The latexbug package*

The LaTeX Team 2021/06/28

This file is maintained by the LATEX Project team. Bug reports can be opened (category latex) at https://latex-project.org/bugs.html.

1 Introduction

Software has bugs and LATEX unfortunately is no exception. If somebody encounters a bug then it helps if that bug gets reported to the right people so that the bug can be resolved (or a workaround documented or whatever is most appropriate). The problem is to know to whom to report the bug.

The LATEX Project Team maintains a bug database for its own code base (which consists of the LATEX kernel and some packages that have been written by people in the LATEX Project Team). However, the LATEX universe consists of several thousand contributed packages maintained by individuals all over the world. And if a bug happens in one of those packages it doesn't help anybody if it is dumped at the LATEX Project's doorstep.

For one, we can't actually change other people's code even if we are able to identify the issue. Furthermore we are only a few people and simply do not have the bandwidth to analyze bugs in other people's work.

We have therefore written this little package called latexbug that should help in identifying the rightful addressee for a bug report. We ask that it will be loaded in any test file that is intended to be sent to the LATEX bug database as part of a bug report.

The package will determine if the test file is in a suitable state to be sent to us or if it should be modified first or if it should be sent to somebody else because the bug is (likely) to be in code not maintained by the LATEX Project Team.

Bug reports sent to the LATEX bug database without that prior verification are likely to get closed without being looked at at our end in the future.

^{*}This file has version number v1.0k, last revised 2021/06/28.

2 The user interface

The user interface is simple: the package has no option and doesn't define any new commands to be used. All that is required is that the package is loaded as the very first step in the test file that shows the bug — in other words before the \documentclass. For that reason it must be loaded using \RequirePackage instead of the usual \usepackage that is used in the preamble of a document.

Thus, a bug report test files should look like this:

If the test file runs through (showing the bug) without any complains for latexbug then the test file is ready to be sent to the LATEX bug database. The procedure for uploading and the location is documented at

```
https://www.latex-project.org/bugs/
```

If latexbug does generate an error, however, then this error needs to be addressed first and the depending on the resolution the bug report may has to be sent to somebody else.

An error is generated if the test file makes use of third-party code that is not maintained by the LATEX Project Team. For example, if the file would load geometry, footmisc and hyperref you would see the following:

```
Package latexbug Error: Third-party file(s)
(latexbug)
(latexbug)
                          This test file uses third-party file(s)
(latexbug)
(latexbug)
                          _____
(latexbug)
                          geometry.sty -> Hideo Umeki
                             <latexgeometry [at] gmail [dot] com>
(latexbug)
(latexbug)
                          footmisc.sty
                          hyperref.sty -> LaTeX Team
(latexbug)
(latexbug)
                             https://github.com/latex3/hyperref/issues
(latexbug)
(latexbug)
```

It then continues with advice to remove such third-party code from the test file. If that is not possible, because the bug goes away if a package is removed, then the problem is (most likely) with this package and the bug report should be sent to the maintainer of that package and not to the LATEX bug database.

```
(latexbug) So you should contact the authors
```

(latexbug)	of these files, not the LaTeX Team!
(latexbug)	(Or remove the packages that load
(latexbug)	them, if they are not necessary to
(latexbug)	exhibit the problem).

To make life somewhat easier latexbug will tell you the name of the maintainer (if we know it and have added it in) and if possible also the canonical bug address for the package (like in the case of geometry and hyperref). If we don't have that information, you need to find it out for yourself by looking at the package documentation.

There may be cases where third-party code is essential to exhibit a bug in core LATEX code maintained by the the LATEX Team. The error text therefore finishes off with the following sentence:

(latexbug)	If you think the bug is in core LaTeX
(latexbug)	(as maintained by the LaTeX Team) but
(latexbug)	these files are needed to demonstrate
(latexbug)	the problem, please continue and mention
(latexbug)	this explicitly in your bug report
(latexbug)	(with an explanation why you think so).

Please explain your reasoning why you think this is the case in detail as part of the bug report.

Thank you for taking the time to report a bug and prepare a test file showing it!

2.1 A note on the database content in the package

When a document is run through IATEX it will load a number of files and bug reports that are to be sent to the IATEX Team should only load files that we maintain and not third-party packages.

The database, if you want to call that, inside latexbug is simply a comma separated key value list consisting of file names = maintainer info. Most of the time the maintainer info is us or us* (meaning we maintain it, so the file is fine) or ignore (meaning we do not maintain it, but it is a file that is likely to appear for one or the other reason and we should accept such a bug report nonetheless).

Any file loaded in the bug report not listed will show up in the error listing flagged as "third-party" code that should be removed as explained above.

For a small number of popular third-party packages we have collected the name of the external maintainer and if available to us some extra info so that it is easier to send to the rightful addressee if you encounter a bug in such a third-party package. But to keep this manageable this is only done for a very small number of the 5000+ packages out there (though we might add one or the other over time).

