Sun Java™ System Application Server Standard and Enterprise Edition Release Notes

Version 7 2004Q2 Update 6

Part Number 820-2610

These release notes contain important information available at the time of the release of the Sun Java™ System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6. 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 product.

This document contains the following sections:

Release Notes Revision History

This section lists the changes that have been made in these release notes after the initial release of the Sun Java System Application Server 7 Standard and Enterprise Edition product.

Revision Date	Description of Change
June 2008	Added known issue 6635248.
October 2007	Localization-related Updates to Update 6 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
June 2007	Update 6 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
December 2006	Update 5 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
November 2005	Update 4 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
April 2005	Update 3 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
January 2005	Update 2 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
September 2004	Update 1 release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition
May 2004	Initial release of Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition

What's New

The Sun Java System Application Server 7 Standard and Enterprise Edition 2004Q2 Update 6 provides a high-performance J2EE platform suitable for broad deployment of application services and web services. The following changes have been made to the Update 6 release:

- J2SE 1.4.2_13

  The JVM version has been upgraded to 1.4.2_13.

- JWSDP 1.5.1 Plug-in for Application Server

Java Web Services Developer Pack v1.5.1 Plug-in is available for Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6. The plug-in can be downloaded at the following URL: http://www.sun.com/download/products.xml?id=432b5f8e

Platform Summary

This section provides information on supported platform components for the Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6.

This section includes:

Operating Systems and Distribution Types

The following table identifies the supported operating systems and distribution types for Sun Java System Application Server 7 2004Q2 Update 6:

Table 1 Supported Operating Systems and Distribution Types

Platform	Operating System Version	Distribution Type	Application Server 7 2004Q2 Update 1 Edition
Solaris SPARC®	Solaris 8 Update 7, Solaris 9 Update 6, Solaris 10[1]	file-based and package-based[2]	Standard and Enterprise Edition
Solaris x86	Solaris 9 Update 4, Solaris 10	file-based and package-based	Standard and Enterprise Edition
Linux x86[3]	Red Hat Advanced Server 2.1 Update 3, Red Hat Advanced Server 3	file-based and RPM-based	Standard and Enterprise Edition

Table 1 Supported Operating Systems and Distribution Types

Platform	Operating System Version	Distribution Type	Application Server 7 2004Q2 Update 1 Edition
Microsoft Windows[4]	Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 Windows 2003 Windows XP: Professional	file-based	Standard and Enterprise Edition

[1]On Solaris 10, both file-based and packaged based installs are supported. Only global zone is supported. Local zones or local sparse root zone is not supported.
[2] Superuser privileges are required for installing package-based and RPM-based distributions.
[3] On Red Hat Advanced Server 2.1, HADB supports devices on `ext2` file systems only.
[4] On Windows XP Professional, only Standard Edition is available.

System Requirements

The following table summarizes the Sun Java System Application Server 7 Standard and Enterprise Edition 2004Q2 Update 6 requirements.

Table 2 Platform Requirements for Sun Java System Application Server

Operating System	Architecture	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space
Sun Solaris 8, 9, or 10 for SPARC	32 and 64 bit[4]	256 MB 1.5 GB (with co-located HADB)	1024 MB 2 GB (with co-located HADB)	250 MB free	500 MB free
Solaris x86, Version 9 and 10	32 bit				
Red Hat Enterprise Linux 2.1, 3					
Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 Windows 2003 Windows XP: Professional	x86 32 bit				

[4] 32 and 64 bit here refers to the supported OS. Sun Java System Application Server is a 32 bit application.

- On UNIX, you can check your operating system version using the `uname` command. Disk space can be checked using the `df` command.

- On Solaris, ensure that the system-wide instance of perl under `/usr/bin/perl` is in the path. Application Server installation will fail if the default perl installation is not found.
- HADB is not supported on Microsoft Windows or Red Hat Enterprise Linux operating system versions in 64 bit mode. On Solaris (x86), HADB has been tested only in 32 bit mode of the operating system.
- HADB uses Intimate Shared Memory (`SHM_SHARE_MMU` flag) when it creates and attaches to its shared memory segments. The use of this flag essentially locks the shared memory segments into physical memory and prevents them from being paged out. Therefore, HADB database's shared memory is locked into physical memory, which can easily impact installations on low end machines. Ensure you have the recommended amount of memory when co-locating Application Server and HADB.

JDBC Drivers and Databases

The Sun Java System Application Server Standard and Enterprise Edition is designed to support connectivity to any DBMS with a corresponding JDBC driver. For a list of components that Sun has tested and found to be acceptable for constructing J2EE compatible database configurations, refer to the following table:

Table 3 Supported JDBC Drivers

JDBC Vendor	JDBC Driver Type	Supported Database Server
PointBase 4.2	Type 4	PointBase Network Server 4.2
JConnect 5.5	Type 4	Sybase ASE 12.5
DataDirect 3.2	Type 4	MS SQL Server 2000 Service Pack 1
DataDirect 3.2	Type 4	Oracle 8.1.7
DataDirect 3.2	Type 4	Oracle 9.2.0.1
Oracle 9.2.0.3	Type 2 (OCI)	Oracle 9.2.0.3+ w/ RAC
Oracle 10.1.0.2	Type 4 and Type 2 (OCI)	Oracle 10g Release 1 (10.1.0.2.0)
IBM	Type 2	IBM DB2 8.1 Service Pack 3

Additional drivers have been tested to meet the JDBC requirements of the J2EE 1.3 platform with the JDBC Driver Certification Program. These drivers can be used for JDBC connectivity with Sun Java System Application Server. While Sun offers no product support for these drivers, we will support the use of these drivers with the Sun Java System Application Server.

Web Servers

This section lists the web servers that are supported for the Sun Java System Application Server 7 2004Q2 Update 6 Standard and Enterprise Edition.

Table 4 Supported Web Servers

WebServer	Version	Operating System
Sun Java System Web Server	6.0 Service Pack 6	Solaris SPARC 8 and 9 Red Hat Enterprise Linux 2.1 x86 Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 Windows 2003 Windows XP: Professional HP-UX 11i
Sun Java System Web Server	6.1	Solaris SPARC 8 and 9, Solaris 9 x86, Red Hat Enterprise Linux 2.1 Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 Windows 2003 Windows XP: Professional HP-UX 11i
Apache Web Server	1.3.29, 2.0.49	Solaris SPARC 8 and 9, Solaris 9 x86, Red Hat Enterprise Linux 2.1, 3, Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 HP-UX 11i
Microsoft IIS	5.0	Windows 2000: Server Service Pack 2 Windows 2000: Advanced Server Service Pack 2 Windows 2000: Professional Service Pack 2 Windows XP: Professional and Windows 2003 (Standard Edition of Application Server Only)

Software Packages

This section lists the associated software packages that are supported for Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6.

Table 5 Version of Component for Bundling with Application Server

Component	Version used in Application Server 7.0 Platform and Standard Edition	Version used in Application Server 7.0 Enterprise Edition	Version used in Application Server 7 2004Q2 Standard and Enterprise Edition	Version used in Application Server 7 2004Q2 Update 1 Standard and Enterprise Edition	Version used in Application Server 7 2004Q2 Update 6 Standard and Enterprise Edition
J2SE	1.4.0_02	1.4.1_03	1.4.2_04	1.4.2_05	1.4.2_13
PointBase	4.2	n/a	4.2 (Standard Edition Only)	4.2 (Standard Edition Only)	4.2 (Standard Edition Only)
Sun Java System Message Queue Standard Edition	3.0.1	3.0.1	3.5 Service Pack 1	3.5 Service Pack 1	3.5 Service Pack 2
JWSDP	1.0_01	1.0_01	1.0_01	1.0_01	1.5.1

[5] Use the JWSDP 1.4 common components available in the product CD to upgrade your JWSDP installation.

Browsers

This section lists the browsers that are supported with the Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6.

Table 6 Browsers Supported

Browser	Version
Mozilla	1.4, 1.7
Netscape Navigator	4.79, 6.2
Internet Explorer	5.5 Service Pack 2, 6.0

Solaris Patches Required

Solaris 8 users must install the Sun recommended patch cluster, available in the Recommended and Security Patches section at:

http://sunsolve.sun.com/

The required patches for Solaris 8 are 109326-06, 108827-26, and 110934 (any revision, for packaged-based installation only). Without these patches, which the installer checks for, you won't be able to install or run the Sun Java System Application Server 7 2004Q2 Update 6 software. These patches are already contained in the latest recommended patch cluster.

Upgrade Options

This section contains the following topics:

Upgrading Sun Java System Application Server

The Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 6 installer allows you to upgrade from a previous version of the Application Server to the current version. The various Application Server installations on all the supported platforms can be upgraded to their corresponding version on the same platform and installation type. The following table identifies the upgrade options available.

Table 7 Upgrade Options Available

Currently Installed Product	Can Be Upgraded to Sun Java System Application Server 7 2004Q2 Update 6:
Sun ONE Application Server 7.0 Standard Edition, Update 1 - Update 9	Standard Edition Enterprise Edition
Sun ONE Application Server 7.0 Enterprise Edition	Enterprise Edition
Sun Java System Application Server 7 2004Q2 Standard and Enterprise Edition, Update 1, Update 2, Update 3, Update 4, and Update 5	Standard Edition Enterprise Edition

- After an upgrade, you must compare the new configuration files with the original files in the backup directory for any changes. Custom settings made in the original configuration files might not be carried over to the new files after upgrading. You might experience issues during server restart if the new configuration files are not in sync with the older files that contained customized settings. The following files will be effected during an upgrade:

- All `*.conf` files in *install_dir*`/config`.
- `server.xml` (Admin and server instance)
- Admin and server instance `startserv` scripts.
- Admin and server instance `server.policy` file.
- Server instance `sun-acc.xml` file.
- `docroot/index.html` file.

