# Sun<sup>™</sup> ONE Application Server 7 Release Notes

Version 7, Update 1

Part Number 817-2164-10 October 2003

These release notes contain important information available at the time of the Version 7 Update 1 release of the Sun<sup>TM</sup> Open Network Environment (ONE) Application Server product. New features and 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 1 product.

This document contains the following sections:

- What's New in the Sun ONE Application Server 7 Product
- Platform Summary
- Documentation
- Accessibility
- Software and Hardware Requirements
- Upgrade Notes
- Resolved Issues
- Known Problems and Limitations
- How to Report Problems
- For More Information
- Revision History

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

Information on what's new in the Sun ONE Application Server 7, Update 1 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#hic

# **Platform Summary**

Information on the supported platform for the Sun ONE Application Server 7, Update 1 product can be found in the Sun ONE Application Server Platform Summary document at this location:

http://docs.sun.com/db/prod/s1.asse#hic

### **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
- Accessibility

### Sun ONE Application Server 7 Documentation

In addition to these release notes, the Sun ONE Application Server 7, Update 1 includes an entire set of documentation. The documents in Update 1 have different part numbers from documents in the initial release of the Sun ONE Application Server product.

### NOTE

Some documents may be posted after the release of Sun ONE Application Server 7, Update 1. If a document listed here is not available on the Sun documentation site, check back later.

For significant issues, a document may be revised. In this case, the revised version will be posted to this site. The date last updated is displayed in the top right corner of the contents page for the HTML version of the document.

The Sun ONE Application Server 7, Update 1 documents can be found at this location:

http://docs.sun.com/db/prod/sl.asse#hic

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—(PN 817-2168-10) Provides a comprehensive, table-based summary of supported hardware, operating system, JDK and JDBC/RDBMS.
- 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 817-2169-10) 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 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 Services and APIs—(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 817-1953-10) 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.
- Sun ONE Studio 4, Enterprise Edition for Java with Application Server 7
  Tutorial—Provides an introduction to using Sun ONE Studio 4 with the Sun ONE
  Application Server.
- Sun ONE Application Server Studio Online Help—Provides content-specific online help for the Sun ONE Application Server modules that integrate with the Sun ONE Studio 4 product.

### 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.s1msqqu

### Sun ONE Studio 4 Documentation

The Sun ONE Studio 4, Enterprise Edition product that is bundled with the Sun ONE Application Server has its own documentation that can be found at the following locations.

• For Sun ONE Studio 4, Enterprise Edition documentation:

```
http://docs.sun.com/db/col1/790.3
```

Other Sun ONE Studio 4 documentation that may be of help can be found here:

```
http://forte.sun.com/ffj/documentation/index.html
```

# 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<sup>™</sup> 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.

# Software and Hardware Requirements

Information on the platform requirements for the Sun ONE Application Server 7, Update 1 product can be found in the *Sun ONE Application Server Platform Summary* document at this location:

http://docs.sun.com/db/prod/sl.asse#hic

The following table summarizes the Sun ONE Application Server requirements.

Operating System	Architecture	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space
UNIX	•			-	
<ul> <li>Sun Solaris 8 or 9 for SPARC®</li> <li>Sun Solaris x86 Version 9, Update 2 (Solaris bundled and the Sun Java Enterprise System only)</li> </ul>	32 and 64 bit 32 bit	256 MB without Sun ONE Studio 512 MB with Sun ONE Studio	512 MB	250 MB free	500 MB free
Microsoft Windows					
<ul> <li>Windows 2000         Advanced Server,         SP2</li> <li>Windows 2000         Server, SP2</li> <li>Windows 2000         Professional, SP2</li> </ul>	Intel 32 bit	256 MB without Sun ONE Studio 256 MB with Sun ONE Studio	256 MB without Sun ONE Studio 512 MB with Sun ONE Studio	250 MB free	500 MB free
Windows XP     Professional					

### 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, 108827-26, 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.

