)
Solaris SPARC	1.5.0_15	Yes	Yes
	1.6.0_06	No	
Solaris x86/AMD,AMD64	1.5.0_15	Yes	Yes
	1.6.0_06	No	
Linux (32-bit)	1.5.0_15	Yes	No
Linux (64-bit)	1.6.0_06	No	Yes
Windows	1.5.0_15	Yes	No
	1.6.0_06	No	

TABLE 1 Supported JDK Versions (Continued)

Operating System	Supported Java SE Version	Whether Co-packaged With Web Server	64-bit Support (Yes/No)
HP-UX	1.5 (1.5.0.12-_21_mar_2008_11_52) 1.6 (1.6.0.00-jinteg_12_nov_2007_21_58-b00)	No	No
AIX	1.5.0 pap32dev-20080315 (SR7)	No	No

At the time of installation, you must specify a valid path for the JDK. To use the JDK version that is not co-packaged with the product, download the software from the following location:

JDK version 1.6.0: <http://java.sun.com/javase/downloads/index.jsp>

JDK version 1.5.0: http://www.hp.com/products1/unix/java/java2/jdkjre5_0/index.html

When you use JDK 1.5.0 on AIX platform, Administration server may fail to start and displays an error message “Unable to find/open the administration server's certificate database”. This is due to the restricted security policy on the installed JDK and limiting key size.

For more information about security information on SDKs, see: <http://www.ibm.com/developerworks/java/jdk/security/50/>

You can overcome this problem by downloading unrestricted security policy by clicking on “IBM SDK Policy files”. The downloaded zip file is unpacked and the two JAR files are placed in the JRE directory (jre/lib/security/).

Accelerator Cache Technology

Web Server includes new accelerator cache technology that speeds the delivery of small files. The accelerator cache is automatically enabled and requires no configuration. For more information, see “File Cache Statistics Information” in *Sun Java System Web Server 7.0 Update 3 Performance Tuning, Sizing, and Scaling Guide*

Administration Support for Configuring FastCGI

You can configure a single FastCGI application using the Admin Console as well as the Command Line Interface (CLI). You can also configure the FastCGI with Web Server using the configuration files.

To configure multiple FastCGI applications, see “Configuring Multiple FastCGI Applications” in *Sun Java System Web Server 7.0 Update 3 Administrator’s Guide*

NetBeans Support

Web Server provides plug-ins to integrate with the NetBeans™ Integrated Development Environment (IDE) 5.0, 5.5, and 5.5.1 versions for deploying and debugging web applications. NetBeans is a complete development environment to create Java Platform Enterprise Edition (Java EE) based web applications with the standard components.

In addition to the deployment of web applications, the plug-in also provides support for the following activities:

- Manage instances, such as start or stop server instances
- Enable or disable applications
- Create server wide resources, such as JDBC resources and JDBC connection pools

For information about NetBeans, see: <http://www.netbeans.org/kb/index.html>.

For more information about using NetBeans with Web Server, see: <http://webserver.netbeans.org>.

Admin Console Support for Configuring Regular Expressions

Web Server provides support for writing regular expressions within the `obj.conf` file through the Admin Console. However, writing regular expressions through the Admin Console is limited to the form of `<If>...</If>` conditions for URL redirects.

For more information on using the Admin Console for writing regular expressions, see the *Sun Java System Web Server 7.0 Update 3 Administrator's Guide*.

GUI and CLI Support for Pattern Matching

Web Server provides support for configuring the URIs, URI prefixes, URI wildcard patterns properties through the Admin Console and the Admin CLI.

For more information on using the Admin Console for configuring URI pattern properties, see the *Sun Java System Web Server 7.0 Update 3 Administrator's Guide*.

For more information on using the CLI commands for configuring URI pattern properties, see the *Sun Java System Web Server 7.0 Update 3 CLI Reference Manual*.

Features and Enhancements in Web Server 7.0

Web Server can be configured to run as a 64-bit application on the Solaris™, SPARC® and AMD64 platforms.

Web Server provides comprehensive command-line interface support, consolidated configuration, enhanced security with elliptic curve cryptography support, and clustering support. It also comes with a robust built-in migration tool that helps migrate applications and configurations from Web Server 6.0 and Web Server 6.1 to Web Server 7.0.

Sun Java System Web Server includes the following new features:

- “JMX Based Management Infrastructure” on page 15
- “Redesigned Administration Server Interface” on page 15
- “Command-Line Interface Support” on page 16
- “Sun N1 Service Provisioning System Support” on page 16
- “Consolidated Configuration Files” on page 17
- “JNDI Support” on page 17
- “Java Database Connectivity and Connection Pooling Support” on page 17
- “Integrated Java Web Services Developer Pack 2.0 Technologies” on page 17
- “Lightweight Session Replication Support” on page 18
- “URL Redirection and Rewriting with Regular Expressions” on page 18
- “Extensive Real-Time Monitoring Support” on page 19
- “Integrated Reverse Proxy” on page 19
- “Enhanced Security” on page 20
- “Elliptic Curve Cryptography Support” on page 20
- “Sun Java Studio Enterprise Support” on page 21
- “Localization Support” on page 21

JMX Based Management Infrastructure

Web Server management infrastructure is based on the modern distributed Java Management Extensions (JMX™) technology. JMX technology provides tools for building distributed, web-based, modular and dynamic solutions for managing and monitoring devices, applications, and service-driven networks. JMX helps to manage and monitor instances, configurations, and web applications across clustered Web Server deployments.

Redesigned Administration Server Interface

The Administration Server is a specially configured Web Server instance on which the administration applications are deployed. An administration instance runs on each node in the server farm. Of these nodes, one node is configured to be the Administration Server and the rest are configured to be Administration Nodes.

The web-based Administration Server is redesigned to make common tasks easier to access and complex tasks easier to accomplish.

The Administration Server includes the following new features:

- Web-based wizards for performing most common tasks
- Comprehensive command-line interface (CLI) support for server configuration and server administration tasks
- Centralized configuration store
- Support for deploying Web Server configuration information on multiple machines. This feature extends to support Web Server in a server farms and clusters.
- Built-in management and monitoring of server clusters

For more information on using the administration interface to perform administrative tasks, see the *Sun Java System Web Server 7.0 Update 3 Administrator's Guide*.

Command-Line Interface Support

The command-line interface enables you to easily configure and administer the server.

The administration CLI has the following key features:

- Embedded Java Command Language (j a c l) shell for scripting
- Extensible CLI, which enables you to add more commands by using the third-party plug-ins
- Support for local and remote administration, configuration, and management of one or more server instances
- Automatically completes commands when you type one or more characters and then press a tab key
- Easy-to-use CLI-based operational modes including single mode, shell mode, and file mode

For more information on the commands, see the *Sun Java System Web Server 7.0 Update 3 CLI Reference Manual*.

Sun N1 Service Provisioning System Support

Web Server is integrated with Sun N1™ Service Provisioning Server 5.2. Sun N1 Service Provisioning System is an application provisioning tool that eliminates the need for custom scripts. With the integration of Web Server with Sun N1 Service Provisioning System, as an administrator, you do not need to write custom scripts for installing multiple Web Servers in a datacenter environment or in a server farm.

Consolidated Configuration Files

Configuration files in Web Server are rearranged and consolidated to simplify administration.

In the earlier versions of Web Server, the configuration files in `userdb` were shared by all instances, while the information contained in these files was often instance-specific. In Web Server 7.0, configuration files from the `userdb` directory are removed. Their functionality is incorporated into the `server.xml` file in the `config` directory. Configuration files from the `alias` and `httpacl` directories are moved into the `config` directory. These changes consolidate instance-specific configuration information within the instance-specific `config` directory.

For information about the configuration files, see the [Sun Java System Web Server 7.0 Update 3 Administrator's Configuration File Reference](#).

JNDI Support

The Java Naming and Directory Interface™ (J.N.D.I.) API provides seamless connectivity to heterogeneous enterprise naming and directory services.

Java Database Connectivity and Connection Pooling Support

Web Server provides out-of-the-box, seamless Java Data Base Connectivity (JDBC™), technology and supports a wide range of industry-standard and customized JDBC drivers.

Web Server supports JDBC connection pooling, that is, a group of reusable connections for a particular database. Because creating each new connection is time consuming, the server maintains a pool of available connections to increase performance. When an application requests a connection, it obtains a connection from the pool. When an application closes a connection, the connection is returned to the pool.

For information on creating JDBC connection pools, see the [Sun Java System Web Server 7.0 Update 3 Administrator's Guide](#).

Integrated Java Web Services Developer Pack 2.0 Technologies

Web Server includes Java Web Services Developer Pack (Java WSDP) 2.0 and XML technologies. Web services developed by using Java WSDP can be deployed on Web Server as a web application by using the `wadm` command.

Web Server 7.0 provides support for security features such as XML Encryption, XML Digital Signature, and support for message security provider.

For more information on Java WSDP 2.0, see the following resource:

<http://java.sun.com/webservices/jwsdp/index.jsp>

Java WSDP 2.0 samples are located at the following location. These samples can be deployed on Web Server 7.0.

http://java.sun.com/webservices/downloads/2.0_preview_webservicespack.html

Lightweight Session Replication Support

Web Server supports cluster-based session replication and failover. Session replication and failover provides high availability to web applications by replicating HTTP sessions from one server instance to another in the same server cluster. Because each HTTP session has a backup copy on a remote instance, a server failure that renders one instance in the cluster unavailable does not disturb session continuity.

For more information on Light Weight Session Replication support, *Sun Java System Web Server 7.0 Update 3 Administrator's Guide*.

URL Redirection and Rewriting with Regular Expressions

Web Server 7.0 introduces enhanced support for regular expressions and conditional processing in the `obj.conf` configuration file.

Key enhancements include the following:

- Support for regular expressions
- A restart Server Application Function (SAF) for restarting requests with a new URI
- Support for dynamic SAF parameters that include expressions, variables, regular expression back references
- `<If>`, `<ElseIf>`, and `<Else>` tags for conditional processing
- Support for complex conditions that use `and`, `or`, and `not` operators
- `sed-request` and `sed-response` filters for rewriting request and response bodies

You can use these new features to define flexible URL rewriting and redirection rules such as those possible with `mod_rewrite` from the Apache HTTP server. Unlike `mod_rewrite`, regular expressions and conditional processing in Web Server 7.0 can be used at any stage of request processing, even with third-party plug-ins.

For more information on regular expressions and URL rewrite functions, see the *Sun Java System Web Server 7.0 Update 3 Administrator's Configuration File Reference*.

