Sun Java™ System Application Server Platform Edition Release Notes

Version 8.1 2005Q2 Update 2

Part Number 819-2802

The Sun Java™ System Application Server Platform Edition 8.1 2005Q2 Update 2 product is a J2EE 1.4 platform-compatible server for the development and deployment of J2EE applications and Java Web Services. Production use of this server is free of charge. Customers interested in redistribution should contact Sun OEM sales for a redistribution license:

http://www.sun.com/software/products/appsrvr/appsrvr_oem.html

These Release Notes contain important information available at the time of release of the Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2. New features and enhancements, known issues and limitations, and other information are addressed here. Read this document before you begin using Application Server Platform Edition 8.1 2005Q2 Update 2.

The most up-to-date version of these release notes can be found at the Sun Java System documentation web site: http://docs.sun.com/db/prod/s1appsrv#hic/. Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and product documentation.

This document contains the following sections:

- Release Notes Revision History
- About Application Server Platform Edition 8.1 2005Q2 Update 2
- Bugs Fixed in the 8.1 Update 2 Release
- Known Issues and Limitations
- How to Report Problems and Provide Feedback
- Sun Welcomes Your Comments
- Additional Sun Resources

Third-party URLs are referenced in this document and provide additional, related information.

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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 Platform Edition 8.1 2005Q2 Update 2 product.

Revision Date	Description
June 2005	Initial release of the Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 product.

About Application Server Platform Edition 8.1 2005Q2 Update 2

Sun Java™ System Application Server Platform Edition 8.1 2005Q2 Update 2 is a J2EE 1.4 platform-compatible server for the development and deployment of J2EE applications and Java technology-based web services.

This section includes:

- What's New in the 8.1 2005Q2 Update 2 Release

- J2EE Support

- Compatibility Issues

- Hardware and Software Requirements

- Switching to a Supported J2SE Version
- Related Documentation

What's New in the 8.1 2005Q2 Update 2 Release

For information on what has changed for this update, see Bugs Fixed in the 8.1 Update 2 Release.

J2EE Support

The Sun Java System Application Server 8.1 2005Q2 Update 2 supports the J2EE 1.4 platform. The following table describes the enhanced APIs available on the J2EE 1.4 platform.

API	Description
Components	
Application and Application Client	Implementation of standard deployment descriptors by means of XML schemas
Enterprise JavaBeans (EJB) 2.1	Timer service and EJB Web-service endpoint
Java Servlet 2.4	Web-service endpoint filter
JavaServer Pages (JSP) 2.0 architecture	Expression language and tag library
J2EE Connector Architecture 1.5	Inbound resource adaptor and Java Message Service (JMS) pluggability
Web Services	
Java Web Services Developer Pack 1.5	Integrated toolkit for building, testing and deploying XML applications, Web services, and Web applications
Java API for XML-based Remote Procedure Calls (JAX-RPC) 1.1	Mapping for WSDL and Java technology and support for development of Web-service clients and endpoints
WS-I Basic Profile 1.0	The enabling element for interoperability using WSDL and SOAP
SOAP with attachment API for Java (SAAJ) 1.2	An API for SOAP-based messaging; fosters the creation of SOAP messages with attachments
Java APIs for XML Registries (JAXR) 1.0	A uniform and standard API for accessing XML registries, such as those for Universal Description Discovery and Integration (UDDI and ebXML)
Other	
J2EE Deployment 1.1	Standard APIs that enable deployments of J2EE components and applications

API	Description
J2EE Management 1.0	Definitions for the information model for managing the J2EE platform
Java Management Extensions (JMX) 1.2	Standard management API
Java Authorization Contract for Containers (JACC) 1.0	Definitions of security contracts between a J2EE Application Server and the authorization policy provider
Java API for XML Processing (JAXP) 1.2	An API with which applications can parse and transform XML documents; also adds support for processing of XML schemas
JMS 1.1	A messaging standard that enables J2EE application components to create, send, receive, and read messages; also adds support for uniform APIs for queues and topics
JavaMail 1.3	A set of abstract classes that model a mail system; also includes minor updates to the APIs

Compatibility Issues

In the next major release of the Sun Java System Application Server Platform Edition the following incompatibilities will be introduced:

- Container managed persistence 1.1 beans will no longer support JDO query language. You will be required to rewrite their queries using EJB query language.

- If an application with CMP 1.1 beans is deployed, an error message is displayed during deployment and each time the application is loaded. The message will state that queries in JDO query language are no longer supported and must be rewritten using EJB query language.

Help is available for converting JDO QL queries to EJB QL on Sun Developer Connection forums.

Hardware and Software Requirements

This section lists the requirements that must be met before installing the Sun Java System Application Server Platform Edition 8.1 product.

- Platform Requirements

- Important Patch Information

- JDBC Drivers and Databases

- Browsers

- Upgrading the Sun Java System Application Server

- Other Requirements

Platform Requirements

The following table lists the operating systems that are supported for Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 product.

