**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:** pcp 6.3.2

**Copyright notice:**

Copyright (c) 2011 The New York Times Company. All Rights Reserved., results:[  
Copyright (c) 2001 Gilly Ran (gilly@exanet.com) - for the portions supporting the Alpha platform. All rights reserved.  
Copyright (c) 2022 Chen Tao ifndef JAVAGCH define JAVAGCH  
Copyright (c) 2017 Nicira, Inc.  
Copyright (c) 2021, Red Hat All rights reserved.  
Copyright (c) 2024 Red Hat.  
Copyright (c) 2012,2013,2016 Ken McDonell. All Rights Reserved.  
Copyright (c) 2021 Facebook include <vmlinux.h>  
Copyright (c) 2001,2009 Silicon Graphics, Inc. All rights reserved.  
Copyright (c) 2018-2020 Red Hat.  
Copyright (c) 2012-2016 Red Hat.  
Copyright (c) 2015,2021 Red Hat.  
Copyright (c) 2017 Ronak Jain.  
Copyright (c) 2013,2015,2017 Red Hat.  
Copyright (c) 2014,2018-2019 Red Hat.  
Copyright (c) 1995,2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2015 M. Nunberg, mnunberg@haskalah.org  
Copyright (c) 2012 Nathan Scott. All rights reversed.  
Copyright (c) 2007-2011 Aconex. All Rights Reserved.  
Copyright (c) 2017-2018,2021 Red Hat.  
Copyright (c) 2015-2016 Red Hat.  
Copyright (c) 2015,2019,2021 Red Hat.  
Copyright (c) 2010 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2002 Uwe Rathmann  
Copyright (c) 2012-2015,2022 Red Hat.  
Copyright (c) 2012-2017, Red Hat.  
Copyright (c) 2013-2015 Red Hat, Inc.  
Copyright (c) 2012-2016,2023, Red Hat. All Rights Reserved.  
Copyright (c) 2000,2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2019 Isovalent, Inc.  
Copyright (c) 2023-2024 Nathan Scott <nathans@debian.org>  
Copyright (c) 2014-2016, Red Hat.  
Copyright (c) 2021 Hengqi Chen include <vmlinux.h>  
Copyright (c) 2022 Ken McDonell.  
Copyright (c) 2015 Intel, Inc. All Rights Reserved.  
Copyright (c) 2016 fujitsu (wulm.fnst@cn.fujitsu.com).  
Copyright (c) 2020 -2021 Red Hat.  
Copyright (c) 2017 Facebook Author: Roman Gushchin <guro@fb.com>  
Copyright (c) 1999 Dallas Semiconductor Corporation, All Rights Reserved.  
Copyright (c) 2012-2019 Red Hat.  
Copyright (c) 2013-2016,2018-2020 Red Hat.  
Copyright (c) 1995,2004-2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015, Redis Labs, Inc All rights reserved.  
Copyright (c) 2012,2015-2016 Red Hat.  
Copyright (c) 2013,2016-2017,2021,2023 Red Hat.  
Copyright (c) 2012-2017,2022 Red Hat.  
Copyright (c) 2017-2018 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2014-2018,2021 Red Hat.  
Copyright (c) 1999-2000 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2018,2022 Red Hat.  
Copyright (c) 2013-2016,2019 Red Hat.  
Copyright (c) 2018 Gerlof Langeveld <gerlof.langeveld@atoptool.nl>  
Copyright (c) 2023,2024 Ken McDonell. All Rights Reserved.  
Copyright (c) 2021 Google LLC.  
Copyright (c) 2021 Yaqi Chen include <vmlinux.h>  
Copyright (c) 2010 Max Matveev. All Rights Reserved.  
Copyright (c) 2021 Red Hat.  
Copyright (c) 2011 SGI. All Rights Reserved.  
Copyright (c) 2016 Sitaram Shelke.  
Copyright (c) 1997,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014,2022 Red Hat.  
Copyright (c) 2022 Oracle and/or its affiliates.  
Copyright 2015 Red Hat.  
Copyright (c) 1995,2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2000 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2000,2004,2007 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2011 Aconex. All Rights Reserved.  
Copyright (c) 2023 Wenbo Zhang include <vmlinux.h>  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright (c) 2014-2015,2017 Red Hat.  
Copyright (c) 2014,2021 Red Hat.  
Copyright (c) 2013-2015,2017,2020-2021,2024 Red Hat.  
Copyright (c) 20212022 Hengqi Chen ifndef SIGSNOOPH define SIGSNOOPH  
Copyright (c) 2007, Aconex. All Rights Reserved.  
Copyright (c) 2015 Jiri Pirko <jiri@resi.us>  
Copyright (c) 2024 Nikhil Jain <nikjain@redhat.com>  
Copyright (c) 2012,2013 Ken McDonell. All Rights Reserved.  
Copyright (c) 2015 Dmitry Bakhvalov. All rights reserved.  
Copyright (c) 2008-2011, Red Hat, Inc.  
Copyright (c) 2019,2022 Red Hat.  
Copyright (c) 2012-2016, Red Hat.  
Copyright (c) 2017-2019 Red Hat.  
Copyright (c) 2021 Bytedance  
Copyright (c) 1999,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2018,2021 Red Hat.  
Copyright (c) 1997,2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2007 Aconex. All Rights Reserved.  
Copyright (c) 2016-2017 Red Hat.  
Copyright (c) 2020 Fujitsu.  
Copyright (c) 2017 Red Hat.  
Copyright (c) 2018 Netronome Systems, Inc.  
Copyright (c) 2011 Nathan Scott. All Rights Reserved.  
Copyright (c) 2008 Aconex. All Rights Reserved.  
Copyright (c) 1995-2002,2004,2006,2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2018 Facebook  
Copyright (c) 2010-2014, Pieter Noordhuis <pcnoordhuis at gmail dot com>  
Copyright (c) 1998 Andrea Chambers and University of Newcastle upon Tyne, All Rights Reserved.  
Copyright (c) 2012-2015,2021 Red Hat.  
Copyright (c) 2017-2021,2024 Red Hat.  
Copyright (c) 2017-2019 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2003 by Sun Microsystems, Inc. All rights reserved.  
Copyright (c) 2012-2015,2017,2021 Red Hat.  
Copyright (c) 2014-2019 Red Hat.  
Copyright (c) 2013,2016 Red Hat.  
Copyright (c) 2018 Facebook  
Copyright (c) 2020 Anton Protopopov ifndef TCPCONNECTH define TCPCONNECTH  
Copyright (c) 2018 Red Hat Inc. All Rights Reserved.  
Copyright (c) 2012-2016 Red Hat.  
Copyright (c) 2012-2014 Red Hat, Inc.  
Copyright (c) 2012,2016-2017 Red Hat.  
Copyright (c) 2015 Wang Nan <wangnan0@huawei.com>  
Copyright (c) 2022 Nicolas Sterchele include vmlinux.h  
Copyright (c) 2007-2011, Lloyd Hilaiel <lloyd@hilaiel.com>  
Copyright (c) 2013, 2017 Red Hat.  
Copyright (c) 2021 Bjorn Svensson <bjorn.a.svensson@est.tech>  
Copyright (c) 1997 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2010-2011 Pieter Noordhuis <pcnoordhuis at gmail dot com>  
Copyright (c) 1995-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2010-2011 Salvatore Sanfilippo <antirez at gmail dot com>  
Copyright (c) 2012-2014 Red Hat.  
Copyright (c) 2012-2015 Mark Nunberg See included LICENSE file for license details.  
Copyright (c) 2013,2015,2017,2024 Red Hat.  
Copyright (c) 2013-2015,2018-2022 Red Hat.  
Copyright (c) 2014-2015,2019-2022 Red Hat.  
Copyright (c) 2012-2017 Mark Nunberg.  
Copyright 2017 Red Hat.  
Copyright (c) 2000-2021 Gerlof Langeveld  