For more details on this and other important prerequisites for upgrading, see *Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 2 Installation Guide.*

Upgrading the High Availability Database

This section contains the following topics:

Pre-upgrade Tasks/Data Migration

Before you begin the upgrade, keep the HADB history files, management agent configuration files, log files and repository, and all the data devices outside the installation path. Use the following procedure to move the management repository and configuration files:

1. Stop all the old management agents and keep the HADB nodes running.
2. On each host, move the repository directory to the new location.
3. On each host, copy the `dbconfig` directory to the new location.
4. On each host, update the `mgt.cfg` file, and set the correct path for `dbconfig` and repository directory.

5. Start the management agents using the updated `mgt.cfg` file.

NOTE On Linux, uninstall HADB 4.4.1-6 before upgrading the Japanese version of Application Server Enterprise Edition 7 2004Q2 Update 2 to Application Server Enterprise Edition 7 2004Q2 Update 6.

The HADB version bundled with Application Server Enterprise Edition 7 2004Q2 Update 6 is 4.4.1-7.

Uninstalling HADB 4.4.1-6 after performing an in-place upgrade to 4.4.1-7 might not remove all RPMs, specially `sun-hadb-i-4.4.1-6`.

To remove `sun-hadb-i-4.4.1-6`, run the following command:

```
rpm -e --nodeps sun-hadb-i-4.4.1-6
```

Upgrade Procedure

To upgrade from HADB version 4.4.x to version 4.4.2-7, use the following procedure:

1. Perform the pre-upgrade tasks mentioned under "Pre-upgrade Tasks/Data Migration" on page 9.
2. Install HADB version 4.4.2-7 on all HADB hosts (on another path than that of version 4.4.x, for instance on `/opt/SUNWhadb/4.4.2-7`).
3. Install the HADB 4.4.2-7 version on the `hadbm` client hosts, if they are different than that of the HADB hosts.
4. Stop all management agents running on all HADB hosts.
5. Start the management agent processes using the HADB 4.4.2-7 software, with the old configuration files. In the remaining steps, use the `hadbm` command found in the HADB 4.4.2-7 `/bin` directory.
6. Register the package in the management domain (default package name becomes V4.4, so another package name may be required to avoid conflicts with existing packages having the same name):

   ```
   hadbm registerpackage --packagepath=/opt/SUNWhadb/4.4.2-7 V4.4.2-7
   ```

7. Run the `hadbm listpackages` command and check that the new package is registered in the domain.

8. Restart the database with the new hadbm version 4.4.2-7. If it is necessary to move the devices and history files, run online upgrade combined with setting new paths for devices and history files in one single operation:

   `hadbm set packagename=V4.4.2-7,devicepath=`*new_devpath*`,historypath=`*new_histpath*

   If the devices and history files are already outside the installation directory, run the following command, which only does a rolling restart of the nodes:

   `hadbm set packagename=V4.4.2-7` *database name*

9. Check that the database status is "running" (using the `hadbm status` command) and that it functions normally, serving the client transactions.

10. If everything is working, the old installation can be removed later. Before unregistering the old package, remove all references to the old package from the `ma` repository. Otherwise, `hadbm unregisterpackage` will fail with "package in use" error message. A dummy reconfiguration operation, for instance, `hadbm set connectiontrace`=*same as previous value* will remove all references to the old package.

11. Unregister the old package:

    `hadbm unregisterpackage [--hosts=`*host-list*`]` *old pacakge name*

12. Remove the old installation from the file system.

Testing the Upgrade

On Solaris, to test that the upgrade was successful, check that the upgrade was performed properly using the following procedure:

1. Ensure that the running processes use the new binaries. Check the following in all HADB nodes:

   ```
   new path/bin/ma -v
   ```

   ```
   new path/bin/hadbm -v
   ```

2. Check whether the database is running. The following command should show that all the HADB nodes are in a "running" state.

   new path/bin/hadbm status -n

3. Ensure that the products using HADB have changed their pointers to point to the new HADB path.

4. The products using the HADB can run their upgrade tests to verify the HADB upgrade is also working.

5. After an online upgrade, if the new version does not work properly, go back to using the previous HADB version. However, if there has been a change to the management agent repository, the HADB itself can be downgraded, but the new management agent must be kept running.

Using Migration Tool

If you have an existing J2EE application that runs on another vendor's application server, you can use the Sun Java System Migration Tool to migrate the application and run it on the Sun Java System Application Server 7 2004Q2 Update 6 release. The migrated application will run on the Sun Java System Application Server 7 2004Q2 release without any modifications. However, to use the high availability features, change the DTD version of the `sun-ejb-jar.xml` deployment descriptors to point to `sun-ejb-jar_2_0-1.dtd` instead of `sun-ejb-jar_2_0-0.dtd`.

Sun ONE Studio 5 Standard Edition Update 1

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

`http://docs.sun.com/app/docs/coll/790.4`

Other IDEs that you can use include, Sun Java Studio 5 Standard Edition Update 1, Sun Java Studio Enterprise 6 2004Q1 and other 3rd party IDEs, for example, Borland's JBuilder X.

Other Requirements and Limitations

- ACL applet in Admin GUI is not loaded in browsers that do not have Java and cookies enabled. Check your browser settings to ensure that both Java and cookies are set to enabled before accessing the Application Server Admin GUI.
- Application Server is not supported over NFS.
- Application Server 7.0 or 7.1 does not work with J2SE 5.0.

Although the file-based installation can be performed on NFS, it is not recommended to run the Application Server in this configuration for the following reasons:

- Issues with timestamp locking and file synchronization.
- Stability of the Application Server on NFS depends on the network's availability and reliability.
- NFS introduces an additional point of failure.
- Hard to troubleshoot when there is an NFS issue. Application Server will report vague error messages.

- Enabling fix for bug id 6275091: `getServerPort() returns port 80 if the Host header does not contain port number`.

  By default, the fix for this bug is disabled. To enable the fix, modify your web server's configuration files and Application Server's `server.xml` file as described in the following procedure:

  a. Modify `magnus.conf`.

  For `Init fn="load-modules"` add `init-passthrough` and `service-passthrough` in `funcs`.

  Example:
  `funcs="init-passthrough,service-passthrough,name-trans-passthrough,change_host header_init,change_hostheader"`

  b. Enable the change by specifying:

  `Init fn="change_hostheader_init" enabled ="true" debug="false"`

  By default, this flag is disabled. Set `debug="true"` to enable logging for the fix. By default, it is disabled.

  If you set `enabled="false"` your `getServerPort` will return the port number as it used to do earlier. If you set `enabled="true"`, `getServerPort` will return the Application Server port you specify in `server.xml`.

  c. Modify `obj.conf`.

  After `PathCheck fn="deny-existance" path="*/WEB-INF/*`, add

  `Service fn="change_hostheader"` inside `<Object name="lbplugin">`.

  d. Modify `server.xml`.

  In `server.xml`, change the `servername` format to `servername="hostname:port"`.

The hostname should be the same as before. Change the port number to the Application Server instance's port number. The port number specified here will be returned by the `getServerPort()` method.

In some cases, the `servername` attribute might be specified as `server-name`.

- High Availability Requirements and Limitations

  The following high availability requirements must be met before configuring the Sun Java System Application Server High Availability component:

  - HADB requires 512 MB minimum memory and 1GB recommended memory to work properly with the Application Server.

    If you install Application Server and HADB on the same machine, the minimum memory required is 1.5GB and the recommended memory is 2GB.

  - HADB supports IPv4 only.

  - The network must be configured for UDP multicast.

  - Do not use dynamic IP addresses (DHCP) for hosts used in create domain, extend domain, hadbm create, or hadbm addnodes commands.

  - If running HADB on Red Hat Linux 3.0, you must install Update 4 to avoid problems with excessive swapping by the operating system. See bug id 6158393.

  - HADB does not support any Microsoft Windows or Red Hat Enterprise Linux operating system version in 64 bit mode.

  - HADB File System Support: There are several important considerations before you configure HADB to use one of the supported file systems.

  - Make sure write caching is disabled for hard drives storing data devices and log files.

    - On RedHat Linux, use the `/sbin/hdparm` utility for IDE disks. The command `/sbin/hdparm -W0 /dev/hda` disables write caching for disk `hda`. Use `/sbin/hdparm -I` *device* to get detailed status information about the drive. For SCSI disks, the `sdparm` utility (`http://sg.torque.net/sg/sdparm.html`) must be downloaded and installed, because it is not part of the default RedHat Linux Advanced Server distribution. Be very careful using these utilities, as they can be harmful to your hard drive if used incorrectly.

    - On Solaris (SPARC or x86), the `format -e` utility should be used. Make sure the `-e` option is used, otherwise, the 'cache' entry will not be present in the command menu.

- On Windows, open the Device Manager. Find your hard drive, bring up its properties, and select the Disk Properties tab. A checkbox indicates whether write caching is enabled.

For details on important installation prerequisites and troubleshooting options, see *Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 2 Installation Guide.*

Accessing the Documentation

The Sun Java System Application Server documentation is provided in a number of ways:

- Manuals—You can view Sun Java System Application Server manuals and release notes in HTML and in printable PDF downloads at:

  `http://docs.sun.com/app/docs/prod/sjs.asse`

- Online help—Click the Help button in the graphical interface to launch a context-sensitive help window.
- Man pages—To view man pages at the command line, you must first add *install_dir*`/man` to your MANPATH environment variable (Solaris unbundled only). After setting the variable, you can access man pages for the Sun Java System Application Server commands by typing `man` *command_name* on the command line. For example:

  ```
  man asadmin
  ```

Sun Java System Application Server 7 2004Q2 Update 6 Documentation

The Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 manuals are available as online files in Portable Document Format (PDF) and Hypertext Markup Language (HTML).