It is however not impossible that we missed one or the other file that should have been listed as "maintained by us" but isn't and thus incorrectly generates an error. If you run into that problem or notice an omission of that sort, please send us a bug report or open an issue at the GitHub source of the package which is located at:

https://github.com/latex3/latexbug/

3 The documentation driver file

The next bit of code contains the documentation driver file for T_EX, i.e., the file that will produce the documentation you are currently reading. It will be extracted from this file by the docstrip program.

```
1 (*driver)
2 \RequirePackage{latexbug}
3 \documentclass{ltxdoc}
4 \GetFileInfo{latexbug.sty}
5 %\usepackage{geometry,footmisc,hyperref} % uncomment for latexbug error
6 %\usepackage{xparse}
                                              % uncomment for latexbug error
7 \EnableCrossrefs
8 %\DisableCrossrefs
                         % Say \DisableCrossrefs if index is ready
9 %\OnlyDescription
                         \% Comment out for implementation details
10 \begin{document}
     \DocInput{latexbug.dtx}
12 \end{document}
13 (/driver)
```

4 The implementation

```
14 \(\*\package\)
15 \NeedsTeXFormat{LaTeX2e}
16 \ProvidesPackage{latexbug}[2021/06/28 v1.0k Bug-classification]
\latexbug@empty Fixed text used in checking what actions to take with different files.
\latexbug@us
17 \def\latexbug@empty{}
\latexbug@ustar 18 \def\latexbug@us{us}
\latexbug@ignore 19 \def\latexbug@usstar{us*}
20 \def\latexbug@ignore{ignore}
\Contact A very simple piece of markup, really.
21 \def\Contact{\MessageBreak \@spaces}
```

The database of packages is set up in a group so we can throw away the loop command.

22 \begingroup

\latexbug@loop

A simple loop set up which reads a known format for the file-to-maintainer mapping. The trailing space is important (stripping it is not really worth it for this very limited use case).

```
23 \long\def\latexbug@loop #1 = #2 , {% spaces matter
24 \global\@namedef{latexbug@@#1}{#2}%
25 \ifx\latexbug@empty#1\else\expandafter\latexbug@loop\fi}
```

A simple database of files. The value us means we accept bugs for it. We also take bug reports for us* (expl3) entries, but they need to go to a different GitHub repository, so are handled separately (and only show up if there doesn't seem to be anything else to pick up). A value of ignore means that its not our code, but we understand that it may show up in legitimate test files and should therefore not trigger an error.

Any file not in there will trigger an error if loaded and any file in there with some other value than us or ignore will also trigger an error displaying the value (which hopefully is the maintainers name). (Handling for us* means these files may not show up, depending on the nature of the use case.)