Extensive Real-Time Monitoring Support

In addition to the monitoring facilities in earlier versions of Web Server, Web Server adds the following enhancements:

- Monitors Servlets, JSPs, and JavaServer Pages Standard Tag Library container characteristics
- Monitors process and virtual server statistics from within the Administration Server
- Integrates with System Management Agent on the Solaris 10 platform. Integrates with the Java Enterprise System Monitoring Framework (Java ES Monitoring Framework) that makes Web Server monitoring information available within the Java ES Monitoring Framework.
- Accesses monitoring data as Management Beans (MBeans) using the Java Monitoring and Management Console (`jconsole`) script, Java ES Monitoring Framework or any Java Management Extensions (JMX) compliant client applications.

For more information on Monitoring feature in Web Server, see the [Sun Java System Web Server 7.0 Update 3 Administrator's Guide](#).

Integrated Reverse Proxy

Reverse Proxy is integrated with Web Server. Reverse Proxy can be executed as an internal module.

A reverse proxy is a proxy that appears to be a web server (origin server) to clients but in reality forwards the requests it receives to one or more origin servers. Because a reverse proxy presents itself as an origin server, clients do not need to be configured to use a reverse proxy. By configuring a given reverse proxy to forward requests to multiple similarly configured origin servers, a reverse proxy can operate as an application level software load balancer. In a typical deployment one or more reverse proxies will be deployed between the browsers and the origin servers.

Integrated reverse proxy provides additional layer of protection between the public Internet and the origin Web Servers. Web Server can be configured as Reverse Proxy server for back end application servers like Tomcat and Sun Java System Application Server 9.

Web Server provides GUI and CLI support for configuring the reverse proxy.

For information about configuring reverse proxy, see the [Sun Java System Web Server 7.0 Update 3 Administrator's Guide](#).

Enhanced Security

Web Server supports a wide variety of technologies that allow data encryption and validation, request authentication, and server process protection. Key security feature enhancements include the following:

- Solaris 10 platform cryptographic framework support. For example, `libpkcs11.so` including support for UltraSPARC® T1 processor hardware acceleration.
- Denial of Service (DoS) attack protection enhancements
- Cross-site scripting protection through the native `sed(1)` based input filtering
- Web services security:
 - IETF XML Digital Signature
 - W3C XML Encryption
- Integrated Platform for Privacy Preferences (P3P) support
- Web-based Distributed Authoring and Versioning (WebDAV) access control support
- The Lightweight Directory Access Protocol (LDAP) `auth-db` is enhanced to make search expressions and match attributes configurable
- The LDAP `auth-db` supports Microsoft Active Directory interoperability
- Support for migration of certificate from Tomcat or other Java keystore file based repositories
- Support for dynamically applied Certificate Revocation Lists (CRLs)
- Integrated IPv6 support.

Elliptic Curve Cryptography Support

Sun Java System Web Server has always supported RSA keys. In addition to the continued support for RSA keys, Web Server 7.0 introduces support for Elliptic Curve Cryptography (ECC).

ECC is the next generation of public-key cryptography for mobile or wireless environments. ECC is based on a set of algorithms for key generation, encryption, and decryption for performing asymmetric cryptography.

Important features of ECC are:

- Compared to traditional cryptosystems like RSA, ECC offers equivalent security with smaller key sizes that enable faster computations, lower power consumption and memory, and bandwidth savings.
- ECC operates on elliptic curves. You must pick a curve and a key length. Curves are standardized and given names by various organizations such as, NIST, ANSI, and SECG. Because these standards include the key length, you only have to pick one of the predefined curve names. Web Server 7.0 supports all the curves currently specified.

For more information on how to use ECC in Web Server, see the *Sun Java System Web Server 7.0 Update 3 Administrator's Guide*.

Sun Java Studio Enterprise Support

Web Server 7.0 supports Sun Java Studio Enterprise 8.1. Sun Java Studio software is Sun's powerful, extensible IDE for Java technology developers. Sun Java Studio 8.1 is based on the NetBeans software, and integrated with the Sun Java platform.

The plug-in for the Web Server can be obtained in the following ways:

- From the companion CD in the Sun Java System Web Server Media Kit
- By using the companion *AutoUpdate* feature of Sun Java Studio
- From the download center for Sun Java System Web Server

Note – Sun Java Studio 8.1 plug-in for Web Server works only with a local web server. That is, the IDE and the web server must be installed on the same machine.

For information about using the web application features in Sun Java Studio 8.1, see the following tutorial:

<http://developers.sun.com/prodtech/javatools/jsenterprise/learning/tutorials/index.jsp>

For more information about Sun Java Studio 8, visit:

<http://www.sun.com/software/sundev/jde/>

Localization Support

Web Server is available in the following languages:

- French
- German

- Spanish
- Japanese
- Simplified Chinese
- Traditional Chinese
- Korean

Supported Platforms

Web Server can be installed on the Solaris, Linux, HP-UX and Windows operating systems. The following table summarizes platform support. For more information about installation requirements, see [“Required Patches” on page 24](#) in these release notes.

Note –

1. Web Server runs as a 32-bit application on Windows, Linux, and HP-UX.
 2. Intel Itanium Architecture is not supported.
 3. Minimum required memory for installing Web Server on the specified platforms is applicable when you are installing Web Server as a stand-alone product. If you are installing Web Server as part of Java ES, the minimum required memory might vary. For exact memory requirements, see the Sun Java Enterprise System 5 Release Notes for UNIX.
-

TABLE 2 Web Server Supported Platforms

Vendor	Architecture	Operating System	Minimum Required Memory	Minimum Recommended Disk Space
Sun	UltraSPARC	Solaris 8, 9, 10	512 MB	550 MB
Sun	AMD/x86	Solaris 9, 10 (x86) Solaris 10 (AMD64)	512 MB	550 MB

TABLE 2 Web Server Supported Platforms (Continued)

Vendor	Architecture	Operating System	Minimum Required Memory	Minimum Recommended Disk Space
Microsoft	AMD/x86	Windows 2000 Advanced Server, Service Pack 4 Windows XP SP2 or above Professional Edition, Windows 2003 Server, Enterprise Edition Windows 2003 Server R2 Enterprise Edition	512 MB	550 MB
Red Hat	AMD/x86	Red Hat Enterprise Linux 3.0 (Update 4 or later), 4.0, 5.0 (or later updates) Red Hat Enterprise Linux 4, 5 (64-bit)	768 MB	550 MB
Novell	AMD/x86	SUSE Linux Enterprise Server 9 (or later updates) SuSE Enterprise Linux 9, 10 SP2 (32-bit, 64-bit)	512 MB	550 MB
Hewlett-Packard	PA-RISC 2.0	HP-UX 11iv1 (B.11.11)	512 MB	550 MB
IBM		AIX 5.3 and 6.1	512 MB	550 MB

System Virtualization Support

System virtualization is a technology that enables multiple operating system (OS) instances to execute independently on shared hardware. Functionally, software deployed to an OS hosted in a virtualized environment is generally unaware that the underlying platform has been virtualized. Sun performs testing of its Sun Java System products on select system virtualization and OS combinations to help validate that the Sun Java System products continue to function

on properly sized and configured virtualized environments as they do on non-virtualized systems. For information about Sun support for Sun Java System products in virtualized environments, see <http://docs.sun.com/doc/820-4651>.

Required Patches

Update your operating system with the latest applicable patches. Required patches are listed in the following sections.

Solaris Patches

x86 or SPARC users of Solaris 8, 9, or 10 Operating System should have the latest patch cluster installed. This patch cluster is available under “Recommended and Security Patches” on the <http://sunsolve.sun.com/pub-cgi/show.pl?target=patchpage> web site.

Note – On a 32-bit Solaris (SPARC) platform, install SUNWlibC and SUNWlibCx packages, in addition to the patches listed in the sections below.

Web Server 7.0 installer determines if the required patches are installed on your machine, without them the installation fails. The following patches are required for successful installation and functioning of Web Server 7.0 on a supported platform.

Note – If the patches available at <http://sunsolve.sun.com> are *obsolete*, download the most recent version of these patches as they include the latest bug fixes and product enhancements.

Note – To know the Solaris Operation System version installed on your machine, see the `/etc/release` file.

The `/etc/release` file contains Solaris Operation System version information in the following format:

```
Solaris 10 6/06 s10x_u2wos_08 X86
Copyright 2006 Sun Microsystems, Inc. All Rights Reserved.
Use is subject to license terms.
Assembled 02 May 2006
```

Solaris 8 Platform (SPARC and x86)

Solaris 8 Platform (SPARC)

- Solaris 8 2/02
- 109326-19
- 108434-18 — Shared library patch for C++ (for 32-bit version of Web Server)
- 108435-18 — Shared library patch for C++ (for 64-bit version of Web Server)

Solaris 8 Platform (x86)

- 109327-19

Solaris 9 Platform (SPARC and x86)

Solaris 9 Platform (SPARC)

- Solaris 9 9/05
- 112970-12
- 111711-12 — Shared library patch for C++ (for the 32-bit version of Web Server)
- 111712-12 — Shared library patch for C++ (for the 64-bit version of Web Server)

Solaris 9 Platform (x86)

- Solaris 9 9/05
- 114354-11
- 111712-17 — Kernel patch
- 111713-09 — Shared library patch for C++

Solaris 10 Platform (SPARC and x86)

Note – For the 64-bit version of Web Server, you must check if the SUNWlxml package is installed on the server by running the command `# pkginfo SUNWlxml` which produces the following output:

```
system      SUNWlxml  The XML library
```

This package is always installed with Solaris 10 standard installation, even if you choose the lowest level of installation `METACLUSTER=SUNWcmreq, NAME=Minimal Core System Support`.

If you do not want this package, you can either, remove it by using the `pkgrm` command or use a `jumpstart` image which lacks this package.

-
- SPARC
 - 119963-03 — Shared library patch for C++
 - x86
 - 119964-03 — Shared library patch for C++

AIX 5.3

- 5300-08-01-0819 or above

AIX 6.1

- 6100-00-04-0815

Note – You need to reboot your system after applying the patches.

Incompatible Patches

Some incompatible patches can affect Web Server startup and cause the server not to respond to requests. The following table lists such patches. If you have an incompatible patch installed on your machine, upgrade the patch to a recommended compatible patch.