Copyright (c) 2012-2017,2021-2022 Red Hat.  
Copyright (c) 2000-2004 Silicon Graphics, Inc. All Rights Reserved. .\  
Copyright (c) 1997-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015-2022 Red Hat  
Copyright (c) 2011-2012 Red Hat.  
Copyright (c) 2020 Facebook ifndef PIDITERH define PIDITERH  
Copyright (c) 2019, Marcus Geelnard <m at bitsnbites dot eu>  
Copyright (c) 2014-2016,2020 Red Hat.  
Copyright (c) 2013-2017 Red Hat, Inc.  
Copyright (c) 2016-2017,2019 Fujitsu.  
Copyright (c) 2013-2021 Red Hat.  
Copyright (c) 1995-2002,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014,2016, Red Hat.  
Copyright (c) 2020,2024 Red Hat.  
Copyright (c) 2020 Anton Protopopov ifndef MAPHELPERSH define MAPHELPERSH  
Copyright (c) 2008, Aconex. All Rights Reserved.  
Copyright (c) 2014,2016,2021-2023 Red Hat.  
Copyright (c) 2014 sergey kirillov <sergey.kirillov@gmail.com>  
Copyright (c) 2015 Red Hat. GPL2+.  
Copyright (c) 2020 Facebook include <vmlinux.h>  
Copyright (c) 2017,2021 Ken McDonell. All Rights Reserved.  
Copyright (c) 2009 JC van Winkel  
Copyright (c) 2021-2022 Red Hat.  
Copyright (c) 2016-2017, Red Hat.  
Copyright (c) 2012-2016 Jean-Philippe Aumasson <jeanphilippe.aumasson@gmail.com>  
Copyright (c) 2020,2022 Ken McDonell. All Rights Reserved.  
Copyright (c) 1983, 1988 Regents of the University of California.  
Copyright (c) 2012-2014,2016 Red Hat.  
Copyright (c) 2022 Red Hat.  
Copyright (c) 1997-2001 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014,2017 Red Hat.  
Copyright (c) 2009-2010 JC van Winkel  
Copyright (c) 2008-2011, Red Hat, Inc.  
Copyright (c) 2021 Red Hat.  
Copyright (c) 2023 Oracle and/or its affiliates.  
Copyright (c) International Business Machines Corp., 2002  
Copyright (c) 2012-2019 Red Hat.  
Copyright (c) 2000,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1995-2000,2009 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013,2015-2017,2021 Red Hat.  
Copyright (c) 2013-2015,2019-2020,2022 Red Hat.  
Copyright (c) 2018-2022 Red Hat.  
Copyright (c) 2015,2017 Red Hat.  
Copyright (c) 2000-2012 Gerlof Langeveld  
Copyright (c) 2015,2019 Red Hat.  
Copyright (c) 2009 JC van Winkel  
Copyright (c) 2013-2015,2021,2023 Red Hat.  
Copyright (c) 2017 Red Hat, Inc. All Rights Reserved.  
Copyright (c) 2023 Red Hat.  
Copyright (c) 2016-2020,2022 Red Hat.  
Copyright (c) 2014-2015,2022 Red Hat.  
Copyright (c) 2014 Ken McDonell. All Rights Reserved.  
Copyright (c) 2022 Jingxiang Zeng  
Copyright (c) 2015-2021 Marko Myllynen <myllynen@redhat.com> .\  
Copyright (c) 2014 Red Hat.  
Copyright (c) 1998,2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2010 Max Matveev. All rights reserved.  
Copyright (c) 2013-2018,2021-2022 Red Hat.  
Copyright (c) 2014 Joe White  
Copyright (c) 2014,2019 Red Hat.  
Copyright (c) 2008,2012 Aconex. All Rights Reserved.  
Copyright (c) 2003-2013 Thomas Graf <tgraf@suug.ch>  
Copyright (c) 1995,2002-2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2023 Meta Platforms, Inc. and affiliates.  
Copyright (c) 2021 Facebook ifndef BASHREADLINEH define BASHREADLINEH  
Copyright (c) 2011 Nathan Scott. All rights reversed.  
Copyright (c) Red Hat 2014,2016,2020.  
Copyright (c) 2013, Red Hat, Inc.  
Copyright (c) 20212022 Hengqi Chen include <vmlinux.h>  
Copyright (c) 2001 Gilly Ran (gilly@exanet.com) for the portions of the code supporting the Alpha platform.  
Copyright (c) 2013-2016,2018,2020-2022 Red Hat.  
Copyright (c) 2013,2018,2020 Red Hat.  
Copyright (c) 2012-2018 Red Hat.  
Copyright (c) 2022-23 Ken McDonell.  
Copyright 2016 Red Hat.  
Copyright (c) 2014-2015 Red Hat.  
Copyright (c) 2021 Facebook include <argp.h>  
Copyright (c) 2018-2019,2021 Red Hat.  
Copyright (c) 2019-2020,2022 Red Hat.  
Copyright (c) 2014 Jan-Frode Myklebust <janfrode@tanso.net>.  
Copyright (c) 2020 Ashwin Nayak. All Rights Reserved.  
Copyright (c) 2022 Hengqi Chen  
Copyright (c) 2013 Joe White  
Copyright (c) 2014-2017,2021 Red Hat.  
Copyright (c) 2013-2015,2018 Red Hat.  
Copyright (c) 2012-2017,2020-2021 Red Hat.  
Copyright (c) 2012-2019,2021-2022 Red Hat.  
Copyright (c) 2022 LG Electronics  
Copyright (c) 2015,2019-2021 Red Hat  
Copyright (c) 2014,2020 Red Hat.  
Copyright (c) 1999-2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015-2017 Red Hat.  
Copyright (c) 1989, 1993, 1994 The Regents of the University of California. All rights reserved.  
Copyright (c) 2021 Facebook ifndef LIBBPFVERSIONH define LIBBPFVERSIONH  
Copyright (c) 2014-2016 Red Hat.  
Copyright (c) 2014 Joe White  
Copyright (c) 2018 Ken McDonell. All Rights Reserved.  
Copyright (c) 2000-2001 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2021 Hengqi Chen 30-May-2021 Hengqi Chen Created this.  
Copyright (c) 2020 Facebook include <errno.h>  
Copyright (c) 2014-2018,2022 Red Hat.  
Copyright (c) 2006-2007, Aconex. All Rights Reserved.  
Copyright (c) 2016,2021 Red Hat.  
Copyright (c) 2014-2016,2018,2022 Red Hat.  
Copyright (c) 2021, Red Hat  
Copyright (c) 2014-2018,2020-2022 Red Hat.  
Copyright (c) 2019,2021 Red Hat.  
Copyright (c) 2015,2023 Red Hat.  
Copyright (c) 2013,2015,2024 Red Hat.  
Copyright (c) 2015-2017 Red Hat.  
Copyright (c) 2013-2022 Red Hat.  
Copyright (c) 2020 Netflix include <vmlinux.h>  
Copyright (c) 2017-2018 Red Hat.  
Copyright (c) 2006-2015 Aconex.  
Copyright (c) 2008-2009, Thomas Gleixner <tglx@linutronix.de>  
Copyright (c) 2009 Ken McDonell. All Rights Reserved.  
Copyright (c) 2021 Facebook include <stdint.h>  
Copyright (c) 2014 Sergey Kirillov.  
Copyright (c) 2013-2015,2017,2020,2022 Red Hat.  
Copyright (c) 2009 Aconex. All Rights Reserved.  
Copyright (c) 2015 Red Hat, Inc.  
Copyright (c) 1995 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2009,2023-2024 Red Hat.  
Copyright (c) 2014,2018 Red Hat.  
Copyright (c) 2013-2017,2019-2020 Red Hat.  
Copyright (c) 2019-2020,2023 Red Hat.  
Copyright (c) 2000 Russell Kroll <rkroll@exploits.org>  
Copyright (c) 2009,2014,2016,2023-2024 Red Hat.  
Copyright (c) 2015,2021 Red Hat.  
Copyright (c) 2012,2014,2022 Red Hat.  
Copyright (c) 2007-2010 Gerlof Langeveld  
Copyright (c) 2016 Sasha Goldshtein  
Copyright (c) 2020 Anton Protopopov  
Copyright (c) 2014,2016,2020 Red Hat.  
Copyright (c) 2012-2013,2022 Red Hat.  
Copyright (c) 2007,2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014,2017,2021-2022 Red Hat.  
