Oracle® Enterprise Communications Broker – P-Cz4.0.0

Program Documentation – License Document Jun 2022

Contents

Copyright Notices	3
License Restrictions Warranty/Consequential Damages Disclaimer	3
Warranty Disclaimer	
Restricted Rights Notice	3
Hazardous Applications Notice	3
Trademark Notice	3
Alpha and Beta Draft Documentation Notice	4
Revenue Recognition Notice	4
Beta Program Notice	4
Documentation Accessibility	4
Access to Oracle Support	5
Election to use GPL v2 / LGPL v2.1 instead of GPL v3 / LGPL v3 where applicable	5
Third Party Content, Products, and Services Disclaimer	5
Oracle Linux License Agreement	5
Oracle Linux License Agreement Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N	
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N	otes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software	otes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software	lotes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure	lotes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1)	lotes10 12 12 12
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0)	lotes10 12 12 12
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0)	lotes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix D: Apache Public License.	lotes10 12 12 13
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix D: Apache Public License Appendix E: Mozilla Public License 2.0	lotes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix D: Apache Public License Appendix E: Mozilla Public License 2.0 Appendix F: Mocana License	lotes10
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix E: Mozilla Public License 2.0 Appendix F: Mocana License Appendix G: Oracle JET 11.1.6.	lotes10 12 12 12 13
Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing N Third-Party Commercial and Open Source Software Commercial Software Open Source Disclosure Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1) Appendix B: GNU General Public License, version 2 (GPL-2.0) Appendix C: GNU General Public License, version 3 (GPL-3.0) Appendix D: Apache Public License Appendix E: Mozilla Public License 2.0 Appendix F: Mocana License	lotes10 12 12 12 13

Copyright Notices

Copyright (c) 2000, 2022 Oracle and/or its affiliates. All rights reserved.

License Restrictions Warranty/Consequential Damages Disclaimer

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or de-compilation of this software, unless required by law for interoperability, is prohibited.

Warranty Disclaimer

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

Hazardous Applications Notice

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Trademark Notice

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used

Program Documentation – License Document Oracle Enterprise Communications Broker – P-Cz4.0.0 under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

START OF NOTICES APPLICABLE TO ALPHA AND BETA PRE-RELEASES ONLY

The following notices apply to pre-release software only. The reader is required to sign a nondisclosure agreement prior to receiving or using this software:

Alpha and Beta Draft Documentation Notice

This documentation is in preproduction status and is intended for demonstration and preliminary use only. It may not be specific to the hardware on which you are using the software. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to this documentation and will not be responsible for any loss, costs, or damages incurred due to the use of this documentation.

Revenue Recognition Notice

The information contained in this document is for informational sharing purposes only and should be considered in your capacity as a customer advisory board member or pursuant to your beta trial agreement only. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described in this document remains at the sole discretion of Oracle.

This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this confidential material is subject to the terms and conditions of your Oracle Software License and Service Agreement, which has been executed and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced, or distributed to anyone outside Oracle without prior written consent of Oracle. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

Beta Program Notice

ORACLE CONFIDENTIAL - For authorized use only. Do not distribute to third parties.

END OF NOTICES APPLICABLE TO ALPHA AND BETA PRE-RELEASES ONLY

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support.

For information, visit <u>http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info</u> or <u>http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</u> if you are hearing impaired.

Election to use GPL v2 / LGPL v2.1 instead of GPL v3 / LGPL v3 where applicable

Oracle elects to use only the GNU Lesser General Public License version 2.1 (LGPL)/GNU General Public License version 2 (GPL) for any software where a choice of LGPL/GPL license versions are made available with the language indicating that LGPLv2.1/GPLv2 or any later version may be used, or where a choice of which version of the LGPL/GPL applies is unspecified. Where a choice is available between the GPL or the LGPL and any other license, and no specific election has been made with respect to that particular component, Oracle chooses the other license.

Third Party Content, Products, and Services Disclaimer

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, products, or services.

For components that reference the GNU General Public License (GPL), please find this license in the Appendix.

Oracle Linux License Agreement

We, us, our and Oracle refers to Oracle America, Inc. "You and Your" refers to the individual or entity that has acquired the Oracle Linux programs. Oracle Linux programs refers to the Linux software product which you have acquired. License refers to your right to use the Oracle Linux programs under the terms of this Agreement and the licenses referenced herein. This Agreement is governed by the substantive and procedural laws of the United States and the State of California and you and Oracle agree to submit to the exclusive jurisdiction of, and venue in, the courts of San Francisco or Santa Clara counties in California in any dispute arising out of or relating to this Agreement.

We are willing to provide a copy of the Oracle Linux programs to you only upon the condition that you accept all of the terms contained in this Agreement. Read the terms carefully and indicate your acceptance by either selecting the Accept button at the bottom of the page to confirm your acceptance, if you are downloading the Oracle Linux programs, or continuing to install the Oracle Linux programs, if you have received this Agreement during the installation process. If you are not willing to be bound by these terms, select the Do Not Accept

button or discontinue the installation process.

1. Grant of Licenses to the Oracle Linux programs - Subject to the terms of this Agreement, Oracle grants to you a license to the Oracle Linux programs under the GNU General Public License version 2.0. The Oracle Linux programs contain many components developed by Oracle and various third parties. The license for each component is located in the licensing documentation and/or in the component's source code. In addition, a list of components may be delivered with the Oracle Linux programs and the Additional Oracle Linux programs (as defined below) or accessed online at http://oss.oracle.com/linux/legal/oracle-list.html. The source code for the Oracle Linux Programs and the Additional Oracle Linux programs can be found and accessed online at https://oss.oracle.com/linut, supersede or modify your rights under the license associated with any separately licensed individual component.

2. Licenses to Additional Oracle Linux programs - Certain third-party technology (collectively the Additional Oracle Linux programs) may be included on the same medium or as part of the download of Oracle Linux programs you receive, but is not part of the Oracle Linux programs. Each Additional Oracle Linux program is licensed solely under the terms of the Mozilla Public License, Apache License, Common Public License, GNU Lesser General Public License, Netscape Public License or similar license that is included with the relevant Additional Oracle Linux program.

3. Ownership - The Oracle Linux programs and their components and the Additional Oracle Linux programs are owned by Oracle or its licensors. Subject to the licenses granted and/or referenced herein, title to the Oracle Linux programs and their components and the Additional Oracle Linux programs remains with Oracle and/or its licensors.

4. Trademark License - You are permitted to distribute unmodified Oracle Linux programs or unmodified Additional Oracle Linux programs without removing the trademark(s) owned by Oracle or its affiliates that are included in the unmodified Oracle Linux programs or unmodified Additional Oracle Linux programs (the Oracle Linux trademarks). You may only distribute modified Oracle Linux programs or modified Additional Oracle Linux programs (the Oracle Linux trademarks). You may only distribute modified Oracle Linux programs or modified Additional Oracle Linux programs if you remove relevant images containing the Oracle Linux trademarks. Certain files, identified in http://oss.oracle.com/linux/legal/oracle-list.html, include such trademarks. Do not delete these files, as deletion may corrupt the Oracle Linux programs or Additional Oracle Linux programs. You are not granted any other rights to Oracle Linux trademarks, and you acknowledge that you shall not gain any proprietary interest in the Oracle Linux trademarks. All goodwill arising out of use of the Oracle Linux trademarks shall inure to the benefit of Oracle or its affiliates. You may not use any trademarks owned by Oracle or its affiliates (including ORACLE) or potentially confusing variations (such as, ORA) as a part of your logo(s), product name(s), service name(s), company name, or domain name(s) even if such products, services or domains include, or are related to, the Oracle Linux programs or Additional Oracle Linux programs.

5. Limited Warranty - THE ORACLE LINUX PROGRAMS AND ADDITIONAL ORACLE LINUX PROGRAMS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. WE FURTHER DISCLAIM ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

6. Limitation of Liability - IN NO EVENT SHALL WE BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOSS OF PROFITS, REVENUE, DATA OR DATA USE, INCURRED BY YOU OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. OUR ENTIRE LIABILITY FOR DAMAGES HEREUNDER SHALL IN NO EVENT EXCEED ONE HUNDRED DOLLARS (U.S.).

7. No Technical Support - Our technical support organization will not provide technical support, phone support, or updates to you for the materials licensed under this Agreement. Technical support, if available, may be acquired from Oracle or its affiliates under a separate agreement.

8. Relationship between the Parties - The relationship between you and us is that of licensee/licensor. Neither party will represent that it has any authority to assume or create any obligation, express or implied, on behalf of the other party, nor to represent the other party as agent, employee, franchisee, or in any other capacity. Nothing in this Agreement shall be construed to limit either party's right to independently develop or distribute

programs that are functionally similar to the other party's products, so long as proprietary information of the other party is not included in such programs.

9. Entire Agreement - You agree that this Agreement is the complete Agreement for the Oracle Linux programs and the Additional Oracle Linux programs, and this Agreement supersedes all prior or contemporaneous Agreements or representations. If any term of this Agreement is found to be invalid or unenforceable, the remaining provisions will remain effective. Neither the Uniform Computer Information Transactions Act nor the United Nations Convention on the International Sale of Goods applies to this agreement.

You can find a copy of the GNU General Public License version 2.0 in the copying or license file included with the Oracle Linux programs or here: <u>http://oss.oracle.com/licenses/GPL-2</u>.

To check the version of the Linux Kernel in the release please run the ACLI command "Show version image". As an example, The Linux Kernel version reported would look like "Linux kernel linux-uek5 v4.14.32-2".

To check the version of the Oracle Linux in the release please run the ACLI command "show version". As an example, The Linux OS version reported would look like "Oracle Linux branches-7/el7-u4 {2018-03-28T07:00:00+0000}".

OFFER TO PROVIDE SOURCE CODE

For software that you receive from Oracle in binary form that is licensed under an open source license that gives you the right to receive the source code for that binary, you can obtain a copy of the applicable source code from https://oss.oracle.com/sources/ or http://www.oracle.com/goto/opensourcecode. Alternatively, if the source code for the technology was not provided to you with the binary, you can also receive a copy of the source code on physical media by submitting a written request to:

Oracle America, Inc.

Attn: Associate General Counsel

Development and Engineering Legal

500 Oracle Parkway, 10th Floor

Redwood Shores, CA 94065

Or, you may send an email to Oracle using the form linked from http://www.oracle.com/goto/opensourcecode. Your written or emailed request should include:

- * The name of the component or binary file(s) for which you are requesting the source code
- * The name and version number of the Oracle product
- * The date you received the Oracle product
- * Your name
- * Your company name (if applicable)
- * Your return mailing address and email
- * A telephone number in the event we need to reach you.

We may charge you a fee to cover the cost of physical media and processing. Your request must be sent (i) within three (3) years of the date you received the Oracle product that included the component or binary file(s) that are

the subject of your request, or (ii) in the case of code licensed under the GPL v3, for as long as Oracle offers spare parts or customer support for that product model or version.

Terms for Other Oracle Programs

General - This Section contains license terms for the software included in the product that you wish to install or use. Oracle Linux is the operating system software, the section above applies with respect to Oracle Linux.

"Program" or "Programs" means, for the purpose of this section, each Oracle Software included in the product, except for the Oracle Linux operating system software.

License - Except as set forth in the Oracle Linux license agreement, by accessing and using a Program, you agree that (a) you have a valid License Agreement covering your use of the Program and that your use of the program is subject to such License Agreement; or (b) subject to this Agreement, the Oracle Trial License Terms and conditions in Clause 3 below cover your use of the Program.

Oracle Trial License Terms and Conditions

General Information

The "Trial Term" shall be 30 Days from the date of your acceptance of the terms and conditions of this Agreement.

- I. License Grant. These Oracle Trial License Terms and Conditions ("Trial License") grant you the temporary right to use the Programs for evaluation purposes on your single computer designated by you. These rights are granted only to you and may not be assigned or transferred to any other party. You may use the Programs only for evaluation and testing and not for production use. You must enter into a separate agreement to obtain production license rights and technical support for the Programs. The rights granted to you under this Trial License expire at the end of the Trial Term. If you decide to use any of the Programs after the end of the Trial Term, you must acquire a license for each Program from Oracle. You shall not: (a) remove any product identification, copyright notices, or other notices or proprietary restrictions from the Programs; (b) use the Programs for commercial timesharing, rental, or service bureau use; (c) cause or permit reverse engineering, disassembly, or decompilation of the Programs; (d) disclose results of any benchmark tests of any Programs to any third party without Oracle's prior written approval; or (e) duplicate and/or install the Programs at any time. Upon termination or expiration, you shall cease using the Programs.
- II. Termination:

If you do not obtain a Program use license at the end of the Trial Term, you shall (a) cease using the Programs, and (b) certify to Oracle that you have destroyed or have returned to Oracle the Programs and all copies. This requirement applies to copies in all forms, partial and complete, in all types of media and computer memory, and whether or not merged into other materials. Your rights to continue to use Separately Licensed Third Party Technology shall be governed by the Separate Terms accepted with the use of such technology.

III. Exclusion Of Warranty:

THE PROGRAM IS PROVIDED "AS IS" TO YOU FOR EVALUATION PURPOSES ONLY, EXCLUSIVE OF ANY WARRANTY, INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED.

IV. Nondisclosure:

By virtue of this Trial License, the parties may have access to information that is confidential to one another ("Confidential Information"). We each agree to disclose only information that is required for the

performance of obligations under this Agreement. Confidential Information shall be limited to the terms and pricing under this Trial License, any source code for the Programs, and all information clearly identified as confidential.

A party's Confidential Information shall not include information that: (a) is or becomes a part of the public domain through no act or omission of the other party; (b) was in the other party's lawful possession prior to the disclosure and had not been obtained by the other party either directly or indirectly from the disclosing party; (c) is lawfully disclosed to the other party by a third party without restriction on the disclosure; or (d) is independently developed by the other party.

The parties agree to hold each other's Confidential Information in confidence for a period of three years from the date of disclosure. Also, we each agree to disclose Confidential Information only to those employees or agents who are required to protect it against unauthorized disclosure. Nothing shall prevent either party from disclosing the terms or pricing under this Trial License in any legal proceeding arising from or in connection with this Trial License or disclosing the information to a federal or state governmental entity as required by law.

V. Limitation Of Liability:

NEITHER PARTY SHALL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, OR ANY LOSS OF PROFITS, REVENUE, DATA, OR DATA USE. ORACLE'S MAXIMUM LIABILITY FOR ANY DAMAGES UNDER THIS TRIAL LICENSE AND YOUR ORDER, WHETHER IN CONTRACT OR TORT, SHALL BE LIMITED TO THE AMOUNT OF THE FEES YOU PAID ORACLE UNDER THIS TRIAL LICENSE, AND IF SUCH DAMAGES RESULT FROM YOUR USE OF PROGRAMS OR SERVICES, SUCH LIABILITY SHALL BE LIMITED TO THE FEES YOU PAID ORACLE FOR THE DEFICIENT PROGRAM OR SERVICES GIVING RISE TO THE LIABILITY.

VI. Miscellaneous

Upon 45 days written notice, Oracle may audit your use of the Programs. You agree to cooperate with Oracle's audit and provide reasonable assistance and access to information. You agree to pay within 30 days of written notification any underpaid fees. If you do not pay, Oracle can end your technical support, licenses and/or this Trial License.

Notwithstanding the second paragraph of Clause 6 in Section A, if your company is located and will be using the Programs in (a) Argentina, the laws of Argentina will apply to this Trial License and jurisdiction will be in the Courts of Buenos Aires; (b) Brazil, the laws of Brazil will apply to this Trial License and jurisdiction will be in the Courts of Sao Paulo; (c) Costa Rica, the laws of Costa Rica will apply to this Trial License and jurisdiction will be in the Courts of San Jose; (d) Colombia, the laws of Colombia will apply to this Trial License and jurisdiction will be in the Courts of San Jose; (d) Colombia, the laws of Colombia will apply to this Trial License and jurisdiction will be in the Courts of Bogota; (e) Chile, the laws of Chile will apply to this Trial License and jurisdiction will be in the Courts of Santiago de Chile; (f) Ecuador, the laws of Ecuador will apply to this Trial License and jurisdiction will be in the Courts of Santiago de Chile; (g) Peru, the laws of Peru will apply to this Trial License and jurisdiction will be in the Courts of Lima; (h) Puerto Rico, the laws of the Commonwealth of Puerto Rico will apply to this Trial License and jurisdiction will be in the Courts of Lima; (h) Puerto Rico, the laws of the Commonwealth of Puerto Rico will apply to this Trial License and jurisdiction will be in the Courts of Mexico City; and (j) Venezuela, the laws of Venezuela will apply to this Trial License and jurisdiction will be in the Courts of Mexico City; and (j) Venezuela, the laws of Venezuela will apply to this Trial License and jurisdiction will be in the Courts of Caracas.

Oracle Employees: Under no circumstances are Oracle Employees authorized to download software for the purpose of distributing it to customers. Oracle products are available to employees for internal use or demonstration purposes only. In keeping with Oracle's trade compliance obligations under U.S. and applicable multilateral law, failure to comply with this policy could result in disciplinary action up to and including termination.

