**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: ftgl 2.1.3

**Copyright notice:**

Copyright (c) 2008 Éric Beets <ericbeets@free.fr>

(c) Copyright 1993, 1994, Silicon Graphics, Inc.

derived from ConvertUTF.c Copyright (C) 2001-2004 Unicode, Inc Unicode, Inc. hereby grants the right to freely use the information supplied in this file in the creation of products supporting the Unicode Standard, and to make copies of this file in any form for internal or external distribution as long as this notice remains attached.

Copyright (c) 2008 Sean Morrison <learner@brlcad.org>

FTGL was inspired by gltt, Copyright (C) 1998-1999 Stephane Rehel (http:gltt.sourceforge.net)

Copyright (c) 2008 Daniel Remenak <dtremenak@users.sourceforge.net>

Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004, 2005, 2006, 2007, 2008 Free Software Foundation, Inc.

Copyright (c) 2008 Sam Hocevar <sam@zoy.org>

Copyright (c) 2001-2004 Henry Maddocks <ftgl@opengl.geek.nz>

2008 Sam Hocevar <sam@zoy.org>

2008 Éric Beets <ericbeets@free.fr>

Copyright (c) 2005-2007 United States Government as represented by the U.S. Army Research Laboratory.

Portions derived from ConvertUTF.c Copyright (C) 2001-2004 Unicode, Inc.

Copyright (C) 2001-3 Henry Maddocks

Copyright (C) 2008 Free Software Foundation, Inc.

**License:** LGPLv2

The GNU General Public License (GPL) Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor

Boston, MA 02110-1335

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 Library General

Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the

freedom to distribute copies of free software (and charge for this

service if you wish), that you receive source code or can get it if you

want it, that you can change the software or use pieces of it in new

free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone

to deny you these rights or to ask you to surrender the rights. These

restrictions translate to certain responsibilities for you if you

distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis

or for a fee, you must give the recipients all the rights that you have.

You must make sure that they, too, receive or can get the source code.

And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and

(2) offer you this license which gives you legal permission to copy,

distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain

that everyone understands that there is no warranty for this free

software. If the software is modified by someone else and passed on, we

want its recipients to know that what they have is not the original, so

that any problems introduced by others will not reflect on the original

authors' reputations.

Finally, any free program is threatened constantly by software patents.

We wish to avoid the danger that redistributors of a free program will

individually obtain patent licenses, in effect making the program

proprietary. To prevent this, we have made it clear that any patent must

be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and

modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a

notice placed by the copyright holder saying it may be distributed under

the terms of this General Public License. The "Program", below, refers

to any such program or work, and a "work based on the Program" means

either the Program or any derivative work under copyright law: that is

to say, a work containing the Program or a portion of it, either

verbatim or with modifications and/or translated into another language.

(Hereinafter, translation is included without limitation in the term

"modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not

covered by this License; they are outside its scope. The act of running

the Program is not restricted, and the output from the Program is

covered only if its contents constitute a work based on the Program

(independent of having been made by running the Program). Whether that

is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source

code as you receive it, in any medium, provided that you conspicuously

and appropriately publish on each copy an appropriate copyright notice

and disclaimer of warranty; keep intact all the notices that refer to

this License and to the absence of any warranty; and give any other

recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and

you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of

it, thus forming a work based on the Program, and copy and distribute

such modifications or work under the terms of Section 1 above, provided

that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices

stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in

whole or in part contains or is derived from the Program or any part

thereof, to be licensed as a whole at no charge to all third parties

under the terms of this License.

c) If the modified program normally reads commands interactively

when run, you must cause it, when started running for such

interactive use in the most ordinary way, to print or display an

announcement including an appropriate copyright notice and a notice

that there is no warranty (or else, saying that you provide a

warranty) and that users may redistribute the program under these

conditions, and telling the user how to view a copy of this License.

(Exception: if the Program itself is interactive but does not

normally print such an announcement, your work based on the Program

is not required to print an announcement.)

These requirements apply to the modified work as a whole. If

identifiable sections of that work are not derived from the Program, and

can be reasonably considered independent and separate works in

themselves, then this License, and its terms, do not apply to those

sections when you distribute them as separate works. But when you

distribute the same sections as part of a whole which is a work based on

the Program, the distribution of the whole must be on the terms of this

License, whose permissions for other licensees extend to the entire

whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest

your rights to work written entirely by you; rather, the intent is to

exercise the right to control the distribution of derivative or

collective works based on the Program.

In addition, mere aggregation of another work not based on the Program

with the Program (or with a work based on the Program) on a volume of a

storage or distribution medium does not bring the other work under the

scope of this License.