The database format is somewhat fragile: one needs to have a space on both sides of the equal sign (or one gets a nasty low-level error) and names can't have no-ascii characters in them, so they end up crippled (sorry for that).

```
26 \latexbug@loop
27 %-----
28 latexbug.sty = us ,
29 regression-test = us ,
30 %----- base
31 alltt.sty = us ,
32 ansinew.def = us ,
33 \text{ applemac.def} = us ,
34 article.cls = us ,
35 article.sty = us ,
36 ascii.def = us ,
37 atbegshi-ltx.sty = us ,
38 atveryend-ltx.sty = us ,
39 bezier.sty = us ,
40 \text{ bk10.clo} = \text{us},
41 \text{ bk11.clo} = \text{us},
42 \text{ bk12.clo} = \text{us},
43 \text{ book.cls} = us ,
44 \text{ book.sty} = us ,
45 \text{ cp1250.def} = us ,
46 \text{ cp1252.def} = us ,
47 \text{ cp1257.def} = us ,
48 \text{ cp437.def} = us ,
49 \text{ cp437de.def} = \text{us},
50 \text{ cp850.def} = \text{us},
51 \text{ cp852.def} = \text{us},
```

```
52 \text{ cp858.def} = \text{us},
 53 \text{ cp865.def} = \text{us},
 54 \text{ decmulti.def} = us ,
 55 \text{ doc-v3beta.sty} = \text{us},
 56 \text{ doc.sty} = \text{us},
 57 \text{ docstrip.tex} = \text{us},
 58 exscale.sty = us ,
 59 \text{ fix-cm.sty} = \text{us},
 60 \text{ fixltx2e.sty} = \text{us},
 61 flafter.sty = us ,
 62 fleqn.clo = us ,
 63 \text{ fleqn.sty} = \text{us},
 64 \text{ fltrace.sty} = \text{us},
 65 \text{ fontenc.sty} = us,
 66 \text{ fontmath.cfg} = us ,
67 \text{ fontmath.ltx} = us ,
 68 \text{ fonttext.cfg} = \text{us} ,
 69 \text{ fonttext.ltx} = \text{us},
 70 \text{ graphpap.sty} = \text{us},
 71 hyphen.ltx = us ,
 72 \text{ idx.tex} = \text{us},
 73 ifthen.sty = us ,
 74 inputenc.sty = us ,
 75 lablst.tex = us ,
 76 latex.ltx = us,
 77 latex209.def = us,
 78 latexrelease.sty = us,
 79 latexsym.sty = us ,
 80  latin1.def = us ,
 81 latin10.def = us ,
 82 \text{ latin2.def} = us ,
 83 latin3.def = us ,
 84 latin4.def = us ,
 85  latin5.def = us ,
 86 \text{ latin9.def} = us ,
 87 \text{ lcyenc.dfu} = \text{us},
 88 \text{ leqno.clo} = us ,
 89 \text{ leqno.sty} = \text{us},
 90 letter.cls = us ,
 91 letter.sty = us ,
 92 lppl.tex = us ,
 93 ltluatex.lua = us ,
 94 ltluatex.lua = us ,
 95 ltluatex.tex = us ,
 96 ltluatex.tex = us ,
 97 ltnews.cls = us ,
 98 ltxcheck.tex = us ,
 99 ltxdoc.cls = us ,
100 ltxguide.cls = us ,
101 ly1enc.dfu = us ,
```

```
102 macce.def = us ,
103 makeidx.sty = us ,
104 minimal.cls = us ,
105 \text{ newlfont.sty} = us,
106 \text{ next.def} = us ,
107 \text{ nfssfont.tex} = \text{us},
108 oldlfont.sty = us ,
109 \text{ omlcmm.fd} = us ,
110 \text{ omlcmr.fd} = us ,
111 \text{ omlenc.def} = us ,
112 \text{ omllcmm.fd} = us ,
113 \text{ omscmr.fd} = us ,
114 omscmsy.fd = us ,
115 \text{ omsenc.def} = us ,
116 \text{ omsenc.dfu} = us ,
117 omslcmsy.fd = us ,
118 \text{ omxcmex.fd} = us ,
119 omxlcmex.fd = us ,
120 \text{ openbib.sty} = us,
121 \text{ ot1cmdh.fd} = us ,
122 \text{ ot1cmfib.fd} = us,
123 ot1cmfr.fd = us ,
124 \text{ ot1cmr.fd} = us,
125 \text{ ot1cmss.fd} = us ,
126 \text{ ot1cmtt.fd} = us ,
127 \text{ ot1cmvtt.fd} = us,
128 \text{ otlenc.def} = us ,
129 \text{ otlenc.dfu} = \text{us},
130 \text{ otllcmss.fd} = us ,
131 \text{ otllcmtt.fd} = us ,
132 \text{ ot2enc.dfu} = \text{us},
133 \text{ ot4enc.def} = us ,
134 preload.cfg = us ,
135 \text{ preload.ltx} = \text{us},
136 proc.cls = us ,
137 \text{ proc.sty} = \text{us},
138 \text{ report.cls} = us ,
139 \text{ report.sty} = \text{us},
140 \; {\tt sample2e.tex} \; {\tt =} \; {\tt us} \; {\tt ,}
141 \text{ sfonts.def} = us ,
142 shortvrb.sty = us ,
143 \text{ showidx.sty} = us,
144 \text{ size} 10.\text{clo} = \text{us},
145 \text{ size} 11.\text{clo} = \text{us},
146 \text{ size} 12.\text{clo} = \text{us},
147 \text{ slides.cls} = us,
148 \text{ slides.def} = us ,
149 \text{ slides.sty} = us,
150 \text{ small2e.tex} = \text{us},
151 \text{ source2e.tex} = \text{us},
```

```
152 source2edoc.cls = us ,
153 structuredlog.sty = us ,
154 \text{ syntonly.sty} = \text{us},
155 t1cmdh.fd = us,
156 \text{ t1cmfib.fd} = \text{us},
157 t1cmfr.fd = us,
158 \text{ t1cmr.fd} = \text{us},
159 t1cmss.fd = us ,
160 \text{ t1cmtt.fd} = \text{us},
161 \text{ t1cmvtt.fd} = \text{us},
162 \text{ tlenc.def} = \text{us} ,
163 \text{ tlenc.dfu} = \text{us},
164 \text{ tlenc.sty} = \text{us},
165 \text{ t1lcmss.fd} = \text{us},
166 \text{ t1lcmtt.fd} = \text{us},
167 t2aenc.dfu = us,
168 \text{ t2benc.dfu} = \text{us},
169 \text{ t2cenc.dfu} = \text{us},
170 testpage.tex = us ,
171 \text{ texsys.cfg} = \text{us},
172 \text{ textcomp-} 2018-08-11.sty = us ,
173 textcomp.sty = us ,
174 tracefnt.sty = us ,
175 \text{ ts1cmr.fd} = \text{us},
176 \text{ ts1cmss.fd} = \text{us},
177 \text{ ts1cmtt.fd} = \text{us},
178 \text{ ts1cmvtt.fd} = \text{us},
179 \text{ ts1enc.def} = us ,
180 \text{ tslenc.dfu} = \text{us} ,
181 \text{ tuenc.def} = us ,
182 \text{ tulmdh.fd} = \text{us},
183 tulmr.fd = us ,
184 tulmss.fd = us ,
185 \text{ tulmssq.fd} = \text{us},
186 \text{ tulmtt.fd} = \text{us},
187 \text{ tulmvtt.fd} = \text{us},
188 \text{ ucmr.fd} = \text{us},
189 \text{ ucmss.fd} = \text{us},
190 \text{ ucmtt.fd} = \text{us},
191 ulasy.fd = us ,
192 ullasy.fd = us ,
193 \text{ utf8-2018.def} = us ,
194 \text{ utf8.def} = \text{us},
195 \text{ utf8enc.dfu} = \text{us},
196 \text{ x2enc.dfu} = \text{us},
197 %----- tools
198 afterpage.sty = us ,
199 \text{ array-} 2016-10-06.sty = us ,
200 \text{ array-} 2020-02-10.sty = us,
201 \text{ array.sty} = \text{us},
```

```
202 \text{ bm.sty} = \text{us},
203 \text{ calc.sty} = \text{us},
204 dcolumn.sty = us ,
205 \text{ delarray.sty} = us ,
206 \text{ e.tex} = \text{us},
207 enumerate.sty = us ,
208 \text{ fontsmpl.sty} = \text{us} ,
209 \text{ fontsmpl.tex} = \text{us},
210 \text{ ftnright.sty} = \text{us},
211 \text{ h.tex} = \text{us},
212 \text{ hhline.sty} = \text{us},
213 indentfirst.sty = us ,
214 layout.sty = us ,
215 longtable-2020-01-07.sty = us,
216 longtable.sty = us ,
217 \text{ multicol-} 2017-04-11.sty = us,
218 multicol.sty = us ,
219 \text{ q.tex} = \text{us},
220 \text{ r.tex} = \text{us},
221 \text{ rawfonts.sty} = \text{us},
222 \text{ s.tex} = \text{us},
223 \text{ shellesc.sty} = \text{us} ,
224 \text{ showkeys.sty} = \text{us},
225 \text{ somedefs.sty} = \text{us},
226 \text{ tabularx.sty} = \text{us},
227 \text{ thb.sty} = \text{us},
228 \text{ thc.sty} = \text{us},
229 \text{ thcb.sty} = \text{us},
230 \text{ theorem.sty} = us ,
231 \text{ thm.sty} = \text{us},
232 \text{ thmb.sty} = \text{us},
233 \text{ thp.sty} = us ,
234 \text{ trace.sty} = \text{us},
235 \text{ varioref-} 2016-02-16.sty = us,
236 \text{ varioref.sty} = \text{us},
237 \text{ verbatim.sty} = \text{us},
238 \text{ verbtest.tex} = \text{us} ,
239 \text{ x.tex} = \text{us},
240 \text{ xr.sty} = \text{us} ,
241 xspace.sty = us ,
242 \%----- babel (part supported by us)
243 UKenglish.sty = us ,
244 \text{ USenglish.sty} = \text{us},
245 \text{ afrikaans.sty} = us,
246 \text{ albanian.sty} = us,
247 \text{ american.sty} = \text{us},
248 austrian.sty = us ,
249 \text{ babel.def} = \text{us} ,
250 \; \text{babel.sty} = \text{us} ,
251 \text{ bahasa.sty} = \text{us},
```

```
252 \text{ bahasam.sty} = \text{us},
253 basque.sty = us ,
254 \text{ blplain.tex} = \text{us},
255 \text{ bplain.tex} = \text{us},
256 \; {\tt breton.sty} \; = \; {\tt us} \; ,
257 \text{ british.sty} = \text{us},
258 bulgarian.sty = us ,
259 \text{ catalan.sty} = \text{us},
260 \text{ croatian.sty} = \text{us},
261 \text{ czech.sty} = \text{us},
262 danish.sty = us ,
263 \text{ dutch.sty} = \text{us},
264 english.sty = us ,
265 	ext{ esperanto.sty} = 	ext{us},
266 estonian.sty = us ,
267 \text{ finnish.sty} = \text{us},
268 \text{ francais.sty} = \text{us},
269 galician.sty = us ,
270 \text{ germanb.sty} = \text{us},
271 \text{ greek.sty} = \text{us},
272 \text{ hebrew.sty} = \text{us},
273 \text{ hyphen.cfg} = \text{us},
274 icelandic.sty = us ,
275 interlingua.sty = us,
276 \text{ irish.sty} = \text{us},
277 \text{ italian.sty} = \text{us},
278 latin.sty = us,
279 lsorbian.sty = us ,
280 \; {\tt luababel.def} \; {\tt = \; us} \; ,
281 \text{ magyar.sty} = \text{us},
282 \text{ naustrian.sty} = \text{us},
283 ngermanb.sty = us ,
284 \text{ nil.ldf} = \text{us},
285 \text{ norsk.sty} = us,
286 \text{ plain.def} = \text{us},
287 \text{ polish.sty} = \text{us},
288 portuges.sty = us,
289 \text{ romanian.sty} = \text{us},
290 russianb.sty = us ,
291 \text{ samin.sty} = \text{us},
292 scottish.sty = us ,
293 \text{ serbian.sty} = \text{us},
294 slovak.sty = us ,
295 \text{ slovene.sty} = \text{us},
296 \text{ spanish.sty} = \text{us},
297 \text{ swedish.sty} = \text{us},
298 \text{ switch.def} = \text{us},
299 turkish.sty = us ,
300 ukraineb.sty = us ,
301 \text{ usorbian.sty} = \text{us},
```

```
302 \text{ welsh.sty} = \text{us},
303 xebabel.def = us ,
304 %----- graphics + graphics-def
305 \text{ color.cfg} = us ,
306 \text{ color.sty} = \text{us},
307 dvipdf.def = us ,
308 \text{ dvipdfmx.def} = \text{us},
309 \text{ dvips.def} = \text{us},
310 \text{ dvipsnam.def} = us ,
311 \; {\tt dvipsone.def} \; = \; {\tt us} \; ,
312 dvisvgm.def = us ,
313 \text{ dviwin.def} = \text{us},
314 \text{ emtex.def} = \text{us},
315 \text{ epsfig.sty} = us,
316 \text{ graphics-}2017-06-25.\text{sty} = \text{us},
317 graphics.cfg = us ,
318 \text{ graphics.sty} = \text{us},
319 graphicx.sty = us ,
320 \text{ keyval.sty} = \text{us},
321 lscape.sty = us ,
322 luatex.def = us,
323 \text{ pctex} 32.\text{def} = \text{us},
324 pctexhp.def = us ,
325 \text{ pctexps.def} = us,
326 pctexwin.def = us,
327 \text{ pdftex.def} = \text{us},
328 \text{ rotating.sty} = \text{us},
329 \text{ rotating.sty} = \text{us},
330 \text{ tcidvi.def} = \text{us},
331 trig.sty = us ,
332 \text{ truetex.def} = \text{us},
333 \text{ xetex.def} = \text{us} ,
334 %----- mfnfss
335 \text{ oldgerm.sty} = \text{us},
336 \text{ ot1panr.fd} = us ,
337 \text{ ot1pss.fd} = us ,
338 \text{ pandora.sty} = us,
339 \text{ uyfrak.fd} = \text{us} ,
340 \text{ uygoth.fd} = \text{us},
341 \text{ uyinit.fd} = \text{us},
342 uyswab.fd = us ,
343 %----- firstaid
344 everysel-ltx.sty = us ,
345 filehook-ltx.sty = us ,
346\ \mbox{\em \%-----} amsmath
347 \text{ amsbsy.sty} = \text{us},
348 \text{ amscd.sty} = \text{us},
349 \text{ amsgen.sty} = \text{us},
350 \text{ amsmath-} 2018-12-01.sty = us,
351 \text{ amsmath.sty} = \text{us} ,
```