Oracle Enterprise Communications Broker – P-Cz4.0.0 – Licensing Notes

This Licensing Information document is a part of the product or program documentation under the terms of your Oracle license agreement and is intended to help you understand the program editions, entitlements, restrictions, prerequisites, special license rights, and/or separately licensed third party technology terms associated with the Oracle software program(s) covered by this document (the "Program(s)"). Entitled or restricted use products or components identified in this document that are not provided with the particular Program may be obtained from the Oracle Software Delivery Cloud website (<u>https://edelivery.oracle.com</u>) or from media Oracle may provide. If you have a question about your license rights and obligations, please contact your Oracle sales representative, review the information provided in Oracle's Software Investment Guide (<u>http://www.oracle.com/us/corporate/pricing/software-investment-guide/index.html</u>), and/or contact the applicable Oracle License Management Services representative listed on <u>http://www.oracle.com/us/corporate/license-management-services/index.html</u>

Product	Subproduct	Licensing Description
	Oracle Enterprise Communications Broker – Network- Wide Concurrent Session Perpetual	 Product Editions & Permitted Features Determines the number of concurrent network wide sessions licensed for the Oracle Enterprise Communications Broker This license provides the ability to run the Oracle Enterprise Communications Broker software. The following features are included in the Network Wide Session License: SIP - Enables all SIP functionality on the Oracle Enterprise Communications Broker. Routing - Enables configuration and use of SIP-based session routing on the Oracle Enterprise Communications Broker. ENUM - Allows the use of ENUM-based server as an external database for query and response. Load Balancing - Allows configuration and use of Session Agent Groups in order to perform sophisticated load balancing of traffic across core network elements. HA - Enables sending and receiving High Availability (HA) heartbeat and check-pointing messages to an HA Peer and take over or relinquish Active status. Allows configuration of the redundancy configuration object. Accounting - Allows the Oracle Enterprise Communications Broker to create call accounting records using Radius or by collecting the information in flat files that can be stored locally or pushed via FTP to an external server. DoS - Enables denial of service protection capability for the Oracle Enterprise Communications Broker system including DDOS controls and rate limiting. ACP - Allows the Oracle Enterprise Communications Broker system to respond to external ACP requests (required for Oracle Communications Session Delivery Management Suite interaction). Prerequisite Products & Restricted Use Licenses N/A
	Oracle Communications Enterprise Communications Broker, Transport Layer Security (TLS) – Network-Wide Concurrent Session Perpetual	 Product Editions and Permitted Features Enables the use of TLS for encryption of SIP signaling for ECB Pre-requisite Products Oracle Enterprise Communications Broker session capacity This license requires an equal number of session capacity licenses

Third-Party Commercial and Open Source Software

Commercial Software

Commercial software used in Oracle Enterprise Communications Broker – P-CZ4.0.0 is identified in the following table with the following license notes, restrictions, and disclaimers.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
Icon Laboratories	Envoy SNMP 3.6	Acme Packet shall not remove or alter and shall likewise require its distributors and End Users to refrain from removing or altering any of lcon''s or grantor''s copyright notices or restrictive or ownership legends appearing on or in the Program and shall reproduce or require reproduction of such legends on all copies permitted to be made. (Agreement, Sec. 3.2 - Pg. 4)
Mocana	Embedded IKE Not set	<u>See APPENDIX F – Mocana License</u>
	Mocana Embedded SSH Server Not set	<u>See APPENDIX F – Mocana License</u>
	NanoSSH Server Not set	<u>See APPENDIX F – Mocana License</u>
	NanoSec Advanced Not set	See APPENDIX F – Mocana License
Skype Limited	silk 1.0.9	Usage License:
		======================================
		Copyright (c) 2006-2010, Skype Limited. All rights reserved.
		Redistribution and use in source and binary forms, with or without modification, (subject to the limitations in the disclaimer below) 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 Skype Limited, nor the names of specific

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		contributors, may be used to endorse or promote products derived from this software without specific prior written permission.
		NO EXPRESS OR IMPLIED LICENSES TO ANY PARTY'S PATENT RIGHTS ARE GRANTED BY THIS LICENSE. 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 USEOF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Open Source Disclosure

Oracle takes no responsibility for its use or distribution of any open source or shareware software or documentation and disclaims any and all liability or damages resulting from use of said software or documentation. Open source software used in Oracle Communications Session Border Controller is identified in the following table with the following license notes, restrictions, and disclaimers.

Election to use GPL v2 / LGPL v2.1 instead of GPL v3 / LGPL v3 where applicable

Oracle elects to use only the GNU Lesser General Public License version 2.1 (LGPL)/GNU General Public License version 2 (GPL) for any software where a choice of LGPL/GPL license versions are made available with the language indicating that LGPLv2.1/GPLv2 or any later version may be used, or where a choice of which version of the LGPL/GPL applies is unspecified. Where a choice is available between the GPL or the LGPL and any other license, and no specific election has been made with respect to that particular component, Oracle chooses the other license.

The GNU GPL v2 license applies to the Enterprise Linux compilation and any portions of Enterprise Linux it does not conflict with. Whenever this policy does conflict with the copyright of any individual portion of Enterprise Linux, it does not apply.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
Andreas Gruenbacher	acl 2.2.51-15	Most components of the "acl" package are licensed under Version 2.1 of the GNU Lesser General Public License (see below). below. Some components (as annotated in the source) are licensed under Version 2 of the
		GNU General Public License (see COPYING). See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
		Most components of the "acl" package are licensed under Version 2.1 of the GNU Lesser General Public License (see COPYING.LGPL). Some components (as annotated in the source) are licensed
		under Version 2 of the GNU General Public License <u>See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)</u>
Andreas Gruenbacher	libattr 2.4.46-13	 * All Rights Reserved. * * This program is free software: you can redistribute it and/or modify it
		* under the terms of the GNU Lesser General Public License as published
		 * by the Free Software Foundation, either version 2.1 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 Lesser General Public License for more details. *
		* You should have received a copy of the GNU Lesser General Public License * along with this program. If not, see <http: licenses="" www.gnu.org=""></http:> .
		/*
		Copyright (C) 2006 Andreas Gruenbacher <agruen@suse.de>, SuSE Linux AG.</agruen@suse.de>
		This program is free software; you can redistribute it and/or
		modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either
		version 2.1 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
		Lesser General Public License for more details.
		You should have received a copy of the GNU Lesser General Public License
		Along

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		*/ See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
Andreas Gruenbacher	libpam 1.1.8-23	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:
		 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.
Artesyn Embedded Computing, Inc.	PCIE 8120 Linux Kernel driver and related software including DPDK driver Current 1.6.5-3 or later	 * Copyright (c) 2018 Artesyn Technologies * 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 is will be useful, * but WITHOUT ANY WARRANTY; without even the implied warranty of * MERCHANTABLILITY or FITNESS FOR A PARTICULAR PURPOSE. See the * GNU General Public License for more details./
		See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Bob Jenkins	Lookup3 May	http://burtleburtle.net/bob/c/lookup3.c

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
	2006	lookup3.c, by Bob Jenkins, May 2006, Public Domain. These are functions for producing 32-bit hashes for hash table lookup. hashword(), hashlittle(), hashlittle2(), hashbig(), mix(), and final() are externally useful functions. Routines to test the hash are included if SELF_TEST is defined. You can use this free for any purpose. It's in the public domain. It has no warranty.
Bull S.A. et. al	Libtirpc 0.2.4-0.16	Include the following in documentation: /* Copyright (c) Copyright (c) Bull S.A. 2005 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 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. */
Cisco Systems	Tacacs+ F4.0.4.19	The original cisco code carries the following license/disclaimer/whatever: /* Copyright (c) 1995-1998 by Cisco systems, Inc. Permission to use, copy, modify, and distribute this software for any purpose and without fee is hereby granted, provided that this copyright and permission notice appear on all copies of the software and supporting documentation, the name of Cisco Systems, Inc. not be used in advertising or publicity pertaining to distribution of the program without specific prior permission, and notice be given in supporting documentation that modification, copying and distribution is by permission of Cisco Systems, Inc. Cisco Systems, Inc. makes no representations about the suitability of this software for any purpose. THIS SOFTWARE IS PROVIDED ``AS IS'' AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND

Product(s) and Version(s)	Licensing Description/Disclaimer
	FITNESS FOR A PARTICULAR PURPOSE. */
	as for the bits i have added or contributions i have received from other folks, they are noted in the CHANGES file post version 4.0.3a. please give credit where due. thanks.
	tac_plus.c
	/* * \$Id: tac_plus.c,v 1.59 2009-07-16 23:31:26 heas Exp \$ *
	* TACACS_PLUS daemon suitable for using on Unix systems. *
	* October 1994, Lol Grant *
	 * Copyright (c) 1994-1998 by Cisco systems, Inc. * Permission to use, copy, modify, and distribute this software for * any purpose and without fee is hereby granted, provided that this * copyright and permission notice appear on all copies of the * software and supporting documentation, the name of Cisco Systems, * Inc. not be used in advertising or publicity pertaining to * distribution of the program without specific prior permission, and * notice be given in supporting documentation that modification, * copying and distribution is by permission of Cisco Systems, Inc.
	 * Cisco Systems, Inc. makes no representations about the suitability * of this software for any purpose. THIS SOFTWARE IS PROVIDED ``AS * IS'' AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, * WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND * FITNESS FOR A PARTICULAR PURPOSE. */
	regexp.c /*
	 * regcomp and regexec regsub and regerror are elsewhere * @(#)regexp.c 1.3 of 18 April 87 *
	* Copyright (c) 1986 by University of Toronto. * Written by Henry Spencer. Not derived from licensed software. *
	 * Permission is granted to anyone to use this software for any * purpose on any computer system, and to redistribute it freely, * subject to the following restrictions:
	 * 1. The author is not responsible for the consequences of use of * this software, no matter how awful, even if they arise * from defects in it. *
	 * 2. The origin of this software must not be misrepresented, either * by explicit claim or by omission. *
	 * 3. Altered versions must be plainly marked as such, and must not * be misrepresented as being the original software. *
	 * Beware that some of this code is subtly aware of the way operator * precedence is structured in regular expressions. Serious changes in * regular-expression syntax might require a total rethink.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
Cisco Systems	libsrtp 2.3.0	<pre>/* * md4c.c - RSA Data Security, Inc., MD4 message-digest algorithm */ /* Copyright (C) 1990-2, RSA Data Security, Inc. All rights reserved. * * License to copy and use this software is granted provided that it * is identified as the "RSA Data Security, Inc. MD4 Message-Digest * Algorithm" in all material mentioning or referencing this software * or this function. * * License is also granted to make and use derivative works provided * that such works are identified as "derived from the RSA Data * Security, Inc. MD4 Message-Digest Algorithm" in all material * mentioning or referencing the derived work. * * RSA Data Security, Inc. makes no representations concerning either * the merchantability of this software or the suitability of this * software for any particular purpose. It is provided "as is" * without express or implied warranty of any kind. * * These notices must be retained in any copies of any part of this * documentation and/or software. */ License The srtp library and the test drivers distributed with it are licensed under the</pre>
		following BSDbased license. /* Copyright (c) 2001-2017 Cisco Systems, Inc. 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 Cisco Systems, Inc. nor the names of its

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* 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 HOLDERS 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.
Cisco Systems, Inc. and The Regents of the University of California	SCTP r8912	 * Copyright (c) 2001-2007, by Cisco Systems, Inc. All rights reserved. * * Redistribution and use in source and binary forms, with or without
cuinornia		* modification, are permitted provided that the following conditions are met: *
		* a) Redistributions of source code must retain the above copyright notice,
		* this list of conditions and the following disclaimer.
		* * b) 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. *
		* c) Neither the name of Cisco Systems, Inc. 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * 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) 1991, 1993 * The Regents of the University of California. 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.
		 * 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* 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.
Daniel Drake	libusbx 1.0.21-1	Copyright © 2001 Johannes Erdfelt <johannes@erdfelt.com> Copyright © 2007-2009 Daniel Drake <dsd@gentoo.org> Copyright © 2010-2012 Peter Stuge <peter@stuge.se> Copyright © 2008-2016 Nathan Hjelm <hjelmn@users.sourceforge.net> Copyright © 2009-2013 Pete Batard <pete@akeo.ie> Copyright © 2009-2013 Ludovic Rousseau <ludovic.rousseau@gmail.com> Copyright © 2010-2012 Michael Plante <michael.plante@gmail.com> http://www.gnu.org/licenses/lgpl-2.1.html See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)</michael.plante@gmail.com></ludovic.rousseau@gmail.com></pete@akeo.ie></hjelmn@users.sourceforge.net></peter@stuge.se></dsd@gentoo.org></johannes@erdfelt.com>
Daniel Stenberg	Curl 7.61.1-18	COPYRIGHT AND PERMISSION NOTICE Copyright (c) 1996 - 2018, Daniel Stenberg, , and many contributors, see the THANKS file. 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.
Dave Gamble	cJSON 1.7.14	Copyright (c) 2009-2017 Dave Gamble and cJSON contributors 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:

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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.
David Olson	Timezone Data	Unless specified below, all files in the tz code and data (including
David Olson	2022a-1.el7	this LICENSE file) are in the public domain.
		tzdata:
		# This file is in the public domain, so clarified as of
		# 2009-05-17 by Arthur David Olson.
		The files date.c, newstrftime.3, and strftime.c contain material derived from BSD and use the BSD 3-clause license.
		/* Copyright 1985, 1987, 1988 The Regents of the University of California.
		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. 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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. */
Digium	dahdi 3.1.0	See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Digium	libpri 1.6.0	<pre>/* * libpri: An implementation of Primary Rate ISDN * * Written by Mark Spencer <markster@digium.com> * * Copyright (C) 2001, Digium, Inc. * All Rights Reserved. */ /* * See http://www.asterisk.org for more information about * the Asterisk project. Please do not directly contact any of the maintainers of this project for assistance; * the project provides a web site, mailing lists and IRC * channels for your use. * * This program is free software, distributed under the terms of * the GNU General Public License Version 2 as published by the * Free Software Foundation. See the LICENSE file included with * this program for more details. * In addition, when this program is distributed work' or as a * 'derivative work' (but not mere aggregation), you can redistribute and/or modify the combination under the terms of the license * provided with that copy of Asterisk, instead of the license * provided with PRL_ or pri_ to indicate that they are part of this * library and to reduce potential naming conflicts. */ */ */* */* */* */* */*************</markster@digium.com></pre>
Fedora Project	Logrotate 3.8.6-19	See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Free Software Foundation	sed 4.2.2-7.el7	\$ bin/sedversion bin/sed (GNU sed) 4.2.2

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
Free Software Foundation, Inc.	ncurses 5.9- 14.20130511.el7_ 4	Copyright (C) 2012 Free Software Foundation, Inc. License GPLV3+: GNU GPL version 3 or later . This is free software: you are free to change and redistribute it. There is NO WARRANTY, to the extent permitted by law. Written by Jay Fenlason, Tom Lord, Ken Pizzini, and Paolo Bonzini. GNU sed home page: . General help using GNU software: . E-mail bug reports to: . Be sure to include the word ``sed" somewhere in the ``Subject." field. \$cat /usr/share/doc/sed-4.2.2/COPYING See APPENDIX C - GNU General Public License, version 3 (GPL-3.0) Licenses: Copyright (c) 1998-2006,2007 Free Software Foundation, Inc. Copyright (c) 1998-2003,2007 Free Software Foundation, Inc. Copyright (c) 1998-2007,2008 Free Software Foundation, Inc. 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, distribute with modifications, 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 substantia
Frodo Looijaard et.al	Imsensors (library) 3.4.0-8 (FOR SBC ONLY)	Im-sensors LGPLv2+ and GPLv3+ and GPLv2+ and Verbatim See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
Google	Breakpad 415b54ab	Overview: Development has confirmed that (a) there are approximately 3500 files in the breakpad package; and (b) they are licensed under the 3-Clause BSD license. Development has also confirmed that the core breakpad for Linux library consists of less than 200 of those files, all of which are licensed exclusively under the specific terms shown below, including the 3-Clause BSD license with the 2006 copyright notice. Other files from the breakpad distribution, including but not limited to files under the src/testing and src/third-party directories, and files specific to platforms other than Linux, are not part of the core breakpad library and may be licensed under the 3-Clause BSD license with different copyright notice dates. Development should work with Legal before distributing any such other files to ensure proper attributions are established.
		Verified LICENSE file is unchanged in git a1dbcdc compared to previous git c2d969c - I.Barker, Sep 11, 2017
		Copyright (c) 2006, Google Inc.
		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 Google Inc. 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Copyright 2001-2004 Unicode, Inc.
		Disclaimer
		This source code is provided as is by Unicode, Inc. No claims are made as to fitness for any particular purpose. No warranties of any kind are expressed or implied. The recipient agrees to determine applicability of information provided. If this file has been purchased on magnetic or optical media from Unicode, Inc., the sole remedy for any claim will be exchange of defective media within 90 days of receipt.
		Limitations on Rights to Redistribute This Code
		Unicode, Inc. hereby grants the right to freely use the information supplied in this file in the creation of products supporting the Unicode Standard, and to make copies of this file in any form for internal or external distribution as long as this notice remains attached.
Google	WebRTC project M85	Include the following in documentation: Copyright (c) 2011, The WebRTC project authors. 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 Google 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. Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the WebRTC code package. Google hereby grants to you a perpetual, worldwide, non-exclusive, no-charge, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer, and otherwise run, modify and propagate the contents of this

