

Sun Java™ System Web Server Release Notes for HP-UX

Version 6.1 SP4 2005Q1

Part Number 819-1572-10

Sun Java™ System Web Server 6.1 2005Q1 SP4 for HP-UX (hereafter referred to as Sun Java System Web Server 6.1 SP4) contains important security vulnerability fixes. All users of Sun Java System Web Server, especially those with web sites that utilize Secure Sockets Layer (SSL) version 3 or Transport Security Layer (TLS), are encouraged to install this service pack. This release provides support for the HP-UX 11i (11.11) v1 platform and Web Server as web container.

These release notes contain important information available at the time of release of Sun Java System Web Server 6.1 SP4, including information about features, known limitations and problems, technical notes, and pointers to additional resources. Review the release notes prior to installing and configuring your software, and then periodically thereafter for the most up-to-date information.

The up-to-date version of these release notes can be found at the Sun Java System Web Server 6.1 documentation web site found at the following location:

<http://docs.sun.com/db/prod/slwebsrv#hic>

Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and product documentation.

These release notes contain the following sections:

- [Release Notes Revision History](#)
- [About Web Server SP4 2005Q1](#)
- [Bugs Fixed in This Release](#)
- [Important Information](#)
- [Known Issues and Limitations](#)
- [How to Report Problems and Provide Feedback](#)
- [Additional Sun Resources](#)

Release Notes Revision History

Table 1 Revision History

Date	Description
February, 2005	Initial release of Sun Java System Web Server 6.1 SP4 2005Q1Release Notes for HP-UX.
July, 2005	Release of RR version of Sun Java System Web Server 6.1 SP4 2005Q1Release Notes for HP-UX.

About Web Server SP4 2005Q1

This section includes:

- [What's New in This Release](#)
- [Hardware and Software Requirements](#)
- [Supported Platforms](#)

What's New in This Release

Sun Java System Web Server 6.1 SP4 provides the following features and enhancements:

- [Java Servlet 2.3 and JavaServer Pages \(JSP\) 1.2 Support](#)
- [J2SE Platform 1.5.0 JDK/JRE Support](#)
- [WebDAV Support](#)
- [NSAPI Filters Support](#)
- [HTTP Compression Support](#)
- [Search Engine Support](#)
- [Security](#)
- [JNDI Support](#)
- [JDBC Support](#)

- [Sun ONE™ Studio 5 Support](#)
- [Active Server Pages Support](#)
- [PHP Compatibility](#)
- [NSS 3.9.5 and NSPR 4.5.1 Support](#)

Java Servlet 2.3 and JavaServer Pages (JSP) 1.2 Support

Sun Java System Web Server includes a Java™ 2 Platform, Enterprise Edition (J2EE™)-compliant implementation of the Java™ Servlet 2.3 and JavaServer Pages™ (JSP™) 1.2 specifications. A J2EE-compliant web container provides the flexibility and reliability needed to design and deploy web applications that comply with Java™ technology standards. You can deploy web applications on a per virtual server basis.

For information about these technologies, see the following resources:

- [Java Servlets](#)
<http://java.sun.com/products/servlet/index.html>
- [JavaServer Pages](#)
<http://java.sun.com/products/jsp/index.html>

For information about developing servlets and JSPs in Sun Java System Web Server, see the Sun Java System Web Server 6.1 *Programmer's Guide to Web Applications*.

J2SE Platform 1.5.0 JDK/JRE Support

Sun Java System Web Server supports Java™ 2 Platform, Standard Edition (J2SE™) 1.5.0 on HP-UX platform.

WebDAV Support

Sun Java System Web Server supports the Web-based Distributed Authoring and Versioning (WebDAV) protocol, which enables collaborative web publishing with the following features:

- Compliance with RFC 2518 and interoperability with RFC 2518 clients
- Security and access control for web publishing
- Basic publishing operations on file-system-based WebDAV collections and resources

WebDAV provides integrated support for content metadata, name space management, and overwrite protection. These technologies combined with the many authoring tools that support WebDAV, provide an ideal development platform for collaborative environments.

NSAPI Filters Support

Sun Java System Web Server 6.1 release extends the Netscape Server Application Programmer's Interface (NSAPI) to support NSAPI filters.

Filters enable the custom processing of HTTP request and response streams, allowing a function to intercept and potentially modify the content presented to or generated by another function. For example, a plugin could install an NSAPI filter to intercept an XML page generated by another plugin's Server Application Function (SAF), and then transform that XML page into an HTML, XHTML, or WAP page appropriate for the client. Alternatively, an NSAPI filter can decompress data received from a client before presenting it to another plugin.

