

The `texdepends` package*

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2018/09/04

Abstract

This package allows L^AT_EX to automatically generate dependencies while compiling documents.

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*This file has version number v2.3.0, last revised 2018/09/04.

1 Introduction

This package automatically generates dependancies on L^AT_EX files and packages, figures, bibliography files, glossary and index files. The generated file is then used by a Makefile to handle dependancies.

2 Implementation of texdepends

2.1 Options

```
1 <*package>
```

texdepends is easier to write with the ifthen package.

```
2 \RequirePackage{ifthen}
```

debug The debug option (enable debug messages, useful for debugging)

```
3 \newboolean{TD@debug}
4 \newcommand{\TD@option@debug}[1][true]{%
5   \%PackageWarningNoLine{texdepends}{Setting debug to #1}
6   \setboolean{TD@debug}{#1}%
7 }%
```

extension The extension option. We can use it to let texdepends know whether we compile a dvi or a pdf file.

```
8 \def\TD@option@extension[#1]{%
9   \%PackageWarningNoLine{texdepends}{Using extention #1}
10  \def\TD@extention{#1}%
11 }%
```

Managing options with specific code. Using the keyval package could be a solution, but this would add one more dependency.

```
12 \def\TD@option@split#1=#2=#3\relax{%
13   \def\TD@option@name{#1}%
14   \ifx\TD@option@name\@empty\else
15     \expandafter\let\expandafter\TD@option@cmd
16     \csname TD@option@\TD@option@name\endcsname
17     \%PackageWarningNoLine{texdepends}{1: '#1', 2: '#2', 3: '#3'}
18     \ifx\TD@option@cmd\relax
19       \@unknownoptionerror%
20     \else
21       \ifx\@empty#3\@empty
22         \TD@option@cmd\relax%
23       \else
24         \def\TD@option@value{#2}%
25         \TD@option@cmd[\TD@option@value]%
26       \fi
27     \fi
28   \fi
29 }%
```

All option are managed by the same code.

```
30 \DeclareOption*{%
31   %\PackageWarningNoLine{texdepends}{Option \CurrentOption}%
32   \expandafter\TD@option@split\CurrentOption==\relax%
33 }%
```

So lets process options

```
34 \ProcessOptions
```

If the `extension` option is not used, we try to find ourselves the good extension based on TeX engine or mode.

```
35 \ifthenelse{\isundefined{\TD@extention}}{%
36   \PackageWarningNoLine{texdepends}{No extension given: detecting it}%
37   \RequirePackage{ifxetex,ifpdf}%
38   \ifxetex%
39     \PackageWarningNoLine{texdepends}{Detected XeTeX: using .pdf}%
40     \def\TD@extention{.pdf}%
41   \else\ifpdf%
42     \PackageWarningNoLine{texdepends}{Detected PDF mode: using .pdf}%
43     \def\TD@extention{.pdf}%
44   \else%
45     \PackageWarningNoLine{texdepends}{Detected DVI mode. Using .dvi}%
46     \def\TD@extention{.dvi}%
47   \fi\fi%
48 }{}%
```

2.2 Tools

Some macros to help development

2.2.1 Debug/info wrapper

```
\TD@warning To write a warning
49 \newcommand{\TD@warning}[1]{%
50   \PackageWarningNoLine{texdepends}{#1}%
51 }%

\TD@warningLine To write a warning with line info
52 \newcommand{\TD@warningLine}[1]{%
53   \PackageWarning{texdepends}{#1}%
54 }%

\TD@info To write an info (as a warning if the debug option is set
55 \newcommand{\TD@info}[1]{%
56   \ifthenelse{\boolean{TD@debug}}{%
57     \PackageWarningNoLine{texdepends}{#1}%
58   }{%
59     \PackageInfo{texdepends}{#1}%
60   }%
61 }%
```

`\TD@debug` To write a message if the `debug` option is set

```
62 \newcommand{\TD@debug}[1]{%
63   \ifthenelse{\boolean{TD@debug}}{%
64     \PackageWarningNoLine{texdepends}{#1}%
65   }{%
66   }%
67 }
```

2.2.2 Writing dependencies

We open the file where we will write dependencies and other infos.

```
68 \newwrite\TD@write
69 \TD@info{Writing info in '\jobname\TD@extention.mk'}
70 \immediate\openout\TD@write\jobname\TD@extention.mk%
```

