Sun Java Enterprise System 6 Release Notes

April 2009

This document is maintained by the Java ES team.

This Release Notes document contains important information about Sun Java™ Enterprise System (Java ES) 6, in particular, the Java ES 6 Base offering. Read this document before you begin using Java ES in order to improve your overall installation, upgrade, and operation experience. This document is updated as needed to describe new issues as they arise. See "Revision History" on page 12 to learn about these updates. The most recent version of this document can be found in the Java ES 6 documentation collection at docs.sun.com/coll/1286.4.

For information about the other offerings in Java ES 6, including the various Java ES suites, see sun.com/software/javaenterprisesystem.

This document covers the following main topics:

- General Information:
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Because this document does not cover issues related to all aspects of product use, you should also read the release notes for the Java ES products you will be using. See "Products in Java ES 6 Base" on page 2 for a listing of the product-level release notes.

Products in Java ES 6 Base

The following table lists the products in Java ES 6 Base, specifies each product's version, provides a link to each product's release notes, and shows the abbreviated name used in these release notes to refer to each product. For information about the products available in other Java ES 6 offerings see sun.com/software/javaenterprisesystem

Product	Version	Release Notes	Abbreviated Name
NetBeans	6.5.1	*NetBeans IDE 6.5 Release Notes* and *NetBeans 6.5 Patches Info*	NetBeans
Solaris Cluster	3.2 1/09	*Solaris Cluster 3.2 1/09 Release Notes*	Solaris Cluster
Solaris Cluster Geographic Edition	3.2 1/09	*Solaris Cluster Geographic Edition 3.2 1/09 Release Notes*	Solaris Cluster Geographic Edition

Product	Version	Release Notes	Abbreviated Name
Sun GlassFish Enterprise Server	v2.1	*Sun GlassFish Enterprise Server 2.1 Release Notes*	GlassFish Enterprise Server
Sun GlassFish Web Space Server	10.0	*Sun GlassFish Web Space Server 10.0 Release Notes*	GlassFish Web Space Server
Sun Java System Directory Server Enterprise Edition	6.3.1	*Sun Java System Directory Server Enterprise Edition 6.3.1 Release Notes*	Directory Server Enterprise Edition
Sun Java System Message Queue	4.3	*Sun Java System Message Queue 4.3 Release Notes*	Message Queue
Sun Java System Web Proxy Server	4.0.8	*Sun Java System Web Proxy Server 4.0.8 Release Notes*	Web Proxy Server
Sun Java System Web Server	7.0 Update 4	*Sun Java System Web Server 7.0 Update 4 Release Notes*	Web Server
Sun OpenSSO Enterprise	8.0	*Sun OpenSSO Enterprise 8.0 Release Notes*	OpenSSO Enterprise

If you are familiar with the products in past Java ES releases, note the following:

- Solaris Cluster and Solaris Cluster Geographic Edition are the same products as Sun Cluster and Sun Cluster Geographic Edition in past Java ES releases.
- Sun GlassFish Enterprise Server is effectively the same product as Sun Java System Application Server Enterprise Edition. Sun contributed the source code for Application Server to the GlassFish open source project and uses code from this project in creating Sun GlassFish Enterprise Server.
- Sun GlassFish Web Space Server is a new product replacing Sun Java System Portal Server.
- Sun OpenSSO Enterprise is effectively the same product as Sun Java System Access Manager. Sun contributed the source code for Access Manager to the OpenSSO open source project and uses code from this project in creating Sun OpenSSO Enterprise.

For quick reference, the release notes for all these products except NetBeans have been collected on docs.sun.com^{SM} at docs.sun.com/coll/1315.4.

What's New in Java ES 6

- Java ES 6 and its suites incorporate more products than Java ES 5 Update 1
- Java ES 6 compatibility and interoperability testing covered more products and more common deployment scenarios more rigorously than Java ES 5 Update 1
- Java ES 6 is tested and supported on Solaris 10 Trusted Extensions
- Java ES 6 platform testing covered more virtualized platforms than Java ES 5 Update 1
- Java ES 6 employs the installers of its constituent products instead of a single-host installer, thus providing more flexibility in setting up enterprise-level deployments

For more detailed information, see What's New in Sun Java Enterprise System 6.