For more information, see the Sun Java System Web Server 6.1 *NSAPI Programmer's Guide*.

HTTP Compression Support

Sun Java System Web Server supports content compression, which allows you to increase delivery speed to clients and serve higher content volumes without incurring a corresponding increase in hardware expenses. Content compression reduces content download time, that benefit the users of dial-up and high-traffic connections.

For more information, see the Sun Java System Web Server 6.1 *Administrator's Guide*.

Search Engine Support

Sun Java System Web Server supports a Java-based search engine that provides full-text search indexing and retrieval. The search feature allows users to search documents on the server and display results on a web page. Server administrators create the indexes of documents against which users will search, and can customize the search interface to meet specific needs.

The default URL that the end-users can use to access search functionality is:

```
http://<server-instance>:port number/search
```

Example:

```
http://plaza:8080/search
```

When the end-user invokes this URL, the Search page, which is a Java web application, is launched.

For detailed information about conducting basic and advanced searches, including information about keywords and optional query operators, see the online Help provided with the search engine. To access this information, click the Help link on the Search page.

For more information, see the Sun Java System Web Server 6.1 *Administrator's Guide*.

Security

Sun Java System Web Server allows you to restrict access using flat file authentication. As of the 6.1 release, Sun Java System Web Server now supports the Java Security Manager. The Security Manager is disabled by default when you install the product, which may improve performance significantly for some types of applications. Enabling the Security Manager can improve security by restricting the rights granted to your J2EE web applications. To enable the Security Manager, "uncomment" entries in the `server.xml` file:

```
<JVMOPTIONS>-Djava.security.manager</JVMOPTIONS>
```

```
<JVMOPTIONS>-Djava.security.policy=instance_dir/config/server.policy</JVMOPTIONS>
```

where `instance_dir` is the path to the installation directory of this server instance.

For more information about `server.xml`, see the Sun Java System Web Server 6.1 *Administrator's Configuration File Reference*.

JNDI Support

Sun Java System Web Server supports the Java Naming and Directory Interface™ (JNDI), which provides seamless connectivity to heterogeneous enterprise naming and directory services.

JDBC Support

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

Sun ONE™ Studio 5 Support

Sun Java System Web Server supports Sun™ ONE Studio 5, Standard Edition. Sun ONE Studio technology is Sun's powerful, extensible, integrated development environment (IDE) for Java technology developers. Sun ONE Studio 5 is based on NetBeans™ software, and integrated with the Sun ONE platform. (Sun Java System Web Server 6.1 and greater version also supports NetBeans 3.5 and 3.5.1.)

Sun ONE Studio support is available on all platforms supported by the Sun Java System Web Server 6.1 SP4. The plugin 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 AutoUpdate feature of Sun ONE Studio
- From the download center for Sun Java System Web Server at <http://www.sun.com/software/download/products/3f567f91.html>

Please note that the Sun ONE Studio 5 plugin for Sun Java System Web Server 6.1 SP4 works only with a local Web Server (that is, with the IDE and the Web Server on the same machine).

The behavior of the Sun ONE Studio 5 plugin for Sun Java System Web Server is the same as that for Sun ONE™ Application Server 7.

For information about using the web application features in Sun ONE Studio 5, see the tutorial <http://developers.sun.com/prodtech/javatools/jsenterprise/learning/tutorials/cdshop.pdf>

Set the Sun Java System Web Server 6.1 SP4 instance as the default, and then take the tutorial.

Also see the NetBeans tutorial

<http://usersguide.netbeans.org/tutorials/webapps/index.html>

For more information about Sun ONE Studio 5, visit

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

For additional developer resources, see Additional Sun Resources in these release notes.

Using Sun ONE Studio 5 for Debugging

Sun ONE Studio 5 can be used for "remote debugging" if you want to manually attach the IDE to a remote Web Server started in debug mode. The steps are as follows:

1. Using the Sun Java System Web Server Administration interface, restart the server instance in debug mode (Server Manager > JVM General > Debug Enabled).
2. Note the JPDA port number.
3. Start the IDE.
4. Choose Debug > Start.
5. Select the dt_socket method, and then enter the remote machine name and the JPDA port number.
6. At that moment, any breakpoint created in the IDE on servlet source code of a deployed application will be active.

Active Server Pages Support

Sun Java System Web Server 6.1 SP4 supports the Active Server Pages 3.0 specification through Sun ONE™ Active Server Pages (formerly Sun ChiliSoft ASP). Sun ONE Active Server Pages adds a secure, enterprise-grade Active Server Pages engine to the Sun Java System Web Server.

