

System Access Guide

Hitachi Virtual Storage Platform Gx00 and Fx00 with NAS Modules

VSP N series

Hitachi NAS Platform

Release 14.3

© 2011, 2019 Hitachi, Ltd. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including copying and recording, or stored in a database or retrieval system for commercial purposes without the express written permission of Hitachi, Ltd., or Hitachi Vantara LLC (collectively "Hitachi"). Licensee may make copies of the Materials provided that any such copy is: (i) created as an essential step in utilization of the Software as licensed and is used in no other manner; or (ii) used for archival purposes. Licensee may not make any other copies of the Materials. "Materials" mean text, data, photographs, graphics, audio, video and documents.

Hitachi reserves the right to make changes to this Material at any time without notice and assumes no responsibility for its use. The Materials contain the most current information available at the time of publication.

Some of the features described in the Materials might not be currently available. Refer to the most recent product announcement for information about feature and product availability, or contact Hitachi Vantara LLC at https://support.hitachivantara.com/en_us/contact-us.html.

Notice: Hitachi products and services can be ordered only under the terms and conditions of the applicable Hitachi agreements. The use of Hitachi products is governed by the terms of your agreements with Hitachi Vantara LLC.

By using this software, you agree that you are responsible for:

- 1. Acquiring the relevant consents as may be required under local privacy laws or otherwise from authorized employees and other individuals; and
- 2. Verifying that your data continues to be held, retrieved, deleted, or otherwise processed in accordance with relevant laws.

Notice on Export Controls. The technical data and technology inherent in this Document may be subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Reader agrees to comply strictly with all such regulations and acknowledges that Reader has the responsibility to obtain licenses to export, re-export, or import the Document and any Compliant Products.

Hitachi and Lumada are trademarks or registered trademarks of Hitachi, Ltd., in the United States and other countries.

AIX, AS/400e, DB2, Domino, DS6000, DS8000, Enterprise Storage Server, eServer, FICON, FlashCopy, GDPS, HyperSwap, IBM, Lotus, MVS, OS/390, PowerHA, PowerPC, RS/6000, S/390, System z9, System z10, Tivoli, z/OS, z9, z10, z13, z14, z/VM, and z/VSE are registered trademarks or trademarks of International Business Machines Corporation.

Active Directory, ActiveX, Bing, Edge, Excel, Hyper-V, Internet Explorer, the Internet Explorer logo, Microsoft, the Microsoft corporate logo, the Microsoft Edge logo, MS-DOS, Outlook, PowerPoint, SharePoint, Silverlight, SmartScreen, SQL Server, Visual Basic, Visual C++, Visual Studio, Windows, the Windows logo, Windows Azure, Windows PowerShell, Windows Server, the Windows start button, and Windows Vista are registered trademarks or trademarks of Microsoft Corporation. Microsoft product screen shots are reprinted with permission from Microsoft Corporation.

All other trademarks, service marks, and company names in this document or website are properties of their respective owners.

Copyright and license information for third-party and open source software used in Hitachi Vantara products can be found at https://knowledge.hitachivantara.com/Documents/Open_Source_Software.

Contents

| Preface | 9 |
|--|----|
| Related Documentation | 9 |
| Accessing product documentation | 12 |
| Getting help | 12 |
| Comments | 12 |
| Chapter 1: NAS Platform overview | 14 |
| Supported NAS Platform functionality | 14 |
| Considerations when using a NAS module | 14 |
| User accounts | 16 |
| Changing supervisor and root passwords | 17 |
| Managing a server or cluster | 17 |
| Using NAS Manager | 18 |
| Browser support | 18 |
| Server Status Console | 18 |
| Using NAS Manager tables | 20 |
| Accessing and navigating NAS Manager pages | 22 |
| Disabling an embedded SMU | 23 |
| Using the command line interface | 23 |
| Restricting CLI commands | 23 |
| Accessing the SMU command line interface | 24 |
| Using the serial (console) port | 24 |
| Using an SSH connection | 25 |
| Accessing the server/cluster command line reference | 25 |
| Using SSH on the SMU | 26 |
| Using SSH on the server | 26 |
| Using Telnet | 27 |
| Using SSC | 27 |
| Chapter 2: Introduction to Licensing | 28 |
| Hitachi NAS Open Source Software Copyrights and Licenses | 28 |
| AES | 28 |
| Ant | 29 |
| Ant-Contrib | 29 |
| Antir | 30 |

| AOP Alliance | 30 |
|---------------------------------|----|
| apt | 31 |
| Arcfour RC4 | |
| Aspectjrt Aspectjweaver | 31 |
| attr | 31 |
| Avalon Framework | 31 |
| Avalon Logkit | 31 |
| AWS SDK for Java | 32 |
| Axis2/java | 32 |
| Azure Libraries for Java | 32 |
| backport-util-concurrent-java60 | 32 |
| Base64 | 32 |
| base-password | 33 |
| bash | 33 |
| Bastille | 33 |
| Big Number | 33 |
| Bison Parser Framework | 33 |
| bitstring.h | 33 |
| boost-jam | 34 |
| Boost library | 35 |
| Bouncy Castle Crypto APIs | 35 |
| C3p0 | 35 |
| C Library strptime | 36 |
| C++ standard template library | 36 |
| CentOS | 36 |
| Cloudfiles | 37 |
| Commons BeanUtils | 37 |
| Commons CLI | 37 |
| Commons Codec | 37 |
| Commons Collections | 38 |
| Commons Compress | 38 |
| Commons Configuration | 38 |
| Commons DBCP | 38 |
| Commons Digester | 39 |
| Commons email | 39 |
| Commons FileUpload | 39 |
| Commons IO | 39 |
| Commons Lang | |
| Commons Logging | |
| Commons Net | |
| Commons Pool | |

| Concurrent | .41 |
|---|------|
| Crypto layer from MIT Kerberos | . 41 |
| CURL | .41 |
| Dce_guid | 42 |
| Debian | . 42 |
| debsigs | . 42 |
| dejavu-fonts | .42 |
| DNSJAVA | 44 |
| dojo | .44 |
| Dom4j | . 48 |
| Dpkg | . 48 |
| Ehcache | .50 |
| Element Construction Set (ECS) | . 50 |
| Excalibur | .50 |
| FastInfoSet | . 50 |
| FreeMarker | .51 |
| Fulcrum YAAFI | 51 |
| FUSE | .51 |
| gettimeofday.c | . 51 |
| GlassFish Server | .51 |
| glob | .51 |
| GNU Crypto | .52 |
| GNU Libc Components | .52 |
| grub | . 52 |
| Gsoap runtime | .52 |
| Guava | .53 |
| Guice | . 53 |
| Henry Spencer's regex library (BSD version) | .53 |
| Hibernate | |
| Hibernate Tools | .53 |
| HttpComponents | |
| http.jar | |
| http-tiny | .54 |
| ICÜ | |
| Inno Setup | |
| ion-java | .58 |
| Jackson JSON Parser | |
| Javassist | |
| JavaMail API Jar | |
| JAX-RS | |
| Jaxen | |

| JCache (JSR107)59 | 9 |
|----------------------------|---|
| jclouds59 | 9 |
| JCommon59 | 9 |
| JCS59 | 9 |
| Jetty60 | 0 |
| Jfreechart64 | 4 |
| JMES Path Query Library64 | 4 |
| Joda Time64 | 4 |
| JPam64 | 4 |
| json Path64 | 4 |
| jQuery68 | 5 |
| jQuery UI68 | 5 |
| JRadius65 | 5 |
| JSON-RPC66 | 6 |
| JSP Standard Tag Library66 | 6 |
| JSR 311 API66 | 6 |
| Junit66 | 6 |
| Jython7 | 1 |
| libbzip272 | 2 |
| libc673 | 3 |
| libgcc173 | 3 |
| libssh273 | 3 |
| libpcap74 | 4 |
| libstdc++75 | 5 |
| libunwind76 | 6 |
| locale.gen76 | 6 |
| linux-kernel77 | 7 |
| Log4cplus77 | 7 |
| logkit78 | 8 |
| Log4j78 | 8 |
| Loki78 | 8 |
| Lua78 | 8 |
| marsaglia-c79 | 9 |
| Mcelog79 | |
| mchange-commons-java79 | |
| MD479 | 9 |
| memtest86+80 | |
| mingwm10.dll80 | |
| Munin8 [,] | |
| NDMJOB8 | |
| NDMP SDK8 | |

| net-ldap | 83 |
|--------------------------|------|
| ndmpcopy | 84 |
| Net-SNMP | 84 |
| net-tools | 84 |
| netbase | 84 |
| netty | 84 |
| NFSv4 constants | 85 |
| nis | 85 |
| NTP | 85 |
| Nutch | 86 |
| OpenJDK | 86 |
| OpenLDAP | 86 |
| OpenSSL | 87 |
| org.jessies.terminator | 87 |
| ORO | 88 |
| PAM | 88 |
| PAM RADIUS-auth module | . 89 |
| Perl module Net::SSH2 | 90 |
| Perl module Regexp::IPv6 | 92 |
| POCO | 92 |
| Postgresql | 93 |
| Postgresql-jdbc | 94 |
| prototype.js | 94 |
| PySocks | 94 |
| qTip | 95 |
| Quartz | 95 |
| Regexp | 95 |
| Requests | 96 |
| Rocoto | 96 |
| Ruby-LDAP | 97 |
| ruby-net-ldap | 97 |
| rrdtool | |
| RSYSLOG | 97 |
| Schematics | 97 |
| screen | 97 |
| Servlet API | 98 |
| SHA-256 | 98 |
| Simpleyaml | |
| SLF4J | 98 |
| solnlib | . 99 |
| SortedContainers | |

| Splunk | 99 |
|--|------|
| SQLite | 99 |
| spring-beans, spring-context, spring-core, sprint-test | 100 |
| strlcat, strlcpy | |
| sysvinit | |
| stdint.h (mingw32only variant) | 100 |
| syslog-ng | |
| Texen | 101 |
| Threadpool | 101 |
| Tigra Calendar | 102 |
| Tomcat | 102 |
| Torque | 102 |
| Turbine | 102 |
| tzdata and tzdata-java | 102 |
| ua.js | 103 |
| udev /dev/ and hotplug management daemon | 103 |
| udis86 | 104 |
| UnboundID LDAP SDK for Java | 104 |
| util-linux | 105 |
| Velocity Engine | 107 |
| Velocity Tools | 108 |
| xbDOM.js | 108 |
| XDR library | 108 |
| Xerces | 109 |
| XML RPC | 109 |
| Zlib library | 109 |
| Appendix A. Apache License, Version 2.0 | |
| Appendix B. OpenSSL License | |
| Appendix C. GNU General Public License (GPL) Version 2.0 | |
| Appendix D. GNU General Public License (GPL) Version 3.0 | |
| Appendix E. GNU LESSER GENERAL PUBLIC LICENSE | |
| Appendix F. OSI - The MIT License | |
| Appendix G. BSD license (3-clause) | 139 |
| Appendix H. Common Development and Distribution License (CDDL) | 400 |
| Version 1.1 | 139 |
| Appendix I. Common Development and Distribution License (CDDL) | 1/15 |

Preface

This guide explains how to log in to the system, provides information about accessing the NAS server/cluster CLI and the SMU CLI, and provides information about the documentation, help, and search capabilities available in the system. Note that some features apply only to individual platforms and may not be applicable to your configuration.

Virtual Storage Platform G400, G600, G800 and Virtual Storage Platform F400, F600, F800 storage systems can be configured with NAS modules to deliver native NAS functionality in a unified storage platform. The term 'NAS module' in this document also applies to VSP F series, VSP G series, and VSP N series. The unified VSP Gx00 models, VSP Fx00 models, and VSP N series models automatically form a two-node cluster in a single chassis upon installation, with no external cabling required.

Related Documentation

Release Notes provide the most up-to-date information about the system, including new feature summaries, upgrade instructions, and fixed and known defects.

Command Line References

The Command Line Reference provides information on the commands used to manage your system, and includes relevant information on the operation of your hardware and software. Depending on the model of your server or cluster node, refer to the Command Line Reference that is appropriate for your system.

- NAS Module Server Command Line Reference
- Command Line Reference for models 4060, 4080, and 4100
- Command Line Reference for models 3080, 3090 and 4040
- Command Line Reference for models 5200 and 5300

Administration Guides

- System Access Guide (MK-92HNAS014)—Explains how to log in to the system, provides information about accessing the NAS server/cluster CLI and the SMU CLI, and provides information about the documentation, help, and search capabilities available in the system.
- Server and Cluster Administration Guide (MK-92HNAS010)—Provides information about administering servers, clusters, and server farms. Includes information about licensing, name spaces, upgrading software, monitoring servers and clusters, and backing up and restoring configurations.
- Storage System User Administration Guide (MK-92HNAS013)—Explains user management, including the different types of system administrator, their roles, and how to create and manage these users.
- Network Administration Guide (MK-92HNAS008)—Provides information about the server's network usage, and explains how to configure network interfaces, IP addressing, name and directory services.
- File Services Administration Guide (MK-92HNAS006)—Explains about file system
 formats, and provides information about creating and managing file systems, and enabling
 and configuring file services (file service protocols).
- Data Migrator Administration Guide (MK-92HNAS005) —Provides information about the Data Migrator feature, including how to set up migration policies and schedules.
- Storage Subsystem Administration Guide (MK-92HNAS012)—Provides information about managing the supported storage subsystems (RAID arrays) attached to the server/cluster.
 Includes information about tiered storage, storage pools, system drives (SDs), SD groups, and other storage device related configuration and management features and functions.
- Snapshot Administration Guide (MK-92HNAS011)—Provides information about configuring the server to take and manage snapshots.
- Replication and Disaster Recovery Administration Guide (MK-92HNAS009)—Provides
 information about replicating data using file-based replication and object-based replication,
 provides information on setting up replication policies and schedules, and using replication
 features for disaster recovery purposes.
- Antivirus Administration Guide (MK-92HNAS004)—Describes the supported antivirus engines, provides information about how to enable them, and how to configure the system to use them.
- Backup Administration Guide (MK-92HNAS007)—Provides information about configuring the server to work with NDMP, and making and managing NDMP backups.



Note: For a complete list of Hitachi NAS open source software copyrights and licenses, see the *System Access Guide*.

Hardware References

- Hitachi NAS Platform and Hitachi Unified Storage Series 4000 Hardware Reference (MK-92HNAS030)—Provides an overview of the Hitachi NAS Platform Series 4000 server hardware, describes how to resolve any problems, and how to replace potentially faulty components
- Hitachi NAS 5000 Series Hardware Reference MK-92HNAS089—Provides an overview of the Hitachi NAS Platform Series 5000 server hardware, describes how to resolve any problems, and how to replace potentially faulty components.
- Hitachi NAS Platform System Manager Unit (SMU) Hardware Reference (MK-92HNAS065)—This document describes the usage and replacement instructions for the SMU 300/400.

Best Practices

- Hitachi NAS Platform Best Practices Guide for NFS with VMware vSphere (MK-92HNAS028)—This document covers best practices specific to using VMware vSphere with the Hitachi NAS platform.
- Hitachi NAS Platform Deduplication Best Practice (MK-92HNAS031)—This document provides best practices and guidelines for using deduplication.
- Hitachi NAS Platform Best Practices for Tiered File Systems (MK-92HNAS038)—This
 document describes the Hitachi NAS Platform feature that automatically and intelligently
 separates data and metadata onto different Tiers of storage called Tiered File Systems
 (TFS).
- Hitachi NAS Platform Data Migrator to Cloud Best Practices Guide (MK-92HNAS045)—
 Data Migrator to Cloud allows files hosted on the HNAS server to be transparently
 migrated to cloud storage, providing the benefits associated with both local and cloud
 storage.
- Best Practices for Hitachi NAS Universal Migrator (MK-92HNAS047)—The Hitachi NAS Universal Migrator (UM) feature provides customers with a convenient and minimally disruptive method to migrate from their existing NAS system to the Hitachi NAS Platform. The practices and recommendations outlined in this document describe how to best use this feature.
- Hitachi Data Systems SU 12.x Network File System (NFS) Version 4 Feature Description (MK-92HNAS056)—This document describes the features of Network File System (NFS) Version 4.
- Hitachi NAS HDP Best Practices (MK-92HNAS057)—This document lists frequently asked questions regarding the use of Hitachi Dynamic Provisioning.
- Hitachi Multi-tenancy Implementation and Best Practice Guide (MK-92HNAS059)—This
 document details the best practices for configuring and using Multi-Tenancy and related
 features, and EVS security.
- Hitachi NAS Platform HDP Best Practices (MK-92HNAS063)—This document details the best practices for configuring and using storage pools, related features, and Hitachi Dynamic Provisioning (HDP).

