

1 GNU LESSER GENERAL PUBLIC LICENSE
2 Version 2.1, February 1999

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7 of this license document, but changing it is not allowed.

8
9 [This is the first released version of the Lesser GPL. It also counts
10 as the successor of the GNU Library Public License, version 2, hence
11 the version number 2.1.]

12
13 Preamble

14
15 The licenses for most software are designed to take away your
16 freedom to share and change it. By contrast, the GNU General Public
17 Licenses are intended to guarantee your freedom to share and change
18 free software--to make sure the software is free for all its users.

19
20 This license, the Lesser General Public License, applies to some
21 specially designated software packages--typically libraries--of the
22 Free Software Foundation and other authors who decide to use it. You
23 can use it too, but we suggest you first think carefully about whether
24 this license or the ordinary General Public License is the better
25 strategy to use in any particular case, based on the explanations below.

26
27 When we speak of free software, we are referring to freedom of use,
28 not price. Our General Public Licenses are designed to make sure that
29 you have the freedom to distribute copies of free software (and charge
30 for this service if you wish); that you receive source code or can get
31 it if you want it; that you can change the software and use pieces of
32 it in new free programs; and that you are informed that you can do
33 these things.

34
35 To protect your rights, we need to make restrictions that forbid
36 distributors to deny you these rights or to ask you to surrender these
37 rights. These restrictions translate to certain responsibilities for
38 you if you distribute copies of the library or if you modify it.

39
40 For example, if you distribute copies of the library, whether gratis
41 or for a fee, you must give the recipients all the rights that we gave
42 you. You must make sure that they, too, receive or can get the source
43 code. If you link other code with the library, you must provide
44 complete object files to the recipients, so that they can relink them
45 with the library after making changes to the library and recompiling
46 it. And you must show them these terms so they know their rights.

47
48 We protect your rights with a two-step method: (1) we copyright the
49 library, and (2) we offer you this license, which gives you legal
50 permission to copy, distribute and/or modify the library.

51
52 To protect each distributor, we want to make it very clear that
53 there is no warranty for the free library. Also, if the library is
54 modified by someone else and passed on, the recipients should know
55 that what they have is not the original version, so that the original
56 author's reputation will not be affected by problems that might be
57 introduced by others.

58
59 Finally, software patents pose a constant threat to the existence of
60 any free program. We wish to make sure that a company cannot
61 effectively restrict the users of a free program by obtaining a
62 restrictive license from a patent holder. Therefore, we insist that
63 any patent license obtained for a version of the library must be
64 consistent with the full freedom of use specified in this license.

65
66 Most GNU software, including some libraries, is covered by the
67 ordinary GNU General Public License. This license, the GNU Lesser
68 General Public License, applies to certain designated libraries, and
69 is quite different from the ordinary General Public License. We use
70 this license for certain libraries in order to permit linking those
71 libraries into non-free programs.

72
73 When a program is linked with a library, whether statically or using

74 a shared library, the combination of the two is legally speaking a
75 combined work, a derivative of the original library. The ordinary
76 General Public License therefore permits such linking only if the
77 entire combination fits its criteria of freedom. The Lesser General
78 Public License permits more lax criteria for linking other code with
79 the library.

80
81 We call this license the "Lesser" General Public License because it
82 does Less to protect the user's freedom than the ordinary General
83 Public License. It also provides other free software developers Less
84 of an advantage over competing non-free programs. These disadvantages
85 are the reason we use the ordinary General Public License for many
86 libraries. However, the Lesser license provides advantages in certain
87 special circumstances.

88
89 For example, on rare occasions, there may be a special need to
90 encourage the widest possible use of a certain library, so that it becomes
91 a de-facto standard. To achieve this, non-free programs must be
92 allowed to use the library. A more frequent case is that a free
93 library does the same job as widely used non-free libraries. In this
94 case, there is little to gain by limiting the free library to free
95 software only, so we use the Lesser General Public License.

96
97 In other cases, permission to use a particular library in non-free
98 programs enables a greater number of people to use a large body of
99 free software. For example, permission to use the GNU C Library in
100 non-free programs enables many more people to use the whole GNU
101 operating system, as well as its variant, the GNU/Linux operating
102 system.

103
104 Although the Lesser General Public License is Less protective of the
105 users' freedom, it does ensure that the user of a program that is
106 linked with the Library has the freedom and the wherewithal to run
107 that program using a modified version of the Library.