Getting the Java ES 6 Software

The Java ES 6 software is available as a free download at sun.com/software/javaenterprisesystem/getit.jsp, and as an orderable CD/DVD media kit.

You are welcome to use the Java ES 6 software for free without support or indemnification. Purchase a Java ES subscription to get the Sun support and indemnification you'll want when running in a production environment. For information about the available support and service plans offered with a Java ES subscription, see sun.com/software/javaenterprisesystem/support.jsp

Installing or Upgrading to Java ES 6

For information about installing the products in Java ES 6, see Installing Sun Java Enterprise System 6. For information about upgrading from previous releases of Java ES to Java ES 6, see Upgrading to Sun Java Enterprise System 6.

Deprecated, Replaced, and Removed Features

The following system-wide features of Java ES are deprecated, replaced, or removed in this release. For information about product-specific features that are deprecated, replaced, or removed in this release, see the release notes for the appropriate product.

- System-wide support of HP-UX, Red Hat Enterprise Linux 3, and Microsoft Windows 2000 have been removed. (Note that specific products might continue to support one or more of these platforms.)
- System-wide support for J2SE 1.4 has been removed. (Note that specific products might continue to support J2SE 1.4.)
- The system-wide installer has been removed.
- Java DB has been removed as a separate product. It is included in GlassFish Enterprise Server.
- Service Registry has been removed.
- Sun Java System Access Manager has been replaced by OpenSSO Enterprise, which is based on Access Manager and effectively equivalent to a new version of Access Manager.
- Sun Java System Application Server Enterprise Edition has been replaced by GlassFish Enterprise Server, which is based on Application Server and effectively equivalent to a new version of Application Server.
- Sun Java System Monitoring Console has been removed.
- Sun Java System Portal Server has been replaced by GlassFish Web Space Server, a new product.
- Sun Java Studio Enterprise and Sun Java Studio Creator have been replaced by NetBeans.

Platform Support

The products in Java ES 6 support at least the following platforms:

- Solaris 10 for SPARC™, x86, and x64 platforms
- Solaris 9 for SPARC and x86 platforms
- Red Hat Enterprise Linux 5 (AS and ES) for x86 and x64 platforms
- Red Hat Enterprise Linux 4 (AS and ES) for x86 and x64 platforms
- Microsoft Windows 2003 Server Standard and Enterprise Editions (32 and 64 bit versions) SP2 for x86 and x64 platforms
- Microsoft Windows 2003 Data Center Server (32 bit version) SP2 for x86 and x64 platforms
- Microsoft Windows XP Professional Edition SP2 for x86 platform
- Microsoft Windows Vista Business Edition for x86 platform

Specific products might support additional platforms, such as OpenSolaris, AIX, and HP-UX, or might have compatibility issues regarding certain platforms. For information, see the release notes for the appropriate product.

Note that several Java ES 6 products support the Microsoft Windows XP and Vista platforms for development use, but not for production use.

Also note that Solaris Cluster and Solaris Cluster Geographic Edition support only Solaris.

Solaris Requirements and Issues

Java ES 6 is tested and supported on Solaris 10 for SPARC, x86, and x64 platforms and on Solaris 9 for SPARC and x86 platforms.

Solaris 10 Trusted Extensions. Java ES 6 is tested and supported on Solaris 10 Trusted Extensions.

Recommended Solaris Update Levels. Although Java ES 6 is supported on all versions of Solaris 9 and Solaris 10, specific products might recommend particular minimum update levels to achieve full functionality. For information, see the release notes for the appropriate product.

Solaris Software Groups Supported. Java ES 6 is tested and supported on Solaris systems installed using the following Solaris software groups:

- SUNWCXall – Entire Solaris Software Group Plus OEM Support
- SUNWCall – Entire Solaris Software Group

Specific products might support additional groups, such as SUNWCprog (Developer Solaris Software Group) or SUNWCuser (End User Solaris Software Group). For information, see the release notes for the appropriate product.

Minimized Installation on Solaris 10. Some Java ES 6 products run on a minimized Solaris 10 system installed using SUNWCreq (Core System Solaris Software Group), or installed using SUNWCreq with the addition of a few other packages. The set of packages required for minimized installation varies by product. Therefore, refer to the release notes for the appropriate product to learn about the product's requirements for minimized installation on Solaris 10.

