Sun™ Java System Application Server 7 Release Notes

(Formerly Sun ONE Application Server)

Version 7, Update 4

Part Number 817-7241

May 2004

These release notes contain important information available at the time of the Update 4 release of the Sun Java System Application Server, Version 7 product (formerly known as Sun™ Open Net Environment (ONE) Application Server).

NOTE Throughout this document and other documents in the documentation set, the product is still referred to as Sun ONE Application Server.

Enhancements, installation notes, known problems, and other late-breaking issues are addressed here. Read this document and associated documents before you begin using the Sun ONE Application Server 7, Update 4 product.

This document contains the following sections:

- Release Notes Revision History
- About Sun ONE Application Server, Version 7, Update 4
- Bugs Fixed in This Release
- Important Information
- Known Issues and Limitations
- Redistributable Files
- How to Report Problems and Provide Feedback
- Additional Sun Resources

Release Notes Revision History

This section lists the changes that have been made in these release notes after the initial release of the Sun ONE Application Server 7, product.

Table 1 Revision History

Date	Description of Changes
May 2004	Initial release of Sun ONE Application Server 7, Update 4.

About Sun ONE Application Server, Version 7, Update 4

The Sun™ ONE Application Server 7 provides a high-performance J2EE platform suitable for broad deployment of application services and web services.

This section includes:

- What's New in the Sun ONE Application Server 7 Product
- Requirements and Limitations

What's New in the Sun ONE Application Server 7 Product

Information on what's new in the Sun ONE Application Server 7 product can be found in the *Sun ONE Application Server What's New* document at this location:

`http://docs.sun.com/db/prod/s1.asse`

Requirements and Limitations

Information on the platform requirements for the Sun ONE Application Server 7 Update 4 product can be found in the *Sun ONE Application Server Platform Summary* document at this location:

`http://docs.sun.com/db/prod/s1.asse`

The following topics are addressed in this section:

- Platform Requirements
- Solaris Patches
- Solaris x86 Limitations

Platform Requirements

The following table summarizes the Sun ONE Application Server 7, Update 4 requirements. For complete platform information, see the *Sun ONE Application Server Platform Summary* document at this location:

`http://docs.sun.com/db/prod/s1.asse`

Table 2 Platform Requirements for Sun ONE Application Server

Operating System	Architecture	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space
UNIX					
Sun Solaris 8 or 9 for SPARC	32 and 64 bit	256 MB without Sun Java Studio 512 MB with Sun Java Studio	512 MB	250 MB free	500 MB free
Solaris x86, Version 9	32 bit				
Red Hat Linux 7.2, 7.3 Red Hat Enterprise Linux 2.1, 3.0					
Microsoft Windows					
Windows 2000 Advanced Server, SP2 Windows 2000 Server, SP2 Windows 2000 Professional, SP2 Windows XP Professional	Intel 32 bit	256 MB without Sun Java Studio 256 MB with Sun Java Studio	256 MB without Sun Java Studio 512 MB with Sun Java Studio	250 MB free	500 MB free

Solaris Patches

Solaris 8 users must have the Sun recommended patch cluster installed, available under "Recommended and Security Patches" at this location:

`http://sunsolve.sun.com/`

Patches that are absolutely required for Solaris 8 are 109326-06, 108993-23, and 110934 (any revision, for package based installation only). Without these patches, which the installer checks for, you won't be able to install or run the Sun ONE Application Server software. These patches are already contained in the latest recommended patch cluster.

Solaris x86 Limitations

- Sun ONE Studio plug-in—The Sun Java Studio Plug-in is not part of this release because Sun Java Studio is not available on the Solaris x86 platform.
- Solaris support—The Solaris x86 release is only supported on Solaris 9, Update 2 onward, not on any earlier version of Solaris.
- The Java™ Smart Ticket Sample Application does not work on the Solaris x86 platform. The sample requires the Java 2 Platform, Micro Edition Wireless Toolkit (v1.0.4), which is not available for Solaris 9, x86.

Bugs Fixed in This Release

This section lists the customer-escalated issues resolved for the Sun ONE Application Server 7, Update 4 product.

Table 3 Fixed Bugs in Application Server 7, Update 4

Bug Number	Description
4744128	EJB compiler failed to generate valid java code for inner classes
4872948	Circular path in jar manifest causes 'error received from mbean null' error
4876672	When you make a map between non-j2ee URLs and URLs that really exist, the `errorhandlerrequest.getAttribute("javax.servlet.error.request_uri")` returns null.
4930027	Whenever `jsp:useBean` is used in a JSP code, if an object with specified ID is not found in the specified scope, it is created using `Beans.instantiate()` irrespective of what attributes are used.
4949245	The Application Server crashes occasionally during the deployment of WAR files.
4955404	`appclient` does not honor `-mainclass` option.
4957162	Verify tool not compatible with the EJB 2.0 & EJB 2.1 Spec rules for `ejb-name` naming convention
4969425	SNMP doesn't work when the instance is stopped and started (restart).
4972432	Not able to create a new domain using asant
4976401	Values for the SNMP MIB variables are always zero, even after server restarts. An example of an SNMP MIB variable is `iwsInstanceDeathCount`.

Table 3 Fixed Bugs in Application Server 7, Update 4 *(Continued)*

Bug Number	Description
4976502	Documentation error in Performance Tuning Guide enabling stats-xml instructions.
4982525	Administration Interface works improperly in Japanese version
4987274	Deployment fails if remote interface for the bean is named `Util`
4991198	Application server log encryption issue.
4997113	Application Server is unstable when application is accessed using passthrough plug-in with SSL enabled.
5004406	`asadmin --passwordfile` option does not work with mix of upper/lowercase characters
5005653	Warning message when deploying jdbc/simple sample.
5013767	Proxy Plug-in is truncating XML return data.
5022904	DB2 Server has connection growing after idle time out with DB2 Type II Drivers. See "Database Driver" on page 28.

Important Information

This section covers the following topics:

- Documentation
- Accessibility
- Upgrade Notes

Documentation

All Sun Microsystems product documentation can be found at this location:

`http://docs.sun.com/`

This section addresses the following topics:

- Sun ONE Application Server 7 Documentation
- Referenced Documentation

Sun ONE Application Server 7 Documentation

In addition to these release notes, the Sun ONE Application Server 7, Update 4 product includes an entire set of documentation. The Sun ONE Application Server 7 documents that were updated in Update 4 have new part numbers and are indicated in the following list as **REVISED**. Documents that were not changed from previous update releases have the same part numbers.

NOTE	For significant issues, a document might be revised. In this case, the revised version will be posted to this site. The date last updated is displayed with the copyright information in the HTML version of the document.

The Sun ONE Application Server 7, Update 4 documents can be found at this location:

`http://docs.sun.com/db/prod/s1.asse`

The following list provides the part number and a brief description for each of the documents in the Sun ONE Application Server collection:

- *Product Overview*—(PN 817-2166-10) Describes Sun ONE Application Server 7, including the features available with each edition of the product.
- *Server Architecture*—(PN 817-2167-10) Presents diagrams and descriptions of server architecture; discusses benefits of the Sun ONE Application Server architectural approach.
- *What's New*—(PN 817-2165-10) Lists the new enterprise, developer, and operational features of Sun ONE Application Server 7.
- *Platform Summary* **REVISED**—(PN 817-7240) Provides a comprehensive, table-based summary of supported operating systems, JDBC drivers and databases, web servers, directory servers, browsers, and associated software packages.
- *Getting Started Guide*—(PN 817-2170-10) Describes how to get started with the Sun ONE Application Server 7 product. Focuses on initial developer exposure; is also suited for users evaluating the product.
- *Installation Guide*—(PN 817-5601-10) Provides instructions for installing or upgrading the Sun ONE Application Server software and its components, such as sample applications, the Administration interface, and the Sun™ Open Net Environment (ONE) Message Queue.
- *Migrating and Redeploying Server Applications*—(PN 817-2181-10) Provides instructions for migrating your applications to the new Sun ONE Application Server 7 programming model, specifically from iPlanet™ Application Server 6.x and from Netscape Application Server 4.0. Includes a sample migration.

- *Developer's Guide*—(PN 817-2171-10) The centerpiece of the developer's collection, this document provides general information about how to create J2EE applications intended to run on the Sun ONE Application Server that follow the open Java standards model for servlets, Enterprise JavaBeans™ (EJBs™), JavaServer Pages (JSPs), and other J2EE components. Topics include: J2EE application design, security, deployment, debugging, and creating lifecycle modules. A comprehensive Sun ONE Application Server glossary is included.
- *Developer's Guide to Web Applications*—(PN 817-2172-10) Describes how to use servlets and JavaServer Pages (JSPs) within J2EE applications, and how to use SHTML and CGI. Topics include results caching, JSP precompilation, session management, security, and deployment.
- *Developer's Guide to Enterprise Java Beans Technology*—(PN 817-2175-10) Describes how to develop and deploy various types of enterprise beans in the Sun ONE Application Server environment. Topics include container-managed persistence, read-only beans, and the XML and DTD files associated with enterprise beans.
- *Developer's Guide to J2EE Features and Services*—(PN 817-2177-10) Describes J2EE features such as Java Database Connectivity (JDBC), Java Naming and Directory Interface (JNDI), Java Transaction Service (JTS), Java Message Service (JMS), and JavaMail.
- *Developer's Guide to NSAPI*—(PN 817-2177-10) Describes how to create NSAPI plug-ins.
- *Developer's Guide to Web Services*—(PN 817-2174-10) Describes how to develop and deploy web services in the Sun ONE Application Server environment.
- *Developer's Guide to Clients*—(PN 817-2173-10) Describes how to develop and deploy Application Client Container (ACC) clients that access J2EE applications on Sun ONE Application Server 7.
- *Administrator's Guide*—(PN 817-3652-10) The centerpiece of the administrator's collection, this document provides information and instructions on the configuration, management, and deployment of the Sun ONE Application Server subsystems and components, from both the Administration interface and the command-line interface. A comprehensive Sun ONE Application Server glossary is included.
- *Administrator's Configuration File Reference*—(PN 817-2178-10) Describes the contents of the Sun ONE Application Server configuration files, such as the `server.xml` file.
- *Administrator's Guide to Security*—(PN 817-2179-10) Describes how to configure and administer security for the Sun ONE Application Server operational environment. Includes information on general security, certificates, and SSL/TLS encryption. HTTP server-based security is also addressed.

- *J2EE CA SPI Administrator's Guide*—(PN 817-2254-10) Describes how to configure and administer JCA SPI Implementation features for the Sun ONE Application Server environment. Topics include the Administration Tool, Pooling Monitor, deploying a JCA connector, and sample connectors and sample applications.
- *Performance Tuning Guide*—(PN 817-2180-10) Describes how and why to tune your Sun ONE Application Server to improve performance.
- *Error Messages Reference*—(PN 817-2182-10) Describes all Sun ONE Application Server error messages.
- Manpages for Command-line Interface—Provides XML pages written in manpage style for all command-line interface commands.
- Manpages for Utilities—Provides XML pages written in manpage style for all Sun ONE Application Server utility commands.
- Admin interface online help—Provides content-specific online help for the Sun ONE Application Server graphical Administration interface.

Referenced Documentation

Documentation for other Sun ONE products is often referenced in the Sun ONE Application Server documentation.

Sun ONE Message Queue Documentation

The Sun ONE Message Queue (also known as iPlanet Message Queue) subsystem that is integrated with the Sun ONE Application Server has its own documentation that can be found at the following location:

`http://docs.sun.com/db?p=prod/s1.s1msgqu`

Sun Java Studio 5, Standard Edition Documentation

The Sun Java Studio 5, Standard Edition product that you can use with the Sun ONE Application Server has its own documentation that can be found at the following location:

- For Sun Java Studio 5, Standard Edition, Update 1 documentation:

  `http://docs.sun.com/db/prod/java.studio`

Accessibility

Sun ONE Application Server product documentation is provided in accessible formats that are readable by assistive technologies.

The product provides many accessibility features that enable you to read about and use the product in the manner that is most comfortable and convenient to you. These features include:

- Mnemonics and keyboard shortcuts
- Customizable fonts
- Customizable colors
- Customizable toolbars
- Customizable style sheets

NOTE The Solaris™ Operating System allows you to set window behavior using the Window Style Manager. When using mnemonics, the window behavior should be set to Click In Window To Make Active. If this option is not set, in some cases, a mnemonic can appear to fail.

If you want to modify the Sun ONE Application Server HTML online help, you can go to the help directory and edit the style sheet which is located here:

server_root`/lib/install/applications/admingui/adminGUI_war/help`

Restart the Admin Server for changes to take effect.

Upgrade Notes

Full instructions for upgrading to Sun ONE Application Server, Update 4 product are contained in the *Sun ONE Application Server Installation Guide* at this location:

`http://docs.sun.com/db/prod/s1.asse`

Known Issues and Limitations

This section describes known problems and associated workarounds for the Sun ONE Application Server 7, Update 4 product.

NOTE If a problem statement does not specify a particular platform, the problem applies to all platforms.

This information is organized into the following sections:

- Installation and Uninstallation
- Server Startup and Shutdown
- Database Driver
- Web Container
- EJB Container
- Container-Managed Persistence
- Message Service and Message-Driven Beans
- Java Transaction Service (JTS)
- Application Deployment
- Verifier
- Configuration
- Deployment Descriptors
- Monitoring
- Server Administration
- Sun ONE Studio 4 Plug-in
- Sample Applications
- ORB/IIOP Listener
- Internationalization (i18n)
- Documentation

Installation and Uninstallation

This section describes known installation and uninstallation issues and the associated solutions.

