# Sun GlassFish Communications Server Release Notes

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◆ ◆ ◆ CHAPTER 1

# Preface

The Sun GlassFish Communications Server adds capabilities of Session Initiation Protocol (SIP) servlet technology to Sun GlassFish Enterprise Server.

GlassFish Communications Server is an easy, fast, and industry-leading application server based on Java Platform, Enterprise Edition (Java EE) 5 technology for developing and delivering web applications and web services. It provides superior performance, clustering, and high availability features for scalable services that continue to operate despite software and hardware faults.


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## About These Notes

These Release Notes contain important information available at the time of release of Sun GlassFish Communications Server . Enhancements, known problems, and other late-breaking issues are addressed here. Read this document before you begin using GlassFish Communications Server .

The most up-to-date version of these release notes can be found at the Sun GlassFish Communications Server documentation web site (`http://docs.sun.com/coll/1343.8`). 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.

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

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## Release Notes Revision History

This section indicates when revisions have been made to these release notes for Sun GlassFish Communications Server product.

**TABLE 1–1** Release Notes Revision History

| Revision Date | Description |
|---|---|
| April 2008 | Milestone 4 release of Sun GlassFish Communications Server . |
| July 2008 | Added known issues that were marked shark-approved. |

## Accessibility Features

To obtain accessibility features that have been released since the publishing of this media, consult Section 508 product assessments available from Sun upon request to determine which versions are best suited for deploying accessible solutions. Updated versions of applications can be found at: `http://sun.com/software/javaenterprisesystem/get.html`

For information on Sun's commitment to accessibility, visit `http://sun.com/access`.

## Related Documentation

**TABLE 1–2** Books in the GlassFish Communications Server Documentation Set

| Book Title | Description |
|---|---|
| *Release Notes* | Late-breaking information about the software and the documentation. Includes a comprehensive, table-based summary of the supported hardware, operating system, Java™ Development Kit (JDK™), and database drivers. |
| *Quick Start Guide* | How to get started with the GlassFish Communications Server product. |
| *Installation Guide* | Installing the software and its components. |
| *Application Deployment Guide* | Deployment of applications and application components to the GlassFish Communications Server. Includes information about deployment descriptors. |

**TABLE 1–2** Books in the GlassFish Communications Server Documentation Set *(Continued)*

| Book Title | Description |
|---|---|
| *Developer's Guide* | Creating and implementing Java Platform, Enterprise Edition (Java EE platform) applications intended to run on the GlassFish Communications Server that follow the open Java standards model for Java EE components and APIs. Includes information about developer tools, security, debugging, and creating lifecycle modules. |
| *Java EE 5 Tutorial* | Using Java EE 5 platform technologies and APIs to develop Java EE applications. |
| *Java WSIT Tutorial* | Developing web applications using the Web Service Interoperability Technologies (WSIT). Describes how, when, and why to use the WSIT technologies and the features and options that each technology supports. |
| *Administration Guide* | System administration for the GlassFish Communications Server, including configuration, monitoring, security, resource management, and web services management. |
| *High Availability Administration Guide* | Post-installation configuration and administration instructions for the high-availability database. |
| *Administration Reference* | Editing the GlassFish Communications Server configuration file, `domain.xml`. |
| *Reference Manual* | Utility commands available with the GlassFish Communications Server; written in man page style. Includes the `asadmin` command line interface. |

## How to Report Problems and Provide Feedback

If you have problems with Sun GlassFish Communications Server, contact Sun using one of the following mechanisms:

- SailFin mailing lists (`https://sailfin.dev.java.net/servlets/ProjectMailingListList`) — A variety of SailFin community mailing lists for various interests and feedback
- SailFin Issue Tracker (`https://sailfin.dev.java.net/servlets/ProjectIssues`)
- Java Technology Forums (`http://forum.java.sun.com/`) — An interactive message board for sharing knowledge and questions about Java technologies and programming techniques.
- Sun Software Support services (`http://www.sun.com/service/sunone/software`) — Links to the Knowledge Base, Online Support Center, and Product Tracker, as well as to maintenance programs and support contact numbers
- The telephone dispatch number associated with your maintenance contract

  So that we can best assist you in resolving problems, please have the following information available when you contact support:
- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem

- Any error logs or core dumps

## 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 Send Comments. In the online form, provide the document title and part number. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document. For example, the title of this book is *Sun GlassFish Communications Server Release Notes*, and the part number is 820-4276-05.

