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

Version 7 2004Q2 Update 3

Part Number 819-2782

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 3. 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
- What's New
- Platform Summary
- Solaris Patches Required
- Upgrade Options
- Using Migration Tool
- Sun ONE Studio 5 Standard Edition Update 1
- Other Requirements and Limitations
- Accessing the Documentation
- Resolved Issues
- Known Problems and Limitations
- Redistributable Files
- How to Report Problems and Provide Feedback
- Additional Sun Resources

Release Notes Revision History

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

Revision Date	Description of Change
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 3 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 3 release:

Stability and Quality Fixes

Update 3 release fixes a number of performance, stability, scalability, and availability fixes, providing improved experience over Sun Java System Application Server 7 2004Q2.

J2SE 1.4.2_07

The JVM version has been upgraded to 1.4.2_07.

JWSDP 1.5 Plug-in for Application Server

Java Web Services Developer Pack v1.5 Plug-in is available for Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3. The plug-in can be downloaded at the following URL: http://www.sun.com/download/products.xml?id=41fed79f

JWSDP 1.4

JWSDP 1.4 common components are packaged under AppServer7/package/jwsdpcc_addon directory in the product CD. Use the common components to upgrade your installation of JWSDP.

For information on installing and uninstalling the common components, see the readme in the <code>jwsdpcc_addon</code> directory.

Package based installs On Solaris[™] 10.

Both file-based and packaged based installs are supported in Update 3.

Support for Oracle® 10g.

Sun Java System Application Server Standard and Enterprise Edition 2004Q2 Update 3 supports Oracle 10g database server.

New JVM Option

FLUSH_ENABLED_APPLICATIONS is the new option that will flush data to the database at the end of every business method call. After enabling this option, flush will be enabled for all entity beans' business methods in the specified applications. To use this option, add the following line in server.xml:

jvm-options-DFLUSH_ENABLED_APPLICATIONS=app_name, app_name/jvm-options>

where *app_name* is the name of your application. You must restart the Application Server for the option to take effect.

Configuring HTTP header redirects.

rewrite-location, a new property in the load balancer configuration file (loadbalancer.xml) enables better control over HTTP/HTTPS routing behaviour. For details, see "Chapter 17, Configuring HTTP Load Balancing and Failover (Enterprise Edition)," in the *Administration Guide*.

• Installing or Upgrading Japanese and Simplified Chinese Application Server 7 2004Q2 Update 3.

Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3 does not have a separate release for Japanese or Simplified Chinese. If you have an existing installation, you must upgrade to the English version of Update 3. Once you have upgraded to Update 3, your localized version of the software will contain all the latest fixed bugs.

See related bugs, 6245916 and 6245424 in "Installation and Uninstallation" on page 17.

Platform Summary

This section provides information on supported platform components for the Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3.

This section includes:

- Operating Systems and Distribution Types
- System Requirements
- JDBC Drivers and Databases
- Web Servers
- Software Packages
- Browsers

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 3:

 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 x86³	Red Hat Advanced Server 2.1 Update 3, Red Hat Advanced Server 3	file-based and RPM-based	Standard and Enterprise 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

System Requirements

The following table summarizes the Sun Java System Application Server 7 Standard and Enterprise Edition 2004Q2 Update 3 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	1024 MB 2 GB (with	250 MB free	500 MB free
Solaris x86, Version 9 and 10	32 bit	(with co-located	co-located HADB)		
Red Hat Enterprise Linux 2.1, 3		HADB)	nadb)		
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."

¹On 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.

³On Red Hat Advanced Server 2.1, HADB supports devices on ext2 file systems only.

⁴On Windows XP Professional, only Standard Edition is available.

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	Туре 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	
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 3 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 3.

 Table 5
 Version of Component for Bundling with Application Server

		U	1.1		
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 3 Standard and Enterprise Edition
J2SE	1.4.0_02	1.4.1_03	1.4.2_04	1.4.2_05	1.4.2_07
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	1.0_015

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 3.

Table 6 Browsers Supported

Browser	Version	
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 3 software. These patches are already contained in the latest recommended patch cluster.

Upgrade Options

The Sun Java System Application Server Standard and Enterprise Edition 7 2004Q2 Update 3 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 3:
Sun ONE Application Server 7.0 Platform Edition	Standard Edition Enterprise Edition
Sun ONE Application Server 7.0 Standard Edition, Update 1, Update 2, and Update 3	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	Standard Edition Enterprise Edition

- Under certain conditions, an upgrade operation from base installation (Sun ONE Application Server 7.0) to a newer version of Sun Java System Application Server 7 2004Q2 may result in an automatic product uninstall. Do not use the upgrade feature of Application Server 7 2004Q2. Instead perform a manual migration.
- 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:
 - o All *.conf files in install_dir/config.