ID	Summary
4403166	**On Microsoft Windows, package/path/application names longer than 255 characters will fail to deploy applications.** On Microsoft Windows only, long package/path names are not supported because of the JDK™ limitation. During deployment, the deployment tool will try to extract class file from the archive. If the expanded name is more than 255 characters, the extraction will fail. • Example of a long application name: J2EE application name as `servlet_jsh_HttpServletRequestWrapper.ear` • Example of a long package name: The servlet is located in the following package: `servlet_jsh_HttpServletRequestWrapper_1\ servlet_jsh_HttpServletRequestWrapper_servlet_war\WEB-INF\classes\tests\ javax_servlet_http\HttpServletRequestWrapperHttpServletRequestWrapperCon structorTestServlet.class` • Example of a long path name: Sun ONE Application Server is installed as `drive \:> Sun \ApplicationServer` **Solution** Consider the following solutions: 1. Make a shorter directory structure during installation. For example, `drive:>App\` instead of the default `drive:\>Sun\Apsserver7.` 2. Use the `create_instance` command to rename the instance to something shorter. For example, `/instance1/domain1/` could be changed to `/i/d`. 3. Have shorter package names, path names, and application names.
4687768	**On Solaris setup-SDK/JDK, an error occurs when installing in command-line mode on a machine without Xwindows.** It is not possible to run the Sun ONE Application Server installer, even in command-line mode, on a hardened Solaris system which does not contain X Windows libraries. The installer will throw `java.lang.UnsatisfiedLinkError` while instantiating AWT objects used by SetupSDK/Webstart Wizard's installer framework. **Solution** 1. Install X Windows support packages temporarily, removing them after installing the Sun ONE Application Server product. 2. Install the Sun ONE Application Server packages using the `pkgadd` command and create the initial domain using `asadmin` commands.

ID	Summary

4719600	**Warning messages occur during installation.**
	During installation, some invalid error messages might occur. For example:
	`WARNING: Couldn't flush system prefs:`
	`java.util.prefs.BackingStoreException: Couldn't get file lock.`
	`WARNING: Could not lock System prefs.Unix error code -223460600.`
	Solution
	Ignore these warnings or, alternatively, you can create a system preferences directory (typically `/etc/.java/.systemPrefs`). This is normally done by the JDK install script.

4737663	**On Solaris, if you install both the package-based install and regular install, there is conflict.**
	If you install both the package-based install (Solaris 9 bundled) and the mainstream installer version of the product, there are potential conflicts. The Sun ONE Message Queue broker for both of these installations will be shared, so if you don't uniquely name the domains and instances, you might see the following message when starting the second instance with the same domain/instance name:
	`SEVERE: JMS5024: JMS service startup failed.`
	`SEVERE: CORE5071: An error occured during initialization`
	In particular, the default domain and instance names are the same for both of these installations.
	Solution
	Follow the instructions in the “JMS Administration” chapter of the *Sun ONE Application Server Administrator’s Guide*.

4742038	**Sun ONE Application Server does not start if the install directory contains non alpha-numeric characters.** Sun ONE Application Server startup fails if the install directory contains characters such as #, spaces, or any other non alpha-numeric characters. In this case, the server log files are not created. The Sun ONE Application Server install directory can contain only the following characters: alphanumerics, - (dash) or _ (underscore). This also applies to entering existing Java 2 SDK directory during installation. **Solution** During installation, specify a directory where names contain only alphanumeric, dash, or underscore characters.
4742828	**Silent installer is not checking user permissions.** Although interactive installers (GUI or command-line) check for appropriate user permissions (admin user for Microsoft Windows platforms, and root user for Solaris package-based installation), this check is not done during silent installation. As a result, installation will fail later in the process because you will not have sufficient permissions to install packages (Solaris) or create services (Microsoft Windows). **Solution** Make sure that silent installation is being run as the appropriate user.

ID	Summary
4741190	**For Solaris, Installer accepts JDK_LOCATION value even if the location contains an earlier version (earlier than Solaris 1.2).** Sun ONE Application Server 7 requires a Java 2 SDK version greater than or equal to 1.4.0_02. However, on Solaris, if a user chooses to reuse an existing Java 2 SDK (less than version 1.2), the installer might not display a warning message. The installation might complete successfully, but the Sun ONE Application Server might not function properly. This is caused by having an existing JAVA_HOME in your environment. **Solution** Before starting the installation program, unset JAVA_HOME as follows: (On ksh): `unset JAVA_HOME` (On csh): `unsetenv JAVA_HOME`
4742171	**Installing a development installation over an existing evaluation installation in silent mode does not report an error.** Affects installers running in silent mode. If user attempts to install over an existing evaluation installation of Sun ONE Application Server 7 (in the same directory), silent installation does not report any errors and proceeds normally. Existing evaluation installation files are preserved. **Solution** Uninstall existing evaluation installations before installing a new development installation in the same location.
4742552	**Selecting Application Server and Sun ONE Studio 4 Enterprise Edition for Java components in the same installation session in command-line and silent mode does not work correctly.** Affects development and operations installations. While running installation in command-line or silent mode, you can choose to install both Application Server and Support for Sun ONE Studio 4 Enterprise Edition for Java components during the same installation session (in GUI mode, these components are mutually exclusive). The installer does not process component dependency correctly and tries to install the Administration Client component instead of the selected Sun ONE Application Server component. **Solution** Simulating GUI mode, first install the Sun ONE Application Server component in command-line or silent mode, then run another installation and install the Support for Sun ONE Studio.

ID	Summary
N/A	**On Solaris, if the Sun ONE Application Server installer upgrades an existing Sun ONE Message Queue 3.0 to 3.0.1, the resulting installation will be removed during Sun ONE Application Server uninstallation.** Affects Solaris development and operations installer. If an installed Sun ONE Message Queue 3.0 is detected on the system, you are given the option of automatically upgrading this installation to version 3.0.1. If this option is chosen, the resulting Sun ONE Message Queue 3.0.1 installation will be uninstalled during Sun ONE Application Server uninstallation. **Solution** To preserve the Sun ONE Message Queue installation after the Sun ONE Application Server is uninstalled: 1. Exit the installer when offered the automatic upgrade choice,. 2. Upgrade Sun ONE Message Queue to version 3.0.1 according to Sun ONE Message Queue documentation,. 3. Run Sun ONE Application Server installation again.
4746410	**On Solaris, when installing the Sun ONE Application Server in non-default locations, the package-based installer on Solaris does not check disk space in the correct locations.** When attempting to install the Sun ONE Application Server on Solaris (using the package-based installer) in non-default locations, the installation program does not check for disk space in the specified target directory. Instead, it checks for disk space only in the default location (`/opt`). **Solution** Before starting the installation, make sure that you have adequate disk space (85 MB) in `/opt` even if you do not plan to install in `/opt`. In addition, make sure you have adequate disk space (85 MB) in the target directory.
4748404	**On Microsoft Windows XP, cannot incrementally install sample applications and PointBase 4.2 components.** This issue affects the Windows XP platform. If you try to incrementally install Sample Applications and/or PointBase 4.2 components over an installed Sun ONE Application Server component, the installer does not correctly detect the existing Sun ONE Application Server installation and reports `Application Server Not Found`. Installation does not proceed. **Solution** Install sample applications and PointBase 4.2 components together with the Sun ONE Application Server component. If the Sun ONE Application Server is already installed on the system, uninstall it and run installation again, this time selecting all necessary components.

ID	Summary
4748455	**Directory error occurs during generic silent install.** This issue affects silent installation on all platforms. If the installer finds a problem with a given installation directory, the generic error message `Invalid Installation Directory` is reported.This error message covers the following situations: • Selected directory is not writable. • Selected directory string is empty or contains space characters. **Solution** Check the supplied installation directory value for both issues to determine the cause of error.
4749033	**On Microsoft Windows XP, cannot uninstall standalone admin client installation using uninstaller.** This issue affects a standalone admin client installation on the Windows XP platform. If user tries to uninstall a standalone admin client through the provided uninstaller, uninstallation tries to uninstall an incorrect set of components and hang. **Solution** Uninstall a standalone admin client manually. Files located in the *install_dir* directory should be deleted. The related Program Group folder (Start->Programs->Sun Microsystems->Sun ONE Application Server) should also be removed. There are no related Microsoft Windows registry entries for a standalone admin client component; these steps will fully revert the system in the state before admin client installation.
4749666	**Samples documentation is not published to initial server instance if Sample Application component has been incrementally installed.** This issue affects the development and operations installer on all platforms. If sample applications are installed in a separate installation session over an installed Sun ONE Application Server, the sample documentation will not be published to the initial server instance and will not be accessible through the `http://`*hostname*`:`*port*`/samples` URL. However, documentation is installed on the file system and can be accessed locally at this location: `file:///`*install_root*`/samples/index.html` **Solution** Access samples documentation locally.

ID	Summary

4754256	**On Solaris, Sun ONE Message Queue configuration files are not preserved during Sun ONE Message Queue upgrade performed by the installer.**
	
	If an existing Sun ONE Message Queue 3.0 package has been detected on the system, the installer offers to upgrade this installation to version 3.0.1 which can be used by the Sun ONE Application Server. During this upgrade operation, the existing 3.0 Solaris packages is removed, resulting in the removal of the following configuration files:
	
	`/etc/imq/passwd`
	`/etc/imq/accesscontrol.properties`
	
	If these files have been modified, those modifications will be lost and the resulting Sun ONE Message Queue 3.0.1 installation will contain the default configuration values.
	
	Solution
	
	Create a backup copy of any user-modified files and restore the backup copies of the files after the upgrade has been completed. For more details, consult *Sun ONE Message Queue 3.0 Installation Guide*.

ID	Summary
4754824	**On Solaris, an installer error message occurs while running installation from a CD.**

When a volume is inserted into the CD-ROM drive, Solaris volume management assigns it the next symbolic name. For example, if two CD-ROMs match the default regular expression, they are named `cdrom0` and `cdrom`. Any that match the added regular expression would be named starting with `cdrom2`. This is documented on `vold.conf` man page. Every time you install the Sun ONE Application Server from the CD, the CD-ROM mount point appends a number after the label name. The first time the CD is mounted everything goes well. On subsequent mounts, the following error message occurs when the installer starts:

```
IOException:java.io.FileNotFoundException: /cdrom/appserver7 No such
file or directory) while loading default flavormap.properties file
URL:file:/cdrom/appserver7#4/AppServer7/pkg/jre/lib/flavormap.properties
```

Solution

Installer functionality is not affected in any way. However, the following workaround exists:

1. Become the superuser by entering the command `su` and the root password at the command prompt, or log in as root. The command prompt changes to the pound sign (#).
2. If the /`cdrom` directory does not already exist, enter the following command to create it:

   ```
   # mkdir /cdrom
   ```

3. Mount the CD-ROM drive.

NOTE: The `vold` process manages the CD-ROM device and performs the mounting. The CD-ROM might automatically mount onto the `/cdrom/cdrom0` directory.

If running File Manager, a separate File Manager window displays the CD-ROM contents.

4. If the `/cdrom/cdrom0` directory is empty because the CD-ROM was not mounted, or if File Manager did not open a window displaying the contents of the CD-ROM, verify that the `vold` daemon is running by entering:

   ```
   # ps -e | grep vold | grep -v grep
   ```

5. If `vold` is running, the system displays the process identification number of `vold`. If the system does not display anything, kill the daemon by typing the following:

   ```
   # ps -ef | grep vold | grep -v grep
   ```

6. Stop the `vold` process by entering:

   ```
   # kill -15 process_ID_number
   ```

7. Mount the CDROM manually:

   ```
   # mount -F hsfs -r ro /dev/dsk/cxtyd0sz /cdrom/cdrom0
   ```

where x is the CD-ROM drive controller number, y is the CD-ROM drive SCSI ID number, and z is the slice of the partition on which the CD-ROM is located.

You have now mounted the CD-ROM drive. Refer to Installing and Setting Up CD One on Solaris for procedures on installation.

ID	Summary
4755165	**On Microsoft Windows, Installer functionality is affected if administrator user credentials are supplied only when running setup.exe.** This issue affects all installations on Microsoft Windows platforms. If a user is logged in without administrator privileges, he/she will be prompted to enter administrator user credentials while attempting to run `setup.exe`. If the correct credentials are entered, the installer checks for user privileges will be satisfied and installation will proceed. However, some installer functionality will be affected: • The installer will hang if the Browse button is selected on the installation directory selection screen. • Program Group entries for the Sun ONE Application Server items might not be created. **Solution** Log in as user with administrator privileges when performing installation.
4757687	**On Solaris, incremental installation of the Sun ONE Application Server component on the system with previously installed Administration Client component might result in an unusable installation.** This issue affects Solaris package-based installation on a Solaris platform. If user tries to install the Sun ONE Application Server component on the system where a standalone Administration Client component has already been installed, and selects a different installation directory from the one originally used for Administration Client installation, the resulting Sun ONE Application Server installation will be unusable even though the installation outcome is reported as successful. This is because the Administration Client Solaris packages will be detected as already installed on the system, and they will not be installed as the part of the Sun ONE Application Server installation. As a result, files critical for product functionality will be missing. **Solution** Uninstall the standalone Administration Client before attempting to install the Sun ONE Application Server on the same Solaris system. Alternatively, an incremental installation can be attempted, but the same installation directory that has been used for the Administration Client installation should be used for the subsequent Sun ONE Application Server installation.

ID	Summary

4762118	**On Solaris, installation fails if a selected custom configuration directory is a subdirectory of the selected installation directory and is called 'etc'.**
	
	This issue affects Solaris package-based installation on a Solaris platform. If the following combination of custom directory locations has been selected, installation fail due to inconsistent group ownership information for the same directory:
	
	• Installation directory: *install_dir*
	• Configuration directory: *install_dir*`/etc`
	
	The `pkgadd` log file in the `/var/sadm/install/logs` directory will contain following error message:
	
	`pkgadd: ERROR: duplicate pathname /`*install_dir*`/etc`
	`pkgadd: ERROR: unable to process pkgmap`
	
	Solution
	
	Select a custom configuration directory other than *install_dir*`/etc`.