## Additional Sun Resources

Useful information can be found at the following locations:

- GlassFish Communications Server product information (`http://wwws.sun.com/software/products/appsrvr/home_appsrvr.html`)
- Sun Documentation (`http://docs.sun.com/prod/java.sys`)
- Sun Professional Services (`http://www.sun.com/service/sunps/sunone`)
- Sun Software Products and Service (`http://www.sun.com/software`)
- Sun Software Support Services (`http://www.sun.com/service/sunone/software`)
- Sun Support and Knowledge Base (`http://www.sun.com/service/support/software`)
- Sun Support and Training Services (`http://training.sun.com`)
- Sun Consulting and Professional Services (`http://www.sun.com/service/sunps/sunone`)
- Sun Developer Information (`http://developers.sun.com`)
- Sun Developer Support Services (`http://www.sun.com/developers/support`)
- Sun 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/`)

◆ ◆ ◆ CHAPTER 2

# About GlassFish Communications Server

The Sun GlassFish Communications Server adds capabilities of Session Initiation Protocol (SIP) Servlet technology to Sun GlassFish Enterprise Server. Sun GlassFish Communications Server is a Java EE 5 platform-compatible server for the development and deployment of Java EE and SIP applications and Java technology-based web services in large-scale production environments.

This chapter includes:


- "Features of Sun GlassFish Communications Server " on page 7
- "Hardware and Software Requirements" on page 8
- "Using the Update Center" on page 9


## Features of Sun GlassFish Communications Server

The important features of Sun GlassFish Communications Server are as follows:

- **Compliant with JSR 116 and JSR 289** — Sun GlassFish Communications Server contains a SIP stack that is compliant with RFCs 3261, 3262, 3265, 3311, 3515, 3903, etc. It will also expose the SIP Servlets Java APIs defined by JSR 116 and JSR 289.
- **Converged SIP and HTTP Sessions** — Sun GlassFish Communications Server supports converged HTTP and SIP session functionality as defined by JSR 289.
- **Integrated SIP Servlet Container** — The SIP Servlet container offers the following functionality:
  - Provides a network end point to listen to SIP requests,
  - Provides an environment to host and manage the lifecycle of SIP Servlets.

  The SIP Servlet container works in conjunction with the web container to provide support for converged applications as defined by the SIP Servlet API Specification ( SSA).
- **Easy Administration** — Sun GlassFish Communications Server enables easy administration of the SIP container and the deployed SIP applications using the CLI and the GUI.

- **Security**— Digest Authentication is supported for both HTTP and SIP protocols. P-Asserted-Identity is supported for SIP protocol. The SIP Container supports SIPS over TLS.
- **Session Replication for SIP and HTTP Sessions** — Session replication capability in Sun GlassFish Communications Server supports SIP application sessions, SIP sessions and converged (SIP and HTTP) sessions.
- **Converged Load Balancer** — Converged Load Balancer (CLB) is a software load balancing component, which facilitates high availability of converged applications, by distributing the application requests in a cluster of server instances. The CLB provides the following functionality:
  - Forwards SIP(S) and HTTP(S) requests to a cluster of server instances.
  - Load balances requests using consistent hashing/round-robin policy.
  - Enables and disables server instances in a cluster.
  - Monitors health of server instances.
- **Support to Deploy SIP and Converged Applications** — Sun GlassFish Communications Server supports deployment of pure SIP applications and converged applications using the extension-module mechanism in GlassFish. It also supports `sun-sip.xml` as the Sun-specific deployment descriptor for SIP applications.
- **NetBeans Tooling** — Sun GlassFish Communications Server provides support for SIP Servlet applications based on JSR 289 on top of NetBeans 6.0. A simple SIP client can be created using the test agent to test SIP Servlets. This plug-in is available under `as-install-dir/lib/tools`.
- **Application Router Deployment** — Sun GlassFish Communications Server supports hot deployment of Application router archives (JAR files) using the extension module mechanism. An application router that follows a simple alphabetical rule for routing the requests is provided by default.
- **Packaging and File Layout** — Sun GlassFish Communications Server is being delivered as a file-based installable.

## Hardware and Software Requirements

This section lists the requirements that must be met before installing the Sun GlassFish Communications Server product.


- "Supported Platforms" on page 8
- "Important Patch Information" on page 9
- "JDK Version" on page 9


### Supported Platforms

The following table lists the operating systems with which the Sun GlassFish Communications Server is compatible.

