**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:** lyx 2.4.4

**Copyright notice:**

Copyright (c) John Maddock 2007.  
Copyright (c) 2002-2017 Németh László  
Copyright (c) 2003-2006, 2008-2012 Free Software Foundation, Inc.  
Copyright (c) David Abrahams 2002.  
Copyright (c) 2000 by Tom Sato <VEF00200@nifty.ne.jp>  
Copyright (c) 2002 Jens Maurer  
Copyright (c) David Abrahams 2001 - 2002.  
Copyright (c) 2007-2008 The LyX Team <lyx-devel@lists.lyx.org>  
Copyright (c) 2001-2003 John Maddock  
Copyright (c) 1999-2002, 2006, 2010 Free Software Foundation, Inc.  
Copyright (c) 1995-2005, 2010 Mark Adler For conditions of distribution and use, see  
Copyright (c) 2003 Eric Friedman  
Copyright 2014 Peter Dimov  
Copyright (c) Beman Dawes 2002 - 2003.  
Copyright 2003 Kevin B. Hendricks, Stratford, Ontario, Canada And Contributors. All rights reserved.  
Copyright (c) 1998 Mark Donohoe <donohoe@kde.org>  
Copyright (c) 2008-2011 Kornel Benko, <Kornel.Benko@berlin.de>  
Copyright (c) 1999-2007 Norman Walsh  
Copyright (c) 2008-2011 Peter Kümmel, <syntheticpp@gmx.net>  
Copyright 2002-2018 Peter Dimov  
Copyright (c) 1997, 1998 by Microstar Software Ltd.  
Copyright (c) 1999-2002, 2004, 2016 Free Software Foundation, Inc.  
Copyright 2019, 2021 Peter Dimov Distributed under the Boost Software License, Version 1.0.  
Copyright (c) 2004, 2010 Mark Adler For conditions of distribution and use, see  
Copyright (c) Noel Belcourt 2007.  
Copyright (c) 2003, 2005, 2008-2011 Free Software Foundation, Inc.  
Copyright 2010 John Maddock  
Copyright (c) Mat Marcus, Jesse Jones and Adobe Systems Inc 2001  
Copyright (c) 2001, 2016 Free Software Foundation, Inc.  
Copyright (c) 2006-2011 Peter Kümmel, <syntheticpp@gmx.net>  
Copyright (c) 2003 Gennaro Prota  
Copyright (c) 2015 Fredrik Berggren  
Copyright (c) Douglas Gregor 2010  
Copyright (c) 2006, Alexander Neundorf, <neundorf@kde.org>  
Copyright (c) 2004-2006 Georg Baum <Georg.Baum@post.rwth-aachen.de>  
Copyright 2005-2014 Daniel James.  
Copyright (c) 2000-2010 by Tom Sato <VEF00200@nifty.ne.jp>  
Copyright (c) 1999-2001, 2008, 2016 Free Software Foundation, Inc.  
Copyright 2005-2009 Dan Moulding  
Copyright (c) John maddock 1999.  
Copyright (c) 2000-2006, 2008-2012 Free Software Foundation, Inc.  
Copyright (c) Dave Abrahams, Steve Cleary, Beman Dawes, Howard Hinnant and John Maddock 2000, 2010.  
Copyright (c) 2014 Kornel Benko <kornel@lyx.org>  
Copyright 2022 Peter Dimov Distributed under the Boost Software License, Version 1.0.  
Copyright (c) Lie-Quan Lee 2001.  
Copyright (c) Stefan Slapeta 2004.  
Copyright (c) 2002, 2008, 2013 Peter Dimov  
Copyright (c) 2001-2002, 2005, 2007, 2009-2017 Free Software Foundation, Inc.  
copyright 1985, 1990, 1993 free software foundation, inc.  
Copyright (c) 2002-2006 José Matos <jamatos@lyx.org>  
Copyright (c) 2002, 2005-2006, 2009-2017 Free Software Foundation, Inc.  
Copyright David Abrahams 2002.  
Copyright (c) 2003-2004 José Matos <jamatos@lyx.org>  
Copyright (c) 2002-2011 Dekel Tsur <dekel@lyx.org>, José Matos <jamatos@lyx.org>, Richard Kimberly Heck <rikiheck@lyx.org>  
Copyright (c) Artyom Beilis 2010.  