108
109 The precise terms and conditions for copying, distribution and
110 modification follow. Pay close attention to the difference between a
111 "work based on the library" and a "work that uses the library". The
112 former contains code derived from the library, whereas the latter must
113 be combined with the library in order to run.

114
115 GNU LESSER GENERAL PUBLIC LICENSE
116 TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

117
118 0. This License Agreement applies to any software library or other
119 program which contains a notice placed by the copyright holder or
120 other authorized party saying it may be distributed under the terms of
121 this Lesser General Public License (also called "this License").
122 Each licensee is addressed as "you".

123
124 A "library" means a collection of software functions and/or data
125 prepared so as to be conveniently linked with application programs
126 (which use some of those functions and data) to form executables.

127
128 The "Library", below, refers to any such software library or work
129 which has been distributed under these terms. A "work based on the
130 Library" means either the Library or any derivative work under
131 copyright law: that is to say, a work containing the Library or a
132 portion of it, either verbatim or with modifications and/or translated
133 straightforwardly into another language. (Hereinafter, translation is
134 included without limitation in the term "modification".)

135
136 "Source code" for a work means the preferred form of the work for
137 making modifications to it. For a library, complete source code means
138 all the source code for all modules it contains, plus any associated
139 interface definition files, plus the scripts used to control compilation
140 and installation of the library.

141
142 Activities other than copying, distribution and modification are not
143 covered by this License; they are outside its scope. The act of
144 running a program using the Library is not restricted, and output from
145 such a program is covered only if its contents constitute a work based
146 on the Library (independent of the use of the Library in a tool for

147 writing it). Whether that is true depends on what the Library does
148 and what the program that uses the Library does.
149

150 1. You may copy and distribute verbatim copies of the Library's
151 complete source code as you receive it, in any medium, provided that
152 you conspicuously and appropriately publish on each copy an
153 appropriate copyright notice and disclaimer of warranty; keep intact
154 all the notices that refer to this License and to the absence of any
155 warranty; and distribute a copy of this License along with the
156 Library.
157

158 You may charge a fee for the physical act of transferring a copy,
159 and you may at your option offer warranty protection in exchange for a
160 fee.
161

162 2. You may modify your copy or copies of the Library or any portion
163 of it, thus forming a work based on the Library, and copy and
164 distribute such modifications or work under the terms of Section 1
165 above, provided that you also meet all of these conditions:
166

167 a) The modified work must itself be a software library.
168

169 b) You must cause the files modified to carry prominent notices
170 stating that you changed the files and the date of any change.
171

172 c) You must cause the whole of the work to be licensed at no
173 charge to all third parties under the terms of this License.
174

175 d) If a facility in the modified Library refers to a function or a
176 table of data to be supplied by an application program that uses
177 the facility, other than as an argument passed when the facility
178 is invoked, then you must make a good faith effort to ensure that,
179 in the event an application does not supply such function or
180 table, the facility still operates, and performs whatever part of
181 its purpose remains meaningful.
182

183 (For example, a function in a library to compute square roots has
184 a purpose that is entirely well-defined independent of the
185 application. Therefore, Subsection 2d requires that any
186 application-supplied function or table used by this function must
187 be optional: if the application does not supply it, the square
188 root function must still compute square roots.)
189

190 These requirements apply to the modified work as a whole. If
191 identifiable sections of that work are not derived from the Library,
192 and can be reasonably considered independent and separate works in
193 themselves, then this License, and its terms, do not apply to those
194 sections when you distribute them as separate works. But when you
195 distribute the same sections as part of a whole which is a work based
196 on the Library, the distribution of the whole must be on the terms of
197 this License, whose permissions for other licensees extend to the
198 entire whole, and thus to each and every part regardless of who wrote
199 it.
200

201 Thus, it is not the intent of this section to claim rights or contest
202 your rights to work written entirely by you; rather, the intent is to
203 exercise the right to control the distribution of derivative or
204 collective works based on the Library.
205

206 In addition, mere aggregation of another work not based on the Library
207 with the Library (or with a work based on the Library) on a volume of
208 a storage or distribution medium does not bring the other work under
209 the scope of this License.
210

211 3. You may opt to apply the terms of the ordinary GNU General Public
212 License instead of this License to a given copy of the Library. To do
213 this, you must alter all the notices that refer to this License, so
214 that they refer to the ordinary GNU General Public License, version 2,
215 instead of to this License. (If a newer version than version 2 of the
216 ordinary GNU General Public License has appeared, then you can specify
217 that version instead if you wish.) Do not make any other change in
218 these notices.
219

220 Once this change is made in a given copy, it is irreversible for
221 that copy, so the ordinary GNU General Public License applies to all
222 subsequent copies and derivative works made from that copy.