4724612	**On Solaris SPARC and Linux, PointBase shell scripts fail if run by someone other than the installing user.** This issue affects only the evaluation installation. All PointBase shell scripts are set to execute permission only for the installing user. **Solution** If users other than the person who installed the product need to execute these scripts, change the permissions to 0755.
4762694	**On Solaris, the Sun ONE Message Queue package SUNWiqsup is not removed during Message Queue upgrade process.** This is only an issue on Solaris. The Sun ONE Application Server 7 installation process involves installing Sun ONE Message Queue version 3.0.1. On Solaris, if Sun ONE Message Queue version 3.0 is detected, it is first uninstalled (after user confirmation) and the 3.0.1 version is installed. There is a minor cleanup issue where the Solaris installer does not remove one of the Solaris packages (`SUNWiqsup`) for Sun ONE Message Queue 3.0 as part of this upgrade process. The presence of this package is harmless and does not affect Sun ONE Message Queue or Sun ONE Application Server 7. **Solution** Manually remove the `SUNWiqsup` package using the following command (as root): `# pkgrm SUNWiqsup`

ID	Summary
4890289	**On Window 2000 Pro, the uninstaller is not able to find the JDK to run uninstallation.** On Windows 2000 Pro, uninstallation fails with the following message: `The uninstaller could not locate a suitable j2sdk to run the uninstalltion program. Run the uninstalltion again with the -javahome option set to the directory in which j2sdk 1.4.0_02 or greater is installed. Press Enter to exit.` **Solution** Use the `-javahome` JDK location.
5017630	**When upgrading on Windows, an error is displayed and the upgrade fails if SNMP is running.** **Solution** Stop the SNMP Service before upgrading: 1. From the Control Panel, choose Administrative Tools. 2. Choose Services. 3. Scroll down to the SNMP Service and stop it.
5018162	**On Linux, two Message Queue packages are installed if you are doing a full installation and if a qualified Message Queue is already installed.** **Solution** Due to a bug in the Linux `rpm` utility in 4.2.1.xx, the installed Sun ONE Message Queue (identified as `imq`) `rpm` is not recognized. Because of this problem, the Sun ONE Application Server installer will install a second version of the Sun ONE Message Queue `rpm`. To work around this, either install the 4.2.0.69 version of `rpm` on your system or uninstall Message Queue before installing the application server. Typically 4.2.1.xx version of `rpm` is present in Red Hat Enterprise Linux Advanced Server 3.0 unless the `rpm` package was upgraded on prior versions of the Linux system.
5034338	**On Linux, upgraded packages are not removed by the uninstaller.** **Solution** Remove the packages manually by typing: `rpm -e --nodeps SUNWas* packages`

ID	Summary

5050621	**This problem appears on Linux, if Sun ONE Application Server 7 Update 3 was installed as a part of Sun Java Enterprise 2004Q2, and you then upgrade the Sun ONE Application Server to Update 4. The subsequent attempt to create a new server instance and to install Sun Java System Identity Server 2004Q2 with SSL enabled Directory Server will fail and the newly created server instance will crash with a SIGSEGV error upon restart.**
	
	Solution
	
	For the instance of the application server created after upgrade to Sun ONE Application Server, Update 4, edit the server instance's `server.xml` file and enter the correct location for the `jss3.jar` in `server-classpath` as follows:
	
	Change the following lines:
	
	`<java-config java-home="/usr/jdk/entsys-j2se"`
	
	`server-classpath="/usr/share/lib/mps/secv1/jss3.jar <---`
	
	To:
	
	`<java-config java-home="/usr/jdk/entsys-j2se"`
	
	`server-classpath="//opt/sun/private/share/lib/jss3.jar <----`
	
	To prevent this problem from occurring in future, modify the following template files as well:
	
	`${APPSERVER_INSTALL_DIR}/lib/install/template/server.xml.template.admin`
	
	`${APPSERVER_INSTALL_DIR}/lib/install/template/server.xml.template`
	
	In these template files, change the lines:
	
	`<java-config java-home="%%%JAVA_HOME%%%"`
	
	`server-classpath="/usr/share/lib/mps/secv1/jss3.jar`
	
	To:
	
	`<java-config java-home="%%%JAVA_HOME%%%"`
	
	`server-classpath="/opt/sun/private/share/lib/jss3.jar`

N/A	**On Red Hat Enterprise Linux AS 3.0 you must install `compat-libstdc++` (standard C++ libraries for backwards compatibility) before installing Sun ONE Application Server.** **Solution** Install `compat-libstdc++` before installing Sun ONE Application Server. These libraries are included on the Red Hat Enterprise Linux AS 3.0 CD set.

ID	Summary
N/A	**Installing Sun ONE Application Server on Windows may give the following message:** **"Error writing native components to disk. Aborting wizard"** **Solution** 1. If you have a file named `C:\Documents`, it interferes when processing the system property `user.home` (typically points to `C:\Documents and Settings\`*your_name*). Remove or rename `C:\Documents`. 2. Additionally, the environment variable `TEMP` must be set and must point to an existing writable directory.

Server Startup and Shutdown

This section describes the known startup and shutdown issues and associated solutions.

Behavior of Log Service create-console Attribute

On Microsoft Windows, when the `create-console` attribute of the `log-service` element in `server.xml` is set to true (the default setting), a window displaying the content of the server event log is displayed on the desktop. By design, closing this window does not result in a persistent termination of the App Server instance process. Closing the console window terminates the `appservd.exe` process, but the watchdog process (`appservd-wdog.exe`) immediately restarts the server instance process.

For developers, closing the event log window of an instance can be used as a means of quickly restarting the App Server instance.

However, to stop the App Server instance completely (along with the companion watchdog process), use one of the following methods:

- Administration interface—Start->Programs->Sun ONE Application Server 7->Stop Application Server
- Command-line interface—`asadmin stop-instance --local=true` *instance name*

  This is the local form of the `stop-instance` command. You can also use the remote form. See the `asadmin stop-instance` help for more information.
- Admin Console—Select server instance, and slick Stop.

Using the Admin Console, you can enable / disable the console event log window by modifying the Create Console setting under the Logging tab of the App Server instance.

ID	Summary
4725893	**On Solaris, License expiration information is not shown.** Affects Solaris SPARC evaluation licenses. Warning information relating to imminent expiration of license (within 14 days or less of expiration) would not be reported through the command-line interface and browser-based interfaces. The warnings would, however, appear in the server log files. **Solution** Check the server log files.
4738648	**JMS service/Sun ONE Application Server startup fails.** If the JMS provider (Sun ONE Message Queue broker) has a large number of undelivered persistent messages, a Sun ONE Application Server initialization failure might occur due to following problems: 1. As it tries to load all the pending messages, the MQ broker might run out of memory and abort. **Solution** Use more Java heap space for the MQ broker process. To do this, set the `Start Arguments` attribute of the JMS service to `-vmargs -Xmx256m.` The procedure for setting this attribute is described in the “Using the JMS Service” chapter of the *Sun ONE Application Server Administrator’s Guide*. 2. If the MQ broker cannot complete its initialization sequence within a certain period of time, the Sun ONE Application Server times out and aborts. **Solution** Increase the value of the JMS service Start Timeout attribute. The procedure for setting this attribute is described in the “Using the JMS Service” chapter of the *Sun ONE Application Server Administrator’s Guide*.

ID	Summary

4762420	**Firewall rules might cause Sun ONE Application Server startup failures.**
	
	If you have a personal firewall installed, you might experience this problem. The presence of strict firewall rules on the same machine as a Sun ONE Application Server installation might cause startup failures of the Admin Server and App Server instances. Specifically, the Admin Server and App Server instances attempt to establish local connections within the Sun ONE Application Server environment. Since these connection attempts access ports using the host name of the system rather than localhost, local firewall rules might block such attempts.
	
	The local firewall might also inadvertently generate alerts saying that either the “Portal of Doom Trojan” attack (for example, TCP connection attempts on port 3700) or similar attacks have occurred when, in fact, such access attempts have been made by the Sun ONE Application Server and are in no way a security threat to your machine. Under some conditions, the port number which the Sun ONE Application Server uses for various local communications might overlap with port numbers used in known popular attacks. Some symptoms of this problem:
	
	• An attempt to start the Sun ONE Application Server using the Microsoft Windows program group item “Start Application Server” fails with this message:
	
	`Could not start the instance: domain1:admin-server`
	`server failed to start: abnormal subprocess termination`
	`...`
	
	• The administrative and server instance log files contain connection exceptions followed by this message: `CORE3186: Failed to set configuration`
	
	Solution
	
	Modify the firewall policy to allow the Sun ONE Application Server to make connection attempts to ports on the local system.
	
	To avoid inaccurate alerts concerning possible attacks, either modify the relevant rules or change the conflicting port number(s) used by the Sun ONE Application Server.
	
	To determine the port numbers used by the Admin Server and App Server instances, see the `server.xml` file in the following location of your Sun ONE Application Server installation:
	
	domain_config_dir`/domain1/admin-server/config/server.xml`
	domain_config_dir`/domain1/server1/config/server.xml`
	
	where *domain_config_dir* is the location of your initial server configuration. For example:
	
	Microsoft Windows: *install_dir*`/domains/...`
	Solaris 9 and above integrated install: `/var/appserver/domains/...`
	Solaris 8, 9 and above unbundled install: `/var/opt/SUNWappserver7/domains/...`
	
	Look for the port settings in the <`iiop-listener`> and <`jms-service`> elements. You can either change these port numbers to other unused port numbers, or you can modify your firewall policy to allow connection attempts from clients on the local machine to these port numbers on the same machine.

ID	Summary
4780076	**On Solaris, the Sun ONE Application Server starts all instances as root thereby allowing non-root users to have root access.**

There are several issues associated with application server startup when the Sun ONE Application Server is installed as part of a Solaris installation (bundled):

- All application server and administrative server instances are started automatically during Solaris system startup. In many environments, not all the instances are expected to be started automatically during Solaris system startup. Starting every defined instance can adversely impact the memory available on a system.
- When application server instances and administrative server instances are started automatically, the startup script for each instance is executed as root. Execution of non-root owned instance startup scripts can enable non-root users access to the root user through modification of the instance-level startup scripts.

Background

During installation of the Sun ONE Application Server as part of a Solaris installation, the `/etc/init.d/appserv` script and symbolic links to the `S84appserv` and `K05appserv` scripts in the `/etc/rc*.d/` directories are installed. These scripts cause all the application server and administrative server instances defined as part of the application server installation to be started and stopped automatically during Solaris system startup and shutdown.

The `/etc/init.d/appserv` script contains the following section of code:

```
...
case "$1" in
'start')
    /usr/sbin/asadmin start-appserv
    ;;
'stop')
    /usr/sbin/asadmin stop-appserv
    ;;
...
```

Running the `asadmin start-appserv` command causes the administration server instance and all application server instances defined in all administrative domains to be started during Solaris system startup. Since the system startup and shutdown scripts are executed as root, the startup script for each application server and administrative server instance is also executed as root. The instance-level startup script is named `startserv` and is located at *instance-dir*`/bin/startserv`. Since instances might be owned by users other than root, the `startserv` scripts could be modified by the non-root user to execute commands as the root user.

In cases where an instance is using a privileged network port, the instance's `startserv` script must be executed as root. However, in these cases, "run as user" is typically set in the instance's configuration to force the instance to run as the specified user after the instance has been initially started by the root user.

ID	Summary

4780076 (Continued)	**Solution**
	Perform one of the following workarounds depending on your environment:
	• If your environment does not require all application server and administrative server instances to be started as root, then you should comment out execution of the `asadmin start-appserv` and `asadmin stop-appserv` commands in the `etc/init.d/appserv` script.
	• If your environment requires starting either specific administrative domains (including the administrative server instance and all application server instances of each domain) or specific instances within one or more administrative domains, then you should either modify the `/etc/init.d/appserv` script to start the domains and/or instances of interest or define new `/etc/rc*.d/` scripts that suit the needs of your environment.
	• Starting a specific domain. If you require to start either an administrative domain or specific instances as non-root users, then you should ensure that the `su` command with the `-c` option is used to start the domains and/or instances of interest.
	Examples
	Starting a specific administrative domain—If you want to start the administrative server instance and all application server instances of a specific administrative domain as the root user, you can modify the `/etc/rc*.d/` scripts as follows:
	`...`
	`case "$1" in`
	`'start')`
	`/usr/sbin/asadmin start-domain --domain production-domain`
	`;;`
	`'stop')`
	`/usr/sbin/asadmin stop-domain --domain production-domain`
	`;;`
	`...`

ID	Summary

4780076 (Continued)	• If you want to start specific application server instances as a non-root user, modify the `/etc/rc*.d/` scripts to use the `su` command with the `-c` option:
	
	`...`
	`case "$1" in`
	`'start')`
	`  su - usera -c "/usr/sbin/asadmin start-instance --domain test-domain instance-a"`
	`  su - userb -c "/usr/sbin/asadmin start-instance --domain test-domain instance-b"`
	`  ;;`
	`'stop')`
	`  su - usera -c "/usr/sbin/asadmin stop-instance --domain test-domain instance-a"`
	`  su - userb -c "/usr/sbin/asadmin stop-instance --domain test-domain instance-b"`
	`  ;;`
	`...`
	
	See the *Sun ONE Application Server Administrator's Guide* for more information on the startup and shutdown commands available through the `asadmin` command line interface.

Database Driver

This section describes the known database driver issues and associated solutions.

ID	Summary
4700531	**On Solaris, an ORACLE JDBC driver error occurs.** This new Java Database Connectivity (JDBC) driver is for Oracle (R) working with JDK1.4. The problem is caused by a combination of the Oracle 9.1 database and ojdbc14.jar. Applying the patch will fix the problem on Solaris 32-bit machine, running an Oracle 9.0.1.3 database. **Solution** Obtain and apply the patch to your server from the Oracle Web site for Bug 2199718. Perform the following steps: 1. Go to the Oracle web site. 2. Click the 'patches' button. 3. Type 2199718 in the patch number field. 4. Click the 32-bit Solaris OS patch.Go to `Metalink.oracle.com`. 5. Click patches. 6. Under patch number, enter 2199718. 7. Click the 32 bit Solaris OS patch.
4707531	**On Solaris, accessing an Oracle 9.1 database with an Oracle 9.2 Client might cause data corruption.** If you use an Oracle (R) 9.2 client to access an Oracle 9.1 database, data corruption might occur when a number column follows a timestamp column. The problem might be caused by using the `ojdbc14.jar` file with an Oracle 9.1 database. Applying the patch might assist in addressing the situation on Solaris 32-bit machines, running an Oracle 9.1 database. This JDBC driver is for Oracle working with JDK1.4. **Solution** Obtain the patch that Oracle might make available from the Oracle web site for Bug 2199718 and apply it to your server.

ID	Summary
4991065	**Oracle JDBC drivers must be configured properly to be compliant with J2EE 1.3.** **Solution** Use the following configuration for Type 2 and Type 4 drivers: 1. Use the JDBC from 9.2.0.3 or later. 2. The Oracle database needs to have `compatible=9.0.0.0.0` in its parameter (`init.ora`) file. 3. Use the `ojdbc14.jar` file. 4. Configure the Sun ONE Application Server to define the following JVM property: `-Doracle.jdbc.J2EE13Compliant=true` In addition, for Type-2 drivers both the `ORACLE_HOME` and `LD_LIBRARY_PATH` (which must include `$ORACLE_HOME/lib`) need to be defined in the environment that the Sun ONE Application Server is started in. For example, add them to the `asenv.conf` file and ensure they are exported.

