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Interoperability of the Products in Sun Java Enterprise System 6

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This document is maintained by the Java ES team.

This document provides information about the interoperability of the products in Sun Java Enterprise System (Java ES) 6 Base, the core offering of Java ES. For information about the other offerings in Java ES 6, including the various Java ES suites, see sun.com/software/javaenterprisesystem.

The term *interoperability* refers to the ability of two products to operate together without conflict. Examples of interoperability include:

- **Cohabitation:** Two products can be installed and run on the same system, each without interfering with the operation of the other.
- **Data Sharing:** Two products can operate on the same data stores, each without invalidating the changes made by the other and without interfering with the operation of the other.
- **Dependency:** A product that requires another product can use the required product without either product interfering with the other. For example, a particular web application can be deployed to a particular web container, and both the web application and the web container operate normally.

This document does not provide information about cohabitation unless the cohabitation of two products is in some way limited or restricted, or it requires special configuration.

This document presents two kinds of interoperability information for the products in Java ES 6 Base:

- **Release-centric interoperability** — “[Interoperability of the Product Versions in Java ES 6](#)” on page 2 shows how the product versions in the Java ES 6 release work with each other.
- **Backward compatibility** – “[Backward Compatibility of the Product Versions in Java ES 6](#)” on page 4 shows how each product in Java ES 6 works with previous versions of itself and with previous versions of the products it depends on.

Interoperability of the Product Versions in Java ES 6

The following table summarizes the interoperability of the products in Java ES 6 Base. To use this table, locate the row for the product you are interested in, and then read across to see its interoperability with the other products in Java ES 6. A “Yes” indicates that the product is interoperable, “No” indicates that it is not, and a blank indicates that there is no interaction with the product. A number following the “Yes” or “No” indicates that a note regarding interoperability applies, as described in “[Interoperability Notes](#)” on page 3.

Note that this table presents only interoperability information about pairs of products. It does not present information about general issues the products might have. To form a complete picture of interoperability and feature availability, use this table together with the release notes for the products you are interested in.

To accommodate the large number of products in Java ES 6, the table uses abbreviations for the products, as follows:

Abbreviation	Product
DSEE 6.3.1	Sun Java System Directory Server Enterprise Edition 6.3.1
GFES 2.1	Sun GlassFish Enterprise Server 2.1
GFWS 1.4	Sun GlassFish Web Stack 1.4
GFWSS 10.0	Sun GlassFish Web Space Server 10.0
IdM 8.0	Sun Identity Manager 8.0
JCAPS 6U1	Sun Java Composite Application Platform Suite (Java CAPS) 6 Update 1
MQ 4.3	Sun Java System Message Queue 4.3
OSSOE 8.0	Sun OpenSSO Enterprise 8.0
SC 3.2 1/09	Solaris Cluster 3.2 1/09 (including Solaris Cluster Agents and Solaris Cluster Geographic Edition)

Abbreviation	Product
WPS 4.0.8	Sun Java System Web Proxy Server 4.0.8
WS 7.0U4	Sun Java System Web Server 7.0 Update 4

Note that Sun GlassFish Web Stack, Sun Identity Manager and Java CAPS are not in the Java ES Base offering. Information about their interoperability is included because they are available in Sun Java System suites under the broader Java ES program.

TABLE 1 Interoperability of the Product Versions in Java ES 6

	DSEE 6.3.1	GFES 2.1	GFWSS 10.0	MQ 4.3	OSSOE 8.0	SC 3.2 1/09	WPS 4.0.8	WS 7.0U4
DSEE 6.3.1	—	Yes (1)	Yes	Yes	Yes	Yes		No (1)
GFES 2.1	Yes (1)	—	Yes (2)	Yes	Yes	Yes	Yes (3)	Yes (3)
GFWSS 10.0	Yes	Yes (2)	—		Yes		Yes	No
MQ 4.3	Yes	Yes		—	Yes	Yes		Yes
OSSOE 8.0	Yes	Yes	Yes	Yes	—		Yes	Yes
SC 3.2 1/09	Yes	Yes		Yes		—	Yes	Yes
WPS 4.0.8		Yes (3)	Yes		Yes	Yes	—	Yes (3)
WS 7.0U4	No (1)	Yes (3)	No	Yes	Yes	Yes	Yes (3)	—
GFWS 1.4	Yes (1)	Yes (3)	Yes	Yes	Yes		Yes (3)	Yes (3)
IdM 8.0	Yes	Yes	Yes	Yes	Yes		Yes	No (4)
JCAPS 6U1	Yes	Yes	Yes	Yes	Yes		Yes	No (4)