The following table lists tasks and concepts described in the Sun Java System Application Server manuals. The following manuals have been updated for the Sun Java System Application Server 7 2004Q2 Update 6 Standard and Enterprise Edition release. For a full list of all available manuals, see `http://docs.sun.com/app/docs/prod/sjs.asse`.

Table 8 Sun Java System Application Server Documentation

For information about	See the following
Late-breaking information about the software and the documentation. Includes a comprehensive, table-based summary of supported hardware, operating system, JDK, and JDBC/RDBMS.	*Release Notes*

Resolved Issues

The following table lists the critical issues resolved in Sun Java System Application Server Standard and Enterprise Edition 7 2004 Update 1, Update 2, Update 3, Update 4, Update 5, and Update 6 releases.

Table 9 Resolved Issues

Bug ID	Description
6546242	Exceeding maximum number of open cursors
6371019	Enable File Cache option is not checked by default in the Admin GUI
6453440	Load balancing plug-in health check creates zombie threads.
6451701	ACL with LDAP Authentication is not working.
6459623	Issues using URL Encode.
6438986	Load balancer plug-in malfunctioning since httpsrouting is set to true.
6491181	Japanese version of index.html not correctly due to CSS and images directory.
6432803	Initialization load balancing subsystem fails because of incorrect listener.
4775866	JavaMail sample issues
6543857	Port 4856895 from SJWS to AS7.x for watchdog crashes
6532682	Redirect does not complete until the response times out using apache load balancer plug-in.
4816663	stopserv does not get the location of the PID_FILE value from the setting of PidLog in init.conf.
6465923	Unrecoverable Connection Pool issue when DBMS is restarted repeatedly,
6516230	Connection Pool problem when commit or rollback fails in a transaction.
6439570	Documentation link from Admin Console in invalid.

Table 9 Resolved Issues

Bug ID	Description
6246582	During upgrade, the samples directory within the default instance directory (server1) gets re-created, even if the default instance, server1, has been deleted.
6568090	JSP source code disclosure vulnerability
6562167	Unable to start domain on file-based installation of Application Server Standard Edition 7.1 on Solaris x86
6528257	Fix for Sun Alert ID: 102696
6487022	Load balancer plug-in replaces commas in a cookie header with semi-colons.
6374199	Need to incorporate JDK 1.4.2_10 or higher for AS 7.1 on T2000 systems.
4751904	Broken links at top of ConfigMQSeries.html
4771657	Sample stateless checker application uses stateful beans instead of stateless beans
6556284	Sticky loadbalancing not working on one of the hosts.
6544762	High CPU consumption due to load balancing plugin when using SSL endpoint
6557531	DaemonConfig::getSuggestedId() is bigor little-endian dependent and returns duplicate values on x86

Known Problems and Limitations

This section describes known problems and associated workarounds for the Sun Java System Application Server 7 2004Q2 Update 6 Standard and Enterprise Edition.

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

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

ID	Summary
6602615	**After upgrading from localized version of Application Server 7.1 Update 5 to Application Server 7.1 Update 6, the upgraded instance fails to start on Soalris 10 Update 3 and above.** There is a conflict between the Message Queue (MQ) versions bundled with Solaris and the version bundled with Application Server. **Solution:** 1. Remove the following MQ packages using the `pkgrm` command: • Base packages: `SUNWiqdoc, SUNWiqfs, SUNWiqjx, SUNWiqr, SUNWiqu, SUNWiquc, SUNWiqum,` and `SUNWiqlpl` • ja packages: `SUNWjiqu, SUNWjiquc` • zh packages: `SUNWciqu, SUNWciquc` 2. Install the corresponding OS-bundled base, ja, and zh packages.

ID	Summary
6606419	**Upgrade from localized version of Application Server 7.1 Update 5 to Application Server 7.1 Update 6 fails.** The installer fails to delete the directory, `SUNWhadb/4`. **Solution:** Do one of the following: • Delete `SUNWhadb/4` before running `./setup`. • Run the ./setup command for the second time, if you have already run the `./setup` command once and experienced a failed upgrade.
6606417	**Upgrade from localized version of Application Server Enterprise Edition 7.1 Update 5 to Application Server Enterprise Edition 7.1 Update 6 does not change the `SUNWhadb/4` symbolic links.** **Solution:** Changed the symbolic link to 4.4.2-30.
6606979	**Upgrade to localized version of Application Server Enterprise Edition 7.1 Update 6 displays English index.html** **Solution:** Perform the following steps: 3. Change directory to `<AppServer_install_dir>/domains/domain1/server1/docroot`. 4. Rename `index.html` to `index.html_en`. 5. Copy *AppServer_install_dir*`/lib/install/templates/index.html` to *AppServer_install_dir*`/domains/domain1/server1/docroot`.

ID	Summary
6245916	**When upgrading from localized Application Server 7.1 Update 2 to Update 3/Update 4/Update 6 in Japanese and Simplified Chinese locales, the localized welcome page and index.html is displayed from Update 2.** The localized version of Application Server 7.1 Update 6 contain localized files from Application Server 7.1 Update 2. **Solution** **After upgrading to Update 6, refer to the English welcome page and index page located at**: *Appserver_Install_Dir*`/docs/about.html` *Appserver_Install_Dir*`lib/install/templates/index.html` To register Sun Java System Application Server, use the following URLS: Japanese: `https://www.sun.com/software/product_registration?locale=ja_JP` Simplified Chinese: `https://www.sun.com/software/product_registration?locale=zh_CN` **To view the latest index.html (in English) for an existing domain, instead of the old localized version, copy the index.html to the docroot folder:** copy *Appserver_Install_Dir*`/lib/install/templates/index.html` to *Appserver_domain_root*`/domains/domain1/admin-server/docroot` **Before creating a new domain, replace the localized index.html with the English index.html:** Copy *Appserver_Install_Dir*`/lib/install/templates/index.html` to *Appserver_Install_Dir*`/lib/install/templates/{`*ja*,*zh_CN*`}/index.html` Ensure that you back up your current Japanese or Chinese index.html file.
6222700	**When upgrading from localized Application Server 7.1 Update 2 to Update 3/Update 4/Update 6 in Japanese and Simplified Chinese locales, the default page of server1 instance is displayed in English.**

ID	Summary
6245424	**After uninstalling localized versions of Application Server Update 6, the localized packages/RPMs will remain.**

Solution

Remove the localized packages/RPMs first and then run the uninstall program. Perform the following procedure on package-based Solaris installations.

6. Remove the following packages:

```
pkgrm SUNWjaspx SUNWjasdmo SUNWjiquc SUNWjiqu SUNWjaso
pkgrm SUNWjjmail SUNWjjaf SUNWjasaco SUNWjascmo SUNWjaspx
pkgrm SUNWcaspx SUNWcasdmo SUNWciquc SUNWciqu SUNWcaso
pkgrm SUNWcjmail SUNWcjaf SUNWcasaco SUNWcascmo SUNWcaspx
```

7. Run the Application Server uninstall program.
8. Remove the Application Server installation directory.

`rm -rf` *Appserver_Install_Dir*

Perform the following procedure on RPM-based Linux installations.

1. Remove the following RPMs:

```
rpm -e SUNWjasaco-7.1.0-02.src.rpm
rpm -e SUNWjascmo-7.1.0-02.src.rpm
rpm -e SUNWjasdmo-7.1.0-02.src.rpm
rpm -e SUNWjaso-7.1.0-02.src.rpm
rpm -e SUNWjaspx-7.1.0-02.src.rpm
rpm -e SUNWjjaf-7.1.0-02.src.rpm
rpm -e SUNWjjmail-7.1.0-02.src.rpm
rpm -e SUNWasaco-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWascmo-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWasdmo-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWaso-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWaspx-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWjaf-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWjmail-zh_CN-7.1.0-02.src.rpm
```

2. Run the Application Server uninstall program.
3. Remove the Application Server installation directory.

`rm -rf` *Appserver_Install_Dir*

Perform the following procedure on Windows installations:

1. Run the Application Server uninstall program.
2. Delete *Appserver_Install_Dir*.

ID	Summary
6208875	**Upgrade installation Failed:java.io.FileNotFoundException**
	File-based upgrade of HADB on Solaris SPARC, Solaris x86, and Linux will encounter problems in certain scenarios, as described here:
	Installation fails with the following exception:
	`java.io.FileNotFoundException: /sun/appserver7/./SUNWhadb/4 (Is a directory)`
	Upgrade scenarios: 7.1RTM/7.1ER1/7.1UR1 file-based upgrade to 7.1UR2.
	Solution
	Rename the *file-based-installing-directory*`/SUNWhadb/4` softlink to another name, such as, `SUNWhadb/3`. Restart the upgrade.
6217112	**Incremental installation is not working on Windows platforms.**
	Sample applications can be installed along with Application Server. They cannot be incrementally installed.
	Solution
	Select to install sample applications at the beginning of installation. During incremental installations, do not select the sample applications option.
5006942	**On Windows, the services created have the start type set by default to “Automatic” after an upgrade.**
	Solution
	1. Open the Windows services. 2. Change the start type of the servers to “Manual.”
6217097	**File-based upgrade performed as a non-root user seems to fail if the Application Server binaries for the upgrade were not downloaded as non-root user.**
	Solution
	The downloaded binaries need to be owned by the non-root user. The downloaded archive must be unzipped by the user who will do the installation or upgrade. Otherwise this is known to lead to permissions issues while the JDK is being upgraded.