ID	Summary
5022904	**Sun ONE Application Server has number of connections growing after idle time out with DB2 Type 2 Driver**

Scenario: When the DB2 database is configured with the wrong `datasource` class, Sun ONE Application Server will run out of connections in the connection pool as the connections are not closed properly.

Solution

To avoid this problem, the DB2 Type 2 driver must be configured properly. These examples use the default DB2 client folder `/opt/IBM`.

1. Install a DB2 Client on the machine which hosts Sun ONE Application Server, with a database alias to the DB2 Server.
2. Modify the `startserv` script of the application server instance to set the DB2 environment. Add the following lines to the application server instance's start script:

```
DB2DIR=/opt/IBM/db2/V8.1

export DB2DIR

DB2INSTANCE=db2tmp

export DB2INSTANCE
```

3. Because the client is owned by a user with a password, add these values to the connection pool:

```
user: db2inst1

password: db2inst1

databaseName: sample2

dataSourceName com.ibm.db2.jcc.DB2SimpleDataSource
```

4. Modify the Class Path to have the following values:

```
/opt/IBM/db2/V8.1/java/db2jcc.jar

/opt/IBM/db2/V8.1/java/db2jcc_license_cu.jar

/opt/IBM/db2/V8.1/java/db2jcc_license_cisuz.jar

/opt/IBM/db2/V8.1/java/db2java.zip
```

Web Container

This section describes the known web container issues, and the associated solutions.

ID	Summary

4740477	**The web cache example in sun-web-app_2_3-0.dtd file provides incorrect syntax for the timeout element.**
	
	The `timeout` element is specified to use in XML cache object as:
	`<timeout> 60 </timeout>`
	
	Because the name parameter is a required field, it should be written as:
	`<timeout name="foo">60</timeout>`
	
	Solution
	
	Do not use with verifier.

4817642	**Allowing separate web applications to share the same session ID creates security weakness.**
	
	Solution
	
	According to J2EE specification, each deployed web application maintains separate, unique session objects (session IDs). This is the default behavior of the Sun ONE Application Server. However, in some instances it may be desirable to allow separate web applications to share the same session ID. In this case, the Sun One Application Server allows you to specify a special deployment property in the `sun-web.xml` deployment descriptor to tell the application server that this particular application is allowed to reuse session IDs when going across web application modules. (The first access to a web application will generate a new unique session ID. Later requests to other web applications that have this property set will use that same session ID instead of generating a new one for this client and this web application.)
	
	To do this, the `reuseSessionId` property must be set to true for each deployed web application upon which you want to allow sharing of the same session object. For example:
	
	`<?xml version="1.0" encoding="UTF-8"?>`
	`<sun-web-app>`
	`  <session-config>`
	`  <cookie-properties>`
	`  <property name="cookiePath" value = "/" />`
	`  <property name="cookieDomain" value = ".sun.com" />`
	`  </cookie-properties>`
	`  </session-config>`
	`  <property name="reuseSessionID" value="true"/>`
	`</sun-web-app>`
	
	The property `reuseSessionID` is set to true in next to last line.
	
	CAUTION: Turning on `reuseSessionId` opens a potential avenue for a security weakness (though it is not a weakness in of itself). This property should not be used in a shared environment (such as an ISV) where multiple customers are allowed to run their applications on the same Sun One Application Server instance. In such as setting, it is much safer to use the default J2EE behavior of forcing different web applications deployed to the same server instance to use different session objects.

EJB Container

This section describes the known Enterprise JavaBeans™ (EJB™) container issues and associated solutions.

ID	Summary

4735835	**Cannot properly handle null PKs returned from ejbFind methods.**
	
	The following container-managed persistence (CMP) examples might return one or more nulls from an `ejbFind` (assumed called from `EmployeeEJB` bean, as they must return the same instance type as the bean):
	
	`1. find insurance.employee where insurance.id == 10`
	
	This returns null if such insurance does not have an employee associated with it.
	
	`2. find all insurance.employee where insurance.id > 10`
	
	This returns a collection that might contain nulls for those insurances that do not have an employee.
	
	For the first occurrence of a null PC in the result set, the CMP client will get `JDOFatalInternalException` "param0 cannot be null".
	
	The BMP client will get `EJBException` "Null primary key returned from ejbFind method" for a single object finder, and (possibly) a `NullPointerException` for a multi object finder.
	
	Solution
	
	None.

4744434	**The Sun ONE Application Server occasionally throws Null Pointer Exception when using stateful session beans.** The EJB container in the Sun ONE Application Server caches stateful session beans to improve performance. When the cache overflows (that is, the number of beans in the cache exceeds `max-cache-size`) the container passivates beans to the disk. Occasionally the server throws `NullPointerException`. The problem occurs when the difference between `max-cache-size` and `cache-resize-quantity` is less than 8. **Solution** Ensure that the difference between `max-cache-size` and `cache-resize-quantity` is greater than eight, or use an unbounded cache by setting `max-cache-size` to zero.
4951476, 4967645	**The exception javax.ejb.EJBException: org/dom4j/Element is thrown when using Java WSPD 1.2 or 1.3** **NOTE:** If your application does not use the Java Web Services Developer Pack (Java WSDP) 1.2 or 1.3, this problem does not apply to you. When Java WSDP 1.2 or 1.3 is installed and configured to be used together with Sun ONE Application Server 7, a `javax.ejb.EJBException: org/dom4j/Element` could be thrown by the EJB Container. **Solution** Add the latest `dom4j-full.jar` to `server-classpath` in the `server.xml` file. It is available for download at `http://dom4j.org` and should precede the `appserv-jstl.jar` entry in `server-classpath`.

ID	Summary
4994366	**Error when deploying if ejb-local-ref is used without ejb-link.** **Solution** `ejb-local-ref` requires `ejb-link`. When using `ejb-local-ref`, you must specify an `ejb-link` value.

Container-Managed Persistence

This section describes the known container-managed persistence (CMP) issues and associated solutions.

ID	Summary
4732684	**Oracle JDBC driver optimizations are not being initiated.** To take advantage of Oracle (R) database optimizations with container-managed persistence (CMP) beans, the Oracle driver files must be specified in the `classpath-suffix` attribute of the `server.xml` file rather than placed in the instance's `/lib` directory which is the default for third-party libraries. **Solution** Add the Oracle driver files to the `classpath-suffix` attribute of the `server.xml` file.
4734963	**Self-referencing CMRs cause problem during deployment.** The parser of the EJB deployment descriptor, `ejb-jar.xml`, does not correctly handle self-referencing container-managed relationships (CMRs), that is, `ejb-relationship-role`. The One side field is skipped. **Solution** Switch the `ejb-relationship-role` sections so that the One side (with `<multiplicity>` Many) is the first in `ejb-relation`.

ID	Summary

4747222	**On Oracle, the capture-schema utility does not work if -schemaname is not specified.**
	The `capture-schema` utility has the following problems if the `-schemaname` option is not specified when capturing database schema information from the Oracle (R) database:
	1. If you attempt to capture all tables (that is, no tables are explicitly chosen):
	`bin/capture-schema -dburl jdbc:oracle:thin:@oraserver:1521:ora -username scott -password tiger -driver oracle.jdbc.driver.OracleDriver -out test.dbschema`
	You will receive:
	`java.sql.SQLExceptions`
	`ORA-00942: table or view does not exist`.
	The resulting output file is broken.
	2. If one or more tables are specified with the `-table` option:
	`bin/capture-schema -dburl jdbc:oracle:thin:@oraserver:1521:ora -username scott -password tiger -driver oracle.jdbc.driver.OracleDriver -table DEPT -out test.dbschema`
	The resulting file has the specified tables, but no column information, which means the file can't be used for CMP mapping.
	Solution
	When capturing a schema from the Oracle database, always use the `-schemaname` option with the user name in uppercase letters as the value:
	`bin/capture-schema -dburl jdbc:oracle:thin:@oraserver:1521:ora -username scott -password tiger -driver oracle.jdbc.driver.OracleDriver -schemaname SCOTT -out test.dbschema)`

4751235	**For capture-schema utility: If values for the -table option are not specified in uppercase on Oracle and/or PointBase, the resulting file is broken.** Oracle (R) and PointBase internally translate case-insensitive identifiers into uppercase letters, unless the identifier are enclosed in " "). The `capture-schema` utility does not correctly handle table names in lowercase or mixed-case letters as arguments to the `-table` option when capturing a database schema from Oracle or PointBase (such as `-table student` or `-table Student`). The generated database schema file will not contain any columns information for the corresponding table. **Solution** Use uppercase letters to specify table names (such as `-table STUDENT`).

Message Service and Message-Driven Beans

This section describes the known Java Message Service (JMS), Sun ONE Message Queue, and message-driven beans issues, and the associated solutions.

ID	Summary
4683029	**The -javahome flag in all MQ Solaris/Microsoft Windows scripts does not work if the value has a space.** The command-line utilities in Sun ONE Message Queue have a `-javahome` option that allows you to specify an alternate Java runtime. Using this option exposes a limitation where the path of the specified alternate Java runtime must not contain spaces. Examples of paths that have spaces are: • Microsoft Windows: `C:\jdk 1.4` • Solaris: `/work/java 1.4` This problem occurs at Sun ONE Application Server instance startup. When a Sun ONE Application Server instance is started, by default its corresponding Sun ONE Message Queue broker instance is also started. The broker always starts using the `-javahome` command-line option to ensure that it uses the same Java runtime used by the Sun ONE Application Server. If the Java runtime that is configured for use by the Sun ONE Application Server (and therefore passed on for use by the broker) is located at a path that contains spaces, broker startup fails, which also causes the Sun ONE Application Server instance startup to fail. **Solution** Make sure that the Java runtime used by the Sun ONE Application Server is located at a path that does not contain spaces.

Java Transaction Service (JTS)

This section describes the known Java Transaction Service (JTS) issues and associated solutions.

Recovery

There are some known problems with the recovery implementations of some of the JDBC drivers. For these known problems, Sun One Application Server provided some workarounds. By default, these workarounds will not be used unless you explicitly indicate that these workarounds are to be used.

- Issue with the Oracle (R) JDBC driver—Oracle XA Resource implementation's recover method repeatedly returns the same set of in-doubt Xids regardless of the input flag. According to the XA specs, the Transaction Manager should initially call `XAResource.recover` with TMSTARTSCAN and then call `XAResource.recover` with TMNOFLAGS repeatedly until no Xids are returned.

  Oracle XA Resource's commit method also has some problems, which are addressed in a workaround provided by the Sun ONE Application Server. To enable this workaround, the following property should be added to the `transaction-service` subelement in the `server.xml` file: `oracle-xa-recovery-workaround`

This property value should be set to true.

- Issue with Sybase JConnect 5.2—There are some known problems with JConnect 5.2 driver which are resolved in JConnect 5.5. If the JConnect 5.2 driver is used, to make recovery to work, the following property should be added to the `transaction-service` subelement in the `server.xml` file:

  `sybase-xa-recovery-workaround`

  This property value should be sent to true.

Transactions

In the `server.xml` file, `res-type` is used to demarcate the connection as non-XA or XA. This demarcation is used to identify the configuration of the data source to drive data. For example, in the Datadirect driver, the same data source can be used as either XA or non-XA.

The default behavior of the data source is non-XA. To make the data source behave as XA with the `connpool` element for transactions, `res-type` is needed. For the `connpool` element to work and participate in transactions, add the following for the attributes `res-type` in the `server.xml` file:

```
res-type="javax.sql.XADataSource"
```

ID	Summary
4689337	**The connection from XADatasource in non-txn context cannot be used.**
	This is a known database driver issue. When there is a connection in a non-txn context, with XADataSource the `Autocommit` is set to false by default.
	Solution
	Use the non-XA datasource class to call the commit/rollback programs explicitly rather than through transactions.
4700241	**Non-zero transaction timeout setting causes slow local transactions.**
	Currently, the Local Transaction Manager does not support transactions with definite timeouts. If you set the `timeout-in-seconds` attribute in `transaction-service` element to a value greater than 0, all local transactions will be processed as a global transactions, and will take longer to complete. A local transaction might also fail, if the data source driver does not support global transactions. A timeout value of 0 means that the transaction manager will wait indefinitely if it does not hear back from a participating data source.
	Solution
	Reset the `timeout-in-seconds` value to its default value of 0.

Application Deployment

This section describes the known deployment issues and associated solutions.

ID	Summary
4403166	**On Microsoft Windows, long path names are not supported.** Refer to "Installation and Uninstallation" on page 10 for information on this problem.
4703680	**Redeploying an EJB module (with MDB) throws a resource conflict exception.** This occurs on Microsoft Windows 2000 using Sun ONE Studio 4 when using message-driven beans (MDBs). If an EJB module contains an MDB that utilizes a specific queue, then re-deploying the same EJB module with the same MDB (utilizing the same Queue) causes a resource conflict. This makes (modified) module un-usable. **Solution** None.
4725147	**Cannot choose a particular virtual server for deployment.** In this case, two virtual servers are configured with exactly the same host and listener. If an application is deployed only for second virtual server, it cannot be reached because combination host:port leads to the first virtual server. **Solution** The virtual server hostname should not be the same as the original hostname, especially when the same HTTP listener is used.
4734969	**Can't deploy application with user's Query class in the bean package.** Container-managed persistence (CMP) code-gen does not use the fully qualified name for the JDO Query variable in `concreteImpl`. If you have a Query class in the same package as the abstract bean, a compilation error occurs. **Solution** Move the Query class into another or separate package.

4750461	**On Solaris, the Sun ONE Application Server might crash during dynamic reloading.**
	
	For a large application (with many enterprise beans), a crash might occur during dynamic reloading of the application. The dynamic reloading feature is used, in the development environment, to quickly test minor changes to an application. The crash is caused by attempting to use more file descriptors than are available.
	
	Solution
	
	1. Increase the file descriptors limit by adding lines, in this format, to the `/etc/system` file. Depending on the size of the application, the values can be set higher or lower.
	
	`set rlim_fd_max=8192`
	`set rlim_fd_cur=2048`
	
	2. Reboot the system.

Verifier

This section describes the known verifier issues and associated solutions.