Interoperability Notes

- DSEE 6.3.1 and web containers.** The Directory Server Control Center component of Directory Server Enterprise Edition must be deployed to a web container. It supports deployment on GlassFish Enterprise Server and Apache Tomcat (part of GlassFish Web Stack), but does not support deployment on Web Server. Because the other components of Directory Server Enterprise Edition do not interact with web containers, interoperability of them with web containers is not an issue.
- GFES 2.1 and GFWSS 10.0.** When the Security Manager of GlassFish Enterprise Server is running, GlassFish Web Space Server does not install into GlassFish Enterprise Server correctly. For information about avoiding this issue, see [“GlassFish Enterprise Server and Web Space Server: special configuration required to install Web Space Server when GlassFish Enterprise Server has Security Manager enabled \(6771720, 6813015\)”](#) in *Sun Java Enterprise System 6 Release Notes*.
- Cohabitation of web servers, containers, and proxies.** When installing any two web servers, containers, or proxies on the same system, you must ensure that no port conflicts arise as a result of the two products trying to provide the same listener service on an industry-standard port, such as an HTTP listener service bound to port 80. This potential port conflict arising from cohabitation applies to these products:
 - GlassFish Enterprise Server
 - Web Proxy Server
 - Web Server
 - GlassFish Web Stack (several components, including Apache Server and Apache Tomcat)
- IdM 8.0 or JCAPS 6U1 and WS 7.0U4.** Neither Identity Manager nor Java CAPS support Web Server as a web container. However, services and administrative interfaces for both products can be available through the reverse proxy plug-in feature of Web Server, provided that the services and administrative interfaces are deployed on a supported web container.

Backward Compatibility of the Product Versions in Java ES 6

The following sections provide information about the backward compatibility of each product in Java ES 6, covering both compatibility with previous versions of the product itself and compatibility with previous versions of any products the product requires or depends on to operate.

- “Solaris Cluster 3.2 1/09 and Solaris Cluster Geographic Edition 3.2 1/09” on page 4
- “Sun GlassFish Enterprise Server 2.1” on page 4
- “Sun GlassFish Web Space Server 10.0” on page 5
- “Sun Java System Directory Server Enterprise Edition 6.3.1” on page 5
- “Sun Java System Message Queue 4.3” on page 5
- “Sun Java System Web Proxy Server 4.0.8” on page 6
- “Sun Java System Web Server 7.0 Update 4” on page 6
- “Sun OpenSSO Enterprise 8.0” on page 6

Solaris Cluster 3.2 1/09 and Solaris Cluster Geographic Edition 3.2 1/09

Solaris Cluster 3.2 1/09 is not compatible with previous versions of Solaris Cluster. All nodes in a cluster must be running the same version of Solaris Cluster.

Solaris Cluster Geographic Edition 3.2 1/09 is not compatible with previous versions of Solaris Cluster Geographic Edition. All nodes in a Solaris Cluster cluster must be running the same version of Solaris Cluster Geographic Edition.

Products That Solaris Cluster Depends On

Solaris Cluster does not depend on any other Java ES products.

Products That Solaris Cluster Geographic Depends On

Solaris Cluster Geographic Edition depends on only one Java ES product: Solaris Cluster.

Solaris Cluster Geographic Edition 3.2 1/09 is supported on these versions of Solaris Cluster:

- Solaris Cluster 3.2 2/08
- Solaris Cluster 3.2 1/09

Sun GlassFish Enterprise Server 2.1

Sun GlassFish Enterprise Server 2.1 is binary compatible with Sun Java System Application Server versions 9.1, 8.2, 8.1, 8.0 and 7.x.