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		only to those patent claims, both currently owned by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of the WebRTC code package. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of the WebRTC code package or any code incorporated within this implementation of the WebRTC code package constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of the WebRTC code package shall terminate as of the date such litigation is filed.
Google	gperftools gperftools 2.9.1	The following attribution text is verified as correct for Component gperftools Version 2.8 - G. Robertson 8/19/2018
		Copyright (c) 2005, Google Inc.
		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 Google Inc. 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Fourth party licenses:
		src/third_party/valgrind.h /* -*- c -*-
		Notice that the following BSD-style license applies to this one file (valgrind.h) only. The rest of Valgrind is licensed under the terms of the GNU General Public License, version 2, unless otherwise indicated. See the COPYING file in the source distribution for details.
		This file is part of Valgrind, a dynamic binary instrumentation framework.
		Copyright (C) 2000-2008 Julian 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Notice that the above BSD-style license applies to this one file (valgrind.h) only. The entire rest of Valgrind is licensed under the terms of the GNU General Public License, version 2. See the COPYING file in the source distribution for details.
		*/
IBM Corp	libcgroup 0.41-21	Copyright IBM Corporation. 2007 Author: Dhaval Giani <dhaval@linux.vnet.ibm.com> Author: Balbir Singh balbir@linux.vnet.ibm.com Copyright Red Hat Inc. 2008 Author: Steve Olivieri <sjo@redhat.com> Author: Vivek Goyal <vgoyal@redhat.com> Copyright Red Hat, Inc. 2009, 2010 Authors: Ivana Hutarova Varekova <varekova@redhat.com> Copyright Red Hat, Inc. 2009, 2012 Author: Jan Safranek jsafrane@redhat.com Copyright (C) Matt Helsley, IBM Corp. 2005 Derived from fcctLc by Guillaume Thouvenin Original copyright notice follows: Copyright (C) 2005 BULL SA. Written by Guillaume Thouvenin <at> bull.net> This program is free software; you can redistribute it and/or modify it under the terms of version 2.1 of the GNU Lesser General Public License as published by the Free Software Foundation. This program is distributed in the hope that it would be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1) How to Apply These Terms to Your New Libraries If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting</at></varekova@redhat.com></vgoyal@redhat.com></sjo@redhat.com></dhaval@linux.vnet.ibm.com>
		redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License). To apply these terms, attach the following notices to the library. 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 a="" and="" brief="" does.="" give="" idea="" it="" library's="" line="" name="" of="" the="" to="" what=""></one>

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Copyright (C) <year> <name author="" of=""> This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. 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. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA Also add information on how to contact you by electronic and paper mail. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the library 'Frob' (a library for tweaking knobs) written by James Random Hacker. <signature coon="" of="" ty="">, 1 April 1990</signature></name></year>
		That's all there is to it!
Intel	Data Plane Development Kit	This package contains software provided in three functional areas:
	(DPDK) 20.11.2	Section I : User Space Components in binary format used by the application software (BSD or Public Domain). Section II : Linux Kernel Modules in binary format Section III : Example Code, neither used by nor distributed
		Each section is listed below, with license and author attributions.
		Certain files in this package are dual licensed as follows: "This file is provided under a dual BSD/GPLv2 license. When using or redistributing this file, you may do so under either license." and/or "This file is provided under a dual BSD/LGPLv2 license. When using or redistributing
		this file, you may do so under either license." Oracle elects to license such files under the terms of the BSD license as expressly permitted herein.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Section I: User Space Components (BSD or Public Domain)
		The user space components (i) are made available under a top-level 3-clause BSD license from Intel and other contributors, (ii) other BSD-type licenses from other individuals and entities; or (iii) have been put into the public domain, all as shown below in this Section I.
		Copyright 1982-1994 The Regents of the University of California
		Copyright 1996-1998 Theodore Ts'o
		Copyright 1998 Doug Rabson
		Copyright 2000 The NetBSD Foundation Inc
		Copyright 2001 Benno Rice
		Copyright 2001 David E. O'Brien
		Copyright 2001-2020 Intel Corporation.
		Copyright 2002 Todd C. Miller
		Copyright 2006 Bob Jenkins (bob_jenkins@burtleburtle.net)
		Copyright 2006-2012 Toni Ronkko
		Copyright 2007 Nuova Systems Inc
		Copyright 2007 VMware Inc
		Copyright 2007-2009 Kip Macy kmacy@freebsd.org
		Copyright 2007-2013 Broadcom Corporation
		Copyright 2007-2019 Solarflare Communications Inc
		Copyright 2008 Marcel Moolenaar
		Copyright 2008-2016 Freescale Semiconductor Inc
		Copyright 2008-2019 Cisco Systems Inc
		Copyright 2009 Olivier MATZ
		Copyright 2009-2020 Microsoft Corporation
		Copyright 2010 Fabien Romano
		Copyright 2010 Jonathan Armani
		Copyright 2010 Keith Wiles
		Copyright 2010 Michael Knudsen
		Copyright 2010-2011 Dmitry Vyukov
		Copyright 2010-2012 Citrix Inc
		Copyright 2012 Hasan Alayli
		Copyright 2012 NetApp Inc

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Copyright 2012-2019 6WIND S.A
		Copyright 2012-2020 Mellanox Technologies Ltd
		Copyright 2013-2017 Brocade Communications Systems Inc
		Copyright 2013-2017 Wind River Systems Inc
		Copyright 2014 John W. Linville
		Copyright 2014-2018 Aquantia Corporation
		Copyright 2014-2018 Netronome Systems Inc
		Copyright 2014-2019 IBM Corporation
		Copyright 2014-2020 Broadcom Inc
		Copyright 2014-2020 Cavium Inc
		Copyright 2014-2020 Chelsio Communications
		Copyright 2015 Akamai Technologies
		Copyright 2015-2016 QLogic Corporation
		Copyright 2015-2016 RehiveTech.
		Copyright 2015-2018 Neil Horman
		Copyright 2015-2019 CESNET
		Copyright 2015-2019 Vladimir Medvedkin
		Copyright 2015-2020 Amazon.com Inc or its affiliates
		Copyright 2015-2020 Atomic Rules LLC
		Copyright 2015-2020 NXP
		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 copyright holder 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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.
		Copyright (C) 1996 by Internet Software Consortium. 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" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIALDAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA ORPROFITS, 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.
		Public Domain (code snippets):
		Copyright (C) 1996 Bob Jenkins (bob_jenkins@burtleburtle.net) http://burtleburtle.net/bob/hash/ These are the credits from Bob's sources: lookup2.c, by Bob Jenkins, December 1996, Public Domain.
		hash(), hash2(), hash3, and mix() are externally useful functions. Routines to test the hash are included if SELF_TEST is defined. You can use this free for any purpose. It has no warranty.
		The Linux kernel module and associated drivers are licensed under the GPL version 2, as shown below in this Section II.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Copyright (C) 1999 - 2020 Intel Corporation.
		This program is free software; you can redistribute it and/or modify it under the terms and conditions of the GNU General Public License, version 2, as published by the Free Software Foundation.
		This program is distributed in the hope 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 St - Fifth Floor, Boston, MA 02110-1301 USA.
		Copyright(C) 2007-2020 Intel Corporation. All rights reserved.
		This program is free software; you can redistribute it and/or modify it under the terms of version 2.1 of the GNU Lesser General Public License as published by the Free Software Foundation.
		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 Lesser General Public License for more details.
		You should have received a copy of the GNU Lesser General Public License along with this program; if not, write to the Free Software
		Foundation, Inc., 51 Franklin St - Fifth Floor, Boston, MA 02110-1301 USA.
		Section III: Example Code (BSD or GPL)
		Example code is either licensed under either the BSD or the GPLv2 licenses. The example code, which is neither used nor distributed with the Oracle application software in any format (binary or source), but is made available for download in source code format, including the associated copyright notices and license terms, along with the other third party open source code for DPDK on OTN per Oracle guidelines. Refer to the source code for full attributions.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		dpdk-kmods can include kernel source code for various operating systems.
		DPDK is focused on userspace libraries, so it is encouraged contributing and using vanilla kernels as much as possible.
		Some kernel modules were historically parts of DPDK, and are hosted in its directory kernel/.
		Now the preference is to contribute kernel modules to the upstream project if possible, otherwise to host kernel code in dpdk-kmods.git.
		The license can be BSD-3-Clause or GPL-2.0.
Jacob Schmier	stacktrace 2010	Copyright (c) 2010, Jacob Schmier
		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 theSoftware 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.
Jean-loup Gailly and Mark Adler	zlib 1.2.7-19.el7_9	Overview: Zlib itself is licensed under the permissive zlib license as shown below. However, please note that the zlib distribution also includes separate files under a "contrib" directory that are not part of zlib and were contributed by other authors under other license terms, including the disfavored GPL. Please refer to the
		zlib README and FAQ for more information.
		/* zlib.h interface of the 'zlib' general purpose compression library
		version 1.2.7, May 2nd, 2012
		Copyright (C) 1995-2012 Jean-loup Gailly and Mark Adler 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 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 The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files http://tools.ietf.org/html/rfc1950 (zlib format), rfc1951 (deflate format) and rfc1952 (gzip format).
Kernel.org	rdma-core 22.4-6	*/ Include the following in documentation:
		Libmlx: * Copyright (c) 2000, 2011 Mellanox Technology Inc. All rights reserved. * Copyright (c) 2004, 2005 Topspin Communications. All rights reserved. * Copyright (c) 2005 Mellanox Technologies Ltd. All rights reserved. * Copyright (c) 2005, 2006, 2007 Cisco Systems. All rights reserved. * Copyright (c) 2006, 2007 Cisco, Inc. All rights reserved. * Copyright (c) 2012 Mellanox Technologies, Inc. All rights reserved. * Copyright (c) 2017 Mellanox Technologies, Inc. All rights reserved.
		 * This software is available to you under a choice of one of two * licenses. You may choose to be licensed under the terms of the GNU * General Public License (GPL) Version 2, available from the file * COPYING in the main directory of this source tree, or the * OpenIB.org BSD license below: * * 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.

Vendor	Product(s) and Version(s)	Licensing Description/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.
		*
		* 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.
		Oracle elects the OpenIB.org BSD license.
		-
		Libibverbs:
		* Copyright (c) 2004, 2005 Topspin Communications. All rights reserved.
		* Copyright (c) 2004, 2011-2012 Intel Corporation. All rights reserved.
		* Copyright (c) 2005 Cisco Systems. All rights reserved.
		* Copyright (c) 2005 Intel Corporation. All rights reserved.
		* Copyright (c) 2005 Mellanox Technologies Ltd. All rights reserved.
		* Copyright (c) 2005 PathScale, Inc. All rights reserved.
		* Copyright (c) 2005 Voltaire, Inc. All rights reserved.
		* Copyright (c) 2005, 2006, 2007 Cisco Systems, Inc. All rights reserved.
		* Copyright (c) 2008 Lawrence Livermore National Laboratory
		* Copyright (c) 2017 Mellanox Technologies Ltd. All rights reserved.
		* Copyright (c) 2017 Mellanox Technologies, Inc. All rights reserved.
		* This software is available to you under a choice of one of two
		* licenses. You may choose to be licensed under the terms of the GNU
		* General Public License (GPL) Version 2, available from the file
		* COPYING in the main directory of this source tree, or the

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* OpenIB.org BSD license below: *
		* 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
		discialiner in the documentation and/or other matchais
		* provided with the distribution.
		* 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.
		Oracle elects the OpenIB.org BSD license.
Linaro Limited	Open Data Plane	Copyright (c) 2013-2018, Linaro Limited
	API Open Data	All rights reserved.
	Plane API 1.29.0.0	SPDX-License-Identifier:B SD-3-Clause
		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 Linaro Limited 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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.
Lua.org, PUC-Rio	Lua 5.1.4-15	License for Lua 5.0 and later versions
		Copyright © 1994 - 2010 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.
Lucent Technologies	Lucent RADIUS	http://starlet.deltatel.ru/~laishev/radius21/testuser.c
	1992	Copyright 1992-1999 Lucent Technologies Inc. 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. * All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by Lucent Technologies and its contributors. * Neither the name of the copyright holder 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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.
Mark Pulford	lua-cjson 2.1.0.8rc1	URL for License and Copyright Notice - https://github.com/openresty/lua-cjson/blob/master/LICENSE Copyright (c) 2010-2012 Mark Pulford LICENSE NAME: MIT 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.
		Note – The component has NO 4th party components.
Microsoft Corporation	WALinuxAgent- 2.6.0.2-1.el7	Microsoft Azure Linux Agent Copyright 2012 Microsoft Corporation This product includes software developed at Microsoft Corporation (http://www.microsoft.com/). Copyright 2016 Microsoft Corporation 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. See APPENDIX D - Apache Public License
Mike Pall	LUA BitOp 1.0.2	The following must be reproduced verbatim in the documentation of the Oracle product that includes the code: The MIT License (MIT)

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Lua BitOp is Copyright (C) 2008-2009 Mike Pall. 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.
Miklos Szeredi Mozilla	libfuse 2.9.4-1.0.9 ca-certificates- 2021.2.50-72	See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1) Following contents are from ca-certificate/certdata.txt # # This Source Code Form is subject to the terms of the Mozilla Public # License, v. 2.0. If a copy of the MPL was not distributed with this # file, You can obtain one at http://mozilla.org/MPL/2.0/. # # certdata.txt # # This file contains the object definitions for the certs and other # information "built into" NSS. ## ## Full contents of http://mozilla.org/MPL/2.0/. ## See APPENDIX E - Mozill Public License 2.0
Netfilter Core Team	arptables 0.0.4-8	/* * arptables: * Author: Bart De Schuymer , but almost all code is from the iptables userspace program, which has main authors: Paul.Russell@rustcorp.com.au and mneuling@radlogic.com.au * 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* along with this program; if not, write to the Free Software * Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA. */
Netfilter Core Team	iptables 1.4.21- 35.0.1.el7	 iptables.c version 1.4.21 /* Author: Paul.Russell@rustcorp.com.au and mneuling@radlogic.com.au (C) 2000-2002 by the netfilter coreteam : Paul 'Rusty' Russell Marc Boucher James Morris Harald Welte Jozsef Kadlecsik 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., 675 Mass Ave, Cambridge, MA 02139, USA. */

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Nginx	nginx 1.20.1	 /* * Copyright (C) 2002-2021 Igor Sysoev * Copyright (C) 2011-2021 Nginx, Inc. * 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. * * 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. INCIDENTAL OFFICIAL EVENTILATION OF
		 * 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. */
nongnu.org	libunwind 1.2-2	Engineering must ensure that the following license is included in the documentation of the Oracle product that includes the code. Copyright (c) 2002 Hewlett-Packard Co. Copyright (C) 2008 CodeSourcery Copyright (C) 2014 Tilera Corp. Copyright (C) 2015 Imagination Technologies Limited Copyright (C) 2010, 2011 by FERMI NATIONAL ACCELERATOR LABORATORY Copyright (C) 2014 CERN and Aalto University Contributed by Filip Nyback Copyright (C) 2008 Google, Inc Contributed by Paul Pluzhnikov

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		<pre><ppluzhnikov@google.com> Copyright (C) 2010 Konstantin Belousov <kib@freebsd.org> Copyright (C) 2013 Garmin International Contributed by Matt Fischer matt.fischer@garmin.com Copyright (C) 2006-2007 IBM Contributed by Corey Ashford <cjashfor@us.ibm.com> Jose Flavio Aguilar Paulino <jflavio@br.ibm.com> joseflavio@gmail.com 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</jflavio@br.ibm.com></cjashfor@us.ibm.com></kib@freebsd.org></ppluzhnikov@google.com></pre>
		OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
Nornagon	Luna Wrapper 20140507	 Written by nornagon. Available under the BSD 2-clause license. 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, 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.
Open Market, Inc.	FastCGI Developer's Kit 2.4.2	Copyright Information: Copyright © 1996 Open Market, Inc. 245 First Street, Cambridge, MA 02142 U.S.A. Tel: 617-621-9500 Fax: 617-621-1703 URL: http://www.openmarket.com/, http://www.mit.edu/afs.new/sipb/user/yandros/doc/specs/fcgi-spec.html

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		This is the copy of the FastCGI license included with the software and available at: http://www.fastcgi.com/devkit/LICENSE.TERMS
		This FastCGI application library source and object code (the "Software") and its documentation (the "Documentation") are copyrighted by Open Market, Inc ("Open Market"). The following terms apply to all files associated with the Software and Documentation unless explicitly disclaimed in individual files.
		Open Market permits you to use, copy, modify, distribute, and license this Software and the Documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this Software and Documentation may be copyrighted by their authors and need not follow the licensing terms described here. If modifications to this Software and Documentation have new licensing terms, the new terms must be clearly indicated on the first page of each file where they apply.
		OPEN MARKET MAKES NO EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE SOFTWARE OR THE DOCUMENTATION, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL OPEN MARKET BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DAMAGES ARISING FROM OR RELATING TO THIS SOFTWARE OR THE DOCUMENTATION, INCLUDING, WITHOUT LIMITATION, ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR SIMILAR DAMAGES, INCLUDING LOST PROFITS OR LOST DATA, EVEN IF OPEN MARKET HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOFTWARE AND DOCUMENTATION ARE PROVIDED "AS IS". OPEN MARKET HAS NO LIABILITY IN CONTRACT, TORT, NEGLIGENCE OR OTHERWISE ARISING OUT OF THIS SOFTWARE OR THE DOCUMENTATION.
Open Source	Expat 2.1.0-14.0.1	URL for License - https://opensource.org/licenses/MIT
		URL for Copyright Notice - Unable to find URL for Copyright Notice (For Grapeshot acquisition)
		Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper
		Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.
		License Name: MIT
		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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		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 NON INFRINGEMENT. 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.
		Note - At the time of Grapeshot acquisition it was specified that the component does not contain any 4th party components.
Open Source Telecom Corporation	GNU common c++ library 0.9.7	You are receiving or may download a copy of the GNU common c++ library in both source and object code. The terms of the Oracle license do NOT apply to the program GNU common c++ library; it is licensed under the following license, separately from the Oracle programs you receive.
		 // This code orignally came from the GNU Common C++ library and has // been heavily modified by Acme Packet, thus we include the obligatory // copyright & license info here. Date of first modification: 2000-09-11
		// Copyright (C) 1999-2000 Open Source Telecom Corporation.
		<pre>// // 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. //</pre>
		// 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.
		<pre>// // As a special exception to the GNU General Public License, permission is // granted for additional uses of the text contained in its release // of Common C++.</pre>
		<pre>// // The exception is that, if you link the Common C++ library with other // files to produce an executable, this does not by itself cause the // resulting executable to be covered by the GNU General Public License. // Your use of that executable is in no way restricted on account of // linking the Common C++ library code into it. //</pre>
		 // This exception does not however invalidate any other reasons why // the executable file might be covered by the GNU General Public License. //

