

Sun Java™ System Application Server Platform Edition 8 Release Notes

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Part Number 817-6082

The Sun Java™ System Application Server Platform Edition 8 product greatly simplifies the task of creating and administering web services applications. The Application Server provides a development path for web services that simplifies the development process while providing uniquely flexible growth opportunities.

These release notes contain important information available at the time of the Sun Java™ System Application Server Platform Edition 8 product release. Product requirements, what's new, platform summary, known problems, and other late-breaking issues are addressed here. Read this document before you begin using the Application Server product.

This document contains the following sections:

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What's New in the Application Server

The Sun Java System Application Server Platform Edition 8 implements the new features specified by the J2EE 1.4 platform. The following sections describe the new features and technologies:

- [J2EE 1.4 Support](#)
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J2EE 1.4 Support

The Sun Java System Application Server Platform Edition 8 supports the J2EE 1.4 platform; the most complete platform for Web services in the market today. The J2EE 1.4 platform supports WS-I Basic Profile 1.0 and enables Web services to interoperate on the basis of Web Service Description Language (WSDL) and Simple Object Access Protocol (SOAP). Its many features include:

- Exposure of J2EE applications as Web services that are based on SOAP and Hypertext Transfer Protocol (HTTP)
- Integration with Web services and implementation of Web-service endpoints with Java servlets and Enterprise Java Beans (EJB) technology
- New APIs for Web services, deployment, and management of the J2EE platform, as well as authorization
- Updated APIs, including EJB, Java servlet, JavaServer Pages (JSP), and J2EE connector APIs

The following table describes the enhanced APIs available on the J2EE 1.4 platform.

Table 1 Major API changes 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	Time 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

Table 1 Major API changes on the J2EE 1.4 Platform

API	Description
Web Services	
Web services for J2EE 1.1	Portable Web-service descriptors
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 between 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 application Deployment 1.1	Standard APIs that enable deployments of J2EE components and applications
J2EE Management 1.0	Definitions for the information model for managing the J2EE platform
Java Management Extensions (JMX) 1.2	Management of standards
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

Reduced Download Size and Memory Footprint

The download size for the Sun Java System Application Server Platform Edition 8, with only a 36-Mbyte footprint, represents a major reduction when compared with that of Application Server 7. The requirements for startup memory stands at only 163 Mbytes—a much faster startup cycle and a significant improvement over Application Server 7.

Another contributor to an efficient cycle is that only two processes are loaded at startup: one for the Sun Java System Application Server Platform Edition 8, and another for Sun Java System Message Queue.

Enhanced Developer Experience, Usability and Productivity

The Sun Java System Application Server 8 Platform Edition provides the following developer tools:

- **Administration Console** — for administering and configuring the Application Server Platform Edition 8 from the user interface. Specifically, you can setup the following from the Administration Console:
 - Java Database Connectivity (JDBC), JMS, and connector resources
 - User and security realms
 - Configuration and tuning parameters for containers and services
 - Logging and monitoring levels of subsystems
- **Deploy Tool** — for assembling J2EE components into applications and deploying those applications to the Sun Java System Application Server Platform Edition 8.
- **J2EE Application Verifier** — for performing predeployment checks on applications to ensure that their syntaxes and packaging are correct.
- **Upgrade Tool** — for migrating configuration files from Application Server 7 Platform Edition.
- **Migration Tool** — for migrating applications from BEA, IBM, and JBoss. You can download Migration Tool separately at <http://iforce.sun.com/partners/migration/>
- **Apache Ant 1.5** — for building J2EE applications. Application Server Platform Edition 8 also includes a number of custom Ant tasks that simplify deployment and administration from Ant build files.

Automatic Deployment

You can automatically deploy an application in a running instance of the Application Server by copying the EAR, EJB JAR, or WAR file to the domain's `autodeploy` directory.

Log Viewer

The Log Viewer developer tool displays messages and processes. The logging capability, based on the J2SE logging API, boasts a new, uniform format and viewer. You can change the log level on a subsystem basis without restarting the server, and you can also add custom log handlers and filters.

JavaServer Faces Technology

The Sun Java System Application Server 8 Platform Edition is the first middleware product that bundles and supports JavaServer Faces technology. The JavaServer Faces technology consists of a set of server-side APIs that represent user-interface components that manage their state, event, handling, and input validation. The APIs also define page navigation and support internationalization and accessibility. You can add custom UI components with a JSP custom tag library.

While developing with JavaServer Faces technology, each member of a development team can focus on a single piece of the process. A simple programming model then links the pieces, resulting in a much more efficient and simpler development cycle.

J2EE SDK Bundle

For this release, you can get a stand-alone Sun Java System Application Server Platform Edition 8, or you can get the Java 2 Platform, Enterprise Edition 1.4 SDK bundle. This bundle contains:

- J2SE 1.4.2_04 platform
- Java 2 Platform, Enterprise Edition 1.4 Samples (contains BluePrints and J2EE 1.4 SDK samples)
- Sun Java System Application Server

You can also get the Java 2 Platform, Enterprise Edition 1.4 Samples bundle, which contains just the BluePrints and J2EE 1.4 SDK samples.