ID	Summary
4742545	**Standalone verifier shows EJB Class Not Found errors.** The verifier indicates some failed tests with the following test description message: `EJB Class Not Found`. The test failures occur when an EJB JAR file uses an enterprise bean with a reference to another enterprise bean that is packaged in a separate EJB JAR file within the same EAR application. The failure messages are also observed if you try to validate the connector (RAR) dependent EAR files. This is because the RAR bundle need not be packaged within the EAR file that houses the enterprise bean with dependency on the RAR bundled files. The failures (exception to this are the connector-related failures) are only observed with the standalone verifier. The verifier invoked through the deployment command or the Administration interface does not show the failures. **Solution** Make sure that the packaging of the application EAR is correct and if you are using any utility JAR file, it is packaged within the EAR file. To resolve the referencing errors, you can shift to the verifier invoked through the deployment backend using `asadmin` or the Administration interface. For the connector-related failures, place the JAR file containing the required classes into the class path for the verifier. You can open the *install_root*`/bin/verifier[.bat]` file and add a LOCAL_CLASSPATH variable to the end of the JVM_CLASSPATH variable. Locally add the classes to the LOCAL_CLASSPATH variable, then run the verifier.

Configuration

- The default value of the `env-classpath-ignored` attribute of the `java-config` element is true.
- Not Implemented for this release:
  - The `bytecode-preprocessors` attribute in `java-config` element in `server.xml` (It is likely that it will become available in a future performance patch.)
- Deprecated for this release:
  - `is-cache-overflow-allowed`
  - `max-wait-time-in-millis`
- Due to J2EE 1.4 architecture changes, some elements might not be supported in future releases, such as:
  - `cmt-max-runtime-exceptions` property of the `mdb-container` element

The following table describes the known Sun ONE Application Server 7 configuration issues and their solution.

ID	Summary
4742559	**If IPv6 is not used in your network, this problem does not apply to you.** NOTE: If IPv6 is not used in your network, this problem does not apply to you. By default, the Sun ONE Application Server uses IPv4. This is supported by all platforms on which the Sun ONE Application Server is available. In certain platforms, IPv6 is supported. In this case, Sun ONE Application Server configuration changes are required for conformance. NOTE: If these configuration changes are to be made, it is essential to be absolutely sure of IPv6 support on the platforms. Server instances might not start if the IPv6-related configuration is applied to a system that has only IPv4 support. **Solution** Perform the following configuration changes: 1. Start the Admin Server. 2. Start the Administration interface. (Connect to Admin Server http host/port in a browser). 3. Select the App Server instance to configure for IPv6, such as server1. 4. Expand the HTTP Listeners node in the tree view. 5. Select the HTTP Listener to configure for IPv6, such as http-listener1. 6. In the General section, change the value of the IP Address field to ANY. 7. In the Advanced section, change the value of the Family field to INET6. Setting the Family field to INET6 does not disable IPv4 functionality unless an IPv6 address is selected for IP address. Selecting an IP address of ANY will match any IPv4 or IPv6 address. 8. Click Save. 9. In the left pane, select your server instance. 10. Click Apply Changes. 11. Click Stop. 12. Click Start. This restarts the server and implements your changes.

Deployment Descriptors

This section describes the known deployment descriptor issues.

sun-cmp-mapping.xml Issues

- Not Implemented for this release:

- `check-modified-at-commit`
- `lock-when-modified`

sun-ejb-jar.xml Issues

- Deprecated for this release:
  - `is-cache-overflow-allowed`
  - `max-wait-time-in-millis`

Monitoring

This section describes the known monitoring issues and associated solutions.

ID	Summary
4734595	**Total-connections-failed-validation does not show values.** The issue is with the inherent double pooling problem in the reference implementation (RI). **Solution** None.
4737227	**FlagAsyncEnabled does not set to 1 in http-server.** This is a known the Sun ONE Web Server issue. **Solution** None.
4752199	**Monitoring bean method attribute values are not shown for getPrimaryKey(), getEJBMetaData(), getHomeHandle() methods.** The monitoring tool lists methods in an enterprise bean that can be monitored. For `getPrimaryKey()`, `getEJBMetaData()`, and `getHomeHandle()`, the method level monitoring attributes always show zero. **Solution** None

Server Administration

This section addresses the following areas:

- Command Line Interface (CLI)

- Administration Infrastructure
- Administration Interface

Command Line Interface (CLI)

This section describes the known command-line interface issues and associated solutions.

ID	Summary
4676889	**CLI command overflows in single-mode if the command is more than 256 characters long.** On UNIX(R), when executing a CLI command in single-mode that contains more than 256 characters, the command fails with this error: `...Command Not Found...` This is a terminal restriction, not a CLI restriction. Example: `create-jdbc-connection-pool --instance server4 --datasourceuser admin --datasourcepassword adminadmin --datasourceclassname test --datasourceurl test --minpoolsize=8 --maxpoolsize=32 --maxwait=60000 --poolresize=2 --idletimeout=300 --connectionvalidate=false --validationmethod=auto-commit --failconnection=false --description test sample_connectionpoolid)`  **Solution**  1. For commands that require more than 256 characters, use CLI multi-mode.  2. If you must use single-mode, run the command using OpenWin `cmdtool`.
4680409	**After configuring an instance to use SSL, the administrator cannot access the Admin Server from either the CLI or browser clients.** **Solution** Import the Sun ONE Application Server certificate into each client that is to use SSL to access the Admin Server, and indicate that servers with such a certificate are to be trusted. How to do this on a browser is browser-specific; consult your browser's online help to see how to import a certificate to be trusted. For the CLI, if the server's certificate is in some `servercert.cer` file, and the installation directory is `/INSTALL`, the command is: `keytool -import -file servercert.cer -alias server -keystore /INSTALL/jdk/jre/lib/security/cacerts` NOTE: To avoid this problem in the future, ensure that the Admin Server certificate is installed in both the server *and* the client(s) before configuring the Admin Server to use SSL.

ID	Summary
4688386	**Using the asterisk (*) character in single-mode CLI command results in unexpected behavior and/or error messages.** The asterisk character is being expanded by the underlying shell into a list of names, and it is this list of names that is being seen by the command-line interface (CLI) command. Putting quote marks around the asterisk prevents the shell from expanding the asterisk, and thus the CLI gets to see the asterisk itself. **Solution** Use quote characters (either single or double quotes) around the asterisk.
4701361	**Repeated changes applied to any instance eventually results in an out of memory error.** The Admin Server keeps a record of all changes performed to the system, which requires memory. This change record (but not the changes themselves) is discarded during a reconfiguration, thus releasing the memory for use. **Solution** Use the `asadmin` reconfig command periodically to discard old change records.
4704328	**Cleanup does not happen when a call to create a duplicate domain fails.** When a domain that already exists is created, an appropriate error message is generated. However, a directory specified by the `-path` option in the `create-domain` command is created if it did not exist earlier. This should be removed since the command failed. **Solution** Remove any additional empty directory specified that might be created after the `-path` option is used.
4708813	**Cannot monitor the default (pointbase) connection-pool JDBC resources.** The JDBC connection pools are created dynamically on demand, which means that a pool is created the first time it is used. If the pool has not been created (not used), monitoring is not possible. **Solution** Create the desired connection pool to allow monitoring.

ID	Summary

4722007	**Monitoring: Execution times of less than 1 millisecond cannot be measured.**
	
	When an entity bean method is monitored, the `execution-time-millis` attribute shows -1. For example, when running the command:
	
	`iasadmin>get -m server1.application.usecase1app.ejb-module.UseCase1Ejb_jar.entity-bean.BeanOne.bean-method.method_create0.*`
	
	The following attributes are returned:
	
	`Attribute name = total-num-errors Value = 0`
	`Attribute name = method-name Value = public abstract com.iplanet.ias.perf.jts.UseCase1.ejb.BeanOneRemote com.iplanet.ias.perf.jts.UseCase1.ejb.BeanOneHome.create() throws javax.ejb.CreateException,java.rmi.RemoteException`
	`Attribute name = total-num-calls Value = 0`
	`Attribute name = total-num-success Value = 0`
	`Attribute name = execution-time-millis Value = -1`
	
	Before monitoring is started, the default value for `execution-time-millis` is set to -1 to indicate that the value for that attribute is invalid at that moment. A default value of 0 would give a false impression that the execution time has been measured, and that it has turned out to be a very small value.
	
	Solution
	
	None.

4733109	**Verifier error reported in Administration interface when viewing Persistence Manager Factory resource created from command-line interface.** When a Persistence Manager Factory resource is viewed in the Administration interface, the following error is reported for the resource when it is created from the command-line interface: `ArgChecker Failure: Validation failed for jndiName: object must be non-null` **Solution** None.

ID	Summary

4742993	**On Solaris, the flexanlg command causes open failure when used on Sun ONE Application Server that is integrated into Solaris.**
	
	If you are running a version that is integrated into the Solaris operating environment, and you use the `flexanlg` command from `/usr/appserver/bin`, an open failure error is displayed.
	
	`ld.so.1: /usr/appserver/bin/flexanlg: fatal: libplc4.so: open failed: No such file or directory`
	`Killed`
	
	Solution
	
	Complete these steps.
	
	1. Add the following entry to LD_LIBRARY_PATH file:
	
	`usr/lib/mps`
	
	2. Then run the `flexanlg` command.
	
	`% /usr/appserver/bin/flexanlg`

4750518	**Some CLI commands do not work on the target Admin Server.** The `create`, `delete`, or `list` commands do not work in the CLI on the target Admin Server for creating/deleting/listing new elements (such as SSL, mime, profiler, resources, and so on) in the `server.xml` file of the Admin Server. **Solution** Use the Administration interface to create, delete, and list elements in the Admin Server.

Administration Infrastructure

This section describes the known administration infrastructure issues and associated solutions.

ID	Summary

4676888	**On Microsoft Windows 2000, cannot create JVM when JVM heap size is set to a large value.**
	If you try to set a larger JVM heap size on Windows 2000, you might get the following error message:
	`Error occurred during initialization of VM,`
	`Could not reserve enough space for object heap`
	`Internal error: unable to create JVM`
	Solution
	To configure the Sun ONE Application Server with a larger JAVA heap size on Windows 2000, it is necessary to rebase the Sun ONE Application Server DLLs.
	The Rebase utility, which comes both with Microsoft Framework SDK and Microsoft Visual Studio, allows you to set optimal base addresses for a number of DLLs starting from some address and thereby increasing JVM heap availability. The SDK Help Rebase topic recommends using address 0x60000000. For more details on rebase utility:
	`http://msdn.microsoft.com/library/default.asp?url=/library/en-us/tools/tools/performance_tools.asp`
	Requirements:
	• Window 2000 system with 2-4 GB memory
	• Visual Studio/Microsoft Framework SDK Rebase utility
	To apply rebase to S1AS dynamic libraries do the following:
	1. `cd` into *install_dir*`\bin`
	`2. rebase -b 0x6000000 *.dll`
	`3. cd ..\lib`
	`4. rebase -b 0x6600000 *.dll`

4686003	**HTTP Quality of Service limits are not enforced.** Quality of Service (QOS) includes a means of specifying the maximum number of HTTP connections and the bandwidth limit. When these attributes are exceeded, a 503 error should be returned to the client. However, after enabling QOS through the Administration interface, the server does not enforce the QOS limits. **Solution** To fully enable QOS features, you must manually add an AuthTrans fn=qos-handler line to the top of the default object in the `obj.conf` file of the virtual server. The qos-handler Server Application Function (SAF) and `obj.conf` configuration file are described in the *Developer's Guide to NSAPI*.

ID	Summary
4692673	**Restarting an instance in debug mode seems to fail if the instance is originally running in non-debug mode.** If an instance is started without checking/selecting the 'Start/Restart in debug mode' check box, subsequent settings of this check box do not work. In the Administration interface, the Debug Enabled check box appears unchecked, even though it has been checked. The `server.xml` file also shows `debug-enabled=false`. **Solution** None.
4699450	**On Microsoft Windows 2000, deployment fails for EAR files if total length of the path to a generated file during deployment exceeds 260 characters.** On the Windows 2000 platform, the Java Virtual Machine (JVM) is limited to 260 characters for path names to generated files.This is a problem with Microsoft Windows support in the JVM, and is likely to be fixed in the J2SE 1.5 release. **Solution** When deploying an application, use a path and file name that are less than 260 characters combined.
4723776	**On Solaris, server fails to restart when converting to an SSL-enabled environment.** If you attempt to restart the Sun ONE Application Server after installing a certificate and enabling security, the restart fails. A message is displayed indicating that the server failed to receive a password. A second click of the Start button starts the server. When SSL is not enabled, passwords are not cached which results in the failure of restart. The restart command does not support the transition from non-SSL to SSL enabled mode. NOTE: This problem only occurs the first time the server is restarted. Subsequent restarts work fine. **Solution** If you have encountered this problem: Click Start. To avoid this problem, perform the following steps instead of clicking the Restart button. Click Stop. Click Start.
4724780	**Cannot start Admin Server if the domain is created in another system.** • If the domain is created on a PCNFS mounted drive, the Admin Server and any instances within such domains cannot be started due to a known Microsoft issue involving PCNFS drives. • If the domain is created in the same local drive as the product installation but in a different directory path, the instances and the Admin Server work as expected, and are fully operational. **Solution** None.

ID	Summary
4734184	**On Microsoft Windows 2000, the console is sometimes disabled.** Sometimes (rarely) the Admin Server or App Server instance hangs during deployment or when commands are run. This can happen when some of the text from the console log is selected. If you deselect the text on the console log, the process continues. **Solution** Disable automatic creation of the console for server1 instance by setting `log-service create-console` attribute to false. Clicking the mouse or pressing Enter on the console log might also solve this problem.

4736554	**After a secure httplistener has been removed from a server, the administrator is still prompted for the (no longer needed) password.**
	
	Solution
	
	Remove the entire server and then add it again.
	
	NOTE: To avoid the problem in the future—Before removing the httplistener, disable security using the following command:
	
	`/export2/build/bin/> asadmin set --user admin --password adminadmin server1.http-listener.http-listener-1.securityEnabled=false`
	`Attribute securityEnabled set to false.`
	`/export2/build/bin/> asadmin delete-http-listener --user admin --password adminadmin ls2`
	`Deleted Http listener with id = ls2`

4737756	**On Microsoft Windows 2000, corrupt messages display on the console.** On Windows 2000, for a non-English locale (such as Japanese) you might see corrupted messages displayed on the console. **Solution** Use the Admin interface to view the log messages.

