The gfdl package

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f https://ctan.org/pkg/gfdl
f https://puszcza.gnu.org.ua/bugs/?group=gfdl-tex

Abstract

The GFDL is a popular license used for programming manuals, documentations and various other textual works too, but using this license with LATEX isn't very convenient. This package aims to help users in easily using the license without violating any rules of the license. With a handful of commands, users can rest assured that their document will be perfectly licensed under GFDL.

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Gnu	U Free Documentation License	55

The \LaTeX package gfdl

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Acknowledgment

I acknowledge my friend Sahil Patel for reviewing the output of this package and suggesting some corrections. I would also like to thank Karl Berry for pointing out some critical issues in my package and suggesting alternative ways of dealing with them. This package modifies and uses a few LATEX-files provided on the web-pages of respective versions of GFDL^I which are unlicensed and their authors are unknown, but with a few typographic modifications I have used them in the package. I would like to thank FSF/GNU-hackers for providing a basic skeleton of the LATEX-files which I could modify.

Documentation

This section describes all the macros and parameters that the package provides.

Macros

\gfdlcopyrightdescription \gfdlcopyrightableyears \gfdlcopyrightholders

```
\gfdlcopyrightdescription{\langle project-description \rangle}
\gfdlcopyrightableyears{\langle copyright-able years\rangle}
\gfdlcopyrighthoders{\langle copyright-holders \rangle}
```

The names of these macros are pretty self-explanatory. These macros store the information which is then printed automatically at necessary places. Only if one has loaded the manual option (documented in section I.2); they will have to use the macros following this one to print the notice and the license-text.

\printgfdlnotice This text prints the copyright-notice. LaTeX's float-mechanism is used for printing it. It is printed on the first page of the document with default settings. With option manual user is free to print it anywhere, but not printing it will produce an error.

\printgfdltext This text prints the entire license text. In default settings this command is run after the last page of the document. With option manual, the user is free to use it anywhere, but not using it will produce an error.

I.2 Options

manual By default the package prints the copyright-notice along with the license-text of GFDL in the document by default. The former is printed at the bottom of the first page whereas the latter is printed just after the last page. If anyone wants to suppress this behavior and print both of these things anywhere in the document with \printgfdlnotice and \printgfdltext as documented earlier.

```
<sup>I</sup>GFDLvI.3: https://www.gnu.org/licenses/fdl-1.3.tex.
GFDLvI.2: https://www.gnu.org/licenses/fdl-1.2.tex.
GFDLvI.I: https://www.gnu.org/licenses/fdl-1.1.tex.
```

sc

New: 2025-05-01

Sometimes acronyms are supposed to be printed in small caps instead of all caps. This is achieved by adding this option. This option is set to false by default. (This documentation uses sc option.)

I.2.I Legacy support

The following options are just for legacy support and should be avoided for newer works. It is advised to use these options only when the document demands certain old conventions which are obsolete these days.

(C) The © symbol was at times written as (C) and if someone needs to use this style, then they can use this package-option. The package essentially prints this symbol at two places. One in the actual PDF text and one in its metadata. At both of these places users will see the change if this option is used. By default this option is inactive.

version version={\langle version-number \rangle}

1.1, 1.2 or 1.3

1.3 is the current version of GFDL, but there were two old versions before it (i.e., 1.2 and I.I). By default the latest version is used, but with this package option, users can select previous versions too. It is important to note that as of now this option does not allow any other value than 1.1, 1.2 and 1.3.

If a newer version is released by the FSF, the default behavior of the package will most likely change to produce the latest version of GFDL at that time. In that case recompiling an old document with the new version of this package will break your documents, but as a developer I find that incompatibility reasonable and desirable, because I believe using the newer versions of this license will only help the cause for which hackers are fighting.

Implementation 2

Provide package with its basic information.

- * (*package)
- \ProvidesPackage{gfdl}[2025/05/01 v0.2
- 3 For using the GFDL in LaTeX.]

Load necessary packages.

- \RequirePackage{float}
- \RequirePackage{expkv-def,expkv-opt}

Define conditionals which we will be using in the package and set some initial values for them.

The package issues a warning if copyright-holders aren't declared and it doesn't print the GFDL-notice in this case, because a copyright-notice without copyright-holders makes no sense. The following conditional is at work for this.