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		<pre>// This exception applies only to the code released under the // name Common C++. If you copy code from other releases into a copy of // Common C++, as the General Public License permits, the exception does // not apply to the code that you add in this way. To avoid misleading // anyone as to the status of such modified files, you must delete // this exception notice from them. // // If you write modifications of your own for Common C++, it is your choice // whether to permit this exception to apply to your modifications. // If you do not wish that, delete this exception notice.</pre>
openBSD	OpenSSH 7.4p1-	* Author: Tatu Ylonen
	21.0.3	* Copyright (c) 1995 Tatu Ylonen , Espoo, Finland
		* All rights reserved
		* Password authentication. This file contains the functions to check whether
		* the password is valid for the user.
		*
		* As far as I am concerned, the code I have written for this software
		* can be used freely for any purpose. Any derived versions of this
		* software must be clearly marked as such, and if the derived work is
		* incompatible with the protocol description in the RFC file, it must be
		* called by a name other than "ssh" or "Secure Shell".
		*
		* Copyright (c) 1999 Dug Song. All rights reserved.
		* Copyright (c) 2000 Markus Friedl. 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.
		* 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * 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. */
OpenJS Foundation	lodash 4.17.21	The MIT License Copyright JS Foundation and other contributors <https: js.foundation=""></https:> Based on Underscore.js, copyright Jeremy Ashkenas, DocumentCloud and Investigative Reporters & Editors <http: underscorejs.org=""></http:> This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at https://github.com/lodash/lodash The following license applies to all parts of this software except as documented below: ===== 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 NONINFINGEMENT. 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. ===== Copyright and related rights for sample code are waived via CCO. Sample code is defined as all source code displayed within the prose of the documentation. CCO: http://creativecommons.org/publicdomain/zero/1.0/

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		==== Files located in the node_modules and vendor directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.
OpenSSL Project	OpenSSL 1.0.2k- 25.el7_9	LICENSE ISSUES The OpenSSL toolkit stays under a double license, i.e. both the conditions of
		the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts.
		OpenSSL License
		 * Copyright (c) 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * 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. *
		Original SSLeay License /* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* 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,
		* Ihash, 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)"

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 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.] */
Oracle	JavaScript Extension Toolkit (JET) 11.1.6	See APPENDIX G – Oracle JET 11.1.6
Pablo Neira Ayuso	libmnl 1.0.3-7	See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
Paul Wouters et al	libreswan 3.32- 7.0.1.el8_3	Except for the DES library, MD5 code, and linux/net/ipsec/radij.c this software is under the GNU General Public License (GPL), see the file COPYING. See the file CREDITS for details on origins of more of the code. The linux/net/ipsec/radij.c code is derived from BSD 4.4lite code from sys/net/radix.c. In addition to the terms set out under the GPL, permission is granted to link the software against the libdes, md5c.c, and radij.c libraries just mentioned. The following additional notes apply if if you are NOT using CrytpoAPI:

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		The DES library is under a BSD style license, see linux/crypto/ciphers/des/COPYRIGHT. Note that this software has a advertising clause in it. The MD5 implementation is from RSADSI, so this package must include the
		following phrase: "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm". It is not under the GPL; see details in linux/net/ipsec/ipsec_md5c.c.
		Code in lib/libswan/nss_copies.c is used under the Mozilla Public License Version 2.0. <u>https://www.mozilla.org/MPL/2.0/</u>
		<u>See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)</u> <u>See APPENDIX E - Mozilla Public License 2.0</u>
Python.org	Python 2.7.5- 90.0.3	See Appendix H - Python Software Foundation License, Version 2
Python.org	Python-libs 2.7.5- 90.0.3	See Appendix H - Python Software Foundation License, Version 2
Rainer Gerhards	rsyslog 8.24.0- 57.0.1	********* Copied from LT Public License & Copyright Notices ********
		 * The rsyslog runtime library is in general reentrant and thread-safe. There * are some intentional exceptions (e.g. inside the msg object). These are * documented. Any other threading and reentrency issue can be considered a bug. *
		 * Module begun 2008-04-16 by Rainer Gerhards * * Copyright 2008-2016 Rainer Gerhards and Adiscon GmbH. *
		 * This file is part of the rsyslog runtime library. * * The rsyslog runtime library is free software: you can redistribute it and/or modify
		 * it under the terms of the GNU Lesser General Public License as published by * the Free Software Foundation, either version 3 of the License, or * (at your option) any later version.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* The rsyslog runtime 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. See the
		* GNU Lesser General Public License for more details.
		*
		* You should have received a copy of the GNU Lesser General Public License
		* along with the rsyslog runtime library. If not, see .
		*
		* A copy of the GPL can be found in the file "COPYING" in this distribution.
		* A copy of the LGPL can be found in the file "COPYING.LESSER" in this distribution.
		See APPENDIX C - GNU General Public License, version 3 (GPL-3.0)
		See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
Red Hat	popt 1.13-16	Public Licenses & Copyright Notices Copyright (c) 1998 Red Hat Software
		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 X CONSORTIUM 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 the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.
Red Hat, Inc.	iscsi-initiator-utils 6.2.0.874- 22.0.1.el7_9	See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Regents of the University of California	Fastpath TCP Stack 3.0.0- 374a924	 * Copyright (c) 1982, 1986, 1990, 1993, 1994 * The Regents of the University of California. All rights reserved. * Copyright (c) 2015 Nokia Solutions and Networks * Copyright (c) 2015 Enea Software AB *

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * 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.
Regents of the University of California	uipc_mbuf 8.2	 * Copyright (c) 1982, 1986, 1988, 1991, 1993 * The Regents of the University of California. 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. 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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		WAY * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF * SUCH DAMAGE.
Reuben Thomas and Shmuel Zeigerman	Lrexlib 2.9.1	License of Lrexlib release
Russ Cox and Jef Poskanzer	libghttpd.a gperftools-httpd/0 .2 2006/10/18	Copyright 2006 Russ Cox. 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 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Copyright 1995,1998,1999,2000,2001 by Jef Poskanzer . 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.
		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.
SGI	numactl 2.0.12- 5.0.3	libnuma is under the GNU Lesser General Public License, v2.1. Simple NUMA library. Copyright (C) 2003,2004,2005,2008 Andi Kleen,SuSE Labs and Cliff Wickman,SGI.
		libnuma is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; version 2.1.
		libnuma 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 Lesser General Public License for more details.
		You should find a copy of v2.1 of the GNU Lesser General Public License somewhere on your Linux system; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
		All calls are undefined when numa_available returns an error.
		affinity.c includes a fourth party copyright from Intel:
		Support for specifying IO affinity by various means. Copyright 2010 Intel Corporation Author: Andi Kleen
		libnuma is free software; you can redistribute it and/or

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; version 2.1. libnuma 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 Lesser General Public License for more details. You should find a copy of v2.1 of the GNU Lesser General Public License somewhere on your Linux system; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
Software Freedom Conservancy	Busybox 1.33.1	You are receiving or may download a copy of Busybox v. 1.19.3 in both source and object code. The terms of the Oracle license do NOT apply to the program Busybox v. 1.19.3; it is licensed under the following license, separately from the Oracle programs you receive. <u>See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)</u>
Tatsuhiro Tsujikawa	nghttp2 library 1.33.0-3.el8_2.1	From AUTHORS file: Tatsuhiro Tsujikawa From COPYING file: The MIT License Copyright (c) 2012, 2014, 2015 Tatsuhiro Tsujikawa 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 OTHER WISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
tcpdump project	libpcap 1.5.3-13	Include the following in documentation: /* * Copyright (c) 1993, 1994, 1995, 1996, 1997, 1998 * The Regents of the University of California. All rights reserved. *

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * 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 acknowledgement: * This product includes software developed by the Computer Systems * Engineering Group at Lawrence Berkeley Laboratory. * 4. Neither the name of the University nor of the Laboratory 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 <
		 / Bison parser used pursuant to the following exception: / A Bison parser, made by GNU Bison 3.0.4. */ /* Bison implementation for Yacc-like parsers in C Copyright (C) 1984, 1989-1990, 2000-2015 Free Software Foundation, Inc. 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 3 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 . */ /* As a special exception, you may create a larger work that contains part or all of the Bison parser skeleton and distribute that work under terms of your choice, so long as that work isn't itself a parser generator using the skeleton or a modified version thereof as a parser skeleton. Alternatively, if you modify or redistribute

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		the parser skeleton itself, you may (at your option) remove this special exception, which will cause the skeleton and the resulting Bison output files to be licensed under the GNU General Public License without this special exception.
		This special exception was added by the Free Software Foundation in version 2.2 of Bison. */
		/* C LALR(1) parser skeleton written by Richard Stallman, by simplifying the original so-called "semantic" parser. */
Ted Felix	acpid 2.0.19-9	Main credit: Copyright (C) 2008-2009, Ted Felix (www.tedfelix.com)
		Contributors:
		Copyright (C) 1999-2000 Andrew Henroid
		Copyright (C) 2001 Sun Microsystems (thockin@sun.com)
		Portions Copyright (C) 2003 Sun Microsystems (thockin@sun.com)
		Copyright (C) 2004 Tim Hockin (thockin@hockin.org)
		Portions from acpi_genl Copyright (C) Zhang Rui
		/*
		* connection_list.c - ACPI daemon connection list
		* Copyright (C) 2008, Ted Felix (www.tedfelix.com)
		*
		* 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
		*

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* Tabs at 4 */
		See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Theodore Ts'o	e2fsprogs (libblkid, libuuid) 1.42.9-19.el7	See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Theodore Ts'o	util-linux 2.23.2- 65.0.1.el7_9.1	This request is limited to files under the 'libuuid' directory and one file from the 'lib' directory, 'randutils.c'.
		Files under the 'libuuid' directory are covered by the 3 clause BSD license as referenced in the or COPYING file in the 'libuuid' directory (name of license file is different in the different packages):
		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, and the entire permission notice in its entirety, including the disclaimer of warranties.
		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 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 ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY 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 NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
		"randutils.c" file is licensed under LGPL as indicated in its header (no license file provided):
		/* * General purpose random utilities
		*
		* Based on libuuid code. *
		* This file may be redistributed under the terms of the

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* GNU Lesser General Public License. */
		See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
Thomas Graf	libnl3 3.2.28-4	See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1)
University of Cambridge, Google. Inc.	PCRE (Perl- compatible Regular	PCRE LICENCE
	Expressions) 8.32- 17	PCRE is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language.
		Release 8 of PCRE is distributed under the terms of the "BSD" licence, as specified below. The documentation for PCRE, supplied in the "doc" directory, is distributed under the same terms as the software itself.
		The basic library functions are written in C and are freestanding. Also included in the distribution is a set of C++ wrapper functions, and a just-in-time compiler that can be used to optimize pattern matching. These are both optional features that can be omitted when the library is built.
		THE BASIC LIBRARY FUNCTIONS
		Written by: Philip Hazel
		Email local part: ph10
		Email domain: cam.ac.uk
		University of Cambridge Computing Service,
		Cambridge, England.
		Copyright (c) 1997-2012 University of Cambridge
		All rights reserved.
		PCRE JUST-IN-TIME COMPILATION SUPPORT
		Written by: Zoltan Herczeg

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		Email local part: hzmester
		Emain domain: freemail.hu
		Copyright(c) 2010-2012 Zoltan Herczeg
		All rights reserved.
		STACK-LESS JUST-IN-TIME COMPILER
		Written by: Zoltan Herczeg
		Email local part: hzmester
		Emain domain: freemail.hu
		Copyright(c) 2009-2012 Zoltan Herczeg
		All rights reserved.
		THE C++ WRAPPER FUNCTIONS
		Contributed by: Google Inc.
		Copyright (c) 2007-2012, Google Inc.
		All rights reserved.
		THE "BSD" LICENCE
		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

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		materials provided with the distribution.
		* Neither the name of the University of Cambridge nor the name of Google Inc. nor the names of their 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.
		End
University of	NTP ntp-4.2.6p5-	This file is automatically generated from html/copyright.html
Delaware	29.0.3	Copyright Notice
		jpg "Clone me," says Dolly sheepishly.
		Last update: 1-Jan-2011 08:34 UTC
		The following copyright notice applies to all files collectively called the Network Time Protocol Version 4 Distribution. Unless specifically declared otherwise in an individual file, this notice applies as if the text was explicitly included in the file.
		**
		* *
		* Copyright (c) University of Delaware 1992-2011 *
		* *
		st Permission to use, copy, modify, and distribute this software and $\ ^{st}$
		* its documentation for any purpose with or without fee is hereby *
		st granted, provided that the above copyright notice appears in all $\ ^{st}$
		* 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, *

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* 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.
		* *
		**
		The following individuals contributed in part to the Network Time
		Protocol Distribution Version 4 and are acknowledged as authors of
		this work.
		1. [1]Takao Abe Clock driver for JJY receivers
		2. [2]Mark Andrews Leitch atomic clock controller
		3. [3]Bernd Altmeier hopf Elektronik serial line and PCI-bus devices
		4. [4]Viraj Bais and [5]Clayton Kirkwood port to WindowsNT 3.5
		5. [6]Michael Barone GPSVME fixes
		6. [7]Karl Berry syslog to file option
		7. [8]Greg Brackley Major rework of WINNT port. Clean up recvbuf and iosignal code into separate modules.
		8. [9]Marc Brett Magnavox GPS clock driver
		9. [10]Piete Brooks MSF clock driver, Trimble PARSE support
		10. [11]Nelson B Bolyard update and complete broadcast and crypto features in sntp
		11. [12]Jean-Francois Boudreault IPv6 support
		12. [13]Reg Clemens Oncore driver (Current maintainer)
		13. [14]Steve Clift OMEGA clock driver
		14. [15]Casey Crellin vxWorks (Tornado) port and help with target configuration
		15. [16]Sven Dietrich Palisade reference clock driver, NT adj. residuals, integrated Greg's Winnt port.
		16. [17]John A. Dundas III Apple A/UX port
		17. [18]Torsten Duwe Linux port
		18. [19]Dennis Ferguson foundation code for NTP Version 2 as specified in RFC- 1119
		19. [20]John Hay IPv6 support and testing
		20. [21]Dave Hart General maintenance, Windows port interpolation rewrite
		21. [22]Claas Hilbrecht NeoClock4X clock driver
		22. [23]Glenn Hollinger GOES clock driver
		23. [24]Mike Iglesias DEC Alpha port
		24. [25]Jim Jagielski A/UX port

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		25. [26]Jeff Johnson massive prototyping overhaul
		26. [27]Hans Lambermont or
		[28] ntpsweep
		27. [29]Poul-Henning Kamp Oncore driver (Original author)
		28. [30]Frank Kardel [31] PARSE driver (>14 reference clocks), STREAMS modules for PARSE, supportscripts, syslog cleanup, dynamic interface handling
		29. [32]William L. Jones RS/6000 AIX modifications, HPUX modifications
		30. [33]Dave Katz RS/6000 AIX port
		31. [34]Craig Leres 4.4BSD port, ppsclock, Magnavox GPS clock driver
		32. [35]George Lindholm SunOS 5.1 port
		33. [36]Louis A. Mamakos MD5-based authentication
		34. [37]Lars H. Mathiesen adaptation of foundation code for Version 3 as specified in RFC-1305
		35. [38]Danny Mayer Network I/O, Windows Port, Code Maintenance
		36. [39]David L. Mills Version 4 foundation: clock discipline, authentication, precision kernel; clock drivers:
		Spectracom, Austron, Arbiter, Heath, ATOM, ACTS, KSI/Odetics; audio clock drivers: CHU, WWV/H, IRIG
		37. [40]Wolfgang Moeller VMS port
		38. [41]Jeffrey Mogul ntptrace utility
		39. [42]Tom Moore i386 svr4 port
		40. [43]Kamal A Mostafa SCO OpenServer port
		41. [44]Derek Mulcahy and [45]Damon Hart-Davis ARCRON MSF clock driver
		42. [46]Rob Neal Bancomm refclock and config/parse code maintenance
		43. [47]Rainer Pruy monitoring/trap scripts, statistics file handling
		44. [48]Dirce Richards Digital UNIX V4.0 port
		45. [49]Wilfredo Sánchez added support for NetInfo
		46. [50]Nick Sayer SunOS streams modules
		47. [51]Jack Sasportas Saved a Lot of space on the stuff in the html/pic/ subdirectory
		48. [52]Ray Schnitzler Unixware1 port
		49. [53] Michael Shields USNO clock driver
		50. [54]Jeff Steinman Datum PTS clock driver
		51. [55]Harlan Stenn GNU automake/autoconfigure makeover, various other bits (see the ChangeLog)
		52. [56]Kenneth Stone HP-UX port
		53. [57]Ajit Thyagarajan IP multicast/anycast support
		54. [58]Tomoaki TSURUOKA TRAK clock driver
		55. [59]Paul A Vixie TrueTime GPS driver, generic TrueTime clock driver
		56. [60]Ulrich Windl corrected and validated HTML documents according to the