Copyright (c) 2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013-2019,2013 Red Hat.  
Copyright (c) 2019,2021,2022 Red Hat. All Rights Reserved.  
Copyright (c) 2012 Ken McDonell. All Rights Reserved.  
Copyright (c) 2008 by Aconex  
Copyright (c) 2004,2006 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012,2015,2018-2019 Red Hat.  
Copyright (c) 2015 The Libbpf Authors. All rights reserved.  
Copyright (c) 2012-2013,2019,2022 Red Hat.  
Copyright (c) 2022 Rong Tao include <vmlinux.h>  
Copyright (c) 2009 Max Matveev. All rights reserved.  
Copyright (c) 2018 Andreas Gerstmayr.  
Copyright (c) 2020 Red Hat. All Rights Reserved.  
Copyright (c) 1989, 1991 free software foundation, inc.  
Copyright (c) 2009-2012 Michael T. Werner  
Copyright (c) 2016-2018 Fujitsu.  
Copyright (c) 1997-2000 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1987-2014 Free Software Foundation, Inc.  
Copyright (c) 2014, 2018 Red Hat.  
Copyright (c) 2013-2018, 2020 Red Hat.  
Copyright (c) 2001,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2000,2004,2006 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2009 Aconex. All Rights Reserved.  
Copyright (c) 2015,2018 Red Hat.  
Copyright (c) 2020 red hat. all rights reserved.  
Copyright (c) 2012-2018,2022 Red Hat.  
Copyright (c) 2018,2020,2022 Red Hat.  
Copyright 2022 Sony Group Corporation  
Copyright (c) 2018 Facebook ! \file  
Copyright (c) 2017-2019 Red Hat.  
Copyright (c) 2013,2016,2018,2019 Red Hat.  
Copyright (c) 2014 Red Hat, Inc.  
Copyright (c) 2010 Ken McDonell. All Rights Reserved.  
Copyright (c) 2013-2015,2019-2020 Red Hat.  
Copyright (c) 2014,2021,2023 Red Hat.  
Copyright (c) 2016-2018 Red Hat.  
Copyright (c) 2013-2015,2022 Red Hat.  
Copyright (c) 2012, Red Hat.  
Copyright (c) 2018-2019 Red Hat.  
Copyright (c) 2015 Huawei Inc.  
Copyright (c) 2019 Red Hat  
Copyright (c) 2009-2010 Aconex. All Rights Reserved.  
Copyright (c) 2016 Ryan Doyle  
Copyright (c) 2015 Red Hat.  
Copyright (c) 2013-2016,2018,2020 Red Hat.  
Copyright (c) 2023, Red Hat.  
Copyright (c) 2015-2017,2024 Red Hat.  
Copyright (c) 2022 Francis Laniel <flaniel@linux.microsoft.com>  
Copyright (c) 1994-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2019,2022 Red Hat.  
Copyright (c) 2017-2021 Ken McDonell. All Rights Reserved.  
Copyright (c) 2019,2023 Red Hat.  
Copyright (c) 2012-2024 Red Hat  
Copyright (c) 2001-2014 Silicon Graphics, Inc.  
Copyright (c) 2021 Ken McDonell. All Rights Reserved.  
Copyright (c) 2015-2017,2022 Red Hat.  
Copyright (c) 2009-2010 Aconex. All Rights Reserved.  
Copyright (c) 2015,2018 Red Hat  
Copyright (c) 2021, Ken McDonell. All Rights Reserved.  
Copyright (c) 2021 Hengqi Chen  
Copyright (c) 2012,2018-2019 Red Hat.  
Copyright (c) 2013-2018,2020-2022 Red Hat.  
Copyright (c) 2019 Facebook  
Copyright (c) 2020 Red Hat.  
Copyright (c) 2019 Netronome Systems, Inc.  
Copyright (c) 2004-2016 Dag Wieers.  
Copyright (c) 2012 Nathan Scott. All Rights Reserved.  
Copyright (c) 2020-2022, Bjorn Svensson <bjorn.a.svensson at est dot tech>  
Copyright (c) 1994 Thorsten Lockert <tholo@sigmasoft.com>  
Copyright (c) 2013-2014,2016-2017,2020-2021,2023 Red Hat.  
Copyright (c) 2008-2009 Aconex. All Rights Reserved.  
Copyright (c) 2013-2015 Alexei Starovoitov <ast@kernel.org>  
Copyright (c) 2024 Ken McDonell. All Rights Reserved.  
Copyright (c) 2020 Wenbo Zhang include <vmlinux.h>  
Copyright 2021 Red Hat.  
Copyright (c) 2012-2015,2019 Red Hat.  
Copyright (c) 2018 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2024 red hat.  
Copyright (c) 2016 Red Hat.  
Copyright (c) 2013-2015 Red Hat Inc.  
Copyright (c) 1995-2001 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2018-2019 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2017-2018,2022,2024 Red Hat.  
Copyright (c) 1996 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015-2016 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 1997-2001,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1991, 1999 Free Software Foundation, Inc.  
Copyright (c) 2011, Nathan Scott. All Rights Reserved.  
Copyright (c) 2020 Facebook  
Copyright (c) 2017-2018 Ken McDonell. All Rights Reserved.  
Copyright (c) 2013-2014,2018 Red Hat.  
Copyright (c) 2008-2010 Aconex. All Rights Reserved.  
Copyright 2018 Red Hat.  
Copyright (c) 2016-2018,2021 Red Hat.  
Copyright (c) 2014, Red Hat.  
Copyright (c) 2022, Bjorn Svensson <bjorn.a.svensson at est dot tech>  
Copyright (c) 2020, Bjorn Svensson <bjorn.a.svensson at est dot tech>  
Copyright (c) 2006-2009, Aconex. All Rights Reserved.  
Copyright (c) 2006 Aconex. All Rights Reserved.  
Copyright (c) 2013-2014,2022 Red Hat.  
Copyright (c) 2012-2013,2021-2022 Red Hat.  
Copyright (c) 2011 Nathan Scott. All rights reserved.  
Copyright (c) 2015,2018 Red Hat.  
Copyright (c) 2017-2022,2024 Red Hat.  
Copyright (c) 2020 Facebook, Inc.  
Copyright (c) 2015-2024 Red Hat.  
Copyright (c) 2016, Red Hat. All Rights Reserved.  
Copyright (c) 2017-2019,2022,2024 Red Hat.  
Copyright (c) 2011,2015 Red Hat.  
Copyright (c) 2014-2018 Red Hat.  
Copyright (c) 2017-2022 Red Hat.  
Copyright (c) 2020-2021 Red Hat.  
Copyright (c) 1995,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2011-2021 Ken McDonell. All Rights Reserved.  
Copyright (c) 2013 - 2014 Red Hat.  
Copyright (c) 2013 Joe White  
Copyright (c) 2019,2021-2022 Red Hat.  
Copyright (c) 2020, Red Hat.  
Copyright (c) 2017-2020,2024, Red Hat.  
Copyright (c) 2019-2021 Red Hat.  
Copyright (c) 2006-2007 Aconex. All Rights Reserved.  
Copyright (c) 2014 Red Hat and Ken McDonell. All Rights Reserved.  
Copyright (c) 2011-2015 Ken McDonell. All Rights Reserved.  
Copyright (c) 2013-2015,2020,2022 Red Hat.  
Copyright (c) 2009, Ben Hoyt All rights reserved.  
Copyright (c) 2020 Yushan ZHANG.  
Copyright (c) 2014 Pietro Cerutti <gahr@gahr.ch>  
Copyright (c) 2006-2015, Salvatore Sanfilippo <antirez at gmail dot com>  
Copyright (c) 2007-2008 Aconex. All Rights Reserved.  
Copyright (c) 2015, Red Hat  
Copyright (c) 2000-2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015,2019,2021-2022 Red Hat  
Copyright 2001-2010 Georges Menie (www.menie.org)  
Copyright (c) 1998,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013 Red Hat Inc.  
Copyright (c) 2016-2021 Red Hat.  
Copyright (c) 1991-2022 Free Software Foundation, Inc.  
Copyright (c) 2012-2013,2021 Red Hat.  