- 6 \newif\ifgfdl@copyrightholdersgiven
- \gfdl@copyrightholdersgivenfalse

With the following code we first define various internal conditionals which we require. We also set their initial values here.

- ${\tt 8}$ \newif\ifgfdl@copyrightableyearsgiven
- gfdl@copyrightableyearsgivenfalse
- newif\ifgfdl@copyrightedmaterialdesc
- п \gfdl@copyrightedmaterialdescfalse
- 12 \newif\ifgfdl@licensetextnotprinted
- 13 \gfdl@licensetextnotprintedtrue
- 14 \newif\ifgfdl@noticenotprinted
- 15 \gfdl@noticenotprintedtrue

Define package options with expkv.

16 \ekvdefinekeys{gfdl}{

manual The invbool type is used to define package option manual². We define the conditional \ifgfdl@printgfdl with it.

```
invbool manual = {\ifgfdl@printgfdl},

(End of definition for manual. This function is documented on page 3.)
```

sc We define the conditional \ifgfdl@sc with the option bool for the key sc.

```
bool sc = {\ifgfdl@sc},

(End of definition for sc. This function is documented on page 4.)
```

(C) The following code defines the package option (C) which defines an internally used conditional \ifffdl@bracketedcopyright. The default value of this conditional is false.

```
bool (C) = {\ifgfdl@bracketedcopyright},
(End of definition for (C). This function is documented on page 4.)
```

version The following code develops the option version which takes three options seen in the documentation. By using the initial key-type, we set the initial value of this option to 1.3.

```
= {%
    choice
                 version
                             = {\def\gfdl@version{1p1}},%
      1.1
21
      1.2
                             = {\def\gfdl@version{1p2}},%
                             = {\def\gfdl@version{1p3}}%
      1.3
23
    },
                             = \{1.3\}
    initial
                 version
26 }
```

(End of definition for version. This function is documented on page 4.)

After developing all the options, we set process them with the following code.

27 \ekvoProcessLocalOptions{gfdl}

 $^{^2\}mathrm{Read}$ the documentation of expkv for explanation.

We have used the bool type from expkv for developing the package option (C). It defines the conditional \ifgfdl@bracketedcopyright which is by default false. We use an internal macro, i.e., \gfdl@copyrightsymbol for printing the copyright symbol with the following code. We \let it be \textcopyright when the aforementioned conditional is false and it is defined as (C) when the conditional is true (i.e., when the option is explicitly used by the user).

```
28 \ifgfdl@bracketedcopyright
                                     \def\gfdl@copyrightsymbol{(C)}%
                                 30 \else
                                     \let\gfdl@copyrightsymbol\textcopyright
                                32 \fi
\gfdlcopyrightdescription The following \NewDocumentCommand is used to develop this command.
                                 _{\rm 33} \NewDocumentCommand{ \gfdlcopyrightdescription }{ m }{% }
                                     \def\@copyrightedmaterialdesc{#1}%
                                     \gfdl@copyrightedmaterialdesctrue
                                36 }
                               (End of definition for \gfdlcopyrightdescription. This function is documented on page 3.)
  \gfdlcopyrightableyears
                              For this command we have the following code.
                                 37 \NewDocumentCommand{ \gfdlcopyrightableyears }{ m }{%
                                     \def\@copyrightableyears{#1}%
                                     \gfdl@copyrightableyearsgiventrue
                                 40 }
                               (End of definition for \gfdlcopyrightableyears. This function is documented on page 3.)
    \gfdlcopyrightholders
                              And lastly, we have this command coded as follows.
                                 41 \NewDocumentCommand{ \gfdlcopyrightholders }{ m }{%
                                     \def\@copyrightholders{#1}%
                                     \gfdl@copyrightholdersgiventrue
                                43
                                 44 }
                               (\textit{End of definition for } \verb|\| \textit{Sfdlcopyrightholders}. \ \textit{This function is documented on page } \textit{\textbf{3.}})
```