- Hitachi NAS Platform System Manager Unit (SMU) Hardware Reference (MK-92HNAS065)—This document describes the usage and replacement instructions for the SMU 300/400.
- NAS Platform ICC with Cisco Nexus Reference Guide (MK-92HNAS085)—This document describes how to configure Cisco Nexus series switches for use as an ICC (intra-cluster communication) switch.
- File System Snapshots Operational Best Practice (MK-92HNAS068)—This document provides operational guidance on file system snapshots.
- Virtual Infrastructure Integrator for Hitachi Storage Platforms Operational Best Practice (MK-92HNAS069)—This document provides operational guidance on Hitachi Virtual Infrastructure Integrator for the HNAS platform.
- Hitachi NAS Platform Replication Best Practices Guide (MK-92HNAS070)—This
 document details the best practices for configuring and using HNAS Replication and
 related features.
- Hitachi NAS Platform to Hitachi Virtual Storage Platform Unified Gx00 Models Migration Guide (MK-92HNAS075)—This best practice guide describes how to perform a data-inplace migration of the Hitachi NAS Platform and Virtual Storage Platform (VSP) Gx00 File solution to the VSP Gx00 platform.

Accessing product documentation

Product user documentation is available on the Hitachi Vantara Support Website: https://knowledge.hitachivantara.com/Documents. Check this site for the most current documentation, including important updates that may have been made after the release of the product.

Getting help

The <u>Hitachi Vantara Support Website</u> is the destination for technical support of products and solutions sold by Hitachi Vantara. To contact technical support, log on to the Hitachi Vantara Support Website for contact information: https://support.hitachivantara.com/en_us/contact-us.html.

<u>Hitachi Vantara Community</u> is a global online community for Hitachi Vantara customers, partners, independent software vendors, employees, and prospects. It is the destination to get answers, discover insights, and make connections. **Join the conversation today!** Go to <u>community.hitachivantara.com</u>, register, and complete your profile.

Comments

Please send us your comments on this document to doc.comments@hitachivantara.com. Include the document title and number, including the revision level (for example, -07), and refer to specific sections and paragraphs whenever possible. All comments become the property of Hitachi Vantara LLC.

Thank you!

Chapter 1: NAS Platform overview

NAS Platforms are enterprise-class network storage servers that provide high-performance read/write access to data through multiple protocols, such as SMB, NFS, iSCSI, and FTP.

Supported NAS Platform functionality

These systems support:

- Stand-alone servers, or clusters of up to eight nodes
- Tiered storage
- A single name space with global access
- Virtualized storage pools, servers, file systems, and volumes
- Read caching
- Global symlinks
- Data protection through NVRAM mirroring, snapshots, NDMP-based backup, virus scanner integration, automatic data migration, policy-based data replication, data relocation (with transfer of primary access), and quorum devices
- User, group, and virtual volume (directory) quotas
- Complete tools for managing the system and monitoring system status, including NAS Manager (a browser-based Graphical User Interface), a client for gathering real-time statistics, and a Command Line Interface.

The VSP-F/G/N file server can also acquire Fibre Channel information and publish the detail to the Hitachi Device Manager (HDvM) server. This integration allows the Hitachi Tiered Storage Manager (HTSM) to view information about Fibre Channel devices attached to an HNAS server or cluster by searching for that information on the Hitachi Device Manager.

Considerations when using a NAS module

Managing a NAS module is different from managing an HNAS server. The following information describes these differences.

User management

The following user types are supported:

- Manager
- Supervisor

- Users created in the Maintenance Utility
- Active Directory users

Manager and Supervisor passwords can be changed on the Home -> Server settings -> Server users page. However, passwords for remotely-defined users cannot be changed in the NAS Manager.



Note: SMU local users are not supported on an SMU (NAS Manager) running in a NAS module. RADIUS authentication is also not supported.

IP addresses

IP addresses on aggregate or eth-ag interfaces can be actively managed using the NAS Manager. All controller IP addresses are read-only on the NAS Manager but configurable only through the maintenance utility. EVS IP addresses can be managed using the CLI or the NAS Manager.

SNMP

SNMP access must be configured through the maintenance utility. It cannot be managed through the NAS Manager. However, SNMP traps are configurable using the CLI or the NAS Manager.

SSC / VSS

It is not possible to change the port number for these services on a NAS module.

The port numbers are:

- SSC 206
- VSS 202

The NAS module uses SHA-2 for authentication.

Licensing

Block licenses can be uploaded on the NAS Manager "License keys" page. However, block licenses cannot be removed.

Upgrading

The NAS module can only be upgraded using the maintenance utility.

Restart, reboot and Shutdown

Shutdown of a NAS module is not available through the NAS Manager. It is only possible to reboot the cluster or one node at a time. File service restart is not supported.

Clusters

A NAS module can only run as a cluster, and the cluster is set up automatically. Therefore, it is not possible to create a new cluster through the NAS Manager.

Statistics and status

The following statistics and status pages are not available for a NAS module in the NAS Manager:

- System Monitor
- System Graphs
- Storage statistics

User accounts

This section lists the default system user accounts for Hitachi NAS Platform, NAS module, and embedded or external SMU.

Contact Customer Support to obtain the default passwords for the accounts.



Caution: It is important to change the passwords from the defaults to new, secure passwords.

| System component | User account name |
|----------------------------|-------------------|
| Hitachi NAS Platform | |
| NAS Manager (Embedded SMU) | admin |
| Storage server CLI | supervisor |
| | manager |
| Linux CLI* | root |
| | supervisor |
| | manager |
| NAS module ** | |
| File-serving CLI | maintenance |
| | supervisor |
| | manager |
| Linux CLI | maintenance |
| | supervisor |
| | manager |
| Linux CLI* | root |
| NAS Manager (Embedded SMU) | maintenance |
| | supervisor |

| System component | User account name |
|------------------|-------------------|
| | manager |
| External SMU | |
| NAS Manager | admin |
| SMU CLI | manager |
| SMU CLI * | root |

Notes:

Changing supervisor and root passwords

You can change supervisor and root passwords for the NAS server using the password CLI command. See the password man page for further details.

You can also change supervisor and root passwords using the NAS Manager.

Procedure

- 1. Navigate to the **Home -> Server settings -> Server users** page.
- 2. For the required user, click details.
- 3. On the Server User Details page, enter and confirm the new password.
- 4. Click OK.

Managing a server or cluster

Server/cluster management is performed through NAS Manager (a browser-based graphical user interface) or through commands issued using a command line interface (CLI).

Most management functions can be accomplished through NAS Manager, but some operations require using the CLI.

^{*} The root account provides unlimited access and should only be used with guidance from Customer Support. It is not possible to ssh as this user. The root account must not be deleted but its password can and should be changed.

^{**} To configure NAS module users, use the Maintenance Utility. Only the supervisor user can be created or deleted using the CLI. However, it is possible to log into the CLI and embedded SMU on the NAS module using the credentials of a user defined in the Maintenance Utility with the "Administrator user Group" role. Maintenance Utility users with different permissions cannot log into the NAS module or embedded SMU.

Using NAS Manager

The NAS Manager administration tool provides a browser-based interface for managing standalone or clustered servers and their attached storage subsystems. This tool allows you to perform most administrative tasks from any client on the network using a network browser.



Note: When accessing the SMU through NAS Manager, some browsers might fail with an error message of "Secure Connection Failed" due to an invalid security certificate. This situation might occur the first time you access a new SMU, or when the SMU's IP address or host name have been changed. If you receive this error message, you must add the SMU's security certificate. Refer to the browser's help to find information on how to add a certificate, and make sure to permanently store the exception.

As an alternative to NAS Manager, you can use the command line interface (CLI). For more information, see <u>Using the command line interface (on page 23)</u>. The CLI is documented in the man pages and the *Command Line Reference*, which is available through a link on the NAS Manager Documentation page.

Browser support

Use one of the following browsers to run NAS Manager, the web-based graphical user interface (GUI) of the system management unit (SMU):

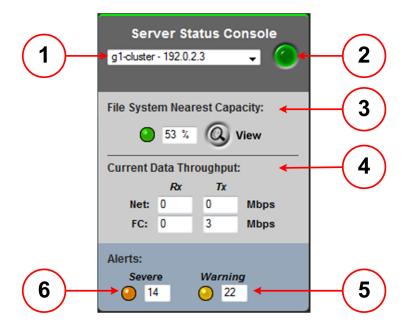
- Microsoft Edge: any version released in 2020 or later.
- Mozilla Firefox: any version released in 2015 or later
- Google Chrome: any version released in 2015 or later.



Note: The SMU uses cookies and sessions to remember user selections on various pages. Therefore, open only one web browser window or tab to the SMU per workstation or computer. If multiple tabs or windows are opened from the same workstation or computer, changes made in one tab or window might affect the other tabs or windows.

Server Status Console

The NAS Manager **Home** page displays summary status information pertaining to the currently managed server:



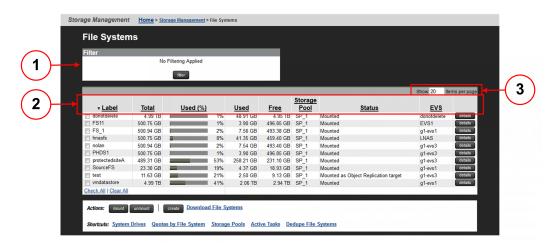
The following table describes the sections of the Server Status Console:

| Item | Description |
|------|--|
| 1 | Currently managed server or cluster name and IP address. |
| | Use the drop-down list (of managed servers/clusters) to select another server or cluster to manage. |
| 2 | Summary status indicator for the currently managed server or cluster: |
| | ■ <i>Green</i> —Operating normally (not showing an alert condition). |
| | Amber—Warning condition (operating normally, but action should be taken to maintain normal operation). |
| | Red—Critical condition (not functioning or failing in a way that presents a danger to the system). |
| 3 | File System Nearest Capacity |
| | The status indicator provides information about how close the file system is to its maximum configured size limit. |
| | ■ <i>Green</i> —Usage is below the Warning threshold. |
| | Yellow—Usage has reached or exceeded the Warning threshold, but is below the Critical threshold. |
| | Orange—Usage has reached or exceeded the Critical threshold. |
| | The percentage of allocated space used by the file system nearest to full capacity is displayed next to the status indicator. |

| Item | Description |
|------|---|
| | Click View to display the File Systems page, where you can learn more about the file systems on the server or cluster. |
| 4 | Current Data Throughput Displays the current data throughput from the data network and Fibre Channel ports, both received (Rx) and transmitted (Tx). Throughput values are updated every 10 seconds. |
| | Note: On a NAS module, this section displays the data for the Storage ports instead of the Fibre Channel ports. |
| 5 | Warning events recorded in the event log during the past 24 hours. Click the yellow indicator to display the event log, which shows all warning events recorded in the event log. |
| 6 | Severe events recorded in the event log during the past 24 hours. Click the orange indicator to display the event log, which shows all severe events recorded in the event log. |

Using NAS Manager tables

Some pages in the NAS Manager interface use tables to present system information:



| Item | Description |
|------|--|
| 1 | Filter displays any filtering in use for the table being displayed. To enable or change filtering, click filter. |
| 2 | Column labels |

| Item | Description |
|------|-----------------------|
| 3 | Show X Items per page |

About Filtering

When you have a large number of items in a table, filtering allows you to specify criteria to limit the display of the items in the table to only those items matching the specified criteria. By default, filtering is disabled, but you can enable it by clicking filter.

The criteria used to filter items in the table depend on the items listed in the table. For example, when you click filter on the **File Systems** page, the file system filter dialog appears:



You can filter by file system name, storage pool containing the file system, file system status, or file systems on a particular EVS.

When you click filter on the **System Drives** page, the system drive (SD) filter dialog appears:



You can filter by SD access enabled or disabled, SD status, if the SD has mirrors, and several other criteria.

To change the filtering criteria, click reset, specify the new criteria to be used to filter the table items, then click OK.

To remove filtering, click reset, then click OK.

Accessing and navigating NAS Manager pages

The NAS Manager uses a two-level page structure, including links to specific functions and categories that wrap those functions. Clicking a link starts its target function, while clicking a category loads a page. Note that the functions that appear depend on your platform.

The top-level page is the NAS Manager **Home** page:



This page groups functions associated with the currently managed server under page categories, including:

- Status & Monitoring: System Monitor, Event Log, Email Alerts Setup, SNMP,
 Management Access Statistics, System Graphs and Statistics, Storage and File Service Statistics, Diagnostic Log, and so on.
- Server Settings: EVS Management, Server/Cluster Configuration and Settings, Maintenance Tasks, Management Access and Statistics, and so on.
- Storage Management: File Systems, System Drives, Storage Pools, RAID Racks, Virtual Volumes, Quotas, Data Migration, and so on.
- Data Protection: Virus Scanning, Object and File Replication, Snapshots, File System Versions and Recovery, NDMP backup, and so on.
- **File Services:** CNS, NFS Exports, SMB Shares, iSCSI, FTP, User Mapping, Group Mapping, and so on.
- Network Configuration: IP Addresses, Name Services, NIS/LDAP Configuration, IP Routes, Link Aggregation, Network Statistics, and so on.

Additional categories (not associated with the currently managed server):

 SMU Administration: Manages the SMU itself (for example, currently managed server selection, date and time, security, private management network).

Disabling an embedded SMU

It is possible to disable the embedded SMU on a NAS platform (unless the GAD Enhanced for NAS feature is enabled, in which case the embedded SMU will already be disabled).

Before disabling an embedded SMU, ensure that there is an external SMU available to manage the cluster and to send updates to any Hitachi Device Manager (HDvM) that may be managing the cluster.

To link an external SMU to your HDvM, in the NAS Manager, navigate to the Home > Storage Management > Hitachi Device Managers page and add a server. This is valid on all file servers prior to NAS Platform Series 5000.

To disable an SMU, use the following command:

smu-service-disable

The command requires confirmation (y/n).

After confirming the disabling of the SMU service:

- the smu-service-status command shows the SMU status as "disabled" on both nodes.
- the embedded SMU is not accessible.
- viewing the Cluster Status page on an external SMU shows a grey status button with text
 "Disabled" for the embedded SMU.
- the embedded SMU is no longer listening on ports 80 or 443. See the Network Administration Guide for further details.

Using the command line interface

The storage server and the system management unit (SMU) each come with a command line interface (CLI) for configuration and management. Both support secure connections, configurable passwords, and other security mechanisms.



Note: For more information on the CLI, see the man pages.

Restricting CLI commands

Dynamically managing the access level of some CLI commands can help prevent system users from viewing and/or changing sensitive company data.



Note: This ability is only available on the CLI. It is not possible to restrict command access through the NAS Manager which already has a read-only user.

Restricting CLI commands on the NAS server can prevent exposure of sensitive data, such as:

- File names and contents
- Directory names and contents
- User names
- Client IP addresses

A restriction is cluster wide and affects all EVSs and tenants.

To use the commands which set and unset restricted access, contact your Hitachi Vantara customer support representative.

Administrators can list the commands that have been restricted using the Supervisor level user-level-override-list CLI command. It also lists the restricted command's current access level.

For example:

\$ user-level-override-list Command Name status

Access Level SUPERVISOR

See the command man page for further information.