Linux Requirements and Issues

Java ES 6 is tested and supported on Red Hat Enterprise Linux 5 (AS and ES) for x86 and x64 platforms, and on Red Hat Enterprise Linux 4 (AS and ES) for x86 and x64 platforms.

Windows Requirements and Issues

Java ES 6 is tested and supported on the following Microsoft Windows platforms:

- Windows 2003 Server Standard Edition (32 and 64 bit versions) SP2 for x86 and x64 platforms
- Windows 2003 Server Enterprise Edition (32 and 64 bit versions) SP2 for x86 and x64 platforms
- Windows 2003 Data Center Server (32 bit version) SP2 for x86 and x64 platforms
- Windows XP Professional Edition SP2 for x86 platform
- Windows Vista Business Edition for x86 platform

The products in Java ES 6 also support newer Service Packs that do not introduce functional regressions.

Note that several Java ES 6 products support the Windows XP and Vista platforms for development use, but not for production use.

System Virtualization Support

System virtualization is a technology that enables multiple operating system (OS) instances to execute independently on shared hardware. Functionally, software deployed to an OS hosted in a virtualized environment is generally unaware that the underlying platform has been virtualized. Sun performs testing of many of its products on select system virtualization and OS combinations to help validate that the products continue to function on properly sized and configured virtualized environments as they do on non-virtualized systems. For general information about Sun support for products in virtualized environments, see System Virtualization Support in Sun Java System Products. For product-specific exceptions to or extensions of this general information, see the release notes for the product.

Web Browser Support

Web-based end user and administrative interfaces provided by the products in Java ES 6 support at least the following web browsers:

- Mozilla Firefox 1.5 and 2.0 on Solaris, Red Hat Linux, Microsoft Windows, and Mac OS X
- Microsoft Internet Explorer 6 and 7 on Microsoft Windows
- Apple Safari 2.0 and 3.0 on Mac OS X

Additionally, several Java ES 6 products support additional web browsers, such as Opera. See the release notes for the products you are using for the complete list of supported web browsers for those products.

Java Platform, Standard Edition (Java SE) Support

The products in Java ES 6 support at least the following versions of Java SE:

- Java SE 5.0 Update 14 (1.5.0_14)
- Java SE 6.0 Update 3 (1.6.0_3)

The products in Java ES 6 also support newer updates that do not introduce functional regressions.

Specific products might support additional versions of Java SE, such as J2SE 1.4.2, or might have compatibility issues regarding certain versions of Java SE. For information, see the release notes for the appropriate product. See "Products in Java ES 6 Base" on page 2 for a list of product release notes.

Known Issues

The following sections describe the following kinds of issues related to Java ES 6:

- Issues relating to special situations when installing the products in Java ES 6
- Issues relating to special situations when upgrading to Java ES 6 from previous versions of Java ES
- Issues relating to the interoperation of two or more products in Java ES 6
- High visiblity issues that pertain to a product in Java ES 6

For quick reference, here is a list of the issues described in the following sections:

- "Directory Server and Identity Manager: LDAP group membership is not maintained when user account ID is changed in Identity Server (20404)" on page 10
- "Access Manager and Java CAPS: HTTP BC cannot authenticate against Access Manager via https (6763628)" on page 10

Further details and updates about many of these issues can be found at sunsolve.sun.com, bugs.sun.com, or java.net.

OpenSolaris: additional OpenSolaris packages required to deploy Java ES products in an OpenSolaris zone

Many of the Java ES 6 products that support OpenSolaris do not install or run correctly in an OpenSolaris zone without the installation of certain additional OpenSolaris packages.

Solution The set of additional packages (if any) required to function in an OpenSolaris zone varies by product. Therefore, refer to the release notes for the appropriate product to learn about installation in OpenSolaris zones.

OpenSolaris 2008.11 and VMWare ESX/ESXi 3.5: system time issue causes several Java ES products to fail

As described in OpenSolaris issue 4788, the system time is incorrect when OpenSolaris is virtualized in VMWare ESX and ESXi 3.5. Due to this issue, several Java ES products fail when installed or run in this virtualized environment, reporting a variety of errors related to time.