Key Features

The Sun Java System Application Server includes the following components:

- [Application Server](#)
- [Sun Java™ System Message Queue](#)
- [PointBase Database Server and Type 4 JDBC Driver](#)
- [Java 2 Software Development Kit, Standard Edition](#)
- [Support for Foreign JMS Providers](#)

Application Server

The Application Server supports the current drafts of the J2EE 1.4 specifications.

- Java Web Services APIs:
 - Java API for XML Processing (JAXP) version 1.2
 - Java API for XML-based Remote Procedure Calls (JAX-RPC) version 1.1
 - Java API for XML Registries (JAXR) 1.0
 - SOAP with Attachments API for Java (SAAJ) version 1.2
- Enterprise JavaBeans specification version 2.1
- WS-I Basic Profile specification 1.0
- J2EE Deployment API version 1.1
- J2EE Management specification version 1.0
- Java Authorization Contract For Containers (JACC) 1.0
- JavaServer Pages specification version 2.0
- Java Servlet specification version 2.4
- Java Naming and Directory Interface (JNDI) specification version 1.2
- Java Database Connectivity (JDBC) specification version 3.0
- JavaMail API version 1.3
- JavaBeans Activation Framework (JAF) version 1.0.
- J2EE Connector specification version 1.5
- JavaServer Pages Standard Tag Library (JSTL) version 1.1

Additionally, the Application Server supports the following J2EE 1.4 features:

- Includes runtime control, process, and thread management
- Embeds a highly scalable and high-performance Container Managed Persistence runtime
- Java Transaction Service-based, all-Java transaction manager
- Object Request Broker (ORB)
- J2EE verifier utilities
- Customized Apache Ant tasks (asant utility)

- Browser-based administration tool (Admin Console)
- Command-line administration tool (asadmin) with interactive and scripting modes
- Graphical deployment utility (deploytool) to simplify application, enterprise bean, and connector packaging and deployment
- Sample applications that demonstrate the features of the Application Server and J2EE technology

Sun Java™ System Message Queue

Also available as a separate product, the Sun Java System Message Queue product is an integral part of the Application Server. This all-Java programming language component delivers a robust JMS provider for both JMS clients and message-driven beans. The Sun Java System Message Queue is integrated with the Sun Java System Application Server Platform Edition 8 through a resource adaptor that is based on J2EE Connector Architecture.

The Sun Java System Application Server Platform Edition 8 product includes the Sun Java System Message Queue 3.5 Service Pack 1 Platform Edition. To get enhanced JMS features, the Sun Java System Message Queue Enterprise Edition can be purchased separately.

PointBase Database Server and Type 4 JDBC Driver

PointBase Server 4.8 relational database is included with the Sun Java System Application Server 8 Platform Edition to support the sample applications and development of JDBC-based applications. PointBase's Type 4 driver supporting the JDBC™ API ("JDBC driver") is preconfigured during installation. Tables are also created and populated for all of the sample applications that depend on JDBC. The bundled PointBase distribution has a 5 MB total database size limitation.

Java 2 Software Development Kit, Standard Edition

The Sun Java System Application Server is certified with the JDK 1.4.2_04 platform.

Support for Foreign JMS Providers

Addendum to the Sun Java System Application Server 8 Developer's Guide.

Sun Java System Application Server supports foreign JMS providers for message outflow and inflow. Thus an EJB component or servlet can send messages to a JMS provider other than Sun Java System Message Queue. A message-driven bean can also receive messages from a foreign JMS provider.

Foreign JMS provider support is part of the Connector 1.5 specification requirements. Each JMS provider must provide a resource adapter, which can be deployed and configured as described here:

http://developers.sun.com/prodtech/appserver/reference/techart/as8_connectors

Each JMS provider supplies an administration tool, which must be used for any provider-specific configuration.

System Requirements

This section lists the requirements that must be met before installing the Sun Java System Application Server Platform Edition 8 product.

- [Platform Requirements](#)
- [JDBC Drivers and Databases](#)
- [Other Requirements](#)

Platform Requirements

The following table lists the operating systems that are supported for Sun Java System Application Server product.

Operating System	Architecture	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space	JVM
Sun Solaris 8, 9 (SPARC)	32 and 64 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04
Solaris 9 (x86)	32 and 64 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04
Sun Java Desktop System	32 bit	256MB	512MB	83 MB free	300 MB free	JDK 1.4.2_04
Redhat Enterprise Linux 2.1 and 3.0	32 bit	256 MB	512 MB	83 MB free	300 MB free	JDK 1.4.2_04

Operating System	Architecture	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space	JVM
Microsoft Windows 2000 Professional Service Pack 4+	Intel 32 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04
Microsoft Windows XP Professional Service Pack 1+	Intel 32 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04
Microsoft Windows 2000 Server SP4+	Intel 32 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04
Microsoft Windows Advanced Server Service Pack 4+ , Microsoft Windows Server 2003	Intel 32 bit	256 MB	512 MB	250 MB free	500 MB free	JDK 1.4.2_04