We issue a warning when copyright-able years are not given. The following code generates the warning. We define the internal macro containing the copyright-able years as ?? in bold font here itself.

```
45 \AddToHook{begindocument/before}{%
46
    \ifgfdl@copyrightableyearsgiven
    \else
47
      \def\@copyrightableyears{\textbf{??}}%
48
      \PackageWarningNoLine{gfdl}{%
49
        Copyright-able years not given. I can't print
        the\MessageBreak
51
        copyright notice without them. To give me
52
        this\MessageBreak
53
        information use the
54
        \string\gfdlcopyrightableyears\space
55
        command.\MessageBreak
56
        Using '??' as a placeholder%
57
58
      }%
    \fi
```

The following code is used to check if user has given information about copyright-holders. If not, then we issue a warning with this code and again define the internal macro containing this information as bold ??.

```
\ifgfdl@copyrightholdersgiven
    \else
      \def\@copyrightholders{\textbf{??}}%
62
      \PackageWarningNoLine{gfdl}{%
63
        Copyright-holders not given. I can't print
        the\MessageBreak
65
        copyright notice without them. To give me
66
        this\MessageBreak
67
        information use the \string\gfdlcopyrightholders\space
68
        command.\MessageBreak
69
        Using '??' as a placeholder%
      }%
71
    \fi
```

With default settings of this package, hyperref, csquotes and hyperxmp are loaded, but to avoid potential conflicts, we load them conditionally. With the following code this is achieved.

For setting the metadata we use the following code.

```
\hypersetup{%
82
       pdfcopyright = {%
83
         \ifgfdl@copyrightedmaterialdesc
84
           \@copyrightedmaterialdesc
85
           \textLF
86
         \fi
87
         Copyright
         \gfdl@copyrightsymbol\
         \@copyrightableyears\
         \verb|\@copyrightholders| textLF|
         Permission is granted to copy, distribute and/or
         modify this document under the terms of the GNU Free
93
         Documentation License, Version 1.3 or any later
94
         version published by the Free Software Foundation;
         with no Invariant Sections, no Front-Cover Texts, and
96
         no Back-Cover Texts. A copy of the license is included
97
         in the section entitled "GNU Free Documentation
         License".%
99
       },%
       pdflicenseurl = {%
IOI
         https://www.gnu.org/licenses/fdl-1.3.txt%
I02
       }%
103
    }%
TOA
```

105 }

Printing the text automatically at the bottom of the first page is achieved with the help of a float. It is developed using package float for the following commands.

ro6 \newfloat{gfdl@float}{b}{delme}

```
This command is developed using the following code.
\printgfdlnotice
```

```
\NewDocumentCommand{ \printgfdlnotice }{ }{%
                        \begin{gfdl@float}[b!]
                   108
                          \hrule\medskip
                   109
                          \ifgfdl@copyrightedmaterialdesc
                   IIO
                            \@copyrightedmaterialdesc\par
                   II2
                          Copyright
                   II3
                   II4
                          \gfdl@copyrightsymbol\
                          \@copyrightableyears\
                   II5
                          \@copyrightholders
                   116
                   II7
                          Permission is granted to copy, distribute and/or modify
                   II8
                          this document under the terms of the
                   IIG
                          \ifgfdl@sc
                   120
                            \textsc{Gnu}
                          \else
                            GNU
                   123
                          \fi
                          Free Documentation License, Version 1.3 or any later
                          version published by the Free Software Foundation; with
                   т2б
                          no Invariant Sections, no Front-Cover Texts, and no
                   127
                          Back-Cover Texts. A copy of the license is included in
                   128
                          the section entitled \enquote{%
                   129
                            \ifgfdl@sc
                   130
                              \textsc{Gnu}
                   131
                            \else
                   132
                              GNU
                   133
                            \fi
                   134
                            Free Documentation License%
                   135
                          }.%
                   136
                        \end{gfdl@float}%
                   137
                        \gfdl@noticenotprintedfalse
                  138
                  139 }
                 (End of definition for \printgfdlnotice. This function is documented on page 3.)
                      We use \printgfdlnotice at the first page of the document with the following code.
                     \AddToHook{begindocument/end}{%
                        \ifgfdl@printgfdl
                   141
                          \printgfdlnotice
                   142
                  143
                   144 }
\printgfdltext The following code is used to define this command.
```

```
145 \NewDocumentCommand{ \printgfdltext }{ }{%
    \input{gfdl-tex-\gfdl@version.tex}%
    \gfdl@licensetextnotprintedfalse
148 }
```

(End of definition for \printgfdltext. This function is documented on page 3.)