- o server.xml (Admin and server instance)
- Admin and server instance startserv scripts.
- o Admin and server instance server policy file.
- Server instance sun-acc.xml file.
- o 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.*

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 3 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/db/prod/java.studio

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

In the next HADB release, the possibility of submitting a password on the command line of hadbm administration commands will be deprecated, and eventually become obsolete. Therefore, avoid using this option. (Bug id 6250651).

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/db/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 3 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 3 Standard and Enterprise Edition release. For a full list of all available manuals, see documentation on the Web.

 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	
Information and instructions on the configuration, management, and deployment of the Sun Java System Application Server subsystems and components, from both the Administration interface and the command-line interface. Topics include cluster management, the high-availability database, load balancing, and session persistence. A comprehensive Sun Java System Application Server glossary is included.	Administration Guide	
Messages that you may encounter while running Sun Java System Application Server. Includes a description of the likely cause and guidelines on how to address the condition that caused the message to be generated.	Error Message Reference	

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, and Update 3 releases.

Table 9 Resolved Issues

Bug ID Description		
6220602	Stateful session being passivated to disk as files is not removed after removal timeout.	
6233088	Error replacing tokens in file when installing Application Server 7.	
6233123	XA transaction with Oracle and JMS can lose a message when Oracle dies.	
6236311	HADB: Too many statement handles allocated.	
6240771	EJB classloader does not close JAR input streams.	
6241348	Loadbalancer fails to redirect from HTTPS to HTTP.	

 Table 9
 Resolved Issues

Bug ID	Description
6171762	Client JNDI lookups via S1ASCtxFactory fail when jndi-name contains a ".".
4916390	Cannot pass command line options to javac during deployment of applications.
6172138	Entries in statefulsessionbean table is not cleared when SJAS 7.0 2004Q2 EE becomes unresponsive.
6193156	Application Server 7.x crashes with CORE 3148: failed to wait on signals. (Interrupted system call).
6209453	Load balancer does not failover to other clusters when all instances are disabled on one cluster.
6215977	Unable to restrict access to specific file types.
6217658	Security issue.
6218086	Cannot postparse ACLs.
6218460	Transactions can fail due to a transaction timeout even when the JTS timeout is large enough.
6223279	Deployment EJB DD: ejb-ref-name mapping using jndi-name generated incorrectly for those without jndi-name.
6223367	Modification of ACL does not add object into server1-obj.conf.
6223368	Unable to see ACLs in the admin UI.
6230798	Exception thrown during the closure of a connection by the pool leads to a connection leak.
2120798	Require support for DataDirect JDBC driver.
2120799	Runtime reloads collection field during relationship management.
6157465	HADB's full path with version is hard-coded in asenv.conf file.
6170685	Load balancer plug-in does not detect an Application Server hang.
6178431	$\mathtt{asadmin}$ CLI does not allow to programmatically delete \mathtt{jvm} options from a newly created instance.
2107329	JDBC connection pool does not properly release connections.
2114274	Conflicting cache-control headers are generated.
2114629	Client authentication is not working with load balancer plug-in on Microsoft IIS 5.0.
2114630	Error while creating auth-realm using asadmin CLI.
2119440	request.getAttribute("javax.servlet.error.request_uri") is not working.
4997111	Marshalling problems.