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 users have the “Sun recommended patch cluster” installed. This patch cluster is available under “Recommended and Security Patches” here:

<http://sunsolve.sun.com/>

JDBC Drivers and Databases

The Sun Java System Application Server 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, please refer to the following table:

Table 2 J2EE Compatible JDBC Drivers

JDBC Vendor	JDBC Driver Type	Supported Database Server
i-net Software	Type 4	Oracle (R) 9.2, 8.17
i-net Software	Type 4	Sybase ASE 12.5.1
i-net Software	Type 4	MS SQL Server 2000 Service Pack 1
IBM	Type 2	IBM DB2 8.1 Service Pack 3

Table 2 J2EE Compatible JDBC Drivers

JDBC Vendor	JDBC Driver Type	Supported Database Server
PointBase	Type 4	PointBase Network Server 4.8

For more information about i-net Software, see:

<http://www.inetsoftware.de/>

The following table identifies additional supported JDBC drivers; however these drivers are not J2EE compatible.

Table 3 JDBC Drivers not J2EE compatible

JDBC Vendor	JDBC Driver Type	Supported Database Server
Oracle	Type 4	Oracle (R) 9.2
Sybase	jConnector	Sybase ASE 12.5.1

Additional drivers have been tested to meet the JDBC requirements of the J2EE 1.4 platform with the JDBC Driver Certification Program. These drivers can be used for JDBC connectivity with the 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.

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 the HTTP server, and 4848 for the Admin Server.

- The installation program will detect used ports and assign two others for you: [Sun Java™ System Message Queue](#) (by default, 7676), and IOP (by default, 3700 for IOP and 1060 and 1061 for IOP/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 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 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 Compatibility Guide available at:

<http://docs.sun.com/db/doc/817-6084>

Documentation

In addition to these release notes, the Application Server product includes an entire set of documentation that can be found at this location:

<http://docs.sun.com/db/prod/slappsrv#hic>

The following list provides a brief description of the documentation in the Application Server collection:

- *Quick Start Guide*—Describes how to get started with the Application Server product. Focuses on initial developer exposure; is also suited for users evaluating the product.
- *Installation Guide*—Provides instructions for installing or uninstalling the Application Server software and its components. Supported platforms are listed.
- *J2EE 1.4 Tutorial*—Describes how to develop software using the technologies provided in the Application Server product. You can find the J2EE 1.4 Tutorial here:

<http://java.sun.com/j2ee/1.4/docs/tutorial/doc/index.html>

- *Compatibility Guide*—Provides information on backward compatibility issues.
- *Utility Reference*—Documentation for all command-line interface commands and the Application Server utility commands.
- Online help for the Admin Console—Provides content-specific online help for the Application Server Administration Console web-based interface.
- Online help for the `deploytool` utility—Provides content-specific online help for the Application Server `deploytool` utility.
- Online help for the `Migrationtool` utility—Provides content-specific online help for the Application Server `Migrationtool` utility. The Migration Tool is available for a separate download.
- *Troubleshooting Guide*—Provides information on solving problems associated with the Application Server product.

Known Problems and Limitations

This section describes known problems and associated workarounds for the Sun Java System Application Server 8 product. If a summary statement does not specify a particular platform, the problem applies to all platforms.

ID	Summary
none	<p data-bbox="317 263 913 291">A slight behavioral change in the client stubs generation.</p> <p data-bbox="317 309 1299 361">The client stubs are generated during deployment process. The deploy operation does not return until the client stubs are fully generated.</p> <p data-bbox="317 378 1299 456">For performance concerns, the client stubs generation has been modified to be an asynchronous operation within deployment when the retrieval of client jars is not explicitly requested by the user; the client stubs are no longer guaranteed to be ready for use upon return of the deployment operation.</p> <p data-bbox="317 473 406 499">Solution</p> <p data-bbox="317 517 1292 569">Do not copy any client jars directly out of the repository post deployment. Instead, the following ways are the recommended ways to retrieve client stubs with guaranteed integrity:</p> <p data-bbox="317 586 556 612">Command-line interface:</p> <ol data-bbox="317 630 654 690" style="list-style-type: none"> 1. <code>asadmin deploy --retrieve=true</code> 2. <code>asadmin get-client-stubs</code> <p data-bbox="317 708 428 734">Deploytool:</p> <ol data-bbox="317 751 992 812" style="list-style-type: none"> 1. Specify retrieval of client jars on the deploy screen. 2. Check the client jar retrieval screen for any deployed applications.
4859661	<p data-bbox="317 836 1263 881">On Microsoft Windows platforms, failure to create default server domain will not always be reported as installation failure.</p> <p data-bbox="317 899 1270 977">If the default server domain creation fails, failure is not always correctly logged and reported by the installer. As a result, the installation is reported as successful but attempts to start the server will produce the following error message: CLI156 Could not start the domain domain1.</p> <p data-bbox="317 994 1292 1046">Checking the content of <code>install_dir\domains\domain1</code> folder reveals that only docroot folder has been created instead of a full domain configuration directory structure.</p> <p data-bbox="317 1064 399 1090">Solution</p> <p data-bbox="317 1107 1249 1159">Default server domain can be created manually. In order to recreate the domain, the <code>install_dir\domains\domain1</code> folder should be deleted and the following command should be run:</p> <pre data-bbox="317 1177 1220 1229"><code>install_dir\bin\asadmin create-domain --adminport admin_port --adminuser admin_user --adminpassword admin_password --instanceport http_port domain1</code></pre> <p data-bbox="317 1246 1278 1298">Values for <code>admin_port</code>, <code>admin_user</code>, <code>admin_password</code>, and <code>http_port</code> should match the values that were originally supplied at product installation.</p>
4925544	<p data-bbox="317 1315 1299 1367">On Microsoft Windows, no error is reported for a silent installation where the user has no JDK installed.</p> <p data-bbox="317 1385 1299 1463">A user is passed a previously made <code>savestate</code> file with the application server only executable bundle. This bundle does not contain a JDK and therefore will fail if there is no JDK installed on the machine. No error message is displayed and no log is created to record the failure.</p> <p data-bbox="317 1480 406 1506">Solution</p> <p data-bbox="317 1524 1013 1548">Microsoft Windows users must have a minimum JDK 1.4.1_07 installed.</p>