Copyright (c) 1999-2001, 2005, 2012, 2016 Free Software Foundation, Inc.  
Copyright (c) Edward Diener 2011-2020.  
Copyright (c) Eric Jourdanneau, Joel Falcou 2010 Use, modification and distribution are subject to the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright 2003 The Trustees of Indiana University  
Copyright (c) Darin Adler 2001.  
Copyright (c) 2006-2009 Dan Moulding  
Copyright Beman Dawes and Daryle Walker 1999. Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at https:www.boost.orgLICENSE10.txt)  
Copyright (c) 1999-2002, 2005, 2016 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2020.  
Copyright (c) Toon Knapen 2001 - 2003.  
Copyright (c) 2006 José Matos <jamatos@lyx.org>  
Copyright (c) 1999-2003, 2005-2006, 2008-2011 Free Software Foundation, Inc.  
Copyright (c) Brian Kuhl 2016.  
Copyright (c) Beman Dawes 2011  
Copyright (c) 2007 Andreas Hartmetz <ahartmetz@gmail.com>  
Copyright (c) 1999-2003 Free Software Foundation, Inc.  
Copyright (c) Jens Maurer 2002 - 2003.  
Copyright (c) Aleksey Gurtovoy 2002.  
Copyright (c) 2008 Timo Bingmann 2008 Stefan Schimanski (weighted variant)  
Copyright 2020 Peter Dimov Distributed under the Boost Software License, Version 1.0.  
Copyright (c) 2013 Kornel Benko kornel@lyx.org  
Copyright (c) 2001 Ellis Whitehead <ellis@kde.org>  
Copyright (c) 1999-2008, 2011 Free Software Foundation, Inc.  
Copyright (c) 2002 Brad King (brad.king@kitware.com)  
Copyright (c) 2012-2014, Kornel Benko, <kornel@lyx.org>  
Copyright (c) 2009 Dan Moulding  
Copyright (c) John Maddock 2005.  
Copyright (c) 1999-2010, 2012, 2016 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2015.  
Copyright (c) 2007, 2014 Peter Dimov  
Copyright (c) 1999-2007, 2016 Free Software Foundation, Inc.  
Copyright (c) 2001, 2002 Peter Dimov and Multi Media Ltd.  
Copyright (c) Douglas Gregor 2002.  
Copyright (c) 2007 José Matos <jamatos@lyx.org>  
Copyright (c) Dave Abrahams, Steve Cleary, Beman Dawes, Howard Hinnant & John Maddock 2000-2003.  
Copyright 2017, NVIDIA CORPORATION.  
Copyright 2019 Peter Dimov  
Copyright (c) 1995-2017 Jean-loup Gailly and Mark Adler For conditions of distribution and use, see  
Copyright 2001 John Maddock.  
Copyright (c) 2005-2006 Dan Moulding  
Copyright (c) 1995-2017 Jean-loup Gailly detectdatatype() function provided freely by Cosmin Truta, 2006 For conditions of distribution and use, see  
Copyright 2016, 2018, 2019 Peter Dimov.  
Copyright (c) 2011 Peter Kümmel, <syntheticpp@gmx.net>  
Copyright (c) Jens Maurer 2001 - 2002.  
Copyright (c) 2014 Scott Kostyshak <skotysh@lyx.org>  
Copyright Nuxi, https:nuxi.nl 2015.  
Copyright 2021 Peter Dimov.  
Copyright (c) Bill Kempf 2002.  
Copyright (c) 2000 Bjoern Jacke  
Copyright 2006-2009 Kitware, Inc.  
Copyright (c) Nicolai M. Josuttis 2001.  
Copyright (c) Guillaume Melquiond 2002 - 2003.  
Copyright (c) Dave Abrahams and Daryle Walker 2001. Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at https:www.boost.orgLICENSE10.txt)  
Copyright (c) 1995-2003, 2010, 2014, 2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see  
Copyright (c) 1995-2011, 2016 Mark Adler For conditions of distribution and use, see  
