**OPEN SOURCE SOFTWARE NOTICE**

The open source software notice for the open source software used in this openEuler distribution (“openEuler distribution”) is provided in this document. The open source software licenses are granted by the respective right holders. With regard to the respective open source software contained in the openEuler distribution, the applicable open source software license will prevail all other license agreement, including but not limited to the openEuler Software License, in case of any conflicts.

**Warranty Disclaimer**

**THE OPEN SOURCE SOFTWARE IN THIS OPENEULER DISTRIBUTION IS PROVIDED ON AN "AS IS" BASIS, WITHOUT ANY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.  
See the applicable licenses for more details.**

**Copyright Notice and License Texts**

Software: communication\_ipc 1.0.0

**Copyright notice:**

Copyright (C) 2010--2012,2015-2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2010-2019 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2018 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2012 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2013--2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2020 Carlos Gomes Martinho <carlos.gomesmartinho@siemens.com>  
Copyright (C) 2010-2011,2015-2016 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2021-2022 Huawei Device Co., Ltd.  
Copyright (C) 2007-2017 Google, Inc.  
Copyright (C) 2010-2020 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2013 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) Huawei Technologies Co., Ltd. 2019-2019. All rights reserved.  
Copyright (C) 2010,2011,2014-2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright 2016-2018 INRIA and Microsoft Corporation SPDX-License-Identifier: Apache-2.0  
Copyright 2016-2018 INRIA and Microsoft Corporation  
Copyright (C) 2010-2012 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2007-2021, Troy D. Hanson http:troydhanson.github.io/uthash/  
Copyright (c) 2001-2003 Swedish Institute of Computer Science.  
Copyright (C) 2011 Google, Inc.  
Copyright (C) 2018 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010,2011,2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2010--2021, Olaf Bergmann and others All rights reserved.  
Copyright (C) 2017 Jean-Claue Michelou <jcm@spinetix.com>  
Copyright 2008 Google Inc.  
Copyright (C) 2018 John Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2013,2015-2018 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2011 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2019-2021 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2021 Huawei Device Co., Ltd.  
Copyright (C) 2021 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2010--2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2018-2021 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2010--2019 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010--2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2012,2014 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2014 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2013,2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010—2021 by Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2016-2020 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2017 Dag Bjorklund <dag.bjorklund@comsel.fi>  
Copyright (C) 2010,2011,2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2012-2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010--2021 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2012,2014,2016-2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2012--2013 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2012,2014-2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2008 Google, Inc.  
Copyright (C) 2019 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2011,2014-2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2003-2021, Troy D. Hanson http:troydhanson.github.io/uthash/  
Copyright (C) 2011,2015,2018-2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (c) 2020 Huawei Device Co., Ltd.  
Copyright (C) 2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2011 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2020 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2014--2015,2019--2020 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2017 Jean-Claude Michelou <jcm@spinetix.com>  
Copyright (C) 2017 Google, Inc.  
Copyright (C) 2010,2011 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2021 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2010--2016 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2021 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2010-2013 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010--2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (c) INRIA and Microsoft Corporation. All rights reserved.  
Copyright (C) 2012-2013 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2019-2021, Arm Limited. All rights reserved.  
Copyright (C) 2007-2008 Google, Inc.  
Copyright (C) 2021-2022 Huawei Device Co., Ltd.  
Copyright (C) 2012 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010--2021 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2010--2012,2015-2016 Olaf Bergmann <bergmann@tzi.org>  
Copyright (c) 2020-2021 Huawei Device Co., Ltd.  
Copyright (c) 2021 Huawei Device Co., Ltd.  
Copyright (C) 2012,2015 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2015 Carsten Schoenert <c.schoenert@t-online.de>  
Copyright (C) 2010--2012,2014--2019 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2019 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2010-2012,2014-2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2019--2020 Olaf Bergmann <bergmann@tzi.org> and others  
Copyright (C) 2022 Huawei Device Co., Ltd.  
Copyright (C) 2004, 2006 The Linux Foundation and its contributors.  
Copyright (C) 2016 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2012 Google, Inc.  
Copyright (c) 2022 Huawei Device Co., Ltd.  
Copyright (C) 2010-2012,2015-2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2010-2021 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2015-2016,2019 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2020 Olaf Bergmann <bergmann@tzi.org>  
Copyright (C) 2020-2021 Jon Shallow <supjps-libcoap@jpshallow.com>  
Copyright (C) 2013-2016 Christian Amsüss <chrysn@fsfe.org>  
Copyright (C) 2010-2011,2014 Olaf Bergmann <bergmann@tzi.org>

**License:** Apache-2.0 and GPL-2.0

Apache License  
 Version 2.0, January 2004  
 http://www.apache.org/licenses/  
  
 TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION  
  
 1. Definitions.  
  
 "License" shall mean the terms and conditions for use, reproduction,  
 and distribution as defined by Sections 1 through 9 of this document.  
  
 "Licensor" shall mean the copyright owner or entity authorized by  
 the copyright owner that is granting the License.  
  
 "Legal Entity" shall mean the union of the acting entity and all  
 other entities that control, are controlled by, or are under common  
 control with that entity. For the purposes of this definition,  
 "control" means (i) the power, direct or indirect, to cause the  
 direction or management of such entity, whether by contract or  
 otherwise, or (ii) ownership of fifty percent (50%) or more of the  
 outstanding shares, or (iii) beneficial ownership of such entity.  
  