Java applications that run on Application Server 9.1 run on GlassFish Enterprise Server 2.1. Additionally, Java applications that run on Application Server versions 8.2, 8.1, 8.0 and 7.x also run on GlassFish Enterprise Server 2.1, except for certain incompatibilities, which are described in [Chapter 1, “Application Server Compatibility Issues,”](#) in *Sun GlassFish Enterprise Server 2.1 Upgrade guide*.

Products That GlassFish Enterprise Server Depends On

The following table provides compatibility information about the Java ES products that GlassFish Enterprise Server 2.1 depends on.

Product	Nature of Dependency	Supported Versions
Message Queue	Required Dependency: Provides reliable asynchronous messaging.	Version 4.3 (included in GlassFish Enterprise Server 2.1)

Product	Nature of Dependency	Supported Versions
Web Server	Optional Dependency: Provides load balancing between instances.	Version 6.1 and newer minor versions that are backward compatible with 6.1; version 7.0 and newer minor versions that are backward compatible with 7.0

Sun GlassFish Web Space Server 10.0

Version 10.0 is the first release of Sun GlassFish Web Space Server, so no backward compatibility information is needed.

Products That GlassFish Web Space Server Depends On

The following table provides compatibility information about the Java ES products that GlassFish Web Space Server 10.0 depends on.

Product	Nature of Dependency	Supported Versions
GlassFish Enterprise Server	Required Dependency: Provides J2EE web container runtime services.	Version 2.1
OpenSSO Enterprise	Optional Dependency: Provides authentication and authorization services.	Version 8.0

Sun Java System Directory Server Enterprise Edition 6.3.1

Directory Server Enterprise Edition 6.3.1 is generally compatible with Directory Server Enterprise Edition versions back to version 6.0, but certain compatibility limitations do exist. For detailed information about compatibility of Directory Server, Directory Proxy Server, Identity Synchronization for Windows, Directory Server Resource Kit, and Directory Editor, see [Chapter 1, “Compatibility Issues,” in *Sun Java System Directory Server Enterprise Edition 6.3.1 Release Notes*](#).

For information about compatibility of the plug-in API, see [Chapter 2, “Changes to the Plug-In API Since Directory Server 5.2,”](#) and [Chapter 3, “Changes to the Plug-In API From Directory Server 4 to Directory Server 5.2,”](#) in *Sun Java System Directory Server Enterprise Edition 6.3 Developer’s Guide*.

Products That Directory Server Enterprise Edition Depends On

Directory Server Enterprise Edition has a dependency on one other Java ES product: GlassFish Enterprise Server. This dependency applies to the Directory Service Control Center (DSCC), which must be deployed to a J2EE web container. Because DSCC supports multiple J2EE web containers, the dependency on GlassFish Enterprise Server specifically is optional. In Directory Server Enterprise Edition 6.3.1, DSCC supports these versions of GlassFish Enterprise Server and its precursor, Sun Java System Application Server:

- Sun GlassFish Enterprise Server 2.1
- Sun Java System Application Server 8.2 or later

Sun Java System Message Queue 4.3

Message Queue 4.3 is generally compatible with Message Queue versions back to version 3.6, but certain compatibility limitations do exist. For detailed information about compatibility in the areas of brokers, clients, administered objects, and the administration tool, see [“Compatibility Issues” in *Sun Java System Message Queue 4.3 Installation Guide*](#).

For information about the stability of the public interfaces that Message Queue 4.3 provides, see [Appendix B, “Stability of Message Queue Interfaces,” in *Sun Java System Message Queue 4.3 Administration Guide*](#).

Products That Message Queue Depends On

Message Queue has no mandatory dependencies on other Java ES products, but it can optionally use several other Java ES products to provide enhanced functionality. The following table provides information about these optional dependencies for Message Queue 4.3.

