



# **Installation Guide**

**Version 0.1**  
**July 2006**

# Contents

---

|  |    |
|--|----|
| <b><u>Contents</u></b> .....   | 2  |
| <b><u>Overview</u></b> .....   | 3  |
| <a href="#">Copyright and trademark information</a> .....                    | 3  |
| <a href="#">Feedback</a> .....   | 3  |
| <a href="#">Acknowledgements</a> .....                                       | 3  |
| <a href="#">Modifications and Updates</a> .....                              | 4  |
| <b><u>Obtaining and Unpacking the OpenDS Directory Server</u></b> .....      | 5  |
| <b><u>Configuring the OpenDS Directory Server</u></b> .....                  | 7  |
| <b><u>Running the OpenDS Directory Server</u></b> .....                      | 9  |
| <a href="#">Stopping the OpenDS Directory Server</a> .....                   | 9  |
| <b><u>Common Development and Distribution License, Version 1.0</u></b> ..... | 12 |

# Overview

---

The OpenDS Directory Server is a pure Java implementation of a network-accessible database that is able to store information in a hierarchical form. Clients may communicate with it using a standard protocol (e.g., LDAP) to retrieve and update information in a variety of ways. We aim to provide unmatched performance and scalability, robust error handling and debugging capabilities, easy extensibility, and innovative feature sets.

This document provides instruction for installing and configuring the OpenDS Directory Server for evaluation and testing purposes.

## Copyright and trademark information

The contents of this document are subject to the terms of the Common Development and Distribution License, Version 1.0 only (the "License"). You may not use this document except in compliance with the License.

You can obtain a copy of the License at <https://OpenDS.dev.java.net/OpenDS.LICENSE> or at the end of this document. See the License for the specific language governing permissions and limitations under the License.

Portions created by Sun Microsystems, Inc. are Copyright © 2006. All Rights Reserved.

All trademarks within this document belong to legitimate owners.

## Feedback

Please direct any comments or suggestions about this document to:  
[dev@OpenDS.dev.java.net](mailto:dev@OpenDS.dev.java.net)

## Acknowledgements

The general format of this document was based on the documentation template used by [OpenOffice.org](http://OpenOffice.org).

# Modifications and Updates

| <b><i>Date</i></b> | <b><i>Description of Change</i></b> |
|--------------------|-------------------------------------|
| July 2006          | Initial draft                       |

# Obtaining and Unpacking the OpenDS Directory Server

---

The OpenDS Directory Server may be obtained in either source or pre-packaged form. In source form, you can compile the code yourself into the packaged form. The process for doing this is described in the OpenDS Source Guide document. Once the server has been built from source, the packaged version will be available as a zip file in the `build/package` directory. Currently, this file will be named `OpenDS-0.1.zip`. For convenience, the contents of this zip file will also be available as a subdirectory of the `build/package` directory (e.g., `build/package/OpenDS-0.1`). This may be used in-place for simple testing purposes without the need to unpack the zip file elsewhere.

The pre-packaged form is available for download from the builds section at <https://OpenDS.dev.java.net/servlets/ProjectDocumentList>. These pre-built packages are simply the result of building from source, and therefore the only differences between them may be that building from source can be based on a more recent version of the code than the latest pre-packaged version. On the other hand, using the pre-built form may be more convenient.

The "installation" process for the OpenDS Directory Server is currently very simple. The packaged version (whether built from source or downloaded in pre-packaged form) will simply be a zip file. Extract the contents of this zip file in the location that you wish to install the server. For example:

```
$ unzip OpenDS-0.1.zip
```

In the event that your system does not come with a utility for extracting zip archives, it is possible to use the `jar` tool provided with the Java environment. For example:

```
$ /usr/java/bin/jar -xvf OpenDS-0.1.zip
```

This will create an `OpenDS-0.1` subdirectory in the current working directory, with the following contents:

- `README` -- This is a simple text file with basic information about the OpenDS Directory Server.
- `bak` -- This is a default directory that may be used for holding backup files.
- `bin` -- This directory contains a number of shell scripts and batch files that may be used to control server operation and perform various administrative tasks.
- `changelogDb` -- This is the default directory that may be used for holding changelog database files.

- `classes` -- This directory may be used to hold class files for any user-defined code that may be accessed by the OpenDS Directory Server (e.g., plugins or other kinds of extensions).
- `config` -- This directory contains the configuration used by the OpenDS Directory Server. The `config.ldif` file contains the main configuration for the server, and the `schema` subdirectory contains the schema element definitions. The `synchronization.ldif` file contains sample entries that may be added to the configuration when setting up synchronization.
- `db` -- This is the default directory that will be used to hold the server database files.
- `ldif` -- This is a default directory that may be used to hold LDIF data files.
- `legal-notice`s -- This directory contains files with license information for the OpenDS Directory Server and any other components that it may contain.
- `lib` -- This directory contains the libraries used by the OpenDS Directory Server. This contains the `OpenDS.jar` file with the core Directory Server code, as well as third-party libraries used by the server (e.g., the Berkeley DB Java Edition).
- `locks` -- This directory is used for maintaining lock files needed to ensure that separate processes running concurrently do not interfere with each other (e.g., to prevent restoring a database from a backup when that database is currently in use by the server).
- `logs` -- This is the default directory that will be used to hold the server log files.
- `war` -- This directory contains the `dsml.war` file, which contains the logic for the DSML to LDAP gateway which runs as a web application.