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352 \text{ amsopn.stv} = \text{us}.
353 \text{ amstex.sty} = \text{us},
354 \text{ amstext.sty} = \text{us},
355 \text{ amsxtra.sty} = \text{us},
356 %----- amscls (AMS)
357 \text{ amsart.cls} = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
358 amsbook.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
359 \text{ amsbooka.sty} = \text{American Mathematical Society } \setminus \text{Contact tech-support [at] ams [dot] org}
360 amsdtx.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
361 \text{ amsldoc.cls} = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
362 \text{ amsmidx.sty} = \text{American Mathematical Society } \\ \text{Contact tech-support [at] ams [dot] org}
363 \text{ amsproc.cls} = \text{American Mathematical Society } \\ \text{Contact tech-support [at] ams [dot] org} ,
364 amsthm.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
365 upref.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
366 %----- amsfonts (AMS)
367 \text{ amsfonts.sty} = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
368 amssymb.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
369 cmmib57.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
370 \; \text{eucal.sty} = \text{American Mathematical Society } \\ \text{Contact tech-support [at] ams [dot] org} \; ,
371 eufrak.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
372 euscript.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
373 ueuex.fd = ignore ,
374 ueuf.fd = ignore ,
375 ueur.fd = ignore ,
376 ueus.fd = ignore ,
377 umsa.fd = ignore,
378 umsb.fd = ignore ,
379 %----- psnfss
380 \; \text{8rbch.fd} = \text{us},
381 \text{ 8rpag.fd} = \text{us},
382 \text{ 8rpbk.fd} = \text{us},
383 \text{ 8rpcr.fd} = \text{us},
384 \text{ 8rphv.fd} = \text{us},
385 \text{ 8rpnc.fd} = \text{us},
386 \text{ Srppl.fd} = \text{us},
387 \text{ 8rptm.fd} = \text{us},
388 8rput.fd = us ,
389 \text{ 8rpzc.fd} = \text{us},
390 \text{ avant.sty} = \text{us},
391 bookman.sty = us ,
392 \text{ chancery.sty} = \text{us},
393 charter.sty = us ,
394 courier.sty = us ,
395 \text{ helvet.sty} = \text{us},
396 \text{ mathpazo.sty} = \text{us},
397 \text{ mathpple.sty} = \text{us},
398 \text{ mathptm.sty} = us,
399 \text{ mathptmx.sty} = us,
400 \text{ newcent.sty} = us ,
```

401 omlbch.fd = us,