Copyright (c) 2023, Red Hat. All Rights Reserved.  
Copyright (c) 2012-2015,2018,2021 Red Hat.  
Copyright (c) 2004-2019 Hisham Muhammad.  
Copyright (c) 2015-2021 Red Hat.  
Copyright (c) 1995-2001,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013-2018,2022 Red Hat.  
Copyright (c) 2022 Microsoft Corporation  
Copyright (c) 2014,2023 Red Hat.  
Copyright (c) 2012-2014 Chandana De Silva.  
Copyright 2010-2012 Salvatore Sanfilippo (adapted to Redis coding style)  
Copyright (c) 2022 Chen Tao Based on ugc from BCC by Sasha Goldshtein Create: Wed Jun 29 16:00:19 2022  
Copyright (c) 2014-2015,2017-2018 Red Hat.  
Copyright (c) 2023 Gerlof Langeveld  
Copyright (c) 2012-2014,2021-2022 Red Hat.  
Copyright (c) 2002 International Business Machines Corp.  
Copyright 1998, Silicon Graphics, Inc.  
Copyright (c) 2021 Wenbo Zhang include <vmlinux.h>  
Copyright (c) 2013-2014,2017-2020 Red Hat.  
Copyright (c) 2015-2016,2019 Red Hat.  
Copyright (c) 2009 Max Matveev. All rights reserved.  
Copyright (c) 1997,2004-2006 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2014,2017,2021-2023 Red Hat.  
Copyright (c) 2022 Hengqi Chen ifndef TCPLIFEH define TCPLIFEH  
Copyright (c) 2000 Michal Kara.  
Copyright (c) 2014-2015,2021 Red Hat.  
Copyright (c) 2014-2017 Red Hat.  
Copyright (c) 2018 Facebook ifndef UAPILINUXBTFH define UAPILINUXBTFH  
Copyright (c) 2016-2024 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2022 Rong Tao  
Copyright (c) 2012,2015 Ken McDonell All Rights Reserved.  
Copyright (c) 2019, Redis Labs  
Copyright (c) 2019 Miroslav Foltýn. All Rights Reserved.  
Copyright (c) 2001-2016 Zabbix SIA  
Copyright (c) 1997,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012,2018 Red Hat.  
Copyright (c) 2006-2010, Aconex. All Rights Reserved.  
Copyright (c) 2012-2015, Red Hat.  
Copyright (c) 2000,2004,2007-2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014-2017, Red Hat.  
Copyright (c) 2008 Uwe Rathmann  
Copyright (c) 1997-2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2021 Netflix, Inc.  
Copyright (c) 2014 joe white. all rights reserved.  
Copyright (c) 2017,2024 Ken McDonell. All Rights Reserved.  
Copyright (c) 2022 Red Hat.  
Copyright (c) 2006-2012, Salvatore Sanfilippo <antirez at gmail dot com>  
Copyright (c) 2015-2022 Red Hat.  
Copyright (c) 2013-2017 Red Hat.  
Copyright (c) 2023 Red Hat. All Rights Reserved.  
Copyright (c) 1998 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2018 Guillem Lopez Paradis. All Rights Reserved.  
Copyright (c) 2021 Wenbo Zhang  
Copyright (c) 2019 Red Hat.  
Copyright (c) 2009-2011 Josef Jeff Sipek.  
Copyright (c) 2013 Ken McDonell, Inc. All Rights Reserved.  
Copyright (c) 2017-2019 Ken McDonell. All Rights Reserved.  
Copyright (c) 2001,2009 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) <var>year</var> <var>name of author</var>  
Copyright (c) 2017 Fumiya Shigemitsu.  
Copyright (c) 1995-1999,2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) year name of author  
Copyright (c) 2013,2021,2023 Red Hat.  
Copyright (c) 2001-2016 Zabbix SIA.  
Copyright (c) 2011-2012 Nathan Scott.  
Copyright (c) 2011 Ken McDonell. All Rights Reserved.  
Copyright (c) 2000-2018 Gerlof Langeveld  
Copyright (c) 2020 Anton Protopopov include <stdlib.h>  
Copyright (c) 2014-2016,2018,2020 Red Hat.  
Copyright (c) 2017 Alperen Karaoglu.  
Copyright (c) 2012-2013,2018-2019,2022 Red Hat.  
Copyright (c) 2012-2024 Red Hat.  
Copyright (c) 2017 Red Hat.  
Copyright (c) 2008 Aconex. All Rights Reserved.  
Copyright (c) 2020 Red Hat.  
Copyright (c) 2009 Aconex. All rights reserved.  
Copyright (c) 2007,2011 Aconex. All Rights Reserved.  
Copyright (c) 2015, Oran Agra  
Copyright (c) 1995-2000 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2022 Red Hat.  
Copyright (c) 2022 Meta Platforms, Inc. and affiliates.  
Copyright (c) 2018-2019,2021-2024 Red Hat.  
Copyright (c) 2016, Red Hat.  
Copyright (c) 1998-2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2020, Nick <heronr1 at gmail dot com>  
Copyright 2013 Daniel Borkmann <daniel@iogearbox.net>  
Copyright (c) 2000,2004-2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012 Red Hat.  
Copyright (c) 2018,2020 Red Hat.  
Copyright Joyent, Inc. and other Node contributors.  
Copyright (c) 1997-2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1995-2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2017 Fujitsu. All Rights Reserved.  
Copyright (c) 1983,1988,1993 The Regents of the University of California.  
Copyright (c) 2016 Ken McDonell. All Rights Reserved.  
Copyright (c) 2006, Ken McDonell. All Rights Reserved.  
Copyright (c) 2009, Aconex. All Rights Reserved.  
Copyright (c) 2019 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2019,2021 Red Hat.  
Copyright (c) 2009-2010 Max Matveev.  
Copyright (c) 2012-2021,2024 Red Hat.  
Copyright (c) 2017-2018 Netronome Systems, Inc.  
Copyright (c) 2001 Alan Bailey (bailey@mcs.anl.gov or abailey@ncsa.uiuc.edu)  
Copyright (c) 2014,2019,2021 Red Hat.  
Copyright (c) 2003 Moser, Inc.  
Copyright (c) 2022 Shiyao CHEN.  
Copyright (c) 2013-2016, Red Hat.  
Copyright (c) 2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2013 Red Hat. All Rights Reserved.  
Copyright (c) 2012 Ken McDonell All Rights Reserved.  
Copyright (c) 2014-2015 Red Hat, based on pcp2es by Frank Ch. Eigler [writejson]  
Copyright (c) 2013,2018,2021-2022 Red Hat.  
Copyright (c) 2011-2014 PLUMgrid, http://plumgrid.com  
Copyright (c) 2008-2010 Aconex. All Rights Reserved.  
Copyright (c) 2014,2016-2017,2020-2021 Red Hat.  
Copyright (c) 2012-2018, Red Hat.  
Copyright (c) 2012,2017 Red Hat.  
Copyright (c) 2018 Facebook Author: Yonghong Song <yhs@fb.com>  
Copyright (c) 2015 Red Hat. All Rights Reserved.  
Copyright (c) 2018 Fujitsu.  
Copyright (c) 2020 Ashwin Nayak <ashwinnayak111@gmail.com>  
Copyright (c) 2020 Anton Protopopov ifndef VFSSTATH define VFSSTATH  
Copyright (c) 2020 Netflix  
Copyright (c) 1995-2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2018, Red Hat. All Rights Reserved.  
Copyright (c) 2020 Wenbo Zhang  
Copyright (c) 2012-2014,2016,2019-2021 Red Hat.  
Copyright 2013 Ken McDonell. All Rights Reserved  
Copyright (c) 2015,2019 Red Hat.  
Copyright (c) 2013-2015 Red Hat.  
Copyright (c) 2024 Lauren Chilton <lchilton@redhat.com>  
Copyright (c) 2017-2020,2024 Red Hat.  