TABLE 3 List of Incompatible Patches

Operating System	Incompatible Patch	Recommended Compatible Patch
Solaris 8 SPARC	109147-37 (linker patch)	109147-40 (linker patch)
	109147-38 (linker patch)	
	109147-39 (linker patch)	
Solaris 9 SPARC	112963-22 (linker patch)	112963-25 (linker patch)
	112963-23 (linker patch)	
	112963-24 (linker patch)	
Solaris 9 x86	113986-18 (linker patch)	113986-21 (linker patch)
	113986-19 (linker patch)	
	113986-20 (linker patch)	

HP-UX Patches

The requirements for installing Web Server on HP-UX platform are as follows:

- HPUX11i-0E B.11.11.0312 (HP-UX 11i Operating Environment Component)
- HPUXBase64 B.11.11 (HP-UX 64-bit Base OS)
- HPUXBaseAux B.11.11.0312 (HP-UX Base OS Auxiliary)
- FEATURE11-11 B.11.11.0209.5 (Feature Enablement Patches for HP-UX 11i, Sept 2002)
- HWEnable11i B.11.11.0412.5 (Hardware Enablement Patches for HP-UX 11i v1)
- BUNDLE B.11.11 (Patch Bundle)

- BUNDLE11i B.11.11.0306.1 (Required Patch Bundle for HP-UX 11i, June 2003)
- GOLDAPPS11i B.11.11.0506.4 (Applications Patches for HP-UX 11i v1, June 2005)
- GOLDBASE11i B.11.11.0506.4 (Base Patches for HP-UX 11i v1, June 2005)
- JAVA00B 2.03.01 (Java2 Out-of-box for HP-UX)
- PHCO_29109 1.0 (Pthread enhancement and fixes)
- PHCO_30544 1.0 (Pthread.h fix and new enhancement)
- PHCO_29495 1.0 (libc cumulative patch)
- PHCO_31923 1.0 (libc cumulative header file patch)
- PHKL_25842 Thread Abort (or its superseded patch)
- PHCO_35743 s700_800 11.11 (libc cumulative patch)

Impact of US DST Changes 2007

Daylight Savings Time (DST) will start in U.S.A from the 2nd Sunday of March and end on the 1st Sunday of November. This will impact the date and time rules of the operating system and JDK/JRE.

To make sure that log files contain the correct time in US time zones, and that Administration Server and Java Web Applications are not impacted by this change, do the following:

Download and use the appropriate operating system patches. You can download the Solaris patches from <http://sunsolve.sun.com/search/document.do?assetkey=1-26-102775-1>. For other platforms, download similar DST compatible patches from operating system vendor's web site.

Upgrade the JRE to make sure that Administration Server and Java Web Applications are not impacted by this change. Download and use the appropriate JRE that has the fix for DST changes. JRE versions for the supported platforms are as follows:

- Solaris: 1.5.0_09 or later
- Linux: 1.5.0_09 or later
- HP-UX: 1.5.0.03 or later
- Windows: 1.5.0_09 or later

Supported Browsers

The following browsers are supported with Web Server Admin Console:

UNIX® and Windows platforms:

- Mozilla 1.7 or above
- Firefox 2.0 or above

Windows platform:

- Microsoft Internet Explorer 6.0 and 7.0

Installation, Migration, and Upgrade Notes

This section includes notes about installing, migrating and upgrading your Sun Java System Web Server. For detailed information about these topics, review the information in the Sun Java System Web Server *Installation and Migration Guide*. For known issues in this release of Web Server, see “[Known Issues](#)” on [page 47](#) in these release notes.

Installation

You cannot install Web Server to a directory that contains an earlier version of Web Server. You can, however, migrate the existing installation after installing Web Server to a new directory.

Web Server can be installed as part of Java Enterprise System or as a standalone version.

Standalone Installation

In a standalone installation, all the necessary shared components such as NSS, NSPR are co-packaged with the Web Server installation files.

Java ES Installation

If you are installing Web Server as part of the Java ES suite, the Java ES installer installs all the shared components such as NSS and NSPR as separate packages and Web Server specific binaries as separate operating system dependent packages. Hence you need to download and install all the shared components patches and Web Server patches.

Visit [Sun Solve](http://sunsolve.sun.com/show.do?target=patches/patch-access) (<http://sunsolve.sun.com/show.do?target=patches/patch-access>). Download and install the latest Java ES Component Patches for the respective operating system.

Note – Web Server 7.0 Update 3 will not start successfully without installing the latest NSS / NSPR patches on your system. Therefore, before installing Web Server 7.0 Update 3, you can check for the appropriate NSS patch available for your system in Web Server 7.0 Update 3 patch README bundled within our Update 3 patch.

Migration

Web Server 6.0 and 6.1 configurations can be migrated. Direct migration from a Web Server version lower than 6.0 is not supported. Earlier versions such as Web Server 4.0 or later must first be migrated to Web Server 6.1, then to Web Server 7.0. For information about migrating from Web Server 4.0 or later to Web Server 6.1, see the latest *Sun Java System Web Server 6.1 Installation and Migration Guide* and the *Sun Java System Web Server 6.1 Release Notes*.

For detailed information on migrating from Web Server 4.1 to Web Server 7.0, and from all versions of Web Server 6.0 to Web Server 7.0, see the *Sun Java System Web Server 7.0 Update 3 Installation and Migration Guide*.

Upgrade

When you install Sun Java System Web Server 7.0 Update 3 over an existing installation of Sun Java System Web Server 7.0, the installer automatically carries out the upgrade.

If you have Sun Java System Web Server 7.0 installed, point the Sun Java System Web Server 7.0 Update 3 installer to the location of the Web Server 7.0 installation and then upgrade.

If you have installed Sun Java System Web Server 7.0 as part of Java ES 5, you are encouraged to install the following patches from the <http://sunsolve.sun.com/pub-cgi/show.pl?target=patchpage> web site to upgrade to Web Server 7.0 Update 3:

- 125437 for Solaris SPARC/SPARCV9
- 125438 for Solaris x86/x64
- 125439 for Linux
- 125440 for HP-UX
- 125441 for Windows

If you are using a localized version of Web Server, install the following patches for successful upgrade from Web Server 7.0 to Web Server 7.0 Update 3:

- 126331 for Solaris SPARC (8/9/10) (Solaris SPARC Localization patch id)
- 126332 for Solaris x86 (8/9/10) (Solaris x86 Localization patch id)
- 126333 (Linux Localization patch id)

For detailed information about upgrading from Web Server 7.0 to Web Server 7.0 Update 3, see the *Installation and Migration Guide*.

Compatibility Issues

1. Web Server 7.0 supports JavaServer™ Faces 1.2 technology. Most JavaServer Faces 1.1 applications are expected to work with Web Server 7.0 without any modifications. However, there are some compatibility issues that might be encountered when migrating applications to JavaServer Faces 1.2 applications and such applications require modifications. The changes are documented in the JavaServer Faces release notes at https://javaserverfaces.dev.java.net/rlnotes/1.2_04/issues.html.
2. Sun Java System Portal Server 7.1, provided with Java ES 5 is not compatible with Sun Java System Web Server 7.0 Update 1. If you have deployed Sun Java System Portal Server 7.1 along with Web Server 7.0, you need to upgrade both servers rather than only Sun Java System Web Server 7.0. The required Sun Java System Portal Server 7.1 upgrade is available with Java Enterprise System 5 Update 1 or with the following patches available on <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/patch-access> web site.
 - 124301 (SPARC)
 - 124302 (x86)
 - 124303 (Linux)

If you are using a localized version of Web Server, install the following Portal Server localization patches:

- 125301 (Solaris SPARC, Solaris x86 localization)
- 125302 (Linux localization)

Product Documentation

The complete Sun Java System Web Server 7.0 Update 3 documentation is available at <http://docs.sun.com/coll/1653.3>.

Resolved Issues

This section lists the issues resolved in Web Server 7.0 Update 3.

Problem ID	Description
6387762	Cannot access shell/system variables from wadm.

4793938	<p>User and password dialog presented instead of directory index.</p> <p>By default, Web Server 7.0 does not send a directory index unless the user has been authenticated. Attempting to access a directory prompts the user to enter a user name and password. This occurs because the default Access Control List (ACL) in Web Server 7.0 grants the list access right only to authenticated users.</p>
6426116	<p>Clicking on the Version button in the Admin Console result in "file not found" warning in Administration error logs.</p>
6446206	<p>When a single user in group is deleted, an incorrect message "Group Saved Successfully" is displayed.</p>
6431984	<p>Web Server should store its pid file and UNIX domain sockets in /var/run instead of /tmp.</p>
6475536	<p>No obvious way to reset the administration server password.</p>
6489727	<p>[JESMF CONFORM] CP when stopping should call MfManagedElementServer_stop().</p>
6493971	<p>Admin Server does not time-out if the server instance restart does not respond.</p> <p>On UNIX systems, the Administration Server waits until the server instance is restarted when the restart-instance command is executed. If the instance is not successfully restarted, the Administration Server does not respond to requests.</p>
6515745	<p>SNMP master agent process fails to start on Web Server</p>
6545779	<p>On Windows, wdeploy command fails if older version of libnspr4.dll is found in the system32 directory.</p>

6606243	<p>Web Server installer should import the admin self signed certificate into IE certificate tab.</p> <p>When the Admin console is accessed using a browser, a pop-up (in the case of IE6 and Mozilla/Firefox) or a warning page (IE7) may be displayed stating that the certificate is not issued by a trusted certificate authority. This is because, the administration server uses a self-signed certificate. To proceed to the Administration GUI login page, do the following:</p> <ul style="list-style-type: none"> ■ On Mozilla/Firefox, click on the OK button in the pop-up window. ■ On Internet Explorer 6, click on the Yes button in the pop-up window. ■ On Internet Explorer 7, click on the "Continue to this website" link in the page. <p>The above procedure will accept the certificate temporarily for that browser session.</p> <p>To accept the certificate permanently, follow the steps below:</p> <ul style="list-style-type: none"> ■ On Firefox/Mozilla: Select the "Accept this certificate permanently" radio button in the pop-up window and click OK. ■ On Internet Explorer 6.0: <ol style="list-style-type: none"> 1. Click on the "View Certificate" button in the pop-up window. Displays another pop-up window. 2. Select the "Certification Path" tab, select the admin-ca-cert. 3. Click on the "View Certificate" button and then on "Install Certificate..." button. Invokes the certificate import wizard using which you can import the admin CA certificate into the trusted root certificate database. ■ On Internet Explorer 7: <ol style="list-style-type: none"> 1. Click on the "Continue to this website" link on the warning page. The login page is displayed. 2. Click on the "Certificate Error" link located next to the address bar. A warning window is displayed. Click on the "View certificates" link. 3. Follow the steps 1 to 3 as described in the section "On Internet Explorer 6" to import the admin CA certificate into the trusted root certificate database.
6606132	<p>Create self signed certificate fails when the "Sun Metaslot" pin is not set</p>
6709477	<p>GUI Registration reminder doesn't show up properly on IE6</p> <p>IE6 select element does not support z-index which is necessary for layering to work. Thus, if there is a layer, registration reminder, overlapping the drop downs (config and vs) , the drop downs will still be visible.</p>