223
224 This option is useful when you wish to copy part of the code of
225 the Library into a program that is not a library.

226
227 4. You may copy and distribute the Library (or a portion or
228 derivative of it, under Section 2) in object code or executable form
229 under the terms of Sections 1 and 2 above provided that you accompany
230 it with the complete corresponding machine-readable source code, which
231 must be distributed under the terms of Sections 1 and 2 above on a
232 medium customarily used for software interchange.

233
234 If distribution of object code is made by offering access to copy
235 from a designated place, then offering equivalent access to copy the
236 source code from the same place satisfies the requirement to
237 distribute the source code, even though third parties are not
238 compelled to copy the source along with the object code.

239
240 5. A program that contains no derivative of any portion of the
241 Library, but is designed to work with the Library by being compiled or
242 linked with it, is called a "work that uses the Library". Such a
243 work, in isolation, is not a derivative work of the Library, and
244 therefore falls outside the scope of this License.

245
246 However, linking a "work that uses the Library" with the Library
247 creates an executable that is a derivative of the Library (because it
248 contains portions of the Library), rather than a "work that uses the
249 library". The executable is therefore covered by this License.
250 Section 6 states terms for distribution of such executables.

251
252 When a "work that uses the Library" uses material from a header file
253 that is part of the Library, the object code for the work may be a
254 derivative work of the Library even though the source code is not.
255 Whether this is true is especially significant if the work can be
256 linked without the Library, or if the work is itself a library. The
257 threshold for this to be true is not precisely defined by law.

258
259 If such an object file uses only numerical parameters, data
260 structure layouts and accessors, and small macros and small inline
261 functions (ten lines or less in length), then the use of the object
262 file is unrestricted, regardless of whether it is legally a derivative
263 work. (Executables containing this object code plus portions of the
264 Library will still fall under Section 6.)

265
266 Otherwise, if the work is a derivative of the Library, you may
267 distribute the object code for the work under the terms of Section 6.
268 Any executables containing that work also fall under Section 6,
269 whether or not they are linked directly with the Library itself.

270
271 6. As an exception to the Sections above, you may also combine or
272 link a "work that uses the Library" with the Library to produce a
273 work containing portions of the Library, and distribute that work
274 under terms of your choice, provided that the terms permit
275 modification of the work for the customer's own use and reverse
276 engineering for debugging such modifications.

277
278 You must give prominent notice with each copy of the work that the
279 Library is used in it and that the Library and its use are covered by
280 this License. You must supply a copy of this License. If the work
281 during execution displays copyright notices, you must include the
282 copyright notice for the Library among them, as well as a reference
283 directing the user to the copy of this License. Also, you must do one
284 of these things:

- 285
286 a) Accompany the work with the complete corresponding
287 machine-readable source code for the Library including whatever
288 changes were used in the work (which must be distributed under
289 Sections 1 and 2 above); and, if the work is an executable linked
290 with the Library, with the complete machine-readable "work that
291 uses the Library", as object code and/or source code, so that the
292 user can modify the Library and then relink to produce a modified

293 executable containing the modified Library. (It is understood
294 that the user who changes the contents of definitions files in the
295 Library will not necessarily be able to recompile the application
296 to use the modified definitions.)
297

298 b) Use a suitable shared library mechanism for linking with the
299 Library. A suitable mechanism is one that (1) uses at run time a
300 copy of the library already present on the user's computer system,
301 rather than copying library functions into the executable, and (2)
302 will operate properly with a modified version of the library, if
303 the user installs one, as long as the modified version is
304 interface-compatible with the version that the work was made with.
305

306 c) Accompany the work with a written offer, valid for at
307 least three years, to give the same user the materials
308 specified in Subsection 6a, above, for a charge no more
309 than the cost of performing this distribution.
310