ID	Summary
4941546	<p data-bbox="237 239 808 265">Misleading information for CLI start-appserv manpage.</p> <p data-bbox="237 279 329 305">Solution</p> <p data-bbox="237 319 1133 374">The DESCRIPTION is incorrect. No operands are required for the <code>start-appserv</code> command. Therefore, there is no point in making any references to an operand in the description.</p> <p data-bbox="237 388 1182 444">Since <code>start-appserv</code> starts all domains present in the given directory, <code>--domaindir</code> option should mention domains in plural.</p> <p data-bbox="237 458 1222 512">Sometimes “default <code>install_dir/domains</code> directory” is used and sometimes “default domains directory” is used in the same manpage. They both refer to the same thing.</p>
4941547	<p data-bbox="237 526 808 552">Misleading information for CLI stop-appserv manpage.</p> <p data-bbox="237 565 329 591">Solution</p> <p data-bbox="237 605 1222 661">The DESCRIPTION is incorrect. No operands are required for the <code>stop-appserv</code> command. Therefore, there is no point in making any references to an operand in the description.</p> <p data-bbox="237 675 1222 760">Since <code>stop-appserv</code> stops all domains present in the given directory, <code>--domaindir</code> option should read: “<code>--domaindir</code>: directory where the domains are to be stopped. If specified, path must be accessible in the filesystem. If not specified, the domain is stopped in the default <code>install_dir/domains</code> directory.”</p> <p data-bbox="237 774 1162 829">Sometimes “default <code>install_dir/domains</code> directory” is used and sometimes “default domains directory” is used in the same manpage. They both refer to the same thing.</p>
4942748	<p data-bbox="237 843 1082 869">Command output in EXAMPLES section of some asadmin manpages is incorrect.</p> <p data-bbox="237 883 329 909">Solution</p> <p data-bbox="237 923 1222 979">In the EXAMPLE section of the manpages, the output for <code>asadmin</code> commands should read: “Command <code>command_name</code> executed successfully.”</p>
4943028	<p data-bbox="237 996 1200 1052">The EXAMPLE section for the list-virtual-servers command in the manpage is missing server and <code>_asadmin</code>.</p> <p data-bbox="237 1065 329 1091">Solution</p> <p data-bbox="237 1105 991 1131">The correct EXAMPLE for the <code>list-virtual-servers</code> command is as follows:</p> <pre data-bbox="237 1145 1176 1286">./asadmin list-virtual-servers --user admin --password adminadmin --port 4848 --host localhost server _asadmin</pre> <p data-bbox="237 1300 796 1326">Command <code>list-virtual-servers</code> executed successfully.</p>