```
402 \text{ omlpag.fd} = \text{us},
403 \text{ omlpbk.fd} = \text{us},
404 \text{ omlpcr.fd} = us ,
405 \text{ omlphv.fd} = \text{us},
406 \text{ omlpnc.fd} = \text{us} ,
407 \text{ omlppl.fd} = \text{us},
408 \text{ omlptm.fd} = us ,
409 \text{ omlptmcm.fd} = us ,
410 \text{ omlput.fd} = \text{us},
411 omlpzc.fd = us ,
412 omlzplm.fd = us ,
413 \text{ omlzpple.fd} = \text{us},
414 \text{ omlztmcm.fd} = us ,
415 \text{ omsbch.fd} = \text{us},
416 \text{ omspag.fd} = us ,
417 \text{ omspbk.fd} = us ,
418 \text{ omspcr.fd} = us ,
419 \text{ omsphv.fd} = us ,
420 \text{ omspnc.fd} = \text{us} ,
421 \text{ omsppl.fd} = \text{us},
422 \text{ omsptm.fd} = \text{us},
423 \text{ omsput.fd} = \text{us},
424 \text{ omspzc.fd} = us,
425 \text{ omspzccm.fd} = us,
426 \text{ omszplm.fd} = us ,
427 \text{ omszpple.fd} = us ,
428 \text{ omsztmcm.fd} = \text{us} ,
429 \text{ omxpsycm.fd} = us,
430 \text{ omxzplm.fd} = \text{us},
431 \text{ omxzpple.fd} = us,
432 \text{ omxztmcm.fd} = us ,
433 \text{ ot1bch.fd} = \text{us},
434 \text{ ot1pag.fd} = us ,
435 \text{ ot1pbk.fd} = us ,
436 \text{ ot1pcr.fd} = \text{us},
437 \text{ ot1phv.fd} = us ,
438 \text{ ot1pnc.fd} = us ,
439 \text{ ot1ppl.fd} = \text{us},
440 \text{ ot1pplj.fd} = us ,
441 \text{ ot1pplx.fd} = us ,
442 \text{ ot1ptm.fd} = us ,
443 \text{ ot1ptmcm.fd} = us ,
444 \text{ ot1put.fd} = us,
445 \text{ ot1pzc.fd} = us,
446 \text{ ot1zplm.fd} = us,
447 \text{ ot1zpple.fd} = us,
448 \text{ ot1ztmcm.fd} = us ,
449 \text{ palatino.sty} = \text{us},
450 \text{ pifont.sty} = \text{us},
451 \text{ t1bch.fd} = \text{us},
```