Copyright (c) 2021 Hengqi Chen ifndef TCPSTATESH define TCPSTATESH  
Copyright (c) 2021 Facebook ifndef BPFGENINTERNALH define BPFGENINTERNALH  
Copyright (c) 2022-2023 Red Hat.  
Copyright (c) 2021, Björn Svensson <bjorn.a.svensson@est.tech>  
Copyright (c) 2014,2016,2024 Red Hat.  
Copyright (c) 2012-2017 Red Hat.  
Copyright (c) 2017, Red Hat.  
Copyright (c) 1998-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2014,2017 Red Hat.  
Copyright (c) 2014-2015, Red Hat.  
Copyright (c) 2017,2021-2022 Red Hat.  
Copyright (c) 2015 Martins Innus. All Rights Reserved.  
Copyright (c) 2007, 2009, Aconex. All Rights Reserved.  
Copyright (c) 2012-2016,2019 Red Hat.  
Copyright (c) 2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2016,2023, Red Hat.  
Copyright (c) 2013-2015,2017 Red Hat.  
Copyright 2016 Ken McDonell.  
Copyright (c) 2018-2019 Red Hat. All Rights Reserved.  
Copyright (c) 2012-2014,2017-2022 Red Hat.  
Copyright (c) 1995-2000,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2012-2018,2022 Red Hat.  
Copyright 2012 Red Hat, Inc. All Rights Reserved  
Copyright (c) 2001,2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2020, Michael Grunder <michael dot grunder at gmail dot com>  
copyright 2021, Performance Co-Pilot  
Copyright (c) 2016 Red Hat.  
Copyright (c) 2017 Ronak Jain.  
Copyright (c) 2017 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2021 Facebook  
Copyright (c) 2012-2017, Red Hat. All Rights Reserved.  
Copyright (c) 2012-2017,2023, Red Hat.  
Copyright 2013 Red Hat.  
Copyright (c) 2024 Red Hat.  
Copyright (c) 2013-2015, Red Hat.  
Copyright (c) 2009-2011, Salvatore Sanfilippo <antirez at gmail dot com>  
Copyright (c) 2019 Facebook  
Copyright (c) 2018 Guillem Lopez Paradis. All Rights Reserved.  
Copyright (c) 2018 Red Hat.  
Copyright (c) 2012,2014 Red Hat.  
Copyright (c) 2020-2024 htop dev team.  
Copyright (c) 2007 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015,2016 Red Hat.  
Copyright (c) 1989, 1991 Free Software Foundation, Inc.  
Copyright (c) 2014 Red Hat.  
Copyright (c) 2013-2014,2018-2021 Red Hat.  
Copyright (c) 2013,2017,2022 Red Hat.  
Copyright (c) 2018 Intel Corporation.  
Copyright (c) 2009 Silicon Graphics Inc.  
Copyright (c) 2018-2023 Red Hat.  
Copyright (c) 2020,2022 Red Hat.  
Copyright (c) 2013-2015,2017-2021,2024 Red Hat.  
Copyright (c) 2013-2019 Red Hat.  
Copyright (c) 2013-2014, Red Hat.  
Copyright (c) 2021 Facebook  
Copyright (c) 2014-2017 Red Hat.  
Copyright (c) 1998-2000,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2009-2012 Michael T. Werner.  
Copyright (c) <var>yyyy</var> <var>name of author</var>  
Copyright 1998, Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2016 Red Hat. All Rights Reserved.  
Copyright (c) 1995,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015,2017 Red Hat.  
Copyright (c) 2019-2020 Red Hat.  
Copyright (c) 1997 Josef Wilgen  
Copyright (c) 2013-2014,2016 Red Hat.  
Copyright (c) 1998-2001, Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2016,2018 Red Hat.  
Copyright (c) 2012-2015 Mark Nunberg.  
Copyright (c) 2023 Ken McDonell. All Rights Reserved.  
Copyright (c) 2004,2007 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015 Ken McDonell. All Rights Reserved.  
Copyright (c) 2012-2014 Daniel J. Bernstein <djb@cr.yp.to>  
Copyright (c) 2017 Ken McDonell. All Rights Reserved.  
Copyright (c) 2012-2013,2015-2019 Red Hat.  
Copyright (c) 2010 Brent Priddy.  
Copyright (c) 2015-2017,2019-2022 Red Hat.  
Copyright (c) 2013-2014,2022 Red Hat.  
Copyright (c) 2016-2017 Fujitsu.  
Copyright (c) 2013-2014,2016-2017 Red Hat.  
Copyright (c) 2023 Wenbo Zhang  
Copyright (c) 2019-2020, Red Hat.  
Copyright (c) 2017 IBM Corp.  
Copyright (c) 2022 Chen Tao include <vmlinux.h>  
Copyright (c) 2004 Ken McDonell. All Rights Reserved.  
Copyright (c) 2018-2022,2024 Red Hat.  
Copyright (c) 2013-2019,2022 Red Hat.  
Copyright (c) 1997 Josef Wilgen.  
Copyright (c) 2021 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2017,2021 Red Hat.  
Copyright (c) 1991, 1999 free software foundation, inc.  
Copyright (c) 1995-2006 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2002 Uwe Rathmann.  
Copyright (c) 2013-2015,2021 Red Hat.  
Copyright (c) 2012, Nathan Scott. All Rights Reserved.  
Copyright (c) 2018 Netronome Systems, Inc.  
Copyright (c) 2021 Facebook ifndef LIBBPFSTRSETH define LIBBPFSTRSETH  
Copyright (c) 2020-2022,2024 Red Hat.  
Copyright (c) 2022 Ken McDonell. All Rights Reserved.  
Copyright (c) 2014-2015 Red Hat.  
Copyright (c) 2017-2020 Red Hat.  
Copyright (c) 2021 Red Hat. All Rights Reserved.  
Copyright (c) 2013 Red Hat Inc.  
Copyright (c) 2013-2016,2018 Red Hat.  
Copyright (c) 2014-2015,2023 Red Hat.  
Copyright (c) 2016 Red Hat Inc. All Rights Reserved.  
Copyright (c) 2000 silicon graphics, inc. all rights reserved.  
Copyright (c) 2017,2023 Ken McDonell. All Rights Reserved.  
Copyright (c) 2006-2010, Salvatore Sanfilippo <antirez at gmail dot com>  
Copyright (c) 2013-2018 Red Hat.  
Copyright (c) 2018 Ken McDonell, Inc. All Rights Reserved.  
Copyright (c) 2012-2022 Red Hat.  
Copyright (c) 2006-2008, Aconex. All Rights Reserved.  
Copyright (c) 2012-2018,2020 Red Hat.  
Copyright (c) 2005,2007-2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2017 Fujitsu.  
Copyright (c) 2012-2018,2020-2022 Red Hat.  
Copyright 2020 Ericsson Software Technology <viktor.soderqvist@est.tech>  
Copyright (c) 2013 Red Hat.  
Copyright (c) 2020-2021, Bjorn Svensson <bjorn.a.svensson at est dot tech>  
Copyright (c) 1995-2001,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1995-2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2011 Red Hat Inc.  
Copyright (c) 2013,2022 Red Hat.  
Copyright (c) 2012-2013 Red Hat Inc.  
Copyright (c) 2012-2019,2021 Red Hat.  
Copyright (c) 2022 Krisztian Fekete  
Copyright (c) 2013,2015 Red Hat.  
Copyright (c) 2015-2016,2019 Red Hat.  
Copyright (c) 2009-2020, Ben Hoyt  
Copyright (c) 2002,2016-2017 International Business Machines, Corp.  
Copyright (c) 1995-2006,2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1983, 1988, 1993 The Regents of the University of California. All rights reserved.  
Copyright (c) 2014-2015,2018,2022 Red Hat.  
Copyright (c) 1999 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013-2014 Red Hat.  
Copyright (c) 2020 Anton Protopopov ifndef MAPSBPFH define MAPSBPFH  