Accessing the SMU command line interface

Use one of the following methods to access the SMU command line interface:

- Serial (console) port
- SSH connection
- Hypervisor console (either ESXi or Hyper-V). See the Virtual SMU Administration Guide for further details.



Warning: The SMU and NAS Platform are appliances, not plain Linux servers, and their configurations are programmatically controlled. If their configuration files are manually changed outside of the provided/supported commands, the impact of such changes cannot be predicted and might destabilize the system. Do not, for any reason, manually edit configuration files or install applications/scripts on the SMU or NAS Platform without consent from your support provider.

Using the serial (console) port

The SMU ships without a preconfigured network setup. To perform the initial setup, access the SMU through a direct serial connection or KVM. After its network configuration has been

completed, access the SMU's CLI directly through SSH or through a Java-enabled SSH session running under NAS Manager.

To connect using a serial console:

Procedure

- 1. Attach an RS232 null-modem cable (DB-9 female to DB-9 female) to the serial port on the SMU back panel. Attach the other end of the serial cable to a terminal (for instance, a laptop).
- 2. Start a console session using your terminal emulation with the following settings:
 - 115,200 b/s
 - 8 data bits
 - 1 stop bit
 - No parity
 - VT100 emulation
 - No flow control

You may want to enable the logging feature in your terminal program to capture the session.

- **3.** Log in as the user manager. When prompted, enter the password for the user manager.
- **4.** After connecting, launch the storage server CLI or select the SMU shell. From the SMU command line, access the server CLI using a method in the displayed menu, or enter q to access the SMU shell.

Using an SSH connection

The SMU can be accessed using any SSH client. Note that the client should be configured to support the UTF-8 (Unicode) character encoding.

Accessing the server/cluster command line reference

The storage server ships with a comprehensive CLI, documented in the online man pages and the CLI Command Line Reference. You can access the server/cluster CLI through the Server Control (SSC) utility, available for Windows and Linux.

Access the CLI in the following ways:

- Secure Shell (SSH) connection into the server through the SMU
- SSH or Telnet connection directly into the server
- Server Control (SSC) utility, available for Windows and Linux



Note: To access the file server CLI directly, using SSH or SSC, through the public network, a server administration IP address may be assigned to at least one of the gigabit Ethernet interfaces. The server supports access to its CLI through any administrative IP address. By default, an administrative IP address is available on the private management network.



Note: When using the server CLI, the console device should be configured to use UTF-8 (Unicode) encoding. When using the CLI through SSH or SSC, the server sends and expects to receive data using UTF-8 encoding, so the device sending data to or receiving data from the server should be configured to use UTF-8 encoding.



Note: System administrators can query the LDAP server for information about hosts configured into netgroups. You may discover whether a host is in a specific netgroup hierarchy or all of the netgroups to which a host belongs. The nis-is-host-in-netgroup and nis-netgroups-for-host commands are used to check whether a host is a member of a specified netgroup or to determine the set of netgroups to which a host belongs.

Using SSH on the SMU

The SMU supports SSH. After logging into the SMU, the SMU can redirect connections directly to the server CLI. This can be useful for two reasons:

- It eliminates the need to assign a server administration IP address to the gigabit interface of the server.
- It enhances the security of the server by isolating administrative access to the private management network.

To SSH into the server using the SMU as a proxy:

Procedure

- 1. Connect to the SMU through SSH.
- 2. Log in to the SMU as manager.
- **3.** Select the targeted server from the list that is displayed. The SMU automatically initiates a connection to the server CLI.
- **4.** When prompted, enter the user name supervisor and the password for the "supervisor" user account.

Using SSH on the server

When connecting to a NAS server/cluster through SSH through the administrative services EVS IP address, log in using the user name <code>supervisor</code>.

The Administrator must configure the server to accept SSH connections, and the SSH client should be configured to support UTF-8 (Unicode) character encoding.

Use these steps to connect by SSH to the server.

Chapter 1: NAS Platform overview

Procedure

- **1.** Connect to the server's administrative services DNS name or IP address. ssh supervisor@server name or IP
- 2. When prompted, enter the "supervisor" user's password.

Using Telnet

Telnet is not supported on the NAS server.

Using SSC

The administrator can connect to the server from Windows PCs and from Linux/Unix workstations using SSC, which provides a secure connection using a modified version of the Arcfour cipher for encryption and SHA-1 for authentication.



Note: The NAS module and NAS Platform Series 5000 uses SHA-2 for authentication.

Use the SSC scripting utility to access the server CLI. The server supports SSC access to its CLI through any administrative IP address. By default, the private management network has an administrative IP address available.

The syntax for SSC: ssc -u user_name -p password host[:port][command]

The following table defines the variables:

| Syntax | Description |
|-----------|--|
| user_name | User account (typically "supervisor"). |
| password | Password. If none specified, SSC prompts for one. |
| timeout | A timeout (in seconds) for a single-use command. |
| EVS | Specifies a particular EVS (by its numerical EVS ID) as the target for a single-use command. |
| host | The server's administration IP address or host name. |
| port | If the SSC port number has been changed from its default of 206, the port number configured for SSC must be specified in the command syntax. |
| command | Command to execute. If no command is specified, SSC allows interactive command entry. |

Chapter 2: Introduction to Licensing

Hitachi NAS Open Source Software Copyrights and Licenses

AES

Copyright (C) 1985-2014 by the Massachusetts Institute of Technology and its contributors. All rights reserved.

This product includes software developed by the University of California, Berkeley and its contributors.

http://web.mit.edu/kerberos/krb5-1.12/krb5-1.12.1.html

http://web.mit.edu/Kerberos/dist/historic.html#krb5-1.3-src

http://web.mit.edu/kerberos/dist/historic.html#krb5-1.2-src

MIT Kerberos License information

Copyright © 1985-2014 by the Massachusetts Institute of Technology.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Downloading of this software may constitute an export of cryptographic software from the United States of America that is subject to the United States Export Administration Regulations (EAR), 15 CFR 730-774. Additional laws or regulations may apply. It is the responsibility of the person or entity contemplating export to comply with all applicable export laws and regulations, including obtaining any required license from the U.S. government.

The U.S. government prohibits export of encryption source code to certain countries and individuals, including, but not limited to, the countries of Cuba, Iran, North Korea, Sudan, Syria, and residents and nationals of those countries.

Documentation components of this software distribution are licensed under a Creative Commons Attribution-ShareAlike 3.0 Unported License. (http://creativecommons.org/licenses/by-sa/3.0/)

Individual source code files are copyright MIT, Cygnus Support, Novell, OpenVision Technologies, Oracle, Red Hat, Sun Microsystems, FundsXpress, and others.

Project Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

Ant

Copyright (C) 1999-2011, The Apache Software Foundation.

http://ant.apache.org/

Apache License, Version 2.0: Appendix A

Ant-Contrib

Copyright © 2001-2003 Ant-Contrib project. All rights reserved.

http://ant-contrib.sourceforge.net/

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** The end-user documentation included with the redistribution, if any, must include the following acknowledgement:
 - "This product includes software developed by the Ant-Contrib project (http://sourceforge.net/projects/ant-contrib)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear.
- **4.** The name Ant-Contrib must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ant-contrib-developers@lists.sourceforge.net.
- **5.** Products derived from this software may not be called "Ant-Contrib" nor may "Ant-Contrib" appear in their names without prior written permission of the Ant-Contrib project.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE ANT-CONTRIB PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Antlr

[The BSD License]

Copyright (c) 2012 Terence Parr and Sam Harwell

All rights reserved.

http://www.antlr2.org/

http://www.antlr2.org/license

AOP Alliance

Public domain

http://aopalliance.sourceforge.net/

apt

Copyright © 1997-2013 Software in the Public Interest, Inc. and others

http://www.debian.org

GNU General Public License (GPL) Version 2.0 : Appendix C

Arcfour RC4

Copyright (C) 1985-2004 by the Massachusetts Institute of Technology.

http://web.mit.edu/kerberos/dist/krb5/1.3/krb5-1.3.5.tar

OSI - The MIT License: Appendix F

Aspectjrt Aspectjweaver

Aspectjrt 1.8.2

https://eclipse.org/aspectj/

Aspectjweaver 1.6.12

https://mvnrepository.com/artifact/org.aspectj/aspectjweaver

License:

http://www.eclipse.org/legal/epl-v10.html

attr

Copyright (c) 2000, 2002 Silicon Graphics, Inc. All Rights Reserved.

Copyright (C) 2009 Andreas Gruenbacher <agruen@suse.de>

http://savannah.nongnu.org/projects/attr

GNU Lesser General Public License (GPL) Version 2.0 : Appendix E

Avalon Framework

Copyright 1997-2004 The Apache Software Foundation

https://avalon.apache.org/closed.html

https://archive.apache.org/dist/avalon/avalon-framework/LICENSE.txt

Apache License, Version 1.1

Avalon Logkit

© 1997-2005, The Apache Software Foundation

https://avalon.apache.org/closed.html

Apache License, Version 2.0: Appendix A

Chapter 2: Introduction to Licensing

AWS SDK for Java

Copyright © 2010-2012 Amazon.com, Inc. or its affiliates. All Rights Reserved.

This product includes software developed by Amazon Technologies, Inc (http://www.amazon.com/).

From http://aws.amazon.com/sdkforjava/

aws-java-sdk-1.5.2.jar

aws-java-sdk-1.11.114.jar

aws-swf-build-tool (https://mvnrepository.com/artifact/com.amazonaws/aws-swf-build-tools/1.1)

Apache License, Version 2.0: Appendix A

Axis2/java

Copyright © 2004-2017 The Apache Software Foundation

http://axis.apache.org/axis2/java/core/

Apache License Version 2.0, January 2004

Azure Libraries for Java

Copyright (c) Microsoft Corporation

https://docs.microsoft.com/en-us/java/azure/java-sdk-azure-install

Apache License, Version 2.0: Appendix A

Azure Libraries for Java includes Jersey-core which is dual licensed under CDDL and GPL2.

backport-util-concurrent-java60

http://backport-jsr166.sourceforge.net/

This software is released to the public domain in the spirit of the original code written by Doug Lea. The code can be used for any purpose, modified, and redistributed without acknowledgment. No warranty is provided, either express or implied.

Base64

Copyright © Robert Harder

http://iharder.sourceforge.net/current/java/base64/

Public domain Java class

base-password

The master files were originally written by Ian Murdock

<imurdock@debian.org> and Bruce Perens <bruce@pixar.com>.

update-passwd is copyright 1999-2002 Wichert Akkerman

http://www.debian.org

GNU General Public License (GPL) Version 2.0 : Appendix C

bash

Copyright (C)

1991,1992,1993,1994,1995,1996,1997,1998,1999,2000,2001,2002,2003,2004,2005,2006

Free Software Foundation, Inc.

The file ifs-posix.tests is Copyright (C) 2005 Glen Fowler.

ftp://ftp.gnu.org/pub/gnu/bash/bash-3.2.tar.gz

GNU General Public License (GPL) Version 2.0 : Appendix C

Bastille

http://bastille-linux.sourceforge.net/

GPL v2

Big Number

Copyright Jonas Raoni Soares Silva - JSFromHell.com @ http://jsfromhell.com

http://jsfromhell.com/classes/bignumber

We authorize the copy and modification of all the codes on the site, since the original author credits are kept.

Bison Parser Framework

Copyright (C) 1984, 1989, 2000, 2001, 2002 Free Software Foundation, Inc.

http://www.gnu.org/software/bison/

GNU General Public License (GPL) Version 2.0 : Appendix C

bitstring.h

Copyright © 1989, 1993 The Regents of the University of California. All rights reserved.

http://fxr.watson.org/fxr/source/sys/bitstring.h

This code is derived from software contributed to Berkeley by Paul Vixie.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 2014 Spectra Logic Corporation

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer, without modification.
- 2. Redistributions in binary form must reproduce at minimum a disclaimer substantially similar to the "NO WARRANTY" disclaimer below ("Disclaimer") and any redistribution must be conditioned upon including a substantially similar Disclaimer requirement for further binary redistribution.

NO WARRANTY

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

boost-jam

Copyright Joe Coder 2004 - 2006.

http://www.boost.org/

Boost Software License (http://www.boost.org/users/license.html)

Boost library

Copyright Joe Coder 2004 - 2006. http://www.boost.org/

http://www.boost.org/users/license.html

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Bouncy Castle Crypto APIs

Please note: our license is an adaptation of the MIT X11 License and should be read as such.

LICENSE

Copyright (c) 2000 - 2011 The Legion Of The Bouncy Castle (https://www.bouncycastle.org/licence.html

C3p0

Includes mchange-commons-java

© 2014 Machinery For Change, Inc.

http://www.mchange.com/projects/c3p0/

GNU LESSER GENERAL PUBLIC LICENSE: Appendix E

C Library strptime

Copyright © 1997, 1998, 2005, 2008 The NetBSD Foundation, Inc.

All rights reserved.

This code was contributed to The NetBSD Foundation by Klaus Klein.

Heavily optimised by David Laight

http://cvsweb.netbsd.org/bsdweb.cgi/~checkout~/src/lib/libc/time/strptime.c? rev=1.35&only with tag=MAIN

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

C++ standard template library

Copyright © 1994 Hewlett-Packard Company

http://www.sgi.com/tech/stl/index.html

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the below copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation.

Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1994

Hewlett-Packard Company

CentOS

http://centos.org/

CentOS-6 EULA

CentOS-6 comes with no guarantees or warranties of any sorts, either written or implied.

The Distribution is released as GPL. Individual packages in the distribution come with their own licences.

http://centos.org/

Cloudfiles

http://jclouds.apache.org/

Apache License, Version 2.0

Commons BeanUtils

Apache Commons BeanUtils

Copyright 2000-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/beanutils/

Apache License, Version 2.0: Appendix A

Commons CLI

Apache Commons CLI

Copyright 2001-2009 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/cli/

Apache License, Version 2.0: Appendix A

Commons Codec

Apache Commons Codec

Copyright 2002-2009 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java contains test data from http://aspell.sourceforge.net/test/batch0.tab.
Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org). Verbatim copying and distribution of this entire article is permitted in any medium,

provided this notice is preserved.

http://commons.apache.org/codec/

Apache License, Version 2.0: Appendix A

Commons Collections

Jakarta Commons Collections

Copyright 2003-2005 The Apache Software Foundation

http://commons.apache.org/collections/

Apache License, Version 2.0: Appendix A

Commons Compress

Apache Commons Compress

Copyright 2002-2009 The Apache Software Foundation

This product includes software developed by The Apache Software Foundation (http://www.apache.org/).