```
452 t1pag.fd = us,
453 \text{ t1pbk.fd} = \text{us},
454 \text{ t1pcr.fd} = us,
455 \text{ t1phv.fd} = \text{us},
456 \text{ t1pnc.fd} = \text{us},
457 t1ppl.fd = us,
458 t1pplj.fd = us,
459 \text{ t1pplx.fd} = \text{us},
460 \text{ t1ptm.fd} = \text{us},
461 \text{ t1put.fd} = \text{us},
462 \text{ t1pzc.fd} = \text{us},
463 \text{ times.sty} = \text{us},
464 \text{ ts1bch.fd} = \text{us},
465 \text{ ts1pag.fd} = \text{us},
466 \text{ ts1pbk.fd} = \text{us},
467 \text{ ts1pcr.fd} = \text{us},
468 \text{ ts1phv.fd} = \text{us},
469 \text{ ts1pnc.fd} = \text{us},
470 \text{ ts1ppl.fd} = \text{us},
471 \text{ ts1pplj.fd} = \text{us},
472 \text{ ts1pplx.fd} = \text{us},
473 \text{ ts1ptm.fd} = \text{us},
474 \text{ ts1put.fd} = \text{us},
475 \text{ ts1pzc.fd} = \text{us},
476 \text{ ufplm.fd} = \text{us},
477 \text{ ufplmbb.fd} = \text{us},
478 \text{ upsy.fd} = \text{us},
479 \text{ upzd.fd} = \text{us},
480 \text{ utopia.sty} = \text{us},
481 %----- 13experimental
482\ l3benchmark.sty = us* ,
483 l3bitset.sty = us*,
484 \ 13 \text{draw.sty} = \text{us*} ,
485 13graphics.sty = us*,
486 \; \texttt{13sys-shell.sty} \; \texttt{=} \; \texttt{us*} \; \texttt{,}
487 %------ 13packages
488 \text{ xparse-} 2018-04-12.sty = us*,
489 \text{ xparse-} 2020-10-01.sty = us* ,
490 xparse-generic.tex = us* ,
491 \text{ xparse.ltx} = \text{us*},
492 xfp.sty = us* ,
493 %----- 13kernel / expl3
494 expl3-code.tex = ignore ,
495 \text{ expl3.ltx} = \text{us*},
496 \text{ expl3.ltx} = \text{us*},
497 \text{ expl3.lua} = \text{us*},
498 \text{ expl3.sty} = \text{us*},
499 13backend-dvipdfmx.def = ignore ,
500 l3backend-dvips.def = ignore ,
501 13backend-dvisvgm.def = ignore ,
```

```
502 13backend-luatex.def = ignore ,
503 13backend-pdfmode.def = ignore ,
                                            % -- old
504 13backend-pdftex.def = ignore ,
505\ \mbox{13backend-xdvipdfmx.def} = ignore , \mbox{\%} -- old
506 13backend-xetex.def = ignore ,
507 13 debug.def = us*,
508 13deprecation.def = ignore ,
509 \; 13 doc.cls = us* ,
510 \; l3docstrip.tex = us ,
511 13keys2e.sty = us*,
512 \, l3str-enc-iso88591.def = us*,
513 l3str-enc-iso885910.def = us* ,
514 13 str-enc-iso885911.def = us*,
515 \, l3str-enc-iso885913.def = us*,
516 l3str-enc-iso885914.def = us*,
517 \ l3str-enc-iso885915.def = us*,
518 l3str-enc-iso885916.def = us*,
519 l3str-enc-iso88592.def = us* ,
520 \; 13 str\text{-enc-iso} 88593.def = us* ,
521 \, l3str-enc-iso88594.def = us*,
522\ l3str-enc-iso88595.def = us* ,
523 \ l3str-enc-iso88596.def = us*,
524 \ l3str-enc-iso88597.def = us*,
525 \ l3str-enc-iso88598.def = us* ,
526 \, l3str-enc-iso88599.def = us*,
527 \text{ xcoffins.sty} = \text{us*},
528 \text{ xfrac.sty} = \text{us*},
529 xgalley.sty = us* ,
530 \text{ xparse.sty} = \text{us*} ,
531 xtemplate.sty = us* ,
532 %----- HYPERREF
533 \text{ hluatex.def} = \text{ignore},
534 \; \text{hpdftex.def} \; = \; \text{ignore} \;,
535 hxetex.def = ignore ,
536 hyperref.cfg = ignore ,
537 \; \text{hyperref.sty} = \text{LaTeX} \; \text{Team}
                   \Contact https://github.com/latex3/hyperref/issues ,
539\; {\tt hyperref-langpatches.def} = ignore ,
540 \; \mathrm{pd1enc.def} \quad = \; \mathrm{ignore} \; ,
541 puenc.def = ignore,
542 %----- USEFUL FOR BUG REPORTS
543 \; \texttt{blindtext.sty} = \texttt{ignore} \; ,
544 etoolbox.sty = ignore ,
545 kantlipsum.sty = ignore,
546 \, {\tt lipsum.ltd} = {\tt ignore} ,
547 lipsum.sty = ignore ,
548 %----- EXTERNALLY SUPPORTED
549 %
550 beamer.cls = Joseph Wright
                    \Contact https://github.com/josephwright/beamer/issues ,
551
```