Server Startup and Shutdown

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

ID	Summary
4693581	**During Application Server startup, IMQ broker fails with `IOException: Not Enough Space`** This error appears when Application Server and the IMQ broker is started simultaneously. The `appservd` process tries to fork a new process to start the iMQ broker, and fails if there is not enough swap space. **Solution** Start the IMQ broker process before starting Application Server. For example: *appserver_install_dir*`/imq/bin/imqbrokerd -name` *appserver_instance_name* `-port` *jms-service port* `-silent`
4762420	**Firewall rules may cause 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 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 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 Application Server and are in no way a security threat to your machine. Under some conditions, the port number which the Application Server uses for various local communications may overlap with port numbers used in known popular attacks. Some symptoms of this problem: • 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 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 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 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: Solaris 9 integrated install: `/var/appserver/domains/...` Solaris 8, 9 unbundled install: `/var/opt/SUNWappserver7/domains/...` Look for the port settings in the `<iiop-listener>` and `<jms-service>` elements. You can either change these port numbers to other unused port numbers, or you can modify your firewall policy to allow connection attempts from clients on the local machine to these port numbers on the same machine.

ID	Summary
5003245	**Server listens on two ports after reconfiguring ports and restarting** **Solution** After changing the port numbers, stop and then start the server using asadmin commands, asadmin stop-instance and asadmin start-instance, respectively.

Database Driver

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

ID	Summary
2082209/5022904	**DB2 Server has connection growing after idle time-out with DB2 Type II driver** **Solution** Set the `SteadyPoolSize` and `MaxPoolSize` to the same number, and in addition, set the Idle Connection timeout also to 0 (zero). This will disable the timing-out of idle connections and the user will have the full set of connections available.
4700531	**On Solaris, an Oracle JDBC driver error occurs with JDK 1.4.** This affects the new JDBC driver for Oracle (R) when working with JDK1.4. The problem is caused by a combination of the Oracle 9.0.1 database and ojdbc14.jar. Applying the patch will fix the problem on Solaris 32-bit machine, running an Oracle 9.0.1.3 database. **Solution** Obtain and apply the patch to your server from the Oracle Web site for Bug 2199718. Perform the following steps: 1. Go to the Oracle Web site. 2. Click the 'patches' button. 3. Type 2199718 in the patch number field. 4. Click the 32-bit Solaris OS patch.Go to `Metalink.oracle.com`. 5. Click patches. 6. Under patch number, enter 2199718. 7. Click the 32 bit Solaris OS patch.

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

Logging

ID	Summary
5014017	**The Appclient logging services don't work properly** Default value for file attribute will not work. **Solution** 1. Create a logs directory. 2. Specify the complete path to the newly created logs directory in the sun-acc.xml file. In case of logging to console, the log level is always' INFO' irrespective of the log level setting (FINE,FINEST...etc) The Administration Guide to Clients states that logs will be present in the *acc_dir*`/logs/client.log`, however you must create the "logs" directory and then specify the full path to this dir in the sun-acc.xml to make it work.

Web Container

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

ID	Summary

6183117	**Incorrect http-headers when using servlet filters for pdf/ xls files.**
	There is no default `mime-type` mapping in `default-web.xml`. Add the desired `mime-types` to `default-web.xml`.
	Solution
	Add the following `mime-type` definition in the `default-web.xml` of the instance that will server `xls`:
	`<mime-mapping>`
	`<extension>xls</extension>`
	`<mime-type>application/vnd.ms-excel</mime-type>`
	`</mime-mapping>`
	Similarly, add the specific mime-type definitions for other file types to the `default-web.xml` file.

6308777/6324326	**Servlet container UTF-8 URI mapping vulnerability.** ACL-based protection for JSPs can be bypassed by presenting characters in the URI in UTF-8 format. **Solution** Ensure to modify ACLs to not accept wildcards in the URI.
5089201/5001994	**getRequestURI() returns unencoded values when it should not.** The fix for this issue will break clients of older NSAPI, such as Portal Server 6.3, which call `getRequestURI()` and expect the URI to be automatically decoded when the data is returned. Therefore, to maintain backward compatibility for older NSAPI clients, a new JVM option has been added to revert to the old NSAPI behavior and allow Portal Server to function correctly. **Solution** Enable the JVM option, `-DJ2EEDecodeURI`, on computers running Portal Server to allow cookie-less mode (and all other functionality) on the `getRequestURI()` call.
4951476	**`javax.ejb.EJBException: org/dom4j/Element` error is thrown with JWSDP 1.2(1.3) installed.** **Solution** Add dom4j-full.jar to server-classpath in server.xml file. It can be downloaded from http://dom4j.org and should precede appserv-jstl.jar entry in server-classpath.
4997770	**HTTP 404 error message still indicating "Sun ONE Application Server"** Read "Sun ONE Application Server" as Sun Java System Application Server.

Message Service and Message-Driven Beans

This section describes the known issues in Java Message Service (JMS), Sun Java System Application Server Standard and Enterprise Edition, and message-driven beans issues and the associated solutions.

ID	Summary

6184426	**ConnectException errors on HP-UX11.11during stress tests.**
	Configuration of the HP-UX TCP-IP parameter at the OS level or at the IMQ level is required.
	Solution
	At the IMQ level, make the following changes:
	`imq.portmapper.backlog=1000`
	`imq.authentication.client.response.timeout=360`
	`imq.jms.tcp.backlog=3000`
	`imq.jms.max_threads=5000`

4683029	**The -javahome flag in all MQ Solaris 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: `/work/java 1.4` This problem occurs at Application Server instance startup. When a Sun ONE Application Server instance is started, by default its corresponding Sun ONE Message Queue broker instance is also started. The broker always starts using the `-javahome` command-line option to ensure that it uses the same Java runtime used by the Application Server. If the Java runtime that is configured for use by the 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 Application Server instance startup to fail. **Solution** Make sure that the Java runtime used by the 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 the associated solutions.

ID	Summary
6218460	**Transactions can fail due to a transaction timeout even when the JTS timeout is large enough.** **Solution** Configure the Application Server's transaction service property, `xaresource-txn-timeout`, and set its value to match the transaction timeout (in seconds) configured for the transaction service.