In default settings the entire license text is printed with the following code.

```
149 \AddToHook{enddocument}{%
     \ifgfdl@printgfdl
       \newpage
ISI
       \phantomsection
152
       \ifgfdl@sc
153
         \addcontentsline{toc}{section}{%
154
           \textsc{Gnu} Free Documentation License%
155
         }%
156
       \else
157
         \addcontentsline{toc}{section}{%
           GNU Free Documentation License%
159
         }%
160
       \fi
тбт
       \printgfdltext
тбэ
163
     \ifgfdl@noticenotprinted
164
       \PackageError{gfdl}{%
165
         You didn't print the copyright notice%
166
167
         You are in the 'manual' mode of the GFDL package and
168
         hence you\MessageBreak
         are supposed to print the copyright notice at a
         suitable place\MessageBreak
I7I
         of your choice, but you haven't printed it at all.
         This violates\MessageBreak
173
         the requirement of the GFDL. To print it
174
         use:\MessageBreak
         \space\space\string\printgfdlnotice.%
176
       }%
     \fi
     \ifgfdl@licensetextnotprinted
179
       \PackageError{gfdl}{%
180
         You didn't print the license text%
т8т
т8э
183
         You are in the 'manual' mode of the GFDL package and
184
         hence you\MessageBreak
185
         are supposed to print the full license text at a
         suitable place\MessageBreak
187
         of your choice, but you haven't printed it at all.
         This violates\MessageBreak
         the requirement of the GFDL. To print it
         use:\MessageBreak
         \space\space\string\printgfdltext.%
       }%
193
     \fi
194
195 }
   This is the end of the package.
196 (/package)
```

We start a new tag, i.e., 1p1, for generating the tex file of the first version of GFDL. it contains all the text of the same.

```
198 \ProvidesFile{gfdl-tex-1p1.tex}[2025-05-01 v0.2 GFDL 1.1]
199 \makeatletter
200 \begin{center}
     \ifgfdl@sc
       \textbf{%
         \LARGE
203
         \textsc{Gnu} Free Documentation License%
204
       }%
205
     \else
206
       \textbf{%
207
         \LARGE
208
         GNU Free Documentation License%
200
       }%
     \fi
     \bigskip
     Version 1.1, March 2000
215
     Copyright \copyright\ 2000 Free Software Foundation, Inc.
216
217
     \bigskip
218
210
     51 Franklin St, Fifth Floor, Boston, MA 02110-1301
     \ifgfdl@sc
221
       \textsc{usa}
222
     \else
223
       USA
224
     \fi
225
226
227
     Everyone is permitted to copy and distribute verbatim
228
     copies of this license document, but changing it is not
220
     allowed.
230
     \bigskip
233
     \textbf{%
234
       \Large
235
       \ifgfdl@sc
236
         \textsc{Preamble}%
       \else
238
         PREAMBLE%
230
240
     }
241
242 \end{center}
244 The purpose of this License is to make a manual, textbook,
_{\text{245}} or other written document \enquote{free} in the sense of
_{246} freedom: to assure everyone the effective freedom to copy
247 and redistribute it, with or without modifying it, either
_{248} commercially or noncommercially. Secondarily, this License
```