```
552 fontspec.sty = Will Robertson
                  \Contact https://github.com/wspr/fontspec/issues ,
554 \text{ geometry.sty} = \text{Hideo Umeki}
                  \Contact <latexgeometry [at] gmail [dot] com> ,
556 luatex85.sty
                  = Joseph Wright
                  \Contact https://github.com/josephwright/luatex85/issues ,
557
558 siunitx.sty = Joseph Wright
                  \Contact https://github.com/josephwright/siunitx/issues ,
559
560 %----
           ----- babel external
                   = Juan M. Aguirregabiria
561 basque.ldf
                     \Contact <http://tp.lc.ehu.es/jma.html> ,
562
                  = Aleksey Novodvorsky, Andrew Shadura
563 belarusian.ldf
                      \Contact <andrew [at] shadura [dot] me> ,
565 bosnian.ldf
                    = Samir Halilcevic %% Halilčević
                      \Contact <samir [dot] halilcevic [at] fet [dot] ba> ,
566
                   = Georgi N. Boshnakov
567 bulgarian.ldf
                     \Contact <Georgi Boshnakov [at] manchester [dot] ac [dot] uk> ,
568
                   = Ivan Kokan
569 croatian.ldf
                      \Contact <ivan [dot] kokan [at] gmail [dot] com> ,
570
571 estonian.ldf
                   = Jaan Vajakas
                      \Contact < jaanvajakas [at] hot [dot] ee> ,
572
573 frenchb.ldf
                   = Daniel Flipo
                      \Contact <daniel [dot] flipo [at] free [dot] fr> ,
575 friulan.ldf
                    = Claudio Beccari
                     \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
577 georgian.ldf
                   = Levan Shoshiashvili
                     \Contact <shoshia [at] hotmail [dot] com> ,
                   = Juergen Spitzmueller
579 austrian.ldf
                     \Contact <juergen [at] spitzmueller [dot] org> ,
580
                   = Juergen Spitzmueller
581 german.ldf
                     \Contact <juergen [at] spitzmueller [dot] org> ,
582
                   = Juergen Spitzmueller
583 germanb.ldf
                      \Contact < juergen [at] spitzmueller [dot] org> ,
585 naustrian.ldf
                   = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
587 ngerman.ldf
                   = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
                   = Juergen Spitzmueller
589 ngermanb.ldf
                      \Contact < juergen [at] spitzmueller [dot] org> ,
591 nswissgerman.ldf = Juergen Spitzmueller
                     \Contact <juergen [at] spitzmueller [dot] org> ,
593 swissgerman.ldf = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
594
595 greek.ldf
                    = Guenter Milde
                      \Contact <milde [at] users [dot] sf [dot] net> ,
596
597 magyar.ldf
                   = Peter Szabo %% Péter Szabó
                      \Contact <http://www.math.bme.hu/latex/> ,
599 italian.ldf
                   = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
600
                   = Japanese TEX Development Community
601 japanese.ldf
```

```
\Contact <https://github.com/texjporg/babel-japanese> ,
                                                 602
                                                                                        = Claudio Beccari
                                                 603 latin.ldf
                                                                                            \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                                                 604
                                                 605 macedonian.ldf = Stojan Trajanovski
                                                                                            \Contact <stojan [dot] trajanovski [at] gmail [dot] com> ,
                                                 606
                                                                                        = Cedric Valmary %% Cédric Valmary
                                                 607 occitan.ldf
                                                                                            \Contact <cvalmary [at] yahoo [dot] fr> ,
                                                 608
                                                 609 piedmontese.ldf = Claudio Beccari
                                                                                            \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                                                 610
                                                                                        = Werner Lemberg
                                                 611 pinyin.ldf
                                                                                             \Contact <wl [at] gnu [dot] org> ,
                                                 612
                                                 613 romansh.ldf
                                                                                          : Claudio Beccari
                                                                                             \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                                                 614
                                                 615 russain.ldf
                                                                                        = Igor A [dot] Kotelnikov
                                                                                            \Contact <kia999 [at] mail [dot] ru> ,
                                                                                                                                                                                                          % -- old?
                                                 616
                                                 617 serbianc.ldf
                                                                                        = Filip Brcic
                                                                                            \Contact <brcha [at] users [dot] sourceforge [dot] net> ,
                                                 618
                                                                                        = J [dot] Luis Rivera
                                                 619 spanglish.ldf
                                                                                            \Contact <jlrn77 [at] gmail [dot] com> ,
                                                                                                                                                                                                          % -- old?
                                                 620
                                                 621 spanish.ldf
                                                                                        = Javier Bezos
                                                                                            \Contact <http://www.texnia.com/contact.html> ,
                                                 622
                                                 623 thaicjk.ldf
                                                                                        = Werner Lemberg
                                                                                            \Contact <wl [at] gnu [dot] org> ,
                                                 625 ukraineb.ldf
                                                                                        = Sergiy Ponomarenko
                                                                                            \Contact <sergiy [dot] ponomarenko [at] gmail [dot] com> ,
                                                 626
                                                 627 vietnamese.ldf = Werner Lemberg
                                                                                            \Contact <wl [at] gnu [dot] org> ,
                                                                                                    ----- LAST LINE
                                                 630 \{ \text{latexbug@empty} = \{ \} ,
                                                          Keep the data but throw away the loop function.
                                                 631 \endgroup
                                                Save the kernel version of \@addtofilelist.
                                                 632 \let\latexbug@addtofilelist\@addtofilelist
                  \latexbug@zzzz Storage for third-party files and those from the IATFX3 set on GitHub.
                                                 633 \def\latexbug@zzzz{}
                                                 634 \def\latexbug@expl{}
\latexbug@process@table A hook into a convenient place in the document set up: the initialization of NFSS
                  \process@table
                                                  during the \document macro. If either \latexbug@zzzz or \latexbug@expl have
                                                   any content then there is a message to issue, it's just a question of deciding which
                                                   one.
                                                 635 \let\latexbug@process@table\process@table
                                                 636 \end{figure} All the constant of the con
                                                           \latexbug@process@table
                                                 637
                                                           \ifx\latexbug@zzzz\latexbug@empty
                                                 638
```

\latexbug@addtofilelist

\latexbug@expl

639

\ifx\latexbug@expl\latexbug@empty