Copyright (c) 2021 Yaqi Chen  
Copyright (c) 2015,2017,2019-2021 Red Hat.  
Copyright (c) 2012 Red Hat. All Rights Reserved.  
Copyright (c) 2007-2021 Gerlof Langeveld  
Copyright (c) 2018 Andreas Gerstmayr <andreas@gerstmayr.me>  
Copyright (c) 2001 The FreeBSD Project.  
Copyright (c) 1997-2000,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 1992-2016 Free Software Foundation, Inc..  
Copyright (c) 2013,2016 Red Hat, Inc.  
Copyright (c) 2014,2016 Red Hat.  
Copyright (c) 2020 Anton Protopopov ifndef SYSCOUNTH define SYSCOUNTH  
Copyright (c) 2016 Fujitsu.  
Copyright (c) 2012,2016,2018,2019,2021 Red Hat.  
Copyright (c) 2017, Red Hat. All Rights Reserved.  
Copyright (c) 2015, Ieshen Zheng <ieshen.zheng at 163 dot com>  
Copyright (c) 2008-2011 Aconex. All Rights Reserved.  
Copyright (c) 2014,2017 Red Hat.  
Copyright (c) 2011-2017 Ken McDonell. All Rights Reserved.  
Copyright (c) 2000-2012 Gerlof Langeveld.  
Copyright (c) 2014-2018,2022 Red Hat.  
Copyright (c) 1995-2000,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2021 Facebook include <stdio.h>  
Copyright (c) 2012-2014,2016,2020-2021 Red Hat.  
Copyright (c) 2007-2008, Aconex. All Rights Reserved.  
Copyright (c) 2015 Red Hat.  
Copyright (c) 2019 Facebook include <vmlinux.h>  
Copyright (c) 2018-2021,2024 Red Hat.  
Copyright (c) 2013,2017-2018,2022 Red Hat.  
Copyright (c) 2022 Nicolas Sterchele  
Copyright (c) 1995-2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2014 Aconex  
Copyright (c) 2018 Red Hat.  
Copyright (c) 2013-2019 Red Hat. .\  
Copyright (c) 2000-2004 Silicon Graphics Inc. All rights reserved.  
Copyright (c) 2013,2016-2018 Red Hat.  
Copyright (c) 20212022 Hengqi Chen  
Copyright (c) 1995-2000,2003,2004 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013,2016 Red Hat.  
Copyright (c) 20212022 Hengqi Chen ifndef MDFLUSHH define MDFLUSHH  
Copyright (c) 2022 Sohaib Mohamed <sohaib.amhmd@gmail.com>  
Copyright (c) 2014,2022 Ken McDonell. All Rights Reserved.  
Copyright (c) 2012-2018,2021-2022 Red Hat.  
Copyright (c) 2011 The FreeBSD Foundation All rights reserved.  
Copyright (c) 2015-2019 Marko Myllynen.  
Copyright (c) 2008-2009 Aconex. All Rights Reserved.  
Copyright (c) 2006-2018 Ken McDonell.  
Copyright (c) 2022 Hengqi Chen include <vmlinux.h>  
Copyright Joyent, Inc. and other Node contributors. All rights reserved.  
Copyright (c) 2000-2001,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2020-2021 Red Hat. All Rights Reserved.  
Copyright (c) 2000-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2009 Max Matveev. All rights reserved.  
Copyright (c) 2009,2014 Ken McDonell. All Rights Reserved.  
Copyright (c) 2012-2013 Red Hat.  
Copyright (c) 2021 Facebook ifndef SKELINTERNALH define SKELINTERNALH  
Copyright (c) 2015-2017, Ieshen Zheng <ieshen.zheng at 163 dot com>  
Copyright (c) 2010 Aconex. All Rights Reserved.  
Copyright (c) 2018 Ken McDonell.  
Copyright (c) 2000 Michal Kara. All Rights Reserved.  
Copyright (c) 2007-2009, Aconex. All Rights Reserved.  
Copyright (c) 2012-2014 Red Hat.  
Copyright (c) 2012-2014, Red Hat.  
Copyright (c) 2015 Red Hat  
Copyright (c) 2004-2016 Dag Wieers <dag@wieers.com>  
Copyright (c) 2017,2020 Ken McDonell. All Rights Reserved.  
Copyright (c) 2021, Red Hat.  
Copyright (c) 2016-2024 Red Hat.  
Copyright (c) 2009 Max Matveev. All Rights Reserved  
Copyright (c) 2012-2015 Red Hat.  
Copyright (c) 2020 Ken McDonell. All Rights Reserved.  
Copyright (c) 2020-2022 Red Hat.  
Copyright (c) 2020-2021, Viktor Söderqvist <viktor.soderqvist at est dot tech>  
Copyright (c) 2012-2015,2017-2018 Red Hat.  
Copyright (c) 2012 Nathan Scott.  
Copyright (c) 2001 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2024, Red Hat.  
Copyright (c) 2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2020-2022, Viktor Söderqvist <viktor.soderqvist at est dot tech>  
Copyright (c) 2000-2010 Gerlof Langeveld  
Copyright (c) 2005 Jens Axboe <jens@axboe.dk>  
Copyright (c) 2000,2003 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2013-2014 Red Hat.  
Copyright (c) 2013,2016,2018-2021 Red Hat.  
Copyright (c) 2016,2020 Red Hat.  
Copyright (c) 2012-2017,2020-2022 Red Hat.  
Copyright (c) 2000-2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2009 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2007-2009 Aconex. All Rights Reserved.  
Copyright (c) 2014-2018 Red Hat.  
Copyright (c) 2017-2018,2020 Red Hat.  
Copyright (c) 2010-2011, Pieter Noordhuis <pcnoordhuis at gmail dot com>  
Copyright (c) 2012-2016,2022 Red Hat.  
Copyright (c) 2016 Paul Cuzner <pcuzner@redhat.com>  
Copyright (c) 2018,2021 Red Hat.  
Copyright (c) 2013,2016,2018,2021 Red Hat.  
Copyright (c) 2017-2018 Red Hat Inc.  
Copyright (c) 2015-2017 Daniel Borkmann  
Copyright (c) 2013 Red Hat.  
Copyright (c) 1996-2002 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2015-2021 Marko Myllynen <myllynen@redhat.com>  
Copyright (c) 2014-2015 Martins Innus. All Rights Reserved.  
Copyright (c) 2016 Hemant K. Shaw, IBM Corporation.  
Copyright (c) 2015-2016 Intel, Inc.  
Copyright (c) 2013-2016,2019 Red Hat  
Copyright (c) 2023 Wenbo Zhang include <argp.h>  
Copyright (c) 2011,2015-2016 Red Hat.  
Copyright (c) 2016 Facebook  
Copyright (c) 2013-2016 Red Hat.  
Copyright (c) 2013-2015,2017-2021 Red Hat.  
Copyright (c) 2002 International Business Machines Corp.  
Copyright (c) 2015,2018-2019 Red Hat.  
Copyright (c) 2015, Matt Stancliff <matt at genges dot com>, Jan-Erik Rediger <janerik at fnordig dot com>  
Copyright (c) 2013 Digia Plc and/or its subsidiary(-ies).  
Copyright (c) 2021 Ken McDonell. All Rights Reserved.  
Copyright (c) 2012-2014,2016,2022 Red Hat.  
Copyright 2017 Ken McDonell. All Rights Reserved  
Copyright (c) 1996-2014 Gerlof Langeveld  
Copyright (c) 2021, Oracle and/or its affiliates.  
Copyright (c) 2000,2004,2005 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2020 - 2021 Red Hat.  
Copyright (c) 2019-2022 Red Hat.  
Copyright (c) 2018-2019,2021-2022 Red Hat.  
Copyright (c) 2017 Salvatore Sanfilippo <antirez@gmail.com>  
Copyright (c) 2013, Red Hat.  
Copyright (c) 2008 Silicon Graphics, Inc. All Rights Reserved.  
Copyright (c) 2022 Krisztian Fekete include <vmlinux.h>  
Copyright (c) 2015,2018-2021 Red Hat.  
Copyright (c) 2013-2015,2022-2023 Red Hat.  
Copyright (c) 2014-2018,2021-2022 Red Hat.