# **Upgrade Notes**

If you are upgrading an existing version of Sun ONE Application Server 7 to Sun ONE Application Server 7, Update 1, you will want to select the upgrade archive on the download site. Full instructions for upgrading to Sun ONE Application Server, Update 1 are contained in the Sun ONE Application Server Update 1 Installation Guide at this location:

http://docs.sun.com/db/prod/s1.asse#hic

NOTE	The upgrade program is not available for Simplified Chinese or
	Japanese. Therefore, if you are upgrading from an existing
	installation to Sun ONE Application Server 7, Update 1 in Simplified
	Chinese or Japanese, you will need to use the uninstall program to
	uninstall your existing version of Sun ONE Application Server, then
	do a full install of Sun ONE Application Server 7, Update 1.

Instructions are contained in the *Sun ONE Application Server 7*,

Update 1 Installation Guide.

### Resolved Issues

This section lists the issues resolved for the Sun ONE Application Server 7, Update 1 product.

ID	Summary
4717324 Security information is not getting passed to the server from the RMI-IIOP Client.	
4735625	Online help doesn't explain clearly how to use the Administration interface Profiler page.
4737808	Invalid JAR deployment results in confusing messages.
4740476	Online help doesn't explain Verifier and Precompile JSPs.

ID	Summary		
4742620	The asadmin deploy command documentation is incorrect.		
4745637	Overloading of finder and selector methods causes parameter error.		
4748351	Key columns don't appear to be mapped to key fields.		
4755711	$Invalid\ argument (s)\ for\ '<'\ occur\ when\ testing\ applications\ on\ Sun\ ONE\ Application\ Server\ 7.$		
4756093	Redeployment of an already deployed CMP-based application fails after server restart.		
4756981	Permission problem occurs during the deployment process.		
4758671	i18n: asadmin help does not pick up man pages in JA locale.		
4764931	CMP 11finders are duplicated after deployment.		
4765588	Proxy plug-in configuration setup steps are not accurate.		
4766638	Scenarios for Sun ONE Studio 4 plug-in installation are missing.		
4768721	Non-package install does not load libnspr_flt4.so causing performance degradation.		
4768847	Cannot deploy an EAR file that contains subdirectories.		
4769194	Exception thrown when Sun ONE Application Server 7 tries to compile a JSP.		
4770733	CORBA Tie objects are unnecessarily cached in two separate tables.		
4770939	The Commit C option for EJBs has an inefficient implementation.		
4771005	PIORB is slow when ClientRequestInterceptor is used.		
4774848	Client cert authentication does not work through proxy plug-in.		
4776350	The com.sun.enterprise.util.Utility.getPropertiesFromFile is not JavaWebStart friendly.		
4778410	EJBQL projections fail if the query constraint navigates two collection relationships.		
4782108	Problem occurs when RequestDispatcher is used to call servlets between web applications.		
4783983	i18n: Can't redirect to Japanese file name or URL using sendredirect.		
4787940	Per Thread Client Programatic Login doesn't work when the client is running as standalone application outside the Sun ONE Application Server JVM.		
4811414	Default policy file prevents use of IasUtilDelegate optimizations.		
4812427	i18n: On Microsoft Windows: Temporary Directory is displayed in English.		
4812717	i18n: English page is displayed after updating information.		
4813680	Passthrough from Sun ONE Web Server 6 to Sun ONE Application Server 7does not work properly.		
4823065	i18n: Only language (not country) is used to load some pages for the Administration interface.		

### **Known Problems and Limitations**

This section describes known problems and associated workarounds for the Sun ONE Application Server 7, Update 1 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)
- Solaris x86 Platform (Solaris Bundled and Java Enterprise System Only)

### 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:

 $servlet\_jsh\_HttpServletRequestWrapper\_1\\servlet\_jsh\_HttpServletRequestWrapper\_servlet\_war\\WEB-INF\\classes\\tests\\javax\_servlet\_http\\HttpServletRequestWrapperConstructorTestServlet.class$ 

Example of a long path name:

Sun ONE Application Server is installed as drive \:> Sun \ApplicationServer

#### Solution

Consider the following solutions:

- 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 <code>java.lang.UnsatisfiedLinkError</code> while instantiating AWT objects used by SetupSDK/Webstart Wizard's installer framework.