ID	Summary
4954870	<p data-bbox="315 239 819 265">Newly created HTTP Listeners are never started.</p> <p data-bbox="315 279 1285 361">If you create an HTTP Listener, using the <code>asadmin</code> command or the Admin Console, with a new port number, after restarting the server, you are unable to connect to the port number of the newly generated HTTP Listener at <code>http://your_server:new_port_number</code></p> <p data-bbox="315 374 408 401">Solution</p> <p data-bbox="315 414 1279 470">Add the name (id) of the newly created HTTP Listener to the <code>http-listeners</code> attribute of the Virtual Server that is referenced by the new HTTP Listener as its Default Virtual Server.</p> <p data-bbox="315 484 1303 539">For example, if you add a new HTTP Listener named <code>http-listener-3</code> that uses the virtual server <code>server</code> as its Default Virtual Server, follow these steps:</p> <ol data-bbox="315 553 1255 808" style="list-style-type: none"><li data-bbox="315 553 1172 579">1. Direct your browser to the admin console, at <code>http://your_server:your_admin_port</code><li data-bbox="315 593 801 619">2. Login using your administrator user/password.<li data-bbox="315 633 839 659">3. Expand the <i>HTTP Service node</i> in the left column.<li data-bbox="315 673 879 699">4. Expand the <i>Virtual Servers node</i> under <i>HTTP Service</i>.<li data-bbox="315 713 753 739">5. Click on the Virtual Server named <code>server</code>.<li data-bbox="315 753 1255 808">6. In the right panel, update the HTTP Listeners field by adding <code>http-listener-3</code> (separated by comma) to the list of HTTP Listeners.
4954884	<p data-bbox="315 824 951 850">Misleading information for <code>asadmin create-domain manpage</code>.</p> <p data-bbox="315 864 408 890">Solution</p> <p data-bbox="315 904 972 930">The <code>--passwordfile</code> option should state the valid values as follows:</p> <pre data-bbox="315 944 1296 999">http.ssl.port=1043:orb.ssl.port=1060:orb.mutualauth.port=1061:jms.port=7676:orb.listener.port=3700.</pre>
4971450	<p data-bbox="315 1015 1285 1071">When creating new virtual server, server startup failure occurs and server throws <code>NullPointerException</code> during server startup.</p> <p data-bbox="315 1085 408 1111">Solution</p> <ol data-bbox="315 1124 1303 1333" style="list-style-type: none"><li data-bbox="315 1124 1279 1180">1. While creating the virtual servers make sure the http listener list is exclusive (i.e. no other virtual server should have the same http listeners in its list).<li data-bbox="315 1194 1303 1333">2. While creating virtual servers and http listeners use the following sequence of <code>asadmin</code> commands<ul data-bbox="358 1234 1303 1333" style="list-style-type: none"><li data-bbox="358 1234 1303 1289">•Create virtual server without specifying the http listener list (<code>httplisteners</code> is an optional option for <code>create-virtual-server</code> command).<li data-bbox="358 1303 1186 1333">•While creating the http listener use the <code>defaultvs</code> option to specify the virtual server.

ID	Summary
4974713	<p>Section 5.3.4.2 of the Connectors 1.5 Specification states that “the application server calls the <code>stop</code> method on the <code>ResourceAdapter</code> <code>JavaBean</code> to notify the resource adapter instance to stop functioning so that it can be safely unloaded. This is a shutdown notification from the application server, and this method is called by an application server thread.”</p> <p>For this release, the <code>ResourceAdapter</code> <code>JavaBean</code>'s <code>stop()</code> method is not called during application server shutdown. The <code>stop()</code> method is called only when the connector module is undeployed.</p> <p>Solution</p> <p>Add a lifecycle listener to listen for application server shutdown and disable the resource adapter module. The disable action calls the <code>RA.stop()</code>.</p> <p>For more information, see http://developer.java.sun.com/developer/bugParade/bugs/4974713.html</p>
4997380	<p>User may observe a stack trace when shutting down Pointbase.</p> <p>By executing the <code>stopserver.sh/stopserver.bat</code> script on any platform, the server instance of the Pointbase runtime is successfully terminated. However, due to runtime regression introduced in version 4.8, a <code>ClassCastException</code> is produced as follows:</p> <pre data-bbox="239 725 1082 857">[qouyang@putian serveroption]\$./stopserver.sh java.lang.ClassCastException at com.pointbase.net.netJDBCPreparedStatement.execute(Unknown Source) at com.pointbase.tools.toolsCommander.a(Unknown Source) at com.pointbase.tools.toolsCommander.go(Unknown Source) at com.pointbase.tools.toolsCommander.main(Unknown Source)</pre> <p>Solution</p> <p>No work-around is currently available, however there is no functional regression as the script still succeeds in terminating the server process. A priority request has been logged with Pointbase to obtain a fix.</p>
5002049	<p>Manpages are incorrect for the <code>create-jvm-options</code> and <code>update-connector-security-map</code>.</p> <p>Solution</p> <ol style="list-style-type: none"> <li data-bbox="239 1095 1186 1229"> <p>The EXAMPLE for the <code>create-jvm-options</code> command should read:</p> <pre data-bbox="239 1135 1186 1187">asadmin> create-jvm-options --user admin --password adminadmin --host localhost --port 4848 --profiler=false -- "-DDebug=true:"-Xmx256m:"-Dcom.sun.aas.imqBin"="VexportVas8peVimqVbin"</pre> <p>Command <code>create-jvm-options</code> executed successfully</p> <li data-bbox="239 1246 1219 1446"> <p>The SYNOPSIS for the <code>update-connector-security-map</code> command should read:</p> <pre data-bbox="239 1286 1219 1446">update-connector-security-map --user admin_user [--password admin_password] [--host localhost] [--port 4848] [--secure -s] [--passwordfile filename] [--terse=false] [--echo=false] [--interactive=true] --poolname connector_connection_pool_name [--addprincipals principal-name[, principal-name]*] [--addusergroups user-group[, user-group]*] [--removeprincipals principal-name[, principal-name]*] [--removeusergroups user-group[, user-group]*] [--mappedusername user_name] [--mappedpassword password] mapname</pre>