**License:** GPL-2.0-or-later AND LGPL-2.1-or-later AND CC-BY-3.0

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.  
  
  
GNU LESSER GENERAL PUBLIC LICENSE  
  
Version 2.1, February 1999  
  
END OF TERMS AND CONDITIONS  
  
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 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 line to give the library's name and an idea of what it does.> Copyright (C) <year> <name of author>  
  
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 Street, 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 of Ty Coon >, 1 April 1990 Ty Coon, President of Vice That's all there is to it!  
  
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.  
  
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.  
  
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.  
  
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.  
  
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.  
  
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.  
  
  
Creative Commons Legal Code  
  
Attribution 3.0 Unported  
  
CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.  
  
License  
  
Creative Commons Notice  
  
Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensor hereunder, it shall have all rights and obligations of Licensor.  
  
Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, Creative Commons does not authorize the use by either party of the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time. For the avoidance of doubt, this trademark restriction does not form part of this License.  
  
Creative Commons may be contacted at http://creativecommons.org/.  
  
THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.  
  
BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.  
  
1. Definitions a. "Adaptation" means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work that constitutes a Collection will not be considered an Adaptation for the purpose of this License. For the avoidance of doubt, where the Work is a musical work, performance or phonogram, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered an Adaptation for the purpose of this License. b. "Collection" means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(f) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the Work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are assembled into a collective whole. A work that constitutes a Collection will not be considered an Adaptation (as defined above) for the purposes of this License. c. "Distribute" means to make available to the public the original and copies of the Work or Adaptation, as appropriate, through sale or other transfer of ownership. d. "Licensor" means the individual, individuals, entity or entities that offer(s) the Work under the terms of this License. e. "Original Author" means, in the case of a literary or artistic work, the individual, individuals, entity or entities who created the Work or if no individual or entity can be identified, the publisher; and in addition (i) in the case of a performance the actors, singers, musicians, dancers, and other persons who act, sing, deliver, declaim, play in, interpret or otherwise perform literary or artistic works or expressions of folklore; (ii) in the case of a phonogram the producer being the person or legal entity who first fixes the sounds of a performance or other sounds; and, (iii) in the case of broadcasts, the organization that transmits the broadcast. f. "Work" means the literary and/or artistic work offered under the terms of this License including without limitation any production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression including digital form, such as a book, pamphlet and other writing; a lecture, address, sermon or other work of the same nature; a dramatic or dramatico-musical work; a choreographic work or entertainment in dumb show; a musical composition with or without words; a cinematographic work to which are assimilated works expressed by a process analogous to cinematography; a work of drawing, painting, architecture, sculpture, engraving or lithography; a photographic work to which are assimilated works expressed by a process analogous to photography; a work of applied art; an illustration, map, plan, sketch or three-dimensional work relative to geography, topography, architecture or science; a performance; a broadcast; a phonogram; a compilation of data to the extent it is protected as a copyrightable work; or a work performed by a variety or circus performer to the extent it is not otherwise considered a literary or artistic work. g. "You" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation. h. "Publicly Perform" means to perform public recitations of the Work and to communicate to the public those public recitations, by any means or process, including by wire or wireless means or public digital performances; to make available to the public Works in such a way that members of the public may access these Works from a place and at a place individually chosen by them; to perform the Work to the public by any means or process and the communication to the public of the performances of the Work, including by public digital performance; to broadcast and rebroadcast the Work by any means including signs, sounds or images. i. "Reproduce" means to make copies of the Work by any means including without limitation by sound or visual recordings and the right of fixation and reproducing fixations of the Work, including storage of a protected performance or phonogram in digital form or other electronic medium.  
  
a. "Adaptation" means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work that constitutes a Collection will not be considered an Adaptation for the purpose of this License. For the avoidance of doubt, where the Work is a musical work, performance or phonogram, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered an Adaptation for the purpose of this License.  
  
b. "Collection" means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(f) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the Work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are assembled into a collective whole. A work that constitutes a Collection will not be considered an Adaptation (as defined above) for the purposes of this License.  
  
c. "Distribute" means to make available to the public the original and copies of the Work or Adaptation, as appropriate, through sale or other transfer of ownership.  
  
d. "Licensor" means the individual, individuals, entity or entities that offer(s) the Work under the terms of this License.  
  
e. "Original Author" means, in the case of a literary or artistic work, the individual, individuals, entity or entities who created the Work or if no individual or entity can be identified, the publisher; and in addition (i) in the case of a performance the actors, singers, musicians, dancers, and other persons who act, sing, deliver, declaim, play in, interpret or otherwise perform literary or artistic works or expressions of folklore; (ii) in the case of a phonogram the producer being the person or legal entity who first fixes the sounds of a performance or other sounds; and, (iii) in the case of broadcasts, the organization that transmits the broadcast.  
  
f. "Work" means the literary and/or artistic work offered under the terms of this License including without limitation any production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression including digital form, such as a book, pamphlet and other writing; a lecture, address, sermon or other work of the same nature; a dramatic or dramatico-musical work; a choreographic work or entertainment in dumb show; a musical composition with or without words; a cinematographic work to which are assimilated works expressed by a process analogous to cinematography; a work of drawing, painting, architecture, sculpture, engraving or lithography; a photographic work to which are assimilated works expressed by a process analogous to photography; a work of applied art; an illustration, map, plan, sketch or three-dimensional work relative to geography, topography, architecture or science; a performance; a broadcast; a phonogram; a compilation of data to the extent it is protected as a copyrightable work; or a work performed by a variety or circus performer to the extent it is not otherwise considered a literary or artistic work.  
  
g. "You" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.  
  
h. "Publicly Perform" means to perform public recitations of the Work and to communicate to the public those public recitations, by any means or process, including by wire or wireless means or public digital performances; to make available to the public Works in such a way that members of the public may access these Works from a place and at a place individually chosen by them; to perform the Work to the public by any means or process and the communication to the public of the performances of the Work, including by public digital performance; to broadcast and rebroadcast the Work by any means including signs, sounds or images.  
  
i. "Reproduce" means to make copies of the Work by any means including without limitation by sound or visual recordings and the right of fixation and reproducing fixations of the Work, including storage of a protected performance or phonogram in digital form or other electronic medium.  
  
2. Fair Dealing Rights. Nothing in this License is intended to reduce, limit, or restrict any uses free from copyright or rights arising from limitations or exceptions that are provided for in connection with the copyright protection under copyright law or other applicable laws.  
  
3. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below: a. to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections; b. to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked "The original work was translated from English to Spanish," or a modification could indicate "The original work has been modified."; c. to Distribute and Publicly Perform the Work including as incorporated in Collections; and, d. to Distribute and Publicly Perform Adaptations. e. For the avoidance of doubt: i. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; ii. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor waives the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; and, iii. Voluntary License Schemes. The Licensor waives the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License. The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. Subject to Section 8(f), all rights not expressly granted by Licensor are hereby reserved.  
  
a. to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections;  
  
b. to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked "The original work was translated from English to Spanish," or a modification could indicate "The original work has been modified.";  
  
c. to Distribute and Publicly Perform the Work including as incorporated in Collections; and,  
  
d. to Distribute and Publicly Perform Adaptations.  
  
e. For the avoidance of doubt: i. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; ii. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor waives the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; and, iii. Voluntary License Schemes. The Licensor waives the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License.  
  
i. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License;  
  
ii. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor waives the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; and,  
  
iii. Voluntary License Schemes. The Licensor waives the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License.  
  