Original BZip2 classes contributed by Keiron Liddle <keiron@aftexsw.com>, Aftex Software to the Apache Ant project

Original Tar classes from contributors of the Apache Ant project

Original Zip classes from contributors of the Apache Ant project

Original CPIO classes contributed by Markus Kuss and the jRPM project (jrpm.sourceforge.net)

http://commons.apache.org/compress/

Apache License, Version 2.0: Appendix A

Commons Configuration

Apache Commons Configuration

Copyright 2001-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/configuration/

Apache License, Version 2.0: Appendix A

Commons DBCP

Apache Jakarta Commons DBCP

Copyright 1999-2007 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/dbcp/

Apache License, Version 2.0: Appendix A

Commons Digester

Apache Jakarta Commons Digester

Copyright 2001-2006 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/digester/

Apache License, Version 2.0: Appendix A

Commons email

Apache Commons Email

Copyright 2001-2007 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/email/

Apache License, Version 2.0: Appendix A

Commons FileUpload

Apache Commons FileUpload

Copyright 2002-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/fileupload/

Apache License, Version 2.0: Appendix A

Commons IO

Apache Commons IO

Copyright 2001-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/io/

Apache License, Version 2.0: Appendix A

Commons Lang

Apache Commons Lang

Copyright 2001-2011 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

This product includes software from the Spring Framework,

under the Apache License 2.0 (see: StringUtils.containsWhitespace())

http://commons.apache.org/lang/

Apache License, Version 2.0: Appendix A

Commons Logging

Apache Commons Logging

Copyright 2003-2007 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/logging/

Apache License, Version 2.0: Appendix A

Commons Net

Apache Commons Net

Copyright 2001-2008 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/net/

Apache License, Version 2.0: Appendix A

Commons Pool

Apache Commons Pool

Copyright 2001-2011 The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

http://commons.apache.org/pool/

Apache License, Version 2.0: Appendix A

Concurrent

Copyright © Doug Lea

http://gee.cs.oswego.edu/dl/classes/EDU/oswego/cs/dl/util/concurrent/intro.html

All classes are released to the public domain and may be used for any purpose whatsoever without permission or acknowledgment. Portions of the CopyOnWriteArrayList and ConcurrentReaderHashMap classes are adapted from Sun JDK source code. These are copyright of Sun Microsystems, Inc, and are used with their kind permission as described in http://gee.cs.oswego.edu/dl/classes/EDU/oswego/cs/dl/util/sun-u.c.license.pdf

Crypto layer from MIT Kerberos

Copyright (C) 1985-2012 by the Massachusetts Institute of Technology and its contributors. All rights reserved.

http://web.mit.edu/Kerberos/

http://web.mit.edu/Kerberos/krb5-1.10/README-1.10.2.txt

OSI - The MIT License: Appendix F

CURL

Copyright (c) 1996 - 2016, Daniel Stenberg, daniel@haxx.se.

http://curl.haxx.se/libcurl

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2016, Daniel Stenberg, daniel@haxx.se.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

Dce_guid

Copyright © 1990- 1993, 1996 Open Software Foundation, Inc.

Copyright © 1989 by Hewlett-Packard Company, Palo Alto, Ca. &

Digital Equipment Corporation, Maynard, Mass.

Copyright © 1998 Microsoft.

http://www.ietf.org/rfc/rfc4122.txt

To anyone who acknowledges that this file is provided "AS IS" without any express or implied warranty: permission to use, copy, modify, and distribute this file for any purpose is hereby granted without fee, provided that the above copyright notices and this notice appears in all source code copies, and that none of the names of Open Software Foundation, Inc., Hewlett-Packard Company, or Digital Equipment Corporation be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Neither Open Software Foundation, Inc., Hewlett-Packard Company, Microsoft, nor Digital Equipment Corporation makes any representations about the suitability of this software for any purpose.

Debian

Copyright © 1997-2019 SPI and others

http://www.debian.org

http://www.debian.org/legal/licenses/

debsigs

Copyright: 2000, 2001, John Goerzen <jgoerzen@progenylinux.com>

2001, 2002, Branden Robinson branden@debian.org

2009 - 2011, Peter Pentchev <roam@ringlet.net>

http://www.debian.org

GNU General Public License (GPL) Version 2.0 : Appendix C

dejavu-fonts

Bitstream Vera Fonts Copyright:

Copyright (c) 2003 by Bitstream, Inc. All Rights Reserved. Bitstream Vera is a trademark of Bitstream, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of the fonts accompanying this license ("Fonts") and associated documentation files (the "Font Software"), to reproduce and distribute the Font Software, including without limitation the rights to use, copy, merge, publish, distribute, and/or sell copies of the Font Software, and to permit persons to whom the Font Software is furnished to do so, subject to the following conditions:

The above copyright and trademark notices and this permission notice shall be included in all copies of one or more of the Font Software typefaces.

The Font Software may be modified, altered, or added to, and in particular the designs of glyphs or characters in the Fonts may be modified and additional glyphs or characters may be added to the Fonts, only if the fonts are renamed to names not containing either the words "Bitstream" or the word "Vera".

This License becomes null and void to the extent applicable to Fonts or Font Software that has been modified and is distributed under the "Bitstream Vera" names.

The Font Software may be sold as part of a larger software package but no copy of one or more of the Font Software typefaces may be sold by itself.

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL BITSTREAM OR THE GNOME FOUNDATION BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Except as contained in this notice, the names of Gnome, the Gnome Foundation, and Bitstream Inc., shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Font Software without prior written authorization from the Gnome Foundation or Bitstream Inc., respectively. For further information, contact: fonts at gnome dot org.

Arev Fonts Copyright:

Copyright (c) 2006 by Tavmjong Bah. All Rights Reserved.

Modifications to the Bitstream Vera fonts.

Copyright (c) 2006 by Tavmjong Bah. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of the fonts accompanying this license ("Fonts") and associated documentation files (the "Font Software"), to reproduce and distribute the modifications to the Bitstream Vera Font Software, including without limitation the rights to use, copy, merge, publish, distribute, and/or sell copies of the Font Software, and to permit persons to whom the Font Software is furnished to do so, subject to the following conditions:

The above copyright and trademark notices and this permission notice shall be included in all copies of one or more of the Font Software typefaces.

The Font Software may be modified, altered, or added to, and in particular the designs of glyphs or characters in the Fonts may be modified and additional glyphs or characters may be added to the Fonts, only if the fonts are renamed to names not containing either the words "Tavmjong Bah" or the word "Arev".

This License becomes null and void to the extent applicable to Fonts or Font Software that has been modified and is distributed under the "Taymjong Bah Arev" names.

The Font Software may be sold as part of a larger software package but no copy of one or more of the Font Software typefaces may be sold by itself.

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL TAVMJONG BAH BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Except as contained in this notice, the name of Tavmjong Bah shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Font Software without prior written authorization from Tavmjong Bah. For further information, contact: tavmjong@free.fr.

DNSJAVA

Copyright (c) 1998-2011, Brian Wellington

http://www.dnsjava.org/download/

Copyright (c) 1998-2011, Brian Wellington.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice,

this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

dojo

Copyright © 2005-2006, The Dojo Foundation All rights reserved.

http://dojotoolkit.org/download/

The "New" BSD License

Copyright © 2005-2006, The Dojo Foundation All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the Dojo Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The Academic Free License, v. 2.1

This Academic Free License (the "License") applies to any original work of authorship (the "Original Work") whose owner (the "Licensor") has placed the following notice immediately following the copyright notice for the Original Work:

Licensed under the Academic Free License version 2.1

- **1.** Grant of Copyright License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license to do the following:
 - a. to reproduce the Original Work in copies;
 - **b.** to prepare derivative works ("Derivative Works") based upon the Original Work;
 - c. to distribute copies of the Original Work and Derivative Works to the public;
 - d. to perform the Original Work publicly; and
 - e. to display the Original Work publicly.
- 2. Grant of Patent License. Licensor hereby grants You a world-wide, royalty-free, non-exclusive, perpetual, sublicenseable license, under patent claims owned or controlled by the Licensor that are embodied in the Original Work as furnished by the Licensor, to make, use, sell and offer for sale the Original Work and Derivative Works.

- 3. Grant of Source Code License. The term "Source Code" means the preferred form of the Original Work for making modifications to it and all available documentation describing how to modify the Original Work. Licensor hereby agrees to provide a machine-readable copy of the Source Code of the Original Work along with each copy of the Original Work that Licensor distributes. Licensor reserves the right to satisfy this obligation by placing a machine-readable copy of the Source Code in an information repository reasonably calculated to permit inexpensive and convenient access by You for as long as Licensor continues to distribute the Original Work, and by publishing the address of that information repository in a notice immediately following the copyright notice that applies to the Original Work.
- 4. Exclusions From License Grant. Neither the names of Licensor, nor the names of any contributors to the Original Work, nor any of their trademarks or service marks, may be used to endorse or promote products derived from this Original Work without express prior written permission of the Licensor. Nothing in this License shall be deemed to grant any rights to trademarks, copyrights, patents, trade secrets or any other intellectual property of Licensor except as expressly stated herein. No patent license is granted to make, use, sell or offer to sell embodiments of any patent claims other than the licensed claims defined in Section 2. No right is granted to the trademarks of Licensor even if such marks are included in the Original Work. Nothing in this License shall be interpreted to prohibit Licensor from licensing under different terms from this License any Original Work that Licensor otherwise would have a right to license.
- 5. This section intentionally omitted.
- **6.** Attribution Rights. You must retain, in the Source Code of any Derivative Works that You create, all copyright, patent or trademark notices from the Source Code of the Original Work, as well as any notices of licensing and any descriptive text identified therein as an "Attribution Notice." You must cause the Source Code for any Derivative Works that You create to carry a prominent Attribution Notice reasonably calculated to inform recipients that You have modified the Original Work.
- 7. Warranty of Provenance and Disclaimer of Warranty. Licensor warrants that the copyright in and to the Original Work and the patent rights granted herein by Licensor are owned by the Licensor or are sublicensed to You under the terms of this License with the permission of the contributor(s) of those copyrights and patent rights. Except as expressly stated in the immediately proceeding sentence, the Original Work is provided under this License on an "AS IS" BASIS and WITHOUT WARRANTY, either express or implied, including, without limitation, the warranties of NON-INFRINGEMENT, MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY OF THE ORIGINAL WORK IS WITH YOU. This DISCLAIMER OF WARRANTY constitutes an essential part of this License. No license to Original Work is granted hereunder except under this disclaimer.
- 8. Limitation of Liability. Under no circumstances and under no legal theory, whether in tort (including negligence), contract, or otherwise, shall the Licensor be liable to any person for any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or the use of the Original Work including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses. This limitation of liability shall not apply to liability for death or personal injury resulting from Licensor'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.

- 9. Acceptance and Termination. If You distribute copies of the Original Work or a Derivative Work, You must make a reasonable effort under the circumstances to obtain the express assent of recipients to the terms of this License. Nothing else but this License (or another written agreement between Licensor and You) grants You permission to create Derivative Works based upon the Original Work or to exercise any of the rights granted in Section 1 herein, and any attempt to do so except under the terms of this License (or another written agreement between Licensor and You) is expressly prohibited by U.S. copyright law, the equivalent laws of other countries, and by international treaty. Therefore, by exercising any of the rights granted to You in Section 1 herein, You indicate Your acceptance of this License and all of its terms and conditions.
- 10. Termination for Patent Action. This License shall terminate automatically and You may no longer exercise any of the rights granted to You by this License as of the date You commence an action, including a cross-claim or counterclaim, against Licensor or any licensee alleging that the Original Work infringes a patent. This termination provision shall not apply for an action alleging patent infringement by combinations of the Original Work with other software or hardware.
- 11. Jurisdiction, Venue and Governing Law. Any action or suit relating to this License may be brought only in the courts of a jurisdiction wherein the Licensor resides or in which Licensor conducts its primary business, and under the laws of that jurisdiction excluding its conflict-of-law provisions. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any use of the Original Work outside the scope of this License or after its termination shall be subject to the requirements and penalties of the U.S. Copyright Act, 17 U.S.C. Ã,§ 101 et seq., the equivalent laws of other countries, and international treaty. This section shall survive the termination of this License.
- 12. Attorneys Fees. In any action to enforce the terms of this License or seeking damages relating thereto, the prevailing party shall be entitled to recover its costs and expenses, including, without limitation, reasonable attorneys' fees and costs incurred in connection with such action, including any appeal of such action. This section shall survive the termination of this License.
- **13.** Miscellaneous. This License represents the complete agreement concerning the 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.
- 14. Definition of "You" in This License. "You" throughout this License, whether in upper or lower case, 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 that controls, is controlled by, or is under common control with you. For purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.
- **15.** Right to Use. You may use the Original Work in all ways not otherwise restricted or conditioned by this License or by law, and Licensor promises not to interfere with or be responsible for such uses by You.

This license is Copyright © 2003-2004 Lawrence E. Rosen. All rights reserved. Permission is hereby granted to copy and distribute this license without modification. This license may not be modified without the express written permission of its copyright owner.

Dom4j

Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved.

http://dom4j.sourceforge.net/

Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved.

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact dom4j-info@metastuff.com.
- **4.** Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd.
- 5. Due credit should be given to the DOM4J Project http://www.dom4j.org

THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR

SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Dpkg

This is Debian's package maintenance system.

Copyright © 2009-2010 Modestas Vainius <modax@debian.org>

Copyright © 2009 Romain Francoise <rfrancoise@debian.org>

Copyright © 2008 Zack Weinberg <zackw@panix.com>

Copyright © 2007 Colin Watson <cjwatson@debian.org>

Copyright © 2007 Don Armstrong <don@donarmstrong.com>

Copyright © 2007 Nicolas François <nicolas.francois@centraliens.net>

Copyright © 2007-2010 Raphaël Hertzog hertzog@debian.org

Copyright © 2006-2010 Guillem Jover <guillem@debian.org>

```
Copyright © 2006-2008 Frank Lichtenheld <djpig@debian.org>
```

Copyright © 2004-2005 Scott James Remnant <scott@netsplit.com>

Copyright © 2004-2005, 2007-2008 Canonical Ltd.

Copyright © 2001,2007 Joey Hess <joeyh@debian.org>

Copyright © 1999-2002 Wichert Akkerman <wakkerma@debian.org>

Copyright © 1999-2001 Marcus Brinkmann <brinkmd@debian.org>

Copyright © 1999 Richard Kettlewell <rjk@sfere.greenend.org.uk>

Copyright © 1999 Ben Collins <bcollins@debian.org>

Copyright © 1999 Roderick Shertler <roderick@argon.org>

Copyright © 1998-1999 Martin Schulze <joey@infodrom.north.de>

Copyright © 1998 Heiko Schlittermann <heiko@lotte.sax.de>

Copyright © 1998 Nils Rennebarth <nils@debian.org>

Copyright © 1998 Juan Cespedes cespedes@debian.org

Copyright © 1998 Jim Van Zandt <irv@vanzandt.mv.com>

Copyright © 1998 Koichi Sekido <sekido@mbox.kyoto-inet.or.jp>

Copyright © 1997-1998 Juho Vuori <javuori@cc.helsinki.fi>

Copyright © 1997-1998 Charles Briscoe-Smith <cpbs@debian.org>

Copyright © 1996-1998 Miquel van Smoorenburg <miquels@cistron.nl>

Copyright © 1996 Kim-Minh Kaplan <kkaplan@cdfhp3.in2p3.fr>

Copyright © 1996 Klee Dienes <klee@debian.org>

Copyright © 1996 Michael Shields <shields@crosslink.net>

Copyright © 1995-1996 Erick Branderhorst <branderhorst@heel.fgg.eur.nl>

Copyright © 1995 Bruce Perens <bruce@pixar.com>

Copyright © 1994-1999 Ian Jackson <ian@chiark.greenend.org.uk>

Copyright © 1994 Carl Streeter <streeter@cae.wisc.edu>

Copyright © 1994 Matt Welsh <mdw@sunsite.unc.edu>

Copyright © 1994 Ian Murdock <imurdock@debian.org>

Includes public domain MD5 code:

lib/dpkg/md5.c and lib/dpkg/md5.h originally written by Colin Plumb,

Includes code from 'getopt' and 'gettext':

Copyright © 1984-2002 Free Software Foundation, Inc.

License:

This program is free software; you can redistribute it and/or modify

it under the terms of the GNU General Public License as published by

the Free Software Foundation; either version 2 of the License, or

(at your option) any later version.

This program is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the

GNU General Public License for more details.

GNU General Public License (GPL) v2.0: Appendix C

Ehcache

Copyright © 2003-2010 Terracotta, Inc.

http://ehcache.org/

Apache License, Version 2.0: Appendix A

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Element Construction Set (ECS)

Copyright © 1999-2003 Apache Software Foundation. All Rights Reserved.