Table 9 Resolved Issues

Bug ID	Description
6156704	Load balancer plug-in on Microsoft IIS has Server hard coded in the HTTP header.
6157453	Servlet filter init() method unable to lookup JNDI Context.
6157473	No error message when failed login to HADB database fails.
6171200	Load balancer plug-in crashes with some URL-encoded URLs.
5084132	HADB: Semaphore routines are not thread-safe.
5097447	HADB: Garbage collection in logstore does not work.
6173355	InvocationException when trying to get database connection when Application Server is restarted
6181948	Input validation error.
6182861	Exceptions with WSI Sample App running against SJSWS 6.1
6156737	Application Server does not start on HP-UX when the heap size is set to 1 GB.
2060927	findByPrimaryKey returns broken bean for char primary key with Sybase.
2058376	EJB compiler failed to generate valid Java code for inner classes.
2075012	Application Server's asadmin utility always requests a password for SSL startup.
2076810	Application Server crashes during deployment of a WAR file.
2078410	SNMP doesn't work when the instance is stopped and started (restart).
2078969	iwsInstanceDeathCount is not being updated.
2079436	Admin Tool works improperly in Application Server 7.0 UR1 Japanese version.
2079785	Deployment fails if remote interface for the bean is named Util.
2080612	appservd.exe crashes when i18n application is accessed using passthrough plug-in with SSL enabled.
2081055	There is a warning message when jdbc/simple sample application is deployed.
2081692	Plugin truncates XML stream.
2084205	ArrayIndexOutOfBoundsException if CMP pk class has non-persistent public fields.
2092977	Application Server running behind SSL off loader needs to convert traffic from HTTP to HTTPs.
2102329	CMP Mapping Error: field does not have valid lower bound reported from Application Server Studio plug-in.
4739569	Virtual server with state of "off" or "disabled" should not be accessible.
4950512	Unable to deploy J2EE application to Application Server running on Windows.

 Table 9
 Resolved Issues

Bug ID	Description			
4953606	Application Server passthrough plug-in splits POST request into two when working with Microsoft IIS.			
4989269	LDAP security realm authentication fails if / appears in the user DN.			
4992519	Only allow the user who installed the product to perform uninstallation.			
4994363	Security role mapping not updated properly.			
5001994	$\verb javax.servlet.http.HttpServletRequest.getRequestURI \textbf{ returns the decoded request}.$			
5004406	passwordfile does not work with a mix of uppercase and lowercase characters.			
5011751	Unable to deploy CMP when EJBQL with finders using Long datatype input param.			
5015561	JCA leaks physical connections if getMetaData() throws ResourceException.			
5015994	Configuration changes to improve out-of-the-box performance.			
5017695	Cannot deploy .rar without authentication-mechanism.			
5020224	Request processing stops on badly-formed header.			
5021054	The EJB class loader does not adhere to EJB Spec when loading Java.			
5025894	Partial JCA 1.5 functionality requested.			
5039545	Web Container sends absolute redirects causing problems with external load balancers or proxies.			
5048147	Application Server with ${\tt zh_CN}$ locale has wrong encoded messages in server.log of ${\tt server1}$ instance.			
5052594	CMR application with multiple keys cannot be deployed to Application Server 7.0x.			
5056695	Application Server's Trust database is not populated with default root CA certificates.			
5063854	Able to access the last session's information.			
2082209	DB2 Server has connection growing after idle time out with DB2 Type II driver.			
2103829	Corrupted transaction log files hang Application Server.			
2105120	Neither the $\mathtt{CNCtxFactory}$ or $\mathtt{S1ASCtxFactory}$ can be used to programmatically reconnect.			
2105121	Application Server does not reconnect to directory server if directory server goes down and comes up.			
2120373	Customer unable to use all documented methods to use a third party ORB within an Application Server container.			

Table 9 Resolved Issues

Bug ID	Description
5063481	Trace method cannot be disabled.
6066323	clsetup not working on Windows.

Known Problems and Limitations

This section describes known problems and associated workarounds for the Sun Java System Application Server 7 2004Q2 Update 3 Standard and Enterprise Edition.

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

This information is organized into the following sections:

- Installation and Uninstallation
- Server Startup and Shutdown
- Database Driver
- Logging
- Web Container
- Message Service and Message-Driven Beans
- Java Transaction Service (JTS)
- Application Deployment
- Verifier
- Load Balancer
- High Availability
- Server Administration
- Sample Applications
- ORB/IIOP Listener

Documentation

Installation and Uninstallation

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

ID Summary

6245916

When upgrading from localized Application Server 7.1 Update 2 to Update 3 in Japanese and Simplified Chinese locales, the Update 2 welcome page is displayed.

The welcome page (about.html) and the default HTTP server index page (index.html) are from Update 2.

Solution

After upgrading to Update 3, refer to the English welcome page located at:

Appserver_Install_Dir/docs/about.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

Before creating a new server instance, replace the locale's index.html with a copy of the English index.html.

Ensure that you back up your current Japanese or Chinese index.html file.

Japanese:

Copy Appserver_Install_Dir/lib/install/templates/index.html to Appserver_Install_Dir/lib/install/templates/ja/index.html

Simplified Chinese:

Copy Appserver_Install_Dir/lib/install/templates/index.html to Appserver_Install_Dir/lib/install/templates/zh/index.html

6245424 After uninstalling localized versions of Application Server Update 3, 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.