Operating System	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space	Minimum Supported JVM	Recommended JVM
Sun Solaris 8, 9, 10 (SPARC) Solaris 9, 10 (x86)	256 MB	512 MB	250 MB free	500 MB free	J2SE 1.4.2_06	J2SE 1.5.0_02
Sun Java Desktop System	256MB	512MB	250 MB free	500 MB free	J2SE 1.4.2_06	J2SE 1.5.0_02
Redhat Enterprise Linux 2.1 Update 2, and 3.0 Update 1	256 MB	512 MB	250 MB free	500 MB free	J2SE 1.4.2_06	J2SE 1.5.0_02
Microsoft Windows 2000® Advanced Server Service Pack 4+	256 MB	512 MB	250 MB free	500 MB free	J2SE 1.4.2_06	J2SE 1.5.0_02
Microsoft Windows XP® Professional Service Pack 1+	256 MB	512 MB	250 MB free	500 MB free	J2SE 1.4.2_06	J2SE 1.5.0_02

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

Solaris Patch Requirements

It is recommended that Solaris 8, 9, 10 (x86, SPARC) users have the "Sun recommended patch cluster" installed. This patch cluster is available under "Recommended and Security Patches" here:

http://sunsolve.sun.com/

RedHat Enterprise Linux 3.0 Additional Package Requirements

To run native components of this product, including installer, the following package, which is not part of the standard RedHat Enterprise Linux 3.0 distribution, should be installed:
compat-libstdc++-7.3-2.96.118.i386.rpm

The package can be downloaded from:

http://mirrors.kernel.org/redhat/redhat/linux/9/en/os/i386/RedHat/RPMS/compat-libstdc++-7.3-2.96.118.i386.rpm

Important Patch Information

For the current list of required patches for Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 go to http://sunsolve.sun.com and select either "Patches" or "Patch Portal." Follow the Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 links. As operating system patch requirements change and patches to Java Enterprise System components become available, updates will be made available on SunSolve, initially in the form of recommended patch clusters.

JDBC Drivers and Databases

Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 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:

JDBC Vendor	JDBC Driver Type	Supported Database Server
i-net Software	Type 4	Oracle (R) 8.1.7, 9i, 9.2.0.3 Sybase ASE 12.5.2 Microsoft SQL Server 2000 4.0 Service Pack 1
IBM	Type 2	IBM DB2 8.1 Service Pack 3+
PointBase	Type 4	PointBase Network Server 4.8 and 5.2
DataDirect	Type 4	Oracle (R) 8.1.7, 9i, 9.2.0.3 Sybase ASE 12.5.2 Microsoft SQL Server IBM DB2 8.1 Service Pack 3+
Sun Java System JDBC Driver for Oracle	Type 4	Oracle (R) 9.2.0.3, 10G
Sun Java System JDBC Driver for DB2	Type 4	IBM DB2 8.1 Service Pack 3+
Sun Java System JDBC Driver for Sybase	Type 4	Sybase ASE 12.5.2
Sun Java System JDBC Driver for Microsoft SQL Server	Type 4	Microsoft SQL Server 2000 4.0 Service Pack 1
Oracle	Type 4, Type 2	Oracle (R) 9.2.0.3, 10G

For more information about i-net Software, see:

http://www.inetsoftware.de/

For more information about DataDirect Technologies, see:

http://www.datadirect.com/

Configuring Oracle

Oracle JDBC drivers must be configured properly to be compliant with J2EE 1.4. Use the following configuration for Type 2 and Type 4 drivers:

1. Use the JDBC driver 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` variables (which must include `$ORACLE_HOME/lib`) need to be defined in the environment in which the Application Server is started. For example, add them to the `asenv.conf` file and ensure they are exported.

Configuring PointBase

Many sample applications use the PointBase database server included with the Application Server. When using Application Server Platform Edition, you must configure the PointBase database server before using it.

There are two ways to configure PointBase:

1. Set the `JAVA_HOME` environment variable to the location of the J2SE. Make sure you have the J2SE installed that you want to use.

   a. Using the command appropriate for your operating system and shell, set the `JAVA_HOME` environment variable to the directory in which J2SE is installed; for example:

      % setenv JAVA_HOME "/opt/SUNWappserver/jdk"

2. Edit the Application Server's PointBase configuration file.

a. On Solaris and Linux systems, edit the
   install_dir/pointbase/tools/serveroption/pbenv.conf configuration file, changing the line:

   PB_JAVA=%%%PB_JAVA%%%

   to

   PB_JAVA=*J2SE_location*

   where *J2SE_location* is the directory where the J2SE is installed. If you installed J2SE with Application Server, it is installed by default to *install_dir*/jdk. After making this change, you can start PointBase using the startserver script.

b. On Windows systems, edit the *install_dir*\pointbase\tools\serveroption\pbenv.bat configuration file, changing the line:

   set PB_JAVA=%%%PB_JAVA%%%

   to

   set PB_JAVA=*J2SE_location*

   where *J2SE_location* is the directory in which the J2SE is installed. If you installed J2SE with Application Server, it is installed by default to *install_dir*\j2se1.5. After making this change, you can start PointBase by running startserver.bat.

Browsers

This section lists the browsers that are supported with the Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2.

Browser	Version
Mozilla	1.4, 1.5, 1.6, 1.7.*x*
Netscape Navigator	4.79, 6.2, 7.0
Internet Explorer	5.5 Service Pack 2, 6.0

Upgrading the Sun Java System Application Server

Refer to the *Upgrade and Migration Guide* for complete instructions for upgrading from a previous version of the Application Server to the current version.