ID	Summary
4739831	**A partially-deleted instance causes incorrect responses from some CLI commands.** If a server instance is partially deleted, the following problems are known to occur with some CLI commands (solutions are provided with each problem description): 1. The `create-instance` command in local mode reports that the instance exists even if there are no sub-directories under the instance folder. **Solution** Manually remove the leftover instance directory, then run the `create-instance` command. 2. The `list-instances` command in local mode includes the partially-deleted instance name and status. **Solution** Manually remove the leftover instance directory, then run the `list-instances` command. 3. On Microsoft Windows 2000, the `start-instance` command in remote mode displays a null string. **Solution** Manually remove the leftover instance directory, create a new instance, then run the `start-instance` command. 4. On Microsoft Windows 2000, the `stop-instance` command in both local and remote modes reports incorrect exceptions. In local mode, the command displays an incorrect message stating that the instance is not running. In remote mode, the command displays a null string. On Solaris, the `stop-instance` command in local mode incorrectly reports that the user does not have permission to access the instance's `config` directory although the `config` directory does not exist. **Solution** Manually remove the leftover instance directory.
4739891	**Deletion of a virtual server fails if the default web module referred to by the virtual server does not exist or has been undeployed.** **Solution** Set the Default Web Module field of the virtual server to None Selected, click OK to save the changes, then delete the virtual server.

ID	Summary
4740022	**SNMP: END OF MIB is returned when adding and starting a new instance server.** If you add and start a new instance without shutting down the instance server and subagent, an `END OF MIB` message is returned. **Solution** 1. To view a new instance, make sure the subagent and all the instance server processes are shut down. Under each server ->Monitoring -> "Enable SNMP Statistics Collection: on", apply the change, then restart each instance server, and start only one subagent process again. 2. If the subagent is already running, don't start any extra subagent processes in any instance. There can only be one master agent and one subagent for a Sun ONE Application Server installation (common for all domains/instances).
4737138	**License expired message does not appear at Microsoft Windows Services or at the DOS prompt.** When starting servers from Windows Services or from the DOS prompt command (`startserv.bat`) after license expiration, appropriate license expiration messages are not shown **Solution** Start servers from CLI (asadmin) or from Sun program icon
4780488	**Existence of multiple obj.conf files causes confusion.** Upon creation of a new Sun ONE Application Server instance, the *instance-dir*`/config/` directory will contain two `obj.conf` files, one named `obj.conf` and the other named v*irtual-server-name*`-obj.conf`, where *virtual-server-name* is the same value as the instance name for the virtual server that is created automatically during instance creation. The documentation refers to "modification of the `obj.conf` file" when it should refer to "modification of the `obj.conf` file associated with the virtual server of interest." When the Sun ONE Application Server is installed, the `obj.conf` and `server1-obj.conf` files exist under the `/domains/domain1/server1/config/` directory. The content in the file named `obj.conf` is overridden by the content of the `server1-obj.conf` file specified at the virtual server level. In effect, the file named `obj.conf` is not used by the Sun ONE Application Server instance. For example, if you modified the file named `obj.conf` while configuring the Sun ONE Application Server web server plug-in, your pass through settings will not take effect because the wrong `obj.conf` file has been modified. **Solution** If and when you need to modify the `obj.conf` file for an instance, modify the file prefixed with the virtual server name of interest.

ID	Summary
4938319	**Errors when using SSL and web server (reverse proxy) plug-in.** 502 errors occur when using SSL and the web server plug-in **Solution** Set the `keepAliveTimout` value to the same value in both the Sun ONE Web Server `magnus.conf` file and the Sun ONE Application Server's `init.conf` file. If these values are different the connection may be closed when the Application Server connects to the Web Server or the Web Server connects to the Application Server. If the connection is already closed, you see a 502 error.

Administration Interface

When using Administration interface, make sure that the browser is configured to check for newer versions of pages from the server, instead of picking these from cache. Generally, default browser settings would not cause problems.

- On Internet Explorer, make sure that Tools->Settings...->Check for newer versions of stored pages: is not set to 'Never'.
- On Netscape, make sure that Edit->Preferences...->Advanced->Cache->Compare the page in the cache to the page on the network: is not set to 'Never'.

This section describes the known Sun ONE Application Server 7 administration graphical user interface issues, and the associated solutions.

ID	Summary
4722607	**On Microsoft Windows 2000, cannot edit or remove entries within a newly created mime file that omits the .types extension.** On Windows 2000, the MIME file must have the .types extension following the file name in order for modifications to entries in the file. For example, `mime2.types` and not `mime2` **Solution** Use the `.types` extension for any mime file name.

ID	Summary
4725473	**External certificate nickname doesn't display on the Administration interface Nickname list.**

When you install an external certificate through the Sun ONE Application Server Administration interface, a problem is encountered when you attempt to enable SSL for the http-listener by using the certificate that is installed on the external cryptographic module. Although the installation of the certificate is successful, the certificate nickname does not display in the Administration interface.

Solution

1. Log in to the system where the Sun ONE Application Server software is installed as an Administrative User.
2. Link the http-listener to the certificate installed on the external cryptographic module. Execute the `asadmin` command. For more information on the `asadmin` command, see the `asadmin`(1M) man page.

```
/sun/appserver7/bin/asadmin create-ssl
   --user admin --password password
   --host host_name
   --port 8888
   --type http-listener
   --certname nobody@apprealm:Server-Cert
   --instance server1
   --ssl3enabled=true
   --ssl3tlsciphers +rsa_rc4_128_md5
  http-listener-1
```

This command establishes the link between the certificate and the server instance; it does not install the certificate (which was done using the Administration interface). Even though the certificate is linked with http-listener, the http-listener will be listening in non-SSL mode.

3. Enable the http-listener to listen in SSL mode by using the following CLI command.

```
/sun/appserver7/bin/asadmin  set
   --user admin
   --password password
   --host host_name
   --port 8888
   server1.http-listener.http-listener-1.securityEnabled=true
```

This command switches the server instance listening state from non-SSL to SSL.

After completing the preceding steps, the certificate is displayed in the Administration interface.

4. You can now use the Administration interface to edit the http-listener as needed.

ID	Summary
4728718	**When creating a new virtual server and a value is given for the location of the log file, a File Not Found" error is reported.** In the Administration interface, the log file field cannot be used to add any values. **Solution** Delete the virtual server just created, create the needed file, then recreate the virtual server. NOTE: To avoid the problem in the future—Always create the log file first, before attempting to create the new virtual server.

4741123	**On Solaris 9 update 2, default browser is incompatible with Sun ONE Application Server 7.**
	
	When you attempt to use the Sun ONE Application Server Administrative interface with the Solaris 9 4/03 operating environment default browser, the following error message is displayed:
	
	`Unsupported Browser: Netscape 4.78.`
	
	`It is recommended that you upgrade your browser to Netscape 4.79 or Netscape 6.2 to run the Sun ONE Application Server UI. Those who choose not to continue and not upgrade might notice degraded performance and/or unexpected behavior.`
	
	NOTE: If you are running the version of the Sun ONE Application Server Administration interface that is included in the Solaris 9 4/03 operating environment, you will need to use Netscape 4.79 or Netscape 7.0.
	
	Solution
	
	• For Sun ONE Application Server 7 standalone, upgrade to Netscape 4.79 or Netscape 6.2— Use `/usr/dt/bin/netscape6` instead of `/usr/dt/bin/netscape`.
	
	• For Sun ONE Application Server 7 bundled with Solaris, upgrade to Netscape 4.79 or Netscape 7—Use `/usr/dt/appconfig/SUNWns/netscape` instead of `/usr/dt/bin/netscape`.

4750616	**Access Control List (ACL) editing is not supported on some versions of Netscape Navigator.** If you attempt to edit ACL entries while using either Netscape Navigator, versions 6.x or 7.x, you might encounter intermittent problems, such as the browser disappearing or the ACL edit screen never displays. **Solution** Choose one of the following workarounds. • Use the supported 4.79 version of Netscape Navigator. • Manually edit the ACL file. For details on ACL file formatting, see the *Sun ONE Application Server Administrator's Guide*.

ID	Summary
4752055	**Netscape 4.8 produces warning message on Administration interface.** When using Netscape 4.8 to access the Administration interface, a warning appears indicating Netscape 4.8 is an unsupported browser. Although no issues have been identified when using Netscape 4.8 to run the Administration interface, more thorough testing needs to be completed on this version of the Netscape browser. **Solution** Select the Continue hyperlink from the warning message to continue using the Administration interface. Use Netscape 4.79, or upgrade to Netscape 6.2.
4760714	**An invalid Help button appears in the Install Certificate screen.** In the Install Certificate screen, which displays all the certificate information entered, an invalid Help button is present in the Administration interface. If you click this button, an error message is displayed indicating the help page was not found. Context-sensitive help is only available by clicking the Help link on the top frame of any page. **Solution** Click the Help link in the top pane for context-sensitive help.
4760939	**SSL: A self-signed certificate generated by certutil is not displayed on the Certificate Nickname list.** A self-signed certificate is generated by the `certutil` and Certificate Nickname is not displayed on the Administration interface. **Solution** To use a self-signed certificate, you must manually edit the `server.xml` file.
4848146	**Error occurs accessing the Administration interface if the browser uses a proxy server.** If your browser is set to use a proxy server and the proxy server is not configured to ignore localhost, an error occurs when you choose Start Admin Console from the Start menu. **Solution** Disable the proxy server. OR Include localhost in the list of domains to be ignored by their proxy server.
4957860	**On Red Hat Enterprise Linux AS 3.0 Failed to add MIME type.** When you attempt to add a MIME type to a MIME types file through the Administration interface, an error appears to prevent accessing the Global MIME Types page. **Solution** This problem happens because the default locale is set to `en_US.UTF-8` instead of `en_US`. The workaround is to set `export LANG=en_US`, then restart the Admin Server.

ID	Summary
5011969	**On Solaris x86, HTTP listener and IIOP listener pages in the Administration interface give errors.** **Solution** The problem is caused by certain versions of `jss3.jar`. Two workarounds exist: 1. For patch levels 115924-03, 115925-03, 115926-03, 115927-03, upgrade the SUNWjss package with a later version. 2. Remove the path to `jss3.jar` from the server's classpath. To remove it, open `server.xml` for editing. Remove `usr/share/lib/mps/secv1/jss3.jar` from the classpath. This is the first entry in the classpath unless you have explicitly modified it. Save `server.xml` and run `asadmin reconfig`. Before starting your server instance, you also need to rename `jss3.jar`.

Sun ONE Studio 4 Plug-in

This section describes the known Sun ONE Studio 4, Enterprise Edition (formerly known as Forte for Java) issues and associated solutions.

ID	Summary
4689097	**Error occurs when spaces are specified in directories to be used by Sun ONE Studio 4.** Sun ONE Studio 4 does not install correctly if a space is used in the directory structure. The installer checks for spaces in the install path, and, if found, displays an error dialog. **Solution** Do not use a space when specifying the install directory for the Sun ONE Studio 4 component of Sun ONE Application Server.
4720145	**ConnectionException was thrown while establishing a connection to the debugger.** Sun ONE Studio 4 prompts many times asking if you want to create a new debugging session and then throws the exception. **Solution** Restart the IDE.
4727932	**Using MAD environment in FFJ causes side effects.** Intermittent side effects occur when using MAD configurations with Sun ONE Studio 4. **Solution** Don't use Sun ONE Studio 4 with MAD configurations.

ID	Summary
4733794	**ejb-name changes applied at Application node are undeployable.** It is possible to change the `ejb-name` element of a bean, in the context of an application, using the dialog presented when you select the View EJB Names item of an application node's contextual menu (right-click menu). These changes are applied to the 'alt-dd' that is created as part of the packaging. The name change is *not* propagated to the Sun ONE Application Server `alt-dd`. **Solution** None.
4725779	**Pre-configured Sun ONE specific property values do not appear in the editor.** If you have a RAR file that has been configured for deployment to the Sun ONE Application Server, and try to look at the property values in the property sheet, you will see the default values, not the values specified in the `sun-ra.xml` file. **Solution** Extract the Sun-specific descriptor XML file from the RAR and put it in the same directory as the RAR.This allows you to edit the `s1as` descriptors. NOTE: The original contents of the RAR file will not be changed as a result of user edits this way, but the RAR file sent to the server will have the updated XML file in it.
4733794	**EJB name changes applied at Application node are undeployable.** It is possible to change the `ejb-name` element of a bean in the context of an application by using the dialog presented when the you select the View EJB Names item of an application node's contextual menu (right click menu). These changes are applied to the `alt-dd` that is created as part of the packaging. The name change is not propagated to the Sun ONE Application Server `alt-dd`. **Solution** None.

ID	Summary

4745283	**If only Admin Client is installed, App Client cannot be run.**
	If only Admin Client or Sun ONE Studio Plug-in is installed, you cannot run an App Client application. App Client is a separate package from Admin Client.
	Solution
	Install the App Client package. Get either a full installation (`appclient` script is under *SUNONE_INSTALL_ROOT*`/bin`), or get the `appclient` package from a remote machine where the Sun ONE Application Server installed.
	To get `appclient` package:
	1. Run *SUNONE_INSTALL_ROOT*`/bin/package-appclient[.bat]`
	This generates `appclient.jar` file in *SUNONE_INSTALL_ROOT*`/lib/appclient/appclient.jar`
	2. Distribute the `appclient.jar` to the remote machine that does not have the Sun ONE Application Server installed, then unjar `appclient.jar`. You should get an appclient directory containing all App Client libraries and JAR files.
	3. Modify the `bin/appclient` script that is packed in the `appclient.jar` file before first use. The `%CONFIG_HOME%` string should be substituted by the real path to `asenv.conf` (or `asenv.bat` for Windows 2000.)
	4. Configure `asenv.conf` (`asenv.bat` for Microsoft Windows) as follows:
	`%AS_INSTALL%=`*APPCLIENT_INSTALLED_ROOT*
	`%AS_JAVA%=`*Your_Installed_Java_Home*
	`%AS_IMQ_LIB%=`*APPCLIENT_INSTALLED_ROOT*`/imq/lib`
	`%AS_ACC_CONFIG%=`*APPCLIENT_INSTALLED_ROOT*`/config/sun-acc.xml`
	`%AS_WEBSERVICES_LIB%=`*APPCLIENT_INSTALLED_ROOT*`/lib`
	NOTE: The `appclient.jar` file is only intended to be run from a remote machine that has the same operating system as the machine where it was created. For example, `appclient.jar` created on a Solaris platform will not function on Windows 2000.
	For details, see the `package-appclient` manpage.