1. 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
```

- 2. Run the Application Server uninstall program.
- 3. 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 SUNWjjaf-7.1.0-02.src.rpm
rpm -e SUNWjjmail-7.1.0-02.src.rpm
rpm -e SUNWascmo-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWascmo-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWascmo-zh_CN-7.1.0-02.src.rpm
rpm -e SUNWascmo-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 SUNWjaf-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.
Page 18 of 50 Application Server Version 7_2004Q2 Update 3 • Release Notes

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:
	<pre>java.io.FileNotFoundException: /sun/appserver7/./SUNWhadb/4 (Is a directory)</pre>
	Upgrade scenarios: 7.1RTM/7.1ER1/7.1UR1 file-based upgrade to 7.1UR2.
	Solution
	Rename the $\it file-based-installing-directory/SUNWhadb/4$ 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, d 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.

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
2082209/50 22904	DB2 Server has connection growing after idle time-out with DB2 Type II driver
	Solution
	Set the <code>SteadyPoolSize</code> and <code>MaxPoolSize</code> 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.

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 <code>acc_dir/logs/client.log</code>, 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
5089201/50 01994	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 <code>getRequestURI()</code> 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
	<pre>imq.authentication.client.response.timeout=360</pre>
	imq.jms.tcp.backlog=3000
	imq.jms.max_threads=5000
	Ind. Just max_tireads=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 <code>-javahome</code> 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.

6218460	Summary
	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.

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 <code>jndi-name</code> 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.

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.

4742545 Standalone verifier shows EJB Class Not Found errors.

The verifier indicates some failed tests with the following test description message: EJB Class Not Found. The test failures occur when an EJB JAR file uses an enterprise bean with a reference to another enterprise bean that is packaged in a separate EJB JAR file within the same EAR application. The failure messages are also observed if you try to validate the connector (RAR) dependent EAR files. This is because the RAR bundle need not be packaged within the EAR file that houses the enterprise bean with dependency on the RAR bundled files. The failures (exception to this are the connector-related failures) are only observed with the standalone verifier. The verifier invoked through the deployment command or the Administration interface does not show the failures.

Solution

Make sure that the packaging of the application EAR is correct and if you are using any utility JAR file, it is packaged within the EAR file. To resolve the referencing errors, you can shift to the verifier invoked through the deployment backend using <code>asadmin</code> or the Administration interface. For the connector-related failures, place the JAR file containing the required classes into the class path for the verifier. You can open the <code>install_root/bin/verifier[.bat]</code> file and add a LOCAL_CLASSPATH variable to the end of the JVM_CLASSPATH variable. Locally add the classes to the LOCAL_CLASSPATH variable, then run the verifier.

Load Balancer

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

ID Summary

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:

- 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.

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.

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 <code>java.net.NetworkInterface.getNetworkInterfaces()).</code>

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.

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.

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-idbc 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.

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.

6175436 Second addnodes fails during refragmentation

Description

The second (and subsequent) addnodes command may fail during refragmentation with the following error:

hadbm:Error 22042: Database could not be refragmented. Please retry with hadbm refragment command to refragment the database. Caused by: HADB-E-11747: Nodegroup all_nodes exists already.

Solution

Refragment the tables manually using hadbm refragment.

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 list> 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.

6197822 hadbm set brings the database instance to a state from which it is difficult to recover.

Description

In this scenario, the <code>hadbm set</code> command fails when attempting to change some database configuration variable; for example, setting <code>DataBufferPoolSize</code> to a larger size fails due to insufficient shared memory on node-0. The <code>hadbm set</code> 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 <code>hadbm set</code> 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.

6181845 Cannot create one data device larger than 2 GB on Windows.

Description

If hadbm create (or hadbm set) uses --NumberOfDataDevices=1 (default) and --devicesize to a value larger than 2 GB, the following error will be encountered:

DEVINIT-ERROR: out of space, wrote -2147479552 B of -2036330496 B An attempt was made to move the file pointer before the beginning of the file.

Solution

If you need to create data device larger than 2 GB in Windows, divide the devizesize by 2 GB and find the number of devices you need. Then create a number of data devices according to the calculation, using the --NumberOfDataDevices option.

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.

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.
- 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.