Other Requirements

The following additional requirements should be met before installing the Sun Java System Application Server software.

- **Free space:** your temporary directory must have a minimum of 35MB free for Sun Java System Application Server installation, and 250 MB of free space for the SDK installation.

- **Using the uninstall program:** If you need to remove the Application Server from your system, it is important to use the uninstall program that is included with the software. If you attempt to use another method, problems will arise when you try to reinstall the same version, or when you install a new version.

- **Free ports:** You must have seven unused ports available.

  - The installation program automatically detects ports in use and suggests currently unused ports for the default settings. By default, the initial default ports are 8080 for HTTP, 8181 for HTTPS, and 4848 for the Administration Server.

  - The installation program will detect used ports and assign two others for you: *Sun Java™ System Message Queue* (by default, 7676), and IIOP (by default, 3700 for IIOP and 3820 and 3890 for IIOP/SSL). If these default port numbers are in use, the installation program will assign a random port number from the dynamic port range (note that this may not be the next available port number).

- **Starting previously-installed servers** (UNIX) — unless you are replacing the previously installed server, you should start it before you begin the Sun Java System Application Server 8.1 installation process. This allows the installation program to detect ports that are in use and avoid assigning them for other uses.

- **Replacing previously-installed servers** (UNIX) — if you have an older version on the Sun Java System Application Server installed that you wish to replace with the current Application Server, you should stop it before installing the new server. Use the installation program and Upgrade wizard to upgrade the server.

- **Shutting down firewall** (Microsoft Windows) — You must stop any firewall software before installing the Sun Java System Application Server software, because some of this software disables all ports by default. The installation program must be able to accurately determine which ports are available.

For further compatibility information, see the *Upgrade and Migration Guide.*

Switching to a Supported J2SE Version

If you want to use a different supported version of the J2SE to run the Application Server, perform the following steps (Windows and Unix):

1. Download the desired supported J2SE version (not the JRE) and install it on your system, if you have not already done so.

   The J2SE SDK can be downloaded from http://java.sun.com/j2se/

2. Stop the Application Server.

   From the Command line:

   install_dir/bin/asadmin stop-domain

   From the Administration Console:

   a. Click the **Application Server** node.

   b. Click **Stop Instance**.

3. Edit the *install_dir*/config/asenv.conf file (asenv.bat on Windows), changing the value for AS_JAVA to point to the J2SE home directory:

4. Edit the *install_dir*/samples/common.properties file, changing the line beginning com.sun.aas.javaRoot... to reference the J2SE home directory.

5. Restart the Application Server.

   From the Command line:

   install_dir/bin/asadmin start-domain

   From the Administration Console:

   a. Click the **Application Server** node.

   b. Click **Start Instance**.

If you are upgrading from a JDK version earlier than the bundled version (JDK 1.5.0_02) then you cannot upgrade using just the steps above. Specifically, in addition to the above steps, you must delete any existing domains and recreate them.

Related Documentation

The Sun Java System Application Server documentation set covers the following product releases:

- Application Server Platform Edition 8.1 2005Q1

- Application Server Platform Edition 8.1 2005Q1 Update 1

- Application Server Platform Edition 8.1 2005Q2 Update 2

Unless otherwise specified, whenever either product release is mentioned in the documentation, all these releases are implied.

The Application Server product documentation set can be found at this location:

http://docs.sun.com/app/docs/coll/ApplicationServer81_pe_05q2_UR2

The following table summarizes the books included in the Application Server core application documentation set.

Book Title	Description
Documentation Home Page	One stop location to access all Application Server topics.
Quick Start Guide	How to get started with the Sun Java System Application Server product.
Installation Guide	Installing the Sun Java System Application Server software and its components.
J2EE 1.4 Tutorial	Using J2EE 1.4 platform technologies and APIs to develop J2EE applications and deploying the applications on the Sun Java System Application Server.
Administration Guide	Configuring, managing, and deploying the Sun Java System Application Server subsystems and components from the Administration Console.
Developer's Guide	Creating and implementing Java™ 2 Platform, Enterprise Edition (J2EE™ platform) applications intended to run on the Sun Java System Application Server that follow the open Java standards model for J2EE components and APIs. Includes general information about developer tools, security, assembly, deployment, debugging, and creating lifecycle modules.
Administration Reference	Editing the Sun Java System Application Server configuration file, domain.xml.
Reference Manual	Utility commands available with the Sun Java System Application Server; written in manpage style. Includes the asadmin command line interface.
Upgrade and Migration Guide	Migrating your applications to the new Sun Java System Application Server programming model, specifically from Application Server 6.x and 7. This guide also describes differences between adjacent product releases and configuration options that can result in incompatibility with the product specifications.
Troubleshooting Guide	Solving Sun Java System Application Server problems.
Error Message Reference	Solving Sun Java System Application Server error messages.

Bugs Fixed in the 8.1 Update 2 Release

This section lists the customer-escalated issues resolved for the Sun Java System Application Server Platform Edition 8.1 2005Q2 Update 2 product.