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

https://attic.apache.org/projects/jakarta-ecs.html

The Apache Software License, Version 2.0, Appendix A

Excalibur

© 1997-2005, The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

https://attic.apache.org/projects/excalibur.html

Apache License, Version 2.0: Appendix A

FastInfoSet

Copyright (c) 2011 Oracle and/or its affiliates. All rights reserved.

http://jax-ws.java.net/

CDDL 1.1, Appendix H

FreeMarker

Copyright © The Apache Software Foundation

FreeMarker is Free software, licensed under the Apache License, Version 2.0, Appendix A http://freemarker.org/

Fulcrum YAAFI

Turbine Fulcrum YAAFI

Copyright 2002-2007 The Apache Software Foundation.

http://turbine.apache.org/fulcrum/fulcrum-yaafi/

Apache License, Version 2.0: Appendix A

FUSE

https://github.com/libfuse/

GNU General Public License (GPL 3.0) - Appendix D

GNU Library or Lesser General Public License (LGPL) - Appendix E

gettimeofday.c

http://wyw.dcweb.cn/time.htm

All code here is considered in the public domain though I do wish my name could be retained if anyone uses them. :-)

2002-2-26, Written by Wu Yongwei

GlassFish Server

Copyright © 2010, 2012 Oracle Corporation

http://glassfish.java.net/

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1: Appendix H

glob

Copyright © Ozan S. Yigit

http://www.cse.yorku.ca/~oz/

License "public domain"

GNU Crypto

http://www.gnu.org/software/gnu-crypto/

GNU General Public License (GPL) – Appendix D

GNU Library or Lesser General Public License (LGPL) - Appendix E

GNU Crypto is licensed under the terms of the GNU General Public License, with the "library exception" which permits its use as a library in conjunction with non-Free software:

"As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version." The effect of that license is similar to using the LGPL, except that static linking is permitted. GPL with that exception is sometimes called the Guile License, because the Guile implementation of Scheme (for embedding) uses this license.

GNU Libc Components

libc6 dns resolver files

local.gen: generated by ./debian/debhelper.in/locales.config from glibc

libc6 pthread-2.7.so

Copyright (C) 1991,92,93,94,95,96,97,98,99,2000,2001,2002,2003,2004,2005,2006,2007, 2014

Free Software Foundation, Inc.

http://archive.debian.org/debian/pool/main/g/glibc/

http://archive.debian.org/debian/pool/main/g/glibc/glibc 2.7-18lenny7.diff.gz

https://lists.debian.org/debian-glibc/2014/10/msg00023.html

GNU LESSER GENERAL PUBLIC LICENSE, Version 2.1: Appendix E

grub

Copyright (C) 1999,2000,2001,2002,2004 Free Software Foundation, Inc.

ftp://alpha.gnu.org/gnu/grub/

https://www.gnu.org/software/grub/

GNU General Public License (GPL) Version 2.0 : Appendix C

Gsoap runtime

Copyright (C) 2001–2009 Robert A. van Engelen, Genivia inc.

http://www.cs.fsu.edu/~engelen/soap.html

GNU General Public License (GPL) Version 2.0 : Appendix C

Guava

Copyright (C) 2010 The Guava Authors

https://github.com/google/guava

Apache License, Version 2.0: Appendix A

Guice

Guice developer community

https://github.com/google/guice

Apache 2.0 license

Henry Spencer's regex library (BSD version)

Copyright 1992, 1993, 1994 Henry Spencer. All rights reserved.

https://garyhouston.github.io/regex/

https://github.com/garyhouston/regex/blob/master/COPYRIGHT

Hibernate

Copyright © 2004 Red Hat Inc. and the various authors

http://www.hibernate.org/

GNU LESSER GENERAL PUBLIC LICENSE: Appendix E

Hibernate Tools

Copyright © 2011 JBoss by Red Hat

This software is distributed under the terms of the FSF Lesser Gnu Public License v2.1.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

http://hibernate.org/tools/

GNU LESSER GENERAL PUBLIC LICENSE: Appendix E

HttpComponents

Copyright 1999-2012 The Apache Software Foundation

http://hc.apache.org

Apache License, Version 2.0: Appendix A

This project contains annotations derived from JCIP-ANNOTATIONS Copyright (c) 2005 Brian Goetz and Tim Peierls. See http://www.jcip.net

http.jar

Copyright © 2005, 2011, Oracle and/or its affiliates. All rights reserved. http://jax-ws-commons.java.net/json/dependencies.html#com.sun.net.httpserver:http:jar COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL): Appendix H

http-tiny

- (c) 1998 Laurent Demailly see LICENSE
- (c) 1996 Observatoire de Paris

Author(s): Laurent Demailly L@Demailly.com

http://www.demailly.com/~dl/wwwtools.html

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

- 1. You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.
- 2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
- 3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the

following:

- a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.
- b) use the modified Package only within your corporation or organization.
- c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.
- d) make other distribution arrangements with the Copyright Holder.
- 4. You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:
 - a) distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.
 - b) accompany the distribution with the machine-readable source of the Package with your modifications.
 - c) accompany any non-standard executables with their corresponding Standard Version executables, giving the non-standard executables non-standard names, and clearly documenting the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.
 - d) make other distribution arrangements with the Copyright Holder.
- 5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that you do not advertise this Package as a product of your own.
- 6. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whomever generated them, and may be sold commercially, and may be aggregated with this Package.
- 7. C subroutines supplied by you and linked into this Package in order to emulate subroutines and variables of the language defined by this

Package shall not be considered part of this Package, but are the equivalent of input as in Paragraph 6, provided these subroutines do not change the language in any way that would cause it to fail the regression tests for the language.

- 8. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.
- 9. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End

ICU

Copyright (c) 1995-2015 International Business Machines Corporation and others

http://site.icu-project.org/

ICU License - ICU 1.8.1 and later

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2015 International Business Machines Corporation and others All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

All trademarks and registered trademarks mentioned herein are the property of their respective owners

Inno Setup

Except where otherwise noted, all of the documentation and software included in the Inno Setup package is copyrighted by Jordan Russell.

http://www.jrsoftware.org/isinfo.php

Inno Setup License (http://www.jrsoftware.org/files/is/license.txt)

Copyright © 1997-2012 Jordan Russell. All rights reserved.

Portions Copyright © 2000-2012 Martijn Laan. All rights reserved.

This software is provided "as-is," without any express or implied warranty. In no event shall the author be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter and redistribute it, provided that the following conditions are met:

- 1. All redistributions of source code files must retain all copyright notices that are currently in place, and this list of conditions without modification.
- 2. All redistributions in binary form must retain all occurrences of the above copyright notice and web site addresses that are currently in place (for example, in the About boxes).
- 3. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software to distribute a product, an acknowledgment in the product documentation would be appreciated but is not required.
- **4.** Modified versions in source or binary form must be plainly marked as such, and must not be misrepresented as being the original software.

ion-java

© 1997-2017, The Apache Software Foundation

Apache License, Version 2.0

https://mvnrepository.com/artifact/software.amazon.ion/ion-java

Jackson JSON Parser

Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated.

http://wiki.fasterxml.com/JacksonHome

Apache License, Version 2.0: Appendix A

Javassist

Copyright (C) 1999-2008 Shigeru Chiba. All Rights Reserved.

https://jboss-javassist.github.io/javassist/

The GNU Lesser General Public License (LGPL) Version 2: Appendix C

JavaMail API Jar

https://mvnrepository.com/artifact/javax.mail/javax.mail-api

The GNU General Public License: Appendix C

Common Development and Distribution License (CDDL) v1.1, Appendix H

JAX-RS

Copyright (c) 2010-2011 Oracle and/or its affiliates. All rights reserved.

https://jersey.github.io/

https://jersey.github.io/license.html

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1: Appendix H

Jaxen

Copyright 2003 (C) The Werken Company. All Rights Reserved.

https://github.com/jaxen-xpath/jaxen

https://github.com/jaxen-xpath/jaxen/blob/master/LICENSE.txt

JCache (JSR107)

Copyright (c) JSR107 Expert Group

http://jsr107cache.sourceforge.net (jsr107cache-1.0.jar)

Apache License, Version 2.0: Appendix A

jclouds

jclouds developer community

https://github.com/apache/jclouds

Apache 2.0 license

JCommon

(C)opyright, 2000-2009, by Object Refinery Limited and Contributors.

http://www.jfree.org/jcommon/index.html

GNU LESSER GENERAL PUBLIC LICENSE, Version 2.1: Appendix E

JCS

Apache Jakarta JCS

Copyright 2001-2007 The Apache Software Foundation.

http://commons.apache.org/jcs/

Apache License, Version 2.0: Appendix A

Jetty

Copyright (c) 2004-2009 Mort Bay Consulting Pty. Ltd.

The Eclipse Foundation makes available all content in this plug-in ("Content"). The Content is dual licensed and is provided to you under the terms and conditions of the Eclipse Public License Version 1.0 ("EPL") as well as the Apache Software License Version 2.0. For purposes of the EPL, "Program" will mean the Content.

http://www.eclipse.org/jetty/

Apache License, Version 2.0: Appendix A

Eclipse Public License - v 1.0:

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- **a.** in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and
- **b.** in the case of each subsequent Contributor:
 - i. changes to the Program, and
 - ii. additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which:

- i. are separate modules of software distributed in conjunction with the Program under their own license agreement, and
- ii. are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

- a. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.
- b. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
- c. Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.
- **d.** Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a. it complies with the terms and conditions of this Agreement; and
- **b.** its license agreement:
 - effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and noninfringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - ii. effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - **iii.** states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - **iv.** states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a. it must be made available under this Agreement; and
- **b.** a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must:

- a. promptly notify the Commercial Contributor in writing of such claim, and
- **b.** allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations.

The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Jfreechart

© 2005-2011 Object Refinery Limited

http://www.jfree.org/jfreechart/

GNU Lesser General Public License, Appendix E

JMES Path Query Library

https://mvnrepository.com/artifact/com.amazonaws/jmespath-java

© 1997-2017, The Apache Software Foundation, Amazon aws

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

Apache License, Version 2.0

Joda Time

https://mvnrepository.com/artifact/joda-time/joda-time

© 1997-2017, The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

Apache License, Version 2.0

JPam

Copyright 2003-2007 Greg Luck

http://jpam.sourceforge.net/

http://jpam.sourceforge.net/license.html

Apache License, Version 2.0: Appendix A

json Path

Java port of Stefan Goessner JsonPath.

https://mvnrepository.com/artifact/com.jayway.jsonpath/json-path

© 1997-2017, The Apache Software Foundation

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

Apache License, Version 2.0

jQuery

Copyright (c) 2012 jQuery Foundation and other contributors,

http://jquery.com/

https://jquery.org/license/

OSI - The MIT License: Appendix F

GNU GPL Version 2: Appendix C

Sizzle

Copyright (c) 2009 John Resig

The Sizzle selector engine (which is included inside the jQuery library) is held by the Dojo Foundation and is licensed under the MIT, GPL, and BSD licenses.

jQuery UI

Copyright 2013 ¡Query Foundation and other contributors

http://jqueryui.com/

This software consists of voluntary contributions made by many individuals (AUTHORS.txt, http://jqueryui.com/about) For exact contribution history, see the revision history and logs, available at http://jquery-ui.googlecode.com/svn/

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

JRadius

Copyright 2006-2008 David Bird <david@coova.com>

https://coova.github.io/

JRadius is an open-source Java RADIUS client and server framework. The JRadius client helps you to implement RADIUS authentication and accounting in your Java application. The JRadius server is a RADIUS processing engine accessed through the rlm_jradius module in FreeRADIUS. The core JRadius library is licensed under the GNU Lesser General Public License (LGPL) with certain standalone programs, such as JRadiusSimulator, are released under the GNU General Public License (GPL).

GNU LESSER GENERAL PUBLIC LICENSE, Version 2.1: Appendix E

GNU General Public License (GPL) Version 2.0, Appendix C

JSON-RPC

JSON-RPC JavaScript client

\$Id: jsonrpc.js,v 1.36.2.3 2006/03/08 15:09:37 mclark Exp \$

Copyright © 2003-2004 Jan-Klaas Kollhof

Copyright © 2005 Michael Clark, Metaparadigm Pte Ltd

http://www.koders.com/javascript/

fidBB48319BEC6E3241B86CDDC54CA122783370C371.aspx?s=document

This code is based on Jan-Klaas' JavaScript o lait library (jsolait).

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JSP Standard Tag Library

Copyright (c) 1997-2010 Oracle and/or its affiliates. All rights reserved.

https://mvnrepository.com/artifact/javax.servlet/jstl/1.2

Common Development and Distribution License (CDDL) version 1.0: Appendix I

GNU General Public License (GPL) Version 2.0 : Appendix C

JSR 311 API

Oracle

https://jsr311.dev.java.net

CDDL

Junit

Copyright (c) 2000-2006, www.hamcrest.org

https://mvnrepository.com/artifact/junit/junit/4.8.1

Common Public License (http://www.junit.org/license)

License

JUnit

Common Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- **a.** in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and
- **b.** in the case of each subsequent Contributor:
 - i. changes to the Program, and
 - ii. additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

- b. Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
- c. Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.
- **d.** Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a. it complies with the terms and conditions of this Agreement; and
- **b.** its license agreement:
 - effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and noninfringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - ii. effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - **iii.** states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - **iv.** states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a. it must be made available under this Agreement; and
- **b.** a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

Jython

Copyright (c) 2007 Python Software Foundation; All Rights Reserved

Copyright (c) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 Jython Developers All rights reserved.

http://www.jython.org/index.html

Jython 2.0, 2.1 License

Copyright (c) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 Jython Developers All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the Jython Developers nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

libbzip2

copyright (C) 1996-2000 Julian R Seward. All rights reserved.

http://www.bzip.org/

The bzip2 license

This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2010 Julian R Seward. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

- 3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- 4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Julian Seward, jseward@bzip.org

bzip2/libbzip2 version 1.0.6 of 6 September 2010

libc6

https://www.gnu.org/software/libc/

GNU Libc Maintainers

LGPL 2.1

Including:

libc6 dns resolver files

libc6 pthread-2.7.so

libgcc1

Debian GCC Maintainers

http://ftp.debian.org/debian/pool/main/g/gcc-4.7/

GNU General Public License (GPL) v3.0, Appendix D

libssh2

Copyright (c) 2004-2007 Sara Golemon <sarag@libssh2.org>

Copyright (c) 2005,2006 Mikhail Gusarov dottedmag@dottedmag.net

Copyright (c) 2006-2007 The Written Word, Inc.

Copyright (c) 2007 Eli Fant elifantu@mail.ru

Copyright (c) 2009 Daniel Stenberg

Copyright (C) 2008, 2009 Simon Josefsson

All rights reserved.

https://www.libssh2.org/

```
License
/* Copyright (c) 2004-2007 Sara Golemon <sarag@libssh2.org>
 * Copyright (c) 2005,2006 Mikhail Gusarov <dottedmag@dottedmag.net>
 * Copyright (c) 2006-2007 The Written Word, Inc.
 * Copyright (c) 2007 Eli Fant <elifantu@mail.ru>
 * Copyright (c) 2009-2014 Daniel Stenberg
 * Copyright (C) 2008, 2009 Simon Josefsson
 * All rights reserved.
 * Redistribution and use in source and binary forms,
 * with or without modification, are permitted provided
 * that the following conditions are met:
    Redistributions of source code must retain the above
    copyright notice, this list of conditions and the
    following disclaimer.
    Redistributions in binary form must reproduce the above
    copyright notice, this list of conditions and the following
    disclaimer in the documentation and/or other materials
    provided with the distribution.
    Neither the name of the copyright holder nor the names
    of any other contributors may be used to endorse or
    promote products derived from this software without
    specific prior written permission.
 * THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND
 * CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES,
 * INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
 * OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
 * ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR
 * CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
 * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING,
 * BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
 * SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
 * INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
 * WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING
 * NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE
 * USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY
 * OF SUCH DAMAGE.
```

libpcap

(c) 2010 Tcpdump/Libpcap. Designed by Luis MartinGarcia http://www.tcpdump.org/

http://www.tcpdump.org/license.html

BSD license (3-clause): Appendix G

libstdc++

Copyright (C) 1997, 1998, 1999, 2000, 2001 Free Software Foundation, Inc.

http://gcc.gnu.org/libstdc++/

GNU General Public License (GPL) Version 3.0: Appendix D

with GCC Runtime Library Exception, version 3.1

GCC RUNTIME LIBRARY EXCEPTION

Version 3.1, 31 March 2009

Copyright (C) 2009 Free Software Foundation, Inc. http://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This GCC Runtime Library Exception ("Exception") is an additional permission under section 7 of the GNU General Public License, version 3 ("GPLv3"). It applies to a given file (the "Runtime Library") that bears a notice placed by the copyright holder of the file stating that the file is governed by GPLv3 along with this Exception.