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		HTML DTD
		References
		1. mailto:%20takao_abe@xurb.jp
		2. mailto:%20mark_andrews@isc.org
		3. mailto:%20altmeier@atlsoft.de
		4. mailto:%20vbais@mailman1.intel.co
		5. mailto:%20kirkwood@striderfm.intel.com
		6. mailto:%20michael.barone@Imco.com
		7. mailto:%20karl@owl.HQ.ileaf.com
		8. mailto:%20greg.brackley@bigfoot.com
		9. mailto:%20Marc.Brett@westgeo.com
		10. mailto:%20Piete.Brooks@cl.cam.ac.uk
		11. mailto:%20nelson@bolyard.me
		12. mailto:%20Jean-Francois.Boudreault@viagenie.qc.ca
		13. mailto:%20reg@dwf.com
		14. mailto:%20clift@ml.csiro.au
		15. mailto:casey@csc.co.za
		16. mailto:%20Sven_Dietrich@trimble.COM
		17. mailto:%20dundas@salt.jpl.nasa.gov
		18. mailto:%20duwe@immd4.informatik.uni-erlangen.de
		19. mailto:%20dennis@mrbill.canet.ca
		20. mailto:%20jhay@icomtek.csir.co.za
		21. mailto:%20davehart@davehart.com
		22. mailto:%20neoclock4x@linum.com
		23. mailto:%20glenn@herald.usask.ca
		24. mailto:%20iglesias@uci.edu
		25. mailto:%20jagubox.gsfc.nasa.gov
		26. mailto:%20jbj@chatham.usdesign.com
		27. mailto:Hans.Lambermont@nl.origin-it.com
		28. mailto:H.Lambermont@chello.nl
		29. mailto:%20phk@FreeBSD.ORG
		30. http://www4.informatik.uni-erlangen.de/%7ekardel
		31. mailto:%20kardel(at)ntp(dot)org
		32. mailto:%20jones@hermes.chpc.utexas.edu

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		33. mailto:%20dkatz@cisco.com
		34. mailto:%20leres@ee.lbl.gov
		35. mailto:%20lindholm@ucs.ubc.ca
		36. mailto:%20louie@ni.umd.edu
		37. mailto:%20thorinn@diku.dk
		38. mailto:%20mayer@ntp.org
		39. mailto:%20mills@udel.edu
		40. mailto:%20moeller@gwdgv1.dnet.gwdg.de
		41. mailto:%20mogul@pa.dec.com
		42. mailto:%20tmoore@fievel.daytonoh.ncr.com
		43. mailto:%20kamal@whence.com
		44. mailto:%20derek@toybox.demon.co.uk
		45. mailto:%20d@hd.org
		46. mailto:%20neal@ntp.org
		47. mailto:%20Rainer.Pruy@informatik.uni-erlangen.de
		48. mailto:%20dirce@zk3.dec.com
		49. mailto:%20wsanchez@apple.com
		50. mailto:%20mrapple@quack.kfu.com
		51. mailto:%20jack@innovativeinternet.com
		52. mailto:%20schnitz@unipress.com
		53. mailto:%20shields@tembel.org
		54. mailto:%20pebbles.jpl.nasa.gov
		55. mailto:%20harlan@pfcs.com
		56. mailto:%20ken@sdd.hp.com
		57. mailto:%20ajit@ee.udel.edu
		58. mailto:%20tsuruoka@nc.fukuoka-u.ac.jp
		59. mailto:%20vixie@vix.com
		60. mailto:%20Ulrich.Windl@rz.uni-regensburg.de
University of Illinois Board of Trustees	Libtar 1.2.11-29	Copyright (c) 1998-2003 University of Illinois Board of Trustees Copyright (c) 1998-2003 Mark D. Roth All rights reserved.
		Developed by: Campus Information Technologies and Educational Services, University of Illinois at Urbana-Champaign
		Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the ``Software''), to deal with 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:

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution. * Neither the names of Campus Information Technologies and Educational Services, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission. 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 CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TOPT. OF OTHER STRUCE TO A DUE OF ON DURING TO DURING THE UNDER STRUCTURE TO THE WART TO THE WARD TO THE WARD THE TO THE WARD THE TOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TOPT. OF OTHER STRUCE TO A DURING TO THE WARD THE TOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
VMware	open-vm-tools 11.0.5- 3.0.1.el7_9.3	TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE. Updated copyright year for uplift v10.3.10 to v11.0.5-3.0.1.el7_9.1 Copyright (C) 1998-2020 VMware, Inc. All rights reserved. LICENSE Open-vm-tools v10.3.0 The Linux kernel modules are released under the GPL v2, a majority of the user level components are released under the LGPL v2.1, and the SVGA and mouse drivers are released under the X11 license. Copyright 2007-2018 VMware, Inc. All rights reserved.
		See Appendix A - GNU General Public License, version 2.1 (LGPL-2.1) See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Valery Kholodkov	nginx-upload- module 2.3.0- 643b4c1	 * Copyright (c) 2006, 2008, Valery Kholodkov * 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.

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		* * Neither the name of the Valery Kholodkov 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 VALERY KHOLODKOV ''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 VALERY KHOLODKOV 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.
Vovida Networks	sip 1.5.0	/* * This code orignally came from Vovida and was heavily modified, * thus we include the obligatory copyright & license info here
		** The Vovida Software License, Version 1.0
		* * Copyright (c) 2000 Vovida Networks, Inc. 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 names "VOCAL", "Vovida Open Communication Application Library", * and "Vovida Open Communication Application Library (VOCAL)" must * not be used to endorse or promote products derived from this * software without prior written permission. For written * permission, please contact vocal@vovida.org.
		* * 4. Products derived from this software may not be called "VOCAL", nor

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		 * may "VOCAL" appear in their name, without prior written * permission of Vovida Networks, Inc. * THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED * WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES * OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND * NON-INFRINGEMENT ARE DISCLAIMED. IN NO EVENT SHALL VOVIDA * NETWORKS, INC. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT DAMAGES * IN EXCESS OF, 000, NOR FOR ANY 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 Vovida * Networks, Inc. and many individuals on behalf of Vovida Networks, * Inc. For more information on Vovida Networks, Inc., please see * . * .
Vyacheslav Trushkin	iotop 0.1	See APPENDIX B - GNU General Public License, version 2 (GPL-2.0)
Wind River Systems	TCP/IP Stack 3.6	Note: The Software includes documentation. The Software licensed under the Agreement may contain or be derived from materials of third party licensors. Such third party materials may be subject to restrictions in addition to those listed in Section 3, which restrictions, if any, are set forth in Exhibit attached in the agreement. (Agreement, Sec. 3(a)(viii) - Pg. 3) The Software licensed under the Agreement may contain or be derived from materials of third party licensors (¿Third Party Software¿). In addition to the terms of the Agreement, such Third Party Software may be subject to additional terms, which, if any, are set forth in the Third Party Software file. Third Party Software is excluded from the definition of Software for the purposes of Section 12 of the Agreement (¿Wind River¿s Indemnity¿), including but not limited to, any software licensed under the Eclipse Public License, Academic Free License, Apache Software License, Artistic License, BSD License, Mozilla Public License, Python License or any other similar license. (Exhibit A-2, Sec. 2 - Pg. 1) Except with respect to Wind River support obligations contained in Section 11 of the Agreement, the definition of Software excludes all materials provided Wind River to Acme Packet to the extent such materials are subject to any of the following licenses ¿ GNU General Public License, GNU Library General Public License, Such materials are not subject to the terms of the Agreement, and are licensed solely under the terms of such licenses. (Exhibit A-2, Sec. 2 - Pg. 2) Note - The Software may contain Third Party Components. Do NOT use or distribute such third party programs without first contacting legal. Acme Packet shall reproduce and include any and all copyright notices and

Vendor	Product(s) and Version(s)	Licensing Description/Disclaimer
		proprietary rights legends, as such notice and legend appear in the original Software on any copy of the Software, in any Permitted Modifications and on the Run-Time Modules. (Agreement, Sec. 3(a)(i) - Pg.2) Note - In the event of conflict between the terms of Exhibit A-2 and those of Agreement, the Exhibit A-2 shall prevail. (Exhibit A-2, Preamble - Pg. 1)
XenSource Inc.	xen hypervisor detection 3.1	Copyright (c) 2007, XenSource Inc. 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.

Appendix A: GNU Lesser General Public License, version 2.1 (LGPL-2.1)

http://www.gnu.org/licenses/lgpl-2.1.html

GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999

Copyright (C) 1991, 1999 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.

[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.

GNU LESSER GENERAL PUBLIC LICENSE 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 B: GNU General Public License, version 2 (GPL-2.0)

http://www.gnu.org/licenses/gpl-2.0.html

GNU GENERAL PUBLIC LICENSE Version 2, June 1991

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

Appendix C: GNU General Public License, version 3 (GPL-3.0)

http://www.gnu.org/licenses/gpl-3.0.html

GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007

Copyright (C) 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 section7. 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

Appendix D: Apache Public License

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

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 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:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) 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
 - (d) 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 E: Mozilla Public License 2.0

Mozilla Public License

Version 2.0

1. Definitions

1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

1.3. "Contribution"

means Covered Software of a particular Contributor.

1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

1.5. "Incompatible With Secondary Licenses"

Means that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

1.6. "Executable Form"

means any form of the work other than Source Code Form.

1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

1.8. "License"

means this document.

1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

1.10. "Modifications"

means any of the following:

any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

any new file in Source Code Form that contains any Covered Software.

1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. "Source Code Form"

means the form of the work preferred for making modifications.

1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under 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 (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 and Conditions

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

for any code that a Contributor has removed from Covered Software; or

for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or

under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

3. Responsibilities

3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and

You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

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 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 every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have

been validly granted by You or Your distributors under this License prior to termination shall survive termination.

6. Disclaimer of Warranty

Covered Software is provided under this License on an "as is" basis, without warranty of any kind, either expressed, implied, or statutory, 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 any 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 under this License except under this disclaimer.

7. Limitation of Liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, indirect, special, incidental, or consequential damages of any character including, without limitation, damages for lost profits, loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party's negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation may not apply to You.

8. Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. 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. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at https://mozilla.org/MPL/2.0/.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

Appendix F: Mocana License

Acme Packet may not remove, efface or obscure any copyright notices or other proprietary notices or legends from any Mocana Software or Mocana material provided hereunder, and shall reproduce all such notices and legends when incorporating the Mocana Software into the Integrated Products. (Agreement, Sec. 2.5 - Pg. 2)Acme Packet agrees that Acme Packet and its employees and contractors shall not, without the written consent of Mocana, directly or indirectly make any attempt, to strip out or alter any trademark, service mark, copyright, patent, trade secret, ownership or any other proprietary or intellectual property notices, legends, warnings, markings or indications on or within any component of the Mocana Software or accompanying documentation. (Agreement, Sec. 7.3 - Pg. 6)Acme Packet agrees to insert and maintain the Mocana trademark within the Integrated Product such that users of the Integrated Product are exposed to the Mocana trademark during normal use of the product. The trademark shall at least be featured within any Integrate Product's startup splash screen, under any "About" menu item describing the Integrated Product's release details, and within any "user login" dialog box of the Integrated Product. Acme Packet agrees to insert and maintain the Mocana trademark within related marketing materials for the Integrated Product including but not limited to printed and electronic datasheets, direct mail, user documentation, product packaging, advertisements, and Acme Packet's website. The Mocana trademark is available to Acme Packet from the Mocana website at http://www.mocana.com. (Agreement, Sec. 9.2 - Pg. 7)Upon mutual agreement, Mocana and Acme Packet shall issue a joint press release announcing the relationship contemplated by the Agreement with mutual endorsements for Integrated Products and Mocana Software within 90 days of the execution of the Agreement. (Agreement, Sec. 9.3 - Pg. 7)Acme Packet further agrees to provide Mocana with the following customer reference information for possible use on Mocana's website and on other promotional material in conjunction with Acme Packet - (i) brief marketing summary of Acme Packet's Integrated Products under the Agreement, and (ii) a quotation on how Mocanas products and/or services contributed to the success of the Integrated Products under the Agreement. Acme Packet agrees to discuss the Mocana Software with the press, industry analysts and prospective (non-competitive) customers on a limited basis to be mutually agreed upon by both parties. (Agreement, Sec. 9.4 - Pg. 8)

Appendix G: Oracle JET 11.1.6

You may not use the identified files except in compliance with the Universal Permissive License (UPL), Version 1.0 (the "License.")

You may obtain a copy of the License at https://opensource.org/licenses/UPL. A copy of the license is also reproduced below.

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.

Copyright (c) 2014, 2021 Oracle and/or its affiliates The Universal Permissive License (UPL), Version 1.0

Subject to the condition set forth below, permission is hereby granted to any person obtaining a copy of this software, associated documentation and/or data (collectively the "Software"), free of charge and under any and all copyright rights in the Software, and any and all patent rights owned or freely licensable by each licensor hereunder covering either (i) the unmodified Software as contributed to or provided by such licensor, or (ii) the Larger Works (as defined below), to deal in both

(a) the Software, and (b) any piece of software and/or hardware listed in the lrgrwrks.txt file if one is included with the Software (each a Larger Work to which the Software is contributed by such licensors), without restriction, including without limitation the rights to copy, create derivative works of, display, perform, and distribute the Software and make, use, sell, offer for sale, import, export, have made, and have sold the Software and the Larger Work(s), and to sublicense the foregoing rights on either these or other terms.

This license is subject to the following condition:

The above copyright notice and either this complete permission notice or at a minimum a reference to the UPL must 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. _____ DO NOT TRANSLATE OR LOCALIZE. * * * * Oracle elects to use only the GNU Lesser General Public License version 2.1 (LGPL) for any software where a choice of LGPL/GPL license versions are made available with the language indicating that LGPLv2.1/GPLv2 or any later version may be used, or where a choice of which version of the LGPL/GPL is applied is unspecified. **** THIRD-PARTY COMPONENT FILE LICENSE (path in the installation) (see license text reproduced below) _____ - - - js/libs/chai/chai-4.2.0.js MIT js/libs/hammer/hammer-2.0.8.js MIT js/libs/js-signals/signals.js MIT js/libs/jquery/jquery-3.6.0.js MTT js/libs/jquery/jquery-ui-1.13.0.custom.js MIT js/libs/jquery/jqueryui-amd-1.13.0/core.js MIT js/libs/jquery/jqueryui-amd-1.13.0/draggable.js MIT js/libs/jquery/jqueryui-amd-1.13.0/mouse.js MIT js/libs/jquery/jqueryui-amd-1.13.0/position.js MIT js/libs/jquery/jqueryui-amd-1.13.0/sortable.js MIT js/libs/jquery/jqueryui-amd-1.13.0/widget.js MIT js/libs/knockout/knockout-3.5.1.js MIT js/libs/knockout/knockout-mapping-latest.js MIT js/libs/oj/v11.1.6/min/ojcspexpressionevaluator.js (cspexpressionevaluator.js) MIT

js/libs/oj/v11.1.6/min/ojexpparser.js (expparser.js) MIT js/libs/oj/v11.1.6/min/ojknockout.js (knockout-fast-foreach.js) MIT js/libs/oj/v11.1.6/min/ojselectcombobox.js (Select2.js) Apache 2.0 js/libs/oj/v11.1.6/min/ojtree.js (jsTree.js) MIT js/libs/oj/v11.1.6/ojL10n.js (requireJS i18n) MIT js/libs/proj4js/dist/proj4.js Proj4js js/libs/require/require.js MIT js/libs/require/text.js MIT js/libs/require-css/css.min.js (require-css) MIT scss/oj/v11.1.6/3rdparty/normalize/normalize.scss MTT js/libs/touchr/touchr.js MIT js/libs/preact/dist/preact.umd.js MIT Chai - v4.2.0 https://github.com/chaijs/chai Copyright (c) 2017 Chai.js Assertion Library 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. expression-eval - v2.0.0 https://github.com/donmccurdy/expression-eval Copyright (c) 2017 Don McCurdy 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 Program Documentation – License Document

Oracle Enterprise Communications Broker – P-Cz4.0.0

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.

jsep - v0.3.4 https://github.com/soney/jsep Copyright (c) 2013 Stephen Oney, https://ericsmekens.github.io/jsep/

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.

Knockout Fast Foreach v0.6.0 (2016-07-28T11:02:54.197Z) By: Brian M Hunt (C) 2015 | License: MIT 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.

proj4js - v2.5.0 http://proj4js.org/ Copyright (C) 2014 Mike Adair, Richard Greenwood, Didier Richard, Stephen Irons, Olivier Terral and Calvin Metcalf; Licensed under the Proj4js license

require-css - v0.1.10
https://github.com/guybedford/require-css
Copyright (C) 2013 Guy Bedford

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.

Hammer.JS - v2.0.8 - 2016-04-22 http://hammerjs.github.io/ Copyright (C) 2011-2017 by Jorik Tangelder (Eight Media)

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.

Foundation Responsive Library http://foundation.zurb.com Copyright 2014, ZURB 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.

Normalize.scss Copyright © Nicolas Gallagher and Jonathan Neal

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.

RequireJS i18n 2.0.2 http://github.com/requirejs/i18n for details

Copyright (c) 2010-2011, The Dojo Foundation 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. isTree 1.0-rc3 http://jstree.com/ Copyright (c) 2012 Ivan Bozhanov (http://vakata.com) 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 $% \ensuremath{\vec{r}}$ 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. select2.js https://github.com/select2/select2 Copyright 2012 Igor Vaynberg This software is licensed under the Apache License, Version 2.0 (the "Apache License") or the GNU General Public License version 2 (the "GPL License"). You may choose either license to govern your use of this software only upon the condition that you accept all of the terms of either the Apache License or the GPL License. You may obtain a copy of the Apache License and the GPL License at:

http://www.apache.org/licenses/LICENSE-2.0
http://www.gnu.org/licenses/gpl-2.0.html

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

jQuery UI - v1.13.0 - 2015-03-18 http://jqueryui.com Includes: core.js, widget.js, mouse.js, position.js, draggable.js, sortable.js

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.

jQuery JavaScript Library v3.6.0 http://jquery.com/ Copyright OpenJS Foundation and other contributors, https://openjsf.org/

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.

JS Signals Author: Miller Medeiros Version: 1.0.0 - Build: 268 (2012/11/29 05:48 PM)

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.

RequireJS text 2.0.15 http://github.com/requirejs/text Copyright jQuery Foundation and other contributors, https://jquery.org/

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.

RequireJS 2.3.6
http://github.com/jrburke/requirejs

Copyright jQuery Foundation and other contributors, https://jquery.org/

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.

Knockout JavaScript library v3.5.1 Copyright (c) 2010 Steven Sanderson, the Knockout.js team, and other contributors http://knockoutjs.com/

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.

