



# **Sun GlassFish Communications Server Diameter Adapter 1.0 Release Notes**



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# Overview

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The Sun GlassFish™ Communications Server Diameter Adapter 1.0 integrates the Diameter stack into Communications Server. Diameter Adapter is available to Sun customers from [SunSolve](#).

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

Sun GlassFish Communications Server is free for development, deployment, and redistribution. If you are a customer who is interested in redistribution, contact [Sun OEM](#) sales for a redistribution license.

- [“About These Notes” on page 3](#)
- [“Accessibility Features” on page 4](#)
- [“Related Documentation” on page 4](#)
- [“How to Report Problems and Provide Feedback” on page 5](#)
- [“Sun Welcomes Your Comments” on page 6](#)
- [“Additional Sun Resources” on page 6](#)

## About These Notes

These Release Notes contain important information available at the time of release of the Diameter Adapter for Sun GlassFish Communications Server 2.0. Enhancements, known problems, and other late-breaking issues are addressed here.

The most up-to-date version of these release notes can be found at the Communications Server [documentation web site \(http://docs.sun.com/coll/1343.10\)](http://docs.sun.com/coll/1343.10). 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 lists the changes that have been made in these release notes after the initial release of the Sun GlassFish Communications Server product.

TABLE 1-1 Release Notes Revision History

Revision Date	Description
December 2009	Release of the Diameter Adapter for Communications Server.

## 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 Communications Server Documentation Set

Book Title	Description
<i>Documentation Center</i>	Communications Server documentation topics organized by task and subject.
<i>Release Notes</i>	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.
<i>Quick Start Guide</i>	How to get started with the Communications Server product.
<i>Installation Guide</i>	Installing the software and its components.
<i>Application Deployment Guide</i>	Deployment of applications and application components to the Communications Server. Includes information about deployment descriptors.

TABLE 1-2 Books in the Communications Server Documentation Set (Continued)

Book Title	Description
<i>Developer's Guide</i>	Creating and implementing Java Platform, Enterprise Edition (Java EE platform) applications intended to run on the 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.
<i>Java EE 5 Tutorial</i>	Using Java EE 5 platform technologies and APIs to develop Java EE applications.
<i>Java WSIT Tutorial</i>	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.
<i>Administration Guide</i>	System administration for the Communications Server, including configuration, monitoring, security, resource management, and web services management.
<i>High Availability Administration Guide</i>	Setting up clusters, working with node agents, and using load balancers.
<i>Administration Reference</i>	Editing the Communications Server configuration file, <code>domain.xml</code> .
<i>Performance Tuning Guide</i>	Tuning the Communications Server to improve performance.
<i>Reference Manual</i>	Utility commands available with the Communications Server; written in man page style. Includes the <code>asadmin</code> 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 \(https://sailfin.dev.java.net/servlets/ProjectMailingListList\)](https://sailfin.dev.java.net/servlets/ProjectMailingListList) — A variety of SailFin community mailing lists for various interests and feedback
- [Bug database on Java Developer Connection \(http://developer.java.sun.com/servlet/SessionServlet?url=/developer/bugParade/index.jshtml\)](http://developer.java.sun.com/servlet/SessionServlet?url=/developer/bugParade/index.jshtml) — To view bugs or to submit a bug, use the Java Developer Connection Bug Parade
- [SailFin Issue Tracker \(https://sailfin.dev.java.net/servlets/ProjectIssues\)](https://sailfin.dev.java.net/servlets/ProjectIssues)
- [Java Technology Forums \(http://forum.java.sun.com/\)](http://forum.java.sun.com/) — An interactive message board for sharing knowledge and questions about Java technologies and programming techniques.
- [Sun Software Support services \(http://www.sun.com/service/sunone/software\)](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 Feedback. 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 Diameter Adapter 1.0 Release Notes*, and the part number is 821-1276.

## Additional Sun Resources

Useful information can be found at the following locations:

- Communications Server product information ([http://www.sun.com/software/products/appsrvr/home\\_appsrvr.html](http://www.sun.com/software/products/appsrvr/home_appsrvr.html))
- Professional Services (<http://www.sun.com/service/sunps/sunone>)
- Software Products and Service (<http://www.sun.com/software>)
- Software Support Services (<http://www.sun.com/service/sunone/software>)
- Support and Knowledge Base (<http://www.sun.com/service/support/software>)
- Sun Support and Training Services (<http://training.sun.com>)
- Consulting and Professional Services (<http://www.sun.com/service/sunps/sunone>)
- Developer Information (<http://developers.sun.com>)
- Sun Developer Support Services (<http://www.sun.com/developers/support>)
- Software Training (<http://www.sun.com/software/training>)
- Sun Software Data Sheets (<http://www.sun.com/software>)
- Sun Microsystems product documentation (<http://docs.sun.com/>)

# Diameter Adapter for Sun GlassFish Communications Server 2.0

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The Diameter Adapter integrates the Diameter stack into Sun GlassFish Communications Server. Communications Server is a Java EE 5 platform-compatible server for the development and deployment of Web, SIP, and converged applications and Java technology-based web services in large-scale production environments.