# Configuring the OpenDS Directory Server

---

The default configuration for the OpenDS Directory Server is such that it is possible to run "out of the box" with no additional setup needed. In this case, it will run with the following configuration:

- It will listen for LDAP communication from clients on port 389.
- It will use a suffix of "dc=example,dc=com".
- It will have a root user with a DN of "cn=Directory Manager" and a password of "password".

If any or all of these defaults are unacceptable, then they may be easily changed using the `bin/configure-ds.sh` script on UNIX systems or the `bin\configure-ds.bat` batch file on Windows. This tool accepts the following configuration options:

- `--ldapPort {ldapPort}` -- This may be used to set the port number on which the server will listen for connections from LDAP clients. Only a single port number may be provided.
- `--baseDN {baseDN}` -- This may be used to specify the base DN (i.e., the suffix) for the server. Multiple base DN's may be given by providing this option multiple times.
- `--rootDN {rootUserDN}` -- This specifies the DN that should be used for the initial root user in the Directory Server. Only a single root DN value may be provided.
- `--rootPassword {rootUserPW}` -- This specifies the password that should be used for the initial root user in the Directory Server. Only a single password value may be provided. If this option is provided, then the `--rootPasswordFile` option should not be used.
- `--rootPasswordFile {filename}` -- This specifies the path to a file containing the password for the initial root user in the Directory Server. Only a single password value may be provided. If this option is provided, then the `--rootPassword` option should not be used.
- `--help` -- This will display usage information for the tool, including descriptions of all the above configuration options.

Depending on the Java environment configuration, it may be sufficient to merely run the `configure-ds.sh` or `configure-ds.bat` command with the appropriate arguments and allow it to find the Java environment automatically. If this results in an error because the Java environment

installation could not be located, or if the default Java environment identified is not the one that should be used for running the tool, then it may be explicitly specified by setting the value of the `JAVA_HOME` environment variable to point to the root of the appropriate Java installation. A Java 5 or higher environment will be required to use any part of the OpenDS Directory Server.

If any other configuration properties for the OpenDS Directory Server need to be changed from their default values, then the `config/config.ldif` file may be directly edited with the server offline, or the configuration may be modified using either LDAP or JMX with the server online. Information about accessing the OpenDS configuration may be found in the OpenDS Configuration Guide available online at <https://OpenDS.dev.java.net/>.



# Running the OpenDS Directory Server

---

On UNIX systems, to start the OpenDS Directory Server simply run the `bin/start-ds.sh` shell script. It may be executed with no arguments to have the server start in the background, or the string `"-nodetach"` may be given as the first argument to cause the server to start running as a foreground process. On Windows systems, the `bin\start-ds.bat` batch file may be used. It will always cause the server to be started in the foreground.

As with the configuration script, the OpenDS start script will attempt to automatically find the Java environment to use. If this is not successful, or if it does not locate the correct Java installation, then the `JAVA_HOME` environment variable may be used to explicitly specify the path to the Java installation.

It may also be useful to set the `JAVA_ARGS` environment variable when starting the OpenDS Directory Server. This environment variable may be used to provide options directly to the JVM when the server is starting. The particular arguments that will be supported may vary based on the JVM implementation, but some of the most useful options include:

- `-ea` -- This indicates that the JVM should enable the use of assertions. The OpenDS Directory Server uses assertions as a debugging facility, and significantly more debugging information may be obtained while the JVM is running with assertions enabled (although it will significantly degrade performance).
- `-d64` -- This indicates that the 64-bit version of the JVM should be used if possible. This may be used to allow the server to access very large amounts of memory, whereas the amount of memory available to 32-bit JVMs is more limited.
- `-Xms512m` -- This specifies the initial heap size that should be used for the JVM (which impacts the minimum amount of memory that the JVM may consume). The "512m" portion may be changed to use a different initial heap size.
- `-Xmx512m` -- This specifies the maximum heap size that should be used for the JVM (which impacts the maximum amount of memory that the JVM may consume). The "512m" portion may be changed to use a different maximum heap size.