Sun Java System Web Server 6.1 SP4 provides support for Sun ONE Active Server Pages 4.0.1 on the following platforms:

- Solaris™ (SPARC®) 8 and 9
- Windows 2000 and XP

- Red Hat Advanced Server 2.1

and support for Sun ONE Active Server Pages 4.0.2 on the platform below is yet to be tested,

- HP-UX 11i (11.11) V1

A license is not required for Sun ONE Active Server Pages if you are installing to the Sun Java System Web Server. The Sun ONE Active Server Pages installer is available on the companion CD if you purchase the Sun Java System Web Server Media Kit, or download from the following location:

<http://www.sun.com/software/chilisoft/index.html>

Please note the following:

- The Sun ONE Active Server Pages plugin requires an additional 50 Mbytes (approximately) of disk space after Sun Java System Web Server 6.1 SP4 is installed.
- Before you begin installation, make sure you are logged in as administrator.

For more information about Sun ONE Active Server Pages, visit the URL listed above.

PHP Compatibility

Sun Java System Web Server 6.1 SP4 is compatible with PHP, the versatile and widely-used Open Source web scripting language. PHP runs on all major operating systems.

PHP version 4.3.2 is recommended for use with Sun Java System Web Server 6.1 SP4. For PHP-related installation and configuration information specific to Sun Java System Web Server, see <http://www.php.net/manual/en/install.netscape-enterprise.php>

NSS 3.9.5 and NSPR 4.5.1 Support

Sun Java System Web Server 6.1 SP4 supports NSS 3.9.5. NSS is a set of libraries designed to support cross-platform development of security-enabled server applications. Sun Java System Web Server 6.1 SP4 also supports NSPR 4.5.1.

Hardware and Software Requirements

The following software is required for Web Server SP4 2005Q1.

Table 2 HP-UX Hardware and Software Requirements

Component	Platform Requirement
Supported Platforms	Solaris 8 (SPARC) Solaris 9 (SPARC, x86) Solaris 10 (SPARC, x86) RH AS 3.0 RH AS 2.1 HPUX 11i (PA-RISC) Windows 2000
Operating System	HP-UX 11i v1
RAM	512 Mbytes
Disk Space	300 Mbytes

Supported Platforms

Sun Java System Web Server 6.1 SP4 can be installed on the HP-UX platform. The following table summarizes platform support. For more information about installation requirements, see Required Patches in these release notes, and Chapter 2 in the *Sun Java System Web Server 6.1 Installation and Migration Guide*.

NOTE HP-UX 11i (11.11) is supported only on PA-RISC platforms.

Table 3 Sun Java System Web Server 6.1 SP4 Supported Platforms

Vendor	Architecture	Operating System	Minimum Required Memory	Recommended Memory	Recommended Disk Space
Hewlett-Packard	PA-RISC 2.0	HP-UX 11i (11.11) v1	256 Mbytes	512 Mbytes	300 Mbytes

Bugs Fixed in This Release

The table below describes the bugs fixed in Web Server SP4 2005Q1 (3.6):

Table 4 Fixed Bugs in Web Server SP4 2005Q1

Bug Number	Description
6233669	During Configure Later the system user name is displayed as nobody instead of www.
6256580	Web Server start fails due to permission error in lbplugin.
6218946	Using Search Engine of the Web Server.

Important Information

This section covers the following topics:

- [Installation Notes](#)
- [Required HP-UX Patches](#)
- [Product Documentation](#)

Installation Notes

This section includes notes about installing your Sun Java System Web Server. For detailed information about these topics, review the information in the Sun Java System Web Server 6.1 *Installation and Migration Guide*. References to Sun Java System Web Server 6.1 in the guide also apply to Sun Java System Web Server 6.1 SP4. For known issues in this release of Sun Java System Web Server, see [Known Issues and Limitations](#) in these release notes.

Do not install Web Server into a directory with spaces in the name.

The Web Server will not start if it is installed into a directory with spaces in the name, for instance, Program Files. You will not receive an error message about this during installation, but following installation the server will not start.

Required HP-UX Patches

You should update your operating system with the latest applicable patches. The following patches are required to use Sun Java System Web Server 6.1 SP4.