 "You" (or "Your") shall mean an individual or Legal Entity  
 exercising permissions granted by this License.  
  
 "Source" form shall mean the preferred form for making modifications,  
 including but not limited to software source code, documentation  
 source, and configuration files.  
  
 "Object" form shall mean any form resulting from mechanical  
 transformation or translation of a Source form, including but  
 not limited to compiled object code, generated documentation,  
 and conversions to other media types.  
  
 "Work" shall mean the work of authorship, whether in Source or  
 Object form, made available under the License, as indicated by a  
 copyright notice that is included in or attached to the work  
 (an example is provided in the Appendix below).  
  
 "Derivative Works" shall mean any work, whether in Source or Object  
 form, that is based on (or derived from) the Work and for which the  
 editorial revisions, annotations, elaborations, or other modifications  
 represent, as a whole, an original work of authorship. For the purposes  
 of this License, Derivative Works shall not include works that remain  
 separable from, or merely link (or bind by name) to the interfaces of,  
 the Work and Derivative Works thereof.  
  
 "Contribution" shall mean any work of authorship, including  
 the original version of the Work and any modifications or additions  
 to that Work or Derivative Works thereof, that is intentionally  
 submitted to Licensor for inclusion in the Work by the copyright owner  
 or by an individual or Legal Entity authorized to submit on behalf of  
 the copyright owner. For the purposes of this definition, "submitted"  
 means any form of electronic, verbal, or written communication sent  
 to the Licensor or its representatives, including but not limited to  
 communication on electronic mailing lists, source code control systems,  
 and issue tracking systems that are managed by, or on behalf of, the  
 Licensor for the purpose of discussing and improving the Work, but  
 excluding communication that is conspicuously marked or otherwise  
 designated in writing by the copyright owner as "Not a Contribution."  
  
 "Contributor" shall mean Licensor and any individual or Legal Entity  
 on behalf of whom a Contribution has been received by Licensor and  
 subsequently incorporated within the Work.  
  
 2. Grant of Copyright License. Subject to the terms and conditions of  
 this License, each Contributor hereby grants to You a perpetual,  
 worldwide, non-exclusive, no-charge, royalty-free, irrevocable  
 copyright license to reproduce, prepare Derivative Works of,  
 publicly display, publicly perform, sublicense, and distribute the  
 Work and such Derivative Works in Source or Object form.  
  
 3. Grant of Patent License. Subject to the terms and conditions of  
 this License, each Contributor hereby grants to You a perpetual,  
 worldwide, non-exclusive, no-charge, royalty-free, irrevocable  
 (except as stated in this section) patent license to make, have made,  
 use, offer to sell, sell, import, and otherwise transfer the Work,  
 where such license applies only to those patent claims licensable  
 by such Contributor that are necessarily infringed by their  
 Contribution(s) alone or by combination of their Contribution(s)  
 with the Work to which such Contribution(s) was submitted. If You  
 institute patent litigation against any entity (including a  
 cross-claim or counterclaim in a lawsuit) alleging that the Work  
 or a Contribution incorporated within the Work constitutes direct  
 or contributory patent infringement, then any patent licenses  
 granted to You under this License for that Work shall terminate  
 as of the date such litigation is filed.  
  
 4. Redistribution. You may reproduce and distribute copies of the  
 Work or Derivative Works thereof in any medium, with or without  
 modifications, and in Source or Object form, provided that You  
 meet the following conditions:  
  
 (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: How to apply the Apache License to your work.  
  
 To apply the Apache License to your work, attach the following  
 boilerplate notice, with the fields enclosed by brackets "[]"  
 replaced with your own identifying information. (Don't include  
 the brackets!) The text should be enclosed in the appropriate  
 comment syntax for the file format. We also recommend that a  
 file or class name and description of purpose be included on the  
 same "printed page" as the copyright notice for easier  
 identification within third-party archives.  
  
 Copyright [yyyy] [name of copyright owner]  
  
 Licensed under the Apache License, Version 2.0 (the "License");  
 you may not use this file except in compliance with the License.  
 You may obtain a copy of the License at  
  
 http://www.apache.org/licenses/LICENSE-2.0  
  
 Unless required by applicable law or agreed to in writing, software  
 distributed under the License is distributed on an "AS IS" BASIS,  
 WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
 See the License for the specific language governing permissions and  
 limitations under the License.

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

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and an idea of what it does.>

Copyright (C) <yyyy> <name of author>

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

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

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989 Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

**Written Offer**

This openEuler distribution may contain certain software whose rights holders license it on the terms of the GNU General Public License, version 2 (GPLv2) or other open source software licenses which require us to release corresponding source code. We will provide you and any third party with corresponding source code required under applicable open source software license through the repository: https://gitee.com/src-openeuler/. You can access and obtain corresponding source code by searching the aforementioned repository using package name and tag.

This offer is valid to anyone in receipt of this information.

**THIS OFFER IS VALID FOR THREE YEARS FROM THE MOMENT WE DISTRIBUTED THIS OPENEULER DISTRIBUTION .**