### Solution

- Install X Windows support packages temporarily, removing them after installing the Sun ONE Application Server product.
- Install the Sun ONE Application Server packages using the pkgadd command and create the initial domain using asadmin commands.

### 4719600

### Warning messages occur during installation.

During installation, some invalid error messages may 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 may 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.

### 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 may not display a warning message. The installation might complete successfully, but the Sun ONE Application Server may 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 Support for 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 s 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 4, Enterprise Edition for Java component.

# 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.

N/A

### 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.

#### 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 <code>install\_dir</code> 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  $\label{eq:http://bostname:port/samples} \ URL.$  However, documentation is installed on the file system and can be accessed locally at this location:  $\ \frac{1}{100} = \frac{1}{1000} = \frac{1}{10000} = \frac{1}{1000} = \frac{1}{1$ 

#### Solution

Access samples documentation locally.

### 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*.

### 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 <code>cdrom0</code> and <code>cdrom</code>. Any that match the added regular expression would be named starting with <code>cdrom2</code>. This is documented on <code>vold.conf</code> 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 you are running File Manager, a separate File Manager window displays the contents of the CD-ROM.

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 Page 17 of 68 Solaris for procedures on installation.

### 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 <code>setup.exe</code>. 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 may 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 may 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.

# 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 <code>install\_dir/etc</code>.

### 4724612 On Solaris, PointBase shell scripts fail if run by someone other than the installing user.

This issue affects only the evaluation installation for Solaris. 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, 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 SUNWigsup package using the following command (as root):

# pkgrm SUNWigsup

### 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 <code>create-console</code> attribute of the <code>log-service</code> element in <code>server.xml</code> 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 <code>appservd.exe</code> process, but the watchdog process (<code>appservd-wdog.exe</code>) 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 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 may occur due to following problems:

 As it tries to load all the pending messages, the MQ broker may 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.* 

### 4762420 Firewall rules may cause Sun ONE Application Server startup failures.

If you have a personal firewall installed, you may experience this problem. The presence of strict firewall rules on the same machine as a Sun ONE Application Server installation may 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 may block such attempts.

The local firewall may 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 may 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.

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
    ;;
```

Execution of 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 <code>instance-dir/bin/startserv</code>. Since instances may be owned by users other than root, the <code>startserv</code> 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.

### (cont.) 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
;;
```

(cont.)

• 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.

### 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.
- 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 may 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.

### 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.		

## **EJB** Container

This section describes the known Enterprise JavaBeans  $^{\text{\tiny TM}}$  (EJB  $^{\text{\tiny TM}}$ ) 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.

### 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 classes12.zip file 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			
	$Add\ the\ {\tt classes12.zip}\ file\ to\ the\ {\tt classpath-suffix}\ attribute\ of\ the\ server. {\tt xml}\ file.$			
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.</multiplicity>			

### 4742757 Cascade-delete does not work for CMRs with overlapping PK/FKs.

Related elements of a container-managed relationship (CMR) field cannot be deleted with the cascade-delete functionality if such CMR field is mapped to a database schema with overlapping primary key/foreign key constraints.

An example of such schema is an Order-LineItem relationship. If an application with such a schema tries to delete an Order bean, and the corresponding relationship is marked for <code>cascade-delete</code>, the caller gets the following error message about not allowing update of a primary key:

```
java.rmi.RemoteException: Exception thrown from bean; nested
exception is:
javax.ejb.EJBException: nested exception is:
com.sun.jdo.api.persistence.support.JDOUserException: Incorrect
attempt to remove an instance from a managed relationship.
```

The relationship is defined by a primary key column on the other side. A remove operation on a collection requires updating the column on the other side, and primary key update is not allowed. Therefore, removal of an instance from a managed relationship collection defined by a primary key can only be done by deleting the instance, either explicitly or by cascade-delete.

```
NestedException:
```

com.sun.jdo.api.persistence.support.JDOUnsupportedOptionException: Update of a primary key field is not allowed.