6639402	<p>Connection queue size set by server for 1024 max file descriptor is very less (128)</p> <p>Web Server reserves the file descriptors for various components. If connection pool queue size, file cache max open files and keep-alive max connections are not set, then after reserving file descriptors for other components, Web Server divides the available descriptors among three. On systems where default value of max file descriptor is low, for example, Solaris 8 and RHEL, the connection pool size might be set to a low value. For example, on RHEL, the default value of max file descriptors is 1024. If the connection queue size is not assigned, then Web Server assigns 128 connections to connection queue. The value can be very low on busy systems. If connections starts timing out, users should set higher value for max file descriptors.</p>
6644322	<p>Memory leak in Fastcgistub causes hang in the Fastcgi sub-system</p>
6474037	<p>Exception installing Web Server on Ubuntu.</p> <p>On Linux Ubuntu, the package which contains the /bin/domainname is not available by default. You must install these packages for the Web Server installation to succeed.</p> <p>To install the package, type the following command:</p> <pre>sudo apt-get install nis</pre>
6414481	<p>Web Server cannot be installed without installing compat-libstdc++.</p>
6641672	<p>REDHAT ES4.0 Linux 64-bit installation fails by having compat-libstdc++-33-3* (64-bit)version</p>
6472668	<p>On Windows, Web Server installation should use -Xrs JVM option by default.</p>
6559918	<p>Unclear error message if CLI and Administration Server versions are incompatible.</p> <p>While upgrading Web Server 7.0 installation to Web Server 7.0 Update 2 , make sure that the entire setup CLI, Administration Server and all the Administration Nodes are also upgraded to Web Server 7.0 Update 2. This is because, Web Server 7.0 administration interfaces will not work correctly with Web Server 7.0 Update 2 administration interfaces.</p>
6595795	<p>The Admin console does not add the required functions in the obj.conf file for a migrated instance.</p> <p>When a JVM disabled Web Server 6.0 instance is migrated to Web Server 7.0 and when the migrated instance is enabled with the JVM option using the Admin console, the process does not add the following necessary lines in obj . conf file.</p> <pre>NameTrans fn="ntrans-j2ee" name="j2ee" PathCheck fn="find-index-j2ee" ObjectType fn="type-j2ee" Error fn="error-j2ee"</pre>
6641844	<p>On Windows, server fails to start after upgrading from Web Server 7 that is part of the Java ES 5 release to Web Server 7.0 Update 2 release using the patch.</p>
6644314	<p>Security patch 121656-16 is a mandatory prerequisite for Sun Java System Web Server 7.0 Update 2 Linux patch on Java ES 5/U1. However, the security patch exhibits cyclic dependency, hence making it impossible to apply any of the patches.</p>

6640206	<p>On non-windows platforms (Solaris, Linux and HP-UX), if you have installed Web Server 7.0 or 7.0 update 1 without sample applications and if you upgrade to Web Server 7.0 update 2, you will see the following error message:</p> <p>A problem occurred during upgrade. To troubleshoot the problem, review the installation log at: <code><install-dir>/setup/Sun_Java_System_Web_Server_install.log</code></p> <p>Note – This error does not impact the upgrade.</p>
6559735	<p>Sample applications documentation must mention adding jar file to the class path in the properties file.</p> <p>In the <i>install-dir/samples/java/webapps/security/jdbcrealm/docs/index.html</i>, under 'Compiling and Assembling the Application' section, there must be a mention of adding JDBC driver jar file to class path suffix in the <i>jdbcrealm.build.properties</i> file.</p>
6413058	<p>server.xml does not store the full file pattern for converting and including search .</p> <p>The schema does not store the full file pattern allowed by both the Admin Console and the search administration tools in this version of the Web Server. It also has no way to represent the full file pattern that might sometimes need migration from the previous versions of the Web Server.</p>
6632936	<p>On Red Hat Linux Enterprise Linux 5, Search functionality does not work properly.</p> <p>On a Red Hat Enterprise Linux machine, if the <code>compat-libstdc++</code> library is installed, you must remove the installed rpm and download/install the <code>compat-libstdc++-296-2.96-132.7.2.i386.rpm</code>.</p> <p>For x86 32-bit and 64-bit download and install the <code>compat-libstdc++-296-2.96-132.7.2.i386.rpm</code>.</p> <p>Note – Do not download/install an rpm from unreliable sources as it may lead to security vulnerabilities.</p>
6611067	<p>Red Hat Enterprise Linux instance fails to start when the file system SELinux security is enabled.</p> <p>Newer Linux distributions have new kernel security extensions enabled from the SELinux project. These extensions allow finer grained control over system security. However, SELinux also changes some default system behaviors, such as shared library loading that can be problematic to third-party programs. If you receive the error message "Cannot restore segment prot after reloc: Permission denied" when starting the Web Server Admin Server or instance, that means the system is SELinux enabled.</p>
6602075	<p>Sun crypto 1000 with Web Server needs Solaris 10 patch 125465-02 (SPARC) and 125466-02 (x86).</p>
6432870	<p>Servlet container collects statistics when stats enabled element is set to false in the server.xml file.</p>

6567124	<p>JSF Web Applications running on Web Server 7.0 may break when running on Web Server 7.0 Update 1.</p> <p>Web Server 7.0 Update 1 ships with JavaServer Faces 1.2 technology. All JavaServer Faces web applications are expected to work with Web Server 7.0 Update 1 without any modifications. However, there are a few known compatibility issues with JavaServer Faces 1.2 and might require applications to be modified to address these incompatibilities. The incompatibilities are documented in the JavaServer Faces release notes at: https://javaserverfaces.dev.java.net/rlnotes/1.2_04/issues.html.</p> <p>Java ES 5 Portal Server users are suggested to delay upgrading to Web Server 7.0 Update 1 until Java ES 5 Update 1 is released.</p>
6549619	<p>On Windows 2003, when a command is executed from the CLI, the message is not encoded correctly.</p>
6630841	<p>FastCGI Handler new Role is always created with "English" name.</p>
6632818	<p>Unlocalized strings are seen in CGI settings page.</p>
6628910	<p>CLI installer "Enter your option" is in English in localization locale.</p>
6484181	<p>Portal Server configures JVM stack size to 128K (too low) for Web Server 7.0 64-bit to start.</p> <p>If Web Server 7.0 is already configured in 64-bit mode, and the Portal Server installation is started, Portal Server configuration does not set stack size to 128K. However, if both Portal Server and Web Server are already installed and configured in 32-bit mode, switching to 64-bit mode involve series of manual steps that are described in the Workaround section.</p>
6487041	<p>schemagen/xjc/wsgen/wsimport scripts not present in Java ES Web Server installation.</p> <p>schemagen/xjc/wsgen/wsimport scripts are present in different locations in Java ES installation and stand-alone installation of Web Server.</p>
6550622	<p>When upgrading Java ES 5 software to Java ES 5 Update 1, Portal Server samples fail with JSF exceptions if you have upgraded only Web Server but not the Portal Server.</p> <p>For more information, see "Compatibility Issues" on page 30.</p>
6643821	<p>SMF commands removes Java ES environment from startserv and stopserv scripts (Solaris 10 only).</p>
6549580	<p>Web Server running on Windows contains no description for the service and the description is not updated after applying Java ES Update 1 patches.</p>
6641175	<p>Streaming data (>2GB) to server using POST has problems. request.getInputStream().read() returns -1</p>
6576542	<p>Samples bundled with WS 7.0 cannot be used for experimenting session replication feature</p>
6600183	<p>Transfer-encoding header is sent after the body has been sent for fastcgi-perl.</p>

6613414	iWS7.0UI - Page-encoding is not case sensitive capable, e.g. utf-8 is different from UTF-8
6613865	Servlet container implementation of encode/decode cookies has changed from >= SJSWS6.1
6641175	Streaming data (>2GB) to server using POST has problems. request.getInputStream().read() returns -1
6641231	Uploading file > 2MB is limited by java webcontainer.
6658609	web 7.0 u2 jdbc resource settings do not allow -1 in maximum wait time and idle time out
6660297	JDBC resource pool of web70 doesn't work as expected after restarting RDB.
6671260	Can't redirect the stderr message from FastCGI into error log. The data sent from FastCGI to stderr is not logged into the error log.
6671957	compress-file function lacks documentation (SJSWS7.0)
6671992	web server documentation needs to be more specific on filter it's scope and what they are
6680376	server goes into a loop given a particular htaccess configuration
6681681	filter is applied twice when a web-apps 's welcome file list is accessed as /contextroot When a welcome file is accessed as /context - root, filters present are applied twice.
6708333	web 7.0 u2 patch 125437-13 should doc pre-requisite of nss patch 3.11.8 or above as needed
6697002	pull-config garbles binary file in config/ directory due to tokenizing (SJSWS7.0u2)
6701520	instance does not start if the user has certain umask settings during installation
6710993	es, fr - OLH is not displaying, exception thrown

This section lists the issues resolved in Web Server 7.0 Update 2.

Problem ID	Description
6467621	Request to the server fails with using of "Sun Software PKCS#11 softtoken".
6493271	Java garbage collector activity is higher in Web Server 7.0 when compared against Web Server 6.1. The servlet container in Web Server 7.0 creates many Java objects.