Copyright (c) 2004-2007 Steve Ball  
Copyright 2001, 2004, 2011 Daryle Walker.  
Copyright (c) John Maddock 2018.  
Copyright (c) Boris Gubenko 2006 - 2007.  
Copyright (c) 2000-2002, 2005-2006, 2008-2009, 2016 Free Software Foundation, Inc.  
Copyright (c) 1999-2008, 2011, 2016 Free Software Foundation, Inc.  
Copyright (c) 2007-2012 LuaDist.  
Copyright (c) 2003 Free Software Foundation, Inc.  
Copyright (c) 1999-2011, 2016 Free Software Foundation, Inc.  
Copyright (c) 2002 Rani Sharoni (ranisharoni@hotmail.com) and Robert Ramey Use, modification and distribution is subject to the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright 1999-2007 ImageMagick Studio LLC, a non-profit organization dedicated to making software imaging solutions freely available.  
Copyright (c) John Maddock 2017.  
Copyright 2021, 2022 Peter Dimov.  
Copyright (c) Jens Mauer 2001  
Copyright (c) 1999 Stefano Ghirlanda, stefano@zool.su.se  
Copyright 1995-2017 Jean-loup Gailly and Mark Adler ; deflate 1.2.11  
Copyright 2014 Parag Nemade <pnemade AT redhat DOT com>  
Copyright (c) 2002 Bill Kempf  
Copyright (c) John Maddock 2002 - 2003.  
Copyright 2006 Alexander Neundorf <neundorf@kde.org>  
Copyright (c) 1995-2016 Mark Adler For conditions of distribution and use, see  
Copyright (c) 2013 Scott Kostyshak skotysh@lyx.org  
Copyright (c) 2005-2014 The DocBook Project  
Copyright (c) 1999-2001, 2005, 2011, 2016 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2001 - 2002.  
Copyright (c) 1995-2016 Jean-loup Gailly For conditions of distribution and use, see  
Copyright (c) Rene Rivera 2005.  
Copyright (c) John Maddock 2001 - 2003.  
Copyright (c) Jens Maurer 2001.  
Copyright (c) 2006-2011 Peter K�mmel, <syntheticpp@gmx.net>  
Copyright (c) 1999-2001, 2005, 2008, 2016 Free Software Foundation, Inc.  
Copyright (c) Christof Meerwald 2003  
Copyright (c) 1999-2003, 2005, 2007, 2010, 2012 Free Software Foundation, Inc.  
Copyright 2005-2009 Daniel James.  
Copyright (c) 2002-2004 Dekel Tsur <dekel@lyx.org>  
Copyright 2020, 2021 Peter Dimov Distributed under the Boost Software License, Version 1.0.  
Copyright (c) 2002-2018 The LyX Team  
Copyright (c) 2001, 2002 Free Software Foundation, Inc.  
Copyright 2015 Peter Dimov.  
Copyright (c) 1999-2003, 2008 Free Software Foundation, Inc.  
Copyright 2015 Peter Dimov  
Copyright (c) 1999-2004, 2008, 2016 Free Software Foundation, Inc.  
Copyright (c) Jessica Hamilton 2014.  
Copyright (c) 2005-2009 Dan Moulding  
Copyright (c) John Maddock 2000.  
Copyright (c) 2002-2003 David Abrahams  
Copyright (c) Beman Dawes 2001 - 2003.  
Copyright (c) 2013-2014 Kornel Benko <kornel@lyx.org>  
Copyright (c) 2004-2005 Georg Baum <Georg.Baum@post.rwth-aachen.de>  
Copyright (c) 2002-2004 José Matos <jamatos@lyx.org>  
Copyright (c) John Maddock & Thorsten Ottosen 2005.  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2010.  
Copyright (c) 1999-2001, 2008, 2011-2012, 2016 Free Software Foundation, Inc.  
Copyright (c) 1999-2002, 2016 Free Software Foundation, Inc.  
Copyright (c) 2006 Dan Moulding  
Copyright (c) 1991 Free Software Foundation, Inc.  