Bug Number	Description
4891060	Listeners ignore address directive when listening on sockets.
6155190	On Windows, Jasper compilations fail if the installation path includes an embedded space.
6189189	export-http-lb-config doesn't create loadbalancer.xml file name when absolute path is given.
6195779	The values of options of some filter dropdown lists are not internationalized.
6196741	Upgrade in place of bundled J2SE component does not work correctly when upgrading J2SE 1.4.x.
6198225	QuickStart Guide has typo; i.e., repeated sentence.
6212791	No items displayed in the right pane when clicking a tree node.
6219560	Listeners won't obey network address.
6227502	Initialization errors in EJB Timer Service should not be logged as SEVERE.
6232347	dropandcreatetables not quite correct for asdamin deploy --help.
6232974	Installer failed to create a node-agent when upgrading from 8.0PE to 8.1EE.
6233276	form auth does not work for URL-pattern /*.jsp.
6233469	Incorrect help text in asadmin help.
6233476	Incorrect help text for update-file-user and similar commands.
6237567	Missing key AdminObjectStep2PageHelp in Create Admin Object Resource window.
6238477	Unable to resolve "corbaname" EJB references in same app server instance.
6239630	Cannot properly map a particular entity bean.
6239837	Wrong unit and default value for Reconnect Interval in Admin for JMS server-config.
6240661	some messages remain in english in the locale.
6241311	The note for "Pool Idle Timeout" field is wrong.
6241368	Admin Console login screen and online help never refer to english browser language.
6243395	Transaction recovery not working with a JMS and JDBC resource.
6245922	AppServer crashes consistently.
6246426	Expansion of JAR files in WEB-INF/lib exposes content that should be concealed.
6249637	Change of JDBC connection pool properties requires a restart.
6249662	Proxy-auth-cert not properly formatted.
6250989	SOAPElement.addChildElement(SOAPElement); adds an incomplete element without markups.
6252810	configure-ha-persistence in manpages is not up-to-date.
6254393	Bundled QuickStart has link to out-of-date release notes.
6254462	NPE thrown by connection validation code after database restart.

Bug Number	Description
6255253	"How to Buy" link in bundled docs is wrong URL.
6255440	Performance improvement for synchronization.
6255458	Typo in delete-virtual-server.
6255524	UpdateTask ANT Task does not work with ANT 1.6.2.
6255564	Upgraded domain startup fails due to admin user authentication failure after PE to EE upgrade.
6258844	File realm user logins don't work after upgrade to 8.1 Update 1.
6258997	Correct description for --secure option in CLI manpages.
6259125	Documentation for asadmin get is inadequate and confusing.
6262564	PrivateKeyProcessor does not support get by keyIdentifier (prevents interop from working).
6263684	Linux RPM patch generation script requires manual changes in the README.
6263686	svr4 patch generation insert incorrect entires in README.
6264292	package-appclient script broken.
6264969	The setup of all AS samples that use pointbase failed: annot upgrade db to version 5.1.
6265687	Installer's graphic image has incorrect product version.
6267410	Exception during session.invalidate()if Log level is set to FINE.

Known Issues and Limitations

This section describes known problems and associated workarounds for the Sun Java System Application Server 8.1 2005Q2 Update 2 product. If a summary statement does not specify a particular platform, the problem applies to all platforms. This information is organized into the following sections:

- Administration

- Application Client

- Deploytool

- Documentation

- Installation

- JDBC Drivers

- Lifecycle Management

- Logging

- Upgrade Utility

- Web Container

Administration

This section describes known Administration issues and associated solutions.

Bug ID	Summary
6171458	**The package-appclient script does not work if domain1 is not present.**
	By default, there is a hard-coded value in $INSTALL/lib/package-appclient.xml for the AS_ACC_CONFIG variable for domain1 that is pointed to by asenv.conf. If domain1 is deleted and a new domain created, the AS_ACC_CONFIG variable is not updated with the new domain name, which causes the package-appclient script to fail.
	Solution
	Do one of the following:
	• Leave domain1 intact, and create your other domains around it.
	• Remove domain1 and replace the hard-coded value for domain1 in $INSTALL/lib/package-appclient.xml with the new domain name.
	This will have to be done every time a new domain is created if domain1 is not present.
6196993	**Cannot restore backed-up domain with another name.**
	Mirroring of a domain on the same Application Server installation cannot be performed using the backup-domain and restore-domain commands because the domain cannot be restored using a different name than the original, even though the asadmin restore-domain command provides an option to rename the domain. Renaming the backed-up domain appears to succeed, but attempts to start the renamed domain fail because the entries in the domain configuration are not changed, and startserv and stopserv use the original domain name to set paths.
	Solution
	The domain name used for restore-domain must be the same as that used for the original backup-domain command. The backup-domain and restore-domain commands in Application Server 8.1 work only for backing up and restoring the same domain on the same machine.

Bug ID	Summary
6200011	**Starting Application Server with additional JMX Agent is not supported.**

J2SE 1.4.x, 5.0, or later can be configured on the Application Server. An integral feature of J2SE 5.0 platform is the ability to start a JMX agent. This is activated when you explicitly set system properties at the server startup.