Preact - v10.5.13

The MIT License (MIT) Copyright (c) 2015-present Jason Miller

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.

The following applies to all products licensed under the Apache 2.0 License:

You may not use the identified files except in compliance with the Apache License, Version 2.0 (the "License.")

You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. A copy of the license is also reproduced below.

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.

<u>See APPENDIX D – Apache Public License</u>

Appendix H: Python Software Foundation License, Version 2

A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL- compatible?	(1)
0.9.0 thru 1.2 1.3 thru 1.5.2 1.6 2.0 1.6.1 2.1 2.0.1 2.1.1 2.2 2.1.2 2.1.3 2.2.1 2.2.2 2.2.3 2.3 2.3.1 2.3.2 2.3.3	from 1.2 1.5.2 1.6 1.6 2.0+1.6.1 2.0+1.6.1 2.1+2.0.1 2.1.1 2.1.1 2.1.2 2.2 2.2.1 2.2.2 2.2.2 2.3 2.3.1 2.3.2	1991-1995 1995-1999 2000 2001 2001 2001 2001 2001 2001	CWI CNRI CNRI BeOpen.com CNRI PSF PSF PSF PSF PSF PSF PSF PSF PSF PSF	compatible? yes yes no no yes (2) no yes yes yes yes yes yes yes yes yes yes	(1)
2.3.4 2.3.5 2.4	2.3.3 2.3.4 2.3	2005 2004	PSF PSF	yes yes yes	
2.4.1	2.4	2005	PSF	yes	

2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.7	2.6	2010	PSF	yes

Footnotes:

- (1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.
- (2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON

FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant

permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: http://hdl.handle.net/1895.22/1013".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR 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.

A. HISTORY OF THE SOFTWARE

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

			_	
Release	Derived	Year	Owner	GPL-
0 0 0 + 6 - 1 0	from	1001 1005	OUT	<pre>compatible? (1)</pre>
0.9.0 thru 1.2	1 0	1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF PSF	yes
2.1.1 2.2	2.1+2.0.1	2001	PSF	yes
2.1.2	2.1.1 2.1.1	2001	PSF	yes
	2.1.2	2002		yes
2.1.3 2.2.1	2.2	2002 2002	PSF PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.2.2	2.2.2	2002	PSF	yes
2.3	2.2.2	2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
2.3.3	2.3.2	2002-2003	PSF	yes yes
2.3.4	2.3.3	2002-2003	PSF	yes
2.3.5	2.3.4	2004	PSF	yes
2.4	2.3	2003	PSF	yes
2.4.1	2.4	2005	PSF	yes
2.4.2	2.4.1	2005	PSF	yes
2.4.3	2.4.2	2006	PSF	yes
2.4.4	2.4.3	2006	PSF	yes
2.5	2.4	2006	PSF	yes
2.5.1	2.5	2007	PSF	yes
2.5.2	2.5.1	2008	PSF	yes
2.5.3	2.5.2	2008	PSF	yes
2.6	2.5	2008	PSF	yes
2.6.1	2.6	2008	PSF	yes
2.6.2	2.6.1	2009	PSF	yes
2.6.3	2.6.2	2009	PSF	yes
2.6.4	2.6.3	2009	PSF	yes
2.6.5	2.6.4	2010	PSF	yes
2.7	2.6	2010	PSF	yes
				-

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute

a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce,

analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright,

i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010,

2011, 2012, 2013 Python Software Foundation; All Rights Reserved" are retained

in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee. 3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following

unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: http://hdl.handle.net/1895.22/1013". 3. In the event Licensee prepares a derivative work that is based on

or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR 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. README File This is Python version 2.7.5 _____ Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 Python Software Foundation. All rights reserved. Copyright (c) 2000 BeOpen.com. All rights reserved. Copyright (c) 1995-2001 Corporation for National Research Initiatives. All rights reserved. Copyright (c) 1991-1995 Stichting Mathematisch Centrum. All rights reserved. License information See the file "LICENSE" for information on the history of this software, terms & conditions for usage, and a DISCLAIMER OF ALL WARRANTIES. This Python distribution contains no GNU General Public Licensed (GPLed) code so it may be used in proprietary projects just like prior Python distributions. There are interfaces to some GNU code but these are entirely optional. All trademarks referenced herein are property of their respective holders. What's new in this release? See the file "Misc/NEWS". If you don't read instructions -----Congratulations on getting this far. :-) To start building right away (on UNIX): type "./configure" in the current directory and when it finishes, type "make". This creates an executable "./python"; to install in /usr/local, first do "su root" and then "make install". The section `Build instructions' below is still recommended reading. What is Python anyway? ------Python is an interpreted, interactive object-oriented programming language suitable (amongst other uses) for distributed application development, scripting, numeric computing and system testing. Python is often compared to Tcl, Perl, Java, JavaScript, Visual Basic or Scheme. To find out more about what Python can do for you, point your browser to http://www.python.org/. How do I learn Python? -----The official tutorial is still a good place to start; see http://docs.python.org/ for online and downloadable versions, as well as a list of other introductions, and reference documentation. There's a quickly growing set of books on Python. See http://wiki.python.org/moin/PythonBooks for a list. Documentation All documentation is provided online in a variety of formats. In

order of importance for new users: Tutorial, Library Reference, Language Reference, Extending & Embedding, and the Python/C API. The Library Reference is especially of immense value since much of Python's power is described there, including the built-in data types and functions! All documentation is also available online at the Python web site (http://docs.python.org/, see below). It is available online for occasional reference, or can be downloaded in many formats for faster access. The documentation is downloadable in HTML, PostScript, PDF, LaTeX, and reStructuredText (2.6+) formats; the LaTeX and reStructuredText versions are primarily for documentation authors, translators, and people with special formatting requirements. Web sites _ _ _ _ _ _ _ _ _ New Python releases and related technologies are published at http://www.python.org/. Come visit us! Newsgroups and Mailing Lists Read comp.lang.python, a high-volume discussion newsgroup about Python, or comp.lang.python.announce, a low-volume moderated newsgroup for Python-related announcements. These are also accessible as mailing lists: see http://www.python.org/community/lists/ for an overview of these and many other Python-related mailing lists. Archives are accessible via the Google Groups Usenet archive; see http://groups.google.com/. The mailing lists are also archived, see http://www.python.org/community/lists/ for details. Bug reports -----To report or search for bugs, please use the Python Bug Tracker at http://bugs.python.org/. Patches and contributions To submit a patch or other contribution, please use the Python Patch Manager at http://bugs.python.org/. Guidelines for patch submission may be found at http://www.python.org/dev/patches/. If you have a proposal to change Python, you may want to send an email to the comp.lang.python or python-ideas mailing lists for inital feedback. A Python Enhancement Proposal (PEP) may be submitted if your idea gains ground. All current PEPs, as well as guidelines for submitting a new PEP, are listed at http://www.python.org/dev/peps/. **Ouestions** - - - - - - - - -For help, if you can't find it in the manuals or on the web site, it's best to post to the comp.lang.python or the Python mailing list (see above). If you specifically don't want to involve the newsgroup or mailing list, send questions to help@python.org (a group of volunteers who answer questions as they can). The newsgroup is the most efficient way to ask public questions. Build instructions =================== Before you can build Python, you must first configure it. Fortunately, the configuration and build process has been automated for Unix and Linux installations, so all you usually have to do is type a few commands and sit back. There are some platforms where things are not quite as smooth; see the platform specific notes below. If you want to build for multiple platforms sharing the same source

tree, see the section on VPATH below. Start by running the script "./configure", which determines your system configuration and creates the Makefile. (It takes a minute or two -- please be patient!) You may want to pass options to the configure script -- see the section below on configuration options and variables. When it's done, you are ready to run make. To build Python, you normally type "make" in the toplevel directory. If you have changed the configuration, the Makefile may have to be rebuilt. In this case, you may have to run make again to correctly build your desired target. The interpreter executable is built in the top level directory. Once you have built a Python interpreter, see the subsections below on testing and installation. If you run into trouble, see the next section. Previous versions of Python used a manual configuration process that involved editing the file Modules/Setup. While this file still exists and manual configuration is still supported, it is rarely needed any more: almost all modules are automatically built as appropriate under guidance of the setup.py script, which is run by Make after the interpreter has been built. Troubleshooting See also the platform specific notes in the next section. If you run into other trouble, see the FAQ (http://www.python.org/doc/faq/) for hints on what can go wrong, and how to fix it. If you rerun the configure script with different options, remove all object files by running "make clean" before rebuilding. Believe it or not, "make clean" sometimes helps to clean up other inexplicable problems as well. Try it before sending in a bug report! If the configure script fails or doesn't seem to find things that should be there, inspect the config.log file. If you get a warning for every file about the -Olimit option being no longer supported, you can ignore it. There's no foolproof way to know whether this option is needed; all we can do is test whether it is accepted without error. On some systems, e.g. older SGI compilers, it is essential for performance (specifically when compiling ceval.c, which has more basic blocks than the default limit of 1000). If the warning bothers you, edit the Makefile to remove "-Olimit 1500" from the OPT variable. If you get failures in test_long, or sys.maxint gets set to -1, you are probably experiencing compiler bugs, usually related to optimization. This is a common problem with some versions of gcc, and some vendor-supplied compilers, which can sometimes be worked around by turning off optimization. Consider switching to stable versions (gcc 2.95.2, gcc 3.x, or contact your vendor.) From Python 2.0 onward, all Python C code is ANSI C. Compiling using old K&R-C-only compilers is no longer possible. ANSI C compilers are available for all modern systems, either in the form of updated compilers from the vendor, or one of the free compilers (gcc). If "make install" fails mysteriously during the "compiling the library" step, make sure that you don't have any of the PYTHONPATH or PYTHONHOME environment variables set, as they may interfere with the newly built executable which is compiling the library. Unsupported systems A number of systems are not supported in Python 2.7 anymore. Some

support code is still present, but will be removed in later versions. If you still need to use current Python versions on these systems, please send a message to python-dev@python.org indicating that you volunteer to support this system. For a more detailed discussion regarding no-longer-supported and resupporting platforms, as well as a list of platforms that became or will be unsupported, see PEP 11. More specifically, the following systems are not supported any longer: - SunOS 4 - DYNIX - dqux - Minix - NeXT - Irix 4 and --with-sgi-dl - Linux 1 - Systems defining ___d6_pthread_create (configure.ac) - Systems defining PY_PTHREAD_D4, PY_PTHREAD_D6, or PY_PTHREAD_D7 in thread_pthread.h - Systems using --with-dl-dld - Systems using --without-universal-newlines - MacOS 9 - Systems using --with-wctype-functions - Win9x, WinME Platform specific notes (Some of these may no longer apply. If you find you can build Python on these platforms without the special directions mentioned here, submit a documentation bug report to SourceForge (see Bug Reports above) so we can remove them!) Unix platforms: If your vendor still ships (and you still use) Berkeley DB 1.85 you will need to edit Modules/Setup to build the bsddb185 module and add a line to sitecustomize.py which makes it the default. In Modules/Setup a line like bsddb185 bsddbmodule.c should work. (You may need to add -I, -L or -l flags to direct the compiler and linker to your include files and libraries.) XXX I think this next bit is out of date: 64-bit platforms: The modules audioop, and imageop don't work. The setup.py script disables them on 64-bit installations. Don't try to enable them in the Modules/Setup file. They contain code that is quite wordsize sensitive. (If you have a fix, let us know!) Solaris: When using Sun's C compiler with threads, at least on Solaris 2.5.1, you need to add the "-mt" compiler option (the simplest way is probably to specify the compiler with this option as the "CC" environment variable when running the configure script). When using GCC on Solaris, beware of binutils 2.13 or GCC versions built using it. This mistakenly enables the -zcombreloc option which creates broken shared libraries on Solaris. binutils 2.12 works, and the binutils maintainers are aware of the problem. Binutils 2.13.1 only partially fixed things. It appears that 2.13.2 solves the problem completely. This problem is known to occur with Solaris 2.7 and 2.8, but may also affect earlier and later versions of the 0S. When the dynamic loader complains about errors finding shared

libraries, such as ld.so.1: ./python: fatal: libstdc++.so.5: open failed: No such file or directory you need to first make sure that the library is available on your system. Then, you need to instruct the dynamic loader how to find it. You can choose any of the following strategies: 1. When compiling Python, set LD_RUN_PATH to the directories containing missing libraries. 2. When running Python, set LD_LIBRARY_PATH to these directories. 3. Use crle(8) to extend the search path of the loader. 4. Modify the installed GCC specs file, adding -R options into the *link: section. The complex object fails to compile on Solaris 10 with gcc 3.4 (at least up to 3.4.3). To work around it, define Py_HUGE_VAL as HUGE_VAL(), e.g.: make CPPFLAGS='-D"Py_HUGE_VAL=HUGE_VAL()" -I. -I\$(srcdir)/Include' ./python setup.py CPPFLAGS='-D"Py_HUGE_VAL=HUGE_VAL()"' Linux: A problem with threads and fork() was tracked down to a bug in the pthreads code in glibc version 2.0.5; glibc version 2.0.7 solves the problem. This causes the popen2 test to fail; problem and solution reported by Pablo Bleyer. Red Hat Linux: Red Hat 9 built Python2.2 in UCS-4 mode and hacked Tcl to support it. To compile Python2.3 with Tkinter, you will need to pass --enable-unicode=ucs4 flag to ./configure. There's an executable /usr/bin/python which is Python 1.5.2 on most older Red Hat installations; several key Red Hat tools require this version. Python 2.1.x may be installed as /usr/bin/python2. The Makefile installs Python as /usr/local/bin/python, which may or may not take precedence over /usr/bin/python, depending on how you have set up \$PATH. FreeBSD 3.x and probably platforms with NCurses that use libmytinfo or similar: When using cursesmodule, the linking is not done in the correct order with the defaults. Remove "-ltermcap" from the readline entry in Setup, and use as curses entry: "curses cursesmodule.c -lmytinfo -lncurses -ltermcap" - "mytinfo" (so called on FreeBSD) should be the name of the auxiliary library required on your platform. Normally, it would be linked automatically, but not necessarily in the correct order. BSDI: BSDI versions before 4.1 have known problems with threads, which can cause strange errors in a number of modules (for instance, the 'test_signal' test script will hang forever.) Turning off threads (with --with-threads=no) or upgrading to BSDI 4.1 solves this problem. DEC Unix: Run configure with --with-dec-threads, or with --with-threads=no if no threads are desired (threads are on by default). When using GCC, it is possible to get an internal compiler error if optimization is used. This was reported for GCC 2.7.2.3 on selectmodule.c. Manually compile the affected file without optimization to solve the problem. DEC Ultrix: compile with GCC to avoid bugs in the native compiler, and pass SHELL=/bin/sh5 to Make when installing. AIX: A complete overhaul of the shared library support is now in place. See Misc/AIX-NOTES for some notes on how it's done. (The optimizer bug reported at this place in previous releases

has been worked around by a minimal code change.) If you get errors about pthread_* functions, during compile or during testing, try setting CC to a thread-safe (reentrant) compiler,

like "cc_r". For full C++ module support, set CC="xlC_r" (or CC="xlC" without thread support). AIX 5.3: To build a 64-bit version with IBM's compiler, I used the following: export PATH=/usr/bin:/usr/vacpp/bin ./configure --with-qcc="xlc_r -q64" --with-cxx="xlC_r -q64" ∖ --disable-ipv6 AR="ar -X64" make HP-UX: When using threading, you may have to add -D_REENTRANT to the OPT variable in the top-level Makefile; reported by Pat Knight, this seems to make a difference (at least for HP-UX 10.20) even though pyconfig.h defines it. This seems unnecessary when using HP/UX 11 and later - threading seems to work "out of the box". HP-UX ia64: When building on the ia64 (Itanium) platform using HP's compiler, some experience has shown that the compiler's optimiser produces a completely broken version of python (see http://bugs.python.org/814976). To work around this, edit the Makefile and remove -O from the OPT line. To build a 64-bit executable on an Itanium 2 system using HP's compiler, use these environment variables: CC=cc CXX=aCC BASECFLAGS="+DD64" LDFLAGS="+DD64 -lxnet" and call configure as: ./configure --without-gcc then *unset* the environment variables again before running make. (At least one of these flags causes the build to fail if it remains set.) You still have to edit the Makefile and remove -O from the OPT line. HP PA-RISC 2.0: A recent bug report (http://bugs.python.org/546117) suggests that the C compiler in this 64-bit system has bugs in the optimizer that break Python. Compiling without optimization solves the problems. The following apply to SCO 3 only; Python builds out of the box SCO: on SCO 5 (or so we've heard). 1) Everything works much better if you add -U__STDC__ to the This is because all the SCO header files are broken. defs. Anything that isn't mentioned in the C standard is conditionally excluded when __STDC__ is defined. 2) Due to the U.S. export restrictions, SCO broke the crypt stuff out into a separate library, libcrypt_i.a so the LIBS needed be set to: LIBS=' -lsocket -lcrypt_i' UnixWare: There are known bugs in the math library of the system, as well as problems in the handling of threads (calling fork in one thread may interrupt system calls in others). Therefore, test_math and tests involving threads will fail until those problems are fixed. QNX: Chris Herborth (chrish@qnx.com) writes: configure works best if you use GNU bash; a port is available on ftp.qnx.com in /usr/free. I used the following process to build, test and install Python 1.5.x under QNX: 1) CONFIG SHELL=/usr/local/bin/bash CC=cc RANLIB=: \ ./configure --verbose --without-gcc --with-libm="" 2) edit Modules/Setup to activate everything that makes sense for

- your system... tested here at QNX with the following modules: array, audioop, binascii, cPickle, cStringIO, cmath, crypt, curses, errno, fcntl, gdbm, grp, imageop, _locale, math, md5, new, operator, parser, pcre, posix, pwd, readline, regex, reop, select, signal, socket, soundex, strop, struct, syslog, termios, time, timing, zlib, audioop, imageop
- 3) make SHELL=/usr/local/bin/bash
 or, if you feel the need for speed:
 make SHELL=/usr/local/bin/bash OPT="-5 -0il+nrt"
- 4) make SHELL=/usr/local/bin/bash test
 Using GNU readline 2.2 seems to behave strangely, but I
 think that's a problem with my readline 2.2 port. :-\
- 5) make SHELL=/usr/local/bin/bash install

If you get SIGSEGVs while running Python (I haven't yet, but I've only run small programs and the test cases), you're probably running out of stack; the default 32k could be a little tight. To increase the stack size, edit the Makefile to read: LDFLAGS = -N 48k

BeOS: See Misc/BeOS-NOTES for notes about compiling/installing Python on BeOS R3 or later. Note that only the PowerPC platform is supported for R3; both PowerPC and x86 are supported for R4.