Sample Applications

- The sample applications source is set up with an ANT directory structure and applications are not Sun Java Studio-oriented. For this reason, you do not see icons for EJB modules, and so on. Only source files can be seen if a sample's `src` folder is mounted.
- Although Sun Java Studio is ANT enabled, it cannot deploy the sample applications using an ANT target. In other words, running the `ANT target = all` command does not produce the same result as running an `ant all` command from the shell.
- Existing ANT-styled applications can be successfully compiled using Sun Java Studio (ANT through Sun Java Studio).

This section describes known Sun ONE Application Server 7 sample application issues, and the associated solutions.

ID	Summary
4714439	**In PetStore, cannot add a user that already exists.** In the PetStore sample application, trying to add a user that already exists displays a stack trace on the screen. **Solution** None.

4726161	**Modified samples are not updated until redeployment.**
	If users attempt to deploy a sample more than once, after making small changes and repackaging the application, the following error message is displayed.
	`"Already Deployed"`
	This issue affects most of the samples since they use the Ant utility and the `common.xml` file, which have the "deploy" target, thus mixing deployment of applications with registration of resources.
	Solution
	Choose one of the following workarounds:
	For the majority of the sample applications that use the Ant utility `build.xml` files, which include the `common.xml` file, type the following command.
	`% asant deploy_common`
	For all other sample applications, type the following commands.
	`% asant undeploy`
	`% asant deploy`

4733412	**Sample application converter has redundant JAR file in web module.** The converter application has a redundant stateless-converter EJB JAR file under the `WEB-INF/lib` directory. The EAR file is located under the sample application directory. From the bundled Solaris build, it is here: `/usr/appserver/samples/ejb/stateless/converter/stateless-converter.ear` Extract this file and go to the `WEB-INF/lib` directory of the web module named stateless-converter and you will see the file. This redundant JAR file applies to all the web modules which call the EJB module. The root cause of the problem is the `common.xml` file used to build the application. **Solution** None. Doesn't affect functionality when running sample application.

ID	Summary
4739854	**Instructions needed for deploying resources using asadmin.**
	In the documentation for some samples, your are instructed to deploy the application using the `asadmin` command, but no explanation is provided on how to create the needed resources.
	Solution
	You can deploy the application/resource by using the `asadmin` command and can get more information by referring to the sample's `build.xml` file. More information can also be found in the printout from running `asant deploy`.
	For JDBC/BLOB example, the following steps create the resources using `asadmin` (assuming the hostname is `jackiel2` and the username/password/port for the Admin Server is admin/adminadmin/4848):
	`asadmin create-jdbc-connection-pool --port 4848 --host jackiel2 --password adminadmin --user admin jdbc-simple-pool`
	`--datasourceclassname com.pointbase.jdbc.jdbcDataSource --instance server1`
	`asadmin set --port 4848 --host jackiel2 --password adminadmin --user admin`
	`server1.jdbc-connection-pool.jdbc-simple-pool.property.DatabaseName=jdbc:pointbase:server://localhost/sun-appserv-samples`
4747534	**The lifecycle-multithreaded sample application asks for the admin user password 8 times.**
	While deploying the sample application `lifecycle-multithreaded.jar` file using the `asant deploy` command, you are prompted to enter the admin user password eight times.
	Solution
	None.

ID	Summary

4748535	**Miscellaneous sample file issues.**
	1. Logging sample generates multiple log files, for the fourth logging option.
	2. Logging sample has a redundant `log.properties` file.
	3. Instructions for the security grant in sample documentation are not fully correct.
	Solution
	1. Close the handler before removing it. See `initLog()` method in `GreeterServlet.java`.
	`private void initLog(String log_type) {`
	`  //Remove all handlers`
	`  Handler[] h = logger.getHandlers();`
	`  for (int i = 0; i < h.length; i++) {`
	`  h[i].close(); //must do this`
	`  logger.removeHandler(h[i]);`
	`  }`
	`  ...`
	`}`
	Also, open file handler with an append option. See `addHandler()` in `GreeterServlet.java`. Write:
	`Handler fh = new FileHandler(log_file, true);`
	instead of
	`Handler fh = new FileHandler(log_file);`
	2. Edit the `build.xml` file as follows:
	`< <fileset dir="${src.docroot}" excludes="cvs,annontation"/>`
	`> <fileset dir="${src.docroot}"`
	`excludes="cvs,annontation,log.properties"/>`
	3. In "Running the Sample Application" section, remove `domains/domain1/` from instructions to adding security grant entries to the `server.policy` file.

4752731	**PointBase 4.3 replaced with PointBase 4.4.** When downloading and installing PointBase with the samples, (`http://`*`hostname`*`:`*`port`*`/samples/docs/pointbase.html`) the instructions refer to PointBase 4.3. However, PointBase 4.3 as been replaced by PointBase 4.4. **Solution** In the "Update Samples Ant Files" section, use the `pbtools44.jar` and `pbclient44.jar` files instead of the `pbtools43.jar` and `pbclient43.jar` files. In the "Starting PointBase" section, for PointBase downloaded and installed separately on UNIX platforms, use *pointbase_install_dir*`/tools/server/start_server` to start PointBase.

ORB/IIOP Listener

This section describes known ORB/IIOP-Listener issues and associated solutions.

ID	Summary
4743366	**The address attribute in the iiop-listener element in the server.xml file does not support ANY.** In the default configuration, the Sun ONE Application Server is configured with the address value of "0.0.0.0" in the `iiop-listener` element. This default configuration does not listen on IPv6 interfaces. It only listens on all IPv4 interfaces on a system. The value of ANY in the address element of the iiop-listener, that would allow the server to listen on all interfaces (IPv4 or IPv6) on a system, is not supported. The ANY value in the address attribute of the iiop-listener element in the `server.xml` file allows for listening on all interfaces available on a system.This support includes both the IPv4 and IPv6 interfaces. **Solution** For both IPv4 and IPv6 interfaces, use "::" in the address value of the `iiop-listener` element. This solution is only applicable to Solaris 8.0 and above.
4743419	**RMI-IIOP clients will not work for IPv6 addresses where DNS address lookups fail for the IPv6 address.** If a DNS lookup for an IPv6 address fails, clients of Remote Method Invocation-Internet Inter-ORB Protocol (RMI-IIOP) will not work for IPv6 addresses. **Solution** Domain Name Service (DNS) should be set up at the deployment site in order to look up an IPv6 address.
4810199	**The optimized CORBA Util delegate, which is bundled with Sun ONE Application Server 7.0 Standard Edition, is not enabled by default.** A default installation of Sun ONE Application Server 7 does not enable the use of the high performance CORBA Util delegate. As a result, you might experience a significant decrease in performance when using the JDK-bundled or Sun ONE Application Server-bundled ORB. Refer to the "High performance CORBA Util Delegate Class" section in the "ORB Tuning" module of the *Sun ONE Application Server Performance Tuning Guide*. **Solution** You can improve performance significantly by enabling the use of a high performance CORBA Util Delegate implementation. To enable the alternate CORBA Util Delegate, add the following to the Sun ONE Application Server configuration file, `server.xml`: `<jvm-options>-Djavax.rmi.CORBA.UtilClass=com.iplanet.ias.util.orbutil.IasUtilDelegate</jvm-options>`

ID	Summary
4847269	**The J2SE 1.3.1_X client cannot communicate with Sun ONE Application Server 7.** When the J2SE 1.3.1_X client communicates with Sun ONE Application Server 7, the client will core dump. **Solution** Use J2SE 1.3.1_04 for the client.

Internationalization (i18n)

This section describes known internalization issues and the associated solutions.

ID	Summary
4761017	**On Solaris bundled version: Administration interface displays in English.** Because there is no language entry for Admin Server instance on the Solaris bundled version, the Sun ONE Application Server Administration interface displays in English for the localized version. **Solution** Manually set the locale entry in the `server.xml` file
4957904	**User cannot launch the Chinese version of the Administration interface after installation.** After installing the Chinese version of Sun ONE Application Server, the Administration interface displays in English. **Solution** Manually set the locale entry in the `server.xml` file and restart the server.
N/A	**On Solaris, there are limitations associated with the Netscape 4.79 browser.** • When using Netscape 4.79 on Solaris, localized JavaScript messages display garbled characters. JavaScript cannot handle UTF-8 encoding. • When using Netscape 4.79 on Solaris in the Chinese GB18030 locale, GB18030 characters are not accepted. **Solution** On the Sun web site, download Netscape 6.23 or 7.0 for Solaris. This solves both problems.

Documentation

This section describes the known documentation issues and associated solutions.

ID	Summary
4839719	**Developer's Guide to Web Applications: Description of cookieName property misleading.** In the *Developer's Guide to Web Applications*, the documentation of the `sun-web.xml` file lists the `cookieName` property of the `cookie-properties` subelement and implies that the value of the `cookieName` property can be changed from the default value. However, the value cannot be changed; it must always be `JSESSIONID`. **Solution** None.

ID	Summary
4720171	**There is no documentation explaining the use of indexed deployment directories.**

The numbering scheme part of a deployed application's directory name has been implemented as an indexing mechanism to allow a developer to modify a JAR and/or class file associated with the deployed application. This is significant to the Windows platform due to a sharing violation error that occurs during an attempt to overwrite a loaded file; Windows places a file lock on the loaded file. The file is loaded into the server instance or the IDE during session startup. With the sharing violation error, two options are possible:

- Compile the updated class file (originally part of that JAR file) and place it first in the classpath in order to be loaded before the older classes, then allow for the Sun ONE Application Server to reload this application (as long as reload is active), OR
- Update the JAR file, create a new EAR file, and redeploy the application.

NOTE: Redeployment of the application on the Solaris platform is not necessary since there are no file locking constraints.

Solution

When making changes to an already deployed application on the Windows platform for IDE setup, ANT file copy, or compile or other operations, note that a new directory will be created with an incremented index number as the workaround for the file locking constraint. For example: On the Solaris platform the J2EE application, helloworld, is deployed to the Sun ONE Application Server with the following directory structure:

```
appserv/domains/domain1/server1/applications/j2ee-apps/helloworld_1
```

A change is then to be made to a servlet that's part of this deployed application (for example, `HelloServlet.java`). The Sun Java Studio IDE is started, the source file for this servlet is changed and compiled with the `javac` target set to the above directory. With the source compiled to the proper location, a reload file exists for this application, the reload flag in `server.xml` is set to true, and, with the server instance running, the changes take effect without having to reassemble the application and redeploy it.

For the Windows platform, the JAR or class file cannot be altered and updated due to the file locking issue. Therefore, there are two methods of dealing with this issue on Windows:

- Compile the changed source file and prepend the class file or JAR in the classpath in order to have the source changes picked up, OR
- Make the changes to the helloworld source, assemble it, and redeploy it without undeploying the previous deployment of helloworld.

The second option is the preferred method since this option results in the use of the incremented index number appended to the deployed application's directory name. Therefore, after a second deployment of helloworld, the directory structures would be:

```
appserv/domains/domain1/server1/applications/j2ee-apps/helloworld_1
appserv/domains/domain1/server1/applications/j2ee-apps/helloworld_2
```

The second deployment of helloworld would be deployed under `helloworld_2`.

ID	Summary

4851218	**You cannot use keytool to generate certificates with Sun ONE Application Server.**
	Certificates generated with keytool are not compatible with Sun ONE Application Server.
	Solution
	You can use `certutil` to generate self-signed certificates. It is available as an add-on to the Sun ONE Application Server at:
	`http://wwws.sun.com/software/download/app_servers.html`
	For information on using `certutil`, see:
	`http://www.mozilla.org/projects/security/pki/nss/tools/certutil.html`

4870888	**Getting Started Guide built into the product is incorrect.** The *Getting Started Guide* that is built into the product contains incorrect information regarding platforms and sizing. It also is not fully 508-compliant. **Solution** For correct platform and sizing information, refer to the *Installation Guide* or the *Platform Summary*. For a 508-compliant version of the *Getting Started Guide*, see the version posted here: `http://docs.sun.com`
4875280	**Online help has some incorrect descriptions.** **Solution** • In the `asprfhls.html` file: Determines whether SSL3 is enabled. For administrative purposes, deselecting SSL2 and using TLS only is recommended. (file name asprfhls.html) If your browser does not support TLS, then select SSL3. Instead, this should be: Determines whether SSL3 is enabled. For administrative purposes, deselecting SSL3 and using TLS only is recommended. If your browser does not support TLS, then select SSL3. • In the asprflo.html file: Create Console (Window only). When checked, a console window is created for stderr output. Instead, this should be: Create Console (Windows only). When checked, a console window is created for stderr output.

ID	Summary

4879044	**Administrator's Guide: Compiler path is not applicable.**
	Solution
	On Page 196 of the Update 1 *Sun ONE Application Server Administrator's Guide*, the following is incorrect.
	`CC=/usr/dist/share/devpro/5.x-sparc/bin/cc`
	The above path is a Sun Internal path. Instead, the compiler's default installation directory should be:
	`/opt/SUNWspro`

4884043	**Configuration File Reference: Transmit File parameter default is stated incorrectly.** **Solution** The document description for the `TransmitFile` parameter in the `nsfc.conf` file specifies the following default: (for Unix) i.e. `TransmitFile=off` This is incorrect.The Transmit File check box by default is "enabled". As described in the document, it should have been disabled.
4890285	**Some documents are not updated for the Solaris x86 platform.** In documents that list supported platforms for Sun ONE Application Server, the Solaris x86 platform might not be included. For the latest platform information, see the *Platform Summary*. **Developer's Guide to NSAPI:** Where the manual refers to SPARC, the references should be to Solaris (Solaris includes SPARC and x86). On Page 158 and 159, SPARC should not be specified. **Solution** Refer to "Solaris x86 Limitations" on page 4 for a list of Solaris x86 limitations in this release. The documentation does not always specify these limitations.
4893954	**Administrator's Guide doesn't include the information that log rotation using the Solaris cron script restarts the Sun ONE Application Server.** **Solution** Two types of log rotation are available: Internal-daemon log rotation happens within the HTTP daemon, and can only be configured at startup time. Internal daemon log rotation allows the server to rotate logs internally without requiring a server restart. Scheduler-based (cron-based) log rotation is initialized at server startup. If rotation is turned on, the server creates a time-stamped access log file and rotation starts at server startup. This type log rotation internally calls the `rotatelog` script, which restarts the application server process.