Recovery

There are some known problems with the recovery implementations of some of the JDBC drivers. For these known problems, Sun Java System 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 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"
```

Application Deployment

This section describes the known application deployment issues and associated solutions.

ID	Summary
6502888	**In Application Server 7.1, when you deploy an application to server instance that is running as non-root user, the files of `<server-instance>/generated` is owned by root user.** **Solution** You need to change the permissions manually.
6078271	**Deployment of an EAR fails on Windows due to file length issue.** Windows running on non-NTFS file systems will face file name and path limitation of that file system. **Solution** Run Windows on an NTFS file system.

6223279	**ejb-ref-name to the jndi-name mapping incorrect if the jndi-name is missing.**
	When deploying ejb applications, the XML Deployment Descriptor (`sun-ejb-jar.xml`) should have a *jndi-name* entry for each EJB reference. For example:
	`<ejb-ref>`
	`<ejb-ref-name>ejb/`*package_name*`.`*ejb_name*`</ejb-ref-name>`
	`<jndi-name>ejb/`*package_name*`.`*ejb_name*`</jndi-name>`
	`</ejb-ref>`
	If the `jndi-name` entry is missing, it will deploy without error, but the application will not work correctly as JNDI lookup will fail to find an EJB.
	Solution
	Ensure that `JNDI` names are present in the deployment descriptors. To ensure that your application does not have this problem, select the `Run Verifier` check box before deploying as this will highlight problems with missing JNDI names.

ID	Summary
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.
4994366	**Deploy error with ejb-local-ref and ejb-link.** **Solution** ejb-local-ref requires ejb-link. Therefore, when dealing with ejb-local-ref, you must specify an ejb-link value.

Verifier

This section describes the known verifier issues and associated solutions.

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

Load Balancer

This section describes the known load balancer issues and associated solutions.

ID	Summary
6422893	**The Application Server 7.1 UR5 load balancer plug-in does not recognize the HTTPS listeners even when the `https-routing` property is set to true in `loadbalancer.xml`.** **Solution** **If you are installing Application Server 7.1 afresh:** 1. Install Application Server 7.1 UR5 without the load balancer plug-in by deselecting the load balancer during product installation. 2. Install the Java Enterprise System (JES) 3 or JES4 Application Server from http://www.sun.com/software/javaenterprisesystem 3. Download JES component Patch 10 from http://sunsolve.sun.com • For package-based patches, the patch ids are 119166-16(Solaris Sparc), 119167-16 (Solaris x86), 119168-16 (Linux) • For file-based patches, the patch ids (Enterprise Edition) are 119169-08 (Solaris Sparc), 119170-08 (Solaris x86), 119171-08(Linux) , 119172-08 (Windows) • For file-based patches, the patch ids (Platform Editon) are 119173-08 (Solaris Sparc), 119174-08 (Solaris x86), 119175-08 (Linux), 119176-08 (Windows) 4. Begin installation. From the component list, select only the load balancer plug-in and proceed with the installation of the load balancer plug-in in the specified Web Server location. 5. Configure Application Server 7.1 UR5 and Web server to use this plug-in. **If you already have an installation of Application Server 7.1:** 1. Rename the `libpassthrough.so` file and all other related files, such as `LBPluginDefault_root.res` and `LBPlugin_root.res` installed as part of the Application Server 7.1 UR5 load balancer plugin. 2. Install the Java Enterprise System (JES) 3 or JES4 Application Server from http://www.sun.com/software/javaenterprisesystem 3. Download JES component Patch 10 from http://sunsolve.sun.com • For package-based patches, the patch ids are 119166-16(Solaris Sparc), 119167-16 (Solaris x86), 119168-16 (Linux) • For file-based patches, the patch ids (Enterprise Edition) are 119169-08 (Solaris Sparc), 119170-08 (Solaris x86), 119171-08(Linux) , 119172-08 (Windows) • For file-based patches, the patch ids (Platform Editon) are 119173-08 (Solaris Sparc), 119174-08 (Solaris x86), 119175-08 (Linux), 119176-08 (Windows) 4. Begin installation. From the component list, select only the load balancer plug-in and proceed with the installation of the load balancer in the specified Web Server location. 5. Configure Application Server 7.1 UR5 and Web server to use this plug-in.

ID	Summary
6338687	**Load Balancer Plug-in cannot handle URL/URI greater than 8K.** Ensure not to create a URL/URI greater than 8k if it is going to be forwarded by the load balancer plug-in to the Application Server.
6262746	**Load balancer plug-in on Apache web server, installed on Solaris 10 (SPARC and x86), is not a supported configuration.** **Solution** • Use Apache on Solaris 8 or 9, and the Application Server on Solaris 10. Or, • Use Sun Java System Web Server on Solaris10.
6155134	**Manual setting of path is required for webservers to start.** After installing load balancer plug-in on Windows for IIS or Apache, append the path of the Application Server to the Path environment variable. • Go to Start->Settings->Control Panel->System->Advanced->Environment Variables->System Variables->Path, and add: `appserver_install_dir\bin` • You must restart the machine.
4761151, 4825429, 4981545	**Intermediate form and basic authentication failures while sending intermittent SSL and non-SSL requests through load balancer plug-in. Displays a 502 Bad Gateway error message. The persistency of proxy-to-container connections is not maintained with the default settings.** Loadbalancer looses persistent connections to the application server due to deployment/undeployment on the application server and/or due to keep alive timeout or due to stale connections in the load balancer's connection pool. When this happens, some of load balancer's requests will fail and the error page is displayed. This typically occurs in a development environment where frequent deployment/undeployment and other configuration changes are tried and tested. **Solution** Set the keep alive timeout on the appserver to 0. **Using web-based Administration interface:** 1. Launch the Administration console. 2. Select HTTP Server -> Tuning. 3. In the HTTP Persistent Connection Timeout field, enter 0 (last text box on the page) 4. Apply changes and restart the appserver. **Using the Command-line Interface:** 1. Add the line: `KeepAliveTimeout 0` in `init.conf` of appserver 2. Launch the asadmin reconfig command. 3. Restart the appserver.

ID	Summary
4962735	**On Linux, Apache Web Server 1.3.27 does not start after installing load balancer plug-in and sec_db files.** **Solution** Include the following lines in /src/MakeFile after “End of automatically generated section,” and just before “OBJS= \”. Also, make sure the Application Server libraries are already installed in a particular location: **LIBS+= -licuuc -licuil8n -lnspr4 -lpthread -lxerces-c -lsupport -lnsprwrap -lns-httpd40** **LDFLAGS+= -L/space/SJSAS/installations/lib.** Where: /space/SJSAS/installations is the location of the application server installation. For more information, see Appendix “Compiling Apache Web Server” in *Sun Java System Application Server Administration Guide*.

5018537	**Identity Server/Application Server Integration Services unavailable error shown during failover.**
	
	Loadbalancer.xml has “/” as the context-root for a web-module. After a failover, since there is no context root, a “Default” string is assigned as the path of the update JROUTE cookie. This results in two JROUTE cookies on the browser side.
	
	1. The old JROUTE cookie pointing to the failed instance with “/” aspath.
	
	2. The new JROUTE cookie pointing to the new instance with “/Default” as the path.
	
	The browser would always use the old outdated cookie (1) and consequently it results in redirects and failovers, and sometimes the browser itself fails.
	
	Solution
	
	Have specific context root for all web modules. For example:
	
	`<web-module context-root=”appl” enabled=”true”`
	`disable-timeout-in-minutes=”60” error-url=”appl-lberror.html” />`
	`<web-module context-root=”app2” enabled=”true”`
	`disable-timeout-in-minutes=”60” error-url=”app2-lberror.html” />`
	
	After the failover, the JROUTE gets the path as “/appl” which is valid and works correctly.

5007720	**Log message not proper for invalid value for error-url in web-module.**
	
	When the error-url attribute in web-module tag of loadbalancer.xml is set, as follows, to an invalid value, such as:
	
	`<web-module context-root="app1" enabled="true"`
	`disable-timeout-in-minutes="60" error-url="abc"/>`
	
	The log message displayed is as follows:
	
	`warning (11113): reports: lb.configurator: XML_VALIDATOR_WARNING: Invalid format for the error-url sun-http-lberror.`
	
	However, the log should be:
	
	`warning (20015): reports: lb.configurator: XML_VALIDATOR_WARNING: Invalid format for the error-url abc`

High Availability

This section describes the known high availability issues and associated solutions.

ID	Summary
6301842	**Sometimes on Windows, the management agent cannot deregister the service when running,** `ma -r`**, and fails with the error message,** `Could not identify program`**.** **Solution** Start a Windows command prompt window and run `sc stop HADBMgmtAgent` and then run `sc delete HADBMgmtAgent`. If the command `ma -i -n` *servicename* was used to install and start the service, then use *servicename* when running the command *sc*.
6293912	**The Management Agent should not use special-use interfaces.** **Solution** When issuing hadbm create on hosts with multiple interfaces, always specify the IP-addresses explicitly, using DDN notation.
6291562	**Reassembly failures on Windows.** On the Windows platform, with certain configurations and load, there may be a large number of reassembly failures in the operating system. The problem has been seen with configurations of more than 20 nodes when running several table scans (select *) in parallel. The symptoms could be that transactions abort frequently, or repair and recovery may take a long time to complete, and there may be frequent timeouts in various parts of the system. **Solution** To fix the problem, the Windows registry variable `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters` should be set to a value higher than the default value of 100. We recommend increasing it to `0x1000` (`4096`). For more information, see article 811003 from the Microsoft support pages: `http://support.microsoft.com/default.aspx?scid=kb;en-us;811003`.
6275319	**Non-root users cannot manage HADB.** Installing with Java Enterprise System (as root) does not permit non-root users to manage HADB. **Solution** Always login as root to manage HADB.
6275103	**hadbm management agent should give a better error message when a session object has timed out and deleted at MA.** Sometimes, a resource contention problem on the server may cause a management client to become disconnected, When reconnecting, a misleading error message, `hadbm:Error 22184: A password is required to connect to the management agent` may be returned. **Solution** Check if there is a resource problem on the server, take proper action (e.g., add more resources), and retry the operation.

ID	Summary