Copyright (c) 2016 Kornel Benko <kornel@lyx.org>  
Copyright 2010 Vicente J. Botet Escriba  
Copyright (c) 1999-2001, 2004, 2016 Free Software Foundation, Inc.  
Copyright (c) 1999-2002, 2004-2011, 2016 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2002.  
Copyright (c) 1995-2003, 2010 Mark Adler For conditions of distribution and use, see  
Copyright (c) Steve Cleary, Beman Dawes, Howard Hinnant & John Maddock 2000.  
Copyright (c) 2000 Free Software Foundation, Inc.  
Copyright (c) Martin Wille 2003.  
Copyright (c) Douglas Gregor 2001.  
Copyright (c) 1999-2001 Free Software Foundation, Inc.  
Copyright (c) Peter Dimov 2002.  
Copyright (c) 1991, 1999 Free Software Foundation, Inc.  
Copyright Kevlin Henney, 2000, 2001, 2002. All rights reserved.  
Copyright John Maddock 2002-21.  
Copyright 1999, 2000 Jaakko Jarvi (jaakko.jarvi@cs.utu.fi)  
Copyright (c) Dave Abrahams, Steve Cleary, Beman Dawes, Howard Hinnant & John Maddock 2000.  
Copyright 2017 Peter Dimov.  
Copyright (c) Markus Schoepflin 2002 - 2003.  
Copyright (c) 2006-2009 Emil Dotchevski and Reverge Studios, Inc.  
Copyright (c) John Maddock 2003  
Copyright (c) 1999-2006, 2012, 2016 Free Software Foundation, Inc.  
Copyright 2017, 2018 Peter Dimov.  
Copyright 2012-2022 Antony Polukhin.  
Copyright 2011 John Maddock  
Copyright (c) John Maddock 2003.  
Copyright (c) Dan Watkins 2003  
Copyright 2018 Glen Joseph Fernandes (glenjofe@gmail.com)  
Copyright (c) 1999-2002 Free Software Foundation, Inc.  
Copyright 2015, 2016 Peter Dimov.  
Copyright 2013, 2017-2018 Cray, Inc.  
Copyright (c) Aleksey Gurtovoy 2003.  
Copyright (c) 1995-2006, 2010, 2011, 2012, 2016 Mark Adler For conditions of distribution and use, see  
Copyright 2002 Aleksey Gurtovoy (agurtovoy@meta-comm.com)  
Copyright (c) Dave Abrahams, Steve Cleary, Beman Dawes, Howard Hinnant and John Maddock 2000.  
Copyright Antony Polukhin, 2013-2022.  
Copyright (c) Jens Maurer 2003.  
Copyright (c) 1991, 1999 Free Software Foundation, Inc.  
Copyright (c) 1999-2000 by David Brownell. All Rights Reserved.  
Copyright 2014 Andrey Semashev  
Copyright (c) 2001 Free Software Foundation, Inc.  
Copyright (c) 1999 Stefano Ghirlanda, stefano@zool.su.se.  
Copyright 1995-2017 Mark Adler ; inflate 1.2.11  
Copyright (c) 2000-2003, 2009-2017 Free Software Foundation, Inc.  
Copyright (c) 2015 The LyX team  
Copyright (c) Dustin Spicuzza 2009.  
Copyright (c) Steve Cleary, Beman Dawes, Howard Hinnant & John Maddock 2000-2005.  
Copyright 2013-2022 Antony Polukhin.  
Copyright (c) John maddock 1999. Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright Antony Polukhin, 2021-2022.  
Copyright (c) 2018 The LyX team  
Copyright (c) Markus Schoepflin 2005.  
Copyright (c) 1999-2003, 2005, 2008, 2012 Free Software Foundation, Inc.  
Copyright (c) John Maddock 2011.  
Copyright (c) 1999-2000, 2016 Free Software Foundation, Inc.  
Copyright (c) 2017 Glen Joseph Fernandes (glenjofe@gmail.com)  
Copyright 2002 Kevin B. Hendricks, Stratford, Ontario, Canada And Contributors. All rights reserved.  
Copyright (c) 1999-2005, 2012, 2016 Free Software Foundation, Inc.  
Copyright 2015-2019 Peter Dimov.  
Copyright (c) John Maddock 2001.  