Product	Enhanced Functionality	Supported Versions
Directory Server	To store administered objects and user data in an LDAP directory rather than locally.	Version 6.0 and newer minor versions that are backward compatible with 6.0
GlassFish Enterprise Server	To support HTTP messaging between clients and brokers.	Version 2.1
Solaris Cluster	To provide high availability support.	Version 3.2 and newer minor versions that are backward compatible with 3.2
Web Server	To support HTTP messaging between clients and brokers.	Version 7.0 Update 3 and newer updates that are backward compatible with 7.0 Update 3

Sun Java System Web Proxy Server 4.0.8

Web Proxy Server 4.0.8 is backward compatible with Web Proxy Server versions back to 4.0.

Products That Web Proxy Server Depends On

Web Proxy Server has no mandatory dependencies on other Java ES products, but it can optionally use Directory Server (in Directory Server Enterprise Edition) to provide LDAP-based authentication. When Directory Server is used, Web Proxy Server 4.0.8 supports Directory Server versions 5.2 and 6.x.

Sun Java System Web Server 7.0 Update 4

Web Server 7.0 Update 4 is backward compatible with Web Server versions back to 7.0.

Products That Web Server Depends On

Web Server has no mandatory dependencies on other Java ES products, but it can optionally use Directory Server (in Directory Server Enterprise Edition) to provide LDAP-based authentication. When Directory Server is used, Web Server 7.0 Update 4 supports Directory Server versions 6.x.

Sun OpenSSO Enterprise 8.0

Although 8.0 is the first release of OpenSSO Enterprise, it maintains compatibility with versions of its precursor product, Sun Java System Access Manager. More specifically:

- OpenSSO Enterprise 8.0 supports backward compatibility for all Access Manager 7.1 and Access Manager 7 2005Q4 existing features including the full SDK and the client SDK APIs. Backward compatibility is *not* supported for:
 - Access Manager 6 2005Q1 (6.3) and earlier releases.
 - Liberty ID-FF schema metadata: Liberty ID-FF profiles do not work unless you upgrade the Access Manager or Federation Manager schema in Directory Server.
- OpenSSO Enterprise 8.0 can coexist with Access Manager 7.1, but only when instances of OpenSSO Enterprise and Access Manager 7.1 access the same Directory Server schema. This coexistence usually occurs when multiple instances of Access Manager 7.1 that access the same Directory Server are being upgraded sequentially. Coexistence is *not* supported for:
 - Access Manager 7 2005Q4
 - Access Manager 6 2005Q1 (6.3) and earlier releases
 - Federation Manager 7.0

For more information about backward compatibility, see [“Backward Compatibility with OpenSSO Enterprise 8.0” in *Sun OpenSSO Enterprise 8.0 Upgrade Guide*](#).

For more information about coexistence, see [“Coexistence with OpenSSO Enterprise 8.0” in *Sun OpenSSO Enterprise 8.0 Upgrade Guide*](#).

Products That OpenSSO Enterprise Depends On

OpenSSO Enterprise has no mandatory dependencies on other Java ES products, but it can use multiple Java ES products to satisfy its required dependency on a web container, and it can use other Java ES products to provide enhanced functionality. The following table provides information about these optional dependencies for OpenSSO Enterprise 8.0.

Product	Nature of Dependency	Supported Versions
Directory Server Enterprise Edition	OpenSSO Enterprise can optionally use an LDAP server to store its configuration data.	Versions 5.2, 6.0, 6.2, 6.3, and 6.3.1
	OpenSSO Enterprise can optionally use an LDAP server to store its user data.	Versions 6.3 and 6.3.1
GlassFish Enterprise Server	OpenSSO Enterprise requires a web container.	Version 2.1; also Sun Java System Application Server versions 9.1 Update 1 and Update 2
Message Queue	OpenSSO Enterprise requires Message Queue if session failover capabilities are enabled.	Version 4.1 and newer minor versions that are backward compatible with 4.1
Web Server	OpenSSO Enterprise requires a web container.	Version 7.0 Update 3 and Update 4

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