Example values include:

```
name="com.sun.management.jmxremote" value="true"
name="com.sun.management.jmxremote.port" value="9999"
name="com.sun.management.jmxremote.authenticate" value="false"
name="com.sun.management.jmxremote.ssl" value="false"
```

After configuring JMX properties and starting the server, a new jmx-connector server is started within the Application Server VM. An undesirable side-effect of this is that the administration functions are affected adversely, and the Application Server administration GUI and CLI may produce unexpected results. The problem is that there are some conflicts between the built in jmx-connector server and the new jmx-connector server.

Solution

If using `jconsole` (or any other JMX-compliant client), consider reusing the standard JMX Connector Server that is started with Application Server startup.

When the server starts up, a line similar to the one shown below appears in the server.log. You can connect to the JMXServiceURL specified there and perform the same management/configuration operations after successfully providing the credentials; for example:

```
[#|2004-11-24T17:49:08.203-0800|INFO|sun-appserver-ee8.1|javax.enterprise.system.tools.
admin|_ThreadID=10;|ADM1501: Here is the JMXServiceURL for the JMXConnectorServer:
[service:jmx:rmi:///jndi/rmi://hostname:8686/management/rmi-jmx-connector]. This is
where the remote administrative clients should connect using the JSR 160 JMX
Connectors.|#]
```

For more information, refer to the *Administration Guide*.

6201462	**FrameworkError exception after deploying a WAR and JAR to Platform Edition server via the AMX API in the Application Server Admin Console.**

When an application is deployed on Platform Edition using the AMX API and not referenced, the Application Server Admin Console throws errors while displaying that application. AMX requires that you explicitly handle references for your applications. For example, when an application is deployed, the `DeployedItemRefConfig` needs to be explicitly created. To simplify the deployment process, references are assumed to be present in Platform Edition, which in turn causes the issue with Application Server Admin Console.

Solution

Always create the reference to a resource or application after creating it.

Application Client

This section describes known application client issues and associated solutions.

Bug ID	Summary
6193556	**Library JAR packaged in Application Client Archive overwrites MANIFEST file.**
	If you have a top level JAR file inside your client JAR (in this case, reporter.jar), when you deploy the client JAR, the MANIFEST file for that JAR overwrites the MANIFEST file for the client JAR.
	Solution
	None at this time.

Deploytool

Bug ID	Summary
6276218	**On Windows, Deploytool does not work with spaces in the install path.**
	If you install the Application Server in a directory with spaces, Deploytool will not be able to launch.
	Solution
	1. Modify line 83 of the `deploytool.bat` script located under the bin directory.
	Change:
	`    call %ASENV_DIR%%ASENV_CONF%`
	to
	`    call "%ASENV_DIR%%ASENV_CONF%"`
	OR
	2. Install the Application Server in a directory without spaces.

Documentation

This section describes known documentation issues and associated solutions.

Bug ID	Summary
6266568	**Document the way a user can create-domain with a custom jmx port.**
	To create a domain that has a custom jmx administration port value, use the `--domainproperties` option in the `create-domain asadmin` command. The property name for the setting the JMX port value is `domain.jmxPort`.
6267772	**The Developer's Guide provides incorrect information about integration with Borland `OptimizeIt`.**
	According to the Application Server Platform Edition 8.0 and 8.1 Developer's Guides, to enable Borland `OptimizeIt` Profiler, one of the steps is to set the JVM options in the Profiler tab as follows:
	``` -DOPTITHOME=<Optimizeit_dir> -Xrunpri -Xbootclasspath/<Optimizeit_dir>/lib/oibcp.jar ```
	Solution
	There are two errors in this configuration, and the correct parameters are:
	``` -DOPTITHOME=<Optimizeit_dir> -Xbootclasspath/p:/<Optimizit_dir>/lib/oibcp.jar -Xrunpri:startAudit=t ```
	Without "`/p`", the Application Server complains that the `java.lang.Object` class is not found. Without "`startAudit=t`", the `OptimizeIt` Auditor installed at the server side will not be launched, and this makes it impossible for the Profiler console to attach to the server instance.

Installation

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

Bug ID	Summary
4977191	**On Solaris x86, SPARC, and Linux platforms, intermittent failure to render "Next" navigation button on installer and uninstaller Welcome screen.**
	The installer or uninstaller first screen correctly displays the full text and "Help" and "Cancel" buttons, but the "Next" button necessary to navigate to the next screen is not visible. Although button is not visible, its area is active and if you click on it, navigation to the next screen proceeds normally. The cause of the problem is intermittent J2SE GUI repaint issue.
	Solution
	• Click on the "Next" button area just to the left of the "Help" button, or.
	• Force repainting of the screen by resizing it slightly or by minimizing and restoring the installer window. After repainting, the missing "Next" button will become visible.