Cray T3E: Mark Hadfield (m.hadfield@niwa.co.nz) writes:

Python can be built satisfactorily on a Cray T3E but based on my experience with the NIWA T3E (2002-05-22, version 2.2.1) there are a few bugs and gotchas. For more information see a thread on comp.lang.python in May 2002 entitled "Building Python on Cray T3E".

- 1) Use Cray's cc and not gcc. The latter was reported not to work by Konrad Hinsen. It may work now, but it may not.
- 2) To set sys.platform to something sensible, pass the following environment variable to the configure script: MACHDEP=unicosmk
- 2) Run configure with option "--enable-unicode=ucs4".
- 3) The Cray T3E does not support dynamic linking, so extension modules have to be built by adding (or uncommenting) lines in Modules/Setup. The minimum set of modules is posix, new, _sre, unicodedata

On NIWA's vanilla T3E system the following have also been included successfully:

_codecs, _locale, _socket, _symtable, _testcapi, _weakref array, binascii, cmath, cPickle, crypt, cStringIO, dbm errno, fcntl, grp, math, md5, operator, parser, pcre, pwd regex, rotor, select, struct, strop, syslog, termios time, timing, xreadlines

- 4) Once the python executable and library have been built, make will execute setup.py, which will attempt to build remaining extensions and link them dynamically. Each of these attempts will fail but should not halt the make process. This is normal.
- Running "make test" uses a lot of resources and causes problems on our system. You might want to try running tests singly or in small groups.
- SGI: SGI's standard "make" utility (/bin/make or /usr/bin/make) does not check whether a command actually changed the file it is supposed to build. This means that whenever you say "make"

it will redo the link step. The remedy is to use SGI's much smarter "smake" utility (/usr/sbin/smake), or GNU make. If you set the first line of the Makefile to #!/usr/sbin/smake smake will be invoked by make (likewise for GNU make). WARNING: There are bugs in the optimizer of some versions of SGI's compilers that can cause bus errors or other strange behavior, especially on numerical operations. To avoid this, try building with "make OPT=".

- OS/2: If you are running Warp3 or Warp4 and have IBM's VisualAge C/C++ compiler installed, just change into the pc\os2vacpp directory and type NMAKE. Threading and sockets are supported by default in the resulting binaries of PYTHON15.DLL and PYTHON.EXE.
- Reliant UNIX: The thread support does not compile on Reliant UNIX, and there is a (minor) problem in the configure script for that platform as well. This should be resolved in time for a future release.
- MacOSX: The tests will crash on both 10.1 and 10.2 with SEGV in test_re and test_sre due to the small default stack size. If you set the stack size to 2048 before doing a "make test" the failure can be avoided. If you're using the tcsh or csh shells, use "limit stacksize 2048" and for the bash shell (the default as of OSX 10.3), use "ulimit -s 2048". On naked Darwin you may want to add the configure option "--disable-toolbox-glue" to disable the glue code for the Carbon interface modules. The modules themselves are currently only built if you add the --enable-framework option, see below. On a clean OSX /usr/local does not exist. Do a "sudo mkdir -m 775 /usr/local" before you do a make install. It is probably not a good idea to do "sudo make install" which installs everything as superuser, as this may later cause problems when installing distutils-based additions. Some people have reported problems building Python after using

"fink"

to install additional unix software. Disabling fink (remove all references to /sw from your .profile or .login) should solve this. You may want to try the configure option "--enable-framework" which installs Python as a framework. The location can be set as argument to the --enable-framework option (default /Library/Frameworks). A framework install is probably needed if you want to use any Aqua-based GUI toolkit (whether Tkinter, wxPython, Carbon, Cocoa or anything else).

You may also want to try the configure option "--enableuniversalsdk"

which builds Python as a universal binary with support for the i386 and PPC architetures. This requires Xcode 2.1 or later to

build.

See Mac/README for more information on framework and universal builds.

Cygwin: With recent (relative to the time of writing, 2001-12-19) Cygwin installations, there are problems with the interaction of dynamic linking and fork(). This manifests itself in build failures during the execution of setup.py. There are two workarounds that both enable Python (albeit without threading support) to build and pass all tests on NT/2000 (and most likely XP as well, though reports of testing on XP would be appreciated).

The workarounds: (a) the band-aid fix is to link the _socket module statically rather than dynamically (which is the default). To do this, run "./configure --with-threads=no" including any other options you need (--prefix, etc.). Then in Modules/Setup uncomment the lines: #SSL=/usr/local/ssl #_socket socketmodule.c \ # -DUSE_SSL -I\$(SSL)/include -I\$(SSL)/include/openssl \ # -L\$(SSL)/lib -lssl -lcrypto and remove "local/" from the SSL variable. Finally, just run "make"! (b) The "proper" fix is to rebase the Cygwin DLLs to prevent base address conflicts. Details on how to do this can be found in the following mail: http://sources.redhat.com/ml/cygwin/2001-12/msg00894.html It is hoped that a version of this solution will be incorporated into the Cygwin distribution fairly soon. Two additional problems: (1) Threading support should still be disabled due to a known bug in Cygwin pthreads that causes test_threadedtempfile to hang. (2) The _curses module does not build. This is a known Cygwin neurses problem that should be resolved the next time that this package is released. On older versions of Cygwin, test_poll may hang and test_strftime may fail. The situation on 9X/Me is not accurately known at present. Some time ago, there were reports that the following regression tests failed: test_pwd test_select (hang) test_socket Due to the test_select hang on 9X/Me, one should run the regression test using the following: make TESTOPTS='-1 -x test_select' test News regarding these platforms with more recent Cygwin versions would be appreciated! Windows: When executing Python scripts on the command line using file type associations (i.e. starting "script.py" instead of "python script.py"), redirects may not work unless you set a specific registry key. See the Knowledge Base article . Configuring the bsddb and dbm modules -----Beginning with Python version 2.3, the PyBsddb package was adopted into Python as the bsddb package, exposing a set of package-level functions which provide backwards-compatible behavior. Only versions 3.3 through 4.4 of Sleepycat's libraries provide the necessary API, so older versions aren't supported through this interface. The old bsddb module has been retained as bsddb185, though it is not built by default. Users wishing to use it will have to tweak Modules/Setup to build it. The dbm module will still be built against the Sleepycat libraries if other preferred alternatives (ndbm, gdbm) are not found. Building the sqlite3 module

To build the sqlite3 module, you'll need the sqlite3 or libsqlite3 packages installed, including the header files. Many modern operating systems distribute the headers in a separate package to the library often it will be the same name as the main package, but with a -dev or -devel suffix. The version of pysqlite2 that's including in Python needs sqlite3 3.0.8 or later. setup.py attempts to check that it can find a correct version. Configuring threads As of Python 2.0, threads are enabled by default. If you wish to compile without threads, or if your thread support is broken, pass the --with-threads=no switch to configure. Unfortunately, on some platforms, additional compiler and/or linker options are required for threads to work properly. Below is a table of those options, collected by Bill Janssen. We would love to automate this process more, but the information below is not enough to write a patch for the configure.ac file, so manual intervention is required. If you patch the configure.ac file and are confident that the patch works, please send in the patch. (Don't bother patching the configure script itself -- it is regenerated each time the configure.ac file changes.) Compiler switches for threads The definition of _REENTRANT should be configured automatically, if that does not work on your system, or if _REENTRANT is defined incorrectly, please report that as a bug. OS/Compiler/threads Switches for use with threads (POSIX is draft 10, DCE is draft 4) compile & link SunOS 5.{1-5}/{gcc,SunPro cc}/solaris -mt SunOS 5.5/{gcc,SunPro cc}/POSIX (nothing) DEC OSF/1 3.x/cc/DCE -threads (butenhof@zko.dec.com) Digital UNIX 4.x/cc/DCE -threads (butenhof@zko.dec.com) Digital UNIX 4.x/cc/POSIX -pthread (butenhof@zko.dec.com) AIX 4.1.4/cc_r/d7 (nothing) (buhrt@iquest.net) AIX 4.1.4/cc_r4/DCE (nothing) (buhrt@iquest.net) IRIX 6.2/cc/POSIX (nothing) (robertl@cwi.nl) Linker (ld) libraries and flags for threads OS/threads Libraries/switches for use with threads SunOS 5.{1-5}/solaris -lthread SunOS 5.5/POSIX -lpthread DEC OSF/1 3.x/DCE -lpthreads -lmach -lc_r -lc (butenhof@zko.dec.com) Digital UNIX 4.x/DCE -lpthreads -lpthread -lmach -lexc lc (butenhof@zko.dec.com) Digital UNIX 4.x/POSIX -lpthread -lmach -lexc -lc (butenhof@zko.dec.com) AIX 4.1.4/{draft7,DCE} (nothing) (buhrt@iquest.net) IRIX 6.2/POSIX -lpthread

(jph@emilia.engr.sgi.com) Building a shared libpython

Starting with Python 2.3, the majority of the interpreter can be built into a shared library, which can then be used by the interpreter executable, and by applications embedding Python. To enable this feature, configure with --enable-shared.

If you enable this feature, the same object files will be used to create a static library. In particular, the static library will contain object files using position-independent code (PIC) on platforms where PIC flags are needed for the shared library.

Configuring additional built-in modules

Starting with Python 2.1, the setup.py script at the top of the source distribution attempts to detect which modules can be built and automatically compiles them. Autodetection doesn't always work, so you can still customize the configuration by editing the Modules/Setup file; but this should be considered a last resort. The rest of this section only applies if you decide to edit the Modules/Setup file. You also need this to enable static linking of certain modules (which is needed to enable profiling on some systems).

This file is initially copied from Setup.dist by the configure script; if it does not exist yet, create it by copying Modules/Setup.dist yourself (configure will never overwrite it). Never edit Setup.dist -- always edit Setup or Setup.local (see below). Read the comments in the file for information on what kind of edits are allowed. When you have edited Setup in the Modules directory, the interpreter will automatically be rebuilt the next time you run make (in the toplevel directory).

Many useful modules can be built on any Unix system, but some optional modules can't be reliably autodetected. Often the quickest way to determine whether a particular module works or not is to see if it will build: enable it in Setup, then if you get compilation or link errors, disable it -- you're either missing support or need to adjust the compilation and linking parameters for that module.

On SGI IRIX, there are modules that interface to many SGI specific system libraries, e.g. the GL library and the audio hardware. These modules will not be built by the setup.py script.

In addition to the file Setup, you can also edit the file Setup.local. (the makesetup script processes both). You may find it more convenient to edit Setup.local and leave Setup alone. Then, when installing a new Python version, you can copy your old Setup.local file.

Setting the optimization/debugging options

If you want or need to change the optimization/debugging options for the C compiler, assign to the OPT variable on the toplevel make command; e.g. "make OPT=-g" will build a debugging version of Python on most platforms. The default is OPT=-O; a value for OPT in the environment when the configure script is run overrides this default (likewise for CC; and the initial value for LIBS is used as the base set of libraries to link with).

When compiling with GCC, the default value of OPT will also include the -Wall and -Wstrict-prototypes options.

Additional debugging code to help debug memory management problems can be enabled by using the --with-pydebug option to the configure script. For flags that change binary compatibility, use the EXTRA_CFLAGS

variable. Profiling - - - - - - - - . If you want C profiling turned on, the easiest way is to run configure with the CC environment variable to the necessary compiler invocation. For example, on Linux, this works for profiling using gprof(1): CC="gcc -pg" ./configure Note that on Linux, gprof apparently does not work for shared libraries. The Makefile/Setup mechanism can be used to compile and link most extension modules statically. Coverage checking For C coverage checking using gcov, run "make coverage". This will build a Python binary with profiling activated, and a ".gcno" and ".gcda" file for every source file compiled with that option. With the built binary, now run the code whose coverage you want to check. Then, you can see coverage statistics for each individual source file by running gcov, e.g. gcov -o Modules zlibmodule This will create a "zlibmodule.c.gcov" file in the current directory containing coverage info for that source file. This works only for source files statically compiled into the executable; use the Makefile/Setup mechanism to compile and link extension modules you want to coverage-check statically. Testing - - - - - - -To test the interpreter, type "make test" in the top-level directory. This runs the test set twice (once with no compiled files, once with the compiled files left by the previous test run). The test set produces some output. You can generally ignore the messages about skipped tests due to optional features which can't be imported. If a message is printed about a failed test or a traceback or core dump is produced, something is wrong. On some Linux systems (those that are not yet using glibc 6), test_strftime fails due to a non-standard implementation of strftime() in the C library. Please ignore this, or upgrade to glibc version 6. By default, tests are prevented from overusing resources like disk space and memory. To enable these tests, run "make testall". IMPORTANT: If the tests fail and you decide to mail a bug report, *don't* include the output of "make test". It is useless. Run the failing test manually, as follows: ./python Lib/test/regrtest.py -v test_whatever (substituting the top of the source tree for '.' if you built in a different directory). This runs the test in verbose mode. Installing - - - - - - - - - -To install the Python binary, library modules, shared library modules (see below), include files, configuration files, and the manual page, just type make install This will install all platform-independent files in subdirectories of the directory given with the --prefix option to configure or to the `prefix' Make variable (default /usr/local). All binary and other platform-specific files will be installed in subdirectories if the directory given by --exec-prefix or the `exec_prefix' Make variable (defaults to the --prefix directory) is given.

If DESTDIR is set, it will be taken as the root directory of the installation, and files will be installed into \$(DESTDIR)\$(prefix), \$(DESTDIR)\$(exec_prefix), etc. All subdirectories created will have Python's version number in their name, e.g. the library modules are installed in "/usr/local/lib/python/" by default, where is the . release number (e.g. "2.1"). The Python binary is installed as "python" and a hard link named "python" is created. The only file not installed with a version number in its name is the manual page, installed as "/usr/local/man/man1/python.1" by default. If you want to install multiple versions of Python see the section below entitled "Installing multiple versions". The only thing you may have to install manually is the Python mode for Emacs found in Misc/python-mode.el. (But then again, more recent versions of Emacs may already have it.) Follow the instructions that came with Emacs for installation of site-specific files. On Mac OS X, if you have configured Python with --enable-framework, you should use "make frameworkinstall" to do the installation. Note that this installs the Python executable in a place that is not normally on your PATH, you may want to set up a symlink in /usr/local/bin. Installing multiple versions -----On Unix and Mac systems if you intend to install multiple versions of Python using the same installation prefix (--prefix argument to the configure script) you must take care that your primary python executable is not overwritten by the installation of a different version. All files and

directories installed using "make altinstall" contain the major and minor version and can thus live side-by-side. "make install" also creates \${prefix}/bin/python which refers to \${prefix}/bin/pythonX.Y. If you intend to install multiple versions using the same prefix you must decide which version (if any) is your "primary" version. Install that version using "make install". Install all other versions using "make altinstall". For example, if you want to install Python 2.5, 2.6 and 3.0 with 2.6 being the primary version, you would execute "make install" in your 2.6 build directory and "make altinstall" in the others. Configuration options and variables

Some special cases are handled by passing options to the configure script.

WARNING: if you rerun the configure script with different options, you must run "make clean" before rebuilding. Exceptions to this rule: after changing --prefix or --exec-prefix, all you need to do is remove Modules/getpath.o.

- --with(out)-gcc: The configure script uses gcc (the GNU C compiler) if it finds it. If you don't want this, or if this compiler is installed but broken on your platform, pass the option --without-gcc. You can also pass "CC=cc" (or whatever the name of the proper C compiler is) in the environment, but the advantage of using --without-gcc is that this option is remembered by the config.status script for its --recheck option.
- --prefix, --exec-prefix: If you want to install the binaries and the Python library somewhere else than in /usr/local/{bin,lib}, you can pass the option --prefix=DIRECTORY; the interpreter binary will be installed as DIRECTORY/bin/python and the library files as DIRECTORY/lib/python/*. If you pass

--exec-prefix=DIRECTORY (as well) this overrides the installation prefix for architecture-dependent files (like the interpreter binary). Note that --prefix=DIRECTORY also affects the default module search path (sys.path), when Modules/config.c is compiled. Passing make the option prefix=DIRECTORY (and/or exec_prefix=DIRECTORY) overrides the prefix set at configuration time; this may be more convenient than re-running the configure script if you change your mind about the install prefix.

- --with-readline: This option is no longer supported. GNU readline is automatically enabled by setup.py when present.
- --with-threads: On most Unix systems, you can now use multiple threads, and support for this is enabled by default. To disable this, pass --with-threads=no. If the library required for threads lives in a peculiar place, you can use --with-thread=DIRECTORY. IMPORTANT: run "make clean" after changing (either enabling or disabling) this option, or you will get link errors! Note: for DEC Unix use --with-dec-threads instead.
- --with-sgi-dl: On SGI IRIX 4, dynamic loading of extension modules is supported by the "dl" library by Jack Jansen, which is ftp'able from ftp://ftp.cwi.nl/pub/dynload/dl-1.6.tar.Z. This is enabled (after you've ftp'ed and compiled the dl library) by passing --with-sgi-dl=DIRECTORY where DIRECTORY is the absolute pathname of the dl library. (Don't bother on IRIX 5, it already has dynamic linking using SunOS style shared libraries.) THIS OPTION IS UNSUPPORTED.