6497803	<p>If a servlet is mapped to req URI formed by partial req + welcome file, the behavior is wrong.</p> <p>If a web container receives a valid partial request, the web container must examine the welcome file list defined in the deployment descriptor. The welcome file list is an ordered list of partial URLs with no trailing or leading /. The Web Server must append each welcome file in the order specified in the deployment descriptor to the partial request and check whether a static resource or a servlet in the WAR file is mapped to that request URI. The web container must send the request to the first resource in the WAR that matches.</p>
6316881	<p>Multi-byte characters in headers can not be retrieved by req.getHeader().</p> <p>The characters are not parsed correctly, when request.getHeader() is called.</p>
6554326	<p>The hardcoded message "ADMIN3594: Configuration changes require a server restart" is not localized.</p>
6565615	<p>In the Japanese locale online help, the description about the PAM for "Editing Authentication Databases" incorrectly states the name of Directory Server.</p> <p>The description must be read as: "Editing Authentication Databases" PAM -- PAM is the new auth-db supported by Sun Java System Web Server 7.0.</p>
6563951	<p>Search collection subdirectory with leading slash causes confusing error.</p> <p>When you try to create a search collection and set the document root subdirectory with a leading slash, the error message produced wrongly informs you that a slash at the beginning is needed.</p>
6571208	<p>Inconsistent wording found in Directory listing type.</p> <p>The sentence "Error response file to use when indexing is None" should be changed to "Error response file to use when listing is None".</p>
6549584	<p>The word "Other" in the list of countries is not translated.</p>
6556225	<p>In the Add Documents window, Included checkbox for subdirectory is not translated.</p>
6565615	<p>Japanese language help: "Editing Authentication Databases" have different description about PAM.</p>
6628918	<p>Translation issue of Admin GUI messages in Japanese.</p>
6628917	<p>Translation issue of GUI installer OLH.</p>
6604075	<p>In Java ES, Web Server 7.0 with Access Manager displays a null pointer exception.</p>
6479062	<p>Web Server fails to start when HTTP listener protocol family="nca" is used for Solaris SPARC, Linux and HP-UX platforms.</p> <p>Web Server instance does not restart on setting the Protocol-Family property to nca in the EditHTTPListener wizard.</p>
6464953	<p>Setting digestauthstate property through the set-authdb-prop CLI does not validate the value and allows to set junk value for this property.</p>

6504050	The Results page in all Admin Console wizards should be aligned properly.
6473376	The default server.xml should not contain the <stack-size> element.
6367751	The create-instance command fails on remote node intermittently and logs HTTP 400 error.
6547264	Executing the create-instance command immediately after starting a remote node fails on the remote node.
6468132	The list-cert command does not list the certificates if the certificate nickname contains a colon.
6437577	<pkcs11> element not removed from server.xml even when child elements are absent.
6473589	<pkcs11/> added to <code>server.xml</code> when token pin is set.
6534202	Cannot edit WebDAV collection properties through the Admin Console When a configuration is deployed on multiple nodes, the lockdb path must be a shared location mounted on the same path on all the nodes. Additionally, to list or expire locks in the lockdb from the Admin Console, the same path must be writable from the Administration Server.
6554691	The add-webapp command when used with JSP pre-compilation option does not delete the previously precompiled JSP files.
6556820	The Admin Console or the Admin CLI does not provide support to add CA certificates to the Administration Server.
6489269	'external' expression function with quoted path is not working.
6432375	On HP-UX, SNMP fails for some oid values.
6483212	On HP-UX 11.11, Web Server fails to start when max heap size is 2048 MBytes or greater.
6474011	The basic-search.html has unclear description.
4988156	Installing the stand-alone product over an existing Java ES installation and vice-versa is not supported.
6610103	On Windows - unable to deploy configuration and start up after disabled Java

This section lists the issues resolved in Web Server 7.0 Update 1.

Problem ID	Description
6390112	Java LDAP connection pool interaction issue - initial connection is never timed out. Specifying a Java LDAP connection pool through the JVM options in the <code>server.xml</code> file and referencing this with an external JNDI resource when the web server is started, creates a pooled LDAP connection. With this connection, it is always marked as busy and the connection never expires.

Problem ID	Description
6472223	Values of 'mail-resource' sub elements are not getting set on mail session object.
6487083	NSAPIRequest.setupRequestFields is slow. com.sun.webserver.connector.nsapi.NSAPIRequest.setupRequestFields is slow primarily because of excessive String-->byte and byte-->String conversion when parsing Cookie headers.
6501785	The servlet container does not use accelerator cache when processing RequestDispatcher includes.
6500647	On Windows, dynamic reloading of JSP produces incorrect output.
6433752	ssl-check is not working with NSAPI based plug-in. "PathCheck fn="ssl-check" secret-keysize=128 bong file="xxxxx.yyy.html" For static file requests, if the secret-keysize of the client is less than the size specified by the server and a bong file is present, then the bong file is sent back as the response. However, requests for dynamic content (for example, JSP files) return the actual requested object (for example, the JSP file) rather than the bong file.
6421617	Problem having server-parsed HTML (ParseHTML) and .htaccess with restricted group option. Authentication succeeds when parsing through a HTML file which has the shtml include entries and is configured to authenticate through .htaccess which has the "restricted by group" option enabled. If the group user gets authenticated, then the result page does not get shtml include entries. This however works fine with the user in .htaccess file has "restricted by user" option.
6489913	SSL session cache cannot be disabled. Session cache is enabled by default. When the session cache is disabled and URL is accessed through the HTTPs protocol, the URL does not go through and the server log displays an error message indicating that the SSL cannot be configured without session-cache.
6302983	Samples refer to "Sun ONE" instead of "Sun Java System". The servlet sample, LocalCharsetServlet.java, co-packaged with Web Server 7.0 refers to "SunONE" instead of "Sun Java System".
6495588	sampleapps/java/webapps/simple docs invalid. The documents for a simple sample application shows an incorrect pathname. The path should be <i>install_dir/plugins/java/samples/webapps/simple/src</i> instead of <i>install_dir/samples/java/webapps/simple/src</i> .
6347905	No CLI support to configure FastCGI. Need to manually edit obj.conf or magnus.conf files to configure FastCGI.
6504587	Memory leak found in FastCGI.

Problem ID	Description
6479045	<p>Admin Console online help needs to be updated.</p> <p>The online help needs to be updated for the following:</p> <ol style="list-style-type: none"> 1. Context-based help should be provided. 2. All screens must have a corresponding help page. 3. Help pages must reflect the changes in the GUI. 4. Inconsistent usage of terminology between the GUI and online help. 5. Fix grammatical errors. 6. Detailed description for some topics.
6482764	<p>Mismatch between online help and the Admin Console.</p>
6498477	<p>Missing help file under config tokens page.</p> <p>Common Tasks > Edit Configuration > Certificates > PKCS11 Tokens, the help file for this screen is missing.</p>
6479062	<p>Cannot dynamically reconfigure HTTP listener family. The Instance does not start on setting the protocol family to nca.</p>
6482536	<p><listen-queue-size> upper bound is set to 65535, which is too small. Need to increase the <listen-queue-size> upper bound.</p>
6500715	<p>Incorrect ObjectType fn="force_type" added in object cgi on creation of new cgi directory.</p> <p>When creating a new cgi directory, an incorrect object type force_type is added to the obj.conf file.</p>
6479247	<p>On Windows, dialog box to enter the token password appears on restarting an instance after the deployment. This behavior is not see on other platforms.</p>
6425144	<p>On Windows, wadm does not update classpath correctly if classpath contains a semicolon (;)</p> <p>The semicolon in tcl is interpreted as a command terminator, which is used to group multiple commands in a single line. On Windows, semicolon is used as a path separator.</p>
6292582	<p>SNMP Management Information Base (MIB) for "iwsFractionSysMemUsage" does not show correct results</p> <p>SNMP MIB "Fraction of process memory in system memory" which is part of iws.mib gives wrong results when queried by the SNMP manager utility.</p>
6471744	<p>Incorrect error message is displayed if you execute the list-tokens command without specifying the configuration value.</p>
6471754	<p>Incorrect error message is displayed if you execute the list-authdb-userprops command without specifying the authdb value.</p>
6472210	<p>No error message is displayed if you execute the get-ssl-prop command with an invalid http-listener value.</p>

Problem ID	Description
6476111	Cannot edit the MIME types using the Admin Console.
6478601	Displays an improper message when you stop an instance that does not exist. An error message 'Successfully stopped the server instance' is displayed if you try to stop an instance that does not exist.
6480523	wadm allows you to create a configuration with a negative port number.
6489765	Incorrect error message is displayed if you execute the create-cert-request command with an invalid key-size value.
6489777	The delete-group command displays an incorrect error message if you specify an invalid group value.
6489779	No error message is displayed when you execute the list-group-members command with an invalid group-ID value.
6490728	Cannot set the rewrite-location properties using the set-reverse-proxy-prop command. You cannot set the <code>-rewrite-location</code> property to <code>false</code> . The value specified for the <code>-rewrite-location</code> is not validated. For example, specifying the <code>=</code> symbol for the <code>i-rewrite-location</code> option corrupts the <code>obj.conf</code> file and results in parser error.
6492315	The set-token-prop command sets wrong passwords in the server.xml file even if the token pin has not been specified.
6492469	Incorrect error message is displayed on LDAP user creation failure.
6494353	If an invalid node name is specified while deleting an instance, an incorrect error message is displayed.
6494950	The register-node command runs successfully with non SSL port only in shell mode. In shell mode, typing the <code>register-node</code> command with the <code>-no-ssl</code> option registers the node successfully as the command is falsely executed in the SSL mode.
6405018	The get-jvm-prop command does not print the command when echo is enabled in shell mode.
6499507	Incorrect error messages are displayed when you execute the list-locks and expire-lock commands.
6499510	A 'null' message is displayed if you execute the list-instances, list-crls, list-tokens, and list-certs commands without specifying the configuration name.
6499512	The error message for the list-url-redirects command is not localized.
6500119	wadm prompts for a token pin if you specify an invalid configuration name while trying to delete an existing certificate.
6500146	While creating an HTTP listener using the CLI, the create-http-listener command creates a listener with null value as name.

Problem ID	Description
6500150	If you do not specify a virtual server while executing the list-dav-collections command, an incorrect error message is displayed.
6500151	If you do not specify the authentication database while executing the list-users, list-org-units, list-groups, and list-group-members commands, an incorrect error message is displayed.
6500152	If you do not specify a virtual server while executing the list-uri-patterns command, an incorrect error message is displayed.
6500154	If you do not specify a JNDI name or specify an invalid JNDI name while executing the list-jdbc-resource-userprops, list-soap-auth-provider-userprops, list-auth-realm-userprops, list-external-jndi-resource-userprops, list-custom-resource-userprops commands, an incorrect error message is displayed.
6503350	Error message given when entering invalid wadm command is misleading. When you type an invalid command, an error message "Invalid command <command name>. Use "help" command for a list of valid commands." is displayed. The help man page does not contain a list of valid command. Therefore this error message is misleading.
6503944	The create-user command usage for the LDAP authentication database is ambiguous.
6504095	The set-cert-trust-prop command accepts incorrect properties and does not show proper error message.
6443845	Administration Server does not validate the password length and mechanism support of the given token.
6449506	Certificate with same server name as existing certificate cannot be created with the same nickname.
6461553	Virtual Server Web Applications page title help is incorrect.
6473518	Prompt to enter token pin while starting instance should not appear if configuration has not been deployed.
6476095	Admin Console does not provide an option to edit document directories and CGI records.
6476736	Admin Console should have a tab to add and edit MIME mappings at the Virtual server level.
6478090	'Current Password' field in the Nodes -> Select Administration Server-> Certificates -> Token Password Management page should be disabled if no token password has been set for the administrator.
6490705	Unable to configure uri-pattern specific configurations using the Admin Console.
6496545	Admin Console displays invalid properties when custom authentication database user properties are created through Administration CLI.