And we define a few macro to write in this file

`\TD@print` We write something in the file

```
71 \def\TD@print#1{%
72   \immediate\write\TD@write{#1}%
73 }
```

`\TD@printClass` We need a class

```
74 \def\TD@printClass#1{%
75   \TD@print{TD_\jobname\TD@extention _INPUTS\space += #1.cls}%
76 }
```

`\TD@printPackage` We need a package

```
77 \def\TD@printPackage#1{%
78   \TD@print{TD_\jobname\TD@extention _INPUTS\space += #1.sty}%
79 }
```

`\TD@printInput` We need a (L^AT_EX) file

```
80 \def\TD@printInput#1{%
81   \TD@print{TD_\jobname\TD@extention _INPUTS\space += #1}%
82 }
```

`\TD@printFig` We want to ignore a dependency

```
83 \def\TD@printNoDependsFile#1{%
84   \TD@print{TD_\jobname\TD@extention _DEPENDS_EXCLUDE\space += #1}%
85 }
```

`\TD@printFig` We need an XFig file

```
86 \def\TD@printFig#1{%
87   \TD@print{TD_\jobname\TD@extention _FIGURES\space += #1}%
88 }
```

```

\TD@printSubfig  Web need a subfig file (see figlatex.dtx)
89 \def\TD@printSubfig#1{%
90   \TD@print{TD_\jobname\TD@extention _SUBFIGS\space += #1}%
91 }%

\TD@printRequiredFile  A file is missing. texdepend will try to skip it this time, but it will be needed at
the next compilation
92 \def\TD@printRequiredFile#1{%
93   \TD@print{TD_\jobname\TD@extention _REQUIRED\space += #1}%
94 }%

\RequireFile  LaTeX users can directly declare a dependencie
95 \let\RequireFile\TD@printRequiredFile

\TD@printOut  We write in a file
96 \def\TD@printOut#1{%
97   \TD@print{TD_\jobname\TD@extention _OUTPUTS\space += #1}%
98 }%

\TD@printGraphicspath  We modify the graphicspath
99 \def\TD@printGraphicspath#1{%
100   \TD@print{TD_\jobname\TD@extention _GRAPHICSPATH\space := #1}%
101 }%

\TD@printBibfile  We use a bibfile (*.bib)
102 \def\TD@printBibfile#1{%
103   \TD@print{TD_\jobname\TD@extention _BIBFILES\space += #1.bib}%
104 }%

\TD@printBibstyle  We use a bibstyle file (*.bst)
105 \def\TD@printBibstyle#1{%
106   \TD@print{TD_\jobname\TD@extention _BIBSTYLES\space += #1.bst}%
107 }%

\TD@printBblfile  We use a bibliography file (*.bbl)
108 \def\TD@printBblfile#1{%
109   \TD@print{TD_\jobname\TD@extention _BBLFILES\space += #1.bbl}%
110 }%

\TD@printRebuildRule  We need a specific rule in the Makefile to check if a rebuild is needed
111 \def\TD@printRebuildRule#1{%
112   \TD@print{TD_\jobname\TD@extention _REBUILD_RULES\space += #1}%
113 }%

\TD@printIndex  We use a new index
114 \def\TD@printIndex#1{%
115   \TD@print{TD_\jobname\TD@extention _INDEXES\space += INDEX}%
116   \TD@print{TD_\jobname\TD@extention _INDEXES_INDEX\space += #1}%
117 }%

```

```

\TD@printIndexSource The index file filled by LATEX
118 \def\TD@printIndexSource#1#2{%
119 \TD@print{TD_\jobname\TD@extention _INDEX_#1_SRC\space = #2}%
120 }%

\TD@printIndexTarget And the index file read by LATEX after makeindex processing
121 \def\TD@printIndexTarget#1#2{%
122 \TD@print{TD_\jobname\TD@extention _INDEX_#1_TARGET\space = #2}%
123 }%

\TD@printIndexStyle The index style to be used with makeindex (never called for now)
124 \def\TD@printIndexStyle#1#2{%
125 \TD@print{TD_\jobname\TD@extention _INDEX_#1_STYLE\space = #2}%
126 }%

\TD@printGlossary And the same things for glossary. Its name
127 \def\TD@printGlossary#1{%
128 \TD@print{TD_\jobname\TD@extention _INDEXES += GLOSS}%
129 \TD@print{TD_\jobname\TD@extention _INDEXES_GLOSS\space += #1}%
130 }%

\TD@printGlossarySource The glossary file filled by LATEX
131 \def\TD@printGlossarySource#1#2{%
132 \TD@print{TD_\jobname\TD@extention _GLOSS_#1_SRC\space = #2}%
133 }%

\TD@printGlossaryTarget And the glossary file read by LATEX after makeindex processing
134 \def\TD@printGlossaryTarget#1#2{%
135 \TD@print{TD_\jobname\TD@extention _GLOSS_#1_TARGET\space = #2}%
136 }%

\TD@printGlossaryStyle The glossary style to be used with makeindex (never called for now)
137 \def\TD@printGlossaryStyle#1#2{%
138 \TD@print{TD_\jobname\TD@extention _GLOSS_#1_STYLE\space = #2}%
139 }%