Bug ID	Summary
5009728	**On Linux, installation shutdown hangs after clicking the "Finish" button.**
	This problem is most common on Java Desktop System 2 but has also been observed on RedHat distributions.
	After clicking the "Finish" button on the last installer screen, the installer fails to launch a browser window containing the product About page or product registration page, and hangs indefinitely, not returning the command prompt.
	Solution
	Exit the installer by pressing Ctrl+C in the terminal window in which the installer was started. After doing this, browser window containing product About page or registration page will sometimes be launched, but if it does not show up, start the browser and enter following URL in order to review About page:
| | ```
file://install_dir/docs/about.html
``` |
	If you also selected the installation option to register the product, follow the link to registration page available on product About page.
6172980	**On Linux, intermittent J2SE detection and bootstrap issues in install wrapper.**
	The setup executable that launches the Linux installer sometimes hangs. Instead of resolving the J2SE location and starting the install wizard, the wrapper hangs and returns the following messages:
| | ```
Checking available disk space....
Checking Java(TM) 2 Runtime Environment....
Extracting Java(TM) 2 Runtime Environment....
Deleting temporary files.....
``` |
	This issue is seen only in some versions of Linux, and seems to depend on environment settings, especially the presence of the JAVA_HOME variable.
	Solution
	To work around this issue:
	1. Unset the JAVA_HOME variable by running unset or unsetenv depending on your shell.
	2. Run setup with the -javahome option to specify the JAVA_HOME used by the installer.

JDBC Drivers

This section describes known JDBC Driver issues and associated solutions.

Bug ID	Summary
6247468	**On Solaris 10 and Enterprise Linux 3.0, the Sun bundled Oracle JDBC driver does not allow the creation of a connection.**
	Solution
	Set the following property on the JDBC connection pool when using the SUN JDBC oracle datasource (`com.sun.sql.jdbcx.oracle.OracleDataSource`):
	`<property name="serverType" value="dedicated"/>`
	The value of the property depends upon the way the Oracle server's listener is configured. If it is configured in the "shared" mode, the above value needs to change to "dedicated".
6264969, 6275448	**Upgrade problem where the default Pointbase database is overwritten.**
	When upgrading to Application Server Platform Edition 8.1 2005Q2 Update 2, the Update release patch overwrites the Pointbase default database.
	Solution
	Recreate or re-enter any scheme or data that existed prior to the upgrade. If you deployed applications with CMP beans with the "Generate Table" option, you must undeploy or redeploy the application to have the tables regenerated.

Lifecycle Management

This section describes known lifecycle management issues and associated solutions.

Bug ID	Summary
| 6193449 | **After setting the `ejb-timer-service` property `minimum-delivery-interval` to `9000`, an attempt to set the `ejb-timer-service` property `redelivery-interval-in-mills` to `7000` causes the set command to fail with the following error:**<br><br>```
[echo] Doing admin task set
[exec] [Attribute(id=redelivery-interval-internal-in-millis) :
Redelivery-Interval (7,000) should be greater than or equal to
Minimum-delivery-interval-in-millis (9,000)]
[exec] CLI137 Command set failed.
minimum-delivery-interval is the minimal interval duration between
deliveries of the same periodic timer.
redelivery-interval-in-mills is the time the timer service will wait after a
failed ejbTimeout before attempting redelivery.
```<br><br>The problem is that the logic that relates the redelivery interval property to the minimum delivery property is incorrect and prevents you from using the Admin Console or the Command-line interface to set any value where the minimum delivery interval is greater than redelivery interval.<br><br>The `minimum-delivery-interval-in-millis` must always be set equal to or higher than `ejb-timer-service` property `redelivery-interval-in-millis`. The problem is that there is an erroneous validation check in the Application Server to verify that the value for `redelivery-interval-in-millis` is greater than the value for `minimum-delivery-interval-in-millis`.<br><br>**Solution**<br><br>Use the default values for these properties, as follows:<br><br>```
minimum-delivery-interval(default)=7000
redelivery-interval-in-millis(default)=5000
```<br><br>Values other than these defaults will generate an error. |

Logging

This section describes known logging issues and solutions.

Bug ID	Summary
6236312	**On Windows systems multibyte characters in asadmin messages are garbage.** **Solution** On European versions of Windows, use different encodings for MS-DOS console and all other operations. For example, on Windows 95 systems, default encoding may be Cp1252, but the MS-DOS command prompt's encoding may be Cp863. As Java always uses the default encoding, national characters printed into MS-DOS console may display incorrectly.

Upgrade Utility

This section describes known Upgrade utility issues and associated solutions.

The in-place upgrade from any prior Application Server release is not supported. Please see the *Upgrade and Migration Guide* for alternative ways to upgrade the Application Server.

Bug ID	Summary
6165528	**Domains created in custom-path other than *install_dir*/domains directory are not upgraded directly while upgrading from Application Server Platform Edition 8 to Application Server Platform Edition 8.1 or Application Server Platform Edition 8.1 Update 1 or Update 2.** When running the Upgrade Utility and identifying the *install_dir* as the source installation directory, the upgrade process upgrades only those domains that are created under *install_dir*/domains directory. Domains created in other locations are not upgraded. **Solution** Before starting the upgrade process, copy all the domain directories from their different locations to the *install_dir*/domains directory.
6202188	**Port conflict when starting `domain1` or samples domain after upgrading from 8.0 Platform Edition to 8.1 Platform Edition, or 8.1 Platform Edition Update 1 or Update 2.** After upgrading an 8.0 Application Server with multiple domains, the domains may not be able to start simultaneously due to having the same port number configured for the JMX connector. **Solution** 1. Check the *install_dir*/domains/domain1/config/domain.xml file, for the following entry: jmx-connector accept-all="false" address="0.0.0.0" auth-realm-name="admin-realm" enabled="true" name="system" port="8686" protocol="rmi_jrmp" security-enabled="false"/" -- and in file *install_dir*/domains/domain1/samples/config/domain.xml, notice it used the same port "8686", so it failed to start domain due to port conflict. 2. Change the port value 8686 to 8687, and then restart domain1.