```
640
       \else
         \PackageError{latexbug}%
641
           {LaTeX3 file(s)\MessageBreak
642
643 \MessageBreak
644 This test files uses the LaTeX3 file(s)\MessageBreak
645 \MessageBreak
           ========\MessageBreak
646
647
           \latexbug@expl
           648
649
           \MessageBreak
650 You should report bugs in these packages\MessageBreak
651 at the LaTeX3 GitHub site,\MessageBreak
652 https://github.com/latex3/latex3/issues\MessageBreak
653 (Or remove them from your example,\MessageBreak
654 if they are not necessary to\MessageBreak
655 exhibit the problem).\MessageBreak
656 }{Please correct your test file prior
                         to submitting the bug report.\MessageBreak
657
                         Otherwise it is likely to be rejected!}%
658
659
       \fi
660
     \else
         \PackageError{latexbug}%
661
662
                       {Third-party file(s)\MessageBreak
663 \MessageBreak
664 This test file uses third-party file(s)\MessageBreak
665 \MessageBreak
666
           ========MessageBreak
           \latexbug@zzzz
667
           668
           \MessageBreak
669
670 So you should contact the authors\MessageBreak
671 of these files, not the LaTeX Team!\MessageBreak
672 (Or remove the packages that load\MessageBreak
673 them, if they are not necessary to\MessageBreak
674 exhibit the problem).\MessageBreak
675 \MessageBreak
676\ {\tt If}\ {\tt you}\ {\tt think}\ {\tt the}\ {\tt bug}\ {\tt is}\ {\tt in}\ {\tt core}\ {\tt LaTeX}\backslash {\tt MessageBreak}
677 (as maintained by the LaTeX Team) but\MessageBreak
678 these files are needed to demonstrate\MessageBreak
679\ {\rm the} problem, please continue and mention
\MessageBreak
680 this explicitly in your bug report\MessageBreak
681 (with an explanation why you think so)}{Please
682
                         correct your test file prior
683
                         to submitting the bug report.\MessageBreak
                         Otherwise it is likely to be rejected!}%
684
685
     \fi
686 }
```

\@addtofilelist First, a test to see if we are at the top level: there's no need to test dependencies \latexbug@iftoplevel of packages. Assuming we are doing a check, the aim is to see if the current name

is known, and if it is whether it fits into one of our special cases. If it's one of the LATEX3 GitHub packages it gets recorded in a dedicated space. Third-party package can also have information about where to report issues: this is all stored for reporting later.

```
687 \def\@addtofilelist#1{%
688 % \show\@currnamestack
     \expandafter\latexbug@iftoplevel\@currnamestack {}\@nil
689
690
       \xdef\latexbug@x{#1}% TODO: one-level sanitize
691
       \expandafter
692
       \ifx\csname latexbug@@\latexbug@x\endcsname\relax
693
694
         \def\latexbug@y{}%
695
       \else
696
         \xdef\latexbug@y{\csname latexbug@@\latexbug@x\endcsname}%
697
698
       \ifx\latexbug@y\latexbug@us\else
699
         \ifx\latexbug@y\latexbug@usstar
           \begingroup
700
             \let\MessageBreak\relax
701
             \xdef\latexbug@expl{%
702
                \latexbug@expl\latexbug@x
703
704
                \MessageBreak
             }%
705
           \endgroup
706
707
708
           \ifx\latexbug@y\latexbug@ignore\else
709
               {\let\MessageBreak\relax
710
                 \xdef\latexbug@zzzz{\latexbug@zzzz\latexbug@x
711
                   \ifx\latexbug@y\latexbug@empty\else
                     \space\space -> \space \latexbug@y\fi
712
                   \MessageBreak}}%
713
           \fi
714
         \fi
715
       \fi
716
       \endgroup
717
718
719
     \latexbug@addtofilelist{#1}}
720 \def\latexbug@iftoplevel #1#2\@nil{%
     \def\next{#1}%
721
     \ifx\next\@empty
722
723 }
724 \endinput
725 (/package)
```