3. You may copy and distribute the Program (or a work based on it,

under Section 2) in object code or executable form under the terms of

Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable

source code, which must be distributed under the terms of Sections 1

and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three

years, to give any third party, for a charge no more than your cost

of physically performing source distribution, a complete

machine-readable copy of the corresponding source code, to be

distributed under the terms of Sections 1 and 2 above on a medium

customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to

distribute corresponding source code. (This alternative is allowed

only for noncommercial distribution and only if you received the

program in object code or executable form with such an offer, in

accord with Subsection b above.)

The source code for a work means the preferred form of the work for

making modifications to it. For an executable work, complete source code

means all the source code for all modules it contains, plus any

associated interface definition files, plus the scripts used to control

compilation and installation of the executable. However, as a special

exception, the source code distributed need not include anything that is

normally distributed (in either source or binary form) with the major

components (compiler, kernel, and so on) of the operating system on

which the executable runs, unless that component itself accompanies the

executable.

If distribution of executable or object code is made by offering access

to copy from a designated place, then offering equivalent access to copy

the source code from the same place counts as distribution of the source

code, even though third parties are not compelled to copy the source

along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program

except as expressly provided under this License. Any attempt otherwise

to copy, modify, sublicense or distribute the Program is void, and will

automatically terminate your rights under this License. However, parties

who have received copies, or rights, from you under this License will

not have their licenses terminated so long as such parties remain in

full compliance.

5. You are not required to accept this License, since you have not

signed it. However, nothing else grants you permission to modify or

distribute the Program or its derivative works. These actions are

prohibited by law if you do not accept this License. Therefore, by

modifying or distributing the Program (or any work based on the

Program), you indicate your acceptance of this License to do so, and all

its terms and conditions for copying, distributing or modifying the

Program or works based on it.

6. Each time you redistribute the Program (or any work based on the

Program), the recipient automatically receives a license from the

original licensor to copy, distribute or modify the Program subject to

these terms and conditions. You may not impose any further restrictions

on the recipients' exercise of the rights granted herein. You are not

responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent

infringement or for any other reason (not limited to patent issues),

conditions are imposed on you (whether by court order, agreement or

otherwise) that contradict the conditions of this License, they do not

excuse you from the conditions of this License. If you cannot distribute

so as to satisfy simultaneously your obligations under this License and

any other pertinent obligations, then as a consequence you may not

distribute the Program at all. For example, if a patent license would

not permit royalty-free redistribution of the Program by all those who

receive copies directly or indirectly through you, then the only way you

could satisfy both it and this License would be to refrain entirely from

distribution of the Program.

If any portion of this section is held invalid or unenforceable under

any particular circumstance, the balance of the section is intended to

apply and the section as a whole is intended to apply in other

circumstances.

It is not the purpose of this section to induce you to infringe any

patents or other property right claims or to contest validity of any

such claims; this section has the sole purpose of protecting the

integrity of the free software distribution system, which is implemented

by public license practices. Many people have made generous

contributions to the wide range of software distributed through that

system in reliance on consistent application of that system; it is up to

the author/donor to decide if he or she is willing to distribute

software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be

a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in

certain countries either by patents or by copyrighted interfaces, the

original copyright holder who places the Program under this License may

add an explicit geographical distribution limitation excluding those

countries, so that distribution is permitted only in or among countries

not thus excluded. In such case, this License incorporates the

limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new

versions of the General Public License from time to time. Such new

versions will be similar in spirit to the present version, but may

differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program

specifies a version number of this License which applies to it and "any

later version", you have the option of following the terms and

conditions either of that version or of any later version published by

the Free Software Foundation. If the Program does not specify a version

number of this License, you may choose any version ever published by the

Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free

programs whose distribution conditions are different, write to the

author to ask for permission. For software which is copyrighted by the

Free Software Foundation, write to the Free Software Foundation; we

sometimes make exceptions for this. Our decision will be guided by the

two goals of preserving the free status of all derivatives of our free

software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO

WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR

OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND,

EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE

ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH

YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL

NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN

WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY

AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR

DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL

DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM

(INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED

INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF

THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR

OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest

possible use to the public, the best way to achieve this is to make it

free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to

attach them to the start of each source file to most effectively convey

the exclusion of warranty; and each file should have at least the

"copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

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

This program is free software; you can redistribute it and/or modify

it under the terms of the GNU General Public License as published by

the Free Software Foundation; either version 2 of the License, or

(at your option) any later version.

This program is distributed in the hope that it will be useful, but

WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

General Public License for more details.

You should have received a copy of the GNU General Public License

along with this program; if not, write to the Free Software

Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1335 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 Library

General Public License instead of this License.

**Written Offer**

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

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

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