Bug ID	Summary

6207337	**On Java Desktop System 2 and Linux systems, the installer running "Upgrade in place" fails to start upgrade tool after clicking on the "Start Upgrade Wizard" button.**
	
	After clicking the "Start Upgrade Tool" button on the final installer screen, the installer fails to launch the upgrade tool to complete the upgrade process, and hangs indefinitely, not returning the command prompt.
	
	Solution
	
	This issue is not encountered if command line installation mode is used to run upgrade in place.
	
	1. If you ran upgrade in place in GUI mode and encountered this problem, exit the installer by pressing Ctrl+C in the terminal window in which the installer was started.
	
	2. Start upgrade tool from the terminal window, using following command:
	
	`install_dir/bin/asupgrade --source install_dir/domains --target install_dir --adminuser adminuser --adminpassword adminpassword --masterpassword changeit`
	
	• *adminuser* and *adminpassword* should match the values used for the installation you are upgrading.
	
	3. When the upgrade tool completes the upgrade process you can also start the browser and enter following URL in order to review About page:
	
	`file://install_dir/docs/about.html`
	
	• If you also selected the installation option to register the product, follow the link to registration page available on product About page.

Bug ID	Summary
6270889	**Client cannot connect to Web service after upgrading from Application Server 8.0 to 8.1 java.rmi.ServerException: JAXRPCSERVLET28: Missing port information.**
	After upgrading an 8.0 Platform Edition domain with the `jaxrpc-simple` application deployed in `domain1` to 8.1 Enterprise Edition, the application no longer works on the upgraded domain. There is no indication from the server that there was a problem with deployment.
	The standard `web.xml` deployment descriptor is modified during deployment, the original descriptor is not restored by the `asupgrade` utility before deployment. As a result, the client stubs for the web service are not properly generated during the upgrade.
	During the original deployment the `servlet-class` element of the `web.xml` deployment descriptor is changed from the original implementation class name to `com.sun.enterprise.webservice.JAXRPCServlet`. The original value is available in `sun-web.xml` in the `servlet-impl-class` element.
	Solution#1
	Before running `asupgrade`, edit the `web.xml` for the servlet of each webservice in the domain to be upgraded, replacing the `com.sun.enterprise.webservice.JAXRPCServlet` value contained in `servlet-class` with the value contained in `WEB-INF/sun-web.xml` in the `servlet-impl-class` element (the original value from `web.xml` `servlet-class` was stored there during deployment). Then run `asupgrade`. The webservices will now be deployed and the client stubs generated properly.
	Solution#2
	After upgrading a domain that contains webservices, redeploy the webservices using their original archives.
6273397	**Startup throws exception after upgrading to a filebased installation of Application Server Platform Edition 8.1 Update 2.**
	This problem is specific to the bundles of the Application Server that installs JDK/JRE. When performing an upgrade, the installer updates JDK/JRE along with product upgrade. Consequently, when the upgraded Application Server is started, the start up fails. Before upgrading the Application server, make sure none of the processes use the JDK/JRE in the Application server *install_dir* and this error will be avoided.
	Solution
	After upgrading:
	1. Rename *install_dir*/`jdk` to something else.
	2. Create an empty directory with the name `jdk` under the *install_dir*/ directory.
	3. Unzip *cd_image*/`package/jdk.zip` to the *install_dir*/`jdk` directory.
	4. Copy *cd_image*/`package/jre` directory as *install_dir*/`jdk/jre`.
	OR
	Update `AS_JAVA` token in `asenv.conf` to point to a valid supported version of the JDK/JRE (the one other than *install_dir*/`jdk`).

Web Container

This section describes known web container issues and associated solutions.

Bug ID	Summary
5004315	**On Windows, deploying an application using `--precompilejsp=true` can lock JAR files in the application, causing later undeployment or redeployment to fail.**

If you request precompilation of JSPs when you deploy an application, later attempts to undeploy that application or to redeploy it (or any application with the same module ID) will not work as expected. The problem is that JSP precompilation opens JAR files in your application but does not close them, and Windows prevents the undeployment from deleting those files or the redeployment from overwriting them.

Note that undeployment succeeds to a point, in that the application is logically removed from the Application Server. Also note that no error message is returned by the asadmin utility, but the application's directory and the locked jar files remain on the server. The server's log file will contain messages describing the failure to delete the files and the application's directory.

Attempts to redeploy the application after undeploying fail because the server tries to remove the existing files and directory, and these attempts also fail. This can happen if you try to deploy any application that uses the same module ID as the originally deployed application, because the server uses the module ID in choosing a directory name to hold the application's files.

Attempts to redeploy the application without undeploying it first will fail for the same reasons.

Diagnostics

If you attempt to redeploy the application or deploy it after undeploying it, the `asadmin` utility returns an error similar to the one below.

```
An exception occurred while running the command.  The exception message is:
CLI171 Command deploy failed : Deploying application in domain  failed;
Cannot deploy. Module directory is locked and can't be deleted
```

Solution

If you specify `--precompilejsps=false` (the default setting) when you deploy an application, then this problem will not occur. Be aware that the first use of the application will trigger the JSP compilation, so the response time to the first request will be longer than for later requests.