### **Solution**

Either of these solutions can be used as a work around:

- Do not use cascade-delete for relationships mapped to a table with overlapping PK/FKs. Iterate over-related beans, and call remove on each of them separately before removing the owning bean.
- 2. Change the table definition not to have overlapping PK/FKs.

### 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)
```

# 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).

### 4852757 Deployment of CMP beans fails.

The following error is thrown because there are no <query-params> entries in the container-managed persistence (CMP) bean in sun-ejb-jar.xml file:

Error while running ejbc. Fatal error from EJB Compiler ---- Error while processing CMP beans.

### **Solution**

Even if it isn't necessary for the CMP beans, add the query-params tag for finders in the sun-ejb-jar.xml file with the empty parameters.

### 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 <code>-javahome</code> 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 data source 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 may 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 11 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 may 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.

### 4744128 The EJB compiler fails to generate valid JAVA code for inner classes.

The EJB compiler fails to generate valid JAVA code for the implementation of the enterprise bean that uses inner classes as the return type.

```
public interface IStateServer {
    ....
    public StateProperties getProperties(String objectID, String
variantName, IToken securityToken) throws RemoteException;

public class StateProperties implements Serializable {
    public StateProperties() {
     }
     public String description = "";
     public String owner = "";
     public Date modifyTime = new Date();
     public String accessPermissions = "";
    }
}

public interface IStateServerEJB extends EJBObject, IStateServer {
     ....
}
```

Note method getProperties returns an inner class.

### Example of the error:

```
D:\AppServer7a\appserv\domains\domain1\server1\generated\ejb\j2ee-app s\smugglercom\spss\ssp\state\ejb\StateServerEJB_EJBObjectImpl.java:13 3:
```

### Direct use of synthetic inner class names is not allowed:

```
com.spss.ssp.state.IStateServer$StateProperties
```

### The generated code should be

```
com.spss.ssp.state.IstateServer.StateProperties
```

### instead of

com.spss.ssp.state.IstateServer\$StateProperties

### **Solution**

Move StateProperties to a separate (standalone not inner) class.

### Verifier

This section describes the known verifier issues and associated solutions.

### 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 <code>asadmin</code> 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 <code>install\_root/bin/verifier[.bat]</code> 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.

## 4743480 Verifier cannot detect the methods declared in the super interface of the local home interface.

The verifier performs tests on the local home interface to check the interface for conformance to the J2EE specification. Some of the tests for the findByPrimaryKey method fail if you have a derived local home interface and the required method is declared in the super interface of the home interface. The failed tests are those performed by the tests named HomeInterfaceFindByPrimaryKeyArg, HomeInterfaceFindByPrimaryKeyName, HomeInterfaceFindByPrimaryKeyReturn, and PrimaryKeyClassOpt. Deployment would also fail if you use the -verify option with the module or application.

### **Solution**

The test results can be ignored if the function has been properly declared in the super interface for the local home interface. In this case, do not use the <code>-verify</code> option with the deployment command. The deployment will complete correctly. A workaround is to declare the same function again in the derived home interface to pass the verification tests.

### 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:
  - o is-cache-overflow-allowed
  - o max-wait-time-in-millis
- Due to J2EE 1.4 architecture changes, some elements may 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.

### 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 may 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:

- o check-modified-at-commit
- o lock-when-modified

# sun-ejb-jar.xml Issues

- Deprecated for this release:
  - o is-cache-overflow-allowed
  - o 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 contains the following sections:

- 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.

### 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 <code>-path</code> option in the <code>create-domain</code> 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.

### 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.usecaselapp.ejb-module.UseCaselEjb_jar.entity-bea
n.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.UseCasel.ejb.BeanOneRemote
com.iplanet.ias.perf.jts.UseCasel.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.

# 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.

### 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 may 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/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*.

### 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 the Start button.

To avoid this problem, perform the following steps instead of clicking the Restart button.

Click the Stop button.

Click the Start button.

# 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.

### 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 <code>log-service</code> <code>create-console</code> attribute to false. Clicking the mouse or pressing Enter on the console log may 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 may see corrupted messages displayed on the console.

### Solution

Use the Admin interface to view the log messages.

# 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.

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.

# 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

- 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.
- 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 <code>instance-dir/config/directory</code> will contain two <code>obj.conf</code> files, one named <code>obj.conf</code> and the other named <code>virtual-server-name-obj.conf</code>, where <code>virtual-server-name</code> 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 <code>obj.conf</code> file associated with the virtual server of interest."

When the Sun ONE Application Server is installed, the <code>obj.conf</code> and <code>server1-obj.conf</code> files exist under the <code>/domains/domain1/server1/config/</code> directory. The content in the file named <code>obj.conf</code> is overridden by the content of the <code>server1-obj.conf</code> file specified at the virtual server level. In effect, the file named <code>obj.conf</code> 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 passthrough plug-in, your passthrough 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.

### 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.

# 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

- 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 serverl
--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.

# 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 may notice degraded performance and/or unexpected behavior.

NOTE: If you are running the version of the Sun ONE Application Server Administrative 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.

### 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.

# 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.
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 <i>not</i> propagated to the Sun ONE Application Server alt-dd.
	Solution
	None.

# 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. It can be 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.
- 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.

### 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 slas 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.

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 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.

# Sample Applications

- The sample applications source is set up with an ANT directory structure and applications are not Sun ONE 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 ONE 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 ONE Studio (ANT through Sun ONE Studio).

This section describes known Sun ONE Application Server 7, Update 1 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 <code>common.xml</code> 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.ea
```

