**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:** mingw-crt 9.0.0

**Copyright notice:**

Copyright (c) 2013-2018 The Khronos Group Inc.  
Copyright (c) 2009-2016 mingw-w64 project  
Copyright (c) 2009, 2010 mingw-w64 project  
Copyright 1984, 1987, 1988 by Stephen L. Moshier Direct inquiries to 30 Frost Street, Cambridge, MA 02140  
Copyright (c) 1984, 1989, 1990, 2000, 2001, 2002, 2003, 2004, 2005, 2006 Free Software Foundation, Inc.  
Copyright 2020 Jacek Caban for CodeWeavers  
Copyright 1999 Corel Corporation  
Copyright (c) 1988, 1993 The Regents of the University of California. All rights reserved.  
Copyright (c) 2017 Alexandre Julliard  
Copyright (c) 2011 Francois Gouget  
Copyright 2008 Andrew Fenn  
Copyright 2008 Robert Shearman  
Copyright (c) 1999,2000,2001 Ross Johnson  
Copyright 2018 Daniel Lehman  
Copyright 1999-2000 Bertho A. Stultiens (BS)  
Copyright 1998 Bertho A. Stultiens (BS)  
Copyright (c) 2007 David Adam  
Copyright (c) the Wine project  
Copyright (c) 2010 Tony Wasserka  
Copyright (c) 1998 John E. Bossom  
Copyright 2015 Martell Malone;  
Copyright (c) 2002-2003 Jason Edmeades Raphael Junqueira  
Copyright (c) 2009-2016 mingw-w64 project  
Copyright (c) 2004 Raphael Junqueira  
Copyright 2006 Jacek Caban for CodeWeavers  
Copyright (c) 2015 Intel Corporation  
Copyright (c) 2004 by Sun Microsystems, Inc. All rights reserved.  
Copyright (c) 2019 Daniel Lehman  
Copyright 2005 Huw Davies  
Copyright (c) 2010 Christian Costa  
Copyright (c) 2002 Todd C. Miller <Todd.Miller@courtesan.com>  
Copyright (c) 1992, 1993 The Regents of the University of California. All rights reserved.  
Copyright 2019 Hans Leidekker for CodeWeavers  
Copyright 2004 Alastair Bridgewater 2004, 2005 Huw Davies  
Copyright (c) 2009, 2010, 2011, 2012, 2013 by the mingw-w64 project  
Copyright 2005-2006 Robert Shearman  
Copyright 2009 Henri Verbeet for CodeWeavers  
Copyright (c) 2014 by the mingw-w64 project  
Copyright (c) 2013-2016 mingw-w64 project  
Copyright 2002 Ove Kaaven  
Copyright (c) 1984-1998 Stephen L. Moshier  
Copyright (c) 1997, 1999, 2001 Lucent Technologies All Rights Reserved  
Copyright (c) 1989, 1997, 1998, 1999, 2000 Free Software Foundation, Inc.  
Copyright (c) 2008 Maarten Lankhorst  
Copyright 2004 Christian Costa  
Copyright 2012 Jacek Caban for CodeWeavers  
Copyright (c) 2003-2004 Rok Mandeljc  
Copyright (c) 2009 Maarten Lankhorst  
Copyright 2007,2010 Vijay Kiran Kamuju  
Copyright (c) 1999,2005 Pthreads-win32 contributors  
Copyright (c) 2004 by David M. Gay.  
Copyright (c) 2000 Peter Hunnisett  
Copyright (c) 2015 Martell Malone  
Copyright (c) 2009, 2010 by the mingw-w64 project  
Copyright (c) 1999 Patrik Stridvall  
Copyright 2015 Michael Müller  
Copyright 2010 Alexandre Julliard  
Copyright (c) 2007 Francois Gouget  
Copyright (c) 2012 by the mingw-w64 project  
Copyright (c) 1997, 1998, 1999, 2000, 2001 by Lucent Technologies All Rights Reserved  
Copyright (c) 2008 Tony Wasserka  
Copyright 2011 Dylan Smith  
Copyright 2010 Christian Costa  
Copyright (c) 1991, 1992, 1996, 1998 Free Software Foundation, Inc.  
Copyright (c) 2011 mingw-w64 project  
Copyright (c) 2004 Christian Costa  
Copyright (c) 2007, 2008 Tony Wasserka  
Copyright 2008 Luis Busquets  
Copyright (c) 1999 Francois Gouget  
Copyright (c) 2003-2005 Raphael Junqueira  
Copyright 2004 Jacek Caban  
Copyright 2007 David ADAM  
Copyright (c) 1998 Softweyr LLC. All rights reserved.  
Copyright (c) 1987,88,89,90,91,92,93,94,95,96,98,99,2000,2001,2002 Free Software Foundation, Inc.  
Copyright (c) 2020 mingw-w64 project  
Copyright (c) 1998-2001 by Lucent Technologies All Rights Reserved  
Copyright 1996 Alexandre Julliard  
Copyright (c) 1998 Ben Elliston and Ross Johnson  
Copyright 2014 Kai Tietz  
Copyright (c) 2002-2003 Jason Edmeades  
Copyright (c) 2011 Piotr Caban for CodeWeavers  
Copyright (c) 2009-2016 mingw-w64 project  
Copyright (c) 2000 Ove Kaaven  
Copyright 2001-2003 Jon Griffiths  
Copyright 2002 Ove Kaaven;  
Copyright (c) Free Software Foundation License: GNU GPLv3+ (see the file COPYING.GPLv3)  
Copyright (c) 1993 by Sun Microsystems, Inc. All rights reserved.  
Copyright (c) 2008-2018 The Khronos Group Inc.  
Copyright (c) 2013 mingw-w64 project  
Copyright 2008 James Hawkins for CodeWeavers  
Copyright (c) 2000 The NetBSD Foundation, Inc.  
Copyright (c) 1998-2000 by Lucent Technologies All Rights Reserved  
Copyright 2005-2006 Eric Kohl  
Copyright (c) 2000 by Lucent Technologies All Rights Reserved  
Copyright (c) 1998, 2000 by Lucent Technologies All Rights Reserved  
Copyright (c) 2003 Robert Reif  
Copyright (c) 2002 Alexandre Julliard  