Note also that if you do precompile, you should stop and restart the server before undeploying or redeploying the application. The shutdown frees the locked JAR files so the undeployment or redeployment after the restart can succeed.

Bug ID	Summary
6172006	**Unable to deploy WAR with Servlet 2.4-based `web.xml` that contains an empty `load-on-startup` element.**
	The optional `<load-on-startup>` servlet element in a `web.xml` indicates that the associated servlet is to be loaded and initialized as part of the startup of the web application that declares it.
	The optional content of this element is an integer indicating the order in which the servlet is to be loaded and initialized with respect to the web application's other servlets. An empty `load-on-startup` indicates that the order is irrelevant, as long as the servlet is loaded and initialized during the startup of its containing web application.
	The Servlet 2.4 schema for `web.xml` no longer supports an empty `<load-on-startup>`, meaning that an integer must be specified when using a Servlet 2.4 based `web.xml`. If specifying an empty `<load-on-startup>`, as in `<load-on-startup/>`, the `web.xml` will fail validation against the Servlet 2.4 schema for `web.xml`, causing deployment of the web application to fail.
	Backwards compatibility issue. Specifying an empty `<load-on-startup>` still works with Servlet 2.3 based `web.xml`.
	Solution
	Specify `<load-on-startup>0</load-on-startup>` when using a Servlet 2.4 based `web.xml` to indicate that servlet load order does not matter.

Bug ID	Summary
6184122	**Unable to compile JSP page on resource constrained servers.**

The JSP page is accessed but fails to compile, and the server log contains the error message "Unable to execute command" with the following stack trace:

```
at
org.apache.tools.ant.taskdefs.Execute$Java13CommandLauncher.exec(Execute.ja
va:655) at org.apache.tools.ant.taskdefs.Execute.launch(Execute.java:416)
at org.apache.tools.ant.taskdefs.Execute.execute(Execute.java:427) at
org.apache.tools.ant.taskdefs.compilers.DefaultCompilerAdapter.executeExter
nalCompile(DefaultCompilerAdapter.java:448) at
org.apache.tools.ant.taskdefs.compilers.JavacExternal.execute(JavacExternal
.java:81) at org.apache.tools.ant.taskdefs.Javac.compile(Javac.java:842) at
org.apache.tools.ant.taskdefs.Javac.execute(Javac.java:682) at
org.apache.jasper.compiler.Compiler.generateClass(Compiler.java:396)
```

Solution

Set the JSP compilation switch "fork" to "false."

This can be done either of two ways:

- Globally, by setting the fork init parameter of the JspServlet in
  `${S1AS_HOME}/domains/domain1/config/default-web.xml` to false:

  ```
  <servlet> <servlet-name>jsp</servlet-name>
  <servlet-class>org.apache.jasper.servlet.JspServlet</servlet-class>
  .... <init-param> <param-name>fork</param-name>
  <param-value>false</param-value> </init-param> .... </servlet>
  ```

- On a per-web application basis, by setting the fork JSP configuration property in `sun-web.xml` to false:

  ```
  <sun-web-app> <jsp-config> <property name="fork" value="false" />
  </jsp-config> </sun-web-app>
  ```

Either setting will prevent ant from spawning a new process for javac compilation.

Bug ID	Summary
6194026	**Performance degradation on multi-CPU machines.**

The default configuration of the Application Server Platform Edition does not perform optimally on multi-CPU machines. A trade-off is made so that startup is faster, but this can negatively impact the performance of web applications.

Solution

Configure the Application Server to use the following JVM option:

```
-Dcom.sun.enterprise.server.ss.ASQuickStartup=false
```

How to Report Problems and Provide Feedback

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

- **Feedback Submittal form** – A form for submitting feedback on the Application Server product, here:

  http://java.sun.com/docs/forms/J2EE14SubmittalForm.html

- **J2EE-INTEREST list** – A mailing list for J2EE questions, here:

  http://archives.java.sun.com/archives/j2ee-interest.html

- **Bug database on Java Developer Connection** – To view bugs or to submit a bug, use the Java Developer Connection Bug Parade here:

  http://developer.java.sun.com/servlet/SessionServlet?url=/developer/bugParade/index.jshtml

- **Java Technology Forums** – An interactive message board for sharing knowledge and questions about Java technologies and programming techniques. Use the J2EE SDK forum here for discussions related to the Sun Java System Application Server Platform Edition 8.1 product:

  http://forum.java.sun.com/

- **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 Product Tracker, as well as to maintenance programs and support contact numbers.

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

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Additional Sun Resources

Useful information can be found at the following locations:

- Application Server product information:

  http://wwws.sun.com/software/products/appsrvr/home_appsrvr.html

- Application Server product documentation:

  http://docs.sun.com/db/prod/s1appsrv#hic/

- Sun Java System Documentation

  http://docs.sun.com/prod/java.sys

- 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/sunjavasystem/sjsservicessuite.html

- 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

- Sun Software Data Sheets

  http://wwws.sun.com/software

- Sun Microsystems product documentation:

  http://docs.sun.com/

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