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.

# 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

# 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.

# 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**

 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]);
    }
    ...
}</pre>
```

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.

ID	Summary
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 may 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, $server.xml$ :
	<pre><jvm-options>-Djavax.rmi.CORBA.UtilClass=com.iplanet.ias.util.orbutil .IasUtilDelegate</jvm-options></pre>

# Internationalization (i18n)

This section describes known internalization issues and the associated solutions.

ID Summary	
4757859	Multi-byte messages on the console are displayed as corrupted.
	If the default encoding for the system is not UTF-8, Sun ONE Application Server output might cause multi-byte characters to display incorrectly.
	Solution
	Open the server.log file in your browser.

# 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

### 4783129 On Microsoft Windows: English about.html is displayed in the ja locale.

When the browser is launched in a ja locale, the about.html page is displayed in English instead of Japanese.

### **Solution**

Change the URL as follows:

#### From:

.../about.html

To:

.../ja/about.html

# 4840621 Archive does not work when Sun ONE Application Server is running in non-English locale.

When Sun ONE Application Server is running in a non-English locale, the Archive button in the following location does not archive log files:

App Server Instance -> Logging -> Log rotation window -> scheduler based log rotation

### Solution

- 1. Go to the following directory: \$install\_dir/domains/domain1/server1/bin
- 2. Open the rotatelogs file.
- 3. Uncomment the following line: #LANG=C; export LANG
- 4. Add the following line: LC\_ALL=C; export LC\_ALL
- 5. Click Archive again.

# 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.

# Solaris x86 Platform (Solaris Bundled and Java Enterprise System Only)

This section describes the known issues and limitations with the Solaris x86 version of the Sun ONE Application Server, available bundled with Solaris and with Java Enterprise System.

ID	Summary	
N/A	Solaris X86 Limitations	
	<b>No Sun ONE Studio Plug-in.</b> The Sun ONE Studio Plug-in is not part of the Sun ONE Application Server release on the Solaris x86 platform because Sun ONE Studio is not available on the Solaris X86 platform.	
	The web server plug-in. The web server plug-in (sometimes called the reverse proxy plug-in) is supported only with Apache Web Server, not with Sun ONE Web Server, because the Sun ONE Web Server is not available on the Solaris X86 platform.	
	<b>Solaris support</b> . The Solaris X86 release is only supported on Solaris 9, Update 2 onward, not on any earlier version of Solaris.	
	<b>Evaluation installation.</b> There is no evaluation installation for the Solaris x86 platform.	

### 4890285

Documentation issues for Solaris x86.

**Solaris x86 may not be listed as a supported platform.** In documents that list supported platforms for Sun ONE Application Server, the Solaris x86 platform may not be included. For the latest platform information, see the *Platform Summary*.

**References to SPARC.** The *Developer's Guide to NSAPI* includes references to Solaris SPARC, which should be references to Solaris (Solaris includes SPARC and X86).

**References to evaluation installation.** The *Installation Guide* and *Getting Started Guide* describe an evaluation (express) installation available with the installation program. This installation option is not available for the Sun ONE Application Server on the Solaris x86 platform.

**Sun ONE Studio Plug-in.** The documentation contains references to the Sun ONE Studio plug-in, which is unavailable on Solaris x86.

**Web server plug-in unavailable for use with Sun ONE Web Server.** The documentation contains references to using the web server plug-in with the Sun ONE Application Server.

# **Documentation**

This section describes the known documentation issues and associated solutions.

# 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 ONE 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.

# **4720171** *Continued*

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 look like the following:

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.

# 4717815 Integration requirements for Sun ONE Studio 4 and Application Server 7 needed.

Information on integrating Sun ONE Studio 4 and Application Server is difficult to find. Need to provide full instructions and clear pathways to relevant documentation.

### **Solution**

Refer to "Sun ONE Studio 4 Documentation" on page 5 for pointers to Sun ONE Studio 4 documentation. Additional information can be found in the *Application Server Getting Started Guide* and *Administrator's Guide*.

# 4837479 No documentation available on accessing JMS destinations from a non-ACC client.

The information on how to access JMS destinations from a non-ACC client will be added to the *Application Server Developer's Guide to Clients* in the next release of Sun ONE Application Server 7.

### 4849663 Documentation wrongly indicates non-ACC client uses a string instead of JNDI.

In the "Using the Application Client Container" chapter of the *Application Server Developer's Guide to Clients*, the non-ACC client wrongly uses a string instead of JNDI to obtain the initial naming context.

# Solution

Use the JNDI lookup to obtain the naming initial context:

```
env.put(Context.INITIAL_CONTEXT_FACTORY,
"com.sun.jndi.cosnaming.CNCtxFactory");
env.put(Context.PROVIDER_URL, url);
```

# 4855015 Incorrect default is stated for DNS description.

In the "Syntax and Use of init.conf" chapter of the *Application Server Administrator's Configuration File Reference*, the DNS description default is incorrectly stated as on. The correct default is off.

ID	Summary	
N/A	Getting Started Guide lists wrong SDK version.	
	In the <i>Application Server Getting Started Guide</i> for Update 1, Java 2 Software Development Kit, Standard Edition 1.4.0_02 is listed as supported. The supported version for Update 1 is 1.4.1_01	
	Solution	
	None.	

# How to Report Problems

If you have problems with your system, contact customer support using one of the following mechanisms:

The online support web site at:

http://www.sun.com/supportraining/

• The telephone dispatch number associated with your maintenance contract

Please have the following information available prior to contacting support. This helps to ensure that our support staff can best assist you in resolving problems:

- 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

# For More Information

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

Sun ONE products and services information

```
http://www.sun.com/service/sunps/sunone/index.html
```

• Sun ONE developer information

http://wwws.sun.com/software/product\_categories/application\_development.html

Sun ONE learning solutions

http://www.sun.com/supportraining/index.html

Sun ONE product data sheets

```
http://wwws.sun.com/software/
```

Sun Microsystems product documentation:

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

• Sun ONE Application Server product documentation:

http://docs.sun.com/db/prod/s1.asse#hic

# **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.

Revision Date	Description of Change
April 2003	Initial release of Sun ONE Application Server 7, Update 1.
October 2003	Updated to include information on the Solaris x86 platform release for bundled Solaris and Java Enterprise System.

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