## Stopping the OpenDS Directory Server

If the OpenDS Directory Server is running in the foreground, it may be stopped by using the Ctrl+C key combination on either UNIX or Windows systems. Alternately, on any system (whether the server is running in the foreground or the background), or even from a remote system

it will be possible to use the `bin/stop-ds.sh` script on UNIX systems or `bin\stop-ds.bat` batch file on Windows. This utility communicates with the server over LDAP to invoke the shutdown task. This script may use the same environment variables as the startup script, but it may also take a number of command-line arguments, including:

- `--host {host}` -- This specifies the address of the system on which the Directory Server instance is running. If this is not provided, the loopback address will be used.
- `--port {port}` -- This specifies the port to use to communicate with the Directory Server instance.
- `--useSSL` -- This indicates that the tool should communicate with the server over SSL. See the complete usage generated by the `--help` argument to see the entire set of options that may be specified when using SSL/TLS.
- `--useStartTLS` -- This indicates that the tool should communicate securely with the server through the use of the StartTLS extended operation. See the complete usage generated by the `--help` argument to see the entire set of options that may be specified when using SSL/TLS.
- `--bindDN {bindDN}` -- This specifies the DN that should be used to authenticate to the server using simple authentication. At present, no authentication is required but in the future the access control subsystem will require authentication for this operation.
- `--bindPassword {bindPW}` -- This specifies the password that should be used to authenticate to the server. If this option is given, then the `--bindPasswordFile` option should not be used.
- `--bindPasswordFile {filename}` -- This specifies the path to a file containing the password that should be used to authenticate to the server. If this option is given, then the `--bindPassword` option should not be used.
- `--sasloption {option}` -- This specifies an option that should be used for performing SASL authentication. The individual options that may be used will vary based on the SASL mechanism, but in all cases the "mech" option can specify which SASL mechanism to use (e.g., `--sasloption mech=DIGEST-MD5` will cause the tool to use the DIGEST-MD5 SASL mechanism for authentication).
- `--stopReason {reason}` -- This may be used to provide a human-readable reason for the shutdown. It will appear in the server log and will be included in any alert notifications that are generated.
- `--restart` -- This may be used to cause the server to restart rather than shut down. Note that this will be an "in-core" restart in which the JVM itself stays running but the Directory Server will completely reinitialize itself. Any configuration changes that require a JVM restart will not take effect.

- `--help` -- This may be used to obtain complete usage information for the command, including options not provided in this summary (e.g., for configuring access to SSL key and trust stores, using proxied authorization, or configuring the shutdown to occur at some time in the future rather than immediately).

# Common Development and Distribution License, Version 1.0

---

Unless otherwise noted, all components of the OpenDS Directory Server, including all source, configuration, and documentation, are released under the Common Development and Distribution License (), Version 1.0. The full text of that license is as follows:

## 1. Definitions.

- 1.1. "Contributor" means each individual or entity that creates or contributes to the creation of Modifications.
- 1.2. "Contributor Version" means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.
- 1.3. "Covered Software" means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.
- 1.4. "Executable" means the Covered Software in any form other than Source Code.
- 1.5. "Initial Developer" means the individual or entity that first makes Original Software available under this License.
- 1.6. "Larger Work" means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.
- 1.7. "License" means this document.
- 1.8. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
- 1.9. "Modifications" means the Source Code and Executable form of any of the following:
  - A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications;
  - B. Any new file that contains any part of the Original Software or previous Modifications; or
  - C. Any new file that is contributed or otherwise made available under the terms of this License.
- 1.10. "Original Software" means the Source Code and Executable form of computer software code that is originally released under this License.
- 1.11. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

- 1.12. "Source Code" means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.
- 1.13. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 2. License Grants.

### 2.1. The Initial Developer Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).
- (c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.
- (d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.

### 2.2. Contributor Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of:

(1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

- (c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.
- (d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

### 3. Distribution Obligations.

#### 3.1. Availability of Source Code.

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

#### 3.2. Modifications.

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

#### 3.3. Required Notices.

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

#### 3.4. Application of Additional Terms.

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients' rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

### 3.5. Distribution of Executable Versions.

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipient's rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

### 3.6. Larger Works.

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

## 4. Versions of the License.

### 4.1. New Versions.

Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

### 4.2. Effect of New Versions.

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

### 4.3. Modified Versions.

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

## 5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY

COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

#### 6. TERMINATION.

6.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

6.2. If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as "Participant") alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination.

#### 7. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

#### 8. U.S. GOVERNMENT END USERS.

The Covered Software is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" (as that term is defined at 48 C.F.R. 252.227-7014(a)(1)) and "commercial computer software documentation" as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or



provision that addresses Government rights in computer software under this License.

#### 9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdiction's conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

#### 10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

-----  
NOTICE PURSUANT TO SECTION 9 OF THE COMMON DEVELOPMENT AND  
DISTRIBUTION LICENSE (CDDL)

For Covered Software in this distribution, this License shall be governed by the laws of the State of California (excluding conflict-of-law provisions).

Any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California and the state courts of the State of California, with venue lying in Santa Clara County, California.