ID	Summary
5002174	<p data-bbox="311 239 1336 291">On Microsoft Windows, intermittent corruption of PATH environment variable content after product uninstallation.</p> <p data-bbox="311 309 1336 361">If the “Add bin directory to PATH” installation option is selected during installation, content of PATH environment variable may get corrupted after installation.</p> <p data-bbox="311 378 1336 430">The corrupted PATH variable will have a random set of characters appended as the last entry in the PATH. This additional PATH entry generally will not affect system functioning.</p> <p data-bbox="311 447 1336 473">Solution</p> <p data-bbox="311 491 1336 543">Use the Windows Control Panel, System, Advanced, Environment variables tool to edit the content of the PATH environment variable and remove the superfluous characters.</p>
5003356	<p data-bbox="311 557 1336 583">Missing entries in server.policy file after upgrade.</p> <p data-bbox="311 600 1336 678">User chooses to upgrade from Sun ONE Application Server 7.x Platform Edition to Sun Java System Application Server Platform Edition 8. After the upgrade process is complete, the updated server.policy file loses two entries that were existing prior to the upgrade.</p> <p data-bbox="311 696 1336 722">Solution</p> <p data-bbox="311 739 1336 765">Edit <code>install_dir/domains/domain_name/config/server.policy</code> file as follows:</p> <ol data-bbox="311 782 1336 808" style="list-style-type: none"> <li data-bbox="311 782 1336 808">1. Add the following lines to the end of the file: <pre data-bbox="311 826 1336 930">//ANT classes get all permissions by default grant codeBase "file:\${com.sun.aas.antLib}/-" { permission java.security.AllPermission; };</pre> <ol data-bbox="311 947 1336 999" style="list-style-type: none"> <li data-bbox="311 947 1336 999">2. Locate “// Basic set of required permissions granted...” block in the file. Add the following lines inside this grant block: <pre data-bbox="311 1017 1336 1069">// work-around for pointbase bug 4864405 permission java.io.FilePermission "\${com.sun.aas.instanceRoot}\${/}-", "delete";</pre> <p data-bbox="311 1086 1336 1130">The original server.policy file, before upgrading, is saved in the same directory with file named <code>server.policy.back</code>. Please refer to this file to identify where the missing lines were placed.</p>
5004719	<p data-bbox="311 1147 1336 1173">Network addresses any, ANY, and INADDR_ANY are not supported.</p> <p data-bbox="311 1190 1336 1295">When creating an HTTP listener via the Admin Console, the description of the “Network Address” field mentions any, ANY, and INADDR_ANY as valid network addresses. However, when specifying any of these values, the following error is logged when starting the application server: unable to resolve host name:any.</p> <p data-bbox="311 1312 1336 1338">Solution</p> <p data-bbox="311 1355 1336 1407">When creating an HTTP listener using the Admin Console, avoid using any, ANY, or INADDR_ANY as network address values.</p>

ID	Summary
5004911	<p data-bbox="239 244 1249 296">Using Deploytool, unable to deploy an application with database mappings that were automatically created.</p> <p data-bbox="239 314 1249 338">The problem occurs after creating database mappings and then trying to deploy the application.</p> <p data-bbox="239 355 508 380">Create database mappings:</p> <ol data-bbox="239 397 1249 651" style="list-style-type: none"><li data-bbox="239 397 668 421">1. Select a CMP EJB in the Files tree view.<li data-bbox="239 439 1249 491">2. Click on the Sun-specific Settings button in the EJB JAR General tab to display the CMP Database dialog.<li data-bbox="239 508 933 532">3. Click on the Create Database Mappings button to display the dialog.<li data-bbox="239 550 1158 574">4. In the Create Database Mappings dialog, select Automatically Generate Necessary Tables.<li data-bbox="239 591 382 616">5. Select OK.<li data-bbox="239 633 594 657">6. Close the CMP Database dialog. <p data-bbox="239 675 459 699">Deploy the application:</p> <ol data-bbox="239 716 696 769" style="list-style-type: none"><li data-bbox="239 716 696 741">1. Select the application in the Files tree view.<li data-bbox="239 758 625 782">2. Select Deploy from the Tools menu. <p data-bbox="239 800 888 824">The application is not deployed and the following error is displayed:</p> <p data-bbox="239 841 888 866">Referenced schema is not present in jar: RosterAppJ2DB_team-ejb</p> <p data-bbox="239 883 1249 935">Adding the schema and saving the archive or replacing the mapping, by triggering the Create Database Mapping action, will correct this.</p> <p data-bbox="239 953 329 977">Solution</p> <p data-bbox="239 994 474 1019">Dismiss the error dialog.</p> <p data-bbox="239 1036 444 1060">Save the application:</p> <ol data-bbox="239 1078 696 1130" style="list-style-type: none"><li data-bbox="239 1078 696 1102">1. Select the application in the Files tree view.<li data-bbox="239 1119 586 1144">2. Select Save from the File menu. <p data-bbox="239 1147 459 1171">Deploy the application:</p> <ol data-bbox="239 1189 722 1241" style="list-style-type: none"><li data-bbox="239 1189 722 1230">1. Select the application from the Files tree view.<li data-bbox="239 1241 625 1265">2. Select Deploy from the Tools menu.