Problem ID	Description
6502303	The Admin Console Migrate wizard creates multiple configurations if you click the Finish button multiple times.
6504495	Admin Console has 508 compliance issues.
6504951	User selection process in the Common Tasks->Edit Virtual Server->WebDAV->New page needs validation.
6360666	Installed CRL should have a meaningful name.
6364821	Administration CLI should support URIs, URI prefixes, URI wildcard patterns, and URI regular expressions for all commands that operate on URI space.
6366956	Search schedule events do not work from the Admin Console.
6378612	64-bit instance does not start on 32-bit remote node.
6423391	When a server certificate with data in non-DER format is installed, an incorrect error message is displayed.
6439132	Exceptions in Certificate Installation wizard not clear.
6468676	No validation exists for 'Java Home' field; accepts invalid data.
6474668	HTTP Listener field accepts names with spaces. This is invalid.
6476111	Unable to edit MIME types either using the Admin Console or the CLI.
6483365	<p>GUI and CLI accept Web Server 7.0's server root for migration</p> <p>The Admin Console and the CLI accept the Web Server 7.0 path instead of Web Server 6.1 or Web Server 6.0 path during migration. Web Server 7.0 path is not a valid path for the server-root property in the migrate-server command.</p>
6492176	<p>Default and null values get stored in obj.conf when a new configuration is created and saved using the Admin Console.</p> <p>Administration Server stores the values passed by the Admin Console into obj.conf file without any validation.</p>
6497004	<p>SaveConfigurationException displayed on CLI during set-authdb-prop.</p> <p>If a nonexistent file path is provided to the path property for keyfile authdb by using the set-authdb-prop command, results in SaveConfigurationException instead of a File does not exist message.</p> <p>See the error log for the Administration Server.</p>
6497143	At times, the execution of stop-admin command displays the "Admin Server Not Running" message when the Administration Server is actually running.
6498411	The get-cert-prop does not display only those properties mentioned in the <displayproperties> element.

Problem ID	Description
6500715	Server error on trying to access a file in the cgi-bin directory.
6364702	wadm commands do not return valid error codes [0-125] when success or failure.
6370032	Session failover does not happen with RequestDispatcher include call. While deploying two web applications on a cluster where the first application calls on the second application using the <code>RequestDispatcher()</code> include call, the persistence valves are not called during the <code>RequestDispatcher()</code> 's <code>invoke()</code> method, and session replication does not occur.
6381950	Incorrect load factor set for BaseCache. Session replication does not support more than two web applications.
6381954	Session replication fails to work on multiple web applications involving RequestDispatcher due to bad sequence.
6383313	Incorrect path is set on SR-instanceId cookie. The <code>SR-instanceId</code> cookie should be set to the web application's path instead of the servlet's path.
6450360	The create-authdb command does not validate the URL at the time of the authentication database (authdb) creation. The create-authdb command successfully creates an authentication database with the wrong URL.
6450800	The get-error-log and the get-access-log commands displays cluttered and improper messages.
6459106	The wadm deploy fails to deploy the cluster configuration. If any changes occur to the instance configuration files, manually or otherwise, the <code>deploy-config</code> command displays an error message stating that the instance has been modified.
6462891	No Admin Console is available to deploy web applications in user specific location.
6439577	Does not prompt for the token password when the instance is started from the wadm command prompt with a wrong token-pin.
6465470	Incorrect text in Groups settings page. The text should read as "From this page you can add/remove user groups in the selected Authentication Database" instead of "From this page you add/remove user groups in the selected Authentication Database."
6465480	Incorrect message when you delete a JVM profiler. The message should read as "Profiler deleted successfully" instead of "Profiler saved successfully".
6466409	Incorrect error message is displayed when you provide a wrong path while adding web application.

Problem ID	Description
6467164	The window titles of the Admin Console wizards are not consistent.
6467785	Admin Console gives incorrect error message when you provide invalid Directory Server configuration values.
6470585	URI prefix of document directories is accepts the value without '\'.
6471737	The list-instances command lists the instances even if you do not specify the configuration value.
6472385	Token password changes made through the CLI is not reflected in GUI. It requires a browser refresh.
6467665	Migrating certificate with an invalid file path using the migrate-jks-keycert command, prompts the user to enter the keystore-password and the key-password.
6469104	The create-selfsigned-cert command allows you to define an inappropriate validity period while creating a server certificate.
6469109	The delete-cert command does not delete a certificate which is created with token "Sun Software PKCS#11 softtoken".
6471649	The list-events command output is not aligned.
6474584	<p>dayofweek does not take "*" as an option.</p> <p>For example, set an ACL as follows:</p> <pre>acl "uri="/"; deny (all) dayofweek="*"; allow (all) dayofweek="Sat,Sun";</pre> <p>In this program, you are restricting access on all days of week except Saturday and Sunday. This program does not work as you can you can successfully access the ACL on a Monday.</p>
6477840	Admin Console should provide large text region for entering class path prefix, class path suffix, and native library path prefix.
6478165	Usability issues in the Install CRL page after incorrect file path is entered for CRL file on server.
6478229	The Instance->New page has incorrect title.
6478292	The Common Tasks->Select configuration ->Select Virtual Server ->Edit Virtual Server ->WebDAV->New page should have the Enter Users field only if the authentication database is PAM.
6478303	Admin Console allows you to create an ACE without entering user or group information for ACL. The check is not done if the authentication database is PAM.
6478612	Inline help for range of values accepted by Request Header Time-out text field is incorrect.

Problem ID	Description
6500228	The Admin Console displays an exception when you create a duplicate record of a MIME types.
6501807	Deploying a new web application using the Admin console kills sessions for all existing web applications.
6504748	With delete instance option, instead of deleting the symbolic links, the uninstaller deletes files from symbolic links.
6505994	Crash detected when creating properties with empty URI pattern
6510486	htaccess rules can become corrupted in memory. If a single .htaccess file has more than five allow or deny rules, it is possible that some of the rules may become corrupted in memory. If this occurs, some of the rules may be bypassed.
6506936	deploy-config fails when you modify JSPs or any other files in the webapps directory of the instance. When using the pull-config either through the Admin Console or through the CLI, only the contents of the <i>instance_dir/config</i> directory is pulled into the config-store. In Web Server 7.0, when pull-config was used, the contents were pulled into <i>instance_dir/config</i> , <i>instance_dir/lib</i> , and <i>instance_dir/web-app</i> directories.
6492407	Front-end file accelerator cache. Depending on ACLs and obj.conf configuration, a front end accelerator cache can service static file requests for URIs that were previously processed using NSAPI. The accelerator cache must work with the default configuration.
6498928	Output directives are not invoked for 0-byte files. Output directives are not invoked for 0-length responses unless <code>protocol_start_response()</code> is called. <code>send-file</code> does not call <code>protocol_start_response()</code> function. Output directives are not invoked when sending 0-byte files.
6502258	Server crash with large output buffers. If the output stream buffer size is bigger than the input buffer size, the server might attempt to buffer data at an invalid address. The default input buffer size is 8192 bytes.
6504755	Cannot disable access logging in default server instance. The value of the <code><access-log></code> <code><enabled></code> element is ignored in the <code>server.xml</code> file.
6505390	Accelerator cache does not handle ssl-unclean-shutdown properly. The accelerator cache does not interact correctly with the <code>AuthTrans fn="match-browser" browser="*MSIE*" ssl-unclean-shutdown="true"</code> directive in the default configuration. When such a directive is present, the accelerator cache applies the "unclean shutdown" setting to every connection, regardless of the browser used.

Problem ID	Description
6432375	On HP-UX, SNMP fails for some oid values. Workaround Due to lack of the HP-UX API support and complexity, network in and out traffic statistics is not implemented. Use HP tools for monitoring the traffic statistics.
6430293	The AdminException messages displayed on the Admin Console are not localized.
6508299	Displays incorrect characters in search results on the left panel of online help on non-English locales.
6507819	Localized online help content have some differences from the English version.
6536820	Intermittent deploy-config failure while running QA Regression Tests on tinderbox

Known Issues

This section lists the important known issues and limitations at the time of Web Server 7.0 Update 3 release.

- “Administration” on page 47
- “Core” on page 52
- “FastCGI” on page 53
- “Installation” on page 54
- “Migration and Upgrade” on page 55
- “Sample Applications” on page 55
- “Search” on page 56
- “Security” on page 56
- “Session Replication” on page 57
- “Web Container” on page 57
- “Localization” on page 58
- “Java Enterprise System” on page 58

Administration

The following table lists the known issues in the administration of Web Server.