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_{254} that derivative works of the document must themselves be
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256 \ifgfdl@sc
     \textsc{Gnu}
258 \else
     GNII
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262 for free software.
264 We have designed this License in order to use it for manuals
_{265} for free software, because free software needs free
266 documentation: a free program should come with manuals
_{\mbox{\scriptsize 267}} providing the same freedoms that the software does. But this
268 License is not limited to software manuals; it can be used
269 for any textual work, regardless of subject matter or
_{\mbox{\scriptsize 270}} whether it is published as a printed book. We recommend this
_{\it 27I} License principally for works whose purpose is instruction
272 or reference.
274 \medskip
   \begin{center}
275
     \textbf{%
276
       \Large
277
       \ifgfdl@sc
278
          \textsc{Applicability and Definitions}%
279
       \else
          APPLICABILITY AND DEFINITIONS%
281
282
283
284 \end{center}
285
287 This License applies to any manual or other work that
_{\mbox{\tiny 288}} contains a notice placed by the copyright holder saying it
_{289} can be distributed under the terms of this License. The
290 \enquote{Document}, below, refers to any such manual or
_{\mbox{\scriptsize 2g}\mbox{\tiny I}} work. Any member of the public is a licensee, and is
292 addressed as \enquote{you}.
294 A \enquote{Modified Version} of the Document means any work
295 containing the Document or a portion of it, either copied
296 verbatim, or with modifications and/or translated into
297 another language.
299 A \enquote{Secondary Section} is a named appendix or a
_{300} front-matter section of the Document that deals exclusively
_{\mbox{\scriptsize 3OT}} with the relationship of the publishers or authors of the
_{\mbox{\scriptsize 302}} Document to the Document's overall subject (or to related
```

```
_{\text{303}} matters) and contains nothing that could fall directly
_{\rm 304} within that overall subject. (For example, if the Document
305 is in part a textbook of mathematics, a Secondary Section
306 may not explain any mathematics.) The relationship could be
307 a matter of historical connection with the subject or with
308 related matters, or of legal, commercial, philosophical,
309 ethical or political position regarding them.
310
311 The \enquote{Invariant Sections} are certain Secondary
_{\mbox{\scriptsize 312}} Sections whose titles are designated, as being those of
_{\mbox{\scriptsize 3I3}} Invariant Sections, in the notice that says that the
314 Document is released under this License.
316 The \enquote{Cover Texts} are certain short passages of text
317 that are listed, as Front-Cover Texts or Back-Cover Texts,
318 in the notice that says that the Document is released under
319 this License.
320
321 A \enquote{Transparent} copy of the Document means a
_{3^{22}} machine-readable copy, represented in a format whose
_{3^{23}} specification is available to the general public, whose
_{\mbox{\scriptsize 324}} contents can be viewed and edited directly and
_{325} straightforwardly with generic text editors or (for images
_{326} composed of pixels) generic paint programs or (for drawings)
327 some widely available drawing editor, and that is suitable
_{328} for input to text formatters or for automatic translation to
_{3^{29}} a variety of formats suitable for input to text formatters.
_{330} A copy made in an otherwise Transparent file format whose
_{
m 33I} markup has been designed to thwart or discourage subsequent
_{33^2} modification by readers is not Transparent. A copy that is
333 not \enquote{Transparent} is called \enquote{Opaque}.
_{\mbox{\scriptsize 335}} Examples of suitable formats for Transparent copies include
_{336} plain
337 \ifgfdl@sc
     \textsc{ascii}
339 \else
340
341 \fi
342 without markup, Texinfo input format, \LaTeX~input format,
343 \ifgfdl@sc
     \textsc{sgml}
345 \else
     SGML
347 \fi
348 or
349 \ifgfdl@sc
     \textsc{xml}
351 \else
     XML.
353 \fi
354 using a publicly available
_{355} \ifgfdl@sc
   \textsc{dtd}%
```

```
_{357} \else
     DTD%
_{359} \fi
   , and standard-conforming simple
361 \ifgfdl@sc
     \textsc{html}
363 \else
     HTML
364
_{\rm 366} designed for human modification. Opaque formats include
367 PostScript,
368 \ifgfdl@sc
     \textsc{pdf}%
_{370} \else
37I
372 \fi
_{\mbox{\scriptsize 373}} , proprietary formats that can be read and edited only by
374 proprietary word processors,
375 \ifgfdl@sc
     \textsc{sgml}
376
_{377} \else
     SGML
378
379 \fi
380 or
\textsc{xml}
383 \else
     XML
384
385 \fi
_{\rm 386} for which the
387 \ifgfdl@sc
     \textsc{dtd}
_{389} \else
     DTD
_{39^{\text{I}}} \fi
_{392} and/or processing tools are not generally available, and the
_{393} machine-generated
394 \ifgfdl@sc
     \textsc{html}
395
396 \else
     HTML
397
_{
m 399} produced by some word processors for output purposes only.
_{\mbox{\tiny 40I}} The \enquote{Title Page} means, for a printed book, the
_{\mbox{\tiny 402}} title page itself, plus such following pages as are needed
_{\text{403}} to hold, legibly, the material this License requires to
_{\mbox{\tiny 404}} appear in the title page. For works in formats which do not
405 have any title page as such, \enquote{Title Page} means the
406 text near the most prominent appearance of the work's title,
_{\mbox{\tiny 407}} preceding the beginning of the body of the text.
_{409} \medskip
410 \begin{center}
```