6273681	**Management agents in global and local zones may interfere.** On Solaris 10, stopping a management agent by using the `ma-initd` script in a global zone stops the management agent in the local zone as well. **Solution** Do not install the management agent both in the global and local zone.
6271063	**Install/removal and symlink preservation.** Regarding install/removal of HADB c package (Solaris: `SUNWhadbc`, Linux: `sun-hadb-c`) version <m.n.u-p>, the symlink `/opt/SUNWhadb/<m>` is never touched once it exists. Thus, it is possible that an orphaned symlink will exist. **Solution** Delete the symlink before install or after uninstall unless in use.
6265419	**Downgrading from HADB Version 4.4.2.5 to HADB Version 4.4.1.7 causes management agent to fail with different error codes.** When downgrading to a previous HADB version, the management agent may fail with different error codes. **Solution** It is possible to downgrade the HADB database, however the management agent cannot be downgraded if there changes have been made in the repository objects. After a downgrade, you must use the management agent from the latest HADB version.
6262824	**hadbm does not support passwords containing uppercase letters.** Capital letters in passwords are converted to lowercase when the password is stored in hadb. **Solution** Do not use passwords containing uppercase letters.

ID	Summary
6173886, 6253132	**hadbm createdomain may fail.** If running the management agent on a host with multiple network interfaces, the `createdomain` command may fail if not all network interfaces are on the same subnet: `hadbm:Error 22020: The management agents could not establish a domain, please check that the hosts can communicate with UDP multicast.` The management agents will (if not configured otherwise) use the *first* interface for UDP multicasts (*first* as defined by the result from `java.net.NetworkInterface.getNetworkInterfaces()`). **Solution** The best solution is to tell the management agent which subnet to use (using `ma.server.mainternal.interfaces` in the configuration file. For example, `ma.server.mainternal.interfaces=10.11.100.0`). Alternatively you can configure the router between the subnets to route multicast packets (the management agent uses multicast address 228.8.8.8). Before retrying with a new configuration of the management agents, you should clean up the management agent's repository. Stop all agents in the domain, and delete all files and directories in the repository directory (identified by `repository.dr.path` in the management agent configuration file). This must be done on all hosts before restarting the agents with a new configuration file.
6249685	**clu_trans_srv process cannot be interrupted on Linux.** There is a bug in the 64 bit version of Red Hat Enterprise Linux 3.0 that makes the `clu_trans_srv` process end up in an uninterruptible mode when performing asynchronous I/O. This means that kill -9 does not work and the operating system must be rebooted. **Solution** Use a 32 bit version of Red Hat Enterprise Linux 3.0.

ID	Summary

6230792, 6230415	**Starting, stopping or reconfiguring HADB may fail or hang.**
	On AMD Opteron™ systems running Solaris 10, starting, stopping or reconfiguring HADB using the `hadbm` command may fail or hang with one of the following errors:
	`hadbm:Error 22009: The command issued had no progress in the last 300 seconds.`
	`HADB-E-21070: The operation did not complete within the time limit, but has not been cancelled and may complete at a later time.`
	This may happen if there are inconsistencies while reading/writing to a file (nomandevice) which the `clu_noman_srv` process uses. This problem can be detected by looking for the following messages in the HADB history files:
	`n:3 NSUP INF 2005-02-11 18:00:33.844 p:731 Child process noman3 733 does not respond.`
	`n:3 NSUP INF 2005-02-11 18:00:33.844 p:731 Have not heard from it in 104.537454 sec`
	`n:3 NSUP INF 2005-02-11 18:00:33.844 p:731 Child process noman3 733 did not start.`
	Solution
	To solve the problem, run the following command for the affected node:
	`hadbm restartnode --level=clear` *nodeno dbname*
	Note that all devices for the node will be reinitialized. You may have to stop the node before reinitializing it.

None	**HADB database creation fails.** Creating a new database may fail with the following error, stating that too few shared memory segments are available: `HADB-E-21054: System resource is unavailable : HADB-S-05512: Attaching shared memory segment with key "xxxxx" failed, OS status=24 OS error message: Too many open files.` **Solution** Verify that shared memory is configured and the configuration is working. In particular, on Solaris 8, inspect the file `/etc/system`, and check that the value of the variable `shmsys:shminfo_shmseg` is at least six times the number of nodes per host.
6232140	**The management agent terminates with the exception, "IPV6_MULTICAST_IF failed."** The management agent may terminate with the exception, `IPV6_MULTICAST_IF failed`, when starting on a host running Solaris 8 with several NIC cards, and if there is a mixture of cards with IPv6 and IPv4 enabled. The root cause is described in bug 4418866/4418865. **Solution** 1. Set the environment variable, _JAVA_OPTIONS, as described here: `$> export _JAVA_OPTIONS="-Djava.net.preferIPv4Stack=true″` 2. Alternatively, use Solaris 9.

ID	Summary
6171832/ 6172138	**Stale sessions are not cleaned up leading to degraded HADB performance, or the data device is getting full.** **Solution** To remove stale sessions efficiently, modify the `sun-ejb-jar.xml` file to set the value of `cache-idle-timeout-in-seconds` to *less* than the `removal-timeout-in-seconds` value. If the `cache-idle-timeout-in-seconds` is equal to or greater than the `removal-timeout-in-seconds`, old sessions will not be cleaned-up in HADB, which is the expected behavior. If you continue to face issues with stale sessions even after setting these properties as recommended, contact product support for help.

6171994	**Improper permissions in security.policy file causing startup hang.**
	Description
	hadb-jdbc has improper access permissions in the security.policy file.
	Solution
	If there is an intermittent hang during startup, add the following suggested permissions in the security.policy file:
	By default, the following is present:
	`permission java.net.SocketPermission "*", "connect";`
	Suggested permissions:
	`permission java.net.SocketPermission "*", "connect accept,listen,resolve";`

5042351	**New tables created after new nodes are added will not spread on the added nodes.** **Description** If a user creates a database instance, add nodes to it, then any new tables created afterwards will not be fragmented on the nodes added after database creation. Only the tables created before `addnodes` will be able to use the added nodes when `hadbm addnodes` refragment it. This is because create table uses the `sysnode node` group which is created at the boot time of the database (when `hadbm create` is executed). **Solution** Run `hadbm refragment` after new tables have been added, or create the new tables on nodegroup, *all_nodes*.

ID	Summary
6158393	**HADB problem with RedHat AS 3.0 in co-located mode under load.** **Description** HADB runs on RedHat Linux AS 3.0 co-located with Application Server. Transactions may get aborted and affect the performance. This is caused by the excessive swapping performed by the operating system. **Solution** This issue appears to have been resolved when HADB was tested against RedHat Linux AS 3.0 Update 4.

6214601	**Addnodes fails with table not found error since hadbm searches user tables in sysroot schema.**
	Description
	The hadbm refragment command fails with:
	`hadbm:Error 22042: Database could not be refragmented. Please retry with hadbm refragment command to refragment the database.. Caused by: HADB-E-11701: *Table singlesignon not found*`
	Solution
	Refragment the Application Server tables manually with the help of `clusql`:
	> clusql *server:port lis*t> system+*dbpassword specified at database create*>
	`SQL: set autocommit on;`
	`SQL: set schema haschema;`
	`SQL: alter table sessionattribute nodegroup all_nodes;`
	`SQL: alter table singlesignon nodegroup all_nodes;`
	`SQL: alter table statefulsessionbean nodegroup all_nodes;`
	`SQL: alter table sessionheader nodegroup all_nodes;`
	`SQL: alter table blobsessions nodegroup all_nodes;`
	`SQL: quit;`

6159633	**configure-ha-cluster may hang.** **Description** When the `asadmin configure-ha-cluster` command is used to create or configure a highly available cluster on more than one host, the command hangs. There are no exceptions thrown from the HADB Management Agent or the Application Server. `Solution` HADB does not support heterogeneous paths across nodes in a database cluster. Make sure that the HADB server installation directory and configuration directory are the same across all participating hosts. Additionally, clear the repository directories before running the command again.

ID	Summary
6197822	**hadbm set brings the database instance to a state from which it is difficult to recover.** **Description** In this scenario, the `hadbm set` command fails when attempting to change some database configuration variable; for example, setting `DataBufferPoolSize` to a larger size fails due to insufficient shared memory on node-0. The `hadbm set` command then leaves the database with node-0 in stopped state and node-1 in running state. Resetting the pool size back to the original value with the help of `hadbm` set fails with the message: `22073: The operation requires restart of node 1. Its mirror node is currently not available. Use hadbm status --nodes to see the status of the nodes.` In this case, hadbm startnode 0 also fails. **Solution** Stop the database, then restore the old values using `hadbm set` and restart the database.
6200133	**Failure in configure-ha-cluster; creating an HADB instance fails.** **Description** Attempts to create a HADB cluster fails with the message: `HADB-E-00208: The transaction was aborted.` The booting transaction populating the SQL dictionary tables gets aborted. **Solution** Run the `configure-ha-cluster` command again. If you run the `hadbm create` command and it fails with the previous message, rerun it.
5091349	**Heterogeneous install paths are not supported.** It's not possible to register the same software package with the same name at different locations on different hosts. **Solution** HADB does not support heterogeneous paths across nodes in a database cluster. Ensure that the HADB server installation directory and configuration directory are same across all participating hosts.
5091280	**hadbm set does not check resource availability (disk and memory space)** **Scenario** Increasing device or buffer sizes using `hadbm set`. **Description** The management system will check resource availability when creating databases or adding nodes, but it will not check if there are sufficient resources available when device or main-memory buffer sizes are changed. **Solution** Check that there is enough free disk/memory space on all hosts before increasing any of the `devicesize` or `buffersize` configuration attributes.

ID	Summary