When you use GCC to compile a program, GCC may combine portions of certain GCC header files and runtime libraries with the compiled program. The purpose of this Exception is to allow compilation of non-GPL (including proprietary) programs to use, in this way, the header files and runtime libraries covered by this Exception.

0. Definitions.

A file is an "Independent Module" if it either requires the Runtime Library for execution after a Compilation Process, or makes use of an interface provided by the Runtime Library, but is not otherwise based on the Runtime Library.

"GCC" means a version of the GNU Compiler Collection, with or without modifications, governed by version 3 (or a specified later version) of the GNU General Public License (GPL) with the option of using any subsequent versions published by the FSF.

"GPL-compatible Software" is software whose conditions of propagation, modification and use would permit combination with GCC in accord with the license of GCC.

"Target Code" refers to output from any compiler for a real or virtual target processor architecture, in executable form or suitable for input to an assembler, loader, linker and/or execution phase. Notwithstanding that, Target Code does not include data in any format that is used as a compiler intermediate representation, or used for producing a compiler intermediate representation.

The "Compilation Process" transforms code entirely represented in non-intermediate languages designed for human-written code, and/or in Java Virtual Machine byte code, into Target Code. Thus, for example, use of source code generators and preprocessors need not be considered part of the Compilation Process, since the Compilation Process can be understood as starting with the output of the generators or preprocessors.

A Compilation Process is "Eligible" if it is done using GCC, alone or with other GPL-compatible software, or if it is done without using any work based on GCC. For example,

using non-GPL-compatible Software to optimize any GCC intermediate representations would not qualify as an Eligible Compilation Process.

1. Grant of Additional Permission.

You have permission to propagate a work of Target Code formed by combining the Runtime Library with Independent Modules, even if such propagation would otherwise violate the terms of GPLv3, provided that all Target Code was generated by Eligible Compilation Processes. You may then convey such a combination under terms of your choice, consistent with the licensing of the Independent Modules.

2. No Weakening of GCC Copyleft.

The availability of this Exception does not imply any general presumption that third-party software is unaffected by the copyleft requirements of the license of GCC.

libunwind

http://www.nongnu.org/libunwind

https://github.com/libunwind/libunwind/blob/master/LICENSE

```
License:
  1
  2
  3 Permission is hereby granted, free of charge, to any person obtaining
  4 a copy of this software and associated documentation files (the
  5 "Software"), to deal in the Software without restriction, including
  6 without limitation the rights to use, copy, modify, merge, publish,
  7 distribute, sublicense, and/or sell copies of the Software, and to
  8 permit persons to whom the Software is furnished to do so, subject to
  9 the following conditions:
 10
 11 The above copyright notice and this permission notice shall be
 12 included in all copies or substantial portions of the Software.
 13
 14 THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
 15 EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
 16 MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
 17 NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE
 18 LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION
 19 OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION
  20 WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
```

locale.gen

Generated by ./debian/debhelper.in/locales.config from glibc

Debian GNU Libc Maintainers

LGPL 2.1

http://www.gnu.org/licenses/old-licenses/lgpl-2.1.txt

linux-kernel

Copyright 1998-2019 Linus Torvalds and all other contributors

http://www.kernel.org/

GNU General Public License (GPL) Version 2.0 : Appendix C

Log4cplus

Each file of log4cplus source is licensed using either two clause BSD license or Apache license 2.0.

Two clause BSD license

Copyright © 1999-2009 Contributors to log4cplus project. All rights reserved.

https://sourceforge.net/p/log4cplus/wiki/Home/

BSD license (Two clause)

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Apache License, Version 2.0: Appendix A

Apache License 2.0

Copyright © 1999-2009 Contributors to log4cplus project

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

logkit

https://archive.apache.org/dist/excalibur/excalibur-logkit/jars/

Apache 2

Log4j

Copyright © 2011 The Apache Software Foundation

http://logging.apache.org/log4j/

Apache License, Version 2.0: Appendix A

Loki

Copyright © 2001 by Andrei Alexandrescu

http://loki-lib.sourceforge.net/

OSI - The MIT License: Appendix F

Lua

(ported by Matthewh)

Copyright © 1994–2012 Lua.org, PUC-Rio.

http://www.lua.org/

MIT License (http://www.lua.org/license.html)

License

Lua is free software distributed under the terms of the MIT license reproduced below.

Lua may be used for any purpose, including commercial purposes, at absolutely no cost. No paperwork, no royalties, no GNU-like "copyleft" restrictions, either. Just download it and use it. Lua is certified Open Source software. Its license is compatible with GPL. Lua is not in the public domain and PUC-Rio keeps its copyright.

The spirit of the Lua license is that you are free to use Lua for any purpose at no cost without having to ask us. The only requirement is that if you do use Lua, then you should give us credit by including the copyright notice somewhere in your product or its documentation. A nice, but optional, way to give us further credit is to include a Lua logo and a link to our site in a web page for your product.

The Lua language is entirely designed, implemented, and maintained by a team at PUC-Rio in Brazil. The implementation is not derived from licensed software.

Copyright © 1994–2012 Lua.org, PUC-Rio.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Before Lua 5.0, Lua used its own license, which were very close to the zlib license and others, but not quite the same.

Check the source distribution for the exact license text for each version before Lua 5.0. Nevertheless, if you wish to use those old versions, you may hereby assume that they have all been re-licensed under the MIT license.

marsaglia-c

Copyright © George Marsaglia

http://www.math.uni-bielefeld.de/~sillke/ALGORITHMS/random/marsaglia-c

Mcelog

https://www.mcelog.org/

GNU General Public License (GPL) Version 2.0: Appendix C

mchange-commons-java

Machinery for Change

http://www.mchange.com/projects/c3p0/

LGPL 2.1

MD4

MD4.jar is extracted from the Cryptix v3 project.

Copyright © 1995-2005 The Cryptix Foundation Limited. All rights reserved.

http://www.cryptix.org/

Cryptix General License

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE CRYPTIX FOUNDATION LIMITED AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE CRYPTIX FOUNDATION LIMITED OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

memtest86+

Memtest86+ is written by Samuel DEMEULEMEESTER, Chris Brady et al.

http://www.memtest.org/

GNU General Public License (GPL) v2.0, Appendix C

mingwm10.dll

mingwm10.dll is part of the MingGW.org project.

http://www.mingw.org/

https://sourceforge.net/p/mingw/mingw-org-wsl/ci/21762bb4a1bd0c88c38eead03f59e8d994349e83/tree/LICENSE

Copyright (c) 2012 MinGW.org project

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice, this permission notice and the below disclaimer shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Munin

Copyright (C) 2002-2009 Jimmy Olsen, et al.

http://munin-monitoring.org/

GNU General Public License (GPL) Version 2.0 : Appendix C

NDMJOB

Copyright © 1998,1999,2000 Traakan, Inc., Los Altos, CA. All rights reserved.

http://ndmjob.sourceforge.net/

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice unmodified, this list of conditions, and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NDMP SDK

Copyright (c) 1997,1998,2000,2001,2002 Legato, Network Appliance. All Rights Reserved.

http://www.ndmp.org/download/

```
# Description: NDMP SDK license
#
# Copyright (c) 1997,1998,2000,2001,2002 Legato, Network Appliance.
```

```
# All Rights Reserved.

# 
# $Id: LICENSE, v 2.0 2000/09/15

#
```

NETAPP AND LEGATO SOFTWARE LICENSE AGREEMENT FOR NETWORK DATA MANAGEMENT PROTOCOL (NDMP) SOFTWARE DEVELOPER'S KIT (SDK)

NOTICE TO USER (THE "LICENSEE"): CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT. USE OF ALL SOFTWARE AND SOURCE CODE PROVIDED WITH THIS AGREEMENT (THE "SOFTWARE") CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS. THE TERMS OF THIS AGREEMENT PERTAIN TO THE SOFTWARE PROVIDED WITH THIS AGREEMENT AND ANY SUBSEQUENT VERSIONS RECEIVED, IF ANY, INCLUDING BUT NOT LIMITED TO UPDATES AND ENHANCEMENTS PROVIDED UNDER THE TERMS OF ANY MAINTENANCE AGREEMENT BETWEEN THE PARTIES, UNLESS THE PARTIES HAVE EXECUTED A FORM OF SIGNED LICENSE AGREEMENT WHICH SPECIFICALLY SUPERSEDES THIS LICENSE BY ITS TERMS.

LICENSE GRANT: THE SOFTWARE BEING PROVIDED TO YOU IS LICENSED, NOT SOLD. NETAPP AND LEGATO OWN ALL COPIES OF THE LICENSED ITEMS, INCLUDING BACKUP AND ARCHIVAL COPIES. YOU, THE LICENSEE, ONLY HAVE THE LIMITED RIGHTS EXPRESSLY GRANTED TO YOU UNDER THE TERMS AND CONDITIONS OF THIS END USER LICENSE AGREEMENT.

NetApp and Legato grant to you (either as an individual or entity) a limited, nontransferable, nonexclusive, perpetual license to use, copy, modify, distribute or sublicense, to third parties, copies of the SOFTWARE and derivative works in the form of source code or binary executables under the terms of this license. The term of this license agreement will be perpetual, unless terminated by You or by licensors in the event of material breach by You. In the event of termination, the license rights granted with this Agreement will survive for any end users of the software subject to the warranty disclaimer and limitation of liability.

The SOFTWARE is available only through the website, www.ndmp.org. The user registers online and downloads the SOFTWARE. The SOFTWARE may be used at no charge.

You may transfer the SOFTWARE in source code or executable form. You agree that any copies of the SOFTWARE will contain the same proprietary notices which appear on and in the SOFTWARE. The SOFTWARE is provided as is without warranty of any kind. Support is limited to bug fixes, if and when available, and the right to submit email bug reports to ndmp.org.

Ownership Rights: You acknowledge that no title to the intellectual property in the SOFTWARE is transferred to you. You further acknowledge that title and full ownership rights to the SOFTWARE will remain the exclusive property of NetApp and Legato, and you will not acquire any rights to the SOFTWARE except as expressly set forth herein.

No Warranties: NETAPP AND LEGATO DO NOT WARRANT THAT THE SOFTWARE IS ERROR FREE. NETAPP AND LEGATO EXPRESSLY EXCLUDE ALL WARRANTIES, EXPRESS OR IMPLIED, IN RELATION TO THE SOFTWARE (AND ANY SERVICES RENDERED TO SUPPORT THE SOFTWARE), INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Severability: In the event of invalidity of any provision of this Agreement, the parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement.

No Liability for Damages: IN NO EVENT SHALL NETAPP OR LEGATO BE LIABLE TO YOU FOR ANY DAMAGES CAUSED BY THE USE OF THIS SOFTWARE, INCLUDING WITHOUT LIMITATION INTERRUPTION OF BUSINESS, LOST PROFITS OR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES OF ANY KIND ARISING OUT OF THE USE OF THE SOFTWARE, EVEN IF NETAPP OR LEGATO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH POTENTIAL DAMAGES.

Export: You agree that you will not export or re-export the SOFTWARE without the appropriate United States or foreign government licenses.

Governing Law: This Agreement shall be construed in accordance with the laws of the State of California as they are applied to agreements between California residents entered into and to be performed entirely within California. The United Nations Convention on Contracts for the International Sale of Goods is specifically disclaimed.

U.S. Government Rights: If this software is acquired under the terms of: (i) a DoD contract: pursuant to 48 CFR 227.7202-2 and its successors, use, duplication, or disclosure by the Government is subject to restrictions as set forth in this Agreement; or (ii) a Civilian agency contract: Pursuant to 48 CFR 12.212 and its successors, use, reproduction, or disclosure is subject to the restrictions set forth in this Agreement.

Unpublished - rights reserved under the copyright laws of the United States.

Contractor/Manufacturer:

| Network Appliance | Legato Systems |
|------------------------|--------------------------|
| 495 East Java Drive | 2350 West El Camino Real |
| Sunnyvale, CA 94089 | Mountain View, CA 94040 |

Entire Agreement: This is the entire agreement between you and NetApp and Legato which supersedes any prior agreement, whether written or oral, relating to the subject matter of this Agreement. Should you have any questions concerning this Agreement, or if you desire to contact NetApp or Legato for any reason, please write:

| Network Appliance | Legato Systems |
|------------------------|--------------------------|
| 495 East Java Drive | 2350 West El Camino Real |
| Sunnyvale, CA 94089 | Mountain View, CA 94040 |

Revised April 30, 2002

net-Idap

Copyright 2006-2011 by Francis Cianfrocca and other contributors.

https://rubygems.org/gems/net-ldap/versions/0.8.0

MIT license

ndmpcopy

Copyright © 1999 Network Appliance, Inc. All Rights Reserved.

http://www.ndmp.org/download/ndmpcopy/index.shtml

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Net-SNMP

http://www.net-snmp.org/

http://www.net-snmp.org/about/license.html

net-tools

Copyright 1999-2001 Bernd Eckenfels <ecki@debian.org> , Phil Blundell <u>philb@gnu.org</u>, et al.

https://sourceforge.net/projects/net-tools/

GNU General Public License (GPL) Version 2.0 : Appendix C

netbase

This package was created by Peter Tobias tobias@et-inf.fho-emden.de on Wed, 24 Aug 1994 21:33:28 +0200 and maintained by Anthony Towns <ait@debian.org> until 2001.

It is currently maintained by Marco d'Itri <md@linux.it>.

http://www.debian.org/

GNU General Public License (GPL) Version 2.0 : Appendix C

netty

netty-buffer netty-codec netty-codec-http netty-hadler netty-resolver netty-transport https://mvnrepository.com/artifact/io.netty

Apache 2 license

NFSv4 constants

Copyright (C) The Internet Society (2003). All Rights Reserved.

http://www.ietf.org/rfc/rfc3530.txt

Full Copyright Statement

Copyright (C) The Internet Society (2003). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

nis

Copyright 2002-2005 Thorsten Kukuk <kukuk@thkukuk.de>

http://www.linux-nis.org/

GNU General Public License (GPL) Version 2.0: Appendix C

NTP

Copyright (c) University of Delaware 1992-2014

http://www.ntp.org/

* Copyright (c) University of Delaware 1992-2014 *

- * :
- * Permission to use, copy, modify, and distribute this software and *
- * its documentation for any purpose with or without fee is hereby *
- * granted, provided that the above copyright notice appears in all *

```
* copies and that both the copyright notice and this permission *

* notice appear in supporting documentation, and that the name *

* University of Delaware not be used in advertising or publicity *

* pertaining to distribution of the software without specific, *

* written prior permission. The University of Delaware makes no *

* representations about the suitability this software for any *

* purpose. It is provided "as is" without express or implied *

* warranty.
```

Nutch

Copyright © 2005-2011 The Apache Software Foundation.

http://nutch.apache.org/

Apache License, Version 2.0: Appendix A

OpenJDK

Copyright (c) 2010-2019, Oracle and/or its affiliates.

All rights reserved.

http://openjdk.java.net

GNU General Public License (GPL) Version 2.0 : Appendix C

with Classpath Exception (http://openjdk.java.net/legal/gplv2+ce.html)

```
"CLASSPATH" EXCEPTION TO THE GPL

Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.
```

OpenLDAP

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved.

http://www.openIdap.org/

http://www.openIdap.org/software/release/license.html

The OpenLDAP Public License Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions in source form must retain copyright statements and notices,
- 2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and
- 3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

OpenSSL

Copyright (c) 1998-2019 The OpenSSL Project

Copyright (c) 1995-1998 Eric Young (eay@cryptsoft.com)

All rights reserved.

http://www.openssl.org/

OpenSSL License: Appendix B

org.jessies.terminator

Copyright ©2004-2009 software.jessies.org team.