Copyright (c) 2000-2003 Free Software Foundation, Inc.  
Copyright 2020 Glen Joseph Fernandes (glenjofe@gmail.com)  
Copyright (c) 1999-2001, 2005, 2007, 2016 Free Software Foundation, Inc.  
Copyright (c) 1995-2017 Mark Adler For conditions of distribution and use, see  
Copyright (c) Beman Dawes 1999.  
Copyright 2000 Jeremy Siek (jsiek@lsc.nd.edu)  
Copyright (c) 2016 The LyX team  
Copyright (c) 1999-2007, 2012, 2016 Free Software Foundation, Inc.  
Copyright (c) Christopher Jefferson 2011.  
Copyright (c) 2008-2024 Kornel Benko, <Kornel.Benko@berlin.de>  
Copyright 2022 Peter Dimov.  
Copyright (c) 2011 The LyX team  
Copyright Jens Maurer 2000 Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at  
Copyright (c) 1999-2005, 2016 Free Software Foundation, Inc.  
Copyright (c) Aleksey Gurtovoy 2002 - 2003.  
Copyright (c) Beman Dawes 2003.  
Copyright (c) 2012 Kornel Benko, <kornel@lyx.org>  
Copyright (c) 1999-2003, 2005-2006, 2008 Free Software Foundation, Inc.  
Copyright (c) 2012 Kornel Benko kornel@lyx.org  
Copyright (c) 1994, 1995, Basil K. Malyshev. All Rights Reserved.  
Copyright (c) Bryce Lelbach 2011  
Copyright (c) 1999-2001, 2012, 2016 Free Software Foundation, Inc.  
Copyright (c) Bill Kempf 2001.  
Copyright (c) Boris Gubenko 2007.  
Copyright 2015-2021 Peter Dimov.  
Copyright (c) John Maddock and Steve Cleary 2000.  
Copyright (c) John Maddock 2008.  
Copyright (c) 2011 Kornel Benko, <Kornel.Benko@berlin.de>  
Copyright (c) Jim Douglas 2005.  
Copyright (c) 1999-2001, 2008, 2011, 2016 Free Software Foundation, Inc.  
Copyright (c) Yuriy Krasnoschek 2009.  
Copyright (c) 2004, Nisus Software, Inc.  
Copyright 2015, 2017, 2019 Peter Dimov.  
Copyright (c) 2001 Deepak Bandyopadhyay, Lutz Kettner  
Copyright (c) 1999-2001, 2003, 2005, 2008, 2012 Free Software Foundation, Inc.  
Copyright (c) 2008-2009 Emil Dotchevski and Reverge Studios, Inc.  
Copyright (c) 2001 housemarque oy  
Copyright (c) 2006, Peter Kümmel, <syntheticpp@gmx.net>  
Copyright (c) 1995-2017 Jean-loup Gailly For conditions of distribution and use, see  
Copyright (c) 2002, 2018-2022 Peter Dimov  
Copyright 2009-2010 Mathieu Malaterre <mathieu.malaterre@gmail.com>  
Copyright 2015-2019 Peter Dimov  
Copyright (c) 2005, 2016 Free Software Foundation, Inc.  
Copyright (c) Synge Todo 2003.  
Copyright (c) John Maddock 2006.  
Copyright (c) 1999-2003 Free Software Foundation, Inc.); printf(  
Copyright (c) Toon Knapen 2003.  
Copyright (c) 1999-2001, 2016 Free Software Foundation, Inc.  
Copyright (c) 2007, 2008 Steven Watanabe, Joseph Gauterin, Niels Dekker  
Copyright (c) 2004-2017 Mark Adler For conditions of distribution and use, see  
Copyright (c) 2003 Jiří Kosek  
Copyright (c) 2002 Dekel Tsur <dekel@lyx.org>  
Copyright (c) 2003 The Trustees of Indiana University.  
Copyright (c) Guillaume Melquiond 2003.  
Copyright (c) 1999-2001, 2005, 2016 Free Software Foundation, Inc.  
Copyright (c) 1995-2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright (c) Paul Mensonides 2002-2011.  
Copyright (c) 2017 Dynatrace  
Copyright (c) David Abrahams 2002 - 2003.  
Copyright (c) 1999-2003, 2005, 2011-2012, 2016 Free Software Foundation, Inc.  