4855623	**When one of the nodes' host is down, hadbm stop command does not exit.** The hadbm stop command may not be able to shutdown a database completely if HADB nodes do not receive shutdown messages due to network problems. The typical symptom is that hadbm takes more than 60 seconds to complete. In this situation, hadbm stop/delete will not work. You must specify the nodes that needs to be shutdown. **Solution** 1. Use "hadbm status --nodes" to determine which nodes are still alive. 2. Run "hadbm stopnode -f *node_number*" for each of the partially running nodes.
4861337	**If an active data node fails while executing `hadm stopdb`, `hadm startdb` will fail.** `hadbm status` should return `non-operational` if the database is unable to start. **Solution** To correct the problem: 1. Run `hadbm clear --fast` If this command reports failures of type, `address in use`, for each machine in the system, login and kill all processes starting with `clu_`. 2. Rerun the command, `hadbm clear --fast`. This will restart the database, causing the loss of all data. 3. Recreate the session-store. For details on creating the session-store, see *Sun Java System Application Server Administration Guide*.
4958827	**Child process transaction does not respond.** When a host machine accommodates more than one HADB node and all nodes use the same disk for placing their devices, it is observed that the disk I/O becomes the bottleneck. HADB process have been waiting for asynchronous I/O and therefore did not answer the node supervisor's heartbeat check. This causes the processes to be restarted by the node supervisor. Although this problem can occur on any operating system, it is observed on Red Hat Linux AS 2.1 and 3. **Solution** Use separate disks to place the devices belonging to different HADB nodes residing on the same machine.

ID	Summary
None	**HADB Configuration with Double Networks** HADB, configured with double networks on two subnets, work properly on Solaris SPARC. However, due to problems in the operating system or network drivers on some hardware platforms, it is observed that Solaris x86 and Linux platforms do not handle double networks properly. This causes the following problems to HADB: • On Linux, some of the HADB processes are blocked on message sending. This causes HADB node restarts and network partitioning. • On Solaris x86, after a network failure, some problems may arise that prohibits switching to the other network interface. This does not happen all the time, so it is still better to have two networks than one. These problems are partially solved in Solaris 10. • Trunking is not supported. • HADB does not support double networks on Windows 2003 (bug id **5103186**).

Server Administration

This section contains the following sections:

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`.

Administration Infrastructure

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

ID	Summary
6635248	***~ wildcard pattern does not work as documented.** http://docs.sun.com/source/817-2176/dnwldcrd.html#24629 shows a list of available wildcard patterns used by Sun Application Server. However, the wildcard pattern with tilde in the `ppath` does not work as documented. **Solution** Add one of the following to the `obj.conf` file. • `<Object ppath="/test[^h].html"> PathCheck fn="htaccess-find" filename=".htaccess"</Object>` • `<Object ppath="*~*(.testh.html|.testh.html/)"> PathCheck fn="htaccess-find" filename=".htaccess" </Object>` • `<Object ppath="*~*.testh.html*"> PathCheck fn="htaccess-find" filename=".htaccess" </Object>`

ID	Summary
6245376	**Virtual server's obj.conf is not removed after deleting the virtual server.** By default, the configuration file for a virtual server is not removed from the filesystem after deleting the virtual server. **Solution** Manually remove the *virtual_server*-`obj.conf` file of the deleted virtual server.
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*.
4740022	**`SNMP: END OF MIB` is returned when adding and starting a new instance server.** If you add and start a new instance without shutting down the instance server and subagent, an `END OF MIB` message is returned. **Solution** 1. To view a new instance, make sure the subagent and all the instance server processes are shut down. Under each server ->Monitoring -> "Enable SNMP Statistics Collection: on", apply the change, then restart each instance server, and start only one subagent process again. 2. If the subagent is already running, don't start any extra subagent processes in any instance. There can only be one master agent and one subagent for a Application Server installation (common for all domains/instances).
4865739	**Negative test for instance port in server.xml corrupts `domains.bin`** If the port number and/or IP Address includes a letter character, no new instances can be created and the current instances become unmanageable. **Solution** 1. Edit the `server.xml` file and the backup `server.xml` and correct the port number and/or IP Address. 2. Execute the `asadmin reconfig` command using the `keepmanualchanges=true` option. 3. Using the Administration Interface, stop the instance by selecting the instance name in the Administration tree. 4. Restart the administration server and application server instance.

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 administration graphical user interface issues, and the associated solutions.

ID	Summary

4725473	**External certificate nickname doesn't display on the Administration interface Nickname list.**
	When you install an external certificate through the Application Server Administration interface, a problem is encountered when you attempt to enable SSL for the http-listener by using the certificate that is installed on the external cryptographic module. Although the installation of the certificate is successful, the certificate nickname does not display in the Administration interface.
	Solution
	1. Log in to the system where the Sun ONE Application Server software is installed as an Administrative User.
	2. Link the http-listener to the certificate installed on the external cryptographic module. Execute the `asadmin` command. For more information on the `asadmin` command, see the `asadmin`(1M) man page.
	`/sun/appserver7/bin/asadmin create-ssl`
	`--user admin --password` *password*
	`--host` *host_name*
	`--port 8888`
	`--type http-listener`
	`--certname nobody@apprealm:Server-Cert`
	`--instance server1`
	`--ssl3enabled=true`
	`--ssl3tlsciphers +rsa_rc4_128_md5`
	http-listener-1
	This command establishes the link between the certificate and the server instance; it does not install the certificate (which was done using the Administration interface). Even though the certificate is linked with http-listener, the http-listener will be listening in non-SSL mode.
	3. Enable the http-listener to listen in SSL mode by using the following CLI command.
	/`sun/appserver7/bin/asadmin set`
	`--user admin`
	`--password` *password*
	`--host` *host_name*
	`--port 8888`
	`server1.http-listener.http-listener-1.securityEnabled=true`
	This command switches the server instance listening state from non-SSL to SSL.
	After completing the preceding steps, the certificate is displayed in the Administration interface.
	4. You can now use the Administration interface to edit the http-listener as needed.

ID	Summary
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.
4991824	**Restart times out after SSL is enabled from the Admin Console.** **Solution** Stop and start the server when SSL is enabled instead of doing a instance restart.
4988332	**“Apply Changes Required” icon appears even though no changes have been made.** In the Admin Console, when an Application Server instance’s properties or settings are viewed, the Apply Changes Required” icon appears even if no changes have been made to the settings. **Solution** This message appears only once and does not make any changes to the Application Server. Select “Apply Changes” when you get this message.
5011969	**On Solaris x86, HTTP listener and IIOP listener pages in the Administration interface give errors.** **Solution** The problem is caused by certain versions of jss3.jar. Two workarounds exist: For patch levels 115924-03, 115925-03, 115926-03, 115927-03, upgrade the SUNWjss package with a later version. Remove the path to `jss3.jar` from the server’s classpath as described here: 1. Open `server.xml` for editing. 2. Remove `usr/share/lib/mps/secv1/jss3.jar` from the classpath. This is the first entry in the classpath unless you have explicitly modified it. 3. Save `server.xml` and run `asadmin reconfig`. 4. Before starting your server instance, you also need to rename `jss3.jar`.

Sample Applications

This section describes known sample application issues and associated solutions.

ID	Summary
5048279	**Steps 1&2 of the Precompilation Tasks section of JDBC Realm Authentication sample is incomplete.** **Solution** The proper steps for 1 and 2 should be: 1. 1. Start the PointBase database server. Go to the *appserver_install_root*/pointbase/server directory and run the StartServer.sh script. 2. Start the PointBase Console. • Go to the *appserver_install_root*/pointbase/client_tools directory and run the PB_console.sh script. • The database URL is: jdbc:pontbase:server://localhost/sun-appserv-samples • The default admin username is: security. • The default admin password is: security. 3. Verify that the PUBLIC.user_tbl exists and contains users. • Navigate to the Catalog -> Catalog menu item. • Within the Database Catalog, navigate to the PUBLIC, TABLES, USER_TBL node. • Right-click the USER_TBL node and click SELECT * FROM "PUBLIC"."USER_TBL" within the pop-up menu.

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`

ID	Summary
4993620	**afterCompletion() called with false when more than one XA connection is used.** Using a modified version of `samples/transactions/ejb/cmt/bank` application - The BankBean ejb connects to two databases. one for checking a/c and one for saving. There are two connection pools created which are configured for `oracle.jdbc.xa.client.OracleXADataSource` datasource and global transactions have been turned on. Running the standalone client which transfers some balance and retrieves the checking as well as saving balances, three remote calls are made - `transferBalance()`, `getCheckingBalance()` and `getSavingsBalance()`. It is observed that afterCompletion for `getCheckingBalance()` invocation is called with `committed=false`, although all the database operations were successful. For example, the following is executed: `appclient -client /space/S1AS/installation/domains/domain1/server1/applications/j2ee-apps/transactions-bank_13/transact -name BankClient -textauth com.sun.jndi.cosnaming.CNCtxFactory iiop://localhost:3700` Result: `afterCompletion()` is called with false even though tx is successful for a stateful session bean that uses more than one XA connections and performs only read-only db operations. **Solution** The current JTS implementation does not support this.

ID	Summary
5016748	**The description for running SFSB Failover sample application using java client is incorrect.**

The java command for running the SFSB Failover sample application in the sample application documentation is incorrect.

Solution

The following is the correct description for running sfsbFailover with java client:

Running sfsbFailover sample with local or remote RMI/IIOP-based client without ACC:

The java client is executed without using the interface of Application Client Container. It can be executed on the local machine (ashost) or a remote machine. The client application runs from the command line, i.e.