```

2.2.3 Diverting a macro

```

\TD@switch \TD@switch replace the macro \#1 by the macro \TD@#1. The original macro is
stored in the \TD@orig@#1 macro. Nothing is done if \#1 is already \TD@#1 (that
is if \TD@switch is called several times with the same argument)
140 \def\TD@switch#1{%
141 \expandafter\let\expandafter\TD@local@old\csname#1\endcsname%
142 \expandafter\let\expandafter\TD@local@new\csname TD@#1\endcsname%
143 \ifx\TD@local@old\TD@local@new
144 \PackageWarning{texdepends}{#1 already redefined. Skipping it.}%
145 \else
146 \ifx\TD@local@old\relax

```

```

147     \TD@warning{Diverting empty macro '#1' \MessageBreak%
148         Probably a bug in texdepends.sty}%
149     \else
150         \TD@info{Diverting macro '#1'}%
151     \fi
152     \expandafter\let\csname TD@orig@#1\endcsname\TD@local@old%
153     \expandafter\let\csname#1\endcsname\TD@local@new%
154 \fi
155 }%

```

\TD@docswitch Sometimes, we want the diversion to be delayed until the start of the document.

```

156 \def\TD@docswitchlist{}%
157 \def\TD@docswitch#1{%
158     \TD@info{Registering macro '#1' for diversion}%
159     \ifx\TD@docswitchlist\@empty%
160         \xdef\TD@docswitchlist{#1}%
161     \else%
162         \xdef\TD@docswitchlist{\TD@docswitchlist,#1}%
163     \fi%
164 }%
165 \AtBeginDocument{%
166     \TD@info{Diverting registered macros...}%
167     \@for\TD@cmd:=\TD@docswitchlist\do{%
168         \TD@switch{\TD@cmd}%
169     }%
170     \TD@info{Divertions done}%
171 }%

```

\TD@PackagePreDivert And then, two macros to insert command just before or after loading a package.

\TD@PackagePostDivert The first argument is the name of the package we want to add an hook before or after, and then there is the definition of the hook that will be called. Four parameters (#1, ..., #4) are available (the same as the @onefilewithoptions L^AT_EX macro, ie package name, options, and the two remaining ;-)).

```

172 \def\TD@PackagePreDivert#1{%
173     \expandafter\def\csname TD@PackageStart@#1\endcsname ##1##2##3##4%
174 }%
175 \def\TD@PackagePostDivert#1{%
176     \expandafter\def\csname TD@PackageEnd@#1\endcsname ##1##2##3##4%
177 }%

```

2.2.4 Initialisation

We need to be loaded *before* \documentclass

```

178 \ifx\documentclass\@twoclasseserror
179     \PackageError{texdepends}{texdepends needs to be loaded BEFORE
180 \string\documentclass \MessageBreak
181 Use \string\RequirePackage\space instead of \string\usepackage
182 \MessageBreak as the later is not allowed before
183 \string\documentclass}

```

```

184 \fi
    And we write the first dependency (upon ourself)
185 \TD@printPackage{texdepends}
    We write default graphicspath (is this really needed ?)
186 \TD@printGraphicspath{{.}}

```

2.2.5 Warning upon missing figures

`\TD@depends` If some figures are missing, `\TD@missingDepends` will be called so that a warning
`\TD@dependsWarning` will be displayed at the end of the compilation. Figures should be generated before
`\TD@missingDepends` the next run.

```

187 \def\TD@depends{}%
188 \def\TD@dependsWarning{%
189   \PackageWarningNoLine{texdepends}{Figure(s) missing. Check
190     dependencies again}%
191 }%
192 \def\TD@missingDepends{%
193   \global\let\TD@depends\TD@dependsWarning%
194 }%
195 \AtEndDocument{%
196   \TD@depends%
197 }%