Solution Upgrade to VMWare ESX or ESXi 3.5.0 Update 4. This version of VMWare ESX and ESXi resolves the system time issue.

Web Server: some pages delivered through the reverse proxy do not render properly (6762401)

In some instances, HTTP responses are not forwarded correctly through the Reverse proxy feature of Web Server, resulting in the improper rendering of web pages in a web browser.

Solution None.

OpenSSO Enterprise: % (percent) in a user password can cause authentication to fail (4122)

If a user's password includes a % (percent) symbol followed by two decimal digits, as in "%52", OpenSSO Enterprise will not authenticate that user because it interprets the sequence as an ASCII code; for example, "%52" is the ASCII code for R (capital letter R).

Solution Reset the user's password.

GlassFish Enterprise Server and Web Space Server: cannot install Web Space Server when GlassFish Enterprise Server admin user is not "admin" (6812932)

If the GlassFish Enterprise Server domain or instance into which Web Space Server is to be deployed does not use the default username "admin" for the administrative user, attempts to install Web Space Server fail.

Solution Before installing Web Space Server, edit its `install.xml` file (located in the `webspace/application` subdirectory), replacing all instances of

```
<arg value="admin"/>
```

with

```
<arg value="username"/>
```

where *username* is the username of the administrative user of the GlassFish Enterprise Server domain or instance into which Web Space Server is to be deployed.

GlassFish Enterprise Server and Web Space Server: special configuration required to install Web Space Server when GlassFish Enterprise Server has Security Manager enabled (6771720, 6813015)

If the GlassFish Enterprise Server domain or instance into which Web Space Server is to be deployed has the Security Manager feature enabled, Web Space Server does not operate after installation. Note that this feature is automatically enabled when using the GlassFish Enterprise Server enterprise profile.

Solution Follow these instructions to install Web Space Server:

1. Change the `server.policy` file of the GlassFish Enterprise Server domain where Web Space Server is to be deployed. This file is located in the `domains/`*domain-name*`/config` subdirectory.

   Before the lines

   ```
   // Basic set of required permissions granted to all remaining code
   grant {
   ```

   add these lines

   ```
   // permissions to support Web Space Server
   grant codeBase "file:${com.sun.aas.instanceRoot}/lib/-" {
       permission java.security.AllPermission;
   };

   grant codeBase "file:${com.sun.aas.instanceRoot}/applications/j2ee-modules/webspace/-" {
       permission java.security.AllPermission;
   };

   grant codeBase "file:${com.sun.aas.instanceRoot}/applications/j2ee-modules/saw-web/-" {
      permission java.security.AllPermission;
   };
   ```

   Also, in the basic grant block

   ```
   // Basic set of required permissions granted to all remaining code
   grant {
       ...
   };
   ```

   add this line just before the close of the block

   ```
       permission java.lang.reflect.ReflectPermission "suppressAccessChecks";
   ```

2. Restart the GlassFish Enterprise Server domain where Web Space Server is to be deployed.

3. Change the `portal-ext.properties` file in the Web Space Server distribution (webspace-for-gfv2). This file is located in `webspace/application/distribution/deploy/webspace/WEB-INF/classes/` subdirectory.

   At the end of the file, add this line:

   ```
   auto.deploy.glassfish-tomcat.jee.dm.id=deployer:Sun:AppServer::localhost:4848:https
   ```

4. Install Web Space Server by navigating to the `webspace/application` subdirectory and then entering this command:

   ```
   ant -f install.xml
   ```

Web Space Server and OpenSSO Enterprise: login attempts to Web Space Server fail when it is configured to use OpenSSO Enterprise (6760660)

After Web Space Server is configured for user management using OpenSSO Enterprise, attempts to login to Web Space Server fail.

Solution Follow these steps:

1. Login to the OpenSSO Enterprise administration console.
2. Click "Configuration".
3. Click "Sites and Servers".
4. Click the server that Web Space Server is configured to contact for user management.
5. Click "Security".
6. In the "Cookie" section, enable "Encode Cookie Value"; then, click "Save".
7. Restart the web container where OpenSSO Enterprise is deployed.