TABLE 4 Known Issues in Administration

Problem ID	Description
6364924	<p>A node can be registered to multiple administration servers which may cause a configuration conflict.</p> <p>It is possible to register a node to a second Administration Server without canceling the registration with the first Administration Server. However, this leads to the nodes becoming inaccessible to both the Administration Servers.</p> <p>Workaround:</p> <p>On each registration, restart the administration node. The administration node will be available to the most recent Administration Server it has registered to.</p>
6379125	<p>wadm command allows connecting to a node, shows a certificate and then throws a 'HTTP 400 Error'.</p> <p>When an administration node receives a connection, the administration node does not check the connection is from the Administration Server before proceeding. It not only prints an inappropriate error message, but also prompts the user to enter the password.</p>
6327352	<p>Session replication enabled instances does not come up normally, if other instances in the cluster are not started.</p>
6393534	<p>After migrating the Java keystore keycerts using the migrate-jks-keycert command, trying to list the migrated jks keycerts using the list-certs command, displays the CN, org and other information instead of the certificate nickname.</p>
6407486	<p>While setting the SSL property using the wadm set-ssl-prop command, the server-cert-nickname property accepts any certificate nickname, instead of accepting only the server certificate nickname.</p>
6443742	<p>The set-session-replication-prop CLI command does not work if the 'node' option is provided with a qualified domain name.</p> <p>Workaround</p> <p>Use the output of the list-nodes command for the valid names of the nodes in the set-session-replication-prop command.</p>
6468570	<p>Specifying "yes" at the wadm prompt crashes the CLI.</p>
6469676	<p>When you try to connect to the Administration Server after the administration certificates have expired, an incorrect error message is displayed.</p>
6480600	<p>The register-node command gives an incorrect error message when the Administration server runs out of disk space.</p>
6495446	<p>If no disk space is available on the device, wadm throws an incorrect error message "Unable to communicate with the administration server".</p>

TABLE 4 Known Issues in Administration (Continued)

Problem ID	Description
6502800	Executing the migrate-server command with both "--all" and "--instance" options does not result in an error. A warning or an error message should be displayed indicating that the user is attempting the set mutually exclusive options.
6416328	The Start Instances. button in the Admin Console is enabled for instance which is already running. The buttons should be enabled or disabled based on the status of the instance.
6418312	wadm allows you to define duplicate user properties. Adding duplicate user properties does not show an error message; however, a new user property is not created.
6421740	There is no provision to create new Access Control List (ACL) file using the Admin Console or the CLI.
6423432	On Windows, using an existing configuration, repeating the process of adding and removing the registered nodes causes validation failure.
6430417	MIME Types allows MIME value with multibyte characters.
6442081	Text in Access Control List page is not formatted.
6442172	User can be switched between 'available' and 'selected' lists in ACE even though the user is deleted from the authentication database.
6446162	No warning is issued before the deletion of key or the digestfile authentication database.
6448421	Administration Interface allows you to create a new user with multi-byte User ID in the keyfile authentication database.
6455827	User and Group table in the Admin Console displays the entire result in a single page.
6461101	Labeling of the Request Certificate and Install buttons in the Admin Console Create Self-Signed Certificate page needs to be revised.
6462057	Add and Remove buttons are enabled in new ACE window even if no items are present in the 'Available' list.
6464891	Admin Console truncates the display of server logs at 50 lines or 2 pages.
6465382	No validation exist to check the entry of wrong country code in the certificate request wizard.
6465421	In the Admin Console, no text field description is provided for virtual-server, authdb, dav collection, and event fields .
6466336	Admin Console shows wrong JDK version while creating a new configuration. The JDK version displayed in the Admin Console is 5.0 u6 instead of 5.0 u7.

TABLE 4 Known Issues in Administration (Continued)

Problem ID	Description
6471171	Style formatting is lost after restarting the Administration Server from Nodes -> Administration Server General tab.
6471367	Attempting to access the Admin Console in another tab of the same browser does not work.
6471792	View Log displays result in a single page. Although the search criteria selected for record size is 25 log entries, the log displays the results in one single page even if there are more than 50 log entries.
6472932	Token mismatch error is displayed when you remove the token password and then reset it in the Common tasks -> Select configuration -> Edit configuration -> Certificates -> PKCS11 Tokens page.
6486037	The Virtual Server Management->Content Handling->Document Directories->Add should have a browse option to choose the path of a additional document directory.
6492906	Message displayed about WebDAV collection locks in the Admin Console is misleading. If you specify the time-out value for the WebDAV collection as <i>infinite</i> , the Common Tasks->Select Configuration ->Select Virtual Server->Edit Virtual Sever ->WebDAV->Select collection page displays the message DOES NOT EXPIRE. What it actually means is that the lock does not expire automatically after a specified time or the time-out is infinite.
6498484	Incorrect error message is displayed on setting empty token password using the 'Set passwords' button.
6500157	Instance fails to restart if you try to edit a token password and deploy a configuration on an instance which is already running.
6502287	The Admin Console displays an exception when you delete a configuration and click on the Migrate button.
6502374	The Admin Console Review screen in wizards should only show fields that have values.
6502793	During migration, the log-dir path permission is not validated.
6266358	Cannot log in through the Administration CLI if the administration password has extended ASCII characters.
6361329	The error-response file name should be validated.
6367282	Administration server starts with expired certificate; wadm should warn about expired certificates.
6375505	The unregister-node command should also clean up certificates on the administration node.
6408169	WebDAV lock CLIs do not work in a cluster environment.

TABLE 4 Known Issues in Administration (Continued)

Problem ID	Description
6408186	Multiple installations of the administration nodes on the same node that is registered to the same administration server should be not be allowed.
6416369	Accessing the administration node URL results in Page Not Found error. As the administration node does not have a GUI, accessing the administration node URL results in Page Not Found error.
6422936	No validation for class path prefix and suffix, and native library path in JVM Path Settings in Java.
6423310	The server.xml elements should be grouped based on functionality.
6441773	On Windows, Administration Server moves the Web application files physically before stopping the Web application.
6462515	The Admin Console misleads user with "Instance modified" message when runtime files gets created in the config directory.
6462579	Trust store does not deleted on uninstalling the administration node after unregistering it with the administration server.
6468330	Changes made to the JavaHome property does not get saved after restarting the instance.
6491749	Need better validation in certain text fields to prevent obj.conf file corruption. Most of the functional validation of the data in a form is done in the back end. The GUI has only minimal checks such as empty fields, integer values, and ASCII values. Hence, the GUI stores the data in the obj . conf when parsed gets corrupted .
6497213	Executing the restart-admin command followed by the stop-admin command throws exception in administration error logs.
6587832	On Windows, theAdmin Console intermittently fails to come up. Workaround: <ol style="list-style-type: none"> 1. This problem is seen on Windows 2003 if you have "Internet Explorer Enhanced Security Configuration" enabled. 2. To access the Admin Console without disabling Enhanced Security feature, include the site in the list of trusted sites explicitly on the browser. 3. To disable Internet Explorer enhanced security configuration, go to Control Panel > Add/Remove Programs > Add/Remove Windows Components. 4. Deselect the check box next to Internet Explorer Enhanced Security Configuration. 5. Restart the browser.

TABLE 4 Known Issues in Administration (Continued)

Problem ID	Description
6746045	<p>Once config changes are made it is found that file ownership changes in docs directory</p> <p>When a user creates a directory, adds some files and deploys them under the docs directory, the ownership of all files under this directory, changes to the owner who installed Web Server.</p> <p>Workaround:</p> <p>The user directories should not be created under docs directory.</p>

Core

The following table lists the known issues in the core of Web Server.

TABLE 5 Known Issues in Core

Problem ID	Description
6296993	When there is an error executing an obj.conf directive, the filename and line number where the offending directive was found are not logged.
6365160	When server.xml schema validation fails due to a data type constraint violation, it displays an error message that does not describe the set of valid values for the element.
6378940	All HTTP header parsing error are not logged with the client IP and a description of the error.
6470552	set-variable SAF could not set predefined variable.
6486480	<p>service-nsfc-dump entry hit counts are 0 with <replacement>>false</replacement>.</p> <p>If <replacement>>false</replacement> is specified in server.xml file, entry hit counts show as 0 in the service-nsfc-dump output. However, the cache hit counts are displayed correctly.</p>
6489220	<p>Server treats non-interpolated strings that contain \$\$ character constants as interpolated.</p> <p>When a parameter value contains a \$\$ escape, the server constructs a PblockModel for the parameter block. This is unnecessary because \$\$ is a constant.</p>

TABLE 5 Known Issues in Core (Continued)

Problem ID	Description
6641109	<p>Webserver crashing configured with an NFS-mounted docroot directory</p> <p>Web Server crashes if NFS file is removed or replaced, while using NFS and <code>MediumFileSizeLimit > 0</code>. Therefore, you should not use <code>MediumFileSizeLimit > 0</code>, if the document root is mounted over NFS.</p> <p>Workaround</p> <p>When Web Server documents are residing on an NFS mount, as in NFS client, set <code>MediumFileSizeLimit</code> to 0 in <code>nsfc.conf</code>.</p>

FastCGI

The following table lists the known issues in the FastCGI.

TABLE 6 Known Issues in FastCGI

Problem ID	Description
6485248	<p>The fastcgi stub does not properly close all the processes when reuse-connection is set to true.</p> <p>Configure Web Server 7.0 to work with PHP as a FastCGI plug-in and set <code>reuse-connection=true</code>. When you shutting down the server or reconfiguring the server, the <code>fastcgi()</code> process and its child processes are left behind and not killed properly.</p>

Installation

The following table lists the known issues in the installation of Web Server.

TABLE 7 Known Issues in Installation

Problem ID	Description
6414539	<p>Uninstalling the administration node does not delete itself from the administration server node.</p> <p>After installing the administration node and registering it with the administration server in the Node tab, the administration node is listed in the Node tab. When the administration node is uninstalled, the administration node entry remains in the Node tab.</p>
6287206	<p>Cannot install if the setup is started from a shared folder on the network.</p> <p>On the Windows platform, unable to install the product when the installer <code>setup.exe</code> is started from a shared network folder on another machine.</p>
6311607	<p>On Windows, installer crashes in CLI mode, if the administration password is \geq 8 characters.</p> <p>If the administration user password is greater than eight characters, then any invalid input to the administration port, web server port, or the administration user ID crashes the installer.</p> <p>Workaround:</p> <p>When installing Web Server 7.0 on the Windows platform using the command-line interface (CLI), the administration password must be set to less than (<) eight characters.</p>
6408072	<p>On Windows, need icons for objects in Programs folder.</p> <p>The objects in the Sun Java System Web Server 7.0 folder on Windows are created with default Windows program icons and do not have specific icons that denote Sun programs.</p>
6492144	<p>The CLI installer does not handle <code>ctrl+c</code> while entering the password.</p> <p>The installer does not accept <code>ctrl+c</code> and hence the terminal becomes unusable.</p>
6710925	<p>setup start with CLI mode, can't start with GUI mode on RH5.1</p> <p>Workaround</p> <p>To overcome this failure:</p> <ol style="list-style-type: none"> 1. Use the CLI based installer. 2. Create a symbolic link to the <code>xdpyinfo</code> command. For example, <pre>[root@server bin]# ln -s /usr/bin/xdpyinfo /usr/X11R6/bin/xdpyinfo</pre>

TABLE 7 Known Issues in Installation (Continued)

Problem ID	Description
6717123	<p>Registration Options panel UI sometimes doesn't show up properly</p> <p>The 'Registration Options' GUI in the installer does not show up properly sometimes.</p> <p>Workaround:</p> <p>Resizing the installer window will fix this issue.</p>

Migration and Upgrade

The following table lists the known issues in the migration and upgrade areas of Web Server.