```

2.3 Diversion of L^AT_EX macros

2.3.1 Class and package loading

`\TD@@fileswith@pti@ns` Diverting `\@fileswith@pti@ns` and `@@fileswith@pti@ns` so that we can track
`\TD@@@fileswith@pti@ns` class loading. Package are tracked with an other macro (see just after).

```

198 \def\TD@@fileswith@pti@ns#1[#2]#3[#4]{%
199   \ifx#1\@clsextension
200     \TD@printClass{#3}
201   \fi
202   \TD@orig@@fileswith@pti@ns{#1}[#2]{#3}[#4]%
203 }%
204 \let\TD@@@fileswith@pti@ns\TD@@fileswith@pti@ns
205 \TD@switch{@fileswith@pti@ns}%
206 \TD@switch{@@fileswith@pti@ns}%

```

`\TD@@onefilewithoptions` By diverting `\@onefilewithoptions`, we can track all loaded packages. We write
the dependency, and we look at the loaded package to see if we need some special
requirements

```

207 \def\TD@@onefilewithoptions#1[#2][#3]#4{%
208   \TD@printPackage{#1}%
209   \ifthenelse{equal{#1}{texdepends}}{%

```


The `texdepends` package is special : we know it has already been loaded (we are running code in it) but perhaps L^AT_EX does not know it. So we try to honor the `debug` option.

```

210 \TD@debug{Package ' #1 ' detected}
211 \@for\TD@package@option:=#2\do{%
212 \ifthenelse{\expandafter\isundefined\csname TD@option@\TD@package@option\endcsname}{
213 \TD@warningLine{Ignoring unknown option '\TD@package@option'}
214 }{
215 \ifthenelse{%
216 \equal{\TD@package@option}{debug}%
217 %\OR\equal{\TD@package@option}{debug}%
218 }{
219 \csname TD@option@\TD@package@option\endcsname%
220 }{
221 \TD@warningLine{Ignoring option '\TD@package@option'
222 \MessageBreak #1 already loaded
223 }
224 }
225 }
226 }
227 }{%
228 \expandafter\let\expandafter\TD@divert
229 \csname TD@PackageStart@#1\endcsname
230 \ifx\TD@divert\relax
231 \TD@debug{No preamble for package #1}
232 \else
233 \TD@info{Preamble for package #1}
234 \TD@divert{#1}{#2}{#3}{#4}%
235 \fi
236 \TD@orig@@onefilewithoptions{#1}[#2][#3]{#4}%
237 \expandafter\let\expandafter\TD@divert
238 \csname TD@PackageEnd@#1\endcsname
239 \ifx\TD@divert\relax
240 \TD@debug{No postamble for package #1}
241 \else
242 \TD@info{Postamble for package #1}
243 \TD@divert{#1}{#2}{#3}{#4}%
244 \fi
245 }%
246 }%
247 \TD@switch{@onefilewithoptions}%

```

2.3.2 Tracking input files

```

\TD@@input \@input and \input@ are diverted to track loaded files
\TD@@input@
248 \def\TD@@input#1{%
249 \TD@printInput{#1}%
250 \TD@orig@@input{#1}}%
251 \def\TD@input@#1{%

```

```

252 \IfFileExists{#1}{%
253   \TD@printInput{#1}%
254 }{%
255   \TD@orig@input@{#1}}%
256 \TD@switch{@input}%
257 \TD@switch{@input@}%
258 \def\TD@verbatiminput#1{%
259   \TD@printInput{#1}%
260   \TD@orig@verbatiminput{#1}}%
261 \TD@PackagePostDivert{verbatim}{%
262   \TD@switch{verbatiminput}}%

```

2.3.3 Tracking output files

```

\TD@openout Note: that does not work. Currently, we parse the log file instead of using this. If
\TD@poenout@eq someone has ideas...
\TD@poenout@noeq 263 \let\TD@orig@openout\openout
264 \def\TD@openout#1{%
265   \@ifnextchar={\TD@openout@eq#1}{\TD@openout@noeq#1}}
266 \def\TD@openout@eq#1=#2.#3{%
267   \TD@printOut{#2.#3}%
268   \TD@orig@openout#1=#2.#3%
269 }%
270 \def\TD@openout@noeq#1#2.#3{%
271   \TD@printOut{#2.#3}%
272   \TD@orig@openout#1#2.#3%
273 }%
274 %\TD@switch{openout}