All Rights Reserved

http://software.jessies.org/

GNU GENERAL PUBLIC LICENSE, Version 2.0: Appendix C

ORO

The Apache Software License, Version 1.1

Copyright © 2000-2002 The Apache Software Foundation. All rights reserved.

http://jakarta.apache.org/oro/

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the Apache Software Foundation (http://www.apache.org/)."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

- **4.** The names "Apache" and "Apache Software Foundation", "Jakarta-Oro" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact apache@apache.org.
- **5.** Products derived from this software may not be called "Apache" or "Jakarta-Oro", nor may "Apache" or "Jakarta-Oro" appear in their name, without prior written permission of the Apache Software Foundation.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see http://www.apache.org/

PAM

Copyright © Linux-PAM Project

http://www.linux-pam.org/

Linux PAM License (see below)

Unless otherwise *explicitly* stated the following text describes the licensed conditions under which the contents of this Linux-PAM release may be distributed:

Redistribution and use in source and binary forms of Linux-PAM, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
- 2. Redistributions in binary form must reproduce all prior and current copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU General Public License, in which case the provisions of the GNU GPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU GPL and the restrictions contained in a BSD-style copyright.)

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

PAM RADIUS-auth module

http://freeradius.org/pam_radius_auth/

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

The original pam_radius.c code is copyright (c) Cristian Gafton, 1996, gafton@redhat.com Some challenge-response code is copyright (c) CRYPTOCard Inc, 1998.

All rights reserved.

Perl module Net::SSH2

Copyright (C) 2005 - 2010 by David B. Robins; all rights reserved.

https://metacpan.org/release/Net-SSH2

GNU GENERAL PUBLIC LICENSE

Version 1, February 1989

Copyright (C) 1989 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

When we speak of free software, we are referring to freedom, not price. Specifically, the General Public License is designed to make sure that you have the freedom to give away or sell copies of free software, that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

- 0. This License Agreement applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any work containing the Program or a portion of it, either verbatim or with modifications. Each licensee is addressed as "you".
- 1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this General Public License and to the absence of any warranty; and give any other recipients of the Program a copy of this General Public License along with the Program. You may charge a fee for the physical act of transferring a copy.
- 2. You may modify your copy or copies of the Program or any portion of it, and copy and distribute such modifications under the terms of Paragraph 1 above, provided that you also do the following:

- a) cause the modified files to carry prominent notices stating that you changed the files and the date of any change; and
- b) cause the whole of any work that you distribute or publish, that in whole or in part contains the Program or any part thereof, either with or without modifications, to be licensed at no charge to all third parties under the terms of this General Public License (except that you may choose to grant warranty protection to some or all third parties, at your option).
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the simplest and most usual way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this General Public License.
- d) You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

Mere aggregation of another independent work with the Program (or its derivative) on a volume of a storage or distribution medium does not bring the other work under the scope of these terms.

- 3. You may copy and distribute the Program (or a portion or derivative of it, under Paragraph 2) in object code or executable form under the terms of Paragraphs 1 and 2 above provided that you also do one of the following:
- a) accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Paragraphs 1 and 2 above; or,
- b) accompany it with a written offer, valid for at least three years, to give any third party free (except for a nominal charge for the cost of distribution) a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Paragraphs 1 and 2 above; or,
- c) accompany it with the information you received as to where the corresponding source code may be obtained. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form alone.)

Source code for a work means the preferred form of the work for making modifications to it. For an executable file, complete source code means all the source code for all modules it contains; but, as a special exception, it need not include source code for modules which are standard libraries that accompany the operating system on which the executable file runs, or for standard header files or definitions files that accompany that operating system.

- 4. You may not copy, modify, sublicense, distribute or transfer the Program except as expressly provided under this General Public License. Any attempt otherwise to copy, modify, sublicense, distribute or transfer the Program is void, and will automatically terminate your rights to use the Program under this License. However, parties who have received copies, or rights to use copies, from you under this General Public License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. By copying, distributing or modifying the Program (or any work based on the Program) you indicate your acceptance of this license to do so, and all its terms and conditions.

- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.
- 7. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of the license which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the license, you may choose any version ever published by the Free Software Foundation.

8. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

- 9. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 10. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Perl module Regexp::IPv6

Copyright (C) 2009, 2010 by Salvador Fandiño (<u>mailto:sfandino@yahoo.com</u>) http://www.cpan.org/misc/cpan-faq.html#How is Perl licensed

POCO

Copyright Michael Feathers

http://pocoproject.org/

The Boost Software License 1.0

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Postgresql

Portions Copyright (c) 1996-2012, The PostgreSQL Global Development Group

Portions Copyright (c) 1994, The Regents of the University of California

http://www.postgresql.org/

The PostgreSQL Licence (http://www.postgresql.org/about/licence)

PostgreSQL is released under the PostgreSQL License, a liberal Open Source license, similar to the BSD or MIT licenses.

PostgreSQL Database Management System (formerly known as Postgres, then as Postgres95)

Portions Copyright (c) 1996-2012, The PostgreSQL Global Development Group

Portions Copyright (c) 1994, The Regents of the University of California

Permission to use, copy, modify, and distribute this software and its documentation for any purpose, without fee, and without a written agreement is hereby granted, provided that the above copyright notice and this paragraph and the following two paragraphs appear in all copies.

IN NO EVENT SHALL THE UNIVERSITY OF CALIFORNIA BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE UNIVERSITY OF CALIFORNIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THE UNIVERSITY OF CALIFORNIA SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE UNIVERSITY OF CALIFORNIA HAS NO OBLIGATIONS TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

Postgresql-jdbc

Copyright (c) 1997-2011, PostgreSQL Global Development Group

http://jdbc.postgresql.org/

https://jdbc.postgresql.org/about/license.html

BSD License (2-clause)

prototype.js

Copyright (c) 2005-2010 Sam Stephenson

http://prototypejs.org/

https://raw.github.com/sstephenson/prototype/master/LICENSE

Copyright (c) 2005-2010 Sam Stephenson

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

PySocks

Copyright 2006 Dan-Haim. All rights reserved.

https://github.com/Anorov/PySocks

https://github.com/Anorov/PySocks/blob/master/LICENSE

qTip

Copyright © 2009 Craig Thompson

http://craigsworks.com/projects/qtip/

The MIT License: Appendix F

Copyright © 2009 Craig Thompson

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Quartz

© 2005-2011 The Apache Software Foundation

https://mvnrepository.com/artifact/opensymphony/quartz

Apache License, Version 2.0: Appendix A

Regexp

https://attic.apache.org/projects/jakarta-regexp.html

The Apache Software License, Version 1.1

Copyright © 1999-2002 The Apache Software Foundation. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** The end-user documentation included with the redistribution, if any, must include the following acknowlegement:

"This product includes software developed by the Apache Software Foundation (http://www.apache.org/)."

Alternately, this acknowlegement may appear in the software itself, if and wherever such third-party acknowlegements normally appear.

- **4.** The names "The Jakarta Project", "Jakarta-Regexp", and "Apache software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact apache@apache.org.
- **5.** Products derived from this software may not be called "Apache" nor may "Apache" appear in their names without prior written permission of the Apache Group.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see http://www.apache.org/

Requests

Kenneth Reitz

https://pypi.python.org/pypi/requests/2.9.1

Apache 2

Rocoto

99 Software Foundation

https://github.com/99soft/rocoto

APACHE LICENSE, VERSION 2.0

Ruby-LDAP

Takaaki Tateishi and Ian Macdonald ftp://fr2.rpmfind.net/linux/epel/6/x86_64/ruby-ldap-0.9.7-10.el6.x86_64.rpm 3-clause BSD

ruby-net-ldap

Copyright 2006-2011 by Francis Cianfrocca and other contributors.

https://packages.debian.org/jessie/ruby-net-ldap

MIT license

rrdtool

Copyright (c) 1998-2008 Tobias Oetiker

All rights reserved.

http://oss.oetiker.ch/rrdtool/

GNU General Public License (GPL) Version 2.0 : Appendix C with FLOSS exception

RSYSLOG

https://packages.debian.org/wheezy/rsyslog

http://www.rsyslog.com/

GNU General Public License Version 3.0, Appendix D

Schematics

https://pypi.python.org/pypi/schematics/2.0.0a1

BSD license

screen

Copyright (C) 1987 Oliver Laumann

Copyright (C) 1991 Wayne Davidson

Copyright (C) 1993-2006 Juergen Weigert <inweiger@immd4.informatik.uni-erlangen.de>

Copyright (C) 1993-2006 Michael Schroeder <mlschroe@immd4.informatik.uni-erlangen.de>

Debian Modifications:

Copyright (C) 1996 Ian Murdock <imurdock@debian.org>

Copyright (C) 1997 joost witteveen <joost@rulcmc.leidenuniv.nl>

Copyright (C) 1997-2001 Juan Cespedes <cespedes@debian.org>

Copyright (C) 2001-2003 Adam Lazur <zal@debian.org>

Copyright (C) 2007 Jan Christoph Nordholz hesso@pool.math.tu-berlin.de

http://archive.debian.org/debian/pool/main/s/screen/screen 4.0.3-11+lenny1 amd64.deb

GNU General Public License (GPL) Version 2.0 : Appendix C

Servlet API

Copyright 2003-2004 The Apache Software Foundation

http://grepcode.com/project/repo1.maven.org/maven2/javax.servlet/servlet-api/

Apache License, Version 1.1

https://www.apache.org/licenses/LICENSE-1.1

SHA-256

Arif Endro Nugroho

https://opencores.org/project,nfhc

Simpleyaml

Reuven V. Gonzales

https://pypi.python.org/pypi/simpleyaml

MIT license

SLF4J

Copyright (c) 2004-2008 QOS.ch All rights reserved.

http://www.slf4j.org/

Copyright (c) 2004-2008 QOS.ch

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

solnlib

provided as part of Splunk Add-on Builder

https://splunkbase.splunk.com/app/2962/

https://www.splunk.com/en_us/legal/splunk-app-end-user-license-agreement.html

SortedContainers

Copyright 2014-2016 Grant Jenks

https://github.com/grantjenks/sorted_containers

Apache 2 license

Splunk

Splunk Inc

splunk_aoblib

splunktaucclib

https://splunkbase.splunk.com/app/2962/

provided as part of Splunk Add-on Builder

https://www.splunk.com/en_us/legal/splunk-app-end-user-license-agreement.html

Also:

splunk-sdk-python

https://github.com/splunk/splunk-sdk-python

Apache 2 license

SQLite

http://sqlite.org/

Public domain:

http://sqlite.org/copyright.html

spring-beans, spring-context, spring-core, sprint-test

https://mvnrepository.com/artifact/org.springframework

Apache 2.0 licence

stricat, stricpy

Copyright (c) 1988 Regents of the University of California.

All rights reserved.

This product includes software developed by the University of California, Berkeley and its contributors.

http://www.openbsd.org/cgi-bin/cvsweb/src/lib/libc/string/strlcat.c?rev=1.13

http://www.openbsd.org/cgi-bin/cvsweb/src/lib/libc/string/strlcpy.c?rev=1.11

sysvinit

Copyright (C) 1991-2004 Miquel van Smoorenburg

https://packages.debian.org/wheezy/sysvinit

GNU General Public License (GPL) Version 2.0: Appendix C

stdint.h (mingw32only variant)

http://www.mingw.org/

https://sourceforge.net/p/mingw/mingw-org-wsl/ci/

21762bb4a1bd0c88c38eead03f59e8d994349e83/tree/LICENSE

This package was debianized by Ron Lee <ron@debian.org>

It's components are available from www.mingw.org.

The mingw32-runtime source is in the public domain, the win32api source is licenced as follows:

Written by Anders Norlander <anorland@hem2.passagen.se>

Maintained by MinGW Developers Send bug reports and questions to MinGW-users@lists.sourceforge.net URL: http://www.mingw.org

* License

You are free to use, modify and copy this package. No restrictions are imposed on programs or object files compiled with this library.

You may not restrict the the usage of this library.

You may distribute this library as part of another package or as a modified package if and only if you do *not* restrict the usage of the portions consisting of this (optionally modified) library.

If distributed as part of another package, please notify the author of what you are going to do. If distributed as a modified package, this file *must* be included.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

syslog-ng

Copyright (C) 1999 BalaBit Computing

http://archive.debian.org/debian/pool/main/s/syslog-ng/syslog-ng/2.0.9-4.1 amd64.deb

BalaBit Computing

GNU General Public License (GPL) Version 2.0: Appendix C

Texen

© 2007 The Apache Software Foundation

https://velocity.apache.org/texen/1.0/

Apache License, Version 2.0: Appendix A

Threadpool

Copyright (c) 2005-2007 Philipp Henkel

http://threadpool.sourceforge.net/

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Tigra Calendar

Softcomplex

http://www.softcomplex.com/products/tigra_calendar/

Public Domain

Tomcat

Copyright © 1999-2012, The Apache Software Foundation

http://tomcat.apache.org/

Apache License, Version 2.0: Appendix A

Torque

Apache DB Torque

Copyright 2001-2006 The Apache Software Foundation.

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/).

http://db.apache.org/torque/

Apache License, Version 2.0: Appendix A

Turbine

Copyright © 1999-2011, The Apache Software Foundation.

https://turbine.apache.org/

Apache License, Version 2.0: Appendix A

tzdata and tzdata-java

http://www.iana.org/time-zones

This is the Debian prepackaged version of the Time Zone and Daylight Saving Time Data.

It was downloaded from http://www.iana.org/time-zones

Upstream Author: The Internet Assigned Numbers Authority (IANA)

Commentary should be addressed to tz@iana.org

Copyright: This database is in the public domain.

tz distrubution:

This file is in the public domain, so clarified as of 2009-05-17 by Arthur David Olson. The other files in this distribution are either public domain or BSD licensed.

ua.js

The Initial Developer of the Original Code is Netscape Corporation.

Portions created by the Initial Developer are Copyright © 2001 the Initial Developer. All Rights Reserved.

http://archive.bclary.com/xbProjects-docs/ua/

The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.mozilla.org/MPL/

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Original Code is Netscape code.

The Initial Developer of the Original Code is Netscape Corporation.

Portions created by the Initial Developer are Copyright © 2001 the Initial Developer. All Rights Reserved.

Contributor(s): Bob Clary

bclary@netscape.com>

Alternatively, the contents of this file may be used under the terms of either the GNU General Public License Version 2 or later (the "GPL"), or the GNU Lesser General Public License Version 2.1 or later (the "LGPL"), in which case the provisions of the GPL or the LGPL are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of either the GPL or the LGPL, and not to allow others to use your version of this file under the terms of the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the GPL or the LGPL. If you do not delete the provisions above, a recipient may use your version of this file under the terms of any one of the MPL, the GPL or the LGPL.

udev /dev/ and hotplug management daemon

http://archive.debian.org/debian/pool/main/u/udev/udev_0.125-7+lenny3_amd64.deb

GNU General Public License (GPL) Version 2.0: Appendix C

This is the Debian GNU/Linux prepackaged version of udev.

It has been packaged by Marco d'Itri <md@linux.it>.