4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions: a. You may Distribute or Publicly Perform the Work only under the terms of this License. You must include a copy of, or the Uniform Resource Identifier (URI) for, this License with every copy of the Work You Distribute or Publicly Perform. You may not offer or impose any terms on the Work that restrict the terms of this License or the ability of the recipient of the Work to exercise the rights granted to that recipient under the terms of the License. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties with every copy of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform the Work, You may not impose any effective technological measures on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License. This Section 4(a) applies to the Work as incorporated in a Collection, but this does not require the Collection apart from the Work itself to be made subject to the terms of this License. If You create a Collection, upon notice from any Licensor You must, to the extent practicable, remove from the Collection any credit as required by Section 4(b), as requested. If You create an Adaptation, upon notice from any Licensor You must, to the extent practicable, remove from the Adaptation any credit as required by Section 4(b), as requested. b. If You Distribute, or Publicly Perform the Work or any Adaptations or Collections, You must, unless a request has been made pursuant to Section 4(a), keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or if the Original Author and/or Licensor designate another party or parties (e.g., a sponsor institute, publishing entity, journal) for attribution ("Attribution Parties") in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; (ii) the title of the Work if supplied; (iii) to the extent reasonably practicable, the URI, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and (iv), consistent with Section 3(b), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). The credit required by this Section 4 (b) may be implemented in any reasonable manner; provided, however, that in the case of a Adaptation or Collection, at a minimum such credit will appear, if a credit for all contributing authors of the Adaptation or Collection appears, then as part of these credits and in a manner at least as prominent as the credits for the other contributing authors. For the avoidance of doubt, You may only use the credit required by this Section for the purpose of attribution in the manner set out above and, by exercising Your rights under this License, You may not implicitly or explicitly assert or imply any connection with, sponsorship or endorsement by the Original Author, Licensor and/or Attribution Parties, as appropriate, of You or Your use of the Work, without the separate, express prior written permission of the Original Author, Licensor and/or Attribution Parties. c. Except as otherwise agreed in writing by the Licensor or as may be otherwise permitted by applicable law, if You Reproduce, Distribute or Publicly Perform the Work either by itself or as part of any Adaptations or Collections, You must not distort, mutilate, modify or take other derogatory action in relation to the Work which would be prejudicial to the Original Author's honor or reputation. Licensor agrees that in those jurisdictions (e.g. Japan), in which any exercise of the right granted in Section 3(b) of this License (the right to make Adaptations) would be deemed to be a distortion, mutilation, modification or other derogatory action prejudicial to the Original Author's honor and reputation, the Licensor will waive or not assert, as appropriate, this Section, to the fullest extent permitted by the applicable national law, to enable You to reasonably exercise Your right under Section 3(b) of this License (right to make Adaptations) but not otherwise.  
  
a. You may Distribute or Publicly Perform the Work only under the terms of this License. You must include a copy of, or the Uniform Resource Identifier (URI) for, this License with every copy of the Work You Distribute or Publicly Perform. You may not offer or impose any terms on the Work that restrict the terms of this License or the ability of the recipient of the Work to exercise the rights granted to that recipient under the terms of the License. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties with every copy of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform the Work, You may not impose any effective technological measures on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License. This Section 4(a) applies to the Work as incorporated in a Collection, but this does not require the Collection apart from the Work itself to be made subject to the terms of this License. If You create a Collection, upon notice from any Licensor You must, to the extent practicable, remove from the Collection any credit as required by Section 4(b), as requested. If You create an Adaptation, upon notice from any Licensor You must, to the extent practicable, remove from the Adaptation any credit as required by Section 4(b), as requested.  
  
b. If You Distribute, or Publicly Perform the Work or any Adaptations or Collections, You must, unless a request has been made pursuant to Section 4(a), keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or if the Original Author and/or Licensor designate another party or parties (e.g., a sponsor institute, publishing entity, journal) for attribution ("Attribution Parties") in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; (ii) the title of the Work if supplied; (iii) to the extent reasonably practicable, the URI, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and (iv), consistent with Section 3(b), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). The credit required by this Section 4 (b) may be implemented in any reasonable manner; provided, however, that in the case of a Adaptation or Collection, at a minimum such credit will appear, if a credit for all contributing authors of the Adaptation or Collection appears, then as part of these credits and in a manner at least as prominent as the credits for the other contributing authors. For the avoidance of doubt, You may only use the credit required by this Section for the purpose of attribution in the manner set out above and, by exercising Your rights under this License, You may not implicitly or explicitly assert or imply any connection with, sponsorship or endorsement by the Original Author, Licensor and/or Attribution Parties, as appropriate, of You or Your use of the Work, without the separate, express prior written permission of the Original Author, Licensor and/or Attribution Parties.  
  
c. Except as otherwise agreed in writing by the Licensor or as may be otherwise permitted by applicable law, if You Reproduce, Distribute or Publicly Perform the Work either by itself or as part of any Adaptations or Collections, You must not distort, mutilate, modify or take other derogatory action in relation to the Work which would be prejudicial to the Original Author's honor or reputation. Licensor agrees that in those jurisdictions (e.g. Japan), in which any exercise of the right granted in Section 3(b) of this License (the right to make Adaptations) would be deemed to be a distortion, mutilation, modification or other derogatory action prejudicial to the Original Author's honor and reputation, the Licensor will waive or not assert, as appropriate, this Section, to the fullest extent permitted by the applicable national law, to enable You to reasonably exercise Your right under Section 3(b) of this License (right to make Adaptations) but not otherwise.  
  
5. Representations, Warranties and Disclaimer UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.  
  
6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.  
  
7. Termination a. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Adaptations or Collections from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License. b. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.  
  
a. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Adaptations or Collections from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.  
  
b. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.  
  
8. Miscellaneous a. Each time You Distribute or Publicly Perform the Work or a Collection, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License. b. Each time You Distribute or Publicly Perform an Adaptation, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License. c. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable. d. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent. e. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You. f. The rights granted under, and the subject matter referenced, in this License were drafted utilizing the terminology of the Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979), the Rome Convention of 1961, the WIPO Copyright Treaty of 1996, the WIPO Performances and Phonograms Treaty of 1996 and the Universal Copyright Convention (as revised on July 24, 1971). These rights and subject matter take effect in the relevant jurisdiction in which the License terms are sought to be enforced according to the corresponding provisions of the implementation of those treaty provisions in the applicable national law. If the standard suite of rights granted under applicable copyright law includes additional rights not granted under this License, such additional rights are deemed to be included in the License; this License is not intended to restrict the license of any rights under applicable law.  
  
a. Each time You Distribute or Publicly Perform the Work or a Collection, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.  
  
b. Each time You Distribute or Publicly Perform an Adaptation, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.  
  
c. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.  
  
d. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.  
  
e. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.  
  
f. The rights granted under, and the subject matter referenced, in this License were drafted utilizing the terminology of the Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979), the Rome Convention of 1961, the WIPO Copyright Treaty of 1996, the WIPO Performances and Phonograms Treaty of 1996 and the Universal Copyright Convention (as revised on July 24, 1971). These rights and subject matter take effect in the relevant jurisdiction in which the License terms are sought to be enforced according to the corresponding provisions of the implementation of those treaty provisions in the applicable national law. If the standard suite of rights granted under applicable copyright law includes additional rights not granted under this License, such additional rights are deemed to be included in the License; this License is not intended to restrict the license of any rights under applicable law.

**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 .**