```

2.3.4 Tracking bibliography files

```

275 \def\TD@bibli@bbl{%
276   \TD@printBblfile{\jobname}%
277   \global\let\TD@bibli@bbl\relax%
278 }%
279 \def\TD@bibli@files#1{%
280   \TD@bibli@bbl%
281   \@for\TD@bibfile:=#1\do{%
282     \TD@printBibfile{\TD@bibfile}%
283   }%
284 }
285 \def\TD@bibli@style#1{%
286   \TD@bibli@bbl%
287   \@for\TD@bibstyle:=#1\do{%
288     % \TD@printBibstyle{\TD@bibstyle}%
289   }%
290   \TD@printBibstyle{#1}%
291 }
292 \def\TD@bibliography#1{%

```

```

293 \TD@bibli@files{#1}%
294 \TD@orig@bibliography{#1}%
295 }%
296 \def\TD@bibliographystyle#1{%
297 \TD@bibli@style{#1}%
298 \TD@orig@bibliographystyle{#1}%
299 }%
300 \TD@docswitch{bibliography}%
301 \TD@switch{bibliographystyle}%

```

2.3.5 Glossary and index files

```

302 \def\TD@makeindex{%
303 \TD@printIndex{\jobname}%
304 \TD@printIndexSource{\jobname}{\jobname.idx}%
305 \TD@orig@makeindex%
306 }%
307 \def\TD@makeglossary{%
308 \TD@printGlossary{\jobname}%
309 \TD@printGlossarySource{\jobname}{\jobname.glo}%
310 \TD@orig@makeglossary%
311 }%
312 \TD@switch{makeindex}%
313 \TD@switch{makeglossary}%

```

2.4 Diversion of package's macros

2.4.1 Package graphics

```

314 \def\TD@Gin@getbase#1{%
315 \TD@orig@Gin@getbase{#1}%
316 \ifx\Gin@ext\relax%
317 \else%
318 \TD@printFig{\Gin@base\Gin@ext}%
319 \fi%
320 }%
321 \def\TD@Gin@include@eps#1{%
322 \IfFileExists{#1}{%
323 \TD@orig@Gin@include@eps{#1}%
324 }{%
325 \PackageWarning{texdepends}{Figure '#1' needed\MessageBreak
326 Skipping it this time (the last one however)\MessageBreak}%
327 \TD@missingDepends%
328 \TD@printRequiredFile{#1}%
329 }%
330 }%
331 \def\TD@Gin@include@pdf#1{%
332 \IfFileExists{#1}{%
333 \TD@orig@Gin@include@pdf{#1}%
334 }{%
335 \PackageWarning{texdepends}{Figure '#1' needed\MessageBreak
336 Skipping it this time (the last one however)\MessageBreak}%

```

```

337 \TD@missingDepends%
338 \TD@printRequiredFile{#1}%
339 }%
340 }%
341 \def\TD@graphicspath#1{%
342 \TD@printGraphicspath{#1}%
343 \TD@orig@graphicspath{#1}%
344 }%
345 \def\TD@Gread@eps#1{%
346 \IfFileExists{#1}{%
347 \PackageWarning{texdepends}{Gread File '1' exists}%
348 \TD@orig@Gread@eps{#1}%
349 }{%
350 \PackageWarning{texdepends}{No '1' file \MessageBreak
351 using 1 for graphic dimensions}%
352 \setbox\@tempboxa\hbox{\relax}%
353 \def\Gin@llx{1}\let\Gin@lly\Gin@llx
354 \Gin@defaultbp\Gin@urx{\wd\@tempboxa}%
355 \Gin@defaultbp\Gin@ury{\ht\@tempboxa}%
356 }%
357 }%
358 \def\TD@Gread@pdf#1{%
359 \IfFileExists{#1}{%
360 \PackageWarning{texdepends}{Gread File '1' exists}%
361 \TD@orig@Gread@pdf{#1}%
362 }{%
363 \PackageWarning{texdepends}{No '1' file \MessageBreak
364 using 1 for graphic dimensions}%
365 \setbox\@tempboxa\hbox{\relax}%
366 \def\Gin@llx{1}\let\Gin@lly\Gin@llx
367 \Gin@defaultbp\Gin@urx{\wd\@tempboxa}%
368 \Gin@defaultbp\Gin@ury{\ht\@tempboxa}%
369 }%
370 }%
371 \TD@PackagePostDivert{graphics}{%
372 \TD@switch{graphicspath}%
373 \TD@docswitch{Gin@getbase}%
374 \TD@docswitch{Gin@include@eps}%
375 \TD@docswitch{Gin@include@pdf}%
376 \TD@docswitch{Gread@eps}%
377 \TD@docswitch{Gread@pdf}%
378 }%