ID	Summary
5005059	<p data-bbox="317 239 1302 291">Using Deploytool, when two CMP EAR files are opened with the same name, the mapping is not displayed for the second EAR.</p> <p data-bbox="317 309 1302 387">To view the mapping, select the Sun-specific Settings button in the EJB JAR General tab to display the CMP Database dialog. A Packaging Warning message is displayed: Referenced schema not present in jar ... No mapping is displayed for the second EAR opened.</p> <p data-bbox="317 404 1245 456">If you attempt to perform the mapping again, another error message is displayed: Cannot create schema from cmproster.dbschema. Please check the schema file ...</p> <p data-bbox="317 473 406 491">Solution</p> <p data-bbox="317 517 1288 595">Close the first application and remove <i>earname.dir</i> under the deploytool temporary directory. The temporary directory location is displayed on the General panel of the Edit Preferences dialog. Select Preferences under the Edit menu to display the Edit Preferences dialog.</p>
5005168	<p data-bbox="317 612 1288 664">On Microsoft Windows, while using Deploytool, after adding a CMP EJB to an EAR file, it may not be possible to create database mappings for that EJB.</p> <p data-bbox="317 682 1223 734">When adding a CMP EJB that has a dbschema file to an EAR, an exception is thrown and the mappings dialog cannot be closed. Deploytool must be terminated externally.</p> <p data-bbox="317 751 811 769">Add CMP EJB that has a dbschema file to an EAR:</p> <ol data-bbox="317 786 1082 812" style="list-style-type: none">1. Select Add to Application --> Enterprise JavaBean JAR from the File menu. <p data-bbox="317 829 588 847">Create database mappings:</p> <ol data-bbox="317 873 1228 1003" style="list-style-type: none">1. Click on the Sun-specific Settings button on the EJB JAR General tab to bring up the CMP Database dialog.2. Click on the Create Database Mappings button.3. Select Map to Tables in Database Schema File and choose the schema file. <p data-bbox="317 1020 1302 1072">When trying to create database mappings, an exception is thrown and the mappings dialog cannot be closed: javax.ejb.EJBException: nested exception is: java.lang.ClassNotFoundException</p> <p data-bbox="317 1090 406 1107">Solution</p> <p data-bbox="317 1133 888 1150">After adding the CMP EJB to an EAR, save the application:</p> <ol data-bbox="317 1168 773 1229" style="list-style-type: none">1. Select the application in the Files tree view.2. Select Save from the File menu. <p data-bbox="317 1255 502 1272">Restart deploytool:</p> <ol data-bbox="317 1289 654 1350" style="list-style-type: none">1. Select Exit from the File menu.2. Start deploytool. <p data-bbox="317 1376 588 1394">Create database mappings:</p> <ol data-bbox="317 1411 1228 1541" style="list-style-type: none">1. Click on the Sun-specific Settings button on the EJB JAR General tab to bring up the CMP Database dialog.2. Click on the Create Database Mappings button.3. Select Map to Tables in Database Schema File and choose the schema file.

ID	Summary
5005169	<p data-bbox="237 239 1222 291">Using Deploytool, cannot Create Database Mappings from a dbschema file that has been added to a CMP EJB which is embedded in an EAR and already contains a dbschema file.</p> <p data-bbox="237 309 1222 387">The problem happens when a second dbschema file is added to a CMP EJB which is embedded in an EAR and already contains a dbschema file. The database mappings cannot be created from the second dbschema file.</p> <p data-bbox="237 404 325 430">Solution</p> <ol data-bbox="237 447 1146 743" style="list-style-type: none"><li data-bbox="237 447 479 473">1. Save the application.<li data-bbox="237 491 494 517">2. Restart the deploytool.<li data-bbox="237 534 1146 743">3. Create database mappings using the newly added dbschema file:<ul data-bbox="272 569 1146 743" style="list-style-type: none"><li data-bbox="272 569 1146 621">•Click on the Sun-specific Settings button on the EJB JAR General tab to display the CMP Database dialog.<li data-bbox="272 638 743 664">•Click on the Create Database Mappings button.<li data-bbox="272 682 1146 708">•Select Map to Tables in Database Schema File and choose the newly added schema file.<li data-bbox="272 725 372 743">•Click OK.
5005792	<p data-bbox="237 760 1222 812">Unsupported: RedHat Fedora (core 1) requires the libstdc++ package to be installed in order to install J2EE1.4SDK.</p> <p data-bbox="237 829 325 855">Solution</p> <p data-bbox="237 873 1222 925">The install package named <code>compat-libstdc++-7.3-2.96.118.i386.rpm</code> can be found on disk 3 of the Fedora ISO installation CD image for core1.</p>