OpenSSO Enterprise and Portal Server: after upgrading to OpenSSO Enterprise, cannot login as amadmin (4378)

After upgrading to OpenSSO Enterprise 8.0 from Access Manager 7.x, attempts to login to the Portal Server console (psconsole) or run psadmin commands as the amadmin user fail.

This issue was observed in a multinode architecture where OpenSSO Enterprise and Portal Server were deployed on different nodes.

Solution None.

OpenSSO Enterprise and Portal Server: after upgrading to OpenSSO Enterprise, Portal Server instances on the same node no longer function (4756, 4809)

After upgrading to OpenSSO Enterprise 8.0 from Access Manager on a node, Portal Server installations on that same node no longer function. This failure arises because OpenSSO Enterprise and the AM SDK component of Access Manager cannot coexist in the same web container, and Portal Server relies on the AM SDK component.

Solution None.

GlassFish Enterprise Server and Identity Manager: while upgrading to GlassFish Enterprise Server, Identity Manager idm.war file cannot be redeployed (6819380)

When using the upgrade utility provided with GlassFish Enterprise Server to upgrade from Application Server 8.2, the upgrade log reports that the idm.war file could not be deployed.

Solution Deploy the original idm.war file instead of the one that the upgrade utility modified and attempted to deploy. In a default installation of Identity Manager, the original war file is /opt/idm.war.

GlassFish Enterprise Server and Portal Server: after upgrading from packaged-based Application Server 8.2, admin login security does not work (6818829)

After upgrading from a package-based installation of Application Server 8.2 on which Portal Server has been deployed, admin security does not work. Instead, the admin username and password are not required to use the admin console.

Solution In the GlassFish Enterprise Server server.policy file, change the lines:

```
permissiion java.security.AllPermission "MonitoringAuth.*";
permission java.security.AllPermission "MonitoringPolicy.*";
```

to the following:

```
permission javax.management.MBeanServerPermission "*";
permission javax.management.MBeanPermission "*", "*";
permission javax.management.MBeanTrustPermission "*";
permission java.io.FilePermission "//var/opt/SUNWmfwk/logs/*", "delete,write";
```

Note that the path in the last line begins with two slashes (//). The first slash represents the installation directory of SUNWmfwk-rt. The default installation directory, /opt on Solaris or /opt/sun on Linux, equates to the single slash.

Directory Server and Identity Manager: LDAP group membership is not maintained when user account ID is changed in Identity Server (20404)

When a Directory Server 6.3.1 LDAP store is manageable in Identity Manager 8.0 through the Identity Manager LDAP resource adapter, changing a user's account ID in Identity Manager does not maintain LDAP group memberships for that user even if the Identity Manager accountId attribute is mapped to both the LDAP cn and uid attributes.

Solution None.

Access Manager and Java CAPS: HTTP BC cannot authenticate against Access Manager via https (6763628)

When using Access Manager to provide authentication for Java CAPS, the Java CAPS HTTP Binding Component (HTTP BC) cannot authenticate against Access Manager via https.

Solution Obtain a certificate from Access Manager and add it to the cacerts.jks certificate truststore of GlassFish instance where HTTP BC is deployed. Here is an example procedure to perform this task:

1. Obtain the certificate from Access Manager:

   ```
   openssl s_client -connect accessmanager-host:port
   ```

2. Save the encoded certificate to a text file.

   In the response to the openssl command, locate the segment that's begins with

   ```
   -----BEGIN CERTIFICATE-----
   ```

   and ends with

   ```
   -----END CERTIFICATE-----
   ```

   Select this segment, including the BEGIN and END lines, and copy it to a file named cert.crt. Here is a complete example of such a segment:

   ```
   -----BEGIN CERTIFICATE-----
   MIICpDCCAg2gAwIBAgIFAItb54QwDQYJKoZIhvcNAQEEBQAwgZUxCzAJBgNVBAYT
   AlVTMRMwEQYDVQQIEwpDYWxpZm9ybmlhMRQwEgYDVQQHEwtTYW50YSBDbGFyYTEZ
   MBcGA1UEChMQU3VuIE1pY3Jvc3lzdGVtczErMCkGA1UECxMiU3VuIEphdmEgU3lz
   dGVtIEFwcGxpY2F0aW9uIFNlcnZlcjETMBEGA1UEAxMKanNjLWxxkb20tNzAeFw0w
   ODExMDQxNjA1NDBaFw0xODExMDQxNjA1NDBaMIGVMQswCQYDVQQGEwJVUzETMBEG
   A1UECBMKQ2FsaWZvcm5pYTEUMBIGA1UEBxMLU2FudGEgQ2xhcmExGTAXBgNVBAoT
   EFN1biBNaWNyb3N5c3RlbXMxKzApBgNVBAsTIlN1biBKYXZhIFN5c3RlbSBBcHBs
   aWNhdGlvbiBTZXJ2ZXIxEzARBgNVBAMTCmpzYy1sZG9tLTcwgZ8wDQYJKoZIhvcN
   AQEBBQADgY0AMIGJAoGBAL5I2Kll7NTt1kfZkCFpRykTrPSGrVccYEzE5IPEmf6S
   ytBwRwD/hqBtSr5DFpobEIgG2NSGHF253fubE9nCRkduX11XPfT1Pyh8eZ0RLSi9
   dR1ZT89glnoEuJFw+6LqyRWEyon8ncVyp4Ewrxk7SjvnI8LZeP5j3zIGeAxKEymn
   AgMBAAEwDQYJKoZIhvcNAQEEBQADgYEACpkmOaPVkMfg0KvBQNfS+yE6qG6LKV4X
   WVyEwaASVr7QjxHhdNeEilLob3xZmBXMHDvzLYZMw1RI7MSwZBOLmPT07RioIP0T
   GIIeqVDv6lAjNQtYmWpLH05ANb69L9dLDwYOsA27YnqdhGWbNu4czEI6Qo1oQoiS
   eNF9l0yB+Ks=
   -----END CERTIFICATE-----
   ```

3. Import the certificate into the `cacerts.jks` truststore of GlassFish:

```
keytool -import -keystore /opt/JavaCAPS6/appserver/domains/domain1/config/cacerts.jks -file cert.crt
```

4. Restart the GlassFish instance.

Redistributable Files

Some products in Sun Java Enterprise System 6 contain files that you can redistribute. For information about these files, see the release notes for the products you are using.

Berkeley Database Usage Rights Notice

Some products in Sun Java Enterprise System 6 include object and/or source code for the Berkeley Database, a product of Oracle Corporation. Your use of the Berkeley Database software separately from the Java Enterprise System or authorized derivatives thereof is subject to additional licensing conditions.

Accessibility Features for People With Disabilities

Sun is committed to providing products that include advanced accessibility features and assistive technologies. For information, visit http://sun.com/accessibility.

To learn about the accessibility features of the products in Java ES 6, consult the Section 508 product assessments available from Sun upon request.

In Java ES 6, Sun GlassFish Enterprise Server and Sun GlassFish Web Space Server are not fully Section 508 compliant. Sun is taking steps to make these products fully compliant in a future product version or update.

Documentation for Java ES 6

Documentation for Java ES 6 and the products in Java ES 6 is available on docs.sun.com:

- Release notes: docs.sun.com/coll/1315.4
- System-level installation, upgrade, and interoperability documentation: docs.sun.com/coll/1286.4
- Collections of manuals for each product: docs.sun.com/prod/entsys.6

Additionally, you can find other kinds of documentation at:

- The Java ES information hub on BigAdmin: sun.com/bigadmin/hubs/javaes
- The Java ES Interoperability space: wikis.sun.com/display/Interoperability
- The Java ES forum: forums.sun.com/forum.jspa?forumID=872

Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (http://www.sun.com/documentation/)
- Support (http://www.sun.com/support/)
- Training (http://www.sun.com/training/)

Searching Sun Product Documentation

Besides searching Sun product documentation from the docs.sun.com web site, you can use a search engine by typing the following syntax in the search field:

search-term `site:docs.sun.com`

For example, to search for "broker," type the following:

`broker site:docs.sun.com`

To include other Sun web sites in your search (for example, java.sun.com, www.sun.com, and developers.sun.com), use `sun.com` in place of `docs.sun.com` in the search field.

Third-Party Web Site References

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

Note – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. To share your comments, go to `http://docs.sun.com` and click Feedback.

Revision History

Version	Date	Description of Changes
10	April 2009	Final release version.

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