```

2.4.2 Package figlatex

```

379 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
380 % We do not want to fail when trying to load a missing subfig.
381 % \@@Gin@include@rawtex
382 \def\TD@FL@includerawtexgraphics[#1]#2{%
383 \IfFileExists{#2}{%
384 \TD@orig@FL@includerawtexgraphics[#1]{#2}%

```

```

385 }{%
386   \PackageWarning{texdepends}{Figure '#2' needed\MessageBreak
387     Skipping it this time (the last one however)\MessageBreak}%
388   \TD@missingDepends%
389   \TD@printRequiredFile{#2}%
390 }%
391 }%
392
393 \def\TD@Ginclude@rawtex#1{%
394   \IfFileExists{#1}{%
395     \TD@orig@Ginclude@rawtex{#1}%
396   }{%
397     \PackageWarning{texdepends}{Figure '#1' needed\MessageBreak
398       Skipping it this time (the last one however)\MessageBreak}%
399     \TD@missingDepends%
400     \TD@printRequiredFile{#1}%
401   }%
402 }%
403
404 % \@Ginclude@figtex
405 \def\TD@Ginclude@figtex#1{%
406   \IfFileExists{#1}{%
407     \PackageWarning{texdepends}{Ginclude File '#1' exists}%
408     \TD@orig@Ginclude@figtex{#1}%
409   }{%
410     \ifthenelse{\isundefined{\FL@subfig@mainfigname}}{%
411       \PackageWarning{texdepends}{Figure '#1' needed\MessageBreak
412         Skipping it this time (the last one however)\MessageBreak}%
413     }{%
414       \PackageWarning{texdepends}{SubFigure '#1' from
415         \FL@subfig@mainfigname needed\MessageBreak
416         Skipping it this time (the last one however)\MessageBreak}%
417     }
418     \TD@missingDepends%
419     \TD@printRequiredFile{#1}%
420   }%
421 }%
422 % \@Ginclude@svgtx
423 \def\TD@Ginclude@svgtx#1{%
424   \IfFileExists{#1}{%
425     \PackageWarning{texdepends}{Ginclude File '#1' exists}%
426     \TD@orig@Ginclude@svgtx{#1}%
427   }{%
428     \ifthenelse{\isundefined{\FL@subfig@mainfigname}}{%
429       \PackageWarning{texdepends}{Figure '#1' needed\MessageBreak
430         Skipping it this time (the last one however)\MessageBreak}%
431     }{%
432       \PackageWarning{texdepends}{SubFigure '#1' from
433         \FL@subfig@mainfigname needed\MessageBreak
434         Skipping it this time (the last one however)\MessageBreak}%

```

```

435     }
436     \TD@missingDepends%
437     \TD@printRequiredFile{#1}%
438 }%
439 }%
440
441
442 % \@Gread@figtex
443 \def\TD@Gread@figtex#1{%
444   \IfFileExists{#1}{%
445     \%PackageWarning{texdepends}{Gread File '1' exists}%
446     \TD@orig@Gread@figtex{#1}%
447   }{%
448     \PackageWarning{texdepends}{No '1' file \MessageBreak
449       using 1 for graphic dimensions}%
450     \setbox\@tempboxa\hbox{\relax}%
451     \def\Gin@llx{1}\let\Gin@lly\Gin@llx
452     \Gin@defaultbp\Gin@urx{\wd\@tempboxa}%
453     \Gin@defaultbp\Gin@ury{\ht\@tempboxa}%
454   }%
455 }%
456
457 % \@Gread@svgtx
458 \def\TD@Gread@svgtx#1{%
459   \IfFileExists{#1}{%
460     \%PackageWarning{texdepends}{Gread File '1' exists}%
461     \TD@orig@Gread@svgtx{#1}%
462   }{%
463     \PackageWarning{texdepends}{No '1' file \MessageBreak
464       using 1 for graphic dimensions}%
465     \setbox\@tempboxa\hbox{\relax}%
466     \def\Gin@llx{1}\let\Gin@lly\Gin@llx
467     \Gin@defaultbp\Gin@urx{\wd\@tempboxa}%
468     \Gin@defaultbp\Gin@ury{\ht\@tempboxa}%
469   }%
470 }%
471 % \FL@subfig@check
472 \def\TD@FL@subfig@check#1{%
473   \TD@printRequiredFile{#1}%
474   \TD@printSubfig{#1}%
475 }%
476 %
477 \TD@PackagePostDivert{figlax}{%
478   \TD@docswitch{FL@includerawtexgraphics}%
479   \TD@docswitch{Ginclude@rawtex}%
480   \TD@docswitch{Ginclude@figtex}%
481   \TD@docswitch{Ginclude@svgtx}%
482   \TD@docswitch{Gread@figtex}%
483   \TD@docswitch{Gread@svgtx}%
484   \TD@docswitch{FL@subfig@check}%