Original sources were obtained from:

http://www.kernel.org/pub/linux/utils/kernel/hotplug/

Copyright (C) 2003,2004 Greg Kroah-Hartman <greg@kroah.com>

Copyright (C) 2004,2005 Kay Sievers <kay.sievers@vrfy.org>

udev is licensed under the GNU GPL version 2 or newer, Appendix C

libudev is licensed under the GNU LGPL version 2.1 or newer, Appendix E

libgudev is licensed under the GNU LGPL version 2 or newer:

https://www.gnu.org/licenses/old-licenses/lgpl-2.0.en.html

udis86

Copyright (c) 2002-2012, Vivek Thampi <vivek.mt@gmail.com>

All rights reserved.

https://github.com/vmt/udis86

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

UnboundID LDAP SDK for Java

Copyright 2007-2014 UnboundID Corp.

https://www.ldap.com/unboundid-ldap-sdk-for-java

GNU LESSER GENERAL PUBLIC LICENSE, Version 2.1: Appendix E

util-linux

```
Copyright © 2005 Adrian Bunk (bunk@stusta.de)
Copyright © 1994, 1996 Alessandro Rubini (rubini@ipvvis.unipv.it)
Copyright © 2000 Alvaro Antunes (alvaro@netpar.com.br)
Copyright © 1998 Andrea Arcangeli (andrea@e-mind.com)
Copyright © 2000 Andrea Arcangeli (andrea@suse.de)
Copyright © 1999 Andreas Dilger and Theodore Ts'o
Copyright © 1999 Andreas Dilger (adilger@enel.ucalgary.ca)
Copyright © 2000-2001 Andreas Dilger (adilger@turbolinux.com)
Copyright © 2009-2010 Andreas Dilger (adilger@sun.com)
Copyright © 1998 Andreas Neuper
Copyright © 2002 Andre C. Mazzone (linuxdev@karagee.com)
Copyright © 2010 Andrew Nayenko (resver@gmail.com)
Copyright © 1995-2004 Andries E. Brouwer (aeb@cwi.nl)
Copyright © 2006 Andrzej Krzysztofowicz (ankry@mif.pg.gda.pl)
Copyright © 2002-2003 Antoni Bella Perez (bella5@teleline.es)
Copyright © 1999-2000 Arnaldo Carvalho de Melo (acme@conectiva.com.br)
Copyright © 1992 A. V. Le Blanc (LeBlanc@mcc.ac.uk)
Copyright © 2009 Bastian Friedrich (bastian.friedrich@collax.com)
Copyright © Bernhard Walle (bwalle@suse.de)
Copyright © 2000 Beth Powell (bpowell@turbolinux.com)
Copyright © 2008 Cai Qian (qcai@redhat.com)
Copyright © 2001-2004 Christian Rose (menthos@menthos.com)
Copyright © 2007-2010 Clytie Siddall (clytie@riverland.net.au)
Copyright © 2009 Corentin Chary (corentinci@iksaif.net)
Copyright © 2007 Daniel Nylander (po@danielnylander.se)
Copyright © 2010 Davidlohr Bueso (dave@gnu.org)
Copyright © 1999-2001 Elrond (Elrond@Wunder-Nett.org)
Copyright © 2010 Fran Dieguez (frandieguez@ubuntu.com)
Copyright © 1985-1986, 1988-2010 Free Software Foundation, Inc.
Copyright © 1997-2005 Frodo Looijaard (frodo@frodo.looijaard.name)
Copyright © 1986 Gary S. Brown
Copyright © 1990 Gordon Irlam (gordoni@cs.ua.oz.au)
Copyright © 2000-2001 Gunnar Ritter
Copyright © 2010 Hajime Taira (htaira@redhat.com) & Masatake Yamato
(vamato@redhat.com)
Copyright © 2008 Hayden A. James (hayden.james@gmail.com)
Copyright © Hidenobu NABETANI (nabetani@kern.phys.sci.osaka-u.ac.jp)
Copyright © 2003-2006 H. Peter Anvin
Copyright © 2009-2010 Jakub Bogusz (gboosh@pld-linux.org)
Copyright © 2008 James Youngman (jay@gnu.org)
Copyright © 2010 Jason Borden (jborden@bluehost.com)
Copyright © 2005 Jens Axboe (jens@axboe.dk)
Copyright © 2010 Jeroen Oortwijn (oortwijn@gmail.com)
Copyright © 2010 Jiro SEKIBA (jir@unicus.jp)
Copyright © 1997-1999 Joey Hess
Copyright © 2004-2005 Jordi Mallach (jordi@gnu.org)
Copyright © 2005 Josep Puigdemont (josep.puigdemont@gmail.com)
Copyright © 2006-2010 Karel Zak (kzak@redhat.com)
Copyright © 2001-2002 Karl Eichwalder
```

```
Copyright © 2004-2008 Kay Sievers (kay.sievers@vrfy.org)
Copyright © 1994 Kevin E. Martin (martin@cs.unc.edu)
Copyright © 1994-2002 Kevin E. Martin & Andries E. Brouwer (aeb@cwi.nl)
Copyright © 2002-2003, 2005, 2007-2009 Lauri Nurmi (lanurmi@iki.fi)
Copyright © 1991 Linus Torvalds
Copyright © 2005-2006, 2008 Marco Colombo (m.colombo@ed.ac.uk)
Copyright © Marcus Moreira (marcusms@frb.br)
Copyright © 1988 Mark Nudleman
Copyright © 2007 Matthias Koenig (mkoenig@suse.de)
Copyright © 2004-2006 Maxim V. Dziumanenko (mvd@mylinux.com.ua)
Copyright © 2002 Meelis Roos (mroos@linux.ee)
Copyright © 2004-2006 Michael Holzt, kju -at- fqdn.org
Copyright © 1992-1997 Michael K. Johnson (johnsonm@redhat.com)
Copyright © 2002, 2004-2005, 2007-2008 Michael Piefel (piefel@informatik.hu-berlin.de)
Copyright © 1996 Michel Robitaille (robitail@IRO.UMontreal.CA)
Copyright © 2009 Mike Hommey (mh@glandium.org)
Copyright © 2009 Mikhail Gusarov (dottedmag@dottedmag.net)
Copyright © 1995 Nick Simicich (nis@scifi.emi.net)
Copyright © 1993 Nicolai Langfeldt & janl@math.uio.no
Copyright © 2009 Nicolas Provost (nprovost@quadriv.com)
Copyright © 2004 Nilgün Belma Bugüner
Copyright © (nulo@sul.com.br) Paulo Henrique R Pinheiro
Copyright © 2003-2006 Pavel Maryanov (acid_jack@ukr.net)
Copyright © 2005-2007 Phan Vinh Thinh (teppi82@gmail.com)
Copyright © 2002-2003 PrimoŸ Peterlin <primoz.peterlin@biofiz.mf.uni-lj.si>
Copyright © 2008 Ray Wang (wanglei1123@gmail.com)
Copyright © 1999-2000 Red Hat Software
Copyright © 2002-2011 Red Hat, Inc.
Copyright © 1999 Ricardo Stefani (ricardos@francanet.com.br)
Copyright © 2000-2001 Richard Gooch
Copyright © 1992-1995 Rickard E. Faith (faith@cs.unc.edu)
Copyright © 1996, 2003 Rickard E. Faith (faith@acm.org)
Copyright © 1993 Rick Sladkey (jrs@world.std.com)
Copyright © 2004 Robert Love
Copyright © 2001 Rodrigo Stulzer Lopes (rodrigo@conectiva.com.br)
Copyright © 2010 Rosetta Contributors and Canonical Ltd.
Copyright © 2008 Roy Peled, the roy peled -at- gmail
Copyright © 1994 Salvatore Valente (svalente@mit.edu)
Copyright © 2001-2003 Santiago Vila Doncel (sanvila@unex.es)
Copyright © 2003-2005 Silicon Graphics, Inc.
Copyright © 2005-2006 Simon Mihevc (simonmihevc@volja.net)
Copyright © 2000 (support@turbolinux.com)
Copyright © 2007 SUSE LINUX Products GmbH
Copyright © 1993 Theodore Ts'o (tytso@athena.mit.edu)
Copyright © 1993-2008 Theodore Ts'o
Copyright © 2001, 2003 Theodore Y. Ts'o
Copyright © 1980, 1983, 1985, 1987-1994 The Regents of the University of California
Copyright © 2008 Tilman Schmidt (tilman@imap.cc)
Copyright © 1999-2002 Transmeta Corporation
Copyright © UNIX System Laboratories, Inc.
Copyright © 2010 Wei-Lun Chao (chaoweilun@gmail.com)
```

Copyright © 2000 Werner Almesberger

git://git.debian.org/~lamont/util-linux.git GNU General Public License (GPL) Version 2.0 : Appendix C, or newer

This is the Debian GNU/Linux prepackaged version of util-linux.

This package was put together by Guy Maor <maor@debian.org> and later maintained by Sean 'Shaleh' Perry <shaleh@debian.org>, and Adrian Bunk <bunk@stusta.de>.

The current maintainer is LaMont Jones LaMont Jones Lamont@debian.org.

See also: git://git.debian.org/~lamont/util-linux.git

It was downloaded from:

ftp://ftp.us.kernel.org/pub/linux/utils/util-linux-ng/

Upstream maintainers include:

Maintainer: Karel Zak <kzak@redhat.com>

Past Maintainer: Adrian Bunk <bunk@fs.tum.de>

Past Maintainer: Andries Brouwer <aeb@cwi.nl>

See also /usr/share/doc/util-linux/AUTHORS

Copyright:

A variety of people and entities, as befits the nature of the package.

See the individual sources for exact copyright holder information.

License:

The project doesn't use same license for all code. There is code with:

- * GPLv2+ (GNU General Public License version 2, or any later version)
- * GPLv2 (GNU General Public License version 2)
- * BSD with advertising
- * Public Domain

Please, check source code for more details. A license is usually at the start of each source file.

Anything lacking an explicit license may be redistributed under the terms of the GNU GPL Version 2 or later: Appendix C

Velocity Engine

© 2006-2010 The Apache Software Foundation

http://velocity.apache.org/

Apache License, Version 2.0: Appendix A

Velocity Tools

Apache Velocity Tools

Copyright (C) 2000-2007 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/).

http://velocity.apache.org/

Apache License, Version 2.0: Appendix A

xbDOM.js

The contents of this file are subject to the Mozilla Public License Version 1.1 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.mozilla.org/MPL/

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

The Initial Developer of the Original Code is Netscape Corporation.

Portions created by the Initial Developer are Copyright © 2001 the Initial Developer. All Rights Reserved.

Contributor(s): Bob Clary

bclary@netscape.com>

http://archive.bclary.com/lib/js/xbDOM.js

Alternatively, the contents of this file may be used under the terms of either the GNU General Public License Version 2 or later (the "GPL"), or the GNU Lesser General Public License Version 2.1 or later (the "LGPL"), in which case the provisions of the GPL or the LGPL are applicable instead of those above. If you wish to allow use of your version of this file only under the terms of either the GPL or the LGPL, and not to allow others to use your version of this file under the terms of the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the GPL or the LGPL. If you do not delete the provisions above, a recipient may use your version of this file under the terms of any one of the MPL, the GPL or the LGPL.

XDR library

Written by Sun Microsystems, Inc. 1987

http://tools.ietf.org/rfc/rfc1014.txt

Sun RPC is a product of Sun Microsystems, Inc. and is provided for unrestricted use provided that this legend is included on all tape media and as a part of the software program in whole or part. Users may copy or modify Sun RPC without charge, but are not authorized to license or distribute it to anyone else except as part of a product or program developed by the user.

SUN RPC IS PROVIDED AS IS WITH NO WARRANTIES OF ANY KIND INCLUDING THE WARRANTIES OF DESIGN, MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE.

Sun RPC is provided with no support and without any obligation on the part of Sun Microsystems, Inc. to assist in its use, correction, modification or enhancement.

SUN MICROSYSTEMS, INC. SHALL HAVE NO LIABILITY WITH RESPECT TO THE INFRINGEMENT OF COPYRIGHTS, TRADE SECRETS OR ANY PATENTS BY SUN RPC OR ANY PART THEREOF.

In no event will Sun Microsystems, Inc. be liable for any lost revenue or profits or other special, indirect and consequential damages, even if Sun has been advised of the possibility of such damages.

Sun Microsystems, Inc.

2550 Garcia Avenue

Mountain View, California 94043

Xerces

Copyright © 1999-2012 The Apache Software Foundation.

http://xerces.apache.org/

Apache License, Version 2.0: Appendix A

XML RPC

Apache XML-RPC

Copyright 1999-2009 The Apache Software Foundation

http://ws.apache.org/xmlrpc/

https://mvnrepository.com/artifact/org.apache.xmlrpc

Apache License, Version 2.0: Appendix A

Zlib library

zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.7, May 2nd, 2012

Copyright © 1995-2012 Jean-loup Gailly and Mark Adler

http://zlib.net/

http://zlib.net/zlib_license.html

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

- 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
- **2.** Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- **3.** This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler jloup@gzip.org madler@alumni.caltech.edu

Appendix A. Apache License, Version 2.0

Apache License

Version 2.0, January 2004

http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution.

You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- 1. You must give any other recipients of the Work or Derivative Works a copy of this License;
- 2. You must cause any modified files to carry prominent notices stating that You changed the files; and
- 3. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

4. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions.

Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks.

This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty.

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability.

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability.

While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Appendix B. OpenSSL License

OpenSSL License

Copyright © 1998-2019 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** All advertising materials mentioning features or use of this software must display the following acknowledgment:
 - "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- **4.** The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- **5.** Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 6. Redistributions of any form whatsoever must retain the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)" THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright © 1995-1998 Eric Young (eay@cryptsoft.com). All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL. This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed.

If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- **1.** Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- **3.** All advertising materials mentioning features or use of this software must display the following acknowledgement:
 - "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)."
 - The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).
- **4.** If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:

"This product includes software written by Tim Hudson (tjh@cryptsoft.com)."

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Appendix C. GNU General Public License (GPL) Version 2.0

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

http://www.gnu.org/licenses/old-licenses/gpl-2.0.html

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.
- 7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and an idea of what it does. Copyright (C) yyyy name of author

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker. signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the <u>GNU Lesser General Public License</u> instead of this License.

```
# Copyright (c) 2000, 2002 Silicon Graphics, Inc. All Rights
Reserved.
# Copyright (C) 2009 Andreas Gruenbacher <agruen@suse.de>
#
# This program is free software: you can redistribute it and/or
modify it
# under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 2 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program. If not, see <http://www.gnu.org/
licenses/>.
#
```

Appendix D. GNU General Public License (GPL) Version 3.0

http://www.gnu.org/licenses/gpl.html

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright © 2007 Free Software Foundation, Inc. http://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".

- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it</pre>
does.>
    Copyright (C) <year> <name of author>
    This program is free software: you can redistribute it and/or
    it under the terms of the GNU General Public License as
published by
    the Free Software Foundation, either version 3 of the License,
    (at your option) any later version.
    This program is distributed in the hope that it will be useful,
    but WITHOUT ANY WARRANTY; without even the implied warranty of
    MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
    GNU General Public License for more details.
    You should have received a copy of the GNU General Public
License
    along with this program. If not, see <a href="http://www.gnu.org/">http://www.gnu.org/</a>
licenses/>.
```

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see http://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read http://www.gnu.org/philosophy/why-not-lgpl.html.

Appendix E. GNU LESSER GENERAL PUBLIC LICENSE

http://www.gnu.org/licenses/lgpl-2.1.html

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

Chapter 2: Introduction to Licensing

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
- 11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

Appendix F. OSI - The MIT License

http://www.opensource.org/licenses/mit-license.php

The MIT License (MIT)

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

Chapter 2: Introduction to Licensing

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Appendix G. BSD license (3-clause)

http://www.opensource.org/licenses/BSD-3-Clause

BSD License

Copyright (c) <YEAR>, <OWNER>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the <ORGANIZATION> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Appendix H. Common Development and Distribution License (CDDL) Version 1.1

- 1. Definitions.
- 1.1. "Contributor" means each individual or entity that creates or contributes to the creation of Modifications.

Chapter 2: Introduction to Licensing

- 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 Modification; 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.

Oracle 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-INFRINGING. 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. If You assert a patent infringement claim against Participant alleging that the Participant Software directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.
- 6.4. 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 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)

The code released under the CDDL 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.

Appendix I. Common Development and Distribution License (CDDL) Version 1.0

- 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 Modification; 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
- (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 recipient's 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-INFRINGING. 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 PARTYÕS 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

8. U.S. GOVERNMENT END USERS.

APPLY TO YOU.

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)

The code released under the CDDL 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.