Copyright (c) 2016 mingw-w64 project  
Copyright (c) 1982, 1986, 1992, 1993 The Regents of the University of California. All rights reserved.  
Copyright (c) 2005-2020 Rich Felker, et al.  
Copyright (c) 2009 David Adam  
Copyright 1984, 1987, 1989 by Stephen L. Moshier Direct inquiries to 30 Frost Street, Cambridge, MA 02140  
Copyright (c) 2002 Peter Hunnisett  
Copyright (c) 2010 Maarten Lankhorst for CodeWeavers  
Copyright (c) 2018 mingw-w64 project  
Copyright 2007 Marcel Partap  
Copyright (c) 2002-2003 Raphael Junqueira  
Copyright (c) 2006 Maarten Lankhorst  
Copyright 1998 Bertho A. Stultiens  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright 2006 Robert Shearman (for CodeWeavers)  
Copyright 2010 Rico Schüller  
Copyright (c) 2004/2005 KJK::Hyperion  
Copyright 1998, 1999, 2000, 2001, 2002 Red Hat, Inc.  
Copyright (c) 1999,2003 Pthreads-win32 contributors  
Copyright 1984, 1995 by Stephen L. Moshier  
Copyright 2006-2008 Robert Shearman  
Copyright (c) 2014-2016 mingw-w64 project  
Copyright (c) 2004 Francois Gouget  
Copyright (c) 2008 KJK::Hyperion  
Copyright (c) 2007 Free Software Foundation, Inc. <http:fsf.org/>  
Copyright 1984, 1987, 1988, 1992 by Stephen L. Moshier Direct inquiries to 30 Frost Street, Cambridge, MA 02140  
Copyright 2013 Nikolay Sivov for CodeWeavers  
Copyright (c) 2009, 2010, 2013 by the mingw-w64 project  
Copyright 2021 Rémi Bernon for CodeWeavers  
Copyright (c) 2011-2016 mingw-w64 project  
Copyright (c) 2011, 2014 mingw-w64 project  
Copyright (c) 2008 Vijay Kiran Kamuju  
Copyright (c) 2009 - 2013 by the mingw-w64 project  
Copyright (c) 1997, 1998 Lucent Technologies All Rights Reserved  
Copyright (c) 2011 by the mingw-w64 project  
Copyright (c) 2009 mingw-w64 project  
Copyright 2008 Henri Verbeet for CodeWeavers  
Copyright (c) 2005 by David M. Gay All Rights Reserved  
Copyright (c) 2004-2008 KJK::Hyperion  
Copyright (c) 2002 Jason Edmeades  
Copyright (c) 2009, 2010 KJK::Hyperion  
Copyright 2008 James Hawkins  
Copyright (c) 1998, 1999 by Lucent Technologies All Rights Reserved  
Copyright (c) 2005 Oliver Stieber  
Copyright (c) 2015 Andrew Eikum for CodeWeavers  
Copyright 2004 Mike McCormack  
Copyright (c) 2007 Tony Wasserka  
Copyright (c) 1984, 1989-1990, 2000-2015, 2018-2021 Free Software Foundation, Inc.  
Copyright (c) 2006 Hans Leidekker  
Copyright (c) 2002-2010, and GNU GPLd, by Julian Seward et al. 9853  
Copyright (c) 2011-2016 mingw-w64 project  
Copyright 2010 Matteo Bruni for CodeWeavers  
Copyright (c) 2000 Alexandre Julliard  
Copyright 2002 Ove Kaaven based on WRC code by Bertho Stultiens  
Copyright (c) 2005 Peter Berg Larsen  
Copyright (c) 2013-2016 mingw-w64 project  
Copyright 2004 Ove Kaaven  
Copyright (c) 1983, 1992, 1993 The Regents of the University of California. All rights reserved.  
Copyright (c) 1995-2015 Free Software Foundation, Inc.  
Copyright (c) 1982, 1983, 1986, 1992, 1993 The Regents of the University of California. All rights reserved.  
Copyright 2002 Alexandre Julliard  
Copyright 1999 Rein KLazes  
Copyright (c) 2004 Robert Reif  
Copyright (c) 1999 Peter Hunnisett  
Copyright (c) 2001 Ove Kaaven  
Copyright 2005 Robert Shearman  
Copyright (c) 2009 Andrew Nguyen  
Copyright (c) 1998 by Lucent Technologies All Rights Reserved

**License:** Public Domain and ZPLv2.1

Anyone is free to copy, modify, publish, use, compile, sell, or distribute this software, either in source code form or as a compiled  
binary, for any purpose, commercial or non-commercial, and by any means.  
  
Zope Public License (ZPL) Version 2.1

A copyright notice accompanies this license document that identifies the copyright holders.

This license has been certified as open source. It has also been designated as GPL compatible by the Free Software Foundation (FSF).

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

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

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

3. Names of the copyright holders must not be used to endorse or promote products derived from this software without prior written permission from the copyright holders.

4. The right to distribute this software or to use it for any purpose does not give you the right to use Servicemarks (sm) or Trademarks (tm) of the copyright holders. Use of them is covered by separate agreement with the copyright holders.

5. If any files are modified, you must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

Disclaimer

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS ``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 COPYRIGHT HOLDERS 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.