```
java -Djava.library.path=$AS_INSTALL/lib:/usr/lib/mps
-Dcom.sun.CORBA.connection.ORBSocketFactoryClass=com.sun.enterprise.iiop.EEIIOPSocketFactory
-Dorg.omg.PortableInterceptor.ORBInitializerClass.com.sun.appserv.ee.iiop.EEORBInitializer
-Dorg.omg.CORBA.ORBClass=com.sun.enterprise.iiop.POAEJBORB
-Dorg.omg.CORBA.ORBSingletonClass=com.sun.corba.ee.internal.corba.ORBSingleton
-Djavax.rmi.CORBA.UtilClass=com.sun.corba.ee.internal.POA.ShutdownUtilDelegate
-classpath <CP> <ClientApp>
java.naming.factory.initial=com.sun.appserv.naming.S1ASCtxFactory
com.sun.appserv.iiop.loadbalancingpolicy=ic-based
com.sun.appserv.iiop.endpoints=host:port,host:port
```

where:

- CP includes five jar files for CLASSPATH which are `sfsbFailover.jar, appserv-rt.jar, appserv-ext.jar and appserver-rt-ee.jar,appserv-admin.jar`.

The file of `sfsbFailoverClient.jar` is copied to the current directory from the deployment directory: *install_dir*`/domains/domain1/server1/applications/j2ee-apps/sfsbFailover_1`

The other jars are copied to the current directory from AS installation: *install_dir*`/lib`

If you intend to run the client application on a remote machine, you need to transfer the `sfsbFailoverClient.jar` and other three appserver jar files to the client machine. Although the `sfsbFailoverClient.jar` file is used in this example to run application client with or without an ACC, it contains more files than absolutely necessary for the situation in which an ACC is not used. The minimal files required to run the example on a remote machine without an ACC are the `appserv-ext.jar` file and the following files as extracted from the `sfsbFailoverClient.jar` file:

`samples/ejb/stateful/simple/ejb/Cart.class` - Remote Interface
`samples/ejb/stateful/simple/ejb/CartHome.class` - Home Interface
`samples/ejb/stateful/simple/ejb/_Cart_Stub.class` - Remote Stub
`samples/ejb/stateful/simple/ejb/_CartHome_Stub.class` - Home Stub
`samples/ejb/stateful/simple/client/CartClient.class` - Client Application Main Class

The `appserv-ext.jar` file is required on the client machine because it contains the javax.ejb package that the client needs, and also contains the implementation and interface for J2EE APIs that the client may need.

- ClientApp refers to the client program. In this example: `samples.ejb.stateful.simple.client.CartClient`

ID	Summary

5016748 cont.	• URL refers to the comma separated list of application server running as part of one cluster with hostname (e.g. `ashost`) and with an ORB-port (e.g. `3700`). For example,
	`ashost:3700,ashost:3701,ashost:3702`
	The following is a complete example for the command:
	`java -Djava.library.path=$AS_ISNTALLlib:/usr/lib/mps`
	`-Dcom.sun.CORBA.connection.ORBSocketFactoryClass=com.sun.enterprise.iiop.EEIIOPSocketFactory`
	`-Dorg.omg.PortableInterceptor.ORBInitializerClass.com.sun.appserv.ee.iiop.EEORBInitializer`
	`-Dorg.omg.CORBA.ORBClass=com.sun.enterprise.iiop.POAEJBORB`
	`-Dorg.omg.CORBA.ORBSingletonClass=com.sun.corba.ee.internal.corba.ORBSingleton`
	`-Djavax.rmi.CORBA.UtilClass=com.sun.corba.ee.internal.POA.ShutdownUtilDelegate`
	`-classpath`
	`sfsbFailoverClient.jar:appserv-ext.jar:appserv-rt.jar:appserv-rt-ee.jar:appserv-admin.jar`
	`samples.ejb.stateful.simple.client.CartClient`
	`java.naming.factory.initial=com.sun.appserv.naming.S1ASCtxFactory`
	`com.sun.appserv.iiop.loadbalancingpolicy=ic-based`
	`com.sun.appserv.iiop.endpoints=localhost:3700,localhost:3701`
	Include $AS_INSTALL/lib and /usr/lib/mps in LD_LIBRARY_PATH before running the command.
	You will see interactive console, which helps you to also test the high availability of the SFSB, `InitialContext`, Home reference and remote reference. After creating the `InitialContext`, press Enter. The reference is failed over to another available server instance. You can test the failover behavior for home reference, remote reference as well in the same way.

5016656	**Samples document points to incorrect path for PointBase startup scripts.** The path of startserver.sh is incorrectly mentioned as *pointbase_install_dir*`/tools/server/startserver.sh`. **Solution** The correct path to the PointBase startup script is *pointbase_install_dir*`/client_tools/server/startserver.sh`.
5016647	**Indent-amount issue with Coffee Break application in JWSDP 1.0_01.** The following error is displayed while running the Coffee Break sample application: ERROR: output property ’indent-amount’ not recognized **Solution** This is a known issue in JWSDP 1.0_01. To avoid this issue, use a JWSDP version later than 1.1.

ORB/IIOP Listener

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

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.
5017470	**Default IIOP port numbers assigned by the Application Server are randomly generated.** When a new ORB listener or IIOP endpoint is created, the IIOP Port value varies, depending on whether one is creating an ORB Listener or IIOP Endpoint. 1. Creating a new ORB Listener > The IIOP port value cannot be left blank, though the * that signifies a 'must-specify' entry is not present. The default value shown is 1072, although the listener port value for the default listener created during server installation is 3700. 2. Creating a new IIOP Endpoint > The default IIOP port value shown is 3600. If an endpoint is created with the port value left blank, an IIOP endpoint is created with IIOP port value null. 3. If an new server instance is created, the default ORB listener port value is an arbitrarily high value, usually > 30000. **Solution** IIOP port values should not exceed 32767. If the values configured are outside this range, a connection failure occurs during failover. When configuring the IIOP listener for the server, ensure that the port values are within this range.

Documentation

This section describes the known documentation issues and associated solutions.

ID	Summary

6489168	**Instructions in the README.txt file in the <addons_install>/se directory need to be revised for clarity.**
	The README.txt currently reads as follows:
	Installing on Solaris as root user
	1) Copy SUNWaspx from the RootInstall directory on the CD to directory on your machine.
	2) Change the directory to where SUNWaspx was copied.
	`$ cd <addons_install>/ProxyPlugin`
	Solution:
	The instructions in README.txt must read as follows:
	1) Copy SUNWaspx from the RootInstall directory on the CD to a directory on your machine.
	`$ cp -R <addons_install>/se/WebPlugins/RootInstall/SUNWaspx /var/tmp`
	2) Change the directory to where SUNWaspx was copied.
	`$ cd /var/tmp`

6511489	**Information regarding KeepAliveFlushes in the Sun Java System Application Server Performance Tuning guide is incorrect.** The Performance Tuning guide currently has the following information: The number of times the server had to close a connection because the KeepAliveCount exceeded the MaxKeepAliveConnections. This setting is not tunable. **Solution** The statement must read as follows: Application Server does not close existing connections when the KeepAliveCount exceeds the MaxKeepAliveConnections. Instead, new keep-alive connections are refused and the KeepAliveRefusals count is incremented.
6495372	The section on Dynamic Deployment in Chapter 13 - Application Deployment of the Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3 Administration Guide (English) or the Sun ONE Application Server 7 Administration Guide (Japanese) does not warn users about errors that could occur if they attempt dynamic deployment when a client is accessing the server. **Solution** It is recommended that you execute the online dynamic deployment only when a client is not accessing the server. An error could occur in the data processing for memory and files if a client accesses the server during the application deployment process.

ID	Summary
6412668	**The following statement in the Configuring the File Cache section of the Application Server 7 Performance Tuning Guide is incorrect:** By default, Transmit File is enabled on NT, and not enabled on Unix. On Unix, enable Transmit File for platforms that have native OS support for PR_TransmitFile, which currently includes HP-UX and AIX. It is not recommended for other Unix/Linux platforms. **Solution** The statement must read as follows: By default, Transmit File is enabled on NT, and not enabled on Unix. On Unix, Transmit File is enabled for platforms that have native OS support for PR_TransmitFile, which currently includes Solaris, HP-UX and AIX. It is not recommended for other Unix/Linux platforms.
6067211	**Change in behavior of sessionFilename for memory persistence in Application Server 7 2004Q2 as compared to Application Server 7.0 series not documented.** The `sessionFileName` property in the manager-properties table from Developer's Guide to Web Applications should read: Specifies the absolute or relative pathname of the file in which the session state is preserved between application restarts, if preserving the state is possible. A relative pathname is relative to the temporary directory for this web module. The actual name of the file gets prepended with the context information. For example, if you specify `fileName` to be `/tmp/Session` and the web app context name is `MemoryPersistenceApp`, the session state is preserved in `/tmp/MemoryPersistenceAppSession`. This is applicable only if the persistence-type attribute of the session-manager element is memory.
5060001	**Typo in sample config.xml in Developing JAX-RPC Web Services chapter.** In the Developer's Guide to Web Services chapter, Developing JAX-RPC Web Services, the sample `config.xml` incorrectly capitalizes the *S* in `targetNamespace` and `typeNamespace`. **Solution** `targetNameSpace` should be `targetNamespace`. `typeNameSpace` should be `typeNamespace`.
5050378	**Incorrect button label specified in Application Server 7 2004Q2 Getting Started Guide.** In Chapter 1, under Session Persistence Types, the guide incorrectly states to use the Save button to complete the procedure. There is no Save button. Use the OK button.

6267772	**Instructions for configuring Borland OptimizeIt are incorrect.**
	
	Sun Java System Application Server Developer's Guide contains a typo in instructions for configuring Borland OptimizeIt Profiler.
	
	Solution
	
	Use the following parameters for JVM options in the Profiler tab:
	
	`-DOPTITHOME=Optimizeit_dir`
	`-Xbootclasspath/p:/Optimizit_dir/lib/oibcp.jar`
	`-Xrunpri:startAudit=t`

ID	Summary
5039674	**Error in asadmin create-jdbc-connection-pool man page.** The current description of --restype is incorrect. The -restype must be specified to disambiguate when a Datasource class implements both interfaces. An error is produced when this option has a legal value and the indicated interface is not implemented by the datasource class. This option has no default value. **Solution** `--restype` must be specified to disambiguate when a datasource class implements more than one of the JDBC interfaces `javax.sql.DataSource`, `javax.sql.ConnectionPoolDataSource` or `javax.sql.XADataSource`. An error is produced when this option has a legal value and the indicated interface is not implemented by the datasource class.
5010038	**Incorrect information in Administration Console online help on security realms.** In Application server Administration console, under Appserver instances>Server1>Security>Realms, the help file lists the different realms as: `file`, `ldap`, `certificate`, `solaris`. This is incorrect. The actual realms are: `file`, `ldap`, `certificate`, `agentRealm`. The Application Server installer sets the security realm to `agentRealm` by default.
6190702	**hadbm help gives outdated information.** **Solution** For the latest information, see Chapter, "Administering the High-Availability Database (Enterprise Edition)," in *Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3 Administration Guide* http://docs.sun.com/app/docs/doc/819-2783.
4970418	**In the `create-ssl` man page, a space is missing between `--certname` and `cert_name`.** **Solution** The correct syntax for the `--certname` option is as follows: `--certname cert_name`
4993601	**Outdated help files from Sun ONE Application Server 7, Enterprise Edition are displayed.** **Solution** If you have previously installed a different version of the Sun Java System Application Server (for example, Sun ONE Application Server 7, Enterprise Edition), make sure that your MANPATH environment variable points to your current installation directory.
5008199	**Documentation error in the example section of the `delete-jvm-options` manpage.** The example should read as follows: `asadmin delete-jvm-options --user admin --password adminadmin --host localhost --port 4848 --instance server1 -- "-Djava.security.policy=/var/opt/SUNWappserver7/domains/domain1/server1/config/server.policy"`

ID	Summary
None	**Installation Guide PDF file in product CD is corrupt.**
	Solution
	Use the HTML version of the Installation Guide.

Redistributable Files

Sun Java System Application Server Version 7 2004Q2 Update 6 does not contain any files which you can redistribute.

How to Report Problems and Provide Feedback

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

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

  This site has links to the Knowledge Base, Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.
- The telephone dispatch number associated with your maintenance contract

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

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

You might also find it useful to subscribe to the following interest group, where Sun Java System Application Server topics are discussed:

http://forum.java.sun.com/forum.jspa?forumID=136

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. Use the web-based form to provide feedback to Sun:

http://www.sun.com/hwdocs/feedback

Please provide the full document title and part number in the appropriate fields. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document. For example, the part number of this Release Notes document is 820-2610.

Additional Sun Resources

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

- Sun Java System Documentation
  http://docs.sun.com/db/prod/sjs.asse
- Sun Java System Professional Services
  http://www.sun.com/service/sunjavasystem/sjsservicessuite.html
- Sun Java System Software Products and Service
  http://www.sun.com/software
- Sun Java System Software Support Services
  http://www.sun.com/service/sunone/software
- Sun Java System Support and Knowledge Base
  http://www.sun.com/service/support/software
- Sun Support and Training Services
  http://training.sun.com
- Sun Java System Consulting and Professional Services
  http://www.sun.com/service/sunps/sunone
- Sun Java System Developer Information
  http://developers.sun.com
- Sun Developer Support Services
  http://www.sun.com/developers/support

- Sun Java System Software Training
  http://www.sun.com/software/training