ID	Summary
4896094	**Administrator's Guide: Need instructions for setting ACC_CONFIG variable at installation.** **Solution** There are no instructions in the documentation for setting the ACC_CONFIG variable after creating domain and server instances. After the "Deploying Applications" section in the *Sun ONE Application Server Administrator's Guide*, the following text needs to be added: In addition to the above steps, you need to modify the `asenv.conf` file. After creating the domains, set the value of the AS_ACC_CONFIG variable to the `sun-acc.xml` file located in the *server_instance_config* directory. If this value is not set properly, you might get errors while running the applications related to the Application Client Container (ACC). For example: `AS_ACC_CONFIG=/var/appserver/domains/domain1/server1/config/sun-acc.xml` where server1 is the application server instance you have created.

ID	Summary
4913290	**Form Based Authentication does not provide the same functionality as in 6.5**

Applications developed on iPlanet Application Server 6.5 that use form-based authentication can pass the request parameters to the Authentication Form or the Login page. The Login page could be customized to display the authentication parameters based on the input parameters.

Solution

Sun ONE Application Server 7 does not support the passing of request parameters while displaying the Login page. The applications that uses form-based authentication, which passes the request parameters can not be migrated to Sun ONE Application Server 7. Porting such applications to Application Server 7 requires significant changes in the code. Instead, you can store the input parameters in the session which can be retrieved during the display of Login page.

The following code example demonstrates the workaround:

Before changing the code in 6.5:

```
---------index-65.jsp -----------

<%@page contentType="text/html"%>
<html>
<head><title>JSP Page</title></head>
<body>
go to the <a href="secured/page.jsp?arg1=test&arg2=me">secured area</a>
</body>
</html>

----------login-65.jsp--------------

<%@page contentType="text/html"%>
<html>
<head> </head>
<body>
<!-- Print login form -->
<h3>Parameters</h3><br>
out.println("arg1 is " + request.getParameter("arg1"));
out.println("arg2 is " + request.getParameter("arg2"));
</body>
</html>
```

ID	Summary
4913290 (Continued)	After changing the code in 7.0: `---------index-7.jsp -----------` `<%@page contentType="text/html"%>` `<html>` `<head><title>JSP Page</title></head>` `<body>` `<%session.setAttribute("arg1","test"); %>` `<%session.setAttribute("arg2","me"); %>` `go to the <a href="secured/page.jsp">secured area</a>` `</body>` `</html>` The index-7.jsp shows how you can store the request parameters in a session. `----------login-7.jsp--------------` `<%@page contentType="text/html"%>` `<html>` `<head> </head>` `<body>` `<!-- Print login form -->` `<h3>Parameters</h3> ` `<!--retrieving the parameters from the session -->` `out.println("arg1 is " + (String)session.getAttribute("arg1"));` `out.println("arg2 is " + (String)session.getAttribute("arg2"));` `</body>` `</html>`

ID	Summary
4913611	**J2EE spec incompatibilities are not documented.** **Solution** **Developer's Guide to Web Applications:** The following note applies to the description of the delegate attribute: "If the delegate flag is set to its default value of false, the classloader delegation behavior complies with the Servlet 2.3 specification, section 9.7.2. If set to true, classes and resources residing in container-wide library JAR files are loaded in preference to classes and resources packaged within the WAR file, contrary to what this specification recommends. Portable programs that use this flag should not be packaged with any classes or interfaces that are a part of the J2EE specification. The behavior of a program that includes such classes or interfaces in its WAR file is undefined." **Developer's Guide and the Developer's Guide to Enterprise JavaBeans Technology**: The following note applies to the descriptions of the pass-by-reference element: "If the pass-by-reference flag is set to its default value of false, the passing semantics for calls to remote interfaces comply with the EJB 2.0 specification, section 5.4. If set to true, remote calls involve pass-by-reference semantics instead of pass-by-value semantics, contrary to this specification. Portable programs should not assume that a copy of the object is made during such a call, and thus that it's safe to modify the original. Nor should they assume that a copy is not made, and thus that changes to the object are visible to both caller and callee. When this flag is set, parameters and return values should be considered read-only. The behavior of a program that modifies such parameters or return values is undefined."
4915451	**The definition of idle-timeout-in-seconds in the Administrator's Guide is incorrect.** **Solution** In *Sun ONE Application Server Administrator's Guide* Chapter 6, Monitoring the Sun ONE Application Server, the definition of idle-timeout-in-seconds includes the following sentence: If the current size is less than `steady-pool-size`, it is increased by `pool-resize-quantity`, with a ceiling of min (`current-pool-size`+pool + `resize-quantity`, `max-pool-size`). This should be changed to: If the current size is less than `steady-pool-size`, it is increased by `pool-resize-quantity`, with a ceiling of min (`current-pool-size` + `pool-resize-quantity`, `max-pool-size`).

ID	Summary

4950035, 4976502, 5024804	**The information on enabling statistics with stats-xml in the Performance Tuning Guide is incorrect.**
	Solution
	In the *Sun ONE Application Server Performance Tuning Guide* in the "Tuning Sun ONE Application Server" chapter, the description of enabling statistics with `stats-xml` contains the following errors:
	• You must make the change to the *instance_name*`-obj.conf` file, not the `obj.conf` file as stated.
	• The example is incorrect. The entries for:
	`NameTrans fn="assign-name" from="/stats-xml/*" name="stats-xml"` and
	`NameTrans fn=assign-name from="/.perf" name="perf"`
	must appear before the line:
	`NameTrans fn=document-root root="$docroot"`
	otherwise they'll be ignored. The current example does not have the lines in the correct order.
	• The introductions to Figure 4.1 and Figure 4.2 are incorrect.
	Figure 4.1 should say that it shows a sample *instance_name*`-obj.conf` file which has `stats-xml` enabled.
	Figure 4.2 should say that is shows a sample `init.conf` file which has `stats-xml` enabled.

ID	Summary

4983280, 4992520	**Web server plug-in installation instructions are incorrect**
	In the *Sun ONE Application Server Administrator's Guide*, the instructions for installing the web server plug-in are incorrect.
	Solution
	The procedure should be as follows:
	Changes to Sun ONE Web Server
	Take backups of critical configuration files, such as `magnus.conf` and `obj.conf`, before making changes to these files.
	1. Create a directory in the web server installation area that will contain the web server (passthrough) plug-in. For example:
	`cd /`*`webserver_install_dir`*`/plugins`
	`mkdir -p passthrough/bin`
	2. Copy the passthrough plug-in from Sun ONE Application Server installation to this new, web server directory. For example:
	`cd` *`appserver_install_dir`*`/lib`
	`cp libpassthrough.so` *`webserver_install_dir/`*`plugins/passthrough/bin`
	For Windows, copy the `passthrough.dll` file.
	3. Edit the `magnus.conf` file, found under *`webserver_install_dir`*`/https-host.domain/config`, and append the following lines. These lines need to be entered as 2 lines, each starting with `Init`.
	`Init fn=load-modules shlib="`*`your_app_server_install`*`/lib/libpassthrough.so "funcs="init-passthrough,auth-passthrough,check-passthrough, service-passthrough"NativeThread="no"`
	`Init fn="init-passthrough"`

ID	Summary

4983280 (Continued)	4. Edit the web server's `obj.conf` file, found under *webserver_install_dir*`/https-host.domain/config`, and add the `NameTrans` directive. It must be entered on a single line. The `NameTrans` directives are executed in the order they appear, so make sure your addition is in proper position. If in doubt, put it above all other `NameTrans` directives Be careful with whitespace (spaces/tabs) in this file.The way `obj.conf` gets parsed causes lines that start with whitespace to be ignored, since they are considered to be part of the previous line's directive. The example below only redirects for a context root named "webapp-context". Add more context root names for multiple applications, or use a catch-all directive: from="/*"
	
	`<Object name="default">`
	`NameTrans fn="assign-name" from="(/webapp-context|/webapp-context/*)`
	`"name="passthrough"`
	
	`...`
	`</Object>`
	
	5. Add the following lines in the web server's `obj.conf` file. Replace *app_server*`.`*domain*`:`*port* with the server name and port number of your Sun ONE Application Server. Note that you need to enter the `Service` line as one line.
	
	`Object name="passthrough">`
	`ObjectType fn="force-type" type="magnus-internal/passthrough"`
	`PathCheck fn="deny-existence" path="*/WEB-INF/*"`
	`Service type="magnus-internal/passthrough" fn="service-passthrough"`
	`servers="http://`*app_server*`.`*domain*`:`*port*`"`
	`Error reason="Bad Gateway" fn="send-error" uri="/badgateway.html"`
	`</Object>`
	
	6. Restart the Sun ONE Web Server instance.
	
	If required for authentication reasons, on the Sun ONE Application Server you may need to change `init.conf` and *server_name*`-obj.conf`. These steps are required if you have a web server running in SSL mode while the Sun ONE Application Server is non-SSL. In this case any redirects fail unless you add the lines below to the proper Sun ONE Application Server files. If you don't need this information, skip these steps:
	
	7. In *app_server_instance*`/config/init.conf`, add the following lines as two lines, each starting with `Init`:
	
	`Init fn="load-modules" shlib="/`*app_server_install*`/lib/libpassthrough.so"`
	`funcs="init-passthrough,auth-passthrough,check-passthrough,`
	`service-passthrough"shlib_flags="(global|now)"`
	`Init fn="init-passthrough"`
	
	8. In */*domain*/*server_instance*/config/*server_instance*`-obj.conf`, enter the following lines:
	
	`<Object name="default">`
	`AuthTrans fn="match-browser" browser="*MSIE*" ssl-unclean-shutdown="true"`
	`AuthTrans fn="auth-passthrough"`
	`....`
	`</Object>`

ID	Summary
4986222	**Clarify documentation relating to JMS.** The documentation refers to an incorrect version of the Sun ONE Message Queue documentation. The description of the `server.xml` `jms-service` property `instance-name` is incorrect in the *Administrator's Configuration File Reference* and in the *Developer's Guide to J2EE Features and Services* is incorrect. **Solution** For the correct version of the Sun ONE Message Queue documentation, refer to `http://docs.sun.com/db/prod/s1.s1msgqu`. The documentation for the `jms-service` property `instance-name` says that the Sun ONE Message Queue broker instance name is always the concatenation of the domain and server instance name. That is not true. You can use any name.
5003309	**Administrator's Guide: the section titled "Deploying Static Content" contains an incorrect URL.** **Solution** The URL: http://server:port/NASApp/&ltcontext_root/index.html Should be: http://server:port/tcontext_root/index.html
N/A	**J2EE CA SPI Administrator's Guide refers to wrong book title.** The *Sun ONE Application Server J2EE CA SPI Administrator's Guide* refers to *Sun ONE Application Server J2EE CA SPI Developer's Guide*. This title is incorrect. **Solution** These references should be to the *Sun ONE Application Server Developer's Guide*.
N/A	**Sun ONE Application Server Administrator's Guide doesn't document using escape characters for the asadmin utility properly for Linux.** **Solution** When using the `asadmin` command in multimode on Linux, use a single backslash character to escape reserved characters such as colons. For example:`create-jdbc-connection-pool --datasourceclassname oracle.jdbc.pool.OracleDataSource --property url=jdbc\:oracle\:thin\:@1asperf\:1521\:ntdb01":user=testprod:password=testprod rekla-pool` The value of the URL property will then be stored with the proper syntax for a JDBC connection string

ID	Summary

5015994	**Additional recommended configurations to improve performance.**
	Solution
	If you change the default Sun ONE Application Server configuration by using the settings described below, you may see improved performance. These settings are found in your server instance's `server.xml` file.
	Add or change the following settings:
	`<jvm-options>-server -Xss128k</jvm-options>`
	`<jvm-options>-Xms256m -Xmx256m</jvm-options>`
	`<jvm-options>-XX:+AggressiveHeap</jvm-options>`
	`<jvm-options>-XX:+DisableExplicitGC</jvm-options>`
	`<jvm-options>-Djavax.rmi.CORBA.UtilClass=com.iplanet.ias.util.orbutil.IasUtilDelegate </jvm-options>`
	`<orb message-fragment-size="1024" steady-thread-pool-size="40" max-thread-pool-size="70" idle-thread-timeout-in-seconds="300" max-connections="1024" monitoring-enabled="false"/>`
	`<mdb-container steady-pool-size="32" pool-resize-quantity="16" max-pool-size="1024" idle-timeout-in-seconds="600" monitoring-enabled="false">`
	Remove the following setting:
	`<jvm-options>-Dsun.rmi.dgc.server.gcInterval=3600000</jvm-options>`
	In addition, if the machine has enough memory, you should increase the initial heap size to 1024M (3500M on Solaris systems).

ID	Summary

5031531	**The Performance Tuning Guide does not include information on maximum heap space.**
	Solution
	The maximum heap space depends of various factors:
	• Maximum address space for a process (`maxPAS`)
	• Space that the process needs for stack space (`stack`)
	• Space that the process needs for libraries (`libs`)
	The following equation shows the value for the maximum heap space:
	`MaxHeapSpace = maxPAS - stack - libs`
	The maximum address space per process varies by platform:
	`x86 / Redhat Linux 32 bit 2 GB`
	`x86 / Redhat Linux 64 bit 3 GB`
	`x86 / Win98/2000/NT/Me/XP 2 GB`
	`x86 / Solaris x86 (32 bit) 4 GB`
	`Sparc / Solaris 32 bit 4 GB`
	`Sparc / Solaris 64 bit terabytes`
	Stack space and library space vary by individual application.

Redistributable Files

Sun ONE Application Server 7 does not contain any files which you can redistribute.

How to Report Problems and Provide Feedback

If you have problems with Sun ONE Application Server, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at
  http://www.sun.com/service/sunone/software

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

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. Use the web-based form to provide feedback to Sun:

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Please provide the full document title and part number in the appropriate fields. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document. For example, the part number of this Release Notes document is 817-7241.

Additional Sun Resources

Useful Sun ONE information can be found at the following Internet locations:

- Sun ONE Application Server product documentation:
  http://docs.sun.com/db/prod/s1.asse
- Sun ONE Documentation
  http://docs.sun.com/prod/sunone
- Sun ONE Professional Services
  http://www.sun.com/service/sunps/sunone

- Sun Software Products and Service
  http://www.sun.com/software
- Sun Software Support Services
  http://www.sun.com/service/sunone/software
- Sun Software Support and Knowledge Base
  http://www.sun.com/service/support/software
- Sun Support and Training Services
  http://training.sun.com
- Sun ONE Consulting and Professional Services
  http://www.sun.com/service/sunps/sunone
- Sun Developer Network
  http://developers.sun.com
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  http://www.sun.com/developers/support
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  http://www.sun.com/software/training
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