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.

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).

6178228/

Failure in configure-ha-cluster

6179010

Description

You create an HADB domain with a few host names and the operation succeeds. The hadbm listdomain command confirms it:

\$ hadbm listdomain -w admin

 Hostname
 Enabled? Running? Release
 Interfaces

 europe100
 Yes
 Yes
 V4-4-1-3
 128.139.113.110

 europe111
 Yes
 Yes
 V4-4-1-3
 128.139.113.111

Then you create the database with the command, hadbm create, giving hostname with full domain name as the parameter to the --hosts option. For example:

\$ hadbm create --hosts=europe100.xyz.abc.com,europe111.xyz.abc.com ..

you get the following error:

hadbm:Error 22176: The host europe100.xyz.abc.com is not registered in the HADB management domain. Use hadbm createdomain to set up the management domain or hadbm extenddomain to include new hosts in an existing domain.

Workaround

There are two possible workarounds:

1. Use the names that hadbm listdomain displays:

For example: hadbm create --hosts=europe100,europe111 ...

Use decimal ip-addresses (DDN)

For example: hadbm create --hosts=128.139.113.110,128.139.113.111

6174676/

Unable to run configure-ha-cluster.

6179084

Description

You have two different installations of HADB, one on a server and another on the hadbm client host(s), having different versions of HADB. You start the management agents of one of the versions. Then you run hadbm create with the other version. You get the following error:

HADBMGMT007: hadbm create command failed. Return value: 1 STDOUT:

STDERR: hadbm:Error 22170: The software package V4.4.x could not be found at path packagepath/4.4-x on host hostname.

CLI137 Command configure-ha-cluster failed.

Solution

Use the same HADB version for the management agents and the hadbm clients.

ID	Summary
5103186	NSUP unable to start with one net down on Windows 2003.
	Description
	If HADB is configured with double networks on Windows 2003 and one network goes down, the nodes will not be able to restart. Therefore, as soon as a node goes down, it will stay down.
	Solution
	Do not configure HADB with double networks on Windows 2003.

Server Administration

This section contains the following sections:

- Command Line Interface (CLI)
- Administration Infrastructure
- Administration Interface

Command Line Interface (CLI)

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

ID	Summary
4676889	CLI command overflows in single-mode if the command is more than 256 characters long.
	On UNIX(R), when executing a CLI command in single-mode that contains more than 256 characters, the command fails with this error: Command Not Found
	This is a terminal restriction, not a CLI restriction.
	Example:
	create-jdbc-connection-poolinstance server4datasourceuser admindatasourcepassword adminadmindatasourceclassname testdatasourceurl testminpoolsize=8maxpoolsize=32maxwait=60000poolresize=2idletimeout=300connectionvalidate=falsevalidationmethod=auto-commitfailconnection=falsedescription 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

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

- To view a new instance, make sure the subagent and all the instance server processes are shut down. Under each server ->Monitoring -> "Enable SNMP Statistics Collection: on", apply the change, then restart each instance server, and start only one subagent process again.
- If the subagent is already running, don't start any extra subagent processes in any instance. There can only be one master agent and one subagent for a 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

- 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.
- 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

- Log in to the system where the Sun ONE Application Server software is installed as an Administrative User.
- 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.

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 serverl asadmin set --port 4848 --host jackiel2 --password adminadmin --user admin server1.jdbc-connection-pool.jdbc-simple-pool.property.DatabaseName=jdbc:po

server1.jdbc-connection-pool.jdbc-simple-pool.property.DatabaseName=jdbc:pintbase:server://localhost/sun-appserv-samples

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 <code>getCheckingBalance()</code> invocation is called with <code>committed=false</code>, 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.CNCtxFactoryiiop://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.

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.SIASCtxFactory
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: <code>install_dir/domains/domainl/server1/applications/j2ee-apps/sfsbFailover_1</code>

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

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
- $\verb|Djavax.rmi.CORBA.UtilClass=com.sun.corba.ee.internal.POA.Shutdown \verb|UtilDelegate|| \\$
- -classpath

sfsbFailoverClient.jar:appserv-ext.jar:appserv-rt.jar:appserv-rt-ee.jar:appserv-admin.jarsamples.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.

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.

- 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.
- 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.

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ID Summary

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.

ID	Summary
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 documentation.
4970418	In the create-ssl man page, a space is missing betweencertname and cert_name.
	Solution
	The correct syntax for thecertname 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-optionsuser adminpassword adminadminhost localhostport 4848instance server1 "-Djava.security.policy=/var/opt/SUNWappserver7/domains/domain1/server1/config/server.p
	olicy"
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 3 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://forums.java.sun.com/forum.jspa?forumID=136

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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

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