--with-dl-dld: Dynamic loading of modules is rumored to be supported on some other systems: VAX (Ultrix), Sun3 (SunOS 3.4), Sequent Symmetry (Dynix), and Atari ST. This is done using a combination of the GNU dynamic loading package (ftp://ftp.cwi.nl/pub/dynload/dl-dld-1.1.tar.Z) and an emulation of the SGI dl library mentioned above (the emulation can be found at ftp://ftp.cwi.nl/pub/dynload/dld-3.2.3.tar.Z). To enable this, ftp and compile both libraries, then call configure, passing it the option --with-dl-dld=DL_DIRECTORY,DLD_DIRECTORY where DL_DIRECTORY is the absolute pathname of the dl emulation library and DLD_DIRECTORY is the absolute pathname of the GNU dld library. (Don't bother on SunOS 4 or 5, they already have dynamic linking using shared libraries.) THIS OPTION IS UNSUPPORTED. --with-libm, --with-libc: It is possible to specify alternative

--with-libm, --with-libc: It is possible to specify alternative versions for the Math library (default -lm) and the C library (default the empty string) using the options --with-libm=STRING and --with-libc=STRING, respectively. For example, if your system requires that you pass -lc_s to the C compiler to use the shared C library, you can pass --with-libc=-lc_s. These libraries are passed after all other libraries, the C library last.

- --with-libs='libs': Add 'libs' to the LIBS that the python interpreter is linked against.
- --with-cxx-main=: If you plan to use C++ extension modules, then -- on some platforms -- you need to compile python's main() function with the C++ compiler. With this option, make will use to compile main() *and* to link the python executable. It is likely that the resulting executable depends on the C++

runtime library of . (The default is --without-cxx-main.) There are platforms that do not require you to build Python with a C++ compiler in order to use C++ extension modules. E.g., x86 Linux with ELF shared binaries and GCC 3.x, 4.x is such a platform. We recommend that you configure Python --without-cxx-main on those platforms because a mismatch between the C++ compiler version used to build Pvthon and to build a C++ extension module is likely to cause a crash at runtime. The Python installation also stores the variable CXX that determines, e.g., the C++ compiler distutils calls by default to build C++ extensions. If you set CXX on the configure command line to any string of non-zero length, then configure won't change CXX. If you do not preset CXX but pass --with-cxx-main=, then configure sets CXX=. In all other cases, configure looks for a C++ compiler by some common names (c++, g++, gcc, CC, cxx, cc++, cl) and sets CXX to the first compiler it finds. If it does not find any C++ compiler, then it sets CXX="". Similarly, if you want to change the command used to link the python executable, then set LINKCC on the configure command line. --with-pydebug: Enable additional debugging code to help track down memory management problems. This allows printing a list of all live objects when the interpreter terminates. --with(out)-universal-newlines: enable reading of text files with foreign newline convention (default: enabled). In other words, any of r, n or r^n is acceptable as end-of-line character. If enabled import and execfile will automatically accept any newline in files. Python code can open a file with open(file, 'U') to read it in universal newline mode. THIS OPTION IS UNSUPPORTED. --with-tsc: Profile using the Pentium timestamping counter (TSC). --with-system-ffi: Build the _ctypes extension module using an ffi library installed on the system. --with-dbmliborder=db1:db2:...: Specify the order that backends for the dbm extension are checked. Valid value is a colon separated string with the backend names `ndbm', `gdbm' and `bdb'. Building for multiple architectures (using the VPATH feature) If your file system is shared between multiple architectures, it usually is not necessary to make copies of the sources for each architecture you want to support. If the make program supports the VPATH feature, you can create an empty build directory for each architecture, and in each directory run the configure script (on the appropriate machine with the appropriate options). This creates the necessary subdirectories and the Makefiles therein. The Makefiles contain a line VPATH=... which points to a directory containing the actual sources. (On SGI systems, use "smake -J1" instead of "make" if you use VPATH -- don't try gnumake.) For example, the following is all you need to build a minimal Python in /usr/tmp/python (assuming ~guido/src/python is the toplevel directory and you want to build in /usr/tmp/python): \$ mkdir /usr/tmp/python \$ cd /usr/tmp/python \$ ~guido/src/python/configure [...] \$ make

[...]

\$ Note that configure copies the original Setup file to the build directory if it finds no Setup file there. This means that you can edit the Setup file for each architecture independently. For this reason, subsequent changes to the original Setup file are not tracked automatically, as they might overwrite local changes. To force a copy of a changed original Setup file, delete the target Setup file. (The makesetup script supports multiple input files, so if you want to be fancy you can change the rules to create an empty Setup.local if it doesn't exist and run it with arguments \$(srcdir)/Setup Setup.local; however this assumes that you only need to add modules.) Also note that you can't use a workspace for VPATH and non VPATH builds. The object files left behind by one version confuses the other. Building on non-UNIX systems -----For Windows (2000/NT/ME/98/95), assuming you have MS VC++ 7.1, the project files are in PCbuild, the workspace is pcbuild.dsw. See PCbuild\readme.txt for detailed instructions. For other non-Unix Windows compilers, in particular MS VC++ 6.0 and for OS/2, enter the directory "PC" and read the file "readme.txt". For the Mac, a separate source distribution will be made available, for use with the CodeWarrior compiler. If you are interested in Mac development, join the PythonMac Special Interest Group (http://www.python.org/sigs/pythonmac-sig/, or send email to pythonmac-sig-request@python.org). Of course, there are also binary distributions available for these platforms -- see http://www.python.org/. To port Python to a new non-UNIX system, you will have to fake the effect of running the configure script manually (for Mac and PC, this has already been done for you). A good start is to copy the file pyconfig.h.in to pyconfig.h and edit the latter to reflect the actual configuration of your system. Most symbols must simply be defined as 1 only if the corresponding feature is present and can be left alone otherwise; however the *_t type symbols must be defined as some variant of int if they need to be defined at all. For all platforms, it's important that the build arrange to define the preprocessor symbol NDEBUG on the compiler command line in a release build of Python (else assert() calls remain in the code, hurting release-build performance). The Unix, Windows and Mac builds already do this. Miscellaneous issues _____ Emacs mode - - - - - - - - - - -There's an excellent Emacs editing mode for Python code; see the file Misc/python-mode.el. Originally written by the famous Tim Peters, it is now maintained by the equally famous Barry Warsaw. The latest version, along with various other contributed Python-related Emacs goodies, is online at http://launchpad.net/python-mode/. Tkinter The setup.py script automatically configures this when it detects a usable Tcl/Tk installation. This requires Tcl/Tk version 8.0 or higher. For more Tkinter information, see the Tkinter Resource page: http://www.python.org/topics/tkinter/

There are demos in the Demo/tkinter directory. Note that there's a Python module called "Tkinter" (capital T) which lives in Lib/lib-tk/Tkinter.py, and a C module called "_tkinter" (lower case t and leading underscore) which lives in Modules/_tkinter.c. Demos and normal Tk applications import only the Python Tkinter module -- only the latter imports the C _tkinter module. In order to find the C _tkinter module, it must be compiled and linked into the Python interpreter -- the setup.py script does this. In order to find the Python Tkinter module, sys.path must be set correctly -- normal installation takes care of this. Distribution structure Most subdirectories have their own README files. Most files have comments. Demo/ Demonstration scripts, modules and programs Documentation sources (reStructuredText) Doc/ Grammar/ Input for the parser generator Include/ Public header files Licensing information LICENSE Python library modules Lib/ Macintosh specific resources Mac/ Makefile.pre.in Source from which config.status creates the Makefile.pre Miscellaneous useful files Misc/ Modules/ Implementation of most built-in modules Implementation of most built-in object types Objects/ Files specific to PC ports (DOS, Windows, OS/2) PC/ PCbuild/ Build directory for Microsoft Visual C++ The parser and tokenizer and their input handling Parser/ The byte-compiler and interpreter Python/ The file you're reading now README Files specific to RISC OS port RISCOS/ Some useful programs written in Python Tools/ Source from which pyconfig.h is created (GNU autoheader pyconfig.h.in output) configure Configuration shell script (GNU autoconf output) Configuration specification (input for GNU autoconf) configure.ac Shell script used to install files install-sh setup.py Python script used to build extension modules The following files will (may) be created in the toplevel directory by the configuration and build processes: Build rules Makefile Makefile.pre Build rules before running Modules/makesetup Keeps track of the build number buildno config.cache Cache of configuration variables pyconfig.h Configuration header Log from last configure run config.log config.status Status from last run of the configure script getbuildinfo.o Object file from Modules/getbuildinfo.c libpython.a The library archive python The executable interpreter reflog.txt Output from running the regression suite with the -R flag tags, TAGS Tags files for vi and Emacs That's all, folks! -------Guido van Rossum (home page: <u>http://www.python.org/~guido/</u>)

Appendix I: Patent License

Patent License:

Last Updated: December 6, 2010

PLEASE READ THIS SKYPE SILK PATENT LICENSE AGREEMENT (THE "LICENSE AGREEMENT") CAREFULLY BEFORE USING OR EXPLOITING THE SKYPE SILK CODEC (THE "SILK CODEC"). THIS LICENSE AGREEMENT GRANTS YOU CERTAIN LIMITED RIGHTS UNDER SKYPE PATENTS TO USE AND EXPLOIT THE SILK CODEC. THE SOFTWARE CODE AND COPYRIGHTS FOR SKYPE'S SOFTWARE IMPLEMENTATION OF THE SILK CODEC (THE "SKYPE SILK SOFTWARE") ARE LICENSED SEPARATELY, AND THIS LICENSE AGREEMENT APPLIES ONLY TO SKYPE'S PATENT RIGHTS IN THE SILK CODEC.

NO OTHER SKYPE AGREEMENT GRANTS YOU ANY RIGHT, EXPRESS OR IMPLIED, UNDER SKYPE PATENTS WITH RESPECT TO THE SILK CODEC. SKYPE IS WILLING TO GRANT YOU THE LIMITED PATENT LICENSE SET FORTH HEREIN ONLY UPON THE CONDITION THAT YOU EXPRESSLY ACCEPT AND COMPLY WITH THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT.

BY CLICKING "I AGREE" BELOW, YOU INDICATE THAT YOU UNDERSTAND THIS LICENSE AGREEMENT AND AGREE TO ALL OF ITS TERMS. IF YOU DO NOT ACCEPT AND AGREE TO ALL OF THE TERMS OF THIS LICENSE AGREEMENT, THEN SKYPE IS UNWILLING TO GRANT YOU ANY RIGHTS UNDER SKYPE PATENTS WITH RESPECT TO THE SILK CODEC AND SKYPE RESERVES THE RIGHT TO ENFORCE ITS PATENT RIGHTS AGAINST YOU AND ANY USE OR EXPLOITATION YOU MAY MAKE OF THE SILK CODEC.

1. Definitions

"Affiliate" means, with respect to any entity, any other entity directly or indirectly controlling or controlled by, or under direct or indirect common control with such entity.

"Compare Tool" means the tool supplied with the Skype Silk Software for comparing the decoder output Test Vectors provided by Skype with the output of a decoder part of a Licensed Product to determine whether the Licensed Product is Fully Compatible. The output of the Compare Tool will be either a "pass" or "fail" based on fixed thresholds hardcoded into the Compare Tool.

"Compatibility Test" means the test script supplied with the Skype Silk Software to determine whether a Licensed Product is Fully Compatible. At the user's request, the test script will invoke the decoder of the Licensed Product, input the encoder output Test Vectors, and compare the output from the Licensed Product with the decoder output Test Vectors using the Compare Tool. "Fully Compatible" means that (i) upon successfully running the Compatibility Test on a Licensed Product, the Compare Tool indicates that the Licensed Product has passed the test; and (ii) the use of such Licensed Product with the Skype Silk Software does not create or result in any errors or bugs or otherwise negatively impair or negatively impact the functioning or operation of the Skype Silk Software.

"Licensed Patents" means patents, patent applications and other patent rights owned or controlled by Skype or its Affiliates that would be infringed by any unlicensed manufacture, use, sale, offer for sale or importation of the Silk Codec that is implemented by the Skype Silk Software made publicly available by Skype at http://dev.skype.com/silk.

"Licensed Products" means products having encoder and/or decoder functionality based on a version of the Silk Codec released prior to the date set forth at the top of this License Agreement (a) the unlicensed manufacture, use, sale, offer for sale or importation of which would infringe any issued, unexpired claim or pending claim contained in the Licensed Patents in the country in which any such product is made, used, imported, offered for sale or sold and (b) that are Fully Compatible with the most current version of the Skype Silk Software made publicly available by Skype at http://dev.skype.com/silk at the time you entered into this License Agreement.

"Skype" means Skype Software S.a.r.l., a Luxembourg corporation.

"Test Vector" means the bit representation of a signal provided by Skype with the Skype Silk Software.

2. License and Restrictions

2.1 License Grant. Subject to your compliance with the terms and conditions of this License Agreement, Skype hereby grants you a non-exclusive, nontransferable license under the Licensed Patents to use, make, have made, sell, offer for sale, and import Licensed Products. The license rights granted under this Section 2.1 will remain in force and effect until the earlier of (i) termination of this License Agreement in accordance with its terms or (ii) expiration of the last to expire of the Licensed Patents.

2.2 No Technology Transfer Obligation. Nothing in this License Agreement will be deemed to require Skype to furnish any technology, information, materials or services of any kind.

2.3 No Other Rights. Nothing in this License Agreement will be deemed to confer on you, by

implication, estoppel or otherwise, any license or other right under any

patent or other intellectual property rights of Skype, except as expressly granted herein.

3. Non-Assert

3.1 You agree that you will not, and you will procure that your Affiliates, officers, employees and assignees will not, assert or otherwise claim or allege infringement of any patents or patent rights capable of being infringed by use, manufacture, marketing, making, having made, keeping, disposing of, offering to dispose of, distribution, sale, offering for sale or importation of (i) the Silk Codec or any other or modified version thereof as such or on any device or (ii) any combination of the Silk Codec or any other or modified version thereof with any hardware and/or software, against (a) Skype or its Affiliates, (b) any direct or indirect licensee of Skype or any of the foregoing.

3.2 You shall be released from the non-assertion obligation under Section 3.1 in relation to any beneficiary (but not in relation to other beneficiaries) of Section 3.1 that asserts any patent against you for your use of the Skype Silk Software.

4. No Warranty

4.1 Skype, its Affiliates, officers, employees and agents, make no representations or warranties that Licensed Patents are or will be held valid or enforceable, or that the manufacture, importation, use, offer for sale, sale or other distribution of any Licensed Products will not infringe upon any patent or other rights.

4.2 SKYPE, ITS AFFILIATES, OFFICERS, EMPLOYEES AND AGENTS, MAKE NO REPRESENTATIONS, EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ASSUME NO RESPONSIBILITIES WHATEVER WITH RESPECT TO DESIGN, DEVELOPMENT, MANUFACTURE, USE, SALE OR OTHER DISPOSITION OF ANY LICENSED PRODUCTS.

4.3 YOU ASSUME THE ENTIRE RISK AS TO PERFORMANCE OF LICENSED PRODUCTS. In no event shall Skype, its Affiliates, officers, employees and agents, be responsible or liable for any direct, indirect, special, incidental, or consequential damages or lost profits or other economic loss or damage with respect to Licensed Products or your exercise of any rights granted herein, regardless of legal or equitable theory. The above limitations on liability apply even though Skype, its Affiliates, officers, employees or agents may have been advised of the possibility of such damage.

4.4 You agree not to make any statements, representations or warranties whatsoever to any person or entity, or accept any liabilities or

responsibilities whatsoever from any person or entity that are inconsistent with any disclaimer or limitation included in this Section 4.

5. Termination

5.1 Skype may terminate this License Agreement and any rights granted hereunder in the event that you or any of your Affiliates (i) materially breaches any of the terms and conditions of this Agreement; or (ii) asserts any patent or patent rights against Skype, its Affiliates, or its or their successors or assigns.

5.2 Sections 1, 3, 4, 5.2, 6, and 7 will survive any termination or expiration of this Agreement.

6. Governing Law

This License Agreement will be governed by and construed in accordance with the laws of the State of California and the United States of America, without regard to or application of conflicts of law rules or principles. The United Nations Convention on Contracts for the International Sale of Goods will not apply. Any dispute, controversy or claim arising out of or relating to this License Agreement shall be adjudicated in the state or federal courts located in Santa Clara County, California, and you expressly consent to the exclusive personal jurisdiction and venue therein. Notwithstanding the foregoing, Skype shall have the right to seek injunction or any other equitable or similar relief from any court of competent jurisdiction. Any monetary award shall be payable in United States dollars.

7. General

You may not assign, novate or transfer this License Agreement or any rights granted hereunder, by operation of law or otherwise, without Skype's prior written consent, and any attempt by you to do so, without such consent, will be void and of no effect. Skype may assign, transfer or otherwise dispose of any rights or obligations under this Agreement or novate this License Agreement to any third party. Except as expressly set forth in this License Agreement, the exercise by either party of any of its remedies under this License Agreement will be without prejudice to its other remedies under this License Agreement or otherwise. The failure by Skype to enforce any provision of this License Agreement will not constitute a waiver of future enforcement of that or any other provision. Any waiver, modification or amendment of any provision of this License Agreement will be effective only if in writing and signed by authorized representatives of both parties. If any provision of this License Agreement is held to be unenforceable or invalid, that provision will be enforced to the maximum extent possible and the other provisions will remain in full force and effect. This License Agreement is the complete and exclusive understanding and agreement between the parties regarding its subject matter, and supersedes all proposals, understandings or communications between the parties, oral or written,

regarding its subject matter, unless you and Skype have executed a separate agreement.