```

485 }%

2.4.3 Package doc

```
486 \def\TD@PrintIndex{%
487   \TD@printIndexStyle{\jobname}{gind.ist}
488   \TD@printIndexTarget{\jobname}{\jobname.ind}
489   \TD@orig@PrintIndex%
490 }%
491 \def\TD@PrintChanges{%
492   \TD@printGlossaryStyle{\jobname}{gglo.ist}
493   \TD@printGlossaryTarget{\jobname}{\jobname.gls}
494   \TD@orig@PrintChanges%
495 }%
496 \TD@PackagePostDivert{doc}{%
497   \TD@docswitch{PrintIndex}%
498   \TD@docswitch{PrintChanges}%
499 }%
```

2.4.4 Package index

```
500 \def\TD@def@index#1#2#3#4{%
501   \TD@printIndex{#2}%
502   \TD@printIndexSource{#2}{\jobname.#3}%
503   \TD@printIndexTarget{#2}{\jobname.#4}
504   \TD@orig@def@index{#1}{#2}{#3}{#4}%
505 }%
506 \TD@PackagePostDivert{index}{%
507   \TD@switch{def@index}%
508 }%
```

2.4.5 Package makeidx

```
509 \def\TD@printindex{%
510   \TD@printIndexTarget{\jobname}{\jobname.ind}
511   \TD@orig@printindex%
512 }%
513 \TD@PackagePostDivert{makeidx}{%
514   \TD@docswitch{printindex}%
515 }%
```

2.4.6 Package nomencl

We divert `makeglossary` again after loading this package as it redefines this macro (loosing our diversion). We also setup the glossary style for this package.

```
516 \def\TD@printglossary{%
517   \TD@printGlossaryTarget{\jobname}{\jobname.gls}
518   \TD@orig@printglossary%
519 }%
520 \TD@PackagePostDivert{nomencl}{%
521   \TD@docswitch{printglossary}%
522   \TD@switch{makeglossary}%
523   \TD@printGlossaryStyle{\jobname}{nomencl.ist}
```

524 }%

2.4.7 Package bibtopic

```

525 % For the bibtopic package
526 \def\TD@btSect{%
527   \@ifnextchar[{\TD@btSect@opt}{\TD@btSect@noopt}}
528 \def\TD@btSect@opt[#1]#2{%
529   \TD@bibli@files{#2}%
530   \TD@bibli@style{#1}%
531   \TD@orig@btSect[#1]{#2}}
532 \def\TD@btSect@noopt#1{%
533   \TD@bibli@files{#1}%
534   \TD@orig@btSect{#1}}
535
536 \def\TD@@bt@write@auxfile{%
537   \TD@printBblfile{\thebt@auxfile}%
538   \TD@orig@@bt@write@auxfile%
539 }%
540 \TD@PackagePostDivert{bibtopic}{%
541   \global\let\TD@bibli@bbl\relax%
542   \global\let\TD@biblio@rules@package\TD@biblio@rules@package@bibtopic%
543   \TD@switch{@bt@write@auxfile}%
544   \TD@printOut{btbbl.aux}%
545   \TD@printRebuildRule{bibtopic}%
546   \TD@docswitch{btSect}%
547 }%
```

2.4.8 Package comment

```

548 % For the comment package, the |comment.cut| file must not be used as
549 % a dependency: it is read and written several times during a compilation.
550 \TD@PackagePostDivert{comment}{%
551   \TD@printNoDependsFile{comment.cut}%
552 }%
553 </package>
```

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