```
\textbf{%
       \Large
412
       \ifgfdl@sc
413
          \textsc{Verbatim Copying}%
414
        \else
415
          VERBATIM COPYING%
416
       \fi
417
     }
418
   \end{center}
419
_{42I} \noindent
_{422} You may copy and distribute the Document in any medium,
_{\mbox{\scriptsize 423}} either commercially or noncommercially, provided that this
_{\mbox{\tiny 424}} License, the copyright notices, and the license notice
425 saying this License applies to the Document are reproduced
426 in all copies, and that you add no other conditions
427 whatsoever to those of this License. You may not use
_{\mbox{\tiny 428}} technical measures to obstruct or control the reading or
_{429} further copying of the copies you make or distribute.
430 However, you may accept compensation in exchange for copies.
431 If you distribute a large enough number of copies you must
_{43^2} also follow the conditions in section 3.
_{
m 434} You may also lend copies, under the same conditions stated
435 above, and you may publicly display copies.
436
   \medskip
437
   \begin{center}
438
     \textbf{%
439
       \Large
440
441
       \ifgfdl@sc
         \textsc{Copying in Quantity}%
442
       \else
         COPYING IN QUANTITY%
444
       \fi
445
446
447 \end{center}
448
449 \noindent
_{
m 450} If you publish printed copies of the Document numbering more
_{45\text{I}} than 100, and the Document's license notice requires Cover
_{45^2} Texts, you must enclose the copies in covers that carry,
_{
m 453} clearly and legibly, all these Cover Texts: Front-Cover
_{
m 454} Texts on the front cover, and Back-Cover Texts on the back
_{
m 455} cover. Both covers must also clearly and legibly identify
_{
m 456} you as the publisher of these copies. The front cover must
457 present the full title with all words of the title equally
_{458} prominent and visible. You may add other material on the
_{459} covers in addition. Copying with changes limited to the
_{
m 460} covers, as long as they preserve the title of the Document
_{\rm 46\textsc{i}} and satisfy these conditions, can be treated as verbatim
462 copying in other respects.
_{464} If the required texts for either cover are too voluminous to
```

```
_{
m 465} fit legibly, you should put the first ones listed (as many
_{\rm 466} as fit reasonably) on the actual cover, and continue the
467 rest onto adjacent pages.
_{469} If you publish or distribute Opaque copies of the Document
470 numbering more than 100, you must either include a
471 machine-readable Transparent copy along with each Opaque
_{472} copy, or state in or with each Opaque copy a
473 publicly-accessible computer-network location containing a
474 complete Transparent copy of the Document, free of added
_{
m 475} material, which the general network-using public has access
_{\rm 476} to download anonymously at no charge using public-standard
477 network protocols. If you use the latter option, you must
_{\mbox{\scriptsize 478}} take reasonably prudent steps, when you begin distribution
_{
m 479} of Opaque copies in quantity, to ensure that this
480 Transparent copy will remain thus accessible at the stated
_{48\text{I}} location until at least one year after the last time you
482 distribute an Opaque copy (directly or through your agents
483 or retailers) of that edition to the public.
_{485} It is requested, but not required, that you contact the
486 authors of the Document well before redistributing any large
_{487} number of copies, to give them a chance to provide you with
488 an updated version of the Document.
490 \medskip
   \begin{center}
49I
     \textbf{%
492
       \Large
493
       \ifgfdl@sc
494
         \textsc{Modifications}%
495
       \else
         MODIFICATIONS%
       \fi
498
499
500 \end{center}
502 \noindent
_{503} You may copy and distribute a Modified Version of the
504 Document under the conditions of sections 2 and 3 above,
_{505} provided that you release the Modified Version under
_{506} precisely this License, with the Modified Version filling
_{\mbox{\scriptsize 507}} the role of the Document, thus licensing distribution and
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