- HP-UX 11i Operating Environment Control script Product-OE (B.11.11.0312)
- libc manpage cumulative patch — PHCO_29328
- ld(1) and linker tools cumulative patch — PHSS_30966
- Gold Applications Patches for HP-UX 11iV1, June 04 — GOLDAPPS11i (B.11.11.0406.5)
- Gold Base Patches for HP-UX 11i v1, June 04-GOLDBASE11i (B.11.11.0406.5)
- Transport Optional Upgrade Release for B.11.11 - TOUR (A.02.00)
- Java2 Out-of-box for HP-UX - JAVA00B(2.03.01)
- Required Patch Bundle for HP-UX 11i, June 2003 - BUNDLE 11i (B.11.11.0306.1)

The Java Out-of-Box tool is used to configure the necessary kernel tunable parameters. This tool should be used for modifying kernel values. If necessary, modify the following tunable parameters to reflect a value equal to or greater than the following:

- nkthreads — 3635
- maxfiles — 60
- maxfiles_lim — 1024
- max_thread_proc — 512
- maxswapchunks — 2048
- nfile — 4136
- ncallout — 3651
- nproc — 2068

CAUTION Modifying the kernel tunable parameters can have adverse impacts on your system. Do not modify the parameters unless you fully understand what you are doing.

Product Documentation

Sun Java System Web Server includes a complete set of product documentation, which can be found at the following location:

<http://docs.sun.com/db/prod/slwebsrv#hic>

Sun Java System Web Server manuals are available as online files in PDF and HTML formats. References to Sun Java System Web Server 6.1 in the documentation also apply to Sun Java System Web Server 6.1 SP4. The following table lists the tasks and concepts described in each manual.

Table 5 Sun Java System Web Server Documentation Roadmap

For Information About	See the Following
Late-breaking information about the software and documentation	<i>Release Notes</i>
Getting started with Sun Java System Web Server, including hands-on exercises that introduce server basics and features (recommended for first-time users)	<i>Getting Started Guide</i>
Performing installation tasks: Installing Sun Java System Web Server and its various components, supported platforms, and environments	<i>Installation Guide</i>
Performing the following administration tasks: <ul style="list-style-type: none"> • Using the Administration and command-line interfaces • Configuring server preferences • Using server instances • Monitoring and logging server activity • Using certificates and public key cryptography to secure the server • Configuring access control to secure the server • Using Java™ 2 Platform, Enterprise Edition (J2EE™ platform) security features • Deploying applications • Managing virtual servers • Defining server workload and sizing the system to meet performance needs • Searching the contents and attributes of server documents, and creating a text search interface • Configuring the server for content compression • Configuring the server for web publishing and content authoring using WebDAV 	<i>Administrator's Guide</i> The guide can also be accessed from your Web Server installation: <code>server_root/manual/https/ag/</code>

Table 5 Sun Java System Web Server Documentation Roadmap

For Information About	See the Following
Using programming technologies and APIs to do the following: <ul style="list-style-type: none"> Extend and modify Sun Java System Web Server Dynamically generate content in response to client requests Modify the content of the server 	<i>Programmer's Guide</i>
Creating custom Netscape Server Application Programmer's Interface (NSAPI) plugins	<i>NSAPI Programmer's Guide</i>
Implementing servlets and JavaServer Pages™ (JSP™) technology in Sun Java System Web Server	<i>Programmer's Guide to Web Applications</i>
Editing configuration files	<i>Administrator's Configuration File Reference</i>
Tuning Sun Java System Web Server to optimize performance	<i>Performance Tuning, Sizing, and Scaling Guide</i>

Known Issues and Limitations

This section describes the known issues and limitations of Sun Java System Web Server 6.1 SP4 release for HP-UX. For a list of the known issues and limitations in the product, refer to the following Release Notes:

<http://docs.sun.com/app/docs/doc/819-0290>

The following topics are the known issues:

Installation

server.xml needs updation in few cases (6298134).

When webserver is installed on a system having KRNG11i package, there are some java exceptions related to random seed during start-up process.

Workaround

Add the following line to `server.xml` file after `<JVMOPTIONS>`,

```
<JVMOPTIONS>-Djava.security.egd=/dev/random</JVMOPTIONS>
```

JRE1.5 path needs to be updated if not installed in the default path location (6298134).

The system may face problems if JRE 1.5 is not installed in its default location.

Workaround

Provide the new JRE path if it is not installed in the default location, for example, if JRE1.5 is installed in `/var/opt/java1.5` then create a link like,

```
ln -s /var/opt/java1.5/jre/lib/PA_RISC2.0/server /opt/java1.5/jre/lib/PA_RISC2.0
```

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/supporttraining>

This site has links to the Knowledge Base, Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.

- The telephone dispatch number associated with your maintenance contract

To assist you best 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

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Additional Sun Resources

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

- Documentation for Sun Java System Web Server 6.1 and Service Packs
http://docs.sun.com/db/coll/S1_websvr61_en

- 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 Java System Software Support Services
<http://www.sun.com/support/>
- Sun Consulting and Professional Services
<http://www.sun.com/service/sunjavasystem/sjsservicessuite.html>

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