**TABLE 2–1** Supported Operating Systems

| Operating System | Minimum Memory/ Recommended Memory | Minimum Disk Space/ Recommended Disk Space | JVM | Deployment Type |
|---|---|---|---|---|
| 64–bit Sun Solaris 10 (SPARC, x86) | 512 MB/512 MB | 250 MB free/500 MB free | J2SE 5.0 - 32 bit<br>Java SE 6 - 32 bit | Production |
| Red Hat Enterprise Linux 3.0, 4.0 | 512 MB/1 GB | 250 MB free/500 MB free | J2SE 5.0 - 32 bit<br>Java SE 6 - 32 bit | Production |
| 64–bit SuSE Linux Enterprise Server 10 SP1 | 512 MB/1 GB | 250 MB free/500 MB free | J2SE 5.0 - 32 bit<br>Java SE 6 - 32 bit | Production |
| Windows Vista | 1 GB/2 GB | 500 MB free/1 GB free | J2SE 5.0 - 32 bit<br>Java SE 6 - 32 bit | Development |

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

**Note –** Its recommended that you use the NTFS file system rather than FAT or FAT32 when running the GlassFish Communications Server on any Microsoft Windows platform.

### Important Patch Information

#### Solaris Patch Requirements

It is recommended that Solaris 10 (x86, SPARC) users have the "Sun recommended patch cluster" installed. This patch cluster is available under "Recommended and Security Patches" on the SunSolve (`http://sunsolve.sun.com/pub-cgi/show.pl?target=patchpage`) Web site.

#### JDK Version

The minimum (and certified) version of JDK required for GlassFish Communications Server is **1.5.0_14**.

## Using the Update Center

The Update Center provides automated GlassFish Communications Server updates and easy access to additional components.

When the Update Center is enabled, it performs an automated software update. During this automated update process, the Update Center collects and transmits the following data to Sun Microsystems (or its service provider):

- Unique installation ID (GUID)

- IP address
- Operating system information (name, version, architecture, locale)
- JDK version
- Module download information (module name, date, time, status, download time, number of bytes downloaded)

No personally identifiable information is tracked. No personally identifiable information is associated with any other data or used for reporting purposes.

## ▼ To Use the Update Center

To ensure explicit agreement of the automated update, the Update Center is disabled by default. To enable the Update Center to perform periodic checks and automated updates:

1. **Start the Update Center.**
   - On Unix: `<installdir>/updatecenter/bin/updatetool`
   - On Windows: `<installdir>\updatecenter\bin\updatetool.bat`
2. **Select the Preferences tab.**
3. **In the Update Scheduling window, change the Check for Updates drop-down box value from Never (Manual) to a desired value. For example, daily or weekly.**
4. **Specify the desired day of the week and time of the day for the update.**
5. **Select the Save button to save your changes.**

   The Update Center will now automatically check for SailFin or GlassFish Communications Server component updates according to the schedule specified. When an update is available, the Update Center will launch and notify you of the component available to update.

◆ ◆ ◆ CHAPTER 3

# Known Issues and Limitations

This chapter describes known problems and associated solutions for the Sun GlassFish Communications Server software. If a summary statement does not specify a particular platform, the problem applies to all platforms. This information is organized into the following sections:

## Installation

This section lists known issues related to installing GlassFish Communications Server.

### GlassFish Communications Server does not use the JDK specified by —`javahome` option (Issue 789)

**Description**

You can use a preinstalled JDK instead of the default version for the installation by using the —`javahome` option. But GlassFish Communications Server, by default, uses the JDK version from *as-install*`/jdk`.

**Solution**

The `AS_JAVA` variable in the asenv.conf file always points to *as-install*`/jdk`. If you want to use a different JDK version, update the `asenv.conf` file manually and changed the value of `AS_JAVA`.

## SIP Application Development

This section lists known issues related to SIP application development

### Null pointer exception in `com.ericsson.ssa.sip.transaction.TransactionManager.scavengeCT` (Issue 782)

**Description**

This was caused when multiple dialog/transaction scavengers were scheduled at a fixed rate and conflicting with each other. Also during long scavenge time, the same cleaner were used by multiple threads.

The Null Pointer Exception is caused during Stress Test using an INVITE scenario. It happens at regular intervals and has not been seen to be causing any dropped calls or memory leaks.

**Solution**

No known solution.