This chapter includes:

- “Features of Diameter Adapter for Sun GlassFish Communications Server” on page 7
- “Hardware and Software Requirements” on page 8

## Features of Diameter Adapter for Sun GlassFish Communications Server

Features of the Diameter Adapter are as follows:

- **Support for Diameter Protocol** — Diameter is a networking protocol for authentication, authorization and accounting (AAA). An example of its use: most Internet Service Providers (ISPs) use this protocol for AAA before allowing you to connect to their network. Sun GlassFish Communications Server offers support for the Diameter protocol through the use of this value-add.
- **Implementation of RFCs and 3GPP Specifications** — Diameter Adapter for Communications Server implements the following RFC and 3GPP specifications:
  - RFC 3588
  - RFC 4006
  - 3GPP TS 29.329, 29.328, 32.260, and 32.299
- **Add-on Installer** — Diameter Adapter has an installer that enables you to install the Diameter module to your existing Communications Server installation.
- **Annotations support** — The following annotations are defined to enable faster development of Attribute Value Pairs (AVP): `com.sun.diameter.annotation.AVPFactory` and `com.sun.diameter.annotation.AVPInfo`.
- **Support for standard Diameter interfaces** — Communications Server supports the following Diameter interfaces:

- Rf Interface - Used for Offline Billing functions.
- Ro Interface - Used for Online Billing functions.
- Sh Interface - Used for downloading and updating transparent and non-transparent user data and for requesting and sending notifications on changes to user data.
- **Easy Administration** — Communications Server enables easy administration of the Diameter Adapter using the CLI and the GUI.
- **Open Source and SailFin Community** — The [SailFin](http://sailfin.dev.java.net) (<http://sailfin.dev.java.net>) community has the goal of developing a free, open source, commercial-grade communications server that implements the newest features of the Java EE 5 platform and related enterprise technologies.

## Hardware and Software Requirements

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

- “Supported Platforms” on page 8
- “Important Patch Information” on page 10
- “JDK Version” on page 10

### 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
Sun Solaris 10 (x86) (32-bit and 64-bit)	512 MB	512 MB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Production
Sun Solaris 10 (SPARC)(32-bit and 64-bit)	512 MB	512 MB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Production



TABLE 2-1 Supported Operating Systems (Continued)

Operating System	Minimum Memory	Recommended Memory	Minimum Disk Space	Recommended Disk Space	JVM	Deployment Type
Red Hat Enterprise Linux 3.0 Update 1, 4.0, and 5.x (32-bit and 64-bit)	512 MB	1 GB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Production
SUSE Linux Enterprise Server 10 (32-bit and 64-bit)  (SP1 and SP2 are also supported)	512 MB	1 GB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Production
Windows XP  Windows Vista  Windows 2008	1 GB	2 GB	500 MB free	1 GB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Development
Windows 7	1 GB	2 GB	500 MB free	1 GB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Development
Macintosh OS 10.4, 10.5	512 MB	1 GB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit	Development
OpenSolaris 2009.06	512 MB	1 GB	250 MB free	500 MB free	J2SE 5.0 - 32 bit Java SE 6 - 32 bit and 64 bit	Development

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

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

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## 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 Communications Server is **1.6.0\_7**.

## ▼ To Switch to the Supported Java SE Version

You can switch to a supported Java SE version by editing the `asenv` file as described here.

- 1 **If you have not already done so, install the new Java SE version on your system.**  
The Java SE SDK can be downloaded from <http://java.sun.com/javase>
- 2 **Stop the Communications Server domains.**
- 3 **Edit the `as-install/config/asenv.conf` file (`asenv.bat` on Windows), changing the value for `AS_JAVA` to point to the new Java home directory:**
- 4 **Edit the `as-install/samples/common.properties` file, changing the line beginning `com.sun.aas.javaRoot...` to reference the new Java home directory.**
- 5 **Restart Communications Server.**

## Browsers

TABLE 2-2 Supported Web Browsers

Browser	Version
Mozilla	1.7.12
Internet Explorer	6.0 Service Pack 2, 7.0
Firefox	2.x, 3.x
Safari	3.x, 4.x

TABLE 2-2 Supported Web Browsers (Continued)

Browser	Version
Netscape	8.0.4, 8.1, 9.0, 9.0.x



# Diameter Adapter Known Issues and Limitations

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This chapter describes known problems and associated solutions for the Diameter Adapter software. If a summary statement does not specify a particular platform, the problem applies to all platforms.

## **Transport Wrongly Displayed as TCP After Creating a Peer (6907288)**

### **Description**

If you create a peer with transport specified as TLS, the Admin Console erroneously displays the transport type as TCP. Although, the transport is correctly recorded as TLS, the Admin Console does not fetch the correct value.

### **Solution**

Use the CLI to view correct value of the transport attribute.

## **Domain Restart Required Message Shown on Creating Diameter Service (6902001)**

### **Description**

After creating Diameter service using the CLI, the Admin Console displays a Restart Required message for the domain.

### **Solution**

Diameter Service is not dynamically reconfigurable. Restart the domain or cluster after creating Diameter service.

## **Creating Two Peers With the Same Peer Host and Peer Port Values is Allowed (6901940)**

### **Description**

The `asadmin create-peer` command allows you to create two peers with same peer host and peer port values.

### **Solution**

Specify the peer port using the `--peerport` option while creating a peer to avoid port clashes when configuring multiple peers on the same node.

You cannot configure multiple peers with same hostname and port number. To configure a single server supporting multiple applications, configure a single peer and create applications with list of supported application IDs.

## **Left Pane in Admin Console Shows HTTP 500 Status Error (6905525)**

### **Description**

When you log in to the Admin Console after creating a diameter application using the `asadmin create-diameter-application` command, the left pane of the Admin Console sometimes shows a HTTP 500 status error. This problem occurs when an integer id is provided to the `--applicationsid` option of the `create-diameter-application` command. Although the command succeeds, Admin Console throws an error.

### **Solution**

Use the Admin Console to create a Diameter application with an integer applications id.