311 d) If distribution of the work is made by offering access to copy
312 from a designated place, offer equivalent access to copy the above
313 specified materials from the same place.
314

315 e) Verify that the user has already received a copy of these
316 materials or that you have already sent this user a copy.
317

318 For an executable, the required form of the "work that uses the
319 Library" must include any data and utility programs needed for
320 reproducing the executable from it. However, as a special exception,
321 the materials to be distributed need not include anything that is
322 normally distributed (in either source or binary form) with the major
323 components (compiler, kernel, and so on) of the operating system on
324 which the executable runs, unless that component itself accompanies
325 the executable.
326

327 It may happen that this requirement contradicts the license
328 restrictions of other proprietary libraries that do not normally
329 accompany the operating system. Such a contradiction means you cannot
330 use both them and the Library together in an executable that you
331 distribute.
332

333 7. You may place library facilities that are a work based on the
334 Library side-by-side in a single library together with other library
335 facilities not covered by this License, and distribute such a combined
336 library, provided that the separate distribution of the work based on
337 the Library and of the other library facilities is otherwise
338 permitted, and provided that you do these two things:
339

340 a) Accompany the combined library with a copy of the same work
341 based on the Library, uncombined with any other library
342 facilities. This must be distributed under the terms of the
343 Sections above.
344

345 b) Give prominent notice with the combined library of the fact
346 that part of it is a work based on the Library, and explaining
347 where to find the accompanying uncombined form of the same work.
348

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351 attempt otherwise to copy, modify, sublicense, link with, or
352 distribute the Library is void, and will automatically terminate your
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354 or rights, from you under this License will not have their licenses
355 terminated so long as such parties remain in full compliance.
356

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364 the Library or works based on it.
365

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373
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375 infringement or for any other reason (not limited to patent issues),
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377 otherwise) that contradict the conditions of this License, they do not
378 excuse you from the conditions of this License. If you cannot
379 distribute so as to satisfy simultaneously your obligations under this
380 License and any other pertinent obligations, then as a consequence you
381 may not distribute the Library at all. For example, if a patent
382 license would not permit royalty-free redistribution of the Library by
383 all those who receive copies directly or indirectly through you, then
384 the only way you could satisfy both it and this License would be to
385 refrain entirely from distribution of the Library.

386
387 If any portion of this section is held invalid or unenforceable under any
388 particular circumstance, the balance of the section is intended to apply,
389 and the section as a whole is intended to apply in other circumstances.

390
391 It is not the purpose of this section to induce you to infringe any
392 patents or other property right claims or to contest validity of any
393 such claims; this section has the sole purpose of protecting the
394 integrity of the free software distribution system which is
395 implemented by public license practices. Many people have made
396 generous contributions to the wide range of software distributed
397 through that system in reliance on consistent application of that
398 system; it is up to the author/donor to decide if he or she is willing
399 to distribute software through any other system and a licensee cannot
400 impose that choice.

401
402 This section is intended to make thoroughly clear what is believed to
403 be a consequence of the rest of this License.

404
405 12. If the distribution and/or use of the Library is restricted in
406 certain countries either by patents or by copyrighted interfaces, the
407 original copyright holder who places the Library under this License may add
408 an explicit geographical distribution limitation excluding those countries,
409 so that distribution is permitted only in or among countries not thus
410 excluded. In such case, this License incorporates the limitation as if
411 written in the body of this License.

412
413 13. The Free Software Foundation may publish revised and/or new
414 versions of the Lesser General Public License from time to time.
415 Such new versions will be similar in spirit to the present version,
416 but may differ in detail to address new problems or concerns.

417
418 Each version is given a distinguishing version number. If the Library
419 specifies a version number of this License which applies to it and
420 "any later version", you have the option of following the terms and
421 conditions either of that version or of any later version published by
422 the Free Software Foundation. If the Library does not specify a
423 license version number, you may choose any version ever published by
424 the Free Software Foundation.

425
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428 write to the author to ask for permission. For software which is
429 copyrighted by the Free Software Foundation, write to the Free
430 Software Foundation; we sometimes make exceptions for this. Our
431 decision will be guided by the two goals of preserving the free status
432 of all derivatives of our free software and of promoting the sharing
433 and reuse of software generally.

434
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436
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446

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455 SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH
456 DAMAGES.
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458 END OF TERMS AND CONDITIONS

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