ID	Summary
5006854	<p data-bbox="315 239 1336 291">Deploying to a virtual server using asadmin command fails if the virtual server does not have at least one listener for clear HTTP and at at least one listener for HTTP over SSL.</p> <pre data-bbox="315 309 1336 505"># 2004-03-02T18:08:48.588-0500 WARNING sun-appserver-pe8.0 javax.enterprise.system. tools.admin _ThreadID=11; ADM1026:Redeployment failed - Detailed Message: java.lang.NullPointerException at com.sun.enterprise.admin.mbeans.ApplicationsConfigMBean.getHostName(ApplicationsConfigMBean.java:3045) at com.sun.enterprise.admin.mbeans.ApplicationsConfigMBean.setHostAndPort(ApplicationsConfigMBean.java:3035) at com.sun.enterprise.admin.mbeans.ApplicationsConfigMBean.deploy(ApplicationsConfigMBean.java:274) at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)</pre> <p data-bbox="315 513 408 539">Solution</p> <p data-bbox="315 557 1336 609">Deploy without specifying a virtual server then change the virtual server using the <code>asadmin set</code> command:</p> <pre data-bbox="315 626 1336 678">asadmin deploy hello.ear asadmin set server.application-ref.hello.virtual-servers=newws</pre> <p data-bbox="315 696 1336 722">This will make the web module(s) contained within <code>hello.ear</code> available only on <code>newws</code>.</p> <p data-bbox="315 739 1336 808">This solution does not work completely for web archives (war file). After running the suggested commands, the web archive's context root will be available only on the specified virtual server till the server is running.</p> <p data-bbox="315 826 1336 911">However, a restart of the server will make the web archive's context root available on all virtual servers. To workaround this problem, please package your web modules within an application archive (ear file) for deployment.</p>
5014416	<p data-bbox="315 1055 1336 1085">Supporting unknown Primary Key in CMP beans.</p> <p data-bbox="315 1102 408 1128">Solution</p> <p data-bbox="315 1137 1336 1163">To use unknown Primary Key feature for a CMP bean, do the following:</p> <ol data-bbox="315 1180 1336 1249" style="list-style-type: none"><li data-bbox="315 1180 1336 1206">1. Do not define primary key fields in your bean.<li data-bbox="315 1223 1336 1249">2. Define primary key class as <code>java.lang.Object</code> in deployment descriptor. <p data-bbox="315 1267 1336 1293">If you map your CMP bean to an existing table, make sure the table:</p> <ul data-bbox="315 1310 1336 1414" style="list-style-type: none"><li data-bbox="315 1310 1336 1336">• has only one primary key column<li data-bbox="315 1354 1336 1380">• is not mapped to any other CMP field<li data-bbox="315 1397 1336 1414">• is a NUMERIC type with precision 19 or higher (to store a long value) <p data-bbox="315 1432 1336 1484">If you rely on the CMP module to generate the mapping, you do not need to perform any other steps. When such a bean is created, the primary key value will be populated by the Persistence Manager.</p>

ID	Summary
5014452	Addendum to the Sun Java System Application Server 8 Developer's Guide. Solution Added support for CMP beans with <code>java.lang.String</code> primary key fields mapped to a fixed length character.
5014466	Addendum to the Sun Java System Application Server 8 Developer's Guide. Solution Supporting join table to map all types of CMP relationships: CMR field that represents 1-N (Or 1-1) relationship between CMP beans can now be mapped to join table. For example: <ul style="list-style-type: none">• Department bean is mapped to a DEPARTMENT table with a primary key column "deptid".• Employee bean is mapped to an EMPLOYEE table with primary key column "empid".• CMR field "employees" in a Department bean is a 1-N relationship to an Employee bean, and represents a Collection of employees in this department.• This field can be mapped:<ul style="list-style-type: none">• Either by a foreign key "deptid" field in an EMPLOYEE table• Or a join table EMPLOYEE_DEPARTMENT with columns "empid" and "deptid" that are both foreign keys to the corresponding columns in EMPLOYEE and DEPARTMENT tables. you might consider a unique constraint on the "empid" column to guarantee that each Employee belongs to only one department.
5015099	deploydir instruction in QuickStart.html incorrect. Solution The URL for accessing the deployed quickstart hello application using deploydir should be: "http://localhost:8080/hello"

How to Report Problems

Use the following resources to handle problems you may encounter with the Application Server product:

- **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 8 Platform Edition product:

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

For More Information

Useful information can be found at the following locations:

- **Application Server product information:**

http://www.sun.com/software/products/appsrvr_pe/index.html

- **Java developer resources:**

<http://developer.java.sun.com/>

- **Java 2 Platform, Enterprise Edition (J2EE) site:**

<http://java.sun.com/j2ee/>

- **Application Server product documentation:**

<http://docs.sun.com/db/prod/slappsrv#hic/>

- **Sun Microsystems product documentation:**

<http://docs.sun.com/>

Revision History

This section lists the changes that have been made in these release notes after the initial release of the Application Server product

Revision Date	Description of Change
March 2004	Sun Java System Application Server 8 release.