TABLE 8 Known Issues in Migration and Upgrade

Problem ID	Description
6407877	<p>Incorrect migration occurs while migrating from Web Server 6.0 to 7.0 if the installed.pkg file is not found.</p> <p>In Web Server 6.0 to 7.0 migration, if the installed .pkg file is missing, Web Server incorrectly migrates the NSServlet entries in the magnus.conf file.</p>
6490124	<p>6.x -> 7.0: Migrated scheduled events still points to 6.x paths in the server.xml file.</p>
6502529	<p>6.1->7.0: Migration does not handle relative path set for search-collection-dir correctly.</p> <p>During instance migration, specifying a relative path for the target path into which the search collections should be copied, results in the search collection directory being created with respect to the config-store. When the instance is instantiated, the indexes are created without properly migrating the search collections.</p>
6502769	<p>6.x->7.0: Migration ignores any "document-root" NameTrans specified in the obj.conf file.</p>
6498806	<p>On Windows, Web Server Admin Console does not appropriately warn users during migration.</p> <p>Administration Server does not detect if the selected new configuration or the service name already exists on Windows and hence does not appropriately warn the users to select a different configuration name or suggest a different configuration name as default.</p>
6500509	<p>Web Server 7.0 migration tool is unable to successfully migrate from Web Server 6.1 if it has Root Certs installed in it.</p>

Sample Applications

The following table lists the known issues in Sample Applications of Web Server.

TABLE 9 Known Issues in Sample Applications

Problem ID	Description
6472796	<p>sendmail.jsp shows incorrect file to be edited to specify resource.host for javamail sample application.</p> <p>Workaround</p> <p>To set <code>javamail.resource.host</code>, edit the <code>javamail.build.properties</code> and not the <code>build.xml</code> as specified in <code>install_dir/samples/java/webapps/javamail/src/docroot/sendmail.jsp</code>.</p>

Search

The following table lists the know issues in the search functionality of Web Server.

TABLE 10 Known Issues in Search

Problem ID	Description
6701532	<p>Search engine fails to index password protected PDF document</p> <p>If a PDF document is password protected and encrypted, the search engine fails to index the document's metadata. As a result, the requested search fails.</p>

Security

The following table lists the known issues in the security area of Web Server.

TABLE 11 Known Issues in Security

Problem ID	Description
6376901	<p>Limitation supporting basic and digest-based ACLs for resources in the same directory.</p> <p>If the server uses digest and basic-based ACLs in different parts of their doc tree, attempting to use both simultaneously on different files or resources in the same directory is not possible.</p>
6431287	<p>TLS_ECDH_RSA_* require the server cert signed with RSA keys.</p> <p>Cipher suites of the form <code>TLS_ECDH_RSA_*</code> requires server to have an ECC keypair with a cert signed using RSA keys. Note that this precludes using these cipher suites with self-signed certificates. This requirement is inherent to these cipher suites and is not a bug. The server should detect and warn about wrong configurations related to these cipher suites but currently it does not do so.</p>

Session Replication

The following table lists the known issues in the session replication functionality of Web Server 7.0.

TABLE 12 Known Issues in Session Replication

Problem ID	Description
6324321	<p>Descriptive error message is not displayed when an error occurs remotely.</p> <p>When an exception occurs remotely, error messages are logged in the error log of the remote instance. However, the local instance currently displays a generic remote exception which does not clearly indicate which error log that the user must view.</p>
6396820	<p>Session replication does not failover correctly when cookies are disabled on the client.</p>
6406176	<p>When enabled, session replication should be the default session manager.</p> <p>After enabling session replication by using the Admin Console or the CLI, or by editing the <code>server.xml</code> file, session replication is not really enabled. Instead, <code>sun-web.xml</code> needs to be manually edited.</p>

Web Container

The following table lists the known issues in the web container of Web Server.

TABLE 13 Known Issues in Web Container

Problem ID	Description
4858178	<p>Web container writes to stderr.</p>
6349517	<p>Incorrect web application session statistics for MaxProcs > 1 mode.</p> <p>Web Server runs in multi-process mode. The <code>MaxProcs</code> configuration variable in the <code>magnus.conf</code> is used to set the maximum number of processes. If the value for <code>MaxProcs</code> is set to greater than 1, the Web Server uses <code>mmap</code>-based session manager so that the session could be shared among different JVMs. While collecting statistics from multiple processes, web application MBeans provide session for individual MBeans. There is no way to find the true number of sessions by seeing individual MBean's web application session statistics.</p>
6394715	<p>Web container deletes the disabled web application MBeans object.</p> <p>When the web application is disabled by setting the <code><enabled></code> element to <code>false</code> in the <code>server.xml</code> file, the web container deletes the web application's MBeans and hence treats it as a closed or deleted web application. Since disabled objects are deleted, statistics are also lost.</p>

TABLE 13 Known Issues in Web Container (Continued)

Problem ID	Description
6419070	No information is logged in error logs at the finest log level on successful JNDI resource creation.
6422200	com.sun.org.apache.xerces.internal.jaxp.DocumentBuilderImpl.parse does 1 byte reads. When reading the server.xml file, the first line containing the XML version number and the encoding is read 1 byte at a time.
6440064	Servlet container creates a thread per virtual server.
6501184	REQ_EXIT causes javax.servlet.ServletException.

Localization

The following table lists the known issues in the localized version of Web Server.

TABLE 14 Known Issues in Localization

Problem ID	Description
6543814	Search filter "*" does not work correctly for multi-byte strings.
5046634	There is no functionality equivalent to use-responseCT-for-headers in Web Server 7.0. Response header encoding is enabled at the web-app level by setting the value of the configuration parameter use-responseCT-for-headers to any of the values; yes, true, or on in the web-app/sun-web.xml file. For example, set Response header encoding as follows: <pre><sun-web-app> <parameter-encoding form-hint-field="j_encoding"/> <property name="use-responseCT-for-headers" value="true" /> <session-config> <session-manager/> </session-config> <jsp-config/> </sun-web-app></pre>
6714777	In Japanese locale, Sun Online Account creation error messages have a * star character
6715350	In Japanese locale, the OLH have invalid character

Java Enterprise System

The following table lists the known issues in the Java Enterprise System (Java ES).

TABLE 15 Known Issues in Java ES

Problem ID	Description
6432106	<p>Sun Java System Portal Server search throws exception after Web Server upgrade.</p> <p>Portal Server search functionality throws exception when upgrading Web Server from Java ES 4 to Java ES 5.</p> <p>Workaround</p> <p>Note – Move the existing <code>libdb-3.3.so</code> and <code>libdb_java-3.3.so</code> library files to an appropriate location, somewhere outside the Web Server's private directories. Once the Portal Server libraries are in a suitable location, that path must be specified for the <code><libdb-3.3.so path>:<libdb_java-3.3.so path></code> in the following commands.</p> <p>On Solaris platform, perform the following steps:</p> <ol style="list-style-type: none"> Copy the <code>libdb-3.3.so</code> and <code>libdb_java-3.3.so</code> files from Web Server 6.1 <code>lib</code> directory to an appropriate location. <p>Note – For HP-UX, the files are <code>libdb-3.3.sl</code> and <code>libdb_java-3.3.sl</code>. For windows, the files are <code>libdb-3.3.dll</code> and <code>libdb_java-3.3.dll</code>.</p> <p>Caution – Do not copy the library files to Web Server 7.0 private directories (For example, <code>lib</code> directory).</p> Create a directory (<code>mkdir</code>) by name <code>/portal_libraries</code>. Copy the library files <code>libdb-3.3.so</code> and <code>libdb_java-3.3.so</code> to <code>/portal_libraries</code>. Use the <code>wadm</code> command to inform the Web Server about the location of the library files. Get the current native library path setting by typing the following administration CLI command: <pre>get-jvm-prop -user=admin --config=hostname native-library-path-prefix</pre> Save the output. Append the copied <code>libdb-3.3.so</code> and <code>libdb_java-3.3.so</code> path to the existing native library path by typing the following administration CLI command. <pre>set-jvm-prop --config=hostname native-library-path-prefix=<existing native library-path>:</portal-libraries-path></pre> where, <code>portal-libraries-path</code> is the location of where you copied the <code>libdb-3.3.so</code> and <code>libdb_java-3.3.so</code> files in Step 1. If you do not get any results or output for the <code>get-jvm-prop</code> command, at the command prompt, set the <code>native-library-path-prefix</code>: <pre>native-library-path-prefix=</portal-libraries-path></pre> Note – For Windows platform, use <code>'</code> as the separator for <code>native-library-path-prefix</code> parameter as follows: <pre>native-library-path-prefix=<existing native library path>;<portal-libraries-path></pre> For non-Windows platform, use the <code>'</code> as the separator for <code>native-library-path-prefix</code> parameter as follows: <pre>native-library-path-prefix=<existing native library path>:<portal-libraries-path></pre> Deploy the modified configuration by typing the following command: <pre>deploy-config [-user=admin-user] config-name</pre>

TABLE 15 Known Issues in Java ES (Continued)

Problem ID	Description
6504178	<p>Migration logs reports a bogus "root is not a valid user" message on Java ES 5.</p> <p>While migrating from Java ES 4 to Java ES 5 on UNIX platforms, the migration log file reports WARNING: "root is not a valid user". This is incorrect as the "root" user is valid on that host.</p>
6453037	<p>A lot of warnings/info messages displayed at Web Server startup on the standard output instead of routing these messages to the log file.</p>

How to Report Problems and Provide Feedback

If you have problems with Sun Java System Web Server, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at:
<http://www.sun.com/service/serviceplans/software/>
- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. Send your comments to Sun using the "Send comments" link at:
<http://docs.sun.com/>

Please include identifying information with your comments, such as the part number and the title of the book.

To provide feedback on Sun Java System Web Server product, send email to webservers@sun.com.

Additional Sun Resources

Useful Sun Java Systems information can be found at the following locations:

- Documentation for Sun Java System Web Server
<http://docs.sun.com/coll/1308.3>
- Sun Software Products and Service
<http://www.sun.com/software>
- Sun Developer Information
<http://developers.sun.com/>
- Sun Developer Support Services
<http://developers.sun.com/prodtech/support/>
- Software Support Services
<http://www.sun.com/service/support/software/>
- Sun Support and Training Services
Support: <http://www.sun.com/support>
Training: <http://www.sun.com/training/>
- Sun Consulting and Professional Services
<http://www.sun.com/service/sunjavasystem/sjsservicessuite.html>
- Sun Gathering Debug Data
<http://www.sun.com/service/gdd/index.xml>

Searching Sun Product Documentation

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

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

For example, to search for "Web Server", type the following:

```
Web Server site:docs.sun.com
```

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