Copyright (c) 1999-2009 Free Software Foundation, Inc.  
Copyright Antony Polukhin, 2020-2022.  
Copyright (c) 2014 Glen Fernandes  
Copyright (c) 1999-2001, 2007, 2016 Free Software Foundation, Inc.  
Copyright (c) 2000-2002, 2005-2006, 2008-2009, 2011 Free Software Foundation, Inc.  
Copyright (c) 2012 Kornel Benko, kornel@lyx.org  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright John Maddock 2008 Use, modification, and distribution is subject to the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright (c) 2004 José Matos <jamatos@lyx.org>  
Copyright (c) 2015 Ion Gaztanaga  
Copyright (c) 2001 Peter Dimov  
Copyright (c) 1999-2004, 2012 Free Software Foundation, Inc.  
Copyright (c) 2001 Darin Adler  
Copyright John Maddock 2002-4.  
Copyright (c) 2013 Kornel Benko, <kornel@lyx.org>  
Copyright (c) 2001, 2004, 2011 Free Software Foundation, Inc.  
Copyright 2015-2020 Peter Dimov.  
Copyright (c) 2000-2010 by Tom Sato <VEF00200@nifty.ne.jp>  
Copyright (c) John Maddock 2001 Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright (c) 1995-2017 Jean-loup Gailly and Mark Adler  
Copyright (c) 1999-2012, 2016 Free Software Foundation, Inc.  
Copyright (c) 2013 Thomas Modes <tmodes@@users.sourceforge.net>  
Copyright (c) Peter Dimov 2001.  
Copyright (c) David Abrahams 2003.  
Copyright (c) 1995-2005, 2014, 2016 Jean-loup Gailly, Mark Adler For conditions of distribution and use, see  
Copyright (c) 2000-2004, 2006-2010 Free Software Foundation, Inc.  
Copyright (c) 2011-2012 OReilly Media  
Copyright (c) 2001, 2005, 2016 Free Software Foundation, Inc.  
Copyright (c) Jens Maurer 2001 - 2003.  
Copyright 2000 John Maddock (john@johnmaddock.co.uk)  
Copyright (c) Darin Adler 2001 - 2002.  
Copyright (c) 2010 Eric Jourdanneau, Joel Falcou Distributed under the Boost Software License, Version 1.0. (See accompanying file LICENSE10.txt or copy at http:www.boost.orgLICENSE10.txt)  
Copyright (c) 2007 Michael Gerz <michael.gerz@teststep.org>  
Copyright (c) 1999-2002, 2006, 2016 Free Software Foundation, Inc.  
Copyright 2021 Peter Dimov Distributed under the Boost Software License, Version 1.0.  
Copyright 2015-2017 Peter Dimov.  
Copyright (c) 2013 Kornel Benko <kornel@lyx.org>  
Copyright 2015, 2019 Peter Dimov.  
Copyright (c) 2004, 2005, 2010, 2011, 2012, 2013, 2016 Mark Adler For conditions of distribution and use, see  
Copyright (c) 1999-2004, 2016 Free Software Foundation, Inc.  
Copyright (c) Dave Abrahams, Steve Cleary, Beman Dawes, Aleksey Gurtovoy, Howard Hinnant & John Maddock 2000.  
Copyright (c) John Maddock 2001-8.

**License:** GPL-2.0-or-later

GNU GENERAL PUBLIC LICENSE Version 2, June 1991  
  
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, 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.  
  
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.  
  
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.)  
  
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.  
  
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.)  
  
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.

**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 .**